NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Shipping Road Transport & Highways)
Government of India

Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul bypass) to km 426.6 (Samyanallore) on NH-7 in the state of Tamil Nadu on Build Operate & Transfer (BOT) basis.

CONCESSION AGREEMENT

NATIONAL HIGHWAYS AUTHORITY OF INDIA
G-5 & 6, SECTOR -10, DWARKA, NEW DELHI-110075

AND

DS TOLL ROAD LIMITED
THIRD FLOOR
RELIANCE ENERGY CENTRE
SANTA CRUZ (E)
MUMBAI-400055

PROJECT REFERENCE NO :-NS2/BOT/TN5

ON 30TH OF JANUARY,2006

Volume 1 of 3

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Shipping Road Transport & Highways)
Government of India

Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul bypass) to km 426.6 (Samyanallore) on NH-7 in the state of Tamil Nadu on Build Operate & Transfer (BOT) basis.

CONCESSION AGREEMENT

NATIONAL HIGHWAYS AUTHORITY OF INDIA
G-5 & 6, SECTOR -10, DWARKA, NEW DELHI-110075

AND

DS TOLL ROAD LIMITED
THIRD FLOOR
RELIANCE ENERGY CENTRE
SANTA CRUZ (E)
MUMBAI-400055

PROJECT REFERENCE NO :-NS2/BOT/TN5

ON 30TH OF JANUARY,2006

Volume 1 of 3

SUMMARY

Sr. No	Particular
1	Volume 1 • Concession Agreement ,Schedules and SPV Details for DS Toll Road Limited
2	Volume 2 • RFP, Response to Queries and Addendum for DS Toll Road Limited
3	Volume 3 • DPR for DS Toll Road Limited

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Shipping Road Transport & Highways)
Government of India

Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul bypass) to km 426.6 (Samyanallore) on NH-7 in the state of Tamil Nadu on Build Operate & Transfer (BOT) basis.

CONCESSION AGREEMENT

NATIONAL HIGHWAYS AUTHORITY OF INDIA
G-5 & 6, SECTOR -10, DWARKA, NEW DELHI-110075

AND

DS TOLL ROAD LIMITED
THIRD FLOOR
RELIANCE ENERGY CENTRE
SANTA CRUZ (E)
MUMBAI-400055

PROJECT REFERENCE NO :-NS2/BOT/TN5

ON 30TH OF JANUARY,2006

Volume 1 of 3

TABLE OF CONTENT

DS Toll Road Ltd

TABLE OF CONTENTS

CHAPTER – V

FINANCING ARRANGEMENTS

CHAPTER – VI

FORCE MAJEURE

CHAPTER – VII

SUSPENSION AND TERMINATION

CHAPTER – VIII

MISCELLANEOUS

DS Toll Road Limited

Schedules

II	SCHEDULE NO.	PARTICULARS
	A	SITE OF THE PROJECT
	B	SCOPE OF THE PROJECT
	C	PROJECT FACILITIES
	D	SPECIFICATION & STANDARDS
	E	APPLICABLE PERMITS
	F	BANK GUARANTEE FOR PERFORMANCE SECURITY
	G	SCHEDULE OF USER FEE
	H	PROJECT COMPLETION SCHEDULE
	I	DRAWINGS
	J	TESTS
	K	COMPLETION CERTIFICATE
	L	OPERATION & MAINTENANCE REQUIREMENTS
	M	MONTHLY FEE STATEMENT COLLECTION STATEMENT
	N	SELECTION CRITERIA FOR INDEPENDENT CONSULTANT
	O	TERMS OF REFERENCE OF INDEPENDENT CONSULTANT
	P	TRAFFIC SAMPLING
	Q	ESCROW AGREEMENT
	R	STATE SUPPORT AGREEMENT
	S	SAFETY REQUIREMENTS
	T	CRITERIA FOR LIST OF CHARTERED ACCOUNTANTS
	U	SUBSTITUTION AGREEMENT
	V	VESTING CERTIFICATE
	W	PASSENGER CAR UNIT FACTORS
	X	REPORTING AND RECORD REQUIREMENTS

DS Toll Road Limited

भारतीय गैर न्यायिक

एक सौ रुपये

Rs. 100

ONE HUNDRED RUPEES

रु. 100

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

ली DELHI

A 486446

रियायत करार

यह करार 30 जनवरी, 2006 को

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण अधिनियम, 1988 के प्रावधानों के अंतर्गत गठित सांविधिक निकाय, तीय राष्ट्रीय राजमार्ग प्राधिकरण जिसका मुख्यालय जी-5 और जी-6, सेक्टर 10, द्वारका नई दिल्ली-110075 में जिसे इसमें इसके पश्चात् 'भाराराप्रा' कहा गया है जिसमें जब तक इसके संदर्भ अथवा अर्थ से असंगत न हो ं इसके प्रशासक उत्तराधिकारी और समनुदेशिती शामिल हैं) एक पक्ष,

कंपनी अधिनियम, 1956 के प्रावधानों के अंतर्गत निगमित **डी एस टोल रोड लिमिटेड**, कंपनी जिसका कृत कार्यालय तीसरा तल, रिलांइस इनर्जी सेंटर, सांताक्रुज (ई), मुम्बई-400055 में है (जिसे इसमें इसके त् 'रियायतग्राही' अथवा 'कंपनी' कहा गया है जिसमें जब तक इसके संदर्भ अथवा अर्थ से असंगत न हो इसके उत्तराधिकारी और अनुमत एवजी शामिल हैं) दूसरा पक्ष, के बीच किया गया

National Highways Authority of India New Delhi

DS Toll Road Limited

91 20 / 28 JAN 2006

Serial No:.....Date:.....
Sold to:.....
Address:.....
.....
In Favour of:.....
Purpose:.....
Through:.....

Rajbir Singh L. NO. 171
GF 11/54 Meghdoot Building
Nehru Place, New Delhi-110019

28 JAN 2006

Road Ves
floor
Reliance Energy Eni
Santa Cruz E
Mumbai

भारतीय गैर न्यायिक

एक सौ रुपये

Rs. 100

ONE HUNDRED RUPEES

रु. 100

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

दिल्ली DELHI

A 486443

CONCESSION AGREEMENT

This Agreement is entered into on this the 30th day of January 2006.....
BETWEEN

1. **NATIONAL HIGHWAYS AUTHORITY OF INDIA,** a statutory body constituted under the provisions of the National Highways Authority of India Act, 1988, and having its principal office at G-5&6, Sector-10, Dwarka, New Delhi-110075 (hereinafter referred to as "NHAI" which expression shall unless repugnant to the context or meaning thereof including its administrators, successors and assigns) of One Part,

AND

2. DS Toll Road Limited, a company incorporated under the provisions of the Companies Act, 1956 and having its registered office at 3rd Floor, Reliance Energy Centre, Santa Cruz (E), Mumbai-400055 (hereinafter referred to as the "Concessionaire" or "Company" which expression shall unless repugnant to the context or meaning thereof include its successors and permitted substitutes) of the Other Part.

National Highways Authority of India

DS Toll Road Limited

0002

91198 28 JAN 2006

Serial No. ..... Date .....

Send to: .....

Address: D.S. Toll Road W/S

.....

Le Parvenir ..... 3rd floor

Payment ..... Bond Reliance Energy Centre

Forward ..... Santa Cruz (E)

Mumbai

Dennis

WHEREAS

A. The Government of India in the Ministry of Shipping, Road Transport and Highways, earlier Ministry of Road Transport & Highways, (hereinafter referred to as "MoSRT&H") had authorised NHAI for widening the existing 2 lane portion from Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) covering 53.025 Kms, on National Highway No.7 in the State of Tamil Nadu, to 4 lanes through a concession on Build, Operate and Transfer (BOT) basis and has by its Notification No 465(E) dated 26/04/2002 issued pursuant to Section 11 of the National Highways Authority of India Act, 1988 vested the said stretches of NH-7 in NHAI as set forth in the said Notification dated 26/04/2002

B. NHAI had accordingly invited Proposals under a single stage process from bidders for qualification and prescribed the commercial terms and conditions for selection of a successful bidder under its Notice Inviting Proposals No NHAI/Tech/NS2/BOT/Bids/2005 dated 27th May 2005 ("the Tender Notice"), inter alia, for Design, Construction, Development, Finance, Operation and Maintenance of "Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) on NH7, covering 53.025 Kms," on NH-7 referred to in Recital 'A' above on BOT basis subject to and on the terms and conditions contained in the Tender Notice.

