

(Volume – II)
PPP CONTRACT

BY & BETWEEN

GOVERNOR OF PUNJAB
(THROUGH THE SECRETARY, COMMUNICATION & WORKS DEPARTMENT)

AND

[SPV INCORPORATED BY THE SUCCESSFUL BIDDER]
(AS THE PRIVATE PARTNER)

DATED AS OF [•] 2026

IN RESPECT OF

THE CONCESSION TO BUILD, OPERATE AND TRANSFER
THE
CHINIOT-SARGODHA ROAD INCLUDING OPERATION AND MAINTENANCE OF FAISALABAD CHINIOT ROAD
PROJECT

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PPP CONTRACT

This PUBLIC PRIVATE PARTNERSHIP CONTRACT (this Agreement) is entered into on this [●] day of [●] 2026 at _____, Pakistan:

BY AND BETWEEN

THE GOVERNOR OF PUNJAB (THROUGH **SECRETARY, COMMUNICATION AND WORKS DEPARTMENT**) having its offices at Old, Anarkali, Lahore for and on behalf of **THE GOVERNMENT OF PUNJAB** (the **Implementing Agency**);

AND

[INSERT SPV NAME], a company incorporated under the Applicable Laws of Pakistan, having its registered office located at [●] (the **Private Partner**, which expression shall, where the context so permits, be deemed to mean and include its, successors in interest, administrators and permitted assigns);

(the Implementing Agency and the Private Partner are hereinafter collectively referred to as the **Parties** and each individually as a **Party**).

RECITALS

- a. To cater to the growing vehicular traffic between Faisalabad, Sargodha and Chiniot in the Province of Punjab, Pakistan, and to enhance regional connectivity, the Implementing Agency has decided to design, construct and develop a four-lane divided controlled-access toll highway, along with interchanges, connecting roads, and other Project Facilities on the Chiniot-Sargodha Road; and to install electronic toll and traffic management systems (“**ETTMS**”) and weighbridges and to ensure the subsequent Operation and Maintenance on the Faisalabad-Chiniot Road and the Chiniot Sargodha Road, after completion of the dualization, through a Public Private Partnership on a build, operate and transfer (the “**BOT**”) basis for the Chiniot-Sargodha Road and on an operation, maintenance and transfer basis for the Faisalabad-Chiniot Road in accordance with this Agreement.
- b. On January 2026 a Request for Proposals (the “**RFP**”) was published by the Implementing Agency for the prospective bidders and subsequently the Sponsor(s) was selected by the Implementing Agency for purposes of grant of the Concession and implementation of the Project in reliance upon the Applicable Laws (the “**Bidding Process**”). The Letter of Intent was issued to the Sponsor(s) by the Implementing Agency on [●].
- c. The Private Partner was incorporated by the Sponsors, in accordance with the provisions of Applicable Law: (i) in order to enable the Parties to enter into this Agreement and for the Private Partner to seek and avail the grant of the Concession and for the Implementing Agency to grant the Concession; and (ii) for the specific purpose of implementing the Project on a BOT basis in relation to the Chiniot-Sargodha Road and an operate and maintenance basis in relation to the Faisalabad-Chiniot Road , in each case, in accordance with the terms of this Agreement.
- d. The Private Partner, subject to the terms of this Agreement, acknowledges and confirms that it has, based on the RFP provided by the Implementing Agency, undertaken a due diligence audit of the Project, including technical and financial viability, legal due diligence, and on the basis of its independent satisfaction is entering into this Agreement for the purpose of accepting the Concession and for the

implementation of the Project, in each case, in accordance with the terms and conditions of this Agreement.

- e. The Parties are now entering into this Agreement to set out the terms and conditions applicable to the Concession and the relationship of the Implementing Agency and the Private Partner.

NOW THIS AGREEMENT WITNESSETH and it is hereby agreed and declared by the Parties as under:

1. DEFINITIONS & INTERPRETATION

1.1 DEFINITIONS

In this Agreement (including the recitals), unless the context shall otherwise require:

AASHTO Standards means the standards applicable to roads and highways published in the relevant publication of the American Association of State Highway and Transportation Officials;

Abandonment or Abandon means the voluntary cessation of the construction or Operation and Maintenance of the Concession Assets by the Private Partner and / or the withdrawal of all, or substantially all, personnel by Private Partner from the Project Site for reasons other than a Permitted Event;

Accounting Year means in respect of each Party, the financial year commencing from 1st day of July of any calendar year and ending on 30th day of June of the next calendar year;

Act means the Punjab Public Private Partnership Act, 2025, as amended from time to time and shall include all future enactments in replacement thereof;

Actual Project Revenues shall mean the total revenues of the Project for each Operational Year following Commercial Operations Date (in relation to the Chiniot-Sargodha Road) as determined by the Independent Auditor;

Additional Cost means the additional capital expenditure and / or the additional operating cost and / or, any adverse financial impact on the Private Partner and/or additional taxes and/or all of the above as the case may be, which the Private Partner has or would be required to incur and which has / have arisen as a consequence of Change of Scope or Change in Law; provided, that the Additional Costs shall be paid directly to the Private Partner by the Implementing Agency in terms of this Agreement and shall not form part of Total Project Cost;

Affected Party shall have the meaning ascribed thereto in Section 21.1 (*Force Majeure Event*);

Additional Facilities means the facilities including, but not limited to, service stations, motels, hotels, restaurants, shopping areas, amusement parks and other facilities provided or procured to be provided for the benefit of the Users, and that are in addition to (and not part of) the Concession Assets, and are situated along the right of way;

Agreement means this 'PPP Contract' including the Main Body and all Schedules attached hereto;

Alternative Route means any non-tolled road, established and/or planned or materially improved by or on behalf of Implementing Agency or a Public Sector Entity within 10 km radius of Project Road connecting same origin and destination as of Project Road providing:

- same or better functional classification
- same or better components of typical cross-section
- same or better level of service and facilities

which will divert the traffic from the Project Road leading to loss of Toll Revenues

Alternative Route Event shall have the meaning ascribed thereto in Section 17.7.2;

Alternative Route Relief Event shall have the meaning ascribed thereto in Section 17.7.2;

Applicable Laws means all applicable laws, promulgated or brought into force and effect by the GoPB, Implementing Agency or the Government of Pakistan, as the case may be, including regulations and rules made thereunder, and judgments, decrees, injunctions, writs and orders of any court of record, as may be in force and effect during the subsistence of this Agreement;

Applicable Permits means the Private Partner Permits and all such approvals, consents, authorizations, notifications, concessions, acknowledgements, licenses, permits, decisions or similar items that relate to the Project and its implementation;

Applicable Standards means the standards, specifications, requirements, criterion and timelines (as applicable) set out in relation to and applicable to:

- (a) the Project Works;
- (b) the Project and its implementation;
- (c) the Concession Assets; and
- (d) the performance by the Private Partner and the Sponsor (as applicable) of their respective obligations under the Implementing Agency Agreements;

in each case above, as contained and set out in (as applicable):

- (i) this Agreement (including all Schedules attached hereto);
- (ii) the Implementing Agency Agreements;
- (iii) Applicable Laws;
- (iv) Applicable Permits;
- (v) Environmental Standards;
- (vi) Specific Requirements; and
- (vii) any other standards, requirements, criterion and timelines (as applicable), mutually agreed between the Parties from time to time,

provided, however, that in the event of any discrepancy in the standards, requirements, criterion and timelines (as applicable) set out in the abovementioned, the most stringent standards, requirements, criterion and timelines (as applicable), as contained in any of the above-mentioned, shall apply (unless otherwise mutually agreed between the Parties);

Approved Detailed Engineering Design means the Detailed Engineering Design approved by the Independent Engineer (in consultation with the Implementing Agency) in accordance with the Applicable Standards (including Section 12.5.2 of this Agreement);

Approved Major Maintenance and Overlay Contract(s) shall have the meaning ascribed thereto in Section 19.13(b);

Approved Major Maintenance and Overlay Programme shall have the meaning ascribed thereto in Section 19.13(b);

Authority means the Punjab Public Private Partnership Authority established under the Act;

Authority Fee shall have the same meaning ascribed thereto in Section 6.1.1;

Arbitration Act means the Arbitration Act, 1940 and shall include modifications to or any re-enactment thereof as in force from time to time;

Associate or **Affiliate** means, in relation to either Party and/or the Sponsor, a Person who controls, is controlled by, or is under the common control with such Party and/or the Sponsor (as used in this definition, the expression “*control*” means, with respect to a Person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person and the power to direct the management and policies of such Person, whether by operation of law or by contract or otherwise), and with respect to a Person which is not a company or corporation, the power to direct the management and policies of such Person, whether by operation of law or by contract or otherwise);

Award shall have the meaning ascribed thereto in Section 30.3.4;

Base Case Equity IRR shall mean post tax internal rate of return (expressed as percentage) on the Equity of Shares, as expressly set out in the Base Case Financial Model;

Base Case Financial Model means the financial model attached herewith as **SCHEDULE U (*Financial Model*)**, as updated at Financial Close;

Base Case means the projections of cash flows contained in the Base Case Financial Model that are used to compute the Base Case Equity IRR;

Benchmark Revenue shall mean, in respect of each Operational Year, the projected Toll Revenues of the Project for such Operational Year as set out in Schedule AA, derived exclusively from the Base Case Financial Model as finalised at Financial Close, based on the traffic assumptions and the Toll structure and escalation methodology reflected in Schedule P;

Bid shall mean the technical and financial proposal of the Sponsor with respect to the Project submitted to the Implementing Agency on [●];

Bidding Process shall have the meaning ascribed thereto in Recitals above;

Bid Security means the cash deposit receipt, pay order or bank guarantee submitted by the Sponsor pursuant to the RFP in connection with its Bid for the Concession rights which shall remain valid and in effect until the Bid Security Expiry Date;

Bid Security Expiry Date shall have the meaning ascribed thereto in Section 11.1.4;

Bid Submission Date means [●];

Big Four Accounting Firms means:

- (a) A. F. Ferguson & Co. (a member firm of PricewaterhouseCoopers network);

- (b) EY Ford Rhodes (a member firm of Ernst & Young Global Limited);
- (c) KPMG Taseer Hadi & Co.;
- (d) M. Yousuf Adil Saleem & Co. (a member firm of Deloitte Touche Tohmatsu);

and/or any other successor chartered accountancy firm categorized as one of the Big Four Accounting Firms;

Board of Arbitrators shall have the meaning ascribed thereto in Section 30.3.1;

Board Resolution means a resolution passed by the board of directors of the Private Partner authorizing the Private Partner to, *inter alia*, enter into this Agreement;

BOT shall mean build, operate and transfer;

Certified Impediment Notice shall have the meaning ascribed thereto in Section 4.15.2;

Change in Complete Control means any issuance, sale, transfer, conveyance, disposal or any event, transaction, arrangement, Encumbrance or agreement of any nature that results in or may result in:

- (a) the issuance of any Share to any Person other than the Sponsor; or
- (b) the transfer of direct and / or indirect, legal and/or beneficial ownership of any shares, or securities convertible into shares, that causes or may cause the sale, transfer, conveyance or disposal of the Sponsor's legal and/or beneficial ownership, direct or indirect, in the total (or any part thereof) paid up and outstanding Shares of the Private Partner; and
- (c) the Sponsor, as a result of (a) or (b) above, divesting 100% of the Shares and/or holding less than 100% of the shares and / or losing the power to direct the management, policies, control and/or decisions, in each case, of the Private Partner;

Change in Control means any issuance, sale, transfer, conveyance, disposal or any event, transaction, arrangement, Encumbrance or agreement of any nature that results in or may result in:

- (a) the issuance of any Share to any Person other than the Sponsor; or
- (b) the transfer of direct and / or indirect, legal and/or beneficial ownership of any shares, or securities convertible into shares, that causes or may cause the sale, transfer, conveyance or disposal of the Sponsor's legal and/or beneficial ownership, direct or indirect, in the total (or any part thereof) paid up and outstanding Shares of the Private Partner; and
- (c) the Sponsor, as a result of (a) or (b) above, divests more than or equal to 51% of the Shares and/or holds less than 51% of the Shares and / or loses the power to direct the management, policies and decisions, in each case, of the Private Partner;

Change in Law means the occurrence of any of the following events on or after the Bid Submission Date:

- (a) the enactment of any new federal, provincial or local government law, as applicable in the Province of Punjab;

- (b) the repeal, modification or re-enactment of any existing federal, provincial or local government law, as applicable in the Province of Punjab;
- (c) the commencement of any federal, provincial or local government law, which has not entered into effect until the date of this Agreement;
- (d) a change in the interpretation or application of any Applicable Law (as applicable in the Province of Punjab) by a court of record as compared to such interpretation or application by a court of record prior to the date of this Agreement;
- (e) the imposition by a Government Agency of any additional Private Partner Permit;

provided, that any:

- (i) coming into effect, on or after the Bid Submission Date, of any provision of a statute which is already gazetted in accordance with the Applicable Laws prior to the Bid Submission Date; or
- (ii) any new Applicable Law or any change in the existing Applicable Law under the active consideration of or in the contemplation of the Implementing Agency, GoPB or the Government of Pakistan as of the Bid Submission Date, which is already gazetted in accordance with the Applicable Laws prior the Bid Submission Date,

shall not constitute a ‘Change in Law’;

Change in Law Termination Amount shall have the meaning ascribed thereto in **SCHEDULE T (TERMINATION PAYMENT)**;

Change in Shareholding means any issuance, sale, transfer, conveyance, disposal or any event, transaction, arrangement, Encumbrance or agreement of any nature that results in or may result in:

- (a) the issuance of any Share to any Person other than the Sponsor; or
- (b) the transfer of direct and / or indirect, legal and/or beneficial ownership of any shares, or securities convertible into shares, that causes or may cause the sale, transfer, conveyance or disposal of the Sponsor’s legal and/or beneficial ownership, direct or indirect, in the total (or any part thereof) paid up and outstanding Shares of the Private Partner; and
- (c) the Sponsor, by virtue of (a) or (b) above, divests up to 49% of the Shares, does not hold up to 49% of Shares and/or does not lose the power to direct the management, policies and decisions of the Private Partner;

Change of Scope Notice shall have the meaning ascribed thereto in Section 16.2 (*Change of Scope Notice*);

Change of Scope shall have the meaning ascribed thereto in Section 16.1 (*Change of Scope*);

Chiniot-Sargodha First Major Maintenance and Overlay means the Major Maintenance and Overlay to be undertaken by the Private Partner during the Chiniot-Sargodha First Major Maintenance and Overlay Period in accordance with its Approved Major Maintenance and Overlay Programme;

Chiniot-Sargodha First Major Maintenance and Overlay Commencement Date shall mean the date certified by the Independent Engineer as the date for commencement of the Chiniot-Sargodha First

Major Maintenance and Overlay in its approval for the Proposed Major Maintenance and Overlay Programme in respect of the Chiniot-Sargodha First Major Maintenance and Overlay Period;

Chiniot-Sargodha First Major Maintenance and Overlay Expiry Date shall mean the date of completion of the Chiniot-Sargodha First Major Maintenance and Overlay, as certified by the Independent Engineer;

Chiniot-Sargodha First Major Maintenance and Overlay Period means the period commencing on the Chiniot-Sargodha First Major Maintenance and Overlay Commencement Date and expiring on the Chiniot-Sargodha First Major Maintenance and Overlay Expiry Date;

Chiniot-Sargodha Operations Period means the period commencing on the Commercial Operations Date and ending on the Trigger Date, during which the Private Partner shall operate and maintain the Chiniot-Sargodha Road;

Chiniot-Sargodha Road means the approximately forty seven and a half (47.5) kilometre long road for which the start point is located in Chiniot and the end point is in Sargodha as more particularly described and indicated in the **SCHEDULE F (Project Site)** including bridges, culverts and other appurtenances thereto, which shall form part of the Concession Assets and shall be developed in accordance with the Applicable Standards;

Chiniot-Sargodha Second Major Maintenance and Overlay means the Major Maintenance and Overlay to be undertaken by the Private Partner during the Chiniot-Sargodha Second Major Maintenance and Overlay Period in accordance with the Approved Major Maintenance and Overlay Programme;

Chiniot-Sargodha Second Major Maintenance and Overlay Commencement Date shall mean the date certified by the Independent Engineer as the date for commencement of the Chiniot-Sargodha Second Major Maintenance and Overlay in its approval for the Proposed Major Maintenance and Overlay Programme in respect of the Chiniot-Sargodha Second Major Maintenance and Overlay Period;

Chiniot-Sargodha Second Major Maintenance and Overlay Expiry Date shall mean the date of completion of the Chiniot-Sargodha Second Major Maintenance and Overlay, as certified by the Independent Engineer;

Chiniot-Sargodha Second Major Maintenance and Overlay Period means the period commencing on the Chiniot-Sargodha Second Major Maintenance and Overlay Commencement Date and expiring on the Chiniot-Sargodha Second Major Maintenance and Overlay Expiry Date;

Civil Work Contract(s) means the agreement entered or to be entered into between the Private Partner and the Civil Work Contractor(s), as may be amended by the parties thereto from time to time, to carry out the Installation Works;

Civil Work Contractor(s) means the contractor(s) engaged by the Private Partner for the purposes of performance of Installation Works.

Commencement Certificate means a certificate to be jointly issued in writing by the Independent Engineer and the Independent Auditor, to the Private Partner and copied to the Implementing Agency in accordance with Section 3.4 (*Commencement Certificate & Commencement Date*);

Commencement Date means the date set out in the Commencement Certificate jointly by the Independent Engineer and the Independent Auditor in accordance with Section 3.4 (*Commencement*

Certificate & Commencement Date) of this Agreement, being the date on which each of the Conditions Precedent stand satisfied, waived and/or deferred.

Commercial Operations Date means (as applicable):

- (a) in respect of the Faisalabad-Chiniot Road, the date immediately succeeding the Installation Completion Date or the date of the issuance of the Commencement Certificate, whichever is later, and the date on which the Faisalabad-Chiniot Operations Period shall commence; and
- (b) in respect of the Chiniot-Sargodha Road, the date immediately succeeding the Substantial Completion Date and the date on which the Chiniot-Sargodha Operations Period shall commence;

Competing Route means any road with lower or equal toll rates as that of Project Road, established and/or planned or materially improved by or on behalf of Implementing Agency or a Public Sector Entity within 10 km radius of Project Road connecting same origin and destination as of Project Road providing:

- same or better functional classification
- same or better components of typical cross-section
- same or better level of service and facilities

which will divert the traffic from Project Road leading to loss of Toll Revenue.

Competing Route Event shall have the meaning ascribed thereto in Section 17.6.2;

Competing Route Relief Event shall have the meaning ascribed thereto in Section 17.6.2;

Completion Tests means the tests required to be conducted for Substantial Completion, as listed in SCHEDULE G (*List of Tests & Completion Tests*);

Completion Tests Date Notice shall have the meaning ascribed thereto in Section 14.1.1;

Concession shall have the meaning ascribed thereto in Section 2.1.1;

Concession Assets means and includes all tangible and intangible assets of the Project Site, the Project Road, and the Project Facilities and all rights, title, benefits, facilities and easements, whether directly and / or indirectly related thereto, relating to and forming part of the Project including (only to the extent of the Project Road, the Project Site and the Project Facilities) but not limited to (a) rights over the Project Site in the form of Licence, right of way or otherwise, (b) tangible assets such as civil works including foundations, embankments, pavements, road surface, bridges, approaches to bridges, roads, drainage works, lighting facilities, traffic signals, sign boards, milestones, equipment relating to regulation of traffic, road furniture, electrical works for lighting on the intersections and toll plazas, toll plaza, toll control building, toll gates, weighbridges, the Project Facilities and / or the Project Site, telephone and other communication systems and communication equipment for the Project, wayside amenities, administration maintenance facilities, equipment, vehicles etc. on the Project Road and the Project Facilities (c) Project Facilities situated on the Project Site;

Concession Direct Agreement means the direct agreement that may be entered into between the Private Partner, the Implementing Agency and the Financiers, if required by the Financiers;

Concession Period means, in respect of the Concession and the Concession Assets, the period commencing on the Commencement Date and ending on the Trigger Date;

Condition(s) Precedent means the conditions precedent to the achievement of Commencement Date, as listed in Sections 3.1.2, 3.1.3 and 3.1.4 of Section 3.1 (*Conditions Precedent*);

Condition(s) Subsequent means the conditions subsequent listed in Section 3.2 (*Conditions Subsequent*);

Conditions means the Conditions Precedent and the Conditions Subsequent set out in Article 3 (Conditions);

Construction Contract(s) means the agreement entered or to be entered into between the Private Partner and the Construction Contractor(s) in accordance with this Agreement, for, *inter alia*, the design, engineering, procurement, construction, completion, testing of the Concession Assets and the commissioning of the same, as such agreement may be amended by the parties thereto from time to time;

Construction Contractor(s) means the contractor(s) engaged by the Private Partner in for the purposes of performance of Construction Works;

Construction Drawings means the drawings, designs, calculations and documents prepared and/or to be prepared by the Private Partner pursuant to the Applicable Standards and the Design Requirements that pertain to the Project and the Concession Assets and which are detailed in **SCHEDULE C (List of Construction Drawings)**, as amended from time to time by the Private Partner in accordance with the terms of this Agreement with the approval of the Independent Engineer (in consultation with Implementing Agency);

Construction Inspection Report has the meaning ascribed thereto in Section 13.6.2;

Construction Monthly Progress Report has the meaning ascribed thereto in Section 13.5.1;

Construction Performance Guarantee means a first demand irrevocable and unconditional bank guarantee, issued by a scheduled bank in Pakistan (with a minimum long term credit rating of at least 'AA-' as rated by JCR VIS or an equivalent rating by PACRA) acceptable to the Implementing Agency, in the form of a demand guarantee or a standby letter of credit, of an amount of Pakistan Rupees Five Hundred Million (PKR 500,000,000) in the form of the instrument attached herewith as **SCHEDULE L (Form of Construction Performance Guarantee)**;

Construction Performance Guarantee Expiry Date shall have the meaning ascribed thereto in Section 11.2.6;

Construction Period Damages Payment Date shall have the meaning ascribed thereto in Section 14.5 (*Construction Period Damages*);

Construction Period Damages has the meaning ascribed thereto in Section 14.5 (*Construction Period Damages*);

Construction Period Insurances means the Insurances procured and / or obtained by the Private Partner pursuant to the provisions of and in accordance with Section 20.1 (*Construction Period and Installation Period Insurances*) and **PART I (Construction Period Insurances) OF SCHEDULE I (Insurances)**;

Construction Period means the period commencing on the Commencement Date and ending on the Project Construction Completion Date;

Construction Programme shall bear the meaning ascribed thereto in Section 13.2.2;

Construction Requirements means the relevant standards, requirements, criterion and timelines (as applicable) that are set out in relation to and are applicable to the Construction Works, as set out in:

- (a) the Main Body;
- (b) the Scope of the Project;
- (c) the AASHTO Standards (to the extent adopted by the “C&W Standard Specifications, for Roads and Bridges, 2022”), being the requirements applicable in respect of matters relating to the Concession Assets;
- (d) the Design Requirements;
- (e) **SCHEDULE G (*List of Tests & Completion Tests*)**;
- (f) the Construction Programme; and
- (g) any other standards, requirements, criterion and timelines (as applicable), mutually agreed between the Parties from time to time,

provided, however, in the event of any discrepancy in the standards, requirements, criterion and timelines (as applicable) set out in the abovementioned, the most stringent standards, requirements, criterion and timelines (as applicable), as contained in any of the above-mentioned, shall apply (unless otherwise mutually agreed between the Parties);

Construction Tests shall bear the meaning ascribed thereto in Section 13.4.1;

Construction Time For Completion shall mean the time permitted herein for performance and completion of Construction Works and all other obligations to be performed by the Private Partner until issuance of the Final Project Construction Completion Certificate, as set out in and contemplated by the Applicable Standards and the Construction Programme, including the:

- (i) completion of engineering and design works and services on or prior to the date set out in the Project Construction Completion Schedule;
- (ii) submission of Construction Drawings on or prior to the dates contemplated by the Applicable Standards and the Construction Programme;
- (iii) performance and completion of each Project Construction Milestone on or prior to its Project Construction Milestone Date;
- (iv) achievement of Substantial Completion on or prior to the Scheduled Substantial Completion Date;
- (v) achievement of Project Construction Completion on or prior to the Scheduled Project Construction Completion Date

Construction Works means all obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner on the Chiniot-Sargodha Road until the Project Construction Completion Date pursuant to the Applicable Standards including, *inter alia*, the

obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner in respect of: (a) preparation, completion and delivery of Construction Drawings; (b) the engineering (including design), procurement and construction of the Concession Assets (including all activities and obligations incidental thereto); (c) the Site Construction Works; and (d) the activities consisting of, and for achievement of, in each case, each Project Construction Milestone;

Consumer Price Index or **CPI** means the year-on-year percentage change in the *Consumer Price Index (All Urban, General)* for Pakistan, as published by the Pakistan Bureau of Statistics (or any successor authority that publishes such index). If such index is discontinued or its methodology is materially changed, the Implementing Agency and the Private Partner shall agree (acting reasonably) a comparable successor index, failing which the Independent Auditor shall determine an appropriate replacement index not exceeding ten percent (10%) or eight percent (8%) for the periods before and after Financing Termination Date respectively.

Contractor(s) means the Construction Contractor and the O&M Contractor and any of the Private Partner's other direct contractors and any of their direct sub-contractors integrally involved in the Project for the performance of Project Works (or any part thereof);

Corporate Documents means the constitutional documents and the corporate authorizations set out in **SCHEDULE K (Corporate Documents)**;

Corrupt Act means:

- (a) offering, giving or agreeing to give to the Implementing Agency, a Government Agency or to any Person employed by or on behalf of the Implementing Agency and/or a Government Agency any gift or consideration of any kind as an inducement or reward:
 - (i) for doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of this Agreement or any other contract relating to this Agreement with the Implementing Agency and/or a Government Agency; or
 - (ii) for showing or not showing favour or disfavour to any Person in relation to this Agreement or any other contract relating to this Agreement with the Implementing Agency and/or a Government Agency;
- (b) entering into this Agreement or any other contract relating to this Agreement with the Implementing Agency and/or a Government Agency in connection with which commission / discount has been paid / received (as the case may be) or has been agreed to be paid or received by the Private Partner or on its behalf, or to its knowledge, unless before the relevant contract is entered into particulars of any such commission and the terms and conditions of any such contract for the payment of such commission / discount have been disclosed in writing to the Implementing Agency;
- (c) committing any offence:
 - (i) under any law, in respect of fraudulent acts in relation to this Agreement, from time to time dealing with bribery, corruption or extortion;
 - (ii) under any law, in respect of fraudulent acts in relation to this Agreement, creating offences in respect of fraudulent acts; or
 - (iii) in respect of fraudulent acts in relation to this Agreement;

- (d) in respect of fraudulent acts in relation to this Agreement, defrauding or attempting to defraud or conspiring to defraud the Implementing Agency or any other public body;

Corrupt Act Termination Amount shall have the meaning ascribed thereto in **SCHEDULE T (Termination Payments)**;

Cure shall mean curing of breach or default of this Agreement by the Party responsible for such breach or default;

Cure Period means:

- (a) in respect of a Private Partner Event of Default:
- (i) during any period when any Financing Due is outstanding, the period commencing on the date of receipt by the Private Partner of the Implementing Agency Preliminary Notice and expiring on the date falling ninety (90) days thereafter, or such other time period as may be agreed in the Concession Direct Agreement;
 - (ii) during any period when any Financing Due is not outstanding, the period commencing on the date of receipt by the Private Partner of the Implementing Agency Preliminary Notice and expiring on the date falling forty-five (45) days thereafter;
- (b) in respect of a Implementing Agency Event of Default, the period commencing on the date of receipt by the Implementing Agency of the Private Partner Preliminary Notice and expiring on the date falling forty-five (45) days thereafter;

Debit Authority means the irrevocable and unconditional debit authority executed by the GoPB, acting through the Implementing Agency, in favour of the Financiers, and addressed to the State Bank of Pakistan, authorising the debit of the designated GoPB account in accordance with Sections 8.12.3 and 17.4 of this Agreement and the Financing Documents, provided that such debit authority shall only be callable to the extent of any shortfall in the debt servicing obligations of the Private Partner, subject to the overall limit of the Minimum Revenue Guarantee entitlement for the relevant quarter;

Decommissioned Project Area shall have the meaning ascribed thereto in Section 7.13 (*Emergency Decommissioning*);

Defects & Deficiencies means:

- (a) in respect of Project Works, any Project Works (or any part thereof) that fail to conform to the Applicable Standards in any manner (including (without limitation) in services, performance, materials, design, execution, engineering, operations and maintenance and/or workmanship);
- (b) in respect of the Concession Assets, any Concession Asset (or any part thereof) that fail to conform to the Applicable Standards;

Delayed Payment Rate means the three (3) month Karachi Interbank Offered Rate plus one percent (1%), compounded semi-annually, calculated for the actual number of days which the relevant amount remains unpaid on the basis of a three hundred and sixty five (365) day year;

Design Requirements means the design requirements of the Concession Assets, as set out in **SCHEDULE B (Design Requirements)**;

Detailed Engineering Design means the detailed engineering design for the Project Road prepared by the Private Partner in accordance with Applicable Standards;

Development Rights means such additional rights, property or assets that are not part of and are not anticipated to be part of the Project as on the Effective Date but are available to the Implementing Agency in accordance with Section 29.2 (*Commercial Rights & Additional Facilities*) and may include, without in any manner limited to, provision of additional facilities;

Dispute shall have the meaning ascribed thereto in Section 30.1.1;

Dispute Resolution Procedure means the procedure for resolution of Disputes as set out in Article 30 (*Dispute Resolution*);

Divestment Requirements shall have the meaning ascribed thereto in Section 24.1 (*Requirements for Divestment*);

Easementary Rights means all easements, reservations, rights-of-way, utilities and other similar purposes, or zoning or other restrictions relating to the Project Site and to the use of real property relating to the Project Site, which are necessary or appropriate for the conduct of activities of the Private Partner related to the Concession Assets;

Effective Date means the date on which this Agreement is duly executed by each of the Parties;

EIA means an environmental impact assessment conducted in accordance with the Punjab Environmental Protection Act 1997;

EIA Approval shall have the meaning ascribed thereto in Section 3.1.2(e);

Emergency Decommissioning shall have the meaning ascribed thereto in Section 7.13.1;

Emergency means a condition or situation that is likely to endanger the security of the individuals on or about the Project Site including Users thereof or which poses an immediate threat of material damage to any of the Concession Assets, the Project Site;

Encumbrance means any encumbrance on an asset, including but not restricted to mortgage, charge, pledge, lien, hypothecation and / or any security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations and shall include without limitation any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Concession Assets and / or any part or portion thereof and physical encumbrances and encroachments thereon;

Environmental Standards means collectively, the applicable environmental guidelines and occupational health and safety standards established by the Pakistan Environmental Protection Agency and the Punjab Environmental Protection Agency;

Equity means the share capital of the Private Partner, represented in PKR, subscribed to by any of the Private Partner's shareholders for meeting the equity component of the Total Project Cost;

Escrow Accounts means the accounts established by the Private Partner with a reputable bank, having a minimum long-term credit rating of 'AA', approved by the Implementing Agency;

Escrow Agent means the bank selected by the parties to the Escrow Agreement to manage the toll revenues, compensation and expenditures of the Private Partner;

Escrow Agreement means the agreement entered into between the Implementing Agency, the Financiers, the Escrow Agent and the Private Partner, which shall *inter alia* contain all the provisions provided in Section 17.8 of the Agreement;

Estimated Project Cost means the estimated cost of the Project, as specified in the Base Case Financial Model and being funded through the proceeds of the Financing and the Sponsor Base Equity Amount;

ETTMS means “electronic toll and traffic management system” as further identified in **SCHEDULE Q** (Requirements of Electronic Toll and Traffic Management System - ETTMS).

Exempted Vehicles shall mean the following vehicles are exempted from Toll:

- (a) ambulances;
- (b) defence vehicles, including vehicles of armed forces;
- (c) flag cars;
- (d) fire fighting vehicles;
- (e) funeral vans;
- (f) official vehicles of the GoPB, the Implementing Agency or the Private Partner;
- (g) Police vehicles;
- (h) Vehicles bearing the plates of:
 - 1. Presidency;
 - 2. Prime Minister Secretariat;
 - 3. Governor House;
 - 4. Chief Minister Secretariat;
 - 5. A Foreign dignitary on State visit to Pakistan;
- i) Vehicles deputed for essential services like cleaning, maintenance of green areas etc;

Excess Toll Revenues shall bear the meaning ascribed thereto in Section 17.4.3;

Exit Implementation Period means:

- (a) in case of Termination of this Agreement, the period commencing on the Termination Date and expiring on the Transfer Date;
- (b) in case of expiry of this Agreement on the Final Expiry Date, the period commencing thirty (30) days prior to the Final Expiry Date and expiring on the Final Expiry Date;

Faisalabad-Chiniot First Major Maintenance and Overlay means the Major Maintenance and Overlay to be undertaken by the Private Partner during the Faisalabad-Chiniot First Major Maintenance and Overlay Period in accordance with its Approved Major Maintenance and Overlay Programme;

Faisalabad-Chiniot First Major Maintenance and Overlay Commencement Date shall mean the date certified by the Independent Engineer as the date for commencement of the Faisalabad-Chiniot

First Major Maintenance and Overlay in its approval for the Proposed Major Maintenance and Overlay Programme in respect of the Faisalabad-Chiniot First Major Maintenance and Overlay Period;

Faisalabad-Chiniot First Major Maintenance and Overlay Expiry Date shall mean the date of completion of the Faisalabad-Chiniot First Major Maintenance and Overlay, as certified by the Independent Engineer;

Faisalabad-Chiniot First Major Maintenance and Overlay Period means the period commencing on the Faisalabad-Chiniot First Major Maintenance and Overlay Commencement Date and expiring on the Faisalabad-Chiniot First Major Maintenance and Overlay Expiry Date;

Faisalabad-Chiniot Operations Period means the period commencing on the Installation Completion Date and ending on the Trigger Date, during which the Private Partner shall operate and maintain the Faisalabad-Chiniot Road;

Faisalabad-Chiniot Road means the approximately twenty one (21) kilometre long road for which the start point is located in Faisalabad and the end point is in Chiniot as more particularly described and indicated in the **SCHEDULE F (Project Site)** including bridges, culverts and other appurtenances thereto, which shall form part of the Concession Assets and shall be developed in accordance with the Applicable Standards;

Faisalabad-Chiniot Second Major Maintenance and Overlay means the Major Maintenance and Overlay to be undertaken by the Private Partner during the Faisalabad-Chiniot Second Major Maintenance and Overlay Period in accordance with the Approved Major Maintenance and Overlay Programme;

Faisalabad-Chiniot Second Major Maintenance and Overlay Commencement Date shall mean the date certified by the Independent Engineer as the date for commencement of the Faisalabad-Chiniot Second Major Maintenance and Overlay in its approval for the Proposed Major Maintenance and Overlay Programme in respect of the Faisalabad-Chiniot Second Major Maintenance and Overlay Period;

Faisalabad-Chiniot Second Major Maintenance and Overlay Expiry Date shall mean the date of completion of the Faisalabad-Chiniot Second Major Maintenance and Overlay, as certified by the Independent Engineer;

Faisalabad-Chiniot Second Major Maintenance and Overlay Period means the period commencing on the Faisalabad-Chiniot Second Major Maintenance and Overlay Commencement Date and expiring on the Faisalabad-Chiniot Second Major Maintenance and Overlay Expiry Date;

Final Expiry Date means the date falling on the twenty-seventh (27th) yearly anniversary of the Commencement Date;

Final Installation Completion Certificate shall have the meaning ascribed thereto in Section 14.12 (*Final Installation Completion Certificate*);

Final Project Construction Completion Certificate shall have the meaning ascribed thereto in Section 14.6 (*Final Project Construction Completion Certificate*);

Financial Close means the execution and delivery of the Financing Documents that (together with Equity commitments) evidence sufficient financing for the construction, testing, and commissioning of the Project Road and achievement of Installation Completion and Project Construction Completion (following the resolution of any objections raised by the Implementing Agency and/or the Independent

Auditor to the Financing Term Sheet that sets out a principal repayment schedule and the other principal terms of the transaction between the Private Partner and the Financiers) and evidence of commitments for such equity as is required by the Private Partner to satisfy the requirements of the Financiers and the satisfaction or waiver by the Financiers of all conditions precedent for the initial availability of funds under the Financing Documents and the Private Partner having immediate access to the Financing;

Financial Close Achievement Notice shall have the meaning ascribed in Section 27.4 (*Financial Closing*);

Financiers means the financial institutions, banks, Islamic financiers, funds, trusts or trustees of the holders of debentures or other securities their successors and assigns, that extend Financing to the Private Partner pursuant to the Financing Documents;

Financial Model means the Base Case Financial Model, as revised from time to time by the Independent Auditor (including as updated on or prior to the Commencement Date);

Financing means the finance facilities, loans, advances, financial accommodation and / or arrangement, subscription and / or issuance of debentures / bonds / redeemable capital, risk participation, take out financing and / or any other financial obligation availed by the Private Partner from the Lenders/Financiers in respect of the Project, pursuant to the Financing Documents.

Financing Amendment Term Sheets shall have the meaning ascribed thereto in Section 27.3.3;

Financing Component means the component that relates to the repayment and servicing of Financing Due (i.e. both Principal repayment and interest/mark-up/rental payments) in accordance with the Financing Documents, as set out in the Financial Model;

Financing Documents means the loan agreements for which the Financing Term Sheets related thereto have not been objected to or deemed not to have been objected to by the Implementing Agency and/or the Independent Auditor pursuant to Section 27.3 (*Financing Term Sheet & the Financing Amendment Term Sheets*) and all related notes, indentures, security agreements, guarantees, documents under any Islamic financing arrangements (including but not limited to mark up based financing), agreements or other instruments providing security to the Financiers (including consents and acknowledgements of assignment and direct agreements in respect of documents assigned as security to the Financiers) and other documents entered into by the Private Partner in relation to the construction and permanent financing (including any refinancing) of the Concession Assets (or any part thereof), as such agreement, instruments, guarantees and documents may be amended from time to time in accordance with the provisions of Section 27.3 (*Financing Term Sheet & the Financing Amendment Term Sheets*);

Financing Due means the aggregate of the following sums expressed in Pak Rupees outstanding and payable to the Financiers up to the date immediately preceding the date of payment of the Termination Payments to the Financiers:

- (a) the principal amount of the debt/ financing provided and disbursed by the Financiers under the Financing Documents for financing the Project (the **Principal**) in accordance with the Financing Terms Sheet and Financing Amendment Term Sheets (if any) delivered to and not objected to by Implementing Agency and the Independent Auditor in accordance with Section 27.3 (*Financing Term Sheet & the Financing Amendment Term Sheets*), the same being, for the purposes of calculation in case of Termination, the amount of outstanding financing in the Base Case Financial Model calculated using the rate of KIBOR assumed in the Bid or actual KIBOR, whichever is lower;

- (b) the interest or mark-up (or any other term connoting the return paid to the Financiers on debt/ financing) accruing on the Principal in accordance with the Financing Term Sheet and the Financing Amendment Term Sheets delivered to and not objected to by Implementing Agency and the Independent Auditor in accordance with Section 27.3 (*Financing Term Sheet & the Financing Amendment Term Sheets*);
- (c) only in the event of Termination due to Implementing Agency Event of Default or Termination due to Political Event, penal interest or charges payable under the Financing Documents to the Financiers;

Financing Term Sheet shall have the meaning ascribed thereto in Section 27.3.1;

Financing Termination Date means the date on which no part of the Financing Due is outstanding and all amounts due and payable by the Private Partner to the Financiers are paid in accordance with the Financing Documents, as confirmed in writing by the Independent Auditor (in consultation with the Financiers), which shall be achieved no later than seven (7) years following the Substantial Completion Date;

First IA List shall have the meaning ascribed thereto in Section 6.1 (*Selection*);

First IE List shall have the meaning ascribed thereto in Section 5.1 (*Independent Engineer Selection*);

First Major Maintenance and Overlay means (as applicable):

- (a) in respect of Faisalabad-Chiniot Road, the Faisalabad-Chiniot First Major Maintenance and Overlay; and
- (b) in respect of the Chiniot-Sargodha Road, the Chiniot-Sargodha First Major Maintenance and Overlay;

First Major Maintenance and Overlay Commencement Date means (as applicable):

- (a) in respect of Faisalabad-Chiniot Road, the Faisalabad-Chiniot First Major Maintenance and Overlay Commencement Date; and
- (b) in respect of the Chiniot-Sargodha Road, the Chiniot-Sargodha First Major Maintenance and Overlay Commencement Date;

First Major Maintenance and Overlay Expiry Date means (as applicable):

- (a) in respect of Faisalabad-Chiniot Road, the Faisalabad-Chiniot First Major Maintenance and Overlay Expiry Date; and
- (b) in respect of the Chiniot-Sargodha Road, the Chiniot-Sargodha First Major Maintenance and Overlay Expiry Date;

First Major Maintenance and Overlay Period means the period commencing on the First Major Maintenance and Overlay Commencement Date and expiring on the First Major Maintenance and Overlay Expiry Date;

Force Majeure Costs means all such costs that are directly attributable to, arise from and are a direct result of, in each case, a Force Majeure Event and shall include interest and principal payments under the Financing Documents that are in accordance with the Financing Term Sheets and the Financing

Amendment Term Sheets; any additional capital expenditures; any additional construction costs; any additional installation costs; and any additional operating costs; provided, however, for the purposes of determining such costs, information contained in the Financial Model shall be relied upon;

Force Majeure Event means the occurrence of any or all of the Non Political Events and/or the Political Events;

Force Majeure Notice shall have the meaning ascribed thereto in Section 21.2 (*Obligation to Notify*);

Force Majeure Period means, as determined by the Independent Engineer, the period commencing from the date of occurrence of a Force Majeure Event and ending on (a) the date on which the Affected Party resumes or should have resumed (as determined by the Independent Engineer) such of its obligations the performance of which it was excused in terms of Section 21.8 (*Excuse from Performance of Obligations*); or (b) the Termination Date; as applicable;

Good Industry Practice means those practices, methods, techniques, standards, skills, diligence and prudence which are generally and reasonably expected from a reasonably skilled and experienced operator engaged in the same type of undertaking as envisaged in respect of the Private Partner under this Agreement and acting generally in accordance with the provisions of the Applicable Laws, and would mean good engineering practices in the design, engineering, installation, construction and project management and which would be expected to result in the performance of its obligations by the Private Partner and in the operation and maintenance of the Project in accordance with the Applicable Standards. “Good Industry Practices” are not limited to optimum practices, methods, techniques, standards, skills, diligence, prudence or acts to the exclusion of all others, but rather are a spectrum of possible practices, methods, techniques, standards, skills, diligence, prudence or acts which could have been expected to accomplish the desired result at reasonable cost consistent with reliability and safety;

GoPB means the Government of Punjab, its respective departments or any other authorities, agencies and instrumentalities functioning under the direction or control of the Government of Punjab, and its administrators, successors and permitted assigns;

Government Agency(ies) means the Government of Pakistan, the Government of Punjab, any governmental department, commission, board, body, bureau, agency, instrumentality, court or other judicial or administrative body having jurisdiction over the Private Partner, the Project, Project Site, the Concession Assets or any part thereof, or the performance of all or any of the services or obligations of the Private Partner under or pursuant to this Agreement;

Handover List shall have the meaning ascribed thereto in Section 25.1 (*Liability for defects during Exit Implementation Period*);

Implementing Agency means the Communication and Works (C&W) Department of the Government of Punjab and its officials, administrators, successors and permitted assigns;

Implementing Agency Agreements means:

- (a) this Agreement;
- (b) the Project Site Licence Agreement;
- (c) the Concession Direct Agreement;
- (d) the Escrow Agreement; and

- (e) any other agreement entered into in respect of the Project between the:
 - (i) Implementing Agency; and
 - (ii) Private Partner and/or the Financiers and/or the Sponsor in respect of the Project and designated as a “*Implementing Agency Agreement*” with the written consent of the Implementing Agency;

Implementing Agency Conditions Precedent shall have the meaning ascribed thereto in Section 3.1 (*Conditions Precedent*);

Implementing Agency Default Termination Amount shall have the meaning ascribed thereto in SCHEDULE T (*Termination Payments*);

Implementing Agency Event of Default shall have the meaning ascribed thereto in Section 22.2.1 (*Implementing Agency Event of Default*);

Implementing Agency Indemnified Persons shall have the meaning ascribed thereto in Section 9.1 (*General Indemnity*);

Implementing Agency Overriding Power Event shall have the meaning ascribed thereto in Section 8.9 (*Implementing Agency Overriding Powers*);

Implementing Agency Remedy Amount shall have the meaning ascribed thereto in Section 18.2.3;

Implementing Agency Remedy Invoice shall have the meaning ascribed thereto in Section 18.2.3;

Implementing Agency Representative means the representative of the Implementing Agency appointed by the Implementing Agency for purposes of this Agreement in accordance with Section 8.8 (*Implementing Agency Representative*);

Implementing Agency Windfall shall bear the meaning ascribed thereto 17.4.4;

Indemnified Party shall have the meaning ascribed thereto in Section 9.3 (*Notice and Contest of Claims*);

Indemnifying Party shall have the meaning ascribed thereto in Section 9.3 (*Notice and Contest of Claims*);

Independent Auditor means the auditor appointed in respect of the Project in accordance with Article 5 (*Independent Engineer & Independent Auditor*) and in terms of the Independent Auditor Contract;

Independent Auditor Appointment Term shall have the meaning ascribed thereto in Section 5.7 (*Term of Appointment of the Independent Auditor*);

Independent Auditor Contract means the contract to be entered into between the Implementing Agency, the Private Partner, the Independent Auditor and any other Person agreed by the Parties in accordance with Article 5 (*Independent Engineer & Independent Auditor*);

Independent Auditor Payments shall have the meaning ascribed thereto in Section 5.10 (*Independent Auditor Remuneration*);

Independent Engineer means the engineer appointed in respect of the Project in accordance Article 5 (*Independent Engineer & Independent Auditor*) and in terms of the Independent Engineer Contract;

Independent Engineer Appointment Term shall have the meaning ascribed thereto in Section 5.2 (*Term of Appointment of the Independent Engineer*);

Independent Engineer Contract means the contract to be entered into between the Implementing Agency, the Private Partner, the Independent Engineer and any other Person agreed by the Parties, in accordance with Article 5 (*Independent Engineer & Independent Auditor*);

Independent Engineer Payments shall bear the meaning ascribed thereto in Section 5.5 (*Independent Engineer Remuneration*);

Indicative Independent Engineer Terms of Reference means the duties, functions and the scope of work to be performed by the Independent Engineer, as indicatively attached herewith as **SCHEDULE N** (*Indicative Independent Engineer Terms of Reference*); provided, however, upon execution of the Independent Engineer Contract, the scope of work of the Independent Engineer set out therein shall be deemed to replace **SCHEDULE N** (*Indicative Independent Engineer Terms of Reference*);

Initial Forecasted Revenue shall mean the total revenue expected to be generated from the Project in each Operational Year following Commercial Operations Date, as set out in the Base Case Financial Model;

Installation Completion shall have the meaning ascribed thereto in Section 14.13.1;

Installation Completion Check List Items shall have the meaning ascribed thereto in Section 14.11.1;

Installation Completion Date shall have the meaning ascribed thereto in Section 14.13.1;

Installation Completion Schedule means the schedule attached herewith as **SCHEDULE E** (*Project Completion Schedule*) setting out:

- (a) the Scheduled Installation Completion Date;
- (b) the Installation Milestones;

Installation Inspection Report has the meaning ascribed thereto in Section 13.9.2;

Installation Period Insurances means the Insurances procured and / or obtained by the Private Partner pursuant to the provisions of and in accordance with Section 20.1 (*Construction Period and Installation Period Insurances*) and **PART II** (*Installation Period Insurances*) **OF SCHEDULE I** (*Insurances*);

Installation Period means the period commencing on the Commencement Date and ending on the Installation Completion Date;

Installation Requirements means the relevant standards, requirements, criterion and timelines (as applicable) that are set out in relation to and are applicable to the Installation Works as set out in **SCHEDULE V** (*Installation Works*), provided, however, in the event of any discrepancy in the standards, requirements, criterion and timelines (as applicable) set out in the abovementioned, the most stringent standards, requirements, criterion and timelines (as applicable), as contained in any of the abovementioned, shall apply (unless otherwise mutually agreed between the Parties);

Installation Time For Completion shall mean the time permitted herein for performance and completion of Installation Works and all other obligations to be performed by the Private Partner until issuance of the Final Installation Completion Certificate, as set out in and contemplated by the Applicable Standards, including the completion of Installation Works on or prior to the Installation Completion Date;

Installation Works means all obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner in relation to the installation of weighbridges and the ETTMS on the Faisalabad Chiniot Road and the Chiniot Sargodha Road until the Installation Completion Date pursuant to the Applicable Standards including, *inter alia*, the obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner in respect of the activities consisting of, and for achievement of, the Installation Works on or prior to the Installation Completion Date;

Insurances means all insurances, reinsurance, agreements of insurance and reinsurance and / or arrangement for insurance and / or reinsurance in relation to the Project, the Concession Assets, the Construction Works, the Installation Works and / or any part or portion thereof procured or to be procured by the Private Partner, including but not restricted to the Construction Period Insurances, the Installation Period Insurances and the Operations Period Insurances;

Invested Equity means the aggregate of funds invested by the Sponsors and shareholders of Private Partner for funding of the Sponsor Base Equity Amount in accordance with this Agreement;

Lapse of Consent means any Private Partner Permit:

- (a) ceasing to remain in full force and effect and not being renewed or replaced within the time period prescribed by the Applicable Laws for the renewal or replacement of such Private Partner Permit or, where a time period is not prescribed by the Applicable Laws, within sixty (60) days of such Private Partner Permit ceasing to be in full force and effect, or
- (b) (other than a Specified Private Partner Permit) not being issued upon application having been properly and timely made and diligently pursued within the time period prescribed by the Applicable Laws or where a time period is not prescribed by the Applicable Laws, within sixty (60) days of proper application being made for such Private Partner Permit; or
- (c) being made subject, upon renewal, or otherwise, to any terms or conditions that materially and adversely affect the Private Partner's (or a Contractor's) ability to perform its obligations under any document included within Implementing Agency Agreements and/or the Project Agreements,

in each of the above instances despite such party's compliance with the applicable procedural and substantive requirements as applied in a "*non-discriminatory*" (as explained in Section 8.3.2) manner;

Licence shall have the meaning ascribed thereto in Section 4.1 (*Licence*);

Losses means any loss, damage, liability, payment and obligation (excluding any indirect or consequential loss, damage, liability, payment or obligation), and all expenses (including, without limitation, reasonable legal fees);

Loss of Toll Revenues means the loss of Toll Revenues (as certified by the Independent Auditor and the Independent Engineer) from a relevant Relief Event including a Competing Route Relief Event, Alternative Route Relief Event and a Toll Notification Relief Event which shall be the lower of:

- (a) the difference between (i) the estimated Toll Revenue (excluding fees for overweight vehicles), calculated by multiplying the annual vehicle-category-wise traffic volumes as per the Base Case Financial Model and (ii) the Actual Project Revenues collected by the Private Partner during such period; or
- (b) the difference between (i) the average of two (2) years (immediately preceding the abovementioned Relief Event) of traffic data for each vehicle category multiplied by the traffic growth (calculated based on (a) if available, the actual traffic growth rate on the Project Road in the last twenty four (24) months Date or (b) if actual traffic growth rate is not available because less than two (2) years have lapsed since Commercial Operations Date and the applicable toll rates; and (ii) the actual toll revenues collected by the Private Partner during such period;

Main Body means this Agreement *excluding* the Schedules;

Maintenance Requirements means maintenance requirements for the maintenance of the Project, as prescribed by the Applicable Standards;

Major Maintenance and Overlay shall have the meaning ascribed thereto in the O&M Manual;

Major Maintenance and Overlay Costs shall have the meaning ascribed thereto in Section 19.12.4;

Major Maintenance and Overlay Costs Funding Date means in respect of the First Major Maintenance and Overlay Period and the Second Major Maintenance and Overlay Period, the date falling three (3) months prior to the First Major Maintenance and Overlay Commencement Date and the Second Major Maintenance and Overlay Commencement Date, respectively;

Major Maintenance and Overlay Milestone means the progressive milestones relating to the performance of the Major Maintenance and Overlay and the dates for achievement of each such milestone, as set out in the Approved Major Maintenance and Overlay Programme;

Major Maintenance and Overlay Milestone Certificate means the certificate issued by the Independent Engineer certifying completion of a Major Maintenance and Overlay Milestone and achievement of the corresponding Major Maintenance and Overlay Milestone Date;

Major Maintenance and Overlay Milestone Date means each date of achievement of a Major Maintenance and Overlay Milestone, as certified by the Independent Engineer in the relevant Major Maintenance and Overlay Milestone Certificate;

Major Maintenance and Overlay Milestone Payment means the payment to be made by the Private Partner upon achievement of a Major Maintenance and Overlay Milestone and achievement of the corresponding Major Maintenance and Overlay Milestone Date;

Major Maintenance and Overlay Payment Account means the account to be established by the Private Partner and Notified to the Implementing Agency as a Private Partner Condition Subsequent;

Major Maintenance and Overlay Payment Account Standing Instructions shall have the meaning ascribed thereto in Section 19.14(b);

Major Maintenance and Overlay Payment Account Bank shall mean the bank mutually agreed between the Private Partner and the Implementing Agency for the purposes of establishing the Major Maintenance and Overlay Payment Account;

Major Maintenance and Overlay Period means the First Major Maintenance and Overlay Period and/or the Second Major Maintenance and Overlay Period;

Management Performance Measures shall have the meaning ascribed thereto in Section 6 (*Management Performance Measures*) of **SCHEDULE H (O&M Requirements)**;

Material Adverse Effect means, in the opinion of the Independent Engineer (in respect of technical matters) and/or in the opinion of the Independent Auditor (in respect of financial matters), there has occurred or could reasonably be expected to occur an effect, event, matter or circumstance or a change in the circumstances which materially and adversely impairs:

- (a) the business, operations, property, assets, present or future condition (financial or otherwise) or prospects of any Project Party in respect of the Project;
- (b) the ability or probability (financial or otherwise) of any Project Party to perform and observe its respective obligations under the Project Agreements;
- (c) the legality, validity or enforceability of, or the rights, obligations or remedies of, the Implementing Agency under this Agreement; and/or
- (d) the Private Partner's ability to implement, design, finance, construct, install, operate and maintain the Project in accordance with the terms of the Project Agreements;

Material Adverse Impediment shall have the meaning ascribed to it in Section 4.15.1;

Material Breach means breach by either Party or Sponsor of any of its /their obligations under the Implementing Agency Agreements which has/is likely to have a Material Adverse Effect on the Project and which such breaching Party shall have failed to cure by the date falling forty-five (45) days following the date of receipt of a notice issued by the non-breaching Party to the breaching Party to cure such breach;

Material Breach of O&M Requirements shall have the meaning ascribed to it in Section 19.4.1;

Material Impediment Removal Period shall have the meaning ascribed to it in Section 4.15.2;

Minimum Equity Ratio means the minimum requirement for Equity contribution to the Project, which shall be no less than thirty percent (30%) of the Estimated Project Cost as reflected in the Base Case Financial Model;

Minimum Indemnification Amount means the amount equal to PKR 5,000,000/- (Pakistani Rupees five million only) that a Party's claims for indemnification pursuant to Article 9 (*Indemnities & Limitation of Liabilities*) must exceed in the aggregate before that Party will be entitled to indemnification;

Minimum Revenue Guarantee means in respect of each Operational Year occurring prior to the Financing Termination Date, an amount equal to fifty percent (50%) of the difference between: (a) ninety percent (90%) of the Benchmark Revenue for such Operational Year; and (b) the Actual Project Revenues for such Operational Year, to the extent that Actual Project Revenues are less than such ninety percent (90%) of the Benchmark Revenue, as determined in accordance with this Agreement, provided

that the Minimum Revenue Guarantee shall be payable exclusively through the Debit Authority in accordance with Sections 8.12.3 and 8.12.4 and only to the extent of any shortfall in the debt servicing obligations of the Private Partner for the relevant quarter;

Minimum Revenue Share shall bear the meaning ascribed thereto in Section 17.4.2;

New IA List shall have the meaning ascribed thereto in Section 6.2.3;

New IE List shall have the meaning ascribed thereto in Section 5.2.3;

New O&M Performance Guarantee shall have the meaning ascribed to it in Section 11.3.8;

New Operational Year shall have the meaning ascribed to it in Section 11.3.8;

Non Political Event shall bear the meaning ascribed thereto in Section 21.1.1(b);

Non Political Event Termination Amounts shall have the meaning ascribed thereto in **SCHEDULE T (Termination Payments)**;

Notice, Notify, Notification and its grammatical variations shall mean as notified in writing;

Notice of Remedy shall have the meaning ascribed thereto in Section 18.2.1;

O&M Component means the component of Toll Revenues that relates to the operations and maintenance expenses, as set out in the Financial Model and as adjusted from time to time for inflation in accordance with the Financial Model;

O&M Contract means the contract entered into or that may be entered into by the Private Partner in accordance with this Agreement for the provision of the Operation and Maintenance in accordance with O&M Requirements and the O&M Manual;

O&M Contractor means the Person of good repute with whom the Private Partner has entered into or may enter into the O&M Contract;

O&M Documents means all such reports, records, surveys, plans, analyses, calculations, manuals, operating procedures, guides and manuals, updated 'as built' drawings and documentation of any nature prepared, updated and submitted by the Private Partner in connection with the Operations and Maintenance to the Implementing Agency, the Independent Engineer and/or the Independent Auditor pursuant to the Applicable Standards and pursuant to any requests made in accordance with the Applicable Standards by the Implementing Agency, the Independent Engineer and/or the Independent Auditor from time to time;

O&M Inspection Report has the meaning ascribed thereto in Section 19.22.2;

O&M Manual shall have the meaning ascribed thereto in Section 19.7 (*O&M Manual*);

O&M Monthly Status Report shall have the meaning ascribed thereto in Section 19.21.1;

O&M Performance Guarantee means a first demand irrevocable and unconditional guarantee, issued by a scheduled bank in Pakistan (with a minimum long term credit rating of at least 'AA-' as rated by JCR VIS or an equivalent rating by PACRA) acceptable to the Implementing Agency in an amount equal to ten percent (10%) of the estimated Operation and Maintenance cost for the relevant Operational Year, as set out in the approved O&M Programme for such Operational Year and reflected in the

Financial Model, furnished by the Private Partner to secure the due and proper performance of its Operation and Maintenance obligations under this Agreement;

O&M Performance Guarantee Expiry Date shall have the meaning ascribed thereto in Section 11.3.7;

O&M Programme shall have the meaning ascribed thereto in Section 18.8.2;

O&M Requirements means the relevant standards, requirements, criterion and timelines (as applicable) that are set out in relation to and are applicable to the Operation and Maintenance, as set out in:

- (a) the Main Body;
- (b) the Scope of the Project;
- (c) the **SCHEDULE H (O&M Requirements)**;
- (d) the O&M Manual;
- (e) the Safety Requirements;
- (f) the AASHTO Standards (to the extent adopted by the Implementing Agency in the “C&W Road and Bridges Specifications, 2022 ASTM AASHTO-LRFD (Latest Edition)”), being the requirements applicable in respect of matters relating to the Concession Assets;
- (g) the **SCHEDULE G (List of Tests & Completion Tests)**;
- (h) in respect of each Operational Year following Substantial Completion Date, the O&M Programme prepared for such Operational Year in accordance with Section 19.8 (*O&M Programme*); and
- (i) any other standards, requirements, criterion and timelines (as applicable), mutually agreed between the Parties from time to time,

provided, however, in the event of any discrepancy in the standards, requirements, criterion and timelines (as applicable) set out in the abovementioned, the most stringent standards, requirements, criterion and timelines (as applicable), as contained in any of the above-mentioned, shall apply (unless otherwise agreed between the Parties);

O&M Tests shall have the meaning ascribed thereto in Section 19.23 (*O&M Tests*);

O&M Time For Completion means the time permitted herein for performance and completion of Operations and Maintenance and all other obligations to be performed by the Private Partner during the Operations Period, as set out in and contemplated by the Applicable Standards and each O&M Programme, including, performance and completion of each Project O&M Milestone on or prior to its Project O&M Milestone Date;

Operation and Maintenance or **Operate and Maintain** means all obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner during the Operations Period pursuant to the Applicable Standards including (a) the preparation, completion and delivery of all O&M Documents; (b) the operation and maintenance of the Concession Assets during the Operations Period; (c) functions of operations, maintenance, traffic movement, safety

measurements etc. and performance of other services and obligations incidental thereto; and (d) achievement of Project O&M Milestones;

Operational Performance Measures shall have the meaning ascribed thereto in Section 5 (*Operational Performance Measures*) of **SCHEDULE H (O&M Requirements)**;

Operational Year means a period of one (1) year commencing on each consecutive anniversary of the Commercial Operations Date and ending as of the end of the day preceding the next anniversary of the Commercial Operations Date, except for the first (1st) Operational Year which shall start on the Commercial Operations Date;

Operations Period means (as applicable):

- (a) in respect of Faisalabad-Chiniot Road, the Faisalabad-Chiniot Operations Period; and
- (b) in respect of the Chiniot-Sargodha Road, the Chiniot-Sargodha Operations Period;

Operations Period Insurances means the Insurances procured and / or obtained by the Private Partner pursuant to the provisions of and in accordance with Section 20.2 (*Operations Period Insurances*) and **PART III (Operations Period Insurances) OF SCHEDULE I (Insurances)**;

Parties shall have the meaning ascribed thereto in the Preamble;

Permitted Events means:

- (a) Force Majeure Events;
- (b) Implementing Agency Events of Default;
- (c) Emergency Decommissioning, to the extent the same does not result from reasons attributable to the Private Partner;
- (d) Material Adverse Impediment, to the extent the same does not result from reasons attributable to the Private Partner;
- (e) a Change in Law causing a delay in the performance of the Private Partner's obligations under this Agreement;
- (f) the occurrence of the circumstances set out in Section 4.9 (*Geological and Archaeological Finds*) causing a delay in the performance of the Private Partner's obligations under this Agreement; and
- (g) the occurrence of the Implementing Agency Overriding Power Event, to the extent the same does not result from reasons attributable to the Private Partner;

Persistent Breach of O&M Requirements shall have the meaning ascribed to it in Section 19.4.1(e);

Person means any individual, firm, company, corporation, society, partnership (whether or not having a separate legal personality), joint venture, trust, unincorporated organization, government state, association or Government Agency or any other legal entity and shall include successors and assigns;

Political Event shall have the meaning ascribed thereto in Section 21.1.1(a);

Political Event Termination Amounts shall have the meaning ascribed thereto in **SCHEDULE T (Termination Payments)**;

Preservation Costs shall have the meaning ascribed thereto in Section 18.3.4;

Private Partner shall have the meaning ascribed thereto in the Preamble;

Private Partner Advertising Plan shall have the meaning ascribed thereto in Section 29.1 (*Advertising & Advertising Revenues*);

Private Partner Authorized Representative shall have the meaning ascribed thereto in Section 7.4.1;

Private Partner Conditions Precedent shall have the meaning ascribed thereto in Section 3.1.2 (*Conditions Precedent*);

Private Partner Default Termination Amount shall have the meaning ascribed thereto in **SCHEDULE T (Termination Payment)**;

Private Partner Engaged Persons means the each of the Private Partner's representatives (including the Private Partner Authorized Representative and the Private Partner Project Engineer), agents, executives, contractors, employees, subcontractors, vendors, suppliers, parties with whom it has entered into the Project Agreements, Contractors and other personnel, in each case, that are engaged, hired, appointed, contracted (directly or indirectly) by the Private Partner for the performance of Project Works or any part thereof;

Private Partner Event of Default shall have the meaning ascribed thereto in Section 22.1 (*Private Partner Event of Default*);

Private Partner Indemnified Persons shall have the meaning ascribed thereto in Section 9.1.2;

Private Partner Preliminary Notice shall have the meaning ascribed thereto in Section 23.2 (*Termination for Implementing Agency Event of Default*);

Private Partner Project Engineer shall have the meaning ascribed thereto in Section 7.4.1;

Private Partner's Ownership And Management Control means, with respect to the Private Partner, the ownership, directly or indirectly, legal or beneficial, of 100% (one hundred per cent) of the Shares; and the power to direct the management, policies and all decisions, in each case, of the Private Partner, whether by operation of law or by contract or otherwise;

Private Partner Permits means all such approvals, consents, authorizations, notifications, concessions, acknowledgements, Licences, permits, decisions or similar items which is or are issued by a Government Agency and which the Private Partner is or its Contractors are required to obtain from any Governmental Implementing Agency and thereafter to maintain to fulfil its obligations under the Implementing Agency Agreements, including the Specified Private Partner Permits; provided, however, that in no event shall the Private Partner Permits include any concessions or exemptions from the Applicable Laws unless they are expressly granted pursuant to the terms of the Implementing Agency Agreements;

Project means each of the following activities, as performed (in each case) in accordance with this Agreement:

- (a) the ownership and possession of the Concession Assets;

- (b) the design and detailed design, engineering, financing, construction, installation, procurement, permitting, testing and commissioning of, in each case, the Concession Assets;
- (c) the procurement and contracting for goods, equipment and services for the Concession Assets;
- (d) the insuring and Operation and Maintenance of the Concession Assets;
- (e) the making available, on a continuous basis, of the Concession Assets for the Users;
- (f) payments by the Parties of amounts due and payable under this Agreement;
- (g) the recruitment, employment and training of staff for the Concession Assets;
- (h) the transfer of the Concession Assets to the Implementing Agency on the Transfer Date;
- (i) all activities incidental or related to any of the above;

Project Agreements means:

- (a) this Agreement;
- (b) the Financing Documents;
- (c) the O&M Contract;
- (d) the Construction Contract;
- (e) any other material contract entered into or to be entered into by the Private Partner at any time after the Effective Date in connection with the Project and designated as a “Project Agreement” with the consent of the Implementing Agency;

Project Construction Completion shall have the meaning ascribed thereto in Section 14.7.1;

Project Construction Completion Check List shall have the meaning ascribed thereto in Section 14.3.2;

Project Construction Completion Check List Items shall have the meaning ascribed thereto in Section 14.4.1;

Project Construction Completion Date shall have the meaning ascribed thereto in Section 14.7.1;

Project Construction Completion Schedule means the schedule attached herewith as **SCHEDULE E** (*Project Construction Completion Schedule*) setting out:

- (c) the Scheduled Project Construction Completion Date;
- (d) the Scheduled Substantial Completion Date;
- (e) the Project Construction Milestones;

Project Construction Milestones means the progressive milestones relating to the performance of Construction Works and other obligations to be performed by the Private Partner until the Project Construction Completion Date and the dates for achievement of each such milestone, as set out in:

- (a) this Agreement; and
- (b) the Construction Programme;

Project Construction Milestone Date means the date permitted herein for achievement of each Project Construction Milestone, as set out and contemplated (in respect of each Project Construction Milestone) in:

- (a) the Applicable Standards;
- (b) the Construction Programme;

Project Variation Guarantee shall have the meaning ascribed thereto in Section 8.13.1.