C. NHAI has, pursuant thereto qualified Reliance Energy Limited (the "Single Entity") for undertaking, inter alia, the work referred to in Recital 'A' above on BOT basis.

D. After qualification of the Single Entity, NHAI accepted their Bid on BOT basis and issued its Letter of Acceptance No NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 dated 30th September 2005 ("LOA") to the Single Entity requiring, inter alia, the execution of this Concession Agreement and submission of Performance Security for the performance of its obligations under this Concession Agreement.

E. Subsequently the Single Entity has promoted and incorporated the Concessionaire as a limited liability company and provided its Performance Security to enter into this Concession Agreement pursuant to the LOA for undertaking, inter alia, the design, engineering, financing, procurement, construction, operation and maintenance of the Project, as defined hereinafter on BOT basis as referred to in Recital 'A' and to fulfill other obligations of the Concessionaire pursuant to the LOA and has requested NHAI to accept the Concessionaire as the entity which shall undertake and fulfill and perform the obligations and exercise the rights of the Single Entity under the LOA, including the obligation to enter into this Concession Agreement for the design, engineering, financing, procurement, construction, operation and maintenance of the Project on BOT basis.

DS Toll Road Limited

F. NHAI has agreed to the said request of the Single Entity and has accordingly agreed to enter into this Concession Agreement with the Concessionaire pursuant to the LOA for, inter alia, the design, engineering, financing, procurement, construction, operation and maintenance of the said Project Section on BOT basis.

G. It is deemed necessary and expedient to enter into this Agreement to record the terms of the said Agreement between the Parties.

NOW THEREFORE IN CONSIDERATION OF THE PREMISES AND THE MUTUAL COVENANTS HEREINAFTER CONTAINED, THE PARTIES HERETO HEREBY AGREE AND THIS AGREEMENT WITNESSETH AS FOLLOWS:

I DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

"Accounting Year" means the financial year commencing from 1st April of any calendar year and ending on 31st March of the next calendar year.

"Additional Facilities" means the facilities which the Concessionaire may provide or procure for the benefit of the users of the Project Highway and which are (i) in addition to the Project Facilities, and (ii) not situated on the Site.

"Agreement" means this Agreement, the Schedules 'A' through 'X' and the Annexures and Drawings hereto, the Request for Proposal (RFP) document issued by NHAI dated 27th May 2005 and any amendments thereto made in accordance with the provisions contained in this Agreement,.

"Applicable Laws" means all laws, promulgated or brought into force and effect by GOI or Government of Tamil Nadu including regulations and rules made thereunder, and judgements, 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 all clearances, permits, authorisations, consents and approvals required to be obtained or maintained under Applicable Laws in connection with the design, engineering, financing, procurement, construction, operation and maintenance of the Project Highway during the subsistence of this Agreement.

"Appointed Date" means the date 180 days from signing of Concession Agreement.

DS Toll Road Limited

0004

"Arbitration Act" means the Arbitration and Conciliation Act, 1996 and shall include modifications to or any re-enactment thereof as in force from time to time.

"Associates" means in relation to either Party, a person who controls, is controlled by, or is under the common control with such Party. As used in this definition, the expression "control" means with respect to a person which is a corporation, the ownership, directly or indirectly, of more than 50% of the voting shares of such person, and with respect to a person which is not a corporation, the power to direct the management and policies of such person, whether by operation of law or by contract or otherwise.

"Bank" means a bank incorporated in India and having a minimum net worth of Rs.500 crores (Rupees five hundred crores) and having a branch in the proximity of the Project or at any other place acceptable to NHAI.

"Bid" means the documents in their entirety comprised in the bid submitted by the Bidder in response to the Tender Notice in accordance with the provisions thereof.

"Bid Security" means the security provided by the Bidder to NHAI along with the Bid in the sum of Rs 18.30 crores (Rupees eighteen crores thirty lakhs only) in accordance with the Tender Notice and which is to remain in force until substituted by the Performance Security.

"Bidder" means the single entity referred to in Recital 'C' above.

"COD" means the commercial operations date of the Project Highway and shall be the date on which the Independent Consultant has issued the Completion Certificate or the Provisional Certificate certifying Project Completion of the Project Highway in accordance with Article XVI of this Agreement.

"Capacity Augmentation" means creation of additional capacity in accordance with Article 8A of this Agreement to maintain the desired level of service to the users of Project facility.

"Change in Law" means the occurrence of any of the following after the date of this agreement:

i. the enactment of any new Indian law;

ii. the repeal, modification or re-enactment of any existing Indian law;

0005

DS Toll Road Limited

iii. the commencement of any Indian law which has not entered into effect until the date of this Agreement;

iv. a change in the interpretation or application of any Indian law by a court of record as compared to such interpretation or application by a court of record prior to the date of this Agreement; or

v. any change in the rates of any of the Taxes.

"Change of Scope" shall have the meaning ascribed thereto in Clause 17.1.

"Company" means the Company acting as the Concessionaire under this Agreement.

"Completion Certificate" means the Certificate issued by the Independent Consultant pursuant to Clause 16.4.

"Concession" shall have the meaning ascribed thereto in Article III.

"Concession Fee" shall have the meaning ascribed thereto in Article VII.

"Concession Period" means the period beginning from the Appointed Date and ending on the Termination Date.

"Concessionaire" means DS Toll Road Limited and its successors and substitutes and assigns expressly approved in writing by NHAI.

"Construction Period" means the period beginning from the Appointed Date and ending on the COD.

"Construction Works or Works" means all works and things necessary to complete the Project Highway for use of the traffic and other users thereof in accordance with this Agreement.

"Contractor" means the contractor or contractors, if any, with whom the Concessionaire has entered into all or any of the Project Agreements.

"Cure Period" means the period specified in this Agreement for curing any breach or default of any provision of this Agreement by the Party responsible for such breach or default and upon failing of which the Agreement may be terminated by the other Party.

"Damages" shall have the meaning ascribed thereto in Clause 1.2(p).

DS Toll Road Limited

"Debt Due" means the aggregate of the following sums expressed in Indian Rupees or in the currency of debt, as the case may be, outstanding and payable to the Senior Lenders under the Financing Documents:

(i) the principal amount of the debt provided by the Senior Lenders under the Financing Documents for financing the Project (the "Principal") which is outstanding as on the Termination Date but excluding any part of the Principal that had fallen due for repayment one year prior to the Termination Date unless such repayment had been rescheduled with the prior consent of NHAI; and

(ii) all accrued interest, financing fees and charges payable on or in respect of the debt referred to in sub-clause (i) above upto the date preceding the Termination Date but excluding (a) any interest, fees or charges that had fallen due one year prior to the Termination Date, and (b) penal interest or charges, payable under the Financing Documents to any Senior Lender.

"Debt Service Payments" means the sum of all principal and interest payments due and payable in an Accounting Year to the Senior Lenders under the Financing Documents.

"Development Period" means the period from the date of this Agreement until the Appointed Date.

"Dispute" shall have the meaning set forth in Clause 39.1(a).

"Dispute Resolution Procedure" means the procedure for Dispute resolution set forth in Article XXXIX.

"Divestment Requirements" means the obligations of the Concessionaire and NHAI for and in respect of the Termination of this Agreement as set forth in Article XXXIII.

"Document" or "Documentation" means documentation printed or in written form, tapes, discs, drawings, computer programmes, writings, reports, photographs, cassettes, or expressed in any other written, audio or visual form.

"Drawings" means all the drawings, calculations and documents pertaining to the Project Highway as set forth in Schedule 'I' and shall include "as built" drawings of the Project Highway.

DS Toll Road Limited

"DPR" means the Detailed Project Report in respect of the Project comprised of the following provided by NHAI to the bidders for the Project as part of bidding documents:

Volume I	-	Main Report
Volume II	-	Design Report
Volume III	-	Materials Report
Volume IV	-	Environment Management Plan
Volume VI	-	Standards & Specifications
Volume X	-	Drawings

"EPC Contract" means contract or contracts entered into by the Concessionaire with one or more Contractors for the design, engineering, procurement of materials and equipment, construction, and completion of the Project Highway in accordance with the provisions of this Agreement.

"Emergency" means a condition or situation that is likely to endanger the security of the individuals on or about the Project Highway including users thereof or which poses an immediate threat of material damage to any of the Project Assets.