Project Facilities means the facilities to be constructed, built, installed, erected and / or provided by the Private Partner on the Project Site, as detailed in **SCHEDULE D (Project Facilities)**;

Project Manager means the project manager of the Project Management/Implementation Unit, appointed by the Implementing Agency for purposes of this Agreement;

Project Management/Implementation Unit means the project management/implementation unit established by the Implementing Agency in accordance with the Applicable Laws for the purpose of overseeing the day to day implementation of the Project in accordance with the terms of this Agreement and Applicable Laws, particularly during the Construction Period and Installation Period, and shall be headed by the Project Manager;

Project Milestone means:

- (a) in respect of Construction Works, the Project Construction Milestones;
- (b) in respect of the Operations and Maintenance, the Project O&M Milestones;

Project Milestone Date shall mean:

- (a) in respect of a Project Construction Milestone, the respective Project Construction Milestone Date for such Project Construction Milestone;
- (b) in respect of a Project O&M Milestone, the respective Project O&M Milestone Date for such Project O&M Milestone;

Project O&M Milestones means the progressive milestones relating to the performance and completion of Operation and Maintenance that are to be achieved by the Private Partner pursuant to the Applicable Standards during an Operational Year of the Operation Period, as set out in:

- (a) the Applicable Standards and specifications;
- (b) the O&M Programme for such Operational Year;

Project O&M Milestone Date means the date permitted herein for achievement of each Project O&M Milestone, as set out and contemplated (in respect of each Project O&M Milestone) in:

- (a) the Applicable Standards; and
- (b) the O&M Programme;

Project Party means the Private Partner, the Sponsor and / or any Contractor, as the case may be;

Project Road means the approximately sixty eight and a half (68.5) kilometre long road for which the start point is located in Faisalabad and ends at Sargodha as more particularly described and indicated in the **SCHEDULE F (Project Site)** including bridges, culverts and other appurtenances thereto, which shall form part of the Concession Assets and shall be developed in accordance with the Applicable Standards, provided further that the exact length of the Project Road shall be determined following the completion of detailed design;

Project Requirements means the Design Requirements, the Construction Requirements, the Installation Requirements and the O&M Requirements, as applicable;

Project Site means the site on which the Project is to be implemented comprising of the immovable property including the right of way on which the Project Facilities and the Project Road are to be constructed, built, installed, erected and / or provided by the Private Partner, in accordance with the terms of this Agreement, as demarcated in the map attached hereto in **SCHEDULE F (Project Site)**;

Project Site Conditions shall have the meaning ascribed to it in Section 4.4.1;

Project Site Licence Agreement means the agreement of Licence (in the form agreed between the Parties) to be entered into between the Implementing Agency and the Private Partner pursuant to which the Implementing Agency shall Licence the land comprising the Project Site to the Private Partner;

Project Works means all obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner pursuant to the Applicable Standards and shall include:

- (a) the Construction Works and all obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner until the Project Construction Completion Date;
- (b) the Operations and Maintenance and all obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner during the Operations Period;
- (c) the Installation Works and all obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner until the Installation Completion Date;

PKR or Pak Rupees means the lawful currency of the Islamic Republic of Pakistan;

Proportionate Basis shall mean the revenue shared in accordance with percentage set-out in the Base Case Financial Model;

Proposed Detailed Design shall have the meaning ascribed thereto in Section 12.5.3;

Proposed Construction Programme shall have the meaning ascribed thereto in Section 13.2.1;

Proposed Completion Tests Date shall have the meaning ascribed thereto in Section 14.1.1;

Proposed Major Maintenance and Overlay Contract(s) shall have the meaning ascribed thereto in Section 19.11.2(b);

Proposed Major Maintenance and Overlay Programme shall have the meaning ascribed thereto in Section 19.11.2(a);

Proposed O&M Programme shall have the meaning ascribed to it in Section 19.8.1;

Protected Assets shall have the meaning ascribed thereto in Section 8.10.1(b);

Public-Private Partnership means public-private partnership as ascribed in Act 2025;

Public Sector Entity means the Implementing Agency, or any federal, provincial, district or local government, ministry, department, commission, board, body, bureau, agency, Implementing Agency, instrumentality, Court or other statutory, regulatory, judicial or administrative body, having jurisdiction over the Private Partner, the Concession Assets, the Project Site, or any portion thereof, or the performance of all or any of the services or obligations of the Private Partner under or pursuant to this Agreement;

Relief Costs means the increase in such capital expenditures and costs and/or the operating costs, in each case, that are set out in the Financial Model and which directly result from a Relief Event (excluding such Relief Events that are set out in Section 15.2.1 (f) and (g)), as determined by the Independent Engineer and the Independent Auditor pursuant to Article 15 (*Relief Extensions & Relief Compensations*) and which are set out in the Relief Order; provided, however, for the purposes of determining such costs, information contained in the Financial Model shall be relied upon by the Independent Engineer and the Independent Auditor;

Relief Event(s) shall have the meaning ascribed thereto in Section 15.2.1;

Relief Order means a written order jointly issued by the Independent Auditor and the Independent Engineer to the Parties pursuant to Article 15 (*Relief Orders*) authorizing an extension of Time For Completion and/or payment of Relief Costs in accordance with Article 15 (*Relief Extensions & Relief Compensations*);

Relief Order Proposal shall have the meaning ascribed thereto in Section 15.4.1;

Relief Order Request shall have the meaning ascribed thereto in Section 15.2.1;

Remedy Event shall have the meaning ascribed thereto in Section 18.2.1;

Remedy Time Period shall have the meaning ascribed thereto in Section 18.2.1;

Revenue Sharing Period shall mean the period commencing on the Commercial Operations Date (in respect of the Chiniot Sargodha Road) and ending on the Toll Collection End Date;

RFP shall have the meaning ascribed thereto in Recital B above;

Safety Requirements means the arrangements and procedures for conducting safety related measures in respect of the Concession Assets, as set out in the O&M Manual;

SBP means the State Bank of Pakistan, established under the State Bank of Pakistan Act, 1956 (Act No. XXXII of 1956);

Scheduled Commencement Date means the date falling one-hundred-eighty (180) days after the Effective Date, as may be extended from time to time in accordance with this Agreement;

Scheduled Installation Completion Date shall have the meaning ascribed thereto in Section 14.11.2;

Scheduled Project Construction Completion Date shall have the meaning ascribed thereto in Section 14.4.2;

Scheduled Substantial Completion Date means the date falling twenty-four (24) months after the Commencement Date, as such date as may be extended from time to time in accordance with the terms of this Agreement solely pursuant to a Relief Order;

Scope of the Project means the scope of the Project, as set out in **SCHEDULE A** (*Scope of the Project*);

Second Major Maintenance and Overlay means (as applicable):

- (a) in respect of Faisalabad-Chiniot Road, the Faisalabad-Chiniot Second Major Maintenance and Overlay; and
- (b) in respect of the Chiniot-Sargodha Road, the Chiniot-Sargodha Second Major Maintenance and Overlay;

Second Major Maintenance and Overlay Commencement Date means (as applicable):

- (a) in respect of Faisalabad-Chiniot Road, the Faisalabad-Chiniot Second Major Maintenance and Overlay Commencement Date; and
- (b) in respect of the Chiniot-Sargodha Road, the Chiniot-Sargodha Second Major Maintenance and Overlay Commencement Date;

Second Major Maintenance and Overlay Expiry Date means (as applicable):

- (a) in respect of Faisalabad-Chiniot Road, the Faisalabad-Chiniot Second Major Maintenance and Overlay Expiry Date; and
- (b) in respect of the Chiniot-Sargodha Road, the Chiniot-Sargodha Second Major Maintenance and Overlay Expiry Date;

Second Major Maintenance and Overlay Period means the period commencing on the Second Major Maintenance and Overlay Commencement Date and expiring on the Second Major Maintenance and Overlay Expiry Date;

Service Levels shall have the meaning ascribed thereto in Section 19.10.1;

Service Levels Defect shall have the meaning ascribed thereto in Section 19.10.1;

Share(s) means share capital issued to the shareholders of the Private Partner (excluding the Implementing Agency) from time to time and shall be the main recipient of Base Case Equity IRR in accordance with this Agreement. Moreover, these shares shall be recipients of the Termination Payment

(if applicable in terms of this Agreement) as well; provided, however, for purposes of calculating the Termination Payment, the term “**Equity**” shall exclude all amounts comprising injections to the Equity effected after Project Construction Completion Date and Installation Completion Date; provided, that such amounts shall constitute Equity to the extent the same are part of the Estimated Project Cost and determined by the Independent Auditor to be part of the Total Project Cost;

Site Construction Works means all obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner at the Chiniot-Sargodha Road during the Construction Period pursuant to the Applicable Standards including, inter alia, the obligations, works, services and duties undertaken and/or performed and/or to be undertaken and/or performed by the Private Partner in respect of: (a) the procurement, construction, commissioning and completion of the Concession Assets (including all activities and obligations incidental thereto); (b) construction, alteration, up-gradation, repair, restoration, maintenance, extension, demolition or dismantling of buildings or structures, forming or to form, part of the Project Site, whether permanent or not, on which the Concession Assets shall be situated; and (c) performing all obligations and activities for performance and completion of each Project Construction Milestone; provided, however, “Site Construction Works” does not include any of the following work:

- (a) the drilling for, or extraction of, oil or natural gas;
- (b) the extraction (whether by underground or surface working) of minerals, including tunneling or boring, or constructing underground works, for that purpose;
- (c) clearance of the Project Site, to the extent such clearance is to be expressly performed by the Implementing Agency in accordance with the terms of this Agreement

Specific Requirements means:

- (a) in respect of Construction Works, the Construction Requirements; and
- (b) in respect of Operations and Maintenance, the O&M Requirements;
- (c) in respect of Installation Works, the Installation Requirements;

Specified Private Partner Permits means the Private Partner Permits set out in **SCHEDULE J** (*Specified Private Partner Permits*);

Sponsor means [*to be finalized after bidding*], being the shareholder of the Private Partner that is required, together with its Associates (if any), subject to the terms of this Agreement, to hold (directly and/or indirectly) one hundred percent (100%) of the total Equity of Shares;

Sponsor Base Equity Amount means the amount of Equity to be provided by the Sponsor as set out in the Financial Model, which must at all times satisfy the Minimum Equity Ratio;

Substantial Completion shall have the meaning ascribed thereto in Section 14.3.3;

Substantial Completion Certificate means the certificate issued by the Independent Engineer at the request of the Private Partner in accordance with Section 14.3 (*Substantial Completion Certificate*);

Substantial Completion Date shall have the meaning ascribed thereto in Section 14.3.3;

Suspension shall have the meaning ascribed thereto in Section 18.3.1;

Temporary Works means all temporary works of every kind (other than the Private Partner or its Contractor's equipment) required at the Project Site for the execution and completion of the permanent Construction Works and/or the Installation Works and the remedying of the Defects & Deficiencies;

Termination means the termination of this Agreement and the Concession hereunder upon the issuance of a Termination Notice in accordance with the terms hereof;

Termination Date means the date of issuance of the Termination Notice and this will be the date on which the actual Termination occurs following the Cure Period;

Termination Dividend Amount means the aggregate return on Equity for Shares for each of the three (3) Accounting Years of the Private Partner falling immediately after the Termination Date, the same being an amount equal to the aggregate of Termination Equity IRR applied to the Equity for each of the three (3) Accounting Years falling after the Termination Date; provided however, that in case the time period between the Termination Date and Final Expiry Date is less than three (3) Accounting Years, the Termination Dividend Amount shall be the aggregate of Termination Equity IRR applied to the Equity for each of the Accounting Years falling after the Termination Date;

Termination Equity means, as of the Transfer Date occurring due to Termination, the aggregate of the Invested Equity reduced on a straight-line basis from the Substantial Completion Date through the term of this Agreement to [*to be finalized based on equity contribution of successful bidders base case financial model*] of the Invested Equity;

Termination Equity IRR means the post-tax internal rate of return, the same being 17%, on the Equity;

Termination Notice means a notice to be issued in writing by a Party notifying the other Party of the Termination of this Agreement in accordance with the applicable provisions of this Agreement;

Termination Payment means:

- (a) in respect of Termination due to a Private Partner Event of Default, the Private Partner Default Termination Amount;
- (b) in respect of Termination due to a Corrupt Act, the Corrupt Act Termination Amount;
- (c) in respect of Termination due to a Implementing Agency Event of Default, the Implementing Agency Default Termination Amount;
- (d) in respect of Termination due to a Political Event, the Political Event Termination Amount;
- (e) in respect of Termination due to a Non Political Event, the Non Political Event Termination Amount;
- (f) in respect of Termination due to a Change in Law, the Change in Law Termination Amount;

Termination Payment Date means the date falling ninety (90) days following the Termination Date;

Time For Completion means (as applicable):

- (a) in respect of Construction Works, the Construction Time For Completion;
- (b) in respect of Operations & Maintenance, the O&M Time For Completion; and

(c) in respect of Installation Works, the Installation Time for Completion;

Toll(s) means the amount of money determined, levied, imposed, demanded, charged, collected, retained and appropriated by the Private Partner and/or to be determined, levied, demanded, charged, collected, retained and appropriated by the Private Partner, including fees collected from overweight vehicles, from the Users of the Concession Assets (except the Exempted Vehicles) (including fines for any weigh bridges and vehicles above the permissible weight, or other commercial rights) or part thereof as the fee for the use of the Concession Assets or part thereof, commencing from the Commercial Operations Date (unless otherwise mutually agreed between the Parties) until the Toll Collection End Date. The words “Toll”, “Tolling”, “Tolled” and other grammatical variations of the word “Tolls” shall be construed accordingly;

Toll Collection End Date shall mean the date on which the Private Partner’s right to collect Toll in terms of this Agreement shall stand cancelled and shall cease to exist, such date being:

- (a) In case this Agreement is not terminated prior to the Final Expiry Date, the Final Expiry Date;
- (b) In case this Agreement is terminated prior to the Final Expiry Date and during the period when Financing Due is outstanding, the Transfer Date;
- (c) In case this Agreement is terminated prior to the Final Expiry Date and during the period when no Financing Due is outstanding, the Toll Collection End Date shall be: (i) in case the PPP Contract is terminated due to Implementing Agency Event of Default, the Transfer Date; or (ii) in case the PPP Contract is terminated due to Private Partner Event of Default, Force Majeure or Corrupt Act, the Termination Date.

Toll Concession shall mean all concessions and rights granted to the Private Partner hereunder and under the Implementing Agency Agreements in relation to Toll and all matters relating to the same including determination, levying, imposing, demanding, charging, collection, retention and appropriation of the same by the Private Partner from the Commercial Operations Date until the Trigger Date.

Toll Notification Structure means the structure for imposition and adjustments in the Toll and the list of exempted vehicles, as specifically contemplated by **SCHEDULE P (Toll Notification Structure)**;

Toll Notification has the meaning ascribed thereto in Section 17.5.1;

Toll Notification Date has the meaning ascribed thereto in Paragraph No. 2 of Schedule P (*Toll Notification Structure*);

Toll Notification Event has the meaning ascribed thereto in Section 17.5.2;

Toll Notification Relief Event shall bear the meaning ascribed thereto in Section 17.5.2;

Toll Operations Manual has the meaning ascribed thereto in Section 17.2.2;

Toll Revenues means all income derived by the Private Partner from the Project from collection of the Tolls;

Toll Progress Report shall bear the meaning ascribed thereto in Section 17.3;

Total Project Cost means the actual capital cost of the Project upon completion of the Project, as certified by the Independent Auditor; provided, that the same shall not include (unless otherwise agreed with the Implementing Agency) the Additional Cost;

Transfer Date means:

- (i) in case of early Termination of this Agreement prior to the Final Expiry Date, the Termination Payment Date subject to the Implementing Agency making payment of the relevant Termination Payment to the Private Partner on or prior to such date or the date on which the Termination Payment is actually made;
- (ii) in case of achievement of Final Expiry Date pursuant to this Agreement, the Final Expiry Date;

Trigger Date means and includes, the Final Expiry Date and / or the Termination Date, as the case may be;

Unpaid Implementing Agency Amount shall have the meaning ascribed thereto in Section 17.4.5;

Unpaid Termination Equity Amount shall have the meaning ascribed thereto in Section 23.5.2;

User means the Person who traverses or travels over or on the Concession Assets or any portion thereof;

Utilities Affected Assets shall have the meaning ascribed thereto in Section 4.12.2;

Utility Proceeds shall have the meaning ascribed to it Section 4.12.3;

Vacant Possession means delivery to the Private Partner by the Implementing Agency of possession of the Project Site in accordance with this Agreement and in accordance with Applicable Laws, free from all Encumbrances, encroachments, existing trees and the grant of all Easementary Rights and all other rights appurtenant thereto, so that the Private Partner enjoys complete uninterrupted and quiet possession and control of the Project Site throughout the Concession Period; and

Vesting Certificate shall have the meaning ascribed thereto in Section 24.4 (*Vesting Certificate*).

1.2 CONSTRUCTION

1.2.1 In this Agreement, unless the context otherwise requires:

- (a) references to any legislation or any provision thereof shall include amendment or re-enactment or consolidation of such legislation or any provision thereof so far as such amendment or re-enactment or consolidation applies or is capable of applying to any transaction entered into hereunder;
- (b) references to laws of Pakistan or Pakistan law or regulation having the force of law shall include the laws, acts, ordinances, rules, regulations, bye laws or notifications which have the force of law in the territory of Pakistan and as from time to time may be amended, modified, supplemented, extended or re-enacted;
- (c) the table of contents, headings or sub-headings in this Agreement are for convenience of reference only and shall not be used in, and shall not affect, the construction or interpretation of this Agreement;

- (d) the words “**include**” and “**including**” are to be construed without limitation and shall be deemed to be followed by “**without limitation**” or “**but not limited to**” whether or not they are followed by such phrases;
- (e) references to “**construction**” or “**building**” include, unless the context otherwise requires, investigation, design, developing, engineering, procurement, delivery, transportation, installation, processing, fabrication, testing, commissioning and other activities incidental to the construction, and “**construct**” or “**build**” shall be construed accordingly;
- (f) references to “**development**” include, unless the context otherwise requires, construction, renovation, refurbishing, augmentation, up-gradation and other activities incidental thereto, and “**develop**” shall be construed accordingly;
- (g) any reference to any period of time shall mean a reference to that according to Pakistan Standard Time;
- (h) any reference to day shall mean a reference to a calendar day as per the Gregorian Calendar;
- (i) references to a “**business day**” shall be construed as a reference to a day (other than a Sunday) on which banks in Pakistan are generally open for business;
- (j) any reference to month shall mean a reference to a calendar month as per the Gregorian calendar;
- (k) references to any date, period or Project Milestone shall mean and include such date, period or Project Milestone as may be extended pursuant to Relief Order;
- (l) any reference to any period commencing “**from**” a specified day or date and “**till**” or “**until**” a specified day or date shall include both such days or dates; provided, that if the last day of any period computed under this Agreement is not a business day, then the period shall run until the end of the next business day;
- (m) the words importing singular shall include plural and vice versa;
- (n) references to any gender shall include the other and the neutral gender;
- (o) “**indebtedness**” shall be construed so as to include any obligation (whether incurred as principal or surety) for the payment or repayment of money, whether present or future, actual or contingent;
- (p) references to the “**winding-up**”, “**dissolution**”, “**insolvency**”, or “**reorganization**” of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, reorganization, dissolution, arrangement, protection or relief of debtors;
- (q) save and except as otherwise provided in this Agreement, any reference, at any time, to any agreement, deed, instrument, Licence or document of any description shall be construed as reference to that agreement, deed, instrument, Licence or other document as amended, varied, supplemented, modified or suspended at the time of such reference; provided, that this sub-section shall not operate so as to increase liabilities or obligations of the Implementing Agency hereunder or pursuant hereto in any manner whatsoever;
- (r) any agreement, consent, approval, authorization, notice, communication, information or report required under or pursuant to this Agreement from or by any Party, the Independent Engineer or the

Independent Auditor shall be valid and effective only if it is in writing under the hand of a duly authorized representative of such Party, the Independent Engineer or the Independent Auditor, as the case may be, in this behalf and not otherwise;

- (s) the Schedules and Recitals to this Agreement form an integral part of this Agreement and will be in full force and effect as though they were expressly set out in the body of this Agreement;
- (t) references to Recitals, Articles, Sections, or Schedules in this Agreement shall, except where the context otherwise requires, mean references to Recitals, Articles, Sections, and Schedules of or to this Agreement, and references to a Paragraph shall, subject to any contrary indication, be construed as a reference to a Paragraph of this Agreement or of the Schedule in which such reference appears;
- (u) the damages (including the Construction Period Damages) payable by either Party to the other of them, as set forth in this Agreement, whether on per diem basis or otherwise, are mutually agreed genuine pre-estimated loss and damage likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty; and
- (v) time shall be of the essence in the performance of the Parties' respective obligations. If any time period specified herein is extended, such extended time shall also be of the essence.

1.2.2 The rule of construction, if any, that a contract should be interpreted against the parties responsible for the drafting and preparation thereof, shall not apply.

1.2.3 Any word or expression used in this Agreement shall, unless otherwise defined or construed in this Agreement, bear its ordinary English meaning and, for these purposes, the General Clauses Act 1897 shall not apply.

1.3 COSTS FOR DOCUMENTS

1.3.1 Unless expressly provided otherwise in this Agreement, any documentation required to be provided or furnished by the Private Partner to the Implementing Agency, the Independent Engineer and/or the Independent Auditor or any other relevant person so appointed or nominated by the Implementing Agency, the Financiers or any other person legally so required shall be provided free of cost and in three (3) copies, and if the Implementing Agency, the Independent Engineer and/or the Independent Auditor is required to return any such documentation with their comments and/or approval, they shall be entitled to retain two (2) copies thereof.

1.4 MEASUREMENTS AND ARITHMETIC CONVENTIONS

1.4.1 All measurements and calculations shall be in the metric system and calculations done to two (2) decimal places, with the third digit of five (5) or above being rounded up and below five (5) being rounded down.

1.5 PRIORITY OF AGREEMENTS, ARTICLES, SECTIONS AND SCHEDULES

1.5.1 This Agreement, and all other agreements and documents forming part of this agreement are to be taken as mutually explanatory and, unless otherwise expressly provided elsewhere in this Agreement, the priority of this Agreement and the other Implementing Agency Agreement and other documents and agreements forming part thereof or referred to therein shall, in the event of any conflict between them, be in the following order (unless otherwise agreed between the Parties):

- (a) this Agreement;
- (b) the Implementing Agency Agreements (other than this Agreement).

1.5.2 Subject to the provisions of Section 1.5.1, in the event of any ambiguity and / or discrepancies with regard to this Agreement, the following shall apply:

- (a) between two or more Articles and / or Section of this Agreement, the provisions of a specific Article relevant to the issue under consideration shall prevail over those in other Article and / or Section;
- (b) between the Article and / or Section of this Agreement and the Schedules, the Article and / or Section shall prevail unless the issue in question /matter is specifically provided for in the Schedule and only referred to in the Article and / or Section, as the case may be;
- (c) between any two Schedules, the Schedule relevant to the issue shall prevail;
- (d) between the written description on the Construction Drawings and the Construction Requirements, the latter shall prevail;
- (e) between the written description on the O&M Documents and the O&M Requirements, the latter shall prevail;
- (f) between the dimension scaled from the Construction Drawing and its specific written dimension, the latter shall prevail;
- (g) between the dimension scaled from the O&M Documents and its specific written dimension, the latter shall prevail; and
- (h) between any value written in numerals and that in words, the latter shall prevail.

2. CONCESSION

2.1 GRANT OF CONCESSION

- 2.1.1 In consideration of the Private Partner's obligations contained in this Agreement and relying on the Private Partner's representations, warranties and covenants contained herein, the Implementing Agency, subject to the terms of this Agreement, hereby grants to the Private Partner and authorizes it, for the duration of the Concession Period, to investigate, study, design, engineer, procure, finance, construct, install, develop, operate, maintain and implement the Project on a design, build, operate, finance and transfer basis in relation to the Chiniot-Sargodha Road and an on operate and maintain basis in relation to the Faisalabad-Chiniot Road, and to exercise and enjoy the rights, powers, benefits, privileges, collect Toll, authorizations and entitlements as set forth in this Agreement (the **Concession**).
- 2.1.2 The Private Partner agrees and undertakes to implement the Project in accordance with the terms of this Agreement and the Implementing Agency Agreements.

2.2 CONCESSION PERIOD

- 2.2.1 The Concession hereby is granted and shall be effective for the Concession Period.

3. CONDITIONS

3.1 CONDITIONS PRECEDENT

- 3.1.1 Save and except as expressly provided herein, the respective obligations of the Parties shall be subject to the satisfaction (waiver and/or deferral, in accordance with the terms herein) in full of the conditions precedent specified in Section 3.1.2, Section 3.1.3 and Section 3.1.4 (the **Conditions Precedent**) on or prior to the Scheduled Commencement Date.
- 3.1.2 The Private Partner shall satisfy the following Conditions Precedent to the satisfaction of the Implementing Agency, the Independent Engineer and the Independent Auditor prior to the Scheduled Commencement Date (the **Private Partner Conditions Precedent**):
- (a) the Private Partner has provided copies of its Corporate Documents to the Implementing Agency (with copies delivered to the Independent Engineer and the Independent Auditor), duly certified as true copies by the company secretary or director of the Private Partner;
 - (b) the Private Partner has provided to the Implementing Agency copies (with copies delivered to the Independent Engineer and Independent Auditor) of its Board Resolution that duly authorizes:
 - (i) the Private Partner to enter into this Agreement and to undertake the obligations, liabilities, as set out in this Agreement, and the transactions as contemplated by this Agreement;
 - (ii) a specified Person or Persons to:
 - (aa) execute this Agreement on behalf of the Private Partner; and
 - (bb) undertake all other acts specifically relating to this Agreement, as contemplated by this Agreement;

- (c) the Private Partner has provided the Performance Guarantee to the Implementing Agency that remains effective and valid till the end of the Performance Guarantee Expiry Date;
- (d) each of the Specified Private Partner Permits have been procured by the Private Partner and the same are effective and valid and have not been cancelled and / or rescinded and the Private Partner has provided copies of the same to the Implementing Agency (with copies delivered to the Independent Engineer and the Independent Auditor);
- (e) the Private Partner has prepared an Environmental Impact Assessment (EIA) report in accordance with the Applicable Laws and the same stands approved by the Punjab Environmental Protection Agency and has submitted a copy of each of the same (i.e. the report and its approval) to the Implementing Agency (with a copy delivered to the Independent Engineer and the Independent Auditor) (the **EIA Approval**);
- (f) the Private Partner has provided to the Implementing Agency, the Independent Auditor and the Independent Engineer:
 - (i) a certified true copy of the duly executed Financing Term Sheet that is not objected to or deemed not to be objected to by the Implementing Agency and the Independent Auditor in accordance with Section 27.3 (*Financing Term Sheet and Financing Amendment Term Sheet*);
 - (ii) certified true copies of the executed Financing Documents and the Debit Authority;
 - (iii) the Financial Close Achievement Notice, as issued by the Financiers (or an agent of the same);
- (g) the Implementing Agency has received the following legal opinions:
 - (i) a legal opinion from the legal counsel of the Private Partner confirming that the Private Partner has been duly organized and is validly existing under the Applicable Laws and has the requisite power and Implementing Agency to enter into the Implementing Agency Agreements and to undertake the transactions as contemplated by the Implementing Agency Agreements and to assume the obligations as contained herein and the enforceability of the same against the Private Partner;
 - (ii) a legal opinion from the legal counsel of the Sponsor confirming that such Sponsor is validly existing under the applicable laws and that such Sponsor has the requisite Implementing Agency and power to enter into the Implementing Agency Agreement(s) and the Project Agreement(s) to which such Sponsor is a party and to assume the obligations as contained therein and the enforceability of the same against the Sponsor;
- (h) the Private Partner has entered into the Project Site Licence Agreement with the Implementing Agency for Licence of the Project Site to the Private Partner in accordance with Article 4 (*Project Site*);
- (i) the Private Partner has entered into the Independent Engineer Contract for the appointment of the Independent Engineer with the counterparties to such contract;
- (j) the Private Partner has entered into the Independent Auditor Contract for the appointment of the Independent Auditor with the counterparties to such contract; and

- (k) presentation of evidence that the Escrow Account has been established along with a reputable bank approved by the Implementing Agency and that the Escrow Agreement has been executed.
- (l) the Private Partner's Approved Detailed Engineering Design of the Project stands approved by the Independent Engineer and the Implementing Agency in accordance with Section 12.5;
- (m) the Private Partner has submitted copies of documents evidencing satisfaction of each of the Private Partner Conditions Precedent to the Independent Engineer and the Independent Auditor;

3.1.3 Not Used.

3.1.4 The Implementing Agency shall satisfy the following Conditions Precedent to the satisfaction of the Private Partner, the Independent Auditor and the Independent Engineer prior to the Scheduled Commencement Date (the **Implementing Agency Conditions Precedent**):

- (a) the Implementing Agency has Licenced the Project Site to the Private Partner in accordance with Article 4 (*Project Site*) and the Project Site Licence Agreement;
- (b) subject to section 12.5, the Implementing Agency has handed over Vacant Possession of the Project Site to the Private Partner in accordance with Article 4 (*Project Site*);
- (c) the Implementing Agency has procured the Debit Authority;
- (d) the Implementing Agency has entered into the Independent Engineer Contract for the appointment of the Independent Engineer with the other counterparties to such contract;
- (e) the Implementing Agency has entered into the Independent Auditor Contract for the appointment of the Independent Auditor with the other counterparties to such contract; and
- (f) the Implementing Agency has entered into the Implementing Agency Agreements;
- (g) the Implementing Agency has submitted copies of documents evidencing satisfaction of each of the Implementing Agency Conditions Precedent to the Independent Engineer and the Independent Auditor.

3.2 CONDITIONS SUBSEQUENT

3.2.1 The Private Partner undertakes to fulfil the following Conditions Subsequent to the entire satisfaction of the Implementing Agency:

- (a) Ninety (90) days prior to the Commencement Date, the Private Partner shall provide the Implementing Agency (with copies to the Independent Engineer and the Independent Auditor) with evidence of appointment of the O&M Contractor;
- (b) Ninety (90) days prior to the Scheduled Substantial Completion Date, the Private Partner shall provide evidence that the Major Maintenance and Overlay Payment Account has been established.

3.2.2 The Implementing Agency undertakes to fulfil the following Conditions Subsequent to the satisfaction of the Private Partner:

- (a) On the issuance of the Commencement Certificate by the Independent Engineer (in consultation with the Implementing Agency), the Implementing Agency shall issue the Toll Notification in

accordance with Section 17 authorizing the Private Partner to begin charging the Toll set forth in **Schedule P (Toll Notification Structure)**.

3.3 WAIVER AND/OR DEFERRAL OF CONDITIONS AND EXTENSION OF SCHEDULED COMMENCEMENT DATE

3.3.1 The:

- (a) Implementing Agency may (at its discretion) waive and/or defer any of the Private Partner Conditions Precedent set forth in Section 3.1.2 of Section 3.1 (*Conditions Precedent*) and/or the Conditions Subsequent set out in Section 3.2 (*Conditions Subsequent*). For the avoidance of doubt, the Implementing Agency may, at its sole discretion, grant any waiver and/or deferral hereunder with such conditions as it may deem fit;
- (b) Private Partner may (at its discretion) waive and/or defer any of the Implementing Agency Conditions Precedent set forth in Section 3.1.4 of Section 3.1 (*Conditions Precedent*). For the avoidance of doubt, the Private Partner may, at its sole discretion, grant any waiver and/or deferral hereunder with such conditions as it may deem fit;

3.3.2 Notwithstanding anything contained herein, the Scheduled Commencement Date may be extended from time to time with the mutual consent of the Parties.

3.3.3 Any deferral and/or waiver of a Condition Precedent and/or Condition Subsequent in terms of this Section 3.3 (*Waiver and/or Deferral or Conditions and Extension of Scheduled Commencement Date*) shall be notified in writing to the Independent Engineer and the Independent Auditor by the Party granting such deferral and/or waiver of such condition in accordance with this Agreement.

3.4 COMMENCEMENT CERTIFICATE & COMMENCEMENT DATE

3.4.1 The Conditions Precedent shall be satisfied, waived and/or deferred by the Scheduled Commencement Date in accordance with this Agreement. Each Party shall promptly inform the other Party in writing (together with a copies delivered to the Independent Engineer and the Independent Auditor) when the Conditions Precedent for which it is responsible have been satisfied.

3.4.2 The Parties agree that:

- (a) within thirty (30) days of the Implementing Agency's receipt from the Private Partner, (through the Independent Engineer and the Independent Auditor), evidence of satisfaction of a Private Partner Condition Precedent, the Implementing Agency shall (through the Project Manager) notify the Independent Engineer and the Independent Auditor in writing (with a copy to the Private Partner) whether it has any objections on the satisfaction of such Private Partner Condition Precedent. In the event the Implementing Agency (through the Project Manager) does not raise any objection in writing on the satisfaction of a Private Partner Condition Precedent within the thirty (30) day period set out herein, such Private Partner Condition Precedent shall be deemed to be not objected to by the Implementing Agency. In the event the Implementing Agency raises any objections on the satisfaction of a Private Partner Condition Precedent and notifies the same to the Independent Engineer and the Independent Auditor (with a copy to the Private Partner) within the thirty (30) day period set out herein, the Private Partner shall address such objections and re-submit to the Independent Engineer and the Independent Auditor (with a copy to Implementing Agency) evidence of satisfaction of such Private Partner Condition Precedent and the process in this Section 3.4.2(a) shall be repeated until such time that the Implementing Agency has not objected to or is deemed to have not objected to the satisfaction of such Private Partner Condition Precedent. The provisions of this Section 3.4.2(a) shall apply

to each Private Partner Condition Precedent for which evidence of satisfaction is submitted by the Private Partner to the Independent Engineer and the Independent Auditor (with a copy to the Implementing Agency) from time to time;

- (b) within thirty (30) days of the Private Partner's receipt from the Implementing Agency, through the Independent Engineer and the Independent Auditor, evidence of satisfaction of a Implementing Agency Condition Precedent, the Private Partner shall notify the Independent Engineer and the Independent Auditor in writing (with a copy to the Implementing Agency) whether it has any objections on the satisfaction of such Implementing Agency Condition Precedent. In the event the Private Partner does not raise any objection in writing on the satisfaction of a Implementing Agency Condition Precedent within the thirty (30) day period set out herein, such Implementing Agency Condition Precedent shall be deemed to be not objected to by the Private Partner. In the event the Private Partner raises any objections on the satisfaction of a Implementing Agency Condition Precedent and notifies the same to the Independent Engineer and the Independent Auditor (with a copy to Implementing Agency) within the thirty (30) day period set out herein, the Implementing Agency shall address such objections and re-submit to the Independent Engineer and the Independent Auditor (with a copy to the Private Partner) evidence of satisfaction of such Implementing Agency Condition Precedent and the process in this Section 3.4.2(b) shall be repeated until such time that the Private Partner has not objected to or is deemed to have not objected to the satisfaction of such Implementing Agency Condition Precedent. The provisions of this Section 3.4.2(b) shall apply to each Implementing Agency Condition Precedent for which evidence of satisfaction is submitted by the Implementing Agency to the Independent Engineer and the Independent Auditor (with a copy to Private Partner) from time to time.

3.4.3 The Parties hereby jointly undertake to procure that the Independent Engineer and the Independent Auditor jointly issue the Commencement Certificate within three (3) days of the date on which the Independent Engineer and the Independent Auditor are satisfied that each of the:

- (a) Private Partner Conditions Precedent stand satisfied (and/or waived or deferred by the Implementing Agency in accordance with Section 3.3.1(a));
- (b) Private Partner Conditions Precedent are not objected to or deemed not to have been objected to by the Implementing Agency (acting through the Project Manager) in accordance with Section 3.4.2(a) and if any Private Partner Condition Precedent is objected to by the Implementing Agency in accordance with Section 3.4.2(a), the Private Partner has addressed such objections and re-submitted evidence of satisfaction of such Private Partner Condition Precedent to the Independent Engineer and the Independent Auditor (with a copy to the Implementing Agency) in accordance with Section 3.4.2(a);
- (c) Implementing Agency Conditions Precedent stand satisfied (and/or waived or deferred by the Private Partner in accordance with Section 3.3.1(b));
- (d) Implementing Agency Conditions Precedent are not objected to or deemed to not have been objected to by the Private Partner in accordance with Section 3.4.2(b) and if any Implementing Agency Condition Precedent is objected to by the Private Partner in accordance with Section 3.4.2(b), the Implementing Agency has addressed such objections and re-submitted evidence of satisfaction of such Implementing Agency Condition Precedent to the Independent Engineer and the Independent Auditor (with a copy to the Private Partner) in accordance with Section 3.4.2(b); and

The Independent Engineer and the Independent Auditor, jointly, shall set out in the Commencement Certificate the date on which the Commencement Date is achieved.

3.5 TERMINATION PRIOR TO COMMENCEMENT DATE

3.5.1 In the event:

- (a) the Conditions Precedents are not satisfied, waived and/or deferred on or prior to the date falling ninety (90) days following the Scheduled Commencement Date, (including the extended time, if any) due to reasons attributable to the Private Partner; and/or
- (b) of occurrence of a Private Partner Event of Default prior to the Commencement Date;

then the Implementing Agency shall have the right (to be exercised in its sole and absolute discretion) to terminate this Agreement by issuance of a written Termination Notice to the Private Partner. In such case, the Implementing Agency shall be entitled to encash the Bid Security or the Performance Guarantee (as in effect at such time) to its full value. Except for the encashment of the Bid Security or the Performance Guarantee (as in effect at such time) in terms of this Section 3.5.1, each Party hereto shall have no claims against the other for costs, damages, compensation or otherwise for such termination of this Agreement.

3.5.2 In the event:

- (a) the Conditions Precedents are not satisfied, waived and/or deferred on or prior to the date falling ninety (90) days following the Scheduled Commencement Date, (including the extended time, if any) due to reasons attributable to the Implementing Agency and/or a Force Majeure Event; and/or
- (b) of occurrence of a Implementing Agency Event of Default prior to Commencement Date,

the Private Partner shall have the right (to be exercised in its sole discretion) to Terminate this Agreement by issuance of a written Termination Notice to the Implementing Agency. In such case, the Implementing Agency shall (within fifteen (15) days of its receipt of the Termination Notice) return the Bid Security or the Performance Guarantee (as in effect at such time) to the Private Partner without any encashments, demands or claims. Further, in the event the Private Partner has prepared the Detailed Engineering Design and the same has been approved by the Independent Engineer and is transferred/ delivered to the Implementing Agency, the Implementing Agency shall (within fifteen (15) days of its receipt of the Termination Notice) make payment of the cost of Detailed Engineering Design, as set out in the Bid and as approved by the Independent Engineer and the Independent Auditor. Except as afore-stated and except as may be mutually agreed between the Parties, each Party hereto shall have no claims against the other for costs, damages, compensation or otherwise for Termination of this Agreement.

3.5.3 It is clarified that the provisions of this Section 3.5 (*Termination Prior to Commencement Date*) shall only apply to any Termination of this Agreement occurring on or prior to the Commencement Date.

4. PROJECT SITE

4.1 LICENCE

- 4.1.1 The Implementing Agency shall, as a condition precedent to achievement of Commencement Date, Licence to the Private Partner, pursuant to the Project Site Licence Agreement, for use and Vacant Possession of all the land and rights comprising the Project Site (the **Licence**). The Project Site Licence Agreement shall be duly executed by the Parties and, to the extent required by Applicable Laws, registered by the Private Partner with the relevant Government Agency and all costs, fees, expenses, duties, charges and taxes (including charges relating to the registration of the Project Site Licence Agreement) relating to the same shall be borne by the Private Partner.
- 4.1.2 The Private Partner shall be responsible for payment of all charges in accordance with the Project Site Licence Agreement that relate to the Licence of the Project Site to the Private Partner by Implementing Agency.
- 4.1.3 The Licence shall commence on the physical handing over of the Vacant Possession of the Project Site to the Private Partner by the Implementing Agency and upon commencement shall be co-terminus on the Transfer Date without the need for any action to be taken by the Parties to terminate the Licence.

4.2 TITLE OF PROJECT SITE & DELIVERY OF VACANT POSSESSION

- 4.2.1 The Implementing Agency represents and warrants that it has the power and Implementing Agency to grant the Licence in respect of the Project Site to the Private Partner.
- 4.2.2 Subject to Section 15.2, the Implementing Agency shall at its own cost and expense, deliver to the Private Partner the Vacant Possession of the Project Site (including all Easementary Rights), on or prior to the Scheduled Commencement Date.

4.3 USE OF PROJECT SITE

- 4.3.1 The Private Partner hereby unconditionally and irrevocably confirms, acknowledges and agrees that the Implementing Agency shall enter into the Project Site Licence Agreement with the Private Partner that shall grant the Licence of the Project Site to Private Partner for the sole purpose of implementation of the Project and for enjoying the rights and benefits of the Concession granted hereunder and that the Private Partner shall use the Project Site only for the purposes of implementing the Project thereupon and for purposes incidental or necessary thereto subject always to the terms and conditions of the Applicable Standards. The Private Partner shall, in carrying out its obligations under this Agreement, utilize all existing roads and land areas at the Project Site.
- 4.3.2 The Private Partner hereby undertakes that it shall not without prior written consent of the Implementing Agency use the Project Site for any purpose other than:
- (a) for the purposes of the Project and purposes incidental thereto;
 - (b) as permitted under this Agreement (including for the purposes set out in Article 29 (*Additional Matters*)); or
 - (c) as may otherwise be approved by the Implementing Agency in writing.

4.4 PRIVATE PARTNER'S RESPONSIBILITY

4.4.1 Subject to Section 4.15 (*Removal of Material Adverse Impediment*), the physical and the ambient conditions (including climatic, hydrological, hydro-geological, ecological, environmental, geotechnical, geological, paleontological and archaeological conditions) of the Project Site (the **Project Site Conditions**) shall be the sole responsibility of the Private Partner. Accordingly, without limiting any other obligations of the Private Partner that are included in this Agreement, the Private Partner shall be deemed as at the Effective Date of the Agreement to have:

- (a) carried out an investigation of all Project Site Conditions and of any extraneous material in or under the Project Site including its surface, sub-soil and ground water to enable the Concession Assets to be designed and constructed and for its obligations to be performed with due regard for the Project Site Conditions and the seismic activity (if any) in the region of the Project Site;
- (b) for the purpose of such investigation in section (a), inspected and examined the Project Site and surroundings;
- (c) satisfied itself as to the nature of the Project Site Conditions, the surface, sub-soil and ground water of the Project Site, the form and nature of the Project Site, the load-bearing and other relevant properties of the Project Site, the risk of damage to property affecting the Project Site, the nature of the materials (whether natural or otherwise) to be excavated and the nature of the design, its obligations and material necessary for the implementation of the Project;
- (d) satisfied itself as to the adequacy of its right of passage over, access to and through the Project Site and any accommodation it may require for the purposes of fulfilling any of its obligations included in this Agreement, such as any additional land or buildings located outside the Project Site;
- (e) satisfied itself as to the possibility of interference by Persons with rights-of-way across, access to or use of the Project Site with particular regard to the owners and users of any land adjacent to the Project Site; and
- (f) satisfied itself as to the precautions, times and methods of working necessary to prevent or minimize nuisance or interference being caused to any third parties.

4.4.2 To avoid doubt, the Private Partner accepts full responsibility for all matters in Section 4.4.1 above and the Private Partner shall, subject to Section 4.15 (*Removal of Adverse Impediment*):

- (a) not be entitled to make any claim against the Implementing Agency whether in contract, tort or otherwise on any ground relating to the matters in Section 4.4.1 above; and
- (b) indemnify the Implementing Agency against all direct Losses sustained by the Implementing Agency and/or any third party in consequence of cleaning-up and otherwise dealing with any potentially hazardous materials being any natural or artificial substance, whether in solid, gaseous or liquid form capable of causing harm to any human or any other living organism supported by the environment (including air, water, land, surface land and sub-surface land) or capable of damaging the environment or public health or posing a threat to public safety including any pollutants and any hazardous, toxic, radioactive, noxious, corrosive or dangerous substances and all substances for which in each case liability or responsibility is imposed under applicable environment law) at the Project Site.

4.5 NO SALE OR CREATION OF ENCUMBRANCE

4.5.1 The Private Partner shall not part with, dispose off, sell, sublease or create any Encumbrance of any nature whatsoever on the whole or any part of the Project Site and shall not place or create nor permit

any Contractor or other person claiming through or under the Private Partner to place or create any Encumbrance over all or any part of the Project Site or the Concession Assets, or on any rights of the Private Partner therein or under this Agreement, save and except as otherwise expressly set forth in this Agreement.

4.6 PROTECTION OF SITE FROM ENCROACHMENTS

- 4.6.1 Following the delivery and handing over to the Private Partner of the Vacant Possession of the Project Site by the Implementing Agency and until the Transfer Date, the Private Partner shall be fully responsible for and shall protect the Project Site and the Concession Assets from, in each case, any and all occupations, thefts (to the extent of the Concession Assets), encroachments and Encumbrances. The Private Partner further undertakes, covenants and confirms to indemnify the Implementing Agency, any Government Agency and GoPB from any costs, claims expenses or charges incurred resulting from any breach of its obligations under this Section 4.6. Provided always, that the Implementing Agency shall be responsible for ensuring police security of the Project Road in accordance with the applicable law.

4.7 SPECIAL/TEMPORARY RIGHT OF WAY

- 4.7.1 The Private Partner shall, at its own cost and risk, obtain any special or temporary right of way that is not included in the Scope of the Project and description of Project Site and the Concession Assets, and is required by the Private Partner in connection with access to the Project Site and shall also obtain (at its cost and expense) such other facilities, the provision of which is not the responsibility of the Implementing Agency under the Implementing Agency Agreements, as may be required by the Private Partner for the purposes of the Project and its implementation in accordance with the Applicable Standards; provided, that the Implementing Agency shall reasonably facilitate the Private Partner in obtaining the aforesaid special or temporary right of way.

4.8 PROJECT SITE ACCESS

- 4.8.1 Following Licence of the Project Site and delivery of the Vacant Possession of the Project Site to the Private Partner by the Implementing Agency, the Licence granted to the Private Partner shall always be subject to the right of access of the Implementing Agency, any relevant Government Agency, the Independent Auditor and the Independent Engineer and their representatives, officers, employees and agents for inspection, viewing and exercise of their rights and performance of their obligations under this Agreement; provided, that the exercise of such right of access shall not interfere with the Private Partner's performance of its rights and obligations under this Agreement. Further, the Licence granted to the Private Partner shall always be subject to the right of access of the Users.

4.9 GEOLOGICAL AND ARCHAEOLOGICAL FINDS

- 4.9.1 It is expressly agreed between the Parties that mining, geological or archaeological rights do not form part of the Licence to be granted to the Private Partner in terms of the Project Site Licence Agreement and the Private Partner hereby acknowledges and agrees that it shall not have any mining rights or interest in the underlying minerals, fossils, antiquities, structures or other remnants or things either of particular geological or archaeological interest and that all such rights, interest and property on or under the Project Site shall vest in and belong to the Implementing Agency or the relevant concerned Government Agency.
- 4.9.2 The Private Partner shall procure all no-objection certificates and consents from the relevant department of the GoPB that may be required by the Private Partner under the Applicable Laws, in respect of any potential geological and archaeological finds on the Project Site, prior to commencement of the Project Works. Furthermore, the Private Partner shall take all reasonable precautions to prevent its employees, workmen, agents, representatives and/ or any other persons appointed by the Private Partner from having

access to the Project Site, including the Contractors, from removing or damaging such interest or property (as set out in Section 4.9.1) and shall inform the Implementing Agency forthwith of the discovery thereof and comply with such instructions as the Implementing Agency and / or the concerned Government Agency may issue in relation to the protection and / or removal of such property. In the event any expenses are incurred by the Private Partner in fulfilling its obligations as set out in this Section 4.9.2 and/or as a result of the geological and/or archaeological finds being on the Project Site, then the same shall be reimbursed by the Implementing Agency (provided the same are duly certified by the Independent Engineer and the Independent Auditor) and in such case the provisions of Article 15 (*Relief Extensions & Relief Compensations*) shall apply. Further, in the event the Private Partner is delayed in performance of its obligations under this Agreement due to the occurrence of the circumstances set out in this Section 4.9 (*Geological and Archaeological Finds*), the Private Partner shall be granted extensions in the timeline in which it has to perform its obligations under this Agreement (provided that such extensions are duly certified by the Independent Engineer) and in such case the provisions of Article 15 (*Relief Extensions & Relief Compensations*) shall apply. Notwithstanding anything contained herein, the Implementing Agency shall procure the issuance of the instructions required from the concerned Government Agency and referred to in this Section 4.9.2.

4.10 EXISTING UTILITIES AND ROADS

- 4.10.1 Notwithstanding anything to the contrary contained herein, the Private Partner shall ensure that the respective entities owning the existing roads, right of way or utilities on, under or above the Project Site are enabled by the Private Partner to keep such utilities in continuous satisfactory use, if necessary, by providing suitable temporary or permanent diversions with the Implementing Agency of the controlling body of that road, right of way or utility, and the Implementing Agency shall, upon written request from the Private Partner (as certified by the Independent Engineer), initiate and undertake, at the Implementing Agency's cost, legal proceedings for acquisition of any right of way or any no objections or permits/ approvals necessary for such diversion.
- 4.10.2 The Private Partner shall be required to provide the details of the existing utilities, including the relocation plan to the Implementing Agency within ninety (90) days of the Signing Date. Upon submission of the relocation plan, the Implementing Agency shall procure the removal and/or relocation of the existing utilities including (providing for any alternate duct/ corridor) at its own cost and expense and, upon the completion of the same, provide Vacant Possession of the Project Site to the Private Partner in accordance with the timelines of the PPP Contract.
- 4.10.3 If the Private Partner fails to provide the details of the existing utilities within 90 days of Signing Date (as such date may be extended with mutual consent), the Implementing Agency shall not be responsible for all delays resulting from the same.

4.11 INSTALLATION OF SIGNS

- 4.11.1. The Private Partner shall, at its own cost, install and maintain signs marketing the Authority, the Implementing Agency and public private partnership projects every five (5) kilometres along the Project Road. Each sign shall prominently display the names and/or logos of the Implementing Agency, the Authority, and other relevant stakeholders as may be specified by the Implementing Agency. The format, size, and positioning of the signage must comply with the standards or instructions issued by the Implementing Agency.

4.12 NEW UTILITIES AND ROADS

- 4.12.1 The Private Partner shall allow utility companies (subject to consent of Implementing Agency and subject to such conditions as the Implementing Agency and the Private Partner may specify and subject to mutual agreement between the Implementing Agency, Private Partner and the utility companies),

access to, and use of the Project Site for laying telephone lines, water pipes, electric cables or other public utilities; provided, that nothing contained in this Section 4.12.1 shall waive and / or relieve or be deemed to waive and / or relieve the obligations of the Private Partner contained in the Implementing Agency Agreements and any damage caused to the Concession Assets by such access to, and use of the Project Site for laying telephone lines, water pipes, electric cables or other public utilities shall be restored forthwith.

- 4.12.2 The affected part of the Concession Assets (or any part thereof) (the **Utilities Affected Assets**) shall be restored in accordance with the Applicable Standards and Good Industry Practice by the Private Partner and the costs relating to the same shall be borne by the Private Partner and/or the utility companies in accordance with the terms mutually agreed between the Private Partner and the utility companies; provided, however, any such terms (including any amendments of the same) shall be subject to the prior approval of the Implementing Agency (which approval shall not be unreasonably delayed, conditioned or withheld). Notwithstanding anything to the contrary set out herein, the Implementing Agency shall neither be responsible for restoration of any Utilities Affected Assets nor for any costs relating to the same.
- 4.12.3 The Private Partner exclusively reserves the right to charge fees from the utility company or any other entity for allowing the passage of the telephone lines, water pipes, electric cables or other public utilities over or under the Project Site (the **Utility Proceeds**).

4.13 FELLING OF TREES

- 4.13.1 The Implementing Agency undertakes to fell the trees at the Project Site, to be identified by the Private Partner, the cost of which shall be borne by the Implementing Agency, provided further the Implementing Agency shall be responsible for procuring any approvals and/or permits from the GoPB or any other governmental agency for compliance with this Section 4.13.
- 4.13.2 The trees removed by the Implementing Agency shall be deemed to be owned by the Implementing Agency and shall be disposed in such manner and subject to such conditions as the Implementing Agency may in its sole discretion deem appropriate provided however all costs, fees and expenses of such disposal shall be borne by the Implementing Agency.
- 4.13.3 The Private Partner hereby undertakes that it shall (as condition precedent to achievement of Substantial Completion), at its sole cost and expense, plant and maintain at least sixty (60) fruit or shade bearing trees in each kilometre on either side where possible at the Project Site. Furthermore, the Private Partner undertakes to maintain in accordance with the Applicable Standards all the trees planted by it pursuant to this Section 4.13 (*Felling of Trees*) till the Transfer Date and shall ensure that at all times until Transfer Date, a minimum of number of sixty (60) trees remain planted and maintained at the Project Site.

4.14 IMPLEMENTING AGENCY INDEMNITIES IN RESPECT OF PROJECT SITE

- 4.14.1 The Implementing Agency shall indemnify and shall hold the Private Partner harmless from any costs, claims expenses or charges incurred in relocating, rehabilitating or resettling persons in connection with making available the Project Site to the Private Partner for implementation of the Project and for delivery of Vacant Possession of the Project Site to the Private Partner.
- 4.14.2 The Implementing Agency hereby indemnifies and holds harmless the Private Partner against all Losses arising in connection with or relating to any defect in title in the Private Partner's Licenced interest in the Project Site, which prevents, impedes or delays the Private Partner from constructing or, Operating and Maintaining the Concession Assets in accordance with this Agreement; provided, that such Losses are not the consequence of any breach or non-compliance by the Private Partner of this Agreement, the

Project Site Licence Agreement and the Applicable Standards; provided, further that such action is not a consequence of the Private Partner's failure to maintain the Project Site in its possession free from encroachments and encumbrances by third parties and/or is not as a consequence or failure by the Private Partner to meet its obligations under this Agreement.

4.15 REMOVAL OF MATERIAL ADVERSE IMPEDIMENT

4.15.1 Following delivery of the Vacant Possession of the Project Site to the Private Partner by Implementing Agency, the Private Partner shall be responsible for removal of all impediments, debris (including any structures not in anyone's possession) on the Project Site, whether physical or legal, to the construction, installation and, Operation and Maintenance of the Concession Assets; provided, however, that the Private Partner shall Notify the Implementing Agency of any impediment (the **Material Adverse Impediment**) on the Project Site, whether physical or legal, to the construction, installation and/or, Operation and Maintenance of the Concession Assets which:

- (a) causes a Material Adverse Effect;
- (b) is not attributable to the Private Partner; and
- (c) does not result from any non-compliance by the Sponsor and/or the Private Partner under any Implementing Agency Agreements.

4.15.2 Any Notice issued by the Private Partner pursuant to Section 4.15.1 shall be duly verified and certified by the Independent Engineer prior to submission to the Implementing Agency and the Independent Engineer shall, prior to delivery of such Notice to the Implementing Agency, duly certify in the Notice, *inter alia*, the occurrence and subsistence of the Material Adverse Impediment and the time period required for removal of the same (the **Material Impediment Removal Period**). Upon receipt by the Implementing Agency of the Notice duly verified and certified by the Independent Engineer (the **Certified Impediment Notice**), the Implementing Agency shall act so as to remove such Material Adverse Impediment within the Material Impediment Removal Period. In the event the Private Partner suffers delays in the performance of its obligations and/or incurs Relief Costs, in each case, as a direct result of the Material Adverse Impediment, the same shall entitle the Private Partner to issuance of a Relief Request and in such case, the provisions of Article 15 (*Relief Extensions & Relief Compensations*) shall apply.

5. INDEPENDENT ENGINEER & INDEPENDENT AUDITOR

5.1 INDEPENDENT ENGINEER SELECTION

5.1.1 Within fifteen (15) days from the Effective Date, the Private Partner shall provide the Implementing Agency with a list of three (3) reputable firms of engineers for appointment of the Independent Engineer (the **First IE List**).

5.1.2 Within fifteen (15) days of receipt by the Implementing Agency of the First IE List, the Implementing Agency shall (subject to one (1) of the firms in the First IE List being acceptable to the Implementing Agency) select a reputed firm of engineers from First IE List and the Implementing Agency and the Private Partner shall appoint such firm as the Independent Engineer in terms of the Independent Engineer Contract.

5.1.3 In the event the firms of engineers identified by the Private Partner in the First IE List are not acceptable to the Implementing Agency, the Private Partner and the Implementing Agency shall appoint (in terms of the Independent Engineer Contract) such firm as the Independent Engineer as is mutually acceptable

to the Implementing Agency and the Private Partner and such appointment shall be in terms of the Independent Engineer Contract.

- 5.1.4 The Independent Engineer shall provide the services set out in the Independent Engineer Contract and as requested by the Parties with mutual consent from time to time. Unless mutually agreed otherwise between the Parties, the Independent Engineer Contract shall be in accordance with the mutual agreement between the Implementing Agency; the Private Partner; and the Financiers (until Financing Termination Date).

5.2 TERM OF APPOINTMENT OF THE INDEPENDENT ENGINEER

- 5.2.1 The appointment of the Independent Engineer shall be for an initial term of two (2) years from the date of the effectiveness of the Independent Engineer Contract (the **Independent Engineer Appointment Term**); provided, however, that:

- (a) the Independent Engineer Appointment Term shall be extended prior to expiry of the same so as to ensure that at all times during the Concession Period an Independent Engineer is retained/appointed, for the purposes set out in this Agreement; or
- (b) the Parties shall be entitled to appoint a new Independent Engineer prior to the expiry of the Independent Engineer Appointment Term (such appointment to be effective upon expiry of the Independent Engineer Appointment Term) so as to ensure that at all times during the Concession Period an Independent Engineer is retained/appointed for the purposes set out in this Agreement. In the event of the appointment of a new Independent Engineer upon expiry of the Independent Engineer Appointment Term, the provisions of Section 5.2.3 shall apply.

- 5.2.2 The appointment of the Independent Engineer may be terminated:

- (a) by either Party if, the Independent Engineer is adjudged insolvent and / or bankrupt and / or the winding up proceedings are filed against the Independent Engineer and/or the Independent Engineer files winding up proceedings in a court of law and / or any action for malpractice and / or misadministration is filed against the Independent Engineer in a court of law;
- (b) by the Parties with the mutual consent of the Parties.

- 5.2.3 Upon the occurrence of any of the events listed in Section 5.2.2, the Parties shall have the right to terminate the Independent Engineer Contract in accordance with the terms of the same or and/or in the event of expiry of the Independent Engineer Appointment Term, the Parties shall appoint a new Independent Engineer in accordance with this Section 5.2.3. In the afore-stated circumstances, the Parties shall replace the appointed Independent Engineer with another consulting engineering firm or body corporate selected by the Implementing Agency from the First IE List provided by the Private Partner pursuant to Section 5.1.1 above; provided, however, that the termination and/or replacement of the Independent Engineer shall not have effect till such time as the replacement Independent Engineer has been appointed. In the event the Implementing Agency objects to the appointment of any firm of engineers named in the First IE List, then the Private Partner shall provide the Implementing Agency with a new list of three (3) reputable firms of engineers for appointment of the replacement Independent Engineer (the **New IE List**). Within ten (10) days of receipt by the Implementing Agency of the New IE List, the Implementing Agency shall either:

- (a) select a reputable firm of engineer from the New IE List and shall cause the Private Partner to appoint such firm as the Independent Engineer; or

- (b) reject the appointment of any of the firms provided in the New IE List, in which case, the Parties shall appoint such firm of engineers as the new Independent Engineer as is mutually agreed by the Parties.

The provisions of this Article 5 (*Independent Engineer*) shall apply to any new Independent Engineer (including appointment and replacement of the same) appointed in accordance with the terms herein.

- 5.2.4 The term of appointment of the replacement Independent Engineer shall be the unexpired period of the Independent Engineer Appointment Term or such other term as may be mutually agreed between the Parties.
- 5.2.5 The Private Partner shall ensure that all provisions of this Agreement pertaining to the Independent Engineer and its responsibilities in respect of the matters set out herein are duly incorporated in the Independent Engineer Contract.

5.3 INDEPENDENT ENGINEER AUTHORIZED SIGNATORIES

- 5.3.1 The Parties shall require the Independent Engineer to designate and notify to the Implementing Agency and the Private Partner of the authorized representatives of the Independent Engineer that shall be authorized by the Independent Engineer to sign for and on behalf of the Independent Engineer, and any communication or document required to be signed by the Independent Engineer shall be valid and effective only if signed by such authorized signatories on behalf of the Independent Engineer; provided, that the Independent Engineer may, by notice in writing to the Parties, substitute any of the authorized signatories.

5.4 DECISION OF INDEPENDENT ENGINEER & DISPUTE RESOLUTION

- 5.4.1 Subject to Section 5.4.2, any advice, instruction, decision, direction and / or award of the Independent Engineer shall be binding on the Parties unless mutually agreed otherwise by the Parties.
- 5.4.2 In the event any Dispute arises between the Implementing Agency and the Private Partner with regard to any advice, instruction, decision, direction and / or award of the Independent Engineer, then such Dispute shall be resolved in accordance with the Dispute Resolution Procedure.

5.5 INDEPENDENT ENGINEER REMUNERATION

- 5.5.1 The Private Partner shall deposit into the Escrow Account the requisite amount for the payment of the fees and expenses payable to the Independent Engineer pursuant to the Independent Engineer Contract (the **Independent Engineer Payments**), notwithstanding that the Independent Engineer shall be appointed by and shall fulfil its obligations in accordance with the terms of the Independent Engineer Contract.
- 5.5.2 The Escrow Agent shall be responsible for the release of the Independent Engineer Payments from the Escrow Account to the Independent Engineer in a diligent and timely manner and in accordance with the Escrow Agreement and the Independent Engineer Contract.

5.6 INDEPENDENT AUDITOR SELECTION

- 5.6.1 Within fifteen (15) days from the Effective Date, the Private Partner shall provide the Implementing Agency with a list of four (4) reputable firms of chartered accountants which should be within the “A Category” of SBP for appointment of the Independent Auditor (the **First IA List**).

- 5.6.2 Within fifteen (15) days of receipt by the Implementing Agency of the First IA List, the Implementing Agency shall (subject to one of the firms in the First IA List being acceptable to the Implementing Agency) select a reputed firm of auditors from First IA List and the Implementing Agency and the Private Partner shall appoint such firm as the Independent Auditor in terms of the Independent Auditor Contract.
- 5.6.3 In the event the firms of auditors identified by the Private Partner in the First IA List is not acceptable to the Implementing Agency, the Private Partner and the Implementing Agency shall appoint (in terms of the Independent Auditor Contract) such firm as the Independent Auditor as is mutually agreed by the Implementing Agency and the Private Partner and such appointment shall be in terms of the Independent Auditor Contract.
- 5.6.4 The Independent Auditor shall provide the services set out in the Independent Auditor Contract and as requested by the Parties with mutual consent from time to time.

5.7 TERM OF APPOINTMENT OF THE INDEPENDENT AUDITOR

- 5.7.1 The appointment of the Independent Auditor shall be for an initial term of two (2) years from the date of the effectiveness of the Independent Auditor Contract (the **Independent Auditor Appointment Term**); provided, however, that:
- (a) the Independent Auditor Appointment Term shall be extended prior to expiry of the same with the mutual consent of the Parties so as to ensure that at all times during the Concession Period an Independent Auditor is retained/appointed for the purposes set out in this Agreement; or
 - (b) the Parties shall be entitled to appoint a new Independent Auditor prior to the expiry of the Independent Auditor Appointment Term (such appointment to be effective upon expiry of the Independent Auditor Appointment Term) so as to ensure that at all times during the Concession Period an Independent Auditor is retained/appointed for the purposes set out in this Agreement. In the event of the appointment of a new Independent Auditor upon expiry of the Independent Auditor Appointment Term, the provisions of Section 5.7.3 shall apply.
- 5.7.2 The appointment of the Independent Auditor may be terminated:
- (a) by either Party if the Independent Auditor is adjudged insolvent and / or bankrupt and / or winding up proceedings are filed against the Independent Auditor and/or the Independent Auditor files winding up proceedings in a court of law and / or any action for malpractice and / or misadministration is filed against the Independent Auditor in a court of law;
 - (b) by the Parties with the mutual consent of the Parties.
- 5.7.3 Upon the occurrence of any of the events listed in Section 5.7.2, the Parties shall have the right to terminate the Independent Auditor Contract in accordance with the terms of the same or and/or in the event of expiry of the Independent Auditor Appointment Term, the Parties shall appoint a new Independent Auditor in accordance with this Section 5.7.3. In the aforesaid circumstances, the Parties shall replace the appointed Independent Auditor with another firm of chartered accountants selected by the Implementing Agency from the First IA List provided by the Private Partner pursuant to Section 5.6.1 above; provided, however, that the termination and/or replacement of the Independent Auditor shall not have effect till such time as the replacement Independent Auditor has been appointed. In the event the Implementing Agency objects to the appointment of any firm of chartered accountants named in the First IA List, then the Private Partner shall provide the Implementing Agency with a new list of three (3) reputable firms of chartered accountants for appointment of the replacement Independent

Auditor (the **New IA List**). Within ten (10) days of receipt by the Implementing Agency of the New IA List, the Implementing Agency shall either:

- (a) select a reputable firm of chartered accountants from the New IA List and shall cause the Private Partner to appoint such firm as the Independent Auditor; or
- (b) reject the appointment of any of the firms provided in the New IA List, in which case, the Parties shall appoint one of the Big Four Accounting Firms with mutual consent of the Parties as the new Independent Auditor.

The provisions of Section 5.6 to 5.10 shall apply to any new Independent Auditor (including appointment and replacement of the same) appointed in accordance with the terms herein.

- 5.7.4 The term of appointment of the replacement Independent Auditor shall be the unexpired period of the Independent Auditor Appointment Term or such other term as may be mutually agreed between the Parties.
- 5.7.5 The Private Partner shall ensure that all provisions of this Agreement pertaining to the Independent Auditor and its responsibilities in respect of the matters set out herein are duly incorporated in the Independent Auditor Contract.

5.8 INDEPENDENT AUDITOR AUTHORIZED SIGNATORIES

- 5.8.1 The Parties shall require the Independent Auditor to designate and notify to the Implementing Agency and the Private Partner of the authorized representatives of the Independent Auditor that shall be authorized by the Independent Auditor to sign for and on behalf of the Independent Auditor, and any communication or document required to be signed by the Independent Auditor shall be valid and effective only if signed by such authorized signatories on behalf of the Independent Auditor; provided, that the Independent Auditor may, by notice in writing to the Parties, substitute any of the authorized signatories.

5.9 DECISION OF INDEPENDENT AUDITOR & DISPUTE RESOLUTION

- 5.9.1 Subject to Section 5.9.2, any advice, instruction, decision, direction and / or award of the Independent Auditor shall be binding on the Parties unless mutually agreed otherwise by the Parties.
- 5.9.2 In the event any Dispute arises between the Implementing Agency and the Private Partner with regard to any advice, instruction, decision, direction and / or award of the Independent Auditor, then such Dispute shall be resolved in accordance with the Dispute Resolution Procedure.

5.10 INDEPENDENT AUDITOR REMUNERATION

- 5.10.1 The Private Partner shall deposit into the Escrow Account the requisite amount for the payment of the fees and expenses payable to the Independent Auditor pursuant to the Independent Auditor Contract (the **Independent Auditor Payments**), notwithstanding that the Independent Auditor shall be appointed by and shall fulfil its obligations in accordance with the terms of the Independent Auditor Contract.
- 5.10.2 The Escrow Agent shall be responsible for the release of the Independent Auditor Payments from the Escrow Account to the Independent Auditor in a diligent and timely manner and in accordance with the Escrow Agreement and the Independent Auditor Contract.

6. AUTHORITY FEE

6.1 PAYMENT OF AUTHORITY FEE

- 6.1.1 The Private Partner shall make a payment of an amount equal to one percent (1%) of the Estimated Project Cost (the “**Authority Fee**”) to the Authority on the achievement of the Financial Close into the designated bank account of the Authority, the details of which will be communicated to the Private Partner in writing by the Authority prior to such date.

7. PRIVATE PARTNER’S REPRESENTATIONS, WARRANTIES AND CERTAIN OBLIGATIONS & UNDERTAKINGS

7.1 PRIVATE PARTNER REPRESENTATIONS & WARRANTIES

- 7.1.1 The Private Partner hereby represents and warrants to the Implementing Agency that:
- (a) it is duly organized and validly existing under the Applicable Laws, and that it has full power and Implementing Agency to execute and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;
 - (b) it has taken all necessary corporate and other actions under the Applicable Laws to:
 - (i) authorize the execution, delivery and performance of this Agreement; and
 - (ii) validly exercise its rights and perform its obligations under this Agreement;
 - (c) this Agreement and all obligations contained herein constitutes its legal, valid and binding obligations, enforceable against it in accordance with the terms hereof;
 - (d) it has the financial standing and capability to undertake and implement the Project in accordance with the Applicable Standards and neither the Private Partner nor the Sponsors have committed a breach in respect of their payment obligations in relation to a financial indebtedness;
 - (e) it is subject to the Applicable Laws, and hereby expressly and irrevocably waives any immunity in any jurisdiction in respect of this Agreement and/or or matters arising hereunder including any obligation, liability or responsibility hereunder;
 - (f) the execution, delivery and performance of this Agreement does not and shall not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of the terms of its memorandum and articles of association or any of its constitutive and corporate charters, filings with Government Authorities, documents, or any Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;
 - (g) there are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it under the Applicable Laws before any court or before any other judicial, quasi-judicial or other Implementing Agency, the outcome of which may result in the breach of this Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform any of its obligations under this Agreement;

- (h) it has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Agency which may result in any Material Adverse Effect on its ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would have a Material Adverse Effect on the performance of its obligations under this Agreement;
- (i) it has complied with Applicable Laws in all material respects and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have a Material Adverse Effect on its ability to perform its obligations under this Agreement;
- (j) the Sponsor has the Private Partner's Ownership And Management Control as of the Effective Date;
- (k) the Private Partner and the Sponsor (along with its Associates (if any)) have the financial standing and resources to fund the required Equity for Shares and to raise the debt/ financing necessary for undertaking and implementing the Project in accordance with this Agreement;
- (l) no representation or warranty made by the Private Partner and contained herein or in any other document furnished by it to the Implementing Agency or to any Government Agency in relation to the Private Partner Permits contains any untrue or misleading statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty misleading;
- (m) no sums, in cash or kind, have been paid or will be paid, by it or on its behalf, to any Person by way of fees, commission or otherwise for securing the Concession or entering into this Agreement or for influencing or attempting to influence any officer or employee of the Implementing Agency in connection therewith and neither the Private Partner nor the Sponsor (together with their Affiliates) have engaged in any Corrupt Act in respect of the foregoing;
- (n) the Sponsor has complied with requirements of the Applicable Laws and the RFP (to the extent the same are applicable to the Private Partner and the bidders) in the preparation, finalization, delivery and submission of its Bid for the award of the Project and the Concession to the Private Partner and have undertaken all acts and deeds (to the extent the same are applicable to the Private Partner and the bidders) necessary for award of the Concession and the Project to the Private Partner in terms of the RFP and the Applicable Laws;
- (o) all representations, breach of which may cause a Material Adverse Effect, provided by the Sponsors in its Bid submitted in response to the RFP, is true and accurate in all respects;
- (p) it is subject to civil and commercial law with respect to this Agreement and it hereby expressly and irrevocably waives any sovereign immunity (if any) in any jurisdiction.

7.1.2 In the event that any occurrence or circumstance comes to the attention of either Party that renders any of its aforesaid representations or warranties untrue or incorrect, such Party shall immediately notify the other Party of the same. Such Notification shall not have the effect of remedying any breach of the representation or warranty that has been found to be untrue or incorrect nor shall it adversely affect or waive any right, remedy or obligation of either Party under this Agreement or any Implementing Agency Agreement.

7.2 PRIVATE PARTNER'S GENERAL UNDERTAKINGS

7.2.1 The Private Partner hereby undertakes that it shall, at its own cost and expense:

- (a) comply with and perform all duties, obligations, acts, deeds and obligations set out in, in each case, the Applicable Standards;
- (b) continuously and diligently undertake, perform and complete all Project Works and Concession Assets in accordance with the Applicable Standards and within the Time For Completion;
- (c) ensure that all Project Works and Concession Assets comply with the Applicable Standards;
- (d) investigate, study, finance, design, construct, install, Operate and Maintain the Concession Assets in accordance with the Applicable Standards;
- (e) ensure and achieve each Project Milestone on or prior to its Project Milestone Date in accordance with the Applicable Standards including:
 - (A) achieve Substantial Completion on or prior to the Scheduled Substantial Completion Date;
 - (B) achieve Project Construction Completion on or prior to the Scheduled Project Construction Completion Date;
 - (C) achieve Installation Completion on or prior to the Scheduled Installation Completion Date;
- (f) remedy any Defects & Deficiencies in the Project Works (including in the performance of the same) and/or the Concession Assets at its own cost and risk;
- (g) obtain and maintain all Private Partner Permits (including any renewals of the same) in conformity with the Applicable Laws and be in compliance thereof, and deliver copies of the same to the Implementing Agency, the Independent Engineer and the Independent Auditor from time to time;
- (h) be in compliance with and perform all its obligations in accordance with, in each case, the Applicable Laws and fulfil the requirements (including the environmental requirements) under the Applicable Laws,
- (i) procure and maintain in full force and effect, as necessary, appropriate proprietary rights, Licences, agreements and permissions for materials, methods, processes and systems used in or incorporated into the Project;
- (j) appoint, supervise, monitor and control as necessary, the activities of the Private Partner Engaged Persons (including those of the Contractors under their respective and relevant Project Agreements);
- (k) make its own arrangements for materials (including construction materials and installation materials), parts, components, supplies, tools, machinery etc. for performance of the Project Works;
- (l) be responsible for strict compliance with the relevant Applicable Standards notwithstanding the appointment and/or engagement by it of the Private Partner Engaged Persons to implement the Project (or any part thereof) and performance of Project Works (or any part thereof);
- (m) keep and maintain the Project Site free from all encroachments and take all steps necessary to remove encroachments, if any;

- (n) except as provided in this Agreement, make payments to the relevant Government Agency, if required, for provision of such services as are not provided in the normal course or are available only on payment;
- (o) afford access of the Project Site to the authorized representatives of the Implementing Agency, the Independent Engineer, Independent Auditor and any Government Agency having jurisdiction over the Project, including those concerned with safety, security or environmental protection to inspect the Project Works and the Concession Assets and, upon reasonable notice, to investigate any matter within their Implementing Agency, and provide to such Persons assistance reasonably required to carry out their respective duties and functions;
- (p) not engage in any business or activity other than the business or related to, and conducted for, the purpose of the Project and/or other than as provided in this Agreement;
- (q) maintain its corporate existence and its rights to carry on operations of its business;
- (r) provide all necessary assistance to the Project Manager, as the Project Manager may reasonably require for the performance of its duties and services;
- (s) make all payments to the Implementing Agency of the amounts due and payable by the Private Partner in accordance with the terms of this Agreement and the Implementing Agency Agreements;
- (t) ensure that no damage is caused to any property belonging to Implementing Agency and/or other third parties in the execution of the Project Works;
- (u) coordinate and manage all the Project Works and be responsible for the coordination and general management of the Project Works;
- (v) provide to the Implementing Agency, the Independent Auditor and the Independent Engineer all such information relating to the Project Works and the execution and completion of the same as is reasonably requested by the Implementing Agency, the Independent Auditor and the Independent Engineer from time to time;
- (w) Notify the Implementing Agency, the Independent Engineer and/or the Independent Auditor (as applicable) without undue delay upon becoming aware of any changes in the information provided and/or to be provided to the same by the Private Partner pursuant to the Applicable Standards;
- (x) provide all necessary assistance to the Independent Engineer and the Independent Auditor as the same may reasonably require for the performance of their duties and services in accordance with the Independent Engineer Contract and the Independent Auditor Contract, respectively, and for the performance of its roles and obligations contemplated under this Agreement and the Implementing Agency Agreements;
- (y) ensure that the Project Agreements entered into by the Private Partner shall not be inconsistent with the terms and conditions of the Implementing Agency Agreements;
- (z) submit from time to time to the Implementing Agency and the Independent Engineer its detailed design, construction methodology and quality assurance procedures for implementation and completion of the Project in accordance with the Applicable Standards and the same shall be subject to the review and approval of the Independent Engineer;

- (aa) undertake, do and perform from time to time, all such acts, deeds and things as may be necessary or required before commencement of Project Works (or any part thereof) for the performance of the Project Works under and in accordance with the Applicable Standards;
- (bb) construct, provide and maintain a reasonably furnished site office accommodation for the Independent Engineer at the Project Site commencing from the Commencement Date and until the Transfer Date;
- (cc) ensure the safety of the Concession Assets and the Users in accordance with the Safety Requirements;
- (dd) maintain the Project Site and the Concession Assets in good condition;
- (ee) comply with the Project Requirements; and
- (ff) comply with all the conditions set out in the EIA Approval.

7.3 PRIVATE PARTNER ENGAGED PERSONS

- 7.3.1 The Private Partner shall, commencing from the Effective Date, have requisite organization and designate and appoint suitable officers/ representatives as it may deem appropriate to implement and supervise the Project, to deal with the Independent Engineer/Independent Auditor/the Implementing Agency and to be responsible for all necessary exchange of information required pursuant to the Applicable Standards.
- 7.3.2 The Private Partner shall ensure that the Private Partner Engaged Persons experienced and qualified for the purposes of Project implementation and performance of the Project Works and are at all times properly trained for their respective functions. The Private Partner shall be responsible for maintaining harmony and good industrial relations among the Private Partner Engaged Persons.
- 7.3.3 The Private Partner shall be fully and solely responsible for:
 - (a) observance by all the Private Partner Engaged Persons of all the provisions and requirements of the Applicable Standards;
 - (b) the acts, omissions, failure to perform, breaches or defaults of the Private Partner Engaged Persons of the Applicable Standards as fully as if they were the acts, omissions, failures, breaches or defaults of the Private Partner of the Applicable Standards under this Agreement and the Implementing Agency Agreement.
- 7.3.4 The Private Partner shall be responsible for strict compliance with the Applicable Standards notwithstanding the appointment and/or engagement by it of the Private Partner Engaged Persons to implement the Project (or any part thereof) and performance of Project Works (or any part thereof) and any engagement by the Private Partner of any of the Private Partner Engaged Persons shall not release or discharge the Private Partner of any of its liabilities, responsibilities or obligations under the Applicable Standards and the Private Partner shall not be entitled to any relief or compensation (including any extension of Time For Completion and/or monetary compensations) under this Agreement or otherwise for any acts, omissions, failures, breaches or defaults of the Private Partner Engaged Persons. Notwithstanding anything to the contrary, the Implementing Agency shall not be liable or responsible in any manner whatsoever under any Applicable Laws, in contract, tort or otherwise in respect of the Private Partner Engaged Persons.

- 7.3.5 Employment of any foreign Private Partner Engaged Persons shall be subject to grant of requisite regulatory permits and approvals including employment/residential visas and work permits, if any required, and the obligation to apply for and obtain the same shall be the sole responsibility of the Private Partner and, notwithstanding anything to the contrary contained in this Agreement or otherwise, refusal of or inability to obtain any such permits and approvals by the Private Partner or the relevant Contractor shall not constitute Force Majeure Event, and shall not in any manner excuse the Private Partner from the performance and discharge of its obligations and liabilities under the Applicable Standards. The Private Partner shall use reasonable efforts to promote local contractors and to employ and engage, to the extent practicable local employees and contractors.
- 7.3.6 The Private Partner undertakes that it shall itself and any of its Private Partner Engaged Persons shall be available to attend any meetings with the Implementing Agency, the Independent Engineer and/or the Independent Auditor at all reasonable times, as required and Notified by the Implementing Agency, the Independent Engineer and/or the Independent Auditor (as applicable) to the Private Partner. All costs for attending such meetings by (including those relating to preparation and attendance in such meetings by the Private Partner Engaged Persons) shall be on the Private Partner's account.