"Encumbrances" means any encumbrances such as mortgage, charge, pledge, lien, hypothecation, 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 Project Highway.

"Equity" means the sum expressed in Indian Rupees representing the equity share capital of the Company and shall include the funds advanced by the Single Entity or by any of its Associates to the Concessionaire company for meeting the equity component of the Total Project Cost. Provided, however, that for purposes of computing Termination Payments under this Agreement, Equity shall be reckoned as an amount that is arrived at after excluding from the equity share capital of the Company the following viz. (a) Equity Support, if any , and (b) the sum by which the capital cost of the Project Highway as stated by the Concessionaire for purposes of claiming Termination Payments exceeded the Total Project Cost.

"Equity Support" shall have the meaning ascribed thereto in Clause 23.3.

"Escrow Account" means an Account which the Concessionaire shall open and maintain with a Bank in which all inflows and outflows of cash on account of capital and revenue receipts and expenditures shall be credited and debited, as the case may be, in accordance with the provisions of this Agreement.

"Escrow Agreement" shall have the meaning ascribed thereto in Clause 25.2.

"Exempted Vehicles" means
Vehicles –

(a) Defense Vehicles;
(b) Police vehicles;
(c) Fire fighting vehicles;
(d) Ambulances;
(e) Funeral vans;
(f) Post and Telegraph Department's vehicles;
(g) Central and State Government vehicles on duty
(h) Vehicles with "VIP" symbols or officially belonging to:-
   i. President of India,
   ii. Vice-President of India
   iii. Governor of a State and Lt. Governor of a Union Territory
   iv. A Foreign dignitary on State visit to India, and
   v. A Foreign Diplomat stationed in India using cars with "CD"/ "CC" symbols
   vi. Chairman of Rajya Sabha or Speaker of Lok Sabha or Chairman of a State Legislative Council or Speaker of a State Legislative Assembly or a Minister for the Union or State or Leader of Opposition in Lok Sabha or Rajya Sabha or State Legislatures having the Status of Cabinet Minister if he is sitting in the vehicle; Or
   vii. Members of Parliament in the entire country or a Member of Legislative Assembly of a State or a Member of Legislative Council of a State, in the respective State if he produces his Identity Card issued by the Parliament or concerned Legislature of a State as the case may be.
   viii. Belonging to winner of Gallantry awards such as Param Vir Chakra, Ashok Chakra, Maha Vir Chakra, Kirti Chakra, Vir Chakra and Shaurya Chakra, if such awardee produces his photo Identity Card duly authenticated by the Competent Authority for such award
(i) Different class of defence personnel and vehicle carrying cargo meant for them in accordance with Indian Tolls (Army and Air Force) Act, 1901, Rules including any amendments thereto.

"Fee" means the charge levied on and payable for a vehicle crossing the toll plaza while using the Project Highway or part thereof in accordance with the Fee Notification and this Agreement.

"Fee Notification" means the Notification to be issued by GOI in exercise of the powers conferred by Section 8A of the NH Act, 1956 in respect of the levy and

DS Toll Road Limited

collection of the Fees, substantially as per the format in Schedule 'G', 30 days prior to the COD.

"Financial Close" means the date on which the Financing Documents providing for funding by the Senior Lenders have become effective and the Concessionaire has immediate access to such funding under the Financing Documents.

"Financing Documents" means the documents executed by the Concessionaire in respect of financial assistance to be provided by the Senior Lenders by way of loans, guarantees, subscription to non-convertible debentures and other debt instruments including loan agreements, guarantees, notes, debentures, bonds and other debt instruments, security agreements, and other documents relating to the financing (including refinancing) of the Project and includes amendments or modifications made in accordance with Clause 9.1(iv).

"Force Majeure" or "Force Majeure Event" shall mean an act, event, condition or occurrence specified in Article XXIX.

"GOI" means the Government of India.

"GOTN" means the Government of the State of Tamil Nadu.

"Good Industry Practice" means those practices, methods, techniques, standards, skills, diligence and prudence which are generally and reasonably expected of and accepted internationally from a reasonably skilled and experienced operator engaged in the same type of undertaking as envisaged under this Agreement and acting generally in accordance with the provisions of the NH Act, and would mean good engineering practices in the design, engineering, construction and project management and which would be expected to result in the performance of its obligations by the Concessionaire and in the operation and maintenance of the Project Highway in accordance with this Agreement, Applicable Laws, Applicable Permits, reliability, safety, environment protection, economy and efficiency.

"Governmental Agency" means GOI, Government of Tamil Nadu or any ministry, department, commission, board, authority, instrumentality or agency, under the control of GOI or Government of Tamil Nadu having jurisdiction over all or any part of the Project Highway or the performance of all or any of the services or obligations of the Concessionaire under or pursuant to this Agreement.

"Grant" shall have the meaning ascribed thereto in Clause 23.1.

0010 DS Toll Road

"Indemnifying Party" means the Party obligated to indemnify the other Party pursuant to Article XXXVII.

"Independent Consultant" shall have the meaning ascribed thereto in Clause 20.1.

"Indirect Political Event" shall have the meaning ascribed thereto in Clause 29.3.

"Lenders' Representative" means the person(s) duly authorised by the Senior Lenders to deal with the Parties to the Agreement with regard to the issues arising out of and contained in this Agreement.

"Local Traffic" shall have the meaning ascribed thereto in Schedule 'G'.

"Maintenance Manual" shall have the meaning ascribed to it in Clause 18.2.

"Maintenance Programme" shall have the meaning ascribed to it in Clause 18.3.

"Material Adverse Effect" means material adverse effect of any act or event on the ability of either Party to perform any of its obligations under and in accordance with the provisions of this Agreement

"Material Breach" means a breach by either Party of any of its obligations in this Agreement which shall be deemed to have a Material Adverse Effect on the Project and which it shall have failed to cure within the Cure Period.

"NHAI Representative" means such person or persons as may be authorised in writing by NHAI to act on its behalf under this Agreement and shall include any person or persons having authority to exercise any rights or perform and fulfill any obligations of NHAI under this Agreement.

"Net Cash Flow" means in any Accounting Year revenue income less tax payments, O&M Expense, Concession Fee, Negative Grant and Debt Service Payments to Senior Lenders.

"Non Political Event" shall have the meaning ascribed thereto in Clause 29.2.

"O&M" means the operation and maintenance of the Project Highway during the Operations Period and includes but is not limited to functions of maintenance, collection and appropriation of Fees and performance of other services incidental thereto.

0011

DS Toll Road Ltd

"O&M Contract" means the Operation and Maintenance Contract that may be entered into between the Concessionaire and the O&M Contractor for O&M of the Project Highway..

"O&M Contractor" means the person or entity with whom the Concessionaire has entered into an O&M Contract for discharging O&M functions for and on behalf of the Concessionaire.

"O&M Expense" means expenses incurred by or on behalf of the Concessionaire duly certified by its Statutory Auditors or by NHAI, as the case may be, for all regularly scheduled and reasonably anticipated O&M during Operations Period, including, without limitation (a) all cost of salaries and other employee compensation and contract fee payable to the O&M Contractor, if any (b) cost of materials, supplies, utilities and other services (c) premia for insurance (d) all franchise, excise, property and other similar taxes and all costs and fees incurred in order to obtain and maintain all Applicable Permits necessary for the O&M of the Project Highway at its full design capacity, (e) all repair, replacement and maintenance costs of the Project Highway, and (f) all other expenditures required to be incurred under Applicable Law or under Applicable Permits necessary for the operation and maintenance of the Project Highway according to the Specifications and Standards at its full design capacity.

"O&M Support" shall have the meaning ascribed thereto in Clause 23.5.
"O&M Works" means all works necessary to keep the Project Highway in operation during the Operations Period.

"Operations Period" means the period commencing from COD and ending on the Termination Date.

"PCU" shall have the meaning ascribed to the passenger car unit in the 'Indian Roads Congress', Publication No.IRC-64, 1990, a true copy of which is at Schedule 'W', and for the purposes of this Agreement refers only to such PCUs which pay Fees in accordance with the Fee Notification.

"Parties" means the parties to this Agreement collectively and "Party" shall mean any of the Parties to this Agreement individually.

"Performance Security" shall have the meaning ascribed in the RFP

"Political Event" shall have the meaning ascribed thereto in Clause 29.4.

"Preliminary Notice" shall have the meaning attributed thereto in Clause 32.1.2.