7.4 PRIVATE PARTNER AUTHORIZED REPRESENTATIVE & PRIVATE PARTNER PROJECT ENGINEER

- 7.4.1 Within seven (7) days following the Effective Date, the Private Partner shall:
- (a) appoint, with the prior written consent of the Implementing Agency (which consent shall be deemed to be accorded in case no response from Implementing Agency is received within fifteen (15) days of Implementing Agency's receipt of the Private Partner's written request for such consent) and prior Notification to the Independent Engineer and the Independent Auditor, its representative duly authorized to deal with the Implementing Agency in respect of all matters under or arising out of or relating to this Agreement (the **Private Partner Authorized Representative**);
 - (b) appoint, with the prior written consent of the Implementing Agency (which consent shall be deemed to be accorded in case no response from Implementing Agency is received within fifteen (15) days of Implementing Agency's receipt of the Private Partner's written request for such consent) and prior Notification to the Independent Engineer and the Independent Auditor, at its sole cost and expense one or more established consulting engineering firm to design and supervise the Construction Works and Installation Works and in particular to ensure that the Construction Works and Installation Works are performed and are in accordance with the Applicable Standards and Good Industry Practice (the **Private Partner Project Engineer**);
 - (c) ensure that the Private Partner Authorized Representative or the Private Partner Project Engineer perform their respective obligations in the same manner as the Private Partner is required to perform its obligations under this Agreement; and
 - (d) prior to the appointment or any substitution of the Private Partner Authorized Representative and/or the Private Partner Project Engineer, the Private Partner shall submit the details of the same to the Implementing Agency in writing (with copies to the Independent Engineer and the Independent Auditor) and shall provide any other information reasonably requested by the Implementing Agency in respect of the same.
- 7.4.2 The Private Partner shall substitute the Private Partner Authorized Representative and the Private Partner Project Engineer with the prior approval of the Implementing Agency. The approval by the Implementing Agency shall not be unreasonably withheld, conditioned or delayed; provided, however, in the event the Implementing Agency fails to grant its approval or disapproval to the Private Partner for the appointment and/or substitution of the Private Partner Authorized Representative and/or the

Private Partner Project Engineer within fifteen (15) days following the receipt of such request by the Implementing Agency from the Private Partner, the approval of the Implementing Agency for the appointment and/or substitution of the Private Partner Authorized Representative and/or the Private Partner Project Engineer shall be deemed accorded. The Private Partner hereby unconditionally and irrevocably confirms, acknowledges and agrees that the liability of the Private Partner for the performance of its obligation pursuant to this Agreement shall neither be rescinded, waived, reduced, cancelled, terminated and / or in any manner adversely impacted as a direct and / or indirect consequence of the approval or otherwise of the Implementing Agency pursuant to this Section.

7.5 THE CONSTRUCTION CONTRACTOR & THE O&M CONTRACTOR

7.5.1 The Private Partner hereby undertakes that it shall:

- (a) ensure that the Construction Contract(s) and the O&M Contract(s) are entered into on an arm's length basis and on commercially viable terms;
- (b) ensure that the assets created and/or constructed forming part of the Concession Assets pursuant to the Construction Contract(s) and the O&M Contract(s) vest in Implementing Agency on the Transfer Date;
- (c) ensure that the Construction Contractor or the O&M Contractor perform their respective obligations in the same manner that the Private Partner is required to perform its obligations under this Agreement; and
- (d) deliver copies of each of the Construction Contract(s) and the O&M Contract(s) to Implementing Agency within five (5) days of its execution prior to Construction Contractors' mobilization.

7.5.2 The Implementing Agency shall not be liable for losses (including any Losses) of any nature resulting from the Construction Contract and the O&M Contract entered into by the Private Partner as a result of the expiry of the Concession Period or Termination of this Agreement.

7.5.3 Prior to the appointment or any substitution of the Construction Contractor and/or the O&M Contractor, the Private Partner shall submit the details of the same to the Implementing Agency, the Independent Engineer and the Independent Auditor and shall provide any other information reasonably requested by the Implementing Agency, the Independent Engineer and the Independent Auditor in respect of the same.

7.5.4 The Implementing Agency shall have the right to approve and/or disapprove the appointment and/or replacement of the Construction Contractor and/or the O&M Contractor, if:

- (a) any such appointment and/or replacement, in the reasonable opinion of the Implementing Agency, has any implications on national security interests of Pakistan; and/or
- (b) such Construction Contractor and/or O&M Contractor is from the country of origin that is proscribed by the Applicable Laws and/or is black listed by any Government Agency;

and the decision of the Implementing Agency in this regard shall be final and binding on the Private Partner. The Private Partner hereby unconditionally and irrevocably confirms, acknowledges and agrees that the liability of the Private Partner for the performance of its obligations pursuant to this Agreement shall neither be rescinded, waived, reduced, cancelled, terminated and / or in any manner adversely impacted as a direct and / or indirect consequence of the approval or otherwise of the Implementing Agency pursuant to this Section.

- 7.5.5 The Independent Engineer (in respect of technical matters) and the Independent Auditor (in respect of financial matters) shall have the right to approve and / or disapprove the appointment and / or replacement of the Construction Contractor and/or the O&M Contractor, if any, in the event (in the reasonable opinion of the Independent Engineer (in respect of technical matters) and the Independent Auditor (in respect of financial matters)):
- (a) such Construction Contractor is technically and financially incapable (to the extent of its scope of work) of performing the Construction Works (or any part thereof); or
 - (b) such O&M Contractor is technically and financially incapable (to the extent of its scope of work) to perform the Operations and Maintenance (or any part thereof).
- 7.5.6 The execution of the Construction Contract(s) and/or the O&M Contract(s), or any amendment thereof shall be subject to the prior approval of the Independent Engineer in respect of payment terms, payment milestones, scope of the relevant Project Works and technical matters. The Private Partner shall deliver to the Independent Engineer copies of the proposed Construction Contract(s) and O&M Contract(s) (with a copy to the Implementing Agency), or any amendment thereof. The Implementing Agency shall, within fifteen (15) days of its receipt of the proposed Construction Contract(s) and/or the O&M Contract(s), provide its comments or observation on the same, if any, to the Independent Engineer. The Independent Engineer shall within twenty-eight (28) days of the delivery of the proposed Construction Contract(s) and O&M Contract(s) and/or any amendments thereof by the Private Partner, grant its approval or disapproval of the same, in consultation with Implementing Agency, and/or after removing any objection by Implementing Agency). In the event no approval or objections to the proposed Construction Contract(s) and/or the O&M Contracts is granted by the Independent Engineer within twenty-eight (28) days of the delivery of the same by the Private Partner, it shall be deemed not to have been objected to by the Independent Engineer.
- 7.5.7 The Private Partner shall deliver certified (as being true and correct) copies of the executed Construction Contract(s) and O&M Contract(s), together with all amendments thereto, to the Implementing Agency, the Independent Engineer and the Independent Auditor within seven (7) days of execution of the same.

7.6 PRIVATE PARTNER PERMITS

- 7.6.1 The Private Partner shall make or cause to be made, in a timely fashion, all applications (whether initial or renewal applications) for the Private Partner Permits in the prescribed form and with the prescribed fee (in each case, in accordance with the Applicable Laws) to the appropriate Government Agency and shall diligently pursue all such applications. The information supplied in the applications shall be complete and accurate and shall satisfy the substantive and procedural requirements of the Applicable Laws applied in a “*non-discriminatory*” manner.
- 7.6.2 The Private Partner shall make or cause to be made, at least monthly prior to the Project Construction Completion Date and the Installation Completion Date (as applicable), and at least quarterly thereafter, reports listing its schedule for submitting Private Partner Permits application forms or renewal application forms, the status of any Private Partner Permit applications then outstanding, notifications of the granting or denial of any Private Partner Permit or Private Partner Permit renewal, and notifications of any violations of any Private Partner Permit. Each report shall be submitted to the Implementing Agency, the Independent Engineer and the Independent Auditor and shall include copies of all applications and notifications discussed in the report which have not been provided with a previous report. The first section of each report shall also summarize any problems regarding any Private Partner Permit or Private Partner Permit application that may materially affect the Private Partner’s performance under any Implementing Agency Agreement. In the event of any Lapse of Consent, the Private Partner shall submit a report pursuant to this Section 7.6.2 within three (3) days after becoming aware thereof.

7.7 NOT USED

7.8 NOT USED

7.9 ACCESS ROUTE & TRANSPORTATION

7.9.1 The Private Partner shall be responsible for selection and usage of all transportation means, transportation routes, roads, bridges, highways and routes within, and to and from the Project Site in respect of performance of its Project Works and the Implementing Agency shall not be responsible for any claims attributable to Private Partner in respect of the same. The Private Partner shall (as between the Parties) be responsible for the repair of access routes damaged by the Private Partner and/or the Private Partner Engaged Persons.

7.10 TAXES AND SUBSIDIES

7.10.1 The Private Partner shall be responsible to make all payments in respect of the rates, taxes (as applicable), charges, levies, assessments or equivalent taxes levied on it.

7.10.2 The Private Partner may raise any objections in terms of any charges levied on it by any Government Agency; provided, that such objections shall be filed and pursued at the Private Partner's cost and the Private Partner shall be entitled to any benefit accruing as a result of the Private Partner's successful objection.

7.10.3 The Private Partner fully understands that the Implementing Agency or any other Government Agency shall not provide any guarantee, subsidy, grant or any financial support of any nature to the Private Partner in respect of the Project other than as provided under the Implementing Agency Agreements.

7.11 PROTECTION OF THE ENVIRONMENT

7.11.1 The Private Partner shall comply with all Applicable Standards (including any condition which may from time to time be imposed by any Governmental Implementing Agency, including the '*Punjab Environmental Protection Agency*' as regards collection, treatment and disposal or discharge of effluents or waste) pertaining to protection of the environment in its arrangements, execution of Project Works, procurement, construction, installation and operations on Project Site. The Private Partner shall take all necessary steps to protect the environment (both on and off the Project Site) and shall not cause damage and nuisance to people and property resulting from pollution, noise and other results of its operations. The Private Partner shall ensure that air emissions, surface discharges and effluent from the Project Site during the Concession Period shall not exceed the values prescribed by Applicable Standards.

7.11.2 The Private Partner shall provide properly designed storage areas for its hazardous materials that are impermeable to leakage into the surrounding soil for storage of hazardous wastes. Such storage shall also be covered and protected from inundation and overflow by rainfall into the surrounding soil. Any hazardous materials generated during completion of the Project Works by the Private Partner (including any of its Private Partner Engaged Persons) shall be properly disposed off by the Private Partner on completion of the Works. The Private Partner shall be responsible for keeping safe and disposing any hazardous materials and any dangerous substances on the Project Site generated from time to time during performance and completion of the Project Works or brought on to the Project Site by the Private Partner.

7.11.3 The Private Partner undertakes to indemnify, defend and hold the Implementing Agency harmless from any and all liabilities, claims, damages, costs, penalties, fines, expenses, fees (including reasonable

attorney's fees) and charges of any nature associated with any non-compliance by the Private Partner of its obligations contained in this Section 7.3.11 (*Protection of Environment*).

7.12 INTERNAL INFRASTRUCTURE LINKAGES

7.12.1 The Private Partner shall be responsible for internal infrastructure linkages required for the Project such as waste water and storm water drainage at the Project Site. The Implementing Agency shall use reasonable efforts to facilitate for the provision with respective Government Authorities at no cost to itself and it shall be the Private Partner's responsibility to fulfil any monetary or other compliances, as may be required by such Government Authorities.

7.13 EMERGENCY DECOMMISSIONING

7.13.1 In the event, during the Operations Period, in the reasonable opinion of the Private Partner, there exists an Emergency that warrants de-commissioning and closure to traffic and / or the Users of the whole or any part of the Concession Assets (the **Decommissioned Project Area**), the Private Partner shall be entitled to de-commission and close the whole or any part of Decommissioned Project Area, as the case may be, to the traffic and / or the Users for so long as such Emergency and the consequences thereof warrant (the **Emergency Decommissioning**); provided, however, that such Emergency Decommissioning and the particulars thereof shall be notified by the Private Partner to the Implementing Agency and the Independent Engineer without any delay, and the Private Partner shall diligently abide by the Applicable Standards (including the Safety Requirements) in dealing with such Emergency Decommissioning and act in accordance with the directions that the Independent Engineer may issue for dealing with such Emergency Decommissioning; provided, however:

- (a) that the Independent Engineer shall, within seven (7) days from the date of the Emergency Decommissioning, certify whether such Emergency Decommissioning was warranted; and
- (b) that the Private Partner shall re-commission the Decommissioned Project Area, without any delay, whenever the Independent Engineer either: (i) notifies the Private Partner to re-commission the same; or (ii) certifies that such Emergency Decommissioning was not warranted.

7.13.2 Without prejudice to the provisions of Section 7.13.1 (b), the Private Partner hereby undertakes to re-commission the Decommissioned Project Area efficiently and in a time sensitive manner and as quickly as practicable after the circumstances leading to the Emergency Decommissioning have ceased to exist or have so abated as to enable the Private Partner to re-commission the Decommissioned Project Area and shall notify the Implementing Agency and the Independent Engineer of the same without any delay.

7.13.3 The Emergency Decommissioning of the Decommissioned Project Area and the re-commissioning thereof shall, as soon as practicable, be brought to the notice of the affected Persons / Users by means of public announcements/notice by the Implementing Agency. The Independent Engineer shall determine whether the Private Partner has successfully re-commissioned the Decommissioned Project Area and made the same available for traffic / Users as soon as practicable upon the termination / ceasing of the circumstances that have resulted in the Emergency Decommissioning.

7.13.4 All expenses, charges, fees, overheads and costs of any nature and all delays, in each case, resulting from and relating to the Emergency Decommissioning shall be borne by and shall be on account of the Private Partner; provided, however, in the event the Emergency Decommissioning results from a Implementing Agency Event of Default and/or a Force Majeure Event, the Private Partner shall be entitled to issuance of a Relief Request and in such case, the provisions of Article 15 (*Relief Extensions & Relief Compensations*) shall apply.

7.14 RESTORATION OF LOSS OR DAMAGE TO PROJECT

7.14.1 Save and except as a result of a Permitted Events (excluding a Non-Political Event), in the event that the Project Works and/or Concession Assets or any part thereof suffers any loss or damage during the Concession Period, the Private Partner shall, at its cost and expense, rectify and remedy such loss or damage forthwith in accordance with the Applicable Standards so that the Project Works and the Concession Assets conform to the Applicable Standards.

7.15 ACCOUNTS AND REPORTS

7.15.1 APPOINTMENT OF AUDITORS

The Private Partner shall make arrangements with respect to the installation and operation of an accounting and cost control system and for the appointment, as statutory auditors, of a reputed firm of independent chartered accountants reasonably acceptable to the Implementing Agency and the Independent Auditor.

7.15.2 SPECIFIC RECORDS

The Private Partner shall maintain complete and accurate records accounting for all transactions relating to any Relief Order, Relief Costs, extensions of Time For Completion, Change of Scope, minutes of board meetings and shareholder meetings and other records, which records shall be subject to inspection and audit by the Implementing Agency, the Independent Engineer and the Independent Auditor.

7.15.3 PERIODIC REPORTS

- (a) The Private Partner shall in accordance with this Agreement furnish to the Implementing Agency, the Independent Engineer and the Independent Auditor, the Construction Monthly Progress Report and the O&M Monthly Status Report.
- (b) The Private Partner shall, as soon as available but in any event within ten (10) days of filing, furnish to the Implementing Agency, the Independent Engineer and the Independent Auditor two (2) copies of all documents filed in compliance with the requirements of the Companies Act 2017 as amended or superseded from time to time or any other Applicable Laws.
- (c) The Private Partner shall, as soon as available, furnish to the Implementing Agency, the Independent Engineer and the Independent Auditor, a report on any factors materially and adversely affecting, or that might materially and adversely affect, the Project or the Private Partner's business and operations.

7.15.4 REPORTING OF CHANGES

The Private Partner shall, at least fourteen (14) days prior to its becoming effective, report to the Implementing Agency, the Independent Engineer and the Independent Auditor any contemplated (i) material change in its memorandum and articles of association; (ii) change in its fiscal year; (iii) change in the constitution of its board of directors; (iv) change in its chief executive officer, and (v) without prejudice to the provisions of Section 10.3 (*Change of Control*), registration of a transfer of Shares to any Person who thereby becomes a registered holder of greater than five percent (5%) of the issued Shares, or of a transfer of Shares to or from a Person or entity who, immediately prior to such transfer, held greater than five (5) percent of the issued Shares; provided, however, that, reporting as aforesaid shall not relieve the Private Partner from its obligations or liabilities towards any other Government Agency having jurisdiction over any such matter.

7.15.5 LISTS OF FINANCIERS AND CREDITORS

Together with the periodic reports required by Section 7.15.3, the Private Partner shall also furnish to the Implementing Agency, the Independent Engineer and the Independent Auditor a list of:

- (a) the Financiers; and
- (b) each of its creditors to which the Private Partner has an outstanding obligation of PKR 5,000,000 (Pakistani Rupees five million only) or more,

in each case, along with statements or schedules of repayment of local and foreign loans/debts to such Financiers and creditors duly certified by its statutory auditors on a six (6) monthly basis in each Accounting Year. The report shall also indicate any changes, as compared to the report submitted the previous Accounting Year that might have occurred.

7.15.6 INFORMATION REGARDING STATUTORY NOTICE/WINDING UP PROCEEDINGS

The Private Partner shall, within seven (7) days of receipt thereof, provide to the Implementing Agency, the Independent Engineer and the Independent Auditor a copy of any notice that the Private Partner may be served under Sections 301 and 302 (as such Sections may be amended, modified or relocated) of the Companies Act 2017 by any of the Financiers or its creditors.

The Private Partner shall provide to the Implementing Agency, the Independent Engineer and the Independent Auditor all information in respect of any further actions taken by the Financiers or its creditors following any notice under Sections 301 and 302 (as such Sections may be amended, modified or relocated) of the Companies Act 2017.

7.15.7 FAILURE BY THE PRIVATE PARTNER TO SUBMIT REPORTS, DOCUMENTS AND INFORMATION

In addition to the rights the Implementing Agency may have under this Agreement or under the Applicable Laws, in the event that the Private Partner fails to submit any of the documents, reports or information as and when required under this Agreement, the Implementing Agency shall be entitled to assess against and recover from the Private Partner reasonable costs established from time to time by the Implementing Agency for such non-compliance. Such reasonable costs shall be paid to the Implementing Agency within ten (10) days of notice of such non-compliance and assessment by the Implementing Agency.

7.16 AFFIRMATIONS

7.16.1 The Private Partner hereby declares that it has not obtained or induced the procurement of this Agreement and/or any Project Agreement and/or any Implementing Agency Agreement and/or any contract, consent, approval, right, interest, privilege or other obligation or benefit related to this Agreement and/or any Implementing Agency Agreement and/or the Project from the Implementing Agency and/or any Government Agency through any corrupt (including Corrupt Act) or illegal business practice.

7.16.2 Without limiting the generality of the foregoing, the Private Partner represents and warrants that it has fully disclosed in writing all commissions, brokerage and other fees, and other compensation (other than compensation paid to employees of the Private Partner for services provided) paid or payable to any Person within or outside Pakistan in relation to the Project and has not given or agreed to give and shall not give, or agree to give to any Person within or outside Pakistan either directly or indirectly through any natural or juridical Person, including its Affiliates, employees, agents, associates, brokers, consultants, officers, directors, promoters, shareholders, sponsors or subsidiaries (and any of their employees, agents, associates, brokers, consultants, officers, directors, promoters, shareholders or

sponsors), any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of any Implementing Agency Agreement or any Project Agreement or any contract, right, interest, privilege or other obligation or benefit related to any Implementing Agency Agreement or the Project from the Implementing Agency or any Governmental Implementing Agency, except that which has been expressly declared pursuant hereto.

- 7.16.3 The Private Partner accepts full responsibility and strict liability for making any intentional false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of the representations and warranties contained herein and the declarations required hereby. The Private Partner agrees in the event that any of the representations and warranties made by it in Section 7.1 and 7.2 are proved to be materially incorrect, that any contract, consent, approval, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to the Implementing Agency, be voidable and without legal effect at the option of the Implementing Agency.
- 7.16.4 Notwithstanding any rights and remedies that are available to and may be exercised by the Implementing Agency in this regard, the Private Partner agrees to indemnify the Implementing Agency for any loss (including Losses) or damage incurred by it on account of its corrupt business practices and further pay compensation to the Implementing Agency in an amount equivalent to ten (10) times the amount of any commission, gratification, bribe, finder's fee or kickback paid or given by the Private Partner (either directly or indirectly through any natural or juridical Person, including its Affiliates, employees, agents, associates, brokers, consultants, officers, directors, promoters, shareholders, sponsors or subsidiaries (and any of their employees, agents, associates, brokers, consultants, officers, directors, promoters, shareholders or sponsors), as aforesaid for the purpose of obtaining or inducing the procurement of any Implementing Agency Agreement or any Project Agreement or any contract, consent, approval, right, interest, privilege or other obligation or benefit related to any Implementing Agency Agreement or the Project from the Implementing Agency or any Governmental Implementing Agency.

7.17 NO RELIEF FROM LIABILITY

- 7.17.1 No review, non-objection or approval by the Implementing Agency, the Independent Engineer, the Independent Auditor or any Government Agency of any Concession Asset or Project Works (including any agreement, document, instrument, drawing, specifications or design proposed by the Private Partner) shall relieve the Private Partner from any liability that it would otherwise have had for its negligence in the performance and completion of the Project Works and the Concession Assets (including preparation of an agreement, document, instrument, drawing, specification or design) or failure to comply with the Applicable Laws with respect thereto, or to satisfy the Private Partner's obligations under the Implementing Agency Agreements, nor shall the Implementing Agency, the Independent Engineer, the Independent Auditor or any Government Agency be liable to the Private Partner or any other Person by reason of its review and approval of an agreement, document, instrument, drawing, specification, or design.
- 7.17.2 The Private Partner shall, at all times, be responsible and liable for all its obligations under the Applicable Standards notwithstanding anything contained in the Project Agreements or any other agreement, and no default under any Project Agreement or other agreement shall excuse the Private Partner from its obligations or liability hereunder.

7.18 WITHOUT PREJUDICE

- 7.18.1 The representations, warranties, undertakings, obligations, roles and responsibilities of the Private Partner set out in this Article 7 (*Private Partner's Representations, Warranties And Certain Obligations & Undertakings*) shall not limit or prejudice in any manner the representations, warranties, undertakings,

obligations, roles and responsibilities of the Private Partner set out elsewhere in the Implementing Agency Agreements.

8. IMPLEMENTING AGENCY REPRESENTATIONS, WARRANTIES AND CERTAIN OBLIGATIONS & UNDERTAKINGS

8.1 IMPLEMENTING AGENCY REPRESENTATIONS & WARRANTIES

8.1.1 The Implementing Agency hereby represents and warrants to the Private Partner that:

- (a) it has taken all necessary actions under Applicable Laws to:
 - (i) authorize the execution, delivery and performance of this Agreement; and
 - (ii) validly exercise its rights and perform its obligations under this Agreement;
- (b) this Agreement and all obligations contained herein constitutes its legal, valid and binding obligations, enforceable against it in accordance with the terms hereof;
- (c) the execution, delivery and performance of this Agreement will not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets are bound or affected;
- (d) there are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it under the Applicable Laws before any court or before any other judicial, quasi-judicial or other Implementing Agency, the outcome of which may result in a Material Adverse Effect;
- (e) it has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Agency which may result in any Material Adverse Effect on its ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its material obligations under this Agreement; and
- (f) it has complied with Applicable Laws in all material respects and has not been subject to any fines, penalties, injunctive relief or any other civil liabilities which in the aggregate have or may have a Material Adverse Effect.

8.1.2 In the event that any occurrence or circumstance comes to the attention of either Party that renders any of its aforesaid representations or warranties untrue or incorrect, such Party shall immediately notify the other Party of the same. Such notification shall not have the effect of remedying any breach of the representation or warranty that has been found to be untrue or incorrect nor shall it adversely affect or waive any right, remedy or obligation of either Party under this Agreement or any Implementing Agency Agreement.

8.2 GENERAL UNDERTAKINGS

8.2.1 The Implementing Agency hereby undertakes to the Private Partner that it shall:

- (a) ensure peaceful use of the Project Site by the Private Partner without any let or hindrance from the Implementing Agency and/or any person or Government Agency claiming through or under them;
- (b) procure police assistance for regulation of traffic on the Project Road and provide reasonable assistance to the Private Partner in procuring police assistance for removal of trespassers, removal of encroachments and security on and/or in respect of the Project;
- (c) upon written request of the Private Partner, provide police support at and/or near the Project Site as required by the Private Partner;
- (d) provide reasonable support and cooperate with and facilitate the Private Partner in the implementation of the Project in accordance with the provisions of the Implementing Agency Agreements; and
- (e) issue the Toll Notification (substantially, in the form set out in **SCHEDULE R (*Form of Toll Notification*)** as per **SCHEDULE P (*Toll Notification Structure*)** and Applicable Laws in order to implement the Toll Notification Structure.

8.3 SUPPORT FOR PRIVATE PARTNER PERMITS & CONDITIONS FOR PRIVATE PARTNER PERMITS

- 8.3.1 Subject to the Private Partner’s timely submission of reports required by Section 7.6.2, upon request of the Private Partner, the Implementing Agency shall support and use reasonable efforts to expedite consideration of the applications for the Private Partner Permits or reissuance(s) thereof filed pursuant to Section 7.6 (*Private Partner Permits*), and the timely issuance thereof or reissuance of a Private Partner subject to a Lapse of Consent by any Government Agency. Any request for support under this Section shall be made by the Private Partner and shall be accompanied with copies of the application for the Private Partner Permit, any notice that the issuance or reissuance of the Private Partner Permit was denied or deferred, and a statement of the efforts in obtaining the issuance or reissuance of the Private Partner Permit to date.
- 8.3.2 The Implementing Agency or any Government Agency may attach such “*non discriminatory*” terms and conditions (as explained in Section 8.6 (*Non-Discriminatory*)) to the issuance or renewal of any of the Private Partner Permits as are in accordance with the Applicable Laws and the attachment of such terms and conditions shall not in and of itself constitute a breach of this Agreement by the Implementing Agency, a Force Majeure Event, or a Implementing Agency Event of Default. The Private Partner and its Contractors shall abide by all such terms and conditions (subject to this Section 8.3.2 and provisions in this Agreement relating to Change in Law and Lapse of Consent). If the Private Partner (including where it is acting through its Contractors) fails to abide by any term or condition of any Private Partner Permit, then the Implementing Agency or any Government Agency may exercise any power pursuant to the Applicable Laws (provided such power is exercised in a “*non-discriminatory*” manner) in respect of such failure and (subject to this Section 8.3.2 and provisions in this Agreement relating to Change in Law and Lapse of Consent) such exercise shall not of itself constitute a breach of this Agreement by the Implementing Agency, a Force Majeure Event, or a Implementing Agency Event of Default; provided, however, that, with respect to all such Private Partner Permits issued by the Implementing Agency or any Government Agency that is also a department or instrumentality of Implementing Agency, the Implementing Agency shall not, and the Implementing Agency shall ensure that no such Government Agency shall, terminate prior to its expiration date or revoke any such Private Partner Permit earlier than the later of (a) thirty (30) days after delivery to the Private Partner (or the relevant Contractor) of written notice by the Implementing Agency or such department or instrumentality of Implementing Agency of such failure and (b) the period of time, if any, that must expire under the Applicable Laws or the relevant Private Partner Permit prior to early termination or revocation of any such Private Partner Permit; provided, further, that nothing in this Section shall limit the Implementing Agency or any

Government Agency from taking any action in relation to a breach of, or non-compliance with, a Private Partner Permit (other than termination or revocation) which it is entitled to take under the Applicable Laws (provided such action is taken in a “*non-discriminatory*” manner).

8.4 SUPPORT FOR OBLIGATIONS

- 8.4.1 Upon reasonable request by the Private Partner, the Implementing Agency shall use its reasonable efforts and its good offices to support the Private Partner’s performance of its obligations under and pursuant to this Agreement, including, its obligations to design, finance, insure, acquire, construct, install, complete, commission, own, operate and maintain the Concession Assets. If the Private Partner has failed to comply with its obligations under any Implementing Agency Agreement and such failure is the principal cause of the Private Partner’s difficulties in performing such activities, the Implementing Agency may advise the Private Partner of such determination, and the Implementing Agency shall not be obligated to take any action to assist the Private Partner until such time as the Private Partner has fully complied with its obligations under the Implementing Agency Agreements. By agreeing to use its reasonable efforts and its good offices to support the Private Partner’s efforts, the Implementing Agency has not relieved, and does not relieve in any way, the Private Partner of its obligations or potential liability under the Implementing Agency Agreements and the other documents comprising the Project Agreements.

8.5 PROCEDURE

- 8.5.1 To the extent permitted under the Applicable Laws, all applications and any other necessary requisites, whether for the Private Partner, its employees or Contractors, are to be routed through the Private Partner.

8.6 NON-DISCRIMINATORY

- 8.6.1 The use of the term “*non-discriminatory*” or “*discriminatory*” in any Implementing Agency Agreement is not intended to prohibit or limit in any way the Implementing Agency or any Government Agency from making rational distinctions between parties or from using measures, establishing conditions, or enforcing requirements that are, in each case, intended or designed to advance the purposes of the program being implemented by the Implementing Agency or any Government Agency or of a Private Partner Permit. It is intended, however, to prohibit the use of Government Agency, over Private Partner Permits, for example, to deprive the Private Partner of the benefits of the Implementing Agency Agreements or any other Project Agreement by the application of a higher standard to the Private Partner (alone, or together with others in a small class) than to others similarly situated because of, for example, its foreign ownership, or to gain commercial or political advantage.

8.7 PROJECT MANAGEMENT/IMPLEMENTATION UNIT

- 8.7.1 The Project Management/Implementation Unit shall oversee the day to day implementation of the Project and facilitate implementation of the Project Road in accordance with Applicable Laws on the Users.

8.8 IMPLEMENTING AGENCY PROJECT MANAGER

- 8.8.1 Unless already appointed prior to the Effective Date, the Implementing Agency shall, within seven (7) days following the Effective Date, appoint its representative duly authorized to deal on its behalf to facilitate on all matters under or arising out of or relating to the Implementing Agency Agreements (the Project Manager). The Implementing Agency may, by notice in writing to the Private Partner, substitute the Project Manager at its discretion at any time. The Implementing Agency shall ensure that at all times during the Concession Period, the Project Manager remains appointed.

8.9 IMPLEMENTING AGENCY OVERRIDING POWERS

8.9.1 Notwithstanding anything contained in this Agreement, the Implementing Agency shall have the right upon the occurrence of a national emergency, civil commotion and / or as a consequence of a Force Majeure Event, to take over the performance of any or all the obligations of the Private Partner to the extent deemed necessary by the Implementing Agency or as directed by the relevant Government Agency, and exercise such control over the Concession Assets and / or give such directions to the Private Partner as may be deemed necessary by the Implementing Agency; provided, however, that the exercise of such overriding powers by the Implementing Agency shall be of no greater scope and of no longer duration than is reasonably required in the circumstances which causes the exercise of such overriding power by the Implementing Agency (the **Implementing Agency Overriding Power Event**). The Private Partner hereby agrees to act in accordance with the instructions issued by the Implementing Agency pursuant to the provisions of this Section and undertakes to provide assistance and co-operation to the Implementing Agency for performance of its obligations hereunder. In the event the Implementing Agency exercises its overriding powers under this Section 8.9 (*Implementing Agency Overriding Powers*) whereby the Private Partner incurs any costs and expenses and/or is delayed in performance of its obligations under this Agreement, the Private Partner shall be entitled to issuance of a Relief Request and in such case, the provisions of Article 15 (*Relief Extensions & Relief Compensations*) shall apply.

8.10 SOVEREIGN IMMUNITY

8.10.1 The Implementing Agency unconditionally and irrevocably:

- (a) agrees that the execution, delivery and performance by it of the Implementing Agency Agreements and all other agreements, documents and writings relating to the same constitute private and commercial acts and not public or governmental acts;
- (b) agrees that should any proceedings be brought against it or its assets (other than any of its assets which are significant in respect of national security of Pakistan (the **Protected Assets**)) in any jurisdiction in relation to the Implementing Agency Agreements or any transaction contemplated by the Implementing Agency Agreements, no immunity, sovereign or otherwise, from such proceedings, execution, attachment or other legal process shall be claimed by or on behalf of itself or with respect to any of its assets (other than the Protected Assets);
- (c) waives any such right of immunity, sovereign or otherwise, which the Implementing Agency or its assets now has or may acquire in the future (other than the Protected Assets), in respect of proceedings under the Implementing Agency Agreements; and

8.11 WITHOUT PREJUDICE

8.11.1 The representations, warranties, undertakings, obligations, roles and responsibilities of the Implementing Agency set out in this Article 8 (*Implementing Agency Representations, Warranties And Certain Obligations & Undertakings*) shall not limit or prejudice in any manner the representations, warranties, undertakings, obligations, roles and responsibilities of the Private Partner set out elsewhere in the Implementing Agency Agreements.

8.12 SUPPORT FOR DEBT REPAYMENT

8.12.1 The Implementing Agency shall procure for the benefit of the Financiers, a Debit Authority, before the achievement of the Financial Close. The Debit Authority shall at all times, until the Financing Termination Date, cover no less than an amount of [*amount to be inserted on the basis of the Bid*], and shall be callable only by the Financiers, to the extent of any shortfall in the debt servicing obligations

of the Private Partner under the Financing Documents, subject to the overall limit of the Minimum Revenue Guarantee entitlement for the relevant quarter as determined in accordance with this Agreement.

- 8.12.2 The Debit Authority shall not be invoked for any shortfall in debt servicing obligations arising from causes attributable to the Private Partner, including but not limited to shortfalls arising from the failure of the Private Partner to comply with its obligations under this Agreement, the Financing Documents, or the Applicable Standards. For the avoidance of doubt, where the Debit Authority is not invocable under this Section 8.12.2, no Minimum Revenue Guarantee shall be payable to the Financiers or the Private Partner in respect of such shortfall under any provision of this Agreement.
- 8.12.3 The Parties agree to the following quarterly mechanism for the application of Debit Authority towards the Minimum Revenue Guarantee:
- (a) within fifteen (15) days of the end of each quarter of an Operational Year, the Financiers shall be entitled to submit a quarterly report to the Independent Auditor and the Implementing Agency, detailing the Actual Project Revenues and any actual shortfall in debt servicing obligations of the Private Partner as per the Financing Documents;
 - (b) the Independent Auditor shall, within fifteen (15) days of receipt of the quarterly report submitted by the Financiers under sub-clause (a), verify the Actual Project Revenues and prepare a verification report setting out:
 - (i) the overall Minimum Revenue Guarantee entitlement for such quarter, determined in accordance with this Agreement;
 - (ii) the actual shortfall, if any, in the debt servicing obligations of the Private Partner for such quarter;
 - (iii) the amount payable to the Financiers through the Debit Authority, which shall be the lower of the amounts determined under sub-paragraphs (i) and (ii) above; and
 - (iv) confirm whether the shortfall in debt servicing obligations is attributable to causes within the control of the Private Partner.
 - (c) the Independent Auditor shall submit the verification report directly to the Financiers, with a copy to the Implementing Agency; and
 - (d) upon receipt of the Independent Auditor's verification report, the Financier shall be entitled to invoke the Debit Authority and submit a demand to the State Bank of Pakistan for payment of the amount certified by the Independent Auditor under sub-clause (b)(iii), provided that:
 - (i) the amount so demanded shall not exceed the shortfall in debt servicing obligations of the Private Partner for the relevant quarter as verified by the Independent Auditor;
 - (ii) the amount so demanded shall in no event exceed the Minimum Revenue Guarantee entitlement for such quarter; and
 - (iii) the aggregate amount of the Minimum Revenue Guarantee payable and claimed for all quarters during any Operational Year shall not exceed the total Minimum Revenue Guarantee payable for such Operational Year as determined in accordance with this Agreement,

and any excess amount, if received, shall be transferred to the treasury account designated by the Implementing Agency.

- 8.12.4 The Parties agree that the Debit Authority shall constitute the sole and exclusive mechanism for the payment of the Minimum Revenue Guarantee under this Agreement. No direct payment of the Minimum Revenue Guarantee by the Implementing Agency to the Private Partner is contemplated under this Agreement.

8.13 SUPPORT FOR PRICE VARIATION

- 8.13.1 During the Construction Period, the Implementing Agency shall compensate the Private Partner for price fluctuations in the procurement costs of certain key construction inputs, specifically bitumen, cement, steel, and diesel (the “**Project Variation Guarantee**”). The price variation mechanism shall be carried out by the Independent Engineer and the Independent Auditor in accordance with the methodology and parameters set out in **Schedule X (Price Variation)** and submitted with a recommendation to the Implementing Agency. The recommendation shall be reviewed by the Implementing Agency and the Project Variation Guarantee should be disbursed to the Private Partner accordingly.
- 8.13.2 If the Construction Period is extended for a reason other than a Relief Event for which a Relief Order has been passed in accordance with Section 15, the Private Partner shall not be eligible to avail the Project Variation Guarantee for the extended period of the Construction Period.

9. INDEMNITIES & LIMITATION OF LIABILITY

9.1 GENERAL INDEMNITY

9.1.1 The Private Partner

The Private Partner shall indemnify and defend the Implementing Agency, for itself and its officers, servants, agents, Government Agency and Government owned and/or controlled entities/enterprises relating to the Project (the **Implementing Agency Indemnified Persons**) against, and hold the Implementing Agency Indemnified Persons harmless from, at all times after the Effective Date, any and all Losses, incurred, suffered, sustained or required to be paid, directly or indirectly, by, or sought to be imposed upon, the Implementing Agency Indemnified Persons for personal injury or death to persons or damage to property arising out of any negligent or intentional act or omission by the Private Partner in connection with this Agreement. Notwithstanding anything to the contrary contained in the preceding sentence, nothing in this Section 9.1.1 shall apply to any Loss in respect of and to the extent of which the Implementing Agency receives proceeds from insurance policies relating to the Project.

9.1.2 The Implementing Agency

Except as specifically provided elsewhere in this Agreement, the Implementing Agency shall indemnify and defend the Private Partner, for itself and as trustee for its officers, directors and employees against (the **Private Partner Indemnified Persons**), and hold the Private Partner Indemnified Persons harmless from, at all times after the Effective Date, any and all Loss incurred, suffered, sustained or required to be paid, directly or indirectly, by, or sought to be imposed upon the Private Partner Indemnified Persons for personal injury or death to persons or damage to property arising out of any negligent or intentional act or omission by the Implementing Agency in connection with this Agreement. Notwithstanding anything to the contrary contained in the preceding sentence, nothing in this Section 9.1.2 shall apply to any Loss in respect of and to the extent of which the Private Partner receives proceeds from insurance policies or indemnification from another party relating to the Project.

9.1.3 Joint Negligence

In the event injury or damage results from the joint or concurrent negligent or intentional acts or omissions of the Parties (as determined by the Independent Engineer and the Independent Auditor), each Party shall be liable under this indemnification in proportion to its relative degree of fault, as determined by the Independent Engineer and the Independent Auditor.

9.2 ASSERTION OF CLAIMS TO EXCEED MINIMUM INDEMNIFICATION AMOUNT

9.2.1 Each Party shall be solely liable, and shall not be entitled to assert any claim for indemnification under this Agreement, for any Loss that would otherwise be the subject of indemnification under this Agreement, until all Losses of such Party, in the aggregate, during the then-current Accounting Year, exceed the Minimum Indemnification Amount. For the purposes of this Section 9.2 (*Assertion of Claims to Exceed Minimum Indemnification Amount*), a Loss (or claim for indemnification) shall be deemed to arise in the Accounting Year in which the event giving rise to such Loss (or claim for indemnification) occurred, or if the event is continuing in more than one (1) Accounting Year, in the Accounting Year such event ends.

9.3 NOTICE AND CONTEST OF CLAIMS

9.3.1 In the event that either Party receives a claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity under this Article 9 (*Indemnities & Limitation of Liability*) (the **Indemnified Party**) it shall notify the other Party (the **Indemnifying Party**) within twenty-one (21)

days of receipt of the claim or demand and shall not settle or pay the claim without the prior approval of the Indemnifying Party, which approval shall not be unreasonably withheld, conditioned or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim or demand, it may conduct the proceedings in the name of the Indemnified Party, subject to the Indemnified Party being secured against any costs involved, to its reasonable satisfaction.

9.4 DEFENCE OF CLAIMS

- 9.4.1 The Indemnifying Party shall be entitled, at its option and expense and with counsel of its selection, to assume and control the defence of such claim, action, suit or proceeding, subject to the prior approval of the Indemnified Party; provided, however, it gives prompt notice of its intention to do so to the Indemnified Party, and reimburses the Indemnified Party for the reasonable costs and expenses incurred by the Indemnified Party prior to assumption by the Indemnifying Party of such defence.
- 9.4.2 Not Used.
- 9.4.3 Unless and until the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party and assumes control of the defence of a claim, suit, action or proceeding in accordance with Section 9.4.1, the Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate, with counsel of its own selection, any claim, action, suit or proceeding by any third party, alleged or asserted against such Party in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder, and the reasonable costs and expense thereof shall be subject to the indemnification obligations of the Indemnifying Party hereunder.
- 9.4.4 Upon assumption by the Indemnifying Party of the control of the defence of a claim, suit, action or proceeding, the Indemnifying Party shall reimburse the Indemnified Party for the reasonable costs and expenses of the Indemnified Party in the defence of the claim, suit, action or proceeding prior to the Indemnifying Party's acknowledgment of the Indemnification and assumption of the defence.
- 9.4.5 Following acknowledgment of the indemnification and assumption of the defence by the Indemnifying Party, the Indemnified Party shall have the right to employ its own counsel, and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party, when and as incurred, unless:
- (a) the employment of counsel by such Indemnified Party has been authorized in writing by the Indemnifying Party; or
 - (b) the Indemnified Party shall have reasonably concluded that there may be a conflict of interest between the Indemnifying Party and the Indemnified Party in the conduct of the defence of such action; or
 - (c) the Indemnifying Party shall not, in fact, have employed independent counsel reasonably satisfactory to the Indemnified Party, to assume the defence of such action and shall have been so notified by the Indemnified Party; or
 - (d) the Indemnified Party shall have reasonably concluded and specifically Notified the Indemnifying Party either:
 - (i) that there may be specific defences available to it which are different from or additional to those available to the Indemnifying Party; or
 - (ii) that such claim, action, suit or proceeding involves or could have a Material Adverse Effect upon it beyond the scope of this Agreement.

Provided that if Sections 9.4.5, (b), (c) or (d) shall be applicable, then the counsel for the Indemnified Party shall have the right to direct the defence of such claim, demand, action, suit or proceeding on behalf of the Indemnified Party, and the reasonable fees and disbursements of such counsel shall constitute legal or other expenses hereunder.

9.5 NO CONSEQUENTIAL CLAIMS

9.5.1 Notwithstanding anything to the contrary contained in this Article 9 (*Indemnities & Limitation of Liability*), the indemnities herein provided shall not include any claim or recovery in respect of any cost, expense, loss or damage of an indirect, incidental or consequential nature, including loss of profit, except as expressly provided in this Agreement.

9.6 SURVIVAL ON TERMINATION

9.6.1 The provisions of this Article 9 (*Indemnities & Limitation of Liability*) shall survive Termination for a maximum period of two (2) years following Termination and the provisions of this Article 9 (*Indemnities & Limitation of Liability*) shall apply solely in respect of claims that arose immediately on or prior to the Termination Date.

9.7 LIMITATION OF LIABILITY & INDEMNIFICATION FOR FINES AND PENALTIES

9.7.1 Neither Party shall be liable to the other Party in contract, tort, warranty, strict liability (except as may be expressly provided in any Implementing Agency Agreement), or any other legal theory for any indirect, consequential, incidental, punitive, or exemplary damages; provided, that the Implementing Agency hereby agrees that the Termination Payment payable under this Agreement are not indirect, consequential, incidental, punitive or exemplary damages. Neither Party shall have any liability to the other Party except pursuant to, or for breach of any Implementing Agency Agreement; provided, however, that this provision is not intended to constitute a waiver of any rights of one Party against the other with regard to matters unrelated to any Implementing Agency Agreement or to any activity not contemplated by the same.

9.7.2 Any fines or other penalties incurred by the Private Partner for non-compliance with the Applicable Laws or other governmental directions issued pursuant thereto and in accordance therewith or the Private Partner Permits shall not be reimbursed by Implementing Agency or any Government Agency but shall be the sole responsibility of the Private Partner.

10. FUNDING REQUIREMENTS & SHAREHOLDING MATTERS

10.1 FUNDING OF EQUITY

- 10.1.1 The Private Partner hereby undertakes to procure funding by the Sponsor from time to time of the Sponsor Base Equity Amount through subscription in cash in Pak Rupees for Shares by the Sponsor.
- 10.1.2 The Private Partner shall ensure that the capital structure of the Private Partner, insofar as it relates to the Project, maintains the Minimum Equity Ratio at all times during the Construction Period and until the achievement of Project Construction Completion. Any drawdown of Financing shall be subject to the prior or proportionate injection of Equity to ensure the Minimum Equity Ratio is not breached.

10.2 SHARES

- 10.2.1 [not used]
- 10.2.2 Upon funding of the Sponsor Base Equity Amount (or any part thereof) by the Sponsors from time to time, the Sponsors shall be issued Shares by the Private Partner in accordance with the Applicable Laws. The obligation to fund the Sponsor Base Equity Amount shall be independent of the shareholding of the Sponsor in the Private Partner.
- 10.2.3 The Private Partner shall not create any classes of its shares without the prior approval of the Implementing Agency.

10.3 CHANGE IN COMPLETE CONTROL, CHANGE IN CONTROL AND CHANGE IN SHAREHOLDING

- 10.3.1 The Private Partner shall not undertake or permit and hereby undertakes to procure that the Sponsor does not undertake or permit any Change In Complete Control until the Project Construction Completion Date unless such Change In Complete Control:
- (a) is required by any Applicable Laws or by the operation of the Applicable Laws or by order of a court, tribunal, or Government Agency with appropriate jurisdiction;
 - (b) is affected with the prior written approval of the Implementing Agency; and
 - (c) Any Person, to whom any Shares in the Private Partner are being sold to, shall at least possess the similar level of professional expertise, technical capability, financial capacity and legal status as the Sponsor on the basis of which the Sponsor was awarded this Agreement.
- 10.3.2 The Private Partner shall not undertake or permit and hereby undertakes to procure that the Sponsor does not undertake or permit any Change In Control until the Transfer Date unless such Change In Control:
- (a) is required by any Applicable Laws or by the operation of the Applicable Laws or by order of a court, tribunal, or Government Agency with appropriate jurisdiction; or
 - (b) is affected with the prior written approval of the Implementing Agency; provided, that: (i) the Change In Control does not take place prior to the Financing Termination Date or the completion of five (5) years from the Project Construction Completion Date, whichever is later; (ii) any Person, to whom any Shares in the Private Partner are being sold to, shall at least possess the similar level of professional expertise, technical capability, financial capacity and legal status as the Sponsor on the basis of which the Sponsor was awarded this Agreement; and (iii)

the Implementing Agency shall provide its determination in writing within ninety (90) days of the Implementing Agency having received a written request by the Private Partner; provided, further, that the Implementing Agency shall exercise its discretion to grant such approval under this Section 10.3.2 in accordance with, *inter alia*, the Applicable Laws.

- 10.3.3 Any Change of Shareholding carried out pursuant to this Section 10.3 shall only be permitted if the Person(s) acquiring and/or subscribing to the Shares resulting in the Change of Shareholding is:
- (a) is not from a nationality proscribed by the Applicable Laws;
 - (b) is not blacklisted by any Government Agency; and
 - (c) is not a defaulter of any bank or financial institution.

10.4 PUBLIC LISTING OF THE PRIVATE PARTNER

- 10.4.1 On the best efforts basis and subject to the commercial considerations of the Private Partner and its stakeholders, the Private Partner shall be allowed to publicly list itself, if it so chooses, on the stock market within three (3) years of the Commercial Operations Date so that the shares of the Private Partner are available to general public as an investment option.

11. BID SECURITY, CONSTRUCTION PERFORMANCE GUARANTEE & O&M PERFORMANCE GUARANTEE

11.1 BID SECURITY

- 11.1.1 Pursuant to the requirements of the RFP, the Sponsor has submitted a duly valid and effective Bid Security to the Implementing Agency and the Private Partner hereby represents and warrants that:

- (a) the Bid Security is fully secured by the Sponsor as a principal debtor and not as surety without any recourse on the Private Partner, its assets or properties;
- (b) all costs, expenses, fees and other charges of any nature, in each case, associated with the issuance, maintenance and encashment of the Bid Security are solely on account of the Sponsor.

- 11.1.2 The Bid Security shall secure:

- (a) all of the Sponsor's obligations, liabilities, payments, indemnities, representations, guarantees, warranties and responsibilities under the RFP and any Implementing Agency Agreement to which they are a party; and
- (b) all of the Private Partner's obligations, liabilities, payments, liquidated damages, indemnities, representations, guarantees, warranties and responsibilities under the Implementing Agency Agreements, including the integrity and quality of the Private Partner's and its Contractors' workmanship, the timely and continuous performance of the Project Works, the quality and quantity of the any equipment, materials, items and components supplied, the performance of Project Works by the Private Partner and compliance of the same with the Applicable Standards and all other works and services to be provided by the Private Partner under the Implementing Agency Agreements.

- 11.1.3 The Bid Security shall be encashable in accordance with the terms thereof and shall be payable on the Implementing Agency's first written demand without any prior notice, reference or recourse to the Private Partner, the Sponsors or any other entity or person.

- 11.1.4 The Private Partner shall be obligated to maintain and keep valid the Bid Security until submission by the Private Partner of a fully valid and effective Performance Guarantee in accordance with the terms of this Agreement (the **Bid Security Expiry Date**). In the event the Bid Security expires prior to the Bid Security Expiry Date, the Private Partner shall extend the validity of the Bid Security, at least fifteen (15) business days prior to its expiry, so as to keep it valid and enforceable until the Bid Security Expiry Date. In the event of failure by the Private Partner to keep valid or extend the validity of the Bid Security in accordance with this Section 11.1.4, the Implementing Agency shall have the right to encash the Bid Security at any time prior to its expiry to its full outstanding value at any time.
- 11.1.5 Upon delivery of a valid and effective Performance Guarantee by the Private Partner to the Implementing Agency in accordance with Section 11.2 (*Performance Guarantee*) the Bid Security shall automatically terminate and be simultaneously returned to the Private Partner.

11.2 CONSTRUCTION PERFORMANCE GUARANTEE

- 11.2.1 At any time prior to the Bid Security Expiry Date, the Private Partner shall provide and deliver the Implementing Agency the Construction Performance Guarantee. The Construction Performance Guarantee:
- (a) shall be issued and maintained without any recourse on the Private Partner, its assets or properties;
 - (b) shall not be secured through any Concession Assets and no Encumbrance of any nature shall be created on the assets and properties of the Private Partner in respect of the same.

All costs, expenses, fees and other charges of any nature, in each case, associated with the issuance, maintenance and encashment of the Construction Performance Guarantee are solely on account of the Sponsor.

- 11.2.2 The Construction Performance Guarantee shall secure:
- (a) all of the Sponsors' obligations, liabilities, payments, indemnities, representations, guarantees, warranties and responsibilities under the Implementing Agency Agreements to which they are a party; and
 - (b) all of the Private Partner's obligations, liabilities, payments, liquidated damages, indemnities, representations, guarantees, warranties and responsibilities under the Implementing Agency Agreements, including the integrity and quality of the Private Partner's and its Contractors' workmanship, the timely and continuous performance of the Project Works, including the Construction Works, during the Construction Period, the quality and quantity of the any equipment, materials, items and components supplied, the performance of Project Works by the Private Partner and compliance of the same with the Applicable Standards and all other works and services to be provided by the Private Partner under the Implementing Agency Agreements.
- 11.2.3 The Construction Performance Guarantee shall come into force and shall become automatically effective upon issuance and delivery of the same to the Implementing Agency.
- 11.2.4 The Construction Performance Guarantee shall be encashable in accordance with the terms thereof and shall be payable on the Implementing Agency's first written demand without any prior notice, reference or recourse to the Private Partner, the Sponsors or any other entity.
- 11.2.5 The Private Partner shall be obligated to adjust the Construction Performance Guarantee from time to time to reflect any amounts payable by the Implementing Agency pursuant to Article 16 (*Change of*

Scope), such increase being an amount equal to four point five percent (4.5%) of the amounts payable to the Private Partner from time to time in accordance with Article 16 (*Change of Scope*). In addition, the Performance Guarantee shall be adjusted, as condition precedent to issuance of the Final Project Construction Completion Certificate, prior to the Project Construction Completion Date so that it is equal in value to Pakistan Rupees Five Hundred Million (PKR 500,000,000) less the aggregate of any encashments made by the Implementing Agency prior to the date of adjustment.

- 11.2.6 The Private Partner shall be obligated to maintain and keep valid the Construction Performance Guarantee until the date falling six (6) months following the Substantial Completion Date (the **Construction Performance Guarantee Expiry Date**), as evidenced by a certificate jointly issued by the Independent Engineer and the Independent Auditor. In the event the Construction Performance Guarantee expires prior to the Construction Performance Guarantee Expiry Date, the Private Partner shall extend the validity of the Construction Performance Guarantee, at least fifteen (15) business days prior to its expiry, so as to keep it valid and enforceable until the Construction Performance Guarantee Expiry Date. In the event of failure by the Private Partner to keep valid or extend the validity of the Construction Performance Guarantee in accordance with this Section 11.2.6, the Implementing Agency shall have the right to encash the Construction Performance Guarantee at any time to its full outstanding value at any time.
- 11.2.7 Upon the issuance of a certificate jointly issued by the Independent Engineer and the Independent Auditor evidencing the occurrence of Construction Performance Guarantee Expiry Date, the Construction Performance Guarantee shall be null and void and shall be returned to the Private Partner by the Implementing Agency within ten (10) business days of receipt by the Implementing Agency of the afore-stated certificate.

11.3 O&M PERFORMANCE GUARANTEE

- 11.3.1 The Private Partner hereby undertakes to procure issuance and delivery to the Implementing Agency of the O&M Performance Guarantee from time to time in accordance with this Section 11.3 (*O&M Performance Guarantee*).
- 11.3.2 The Private Partner shall deliver the O&M Performance Guarantee to the Implementing Agency prior to the Construction Performance Guarantee Expiry Date and shall replace the same thirty (30) days prior to commencement of each Operational Year falling after the expiry of Construction Performance Guarantee Expiry Date. The O&M Performance Guarantee provided in the first instance shall become effective simultaneously upon return of the Construction Performance Guarantee to the Private Partner by the Implementing Agency and thereafter, each O&M Performance Guarantee provided prior to commencement of an Operational Year shall become automatically become effective simultaneously upon return of the O&M Performance Guarantee for the previous Operational Year.
- 11.3.3 Notwithstanding anything to the contrary, the O&M Contractor may be the applicant for the issuance of the O&M Performance Guarantee provided that the O&M Performance Guarantee should be issued on behalf of the Private Partner in favour of the Implementing Agency in accordance with the terms hereof.
- 11.3.4 The O&M Performance Guarantee:
- (a) shall be issued and maintained without any recourse on the Private Partner, its assets or properties;
 - (b) shall not be secured through any Concession Assets and no Encumbrance of any nature shall be created on the assets and properties of the Private Partner in respect of the same.

All costs, expenses, fees and other charges of any nature, in each case, associated with the issuance, maintenance and encashment of the O&M Performance Guarantee are solely on account of the Sponsors.

11.3.5 The O&M Performance Guarantee shall secure:

- (a) all of the Sponsors' obligations, liabilities, payments, indemnities, representations, guarantees, warranties and responsibilities under the Implementing Agency Agreements to which they are a party; and
- (b) all of the Private Partner's obligations, liabilities, payments, liquidated damages, indemnities, representations, guarantees, warranties and responsibilities under the Implementing Agency Agreements, including the integrity and quality of the Private Partner's and its Contractors' workmanship, the timely and continuous performance of the Project Works during the Operations Period, the quality and quantity of the any equipment, materials, items and components supplied, the performance of Project Works during the Operations Period by the Private Partner and compliance of the same with the Applicable Standards and all other works and services to be provided by the Private Partner under the Implementing Agency Agreements.

11.3.6 The O&M Performance Guarantee shall be encashable in accordance with the terms thereof and shall be payable on the Implementing Agency's first written demand without any prior notice, reference or recourse to the Private Partner, the Sponsors or any other entity.

11.3.7 The O&M Performance Guarantee provided by the Private Partner in respect of an Operational Year shall remain in force and effect until the date that falls on the expiry of such Operational Year subject to receipt by the Implementing Agency of a fully valid and effective O&M Performance Guarantee for the subsequent Operational Year in accordance with the terms of this Agreement on or prior to such date (the **O&M Performance Guarantee Expiry Date**). In the event an O&M Performance Guarantee expires prior to the O&M Performance Guarantee Expiry Date, the Private Partner shall extend the validity of the O&M Performance Guarantee, at least fifteen (15) business days prior to its expiry, so as to keep it valid and enforceable until the O&M Performance Guarantee Expiry Date. In the event of failure by the Private Partner to keep valid or extend the validity of any O&M Performance Guarantee in accordance with this Section 11.3.7, the Implementing Agency shall have the right to encash such O&M Performance Guarantee at any time prior to its expiry to its full outstanding value at any time.

11.3.8 Upon the delivery of an O&M Performance Guarantee for an Operational Year (the **New O&M Performance Guarantee**) to the Implementing Agency by the Private Partner in accordance with this Section 11.3 (*O&M Performance Guarantee*) on or prior to the commencement of such Operational Year (the **New Operational Year**), the previous O&M Performance Guarantee issued for the previous Operational Year shall be null and void upon delivery of the New O&M Performance Guarantee and commencement of the New Operational Year and shall be returned to the Private Partner by the Implementing Agency simultaneously with the provision of the New O&M Performance Guarantee.

11.3.9 Notwithstanding anything to the contrary, the Private Partner hereby undertakes and agrees that the O&M Performance Guarantee shall remain valid:

- (a) in case of Termination, at least for one (1) year after the Termination Notice has been issued;
- (b) in case of expiry of this Agreement on the Final Expiry Date, one (1) year after the Final Expiry Date.

12. CONSTRUCTION DRAWINGS

12.1 PREPARATION OF CONSTRUCTION DRAWINGS

- 12.1.1 The Private Partner shall prepare the Construction Drawings in accordance with the Applicable Standards and shall complete and deliver the same to the Implementing Agency and the Independent Engineer from time to time within the Construction Time For Completion. Further, the Private Partner hereby undertakes that the Construction Drawings shall comply with the Applicable Standards.
- 12.1.2 Defects & Deficiencies, errors, omissions, ambiguities, inconsistencies, inadequacies and other defects in the Construction Drawings or arising there from the same shall be rectified by the Private Partner at its sole cost and risk.
- 12.1.3 The Implementing Agency, the Independent Engineer and the Independent Auditor (as applicable) may use the Construction Drawings for such purposes as the same may require for the purposes of the Project.
- 12.1.4 The Private Partner may at its discretion and subject to the Applicable Standards and the Design Requirements, propose with or without modifications the drawings made available by the Implementing Agency or adopt its own Construction Drawings after prior approval of the Independent Engineer; provided, however, that the Private Partner shall always remain solely responsible and liable for the adequacy and accuracy of the Construction Drawings and shall not hold the Implementing Agency responsible or liable for the adequacy and / or the accuracy of the drawings provided by the Implementing Agency.
- 12.1.5 Notwithstanding the Private Partner's decision to adopt the drawings as provided by the Implementing Agency, irrespective of whether such drawings are adopted with or without modifications, or the adoption by the Private Partner of its own Construction Drawings, the Private Partner hereby confirms and agrees that all Construction Drawings shall remain subject to the review, approval and acceptance by the Independent Engineer prior to the adoption of the same by the Private Partner.
- 12.1.6 The Implementing Agency and the Independent Engineer shall have the right to review and inspect all Construction Drawings. The Private Partner shall provide all such Construction Drawings that the Implementing Agency and the Independent Engineer as may be reasonably required by the Implementing Agency and/or the Independent Engineer to inspect in respect of the Construction Works. It is made clear that nothing in the above shall diminish the Private Partner's responsibility to provide the Implementing Agency and the Independent Engineer with sufficient information to enable the same to satisfy themselves regarding the Construction Works.

12.2 DETAILS OF CONSTRUCTION DRAWINGS

- 12.2.1 The Construction Drawings to be submitted by the Private Partner to the Independent Engineer shall include, but not be limited to, the following details:
- (a) alignment of the Project Road and the Project Facilities;
 - (b) plan and profile drawings of road, general drawings including road cross section(s) with pavement structure, setting out data, road furniture details, bench marks details, intersections details, embankment protection details and drainage details;
 - (c) detailed structural drawings;

- (d) general arrangement drawings of bridges, details of foundation, transoms, girders, deck slab, railings and kerbs, signage, land marking, joints and bearing pads including steel reinforcement details for each component; and
- (e) such further information and details as may be requested by the Independent Engineer and the Implementing Agency acting reasonably.

12.2.2 All Construction Drawings submitted by the Private Partner shall comply with and shall be in accordance with the Design Requirements and the Applicable Standards and shall not deviate therefrom.

12.3 REVIEW & APPROVAL OF CONSTRUCTION DRAWINGS

12.3.1 The Private Partner shall promptly and in such sequence as is consistent with the Construction Requirements, submit four (4) copies of the Construction Drawings to the Independent Engineer and the Implementing Agency.

12.3.2 The submission of the Construction Drawings by the Private Partner to the Independent Engineer and the Implementing Agency pursuant to the provisions of Section 12.3.1 shall constitute the representation of the Private Partner that the Private Partner has verified and determined that the Construction Drawings submitted by the Private Partner are in conformity with the Design Requirements.

12.3.3 Within fifteen (15) days of receipt of the Construction Drawings, the Independent Engineer shall review and comment on the same taking into account, inter alia, the comments of the Implementing Agency, if any, thereon, and convey its comments/observations to the Private Partner on the conformity of the Construction Drawings with Design Requirements.

12.3.4 The Private Partner hereby undertakes to revise the Construction Drawings to the extent necessary and to resubmit the same for the review of the Independent Engineer and the Implementing Agency, in the event the comments and the observations of the Independent Engineers and/or the Implementing Agency indicate that the Construction Drawings initially submitted by the Private Partner for review by the Independent Engineer pursuant to the provisions of Section 12.3.1, are not in conformity with the Design Requirements. The Independent Engineer shall provide its observations and comments on such re-submitted Construction Drawings, if any, within fifteen (15) days of receipt of such revised Construction Drawings.

12.3.5 The Private Partner shall simultaneously with the submission of Construction Drawings to the Independent Engineer prepare and submit to the Independent Engineer the construction plan providing, inter alia, the “*critical path method*” in respect of the Project.

12.3.6 Notwithstanding anything contained herein:

- (a) in the event, the response of the Implementing Agency is not provided within the period stipulated in Section 12.3.3 and / Section or 12.3.4, then the Independent Engineer may, at its discretion proceed with the approval of Construction Drawings, on the basis of the Construction Drawings submitted by the Private Partner to the Independent Engineer;
- (b) the Private Partner shall be solely liable for the Construction Drawings and their compliance and conformity with the Design Requirements, and shall not be relieved and / or absolved in any manner whatsoever of its obligations hereunder, irrespective of whether or not the Independent Engineer has provided its observations and comments in accordance with this Section 12.3 (*Review of Construction Drawings*);

- (c) the Private Partner shall continue to be liable for the Private Partner's obligations and liabilities set out in this Agreement and shall neither be relieved of the same nor shall the same be transferred to any other Person, including, but not restricted to the Independent Engineer and / or the Implementing Agency, as a consequence of the requirement for the Independent Engineer to provide its observations and comments pursuant to Section 12.3.3 and / or Section 12.3.4. Neither the review of the Construction Drawings by the Independent Engineer, the failure of the Independent Engineer to provide its observations and comments in the approval nor the provision of the observations and comments by the Independent Engineer and / or the Implementing Agency on the Construction Drawings shall relieve the Private Partner of its obligations and liabilities hereunder, nor shall the same be construed as a waiver of the Private Partner's obligations contained herein; nor shall the Implementing Agency be held liable for the observations and comments provided by the Independent Engineer on the Construction Drawings.
- (d) the Private Partner shall be obligated to provide a copy of the approved Construction Drawings to the Implementing Agency and the Independent Engineer prior to commencement of Construction Works in accordance with the terms of this Agreement.

12.3.7 The Private Partner hereby undertakes that the Private Partner shall be solely responsible and liable for:

- (a) achieving completion of each Project Construction Milestone on or prior to its respective Project Construction Milestone Date;
- (b) achieving Substantial Completion Date on or prior to the Scheduled Substantial Completion Date;
- (c) achieving Project Construction Completion on or prior to the Scheduled Project Construction Completion Date,

and, in each case above, the said obligation and liability of the Private Partner shall not be reduced, negated, rescinded and / or waived by any delay and / or failure of the Independent Engineer to fulfil its obligations as set out in this Section 12.3 (*Review of Construction Drawings*).

12.4 SUBMISSION OF FINAL CONSTRUCTION DRAWINGS PRIOR TO PROJECT CONSTRUCTION COMPLETION DATE

- 12.4.1 Within forty-five (45) days of the Substantial Completion Date and in any event as one of the conditions precedent to the issuance of the Final Project Construction Completion Certificate, the Private Partner shall submit to the Implementing Agency, in respect of each Project Construction Milestone, the "*as built*" Construction Drawings, duly verified and approved (in form and substance) by the Independent Engineer, including "*as built*" survey, illustrating the layout of the Project Road and the Project Facilities and setback lines, if any, of the buildings and structures forming part of the Project Road and the Project Facilities and reflecting the same as actually designed, engineered and constructed.
- 12.4.2 The Construction Drawings to be submitted by the Private Partner pursuant to this Section 12.4 (*Submission of Construction Drawings Prior to Final Construction Completion Date*) shall be in such form as may be requested by the Implementing Agency, including but not restricted to paper format (hard copies), digital format, micro films or such other format as may be acceptable to the Implementing Agency.
- 12.4.3 The Private Partner shall be responsible for amending, modifying and updating the Construction Drawings from time to time during the Operations Period including, carrying out any amendments and modifications resulting from the operations, repairs, maintenance and other activities relating to the

Operations and Maintenance subject to the approval of Independent Engineer. All updated, amended and/or modified Construction Drawings shall be submitted by the Private Partner to the Implementing Agency and the Independent Engineer and shall be subject to review of the same. Preparation, completion and delivery of the updated, amended and/or modified Construction Documents pursuant to this Section 12.4.3 shall form part of the Private Partner's obligations relating to the O&M Documents.

12.5 APPROVAL OF DETAILED ENGINEERING DESIGN

- 12.5.1 Notwithstanding anything to the contrary, the Private Partner shall, within ninety (90) days of the Effective Date, procure issuance of the Approved Detailed Engineering Design, which shall set out, *inter alia*, and in addition to any other matters determined by the Independent Engineer, the exact location of the Project Site, the relocation of existing utilities etc. and all other matters relation to any relocations/impediments in relation to the Project Site.
- 12.5.2 The Parties hereby acknowledge and agree that the delivery of Vacant Possession of the Project Site, the exact area, location, relocation of existing utilities and other relevant matters relating to the same are a function of the Approved Detailed Engineering Design.
- 12.5.3 The Private Partner shall, as part of the process of the Private Partner Conditions Precedent submit its Detailed Engineering Design (in batches at the Private Partner's discretion) to the Independent Engineer (with a copy to Implementing Agency) within two (2) months of the Effective Date for the approval of the Independent Engineer and Implementing Agency (the **Proposed Detailed Design**). Within thirty (30) days of the receipt of the Proposed Detailed Design, the Independent Engineer and Implementing Agency shall review the same and convey their observations to the Private Partner with particular reference of the conformity of the same with Applicable Standards and **SCHEDULE B (Design Requirements)**. In case, no comments/observations are provided by the Independent Engineer and/or the Implementing Agency, as the case may be, within twenty (20) days of their receipt of the Proposed Detailed Design, the Private Partner shall notify the Independent Engineer and Implementing Agency about such inactivity. In case, no comments are received from the Independent Engineer and/or Implementing Agency are received within ten (10) days following such notification, the Proposed Detailed Design, as submitted by the Private Partner, will be deemed to be approved by the Independent Engineer and Implementing Agency.
- 12.5.4 In the event the specific observations of the Independent Engineer and Implementing Agency on the Proposed Detailed Design indicate that the Proposed Detailed Design is not in conformity with the Applicable Standards, the Proposed Detailed Design shall be revised by the Private Partner, at the cost and expense of the Private Partner, and resubmitted to the Independent Engineer and Implementing Agency, as the case may be, for their review and approval within a period of fifteen (15) days after receiving the observations of the Independent Engineer and Implementing Agency on the Proposed Detailed Design. Following receipt of the observations on the revision (within the time periods contemplated herein), the Independent Engineer and Implementing Agency shall give their observations, if any, within seven (7) days of their receipt of the revised Detailed Engineering Design from the Private Partner. In the event the Independent Engineer and/or Implementing Agency give their observations on the revised Detailed Engineering Design, the Private Partner shall revise the Detailed Engineering Design and submit the same to the Independent Engineer and Implementing Agency within 15 days after receiving of observations on the same.

13. CONSTRUCTION AND INSTALLATION WORKS

13.1 CONSTRUCTION WORKS

- 13.1.1 The Private Partner shall commence the Construction Works on the Chiniot-Sargodha Road in accordance with the Applicable Standards and shall perform and complete the same in accordance with the Construction Time For Completion. The Private Partner shall commence the Site Construction Works on the Commencement Date. The Private Partner shall immediately upon commencement of the Site Construction Works notify the Implementing Agency, the Independent Engineer and the Independent Auditor of the same.
- 13.1.2 The Private Partner shall perform the Construction Works in accordance with the Applicable Standards and shall ensure that the same complies with the Applicable Standards. During the Construction Period, the Private Partner shall be responsible for ensuring that the roads and lanes existing on the Project Site are available for the Users in accordance with the Applicable Standards.
- 13.1.3 Without limiting the provisions of Section 13.1.2, the Private Partner shall be in particular responsible for the performance and compliance, in each case, of the Construction Works with the Construction Requirements.
- 13.1.4 The Private Partner shall perform the Construction Works within the Construction Time For Completion and hereby undertakes to perform and complete each Project Construction Milestone on or prior to its Project Construction Milestone Date.
- 13.1.5 The Private Partner shall perform the Construction Works either itself, or through the Construction Contractor(s) appointed in accordance with the terms of this Agreement; provided, however, the Private Partner shall remain solely responsible and liable for performance (within Construction Time For Completion) and compliance of the Construction Requirements with the Applicable Standards irrespective of whether the Construction Works are undertaken by the Private Partner or the Construction Contractor(s)

13.2 CONSTRUCTION PROGRAMME

- 13.2.1 Within fourteen (14) days following the Effective Date, the Private Partner shall submit to the Independent Engineer, a proposed program (including primavera level 5), to be prepared in compliance with the Applicable Standards and Good Industry Practices, for performance of the Construction Works and achievement of each Project Construction Milestone (the **Proposed Construction Programme**). The Proposed Construction Programme shall not amend or vary the timelines for achievement of the Project Construction Milestones set out in the Project Construction Completion Schedule. The Proposed Construction Programme shall include, without restriction, the following:
- (a) the Project Construction Milestones to be achieved and the respective Project Construction Milestone Dates for each of the same;
 - (b) the detailed order in which the Construction Works shall be performed, together with timelines for performance of the same;
 - (c) arrangements and procedures for carrying out the Construction Works;
 - (d) the timelines, intervals and procedures for conducting the inspection of all elements of the Construction Works and any completed Concession Assets;

- (e) arrangements and procedures for conducting safety related measures in relation to the Construction Works; and
- (f) all major events and activities in the preparation of the Construction Drawings and the Construction Monthly Progress Reports and submission of the same to the Implementing Agency, the Independent Engineer and/or the Independent Auditor (as applicable) for the review and approval (as applicable).

13.2.2 Within fourteen (14) days of the receipt of the Proposed Construction Programme by the Independent Engineer, the Independent Engineer shall finalize its comments on the same and shall ensure the incorporation of its comments and submit the same to the Implementing Agency. The Implementing Agency shall prior to granting its approval in respect of the Proposed Construction Programme, within fifteen (15) days of the Independent Engineer's request for the same, revert to the Independent Engineer in respect of any observations and comments that it may have, if any; provided, however, that the approval of the Proposed Construction Programme shall be granted by Implementing Agency within fifteen (15) days of the Independent Engineer's request for such approval if the Proposed Construction Programme is recommended by the Independent Engineer for approval after addressing any comments and observations of the Implementing Agency on the same. The Proposed Construction Programme, as approved by the Implementing Agency on the Independent Engineer's recommendation, shall be binding on the Parties (the **Construction Programme**); provided, however, that the Construction Programme may be amended from time to time by the mutual agreement between the Parties and the Independent Engineer.

13.2.3 The Private Partner shall, whenever required by the Implementing Agency, the Independent Engineer and/or the Independent Auditor, provide in writing, a general description of the arrangements and methods which the Private Partner proposes to adopt for the execution of the Construction Works. Any alteration to such arrangements and methods shall be made by the Private Partner with prior written consent of the Independent Engineer and the Implementing Agency.

13.2.4 Any reports (including the Construction Monthly Progress Reports) submitted by the Private Partner and covering the execution of the Construction Works shall emphasize any delays in the Construction Time For Completion.

13.3 TRAFFIC FLOW & SAFETY

13.3.1 Following commencement of the Site Construction Works, the Private Partner shall ensure that the existing roads on the Project Site remain open to traffic and that the traffic flow is safe at all times during the Construction Period in accordance with the Applicable Standards. The Private Partner shall ensure minimal disruption in traffic on the existing roads and lanes situated at the Project Site.

13.3.2 The Private Partner undertakes to perform the Site Construction Works in such manner as to ensure compliance with the obligation set out in Section 13.3.1.

13.4 CONSTRUCTION TESTS

13.4.1 The Private Partner shall conduct or procure to be conducted such tests, as specified in **SCHEDULE G (List of Tests & Completion Tests)** and the AASHTO Standards (to the extent adopted by the Implementing Agency in the "C&W Road and Bridges Specifications, 2022 ASTM AASHTO-LRFD (Latest Edition)", in order to determine whether the Construction Works conform to the Applicable Standards (the **Construction Tests**). The Construction Tests shall be conducted at such time and frequency and in such manner as may be specified by the Independent Engineer and the Implementing Agency in accordance with the AASHTO Standards (to the extent adopted by the Implementing Agency in the "C&W Road and Bridges Specifications, 2022 ASTM AASHTO-LRFD (Latest Edition)").

- 13.4.2 The Private Partner hereby undertakes to conduct the Construction Tests under the supervision of the Independent Engineer and the Implementing Agency and in accordance with the Applicable Standards at its own cost and expense. The Implementing Agency shall have a right to conduct separate Construction Tests in case the Implementing Agency determines that the Construction Works are not undertaken in accordance with the Construction Requirements. In case it is determined that the Construction Works are not in accordance with the Construction Requirements as determined by the revised tests, the Private Partner shall be required to re-perform the Construction Works to meet the Construction Requirements and the costs of such revised tests and re-performance works shall be borne by the Private Partner. However, in case it is determined that the Construction Works are in accordance with the Construction Requirements, the cost of such revised tests shall be borne by the Implementing Agency.
- 13.4.3 The Private Partner hereby undertakes to carry out, at its sole cost, the necessary remedial measures required to rectify the Defects & Deficiencies in the Construction Works and/or the Concession Assets that are identified in the Construction Tests and to ensure that as a consequence of such remedial measures the Construction Works and the Concession Assets conform to the Applicable Standards. The Private Partner further undertakes that the remedial measures required to be undertaken by the Private Partner pursuant to this Section 13.4.3 shall be repeated by the Private Partner at its sole cost till such time as the Construction Works and the Concession Assets conform to the Applicable Standards to the satisfaction of the Independent Engineer. In the aforesaid circumstances, the Independent Engineer may require the Private Partner to conduct additional tests to determine whether the Defects & Deficiencies are rectified and in such case the costs of such additional tests shall be borne by the Private Partner.
- 13.4.4 The Private Partner shall maintain proper record of the Construction Tests and the remedial measures taken to cure the Defects & Deficiencies, if any, indicated by the Construction Test results.
- 13.4.5 Results of all Construction Tests shall be jointly recorded by the Independent Engineer, the Private Partner and the Construction Contractor.

13.5 CONSTRUCTION MONTHLY PROGRESS REPORTS

- 13.5.1 Commencing from the Effective Date and until issuance of the Final Project Construction Completion Certificate, the Private Partner shall, no later than ten (10) days after the end of each calendar month, furnish to the Implementing Agency, the Project Manager, the Independent Auditor and the Independent Engineer a monthly report (the **Construction Monthly Progress Report**) stating in reasonable detail the status and condition of the Construction Works and the Concession Assets including its compliance or otherwise with the Applicable Standards and shall promptly give such other relevant information as may be required by the Independent Engineer, the Independent Auditor and/or the Implementing Agency. In particular, the Construction Monthly Progress Report shall separately identify and state in reasonable detail the Defects & Deficiencies in the Construction Works and/or the Concession Assets that require rectification and any delays in the Construction Time For Completion. The Construction Monthly Progress Report shall also expressly highlight all Defects & Deficiencies in the Construction Works and/or the Concession Assets identified by the Independent Engineer in its Construction Inspection Report and shall set out all actions taken and arrangements made by the Private Partner for remedying the same.
- 13.5.2 Each Construction Monthly Progress Report shall be updated by the Private Partner based on any observations and comments made by the Independent Engineer and/or the Implementing Agency and shall be provided again to each of the Implementing Agency and the Independent Engineer until such time that it is approved by the Independent Engineer; provided, that the Independent Engineer shall not accord its approval of the Construction Monthly Progress Report until it is satisfied that all reasonable

comments and observations of the Implementing Agency on the Construction Monthly Progress Report are addressed.

- 13.5.3 The Construction Monthly Progress Report shall be in the form approved by the Independent Engineer from time to time

13.6 CONSTRUCTION INSPECTION REPORT

- 13.6.1 Commencing from the appointment of the Independent Engineer and until the issuance of the Final Project Construction Completion Certificate, the Private Partner shall procure that the Independent Engineer inspects the Construction Works and the Concession Assets at least once a month and shall make all arrangements for the same.
- 13.6.2 The Independent Engineer shall make a report of such inspection (**Construction Inspection Report**) stating in reasonable detail the Defects & Deficiencies, if any, in the Construction Works and /or the Concession Assets with particular reference to the Applicable Standards.
- 13.6.3 The Independent Engineer shall, within ten (10) days of commencement of a month, provide a copy of the Construction Inspection Report to the Private Partner and the Implementing Agency.
- 13.6.4 The Private Partner hereby undertakes that, within fifteen (15) days from receipt of the Construction Inspection Report, it shall rectify and remedy the Defects & Deficiencies, if any, stated in the Construction Inspection Report, on its own cost and expense.
- 13.6.5 The inspection or submission of the Construction Inspection Report by the Independent Engineer shall not relieve or absolve the Private Partner of its obligations and liabilities hereunder in any manner whatsoever.

13.7 DELAYS DURING CONSTRUCTION

- 13.7.1 In the event the Private Partner fails to achieve any Project Construction Milestone or the Independent Engineer shall have reasonably determined that the rate of progress of Construction Works is such that the Project cannot achieve Project Construction Completion on or before the Scheduled Project Construction Completion Date then the Independent Engineer shall issue a notice to the Private Partner to this effect and the Private Partner shall, within seven (7) days of such notice, inform the Independent Engineer in reasonable detail about the steps the Private Partner proposes to undertake to expedite progress and the period within which it shall achieve the Project Construction Completion by the Scheduled Project Construction Completion Date and the Substantial Completion by the Scheduled Substantial Completion Date.

13.8 INSTALLATION WORKS

- 13.8.1 The Private Partner shall commence the Installation Works on the Faisalabad-Chiniot Road in accordance with the Applicable Standards and shall perform and complete the same in accordance with the Installation Time For Completion. The Private Partner shall commence the Installation Works on the Commencement Date. The Private Partner shall immediately upon commencement of the Installation Works notify the Implementing Agency, the Independent Engineer and the Independent Auditor of the same.
- 13.8.2 The Private Partner shall perform the Installation Works in accordance with the requirements set out in **Schedule V (Installation Works)** and shall ensure that the same complies with the Applicable Standards. During the Installation Period, the Private Partner shall be responsible for ensuring that the

roads and lanes existing on the Faisalabad-Chiniot Road are available for the Users in accordance with the Applicable Standards.

- 13.8.3 Without limiting the provisions of Section 13.8.2, the Private Partner shall be in particular responsible for the performance and compliance, in each case, of the Installation Works with the Installation Requirements.
- 13.8.4 The Private Partner shall perform the Installation Works within the Installation Time For Completion.
- 13.8.5 The Private Partner shall perform the Installation Works either itself, or through the Civil Work Contractor(s) appointed in accordance with the terms of this Agreement; provided, however, the Private Partner shall remain solely responsible and liable for performance (within Installation Time For Completion) and compliance of the Installation Requirements with the Applicable Standards irrespective of whether the Installation Works are undertaken by the Private Partner or the Civil Work Contractor(s).
- 13.8.6 Following commencement of the Installation Works, the Private Partner shall ensure that the existing functional parts of the Faisalabad-Chiniot Road remain open to traffic and that the traffic flow is safe at all times for Users during the Installation Period in accordance with the Applicable Standards. The Private Partner shall ensure minimal disruption in traffic on the existing functional roads and lanes situated at the Faisalabad-Chiniot Road.
- 13.8.7 The Private Partner undertakes to perform the Installation Works in such manner as to ensure compliance with the obligation set out in Section 13.8.6.

13.9 INSTALLATION INSPECTION REPORT

- 13.9.1 Commencing from the appointment of the Independent Engineer and until the issuance of the Final Installation Completion Certificate, the Private Partner shall procure that the Independent Engineer inspects the Installation Works and the Concession Assets, if required by the Implementing Agency, and shall make all arrangements for the same.
- 13.9.2 The Independent Engineer shall make a report of such inspection (**Installation Inspection Report**) stating in reasonable detail the Defects & Deficiencies, if any, in the Installation Works and /or the Concession Assets with particular reference to the Applicable Standards.
- 13.9.3 The Independent Engineer shall, within fifteen (15) days of receiving a request by the Implementing Agency to inspect the Installation Works, provide a copy of the Installation Inspection Report to the Private Partner and the Implementing Agency.
- 13.9.4 The Private Partner hereby undertakes that, within thirty (30) days from receipt of the Installation Inspection Report, it shall rectify and remedy the Defects & Deficiencies, if any, stated in the Installation Inspection Report, on its own cost and expense.
- 13.9.5 The inspection or submission of the Installation Inspection Report by the Independent Engineer shall not relieve or absolve the Private Partner of its obligations and liabilities hereunder in any manner whatsoever.

13.10 DELAYS DURING INSTALLATION

- 13.10.1 In the event the Private Partner fails to complete the Installation Works by the Installation Time for Completion, or the Independent Engineer shall have reasonably determined that the rate of progress of Installation Works is such that the Project cannot achieve Installation Completion on or before the Scheduled Installation Completion Date then the Independent Engineer shall issue a notice to the Private

Partner to this effect and the Private Partner shall, within seven (7) days of such notice, inform the Independent Engineer in reasonable detail about the steps the Private Partner proposes to undertake to expedite progress and the period within which it shall achieve Installation Completion by the Scheduled Installation Completion Date.

14. COMPLETION

14.1 COMPLETION TESTS

- 14.1.1 At least thirty (30) days prior to the expected Commercial Operations Date, the Private Partner shall issue a notice to the Implementing Agency and the Independent Engineer (the **Completion Tests Date Notice**) fixing a date and time for performance of the Completion Tests (the **Proposed Completion Tests Date**).
- 14.1.2 The Proposed Completion Tests Date proposed by the Private Partner shall be final for the conducting of the Completion Tests; provided, however, in the event the Proposed Completion Tests Date is unacceptable to the Independent Engineer and/or the Implementing Agency, the Private Partner, the Implementing Agency and the Independent Engineer shall meet within seven (7) days of the Implementing Agency and Independent Engineer's receipt of the Private Partner's Completion Tests Date Notice with an aim to mutually agree on an alternative date and time for performance of the Completion Tests, which date shall be no later than ten (10) days from the Proposed Completion Tests Date. If the Parties are unable to mutually agree on an alternative date and time for performance of the Completion Tests, the Private Partner shall be entitled (with prior Notification to the Independent Engineer and the Implementing Agency) to carry out the Completion Tests on or after the tenth (10th) day from the Proposed Completion Tests Date.
- 14.1.3 Subject to the terms of this Agreement, in the event any Completion Tests are to be repeated due to reasons not attributable to the Implementing Agency, as determined by the Independent Engineer, such Completion Tests shall be repeated on account of the Private Partner.
- 14.1.4 The Completion Tests shall be attended by the Project Manager and such other representatives of the Implementing Agency as the Implementing Agency may nominate in writing, subject to notification of the same to the Private Partner and the Independent Engineer.
- 14.1.5 The Private Partner shall provide such assistance as the Independent Engineer may reasonably require for conducting the Completion Tests.

14.2 SCHEDULED SUBSTANTIAL COMPLETION DATE

- 14.2.1 The Private Partner hereby guarantees that the Substantial Completion shall be achieved in accordance with the provisions of the Applicable Standards and that the Substantial Completion Date shall occur on or before the Scheduled Substantial Completion Date.

14.3 SUBSTANTIAL COMPLETION CERTIFICATE

- 14.3.1 The Completion Tests shall be conducted in accordance with the provisions of Section 14.1 (*Completion Tests*).
- 14.3.2 The Independent Engineer shall (in consultation with the Implementing Agency), at the request of the Private Partner, issue a Substantial Completion Certificate, within ten (10) days of the successful completion of the Completion Tests, if the Completion Tests are successful though certain works or things forming part thereof are outstanding and not yet complete. In such an event, the Substantial Completion Certificate shall have appended thereto a list of outstanding items signed jointly by the Independent Engineer and the Private Partner (the **Project Construction Completion Check List**); provided, that the Independent Engineer shall not withhold the Substantial Completion Certificate for reason of any work remaining incomplete if the delay in completion thereof is attributable to the Implementing Agency. The Independent Engineer shall set out the date in the Substantial Completion

Certificate on which the Completion Tests are successfully passed (the **Substantial Completion Date**) and Substantial Completion is achieved.

- 14.3.3 The Parties hereto expressly agree that a Substantial Completion Certificate under this Section shall, upon request of the Private Partner to this effect, be issued by the Independent Engineer, if at least ninety-nine percent (99%) of the Construction Works and one hundred percent (100%) of the Installation Works of the Chiniot-Sargodha Road has been completed, the Completion Tests are successfully passed and if the movement and safety of the Users is not affected, as determined by the Independent Engineer (the **Substantial Completion**). Upon issuance of such Substantial Completion Certificate in terms of this Section 14.3.3, the Substantial Completion shall be achieved.

14.4 PROJECT CONSTRUCTION COMPLETION CHECK LIST & FAILURE TO ACHIEVE SUBSTANTIAL COMPLETION

- 14.4.1 Notwithstanding that the Substantial Completion Certificate shall be signed by the Independent Engineer (in consultation with the Implementing Agency), the Project Construction Completion Check List shall be jointly signed by the Independent Engineer and the Private Partner as a confirmation of the outstanding works, actions and things required to be completed by the Private Partner in line with the relevant Project Requirements (the **Project Construction Completion Check List Items**).
- 14.4.2 The Private Partner undertakes to complete all Project Construction Completion Check List Items by the date determined by the Independent Engineer and set out in the Substantial Completion Certificate (the **Scheduled Project Construction Completion Date**); provided, however, the Parties agree that the Scheduled Project Construction Completion Date shall not be determined by the Independent Engineer to fall on any date that falls ninety (90) days following the Substantial Completion Date.
- 14.4.3 The Private Partner shall be liable for payment of Construction Period Damages to the Implementing Agency in the event the Private Partner fails to achieve Substantial Completion on or prior to the Scheduled Substantial Completion Date.

14.5 CONSTRUCTION PERIOD DAMAGES

- 14.5.1 In the event the Private Partner fails to achieve Substantial Completion by the Scheduled Substantial Completion Date, then the Private Partner shall pay to the Implementing Agency damages in a sum calculated at the rate of zero point five per cent (0.5%) of the amount of Construction Performance Guarantee for each full day of delay in achieving Substantial Completion beyond the Scheduled Substantial Completion Date up to a maximum of one hundred percent (100%) of the amount of the Construction Performance Guarantee (the **Construction Period Damages**). If the delay in achieving Substantial Completion continues beyond the point at which Construction Period Damages have accrued to one hundred percent (100%) of the amount of the Construction Performance Guarantee, and the Private Partner fails to furnish a fresh Construction Performance Guarantee of equivalent value within thirty (30) days of such occurrence, the Implementing Agency shall be entitled to terminate this Agreement in accordance with Section 23 (*Termination*). All Construction Period Damages becoming due and payable by the Private Partner in terms of this Section 14.5 (*Construction Period Damages*) shall be invoiced by the Implementing Agency to the Private Partner and shall become due and payable on the date falling thirty (30) days following the Private Partner's receipt of such invoice (the **Construction Period Damages Payment Date**). In the event of failure by the Private Partner to pay the Construction Period Damages to the Implementing Agency by the Construction Period Damages Payment Date, the Implementing Agency shall have the right to encash the Performance Guarantee in an amount equal to the Construction Period Damages. Notwithstanding anything contained herein, the recovery of Construction Period Damages under this Section 14.5.1 shall be without prejudice to the rights of the Implementing Agency under the Implementing Agency Agreements (including the right of Termination in accordance with Section 14.4.3).

14.5.2 The Parties agree that the amounts of Construction Period Damages provided under this Section 14.5 (*Construction Period Damages*) are in lieu of actual damages and are the Parties' reasonable and genuine estimates of the losses and damages that may reasonably be anticipated from such failures in respect of such matters, and do not constitute a penalty.

14.6 FINAL PROJECT CONSTRUCTION COMPLETION CERTIFICATE

14.6.1 Within ninety (90) days from the date of issuance of the Substantial Completion Certificate, the Independent Engineer shall issue a certificate certifying that the Project has achieved Project Construction Completion (the **Final Project Construction Completion Certificate**); provided, however, the Final Project Construction Completion Certificate may be issued only upon the confirmation by the Independent Engineer (in consultation with Implementing Agency) that the Project Construction Completion Check List Items have been completed in accordance with the Applicable Standards.

14.7 PROJECT CONSTRUCTION COMPLETION DATE

14.7.1 The Project shall be deemed to achieve project construction completion (the **Project Construction Completion**) on the date of issuance of the Final Project Construction Completion Certificate (the **Project Construction Completion Date**).

14.8 SCHEDULED PROJECT CONSTRUCTION COMPLETION DATE

14.8.1 Subject to the terms of this Agreement, the Private Partner hereby guarantees that the Project Construction Completion Date shall be achieved in accordance with the provisions of this Agreement and that the Project Construction Completion Date shall occur on or before the Scheduled Project Construction Completion Date.

14.9 NOT USED

14.10 TITLE TO PROJECT SITE, CONSTRUCTION WORKS, INSTALLATION WORKS AND CONCESSION ASSETS

14.10.1 The Implementing Agency shall retain all rights and title to the Project Site throughout the Concession Period. Subject to the terms of this Agreement, the Private Partner has, and shall have, no title to, ownership interest in or lien over, the Project Site nor shall create any Encumbrance with respect thereto.

14.10.2 Subject to Section 14.10.1, the Private Partner shall retain all legal and beneficial rights, as specified in this Agreement, on the Concession Assets (including the Construction Works and Installation Works) as and when the same are performed and/or completed until the Transfer Date.

14.10.3 On the Transfer Date, the Private Partner shall transfer all rights to the Concession Assets, granted pursuant to this Agreement, back to the Implementing Agency in accordance with the terms of this Agreement.

14.11 INSTALLATION COMPLETION CHECKLIST & FAILURE TO ACHIEVE INSTALLATION COMPLETION

14.11.1 In the event that the Installation Works are not complete within the prescribed time period, an Installation Completion Check List shall be jointly signed by the Independent Engineer and the Private Partner as a confirmation of the outstanding works, actions and things required to be completed by the Private Partner in line with the relevant Project Requirements (the **Installation Completion Check List Items**).

- 14.11.2 The Private Partner undertakes to complete all Installation Completion Check List Items by the date determined by the Independent Engineer (the **Scheduled Installation Completion Date**); provided, however, the Parties agree that the Scheduled Installation Completion Date shall not be determined by the Independent Engineer to fall on any date that falls one hundred and eighty (180) days following the Commencement Date in relation to the Faisalabad Chiniot Road and one hundred and eighty (180) days following the Substantial Completion Date in relation to the Chiniot Sargodha Road.
- 14.11.3 In the event the Private Partner fails to complete the Installation Works within one hundred and eighty (180) days of the Scheduled Installation Completion Date, then such failure of the Private Partner shall constitute a Private Partner Event of Default, and the Implementing Agency may, at its sole discretion and without prejudice to its other rights and remedies available under the Implementing Agency Agreements, terminate this Agreement in accordance with Article 23 (*Termination*).
- 14.11.4 Without prejudice to Section 14.11.3 hereinabove, in the event the Private Partner fails to complete the Installation Works by the Scheduled Installation Completion Date, the Implementing Agency may require the Private Partner to pay to the Implementing Agency damages in a sum calculated at the rate of zero point one per cent (0.1%) of fifty percent (50%) the amount of Construction Performance Guarantee for each full day of delay in completing the Installation Works beyond the Scheduled Installation Completion Date up to a maximum of fifty percent (50%) of the amount of the Construction Performance Guarantee. All such damages becoming due and payable by the Private Partner shall be invoiced by the Implementing Agency to the Private Partner and shall become due and payable on the date falling thirty (30) days following the Private Partner's receipt of such invoice. In the event of failure by the Private Partner to pay such damages to the Implementing Agency by this date, the Implementing Agency shall have the right to encash the Construction Performance Guarantee in an amount equal to fifty per cent (50%) of the amount of the Construction Performance Guarantee. Notwithstanding anything contained herein, the recovery of these damages shall be without prejudice to the rights of the Implementing Agency under the Implementing Agency Agreements (including the right of Termination in accordance with Section 14.4.3).
- 14.11.5 The Parties agree that the amounts of damages provided under this Section 14.11 (*Installation Completion Checklist & Failure to Achieve Installation Completion*) are in lieu of actual damages and are the Parties' reasonable and genuine estimates of the losses and damages that may reasonably be anticipated from such failures in respect of such matters, and do not constitute a penalty.

14.12 FINAL INSTALLATION COMPLETION CERTIFICATE

- 14.12.1 Within fifteen (15) days from the date of completion of the Installation Works, the Independent Engineer shall issue a certificate certifying that the Project has achieved Installation Completion (the **Final Installation Completion Certificate**); provided, however, the Final Installation Completion Certificate may be issued only upon the confirmation by the Independent Engineer (in consultation with Implementing Agency) that the Installation Completion Check List Items have been completed in accordance with the Applicable Standards.

14.13 INSTALLATION COMPLETION DATE

- 14.13.1 The Project shall be deemed to achieve installation completion (the **Installation Completion**) in relation to the relevant portion of the Project Road on the date of issuance of the Final Installation Completion Certificate (the **Installation Completion Date**).

14.14 SCHEDULED INSTALLATION COMPLETION DATE

14.14.1 Subject to the terms of this Agreement, the Private Partner hereby guarantees that the Installation Completion Date shall be achieved in accordance with the provisions of this Agreement and that the Installation Completion Date shall occur on or before the Scheduled Installation Completion Date.

15. RELIEF EXTENSIONS & RELIEF COMPENSATIONS

15.1 NOT USED

15.2 RELIEF EVENTS

15.2.1 The Private Partner shall be only entitled to initiate a request to the Independent Engineer and Independent Auditor (the **Relief Order Request**) for issuance by the same of a Relief Order relating to, as applicable, an extension of the Time For Completion and/or payment of Relief Costs by the Implementing Agency in the event of occurrence of the following event as certified by the Independent Engineer and circumstances (the **Relief Events**):

- (a) a Material Adverse Impediment; provided, that the Private Partner shall be entitled to only an extension in Time For Completion for any delays and to Relief Costs that, in each case, directly result from the Material Adverse Impediment and as are determined by the Independent Engineer and Independent Auditor in the Relief Order;
- (b) a Political Event; provided, that the Private Partner shall be entitled to only an extension in Time For Completion for any delays and to Relief Costs that, in each case, directly result from the Political Event and as are determined by the Independent Engineer and Independent Auditor in the Relief Order;
- (c) an Emergency Decommissioning directly resulting from a Implementing Agency Event of Default or a Political Event; provided, that the Private Partner shall be entitled to only an extension in Time For Completion for any delays and to Relief Costs that, in each case, directly result from Emergency Decommissioning caused by a Political Event and as are determined by the Independent Engineer and Independent Auditor in the Relief Order;
- (d) the occurrence of the circumstances set out in Section 4.9 (*Geological and Archeological Finds*) causing a delay in the performance of the Private Partner's obligations under this Agreement; provided, that the Private Partner shall be entitled to only an extension in Time For Completion for any delays and to Relief Costs that, in each case, directly result from the occurrence of the circumstances set out in Section 4.9 (*Geological and Archeological Finds*) and as are determined by the Independent Engineer and Independent Auditor in the Relief Order;
- (e) the occurrence of the Implementing Agency Overriding Power Event; provided, that the Private Partner shall be entitled to only an extension in Time For Completion for any delays and to Relief Costs that, in each case, directly result from the Implementing Agency Overriding Power Event and as are determined by the Independent Engineer and Independent Auditor in the Relief Order;
- (f) a Non Political Event; provided, that the Private Partner shall be entitled to only an extension in Time For Completion for any delays that directly result from the Non Political Event and as are determined by the Independent Engineer and Independent Auditor in the Relief Order;
- (g) an Emergency Decommissioning directly resulting from a Non Political Event; provided, that the Private Partner shall be entitled to only an extension in Time For Completion for any delays that directly result from Emergency Decommissioning caused by a Non Political Event and as

are determined by the Independent Engineer and Independent Auditor in the Relief Order.

- 15.2.2 If due to the occurrence of a Relief Event the Private Partner is entitled to initiate a Relief Request, the Private Partner shall prepare and deliver to the Independent Engineer and the Independent Auditor (with a copy to the Implementing Agency) a Relief Order Request, together with the Relief Order Proposal that is prepared in accordance with and is subject to Section 15.4 (*Relief Order Procedure*) and, if applicable, Section 15.5 (*Additional Requirements For Relief Orders Relating To Extension Of Time For Completion*). Each Relief Order Request prepared in accordance with Section 15.4 (*Relief Order Procedure*) and, if applicable, Section 15.5 (*Additional Requirements For Relief Orders Relating To Extension Of Time For Completion*) shall specifically set out in detail the events and circumstances constituting the Relief Event, together with all supporting satisfactory documentary evidence relating thereto.
- 15.2.3 Following submission to the Independent Engineer and the Independent Auditor of a Relief Order Request pursuant to Section 15.2.2, the Independent Engineer and the Independent Auditor shall proceed in accordance with Section 15.4 (*Relief Order Procedure*) and Section 15.5 (*Additional Requirements For Relief Orders Relating To Extension Of Time For Completion*).
- 15.2.4 Notwithstanding anything to the contrary, the Parties agree that the Private Partner shall not be entitled to any extensions of Time For Completion and/or Relief Costs, as applicable, due to occurrence of a Relief Event, until such time the same is determined by the Independent Engineer and the Independent Auditor and set out in the Relief Order issued by the same in accordance with this Agreement provided further that the Independent Engineer certifies that the Private Partner has no space for parallel or alternate sequencing of works available for carrying out its obligations within the prescribed timelines.

15.3 NOT USED

15.4 RELIEF ORDER PROCEDURE

- 15.4.1 In case the Private Partner submits a Relief Order Request to the Independent Engineer and the Independent Auditor (with a copy to the Implementing Agency) pursuant to Section 15.2 (*Relief Events*) then prior to the Independent Auditor and the Independent Engineer issuing a Relief Order, the Private Partner shall prepare and submit to the Independent Auditor and the Independent Engineer (with a copy to the Implementing Agency), as soon as practicable, a detailed proposal (the **Relief Order Proposal**) containing:
- (a) a description of the proposed work to be performed and a detailed programme for its execution;
 - (b) the Private Partner's proposal for any necessary modifications to the Construction Programme and/or the O&M Programme, as applicable;
 - (c) the Private Partner's proposal for any Relief Costs and any adjustments to Time For Completion and/or any Project Milestone Date, accompanied by detailed pricing and documentary evidence;
 - (d) a statement whether and the extent to which, in Private Partner's opinion, the proposed proposals contained in the Relief Proposal would, notwithstanding the exercise of all due skill and care, result in defective Project Works or prevent the Private Partner from performing its obligations under the Agreement, including defects liability,

provided, however, each Relief Order Request and Relief Order Proposal submitted by the Private Partner that proposes an extension to Time For Completion or any Project Milestone Date for a Project Milestone shall be additionally subject to the provisions and requirements of Section 15.5 (*Additional Requirements For Relief Orders Relating To Extension Of Time For Completion*);

provided, further, however, in the event of submission of any Relief Order Request and a Relief Order Proposal, the Private Partner shall provide such additional information as the Implementing Agency, the Independent Engineer and/or the Independent Auditor may reasonably request; and

provided, further, however, the Private Partner shall keep and maintain such contemporary records (as may be necessary to substantiate any proposals contained in the Relief Order Proposal and/or the Relief Order Request) as may reasonably be requested by the Independent Engineer, the Independent Auditor and /or the Implementing Agency and the Private Partner shall permit the Independent Engineer, the Independent Auditor and /or the Implementing Agency to inspect all such records and shall provide the same Representative with copies as required.

15.4.2 The Parties agree that compliance by the Private Partner with the provisions of this Article 15 (*Relief Orders*) shall be a condition precedent to the Independent Engineer and the Independent Auditor issuance of a Relief Order, unless waived in writing by the Implementing Agency. Further, notwithstanding anything to the contrary contained herein:

- (a) if the Project Works (or any part thereof) are not in accordance with this Agreement, any rectification in that respect undertaken by the Private Partner shall not entitle the Private Partner to issuance of a Relief Order;
- (b) the Private Partner is expressly precluded from any extension of the Time For Completion and any extension of a Project Milestone Date for Project Milestone or to payment of any Relief Costs due to delays resulting from any act or omission of the Private Partner and/or the Private Partner Engaged Persons;
- (c) the Private Partner shall not be entitled to any extensions of the Time For Completion for any delays or failure to perform and hence shall not be entitled to initiate Relief Order Request for issuance of a Relief Order to the extent the Private Partner is, in any case, in delay of performance of its obligations under the Agreement.

15.4.3 Following receipt by the Independent Engineer and the Independent Auditor from the Private Partner of the Relief Order Proposal and the Relief Order Request, the Independent Engineer and the Independent Auditor shall review the Private Partner's proposals contained in the Relief Order Proposal and the Relief Order Request, for the purpose of determining:

- (a) the occurrence and subsistence of the Relief Event and the Private Partner's entitlement to issuance of the Relief Order Request;
- (b) whether to proceed with the proposals submitted by the Private Partner in its submitted Relief Order Proposal;
- (c) (if applicable) any amendments or modifications to the estimates and proposals submitted by the Private Partner in the Relief Order Proposal;
- (d) other matters set forth in the Relief Order Proposal and the Relief Order Request including determination of extension of Time For Completion and Relief Costs; and
- (e) any other matters considered necessary by the Independent Engineer and the Independent Auditor for the purposes of issuance of the Relief Order.

15.4.4 Following the Independent Engineer and the Independent Auditor's determination of matters set out in Section 15.4.3 (together with any other matters relating to their evaluation for issuance for Relief Order), the Independent Engineer and the Independent Auditor shall either amend, approve or disapprove in

writing the Private Partner's submitted proposals contained in the Relief Order Proposal and the Relief Order Request within twenty-one (21) days following receipt by the Independent Engineer and the Independent Auditor from the Private Partner of the Relief Order Proposal and the Relief Order Request. If the Independent Engineer and the Independent Auditor amend, modify or reject the Relief Order Proposal and the Relief Order Request, in each case, submitted by the Private Partner, the Private Partner shall submit a revised Relief Order Proposal and Relief Order Request taking into account the amendments, modifications and comments on the same made by the Independent Engineer and the Independent Auditor, which shall be subject to approval by the Independent Engineer and the Independent Auditor within twenty-one (21) days of submission of the revised Relief Order Proposal and the Relief Order Request. In the event of the Independent Engineer and the Independent Auditor's approval of the Relief Order Proposal and the Relief Order Request or, if applicable, a revision of the same approved by the Independent Engineer and the Independent Auditor, it is agreed that the Independent Engineer and the Independent Auditor shall jointly issue a written order of Relief Order to the Implementing Agency and the Private Partner simultaneously. All extensions in Time For Completion, the Concession Period and in any Project Milestone Date for achievement of a Project Milestone and all Relief Costs, as applicable, shall be expressly set out in the Relief Order and shall be (subject to Section 15.6 below) binding on the Parties; provided, however, that such extensions in Time For Completion, the Concession Period and in any Project Milestone Date for achievement of a Project Milestone and the Relief Costs set in the Relief Order shall not be in excess of the Private Partner's request under the Relief Order Proposal and the Relief Order Request; provided, further, that any Relief Costs shall be paid by the Implementing Agency to the Private Partner within ninety (90) days of receipt of the Relief Order by the Implementing Agency. In the event, the Implementing Agency fails to make payment of Relief Costs (as determined and certified by the Independent Engineer and the Independent Auditor) within ninety (90) days of receipt of the Relief Order, late payment interest on the Relief Costs (or part thereof which is unpaid) shall be paid at the rate of Delayed Payment Rate, such interest commencing to accrue from the date of receipt of the Relief Order and ending on the actual date on which the Implementing Agency makes payment of the Relief Costs.

- 15.4.5 Notwithstanding anything to the contrary, in the event of occurrence of a Relief Event (excluding a Non Political Event and an Emergency Decommissioning directly resulting from a Non Political Event, in each case, for which no Relief Costs shall be payable), the Private Partner shall be only entitled to such Relief Costs that:
- (a) are directly attributable to the Relief Event; and
 - (b) represent increase (as a result of a Relief Event) in only such costs that are expressly set out in the Financial Model.
- 15.4.6 Subject to the terms of this Agreement, the Project Works shall not be delayed pending the issuance of a Relief Order by the Independent Auditor and the Independent Engineer or by the granting of an extension of Time For Completion or payment of Relief Costs.

15.5 ADDITIONAL REQUIREMENTS FOR RELIEF ORDERS RELATING TO EXTENSION OF TIME FOR COMPLETION

- 15.5.1 The Parties agree the provisions of this Section 15.5 (*Additional Requirements for Relief Orders Relating to Extension of Time For Completion*) shall apply to each Relief Order Proposal and the Relief Order Request that, in each case, proposes an extension to the Time For Completion or to any Project Milestone Date for a Project Milestone.
- 15.5.2 Any Relief Order Proposal and/or, if applicable, the Relief Order Request submitted by the Private Partner shall be subject to the Private Partner otherwise being ready to progress with the aspect of the

Project Works for which an extension is being sought. In the event the Private Partner is in any event delayed in the performance of its obligations due to reasons other than the Relief Event, the Private Partner shall not be granted any extension of Time For Completion to the extent of its delay.

- 15.5.3 In all cases where the Private Partner submits a Relief Order Proposal and the Relief Order Request, the Private Partner shall consult with the Implementing Agency, the Project Manager, the Independent Engineer and the Independent Auditor in order to determine steps (if any) which can be taken to overcome or minimize the actual or anticipated delay. The Private Partner shall thereafter comply with all reasonable instructions that the Independent Engineer and the Independent Auditor shall give in order to overcome or minimize such delay.
- 15.5.4 If the Private Partner intends to initiate a Relief Order Request for issuance of a Relief Order for an extension of Time For Completion, the Private Partner shall give Notice to the Independent Engineer and the Independent Auditor (with a copy to the Implementing Agency) of such intention as soon as possible and in any event within seven (7) days of the day the Private Partner should reasonably have become aware of the start of the Relief Event giving rise to the delay, together with any other notice required by the Agreement and relevant to such cause. The Private Partner is further required to submit to the Independent Engineer and the Independent Auditor (with a copy to the Implementing Agency), as part of the Relief Order Proposal relating to the Relief Order Request that pertains to an extension of Time for Completion, an acceleration strategy and schedule to demonstrate how such delay can be eliminated and/or mitigated.
- 15.5.5 Within twenty-eight (28) days of the first day of a delay that has resulted from the Relief Event in initiation of the Relief Order Request by the Private Partner for issuance of a Relief Order by the Independent Engineer and the Independent Auditor for an extension of Time for Completion, the Private Partner shall submit full supporting details of its request, including, without limitation, a critical path analysis of the alleged delay reflecting the considerations set forth in this Section. If the Private Partner cannot submit all relevant details within such period because the cause of delay has continued for a period exceeding seven (7) days, the Private Partner shall submit interim details at intervals of not more than twenty-eight (28) days (from the first day of such delay) and full and final supporting details of its request within sixty (60) days of the last day of delay. In the appropriate circumstances, the Implementing Agency shall have the right to waive the time periods set out as above.

15.6 DISPUTES AND BURDEN OF PROOF

- 15.6.1 Any Dispute between the Parties in reference to the issuance of a Relief Order and/or any matters relating to the same shall be resolved pursuant to Article 30 (*Dispute Resolution*).
- 15.6.2 In case of a Dispute regarding the application of the provisions of this Article 15 (*Relief Orders*), the Private Partner shall have the burden of proof as to its entitlement to relief under this Article 15 (*Relief Orders*).

15.7 FULL COMPENSATION

- 15.7.1 Any:
- (a) extensions of Time For Completion; and/or
 - (b) payment of Relief Costs,

in each case, granted pursuant to a Relief Order shall be deemed to be full and complete compensation to the Private Partner by the Implementing Agency in respect of matters relating to the Relief Order.

16. CHANGE OF SCOPE

16.1 CHANGE OF SCOPE

- 16.1.1 Notwithstanding anything to the contrary contained in this Agreement, the Implementing Agency may require a change / amendment in the Scope of the Project (the **Change of Scope**); provided, that the accrued and cumulative change at any given time does not result in a variation in the Estimated Project Cost by more than four point five percent (4.5%), as determined by the Independent Engineer and the Independent Auditor. All Additional Costs to be paid by the Implementing Agency in respect of the Change of Scope and any extensions in the timelines for the performance by the Private Partner of its obligations resulting from a Change of Scope shall be in accordance with Section 16.2 and Section 16.3.

16.2 CHANGE OF SCOPE NOTICE

- 16.2.1 The Implementing Agency may request for the Change of Scope by issuing a Change of Scope Notice in accordance with the provisions of this Section 16.2 (*Change of Scope Notice*).
- 16.2.2 The Implementing Agency may request for a Change of Scope by issuing a notice in writing to the Private Partner through the Independent Engineer (the **Change of Scope Notice**):
- (a) at least ninety (90) days prior to the Scheduled Substantial Completion Date in the event the Change of Scope is required in respect of the Construction Period; and
 - (b) at any time in the event the Change of Scope is required in respect of the Operations Period.
- 16.2.3 In the event at any time during the Construction Period and / or the Operations Period, the Private Partner determines that a Change of Scope is necessary for providing safer and improved services to the Users, the Private Partner shall issue a request in writing to the Implementing Agency through the Independent Engineer to consider issuing a Change of Scope Notice in respect of the same. The Implementing Agency shall within forty-five (45) days from the date of receipt of such notice, either accept such request for Change of Scope, on an “as is” basis or with modifications, and issue the requisite Change of Scope Notice in accordance with the provisions of this Section 16.2 (*Change of Scope Notice*) or communicate its reasons for not accepting the same to the Private Partner.

16.3 CHANGE OF SCOPE ORDER

- 16.3.1 The Private Partner shall, within fifteen (15) days of receipt of the Change of Scope Notice, provide to the Independent Engineer such information as is necessary and reasonable together with the preliminary documentation and details, including the calculations, where necessary, in support of the following:
- (a) the impact which the Change of Scope is likely to have on the Construction Requirements in the event the Change of Scope is in respect of the Construction Period and / or the O&M Requirements in the event the Change of Scope is in respect of the Operations Period;
 - (b) the budgeted estimate of the Additional Cost to be incurred by the Private Partner for implementing the Change of Scope;
 - (c) the estimated additional time (number of days) that the Private Partner would require to achieve Substantial Completion and/or Project Construction Completion consequent to the Change of Scope and any delay, if any, in the Final Expiry Date;
 - (d) any extensions in the Project Construction Completion Schedule resulting from the Change of Scope; and

- (e) any extensions in the timelines for performance by the Private Partner of its obligations under this Agreement resulting from the Change of Scope.
- 16.3.2 The Independent Engineer shall after reviewing the information, documentation and the budgeted estimate of the Additional Cost submitted by the Private Partner pursuant to Section 16.3.1, settle the rates, approve the designs and forward the budgeted estimates of the Additional Cost, as duly certified by the Independent Engineer and the Independent Auditor (in consultation with the Private Partner) to the Implementing Agency. Notwithstanding anything to the contrary set out herein, in the event the Private Partner disagrees with the determinations of the Independent Engineer, the decision of the Implementing Agency shall be final.
- 16.3.3 The Implementing Agency may, within a period of fifteen (15) days from the date of receipt of such statement, issue an order in writing to the Private Partner, through the Independent Engineer instructing the Private Partner to affect the Change of Scope (the **Change of Scope Order**).
- 16.3.4 In the event, the Implementing Agency for any reason whatsoever decides not to issue a Change of Scope Order in accordance with Section 16.3.1, then the Implementing Agency shall reimburse the Private Partner for the cost/expenses actually incurred by the Private Partner in the preparation and submission of the drawings, documents, estimates and other information in compliance with the Change of Scope Notice; provided, such costs and expenses are duly certified by the Independent Auditor and the Independent Engineer.
- 16.3.5 The mode for payment of the Additional Costs to the Private Partner shall be as follows and shall be complied by the Implementing Agency within forty five (45) days of the issuance of a Change of Scope Order and until such time that the following conditions are complied with by the Implementing Agency, the Private Partner shall not be obligated to commence and/or perform the works forming part of the Change of Scope Order:
- (a) the hundred percent (100%) of the Additional Costs shall be transferred by the Implementing Agency to an escrow account pursuant to an escrow arrangement agreed with the Private Partner wherefrom the same shall be utilized progressively upon certification by the Independent Engineer of the performance of works.
- 16.3.6 The Change of Scope Order shall be effective from the date that the Implementing Agency notifies the mode of reimbursement of the Additional Cost to the Private Partner pursuant to sub-section 16.3.5 of this Section 16.3 (*Change of Scope Order*).
- 16.3.7 Save for the advance payment under Section 16.3.5(a), the Implementing Agency shall progressively pay the Additional Cost in accordance with sub-section 16.3.5 of this Section 16.3 (*Change of Scope Order*) or any other modality as mutually agreed between the Parties, only upon receiving a certificate from the Independent Engineer confirming that the Private Partner has completed the relevant milestone(s) of the works in accordance with the Change of Scope Order.
- 16.3.8 In the event, the Implementing Agency fails to make payment of Additional Costs (as determined and certified by the Independent Engineer and the Independent Auditor) for the Change of Scope in accordance with the Change of Scope Order, late payment interest on the Additional Costs (or part thereof which is unpaid) shall be paid at the rate of Delayed Payment Rate, such interest commencing to accrue from the date the payment was due and ending on the actual date on which the Implementing Agency makes payment of the Additional Costs.

17. TOLLING ARRANGEMENT

17.1 TOLL COLLECTION OPERATIONS

- 17.1.1 During the period commencing from the respective Commercial Operations Date(s) of the Faisalabad–Chiniot Road and Chiniot–Sargodha Road and until the Toll Collection End Date, the Private Partner shall be authorized to collect, demand, levy and charge the Tolls from the Users (except the Exempted Vehicles), in accordance with **Schedule P (Toll Notification Structure)**. All funds collected from Tolls shall be deposited immediately with the Escrow Agent and allocated in accordance with the terms of the Escrow Agreement.

17.2 COMMENCEMENT OF TOLL COLLECTION

- 17.2.1 Not Used.
- 17.2.2 At least fifteen (15) days after the Commencement Date, the Private Partner shall provide a copy of a toll operations manual (the **Toll Operations Manual**) for the review and approval of Independent Engineer and the Implementing Agency. If upon review of the Toll Operations Manual, Independent Engineer and/or the Implementing Agency determines that the procedures set forth therein require amendments, the Private Partner shall, at its sole cost and expense, incorporate such changes as are required in the Toll Operations Manual and undertake periodic review and revision of the Toll Operations Manual as instructed by Implementing Agency and the Independent Engineer.
- 17.2.3 The Implementing Agency hereby grants the right to the Private Partner to commence Tolling at the Project Road, based on the Toll Notification Structure set out in **Schedule P (Toll Notification Structure)** from the Commercial Operations Date.
- 17.2.4 Subject to Section 17.2.6, the Private Partner shall commence commercial operations at the Project Road on the Commercial Operations Date based on the Toll Structure set out in **Schedule P (Toll Notification Structure)** and continue such collection until the Toll Collection End Date.

17.3 TOLL PROGRESS REPORT

Commencing from the Commercial Operations Date and until the Transfer Date, the Independent Auditor shall, no later than ten (10) days after the end of each calendar month, furnish to the Implementing Agency, the Independent Engineers and the Financiers (until such time Financing Due is outstanding) a monthly report (the **Toll Progress Report**) stating in reasonable detail the status of the Toll collected from the Project and shall promptly give such other relevant information as may be required by the Implementing Agency, the Independent Engineer and/or and the Financiers in respect of the Toll collected from the Project. If the Independent Auditor fails to furnish the Toll Progress Report within the specified timeframe, the Independent Auditor shall be subject to the payment of damages/penalties to the Implementing Agency in accordance with the terms of the Independent Auditor appointment agreement.

17.4 PROJECT REVENUE SHARING

- 17.4.1 Prior to the Financing Termination Date, during the Revenue Sharing Period, the Actual Project Revenue shall be shared between the Implementing Agency and the Private Partner in the following manner:
- (a) if the Actual Project Revenue for an Operational Year is either: (i) equal to the Benchmark Revenue, (ii) not less than ninety percent (90%) of the Benchmark Revenue; and (iii) up to one hundred and five percent (105%) for that Operational Year then no portion of the Actual Project Revenue will be shared by the Private Partner with the Implementing Agency;
 - (b) if the Actual Project Revenue for an Operational Year is less than ninety percent (90%) of the Benchmark Revenue for that Operational Year, the Private Partner shall be entitled to the Minimum Revenue Guarantee. Such amount shall be determined on a quarterly basis in accordance with Section 8.12.3 and to the extent of any shortfall in debt servicing obligations, paid through the Debit Authority in accordance with Sections 8.12.3 and 8.12.4, provided that all Toll Progress Reports are up to date; and
 - (c) if the Actual Project Revenue for an Operational Year is more than One Hundred and Five Percent (105%) of the Benchmark Revenue for that Operational Year, then the Private Partner shall share seventy percent (70%) of the overall excess amount with the Implementing Agency.
- 17.4.2 After the Financing Termination Date, the Private Partner shall be obligated to share the Initial Forecasted Revenue with the Implementing Agency on a Proportionate Basis for each Operational Year (as specified in the Financial Model) (the **Minimum Revenue Share**) in accordance with the Escrow Agreement.
- 17.4.3 After the Financing Termination Date, in the event that the Actual Project Revenues during an Operational Year are greater than One Hundred and Five percent (105%) of the Benchmark Revenue (as set out in the Schedule AA and determined by the Independent Auditor) (the **Excess Toll Revenues**), then the Private Partner shall share seventy percent (70%) of such Excess Toll Revenues with the Implementing Agency, in addition to the Minimum Revenue Share that the Implementing Agency be entitled to for that Operational Year, in accordance with the Escrow Agreement.
- 17.4.4 The Parties hereby agree that the Minimum Revenue Share and the Implementing Agency's share of the Excess Toll Revenues (the **Implementing Agency Windfall**) shall be utilized by the Implementing Agency in its sole and absolute discretion.
- 17.4.5 To the extent:
- (a) the Minimum Revenue Share and/or Implementing Agency Windfall is payable by the Private Partner to the Implementing Agency; and
 - (b) the Private Partner fails to make payment of such due and payable Minimum Revenue Share and/or Implementing Agency Windfall (the **Unpaid Implementing Agency Amount**) by the date falling thirty (30) days following the date such amount was due,

then, the Private Partner shall (in addition to the payment of the due and payable Unpaid Implementing Agency Amount) make payment to the Implementing Agency of late payment interest on the Unpaid Implementing Agency Amount at the rate of Delayed Payment Rate, such interest commencing to accrue on the date falling fifty (50) days following the date such amount was due and ending on the actual date on which the Private Partner makes payment of the Unpaid Implementing Agency Amount. The

stipulation regarding additional amounts payable in respect of delayed Unpaid Implementing Agency Amount contained in this Section 17.4.5 shall not be construed nor be deemed to authorize any delay in payment of any amount due to the Private Partner nor be construed or deemed to be a waiver of the underlying breach of payment obligations, in each case, in the afore-stated circumstances.

17.5 ISSUANCE OF TOLL NOTIFICATION

- 17.5.1 The Implementing Agency shall issue a notification (the **Toll Notification**) (substantially, in the form set out in **Schedule R (Form of Toll Notification)** and in accordance with **Schedule P (Toll Notification Structure)**) on annual basis in accordance with the Applicable Laws in order to implement the Toll Notification Structure. The Private Partner shall, at least thirty (30) days prior to the date on which Toll rates have to be revised, write to the Implementing Agency (along with a copy to the Independent Engineer and the Independent Auditor) requesting for the issuance of Toll Notification. The Toll Notification shall notify (in writing) the Toll applicable during each year of the Concession Period. In case the Implementing Agency reduces the Toll rates, the same shall entitle the Private Partner to a Relief Request and in such case the provisions of Article 15 (*Relief Extension and Relief Compensations*) shall apply.
- 17.5.2 The Implementing Agency shall ensure that the Toll Notification is issued throughout the Concession Period in accordance with this Agreement. In the event the Implementing Agency fails to issue the Toll Notification in accordance with the Toll Notification Structure (the **Toll Notification Event**) and provided that the Toll Notification Event does not directly result from breach by the Private Partner of its relevant obligations under this Agreement, then such Toll Notification Relief Event and all matters relating to the same shall constitute a Relief Event (the **Toll Notification Relief Event**) and the same shall entitle the Private Partner to issuance of a Relief Order Request and in such case the provisions of Article 15 (Relief Orders) shall apply.

17.6 COMPETING ROUTE

- 17.6.1 The Implementing Agency represents and warrants that there is no Competing Route as of the Effective Date.
- 17.6.2 In case, the Implementing Agency, or a Public Sector Entity, constructs or upgrades any existing road to a Competing Route, the Private Partner shall Notify the Implementing Agency of existence of such Implementing Agency. In the event:
- (a) any Relief Costs are incurred and/or are projected to be incurred; and/or
 - (b) the Private Partner is delayed and/or is projected to be delayed in performance of its obligations under this Agreement; and/or
 - (c) the Private Partner is unable to or may be unable perform its obligations (or any part thereof) under this Agreement; and/or
 - (d) any of the Private Partner's rights, titles, benefits and/or interests (in each case, including any part thereof) under this Agreement are or may be prejudiced under this Agreement

directly result and/or may result from reasons attributable to any Competing Route (the **Competing Route Event**), then such Competing Route Event and all matters relating to the same (including rectification) shall constitute a Relief Event (the **Competing Route Relief Event**) and the same shall entitle the Private Partner to issuance of a Relief Order Request in respect of (a), (b), (c) and/or (d) above (including for grant of extension of Time For Completion, Relief Costs (including Loss of Toll Revenues

to be paid on a quarterly basis) and/or relief from relevant obligations and liabilities under this Agreement) (as applicable) and, in such case, the provisions of Article 15 (*Relief Orders*) shall apply.

17.7 ALTERNATIVE ROUTE

17.7.1 The Implementing Agency represents and warrants that there is no Alternative Route as of the Effective Date.

17.7.2 In case the Implementing Agency, or a Public Sector Entity, constructs or upgrades any existing road to a Alternative Route, the Private Partner shall Notify the Implementing Agency of existence of such Alternative Route.

In the event:

- (a) any Relief Costs are incurred and/or are projected to be incurred; and/or
- (b) the Private Partner is delayed and/or is projected to be delayed in performance of its obligations under this Agreement; and/or
- (c) the Private Partner is unable to or may be unable perform its obligations (or any part thereof) under this Agreement

directly result and/or may result from reasons attributable to any Alternative Route (the **Alternative Route Event**), then such Alternative Route Event and all matters relating to the same (including rectification) shall constitute a Relief Event (the **Alternative Route Relief Event**) and the same shall entitle the Private Partner to issuance of a Relief Order Request in respect of (a), (b) and/or (c) above (including for grant of extension of Time For Completion, Relief Costs (including Loss of Toll Revenues to be paid on a quarterly basis) and/or relief from relevant obligations and liabilities under this Agreement) (as applicable) and, in such case, the provisions of Article 15 (*Relief Orders*) shall apply.

17.8 ESCROW ARRANGEMENT

The Parties shall enter into an Escrow Agreement which shall, *inter alia*, set out the following provisions:

- a) mechanism to deposit/collect all Toll Revenues (and other revenues) and the mechanism for distribution of respective share of such revenues to the Private Partner and the Implementing Agency;
- b) right for the Implementing Agency and the Private Partner to set-off and make direct deductions of any amounts in case any amount contractually payable by the Private Partner or the Implementing Agency which have not been paid by the same;
- c) Implementing Agency's ability (with the confirmation of the Independent Auditor) to determine the amounts of Insurance proceeds (to the extent they are deposited in the escrow account) and other compensations received by the Private Partner and to make adjustments in the amounts of Termination Payments payable by the Implementing Agency, provided however, the Implementing Agency's rights in relation to Insurance proceeds shall be subordinated to Financiers;
- d) the mechanism for the disbursement of funds from the relevant Escrow Account(s) to fund the Major Maintenance and Overlay Payment Account;

- e) any other rights and matters contemplated by the Implementing Agency (in consultation with the Independent Engineer and the Independent Auditor) which it believes are reasonable and necessary for the transactions of this nature and deductions as determined with the Independent Engineer and the Independent Auditor; and
- f) the Escrow Account may have a lien over it in favour of Financiers, if the same is required.

18. DEFECTS & DEFICIENCIES, NOTICE OF REMEDY, SUSPENSION

18.1 REMEDYING DEFECTS & DEFICIENCIES

18.1.1 The Private Partner warrants that the:

- (a) Project Works shall be performed in a good and workmen like manner in accordance with the Applicable Standards and shall be free from all Defects & Deficiencies; and
- (b) the Concession Assets shall comply with the Applicable Standards.

18.1.2 In order that the Project Works and the Concession Assets comply with the foregoing warranties and that the same are in the condition required by this Agreement, the Private Partner shall execute all works and services relating to amendment, reconstruction and remedying of Defects & Deficiencies (including the removal, replacement and reinstallation of materials and equipment, remedying of Defects & Deficiencies and retesting of repaired or replaced portions of the Project Works (if appropriate in accordance with Good Industry Practices)) at its own cost, risk and expense; provided, however the amendment, reconstruction and remedying of such Defects & Deficiencies shall be at the cost, risk and expense of the Implementing Agency in the event the same is caused by a Permitted Events (except a Non Political Event).

18.1.3 If the remedying of any Defect & Deficiency or damage is such that it may significantly affect the performance of the Project Works and/or the Concession Assets, the Independent Engineer and/or the Implementing Agency may require that certain Construction Tests, O&M Tests and/or the Completion Tests (as the case may be) to be repeated to the extent necessary. The requirement shall be made by written Notice after the Defect & Deficiency or damage is remedied. Such tests shall be carried out by the Private Partner in accordance with the Applicable Standards and all costs and expenses of any nature associated with re-performance of such tests shall be allocated in accordance with Section 18.1.2.

18.2 NOTICE REMEDY

18.2.1 In the event (the **Remedy Events**):

- (a) the Project Works (or any part thereof) are not performed in accordance with the Applicable Standards; and/or
- (b) the Project Works (or any part thereof) fail to comply with the Applicable Standards; and/or
- (c) the Concession Assets (or any part thereof) fails to comply with the Applicable Standards, then the Independent Engineer and/or the Implementing Agency (through the Independent Engineer) shall be entitled to issue a Notice to the Private Partner to rectify and remedy the same (the **Notice of Remedy**). The Notice of Remedy shall set out the reasonable time period (as determined by the Independent Engineer) (the **Remedy Time Period**) in which the Private Partner shall remedy and rectify the Remedy Events in accordance with the Applicable Standards.

- 18.2.2 In the event of failure by the Private Partner to remedy the Remedy Events within the Remedy Time Period, the Implementing Agency shall, without prejudice to any of its other rights and remedies under this Agreement, be entitled to, with the prior approval of the Independent Engineer and at the risk and cost of the Private Partner, cause the remedying and rectification of the Remedy Events.
- 18.2.3 The Private Partner shall reimburse all costs incurred by the Implementing Agency (as certified by the Independent Auditor and the Independent Engineer) on account of such remedying and rectification of the Remedy Events within thirty (30) days of receipt of the Implementing Agency's claim thereof set out in an invoice approved by the Independent Engineer and the Independent Auditor (the **Implementing Agency Remedy Invoice**). In the event of failure by the Private Partner to pay the amounts set out in the Implementing Agency Remedy Invoice (the **Implementing Agency Remedy Amount**) within the time period set out herein, the Implementing Agency shall be entitled to receive such Implementing Agency Remedy Amount through encashment of (as in effect at such time) the Construction Performance Guarantee or O&M Performance Guarantee. In the event the funds received by the Implementing Agency through encashment of the Performance Guarantee or O&M Performance Guarantee are less than the Implementing Agency Remedy Amount, the Private Partner shall be obligated to pay the Implementing Agency the shortfall within three (3) days of the Implementing Agency's written demand.

18.3 SUSPENSION

18.3.1 The:

- (a) Implementing Agency may by Notice in writing to the Private Partner (with a copy to the Independent Engineer and the Independent Auditor) require the Private Partner to suspend forthwith the whole or any part of the Project Works if, in the reasonable opinion of the Implementing Agency: (i) such work threatens the safety of the Users and pedestrians; or (ii) such Project Works are not in accordance with the Applicable Standards and/or Good Industry Practices; and/or
- (b) Independent Engineer may, by Notice to the Private Partner (with a copy to the Implementing Agency and the Independent Auditor), require the Private Partner to suspend forthwith the whole or any part of the Project Works which in the reasonable opinion of the Independent Engineer is being carried on / conducted in a manner that is not in conformity with the Applicable Standards and / or is not in accordance with Good Industry Practice,

(the **Suspension, Suspend and its grammatical variations**).

- 18.3.2 The Private Partner shall, pursuant to the any notice issued under Section 18.3.1, Suspend the Project Works or any part thereof for such time and in such manner as may be specified by the Implementing Agency and/or the Independent Engineer and thereupon carry out remedial measures to secure the safety of Suspended works and the Users and for compliance of the Suspended Project Works with the Applicable Standards and Good Industry Practices.
- 18.3.3 The Private Partner may by Notice (with a copy to the Implementing Agency) require the Independent Engineer to inspect such remedial measures forthwith and the Independent Engineer shall, following such inspection, make a report to the Implementing Agency recommending whether or not the Suspension may be revoked. Upon receiving the recommendations of the Independent Engineer, the Implementing Agency shall either revoke such Suspension or instruct the Private Partner to carry out such other and further remedial measures as may be necessary in the reasonable opinion of the Implementing Agency, and the procedure set forth in this Section 18.3 (*Suspension*) shall be repeated till such time as the Suspension hereunder is revoked.

- 18.3.4 All reasonable costs incurred for maintaining and protecting the Project Works (or part thereof) during the period of Suspension (the **Preservation Costs**) shall be borne by the Private Partner; provided, that if the Suspension has occurred as a result of a Permitted Event, the provisions of Article 21 (*Force Majeure*) and Article 15 (*Relief Orders*), as the case may be, shall apply.
- 18.3.5 All delays caused as a result of the Suspension shall be on account of the Private Partner; provided, however, in the event the Suspension is caused due to a Permitted Event, any extensions of the Time For Completion shall be subject to the provisions of Article 15 (*Relief Extensions & Relief Compensations*) and Article 21 (*Force Majeure*), as the case may be.

19. OPERATION AND MAINTENANCE

19.1 OPERATION AND MAINTENANCE

19.1.1 The Private Partner shall perform the Operation and Maintenance of each segment of the Project Road separately during the relevant Operations Period, namely:

- (a) the Faisalabad-Chiniot Road during the Faisalabad-Chiniot Operations Period; and
- (b) the Chiniot-Sargodha Road during the Chiniot-Sargodha Operations Period;

in accordance with the Applicable Standards and shall ensure that the same complies with the Applicable Standards. During the Operations Period, the Private Partner shall be responsible for Operating and Maintaining the Concession Assets on a twenty four (24) hours per day, three-sixty-five (365) days per year basis according to the Applicable Standards so as to ensure that the same comply with the Applicable Standards.

19.1.2 Without limiting the provisions of Section 19.1.1, the Private Partner shall be in particular responsible for the performance and compliance, in each case, of the Operation and Maintenance with the O&M Requirements.

19.1.3 The Private Partner shall perform the Operation and Maintenance within the O&M Time For Completion and hereby undertakes to perform and complete each Project O&M Milestone on or prior to its Project O&M Milestone Date.

19.1.4 The Private Partner shall perform the Operation and Maintenance either itself, or through the O&M Contractor appointed in accordance with the terms of this Agreement; provided, however, the Private Partner shall remain solely responsible and liable for performance (within O&M Time For Completion) and compliance of the Operations and Maintenance with the Applicable Standards irrespective of whether the Operation and Maintenance is undertaken by the Private Partner or the O&M Contractor.

19.2 OPERATION AND MAINTENANCE OBLIGATIONS OF THE PRIVATE PARTNER

19.2.1 The Private Partner undertakes to perform the Operation and Maintenance of the Concession Assets during the Operations Period in accordance with the provisions of Section 19.1 (*Operation and Maintenance*) and undertakes to modify, repair and to provide all such improvements and services as may be required for the Operation and Maintenance of the Concession Assets in accordance with the Applicable Standards.

19.2.2 The Private Partner hereby agrees that the Operation and Maintenance obligations of the Private Partner hereunder shall include, without limitation, the performance of the following obligations in accordance with the Applicable Standards and Good Industry Practices and within the O&M Time For Completion:

- (a) ensuring that during the Operations Period, the Concession Assets are in a condition to permit safe, smooth and uninterrupted flow of traffic during normal operating conditions;
- (b) minimizing disruption to traffic in the event of accidents or other incidents affecting the safety and use of the Project Road and by providing a rapid and effective response and maintaining liaison with emergency services of the Implementing Agency;
- (c) carrying out routine maintenance and the periodic preventive maintenance of the Concession Assets;
- (d) undertaking routine maintenance including prompt repairs of potholes, cracks, joints, drains, embankments, structures, pavement markings, lighting, road signs and other traffic control devices;
- (e) preventing, with the assistance of concerned law enforcement agencies, any unauthorized use of the Concession Assets;
- (f) preventing, with the assistance of the concerned law enforcement agencies, any encroachments on the Project Site;
- (g) protecting the environment (to the extent of the Private Partner's activities) and providing equipment and materials therefor;
- (h) operation and maintenance of all communication, control and administrative systems necessary for the efficient operation of the Concession Assets;
- (i) operate and maintain the toll plazas and toll gates in accordance with Applicable Standards, **Schedule A (Scope of the Project)** and **Schedule Q (Requirements Of Electronic Toll And Traffic Management System –ETTMS)**.
- (j) maintaining a public relations unit to interface with and attend to suggestions from the Users, the Implementing Agency, the Government Authorities, media and other agencies;
- (k) complying with Safety Requirements;
- (l) promptly removing from the Project Site, all surplus construction machinery and materials, waste materials (including hazardous materials and waste water), rubbish and other debris (including, without limitation, accident debris) and keeping the Project Site in a clean, tidy and orderly condition, in each case, in conformity with the Applicable Standards;
- (m) performing all other activities and obligations relating to Operation and Maintenance so as to comply with the Applicable Standards and also so as to result in the Concession Assets complying with the Applicable Standards.

19.3 NOT USED

19.4 MATERIAL BREACH OF O&M REQUIREMENTS

- 19.4.1 The Private Partner shall be deemed to be in material breach of the O&M Requirements (the **Material Breach of O&M Requirements**) if the Independent Engineer and/or the Implementing Agency (through the Independent Engineer), acting reasonably and in accordance with the provisions of this Agreement, has determined that due to breach of its obligations by the Private Partner:

- (a) there has been a failure/undue delay in carrying out scheduled/planned maintenance or the scheduled/planned maintenance has not been carried out in accordance with the O&M Requirements;
- (b) there has been a material failure in performance by the Private Partner of the Operation and Maintenance (or any part thereof) within the O&M Time For Completion which has resulted in a Material Adverse Effect;
- (c) the riding quality of the Project Road or any part thereof has material deteriorated to a level which is below the acceptance level prescribed by the O&M Requirements;
- (d) there has been a serious or persistent let up in adhering to Safety Requirements and thereby the Concession Assets or any part thereof is not safe for operations;
- (e) there has been “Persistent Breach of O&M Requirements”.

The term “*Persistent Breach of O&M Requirements*” means:

- (i) any reoccurring and persistent breach of the O&M Requirements that remains unremedied despite the issuance of Notice of Remedy by the Independent Engineer;
- (ii) repeated occurrences of a breach that has been remedied pursuant to a Notice of Remedy, notwithstanding that the earlier occurrences of breach may have been remedied pursuant to the Notice of Remedy or otherwise,

in each case subsection (e) (i) and (ii) above, that results in a Material Adverse Effect;

provided, however, the Private Partner shall not be deemed to be in Material Breach of the O&M Requirements in the afore-stated circumstances in the event such breach is caused by the Permitted Events.

19.5 IMPLEMENTING AGENCY’ RIGHTS WITH REGARD TO MATERIAL BREACH OF O&M REQUIREMENTS

19.5.1 Upon the occurrence of a Material Breach of O&M Requirements, the Implementing Agency shall without prejudice to and notwithstanding any other consequences provided thereof shall have the right and be entitled to Terminate this Agreement in accordance with Section 23 (*Termination*).

19.6 PRIORITY OF TRAFFIC FLOW

19.6.1 The Private Partner shall ensure that the Project Road remains open to traffic and that the traffic flow is safe at all times during Operations Period in accordance with the Applicable Standards.

19.6.2 The Private Partner undertakes to conduct the Operation and Maintenance in such manner as to ensure compliance with the obligation set out in Section 19.6.1.

19.7 O&M MANUAL

19.7.1 Ninety (90) days prior to the anticipated date for commencement of the Operations Period (as determined by the Independent Engineer), the Private Partner, the Private Partner Project Engineer and the Independent Engineer shall jointly prepare and submit to Implementing Agency, an operations, repair, maintenance and safety manual (together with arrangements and procedures for conducting

safety related measures) in respect of the Concession Assets that shall comply with the Applicable Standards and Good Industry Practices and shall set out, *inter alia*, the regular preventive maintenance and operating procedures for the Concession Assets, as to be performed pursuant to the Applicable Standards and Good Industry Practices. Such operations, repair, maintenance and safety manual shall include provisions for operation and maintenance of the Concession Assets and shall, *inter alia*, provide for life cycle maintenance, routine maintenance and reactive maintenance which may be reasonably necessary for maintenance and repair of the Concession Assets, including replacement thereof, such that their overall condition conforms to the Applicable Standards. The operations, repair, maintenance and safety manual shall also set out certain Project O&M Milestones and their respective Project O&M Milestone Dates.

- 19.7.2 The operations, repair, maintenance and safety manual jointly prepared by the Private Partner, the Private Partner Project Engineer and the Independent Engineer shall be subject to approval of the Implementing Agency; provided, however, such approval shall be granted by Implementing Agency within fifteen (15) days of the Private Partner's request for such approval if the operations, repair, maintenance and safety manual is recommended by the Independent Engineer for approval after addressing any comments and observations of the Implementing Agency on the same. The operations, repair, maintenance and safety manual, as approved by the Implementing Agency, shall be binding on the Parties (the **O&M Manual**).
- 19.7.3 Four (4) copies of the O&M Manual shall be provided by the Private Partner to each of Implementing Agency and the Independent Engineer.
- 19.7.4 The O&M Manual shall be revised and updated on third (3rd) anniversary of its initial preparation and subsequently every three (3) years thereafter, in each case, with mutual consent of the Parties and in consultation with the Independent Engineer; provided, however, the Parties may revise, update and/or amend the O&M Manual with mutual consent at any time.

19.8 O&M PROGRAMME

- 19.8.1 Ninety (90) days prior to commencement of the Operations Period and thereafter thirty (30) days prior to the commencement of each Operational Year during the Operations Period, as the case may be, the Private Partner, the Private Partner Project Engineer and the Independent Engineer shall jointly prepare and provide to the Implementing Agency, a proposed annual program, to be prepared in compliance with the Applicable Standards and Good Industry Practices, of Operation and Maintenance during the upcoming Operational Year (including preventive, urgent and other scheduled maintenance of Concession Assets) (the **Proposed O&M Programme**). The Proposed O&M Programme shall include, without restriction, the following:
- (a) the Project O&M Milestones to be achieved during the upcoming Operational Year and the respective Project O&M Milestone Dates for each of the same;
 - (b) routine maintenance and preventive maintenance schedule;
 - (c) arrangements and procedures for carrying out urgent repairs in respect of the Concession Assets;
 - (d) criteria to be adopted for determining and ascertaining the maintenance requirements of the Concession Assets;
 - (e) the timelines, intervals and procedures for conducting the inspection of all elements of the Concession Assets;

- (f) the timelines and intervals at which the Private Partner shall conduct periodic maintenance in respect of the Concession Assets;
- (g) arrangements and procedures for conducting safety related measures in relation to the Concession Assets;
- (h) timelines and intervals for maintenance works and the scope thereof; and
- (i) all major events and activities in the preparation of O&M Documents and submission of the same to the Implementing Agency, the Independent Engineer and/or the Independent Auditor (as applicable) for the review and approval (as applicable);

19.8.2 The Proposed O&M Programme jointly prepared by the Private Partner, the Private Partner Project Engineer and the Independent Engineer shall be subject to approval of the Implementing Agency; provided, however, such approval shall be granted by Implementing Agency within twenty one (21) days of the Private Partner's request for such approval if the Proposed O&M Programme is recommended by the Independent Engineer for approval after addressing any comments and observations of the Implementing Agency on the same. The Proposed O&M Programme prepared in respect of an Operational Year, as approved by the Implementing Agency on the Independent Engineer's recommendation, shall be binding on the Parties for such Operational Year (the **O&M Programme**).

19.8.3 The Private Partner shall, whenever required by the Implementing Agency, the Independent Engineer and/or the Independent Auditor, provide in writing, a general description of the arrangements and methods which the Private Partner proposes to adopt for the execution of the Operation and Maintenance. Any alteration to the O&M Programme or to such arrangements and methods shall be made by the Private Partner with prior written consent of the Independent Engineer.

19.8.4 Any reports (including the O&M Monthly Status Reports) submitted by the Private Partner and covering the execution of the Operation and Maintenance shall emphasize any delays in the O&M Time For Completion.

19.9 SAFETY, VEHICLE BREAKDOWN AND ACCIDENTS

19.9.1 The Private Partner shall ensure safe conditions for the Users, and in the event of unsafe conditions, lane closures, diversions, vehicle breakdowns and accidents, it shall follow the relevant Applicable Standards including the setting up of temporary traffic cones and lights, and removal of obstruction and debris without delay, in each case, in accordance with the Applicable Standards.

19.10 SERVICE LEVELS

19.10.1 The Private Partner shall ensure that the Project Road is operated and maintained in accordance with Operational Performance Measures and Management Performance Measures set forth in Section 5 (*Operational Performance Measures*) and Section 6 (*Management Performance Measures*) of Schedule H (*O&M Requirements*) (the '**Service Levels**'). Failure of the Private Partner to meet the required Service Levels shall be called a "**Service Level Defect**".

19.10.2 The Private Partner shall be liable to pay a fixed amount to the Implementing Agency, as specified in Schedule H (*O&M Requirements*) for each Service Level Defect, which shall be imposed immediately upon the detection of the Service Level Defect during inspection of the Project Site (the '**First Day Deduction**'). The First-Day Deduction shall be paid by the Private Partner to the Implementing Agency the fixed amount specified in Schedule H for the period in which the Service Level Defect is detected. Notwithstanding the foregoing, the Implementing Agency may waive the First-Day Deduction if, at the

time the inspection is conducted, the Private Partner demonstrates that its staff and equipment are actively engaged in rectifying the relevant Service Level Defect.

- 19.10.3 Following the First Day Deduction, a time period is specified for each Service Level Defect, which shall allow the Private Partner an opportunity to remedy the identified Service Level Defect (the ‘Grace Period’). If the Service Level Defect is not rectified within the applicable Grace Period, the Private Partner shall be liable to pay similar additional amounts to the Implementing Agency for each subsequent day of the existence of the Service Level Defect, commencing on the second day following the detection of the said Service Level Defect. These daily charges shall continue to accrue until the Service Level Defect is fully remedied, with no limit on the duration of such charges being payable.
- 19.10.4 A Service Level Defect shall be deemed rectified only after the Private Partner submits a written notification to the Independent Engineer, along with supporting documentary evidence, clearly demonstrating that the Service Level Defect has been fully addressed and resolved. Upon receipt of such written notification, the Independent Engineer shall review the submitted evidence, and if it is satisfied that the Service Level Defect has been remedied, it shall certify, in writing to the Implementing Agency with a copy to the Private Partner, that no further inspection is required. The Private Partner shall continue to be liable to make fixed amount payments to the Implementing Agency, in accordance with this Section, till the date of the issuance of the abovementioned certificate of the Independent Engineer stating that the Service Level Defect has been remedied satisfactorily.
- 19.10.5 The fixed amount payments that arise from multiple Service Level Defects within a single kilometre of the Project Road shall be cumulative. The total amount applicable, for a Service Level Defect, to a one-kilometre section of the Project Road shall be equal to the sum of all individual amounts that are payable for each identified non-conformance within that section. Notwithstanding the foregoing, the aggregate Service Level Defect payment deductions imposed for a single kilometre of the Project Road in any given month shall not exceed one hundred percent (100%) of the monthly lump-sum amount payable to the Private Partner from the Implementing Agency Payment Account for maintenance services for that kilometre.
- 19.10.6 The imposition of First Day Deductions and subsequent deductions shall not relieve the Private Partner of its obligations under the PPP Contract to *inter alia* comply with Service Levels.
- 19.10.7 Failure by the Private Partner to rectify a Service Level Defect for a continuous period of three months beyond the relevant grace period (as per Schedule H) shall constitute a Private Partner Event of Default.

19.11 MAJOR MAINTENANCE AND OVERLAY

19.12 TIMING OF MAJOR MAINTENANCE AND OVERLAY AND MAJOR MAINTENANCE AND OVERLAY COSTS

- 19.12.1 The Private Partner shall perform the Major Maintenance and Overlay of each segment of the Project Road separately during the relevant Major Maintenance and Overlay Period, specifically:
- (a) the Faisalabad-Chiniot Road during the Faisalabad-Chiniot Major Maintenance and Overlay Period; and
 - (b) the Chiniot-Sargodha Road during the Chiniot-Sargodha Major Maintenance and Overlay Period;
- 19.12.2 The Parties acknowledge that, based on the requirements of the Applicable Standards, the Faisalabad-Chiniot Road shall require its Faisalabad-Chiniot First Major Maintenance and Overlay approximately sixty (60) days after its Proposed Major Maintenance and Overlay Programme has been approved by the Independent Engineer and Implementing Agency, and thereafter the Faisalabad-Chiniot Second

Major Maintenance and Overlay should not be required before the date falling ten (10) years (as determined by the Independent Engineer) following the Faisalabad-Chiniot First Major Maintenance and Overlay Commencement Date.