DS Toll Road Limited

0012

"Project" means the development, design, financing, procurement, engineering and construction, operation and maintenance of the Project Highway in accordance with the provisions of this Agreement and shall include all works relating to or in respect of the Project Highway as described in Article II.

"Project Agreements" means this Agreement, the Financing Documents, the EPC Contract, if any, the O&M Contract, if any, the Tolling Contract, if any, and any other agreements or contracts entered into by the Concessionaire with NHAI or others relating to the Project during the subsistence of this Agreement.

"Project Assets" means all physical and other assets relating to and forming part of the Project Highway including but not limited to (i) rights over the Site in the form of license, right of way or otherwise, (ii) tangible assets such as civil works including the foundation, embankments, pavements, road surface, interchanges, bridges, approaches to bridges and flyovers, road overbridges, drainage works, lighting facilities, traffic signals, sign boards, milestones, toll plazas, equipment for the collection of tolls or relating to regulation of traffic, electrical works for lighting on the Project Highway, telephone and other communication systems and equipment for the Project, rest areas, administration and maintenance depots, relief centers, service facilities etc. (iii) Project Facilities situated on the Site (iv) the rights of the Concessionaire under the Project Agreements, (v) financial assets, such as security deposits for electricity supply, telephone etc. (vi) insurance proceeds and (vii) Applicable Permits and authorisations relating to or in respect of the Project Highway, but does not include Additional Facilities.

"Project Completion" shall have the meaning ascribed thereto in Clause 15.1.
"Project Completion Schedule" means the progressive Project Milestone set forth in Schedule 'H' for the realization of the Project Highway complete in all respects by the Scheduled Project Completion Date.

"Project Facilities" means all the amenities and facilities situated on the Site, as described in Schedule 'C'.

"Project Highway" means the NH-7 stretch from km 373.275 to km 426.6 and includes widening the existing 2 lane portion from km 373.275 to km 426.6 covering 53.025 kms, on National Highway No. 7 in the State of Tamil Nadu, to 4 lanes and shall include the Project Assets and the Project Facilities to be designed, engineered, built and improved on Site and to be operated and maintained during the Concession Period in accordance with the provisions of this Agreement.

"Provisional Certificate" shall have the meaning ascribed to it in Clause 16.5.

DS Toll Road Limited

0013

"Punch List" shall have the meaning ascribed to it in Clause 16.5 and if applicable shall include:

(i) plantation of avenue trees along the edge of the RoW and other landscaping works within RoW
(ii) completion of work on Provision of Unlined Roadside Drains
(iii) lining of roadside drains in identified stretches
(iv) construction of rest areas, as approved
(v) completion of Fencing Works of RoW
(vi) turfing on embankment slopes in identified sections
(vii) pointing to Stone Masonry works in identified Cross Drainage Structures
(viii) stone Pitching at identified locations

"RBI" means the Reserve Bank of India as constituted and existing under the Reserve Bank of India Act, 1946 including any statutory modification or replacement thereof, and its successors etc.

"RFP" shall mean the Request for Proposal dated 27th May 2005 for 4/6 laning of 15 Projects on North – South & East –West Corridors (NHDP – Phase II) in the States of Utter Pradesh, Andhra Pradesh, Karnataka, Tamil Nadu and Kerala issued by the NHAI and any Addendum(s) thereto

"Realizable Fee" means all the Fees due and realizable under this Agreement but does not include Fees that the Concessionaire has not been able to realise after due diligence and best efforts.

"Revenue Shortfall Loan" shall have the meaning ascribed to it in Clause 24.1.

"Rs." Or "Rupees" means the lawful currency of the Republic of India.

"SBI PLR" means the prime lending rate per annum for loans with 1(one) year maturity as fixed from time to time by the State Bank of India, and in the absence of such rate, the average of the prime lending rates for loans with 1(one) year maturity fixed by the Bank of India and Punjab National Bank and failing that any other arrangement that substitutes such prime lending rate as mutually agreed between the Parties.

"Scheduled Project Completion Date" shall have the meaning set forth in Clause 15.3.

"Senior Lenders" means the financial institutions, banks, funds and agents or trustees of debenture holders, Non- Banking Financial Companies or other major lending agencies approved by Reserve Bank of India including their successors and assignees,

who have agreed to guarantee or provide finance to the Concessionaire under any of the Financing Documents for meeting costs of all or any part of the Project and who hold pari passu charge on the Concession granted by this Agreement.

"Site" means the real estate licensed by NHAI to the Concessionaire under and in accordance with this Agreement on which the Project Highway is situated.

"Specifications and Standards" means the specifications and standards relating to the quality, capacity and other requirements for the Project Highway as set forth in Schedule 'D' and any modifications thereof, or additions as included in the design and engineering for the Project Highway submitted by the Concessionaire to and expressly approved by NHAI.

"State Support Agreement" means the agreement to be entered into between the Government of Tamil Nadu, NHAI and the Concessionaire substantially in the form set forth in Schedule 'R' for provision of support, backup and services required from Government of Tamil Nadu for the performance of Concessionaire's obligations under this Agreement.

"Statutory Auditors" means an independent, recognized and reputable firm of Chartered Accountants duly licensed to practice in India acting as independent statutory auditors of the Concessionaire under the provisions of the Companies Act, 1956 including any statutory modification or re-enactment or replacement thereof, for the time being in force, and appointed in accordance with Clause 28.2.

"Subordinated Debt" means any borrowings by the Concessionaire subordinated to the financial assistance provided by the Senior Lenders for meeting the Total Project Cost but does not include any interest thereon.

"Subsistence Revenue Level" means the total amount of Fee revenue that is required by the Concessionaire in an Accounting Year to meet the sum of (a) the O&M Expense subject to an annual ceiling of 2.0 % (two percent) of the Total Project Cost in the first operations year, to be revised each year to reflect the variations in the WPI in each subsequent years and (b) Debt Service Payments due to the Senior Lenders in an Accounting Year.

"Substitution Agreement" means the agreement referred to in Article XXXV and to be entered into among the Concessionaire, NHAI and the Senior Lenders in the form set forth in Schedule 'U' providing, inter alia, for the substitution of the Concessionaire by any other person subject to and in accordance with the provisions of this Agreement and the Substitution Agreement.

DS Toll Road Limited

0015

"Taxes" means any Indian taxes on corporate income, Sales tax, excise duties, customs duties and local taxes and any impost of like nature (whether Central, State or local) charged, levied or imposed on the goods, materials, equipment and services incorporated in and forming part of the Project Highway, on the construction, operation and maintenance thereof and on the Project Assets, but excluding any interest, penalties and other sums in relation thereto imposed on any account whatsoever.

"Termination" means the expiry or termination of this Agreement and the Concession hereunder.

"Termination Date" means the date on which this Agreement and the Concession hereunder expires pursuant to the provisions of this Agreement or is terminated by a Termination Notice.

"Termination Notice" means the communication issued in accordance with this Agreement by any one Party to the other Party terminating this Agreement.

"Termination Payment" means the amounts payable by NHAI to the Concessionaire under this Agreement upon the Termination of this Agreement and shall consist of payments relating to Debt Due, Subordinated Debt and Equity, as the case may be, and such other amounts as are expressly provided for under this Agreement. Provided, however, that for purposes of determining Termination Payments to be made by NHAI under this Agreement, the capital cost of the Project Highway shall at all times be reckoned as an amount not exceeding the Total Project Cost and the liability of NHAI to make such Termination Payments relating to Debt Due, Subordinated Debt and Equity shall be determined as if such capital cost was restricted to Total Project Cost.

"Tests" mean the tests to be carried out as set forth in and in accordance with Schedule 'J' to determine the Project Completion and its certification by the Independent Consultant for commencement of commercial operation of the Project Highway.

"Toll Plaza" means the structures and barriers erected on the Project Highway for the purpose of regulating the entry/exit of vehicles in accordance with the provisions of this Agreement.

"Tolling Contract" means the contract, if any, entered into by the Concessionaire with the Tolling Contractor for operation of the Toll Plazas including collection of Fees for and on behalf of the Concessionaire.

DS Toll Road Limited

0016

"Tolling Contractor" means the person, if any, with whom the Concessionaire has entered into a Tolling Contract for operation of Toll Plazas and collection of Fees for and on behalf of the Concessionaire.

"Total Project Cost" means the lowest of the following:

a. a sum of Rs 2835 million;

b. actual capital cost of the Project upon completion of the Project Highway as certified by the Statutory Auditors; or

c. total project cost as set forth in Financing Documents.