19.12.3 The Parties also acknowledge that based on the requirements of the Applicable Standards, the Chiniot-Sargodha Road shall require its Chiniot-Sargodha Major Maintenance and Overlay approximately sixty (60) days after its Proposed Major Maintenance and Overlay Programme has been approved by the Independent Engineer and Implementing Agency, and thereafter the Chiniot-Sargodha Second Major Maintenance and Overlay should not be required before the date falling ten (10) years (as determined by the Independent Engineer) following the Chiniot-Sargodha First Major Maintenance and Overlay Commencement Date.

19.12.4 The Parties acknowledge and agree that the costs of each of the Major Maintenance and Overlays (the **Major Maintenance and Overlay Costs**) are expressly set out in the Financial Model and shall be adjusted for inflation in accordance with the Financial Model.

19.13 MAJOR MAINTENANCE AND OVERLAY PROGRAMME, MAJOR MAINTENANCE AND OVERLAY CONTRACT(S) AND APPROVALS

(a) Three (03) months prior to the First Major Maintenance and Overlay Commencement Date and the Second Major Maintenance and Overlay Commencement Date, for the Faisalabad-Chiniot Road and Chiniot-Sargodha Road, respectively, the Private Partner shall submit to the Independent Engineer (with a copy to the Implementing Agency) a proposed program for Major Maintenance and Overlay during the upcoming Major Maintenance and Overlay Period (the **Proposed Major Maintenance and Overlay Programme**). The Proposed Major Maintenance and Overlay Programme shall include, without restriction, the following:

- (i) the Major Maintenance and Overlay Milestones to be achieved during the upcoming Major Maintenance and Overlay Period and the respective completion dates for each of the same;
- (ii) the manner and methodology for implementation of the Major Maintenance and Overlay;
- (iii) the arrangements and procedures for conducting safety related measures in relation to the Concession Assets during the upcoming Major Maintenance and Overlay Period; and
- (iv) the timelines for implementation of the Major Maintenance and Overlay.

(b) The Private Partner shall, along with the Proposed Major Maintenance and Overlay Programme, submit to the Independent Engineer (together with a copy to the Implementing Agency) one or more proposed contracts in respect of the implementation of the upcoming Major Maintenance and Overlay (the **Proposed Major Maintenance and Overlay Contract(s)**). The Proposed Major Maintenance and Overlay Programme and the Proposed Major Maintenance and Overlay Contract(s) shall be subject to the prior approval of the Independent Engineer in respect of payment terms, Major Maintenance and Overlay Milestones, scope of the Major Maintenance and Overlay and technical matters. The Independent Engineer and/or the Implementing Agency (through the Independent Engineer) shall, within thirty (30) days of its receipt of the Proposed Major Maintenance and Overlay Programme and the Proposed Major Maintenance and Overlay Contract(s), provide its comments or observations on the same, if any, to the Independent Engineer. The Independent Engineer shall within forty-five (45) days of the delivery of the Proposed Major Maintenance and Overlay Programme and the Proposed Major Maintenance

and Overlay Contract(s), grant its approval or disapproval of the same. In the event no objections to the Proposed Major Maintenance and Overlay Programme and the Proposed Major Maintenance and Overlay Contract(s) are received from Implementing Agency within forty-five (45) days of the delivery of the same by the Private Partner, the same shall be deemed not to have been objected to by the Implementing Agency and the Independent Engineer may approve or disapprove at its own discretion. The Private Partner shall implement the Major Maintenance and Overlay in accordance with the actual or deemed approved Proposed Major Maintenance and Overlay Programme (the **Approved Major Maintenance and Overlay Programme**) and the actual or deemed approved Proposed Major Maintenance and Overlay Contract(s) (the **Approved Major Maintenance and Overlay Contract(s)**) as approved by the Independent Engineer.

- (c) The Private Partner shall execute the Approved Major Maintenance and Overlay Contract(s) prior to the Major Maintenance and Overlay Costs Funding Date and deliver certified (as being true and correct) copies of the Approved Major Maintenance and Overlay Programme and the Approved Major Maintenance and Overlay Contract(s), to the Implementing Agency, the Independent Engineer and the Independent Auditor within seven (7) days of execution of the same.

19.14 MAJOR MAINTENANCE AND OVERLAY PAYMENT ACCOUNT

- (a) The Private Partner shall establish and maintain the Major Maintenance and Overlay Payment Account from the Commencement Date and until the Trigger Date.
- (b) The Private Partner shall issue irrevocable standing instructions to the Major Maintenance and Overlay Payment Account Bank (in form and substance agreed between the Parties) (the **Major Maintenance and Overlay Payment Account Standing Instructions**) containing, *inter alia*, instructions to the Major Maintenance and Overlay Payment Account Bank to debit the Major Maintenance and Overlay Payment Account on each Major Maintenance and Overlay Milestone Date (upon receipt of a Major Maintenance and Overlay Milestone Certificate relating to such Major Maintenance and Overlay Milestone Date) in an amount equal to the Major Maintenance and Overlay Milestone Payment and credit the same to the Escrow Account.
- (c) The Major Maintenance and Overlay Payment Account Standing Instructions issued by the Private Partner shall be irrevocable and shall remain effective, in each case, until the Trigger Date, and no withdrawal from the Major Maintenance and Overlay Payment Account may be made by the Implementing Agency, except as provided in this Agreement.
- (d) The Major Maintenance and Overlay Payment Account Standing Instructions (or any part thereof) issued by the Private Partner may be revoked pursuant a written revocation Notice duly executed and confirmed by the authorized representatives of Implementing Agency and the Private Partner.

The Major Maintenance and Overlay Payment Account shall be strictly operated and maintained in accordance with the Major Maintenance and Overlay Payment Account Standing Instructions. Further, the Private Partner hereby undertakes and covenants with the Private Partner that it shall not until the Trigger Date create, incur, permit, assume or suffer to exist any Encumbrance whatsoever upon or with respect to the Major Maintenance and Overlay Payment Account. Further, the Private Partner hereby undertakes and covenants with the Private Partner that it shall not until the Trigger Date transfer or dispose of all or any of its rights and benefits under or in respect of the Major Maintenance and Overlay Payment Account.

19.15 FUNDING AND PAYMENT

- (a) The Parties agree that the Private Partner shall fund the Major Maintenance and Overlay Payment Account every year following the Substantial Completion Date for such amounts of the Major Maintenance and Overlay Costs as set out in the Financial Model, provided further, in each case:
- (i) at least six (6) months prior to the First Major Maintenance and Overlay Commencement Date the Private Partner shall provide evidence to the Implementing Agency (certified by the Independent Auditor and the Independent Engineer) that the Private Partner has deposited the Major Maintenance and Overlay Funding Amount, into the Major Maintenance and Overlay Payment Account in respect of the First Major Maintenance and Overlay Period; and
 - (ii) at least six (6) months prior to the Second Major Maintenance and Overlay Commencement Date the Private Partner shall provide evidence to the Implementing Agency (certified by the Independent Auditor and the Independent Engineer) that the Private Partner has deposited the Major Maintenance and Overlay Funding Amount, into the Major Maintenance and Overlay Payment Account in respect of the Second Major Maintenance and Overlay Period,

provided further that the determination by the Independent Auditor and the Independent Engineer of the Major Maintenance and Overlay Costs shall take into account the projected inflation (in accordance with the Financial Model) during the Major Maintenance and Overlay Period.

19.16 O&M DOCUMENTS

- 19.16.1 The Private Partner shall prepare the O&M Documents in accordance with the Applicable Standards and shall complete and deliver the same to the Implementing Agency, the Independent Engineer and the Independent Auditor (as applicable) from time to time within the O&M Time For Completion. Further, the Private Partner hereby undertakes that the O&M Documents shall comply with the Applicable Standards.
- 19.16.2 The Implementing Agency, the Independent Engineer and the Independent Auditor (as applicable) shall have the right to review and inspect all O&M Documents. The Private Partner shall provide all such O&M Documents that the Implementing Agency, the Independent Engineer and the Independent Auditor may reasonably require to inspect in respect of the Operation and Maintenance. It is made clear that nothing in the above shall diminish the Private Partner's responsibility to provide the Implementing Agency, the Independent Engineer and the Independent Auditor with sufficient information to enable the same to satisfy themselves regarding the Operation and Maintenance.
- 19.16.3 For each part of the Operation and Maintenance, if the Implementing Agency, the Independent Engineer and the Independent Auditor (as applicable) wish to modify any O&M Documents, the Implementing Agency, the Independent Engineer and the Independent Auditor (as applicable) shall immediately submit their proposal for modification to the Private Partner. Subject to Section 19.12.4, performance of such modification shall be subject to mutual agreement between the Parties.
- 19.16.4 Defects & Deficiencies, errors, omissions, ambiguities, inconsistencies, inadequacies and other defects in the O&M Documents or arising there from shall be rectified by the Private Partner at its sole cost and risk.
- 19.16.5 The Implementing Agency, the Independent Engineer and the Independent Auditor (as applicable) may use the O&M Documents for such purposes as it may require for the purposes of the Project.

19.17 NOT USED

19.18 NOT USED

19.19 MODIFICATIONS TO THE PROJECT

19.19.1 The Private Partner shall not carry out any material modifications to the Concession Assets, save and except where such modifications are necessary for: (a) the Operation and Maintenance of the Concession Assets in conformity with the Applicable Standards; and (b) compliance by the Concession Assets with the Applicable Standards; provided, however, the Private Partner shall Notify the Independent Engineer and the Implementing Agency of the proposed modifications along with particulars thereof at least thirty (30) business days before commencing work on such modifications and shall only implement such modifications upon receipt of the Independent Engineer's and/or Implementing Agency's approval of the same, which approval shall be provided or declined by the Independent Engineer and/or the Implementing Agency within fifteen (15) days of its receiving the Private Partner's proposal. For the avoidance of doubt, all modifications made hereunder shall comply with the Applicable Standards.

19.20 BARRIERS AND DIVERSIONS

19.20.1 The Implementing Agency shall procure that during the Operations Period, no barriers are erected or placed by any Government Agency on the Concession Assets, except for reasons of Emergency, national security, law and order; provided, that all such barriers shall be in accordance with the Applicable Standards (including the Safety Requirements).

19.21 O&M MONTHLY STATUS REPORT

19.21.1 During the Operations Period, the Private Partner shall, no later than seven (7) days after the end of each calendar month of the Operations Period, furnish to the Implementing Agency and the Independent Engineer a monthly report (the **O&M Monthly Status Report**) stating in reasonable detail the condition of the Concession Assets including its compliance or otherwise with the Applicable Standards and shall promptly give such other relevant information as may be required by the Independent Engineer, the Independent Auditor and/or and the Implementing Agency. In particular, the O&M Monthly Status Report shall separately identify and state in reasonable detail the Defects & Deficiencies in the Private Partner Assets and/or the Operation and Maintenance that require rectification and any delays in the performance of its obligations by the Private Partner set out in the O&M Programme. The O&M Monthly Status Report shall also expressly highlight all Defects & Deficiencies in the Operation and Maintenance and/or the Concession Assets identified by the Independent Engineer in its O&M Inspection Report and shall set out all actions taken and arrangements made by the Private Partner for remedying the same.

19.21.2 Each O&M Monthly Status Report shall be updated by the Private Partner based on any observations and comments made by the Independent Engineer and shall be provided again to each of the Implementing Agency and the Independent Engineer until such time that it is approved by the Independent Engineer; provided, that the Independent Engineer shall not accord its approval of the O&M Monthly Status Report until it is satisfied that all reasonable comments and observations of the Implementing Agency on the O&M Monthly Status Report are addressed.

19.21.3 The O&M Monthly Status Report shall be in the form approved by the Independent Engineer from time to time.

19.22 O&M INSPECTION REPORT

- 19.22.1 During the Operations Period, the Private Partner shall enable the Independent Engineer to inspect the Operation and Maintenance and the Concession Assets at least once a month and the Private Partner shall make all arrangements for the same.
- 19.22.2 The Independent Engineer shall make a report of such inspection (the **O&M Inspection Report**) stating in reasonable detail the Defects & Deficiencies, if any, in the Operation and Maintenance and /or the Concession Assets with particular reference to the Applicable Standards.
- 19.22.3 The Independent Engineer shall, within seven (7) days of commencement of a month, provide a copy of the O&M Inspection Report to the Private Partner and the Implementing Agency.
- 19.22.4 The Private Partner hereby undertakes that, within fifteen (15) days from receipt of the O&M Inspection Report, it shall rectify and remedy the Defects & Deficiencies, if any, stated in the O&M Inspection Report, on its own cost and expense.
- 19.22.5 The inspection or submission of the O&M Inspection Report by the Independent Engineer shall not relieve or absolve the Private Partner of its obligations and liabilities hereunder in any manner whatsoever.

19.23 O&M TESTS

- 19.23.1 The Private Partner shall conduct or procure to be conducted such tests, as specified in **SCHEDULE G (List of Tests & Completion Tests)** AND the AASHTO Standards in order to determine whether the Operation and Maintenance and/or the Concession Assets conform to the Applicable Standards (the **O&M Tests**). The O&M Tests shall be conducted at such time and frequency and in such manner as may be specified by the Independent Engineer and the Implementing Agency.
- 19.23.2 The Private Partner hereby undertakes to conduct the O&M Tests under the supervision of the Independent Engineer (in consultation with the Implementing Agency) and in accordance with the Applicable Standards at its own cost and expense.
- 19.23.3 The Private Partner hereby undertakes to carry out, at its sole cost, the necessary remedial measures required to rectify the Defects & Deficiencies in the Operation and Maintenance and/or the Concession Assets that are identified in the O&M Tests and to ensure that as a consequence of such remedial measures the Operation and Maintenance and the Concession Assets conform to the Applicable Standards. The Private Partner further undertakes that the remedial measures required to be undertaken by the Private Partner pursuant to this Section 19.19.3 shall be repeated by the Private Partner at its sole cost till such time as the Operation and Maintenance and the Concession Assets conform to the Applicable Standards to the satisfaction of the Independent Engineer. In the aforesaid circumstances, the Independent Engineer may require the Private Partner to conduct additional tests to determine whether the Defects & Deficiencies are rectified and in such case the costs of such additional tests shall be borne by the Private Partner.
- 19.23.4 The Private Partner shall maintain proper record of the O&M Tests and the remedial measures taken to cure the Defects & Deficiencies, if any, indicated by the O&M Test results.
- 19.23.5 Results of all O&M Tests shall be jointly recorded by the Independent Engineer and the Private Partner.

19.24 REMEDIAL MEASURES

- 19.24.1 The Private Partner shall repair or rectify the Defects & Deficiencies, if any, set forth in the O&M Inspection Report or in the O&M Tests results referred to in Section 19.19 (*O&M Tests*) and furnish a report in respect thereof to the Independent Engineer and the Implementing Agency within seven (7)

days of receiving the O&M Inspection Report or the O&M Tests results, as the case may be; provided, that where the remedying of such Defects & Deficiencies is likely to take more than seven (7) days, the Private Partner shall submit progress reports of the repair works once every week until such works are completed in conformity with this Agreement.

19.24.2 The Independent Engineer shall require the Private Partner to carry out or cause to be carried out the O&M Tests, at its own cost, to determine that such remedial measures have brought the relevant Concession Assets into compliance with the Applicable Standards and the procedure set forth in this Section 19.20 (*Remedial Measures*) shall be repeated until the Concession Assets conform to the Applicable Standards.

19.24.3 The provisions of this Section 19.20 shall not in any manner limit the obligations of the Private Partner relating to remedying of Defects & Deficiencies set out elsewhere in this Agreement.

20. INSURANCES

20.1 CONSTRUCTION PERIOD AND INSTALLATION PERIOD INSURANCES

20.1.1 The Private Partner shall, at its sole cost and expense, procure and maintain during the Construction Period and Installation Period all such Insurances, as described in **PART I (*Construction Period Insurances*) and PART II (*Installation Period Insurances*) OF SCHEDULE I (*Insurances*)**, that are necessary and required to be procured by the Private Partner in accordance with the Financing Documents and the Applicable Laws.

20.2 OPERATIONS PERIOD INSURANCES

20.2.1 The Private Partner shall, at its sole cost and expense, procure and maintain during the Operations Period all such Insurances, as described in **PART III (*Operations Period Insurances*) OF SCHEDULE I (*Insurances*)**, that are necessary and required to be procured by the Private Partner in accordance with the Financing Documents and Applicable Laws.

20.3 INSURANCE COMPANIES

20.3.1 The Private Partner agrees that it shall procure the Insurances from such insurance companies that are acceptable to the Implementing Agency and further agrees that the Private Partner shall only procure Insurances through foreign insurance companies if the relevant Insurances are not being offered by local companies at comparable rates, subject always to the prior consent of the Implementing Agency.

20.3.2 Further, the Insurances to be maintained in terms of this Agreement and in accordance with the terms set out herein will be maintained throughout until the Trigger Date notwithstanding the expiry of the Financing Documents.

20.4 EVIDENCE OF INSURANCES

20.4.1 The Private Partner shall, from time to time, provide to the Implementing Agency copies (duly attested as certified to be a true and correct copy by the relevant insurance company) of all insurance policies (or appropriate endorsements, certifications or other satisfactory evidence of insurance) obtained by the Private Partner in accordance with this Agreement.

20.4.2 Failure by the Private Partner to obtain the Insurance coverage or certificates of Insurance required by this Article 20 (*Insurances*) shall not in any way relieve or limit the Private Partner's obligations and liabilities under any provision of this Agreement.

- 20.4.3 In case the Private Partner fails to procure or maintain any Insurance required pursuant to this Article 20 (*Insurances*), then the Implementing Agency shall have the right to procure such Insurance in accordance with the requirements of **SCHEDULE I (*Insurances*)** and shall be entitled to offset the premiums paid for such insurance against any amounts owed to the Private Partner pursuant to the terms of this Agreement and the Implementing Agency Agreements. The Private Partner shall be named as the loss payee on any such Insurance procured by the Implementing Agency pursuant to this Section 20.4.3.
- 20.4.4 The Private Partner shall provide the Implementing Agency with copies of any underwriters' reports or other reports received by the Private Partner from any insurance company; provided, that the Implementing Agency shall not disclose such reports to any other person except as necessary in connection with administration and enforcement of this Agreement or any other Implementing Agency Agreement or as may be required by any Governmental Implementing Agency and shall use and internally distribute such reports only as necessary in connection with the administration and enforcement of this Agreement.

20.5 APPLICATION OF INSURANCE PROCEEDS

- 20.5.1 Subject to the provisions of the Financing Documents, all moneys received under the Insurance shall be promptly applied by the Private Partner towards repair, renovation, restoration and / or substitution of the Concession Assets or any part thereof which may have been damaged or destroyed; provided, that all costs relating to such repair, renovation, restoration and / or substitution shall be duly certified by the Independent Engineer and the Independent Auditor.
- 20.5.2 The Private Partner may, with the prior approval of the Implementing Agency, designate the Financiers as the loss payees under the Insurance and / or assign the Insurance in their favour as security for the Financing availed by the Private Partner from the Financiers pursuant to the Financing Documents.
- 20.5.3 The Private Partner shall carry out the repair, renovation, restoration and / or substitution to the extent possible in such manner that the Concession Assets or any part thereof, shall, after such repair, renovation, restoration and / or substitution be as far as possible in the same condition as they were before such damage or destruction, normal wear and tear excepted.

20.6 VALIDITY OF INSURANCES

- 20.6.1 The Private Partner hereby undertakes to promptly pay the insurance premium in respect of the Insurances and to keep the policies in force and valid during the entire Concession Period. The Private Partner shall provide to the Implementing Agency, copies of the renewed policies and other documentary evidence of the payment of the insurance premium in respect of the Insurances.
- 20.6.2 The Private Partner shall ensure, subject to market availability, that each instrument, contract and / or policy issued in respect of the Insurances shall provide that the Insurance may not be cancelled and / or terminated without at least ten (10) days prior written notice to the Implementing Agency of such cancellation and / or termination.
- 20.6.3 Notwithstanding anything contained herein, in the event the Private Partner fails to comply with its obligations to procure the Insurances in accordance with Section 20.1 (*Construction Period and Installation Period Insurances*) and / or Section 20.2 (*Operations Period Insurances*), then the Implementing Agency may, without prejudice to its other rights and remedies for breach, at its option, obtain and maintain such Insurance and all sums incurred by the Implementing Agency therefor shall be reimbursed by the Private Partner to the Implementing Agency within seven (7) days from the receipt of a claim by the Private Partner in respect thereof from the Implementing Agency.

20.6.4 The Private Partner shall notify the Implementing Agency in advance, prior to any material variation of the Insurances.

20.7 MAINTENANCE OF “OCCURRENCE” FORM POLICIES

20.7.1 A coverage required under this Article 20 (*Insurances*) and **SCHEDULE I (*Insurances*)** and any “umbrella” or excess coverage shall be “occurrence” form policies. In the event the Private Partner has “claims-made” form coverage, the Private Partner must obtain prior approval of all “claims-made” policies from the Implementing Agency.

20.8 POLICY ENDORSEMENTS

20.8.1 The Private Partner shall cause the insurance companies to provide the following endorsement items in the commercial general liability and, if applicable, umbrella or excess liability policies relating to the construction, installation, Operation and Maintenance of the Concession Assets provided pursuant to this Article 20 (*Insurances*) and **SCHEDULE I (*Insurances*)**:

- (a) the Implementing Agency, its officers, servants and agents shall be additionally insured under such policies with respect to claims arising out of or in connection with this Agreement;
- (b) the insurance shall be primary with respect to the interest of the Implementing Agency, its officers, servants and agents and any other insurance maintained by them is excess and not contributory with such policies;
- (c) the following separation of interests clause shall be made a part of the policy:

“In the event of claims being made by reason of (i) personal and/or bodily injuries suffered by any employee or employees of one insured hereunder for which another insured hereunder is or may be liable, or (ii) damage to property belonging to any insured hereunder for which another insured is or may be liable, then this policy shall cover such insured against whom a claim is made or may be made in the same manner as if separate policies have been issued to each insured hereunder, except with respect to the limits of insurance.”;
- (d) the insurer shall waive all rights of subrogation against the Implementing Agency, its officers, servants and agents; and
- (e) notwithstanding any provision of the policy, the policy may not be cancelled or not renewed without the insurer endeavouring to give thirty (30) days written notice to the Implementing Agency except in the case of non-payment, in which case it will be ten (10) days with prior written notice to the Implementing Agency. All other terms and conditions of the policy shall remain unchanged.

21. FORCE MAJEURE

21.1 FORCE MAJEURE EVENT

21.1.1 A “**Force Majeure Event**” shall mean any event or circumstance or combination of events or circumstances (including the effects thereof) that is beyond the reasonable control of a Party and that on or after the Commencement Date materially and adversely affects the performance by such affected Party (the **Affected Party**) of its obligations under or pursuant to this Agreement; provided, however, that, such material and adverse effect could not have been prevented, overcome or remedied in whole or in part by the Affected Party through the exercise of diligence and reasonable care, it being understood and agreed that reasonable care includes acts and activities to protect the Concession Assets from a casualty or other event that are reasonable in light of the probability of the occurrence of such event, the probable effect of such event if it should occur, and the likely efficacy of the protection measures. Without limiting the generality of the foregoing, “**Force Majeure Events**” hereunder shall include each of the following events and circumstances (including the effects thereof), but only to the extent that each satisfies the requirements above:

- (a) the following political events that occur inside or directly involve Pakistan (each a **Political Event**):
 - (i) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, civil commotion, or act or campaign of terrorism or political sabotage; or
 - (ii) any Lapse of Consent of which report to Implementing Agency, the Independent Engineer and the Independent Auditor shall have been given under Section 7.6.2 and that shall have existed for thirty (30) consecutive days or more; or
 - (iii) any strike, work-to-rule, go-slow, or analogous labour action that is politically motivated or is widespread or nationwide and that shall have existed for thirty (30) consecutive days or more;
- (b) the following events beyond the reasonable control of the affected Party (each a **Non Political Event**), including, but not limited to:
 - (i) lightning, fire, earthquake, tsunami, flood, storm, cyclone, typhoon, or tornado, which has, in each case, affected the work or operations for more than fifteen (15) consecutive days; or
 - (ii) any Lapse of Consent of which report to Implementing Agency, the Independent Engineer and the Independent Auditor shall have been given under Section 7.6.2 and that shall have existed for less than thirty (30) consecutive days; or
 - (iii) any strike, work-to-rule, go-slow, or analogous labour action that is not politically motivated or is not widespread or nationwide and that shall have existed for thirty (30) consecutive days or more; or
 - (iv) explosion, chemical contamination, radioactive contamination or ionizing radiation (except to the extent any of the foregoing events or circumstances results directly from a Political Event, in which case such event or circumstance shall constitute a Political Event); or
 - (v) pandemic, epidemic or plague.

- (c) Force Majeure Events shall expressly not include the following conditions, events or circumstances:
- (i) late delivery or interruption in the delivery of machinery, equipment materials, spare parts or consumables;
 - (ii) a delay in the performance of any Contractor;
 - (iii) a breakdown in machinery and/or equipment; and
 - (vi) normal wear and tear or random flaws in materials and equipment,
 - (vii) a delay caused by rains, monsoons and fog;

provided, that each of the events described in clauses (c)(i), (ii), (iii) or (iv) shall constitute a Force Majeure Event to the extent that such events or circumstances are caused by an event or circumstance that is in itself a Force Majeure Event whether experienced directly by the Private Partner or by one of its Contractors.

21.2 OBLIGATION TO NOTIFY

- 21.2.1 Notwithstanding anything contained herein, the Affected Party shall, as soon as practicable, and in any case within seven (7) days of the date of occurrence of a Force Majeure Event or from the date of having knowledge thereof, Notify the Independent Engineer, the Independent Auditor and the other Party, of the occurrence of the Force Majeure Event by the issuance of a notice in writing (the **Force Majeure Notice**).
- 21.2.2 The Affected Party shall provide all relevant details in respect of the Force Majeure Event in the Force Majeure Notice, including but not restricted to the following:
- (a) the nature and extent of the Force Majeure Event;
 - (b) the estimated Force Majeure Period;
 - (c) the nature of and the extent to which, performance of any of the Affected Party's obligations under this Agreement are affected by the Force Majeure Event;
 - (d) the measures which the Affected Party has taken or proposes to undertake to alleviate/mitigate the impact of the Force Majeure Event and to resume performance of such of its obligations that are affected by the Force Majeure Event; and
 - (e) any other relevant information concerning the Force Majeure Event, and /or the rights and obligations of the Parties under this Agreement.
- 21.2.3 The Parties shall, as soon as practicable upon the receipt of the Force Majeure Notice and in any case within five (5) days from the date of receipt of the same, convene a meeting, along with the Independent Engineer for the purpose of conducting discussions, in good faith, and where necessary the Parties shall agree to conduct inspections and / or surveys of the Project in order to:
- (a) assess the impact of the underlying Force Majeure Event;
 - (b) to determine the likely duration of Force Majeure Period; and

- (c) to formulate damage mitigation measures and the steps to be undertaken by the Parties for resumption of the obligations, the performance of which had been affected by the Force Majeure Event.

21.2.4 The Affected Party shall during the Force Majeure Period provide to the other Party with regular (not less than weekly) reports in respect of the matters set out Section 21.2.3 and such other information, details and / or documents that the other Party may reasonably require.

21.3 CONSEQUENCE OF FORCE MAJEURE EVENT

21.3.1 Upon occurrence of a Force Majeure Event, the following shall apply:

- (a) there shall be no Termination of this Agreement except in accordance with the provisions of Section 21.5 (*Termination Notice for Force Majeure Event*), Section 21.6 (*Termination Payment for Force Majeure Event*) and Article 23 (*Termination*);
- (b) in the event of occurrence of a Force Majeure Event:
 - (i) subject to Section 21.8, the Project Milestone Dates for the Project Milestones (affected by the Force Majeure Event) to be performed (together with the timelines for performance by the Private Partner of its relevant obligations to be performed) shall be extended by the Force Majeure Period (as determined by the Independent Engineer and the Independent Auditor in accordance with Article 15 (*Relief Orders*)) and in such case, the provisions of Article 15 (*Relief Orders*) shall apply;
 - (ii) all costs, fees, expenses and charges arising from and relating to the Force Majeure Event shall be allocated in accordance with Section 21.4 (*Allocation of Costs Arising out of Force Majeure*).

provided, however, that no relief, including extension of Time For Completion, shall be granted to the affected Party to the extent that such failure or delay would nevertheless have been experienced by the Affected Party had the Force Majeure Event not occurred.

21.4 ALLOCATION OF COSTS ARISING OUT OF FORCE MAJEURE

21.4.1 Upon occurrence of a Force Majeure Event, the Force Majeure Costs shall be allocated as follows:

- (a) upon occurrence of a Non Political Event, all Force Majeure Costs shall be on the account of the Private Partner and the Implementing Agency shall not be liable or responsible for the same in any manner;
- (b) upon occurrence of a Political Event, the Implementing Agency shall fund and bear the Force Majeure Costs (as set out in a Relief Order) and in such case, the provisions of Article 15 (*Relief Extensions & Relief Compensations*) shall apply.

21.4.2 Not Used

21.4.3 Save and except as expressly provided in this Section 21.4 (*Allocation of Costs Arising out of Force Majeure*) and, if applicable, Section 21.5 (*Termination Notice For Force Majeure Event*) and Section 21.6 (*Termination Payment For Force Majeure Event*), neither Party shall be liable in any manner whatsoever to the other Party in respect of any loss, damage, cost, expense, claims, demands and

proceedings relating to or arising out of occurrence or existence of any Force Majeure Event or exercise of any right pursuant hereto.

21.5 TERMINATION NOTICE FOR FORCE MAJEURE EVENT

21.5.1 If:

- (a) a Force Majeure Event subsists for a continuous period of one hundred and twenty (120) days, either Party may in its discretion Terminate this Agreement by issuing a Termination Notice to the other Party; or
- (b) in case of a Political Event, the Implementing Agency determines that the Force Majeure Costs relating the same are unacceptable then the Implementing Agency may in its discretion Terminate this Agreement by issuing a Termination Notice to the Private Partner,

in each case above, without being liable in any manner whatsoever, save as provided in this Section 21.5 (*Termination Notice for Force Majeure*) and Section 21.6 (*Termination Payment for Force Majeure Event*), and upon issue of such Termination Notice, this Agreement shall, notwithstanding anything to the contrary contained herein, stand Terminated forthwith; provided, that before issuing such Termination Notice, the Party intending to issue the Termination Notice shall inform the other Party of such intention and grant fifteen (15) days' time to make a representation, and may after the expiry of such fifteen (15) days period, whether or not it is in receipt of such representation, in its sole discretion issue the Termination Notice.

21.6 TERMINATION PAYMENT FOR FORCE MAJEURE EVENT

21.6.1 If Termination is on account of a Non Political Event, the Implementing Agency shall make a Termination Payment to the Private Partner on or prior to the Termination Payment Date in an amount equal to the Non Political Event Termination Amount.

21.6.2 If Termination is on account of a Political Event, the Implementing Agency shall make a Termination Payment to the Private Partner on or prior to the Termination Payment Date in an amount equal to the Political Event Termination Amounts.

21.7 FORCE MAJEURE DISPUTE RESOLUTION

21.7.1 In the event that the Parties are unable to agree in good faith about the occurrence or existence of a Force Majeure Event, such Dispute shall be finally settled in accordance with the Dispute Resolution Procedure; provided, that the burden of proof as to the occurrence or existence of such Force Majeure Event shall be upon the Party claiming relief and/or excuse on account of such Force Majeure Event.

21.8 EXCUSE FROM PERFORMANCE OF OBLIGATIONS

21.8.1 If the Affected Party is rendered wholly or partially unable to perform its obligations under this Agreement because of a Force Majeure Event, it shall be excused from performance of such of its obligations (except payment obligations) to the extent it is unable to perform on account of such Force Majeure Event; provided, that:

- (a) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event and/or of the effects of the same;

- (b) the Affected Party shall make all reasonable efforts to mitigate or limit damage to the other Party arising out of or as a result of the existence or occurrence of such Force Majeure Event and to cure the same with due diligence; and
- (c) when the Affected Party is able to resume performance of its obligations under this Agreement, it shall give to the other Party (with a copy to the Independent Engineer and the Independent Auditor) notice to that effect and shall promptly resume performance of its obligations hereunder.

22. EVENTS OF DEFAULT

22.1 PRIVATE PARTNER EVENT OF DEFAULT

22.1.1 Any of the following events shall constitute an event of default by the Private Partner (the **Private Partner Event of Default**) unless such event has occurred as a consequence of Permitted Events and/or as a consequence events or circumstances for which the Private Partner is relieved of its obligations under this Agreement:

- (a) any Material Breach by the Private Partner or the Sponsor of any Implementing Agency Agreement which Material Breach has not been cured within forty-five (45) days from the date of written notice thereof by the Implementing Agency, or within such time period as provided in the relevant Implementing Agency Agreement, respectively;
- (b) the Private Partner fails to commence the Site Construction Works within thirty (30) days from the Commencement Date;
- (c) the Private Partner fails to achieve Substantial Completion by the date falling ninety (90) days following the Scheduled Substantial Completion Date;
- (d) any statement, representation or warranty made by the Private Partner in this Agreement proving to have been incorrect, in any material respect, when made or when reaffirmed and such incorrect statement, representation or warranty having a Material Adverse Effect on the Private Partner's ability to perform its obligations under this Agreement and/or on the Project or having a Material Adverse Effect on the rights and/or obligations of the Implementing Agency hereunder or under the Implementing Agency Agreements;
- (e) the Private Partner creates any Encumbrance on the Concession Assets in favour of any Person save and except as otherwise expressly permitted in terms of this Agreement;
- (f) the transfer of the rights and/or obligations of the Private Partner under this Agreement, save and except as permitted in terms of this Agreement; and/or
- (g) except for the purpose of amalgamation or reconstruction (provided, that such amalgamation or reconstruction does not affect the ability of the amalgamated or reconstructed entity, as the case may be, to perform its obligations under this Agreement and further; provided, that such amalgamation has been agreed to by the Implementing Agency), the occurrence of any of the following events:
 - (i) the passing of a resolution for the dissolution or winding up of the Private Partner;
 - (ii) the voluntary filing by the Private Partner of a petition of bankruptcy, moratorium, winding up, or other similar relief;

- (iii) the appointment of a provisional liquidator in a proceeding for the winding up of the Private Partner after notice to the Private Partner and due hearing, which appointment has not been set aside or stayed within ninety (90) days of such appointment;
- (iv) the making by a court with jurisdiction over the Private Partner of an order winding up the Private Partner that is not stayed or reversed by a court of competent Implementing Agency within ninety (90) days; and/or
- (v) any proceeding being validly instituted under the Applicable Laws for the dissolution of the Private Partner or attachment of the Concession Assets in accordance with Applicable Laws that has a Material Adverse Effect and that is not stayed or suspended in ninety (90) days; provided, that, if, within seven (7) business days of the Private Partner becoming aware of such proceedings being filed, the Private Partner:
 - (1) confirms to the Implementing Agency that such proceedings relate to the recovery of a claim against the Private Partner that is disputed bona fide by the Private Partner as payable, and
 - (2) furnishes a certificate by the Independent Auditor to the effect that the Private Partner is and will remain solvent despite the payment of the claim subject to the said insolvency proceedings,

then, in such case, the Private Partner Event of Default set forth in Section 22.1.1(g)(v) shall not constitute a Private Partner Event of Default until such time that the said certificate by the Independent Auditor is revoked or otherwise ceases to remain accurate;

- (h) an Abandonment by the Private Partner, without the prior written consent of the Implementing Agency, for a period of thirty (30) consecutive days or for an aggregate period of sixty (60) days during any Accounting Year; provided, however, that the Private Partner shall not be deemed to have Abandoned the Concession Assets so long as it is using all reasonable efforts (as determined by the Independent Engineer) to regain control of the Concession Assets and reinstate its construction and/or Operation and Maintenance , as applicable;
- (i) the Private Partner is in Material Breach of O&M Requirements;
- (j) any other events or circumstances expressly set out in this Agreement as a Private Partner Event of Default;
- (k) the Bid Security, Construction Performance Guarantee or O&M Performance Guarantee in each case, is not issued, renewed, replaced or provided (as the case may be) in accordance with this Agreement or becomes inoperative or ceases to remain valid or in force in breach of the relevant provisions of this Agreement;
- (l) a breach by the Private Partner of its obligation to take out and maintain the required insurances in accordance with Article 20 (*Insurances*);
- (m) a Change In Control, Change In Complete Control and/or Change In Shareholding has occurred in breach of this Agreement;
- (n) the Private Partner or the Sponsors repudiate any of the Implementing Agency Agreements or otherwise evidence an intention not to be bound by the same; and/or

- (o) termination of the Project Site Licence Agreement as a result of a material breach by the Private Partner that is not remedied in accordance with the terms of the Project Site Licence Agreement.
- (p) the Private Partner has delayed any payment that has fallen due and payable under this Agreement and any of the Implementing Agency Agreements and if such delay exceeds sixty (60) days, save where such payment is duly Disputed by the Private Partner in accordance with this Agreement;
- (q) any assets or shares of the Private Partner are expropriated, confiscated, compulsorily acquired or nationalised by any Government Agency or entity due to an act or omission of the Private Partner or its shareholders, causing a Material Adverse Effect;
- (r) (i) the exercise by the Secured Financiers of their remedies under the Financing Documents with respect to either the assets comprising the Concession Assets or any Shares pledged to the Secured Financiers under the Financing Documents such that the Private Partner or its management are removed by the Secured Financiers from control of the Project or of the Private Partner, and/or (ii) the failure by the Secured Financiers (or the agent of the same) to comply with the Concession Direct Agreement;
- (s) a material breach by the Construction Contractors, the O&M Contractors or any other subcontractor or any of the parties to the Project Agreements or any of their respective contracts with the Private Partner having a Material Adverse Effect;
- (t) the Private Partner fails to achieve any Project Milestone by more than ninety (90) days of the Project Construction Milestone Date and such delay in achievement of individual Project Milestone (in the opinion of Independent Engineer) delays the Substantial Completion by more than ninety (90) days;
- (u) the Private Partner has delayed the payment of the Implementing Agency Windfall that has fallen due and payable under this Agreement and any of the Implementing Agency Agreements and if such delay exceeds sixty (60) days, save where such payment is duly Disputed by the Private Partner in accordance with this Agreement;
- (v) The Private Partner fails to fund the Major Maintenance and Overlay Funding Account in accordance with the Financial Model.

22.2 IMPLEMENTING AGENCY EVENT OF DEFAULT

22.2.1 The following events shall constitute events of default by the Implementing Agency (the **Implementing Agency Event of Default**), unless the same has occurred and / or results from a Private Partner Event of Default or a Force Majeure Event:

- (a) any Material Breach by the Implementing Agency of any Implementing Agency Agreement and the same has not been cured within forty-five (45) days from the date of written notice thereof by the Private Partner, or within such time period as provided in the relevant Implementing Agency Agreement, respectively;
- (b) any statement, representation or warranty made by the Implementing Agency in any Implementing Agency Agreement proving to have been incorrect, in any material respect, when made or when reaffirmed and such incorrect statement, representation or warranty having a Material Adverse Effect on the Private Partner's ability to perform its obligations under this Agreement and/or on the Project;

- (c) any termination, cancellation, resumption or revocation of the Private Partner's interest established under the Project Site Licence Agreement in respect of the Project Site (otherwise than for a breach of the conditions of the Project Site Licence Agreement by the Private Partner entitling such termination, cancellation, resumption or revocation);
- (d) any change in any Applicable Laws:
 - (i) making unenforceable, invalid, or void any material undertaking of the Implementing Agency under the Implementing Agency Agreements; and/or
 - (ii) making:
 - (aa) it unlawful for the Private Partner, the Financiers or the Sponsors to make or receive any payment, to perform any material obligation or to enjoy or enforce any material right under any Implementing Agency Agreement (other than a Change in Law for which compensation is provided in accordance with this Agreement); or
 - (bb) any payment, the performance of any material obligation or the enjoyment or enforcement of any material right unenforceable under any Implementing Agency Agreement, invalid or void as a result of any such change in Applicable Laws (other than a Change in Law for which compensation is provided in accordance with this Agreement);
- (e) the expropriation, compulsory acquisition, or nationalization by the Implementing Agency or any Government Agency of: (i) any Shares in the Private Partner; or (ii) of any Concession Assets or rights of the Private Partner;
- (f) any change in, or any change in the interpretation of, any of the Applicable Laws (including the Constitution of Pakistan and any other Applicable Laws that gives effect to the injunctions of Islam, being in the case of a decision of a court, a decision which is no longer in suspense as a result of an appeal) from and after the date of this Agreement having the effect of making:
 - (i) unlawful, unenforceable, invalid, or void any material undertaking of the Implementing Agency under any Implementing Agency Agreement; or
 - (ii) unlawful for the Private Partner to make or receive or the Financiers or the Sponsors to receive any payment (including interest or return), for the Private Partner to perform any material obligation or to enjoy or enforce any material right under this Agreement or any other Project Agreement in relation to the Project; or
 - (iii) any such payment, the performance of any such material obligation or the enjoyment or enforcement of any such material right becoming unenforceable, invalid or void as a result of any such change in the Applicable Laws,

which in the case of (i) (ii) or (iii) above, has a continuing effect for more than one hundred and eighty (180) days without an arrangement being provided to exempt the affected party from the effect of such Change in Law (other than a Change in Law for which compensation is provided in accordance with this Agreement);
- (g) a Change in Law for which no relief is provided under Article 28 (*Change in Law*);

- (h) the Implementing Agency has delayed any payment that has fallen due and payable under this Agreement and /or any of the Implementing Agency Agreements and if such delay exceeds ninety (90) days, save where such payment is duly Disputed by the Implementing Agency in accordance with this Agreement and /or Implementing Agency Agreements;
- (i) non-implementation of Toll in accordance with the Toll Implementation Structure and/ or any adverse notification, revocation and/ or amendment of the Toll Notification, provided that the Private Partner had made a written request at least thirty (30) days before the date on which the Toll rates had to be revised in accordance with Section 17.5.

23. TERMINATION

23.1 TERMINATION FOR PRIVATE PARTNER EVENT OF DEFAULT

- 23.1.1 Without prejudice to any other right or remedy which the Implementing Agency may have in respect thereof under this Agreement, upon the occurrence and continuation of a Private Partner Event of Default, the Implementing Agency shall be entitled to Terminate this Agreement by issuing a Termination Notice to the Private Partner; provided, that before issuing the Termination Notice, the Implementing Agency shall by a notice in writing inform the Private Partner of its intention to issue the Termination Notice (the **Implementing Agency Preliminary Notice**).
- 23.1.2 In the event the underlying Private Partner Event of Default is not cured within the Cure Period and the same is subsisting at the expiry of the Cure Period, the Implementing Agency shall be entitled to:
 - (a) Terminate this Agreement by issuing the Termination Notice upon expiry of the Cure Period; and
 - (b) encash the Construction Performance Guarantee or O&M Performance Guarantee, as applicable and in effect as such time, on or following the issuance of the Termination Notice.
- 23.1.3 The following shall apply in respect of Cure Period relating to a Private Partner Event of Default:
 - (a) the Cure Period provided in this Agreement shall not relieve the Private Partner from liability for damages (as expressly set out in this Agreement), if any, caused by its underlying breach or default giving rise to the Implementing Agency Preliminary Notice;
 - (b) the Cure Period shall not in any way be extended by any period of Suspension under this Agreement;
 - (c) if the cure of any breach by the Private Partner requires any reasonable action by Private Partner that must be approved by the Implementing Agency and/or the Government Agency hereunder, the applicable Cure Period shall be extended from the date the Private Partner notifies the Implementing Agency of the same until the date that the Implementing Agency, and/or the Government Agency, as the case may be, accords the required approval;
 - (d) during any period when any Financing Due is outstanding, the rights of the Parties and the Financiers during the pendency of the Cure Period shall be as set out in the Financing Documents.
- 23.1.4 Upon issuance of a Termination Notice by the Implementing Agency (following expiry of the Cure Period) on account of occurrence and continuation of a Private Partner Event of Default during the Operations Period, the right of the Private Partner to charge Tolls shall stand terminated with immediate

effect and no Toll Revenues shall accrue and / or be payable to the Private Partner from the date of occurrence of the Private Partner's receipt of the Termination Notice;

- 23.1.5 In the event of Termination due to a Private Partner Event of Default, the Implementing Agency shall pay to the Private Partner on or prior to the Termination Payment Date, by way of Termination Payment, an amount equal to the Private Partner Default Termination Amount.

23.2 TERMINATION FOR IMPLEMENTING AGENCY EVENT OF DEFAULT

- 23.2.1 Without prejudice to any other right or remedy which the Private Partner may have in respect thereof under this Agreement, upon the occurrence and continuation of any of the Implementing Agency Event of Default, the Private Partner shall by a notice in writing inform the Implementing Agency of its intention to issue the Termination Notice (the **Private Partner Preliminary Notice**).
- 23.2.2 In the event the underlying Implementing Agency Event of Default is not cured by the Implementing Agency within the Cure Period and the same is subsisting at the expiry of the Cure Period, the Private Partner shall be entitled to terminate this Agreement by issuing the Termination Notice upon expiry of the Cure Period.
- 23.2.3 In the event of Termination due to a Implementing Agency Event of Default, the Implementing Agency shall pay to the Private Partner on or prior to the Termination Payment Date, by way of Termination Payment, an amount equal to the Implementing Agency Default Termination Amount.

23.3 TERMINATION FOR CORRUPT ACTS

- 23.3.1 The Private Partner warrants that in entering into this Agreement it has not committed any Corrupt Act.
- 23.3.2 If any Corrupt Act is committed, then the Implementing Agency shall be entitled to act in accordance with the following provisions of this Section 23.3; provided, that at all times the Implementing Agency shall bear the burden of proof for establishing that a Corrupt Act has been committed:
- (a) if the Corrupt Act is committed by the Private Partner or any Associate of the Private Partner, as the case may be, then in any such case, the Implementing Agency may issue a notice to the Private Partner of its intent to issue a Termination Notice;
 - (b) if the Corrupt Act is committed by an employee of the Private Partner, then in such case, the Implementing Agency may give written notice to the Private Partner of its intention to issue a Termination Notice; provided, however, the Implementing Agency shall not be entitled to issue a Termination Notice in the event the Private Partner, within forty-five (45) days of its receipt the Implementing Agency's notice stating its intention to issue a Termination Notice, terminates such employee's involvement in the Project and (if necessary) provides evidence to the Implementing Agency of the performance of any part of the Project deliverables previously performed by such employee by another person;
 - (c) Not used;
 - (d) Not used;
 - (e) if the Corrupt Act is committed by any other person not specified in sub-section (b) above but involved in the Project as a subcontractor or supplier to any Contractor or to the Private Partner, then the Implementing Agency may give notice to the Private Partner of its intention to issue a Termination Notice; provided, however, that the Implementing Agency shall not be entitled to issue a Termination Notice in the event the Private Partner, within thirty (30) days of its receipt

the Implementing Agency's notice stating its intention to issue a Termination Notice, procures the termination of such person's involvement in the Project and (if necessary) procures the performance of the relevant contract and procures the performance of the relevant part of the Project Works by another person.

23.3.3 Any notice of intention to issue a Termination Notice by the Implementing Agency under this Section 23.3 shall specify:

- (a) the nature of the Corrupt Act;
- (b) the identity of the party or parties who the Implementing Agency believes has committed the Corrupt Act; and
- (c) the date on which the Termination Notice will be issued, which date shall be subject to the timelines provided in Section 23.3.2(b) and (e), as applicable.

23.3.4 Without prejudice to its other rights or remedies under this Section, the Implementing Agency shall be entitled to recover from the Private Partner, the greater of:

- (a) the amount or value of the gift, consideration or commission which is the subject of the Corrupt Act; and
- (b) any direct losses (including Losses) sustained by the Implementing Agency in consequence of any breach of this Section by the Private Partner.

23.3.5 Nothing contained in this Section shall prevent the Private Partner from paying any proper commission or bonus to its employees within the agreed terms of their employment.

23.3.6 In the event of Termination due to a Corrupt Act in accordance with this Section 23.3, the Implementing Agency shall pay to the Private Partner on or prior to the Termination Payment Date, by way of Termination Payment, an amount equal to the Corrupt Act Termination Amount.

23.4 RIGHTS OF THE IMPLEMENTING AGENCY ON TERMINATION AND/OR FINAL EXPIRY DATE

23.4.1 In case of Termination of this Agreement for any reason whatsoever and subject to receipt by the Private Partner of the Termination Payment on or prior to the Transfer Date or in case of expiry of this Agreement on the Final Expiry Date, the Implementing Agency shall, on the Transfer Date, have the power and Implementing Agency to:

- (a) take possession and control of Concession Assets;
- (b) prohibit the Private Partner and any person claiming through or under the Private Partner from entering upon the Concession Assets or dealing with or any part thereof except in the case where the Private Partner and any person claiming through or under the Private Partner enters the Concession Assets or deals with or any part thereof as a User.

23.5 TERMINATION PAYMENTS

23.5.1 The Termination Payment shall be payable to the Private Partner by the Implementing Agency on or prior to the Termination Payment Date in accordance with a demand being made by the Private Partner in writing, subject to the same being duly certified by the Independent Engineer and Independent Auditor.

23.5.2 To the extent:

- (c) the Termination Equity and/or Termination Dividend Amount is payable by the Implementing Agency to the Private Partner upon Termination of this Agreement; and
- (d) the Implementing Agency fails to make payment of such due and payable Termination Equity and/or Termination Dividend Amount (the **Unpaid Termination Equity Amount**) by the date falling fifty (50) days following the Termination Payment Date,

then, the Implementing Agency shall (in addition to the payment of the due and payable Unpaid Termination Equity Amount) make payment to the Private Partner of late payment interest on the Unpaid Termination Equity Amount at the rate of Delayed Payment Rate, such interest commencing to accrue on the date falling fifty (50) days following the Termination Payment Date and ending on the actual date on which the Implementing Agency makes payment of the Unpaid Termination Equity Amount. The stipulation regarding additional amounts payable in respect of delayed Unpaid Termination Equity Amount contained in this Section 23.5.2 shall not be construed nor be deemed to authorize any delay in payment of any amount due to the Private Partner nor be construed or deemed to be a waiver of the underlying breach of payment obligations, in each case, in the afore-stated circumstances.

23.6 MODE OF PAYMENT

- 23.6.1 Notwithstanding any instructions to the contrary issued or any dispute raised by the Private Partner, the Termination Payment, and all other payments that are or may be payable by the Implementing Agency under any of the provisions of this Agreement shall, so long as the Financing Due is outstanding, be made only by way of credit directly to a bank account of the Private Partner designated by the Financiers and advised to the Implementing Agency and the Private Partner in writing and in the event the Financing Due is not outstanding, to a bank account of the Private Partner notified by the Private Partner.
- 23.6.2 Notwithstanding anything to the contrary contained in this Agreement, any Termination pursuant to the provisions of this Agreement shall be without prejudice to accrued rights of either Party including its right to claim and recover money damages and other rights and remedies which it may have in law or contract. All rights and obligations of either Party under this Agreement, including without limitation Termination Payment, shall survive the Termination of this Agreement to the extent such survival is necessary for giving effect to such rights and obligations.

24. DIVESTMENT OF RIGHTS AND INTEREST

24.1 REQUIREMENTS FOR DIVESTMENT

24.1.1 In case of (as applicable):

- (A) Termination of this Agreement prior to Final Expiry Date and subject to the Implementing Agency fully complying with all its obligations in respect of making Termination Payments on or prior to the Termination Payment Date; or
- (B) One (1) year prior to expiry of this Agreement on the Final Expiry Date,

the Private Partner shall comply with and conform complete compliance with the following requirements by the Transfer Date (the **Divestment Requirements**):

- (a) Notify to the Implementing Agency forthwith the location and particulars of all Concession Assets;
- (b) deliver forthwith the actual or constructive possession of the Concession Assets, free and clear of all Encumbrances;
- (c) unless this Agreement is Terminated due to a Permitted Event (excluding Non-Political Event), cure all Concession Assets of all Defects & Deficiencies in accordance with the Handover List; provided, that in the event of Termination during the Construction Period or the Installation Period, all Concession Assets shall be handed over on ‘*as is where is*’ basis after bringing them to a safe condition;
- (d) deliver and transfer all relevant records, reports, intellectual property and other Licences pertaining to the Concession Assets and its design, engineering, construction, installation, Operation and Maintenance, including all programs and manuals pertaining thereto, and complete ‘*as built*’ Construction Drawings, other Construction Drawings and the O&M Documents as on the Transfer Date;
- (e) transfer and/or deliver to the Implementing Agency, all Private Partner Permits to the extent permissible under Applicable Laws;
- (f) execute such deeds of conveyance, documents and other writings as the Implementing Agency may reasonably require for conveying, divesting and assigning all the rights, title and interest of the Private Partner in the Concession Assets, including manufacturers’ warranties in respect of any plant or equipment and the right to receive outstanding insurance claims, absolutely unto the Implementing Agency or its nominee; and
- (g) train all staff notified by the Implementing Agency for Operations and Maintenance in accordance with the O&M Manual;
- (h) comply with all other requirements as may be prescribed or required under Applicable Laws for completing the divestment and assignment of all rights, title and interest of the Private Partner in the Concession Assets, free from all Encumbrances, absolutely unto the Implementing Agency or to its nominee.

24.2 INSPECTION AND CURE

24.2.1 In case of:

- (a) Termination during the Operations Period, not earlier than thirty (30) days prior to Termination but not later than fifteen (15) days prior to the Transfer Date; or
- (b) expiry of this Agreement on the Final Expiry Date, not earlier than twelve (12) months prior to Transfer Date but not later than six (06) months prior to the Transfer Date,

the Independent Engineer shall verify, after giving due notice to the Private Partner of the time, date and venue of such verification, compliance by the Private Partner with the Applicable Standards, and if required, cause appropriate tests to be carried out. In the event of Termination (excluding Termination due to Political Event or a Implementing Agency Event of Default) or expiry of this Agreement on the Final Expiry Date, the Private Partner shall bear the cost for this purpose. In the event of Termination due to Implementing Agency Event of Default or Political Event, the Implementing Agency shall bear the cost for this purpose. All Defects & Deficiencies shall be cured by the Private Partner at its cost

unless the same is due to a Political Event or a Implementing Agency Event of Default in which case, the Implementing Agency shall bear such costs.

- 24.2.2 Until the Transfer Date, all risks shall vest with the Private Partner for loss of or damage to the whole or any part of the Concession Assets and following the Transfer Date, all risks in relation to the same shall be deemed to have been transferred to and vest with the Implementing Agency.

24.3 COOPERATION AND ASSISTANCE FOR TRANSFER OF THE CONCESSION ASSETS

- 24.3.1 The Parties shall cooperate on a best effort basis and take all necessary measures, in good faith, to achieve a smooth transfer of the Concession Assets in accordance with the provisions of this Agreement so as to protect the safety of and avoid undue delay or inconvenience to the users, other members of the public or the lawful occupiers of any part of the Project Site and the Concession Assets.

- 24.3.2 The Parties shall provide to each other (as applicable):

- (a) in case of Termination of this Agreement, two (2) months prior to the Termination Payment Date in the event of Termination and immediately in the event of either Party conveying to the other Party its intent to issue a Termination Notice, as the case may be; or
- (b) in case of expiry of this Agreement on the Final Expiry Date, six (6) months prior to the Final Expiry Date,

as much information and advice as is reasonably practicable regarding the proposed arrangements for operation of the Project following the Transfer Date. The Private Partner shall further provide such reasonable advice and assistance as the Implementing Agency, its appointed Private Partner or agent may reasonably require for operation of the Project until the Transfer Date.

24.4 VESTING CERTIFICATE

- 24.4.1 Subject to:

- (a) in case of Termination of this Agreement, the Implementing Agency fully complying with all its obligations in respect of making Termination Payments on or prior to the Termination Payment Date; or
- (b) expiry of this Agreement on the Final Expiry Date,

the divestment of all rights, title and interest in the Project shall be deemed to be complete on the Transfer Date, and the Independent Auditor and the Independent Engineer shall jointly, without unreasonable delay, thereupon issue a certificate (the **Vesting Certificate**) substantially in the form set forth in **SCHEDULE O (Form of Vesting Certificate)**, which will have the effect of constituting evidence of divestment by the Private Partner of all of its rights, title and interest in the Concession Assets, and their vesting in the Implementing Agency pursuant hereto.

24.5 TRANSFER CONSIDERATION

- 24.5.1 The Parties agree that the Concession Assets shall be transferred to the Implementing Agency on the Transfer Date for a sum of (as consideration) PKR 1/- (Pakistani Rupees One only).

24.6 DIVESTMENT COSTS

- 24.6.1 Subject to Section 24.6.2, the Private Partner shall bear and pay, in case of Termination due to a Private Partner Event of Default and/or due to Corrupt Act and/or due to a Non Political Event or in case of expiry of this Agreement on the Final Expiry Date, all costs incidental to divestment of all of the rights, title and interest of the Private Partner in the Concession Assets in favour of the Implementing Agency, save and except that all stamp duties payable on any deeds or documents executed by the Private Partner in connection with such divestment shall be borne by the Implementing Agency. In the event of Termination due to a Force Majeure Event and/or a Implementing Agency Event of Default, the Implementing Agency shall bear and pay all the abovementioned costs.
- 24.6.2 The Implementing Agency shall be responsible for the costs and expenses, including stamp duties, taxes, legal fees and expenses incurred in connection with the transfer of the Concession Assets to the Implementing Agency or its nominated agency on the Transfer Date. The Implementing Agency shall at its own cost obtain or effect all clearances, permits, authorizations, consents and approvals under or pursuant to Applicable Laws and take such other actions as may be necessary for such transfer.
- 24.6.3 In the event of any Dispute relating to matters covered by and under this Article 24 (*Divestment of Rights and Interest*), the Dispute Resolution Procedure shall apply.

25. DEFECTS LIABILITY DURING EXIT IMPLEMENTATION PERIOD

25.1 LIABILITY FOR DEFECTS DURING EXIT IMPLEMENTATION PERIOD

- 25.1.1 Without prejudice to any obligation of the Private Partner in this Agreement, the Private Partner shall be responsible for all Defects & Deficiencies in the Concession Assets during the Exit Implementation Period in accordance with this Section 25.1.1 and it shall have the obligation to repair or rectify all Defects & Deficiencies observed by the Independent Engineer in the Concession Assets during the aforesaid period, as set out in a list jointly prepared by the Independent Engineer and the Private Partner (the **Handover List**) within:
- (a) in case of Termination of this Agreement, one (1) year of the issuance of a Termination Notice;
 - (b) in case of expiry of this Agreement on the Final Expiry Date, one (1) year after the Final Expiry Date.
- All costs for remedying of such Defects & Deficiencies in accordance with the Handover List shall be borne by:
- (a) the Private Partner in the event this Agreement expires on the Final Expiry Date or in the event this Agreement is Terminated due to a Private Partner Event of Default or due to a Corrupt Act or due to a Non Political Event;
 - (b) the Implementing Agency in the event this Agreement is Terminated due to an Implementing Agency Event of Default or Political Events.
- 25.1.2 Notwithstanding anything to the contrary set out herein, the provisions of this Article 25 (*Defects Liability During Exit Implementation Period*) shall not apply to any Defects & Deficiencies caused by a Political Event that has resulted in Termination.

26. DISCLAIMER

26.1 DISCLAIMER

- 26.1.1 Subject to the terms of this Agreement, the Private Partner acknowledges that prior to the execution of this Agreement, the Private Partner has, after a complete and careful examination, made an independent evaluation of the RFP, Scope of the Project, Project Requirements, Project Site, existing structures, local conditions, physical qualities of ground, subsoil and geology, traffic volumes and all information provided by the Implementing Agency or obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. Except as expressly provided in this Agreement, the Implementing Agency makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumptions, statement or information provided by it and the Private Partner confirms that it shall have no claim whatsoever against the Implementing Agency in this regard.
- 26.1.2 Subject to the terms of Agreement, the Private Partner acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth in Section 26.1.1 and hereby acknowledges and agrees that the Implementing Agency shall not be liable for the same in any manner whatsoever to the Private Partner, the Sponsors and their Associates or any person claiming through or under any of them.
- 26.1.3 Any mistake or error in or relating to any of the matters set forth in Section 26.1.1 shall not vitiate this Agreement or render it voidable.
- 26.1.4 In the event that either Party becomes aware of any mistake or error relating to any of the matters set forth in sub-section 26.1.1 of this Section 26.1 (*Disclaimer*) above, such Party shall immediately notify the other Party, specifying the mistake or error; provided, however, it is expressly agreed between the Parties that any such failure on part of the Implementing Agency to give any notice pursuant to this sub-section 26.1.4 of Section 26.1 (*Disclaimer*) shall not prejudice the disclaimer of the Implementing Agency contained in sub-section 26.1.1 of this Section 26.1 (*Disclaimer*) and shall not in any manner shift to the Implementing Agency any risks assumed by the Private Partner pursuant to this Agreement.
- 26.1.5 Except as otherwise provided in this Agreement, all risks relating to the Concession Assets shall be borne by the Private Partner and the Implementing Agency shall not be liable in any manner for such risks or the consequences thereof.

27. ASSIGNMENT AND CHARGES

27.1 RESTRICTION ON ASSIGNMENT AND CHARGES

- 27.1.1 Subject to Section 27.2 (*Permitted Assignment and Charges*) and the Financing Documents, this Agreement shall not be assigned by the Private Partner to any person, save and except with the prior consent in writing of the Implementing Agency, which consent the Implementing Agency shall be entitled to decline without assigning any reason.
- 27.1.2 Subject to the provisions of Section 27.2 (*Permitted Assignment and Charges*), the Private Partner shall not:
- (a) create nor permit to subsist any Encumbrance, or otherwise transfer or dispose of all or any of its rights and benefits under this Agreement; or

- (b) create or permit to subsist any Encumbrance on the Concession Assets or otherwise transfer or dispose of the Concession Assets;

in each case above, except with prior consent in writing of the Implementing Agency, which consent the Implementing Agency shall be entitled to decline without assigning any reason.

27.2 PERMITTED ASSIGNMENT AND CHARGES

27.2.1 The restriction set forth in sub-section 27.1.2 of Section 27.1 (*Restriction on Assignment and Charges*) shall not apply to:

- (a) liens and Encumbrances arising by operation of law (or by an agreement evidencing the same) in the ordinary course of business of the Project;
- (b) assignment of rights, interest and obligations of the Private Partner under this Agreement, the Implementing Agency Agreements, and/or the Project Agreements, Encumbrances, pledges/hypothecation of goods/assets, and any and all other bank accounts of the Private Partner, a mortgage/charge in relation to the Construction Works, the Installation Works and the Concession Assets (excluding the Project Site), a charge on the present and future movable, immovable and intellectual property of the Private Partner, in each case, arising or created as security only for indebtedness to the Financiers under the Financing Documents in accordance with the Financing Term Sheet or the Financing Amendment Term Sheets, as the case may be.

27.3 FINANCING TERM SHEET & FINANCING AMENDMENT TERM SHEETS

27.3.1 Prior to Financial Close, the Private Partner shall deliver to the Implementing Agency and the Independent Auditor a schedule or a copy of the term sheet reflecting the proposed material terms of the Financing Documents, and setting forth a principal repayment schedule that provides for financing repayment that is not greater than the aggregate of the Financing Component set out in the Base Case Financial Model using the assumptions of the Base Case Financial Model, together with the maximum principal amounts and interest (or markup) rate or rates and any schedules or formulae that will be included in the Financing Documents for the computation of principal and interest (or markup), fees and charges payable to the Financiers upon the winding up for early termination of the Financing under the Financing Documents, and shall also identify the equity commitments, individually and in total, of the Sponsors and other key investors and shareholders. The Implementing Agency and the Independent Auditor will evaluate the principal repayment schedule and other key financial terms and the equity commitments in the Project, to ensure that the principal financial terms are not less than the principal repayment schedule, and that the principal repayment schedule is consistent with the Financing Component and to evaluate the impact on the Implementing Agency's obligations upon any Termination of this Agreement provided further, in case, the Private Partner is able to obtain Financing at rates and terms better than what were quoted in the Bid, then such actual rates and terms shall be applied to the Financing Term Sheet. If Implementing Agency and/or the Independent Auditor has any objections to the terms specified in such term sheet or schedule, it shall inform the Private Partner thereof within thirty (30) days of its receipt thereof. The Implementing Agency or the Independent Auditor shall be entitled to object to the Financing Term Sheet if it identifies a capital structure that violates the Minimum Equity Ratio or if the Equity commitments are insufficient to cover the required proportion of the Estimated Project Cost. If there are no objections by the Implementing Agency and the Independent Auditor then the same shall be deemed not to have objected to those terms (the **Financing Term Sheet**) and the Private Partner shall be entitled thereafter to execute the Financing Documents, consistent with those terms and a principal repayment schedule of the specified term or a shorter term without further notice to or approval by Implementing Agency and/or the Independent Auditor. The Private Partner

shall provide the Implementing Agency, the Independent Engineer and the Independent Auditor with a copy of the Financing Documents no later than fifteen (15) business days of its execution (provided that, to the extent that the commercial terms of these executed Financing Documents do not materially deviate from the Financing Term Sheet, the Implementing Agency and the Independent Auditor shall have no further right to raise any objection in respect of these Financing Documents).

- 27.3.2 Following Financial Close, the Private Partner shall deliver to the Implementing Agency and the Independent Auditor, copies of all amendments to the executed Financing Documents within ten (10) business days after the execution of each such document. The Private Partner shall not execute any amendment or modification changing or affecting the repayment of principal (including any refinancing or restructuring of payment obligations under any Financing Document) or enter into any loan agreement for secured financing or otherwise incur any additional secured financing without submitting to the Implementing Agency and the Independent Auditor, no less than thirty (30) business days prior to execution of such amendment or modification to the loan documents or new loan agreements, a schedule or term sheet setting forth the proposed revised principal repayment schedule and the other key financial terms or material modifications related thereto.
- 27.3.3 The Implementing Agency and the Independent Auditor shall notify the Private Partner of any objections to the term sheet or schedule related to the proposed modification to the principal repayment schedule as soon as reasonably possible, and in any case within thirty (30) days of receipt of the term sheet or schedule. In case no objection has been received by the Private Partner on or before the expiry of the thirty (30) days after receipt of the term sheet or schedule related to the proposed modification, the Implementing Agency and the Independent Auditor shall be deemed not to object to those amendments or terms (the **Financing Amendment Term Sheets**). At the request of the Implementing Agency and the Independent Auditor, prior to the execution of such amendments or modifications to the Financing Documents or new Financing Documents, the Private Partner shall deliver to Implementing Agency and the Independent Auditor, in a form satisfactory to Implementing Agency, assurances, undertakings or agreements that no alteration or enhancement as a result of such refinancing or new or additional debt financing shall increase in any respect the financial obligations of the Implementing Agency hereunder or under any Implementing Agency Agreement or affect in any way the right of the Implementing Agency to acquire the Concession Assets free and clear of all Encumbrances upon the Implementing Agency's payment of the applicable Termination Payment.
- 27.3.4 Notwithstanding anything to the contrary, the Private Partner shall not make any addition, replacement or amendments to any of the Financing Documents without the prior written consent of the Implementing Agency if such addition, replacement or amendment has, or may have, the effect of imposing or increasing any financial liability or obligation on the Implementing Agency, and in the event that any replacement or amendment is made without such consent, the Private Partner shall not enforce such replacement or amendment nor permit enforcement thereof against the Implementing Agency.

27.4 FINANCIAL CLOSING

- 27.4.1 Upon achievement of Financial Close, the Private Partner shall procure issuance by Financiers (or an agent of the same) of a Notice issued to the Implementing Agency (with a copy to the Independent Auditor and the Independent Engineer) certifying the achievement of Financial Close (the **Financial Close Achievement Notice**).

27.5 ASSIGNMENT BY THE IMPLEMENTING AGENCY

- 27.5.1 Notwithstanding anything to the contrary contained in this Agreement or any other Implementing Agency Agreement, the Implementing Agency shall not assign and/ or transfer any of its rights and

benefits and/or obligations under this Agreement or any Implementing Agency Agreement to an assignee or any Person without the consent of the Private Partner.

28. CHANGE IN LAW

28.1 INCREASE IN COSTS

- 28.1.1 If as a result of Change in Law, the Private Partner suffers an increase in costs or reduction in net after-tax return or other financial burden, the aggregate financial effect of which exceeds of PKR 20,000,000/- (Pak Rupees Twenty Million) in any Accounting Year (as determined by the Independent Auditor and the Independent Engineer), the Private Partner may so notify the Implementing Agency and propose amendments to this Agreement so as to place the Private Partner in the same financial position as it would have enjoyed had there been no such Change in Law resulting in the cost increase, reduction in return or other financial burden as aforesaid. Upon notice by the Private Partner, the Parties shall meet, as soon as reasonably practicable but no later than thirty (30) days from the date of notice, and either agree on amendments to this Agreement or on any other mutually agreed arrangement; provided, that if no agreement is reached within sixty (60) days of the aforesaid notice, the Private Partner may by Notice to Implementing Agency (as certified by the Independent Engineer and the Independent Auditor) require the Implementing Agency to pay the Additional Costs (as determined and certified by the Independent Engineer and the Independent Auditor), and within thirty (30) days of receipt of such Notice, along with particulars thereof, the Implementing Agency shall pay the amount specified therein. In the event, the Implementing Agency fails to make payment of Additional Costs (as determined and certified by the Independent Engineer and the Independent Auditor) within sixty (60) days of receipt of the said Notice, late payment interest on the Additional Costs (or part thereof which is unpaid) shall be paid at the rate of Delayed Payment Rate, such interest commencing to accrue from the date the payment was due and ending on the actual date on which the Implementing Agency makes payment of the Additional Costs.
- 28.1.2 In the event as a result of a Change in Law the Private Partner is delayed in performance of any of its obligations under this Agreement, then the Private Partner shall be entitled to and shall be granted an extension in the timelines for performance of its obligations under this Agreement, as determined by the Independent Engineer. Further, the Private Partner shall be excused from performance of its obligations to the extent it is unable to perform on account of such Change in Law.
- 28.1.3 Notwithstanding anything contained to the contrary in this Agreement, in the event:
- (a) of failure by the Implementing Agency to pay the Additional Costs (as determined by the Independent Engineer and the Independent Auditor) within thirty (30) days of receipt of a Notice (as certified by the Independent Engineer and the Independent Auditor) issued by the Private Partner in accordance with Section 28.1.1; and/or
 - (b) the Change in Law (together with its effects) subsists for a period of sixty (60) days or more,
- the Private Partner shall have the right to issue a Private Partner Preliminary Notice to Implementing Agency of its intent to terminate this Agreement and, subsequently (at any time after the date falling thirty (30) days from the date of issuance by the Private Partner of the afore stated Private Partner Preliminary Notice) immediately Terminate this Agreement by issuance of a Termination Notice.
- 28.1.4 If Termination is on account of a Change in Law, the Implementing Agency shall pay a Change in Law Termination Amount to the Private Partner.

28.2 REDUCTION IN COSTS

28.2.1 If as a result of Change in Law, the Private Partner benefits from a reduction in costs or increase in net after-tax return or other financial gains, the aggregate financial effect of which exceeds PKR 5,000,000/- (Pak Rupees Five Million) in any Accounting Year (as determined by the Independent Auditor and the Independent Engineer), the Implementing Agency may so notify the Private Partner and propose amendments to this Agreement so as to place the Private Partner in the same financial position as it would have enjoyed had there been no such Change in Law resulting in the decreased costs, increase in return or other financial gains as aforesaid. Upon notice by the Implementing Agency, the Parties shall meet, as soon as reasonably practicable but no later than thirty (30) days from the date of notice, and either agree on such amendments to this Agreement or on any other mutually agreed arrangement; provided, that if no agreement is reached within sixty (60) days of the aforesaid notice, the Implementing Agency may by notice require the Private Partner to pay an amount that would place the Private Partner in the same financial position that it would have enjoyed had there been no such Change in Law, and within fifteen (15) days of receipt of such notice, along with particulars thereof, the Private Partner shall pay the amount specified therein to the Implementing Agency; provided, that if the Private Partner shall Dispute such claim of the Implementing Agency, the same shall be settled in accordance with the Dispute Resolution Procedure. For the avoidance of doubt, it is agreed that this Section 28.2 (*Reduction in Costs*) shall be restricted to such Change in Law directly affecting the Private Partner's costs of performing its obligations under this Agreement.

28.3 RESTRICTION ON CASH COMPENSATION

28.3.1 The Parties acknowledge and agree that the demand for cash compensation under this Article 28 (*Change in Law*) shall be restricted to the effect of Change in Law during the respective Accounting Year and shall be made at any time after commencement of such year, but no later than one (1) year from the close of such Accounting Year. Any demand for cash compensation payable for and in respect of any subsequent Accounting Year shall be made after the commencement of the Accounting Year to which the demand pertains, but no later than one (1) year from the close of such Accounting Year.

29. ADDITIONAL MATTERS

29.1 NO ADVERTISING RIGHTS

29.1.1 The Private Partner shall not have any right to engage in any advertising activities on the Concession Assets. The Implementing Agency retains all rights in relation to any advertising and promotional activities on the Concession Assets and any revenue generated from such activities.

29.1.2 Notwithstanding anything contained in Section 27.5.1, the Implementing Agency may transfer or assign any or all rights in relation to any advertising and promotional activities on the Concession Assets to any other Government Agency without the consent or approval of the Private Partner.

29.2 COMMERCIAL RIGHTS & ADDITIONAL FACILITIES

29.2.1 At any time prior to the expiration of the Concession Period, the Implementing Agency shall have the exclusive right to establish Additional Facilities along the Project Site or either through the Private Partner or any other party at its sole and absolute discretion. Nothing contained in this Agreement shall prevent the Implementing Agency from granting Development Rights to any person who is not affiliated with the Private Partner or its shareholders.

29.2.2 Subject to Section 29.2.1, nothing contained in this Agreement shall obligate the Implementing Agency in any way to grant or deny such Development Rights and its decision regarding such rights will be carried out at its complete discretion. For the avoidance of doubt, Development Rights are not a part of the Concession Assets.