Provided further that if part of the Total Project Cost is funded in foreign currency, in accordance with the Financing Package, then the rate of exchange shall be determined as on the date of Bid, and the Total Project Cost shall be computed as if such foreign currency were converted with reference to such exchange rate. In the event of Termination of this Agreement requiring NHAI to make Termination Payments, the liability of NHAI shall be determined on basis of the rate of exchange prevailing on the date of Termination Notice and the amounts payable by NHAI for Debt Due and Subordinated Debt, as the case may be, shall be computed accordingly.

"Value Additions" shall have the meaning attributed to it in Clause 17.5.

"Vesting Certificate" shall have the meaning attributed to it in Clause 33.4.

"WPI" means the wholesale price index published by the Ministry of Industry, GOI and shall include any index, which substitutes the WPI.

1.2 In this Agreement, unless the context otherwise requires,

(a) any reference to a statutory provision shall include such provision as is from time to time modified or re-enacted or consolidated so far as such modification or re-enactment or consolidation applies or is capable of applying to any transactions entered into hereunder;

(b) references to Indian law shall include the laws, acts, ordinances, rules, regulations, or bye laws which have the force of law in any State or Union Territory forming part of the Union of India;

(c) the words importing singular shall include plural and vice versa, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal entity);

DS Toll Road Limited

0017

(d) the headings are for convenience of reference only and shall not be used in and shall not affect the construction or interpretation of this Agreement;

(e) terms and words beginning with capital letters and defined in this Agreement shall have the meaning ascribed thereto herein and the terms and words defined in the Schedules and used therein shall have the meaning ascribed thereto in the Schedules;

(f) the words "include" and "including" are to be construed without limitation;

(g) references to "construction" include, unless the context otherwise requires, investigation, design, engineering, procurement, delivery, transportation, installation, processing, fabrication, testing, commissioning and other activities incidental to the construction;

(h) any reference to any period of time shall mean a reference to that according to Indian Standard Time;.

(i) any reference to day shall mean a reference to a calendar day;

(j) any reference to month shall mean a reference to a calendar month;

(k) the Schedules 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;

(l) 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, license or other document as amended, varied, supplemented, modified or suspended at the time of such reference provided that this clause shall not operate so as to increase liabilities or obligations of NHAI hereunder or pursuant hereto in any manner whatsoever;

(m) references to Recitals, Articles, Clauses, Sub-clauses, Paragraphs, or Schedules in this Agreement shall, except where the context otherwise requires, be deemed to be references to Recitals, Articles, Clauses, Sub-clauses, paragraphs, and Schedules of or to this Agreement;

(n) any agreement, consent, approval, authorisation, notice, communication, information or report required under or pursuant to this Agreement from or by any Party or the Independent Consultant shall be valid and effectual only if it is in writing under the hands of duly authorised representative of such

DS Toll Road Limited

Party or the Independent Consultant, as the case may be, in this behalf and not otherwise;

(o) 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;

(p) the 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 or liquidated damages (the "Damages"); and

(q) unless otherwise expressly provided in this Agreement any Documentation required to be provided or furnished by the Concessionaire to NHAI and/or the Independent Consultant shall be provided free of cost and in three copies and if NHAI and/or the Independent Consultant are required to return any such Documentation with their comments and/or approval, they shall be entitled to retain two copies thereof.

1.3 Measurements and Arithmetic Conventions

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

1.4 Priority of contract documents and errors/discrepancies

1.4.1 The several documents forming this Agreement are to be taken as mutually explanatory to one another and, unless otherwise expressly provided elsewhere in this Agreement, the priority of the following documents shall in the event of any conflict between them be in the order they are set out:

(i) this Agreement

(ii) all other documents forming part of this Agreement

i.e. document at (i) above shall prevail over the documents at (ii) above.

1.4.2 In case of ambiguities or discrepancies within this Agreement the following shall apply:

DS Toll Road Limited

(i) Between two Clauses of this Agreement, the provisions of the specific clause relevant to the issue under consideration shall prevail over those in other Clauses;

(ii) Between the Clauses and the Schedules, the Clauses shall prevail save as otherwise expressly set forth in Clause 1.4.1;

(iii) Between DPR issued alongwith RFP and the Schedules, the latter shall prevail;

(iv) Between the written description on the Drawings and the Specifications and Standards, the latter shall prevail;

(v) Between the dimension scaled from the Drawing and its specific written dimension, the latter shall prevail;

(vi) Between any value written in numerals and that in words, the latter shall prevail.

II SCOPE OF PROJECT

2.1 The Project shall be executed on the Site, which is described in Schedule 'A' of this Agreement. The scope of the Project shall include performance and execution by the Concessionaire of all design, engineering, financing, procurement, construction, completion, operation and maintenance of the Project Highway as described in Schedule 'B' and Schedule 'C' of this Agreement. It shall include widening the existing 2 lane portion from Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) covering 53.025 Kms, on National Highway No.7 in the State of Tamil Nadu, to 4 lanes through a concession on Build, Operate and Transfer (BOT) basis in accordance with the Specifications and Standards set forth in Schedule 'D' and operation and maintenance thereof in accordance with Schedule 'L'. It shall also include the performance and fulfillment of other obligations by the Concessionaire under this Agreement.

The Concessionaire shall undertake its obligations at its own cost and risk.

DS Toll Road Limited

0020

CHAPTER – II
GRANT OF CONCESSION

III. GRANT OF CONCESSION

3.1 Subject to and in accordance with the terms and conditions set forth in this Agreement, NHAI hereby grants to the Concessionaire and the Concessionaire hereby accepts the Concession for a period of 20 (twenty) years commencing from the Appointed Date, including the exclusive right, licence and authority during the subsistence of this Agreement to implement the Project and the Concession in respect of the Project Highway.

3.2 Subject to and in accordance with the terms and conditions set forth in this Agreement, the Concession hereby granted shall entitle the Concessionaire to enjoy, and oblige the Concessionaire to undertake the following in accordance with the provisions of this Agreement, the Applicable Laws and the Applicable Permits:

i to develop, design, engineer, finance, procure, construct, operate and maintain the Project Highway during the Concession Period;

ii upon completion of the Project Highway and during the Operations Period to manage, operate & maintain the Project Highway and regulate the use thereof by third parties;

iii levy, demand, collect and appropriate the Fees from vehicles and persons liable to payment of Fees for using the Project Highway or any part thereof and refuse entry of any vehicle to the Project Highway if the due Fee is not paid;

iv perform and fulfill all of the Concessionaire's obligations under this Agreement;

v bear and pay all expenses, costs and charges incurred in the fulfillment of all the Concessionaire's obligations under this Agreement ;and

vi not assign or create any lien or Encumbrance on the Concession hereby granted on the whole or any part of the Project Highway nor transfer, lease or part possession therewith save and except as expressly permitted by this Agreement or the Substitution Agreement.

3.3. The Concession Period shall commence on the Appointed Date and shall end on the Termination Date.

DS Toll Road Limited

0021

IV. CONDITIONS PRECEDENT

4.1 Conditions Precedent

Save and except as provided in Articles IV, V and XXII, the rights and obligations of the Concessionaire under this Agreement are subject to the satisfaction in full of the following conditions precedent to be fulfilled on or before Financial Close unless any such condition has been waived as provided in Clause 4.2:

(a) Concessionaire shall have obtained all such Applicable Permits as listed in Schedule 'E' unconditionally or if subject to conditions then all such conditions have been satisfied in full and such Applicable Permits are and shall be kept in full force and effect for the relevant period during the subsistence of this Agreement;

(b) the Concessionaire shall have been granted way leaves required in connection with the Project including:

(i) existing rights of way for the alignment of the Project Highway free from all Encumbrances;

(ii) rights of way from public roads to the Site; and

(iii) permission/licence to enter upon and utilise the Site for the construction pursuant to and in accordance with this Agreement.

(c) The Concessionaire shall have obtained all Central Government clearances and permits under the applicable laws relating to environmental protection and conservation from the Ministry of Environment and Forest.

(d) Deleted

(e) certified true copies of all Project Agreements, in particular, the Financing Documents, the EPC Contract, O&M Contract, if any and the Tolling Contract, if any, as well as the shareholders funding agreement have been delivered by the Concessionaire to NHAI;

(f) the Performance Security in full has been provided by the Concessionaire to NHAI in accordance with the RFP and the same is in full force and effect;

(g) all of the representations and warranties of the Concessionaire set forth in Article XI are true and correct as on date of this Agreement and as on the Appointed Date;

DS Toll Road Limited

0022

(h) NHAI shall have received from the Concessionaire copies (certified as true copies by an authorised officer of the Concessionaire) of the constitutional documents of the Concessionaire;

(i) NHAI shall have received copies (certified as true copies by a Director of the Concessionaire) of all resolutions adopted by the Board of Directors of the Concessionaire authorising the execution, delivery and performance by the Concessionaire of this Agreement and each of the Project Agreements;

(j) NHAI shall have received from the Indian legal counsel of the Concessionaire a legal opinion with respect to the authority of the Concessionaire to enter into this Agreement and the Project Agreements and the Financing Documents and the enforceability of the provisions thereof; and

4.2 Any of the conditions precedent set forth in Clause 4.1, save and except condition of Sub-clause (b) and (c) thereof, may be waived fully or partially by NHAI at anytime in its sole discretion.

4.3 Obligation to Satisfy the Conditions Precedent.

The Concessionaire shall make all reasonable endeavors to procure the satisfaction in full of the Conditions Precedent set out in Clause 4.1 above and NHAI shall make all reasonable endeavor to procure fulfillment of the conditions set forth in Sub-clauses (b), (c) and (d) of Clause 4.1. Each Party shall bear its respective cost and expense of satisfying such Condition Precedent unless otherwise expressly provided.

4.4 If the Conditions Precedent set forth in Clause 4.1 have not been satisfied on or before the Financial Close and the NHAI has not waived, fully or partially, such conditions under Clause 4.1, NHAI may, notwithstanding anything to the contrary contained in this Agreement, terminate this Agreement in accordance with provisions of Clause 32.2 without being liable in any manner whatsoever to the Concessionaire and forfeit the Performance Security by way of Damages, provided that where NHAI does not fulfill its obligations under Clause 4.3 and terminates this Agreement under this Clause 4.4, it shall refund the Performance Security.

V. PERFORMANCE SECURITY

5.1 The Single Entity, for due and faithful performance of the Concessionaires obligations during the construction period has provided to NHAI, Bank Guarantee No. 0004BG00243605 dated 29th October 2005 its amendments dated 17th January 2006, __ January 2006 and 24th January 2006 for Rs 8,50,60,000 (Rs eight crores

DS Toll Road Limited

0023

fifty lakhs sixty thousand only) being 3% of the Total Project Cost from ICICI Bank Limited valid upto 28th February 2009 and Bank Guarantee No. 0004GB00243405 dated 29th October 2005 its amendments dated 17th January 2006, __ January 2006 and 24th January 2006 for Rs 5,67,00,000 (Rs five crores sixty seven lakhs only) being 2% of the Total Project Cost from ICICI Bank Limited valid upto 31st August 2006. The Performance Security shall be reduced to Rs 8,50,60,000 (Rs eight crores fifty lakhs sixty thousand only) being 3% of the Total Project Cost after achievement of the Financial Close by the Concessionaire. The Single Entity further agrees and undertakes to keep the bank guarantee valid and enforceable till the COD subject to Clause 5.2 below. The Performance Security shall be released by NHAI to the Concessionaire upon issuance of the Completion Certificate by the Independent Consultant.

5.2 In the event of the Concessionaire being in default in the due and faithful performance of its obligations under this Agreement and failing to remedy such default within the Cure Period, the NHAI shall without prejudice to its other rights and remedies hereunder be entitled to encash and appropriate the Performance Security as Damages for such default. Upon such encashment and appropriation of the Performance Security, NHAI shall grant a period of 15 (fifteen) days to the Concessionaire to provide fresh Performance Security and the Concessionaire shall within the time so granted furnish to NHAI such Performance Security failing which NHAI shall be entitled to terminate this Agreement under clause 32.2. The provision set forth in Clause 5.2 and this Clause 5.3 shall apply mutatis-mutandis to such fresh Performance Security.

5.3 Notwithstanding anything to the contrary contained in clause 5.3, upon furnishing of fresh Performance Security in accordance with clause 5.2, the Concessionaire shall be granted an additional period of 60 (Sixty) days as Cure Period for remedying the defaults and complying with his obligations under this Agreement. In the event of the Concessionaire continuing to be in breach of the provisions of this Agreement after such Cure Period, NHAI shall be entitled to terminate this Agreement under the provisions of Clause 32.2.

VI. FEES

6.1 The Concessionaire shall be entitled during the Operations Period to levy, collect and appropriate the Fees from the users of the Project Highway at one Toll Plaza pursuant to and in accordance with the Fee Notification. NHAI undertakes to arrange to publish the Fee Notification substantially in the form set forth in Schedule 'G' 30 days prior to the anticipated COD, as informed by the Concessionaire, who shall provide NHAI with at least 90 days notice of the anticipated COD. Provided,

DS Toll Road Limited

0024

however, that such Fee shall be rounded off to the nearest rupee for ensuring ease of payment and collection.

6.2 The Concessionaire can adopt alternative toll location with due approval of NHAI and Independent Consultant. However the distance between any two consecutive Toll Plazas, including Toll plazas in adjacent packages, shall not be normally less than (50) kms.

6.3 The Concessionaire acknowledges that the Fee Notification, inter alia, provides for annual revision in the Fees linked to the extent of variation in WPI as per the Fee Notification, and hereby confirms that save and except as provided in the Fee Notification, the Concessionaire is not entitled to and shall not seek any relief whatsoever from NHAI, GOI or GOTN on account of increase or otherwise in WPI or on any other account except in accordance with the express provisions of this Agreement.

6.4 NA.

6.5 The Concessionaire shall not collect any Fees from Local Traffic in excess of the discounted rates as Specified in the Schedule 'G'. It shall issue appropriate passes as per Schedule 'G' or make refunds in a manner that minimizes the inconvenience to local traffic consistent with the Concessionaire's need to prevent any leakage of Fees. For carrying out provisions of this Clause, the Concessionaire shall formulate, publish and implement an appropriate scheme in accordance with Schedule 'G' and carry out such modifications and improvements to such scheme as may reasonably be suggested by NHAI or required by local circumstances from time to time in conformity with the objectives of this Agreement.

6.6 The Concessionaire shall not collect any Fees in relation to Exempted Vehicles.

6.7 The Fees collected by the Concessionaire or NHAI or NHAI's nominee pursuant hereto shall be deposited in the Escrow Account and appropriated in accordance with the provisions of Article XXV.

6.8 The Concessionaire may delegate its right to collect Fees to the O&M Contractor or the Tolling Contractor or to any other person provided, however, that notwithstanding such delegation, the Concessionaire shall be and remain solely liable and responsible for the collection of Fees in accordance with this Agreement and its deposit into the Escrow Account.

DS Toll Road Limited

VII CONCESSION FEE

7.1 In consideration of the grant of Concession under this Agreement, the Concession Fee payable by the Concessionaire to the NHAI shall be Re.1.00 (Rupee One) per year during the term of this Agreement.

7.2 The Concession Fee shall be paid in advance within 90 (ninety) days of the commencement of the year, for which it is due and payable.

VIII ADDITIONAL TOLLWAY

8.1 Notwithstanding anything to the contrary contained in this Agreement, any of NHAI, GOI or Government of Tamil Nadu may construct and operate either itself or have the same, inter alia, built and operated on BOT basis or otherwise any Expressway or other toll road, not being a bye-pass, between, inter alia, Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) on NH 7 (the "Additional Tollway") provided that such Additional Tollway shall not be opened to traffic before expiry of 8 (eight) years from the Appointed Date. Provided, however, that any such facility that is more than 120% of the length of the Project Highway or where the toll fees is more than 133% of the applicable toll fees for the Project Highway shall not be considered as an Additional Tollway. Provided further that such facility shall bypass at least one Toll Plaza of the Project Highway

8.2 In the event of NHAI, GOI or Government of Tamil Nadu, as the case may be, constructing or permitting construction of any Additional Tollway as set forth in the Clause 8.1, and the Additional Tollway is commissioned at any time after 8 (eight) years from the Appointed Date, then the Concession Period shall be increased by half the number of years by which such commissioning precedes the expiry of the Concession Period.