- 29.2.3 For the purposes of implementation by the Implementing Agency of its Development Rights the Private Partner shall enter into all such agreements as may be reasonably required by the Implementing Agency to give full effect to the grant of Development Rights and to enable the Implementing Agency to use the Development Rights granted by the Implementing Agency and are solely for the benefit of Implementing Agency and/or its designated (as notified to the Private Partner) nominee.
- 29.2.4 The Implementing Agency shall make use of all Development Rights granted to it in such a manner so as not to impair the general integrity of the Concession Assets and with full regard for the safety of all Users and shall implement the Development Rights so as to avoid danger to any such Persons.
- 29.2.5 Notwithstanding anything contained in Section 27.5.1, the Implementing Agency may transfer or assign any or all Development Rights to any other Government Agency without the consent or approval of the Private Partner.

30. DISPUTE RESOLUTION

30.1 DISPUTE RESOLUTION

- 30.1.1 Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the **Dispute**).
- 30.1.2 The Parties shall, in the first instance, use their best efforts for resolving the Dispute(s) amicably amongst each other in an attempt to achieve consensus, and try to resolve the Dispute(s) promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non-privileged records, information and data pertaining to any Dispute.

30.2 MEDIATION

- 30.2.1 In the event of no consensus being achieved, pursuant to Section 30.1.2, any Dispute between the Parties shall be referred for mediation to the Independent Auditor, for amicable settlement. In the event the Parties are unable to resolve the matters through mediation either Party may refer the Dispute to arbitration in accordance with the provisions of Section 30.3 (*Arbitration*).

30.3 ARBITRATION

- 30.3.1 Any Dispute, which is not resolved amicably by mediation, as provided in Section 30.2 (*Mediation*), within a period of sixty (60) days of the issuance of the mediation request to the Independent Auditor, shall be finally decided by reference to arbitration by a board of arbitrators (the “**Board of Arbitrators**”) appointed in accordance with Section 30.3.3. Such arbitration shall be held in accordance with the provisions of the Arbitration Act 1940.
- 30.3.2 The venue of such arbitration shall be Lahore, Pakistan.
- 30.3.3 There shall be a Board of Arbitrators of three (3) arbitrators, of whom each Party shall select one, and the third arbitrator shall be appointed by the two (2) arbitrators so selected, and in the event the two (2) arbitrators are unable to agree on the third arbitrator, then the same will be appointed by the Authority.
- 30.3.4 The arbitrators shall make a reasoned award (the “**Award**”). Any Award made in any arbitration held pursuant to this Article 30 (*Dispute Resolution*) shall be final and binding on the Parties as from the date

it is made, and the Private Partner and the Implementing Agency agree and undertake to carry out such Award without delay.

30.3.5 The Private Partner and the Implementing Agency agree that an Award may be enforced against the Private Partner and/or the Implementing Agency, as the case may be, and their respective assets wherever situated.

30.3.6 This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any arbitration proceedings hereunder.

31. MISCELLANEOUS

31.1 GOVERNING LAW AND JURISDICTION

31.1.1 This Agreement shall be construed and interpreted in accordance with and governed by the Applicable Laws and the courts of appropriate jurisdiction in the Province of Punjab shall have the exclusive jurisdiction over all Disputes or matters arising out of or relating to this Agreement.

31.2 WAIVER

31.2.1 Waiver by either Party of any default by the other Party in the observance and performance of any provision of or obligations or under this Agreement:

- (a) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions or obligations under this Agreement;
- (b) shall not be effective unless it is in writing and executed by a duly authorized representative of such Party; and
- (c) shall not affect the validity or enforceability of this Agreement in any manner.

31.2.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement or any obligation thereunder nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver of such breach or acceptance of any variation or the relinquishment of any such right hereunder.

31.3 SURVIVAL

31.3.1 Termination of this Agreement (a) shall not relieve the Private Partner or the Implementing Agency of any obligations hereunder which expressly or by implication survives Termination hereof, and (b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, shall not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination.

31.4 AMENDMENTS

31.4.1 This Agreement and the Schedules together constitute a complete and exclusive statement of the terms of this Agreement between the Parties on the subject hereof and no amendment or modification hereto shall be valid and effective unless agreed to by all the Parties hereto and evidenced in writing.

31.5 NOTICES

31.5.1 Unless otherwise stated, notices to be given under this Agreement including but not limited to a notice of waiver of any term, breach of any term of this Agreement and Termination of this Agreement, shall be in writing and shall be given by hand delivery, recognized international courier, mail, telex or facsimile transmission and delivered or transmitted to the Parties at their respective addresses set forth below in **SCHEDULE S (Notices)** or such address, telex number, or facsimile number as may be duly notified by the respective Parties from time to time, and shall be deemed to have been made or delivered (a) in the case of any communication made by letter, when delivered by hand, by recognized international courier or by mail (registered, return receipt requested) at that address and (b) in the case of any communication made by telex or facsimile, when transmitted properly addressed to such telex number or facsimile number.

31.6 CONFIDENTIALITY

31.6.1 Each of the Parties and their Contractors (including the Private Partner Engaged Persons), subcontractors, consultants, employees and agents and each of their respective successors and permitted assigns shall hold in confidence all documents and other information, whether technical or commercial, supplied to it by or on behalf of the other Party, relating to the design, construction, insurance, Operation and Maintenance, transfer, management and Financing of the Concession Assets, and all information and documents obtained in accordance with the terms of the Implementing Agency Agreements, and shall not, without the consent of the other Party, save as required by Applicable Laws or appropriate regulatory authorities, prospective financiers to, or investors in the Private Partner and their professional advisers, publish or otherwise disclose or use the same for its own purposes otherwise than as may be required to perform its obligations under this Agreement. Notwithstanding the above, nothing herein contained shall preclude the use of provisions similar to those contained in the Implementing Agency Agreements and the other agreements referred to herein and in agreements prepared and issued or to be prepared and issued in connection with other projects by the Implementing Agency.

31.6.2 The provisions of Section 31.6.1 hereabove shall not apply to:

- (a) any information in the public domain otherwise than by breach of this Agreement or any other Implementing Agency Agreement;
- (b) information in the possession of the receiving Party thereof before divulgence as aforesaid, and which was not obtained under any obligation of confidentiality.

31.7 SEVERABILITY

31.7.1 If for any reason whatever any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing upon one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable.

31.8 NO PARTNERSHIP

31.8.1 Nothing contained in this Agreement shall be construed or interpreted as constituting a partnership between the Parties. Neither Party shall have any Implementing Agency to bind the other in any manner whatsoever.

31.8.2 Notwithstanding anything to the contrary set out in this Agreement or elsewhere, nothing contained in this Agreement shall be construed or interpreted as the Private Partner providing designing and/or engineering consulting services to the Implementing Agency.

31.9 LANGUAGE

31.9.1 All notices required to be given under this Agreement and all communications, documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in English language.

31.10 EXCLUSION OF IMPLIED WARRANTIES

31.10.1 This Agreement expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement (except the Implementing Agency Agreements) between the Parties or any representation by any Party not contained in a binding legal agreement executed by the Parties.

31.11 COUNTERPARTS

31.11.1 This Agreement shall be executed in two counterparts, each of which when executed and delivered shall constitute an original of this Agreement.

LIST OF SCHEDULES

SCHEDULE A – SCOPE OF THE PROJECT

SCHEDULE B – DESIGN REQUIREMENTS

SCHEDULE C – LIST OF CONSTRUCTION DRAWINGS

SCHEDULE D – PROJECT FACILITIES

SCHEDULE E – PROJECT COMPLETION SCHEDULE

SCHEDULE F – PROJECT SITE

SCHEDULE G – LIST OF TESTS & COMPLETION TESTS

SCHEDULE H – O&M REQUIREMENTS

SCHEDULE I – PART I– CONSTRUCTION PERIOD INSURANCES

SCHEDULE I – PART II– INSTALLATION PERIOD INSURANCES

SCHEDULE I – PART III– OPERATION PERIOD INSURANCES

SCHEDULE J – SPECIFIED PRIVATE PARTNER PERMITS

SCHEDULE K – CORPORATE DOCUMENTS

SCHEDULE L – FORM OF CONSTRUCTION PERFORMANCE GUARANTEE

SCHEDULE M – FORM OF OPERATIONAL PERFORMANCE GUARANTEE

SCHEDULE N – INDICATIVE INDEPENDENT ENGINEER TERMS OF REFERENCE

SCHEDULE O – FORM OF VESTING CERTIFICATE

SCHEDULE P – TOLL NOTIFICATION STRUCTURE

SCHEDULE Q – REQUIREMENTS OF ELECTRONIC TOLL AND TRAFFIC MANAGEMENT SYSTEM -ETTMS

SCHEDULE R – TOLL NOTIFICATION

SCHEDULE S – NOTICES

SCHEDULE T – TERMINATION PAYMENTS

SCHEDULE U – FINANCIAL MODEL

SCHEDULE V – INSTALLATION WORKS

SCHEDULE X – PRICE VARIATION

SCHEDULE Y – RISK ALLOCATION MATRIX

SCHEDULE Z – VEHICLE SPECIFICATION

SCHEDULE AA – BENCHMARK REVENUE

SCHEDULE A – SCOPE OF THE PROJECT

1. DETAILED PROJECT SCOPE

Terms of Reference to achieve overall objectives of the Project are as follows:

1.1 GENERAL

The Project Road is located in Faisalabad, Chiniot and Sargodha District. Start point is located in Faisalabad and end in Sargodha. The total length of this project is about sixty eight and a half (68.5) kilometres which is indicative at this stage. Exact length shall be determined at the Detailed Design stage. Available right of way (ROW) of 33.5m to 38.7m meters has been adopted in general for the whole alignment of the Project.

1.2 EXISTING CONDITION

Existing Faisalabad-Chiniot Road is an un-divided four lane dual carriageway having width of about [24 ft] on either side, with median separator, having hard and earthen shoulders on either sides.

Existing Chiniot-Sargodha Road is an un-divided two lane single carriageway having width of about [47.5 ft], without any median separator, having hard and earthen shoulders on either sides.

1.3 PROJECT COMPONENTS

Project Components *include detailed design, construction, installation, operation and maintenance* of following listed items:

1. Dualization of Chiniot-Sargodha Road by constructing additional lane on either side of existing carriageway, with a central divider as shown in the typical cross-sections for the length between start and end points as mentioned in section 1.1 and 1.2 of this Schedule A, including the lengths through towns/build-up areas and as per typical cross-sections, the details of which are provided herein.
2. Improvement/upgrading/rehabilitation of Project Road between start and end points, to meet the Applicable Standards set forth in the relevant Schedules of this PPP Contract.
3. Improvement/upgrading/strengthening of existing bridges at 5 locations (as identified during preliminary survey, which may change at detailed survey/design stage).
4. Construction of seven (7) new bridges on additional carriageway, one new bridge on drain for U-turn. Construction of three (3) flyovers, one flyover at the start point of Chiniot Bypass, second on Chiniot –Jang Road and third at the end point of Chiniot Bypass at Pakistan Chowk.
5. Improvement/upgrading/strengthening and widening of existing culverts at defined locations (as identified during preliminary survey, which may change at detailed survey/design stage).

6. Private Partner shall carryout a detailed condition evaluation of existing culverts, and shall decide, the number of culverts needing re-construction or rehabilitation.
7. The Construction of three (3) overhead bridges to facilitate pedestrians and motorcyclists.
8. The construction of thirteen (13) protected/unprotected U-turns.
9. Construction of three (3) new toll Plazas duly equipped with Electronic Toll and Traffic Management system located one at Faisalabad side, second at Chiniot and the third on Sargodha side.
10. Construction of three (3) toll control buildings with each toll plazas location of 50 sq.m plinth area).
11. Construction of three (3) Residences for tolling staff (200 sq.m area) one on Faisalabad side, one at Chiniot and other on [Sargodha] side. Tentative locations of Toll Plazas are shown -in the Project Location Plan (Exact location to be decided by Private Partner).
12. Construction of two (2) Offices and two (2) Residences (500sq.m each) for Operation Staff (Exact location to be decided by Private Partner).
13. Procure, operate and maintain four (4) ambulances.
14. Procure, operate and maintain two (2) cranes for stranded vehicles.
15. Procure, operate and maintain four (4) police patrolling vehicles.

Details of these vehicles are provided in Schedule Z.

16. Weighbridges three (3) (the exact location for weigh bridges to be decided by Private Partner).

1.4 PROJECT ALIGNMENT

The alignment of Project Road is generally the same as the alignment of existing road between Faisalabad, Chiniot and Sargodha, except using of Chiniot Bypass rather than Chiniot City and for those stretches which do not comply the geometric design standards assigned to the Project Design Speed (The Project Design Speed is mentioned in the relevant sections/schedules of this PPP Contract).

Estimated Length of Project Road is sixty eight and a half (68.5) km which is indicative at this stage. Exact length shall be determined at the Detailed Design Stage.

The Private Partner, under this PPP Contract, is required to upgrade the Chiniot-Sargodha Road to 4-lane divided highway facility as per the design standards/specifications and cross-sectional elements (Schematics of Typical Cross-sections are attached overleaf) for up-grading the Project Road as given in the relevant sections/Schedules of this PPP Contract.

1.5 DETAILED DESIGN OF THE PROJECT

Detailed design shall be based on preliminary design and its parameters as mentioned in RFP Documents.

1.6 CONSTRUCTION & REHABILITATION OF THE PROJECT ROAD, BRIDGES, CULVERTS AND ANCILLARIES

- The Private Partner will be responsible for all aspects of construction in conformity with AASHTO Design standards, the C&W Road and Bridges Specifications, 2022, ASTM, MUTCD, AASHTO-LRFD, and WPHC-1967 and in accordance with the PPP Contract, including the Construction Requirements, as set out in the PPP Contract.
- During construction, the Private Partner will be required to comply with the traffic management requirements set out in the PPP Contract to minimize the impact of construction on other roads and provide certainty for Users.
- As stated in the PPP Contract, the Private Partner must plan for the Substantial Completion Date no later than twenty four (24) months after the Commencement Date.
- Cost overruns and delays in completing the work shall be governed by the PPP Contract and related Implementing Agency Agreements.

1.7 THE PRIVATE PARTNER SHALL NEED TO:

- Construct the Project within estimated time and the Construction Time For Completion
- Carry-out all quality control tests as per C&W Roads and Bridges Specifications, 2022 (AASHTO recommendations) (see **SCHEDULE G (List of Tests & Completion Tests)** of the PPP Contract as per AASHTO and ASTM references). Records of tests will be signed-off by the Independent Engineer
- Submit Constructions Programme of the Project
- Submit road safety plan and issues diversion plan during construction to obtain control of traffic and minimum hindrance to traffic and make proper liaison with the local police and other relevant civil and district administration/authorities of the area before commencement of work
- The Private Partner should provide independent supervision officer and facilitates their offices and inspection vehicles
- Construction material will be used from approved sources with appropriate tests and certification
- The Private Partner has to make sure that the Project Site is clean from any debris, construction material and-machinery during Operation Period
- International and local safety standards and best practice procedure should be followed during Construction Period
- The Private Partner has to submit the ‘As-built drawings’ at completion of Works in accordance with the PPP Contract

1.8 FACILITIES TO BE PROVIDED BY PRIVATE PARTNER:

1.8.1 Temporary Water Supply

- The Private Partner shall be responsible for supply of water for construction activities, for offices and accommodation of Private Partner
- Where water tank and pumps are temporarily removed, supply to the property must be maintained by the Private Partner

1.8.2 Engineer's Facilities

- The Private Partner shall provide following facilities for the Independent Engineer and its staff:
 - **Construct/Provide, furnish, equip and maintain site office**
The office shall be provided/constructed, furnished, equipped and maintained by the Private Partner, at all times for the duration of the Concession Period including extension period if any
 - **Provide, furnish equip and maintain accommodation**
The accommodation shall be rented, furnished, equipped and maintained by the Private Partner, at all times for the duration of the Concession Period including extension period if any
 - **Survey Equipment**
The Survey equipment and their accessories shall be provided and maintained by the Private Partner along with survey helpers and all consumables, at all times for the duration of the Concession Period including extension period if any
 - **Vehicles**
Vehicles shall be provided with driver, fuel, maintenance, insurance, registration etc. by the Private Partner at all times for the `Concession Period including extension period if any.

1.8.3 Laboratory facility with testing equipment:

- The Private Partner shall furnish the laboratory testing facility with testing equipment, services, supplies, attendants, furniture and its running and maintenance cost for the tests to be conducted
- All tests shall be executed according to AASHTO, ASTM and BS standards as provided in C&W Road and Bridges Specifications, 2022 and all required equipment for facilitation of tests should be furnished in the lab with two sets of latest edition of prescribed standards (one to be placed in the laboratory and other for the Independent Engineer)
- **Note:** The Private Partner should submit the list of tests to be carried out and their sample forms in the proposed methodology

1.8.4 Temporary road, traffic management and control, general protection

- Layout plans showing the detailed proposals of temporary diversions to be carried out by the Private Partner/its Contractor(s) shall be submitted to the Independent Engineer and to concerned district police, civil agencies and local administration for their written approval 10 days before the implantation date
- Diversions must be constructed in advance of any interference within the right of way / existing carriage way and shall be maintained in accordance to traffic load in a condition satisfactory to the Independent Engineer

1.8.5 **Operation and Maintenance**

- The Private Partner is required to carry out the Operation and Maintenance in respect of the Project in conformity with AASHTO standards and in accordance with the PPP Contract. The Operation and Maintenance - O&M Requirements which are set out in the Main Body of the PPP Contract (including Article 19 (*Operation and Maintenance*)) and **SCHEDULE H** (*O&M Requirements*) of the PPP Contract
- The general scope of Operation and Maintenance includes all services associated with the planning, management and delivery of the operations, maintenance and asset preservation activities to ensure compliance with AASHTO standards and with all performance measures set out in the PPP Contract
- The Project should not require a Major Maintenance and Overlay before ten (10) years of Substantial Completion Date and afterwards, should not require another Major Maintenance and Overlay before ten years of first Major Maintenance and Overlay. The Private Partner shall build the Major Maintenance and Overlay expense into their Annuity Amount Payments for that year; however, the payment for the Major Maintenance and Overlay shall be made at the time of actual expense only after certification by the Independent Engineer and the Independent Auditor.
- The shoulders will be resurfaced after every three (03) years and maintained as per the requirements of provided in Schedule H.

1.8.6 **Operations Role**

- The Private Partner should ensure the smooth flow of vehicles and minimization of traffic delay and closures
- The Private Partner should ensure the safety of commuters and shall provide emergency support to commuters
- Control building, safety vehicles, tow trucks, ambulances, patrolling vehicles should be used by developer to ensure smooth operations of Project Works (the details of which are provided in Schedule Z)
- The Private Partner should ensure the administration, monitoring of conditions, traffic control, assessment of the need for load restriction, posting of warnings to vehicles, and signage
- Rest areas and other facilitations will be operated and maintained by the Private Partner
- Quality management on a self-auditing basis, in conformity with AASHTO testing procedures

1.8.7 **Operation Methodology**

- On Patrolling on three hour intervals, on 24/7/365 basis
- Emergency & Rescue response system
- Provision of Tow away facilities
- Provision of emergency medical services/ambulance/clinic
- Maintaining traffic sign maintenance data
- Maintaining Cat eyes
- Maintaining Road marking
- Maintaining Culverts
- Maintaining road
- Maintaining ETTMS including Control Room / Server
- Maintaining weigh bridges
- Maintaining weight violations data
- Maintaining death/injuries data
- Preparing periodic report with peak hour flows and peak day flows and other statistics
- Maintaining operational crew & equipment for emergency Maintenance
- Preparing and implementing education programs and campaigns on:
 - Road safety and customer safety
 - Customer response & comments
 - Customer awareness
 - Operational staff awareness
 - Incentives for fragment road users
 - Maintaining firefighting systems

1.8.8 **Maintenance Role**

The Private Partner shall maintain the Concession Assets including road pavement, structures, pavement markings, drainage infrastructure, electrical systems, mechanical installations,

closed landfill sites, landscaping, inspections, periodic repairs, traffic maintenance, toll booths, toll collection buildings and emergency maintenance.

a) Annual/Routine Maintenance (after substantial completion phase)

- Isolated holes, pot holes, fold pavements, skin patch, windings and rutting in asphaltic layer should immediately be repaired
- Any damages to side barrier due to any accident or other causes should immediately be repaired
- Road Marking Maintenance
- Cat's Eyes Maintenance
- Traffic Sign Maintenance
- Minor maintenance due to damage caused by Road accidents

b) Periodic/Major Maintenance and Overlay

- Over-lays (two overlays approximately first after ten (10) years of Substantial Completion and second approximately eight (8) to ten (10) years of first overlay)
- Potholes Maintenance
- Guard Rail Maintenance
- Shoulder Maintenance
- New Road Marking.
- International Road Roughness Test at selected sections identified by an Independent Engineer should be carried-out after every three (3) years of operation and any portion of pavement found failed should be maintained as per AASHTO standards with approval from Independent Engineer. All the formalities will be checked for their stability and smooth operation.

The Private Partner is required to carry out Project appraisal in detail and price the same in accordance with foreseen work. The construction of the Project is to be completed within two (2) years of the Commencement Date and the bids not accompanied with the workable completion schedule of a two (2) year construction period shall be declared as non- responsive. Any deviation on from the submitted schedule by the successful bidder till the signing of PPP Contract shall be treated as a breach and shall cause forfeiture of security deposit unless an agreement, in writing, is reached with the Implementing Agency for such a change.

1.9 FINANCING

- a. The Private Partner is responsible for developing and implementing the financing structure for the Concession including the financing and commercial arrangements for the design, construction, operations and maintenance work in accordance with the PPP Contract
- b. The Private Partner shall get incorporated a company exclusively for the purpose of implementing the Project (“Project Company” and/ or “SPV”). The Private Partner shall not

undertake or permit and hereby undertakes to procure that the Sponsors do not undertake or permit any Change in Ownership and/or Control during the Concession Period, except as may be permitted pursuant to the PPP Contract.

1.10 HAND-OVER OF THE STRUCTURE

The Private Partner is responsible for handing over the structures to the Implementing Agency in a good working condition at the end of the Concession Period as specified in the PPP Contract without any further compensation to the Private Partner at the time of such transfer. These structures are subject to an inspection and correction process in order to ensure that they are handed over in accordance with established terms and conditions.

SCHEDULE B – DESIGN REQUIREMENTS

1. DETAILED DESIGN OF PROJECT

- a) Carryout map/ satellite photographs study and review of all material/documents/studies/detailed design/drawings provided supplemented with area reconnaissance and detailed topographic survey, study options for alignment of additional carriageway, design of in-route towns and present all options with merits and demerits after ground assessment of salient features of each alignment
- b) Carry out soil & material investigation to determine the “Subsoil Condition”, other required soil tests and analysis for the authenticity of any available report as the Implementing Agency will not be liable to any discrepancy
- c) Carry out condition survey of existing structure (bridges, culverts, drains, retaining walls etc.), and pavement structure to determine load carrying capacity, strength evaluation, rehabilitation methodologies
- d) Carry out hydrological studies for each structure by determining catchment areas for each and every structure
- e) Carry out geotechnical investigations for new bridges (where required)
- f) Carry out traffic surveys and studies. Due consideration should be given to heavy vehicles/large vehicles traversing the Project road
- g) Detailed designing of the Project based on conceptual designs (preliminary designs, drawings and reports with cross-section of road will be provided to Private Partner by Implementing Agency). However, the Private Partner will be responsible for all aspects of design in conformity with Applicable Standards and in accordance with the PPP Contract, including the design requirements as set out in the PPP Contract
- h) Detailed Geometric design as per the geometric design criteria for roads given in the AASHTO standards. Also carry out pavement design, design of retaining/ protection works, design of erosion protection works and drainage works
- i) Carry out culverts structural design in accordance with provisions of ‘AASHTO LRFD Bridge Design Specifications’
- j) Design of other minor structures and intersections (at-grade or grade separated).
- k) Design of town areas including drainage, bus stops, parking areas, service roads (if the existing Right of Way permits and as defined in the Preliminary design).
- l) Prepare Construction Drawings
- m) Preparation of land acquisition and utility/ infrastructures relocation folders
- n) Carry out Environment Impact Assessment - EIA study and submit report to seek approval from the Punjab Environmental Protection Agency as per their rules and regulations

- o) Land acquisition and clearance of encroachment will be the responsibility of the Implementing Agency
- p) Carry out a detailed design rest areas by modifying the designated existing fuel stations, weigh bridges, offices and residence of operation and maintenance staff
- q) Give detailed plan of implementation strategy
- r) A summary of the design criteria is provided hereunder, however, to promote innovation, Bidders are encouraged to develop Proposals that differ or vary from the reference design and that comply with the requirements of the PPP Contract. The general performance requirements for the Project Road are given below:

2. GEOMETRIC DESIGN CRITERIA

Design life

Buildings & Bridges	75 years
Culverts/Drains/Retaining Walls etc.	50 years
Communication & Electrical Cabling	10 years
Electric & Electronic systems	5 years
Pavement*	25 years with staged construction

*Major Maintenance and Overlay shall be provided maximum of ten (10) years after the Substantial Completion Date.

Design Criteria

Item	Sub-Item	Rural Area	Urban Area
1) Design Speed		120 kmph	70 kmph
2) Road Cross Section			
2.1) Width	a) Formation		
	b) Carriageway	24 +24 ft	24 +24 ft 2
	c) Shoulder	8 ft	4 ft
	d) Median	4 ft of New Jersey Barrier (NJB)	NJB
	e) FP/Drain		
2.2) Camber	a) Carriageway	2%	2%
	b) Shoulders	3-4 %	3-4 %
2.3) Embankment Slope	(H:V)	As per detailed Design	
2.4) Right-of -Way	As per typical x-sec	110	120
3) Stopping Sight Distance in meter		AASHTO	AASHTO
4) Passing Sight Distance in meter		AASHTO	AASHTO
5) Minimum Horizontal Curve Radius		AASHTO	AASHTO
6) Maximum Super elevation		AASHTO	AASHTO
7) Maximum Gradient		AASHTO	AASHTO
8) Rate of Vertical Curvature		AASHTO	AASHTO
8.1) k value for crest curves		AASHTO	AASHTO
• For stopping sight distance (m/% A)		AASHTO	AASHTO
• For passing sight distance (m/% A)		AASHTO	AASHTO
8.2) k value for sag curves (m/% A)			
9) Minimum length of vertical curvature			
10) Design Life of Pavement		25 Years with staged construction	
11) Standards for Geometric Design		A policy on Geometric Design of Highways and streets, 2004 of AASHTO	
12) Standards for Pavement Design		AASHTO Guide 1993 for pavement and SHRP	

Above design criteria is general, however, specific design criteria is provided in detailed design.

For Bridges & Culverts

Width

(See Cross Section attached)

Live Load

Class AA Loading for bending movements and
Class A loading for shear according to West
Pakistan Highway Code (1967).

For Material and Testing:

ASTM -American Society for Testing Materials

AASHTO-American Association of State Highway and Transportation Officials.

For Structures:

AASHTO LRFD (Latest Edition) American Association of State Highway and Transportation
Officials.

Loading:

West Pakistan Code of Practice for Highway Bridges 1967.

Seismic Design:

AASHTO analysis and design with latest seismic zoning map for Pakistan as per revised current
Government of Pakistan seismic parameters.

Other design criteria not specified herein shall be approved by the Independent Engineer /
Implementing Agency before being adopted for the design.

Structural Design:

Drawing scale of 1:500 shall be used showing the main features of the structure proposed, the
centreline of the proposed carriageway, the topography of the adjoining terrain and the benchmarks,
the final design plans shall include all details in appropriate scale necessary to construct the said
structures. The choice of structure and specifications will be determined keeping in view the economy,
aesthetics of material.

For Scale of drawings, refer Preliminary Design Drawings. All drawings must be in MKS system

SCHEDULE C – LIST OF CONSTRUCTION DRAWINGS

1. GENERAL DRAWINGS

- List of Drawings
- Location Plan
- General Notes, Abbreviation, Legend
- List of Traverse & Bench Mark
- Typical X-sections
- Details of rehabilitation of existing pavement structure including widening
- Setting out Data
- Geometric Design Criteria & Super-elevation Details
- Traffic Signs, Pavement Marking, Raised Profile type Road Stud Details
- Guard Rail Details
- Foot Path, Bus Bays, Service Road etc.
- Misc. Details

2. PLAN & PROFILE DRAWINGS

In plans, complete topography of the area (ROW), details of point of intersections and curve geometry (coordinates, deflection angle, radius, length of curve, tangent length, super elevation, etc including PI, PC and PT chainage), chainage at every 20m, bridges, culverts etc. should be provided.

In Profile, chainage, existing ground/road level, finished road level (FRL), grade, Vertical Profile data, bridges, culverts etc. should be provided.

Super-elevation, tangent runout and super-elevation runoff data should also be provided in Plan & Profile drawings.

3. STRUCTURE DRAWINGS

- General Notes
- Site Plan of bridge
- General Arrangement of bridges
- Abutment/Pier Concrete/reinforcement detail
- Pile reinforcement Details
- Girder concrete/reinforcement detail
- Transom/diaphragms concrete/reinforcement detail
- Deck Slab, kerb, barrier, railing, expansion joints, bearing pads etc. details
- Schedule of culverts
- General arrangement of box/pipe culverts
- Dimensional details of box/pipe culvert
- Reinforcement detail of box culverts
- Details of wing/head wall (concrete & reinforcement
- Details of retaining wall/protection works
- Details of drains etc.
- Details of retrofitting/rehabilitation of existing bridges/culverts including widening etc.

SCHEDULE D – PROJECT FACILITIES

1. TEMPORARY WATER SUPPLY

Where private or government owned water tank and pumps are temporarily removed a supply to the property must be maintained by the Private Partner.

2. ENGINEER’S FACILITY

- The Private Partner shall provide furnished, equip and maintain site office for the engineer. Office provided shall be maintained by the Private Partner; all times during the duration of the Concession Period including extension period if any.

- The Private Partner shall provide following facilities for the Independent Engineer and its staff:
 - Provide, furnish, equip and maintain site office
The office shall be constructed, furnished, equipped and maintained by the Private Partner, at all times for the duration of the Concession Period including extension period if any

 - Provide, furnish equip and maintain accommodation
The accommodation shall be rented, furnished, equipped and maintained by the Private Partner, at all times for the duration of the Concession Period including extension period if any

 - Survey Equipment
The Survey equipment and accessories shall be provided and maintained by the Private Partner along with survey helpers and all consumable, at all times for the duration of the Concession Period including extension period if any

 - Vehicles
At least two (2) vehicles shall be provided with driver, fuel, maintenance, insurance, registration etc. by the Private Partner at all times for the duration of the Concession Period including extension period if any.

3. LABORATORY FACILITIES WITH TESTING EQUIPMENT

The Private Partner shall furnish the laboratory testing facility with testing equipment, services, supplies, attendants/helpers, furniture and its running maintenance cost for the tests to be conducted.

The Private Partner shall also provide for the laboratory a vehicle with driver to be approved by the Independent Engineer for the sole use of the laboratory to transport testing equipment, testing samples and laboratory technicians, for carrying out inspection and testing on site throughout the same period.

All the tests shall be executed according to AASHTO and ASTM and all required equipment for facilitation of the tests should be furnished in the lab with two sets of latest edition of prescribed standards (one to be placed in the laboratory and other for the Independent Engineer).

The number of vehicles, survey equipment, laboratory equipment, furniture for office/accommodation/laboratory will be finalized with the approval of the Independent Engineer.

4. TEMPORARY ROAD, TRAFFIC MANAGEMENT AND CONTROL, GENERAL PROTECTION

Layout plans showing the detailed proposals of temporary diversions to be carried out by the Private Partner shall be submitted to the Independent Engineer / Implementing Agency and to concerned district police and civil agencies and local administration for their written approval 10 days before the implantation date.

Diversion must be constructed in advance of any interference within the existing carriageway/RoW and shall be maintained in accordance with the traffic load in condition satisfactory to the Independent Engineer.

5. LOCATION OF UTILITY SERVICES

Location and identification of all services, in consultation with relevant Utility service providers, companies whether above ground or below the ground shall be Private Partner and its Contractor(s)' responsibility following transfer of that utility by Implementing Agency and providing the right of way to the Private Partner, free from any encumbrances.

SCHEDULE E – PROJECT COMPLETION SCHEDULE

Construction Completion Schedule

Anticipated start of construction	Commencement Date
Substantial Completion	2 years from Commencement Date
Anticipated expiry of PPP Contract & handover of facilities	25 years following Substantial Completion Date
Scheduled Project Completion Date	As determined by Independent Auditor on Substantial Completion but in any event not exceeding 90 days following Substantial Completion Date

Installation Completion Schedule

Anticipated start of installation	Commencement Date
Scheduled Installation Completion Date	As determined by Independent Auditor but in any event not exceeding 180 days following the Commencement Date for the Faisalabad Chiniot Road, and 180 days following the Scheduled Project Construction Completion Date and for the Chiniot Sargodha Road

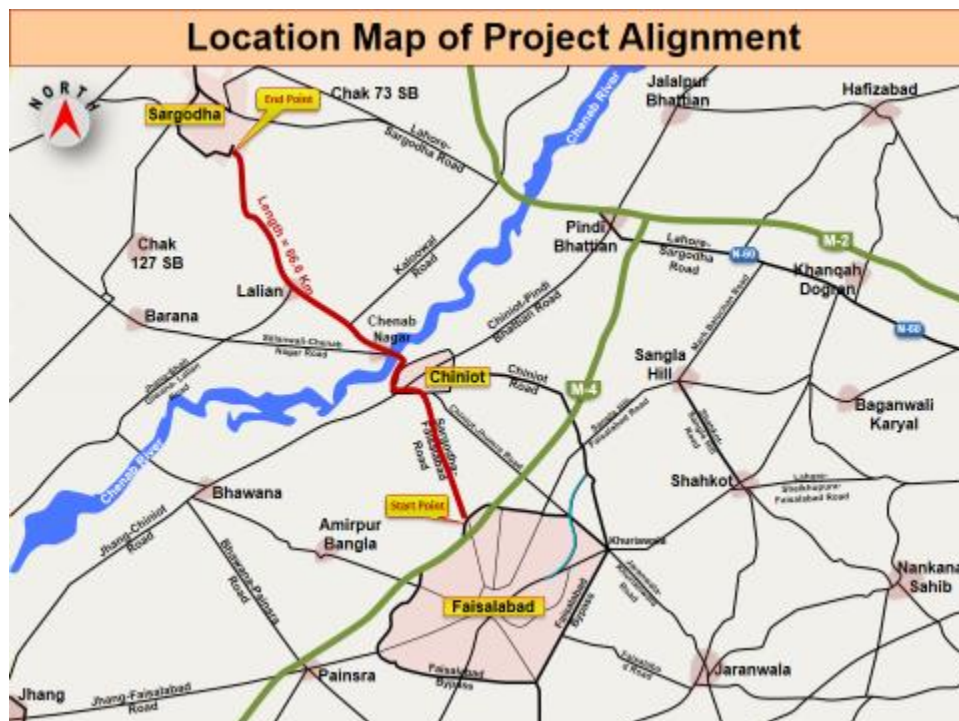
SCHEDULE F – PROJECT SITE

The existing Faisalabad-Chiniot-Sargodha Road is a very important Inter District and very busy highway link of almost sixty-eight and a half (68.5) km in length running between Faisalabad and Sargodha, Punjab. The alignment which starts at Faisalabad passes through Chiniot and ends at Sargodha.

An existing right of way (ROW) of 20 m to 38.7 m has been adopted in general for the whole alignment of the Project except at intersections, toll plazas where such ROW could not be maintained due to site/design requirements.

Any additional land required for the Project will be handed over by the Implementing Agency to accommodate the Project Facilities if so required and mutually agreed.

For the avoidance of doubt, the final parameters of the Project Site shall be communicated by the Implementing Agency to the Private Partner within two (2) weeks of the date of Financial Close and shall be as per the requirements of the Detailed Engineering Design as approved in accordance with the terms of this Agreement.



SCHEDULE G – LIST OF TESTS & COMPLETION TESTS

The Private Partner shall furnish the laboratory testing facility with testing equipment, services, supplies, attendants/helper, furniture and its running and maintenance cost for the tests to be conducted. The Private Partner shall also provide for the laboratory a vehicle with driver to be approved by the Independent Engineer for the sole use of the laboratory to transport testing equipment, testing samples and laboratory technicians, for carrying out inspection and testing on site throughout the same period.

All tests shall be executed as per the designated standard and all required equipment for facilitation of the tests should be furnished in the lab with two sets of latest edition of prescribed standards (one to be placed in the laboratory and other in the Independent Engineer office).

The Private Partner should submit the list of tests to be carried out and their sample forms in the proposed methodology.

THE TESTS

A) LABORATORY TESTS

The Laboratory shall be equipped to perform the following tests:

SR. NO.	TESTS	AASHTO DESIGNATION
1	Dry preparation of soil samples	T-87
2	Soil Classification	M-145
3	Determination of Moisture Content	T-265
4	Atterberg Limits	T-89 & 90
5	Moisture density relationship (Modified Method)	T-180
6	C.B.R Test and swelling test	T-193
7	Relative Density Test	ASTM D4253, D4254
8	Sieve Analysis of Soils, aggregate and Mineral Filler	T-88, T-27 & T-37
9	Los Angeles Abrasion test of aggregates	T-96
10	Sand Equivalent	T-176
11	Soundness of aggregates	T-104
12	Asphalt Coating	T-195
13	Coating and stripping of Bitumen Aggregate	T-182
14	Specific Gravity & Absorption of Coarse Aggregate	T-85
15	Specific Gravity and Absorption of Fine Aggregate	T-84
16	Penetration of bitumen material	T-49
17	Amount of Passing No. 200 sieve	T-11
18	Quantitative Extraction of Bitumen from Mixtures	T-164
19	Gradation analysis of bitumen extracted aggregates	T-30
20	Specific gravity of compacted bitumen mixture	T-166
SR. NO.	TESTS	AASHTO DESIGNATION

21	Marshall test and loss in stability	T-245
22	Maximum specific gravity of bitumen paving mixture	T-209
23	Air voids in compacted paving bitumen mix	T-269
24	Specific gravity of bitumen material	T-228
25	Softening point of bitumen (Ring and Ball method)	T-53
26	Sampling aggregates	T-2
27	Fineness Modulus	T-27
28	Organic impurities	T-21
29	Mortar Strength	T-71
30	Friable particles	T-112
31	Potential reactivity of carbonate rocks for concrete aggregates (rock-Cylinder method)	ASTM C-586
32	Unit weight of aggregates	T-19
33	Air content of freshly mixed concrete by volumetric method	T-196
34	Making and curing of concrete test specimens	T-126
35	Curing concrete compressive test specimens	T-23
36	Compressive strength of cylinder concrete specimens	T-22
37	Setting time and consistency of cement	T-131
38	Normal consistency of hydraulic cement	T-129

B) FIELD TESTS:

The following tests will be carried out for field control/spot checking purposes as the Works proceeds: -

SR. No.	TEST	AASHTO DESIGNATION
1	In-place density by Sand Cone Method	T-191
2	Sampling fresh concrete	T-141
3	Slump of Portland cement concrete	T-119
4	Sampling bituminous materials	T-40
5	Determining the temp. of bituminous paving mixtures	-
6	Determining Degree of Pavement Compaction by coring	T-230
7	Bulk specific gravity	T-166
8	Density of soil and soil aggregate by Nuclear methods	T-238
9	Moisture content of soil and soil aggregate by Nuclear method	T-239

THE COMPLETION TESTS

Completion Tests shall mean the final inspection and tests of the Concession Assets by the Independent Engineer to ensure that the same conforms to the Project Requirements.

The roughness of the pavement, over any one kilometre length, shall not exceed a value of 5,000 millimetre per kilometre, as measured using 'Bump Integrator' technique, or an equivalent alternative standard established through alternative testing methods. Roughness criteria as per Highway Design and Maintenance Standards Model (HDM 1995) are as follows:

Smooth Paved Road	2,000	mm/km
Reasonably Smooth Paved Road	4,000	mm/km
Medium Rough Paved Road	6,000	mm/km
Rough Paved Road	8,000	mm/km
Very Rough Paved Road	10,000	mm/km

THE INSTALLATION COMPLETION TESTS

Completion Tests, for the Installation Works, shall mean the following final inspection and tests of the Toll Plazas, Weighbridges and ETMS by the Independent Engineer to ensure that the same conforms to the Installation Requirements:

I. TOLL PLAZA TESTS		II. WEIGH-IN-MOTION (WIM) TESTS	III. ELECTRONIC TOLL TRANSACTION MACHINE (ETTM) TESTS
A. Civil & Structural Tests		A. Static Calibration Tests	A. Lane Hardware & RFID E-Tag Read Tests
1	Concrete Tests	Zero Load Test	Lane Equipment and AVC (Automatic Vehicle Classification) Integration Test
2	Steel Fabrication & Welding Test	Known Weight Test	RFID M-Tag Read Rate Accuracy and Read Range Test
3	Steel Pipe Thickness Test	Axle Load Accuracy Test	Multi-Tag Discrimination and Tag Blacklist Test
4	-	Gross Vehicle Weight (GVW) Test	Speed Tolerance Test
B. Transaction Tests		B. Dynamic Performance Tests	B. Transaction & Financial Tests
5	Cash Denomination Handling Test	WIM Speed Range, Consistency & Multi-lane Test	E-Tag Account Deduction & Balance Management Test
6	Receipt Printer Accuracy Test	Temperature Sensitivity Test	Double Deduction Prevention Test
7	Shift Change & Reconciliation Test	Vehicle Separation Test	Transaction Reversal Test
C. Physical Infrastructure		C. Classification and Enforcement Tests	C. Integration & System Tests
8	Central Server Connectivity Test	Overload Detection & Enforcement Chain Test	Connectivity Resilience & Recovery Test
9	Power Failover / UPS Test	Data Integrity & Audit Trail Test	Clearinghouse Integration & Reconciliation Test
10	Interoperability Test (Plaza to Plaza)	-	CCTV & ANPR Integration Test
-		D. System Certification Tests	D. Environmental & Stress Tests

11	-	Sealing & Tamper Test	Rain / Dust / Temperature Ingress Test
12	-	Legal Compliance Test of Equipment and Approvals	Surge Protection and continuous operations Test (Voltage surges from power grid fluctuations)

SPECIFICATIONS

PUNJAB ROAD & BRIDGES SPECIFICATION 2022



2022

Standard Specifications For
Road And Bridge Construction



It is available on C&W and Planning & Development (P&D) Websites

O&M Requirement, Evaluation and Enforcement Mechanism (O&M)

(Part of Concession Agreement)
O&M Period

DEFINITIONS

This Guideline contains numerous technical terms. For those that may be ambiguous or potentially confusing, definitions are provided herein. These definitions are also applicable to related manuals and a handbook.

Asphalt Mixture “Asphalt mixture” is a material used for the wearing course and binder course of pavement. It is a mixture of asphalt, coarse aggregate, fine aggregate, and filler, and refers specifically to the material after use.

HMA (Hot Mix Asphalt) “HMA” is a material used in asphalt layers, consisting of asphalt, coarse aggregate, fine aggregate, and filler heated and mixed together.

Specifically, it refers to the loose state of the material before it is compacted.

Asphalt Layer “Asphalt layer” refers to a layer composed of asphalt mixture in a pavement structure, including wearing course and binder course.

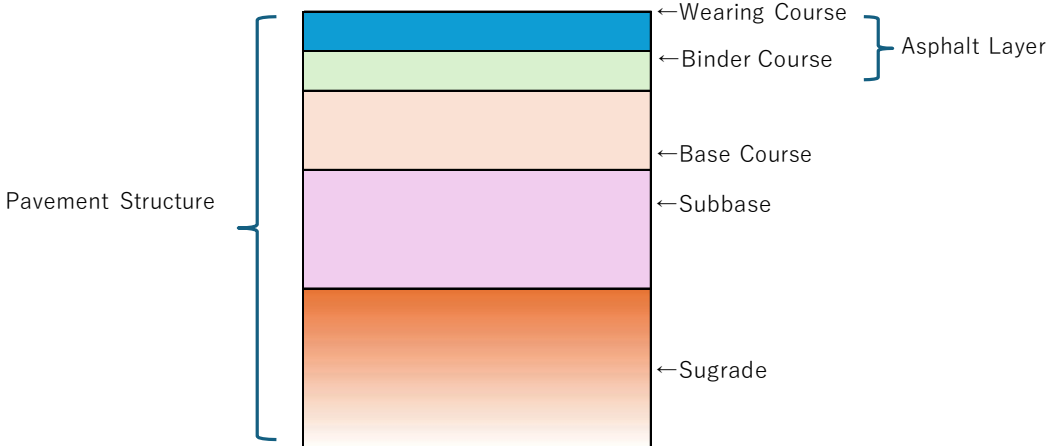
Wearing Course “Wearing Course” refers to the layer that forms the surface of the asphalt layer.

Binder Course “Binder course” refers to the layer between the base-course or sub-base and the surface layer in an asphalt layer.

Base Course “Base Course” refers to the layer of the sub-base that is located directly beneath the asphalt layer, with a thickness of 20 cm or less. It does not exist in cases where the pavement structure is simple.

Sub-base “Sub-base” refers to a layer composed of materials such as granular crushed stone that forms the lower layer beneath the asphalt layer. In high-specification roads, when the base course exists, it specifically refers to the layer between the upper roadbed and the roadbed.

Subgrade “Subgrade” is the lowest layer of the pavement structure and is up to 1 m thick. It mainly consists of existing ground.



Maintenance	“Maintenance” refers to planned, repetitive care or emergency minor repairs that are performed for the purpose of restoring the performance of the road surface. Main maintenance activities include patching and surface treatment.
Repair	“Repair” is performed for the purpose of restoring a pavement to its original level of performance when maintenance work is uneconomical or not sufficiently effective.
Road Surface Condition Survey	“Road surface condition survey” refers to survey that evaluate road surface conditions using visual inspection results and PCI, as well as surveys that quantitatively evaluate road surface conditions using RSP.
Structural Survey	“Structural survey” refers to gaining a detailed understanding of the pavement structures and investigating the causes of damage. They include FFWD and GPR surveys, as well as core sampling and test pit surveys.
Core-sampling	“Core sampling” refers to the process of collecting asphalt layers using a boring machine to investigate the properties of asphalt mixtures (such as asphalt content and void ratio).
Test pit	“Test pit” refers to a type of pavement structure survey in which test excavations are carried out on site to directly investigate the thickness of each layer and the condition of the base course, sub-base and subgrade. Base course, sub-base and subgrade materials are collected for use in CBR tests and other tests.
Deterioration	“Deterioration” refers to the overall deterioration of pavement performance and condition (pavement structure, layers).
Aging	“Aging” refers to changes in material properties over time.
Degradation	“Degradation” refers to the deterioration of material properties and quality (chemical and physical changes).
Patching	“Patching” refers to filling of pothole with asphalt concrete with average depth up to 2 inch in Wearing course and/or Binder course.
Heavy Patching	“Heavy Patchin” refers to filling of pothole with asphalt concrete with average depth up to 4 inch in Wearing course and/or Binder course.
Functional Overlay	“Functional Overlay” refers to milling of the existing Wearing course (default value = 2 inches) and may include laying a fresh Wearing course (again 2 inches).

Structural Overlay	“Structural overlay” refers to the removal of existing asphalt layers and the restructuring of the asphalt layer and/or base-course, sub-base.
Surface treatment	“Surface treatment” refers to a method of maintenance in which the existing pavement is left as is and treated on top of it. Examples include thin overlay and fog seal.
Fog seal	“Fog seal” refers to a maintenance method in which modified asphalt is sprayed directly onto the surface of the asphalt layer to ensure curing time.
Chip Seal	“Chip seal” refers to a road resurfacing repair method that involves cleaning the road surface, heating and spraying asphalt, spreading a mixture of gravel and crushed stone, and compressing it. There are three types of chip seal: single layer (1 layer), double layer (2 layers), and triple layer (3 layers).

THE O&M REQUIREMENT, EVALUATION AND ENFORCEMENT MECHANISM(O&M)

Level of Service (LoS)

Class	Description
A	Dual Carriageway Minimum 24-ft carriageway either side
B	Collectors Road with 20-24ft Carriageway Asphaltic Surface with or without Treated Shoulders.
C	10-12ft Carriageway Asphaltic Surface.

Penalty and Grace Periods:

Failure to meet the required Service Level for Maintenance Services will result penalty to the Private Partner. The principles to be applied for penalty imposition are the following:

“First-day” of Penalty: Penalties in general are meant to enforce the agreed Maintenance Services by the Private Partner so as to the Private Partner shall continuously and proactively identify any non-compliance and to carry out quickly the necessary remedial measures. The “First- day” of penalty in particular has the objective to ensure that the Private Partner detects and remedies non-compliances quickly, without waiting for the next Formal Inspection. Therefore, the existence and detection of a non-conformance with Service Level requirements during the Monthly Formal Inspection triggers the immediate and irreversible application of the “First-day” of penalty. The “First-day” of penalty due for one day of non-compliance. The “First-day” of penalty is to be applied immediately at the time of the Formal Inspection and will lead to a the corresponding Monthly Statement. The application of the “First-day” Penalty can however be voided by the Implementing Agency on an exceptional basis if it is evident that at the time of the Formal Inspection the Private Partner’s staff and equipment are already actively working on remedying the non- compliance.

Suspension of further of Penalties through granting of Grace Period: Penalties are generally applied for each day during which the non-compliance persists. However, in order to avoid overly severe of Penalties and to provide the Private Partner with the opportunity to remedy the non- compliance without incurring in further of Penalties (beyond the “First-day” of Penalty already applied), most OPM’s have a “Grace Period”. The granting of the Grace Period to the Private Partner does NOT void the “First-day” of Penalty, but suspends the further application of additional of Penalties during the Grace Period. The Grace Period will temporarily “stop the clock” for additional daily Penalties, for the duration of the Grace Period after the “First day”. If the Private Partner remedies the non-compliance within the Grace Period granted, there will not be any additional Penalty for that same non-compliance. The duration of the Grace Period given for different types of defects is shown in the corresponding descriptions for each OPM hereunder. However, if the Private Partner does NOT remedy the non-compliance within the Grace Period, a further Penalty for all days of non-compliance (starting from the second day after the initial

detection and until the non-compliance is remedied) will be applied in the following month and (if applicable) for any subsequent months, without a limit being applied to the length of time.

Performance Evaluation and Control:

The Private Partner's performance requirements for Maintenance Services are defined and measured according to:

- (i) Operational Performance Measures (OPM) and
- (ii) Management Performance Measures (MPM), as set out below.

1. OPM: Operational Performance Measures (OPM)

<i>OPM-1:</i>	Usability (Availability of each lane-km for use by traffic)
<i>OPM-2:</i>	Pavement defects (potholes, rutting, ravelling, cracking in pavement, edge break, etc.)
<i>OPM-3:</i>	Pavement Roughness
<i>OPM-4:</i>	Shoulder and Verge Maintenance
<i>OPM-5:</i>	Drainage
<i>OPM-6:</i>	Bridges, Structures and Embankments
<i>OPM-7:</i>	Incident Response and Emergency Works
<i>OPM-8:</i>	Road signs, line-markings and road furniture
<i>OPM-9:</i>	Vegetation control
<i>OPM-10:</i>	Performance of the Private Partner's Self Control Unit(SCU)

2. MPM: Management Performance Measures (MPM)

MPM-1	Quality Assurance Plan (QAP) with its Supplements
MPM-2	O&M Manual
MPM-3	Programme of Performance
MPM-4	Works Completion Reports
MPM-5	Daily Report
MPM-6	Weekly Report
MPM-7	Classified Traffic count / Reporting System
MPM-8	Asset Inventory Reports and updates
MPM-9	Submission of Designs
MPM-10	Monthly Compliance Tables for Maintenance Services
MPM-11	Monthly Progress Report for O&M
MPM-12	Road Asset Damage and Emergency Incident report

- MPM-13 Compliance with requirements in the areas of Environment, Social, Health and Safety of workers, and Traffic Management Plans
- MPM-14 Grievance Redressal System

OPM: OPERATIONAL PERFORMANCE MEASURES (OPM)

OPM-1: Usability

The Private Partner must ensure that the road with all its traffic lanes and other lanes is open to traffic and free of interruptions at all times. Permitted exceptions are:

- Lane closures following serious traffic accidents (not exceeding 4 hours after release of the accident site by Traffic Police);
- Restrictions on traffic flow needed to carry out scheduled works on the road by the Private Partner;
- Natural disasters; and
- Lane or road closures resulting from the direct instructions of the Traffic Police or other relevant authorities, in circumstances which are not the responsibility of the Private Partner.
- Restriction of Traffic not caused by an act of omission or commission by Private Partner.

The above requirements are applied to all Service Level classes.

Method of Inspection: By driving on the road in a normal manner, utilizing a vehicle type that is similar to the vehicles typically used by road users. This requirement is not complied with if one or several traffic lanes are partially or fully interrupted or blocked at any point. The requirement is complied with if the road with all its travel and turning lanes is fully open to traffic and usable as designed.

Penalty for non-compliance:

- **If all travel lanes of the road are interrupted:** 1% for entire length of road for each two-hour period of non-compliance between any two interchanges / intersections.
- If one or several travel lanes are interrupted, but at least one lane remains open **in each direction:** 0.5% for entire length of road for each two-hour period of non-compliance between any two interchanges / intersections.

OPM-2: Flexible Pavement Defects

OPM-2.1: Potholes

Frequency of inspection: Daily	Service Levels		
	Class C	Class B	Class A
Area: Potholes area (Max.tolerable Diameter of any single pothole in cm)	30	30	15
Numbers: Potholes (Max. number in any one (1) km section, with a diameter greater than 10 cm)	10	6	3
Depth: Potholes (Max. tolerable depth of any single pothole, incm)	4	3	2
Grace Period granted after “First-day” of penalty			
Grace Period in days*	28*	14*	7*

* the Grace Period is the time permitted for technically appropriate repairs (patching) which must be carried out in line with the requirements of the General Specifications or good international construction practice. However, since potholes also affect road safety, the Private Partner is obliged to fill potholes at least temporarily with Cold Mix or other materials approved by the Independent Engineer, within 24 hours of their detection.

Method of Inspection: Visual inspection with video/image backup. Measuring shall be made by using a tape measure, ruler or straightedge, transparent ruler or calibrated steel probe.

Penalty for non-compliance: 10% of the monthly Lumpsum to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-2.2: Patching

Patching is the mandatory repair method for many different pavement defects.

Table: Patching for all Service Levels

Patching shall be in the manners including but not limited to the following: Patches (i) shall be square or rectangular, (ii) must have squared edges cut with a blade or a similar tool, (iii) shall be level with the surrounding pavement, (iv) shall be made using materials similar to those used for the surrounding pavement, and (v) shall not have cracks wider than three (3) mm.
Grace Period granted after “First-day” of penalty: 28 days for permanent repair, but 24 hour for temporary repair.
Frequency of inspection: Monthly

Method of Inspection: Patches shall have a smooth and regular surface, flush with the surrounding road surface. When checked with a straightedge extending across the surface of the patch in any direction, there shall be no deviation from the lower edge of the straightedge of more than 5 mm. Methods and equipment used for inspection:

- Visual inspection with video/image backup (for detection of shape and materials used);

- Straightedge (for patch evenness);
- Ruler (to check if patch is level with surrounding pavement); and
- Small transparent ruler (for measuring cracks).

Penalty for non-compliance: 10% of monthly Lumpsum Rate to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-2.3: Isolated cracking in pavement

An isolated crack is defined as a linear opening in the pavement with a width of more than three (3) mm, such as longitudinal cracks, transverse cracks and edge cracks.

The Private Partner is obliged to seal all linear isolated cracks wider than three (3) mm. Sealing must be preceded by routing of the crack (if needed) and cleaning to ensure adherence of sealant material. The seal must ensure that water cannot enter the road structure through the crack.

Linear isolated cracks more than 3 mm wide must not exist on the pavement.
Grace Period for repairs, after “First Day” of penalty, in days: 14
Frequency of inspection: Monthly

Method of Inspection: Laser Crack Measurement System or Crack widths are measured with a small transparent ruler.

Penalty for non-compliance: 05% of monthly Lumpsum Rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-2.4: Multiple cracks in the pavement

OPM 2-4 applies in cases of multiple visible cracks (such as alligator cracks, or block cracking, or cracks crossing each other). For multiple cracks, the “cracked area” is equivalent to a square or rectangle, parallel to the traffic lanes, which fully encloses the cracks, and where the closest crack is at least 0.25 m away from the sides of the square.

The requirement is as follows: The cracked areas shall not exceed ten (10) percent of any 50-meter section of road. Cracked areas of road section must be repaired, with the Private Partner proposing the repair method to the Independent Engineer for approval. Repair methods are: (i) patching, with or without repair of underlying pavement layers, or (ii) applying a seal coat to the entire cracked area, or (iii) sealing of the individual cracks. For all repair methods, the repair must ensure that water cannot enter the road structure through the repaired area.

For any 50-meter section of the pavement, the cracked area shall not be more than ten (10) percent of the pavement surface. Repairs must be performed as per the requirements.
Grace Period for repairs, after “First Day” of penalty, in days: 28
Frequency of inspection: Monthly

Method of Inspection: Laser Crack Measuring System or Detection of multiple cracks by Visual inspection or analysis of video images along with video/image backup. Measurement of cracked areas by measuring tape, handheld measuring wheels or other appropriate measuring devices. The “cracked

area” is equivalent to a square or rectangular area, parallel to the traffic lanes, which fully encloses the cracked area.

Penalty for non-compliance: 10% of monthly lumpsum rate for one km, to be applied for each one-km section in which a non-compliance exists, and for each day during which the non-compliance persists.

OPM-2.5: Cleanliness of the pavement, shoulders and Right-of-Way

Cleanliness refers to the *absence* of soil, debris, trash, rubbish, dead animals and other such objects. The terms “*cleanliness*” and “*absence*” are defined further below for the purposes of the contract.

The requirement is that the **road and shoulder surface** must always be “clean”.

Also, debris, trash, rubbish and other objects, including dead animals, must be absent from the **Right-of-Way** of the road at least up to 20 meters away from the edge of the pavement on both sides of the road, unless otherwise specified by the Independent Engineer.

Frequency of inspection: Daily	Service Level (Grace Period for removal, in days)		
	Class C	Class B	Class A
Cleanliness of the pavement surface and shoulders when unclean conditions present a safety risk .	To be cleaned during patrol. No Grace Period.	To be cleaned during Patrol. No Grace Period.	To be Cleaned During patrol. No Grace Period.
Cleanliness of the pavement surface and shoulders when there are no safety risks	14	7	3
<i>Absence</i> of trash/rubbish from the road’s Right-of-Way , outside the pavement and shoulder surface	30	30	14

Grace Periods (in days) for removal, after “First Day” of penalty is applied.

Method of Inspection: Visual inspection with video/image backup.

Penalty for non-compliance: 5% of monthly lumpsum rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-2.6: Rutting

There are two performance criteria for rutting: (i) Rutting shall not exceed the defined maximum tolerable depth at any point along any one-km road section; and (ii) Rutting of more than 75% of the maximum tolerable depth shall not be present for more than the maximum tolerable percentage of length within any one-km road section. Different levels are set for roads with one traffic lane in each direction (single carriageway) and for multiple carriageway roads and highways.

[Note: For areas with high rainfall, the tolerances may need to be lower to reduce the risk of aquaplaning with the approval of IE.]

Table: Rutting Service Levels

Frequency of inspection: Daily	Service Levels		
	Class C	Class B	Class A
Max. tolerable Rutting depth (mm) – for multi-lane highways	30	25	20
Max. tolerable Rutting depth (mm) – Single Carriageway roads	35	25	20
Max. allowed Rutting % of any KM length	≤ 10	≤ 10	≤ 5
Grace Period for Repairs, after “First Day” of penalty:			
Rutting (Grace Period in days)	56	56	30

Method of Inspection: Measured with one straightedge & ruler and one calibrated wedge. Straightedge of three meters length placed horizontally and perpendicularly across lane. Rut depth is measured as the space between the lower edge of straightedge and the lowest point of rut, using a small ruler / calibrated wedge with scale in mm.

Penalty for non-compliance: 5% of monthly lumpsum rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-2.7: Ravelling/Stripping of pavements

Ravelled pavement areas must not exist for roads at Service Level “A”. For Service Levels “B” and “C”, the maximum surface area of ravelling within any continuous one-km centreline length shall be less than one (1) percent and two (2) percent respectively.

[Sample Table: Ravelling Service Levels]

Service Level “A” - Ravelled areas must not exist at all.
Service Level “B” - Maximum tolerable Ravelled areas: two (2) percent of surface in each one km section of road.
Service Level “C” - Maximum tolerable Ravelled areas: four (4) percent of surface in each one km section of road.
Grace Period for Repairs, after “First Day” of penalty, in days: 56 days
Frequency of inspection: M o n t h l y

Method of Inspection: Detection of Ravelling by Visual inspection with video/image backup. Measurement of ravelled areas by measuring tape, handheld measuring wheels or other appropriate measuring devices. The “ravelled area” is equivalent to a square or rectangular area, parallel to the traffic lanes, which fully encloses the ravelling.

Penalty for non-compliance: 05% of monthly lumpsum rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-2.8: Loose pavement edges / Deformation

Pavement Edges, for all Service Levels

There shall not be loose pavement edges, or pieces of pavement breaking off at the edges. A one-km section is non-compliant if pavement edges are loose or broken off for a combined length of more than 5 meters and width 2 cm at any location

Grace Period for Repairs, after “First Day” of penalty, in days: 30 days

Frequency of inspection: monthly

Method of Inspection: Edge dropout by straight edge of 3 meters and calibrated wedge or ruler, Visual inspection with video/image backup .

Penalty for non-compliance: 5% of monthly rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-3: Pavement roughness and Skid

Maximum tolerable pavement roughness (measured in m/ km.)

Frequency of inspection: Bi-Annually	Service Levels		
	Class C	Class B	Class A
Max. tolerable Roughness (IRI) –(m/km) Single Carriageway (1-2lane) roads	≤ 5	≤ 4	≤ 3.2
Max. tolerable Roughness (IRI) – (m/km)Dual or multiple Carriageway highways: Left- most traffic lane	≤ 6	≤ 4.8	≤ 4
Max. tolerable Roughness (IRI) – (m/km)Dual or multiple Carriageway highways: Other traffic lanes	≤ 4.5	≤ 3.8	≤ 3.2
Pavement Condition Index	2	2.1	2.5
Grace Period for Repairs, after “First Day” of penalty			
Roughness (Grace Period in days) after First day of Penalty	180	180	120
By using Class I Profilometer SCRIM (Sideway force Coefficient Routine Investigation Machine or equivalent or Road Roid Software)			

Method of Inspection: Measurement for each traffic lane, using the methods described in the Specifications or as advised by the Independent Engineer or Road Roid Software.

Penalty for non-compliance: 1% of Monthly rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-4 Embankment, slope, Shoulder and Verge Maintenance

OPM 4-1: Paved Shoulders

The shoulder is defined as the width from the edge of the paved traffic lane to the end of the verge or the start of the side drain. The shoulder must be maintained (i) to support the pavement edge, (ii) to allow for the occasional use by traffic, (iii) to ensure its function as the drainage path for water runoff from the carriageway and (iv) to ensure the elimination of an edge drop off at the edge of the sealed pavement.

Sample Table: Paved Shoulder for all LoS

The criteria of OPM-2 (Pavement Defects) also apply for paved shoulders. In addition, paved shoulders shall always be adequately sealed to prevent water penetration, without deformations or erosions in excess of 15mm under a 3-meter straightedge in any direction.

Grace Period for Repairs (in days) granted after “First-day” of Penalty: 56 days

Method of Inspection: Visual inspection with video/image backup to detect defects. Straightedge and calibrated wedge / ruler (for measuring evenness).

Penalty for non-compliance: 5% of monthly lump sum rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

a. OPM-4: Shoulder & Verge Maintenance	b. Service Levels					
	c. Class C	d. Class B	e. Class A	f. Class	g. Class	h. Class
f. Max. allowed Shoulder drop: Height of pavement vs. Height of Shoulder (difference in mm), over any lengths of 10 meters or more	g. 40	h. 35	i. 25			
j. Max. allowed Shoulder rise (in mm), over any lengths of 10 meters or more	k. 4	l. 2	m. 2			
n. Grace Period for any Repairs : 56 days						

OPM 4-2: Unpaved Shoulders

Table: Unpaved Shoulder for all Service Levels

Unpaved (gravel) shoulders shall be maintained compacted and graded to a smooth condition across the full width, with no depression or hump in excess of 75mm under a 3- meter straightedge in any direction.
Grace Period for Repairs (in days) granted after “First-day” of Penalty: 60

Method of Inspection: Visual inspection with video/image backup to detect defects. Straightedge and calibrated / ruler (for measuring evenness).

Penalty for non-compliance: 5% of monthly rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-5: Drainage

Table: Drainage for all Service Levels

Frequency of inspection: 4 times in a year (specifically before and after rainy season)

The Private Partner must ensure that all drainage elements are structurally sound, clean and without obstructions (due to sediment or debris) which may reduce their normal cross-section and impede the free flow of water. The basic principle used to determine the cleanliness of drainage structures or devices is “the percentage of the theoretical cross-section of the structure or device which is obstructed”. The obstructed percentage shall not exceed 15% of the theoretical cross-section. Also, erosion caused by runoff from drainage elements must be mitigated in order for (i) the structure itself to be protected against future structural failure and (ii) to avoid any significant damage and erosion to adjacent areas. Drainage elements include (but are not limited to) manholes, sumps, slot drains, catch pits, soak holes, flumes, outlets to subsoil drains, and access way/driveway culverts) and other drainage structures such as culverts (pipes and boxes), side drains, Irish crossings, vented fords or drift structures, etc.

Recommended Remedial measures: Cleaning silt up soils and debris in culvert barrel after rainy season, removal of bushes and vegetation, U/s of barrel, under barrel and D/s of barrel before rainy season. 15 days before onset of monsoon and within 30 days after end of rainy season.

Grace Period for cleaning and/or repairs (in days) granted after “First-day” of Penalty: 30.

Method of Inspection: Inspection is done visually to detect obstructions or defects. The percentage of obstruction is calculated for each type of drainage element, based on the measurement or estimate of obstructed cross-section areas. Compliance requires that drainage fulfils the requirements stated above. Determination of structural soundness is based solely on the judgment of the Independent Engineer.

Penalty for non-compliance: 5% of monthly rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-6: Bridges, Structures and Embankments

The Private Partner is responsible for the maintenance of all bridges, structures and embankments along the roads and road sections included in the contract. In particular, he is responsible for the correct functioning of the structures (including the paint of metallic structures if not galvanized, road surfaces on structures, condition and presence of guardrails, etc.) and the safety and comfort of road users while using the structures at designed speeds.

The Private Partner must immediately notify the Independent Engineer in case of any condition which may threaten the structural integrity of any structure. However, the reconstruction, structural repair and improvement of bridges (including culverts, retaining walls and embankments) is included in the Private Partner’s obligations, unless specified elsewhere in the contract.

OPM-6.1 Bridges and structures

The maintenance requirements are as set out in the table below.

Table: Service Levels for Bridges and other structures

Item	Requirements (for all Service Levels)	Measurement/ Detection. And frequency of inspection	Grace Period granted after “First-day” of Penalty
-------------	--------------------------------------------------	------------------------------------------------------------------------	------------------------------------------------------------------

Bridges and structures generally	Road surface, kerbs, guard rails, pedestrian hand railing and barriers must be in sound condition. Guardrails on bridges and access ramps must be present, painted or galvanized, and not deformed. There shall be no erosion or undermining of bridges and structures.	Visual inspection with video/image backup Monthly Inspection	Damages and defects must be repaired within (28)days.
Steel or other metalparts and structures	All metal parts of the overall structure shall be painted or otherwise protected and free ofcorrosion. All the corroded reinforcement shall need to be thoroughly cleaned from rusting and applied with anti-corrosive coating before carrying out the repairs to affected Concrete portion with 3poxy mortar/concrete	Visual inspection with video/image backup By-Annually Inspection	Any corrosion must be cleaned and over-painted using a paint system approved by the Independent Engineer, within (28)days.
Concrete structures (minor or non-structural repairs	Beams and all other structural parts must be in good conditions,free of spalling/delamination and fully functional. The cracks widerthan 0.30 mm shall not be more than one meter in length. There will be no rainwater seepage through deck slab	Visual inspection with video/image backup Quarterly inspection using mobile bridge inspection unit between 15 to30m	Grouting with epoxy mortar, investigating causes for cracker development and carry out necessary rehabilitation within 48 hours. Structural damage tobe notified to The Independent Engineer same day /immediately. Proposals for rectification submitted to The Independent Engineer within fourteen (14) days.
Retaining walls	Private Partner must ensure presence and adequate conditionof retaining walls and their drainage.	Visual inspection with video/image backup	Damages and defects must be repaired within twenty-eight (28)days.
Riverbeds	Private Partner must ensure freeflow of water under bridges and through culverts, and a clear, unobstructed channel at least equal to the structure opening forat least 100 meters upstream anddownstream. Private Partner must maintain design clearance under bridge. The Private Partner shall take all reasonable measures to control erosion around bridge abutmentsand piers.	Visual inspection with video/image backup	Causes for non-compliance must be eliminated within (56) days after water has sufficiently receded to allow minimum working conditions.
Level of expansion	No bump shall exist. Moreover, the upper surface of the pavement shall not	Straightedge and ruler measurement	Damages and defects must be repaired within

joints	be more than 5 mm below the upper surface of the expansion joint, measured with a 1 m straightedge put on top of the expansion joint in the direction of the road.	Daily inspection	(30)days.
Expansion joints	Expansion joints shall be operating properly be watertight if designed to be so, without any loose parts or visible wear and tear. The new expansion joint should have the same or better specifications as compared with the existing expansion joint.	Visual inspection with video/image backup	Temporary replacement of a non-compliant joint part with cold sand-asphalt must be made within (3) days. Damages and defects must be repaired within (28) days.
Leakage in	No damage to elastomeric	Quarterly	Replace of seal in
Expansion joints	sealant compound in strip seal expansion joint, no leakage of rain water through expansion joint in case of buried and asphalt plug and copper strip joint	inspection using mobile bridge inspection unit	expansion joint within 15 days
Debris and dust in strip seal expansion joint	No dust or debris in expansion joint gap.	Monthly inspection using mobile bridge inspection unit	cleaning of expansion joint gap thoroughly within 7 days
Drainage spouts	No down take pipe missing/broken below soffit of the deck slab. No silt, debris, clogging of drainage spout collection chamber.	Monthly inspection using mobile bridge inspection unit	Cleaning of drainage spouts thoroughly Replacement of missing/broken down take pipes with a minimum pipe extension of 500mm below soffit of slab. Providing sealant around the drainage spout if any leakages observed Within 3 days
Bridge Substructure Bearings	Delamination of rearing enforcement not more than 5%, cracking or tearing of rubber not more than 2 location per side, nor rupture of reinforcement or rubber	Bi-Annually inspection using mobile bridge inspection unit	In case of failure of even one bearing or my pier/abutment, shall be bearings on that pier/abutment shall be replaced, in order to get uniform load transfer on to bearings Within 3 months
Bridge Foundations; Scouring around foundations	Scouring shall not be lower than maximum scour level for the bridge	2 times in a year (before and after rainy season) Condition survey) and Visual inspection with video/image backup using Mobile Bridge Inspection Unit. in case of doubt, use	Suitable protection works around pier/abutment 30 days

		Underwater camera for inspection of deep wells in major Rivers.	
Suitable protection works around pier /abutment	Damaged of rough stone apron or bank revetment not more than 3 sq.m, damage to solid apron (concrete apron) not more than one sq.m	using mobile bridge inspection unit	30 days after defect observation or 2 weeks before onset of rainy season whichever is earlier.
Note: Any Structure during the entire concession period which is found that does not comply with all requirements of this Table will be prepared, rehabilitated or even reconstructed under the scope of the Private Partner.			

Method of Inspection: Visual inspection with video/image backups using mobile bridge inspection unit will be undertaken as part of the Formal and Informal Inspections. Bridges, structures and other items listed in the table above will be checked during Inspections at points selected by the Independent Engineer based on visual appearance. The Independent Engineer shall be the sole judge of compliance. If a specified criterion is not met, the one-kilometre section in which the defect occurs will be judged non-compliant.

Penalty for non-compliance: 10% Lump-sum rate for each non-conformance for every one km, to be applied for the one km section where the non-compliant bridge, structure or item is located, for each day during which the non-compliance persists.

OPM-6.2 Embankments, Slopes and Retaining walls

The Private Partner is responsible for the maintenance of all embankments, slopes and existing retaining walls along the roads included in the contract. Embankments and slopes must be kept stable, well compacted and without deformations and erosions. All existing retaining walls or other stabilization measures must be maintained stable and fully functional.

The regular maintenance and stabilization, including preventive maintenance and minor repairs of slopes and retaining walls is a part of the Private Partner's routine maintenance obligation. The Private Partner shall inspect slopes regularly and inform the Independent Engineer if he detects a risk of slope failure which would require major Rehabilitation or Improvement Works even that work will be in the scope of the Private Partner, except force Majeure as described in the contract.

The requirements for all cut and embankment slopes are shown in the Table below.

Table: Embankment and Slopes, for all Service Levels

Item	Service Level (applied to all Service Levels)	Measurement/ Detection	Grace Period granted after "First-day" of Penalty
Cut and Embankment slopes	Shall be stable and without deformations and erosions.	Visual inspection with video/image backup	Repairs must be completed within (28) days after the detection of the defect.

Retaining walls	Private Partner must ensure presence and adequate condition of retaining walls and their drainage.	Visual inspection with video/image backup	Damages and defects must be repaired within (28) days.
Removal of slides	Fallen slope material must be removed immediately.	Visual inspection with video/image backup for fallen slope material on shoulders or pavement	Fallen slope material must be removed. For quantities below 50 m ³ : from pavement within 12 hours after detection From shoulders and side drains within 48 hours after detection. Above 50 m ³ from pavement within 24 hours after detection from shoulders and side drains within seven (7) days after detection

Method of Inspection: Visual inspection with video/image backup of cut and fill slopes and of retaining walls will be undertaken as part of the Formal and Informal inspections.

Compliance with the criteria for slopes and retaining walls will be based on visual appearance. The Independent Engineer shall be the sole judge of compliance. If a specified criterion is not met, the one-kilometre section in which the deficit occurs will be judged non-compliant.

Penalty for non-compliance: 10% of monthly rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-7: Incident Response and Emergency Works

Incident response is defined as:

- a) The response to all storm damage and to other weather-related incidents;
- b) Carrying out special road patrols in advance of and during
 - Announced storms and other extreme weather-related events;
 - Major public events on road or adjacent to the road;
- c) Responding to accidents, incidents and other events that may affect:
 - the safety of road users or people adjacent to the road;
 - the safety and integrity of the road.

Incident response includes:

- Assisting police and other emergency service providers at accident sites with traffic management, detours and site clean-up; or clean-up of the accident debris including oil, fuel or other spillages, sufficient to maintain the safe passage of vehicles and pedestrians.
- Repairing any damage caused by the accident or incident and reinstating the road.
- Attending any other incident that may affect road user safety, road availability and integrity, and completing temporary works to make the site safe. This includes activities such as eliminating obstructions to the free flow of traffic and removing unauthorized deposits of materials and abandoned vehicles from the road and its Right-of-Way.
- During wet weather the Private Partner shall pay particular attention to sections of road which are likely to be inundated by water. The Private Partner shall provide signs on inundated sections of road, clear waterways, pit entrances and culverts of obstructions, and divert water from the roadway when possible and necessary.
- The Private Partner shall remove all blockages from bridges and culverts immediately after water levels permit such work to proceed. In case of flood, the highest level reached by the water on both sides of the road shall be recorded and informed the Independent Engineer within (07) days for his advice.

Response Time: This is the time within which the Private Partner must be on site with at least basic equipment for the clean-up, traffic control and site securing, after becoming aware or receiving notification of an incident. The Private Partner is required to record and report his own conformance with the Response Times. Where the Independent Engineer becomes aware of a failure to achieve the response time requirement, a non-conformance will be recorded by the Independent Engineer unless the Private Partner can provide clear and verifiable evidence to be acceptable by the Independent Engineer.

The term **Time of Notification** is defined as the time when the Private Partner is advised of the incident, accident or emergency; by the Independent Engineer/ Implementing Agency or by the Private Partner's personnel, or by a third party such as the Police or a member of the public.

Supplementary Resources. The Implementing Agency reserves the right to engage additional resources (chargeable to the Private Partner) to supplement those provided by the Private Partner if the Private Partner is unable to provide adequate resources to manage the Incident or Emergency Work.

Temporary Warning Signage. Where required, the Private Partner shall provide and install all necessary temporary warning signage, cones, high visibility netting etc.

Incident Response Site Boundaries. In certain circumstances during an incident the Private Partner may be required to undertake work outside the Contract boundary, or another Private Partner may be required to undertake work within the Contract's boundary. In either circumstance, undertaking of such work by a third party shall not constitute a breach of this Contract. In such instances of working outside the Contract boundaries, the provisions of the Contract shall nevertheless apply. The Independent Engineer/ Implementing Agency / GoP will confirm in writing any specific cross boundary protocols that may apply during large scale emergency events.

Incident Response - prior programming requirements. To facilitate conformance with the required response times, the Private Partner shall identify in advance all such high-risk locations or road sections within the Contract and the travel times required from the nearest Private Partner's camp. He shall have developed and instituted adequate systems and measures to ensure that timely response to any incident is achievable. The Private Partner shall also develop and maintain an up to date list of relevant contact numbers for the local Police, Hospitals, and utility providers. This information shall be readily available

to the Private Partner's personnel and to the Independent Engineer at all times and included in the Private Partner's Quality Assurance Plan (QAP).

Incident and Emergency Response Activities - Response Times

Maximum response time taken (from the Time of Notification):

- i. to contact and inform appropriate authorities: ten (10) minutes
- ii. to secure the site: Four (4) hours
- iii. remove materials, vehicles and any other obstructions etc. to re-establish normal traffic flow: twelve (12) hours, unless the volume of materials obstructing the road is such that it cannot be reasonably be expected that the Private Partner can remove them within 12 hours, with the Independent Engineer being the sole judge if this condition is applicable.

Method of Measurement:

For Incident and Emergency response times: Private Partner's and other parties' communication records and confirmation of actions taken by the Private Partner provided to the Independent Engineer/Implementing Agency in writing, or through on-site observations by the Independent Engineer/Implementing Agency or others. The Private Partner's resources provided to manage emergencies and incidents must be considered satisfactory by the Independent Engineer/Implementing Agency.

Penalty for non-compliance: A Penalty of Rs. 100,000/- is to be applied for each case of non-compliance.

OPM-8: Road signs, line-markings and road furniture

OPM-8.1: Signalling, Lighting and Road Safety

The Private Partner is responsible for ensuring that all horizontal and vertical signalling, as well as lighting, traffic lights, electro technical equipment, guardrails and road safety devices are fully functional and comply with the Specifications. The Service Level requirements for signalling, lighting and road safety devices are as shown in the Table below.

Signalling, lighting and road safety devices for all Service Levels:

Item	Service Level (applied to all Service Levels)	Measurement/Detection	Grace Period granted after “First-day” of Penalty
Vertical signs (Information signs, warning signs, traffic rulesigns, etc.)	Signal has to be present, complete, clean, legible, structurally sound and clearly visible day and night.	Visual inspection with video/image backup	Absent* or defect signs must be replaced within fourteen (14) days.
Horizontal Road markings	Have to be present, clearly legible during dayand night, and firmly attached to the pavement.	Visual inspection with video/image backup with video/image backup	Non-compliant parts must be repainted or replaced within (30) days.
Delineators and additional road furniture	Have to be present, clean, structurally sound, firmly attached tothe surface and clearly visible day and night.	Visual inspection with video/image backup with video/image backup	Non-compliant items must be replaced within (30) days.
Mileposts, guidance postsand similar markers	Have to be present, visible, complete, clean,legible and structurally sound; surface painted or otherwise covered.	Visual inspection with video/image backup with video/image backup	Absent* or defect elements must be replaced within (30) days.
Guardrails	Have to be present, clean, without any structural damage, without corrosion.	Visual inspection with video/image backup with video/image backup	Damaged guardrails must bereplaced within (30) days
Road and Street lighting, traffic lights and lighted signs	The Private Partner is responsible that all installed street and road lighting, and traffic lights, including power supply systems (cables, transformers, switching equipment, etc.) is functional at all times.	Visual inspection with video/image backup with video/image backup	Non-functioning lights and equipment shall be made functional within (14) days

* **“Absence”** refers to the signs and elements that are either listed on the initial road inventory or that have been installed by the Private Partner as Scope of Work.

The following further applies:

i) **Road Markings:** Road markings must include all carriageway markings required by the General Specifications, including edge lines, centre lines, double centre lines, etc. together with markings on intersections (give way line, side road centre line, pedestrian crossings, etc.), hazardous locations, parking and the markings on kerbs. All road markings should conform to the design standards stated in the Specifications. If the Specifications do not cover the Road Markings, the provisions of the General Specifications are to be applied.

Unless specified differently elsewhere in these Specifications, the use of thermoplastic reflective road marking materials is mandatory for:

- all lines in the primary road network; and
- the central line of the secondary road network.

However, for roads or road sections scheduled for pavement Rehabilitation Works to be completed within 24 months after the Start Date, other reflective road marking paint can be used until the Rehabilitation Works are completed. For all other road markings, the relevant parts of the General Specifications must be respected.

ii) **Road Signs:** Unless otherwise specified in the General Specifications, road signs to be installed by the Private Partner shall conform to the design standards defined in the Specifications. If the Specifications do not cover the standards for Road Signs, the provisions of the General Specifications are to be applied. A sign must be considered ineffective when it can no longer be detected or easily read by day and night from a vehicle travelling at the average speed of traffic on the road on which the sign is placed, or when the luminosity is 70% of the minimum values stated in the relevant standards. Ineffective signs must be replaced. For all roads with posted speed ≤ 80 km/h medium size signs will be used and for posted speed > 80 km/h large size signs shall be used.

iii) **Distance Marker Posts (mileposts):** The Private Partner’s scope of work is included for the provision and maintenance of distance marker posts on one side of the project road (at least one post per km) unless otherwise indicated in the Contract. The design and specifications of distance marker posts must conform to the relevant standards.

Method of measurement: Visual inspection with video/image backup. The Independent Engineer shall be the sole judge as to the compliance with the requirements.

Payment reduction for non-compliance: 10% of monthly rate for one km, to be applied for each case of non-compliance and for each day during which the non-compliance persists. If there are multiple cases of non-compliance on a one-km section, the Penalty shall be imposed separately for each case of non-compliance.

OPM-8.2: Retro-reflectivity of Road Signs and Markings

Table: Retro-reflectivity of Road Signs, Road Markings and Road Safety devices - all Service Levels

Item	Service Level (applied to all Service Levels)	Measurement/ Detection	Grace Period granted after “First-day” payment deduction
Vertical signs (Information signs, warning signs, traffic rule signs, etc.)	Reflectivity >80% of the values in the relevant design standard	Visual inspection with video/image backup with video/image backup	Non-compliant items must be replaced within fourteen (14) days.
Horizontal road markings	Luminance (Qd) or Retro reflectivity (RL) is greater than or equal to 80 mcd/m ² /lx	Visual inspection with video/image backup with video/image backup	If non-compliant, must be repainted or replaced within Fifty-Six (56) days.
Delineators and additional road furniture	Retro reflective items must have retained at least 80% of their original reflectivity.	Visual inspection with video/image backup with video/image backup	Non-compliant items must be replaced within twenty-eight (28) days.
Mileposts, guidance posts and similar markers	Retro reflective parts must have retained at least 70% of their original reflectivity.	Visual inspection with video/image backup with video/image backup	Absent or defect reflective elements must be replaced Fifty-Six (56) days.

Method of measurement: Inspection with testing apparatus. The Illumination level shall be measured with Luxmeter

Payment reduction for non-compliance: 5% of Lump-sum rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-9.1: Vegetation Control

Vegetation growth is to be limited to the heights, at the locations and with the restrictions advice by the Independent Engineer. However, the Sightline shall be free from obstruction by vegetation. And furthermore, the drainage structure shall also be free from the vegetation by all means.

The Plantation: The Vegetation/Plantation shall comply with the requirement and as desired by the Implementing Agency, Punjab EPA, or instructions issued time to time.

Table: Vegetation growth control for all Service Levels

Type	Maximum permitted height (cm)	Applied to:
1	maximum permitted height is 25 cm	Urban highway shoulders, medians, traffic islands and highway verges, grass in rest areas (including around rest area furniture).
2	maximum permitted height is 40 cm	Non-urban roads and large vegetated areas, including surface water channels with longitudinal gradient $\geq 3\%$.
3	maximum permitted height is 25 cm	Vegetation control around: Edge marker posts Signposts Bridge end and culvert markers Guardrails Sight rails Lighting Columns Bridge abutments
4	Vegetation-free or near Vegetation-free	Applies to vegetation control around: Culvert ends Culvert headwalls Side drains Culvert waterways Surface water channels with gradient $< 3\%$ (except where nominated for mowing in the specific contract requirements) Weigh pits Kerb and channel Lined channels All sealed surfaces Metalled shoulders Bridge decks.
5	Growth must be removed when it encroaches into the Vegetation-free Zone from the side or top.	Applies to vegetation control in the envelope (grey shaded area in Figure below), including trees, scrub or branches hanging into the Vegetation Free Zone (within 0.5m of the line of the edge marker posts or to within 6.0m above the pavement).
6	The Plantation/forestation under EIA Report	The Vegetation/Plantation shall comply with the requirement of the EIA Report. And as desired by the Punjab EPA, time to time in pursuance of the EIA Report/ updated EIA Report.

Grace Period in days for vegetation control after application of “**First-Day**” of Penalty: 14 days

Method of Inspection: The height of vegetation is defined as the vertical distance between the ground and the highest point of the plant. It is measured by using a ruler or measuring tape. Clearance is also measured with a ruler or tape; it is defined as the distance between the lowest point of the tree (or other plant) above the road surface.

The average height of vegetation in a one km section will be equal to the average of five values measured at points selected by the Independent Engineer/ Implementing Agency, with each point being at least 10 meters apart from the next.

Payment reduction for non-compliance: 10% of monthly rate for one km, to be applied for each one km section that does not comply and for each day during which the non-compliance persists.

OPM-9.2: Green Environment, Plantation of Trees, Horticulture”

The Plantation: The Vegetation/Plantation shall comply with the requirement and as desired by the Implementing Agency, Punjab EPA, or instructions issued time to time.

Type	Type and Minimum permitted (No)	Applied to:
1	Private Partner will be required to plant trees to a minimum of 60 trees on either side of road.	Rural highways, highway edge of RoW, rest areas (including around rest area furniture).
2	Type of trees allowed	Acacia (kikar), Shisham, Mahogany, Arjan, Toot and other shade bearing trees. And all fruit bearing trees, like Jamun, Mango, Cherry, etc. which also bear shade
3	Average height is 5m when grown	Private Partner will procure or make its own nursery for saplings, plant, water and nurture tree plants till the end of concession.

Grace Period in days for plantation of trees after application of “**First-Day**” of Penalty: 180 days

Inspection Frequency: Every Six Months

Method of Inspection: all trees will be numbered and a register of record of trees will be maintained by SCU. Bearing date of plantation, type of tree, avg girth of tree every year.

Trees will be enumerated. If enumeration falls below the required no in one km by more than 5 due to loss due to neglect or disease will cause event of penalty.

Payment reduction for non-compliance: Rs. 500 for loss of 5 trees in one km, to be applied for each one km section that does not comply.

OPM-10: Performance of the Self-Control Unit (SCU)

The correct execution depends to a large degree on the adequate functioning of the Private Partner’s Self-Control Unit – SCU and on the accuracy of the data provided by the SCU. The Independent Engineer will assess the performance of the SCU by comparing the data provided by the SCU in the

Monthly Compliance Tables for Maintenance Services with the data measured or observed during the Formal Inspection, whereas, the Formal Inspection shall be conducted jointly by the Independent Engineer, the Private Partner and the Implementing Agency /Project Manager or their representative.

The Private Partner must ensure that the data included in the Monthly Compliance Tables for Maintenance Services prepared by the SCU and provided to the Independent Engineer prior to the Formal Inspection is accurate and based on actual measurements or observations carried out by the SCU staff. The Independent Engineer will verify the data provided by the SCU in the Monthly Compliance Tables through Informal Inspections prior to the Formal Inspection schedule.

If the Independent Engineer finds that the data provided by the SCU for any road or road section is incorrect for more than 20% of the individual data on OPM's 1 to 9 for a road or road section, this will be considered as a non-compliance with OPM-10 and will trigger the enforcement of the corresponding Penalty under OPM-10 for the same road.

Furthermore, if a situation of non-conformance with OPM-10 continues for more than six months, the Implementing Agency will have sufficient grounds to terminate the contract, if he so desires.

Method of assessment: The assessment is done on the basis of the verification by the Independent Engineer of the 20 performance criteria and sub-criteria included under OPM-1 to OPM-9. The 20% threshold limit corresponds to four (4) criteria. If for any road or road section the information provided by the Private Partner's SCU in the Compliance Tables for five (5) or more criteria is incorrect, then this constitutes non-compliance with OPM-10 for that road or road section. An example for calculation is provided hereunder:

Sample Calculation - Payment Reduction for OPM-10

Data No.	OPM List	Non-compliant length (km)		
		Data from SCU Monthly Compliance Tables	Data from Monthly Inspection	Incorrect Data supplied by SCU*
1	OPM-1	0	0	No
2	OPM-2.1	2	4	YES
3	OPM-2.2	0	0	No
4	OPM-2.3	0	0	No
5	OPM-2.4	0	0	No
6	OPM-2.5	0	4	YES
7	OPM-2.6	2	2	No
8	OPM-2.7	0	0	No
9	OPM-2.8	1	1	No
10	OPM-3	0	0	No
11	OPM-4.1	0	0	No
12	OPM-4.2	0	0	No
13	OPM-5	0	0	No
14	OPM-6.1	0	0	No
15	OPM-6.2	1	3	YES
16	OPM-7	0	0	No
17	OPM-8.1	0	1	YES
18	OPM-8.2	1	1	No
19	OPM-9	3	5	YES

Total No. of Data: **19**

No. of "Yes":

5

20% of 19 OPM's would be 4 OPM's, which means that if the number of "Yes" is higher than 4 then the Penalty is triggered and to be applied.

* Only applies if road condition is "worse" than reported by SCU, not if better.

Payment reduction for non-compliance: 10% of monthly rate for the entire road or road section, to be applied for each road or road section for which incorrect information was provided by the Private Partner in the Monthly Compliance Tables for Maintenance Services for five (5) or more of the OPM criteria or sub-criteria.

Reduced Service Levels prior to Major Maintenance and Overlay

The Independent Engineer with the consultation of Implementing Agency /Project Manager may reduce the service levels (OPM) gradually, and especially six months prior to the Major Maintenance and Overlay / end of concession except OPM-2.1 “Potholes” and OPM-2.5 “Cleanliness of Pavement Surface and Shoulders” and Road Marking under OPM-8: Thermoplastic markings shall not be required for roads or road sections which are under Major Maintenance and Overlay. In those cases, reflective paint can be used instead. *(It would not be reasonable to require the rather expensive reflective pavement markings if the pavement is to be or/and overlaid for Major Maintenance and Overlay)*

Management Performance Measures (MPM's)

MPM's are a set of performance criteria to be fulfilled by the Private Partner that relate to the management of the road assets under contract. They include the quality and testing requirements to be fulfilled by the Private Partner, as well as the collection and reporting of various types of data and timely information to the Independent Engineer and the Project Manager, which may be needed as input to the Implementing Agency's Road Asset Management System (RAMS). The applicable MPM's for this contract are summarized in the table below.

Compliance with MPM's is measured either monthly or as otherwise defined in the Contract. Results are to be expressed as either being "in compliance" or "non-compliant". In case of non-compliance, such non-compliance will continue to be recorded until compliance has been established by the Private Partner to the satisfaction of the Independent Engineer and Project Manager.

In case of non-compliance with MPM's, the Penalty shall be enforced equal to the amounts stated in the table below, multiplied by the duration (in calendar days) of the non-compliance.

Table: Management Performance Measures (MPM's) applied under the contract

MPM #	Item	Compliance criteria	Penalty/day PKR
MPM-1	Quality Assurance Plan (QAP) with its Supplements (ITP including frequency of tests, desirable value of results and tolerance limit; Inspection/Check request system, Check request register, Mock-up Plan etc.)	The Private Partner shall submit draft Quality Assurance Plan (QAP) Ninety (90) days prior to the anticipated date for commencement of the Operations Period to the Independent Engineer / Independent Auditor In case of comments, the revised document must be resubmitted within fourteen (14) days after the issuance of written comments by Independent Engineer /Independent Auditor/ ProjectManager	1,000
MPM-2	O&M Manual	The Private Partner shall submit draft O&M Manual Ninety (90) days prior to the anticipated date for commencement of the Operations Period to the Independent Engineer in accordance with the section 19.7 of the Concession Agreement. The O&M Manual shall not be less qualitative than this document. The tolerance limit provided in the O&M Manual shall not be more than tolerance limit provided in this document.	1,000
MPM-3	Programme of Performance and	Must be complete and submitted by due date, separately. In case of Comments, the revised documents must be resubmitted within fourteen (14) days after the issuance of written comments by the Independent Engineer/ Independent Auditor / Project Manager. Penalty is enforced for each and every separate non-compliance, and for each day during which non-compliance persists.	Rs.1,000
MPM-4	Works Completion Reports		

MPM-5	DAILY REPORT: (cause for any Relief Order, Relief Costs, extensions of Time For Completion and any Change of Scope)	The Private Partner shall maintain complete and accurate records and provide promptly to the Independent Engineer, Independent Auditor and the Implementing Agency for any event or cause for any Relief Order, Relief Costs, extensions of Time for Completion and any Change in the Scope	Rs. 100/- per day of delay. If the event/ cause is not reported up to 28 day of its occurrence then no claim will be entertained
MPM-6	WEEKLY REPORT (Minutes of meeting of Board/stakeholder including site inspection)	The record of minutes of board meetings and shareholder meetings and other records, which records shall be subject to inspection and audit by the Implementing Agency, the Independent Engineer and the Independent Auditor, shall be included in the weekly report.	Rs. 100/- per day of delay. If the event caused for Change of scope, no claim will be entertained if reporting is after 28 days
MPM-7	Classified Traffic Count/Reporting System: with Toll Collection on Daily, Weekly and Monthly Basis on appropriate format of Report	In case of any breakdown of ETTM system, the Private Partner should switch to manual operating system with the required number of manpower and should update the system after restoration of system.	Rs. 100/- per day of delay of report In case of any breakdown of ETTM Rs.1000/hour/entry or exit point; and
MPM-8	Asset Inventory Report and updates	The reports will be submitted including but not limited to the following: i. Pavements, including shoulders (Hard Shoulder / Emergency Lane) ii. Slopes, Embankments and Cuttings iii. Drainage facilities, gullies, culverts, lined channels, sumps etc. iv. Signs, traffic signals and lighting installed v. Pavement markings vi. Bridges and Major Structures vii. All other road furniture (i.e. Safety Barriers, Lighting Points) Reports Must be complete and submitted by due date. Revision must be completed within twenty-one (21) days after the issuance of written comments by the Independent Engineer, Independent Auditor and Project Manager	1000
MPM-9	Submission of Designs	Initial Submission of complete design by due date. Revisions must be completed within fourteen (14) days after the issuance of written comments by the Independent Engineer/ Implementing Agency, or as agreed in writing with the Independent Engineer/ Implementing Agency.	1000
MPM-10	Monthly Compliance Tables for Maintenance Services	Submission of complete The Compliance Tables shall be submitted complete in all respect within 3 working day after each month.	2,000
MPM-11	Monthly Progress Report for Maintenance Work, and Overlay and Emergency Works including out of scope work (if any)	Initial Submission must be done within 3 days after each month. Revision and resubmission must be completed within seven (7) days after the issuance of written comments by the Independent Engineer/ Independent Auditor/ Implementing Agency.	5000

MPM-12	Road Asset Damage and Emergency Incident report	Submission by due date.	1000
MPM-13	Compliance with requirements in the areas of Environment, Social, Health and Safety of workers, and Traffic Management Plans	Private Partner has to be in compliance at all times. Penalty is enforced for each and every separate non- compliance, and for each day during which non- compliance persists.	100
MPM-14	Grievance Redressal System	The Private Partner shall submit draft Grievances Redressal Mechanism (GRM) Ninety (90) days prior to the anticipated date for commencement of the Operations Period to the Independent Engineer / Independent Auditor that how grievances and complaints will be received, monitored, resolved and reported on; The Private Partner shall submit Status of redressal of community complaints and time spent to resolve the community grievances	100

FACILITIES AND EQUIPMENT TO BE PROVIDED BY PRIVATE PARTNER

The Private Partner is obliged to provide the following equipment/facility:

Project Manager Office:

- i. Vehicles with fuels and maintenance for the entire project period
 - 1600 / 1800 CC, Vehicles: 1 numbers
- ii. Site Office with furniture and utilities services for the entire period of project
- iii. Computers, Printers, Scanner, Internet, Networking
- iv. MIS Access i/c internet facility

Independent Engineer Offices:

- v. Vehicles with fuels and maintenance for the entire project period
 - 1000 CC, Vehicles: 01 numbers
- vi. Site Office with furniture and utilities services for the entire period of project
- vii. Computers, Printers, Scanner, Internet, Networking
- viii. Mobile material testing lab equipped with necessary tools for sampling, testing and formal and informal inspection

Independent Auditor Offices:

- ix. Computers, Printers, Scanner, Internet, MIS Access

Data collection, reporting and documentation

The role of the Private Partner extends much beyond the execution/O&M of works and includes important activities related to Road Asset Management. This requires that the Private Partner must

- continuously collect different types of data and information on the roads included in the contract;
- organize and store such data and information in an electronic database;
- prepare various types of reports presenting the data and information, in formats to be agreed with the Independent Engineer/Auditor, for the Private Partner’s own use and for the use of the Independent Engineer/Auditor, Implementing Agency; and
- Submit those reports to the Independent Engineer/Auditor, Implementing Agency in accordance with deadlines defined in the contract.

The timely collection of data and presentation of reports are part of the Management Performance Measures (MPM’s). Some of the reports must be prepared periodically (typically monthly) while others are one-time reports to be submitted at specific times or at special occasions during the duration of the contract. The reports are listed in the table below and described in the sub-sections further below.

Report Title	Frequency / Periodicity
Quality Assurance Plan (QAP) with its Supplements (ITP including frequency of tests, desirable value of results and tolerance limit; Inspection/Check request system, Check request register, Mock-up Plan etc.) (MPM-1)	The Private Partner shall submit draft Quality Assurance Plan (QAP) Ninety (90) days prior to the anticipated date for commencement of the Operations Period to the Independent Engineer / Independent Auditor In case of comments, the revised document must be resubmitted within fourteen (14) days after the issuance of written comments by Independent Engineer /Independent Auditor/ Project Manager
O&M Manual (MPM-2)	The Private Partner shall submit draft O&M Manual Ninety (90) days prior to the anticipated date for commencement of the Operations Period to the Independent Engineer in accordance with the section 19.7 of the Concession Agreement. The O&M Manual shall not be less qualitative than this document. The tolerance limit provided in the O&M Manual shall not be more than tolerance limit provided in this document.

DAILY REPORT: (cause for any Relief Order, Relief Costs, extensions of Time For Completion and any Change of Scope) (MPM-5)	The Private Partner shall maintain complete and accurate records and provide promptly to the Independent Engineer, Independent Auditor and the Implementing Agency for any event or cause for any Relief Order, Relief Costs, extensions of Time For Completion and any Change of Scope for recommendation of the Independent Engineer, Independent Auditor and for approval of the Implementing Agency.
WEEKLY REPORT (Minutes of meeting of Board/stakeholder including site inspection) (MPM-6)	The record of minutes of board meetings and shareholder meetings and other records, which records shall be subject to inspection and audit by the Implementing Agency, the Independent Engineer and the Independent Auditor, shall be included in the weekly report.
Monthly Compliance Tables for Maintenance Services (MPM-10)	Monthly self-reporting by the Private Partner on his own compliance with Service Level requirements which is the basis for the part of the Private Partner Monthly Statement which relates to Maintenance Services.
Monthly Progress Report for Maintenance Work, Major Maintenance and Overlay and Emergency Works including out of scope work (if any)	Monthly report - Initial Submission must be done within 3 days after each month. Revision and resubmission must be completed within seven (7) days after the issuance of written comments by the Independent Engineer/ Independent Auditor/
(MPM-11)	Implementing Agency.
Classified Traffic Count/Reporting System with Toll Collection on Daily, Weekly and Monthly Basis on appropriate format (MPM-7)	Daily, Weekly and Monthly reports containing traffic data collected by flow counters shall be submitted to the Implementing Agency /Project Manager. Reports shall contain all details of Traffic Count with Toll Collection. ETTM system (Japanese or European Make) of minimum scale is to be provided which should have the capability of reporting daily, weekly and monthly classified traffic passing through each tolling gate. This system should also have the capability of automatic toll gate opening and closing system.
Monthly Progress Report for Maintenance Work, Major Maintenance and Overlay and Emergency Works including out of scope work (if any) (MPM-11)	Initial Submission must be done within 3 days after each month. Revision and resubmission must be completed within seven (7) days after the issuance of written comments by the Independent Engineer/ Independent Auditor/ Implementing Agency.
Road Asset Inventory Database and Condition Reports (MPM-8)	<ul style="list-style-type: none"> • Initial Report • Periodic updates as specified
Road Asset Damage Reports (MPM-12)	These are reports due each time when damages to road assets occur
Design Reports (MPM-9)	These are required for all works requiring a detailed engineering design.
1. Programme of Performance and 2. Works Completion Reports (MPM-3 & 4)	Separate reports for each 1. Programme of Performance and 2. Works Completion Reports Shall be submitted by due date

<p>Report for Environment, Social, Health and Safety of workers, and Traffic Management Plans (MPM-13)</p>	<p>Shall be submitted by due date, separately for</p> <ul style="list-style-type: none"> i. Environment including addressing issues related to child labour, sexual exploitation, sexual abuse and sexual harassment and women empowerment (provide equal pay to men and women for work of equal value, in accordance with national laws and international treaty obligations) ii. Social, Health and Safety of workers Report iii. Traffic Management Plans Report
<p>Grievance Redressal System (MPM-15)</p>	<p>The Private Partner shall submit status of redressal of community complaints and time spent to resolve the community grievances</p>

SCHEDULE I – INSURANCES

PART I – CONSTRUCTION PERIOD INSURANCES

It is mandatory that the following insurances should be acquired:

Insurance Type	Coverage Description
Contractor’s All Risk (CAR) Insurance	Covers damage to works (toll plaza, weighbridge etc.), construction equipment, and materials due to fire, flood, theft, etc.
Third-Party Liability Insurance	Covers bodily injury or property damage to third parties during construction (e.g., local public or passing vehicles).
Workers’ Compensation Insurance	Statutory cover for injuries, illness, or death of workers during construction.

In addition to the above, the Private Partner may take on additional insurances as required by it.

PART II –INSTALLATION PERIOD INSURANCES

It is mandatory that the following insurances should be acquired:

Insurance Type	Coverage Description
Contractor’s All Risk (CAR) Insurance	Covers damage to works (toll plaza, weighbridge etc.), construction equipment, and materials due to fire, flood, theft, etc.
Third-Party Liability Insurance	Covers bodily injury or property damage to third parties during construction (e.g., local public or passing vehicles).
Workers’ Compensation Insurance	Statutory cover for injuries, illness, or death of workers during construction.

In addition to the above, the Private Partner may take on additional insurances as required by it.

PART III – OPERATIONS PERIOD INSURANCES

It is mandatory that the following insurances should be acquired:

Insurance Type	Coverage Description
Property All-Risks Insurance	Covers damage or loss to toll plaza, ETTM equipment, buildings, etc., due to fire, flood, vandalism, etc.
Business Interruption Insurance	Covers loss of toll revenue due to interruption from insured events (e.g., fire, flood).
Public Liability Insurance	Covers claims from third parties for injury or property damage (e.g., from system malfunction, vehicle damage).
Motor Vehicle Insurance <i>(if weighbridge or maintenance vehicles are owned)</i>	Mandatory cover for vehicles used in operations.
Cash Insurance	Coverage of Cash in transit collected from toll plaza

In addition to the above, the Private Partner may take on additional insurances as required by it.

SCHEDULE J – SPECIFIED PRIVATE PARTNER PERMITS

The permits from the following entities shall constitute the Private Partner Specified Permits, to the extent the same are required to be procured and are applicable/relevant for the purposes of the Project:

1. Communication & Works Department, Government of Punjab
2. Punjab Public Private Partnership Authority
3. Punjab Environmental Protection Agency.
4. Water & Power Development Implementing Agency, Government of Pakistan.
5. National Transmission & Despatch Company Limited.
6. Sui Northern Gas Company Limited.
7. Pakistan Telecommunication Implementing Agency.
8. Oil & Gas Development Corporation.
9. Forest Department, Government of Punjab.
10. Irrigation Department, Government of Punjab.
11. Mosques, Imam Barghas, Places of Religious Affairs, Government of Punjab.
12. Graveyards through Ministry of Municipalities and Rural Affairs, Government of Punjab.
13. Culture Department, Government of Punjab.

SCHEDULE K – CORPORATE DOCUMENTS

1. The certified copies of the memorandum and articles of association of the Private Partner;
2. Board Resolution duly passed by the board of directors of the Private Partner resolving that the Private Partner may undertake the Project and stating the name of the authorized signatory of the Private Partner who shall sign this Agreement, the Implementing Agency Agreements, the Financing Documents, and the Project Agreements (to which the Private Partner is a party) and all other necessary documents in favour of the Implementing Agency for and on behalf of the Private Partner;
3. Certificate of incorporation; and
4. Latest corporate filing with the Securities & Exchange Commission of Pakistan.

SCHEDULE L – FORM OF CONSTRUCTION PERFORMANCE GUARANTEE

To:
**PROJECT MANAGER,
FAISALABAD- CHINIOT-SARGODHA ROAD PROJECT
ROAD PROJECT
GOVERNMENT OF PUNJAB,**

GUARANTEE NO. (hereinafter referred to as the “**Guarantee**”)
Dated:

[INSERT NAME OF BANK], being the Guarantee issuing bank (hereinafter referred to as the “**Guarantor Bank**”) understands that the following parties have entered into an agreement entitled the “PPP CONTRACT” dated [●], 2026 (hereinafter referred to as the “**Agreement**”) for the design, engineering, construction, installation, financing, commissioning, operations and maintenance of the Faisalabad-Chiniot-Sargodha Road Project under the public private partnership mode:

- (a) **THE GOVERNOR OF PUNJAB** (THROUGH COMMUNICATION AND WORKS DEPARTMENT), having its offices Old Anarkali, Lahore (hereinafter referred to as the “**Implementing Agency**”); and
- (b) [●], a company incorporated under the laws of Pakistan, having its registered office located at [●] (hereinafter referred to as the “**Private Partner**”, which expression shall, where the context so permits, be deemed to mean and include its successors in interest, administrators, executors, and permitted assigns).

Further, the Guarantor Bank understands that pursuant to the terms of the Agreement, the Private Partner is required to provide the Implementing Agency with a bank guarantee in an amount equal to PKR [INSERT AMOUNT IN NUMBERS]/- (Pakistani Rupees [INSERT AMOUNT IN WORDS]).

The above premised, the Guarantor Bank hereby undertakes irrevocably and unconditionally to pay to the Implementing Agency, without any notice, reference or recourse to the Private Partner or to any other entity or without any recourse or reference to the Agreement, any sum or sums (or any part thereof) equivalent in aggregate up to but not exceeding a maximum amount of:

PKR [●]/- (Pakistani Rupees [●])
(hereinafter referred to as the “**Guaranteed Amount**”)

immediately, however not later than within ten (10) business days from the date of the Guarantor Bank’s receipt of the Implementing Agency’s first written demand (hereinafter referred to as the “**Demand**”) at the Guarantor Bank’s offices located at [INSERT ADDRESS OF THE GUARANTOR BANK AT WHICH DEMAND WILL BE MADE], such Demand stating:

- (a) the total amounts demanded; and
- (b) the bank account to which the amounts demanded pursuant to the demand are to be credited/transferred (hereinafter referred to as the “**Bank Account**”).

A Demand shall only be honoured by the Guarantor Bank if it is made by and bears the signature of an authorised officer or representative of the Implementing Agency.

The Guarantor Bank shall unconditionally honour a Demand hereunder made in compliance with this Guarantee immediately (however not later than ten (10) business days) of its receipt of the Implementing Agency’s Demand, as stated earlier, and shall transfer the amount specified in the Demand to the Bank Account.

This Guarantee shall come into force and shall become automatically effective upon its issuance.

After having come into force, this Guarantee and the Guarantor Bank’s obligations hereunder shall expire on [INSERT DATE AND TIME] (the **Guarantee Expiry Hard Date**) irrespective of whether this Guarantee has been returned to the Guarantor Bank provided that, in the event that the Implementing Agency issues a Demand to the Guarantor Bank on or immediately prior to the Guarantee Expiry Hard Date and the same is received by the Guarantor Bank on or prior to the Guarantee Expiry Hard Date, the Guarantor Bank shall honour such Demand.

Upon expiry, this Guarantee shall be returned to the Private Partner without undue delay. Multiple Demands may be made by the Implementing Agency under this Guarantee but the Guarantor Bank’s aggregate liability shall be restricted up to the Guaranteed Amount.

Multiple Demands may be made by the Implementing Agency under this Guarantee but the Guarantor Bank’s aggregate liability shall be restricted up to the Guaranteed Amount.

The Guarantor Bank hereby agrees that any part of the Agreement may be amended, renewed, extended, modified, compromised, released or discharged by mutual agreement between the Implementing Agency and the Private Partner without:

- (a) in any way impairing or affecting the Guarantor Bank's liabilities hereunder;
- (b) notice to the Guarantor Bank; and
- (c) the necessity for any additional endorsement, consent or guarantee by the Guarantor Bank.

This Guarantee for its validity period shall not be affected in any manner by any change in the Guarantor Bank's constitution or of the Private Partner's constitution or of their successors and assignees and this Guarantee shall be legally valid, enforceable and binding on each of their successors and permitted assignees.

All references to any contract or other instruments are by way of reference only and shall not affect the Guarantor Bank's obligations to make payment under the terms of this Guarantee.

The Implementing Agency shall not assign / transfer or cause or permit to be assigned or transferred any of its rights, title, interests and benefits of this Guarantee without the prior written consent of the Guarantor Bank and the Private Partner.

If one or more of the provisions of this Guarantee are held or found to be invalid, illegal, or unenforceable for any reason whatsoever, in any respect, any such invalidity, illegality, or unenforceability of any provision shall not affect the validity of the remaining provisions of this Guarantee.

The Guarantor Bank hereby declares and confirms that under its constitution and applicable laws, it has the necessary power and Implementing Agency to:

- (a) enter into, execute and deliver this Guarantee; and
- (b) perform the obligations it has undertaken under this Guarantee, which obligations are valid and legally binding on and enforceable against the Guarantor Bank under the laws of Pakistan.

Further, the Guarantor Bank hereby declares and confirms that the signatory(ies) to this Guarantee is/are its duly authorized officer(s) to execute this Guarantee.

This Guarantee and all rights and obligations arising from this Guarantee shall be governed and construed in all respects in accordance with the laws of Pakistan. The courts in Lahore, Pakistan shall have exclusive jurisdiction in respect of any dispute relating to any matter contained herein.

**EXECUTED & ISSUED
FOR & ON BEHALF OF THE GUARANTOR BANK**

.....
NAME:
DESIGNATION:
DATED:

WITNESSES

WITNESS I

.....
NAME:
CNIC No.:

WITNESS II

.....
NAME
CNIC No.:

SCHEDULE M – FORM OF O&M PERFORMANCE GUARANTEE

To:
**PROJECT MANAGER,
FAISALABAD- CHINIOT-SARGODHA ROAD PROJECT
GOVERNMENT OF PUNJAB**

GUARANTEE NO. (hereinafter referred to as the “**Guarantee**”)

Dated:

[INSERT NAME OF BANK], being the Guarantee issuing bank (hereinafter referred to as the “**Guarantor Bank**”) understands that the following parties have entered into an agreement entitled the “**PPP CONTRACT**” dated [●], 2026 (hereinafter referred to as the “**Agreement**”) for the design, engineering, construction, financing, commissioning, operations and maintenance of the Faisalabad-Chiniot-Sargodha Road Project under the public private partnership mode:

- (a) **THE GOVERNOR OF PUNJAB** (THROUGH COMMUNICATION AND WORKS DEPARTMENT), having its offices at Old Anarkali, Lahore (hereinafter referred to as the “**Implementing Agency**”); and
- (b) [●], a company incorporated under the laws of Pakistan, having its registered office located at [●], Pakistan (hereinafter referred to as the “**Private Partner**”, which expression shall, where the context so permits, be deemed to mean and include its successors in interest, administrators, executors, and permitted assigns).

Further, the Guarantor Bank understands that pursuant to the terms of the Agreement, the Private Partner is required to provide the Implementing Agency with a bank guarantee in an amount equal to PKR [INSERT AMOUNT IN NUMBERS]/- (Pakistani Rupees [INSERT AMOUNT IN WORDS]).

The above premised, the Guarantor Bank hereby undertakes irrevocably and unconditionally to pay to the Implementing Agency, without any notice, reference or recourse to the Private Partner or to any other entity or without any recourse or reference to the Agreement, any sum or sums (or any part thereof) equivalent in aggregate up to but not exceeding a maximum amount of:

PKR [●]/- (Pakistani Rupees [●])
(hereinafter referred to as the “**Guaranteed Amount**”)

immediately, however not later than within ten (10) business days from the date of the Guarantor Bank’s receipt of the Implementing Agency’s first written demand (hereinafter referred to as the “**Demand**”) at the Guarantor Bank’s offices located at [INSERT ADDRESS OF THE GUARANTOR BANK AT WHICH DEMAND WILL BE MADE], such Demand stating:

- (a) the total amounts demanded; and
- (b) the bank account to which the amounts demanded pursuant to the demand are to be credited/transferred (hereinafter referred to as the “**Bank Account**”).

A Demand shall only be honoured by the Guarantor Bank if it is made by and bears the signature of an authorised officer or representative of the Implementing Agency.

The Guarantor Bank shall unconditionally honour a Demand hereunder made in compliance with this Guarantee immediately (however not later than ten (10) business days) of its receipt of the Implementing Agency’s Demand, as stated earlier, and shall transfer the amount specified in the Demand to the Bank Account.

This Guarantee shall come into force and shall become automatically effective upon its issuance.

After having come into force, this Guarantee and the Guarantor Bank’s obligations hereunder shall expire on [INSERT DATE AND TIME] (the **Guarantee Expiry Hard Date**) irrespective of whether this Guarantee has been returned to the Guarantor Bank provided that, in the event that the Implementing Agency issues a Demand to the Guarantor Bank on or immediately prior to the Guarantee Expiry Hard Date and the same is received by the Guarantor Bank on or prior to the Guarantee Expiry Hard Date, the Guarantor Bank shall honour such Demand.

Upon expiry, this Guarantee shall be returned to the Private Partner without undue delay. Multiple Demands may be made by the Implementing Agency under this Guarantee but the Guarantor Bank’s aggregate liability shall be restricted up to the Guaranteed Amount.

The Guarantor Bank hereby agrees that any part of the Agreement may be amended, renewed, extended, modified, compromised, released or discharged by mutual agreement between the Implementing Agency and the Private Partner without:

- (a) in any way impairing or affecting the Guarantor Bank's liabilities hereunder;
- (b) notice to the Guarantor Bank; and
- (c) the necessity for any additional endorsement, consent or guarantee by the Guarantor Bank.

This Guarantee for its validity period shall not be affected in any manner by any change in the Guarantor Bank's constitution or of the Private Partner's constitution or of their successors and assignees and this Guarantee shall be legally valid, enforceable and binding on each of their successors and permitted assignees.

All references to any contract or other instruments are by way of reference only and shall not affect the Guarantor Bank's obligations to make payment under the terms of this Guarantee.

The Implementing Agency shall not assign / transfer or cause or permit to be assigned or transferred any of its rights, title, interests and benefits of this Guarantee without the prior written consent of the Guarantor Bank and the Private Partner.

If one or more of the provisions of this Guarantee are held or found to be invalid, illegal, or unenforceable for any reason whatsoever, in any respect, any such invalidity, illegality, or unenforceability of any provision shall not affect the validity of the remaining provisions of this Guarantee.

The Guarantor Bank hereby declares and confirms that under its constitution and applicable laws, it has the necessary power and Implementing Agency to:

- (a) enter into, execute and deliver this Guarantee; and
- (b) perform the obligations it has undertaken under this Guarantee, which obligations are valid and legally binding on and enforceable against the Guarantor Bank under the laws of Pakistan.

Further, the Guarantor Bank hereby declares and confirms that the signatory(ies) to this Guarantee is/are its duly authorized officer(s) to execute this Guarantee.

This Guarantee and all rights and obligations arising from this Guarantee shall be governed and construed in all respects in accordance with the laws of Pakistan. The courts in Lahore, Pakistan shall have exclusive jurisdiction in respect of any dispute relating to any matter contained herein.

**EXECUTED & ISSUED
FOR & ON BEHALF OF THE GUARANTOR BANK**

.....
NAME:
DESIGNATION:
DATED:

WITNESSES

WITNESS I

WITNESS II

.....
NAME:
CNIC No.:

.....
NAME
CNIC No.:

SCHEDULE N - INDICATIVE INDEPENDENT ENGINEER TERMS OF REFERENCE

1. GENERAL

The Independent Engineer of the Project shall, in principle be responsible for review of designs, drawings, construction, progress monitoring, and affirmation of all certification done by the Private Partner.

The Independent Engineer shall supervise that the requirement of the PPP Contract and its various appendices, other than mentioned for Independent Auditor-IA of the Project, are met by the Private Partner and in case of any discrepancy / deviations, and shall inform Implementing Agency and the Private Partner. The responsibility of the Independent Engineer during various phases of design review, construction and Operation and Maintenance shall be but not limited to the following.

2. DESIGN REVIEW PHASE

- (a) Review and approve the adequacy of topographical surveys, geo-technical and sub-soil investigations, hydrological investigation for the Project Road and other structures.
- (b) Review and approve the condition survey of existing bridges, culverts and other structures conducted by the Private Partner to establish the structure adequacy, and proposed strengthening for the Project Road.
- (c) Review and approve the design and Construction drawings prepared and submitted by the Private Partner to the Independent Engineer for the construction of various components of the road, bridges / structures, estimates, reports and other deliverables with regard to:
 - (i) Adequacy, completeness, optimality and capability of design to perform as required in anticipated operating conditions and to meet the technical requirements specified in this Agreement.
 - (ii) Identification of project design features or any major equipment component that does not appear to meet design, performance requirements or fails to adhere to good engineer practice.
 - (iii) Provide an opinion on the quality of the design with respect to their effect on the anticipated service life of the facility, the degree of maintenance needed to meet performance requirements and long term availability over the term of the Concession.
- (d) Review and approve reports prepared and submitted by the Private Partner, with respect to the traffic, traffic management etc.
- (e) Review and approve the implementation schedule of engineering, design, procurement and construction of the Project submitted by the Private Partner and determine that adequate provisions have been made for the following:
 - (i) Design
 - (ii) Raw material sourcing
 - (iii) Raw material processing equipment
 - (iv) Utilities
 - (v) Other Equipment procurement
 - (vi) Construction
 - (vii) Testing
- (f) Review and approve the capability of the proposed toll collection system to perform as required in anticipated operating conditions
- (g) Review and approve the Operation and Maintenance during the Operations Period
- (h) Review and comment on the consistency of all project documents
- (i) Review the available permits or permit applications
- (j) Review the environmental management plan for the Project Road during the Construction Period (and the Operations Period, if required)
- (k) Review and comment on the utilities arrangement for the Project, including, but not limited to the water supply and electricity supply
- (l) Review and approve the adequacy and reasonableness of the Project co-ordination and monitoring systems

-
- (m) Review quality assurance and quality control provisions during the design, and construction and O&M phase
 - (i) Independent Engineer is required to prove due diligence and utmost expertise in ensuring that quality control provisions are maintained at all times during the Construction Period and the Operations Period
 - (ii) Independent Engineer will be responsible to report to the Implementing Agency/ Financiers in case the quality standards and quality control provisions are not maintained on the Project Site
 - (n) Audit the safety of the Project Road during Construction Period and the Operations Period

3. ROLE OF INDEPENDENT ENGINEER DURING CONSTRUCTION PHASE

- (a) The duties of the Independent Engineer are to supervise the works and to approve the materials and workmanship of the works. As stated in the PPP Contract, the Independent Engineer shall have no Implementing Agency to relieve the Private Partner of any of its duties or to impose additional obligations
- (b) The Independent Engineer shall review and approve works program prepared and submitted by the Private Partner. Payments will be made upon Independent Engineer's certification, with final approval of Independent Auditor
- (c) The Independent Engineer shall review the material testing results and mix designs and to order special tests of materials and / or completed works, and / or order removal and substitution of substandard material and / or work as required
- (d) The Independent Engineer shall review quality assurance and quality control during construction period.
- (e) The Independent Engineer shall ensure that the Construction Works is accomplished in accordance with the Applicable Standards
- (f) The independent Engineer shall ensure that works executed at site are in compliance with C&W Road and Bridges Specifications 2022 or modified time to time.
- (g) The Independent Engineer shall identify construction delays, if any and recommend to the Implementing Agency/Lender the remedial measures to expedite the progress
- (h) Review the "As Built" drawings for each component of the Project Works prepared and submitted to Independent Engineer by the Private Partner
- (i) Review the safety measures provided for the traffic and Project workers
- (j) Determine any extension of the Project Completion Schedule, to which the Private Partner is entitled and shall notify Implementing Agency/ Financiers, accordingly
- (k) Review compliance by the Private Partner of its obligations under the PPP Contract
- (l) Issue Substantial Completion Certificate after checking the results of prescribed test
- (m) Issue Substantial Completion Certificate duly appended with a list of outstanding item (Project Completion Check List)
- (n) For performance testing, the Independent Engineer will
 - (i) Review test procedures developed by the Private Partner appointed O&M Contractor and confirm compliance with applicable test codes and standards and with testing criteria specified in PPP Contract and its Schedules
 - (ii) Review the quality control reports, material testing results and mix design and to order special tests of materials and/or completed works, and/or order removal and substitution of substandard materials and/or works as required
 - (iii) Review test reports prepared by Private Partner or Private Partner's testing consultant

-
- (iv) Monitor successful completion of each Project Completion Check List Items. Make one final visit to Project Site to verify that Project Completion Check List Items have been completed and thereafter sign and submit the Final Project Construction Completion Certificate

4. ROLE OF INDEPENDENT ENGINEER DURING OPERATIONS PERIOD

- (a) Review and approve work plan and schedules of various operation and maintenance activities
- (b) Review and approve the O&M Manual(s) prepared by the Private Partner for their completeness and compatibility with those of similar facilities
- (c) Review and approved the performance of Operation and Maintenance activities including equipment, service, traffic, operation and safety
- (d) Ensure compliance of the operation and maintenance requirements as are provided in Schedule H and recommend penalties as defined therein.
- (e) Recommend necessary actions to the Implementing Agency/ Financiers to undertake maintenance obligations of the Private Partner at risk and cost of the Private Partner in the event of his failure to carry out the Operations and Maintenance
- (f) Undertake audit of the traffic using the Project Road at reasonable times
- (g) Review and inspect the Project Road at all reasonable times and upon reasonable notice to the Private Partner during the Operations Period and issue a Construction Inspection Report and O&M Inspection Report of such inspections to the Financiers
- (h) Review the accident record, prepared and submitted by Private Partner, on the Project Road and suggest remedial measures at reasonable intervals

5. THE OTHER FUNCTIONS OF THE INDEPENDENT ENGINEER SHALL BE THE FOLLOWING.

- (a) Perform functions, including issue of directions to the Private Partner, in respect of the Emergency De-commissioning of the Concession Assets as provided in this Agreement.
- (b) Verify and ascertain evidence of insurance cover as provide in this Agreement
- (c) Perform functions in respect of Change of Scope as provided in this Agreement
- (d) Inspect the Concession Assets including the Project Road at the time of handing over thereof by the Private Partner to the Financiers / Implementing Agency and perform functions in respect to such handing over as provided in this Agreement

SCHEDULE O – FORM OF VESTING CERTIFICATE

- a. [insert details] being the Independent Engineer, and [insert details] being the Independent Auditor, refer to the agreement entitled “PPP Contract” dated [●], 2026 (as amended from time to time) (the “**PPP Contract**”) relating to, *inter alia*, the designing, construction, development, operation and maintenance (through Public Private Partnership on a design, build, finance, operate and transfer basis) the Faisalabad-Chiniot-Sargodha Road Project (the “**Project**”);

- b. The Independent Engineer and the Independent Auditor hereby acknowledge the compliance the fulfilment by the Private Partner of the Divestment Requirements set forth in Article 24 of the PPP Contract and, on such basis, hereby issue this Vesting Certificate (the “**Certificate**”). Upon issuance of this Certificate, the Implementing Agency shall be deemed to have acquired, and all title and interest of the Private Partner in or about the Concession Assets (*as defined in the PPP Contract*) and the same shall be deemed to have vested unto the Implementing Agency, free from any encumbrances, charges and liens whatsoever, other than such encumbrances which the Implementing Agency was responsible to prevent under the terms of this Agreement.

Signed this day of, at

FOR AND ON BEHALF OF
[INSERT DETAILS]

Signature

Name

Designation

Signed in the presence of the following witnesses:

Signature

Signature

Name

Name

NIC No.

NIC No.

FOR AND ON BEHALF OF
[●]

Signature

Name

Designation

Signed in the presence of the following witnesses:

Signature

Signature

Name

Name

NIC No.

NIC No.

SCHEDULE P – TOLL NOTIFICATION STRUCTURE

1. The base year toll rates shall be applicable, subject to paragraph no. 2 hereinbelow, once the specific Project road is fully operational along with ancillary facilities, are fixed as under:

Faisalabad Toll plaza		FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37
Motor cycle	PKR	-	-	-	-	-	-	-	-	-	-	-	-	-
Rickshaw	PKR	20	20	25	20	20	25	25	30	30	35	40	40	45
Car/Jeep/Taxi	PKR	60	65	75	80	90	95	105	115	130	140	150	160	175
Commercial /Suzuki Pickup	PKR	165	180	200	220	240	265	295	320	355	385	415	445	480
Hiace wagon	PKR	165	180	200	220	240	265	295	320	355	385	415	445	480
Mini Bus	PKR	165	180	200	220	240	265	295	320	355	385	415	445	480
Bus	PKR	190	210	230	255	280	310	340	375	410	445	480	515	560
Loader pickup	PKR	165	180	200	220	240	265	295	320	355	385	415	445	480
Tractor trolley	PKR	155	170	190	205	225	250	275	300	330	355	385	415	450
2-Axle	PKR	240	265	290	320	350	385	425	470	515	555	600	650	700
3-Axle	PKR	240	265	290	320	350	385	425	470	515	555	600	650	700
4-Axle	PKR	355	390	430	475	525	575	630	695	765	825	890	965	1,040
5 Axle & Above	PKR	355	390	430	475	525	575	630	695	765	825	890	965	1,040

FY38	FY39	FY40	FY41	FY42	FY43	FY44	FY45	FY46	FY47	FY48	FY49	FY50	FY51	FY52	FY53
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	50	55	60	65	70	75	80	90	95	100	110	120	130	140	150
190	205	220	240	260	280	300	325	350	380	410	440	475	515	555	600
520	560	605	655	710	765	825	890	965	1,040	1,125	1,215	1,310	1,415	1,530	1,650
520	560	605	655	710	765	825	890	965	1,040	1,125	1,215	1,310	1,415	1,530	1,650
520	560	605	655	710	765	825	890	965	1,040	1,125	1,215	1,310	1,415	1,530	1,650
605	650	705	760	820	885	960	1,035	1,115	1,205	1,305	1,405	1,520	1,640	1,770	1,915
520	560	605	655	710	765	825	890	965	1,040	1,125	1,215	1,310	1,415	1,530	1,650
485	525	565	610	660	715	770	830	900	970	1,045	1,130	1,220	1,320	1,425	1,540
755	820	885	955	1,030	1,115	1,200	1,300	1,400	1,515	1,635	1,765	1,905	2,060	2,225	2,400
755	820	885	955	1,030	1,115	1,200	1,300	1,400	1,515	1,635	1,765	1,905	2,060	2,225	2,400
1,125	1,215	1,310	1,415	1,530	1,650	1,785	1,925	2,080	2,245	2,425	2,620	2,830	3,055	3,300	3,565
1,125	1,215	1,310	1,415	1,530	1,650	1,785	1,925	2,080	2,245	2,425	2,620	2,830	3,055	3,300	3,565

Chiniot and Sargodha Toll plaza		FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37
Motor cycle	PKR	-	-	-	-	-	-	-	-	-	-	-	-	-
Rickshaw	PKR	20	20	25	20	20	25	25	30	30	35	40	40	45
Car/Jeep/Taxi	PKR	60	65	75	80	90	95	105	115	130	140	150	160	175
Commercial /Suzuki Pickup	PKR	165	180	200	220	240	265	295	320	355	385	415	445	480
Hiace wagon	PKR	165	180	200	220	240	265	295	320	355	385	415	445	480
Mini Bus	PKR	165	180	200	220	240	265	295	320	355	385	415	445	480
Bus	PKR	190	210	230	255	280	310	340	375	410	445	480	515	560
Loader pickup	PKR	165	180	200	220	240	265	295	320	355	385	415	445	480
Tractor trolley	PKR	155	170	190	205	225	250	275	300	330	355	385	415	450
2-Axle	PKR	240	265	290	320	350	385	425	470	515	555	600	650	700
3-Axle	PKR	240	265	290	320	350	385	425	470	515	555	600	650	700
4-Axle	PKR	355	390	430	475	525	575	630	695	765	825	890	965	1,040
5 Axle & Above	PKR	355	390	430	475	525	575	630	695	765	825	890	965	1,040

FY38	FY39	FY40	FY41	FY42	FY43	FY44	FY45	FY46	FY47	FY48	FY49	FY50	FY51	FY52	FY53
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	50	55	60	65	70	75	80	90	95	100	110	120	130	140	150
190	205	220	240	260	280	300	325	350	380	410	440	475	515	555	600
520	560	605	655	710	765	825	890	965	1,040	1,125	1,215	1,310	1,415	1,530	1,650
520	560	605	655	710	765	825	890	965	1,040	1,125	1,215	1,310	1,415	1,530	1,650
520	560	605	655	710	765	825	890	965	1,040	1,125	1,215	1,310	1,415	1,530	1,650
605	650	705	760	820	885	960	1,035	1,115	1,205	1,305	1,405	1,520	1,640	1,770	1,915
520	560	605	655	710	765	825	890	965	1,040	1,125	1,215	1,310	1,415	1,530	1,650
485	525	565	610	660	715	770	830	900	970	1,045	1,130	1,220	1,320	1,425	1,540
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755	820	885	955	1,030	1,115	1,200	1,300	1,400	1,515	1,635	1,765	1,905	2,060	2,225	2,400
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1,125	1,215	1,310	1,415	1,530	1,650	1,785	1,925	2,080	2,245	2,425	2,620	2,830	3,055	3,300	3,565

2. The abovementioned Toll Notification table shall remain fixed for the Accounting Year in which the relevant section of the Project Road achieves its Commercial Operations Date. Thereafter, the Toll Notification shall be revised annually, effective from the first day of July of each Accounting Year. The Implementing Agency shall calculate and issue the updated Toll Notification at least fifteen (15) days prior to the first day of July of the relevant Accounting Year (**Toll Notification Date**). Prior to the Financing Termination Date, a ten percent (10%) annual toll escalation shall be applied on each subsequent Toll Notification Date. Following the Financing Termination Date, the annual escalation in the Toll Notification amount shall be the lower of: (i) eight percent (8%); or (ii) the prevailing consumer price index (CPI) percentage as determined by the Independent Auditor, until the end of the Concession Period. Please note that the actual annual toll escalation post Financing Termination Date may differ from the abovementioned table, which assumes: (i) that FY28 is the first full Operational Year after the Commercial Operations Date (in relation to the Chiniot-Sargodha Road); (ii) that FY35 is the first full Operational Year post

Financing Termination Date; and (iii) that the annual toll escalation has taken place at the rate of eight percent (8%) post Financing Termination Date. These figures are subject to change depending on the mechanism for the toll escalation provided herein. All calculations of Tolls have been done in the metric system and calculations rounded down to the nearest multiple of five (5) Pakistan Rupees. Three (3) toll plazas are planned on the entire length of the Project Road. Users passing through each toll plaza will be required to pay the applicable Tolls as notified.

3. Vehicles that are above the permissible weight will be charged in accordance with the following structure:

A. **Permissible Load**

S. NO.	Types of Trucks	Maximum Allowable Weight
1	2 Axle Single	17.5 M. Ton
2	3 Axle Tandem	27.5 M. Ton
3	3 Axle Single	29.5 M. Ton
4	4 Axle Single Tandem	39.5 M. Ton
5	4 Axle Tandem Single	39.5 M. Ton
6	4 Axle Single	41.5 M. Ton
7	5 Axle Single Tridem	48.5 M. Ton
8	5 Axle Single Tandem-Tandem	49.5 M. Ton
9	5 Axle Single-Single Tandem	51.5 M. Ton
10	5 Axle Tandem Single-Single	51.5 M. Ton
11	6 Axle Tandem-Tridem	58.5 M. Ton
12	6 Axle Tandem- Single Tandem	61.5 M. Ton

B. **Special Condition**

1. Axle Load limits for Single Axle is 12 tons, Tandem Axle is 22 tons and Tridem Axle is 31 tons with Front Axle Load Limit is 5.5 Tons.
2. The Pressure of Rear Axle should not be more than 120 psi and for Front Axle 100 psi.

C. **Fees on Over Loading**

S. NO.	Excess Over Permissible Limit	Fee
1	1.1% to 5%	Rs. 1000
2	5.1% to 10%	Rs. 2500
3	10.1% to 15%	Rs. 5000
4	Above 15%	Vehicle will not be allowed to use the road

SCHEDULE Q – REQUIREMENTS OF ELECTRONIC TOLL AND TRAFFIC MANAGEMENT SYSTEM - ETTMS

1. TOLLING METHODOLOGY

Project Road will be provided with **three toll gates**, (i) one at Faisalabad side, (ii) one at Chiniot and (iii) the third on Sargodha side, as shown in the following figure.



Fig; Linear Plan of 3 Nos. toll plaza Locations

All vehicles entering gate of Faisalabad will pay applicable toll and will be issued a machine readable toll ticket. The same is applicable for Chiniot toll plaza and for the exit toll gate of Sargodha, the vehicle will again pay the applicable toll and accordingly will be issued a machine readable toll ticket and pass the gate.

Vehicle entering the Project Road in between any of the toll gates and having no machine readable toll ticket, will stop at any of the toll gates and pay applicable toll and will be issued a machine readable toll ticket before exiting the Project Road.

- **INTELLIGENT TRANSPORT SYSTEM (ITS) AND ELECTRONIC TOLL AND TRAFFIC MANAGEMENT SYSTEM ETTMS**

All equipment shall be of imported origin. Equipment design and manufacturing shall be only from Europe and USA. The list of ITS and ETTMS brands shall be from a) G.E.A France b) Kapsch Trafficcom Austria and c) Siemens Germany or a brand equivalent to any of the above. Materials/Equipment shall be designed, manufactured, tested and installed according to the BS/IEC/ISO/ITU/EN/CE Recommendations. The latest edition and amendments shall apply in all cases.

1.1 Electronic Toll and Traffic Management System – ETTMS

ETTMS shall be deployed to collect tolls with use of machine assistance and thereafter maintain primary and backup records thereof. The Toll Collection systems shall be set up as an open loop system allowing manual and automatic toll collection. Real time Information regarding the cash receipts shall be communicated to the Control Centre where primary and backup data archives for the collected tolls shall be available in real time or instant viewing. Each toll booth shall be powered by the utility power supply. Electronic UPS, Solar and Generator shall provide backup power in case of loss of primary power. The Private Partner will be responsible for procuring, installing, commissioning, testing, operating and maintaining all the components of ETTMS including its hardware, software and procurement of licenses, where required.

1.2 ETTM Schedules and Performance Standards

The Private Partner shall adhere to all installation schedules, standards, applicable laws, ordinances and codes as required including but not limited to the following:

The clauses in the Draft Standards of Automated Toll Collection are developed on the basis of or in reference to the following relevant regulations and standards. Some of the relevant regulations and standards need to be applied to specific ITS implementation projects in combination with the clauses in the Draft Standards of Automated Toll Collection.

Relevant Regulations and Standards:

ISO 14813-1:2007, IEEE 802, BS 7430: 1998, BS 6651:1999, ISO/DIS 14817, ISO/IEC 11179, ISO/CD 24533, ISO 15628, ISO 14906, EN 12253:2004, EN 15509:2007, ISO 15784-1, IETF/RFC 791, 768, 792, 793 (TCP/IP v4), ISO/IEC 15417:2007, ISO 14906:2004, ISO/TS 17573, ISO/TS 14904, ISO/TS 14907-1:2010, ISO/TS 149072:2006 ISO/TS 17574:2009 ISO 14906:2004

1.3 Toll Collection System (TCS) Equipment

The typical physical architecture of the system shall be organized around three functional levels:

Level 1: Toll Lanes (Lane Management Level)

Level 2: Plaza Computer Systems (Toll Plaza Management Level)

Level 3: Central Server System (Host Level)

1.3.1 Toll Lanes (LEVEL 1)

The Toll Lanes shall be kernel of the system. Their main function shall be toll collection, using an attended lane with a toll collector, or unattended lane, using electronic methods. Each lane shall be equipped with a Lane Controller running the toll collection software. This software subsystem shall detect and classify the vehicle, determine the amount to be paid, check the legitimacy of passing and payment and document information on vehicles passing through the lanes.

Two methods of toll collection are considered:

Cash (called also “manual”), Electronic Toll Collection (ETC) (also called “Automatic”) open to all vehicles. All lanes shall be equipped with a Lane Controller.

The Level 1 will ensure the following functions:

Provides dynamic information to the road user with a customer display in order to inform about the available means of payment and the status for each lanes of the plaza, Vehicle classification of the vehicles, Reading of the vehicle plate (front &rear), ETC lanes operation, Calculation of the transaction amount according to the different data coming from the peripherals (classification system, vehicle plate, payment means, etc.), Ensuring the payment with all the payment methods authorized (including change management), Delivering a customer receipt according to the local authorities, storage of pictures of the vehicle when proceeding to the transaction, management of communication with level 2 (collecting and sending transactions and lane equipment status), management of the lane peripherals (alarms and logs).

1.3.2 Plaza Computer System (LEVEL 2)

The Plaza Computer System shall provide all the necessary functions to monitor and control the lanes, as well as to perform cash handling operations. Each plaza shall be equipped with a plaza server to support the plaza TCS functions. The primary function of the Plaza Computer System (PCS) shall be to collect process and store lane transaction data. In addition, the PCS offers a first (local) level of control providing tools enabling the supervision of the toll lanes, the administration of the cash and its transit to the bank. PCS shall comprise of different workstations and software for toll management and control.

1.3.3 Central System Server (Level 3)

The Central System Server provides the third level of processing and storage of transactions, using the Central software and database. The architecture of the Central equipment shall be based on a cluster architecture allowing compliance with the requested system reliability and availability performance. Additionally, the high availability shall also be enhanced with a disaster recovery server which shall be installed on a different geographical area than the Clustered central server.

The main functions of the Central System Server are as follows:

Toll data acquisition and processing, toll operation control (including control of toll collector's shifts and toll revenues), tables, lists and parameters management (RFID & plate status list distribution), generation of reports, archiving of relevant toll data. The typical architecture is presented below:

1.4 Not Used

1.5 Vehicle Detection System

The Vehicle Detection System (VDS) shall detect a vehicle passage by means of a magnetic loop buried in the toll lane pavement. This loop shall be connected to the vehicle detector, which delivers the appropriate signals to the toll lane CPU. A passage loop shall be buried at the exit of each lane in order to detect the passage of vehicles leaving the toll lane and subsequently to turn the Lane Traffic Light from green to red.

The VDS achieves all the functions described in the detailed functional specification, by achieving the level of performance as specified below MTBF 40,000 hours, MTTR for vehicle detector less than 1min, Error rate for 100,000, Vehicle speed range detection between 5 up to 90Kph, Design life time expectancy 10 years, Output Insulated contact "normally open", Response time 44ms ± 7ms, Operating temperature -40 °c / +80°c, Loop characteristics, 3 turns, self-inductance 18 to 2500 micro-Henry.

Two loops detectors will be installed:

1 double detector for presence loop and passage loop, 1 simple detector for entry loop. This detector will be installed only in case of ETC lane.

1.6 Exit Lane Software

The display on the Toll Collector's screen shall be divided in four main areas: Transaction area, Help area, General information area and Alarms display.

The “transaction area” shall be subdivided as: Class of vehicle, Not Used, Fare to be paid, Method of Payment, Status of peripherals (barrier, TL, etc...), Data input area

The “help area” shall be subdivided as: Sequence Message, Detailed help.

The “general information area” shall be subdivided as: Identification of plaza, lane and staff ID and name, Operating mode of the lane, Status of Overhead Lane Sign(OHLS), Current date and time, Staff ID and name.

The alarms area shall be subdivided as Alarm for Toll Collector (end of paper, etc...).

1.7 Audit and Control

Real time audit and control module shall be present; its main function shall be to issue assistance to Plaza management. It is installed on the supervisor’s workstation located at plaza level and Control room at Lahore. The Private Partner shall also install servers, workstations, 4G devices, switches, display screens, video conferencing system and other equipment at Lahore for verification and real time audit and control of all toll plazas.

The software shall have capability of real time IT audit of ETTM and the software shall have the provision of IT audit of ETTM on hourly, daily, weekly, monthly and yearly basis and provision of audit report in PDF and Excel formats.

The IT audit of ETTM shall provide real time data in Lahore and Faisalabad using the following three types:

1. Electronic Toll Collection system
2. ANPR camera system
3. 2D LIDAR Traffic counting system

The software shall collect data from above three sources for accurate and error free IT audit of ETTM.

Additionally, Private Partner will also be responsible to conduct and share IT audit of the system annually.

Auditor for the IT audit shall be selected in consultation with the Implementing Agency.

1.7.1 Main Menu of the Application

After identification, a main menu shall be displayed. Only the authorized options are available according to the staff profile.

- a) **Parameters Menu:** This menu shall be used to enable the visualization of the different parameters tables used for the application (staff list, fares and modulation) and to verify if they are transferred to the different lanes.
- b) **Traffic Menu:** This menu shall provide information on the traffic statistics. The counts for normal traffic are based on the tabulated traffic per Collector class.
- c) **Plaza Activity Menu:** This menu shall enable the check of the jobs performed in lanes by collectors. These jobs may be reconciled (cash-up) all together in a single bag number.
- d) **Revenue Menu:** This menu shall enable the check of the toll collectors’ cash-up.
- e) **Maintenance Menu:** This menu shall enable the management of the plaza and lane alarms.
- f) **System menu:** This menu shall be used to transfer data between the lanes and the Toll Plaza level during a communication failure.

All queries to the PostgreSQL database in values grid form have a print option, an export option (EXCEL and PDF compatible format for example) and a graphical function.

1.7.2 Parameters Menu

This menu shall provide access to the content of the parameter tables (current and future) relevant to the application. Transfer of the tables to the different toll levels can also be verified.

These tables are created using the Parameter Table Management application or received from external entities. They are then transmitted from the Central to the Plazas then to the lanes without being modified.

The functions of this menu shall be:

- List of authorized staff: This screen shall display the current list of authorized employees, used on the whole network. It shall also be used to display the staff list to be used at a future date. Each staff shall have a profile and each profile allows to access to specific functions of each module.
- Tables Versions: This screen shall display the table versions used by the plaza and the toll lanes. It applies to all parameters tables. It shall also display the tables’ versions to be used at some future date and to check whether tables have been transferred to toll lanes or not. Red number means that the version number is different from the reference on the server.

1.7.3 Traffic Menu

The functions of this menu shall be:

- Traffic by Class
- This screen shall display the lane transacted traffic sorted by collector class and by type of passage.

Exempt Traffic

This screen displays the lane exempt traffic sorted by type of exempt.

1.7.4 Plaza Activity Menu

This menu shall enable to control the jobs of operators in lanes. The functions of this menu are:

- List of Jobs: This screen shall display the normal and maintenance jobs list for lanes and allows to access to the end of job screen. It displays not only passage revenues but also revenues of IOU paid in the corresponding lane.
- End of Job: This screen shall display the job data of a particular job coming from lanes. This first tab displays the number and the amount (calculated by the system) of payment by class and by payment means (including the IOU paid in lanes). This traffic/worksheet tab presents a summary of events that occurred during the job grouped by operator actions and a summary of the detected traffic by class. The list of events will be refined during the specifications phase, to be tailored to the Private Partner's needs.
- Transactions: This screen shall display transaction details according to selection criteria. A transaction (summary tab) shall be composed of several operations (operation tab) which give all detail of each transaction. A display filter shall be available for selected hierarchical level only. Images are also linked to each transaction and easily displayable.
- Jobs summary: This screen shall display the data relative to the lane job(s) (passage revenue and IOU payment) performed by one or several toll booth operator(s) according to selection criteria, allowing shift control.

1.7.5 Plaza Revenue Menu

This menu shall display statistics on calculated revenues and declared revenues, determined from the end of job and cash-up messages.

The functions of this menu are:

- List of cash-up: This screen shall display the cash-up report. That is to say the amount declared by the toll booth operator when cashing up and the amount calculated by the system. It allows to access to the cash up details screen.
- Cash-up details: This screen shall display the cash-up content and the validation type for the selected cash-up. It also displays the quantity of coins and notes declared.
- Cash up validation: This screen shall allow the supervisor's validating or refusing the current cash up from TOD application
- Cash collection: This screen displays the list of bags whose content (plaza revenues to return to the bank) may be transferred to the bank.
- The history of banking: This screen shall display the summary banking records per deposit slip number for a specified period (a day or a month, for instance). It shows the total cash amount declared by the staff, the bank count and the discrepancy, the number of jobs and number of bags for each bank in.