8.3 Upon commissioning of the Additional Tollway, the Concessionaire shall continue to levy and collect the Fee under this Agreement and shall not offer any discounts or reductions in such Fee except with the prior written consent of NHAI. Provided, however, that any such discounts or reductions that the Concessionaire had offered to any general or special class of users or vehicles for a continuous period of three years prior to the commissioning of the Additional Tollway may continue in the same form and manner after the commissioning of such Additional Tollway.

VIII A CAPACITY AUGMENTATION

Notwithstanding anything contrary contained any where in this Agreement to the provisions here below, the following are prescribed.

DS Toll Road Limited

8A.1 The NHAI may, following a detailed traffic study conducted by it, at any time after 8 years following COD decide to augment/increase the capacity of the Project (Capacity Augmentation) with a view to provide the desired level of service to the users of the Project Facility.

8A.2 The NHAI shall invite proposals from eligible Persons for Capacity Augmentation. The Concessionaire shall have option to submit its proposal for Capacity Augmentation.

8A.3 The bid document for Capacity Augmentation shall specify a Termination Payment to be made to the Concessionaire in case the Concessionaire chooses not to submit its proposal or fails or declines to match the preferred offer as mentioned in clause 8A.5 below.

8A.4 In case the Concessionaire after participating in the bidding procedure, fails to give the lowest offer, the Concessionaire shall be given the first right of refusal to match the preferred offer. If the Concessionaire matches the preferred offer, the Parties shall enter into a suitable agreement supplemental to this Agreement to give effect to the changes in scope of the Project, Concession Period and all other necessary and consequential changes. In such an event the Concessionaire shall pay to the bidder who had made the lowest offer sum of Rs. 10 lakhs (Ten Lakhs) towards bidding costs incurred by such bidder.

8A.5 In case the Concessionaire (i) chooses not to submit its proposal for Capacity Augmentation or (ii) is not the preferred bidder and also fails or declines to match the preferred offer, NHAI shall be entitled to terminate this Agreement upon payment to the Concessionaire of the Termination Payment.

8A.6 The Termination Payment referred to in the preceding clauses 8A.3 & 8A.5 above shall be the amount equivalent to the amount of Termination Payment set out in Clause 32.4.2

VIII B **Deleted**

DS Toll Road Limited

CHAPTER –III
OBLIGATIONS AND UNDERTAKINGS

IX. OBLIGATIONS OF THE CONCESSIONAIRE

9.1 The Concessionaire shall at its own cost and expense observe, undertake, comply with and perform, in addition to and not in derogation of its obligations elsewhere setout in this Agreement, the following:

(i) make, or cause to be made, necessary applications to the relevant Governmental Agencies with such particulars and details, as may be necessary for obtaining all Applicable Permits, and obtain such Applicable Permits in conformity with the Applicable Laws;

(ii) notify to NHAI forthwith the occurrence of Financial Close;

(iii) submit to NHAI certified true copies of each of the Project Agreements within 7 (seven) days of their execution;

(iv) not make any replacement, amendment or modifications to any of the Project Agreements without the prior written consent of NHAI, where such replacement, amendment or modification has or may have the effect of increasing or imposing any financial liability or obligation on NHAI in any manner, and where such amendment or modification is made without such consent, not to enforce such amendment or modification nor permit enforcement thereof against NHAI in any manner whatsoever;

(v) give NHAI not less than 30 (thirty) days written notice prior to entering into, amending or replacing any Project Agreement so as to enable NHAI to provide its consent or offer its comments, if any thereon which, if made, shall be duly considered and given effect to by the Concessionaire before entering into, amending or replacing such Project Agreement;

(vi) remove promptly from the Project Highway all surplus construction machinery and materials, waste materials (including, without limitation, hazardous materials and waste water), rubbish and other debris (including without limitation accident debris) and shall keep the Site in a neat and clean condition and in conformity with the Applicable Laws and Applicable Permits;

DS Toll Road Limited

(vii) procure, as required, the appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes and systems used or incorporated into the Project Highway;

(viii) provide all assistance to the Independent Consultant as it may require for the performance of its duties and services;

(ix) provide to NHAI reports on regular basis during the Construction Period and the Operations Period in the form and manner set forth in this Agreement and Schedule `X';

(x) obtain and maintain in force on and from the Appointed Date all insurance in accordance with the provisions of this Agreement and Good Industry Practice;

(xi) acquire such real estate, as the Concessionaire may deem appropriate for the Additional Facilities and to indemnify and save harmless and defend GOI, NHAI, and Government of Tamil Nadu from and against all proceedings, claims, demands, costs, expenses, losses and damages arising out of or relating to the securing of rights to use such real estate by the Concessionaire or any person claiming through or under the Concessionaire;

(xii) undertake Debt Service Payments in accordance with the Financing Documents;

(xiii) levy and collect Fees from users of the Project Highway at the rates set forth in the Fee Notification and in accordance with this Agreement and regulate the traffic on the Project Highway in accordance with the Applicable Laws;

(xiv) ensure and procure that each Project Agreement contains provisions that entitle NHAI to step into such agreement in its discretion in place and substitution of the Concessionaire in the event of Termination of this Agreement on account of default or breach by the Concessionaire;

(xv) appoint, supervise, monitor and control the activities of Contractors under their respective Project Agreements as may be necessary;

(xvi) make reasonable efforts to maintain harmony and good industrial relations among the personnel employed in connection with the performance of the Concessionaire's obligations under this Agreement;

DS Toll Road Limited

(xvii) comply with all Applicable Permits and Applicable Laws in the performance of the Concessionaire's obligations under this Agreement including those being performed by any of the Contractors;

(xviii) develop, implement and administer a surveillance and safety program for the Project Highway, the users thereof, and the Contractors personnel engaged in the provision of any services under any of the Project Agreements including correction of safety violations and deficiencies, and taking of all other actions necessary to provide a safe environment in accordance with Schedule 'S', Applicable Laws and Good Industry Practice;

(xix) take all reasonable precautions for the prevention of accidents on or about the Project Highway and provide all reasonable assistance and emergency medical aid to accident victims;

(xx) not to place or create and nor permit any Contractor or other person claiming through or under the Concessionaire to create or place any Encumbrance or security interest over all or any part of Site or the Project Assets, or on any rights of the Concessionaire therein or under this Agreement, save and except as expressly set forth in this Agreement;

(xxi) make its own arrangements for quarrying, and observe and fulfill the environmental and other requirements under the Applicable Laws and Applicable Permits at Concessionaire's own cost and expense;

(xxii) be responsible for safety, soundness and durability of the Project Highway including other structures forming part thereof and their compliance with the Specifications and Standards;

(xxiii) not claim or demand possession or control of any roads, structures or real estate which do not form part of the Project Highway;

(xxiv) after receiving possession of the Site or part thereof, ensure that such Site remains free from all encroachments and take all steps necessary to remove encroachments, if any

(xxv) make payment to Police department or any Government Agency, if required, for provision of such services as are not provided in the normal course or are available on payment;

(xxvi) indemnify the NHAI against all actions, suits, claims, demands and proceedings and any loss or damage or cost or expense that may be suffered

by them on account of anything done or omitted to be done by the Concessionaire in connection with the performance of its obligations under this Agreement;

(xxvii) com ply with the Divestment Requirements and hand over the Project Highway to NHAI upon Termination of the Agreement.

(xxviii) work in optimizing the use of existing Right of Way handed over to them.

(xxix) make all necessary arrangements for accomplishing the tasks of physical removal of the encroachments at his own cost.

(xxx) obtain all the necessary environmental clearances, cut the trees and carry out compensatory afforestation, as per the applicable state laws, at his own cost excluding clearances pertaining to the Project Highway passing through protected forest or sanctuary or other similar features.

(xxxi) carry out shifting of utility services.

(xxxii) obtain all necessary clearances/permits. except General Arrangement Drawings (GADs), from Railways in respect of construction of ROB/RUB and carry out all necessary tasks to accomplish construction of ROB/RUB at its own cost.

(xxxiii) liase with Government of Tamil Nadu for implementation of the Rehabilitation and Resettlement plan.

(xxxiv) to keep in full force and effect the Performance Security deposited pursuant to the RFP.

(xxxv) shall assist NHAI / Government Agency in performing functions under Control of National Highways (Land & Traffic) Act, 2002 to the extent directed by NHAI / Government Agency. Provided, however, the obligations, functions and all such acts already covered under this Agreement shall be governed by this Agreement.