1.7.6 Alarms and allied systems

An Alarm Button shall be integrated under the desk. The alarm switch shall be knee-activated. The signal shall be transmitted to the Toll Collection System level and shall start a hidden listening of the booth communication by the supervisor.

a. Machine Readable Toll Ticket Generation System

Electronic toll collection system shall be deployed to collect tolls with use of machine assistance and thereafter maintain primary and backup records thereof. The Toll Collection systems shall be set up as an open loop system allowing automatic and manual toll collection. Low cost reusable Magnetic Card shall be deployed for this purpose.

b. Automatic Vehicle Identification (AVI) System

AVI system shall be compliant with the National Interoperability requirements. The Private Partner shall be responsible for the AVI System Equipment installation, integration and Maintenance. The Private Partner shall integrate the ETCS with the AVI System at the Tolling Locations specified in this Scope of Work and Requirements.

c. System of Video Filming, and achieving with time and date of all vehicles entering and exiting the toll gates, round the clock

The Private Partner shall provide an integrated Digital Video Filming System that provides Client the capability to investigate lane performance issues and support Client in customer dispute resolution. The Private Partner shall develop, procure, furnish, and install two or more IP addressable, color video cameras at each Tolling Zone sufficient to meet the requirements. The cameras installed shall be the same at all Tolling Zones.

d. Electronically Operated toll gates barrier

Electronically operated toll gates tractable barriers or boom gates shall be a bar, or pole pivoted to allow the boom to block vehicular access through a controlled point. The tip of a boom gate shall rise in a vertical arc to a near vertical position. Boom gates shall be counterweighted, so the pole is easily tipped. Boom gates shall be paired either end to end, or offset appropriately to block traffic in both directions. Boom gates may also have a second arm, which pivots on links that allow the second arm to hang 300 to 400 mm below the upper arm when it descends into the horizontal position, to increase approach visibility.

e. Variable Message Signs System including Information signs (electrical) for “stop” and “go”

The VMS shall be Consist of Video Display with LED Panels, controllers, flicker-free display and IP65 rating with dimensions and specification mentioned below, all necessary hardware and software fulfilling the requirement. VMS shall provide information signs (electrical) for “stop” and “go”.

f. Vehicle Scanning, Type Identification and Number Plate Recording System including ANPR cameras at each lane

The Automatic Number Plate Recognition Cameras (ANPR) shall be used for Entry /Exit Toll station and/or other locations to record number plate’s information. The ANPR Camera shall have 2 Mega pixels. ANPR camera shall have capability of operating day/night and capturing image of standard and nonstandard number plates of vehicles. Image Sensor: 2 MPX CMOS sensor 1/2.8” SONY STARVIS; Min. Illumination: from 0.0026 lx (0 lx, IR on); Digital Slow Shutter (DSS): up to 1/3 s; Wide Dynamic Range (WDR): WDR double scan, 120dB; Digital Noise Reduction (DNR): 2D, 3D; Defog Function (F-DNR): Defog (F-DNR); HLC; Lens Type: motorized, auto-iris function, f=7 ~ 22 mm/F1.4; Switching Type: mechanical IR cut filter; Frame Rate: 60 fps for 1920 x 1080 (Full HD) and lower resolutions; Multistreaming Mode: 3 streams; Video/Audio Compression: H.264, H.264+, H.264 Smart, H.265, H.265+, H.265 Smart, MJPEG/G.711; Privacy Zones: 4; motion detection; Video Content Analysis (VCA): tamper, zone entrance, zone exit; Number plate recognition function implemented in the camera,; all countries of the European Union / CIS countries, Autonomous operation mode recognition function implemented in the camera, Capacity of License Plate Database up to 10000 license plates, on all lists. Recommended maximum speed of the vehicle 70 km/h, Reactions for the licence plate recognition, alarm output activation Audio Input/Output: audio; Alarm Input/Output: 1 (NO/NC)/1 relay type; Memory Card Slot: microSD - capacity up to 128GB; Degree of Protection: IP 67; Enclosure: aluminium, white, fully cable managed wall mount bracket in-set included; Power Supply: PoE, 12 VDC; Operating Temperature: -30°C ~ 60°C.

Twelve (12) No. IP Based Outdoor ANPR Cameras shall be installed on each Toll Plaza. Two (02) No. ANPR cameras shall be installed at entry and exit lanes of Control Room. ANPR cameras shall be installed on Poles of 3m. Total number of ANPR cameras shall be Thirty-Eight (38) on Thirty-Eight (38) No. 3m poles.

g. Automatic Number Plate Recognition Software

When a vehicle appears in the camera’s field of view, software analyzes the image and reads the registration plate. All the results, including date, time, photo of the license plate and other parameters, are being saved in the database.

The application shall able to control executive mechanisms (gates or barriers) and allows to define specific reactions depending on the recognized license plate, improved recognition algorithm, higher efficiency recognition accuracy exceed: enhanced functionality less resources consumption improved recognition algorithm 97% and Direct way to automation of transport access, date channel registration number photo/video, access server-client architecture, automatic reactions, car park management, supports up to 9 cameras and fully automated system, access mechanism control, user-friendly operation Horizontal / vertical camera deflection angle Not more than 30° to the surface of the plate, Recommended maximum speed of the vehicle 140 km/h, Number plate width in the picture not less than 130 pixels. Real time data shall be sent to Control rooms at Lahore and Faisalabad for IT audit of ETTM.

2. IP BASED VIDEO SURVEILLANCE CCTV SYSTEM

All equipment shall be of imported origin. Equipment design and manufacturing shall be only from Europe and USA. The list of IP Based video surveillance system (CCTV System) brands shall be from a) Axis Sweden b) Avigilon Motorola Canada c) NOVUS Europe Poland or a brand equivalent to any of the above. Materials/Equipment shall be designed, manufactured, tested and installed according to the BS/IEC/ISO/ITU/EN/CE Recommendations. The latest edition and amendments shall apply in all cases.

2.1 Outdoor Fixed Bullet IP Camera 5MPX

Image Sensor: 5 MPX CMOS sensor 1/2.7" OV; Min. Illumination: 0.007 lx (0 lx, IR on); Digital Slow Shutter (DSS): up to 1/3 s; Wide Dynamic Range (WDR): WDR double scan, 120dB; Digital Noise Reduction (DNR): 2D, 3D; Defog Function (F-DNR): Defog (F-DNR); HLC; Lens Type: motorized, auto-iris function, f=2.8 ~ 12 mm/F1.4; Switching Type: mechanical IR cut filter; Frame Rate: 30 fps for 2592 x 1944, 60 fps for 1920 x 1080 (Full HD) and lower resolutions; Multistreaming Mode: 3 streams; Video/Audio Compression: H.264, H.264+, H.264 Smart, H.265, H.265+, H.265 Smart, MJPEG/G.711; Privacy Zones: 4; motion detection; Video Content Analysis (VCA): tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection, pedestrian detection, cross counting, Scene Change, Video Blurred, Video Color Cast, objects distinguishing, people counting, vehicle detection, vehicle counting, Facial Recognition; IR LED: IR LED, range up to 50 m; Audio Input/Output: audio; Memory Card Slot: microSD - capacity up to 256GB; Degree of Protection: IP 67; Enclosure: aluminium, white, fully cable managed wall mount bracket in-set included, IK10 impact rating; Power Supply: PoE, 12 VDC; Operating Temperature: -30°C ~ 60°C.

Fifty-Six (56) No. Outdoor Fixed Bullet IP Cameras 5MPX shall be installed on Poles along Faisalabad – Sargodha Road Two (2) km before each Toll Plaza and One (01) km after each Toll Plaza and road section connecting Control Room with Faisalabad Toll Plaza.

2.2 Indoor Dome IP Camera 5MPX

Image Sensor: 5 MPX CMOS sensor 1/2.7" OV; Min. Illumination: 0.007 lx (0 lx, IR on); Digital Slow Shutter (DSS): up to 1/3 s; Wide Dynamic Range (WDR): WDR double scan, 120dB; Digital Noise Reduction (DNR): 2D, 3D; Defog Function (F-DNR): Defog (F-DNR); HLC; Lens Type: motorized, auto-iris function, f=2.8 ~ 12 mm/F1.4; Switching Type: mechanical IR cut filter; Frame Rate: 30 fps for 2592 x 1944, 60 fps for 1920 x 1080 (Full HD) and lower resolutions; Multistreaming Mode: 3 streams; Video/Audio Compression: H.264, H.264+, H.264 Smart, H.265, H.265+, H.265 Smart, MJPEG/G.711; Privacy Zones: 4; motion detection; Video Content Analysis (VCA): tamper, abandoned object, object disappearance, line cross, zone entrance, zone exit, object counting, face detection, pedestrian detection, cross counting, Scene Change, Video Blurred, Video Color Cast, objects distinguishing, people counting, vehicle detection, vehicle counting; IR LED: IR LED, range up to 50 m; Audio Input/Output: audio; Memory Card Slot: microSD - capacity up to 256GB; Dimensions (mm): 112 (Φ) x 100 (H); Degree of Protection: IP 67; Enclosure: vandalproof IK10 impact rating aluminium, white; Power Supply: PoE, 12 VDC; Operating Temperature: -30°C ~ 60°C.

Indoor Dome IP Camera 5MPX shall be installed on Poles in Three (03) No. Toll Plaza buildings and Control Room. Three (03) No. of Indoor Dome IP Camera 5MPX shall be installed at each Toll Plaza and Five (05) No. of Indoor Dome IP Camera 5MPX shall be installed at Control Room.

2.3 Outdoor PTZ Camera 3MP

Image Sensor: 3 MPX CMOS sensor 1/2.8" SONY Exmor R STARVIS; Min. Illumination: from 0.007 lx (0 lx, IR on); Digital Slow Shutter (DSS): up to 1/5 s; Wide Dynamic Range (WDR): WDR double scan, 120dB; Digital Noise Reduction (DNR): 2D, 3D; Defog Function (F-DNR): Defog (F-DNR); HLC; Optical Zoom: 30x; Lens Type: motor- zoom, auto-iris function, f=4.5 ~ 135 mm/F1.6 ~ F4.4; Switching Type: mechanical IR cut filter; Frame Rate: 30 fps for 2048 x 1536 (QXGA) and lower resolutions; Multistreaming Mode: 3 streams; Video/Audio Compression: H.264, H.264+, H.265, H.265+, MJPEG/G.711, RAW_PCM; Preset Commands: 393; Tours: 12 (up to 32 presets per tour); Auto-Scans: 12; Patterns: 6 (max. 1000 commands or 3000 s in total for all patterns); Protocols: Pelco-D; Privacy Zones: 4; motion detection; Video Content Analysis (VCA): Auto Tracking, zone entrance detection and object tracking; IR LED: IR LED, range 200 m (depends on current optical zoom value); Audio Input/Output: audio; Alarm Input/Output: 7 (NO/NC)/2 relay type; Degree of Protection: IP 66; Enclosure: aluminium, white, in set: outdoor housing (integrated with the camera), wall mount bracket; Power Supply: 24 VAC, High PoE (60W) - compatible with NV-8000PS/HP High PoE Injector; Operating Temperature: -30°C ~ 60°C; Built-in Heater/Fan.

Fifty-Six (56) No. Outdoor PTZ Camera 3MP shall be installed on Poles along Faisalabad – Sargodha Road Two (2) km before each Toll Plaza and One (01) km after each Toll Plaza and road section connecting Control Room with Faisalabad Toll Plaza.

2.4 IP Based Network Video Recorder (NVR)

Video and audio channels: 32, Supported protocols: ONVIF, RTSP, Recording speed up to 960 fps at 3840 x 2160, Supports resolution up to 3840 x 2160, Recorded stream size: 256 Mb/s in total from all cameras, Internal HDDs mount: 8, Monitor outputs: 3 (HDMI (4K UltraHD), HDMI, VGA), Face recognition, RAID protects recordings, Recording Mode time-lapse, triggered by: manual, alarm input, motion detection, intelligent image

analysis functions, Recorded Data Search by date/time, events, motion in a defined area, related to face recognition, Supported Functions Exception, Scene Change, Video Blurred, Video Color Cast, Tripwire, Zone entrance, Abandoned Object, Object Disappearance, Face Recognition, Perimeter Intrusion Detection by pedestrian or vehicle, Line Cross Detection by pedestrian or vehicle, Analysis of Recognized Number Plate Numbers (LPR), Operating Temperature -10°C ~ 50°C, RACK Mount 19" 2U, Security, password protection, IP filtering, MAC filtering. Eight (08) No. NVRs shall be provided: two each at Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

2.5 Video Software and Centralized Analytics Software

This feature should not be confused with Edge Analytics. Cross-camera analytics should be available so that any image in one camera (such as a car, determined by shape, color, model, etc.) may be queried and searched across other cameras. The software must have capability of video synopsis.

The video software, which receives the video feeds and then displays them on the video wall or records it, should have been field tested with the cameras and the data centre servers in any ITS projects in the world in order to avoid jerk-free videos. For clarity, it must be explained that at application layer, the cameras can be controlled by software. Software is used for handling all the video feeds, which are received, processed and displayed/recorded. All these software systems are to run on servers in a data centre. Ideally an integrated system should be used for all these tasks.

3. NETWORKS AND WI-FI SYSTEM

All equipment shall be of imported origin. Equipment design and manufacturing shall be only from Europe and USA. The list of Networks and Wi-Fi system brands shall be from a) Cisco USA b) Juniper USA c) Optokom Europe or a brand equivalent to any of the above. Materials/Equipment shall be designed, manufactured, tested and installed according to the BS/IEC/ISO/ITU/EN/CE Recommendations. The latest edition and amendments shall apply in all cases.

3.1 Core Switch

Interfaces: 48x10GBASE-R(SFP+)/1000BASE-X (SFP) 4x40GBASE-SR4/LR4 (QSFP), Console port: RS232/RJ-45, Switching Capacity / Bandwidth: 1.28 Tbps, Buffer memory: 9 MB, MAC table: 128K, VLAN table: 4094, SQinQ rules: 4094, Quality of Service (QoS) : 7 queues, TCAM 2K Ingress, : 1K Egress, VRRP routers: 20, ARP table: 6K, L3 interfaces: 128, Virtual Loopback interfaces: 64, Link Aggregation Groups (LAG) 64, 32 ports per LAG, MSTP 32, Jumbo frames 12270 bytes, IPv4 Unicast routes 16K, IPv6 Unicast routes 8K, Hot swappable redundant power supply, Cooling Front-to-Back, 4 fans, Operating temperature from -0° to +50°C, Operating humidity 80%, Storage temperature from -40° to +70°C, Mounting Rack 19", 1U.

Two (2) No. Core switches shall be installed at each Toll Plaza. In addition, Two (2) No. Core switches shall be installed at Control Room. Total number of Core switches shall be Eight (8).

3.2 24-Port ACCESS SWITCH POE

The Access Switch shall design to connect end users to a large-scale network networks and to a service provider networks using 10G Ethernet interfaces. The switches shall support physical stacking, VLANs, multicast groups and advanced security functions.

The Access Switches Shall Comply with the following:

1000 e -T (RJ-45) Ports (PoE / PoE+) 24 Ports, 1000 Base-X (SFP) 4 Ports, Console Port RS 232/RJ-45, Switching Capacity Bandwidth 128 GBPS, Packet forwarding rate(64B) 92.1Mpps Buffer memory 12 Mb RAM (DDR3) 512 MB, ROM (RAW HAND) 512 MB, MAC table 16K, VLAN table 4k, Quality of Services (QoS) 8 deg queues per port, TCAM for routing 1024xIPv4, Link aggregation Group (LAG) 16, upto 8 ports per LAG Maximum size of ECMP group 08, Maximum Jumbo – frames size 10240 B, Stacking 08 devices, Max power consumption 400W (PoE).

Three (03) No. 24-port Access Switches shall be installed at each Toll Plaza. In addition, three (03) No. 24-port Access Switches shall be installed at Control Room. Total number of 24-port Access Switches shall be Twelve (12).

3.3 08-Port POE Access Industrial Switch

Industrial switches shall be provided to organize secure fault-tolerant networks on sites with high requirements of temperature, vibrations, mechanical impact, etc. The switches shall have 10/100/1000BASE-T with PoE/PoE+1 support and Combo ports of 10/100/1000BASE-T/1000BASE-FX for fiber and cooper cable. Features of 8 port POE access switch shall be as follows:

8x 10/100/1000BASE-T (PoE /PoE+, RJ-45), 2 x Ports: Combo 10/100/1000BASE-T (RJ-45), 2 x Ports: 1000BASE-X/100BASE-FX, Console Port: RS-232 (RJ-45), Protocols and functions: SNMPv1/v2c/v3, DHCP Server/Client, DHCP Option 66/67/82, BootP, TFTP, HTTP, HTTPS, Telnet, SSH, Syslog, IPv6, Port Security, IP Source Guard, Port Monitor, Bandwidth: 20 Gbps, Throughput for 64 bytes: 14 MPPS, Quality of Services (QoS): 4K, MAC table: 16K, Buffer memory: 512MB, RAM (DDR3): 512 MB, ROM (RAW HAND): 512 MB,

TCAM: 3K, Security UL 508, Form factor DIN rail holder, Jumbo frame size: 10240 bytes, Power Supply voltage: PoE enabled : 45 upto 57 VDC, Power budget PoE: 240W (for 802.3at standard 54 upto 56 VDC, Alarm relay: 1 alarm reply output: 1 A, 24 VDC, Device Housing: Metal, IP-30 rating, Operating humidity: 5 to 95%, Operating temperature: -40° to 75C °

Fourteen (14) No. 8-port Access Switches shall be installed at each Toll Plaza. In addition, fourteen (14) No. 8-port Access Switches shall be installed at Control Room. Total number of 8-port Access Switches shall be Fifty-Six (56).

3.4 Management Software for Networks and Wi-Fi System

The Wi-Fi software should have hybrid circuit applications.

a. Key Features of the Wi-Fi Software

Configuring access points, including group policies, Configuring Wi-Fi clients, including group policies, Monitoring of the access points, including selective interfaces and parameters, Displaying the current status of all Wi-Fi network customers, Statistics of the network: the traffic, the sessions, device types, and so on, Collection of service and emergency information, Network failures alerts, Debug information, Flexible system of personnel rights (roles, users), Integration with OSS / BSS provider via Northbound Interface.

b. Key Features of Hotspot Captive Portal

Ability to implement an unlimited number of individual virtual portals, (the number of portals should be equal to the number of SSID on the network), Each virtual portal should have its own interface, Implemented interface of the SMS-sending services, Support for user authorization, Data storage of user's authorization up to 3 years, Advertising platforms integration support, Online payment services support

3.5 Indoor Wi-Fi WLAN Access Point 3x3 MIMO

The Indoor Access Point shall have High-performance solution on the basis of Broadcom chipset Support 802.11 ac (5G Wi-Fi) Power: PoE, leased lines Work in a cluster without a dedicated server (up to 32 devices) Seamless roaming Modern means of authentication and encryption Service up to 400 users; Interface 2x 10/100/1000Base-T ports (RJ- 45) PoE/PoE+, Console RS232, Maximum transmitter power up to 18 dBm, Radius coverage up to 200 m, NAND flash 128 MBRAM DDR3 256, Power: - PoE, DC 48V/54V (IEEE 802.3at) 12V, Operating temperature +5 to +40°C, Humidity: up to 90%.

Four (04) No. Indoor Access Points 3x3 MIMO shall be installed at each Toll Plaza. In addition, six (06) No. Indoor Access Points 3x3 MIMO shall be installed at Control Room. Total number of Indoor Access Points 3x3 MIMO shall be Eighteen (18).

3.6 Indoor Wi-Fi WLAN Access Point 2X2 MIMO

The Indoor Access Point shall have High-performance solution on the basis of Broadcom chipset Support 802.11 ac (5G Wi-Fi) Power: PoE, leased lines Work in a cluster without a dedicated server (up to 32 devices) Seamless roaming Modern means of authentication and encryption Service up to 400 users, Interface shall be 2x 10/100/1000Base-T ports (RJ-45) PoE/PoE+, Console RS232, Maximum transmitter power up to 18 dBm, Radius coverage up to 200 m, NAND flash 128 MBRAM DDR3 256, Power: - PoE, DC 48V/54V (IEEE 802.3at) 12V, Operating temperature 0 ° C to + 60 ° C° and Humidity: up to 90%.

Four (04) No. Indoor Access Points 2x2 MIMO shall be installed at each Toll Plaza. In addition, six (06) No. Indoor Access Points 2x2 MIMO shall be installed at Control Room. Total number of Indoor Access Points 2x2 MIMO shall be Eighteen (18).

3.7 Outdoor Access Point 3x3 MIMO

The Wi-Fi WLAN access point shall have Dual band Wi-Fi 802.11ac, Frequency range: 2412–2472 MHz, 4900– 5850 MHz, Data Transfer rate: 802.11ac: 1300 Mbps, 3x3 MIMO support, 2 x Ethernet 10/100/1000 Base-T (RJ- 45), 1 x 100/1000BASE-X (SFP) optionally , 6 x N – type (female) for external antennas (Omni, sector rod, etc.), Console (RJ-45), IEEE 802.11 a/b/g/n/ac standard support, 32 virtual access points, Automatic speed negotiation, duplex mode negotiation, and MDI/MDI-X switch-over, VLAN, 802.1X authentication, DHCP client, LLDP, ACL and Ipv6 support, Power consumption below 20W, 128MB NAND Flash, 256MB RAM DDR3, Power supply: PoE+ 48V/54V (IEEE 802.3at-2009) 48V DC, Operating temperature -40 C to +60 C.

Five (05) No. Outdoor Access Points 3x3 MIMO shall be installed at each Toll Plaza. In addition, nine (09) No. Outdoor Access Points 3x3 MIMO shall be installed at Control Room. Total number of Outdoor Access Points 3x3 MIMO shall be Twenty-Four (24).

3.8 Server

“Main Rack mount Server for Video Management & Processing (with minimum of following specs: Intel Xeon 14 Processor or eqvt, Redundant Power supply, 16GB DDR4-RAM, Full height PCIe filler, Mega RAID Controller, 6 TB SAS, HDD/hot plug/drive sled mounted, Mega RAID (Raid card)”.

Four (4) No. servers shall be installed in Control Room whereas Two (2) No. servers shall be installed at each Toll Plaza. Total number of servers shall be Ten (10). 55 inch 4k Display Screen shall be used for monitoring of CCTV Cameras in Control room.

4 VIDEO CONFERENCE SYSTEM

All equipment shall be of imported origin. Equipment design and manufacturing shall be only from Europe, USA. The list of Video Conference systems brands shall be from a) Avaya - USA b) CISCO USA c) Triumph Board Czech Republic Europe or a brand equivalent to any of the above. Materials/Equipment shall be designed, manufactured, tested and installed according to the BS/IEC/ISO/ITU/EN/CE Recommendations. The latest edition and amendments shall apply in all cases.

Communications shall meet H.323 and SIP standards, SIP TLS, 4Mbps, RJ45 network LAN (10/100/1000), Manual bandwidth settings, Content sharing capability from all sites. Video shall include Pan/Tilt/Zoom Camera, 2-megapixel CMOS sensor, 16x optical zoom; ±100° pan; ±25° tilt, FOV 61° (H); 35° (V); 67° (Diagonal), All resolutions at 30fps, HD1080p (1920 x 1080) RTMP support for video streaming, Network, 10/100/1000 Mbps; NAT / firewall traversal; High Efficiency Lost, Packet Recovery, API support via Telnet; Wake-on LAN (WOL) support; IPv4 and IPv6 support; Network Test and QoS.

Security shall be AES (Advanced Encryption Standard) function (128-bit). Video standards shall be H.264, H.264 HP, H.264 SVC, H.263+, H.263, H.261. Video inputs shall be HD camera, VGA, DVI (HDMI). Audio standards shall be G.711, G.722, G.722.1, G.728, G.722.1C. Audio features shall include Automatic gain control (AGC), Advanced noise reduction Acoustic echo cancellation (AEC). Web management tool shall include Remote management; Live monitoring; Firmware update; Phonebook download / upload / edit; Restore system setting.

Supported devices shall be Windows® and Mac OS®, iOS, Android phones and tablets, Windows 8 tablets. PTZ camera shall be provided with video conference system and shall be complete in all respect. Four (4) No. of video conference systems shall be installed at Faisalabad, Chiniot, Sargodha and Lahore.

5 ACCESS CONTROL SYSTEM

All equipment shall be of imported origin. Equipment design and manufacturing shall be only from Europe and USA. The list of Access Control System (ACS) brands shall be from a) Johnson Control USA b) KADE Europe Poland c) Avigilon - Motorola Canada or a brand equivalent to any of the above. Materials/Equipment shall be designed, manufactured, tested and installed according to the BS/IEC/ISO/ITU/EN/CE Recommendations. The latest edition and amendments shall apply in all cases.

5.1 Access Controller

The minimum specifications of Controller shall be as per the following:

No. of Inputs: 12, No. of Outputs: 05, Readers port: 4, two way control door 2, One way control door 4, Relay: 3A at 24 V DC; 1A at 24V DC, Connection: Preferably Hub's of RS485, Readers port type: Wiegand, Card buffer: 20,000, Event buffer: 50,000, Supply power: 12 VDC, Minimum Battery: 12 V / 7 Ah, Temperature range: -10°C to 55°C, Humidity (non-condensing): 10% - 90%, Readers type, proximity, magnetic stripe, biometric, Inputs – wire type / max. length AWG # 22 - 300 m, Lock output type relay, LED and buzzer output: 4, Extension port: 1 x 4 relays module, Baud rate: 19200 / 9600 bps, Certificate: CE, FCC. Four (04) No. Access Controllers shall be provided, one each at Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

5.2 Administrator Proximity Card

Administrator proximity card shall be Unique, MIFARE, HID, Prox, Reader type having operating frequency 13.56MHZ and USB interface. Six Hundred (600) No. Proximity cards shall be provided for Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad whereas Four (04) No. Administrator Proximity cards shall be provided for Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

5.3 Proximity Card Reader

The reader shall be powered from the access control panel (ICP) directly, Operating frequency: 125 kHz, 13,56 MHz, Read range : up to 10 cm, Output interface Wiegand, Output bits : 26 or 37 (HID@ Prox), 26 or 34 (Unique, MIFARE), Indoor /outdoor : for indoor and outdoor use, Temperature range : -40°C to 60°C, Humidity (non-condensing) : 10%- 95%, Color: Black / White, Construction: Polycarbonate/ABS/Metal, Indications: Bi color Green/Red, Amber LED and audible tone, Cable Requirements: Seven conductor 22 AWG shielded, Reader Distance Maximum 300 Meters from the Panel, Standards: FCC and CE, Protection Class: IP 66. Twenty-Four (24) No. Proximity Card Readers shall be provided at Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

5.4 Electro Magnetic Lock

The electromagnetic lock provided shall be suitable for single and double door type having locking sensor, door condition sensor and shall meet following minimum specifications:

Anti-pull/Holding Force: 1100 lbs or higher (Main Door), Anti-pull/Holding Force: 600 lbs or higher (Sub-Building Door), Operating Power: 05. A at 12 V DC ; 0.25 A at 24 V DC (adjustable), Operation: Fail Safe (Door shall remain Open on Power failure), Locking: Using Internal circuitry to sense door closure. Twenty-Four (24) No. single door Magnetic Drop Bolt Locks and Sixteen (16) No. double door Magnetic Drop Bolt Locks shall be provided at Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

5.5 Push Button

The minimum specifications of Push button shall be as per the following:

Contact type: NO / C, Product Service Life: 500,000 operations, Type of assembly: Metal, Temperature Range: -10 to 55, Operation Voltage Capacity: 3A / 36vdc. Twenty-Four (24) No. Push Buttons shall be provided at Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

5.6 Emergency Door Release Break Glass Button

The minimum specifications of emergency door release break glass button shall be as per the following:

Emergency exit button with C / NO / NC contacts, Abrasion resistant panel with glass, Color: Red /Green or as approved by the Engineer, Temperature Range: -10 to 55°C, Operation Voltage Capacity: 3A / 36vdc. Twenty-Four(24) No. Emergency Door Release Break Glass Buttons shall be provided at Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

5.7 Biometric Attendance System with Integrated Web Based Time Management

Fingerprint capacity: 8000, Card capacity: 10 000 , Record capacity 200 000, Display 3.5 inch Screen, Communication: RS232/484, TCP/IP, USB host, Wigand ports: 2 - IN/OUT, standard functions: Workcode, SMS, DST, scheduled-bell, self-service query, automatic status switch, T9 input, photo-ID, 9 digits user ID, anti- passback, Optional functions: ID/MIFARE/HID, webserver, Wi-Fi, 3G, GPRS, Biometric identification speed <1sec, Access control interface electric lock, door sensor, exit button, alarm, doorbell, operating temperature 0°C do +45°C,operating humidity 20% - 80%, Dimension 205,6 x 150 x 41,6 (length. x width. x thickness.), Power supply DC 12V 1,5A. Two (02) No. Biometric Attendance System and Visitor Management Systems with Integrated Web Based Time Management shall be installed in each Toll plaza building. Four (04) No. Biometric Attendance System and Integrated Web Based Time Management shall be installed in Control room. Total number of Biometric Attendance System and Visitor Management Systems with Integrated Web Based Time Management shall be Ten (10). Four (04) No. Time Attendance, Access Control Terminal and Time Management Softwares shall be provided at each Toll Plaza and Control room.

6 IP BASED PUBLIC ADDRESS SYSTEM

All equipment shall be of imported origin. Equipment design and manufacturing shall be only from Europe, USA. The list of IP Based Public Address Systems and Voice Evacuation system brands shall be from a) Ambient – Europe b) Bose USA c) Ecler Europe or a brand equivalent to any of the above. Materials/Equipment shall be designed, manufactured, tested and installed according to the BS/IEC/ISO/ITU/EN/CE Recommendations. The latest edition and amendments shall apply in all cases.

6.1 IP Based Power Amplifier 2x150 W RMS (EN standard)

High efficiency amplifier (class D), 2 analogue audio inputs x 2 powered audio outputs, Euroblock input and output connectors, High efficiency, auto standby function and convection cooling (fanless, 100% silent), THD+Noise @ 1kHz Full Power <0.05%, S+N/N 20Hz - 20kHz @ 1W/4Ω

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>85dB, Frequency response (-1 dB, -3dB) 20Hz - 25kHz, BRIDGE mode ready, Thermal protection Complete in all respect. Eight (08) No. Power amplifiers shall be provided: two each at Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

6.2 16 Zone Call Station with Keypad

(as per EN standard) has a microphone on a flexible stem, a push-to-talk button, a speaker, and a headset socket suitable for rack mounting. Complete in all respects including all accessories.

- Call station interface via a CAT-6 cable of up to 500 m
- Supervised microphone on a gooseneck stem with good speech intelligibility with 4 programmable keys and 16 keypads "

Eight (08) No. Call Stations shall be provided: two each at Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

6.3 Sound projector

Water-resistant ABS sound projector, Power options @ 100V: 20W / 10W / 5W, Power options @ 70V: 10W / 5W / 2.5W, IP55 certified, Connection by bare wire, White finish (RAL 9016), Frequency response 110 Hz - 15 kHz, Sensitivity 92dB, IP rating, IP55 Material ABS + Aluminum grill. Sixty (60) No. Sound Projectors shall be provided: two each at Faisalabad, Chiniot, Sargodha Toll Plazas and Control Room at Faisalabad.

6.4 2Cx2.5 Sq.mm LSZH imported Speaker Cable

For Public Address System from Speaker to Speaker as per zoning layout to be installed in Conduit / Cable tray with cover complete in all respects. Length of speaker cable shall be as per requirement of fully functional system.

7 FIBER OPTIC CABLES SYSTEMS

Proposal must include cabling of 100% of the Faisalabad, Chiniot, Sargodha Toll Plaza, Control rooms which may be increased as per demand/ request of LEA's and other concerned quarters, Complete list of Entry-Exit points along with number of cameras per point is attached and total number of cameras is specified in BOQ. Cable can be from any brand which is currently functioning in Pakistan or abroad in any major project.

The fiber optic cable shall be laid before one kilo meter to installed CCTV System.

The Fiber must be preferably armored shielded 12pairs as per site requirement. Lying should be supported with cabinets, ODF boxes and all other allied accessories. All Optic Fiber Cables shall meet, TIA 192, IEC 60793, IEC 60794 and ITU-T G652-D standards. The installation project should be considered as completed after validation of inspection report. Routine on-site inspection and testing should be performed during the construction especially for those concealed work which can't be inspected after completion of the civil work. For OFC civil work, OFC Civil Work Completion Inspection/Test can be performed during civil work for every Hand hole to hand hole distance, usually it is about 100-300m. Total number of Hand holes across OFC shall be Fifty-Six (56). OFC civil work checklist should be countersigned on site after inspection. Forty (40) No. Optical Distribution Frames (ODFs) shall also be installed to provide cable interconnections between communication facilities.

Fiber optic cable shall be installed starting from 2km before each Toll Plaza and will run till 1km after each Toll Plaza. Total length of fiber at each Toll Plaza shall be approximately 3.1km. in addition a Fiber optic cable shall be laid from Faisalabad Toll Plaza to Faisalabad Control Room which will be approximately 1km. Total length of Fiber Optic Cable shall be approximately 10.2km. Rope for HDPE pipe shall also be 10.2km.

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Routine civil work inspection criteria shall be to check that the route is as per design/route plan, Trench depth is as per specification, Pipes/warning tape is as per specification and, Man/hand holes are as per specifications.

8 FIXED WIRELESS

Fixed wireless will be used to send data of Toll Plaza to Control rooms. All data of toll plaza shall be send to Control rooms. The proposed wireless solution must be corroborated by the evidence across the globe by the SOE/development partner. All three toll plazas shall be connected to the Data centre using Gigabit (up to 1000 Gbps).

8.1 Reporting System of Toll Ticket Generation to Control Centre

The Private Partner shall provide high-speed connectivity between all storage, database, application, and reporting servers, and backup systems for sending and receiving toll collection data to Control Centre using latest wireless technologies such as Radio-frequency identification (RFID). RFID is the wireless non-contact use of radio-frequency electromagnetic fields to transfer data, for the purposes of automatically identifying and tracking tags attached to objects. The tags shall contain electronically stored information. Tags can be powered by and read at short ranges (a few meters) via magnetic fields (electromagnetic induction). Alternatively, may use a local power source such as a battery, or else have no battery but collect energy from the interrogating EM field, and then act as a passive transponder to emit microwaves or UHF radio waves (i.e., electromagnetic radiation at high frequencies).

8.2 Data Base and Data Back-up Centre for this system

Control Centre shall comprise of Blade Servers, Video Servers/Processors and Video archiving, Video Recorder(s), IP Contact Centre, Video wall and Work Stations. Video Storage of 30 Days shall be provided. Software Licenses shall be included for creating video walls on the operator's machines where they can see the output of multiple cameras on a single screen. This control centre shall be located either in Faisalabad or Sargodha or in between at a toll station with backup recording features for 30 days and viewing facility of all cameras.

8.3 Telecommunication System

The telecommunication backbone for the ETTMS shall be a modularly expandable system to cater for data video and speech requirements of the future with running out of reserve capacity.

To provide real-time Toll information system, different technologies can be applied. Optical Fibre Cable (OFC) based communication backbone can be used for primary network for connecting Control Room to Faisalabad Toll Plaza and for connecting field ITS devices with Chiniot and Sargodha Toll Plaza. Wireless/ radio networks shall be used for communication from Chiniot and Sargodha Toll Plazas to Control Room at Faisalabad. Wireless network may consist of 4G networks of licensed cellular mobile operators for ETTMS applications. 2 No. 4G devices in redundant configuration shall be connected at each Toll Plaza and 2 No. 4G devices shall be connected at Control Room. Total No. of 4G devices at Toll Plazas and Control Room shall be 8.

Alternatively, the Private Partner may propose VSAT wireless communication in redundant configuration in case 4G is not available keeping in view the best techno-economical solution.

8.4 Proper Illumination/Lighting

Energy Efficient LED lights shall be used to achieve the required lighting level with minimized power consumption. 5 to 10% lights shall be connected on “**Central Battery System**” to provide minimum uninterrupted lighting to avoid 100% black-out during power failure.

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The illumination shall be designed keeping in view the basic illumination levels in accordance with the recommendations in EN12464-1 & EN12464-2, IES and CIBSE Standards.

9 STAND-BY POWER SYSTEM FOR UN-INTERRUPTED ITS SYSTEM

All equipment shall be of imported origin. Equipment design and manufacturing shall be only from Europe and USA. The list of Power Telemetry solution brands shall be from a) Siemens Germany b) ABB Germany c) APC USA and d) G.E USA or a brand equivalent to any of the above. Materials/Equipment shall be designed, manufactured, tested and installed according to the BS/IEC/ISO/ITU/EN/CE Recommendations. The latest edition and amendments shall apply in all cases.

Power Telemetry solution shall be custom designed to meet the requirement of ITS system using host controller using RTOS (Real time operating system) compatible with industry standard NMS (Network management system) using SNMP (Simple network management protocol) /MIBs (Management information base) The telemetry units shall be able to communicate with Control Room , the status of site equipment (Hardware), network health, any site intrusion (pole climbing etc), power failure, environmental conditions and any other abnormality for immediate remedy.

All the critical elements such as the data centre must have voltage stabilization. Field equipment's, Toll Plaza, Data Centre and emergency control room must be 4 tier which includes National power, hybrid UPS 8 Hour Backup, Solar system 8 hours Back up and generators support. UPS and Solar shall be provided in redundant configuration to ensure zero downtime. In case the ITS system goes without power, heavy penalty shall be imposed on the Private Partner. Data Centre must be integrated to show the Power levels, while remote data may be obtained through Grid Power Monitoring through telemetry.

For solar power and batteries, any brand in the world may be used. Entire ITS and ETTM project should have separately solar backup power and UPS Power back for 8 hours. Solar equipment must not only conform to but also be certified as per IEC and ISO standards.

In the field, all power equipment and cameras should be mounted on poles with minimum heights of 25 feet, though the cameras may be placed at 20 feet level if needed. Poles must have anti-climbing sensors.

Fifty-Six (56) No. Poles shall be installed along Faisalabad – Sargodha Road Two (2) km before each Toll Plaza and One (01) km after each Toll Plaza and road section connecting Control Room with Faisalabad Toll Plaza.

9.1 Breakdown of ETTM

In case of breakdown of ETTM/ITS on any day during the Concession Period, penalty shall be imposed on the Private Partner in a manner where while calculating revenue, the maximum hourly traffic of the preceding week shall be counted for the purposes of revenue calculation for the day of any such breakdown.

Classified Traffic Count/Reporting System with Toll Collection on Daily, Weekly and Monthly Basis on appropriate format

Classified Traffic Count/Reporting System shall include Poles, 2D LIDAR sensors, Traffic Controllers FPS, Ethernet Switches, UPS, Power, Control and UPS cabinets, Electrical/Data Cables etc. 4G devices can be used for connecting all sites to Control Centre. Data stored in Traffic Controller shall be transferred using 4G devices to Control Centre in csv format for statistical

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purposes. Daily, Weekly and Monthly reports containing traffic data collected by Flow counters shall be submitted to Client. Reports shall contain all details of Traffic Count with Toll Collection. Complete ITS Systems (USA or European Make) of minimum scale is to be provided which should have the capability of reporting daily, weekly and monthly classified traffic passing through each tolling gate. This system should also have the capability of automatic toll gate opening and closing system.

In case of any breakdown of system, Private Partner should switch to manual operating system with the required number of manpower and should update the system after restoration of system in accordance with the penalty mechanism provided above.

On entry of each toll gate, the Private Partner will issue a machine readable ticket to the passing vehicle. On arrival at the exit toll gate, the vehicle driver will give this ticket back to Private Partner's representative, who will enter the machine readable card to the system. The system should have the capability to automatically determine the vehicle type, travelling length and amount of toll chargeable.

The classified traffic counting shall be used for IT audit and the real time IT audit of ETTM shall be provided in Lahore and Faisalabad.

10 SLOW SPEED WEIGH IN MOTION (SSWIM) SYSTEM

All equipment shall be of imported origin. Equipment design and manufacturing shall be only from Europe and USA. The list of Slow Speed Weigh-in-motion system brands shall be from a) G.E.A France b) Kapsch Trafficcom Austria c) Siemens Germany or a brand equivalent to any of the above. Materials/Equipment shall be designed, manufactured, tested and installed according to the BS/IEC/ISO/ITU/EN/CE Recommendations. The latest edition and amendments shall apply in all cases. The SSWIM shall be installed before each toll plaza. Three (03) No. SSWIM systems shall be provided at Faisalabad, Chiniot, Sargodha Toll Plazas.

10.1 Major Features

Major features of permanent type SSWIM shall be as follows:

Heavy duty anti-slip platform 3m x 0.73m fitted with four (04) 10,000 kg capacity stainless steel, fully welded load cells in unique tension mounting assembly, Load Cell shall have following parameters Inbuilt strength: 150% maximum overload, fully welded stainless steel (up to IP68), or tool steel (up to IP65), Supply Voltage: 5-12 V (DC or AC), Accuracy: As per OIML R7

10.1.1 Intelligent Junction Box:

The intelligent junction box shall provide status of all load cell connectivity in terms of resistance. Each load cell shall be shown graphically as well, Protection class: IP65, BS EN60529, Display Bright OLED 256x64 pixel, Supply voltage: 5-10 volts DC, 100mA min, 175mA max, Self-powered from the excitation voltage.

10.1.2 Weight Indicator:

Weigh indicator shall have following parameters, High precision Weigh Controller with 24-bit resolution, Weights and Measures OIML R76 & MID R61 approved, Bright OLED display for easy viewing in all light conditions, Real time clock, Capability to monitor and alarm individual load cell faults including out of range, out of balance and cable break faults, Housing 304 IP65 Stainless steel wall mounting enclosure, Supply voltage 10-32vdc or 85-264vac internally fused, Environmental conditions, Operation: -10°C to +50°C, Storage: -40°C to +70°C, Accuracy: ±1% Weigh accuracy.

10.1.3 Large Scale Display:

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Character height of Large Scale Display shall be 102mm (4 inches), Number of digits shall be 4 to 8, Back light and Floating decimal shall be provided. Interfaces shall be Serial RS-232 (isolated), RS-485, 20 mA isolated current loop. Housing shall be Stainless steel including mounting bracket. Protection class shall be IP-65.

10.1.4 Composition of Toll Gates

Where Typical Cross Section shows the schematic arrangement of Toll Gates, which are similar for all the Toll Plazas.

11 GENERAL

11.1 Cabinets

U Outdoor Equipment cabinet for sites having rating of IP68 with active temperature control for both heating and cooling. One (01) No. Cabinet shall be installed at each Pole site. Total Number of 12U cabinets shall be Fifty-Six (56).

11.2 Cables

Ancillary equipment Power cable, ducts, clamps, ties and allied accessories. Rolls of Power and Network cables shall be according to the requirement of fully functional system.

Cat 6 UTP cables shall be provided by the connecting hardware manufacturer, Be 100 ohms 4-pair, Category 6 CM for horizontal and CMR rated for vertical backbone with standards TIA/EIA 568-B Category 6, ISO/IEC 11801 Cable or latest, The cables shall have, No. pairs 4, Conductor 23AWG solid copper, Insulation Thickness 0.22mm, External sheath Flame Retardant PVC, Operational Temperature range -20 °C to 70°C, Characteristic Impedance 100ohms + 5 ohms.

11.3 Warranty

The Private Partner shall provide warranty for whole ITS and ETTM system including all sub-system equipment for a period of ten (10) years through authorized local distributor commencing the hand-over and acceptance date to the Implementing Agency. No equipment shall be accepted without warranty certificate from the manufacturer. It shall cover all costs for WARRANTY SERVICE, including parts replacement, labor, prompt field service, pick-up, transportation, and delivery. No extra cost shall be admissible for Warranty services

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SCHEDULE R – FORM OF TOLL NOTIFICATION

The Toll Notification shall be issued by the Communication and Works Department in accordance with the Applicable Laws.



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SCHEDULE S – NOTICES

2. IMPLEMENTING AGENCY:

Attention: [●],

Address: [●]

Phone: [●]

3. PRIVATE PARTNER:

Attention: [●]

Address: [●]

Phone: [●]

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SCHEDULE T – TERMINATION PAYMENT

SR. NO.	TERMINATION PAYMENT AMOUNT	COMPENSATION PAYABLE BY IMPLEMENTING AGENCY
1.	Non Political Event Termination Amount	(a) the Termination Equity; plus (b) the Financing Due
2.	Political Event Termination Amount	(a) the Termination Equity; plus (b) the Termination Dividend Amount, plus (c) the Financing Due
3.	Private Partner Default Termination Amount	(a) the Financing Due
4.	Implementing Agency Default Termination Amount	(a) the Termination Equity; plus (b) the Termination Dividend Amount, plus (c) the Financing Due
5.	Corrupt Act Termination Amount	(a) the Financing Due
6.	Change in Law Termination Amount	(a) the Termination Equity; plus (b) the Termination Dividend Amount, plus (c) the Financing Due

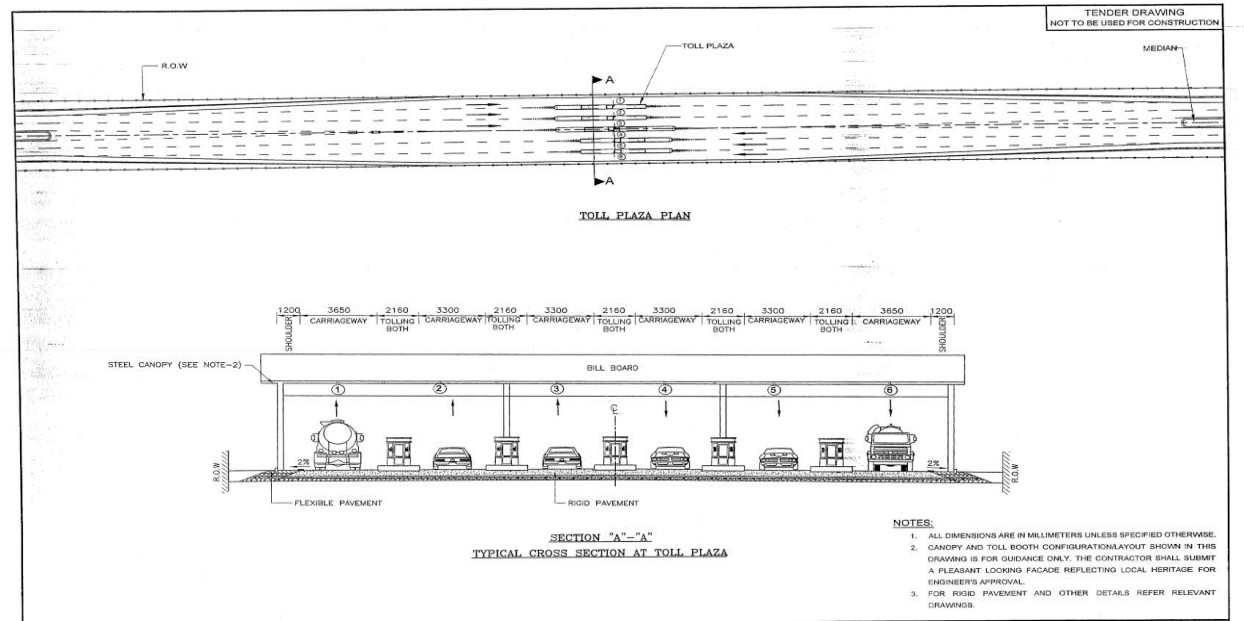
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SCHEDULE U – FINANCIAL MODEL

SCHEDULE V – INSTALLATION WORKS

TOLL PLAZA DESIGN



SIDE VIEW OF TOLL PLAZA



EQUIPMENT

The Installation Works should comprise of the installation of at least the equipment:

Total of Bill No. 9b			
Ch./Item No.	Item Description	Unit	Quantity
	OPTICAL FIBER CABLE (OFC)		

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1	12 Core Optical Fiber Cable Armaid - Direct Buried Cable type Single Mode • Cable construction Loose tube • Layer of Aramid Yarn 5mm• Wavelength 1300/1550 nm • Max attenuation 0.36 db/km including Excavation, Backfilling and duct with all accessories	scM	3,000
2	Man Hole/Hand Hole Man Hole/Hand hole should pre-cast RCC structure. The Hand hole inner size shall W*L*D=0.9MX0.9M*0.9M For Pre-cast manhole/hand hole, shall be • Concrete Ratio =1:1.5:3, target strength >2400 PSI • Steel Bar=10 mm (min) used every 4 inches horizontally & vertically • Thickness of Walls = 4 inches • Entry holes should be made in advance in four walls • Slab and cover should be same strength of material, which will be used for covering the manhole and hand hole	No.	12
3	Rope for spare HDPE Pipe, Route Markers, GI Pipe, Cable/HH Tagging, Caution Tape.	M	3,000
4	OFC Distribution Frame (ODF) IP 66	No.	12
5	ROUTING & SWITCHING		
6	Core Switches 1) Interfaces: 48x10GBASE-R(SFP+)/1000BASE-X (SFP) 4x40GBASE-SR4/LR4 (QSFP) 2) Console port: RS232/RJ-45 3) Switching Capacity / Bandwidth: 1.28 Tbps 4) MAC table: 128K 5) L3 interfaces: 128 16) Jumbo frames: 12270 bytes 6) IPv4 Unicast routes: 16K 7) Hot swappable redundant power supply 8) Cooling Front-to-Back, 4 fans 9) Operating temperature from -0° to +50°C 10) Operating humidity 80% 11) Mounting Rack 19", 1U	No.	2
7	Main Rack mount Server for Video Management & Processing (with minimum of following specs): - Intel Xeon 14 Processor or eqvt - redundant Power supply - 16GB DDR4-RAM - Full height PCIe filler - Mega RAID Controller - 6 TB SAS, HDD/hot plug/drive sled mounted - Mega RAID (Raid card)	No	2
8	Core i7 Ultra Slim Desktop PC • 2TB HDD • DVD Writer • Genuine Latest MS WINDOWS 10 Professional 64 bit pre-installed Operating System and associated software.	No	2

9	<p>Industrial Grade Access 8 port Switch Features of 8 port POE access switch shall be as follows:</p> <ul style="list-style-type: none"> • 8x100/1000BASE-T (PoE/PoE+, RJ-45), • Bandwidth : 20 Gbps • Power budget PoE : 120W • Device Housing : Metal, IP-30 rating • Operating humidity : 5 – 95% • Operating temperature: -40°to 70° 	No.	12
Ch./Item No. MRS	Item Description	Unit	Quantity
10	<p>OUTDOOR ACCESS POINT 3x3 MIMO</p> <ul style="list-style-type: none"> • Dual band Wi-Fi 802.11ac • Data Transfer rate: 802.11ac: 1300 Mbps • 3x3 MIMO support • IEEE 802.11 a/b/g/n/ac standard support • Power supply: PoE+ 48V/54V (IEEE 802.3at-2009) • Operating temperature -40 C to +60 C 	No.	4
11	<p>24 Access Switches layer 3 with SFP Managed</p> <ul style="list-style-type: none"> • 1000 Base –T (RJ-45) Ports(PoE / PoE+) : 24 Ports • 1000 Base-X (SFP) : 4 Ports • Console Port RS-232/RJ-45 • Switching Capacity Bandwidth 128 Gbps • Packet forwarding rate (64B) : 92.1Mpps • Buffer memory 12 Mb • RAM (DDR3) : 512 MB • ROM (RAW HAND) : 512 MB • MAC table : 16K • VLAN table : 4k • Link aggregation Group (LAG) : 16, upto 8 ports per LAG • Maximum size of ECMP group : 8 • Maximum Jumbo – frames size : 10240 B • Stacking : 08 devices • Max power consumption : 400W (PoE) 	No.	2
12	Solar System 5KVA with Hybrid UPS/Inverter & 8 hour Power Back up	No.	1
13	<p>Indoor Wi-Fi Access points (APs) 3x3 MIMO</p> <ol style="list-style-type: none"> a) Interface 2x 10/100/1000Base-T ports (RJ-45) PoE/PoE+ b) User 400 c) Maximum transmitter power 18 dBm d) Radius coverage up to 200 m e) NAND flash 128 MB f) RAM DDR3 256 g) Power: - PoE i) 32 virtual access points j) Operating temperature +5 to +40 °C l) Humidity: up to 90% k) Dual-band antennas l) Support for 3x3 MIMO (Multiple-input multiple-output) m) Two built-in Broadcom chip (IEEE 802.11 b/g/n/a/ac) n) 802.11n: 216,7 Mbit/s (20 MHz channel), 450 Mbit/s (40 MHz channel and 802.11ac: 1300 Mbit/s (80 MHz) 	No.	2
14	Poles		

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	Surveillance poles with anti-climbing fixtures. <ul style="list-style-type: none"> • 10 Meters height Poles. • 8-M25 Anchor Bolts (Grade 8.8) • Foundation shall be Designed as per site survey • steel plate shall be 250 MPa or 36 Ksi 	No.	10
15	Cabinets		
	12 U Outdoor Equipment cabinet for sites having rating of IP68 with active temperature control for both heating and cooling.	No.	10
Ch./Item No.	Item Description	Unit	Quantity
16	Cables		
	Ancillary equipment Power cable, ducts, clamps, ties and allied accessories.	No.	10
	UTP Network Cabling, One Roll CAT 6 . 306 M Minimum 23 AWG. Low Smoke Zero Halogen (LSOH)	Roll	3
21	IP BASED VIDEO SURVEILLANCE SYSTEM		
22	<u>NETWORK BASED CAMERAS</u>		
23	Fixed and PTZ Cameras:		
24	Fixed Bullet IP Camera 8MP <ul style="list-style-type: none"> • Image Sensor : 8 MPX (4K Ultra HD) • Lens: motorized, auto-iris and auto-focus function, f=2.8 ~ 12 mm/F1.4 • Human/Vehicle Object Classification • D/N function - IR cut filter • Min. Illumination: 0.015 lx (0 lx, IR on) • IR LED, range up to 70 m •128Gb SD card •Video Intelligent Analytics • facial recognition. • Deep learning algorithm having People and Vehicle Counting technology • Detect, track, capture vehicle, non-motor vehicle and people •Protection class: IP67 	No.	10
25	Outdoor PTZ Camera 4MP <ul style="list-style-type: none"> • IP Camera 4MP • 30X Optical Zoom • Lens Type motorized, auto-iris function, f=4.7 ~ 141 mm/F1.5 ~ F4 • Edge Analytics • facial recognition. • Deep learning algorithm having People and Vehicle Counting technology • Detect, track, capture vehicle, non-motor vehicle and people 	No.	10
26	IP Based Outdoor ANPR Camera with Software <ul style="list-style-type: none"> • Image Sensor : 2 MPX • Lens Type :motorized, auto-iris function, f=7 ~ 22 mm/F1.4 • IR Range : 100 meter • Frame Rate 60 fps for 1920 x 1080 (Full HD) • Recommended maximum speed of the vehicle 70 km/h • Minimum IP Class: IP67 • Memory Micro SD Card Slot up to 128 GB • along with ANPR software • Operating Temperature -30°C ~ 60°C 	No.	12
27	55 inch 4k Display Screen for CCTV Cameras	No	1

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28	<p>Wall Mounted Communication Rack 27U (Floor Mounted) suitable for installation of standard patch panels and etc. Complete with floor base, vertical cable managers. Rack shall be equipped with power distribution units (PDUs) with at least 5 imported power sockets etc. Complete in all respects.</p> <ul style="list-style-type: none"> • 4 no. cooling fans • Steel front door • Earthing strip • Door lock 	No	2
Ch./Item No.	Item Description	Unit	Quantity
29	<p>Biometric System</p> <ul style="list-style-type: none"> • Fingerprint capacity: 8000 • Card capacity: 10 000 • Record capacity 200 000 • Display 3.5 inch Screen • Communication: RS232/484, TCP/IP, USB host • Wigand ports: 2 - IN/OUT • standard functions: Work code, SMS, DST, scheduled-bell, self-service query, automatic status switch, T9 input, photo-ID, 9 digits user ID, anti- passback • Optional functions: ID/MIFARE/HID, webserver, Wi-Fi, 3G, • Biometric identification speed <1sec • operating temperature 0°C do +45°C • operating humidity 20% - 80% 	No.	2
30	Web Base Time Management Software and integration with Existing Time Management Software System	No.	1
31	ELECTRONIC TOLL COLLECTION AND ACCESS CONTROL SYSTEM - 06 No. of Toll Station		
32	Fog Light	No.	6
33	Lane Status Indicator ↓×	No.	6
34	Motorized Entry Barrier	No.	6
35	Automatic Vehicle classification system	No	6
36	Camera Pole	No.	6
37	<p>IP Based Fixed Bullet Camera</p> <ul style="list-style-type: none"> • Image Sensor : 5 MPX CMOS sensor 1/2.7” • Lens Type : motor-zoom,f=2.8 ~ 12 mm/F1.4 or higher • IR Range : 50 meter • Frame Rate: 30 fps • Multi-streaming • Compression : H.264+, H.265+, G.711 <p>Facial Recognition Advanced Analytics</p> <ul style="list-style-type: none"> • Video Intelligence Analytics • Minimum IP Class: IP-67 with IK-10 rating & Aluminium Casing • Memory Micro SD Card Slot up to 128 GB • Operating Temperature -30°C ~ 60°C • Power Supply High POE. 	No	6
38	Lane Traffic Light	No.	6
39	Alarm Rotating Beacon	No.	6
40	Alarm Siren	No.	6
41	Traffic Light Pole	No.	6
42	RFID Antenna	No.	6
43	<p>Automatic Transit Distributor (ATD) fitted with 4 Contactless cards distributors including:</p> <ul style="list-style-type: none"> - Lane Controller, - I/O boards. 	No.	2

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44	Toll Station attendand PC (Core i7) with Toll Collection software	No.	6
45	Thermal Printer / booth	No.	6
46	UPS for Toll Station 2 KVA / Booth	No.	6
47	2D LiDAR sensors, Traffic Controller FPS		
48	2D LiDAR sensor Shall records the contour of the passing vehicle, measuring range and scans the vehicle using a non-contact time of-flight process. The laser beam shall emitted through the inspection window. The scan plane position shall indicated by a housing marking next to the inspection.	No	2
49	Traffic Controller FPS The Traffic Controller FPS shall be used the installed profiling software to calculate the vehicle dimensions, vehicle class, and number of axles. These calculations shall based on the vehicle contour that has been recorded and the position of the vehicle within the lane. At the same time, the Traffic Controller FPS acts as the central control unit for the profiling system. Using its TCP/IP Ethernet interface, it constantly provides the downstream systems with all system data, the measuring points, measurement results, and system messages. The TCP/IP interface shall also used for set-up, calibration, and fault analysis with the aid of tools.	No	1
50	IP Medium Executive Phone <ul style="list-style-type: none"> • High quality TFT LCD Touch color screen of at least 480 x 320 pixels • 10 programmable keys (2x19) • 2 VIP touch buttons on screen • 2-way conference • HD Audio voice quality • Two access level: administrator, user 	No	6
Ch./Item No.	Item Description	Unit	Quantity
51	Proximity Door Access Controller suitable for Standard controller, 4 doors one way, 2 doors two way, 4 readers ports, TCP/RS-485 communication ports, 20 000 card buffer, 50 000 events buffer, 20 000 alarm buffer. Supported readers with Wiegand interface 26-40 bits	No	2
52	Proximity card reader with keypad for Unique (EM), HID Prox (125 kHz) and Mifare Classic (13.56 MHz) card type. Work with Wiegand port. Switched output Wiegand format - 26/34-bit for Unique and Mifare, 26/37 for HID Prox (automatic). Switched output keypad format - 4/8-bit or virtual card number. Read range from 2 to 10 cm.	No	6
53	Proximity Cards ISO credit card standard size and thickness, thin, MIFARE® compatible, Operating frequency:13.56 MHz, flexible polyvinyl chloride laminated, passive type, easy printable on both sides.	No	100
54	Administrator proximity card Unique, MIFARE®, HID, Prox, reader type, operating frequency: 125 kHz, 13.56 MHz and USB interface.	No.	1
55	Magnetic Drop Bolt Lock (Single Door) with holder and fixing accessories.	No	5
56	Magnetic Drop Bolt Lock (Double Door) with holder and fixing accessories.	No	1

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57	Push Button (Exit Switch) suitable for installation on BS standard size back box connected to door controller for access including emergency door release break glass button.	No	5
58	Power Supply The buffer power supply shall intended for the uninterrupted supply of demanding devices stabilized voltage of 12V DC (+/- 15%). The PSU supplies voltage U = 13.8V DC with current efficiency I = 4.5A + 0.5A battery charging controller (1 door) and for RS controllers. In the event of a power failure, it shall instantaneous switching to battery operation. With high energy efficiency and placed in a metal casing (RAL 9003 color) with place for 7Ah / 12V battery. The maximum battery charging current is 0.5A *. Total current of receivers + battery is max. 5A	No.	2
59	32 channels (NVR Network Video Recorder) <ul style="list-style-type: none"> • Resolution : Resolution (4K) (video + audio) • Internal storage : 8 x HDD 3.5" 14 TB SATA (each) • Video Intelligence Analytics • Recording: Recording speed up to 960 fps at 3840 x 2160 • High quality images and support H.264, H.264+, H.265, H.265+ • Supported protocols: ONVIF, RTSP • Supports up to 2 monitors simultaneously • disk mounting: 8 x S-ATA 3,5 or higher" • Operating system: Microsoft Windows 10 IoT • Recording and surveillance system: VMS (Video Management System) • Redundant multi-site video storage with primary and backup storage • Integration with Access Control System • Power Supply High POE. 	No.	1
Ch./Item No. MRS	Item Description	Unit	Quantity
60	IP Based Power Amplifier 2x150 W RMS (EN standard) <ul style="list-style-type: none"> • High efficiency amplifier (class D) • 2 analogue audio inputs x 2 powered audio outputs • Euroblock input and output connectors • High efficiency, auto standby function and convection cooling (fanless, 100% silent) • THD+Noise @ 1kHz Full Power <0.05% • S+N/N 20Hz - 20kHz @ 1W/4Ω >85dB • Frequency response (-1 dB, -3dB) 20Hz - 25kHz • BRIDGE mode ready • Thermal protection • Complete in all respect. 	No.	1
61	20W Out Door Sound Projector Speaker EN STANDARD <ul style="list-style-type: none"> • 20 WRMS • Suitable for extreme humidity and/or temperature • Frequency response (-10dB) 80Hz - 20KHz • Sensitivity (dB@1m 1W) 89dB 	No	10

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62	<p>16 Zone Call Station with Keypad (as per EN standard) has a microphone on a flexible stem, a push-to-talk button, a speaker, and a headset socket suitable for rack mounting. Complete in all respects including all accessories.</p> <ul style="list-style-type: none"> • Call station interface via a CAT-6 cable of up to 500 m • Supervised microphone on a gooseneck stem with good speech intelligibility with 4 programmable keys and 16 keypads 	No	1
63	<p>2C, 2.5 Sq.mm LSZH imported Speaker Cable for Public Address System from Speaker to Speaker as per zoning layout to be installed in Conduit / Cable tray with cover complete in all respects.</p>	m	500
64	4G Device to transfer data from Toll Plaza to Control Room	No.	2
65	UPS for Toll Station 10 KVA For all system	No.	1
Total of Bill No. 9c			
Ch./Item	Item Description	Unit	Quantity
-	Operational Building for Toll Plaza	Sq.m	50

SCHEDULE X – PRICE VARIATION

1. Where any variation (increase or decrease), to the extent of 5% or more, in the price of any of the item mentioned in sub-clause (3) below takes place after the Effective Date and prior to the completion of the Construction Period, the amount payable under Section 8.13.1 of the Agreement shall be adjustable to the extent of the actual variation in the cost of the item(s) concerned.
2. Price variations will only be calculated by Independent Engineer and Independent Auditor on or after the Project Construction Completion Date and no price variation will be admissible after the said date.
3. No price variation under Section 8.13.1 shall be admissible except in respect of the following items and to the extent of material quantity indicated here with:

No	Item	Quantity (Not Exceeding)
1	Cement	302,539 Bags
2	Steel,	
	a. MS Bars (Plain or Deformed)	2,494 Ton
	b. High Tensile Steel Wire	
3	Bitumen	17,783 Ton
4	Diesel	

4. The base price for the purposes of calculation of the price variation shall be the price prevalent on the Bid Submission Date (the “**Base Price**”).
5. The price variation calculation under Section 8.13.1 shall be worked out on the basis of the price of the item concerned as notified or placed on the official web site by the Finance Department, GoPB for the particular month and particular district.

Example: If the price of a particular item, as notified on the official website of the Finance Department, Government of the Punjab, for the base month is Rs. A, and the corresponding price for the month of consumption is Rs. B, and the quantity of the item consumed during that month is C, then the adjustment in price, whether increase or decrease, shall be calculated in accordance with the following formula:

$$\text{Price Adjustment (Increase/Decrease)} = (B-A) \times C$$

6. If no official notification by the GoPB in respect of any of the item mentioned in sub-clause (3) is issued under sub-clause (4) no price variation shall be admissible in respect of that item during that month.
7. The amount payable or deductible in respect of items No. (1) to (5) of sub-clause (3) shall be calculated on the basis of the quantity of the item actually consumed on the work during the month.
8. No price variation shall be allowed to the Private Partner in respect of the period beyond the Construction Period.
9. The increase or decrease in the project cost subsequent to any increase or decrease in the cost of high speed diesel shall be calculated from the increase or decrease in the basic price of high speed diesel using the following formula:

$$\text{Increase or decrease} = \square \times \text{VOW} \times (\text{CPD-BPD}) / \text{BPD in contract price.}$$

Where:

VOW = the value of the work for which payment has been certified by the Independent Engineer, executed subsequent to such increase or decrease in the Basic Price as shall be obtained by applying the approved unit rates and prices entered in the measurement book.

CPD = Current price of high speed diesel, and

BPD = Basic price of high speed diesel.

Factor $\square = 0.15$ for Highway / Road works &

$\square = 0.07$ for R.C.C structures

SCHEDULE Y – RISK ALLOCATION MATRIX

S.no.	Risks Identified	Risk Description	Borne by
1	Technical specifications risk	The possibility that individual technical characteristics of the road do not meet the standards and specifications.	Private Partner
2	Completion risks	The possibility that the completion of construction works may be delayed.	Private partner – (If the delays cannot be attributed to the Government)
3	Cost overrun risk	The possibility that during the design and construction phase, the actual project costs will exceed projected project costs.	Private partner
4	Design risk	The possibility of mistakes in project design.	Private partner
5	Environmental risk	The possibility of adverse impact on the environment due to private partner’s activities during construction and operation of the project;	Private partner
6	Force Majeure risks	The possibility of the occurrence of certain unexpected events that are beyond the control of the Parties (natural disasters, civil riots etc.)	1) Government
		o.	
		1 – Political event	2) Private partner
2–Nonpolitical event			
7	Inflation risk	The possibility that the actual inflation rate will exceed the projected inflation rate.	Shared during construction phase in shape of price variation in four items only Private partner During O&M phase
8	Insolvency risk	The possibility of the insolvency of the private partner.	Private partner
9	Insurance risk	The risk that insurance for particular risks is or becomes unavailable.	Private partner
10	Financing risk	The possibility of increase of the interest rate at construction and operations stages.	Private partner
		The possibility of negative exchange rate fluctuations.	Private partner
11	Maintenance risk	The possibility that project maintenance and rehabilitation costs may vary from the projected maintenance and rehabilitation costs.	Private partner
12	Demand risks	The possibility that the demand for road may be less than projected.	Shared During debt financing period Private partner During Operation period
13	Right-of-way risks	Delayed acquisition of the right-of way and its total impossibility.	Government
14	Regulatory risk	The possibility that consents required from other government authorities will not be obtained or, if	Shared

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		obtained, can only be implemented at a greater cost than originally projected.	
15	The risk that the Project Assets at termination or expiry of Concession Agreement will not be in the prescribed condition.	Risk of value loss on the transfer of the project or at termination of the Concession Agreement.	Private partner
16	Resource or input risk	The possibility of a failure or shortage in the supply of the inputs or resources required for the operation of the project.	Private partner
17	Technology obsolescence risk	The possibility that (i) the technology inputs for the outsourced institutional function may fail to deliver the required output specifications, or (ii) technological improvements may render these technology inputs out of-date.	Private partner
18	Utilities risk	Shortage of utilities (e.g. water, electricity, etc.), necessary for construction and/or operation of the project.	Private partner

SCHEDULE Z – VEHICLE SPECIFICATIONS

AMBULANCE

Vehicle & Chassis Specifications

- **Type:** Van-type with integrated cabin, long chassis, suitable for tropical conditions.

Drive: Rear-wheel drive (4x2), with power steering.

- **Engine:** Diesel, 4-cylinder, 2.2L-3.0L, Euro-compliant, with sufficient power for full load.
- **Transmission:5-7 SPEED** Manual or automatic, depending on requirement.
- **Brakes:** Hydraulic/Pneumatic, with ABS.
- **Suspension:** Heavy-duty, suitable for rough roads
- **Dimensions:** Generally a large box body with good internal height and length for stretchers.

Interior & Safety Features

- **Space:** Capacity for at least two stretchers (primary and secondary) plus medical staff and equipment.
- **Flooring:** Anti-skid, non-corrosive, and easy to clean/disinfect.
- **Lighting & Power:** Adequate 12/24V DC power for equipment, ample interior lighting, and sufficient alternator/battery capacity.
- **Air Conditioning:** Fully air-conditioned and heated cabin for driver/patient.
- **Safety:** Seatbelts for all, airbags (driver/passenger), fire extinguisher, non-reflective markings, safety glass.

Medical Equipment (Varies by Type: Basic to Advanced)

- **Patient Handling:** Wheeled stretcher (cot), scoop stretcher, stair chair, spine board, immobilization devices.
- **Oxygen & Suction:** Oxygen cylinder, flowmeter, humidifier, portable suction unit.
- **Resuscitation:** Bag-Valve-Mask (BVM) (adult/pediatric), airway adjuncts, defibrillator (for ALS).
- **Monitoring:** Pulse Oximeter, Digital BP Apparatus, Stethoscope, Thermometer.
- **First Aid & Supplies:** First aid kit, trauma shears, dressing materials, maternity kit, biohazard bags, IV hooks/poles.

Regulatory Compliance

- **Standards:** Must meet national standards for safety, emissions, and equipment.
- **Markings:** Specific emergency symbols, "Star of Life," and clear labeling.

MECHANICAL SWEEPER

- **Performance:**
 - **Sweeping Width:** over 2.8m (large truck-mounted), with side brooms.
 - **Performance Rate:** Not less than 6,660 m²/hr for walk-behind).
 - **Sweeping Speed:** Ranges from low (1-15 km/h) for detailed work to higher speeds for roads.
- **Capacity:**
 - **Hopper Volume:** From, 3.5m³ - 6m³ for large units.
 - **Water Tank:** integrated, for dust suppression (e.g., 900-1000L).
- **Mechanical & Power:**

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- **Engine:** Diesel or hydraulic, with horsepower ratings (e.g., 74-115+ HP).
- **Broom System:** Main broom diameter/length, side broom diameter, hydraulic/direct drive, digging pressure settings.
- **Conveyor:** Squeegee or belt type, chain/spring driven.
- **Features:**
 - **Controls:** In-cab hydraulic levers, broom height/speed adjustment.
 - **Dumping:** High-rise scissor lift to dump into trucks.
 - **Water System:** Multiple spray nozzles, low-level indicators, filters.
 - **Chassis/Mounting:** Tractor-towed, truck-mounted, or self-propelled.
- **Dimensions & Weight:** Overall length, width, height, operating weight.

Examples of Variation

- **Tractor-Towed:** Uses PTO power, 2.8m width, 3m³ tank (UST-4000).
- or
- **Truck-Mounted:** 2-3 ton payload, 3.5m³ hopper, powerful diesel engine.
Suitable for cleaning of roads, debris type (wet or dry), and budget.
- Truck Mounted Vacuum Street Sweeper |

SCHEDULE AA – BENCHMARK REVENUE

[The Benchmark Revenue table shall either be the one provided below or the Expected Toll Revenue table submitted by the successful bidder in its Bid, if the latter is lower]

FY Year	Quarter	PKR
2028	1	1,122,807,608
2028	2	1,122,807,608
2028	3	1,122,807,608
2028	4	1,122,807,608
2029	5	1,262,555,988
2029	6	1,262,555,988
2029	7	1,262,555,988
2029	8	1,262,555,988
2030	9	1,413,736,231
2030	10	1,413,736,231
2030	11	1,413,736,231
2030	12	1,413,736,231
2031	13	1,594,967,656
2031	14	1,594,967,656
2031	15	1,594,967,656
2031	16	1,594,967,656
2032	17	1,797,172,930
2032	18	1,797,172,930
2032	19	1,797,172,930
2032	20	1,797,172,930
2033	21	2,018,793,694
2033	22	2,018,793,694
2033	23	2,018,793,694
2033	24	2,018,793,694
2034	25	2,240,213,388
2034	26	2,240,213,388
2034	27	2,240,213,388
2034	28	2,240,213,388
2035	29	2,489,385,050
2035	30	2,489,385,050
2035	31	2,489,385,050
2035	32	2,489,385,050
2036	33	2,762,770,923
2036	34	2,762,770,923
2036	35	2,762,770,923
2036	36	2,762,770,923
2037	37	3,045,419,919
2037	38	3,045,419,919
2037	39	3,045,419,919
2037	40	3,045,419,919
2038	41	3,268,419,000
2038	42	3,268,419,000
2038	43	3,268,419,000
2038	44	3,268,419,000
2039	45	3,517,926,056
2039	46	3,517,926,056
2039	47	3,517,926,056
2039	48	3,517,926,056

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2040	49	3,791,028,008
2040	50	3,791,028,008
2040	51	3,791,028,008
2040	52	3,791,028,008
2041	53	4,073,110,269
2041	54	4,073,110,269
2041	55	4,073,110,269
2041	56	4,073,110,269
2042	57	4,389,867,044
2042	58	4,389,867,044
2042	59	4,389,867,044
2042	60	4,389,867,044
2043	61	4,735,867,275
2043	62	4,735,867,275
2043	63	4,735,867,275
2043	64	4,735,867,275
2044	65	5,113,667,333
2044	66	5,113,667,333
2044	67	5,113,667,333
2044	68	5,113,667,333
2045	69	5,515,767,713
2045	70	5,515,767,713
2045	71	5,515,767,713
2045	72	5,515,767,713
2046	73	5,960,020,263
2046	74	5,960,020,263
2046	75	5,960,020,263
2046	76	5,960,020,263
2047	77	6,454,106,881
2047	78	6,454,106,881
2047	79	6,454,106,881
2047	80	6,454,106,881
2048	81	7,004,188,943
2048	82	7,004,188,943
2048	83	7,004,188,943
2048	84	7,004,188,943
2049	85	7,562,979,925
2049	86	7,562,979,925
2049	87	7,562,979,925
2049	88	7,562,979,925
2050	89	8,197,180,981
2050	90	8,197,180,981
2050	91	8,197,180,981
2050	92	8,197,180,981
2051	93	8,903,216,113
2051	94	8,903,216,113
2051	95	8,903,216,113
2051	96	8,903,216,113
2052	97	9,686,217,578
2052	98	9,686,217,578
2052	99	9,686,217,578
2052	100	9,686,217,578

SIGNATURE PAGE

For and on behalf of
GOVERNOR OF PUNJAB
(Through **SECRETARY,**
COMMUNICATION AND WORKS
DEPARTMENT)
through its authorised signatory

SIGNATURE

Name:
Designation:

.....

Name:
Designation:

.....

in the presence of:
signature of **WITNESSES**

SIGNATURE

1- Name:
Address:
NIC No:

.....

2- Name:
Address:
NIC No:

.....

For and on behalf of **[INSERT NAME OF**
PRIVATE PARTNER] through its
authorised signatory

SIGNATURE

Name:
Designation:

.....

in the presence of:
signature of **WITNESSES**

SIGNATURE

1- Name:
Address:
NIC No:

.....

2- Name:
Address:
NIC No:

.....