(xxxvi) enter into the State Support Agreement with NHAI and the Government of Tamil Nadu;

9.2 Subject to the terms and conditions of this Agreement the Concessionaire shall at its cost and expense:

(i) undertake the design, engineering, procurement and construction and financing of the Project Highway in accordance with this Agreement;

(ii) operate and maintain the Project Highway at all times in conformity with this Agreement including but not limited to the Specifications and Standards set forth in Schedule 'D', Schedule 'L', the Maintenance Programme and Good Industry Practice.

9.3 The Concessionaire shall, before commencement of construction of the Project Highway:

(i) submit to NHAI with due regard to Project Completion Schedule as set forth in Schedule 'H' and Scheduled Project Completion Date, its design, engineering and construction time schedule and shall formulate and provide CPM/PERT charts for the completion of the said activities;

(ii) finalise the design and detailed engineering basis;

(iii) have requisite organisation and designate and appoint a Project manager and such other managers, officers and representatives as it may deem appropriate to supervise the Project and to deal with the NHAI Representative and be responsible for all necessary exchanges of information required pursuant to this Agreement; and

(iv) undertake, do and perform such acts, deeds and things as may be necessary or required for construction and Project completion under and in accordance with this Agreement.

9.4 In respect of the Concessionaire's obligations with respect to the Drawings of the Project Highway as set forth in Schedule 'I', the following shall apply:

(i) The Concessionaire shall prepare and submit with reasonable promptness and in such sequence as is consistent with the Project Completion Schedule, three copies each of all Drawings to NHAI and the Independent Consultant for review and comments.

(ii) By forwarding the Drawings for review and comment to NHAI, the Concessionaire represents that it has determined and verified that the design and engineering including field construction criteria related thereto is in conformity with the Specifications, Standards and quality set forth in this Agreement for and in respect of the Project Highway.

0088

(iii) Within 30 (thirty) days of the receipt of the Drawings, NHAI shall review the same and convey its comments/observations to the Concessionaire with particular reference to the conformity or otherwise with the Specifications and Standards set forth in this Agreement. It is expressly agreed that notwithstanding any review and comment/observations of NHAI on any Drawings or failure of NHAI to provide comments/ observations thereon, NHAI shall not be liable for the same in any manner whatsoever and the Concessionaire shall remain solely responsible for and shall not be relieved or absolved in any manner whatsoever of its obligations, duties and liabilities as set forth in this Agreement. The Concessionaire shall not be obliged to await the comments/observations of NHAI on the Drawings submitted pursuant hereto beyond the period set forth hereinabove.

(iv) If the comments/observations of NHAI indicate that the Drawings are not in conformity with the Specifications and Standards set forth in this Agreement, such Drawings shall be revised by the Concessionaire to the extent necessary and resubmitted to NHAI for review, observations and comments. NHAI shall give its observations and comments, if any, within 15 (fifteen) days of the receipt of such revised Drawings provided, however, that any observations or comments of NHAI or failure of NHAI to give any observations or comments on such revised drawings shall not relieve or absolve the Concessionaire of its obligation to conform to such Specifications and Standards.

(v) The Concessionaire shall be responsible for delays in Project Completion Schedule caused by reasons of any Drawings not being in conformity with the Specifications and Standards, and the Concession Period shall not be extended in any manner whatsoever on account of submission or revision of any Drawings.

(vi) Within 90 (ninety) days of the COD, the Concessionaire shall furnish NHAI with "as built" Drawings reflecting the Project Highway as actually designed, engineered and constructed, including without limitation on "as built" survey illustrating the layout of the Project Highway and setback lines, if any, of the buildings and structures forming part of Project Facilities.

9.5 The Concessionaire shall submit to NHAI the drafts of the Project Agreements including in particular the EPC Contract, the Financing Documents, the O&M Contract and the Tolling Contract for its review. NHAI shall have the right but not the obligation to provide its comments and observations, if any, in respect of the Project Agreements within 30 (thirty) days of the receipt thereof by NHAI and the Concessionaire shall consider all such comments/observations. Any such

comments/observations by NHAI on any Project Agreements or the failure to provide such comments shall not relieve or absolve in any manner whatsoever the Concessionaire of its obligations, duties and liabilities under this Agreement nor shall it make NHAI and/or Independent Consultant liable to the Concessionaire in any manner whatsoever and shall be without prejudice to the rights of NHAI hereunder.

9.6 During the Construction Period, the Concessionaire shall be responsible for maintaining the Site including the existing two lanes of the Project Highway as also the existing section of the National Highway which is proposed to be bypassed as part of the Project Highway, at its own cost and expense. During this period, the Concessionaire shall modify, repair or otherwise make improvements to the existing two lanes before expiry of six months from the Appointed Date so that the existing two lanes comply with requirements provided in Schedule 'L' and at least 2 (two) lanes of the Project Highway are ordinarily open to traffic at all times. The Concessionaire shall promptly undertake all such repairs and maintenance works as may be necessary to keep the Project Highway traffic-worthy and safe during the Construction Period.

9.7 The Concessionaire shall, at all times, afford access to the Site to the authorised representatives of NHAI, Senior Lenders, and the Independent Consultant and to the persons duly authorised by any Governmental Agency having jurisdiction over the Project, including those concerned with safety, security or environmental protection to inspect the Project Highway and to investigate any matter within their authority and upon reasonable notice, the Concessionaire shall provide to such persons reasonable assistance necessary to carry out their respective duties and functions with minimum disruption to the construction, operation and maintenance of the Project Highway consistent with the purpose for which such persons have gained such access to the Site.

X. OBLIGATIONS OF NHAI

10.1 NHAI agrees to observe, comply and perform the following:

(i) enable access to the Site, free from Encumbrances, in accordance with this Agreement

(ii) permit peaceful use of the Site by the Concessionaire as licensee under and in accordance with the provisions of this Agreement without any let or hindrance from NHAI or persons claiming through or under it;

(iii) assist and provide all reasonable support to the Concessionaire in obtaining Applicable Permits;

(iv) upon written request from the Concessionaire, assist the Concessionaire in obtaining access to all necessary infrastructure facilities and utilities, including water, electricity and telecommunication facilities at rates and on terms no less favourable to the Concessionaire than those generally available to commercial customers receiving substantially equivalent services;

(v) Make reasonable endeavors in not allowing erection or placement of barriers by Government of Tamil Nadu or any Governmental Agency on the Project Highway except on account of any law and order situation or upon national security considerations;

(vi) enter into the State Support Agreement with the Concessionaire and the Government of Tamil Nadu;

(vii) assist the Concessionaire in obtaining necessary assistance to regulate traffic on the Project Highway subject to and in accordance with the Applicable Laws;

(viii) assist the Concessionaire in obtaining Police assistance from Government of Tamil Nadu against payment of prescribed costs and charges, if any, for traffic regulation, patrolling and provision of security on the Project Highway;

(ix) operate and maintain the Project Highway during the Development Period, at its own cost and expense, in a manner that the level of service is at no time inferior to the level prevailing on the date when bids were received for this Concession; and

(x) Observe and comply with its obligations set forth in this Agreement.

(xi) take all necessary steps towards accomplishment of acquisition of additional land and its handing over to the Concessionaire as per Clause 13.5 NHAI shall bear the cost of additional land.

(xii) coordinate with Government of Tamil Nadu authorities for completing the legal requirements and maintaining law and order during removal of encroachments by the Concessionaire.

(xiii) provide necessary support to the Concessionaire in obtaining necessary clearances/permissions/permits in respect of environmental clearances, tree cutting, compensatory afforestation, shifting of all types of utility services,

construction of ROB/RUB on Railway lines and rehabilitation and resettlement.

(xiv) bear all expenses as per the demand note raised by the concerned government or other concerned agencies in respect of shifting of all types of utility services and rehabilitation and resettlement. Obtain approvals from Railways for GADs for construction of ROB/RUB on Railway lines.

(xv) NHAI will arrange to issue fee notification substantially in the form of Schedule 'G'.

XI. REPRESENTATIONS AND WARRANTIES

11.1 Representations and Warranties of the Concessionaire

The Concessionaire represents and warrants to NHAI that:

(i) It is duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation;

(ii) It has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;

(iii) It has taken all necessary corporate and other action under Applicable Laws and its constitutional documents to authorize the execution, delivery and performance of this Agreement;

(iv) It has the financial standing and capacity to undertake the Project;

(v) This Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with the terms hereof;

(vi) It is subject to civil and commercial laws of India with respect to this Agreement and it hereby expressly and irrevocably waives any immunity in any jurisdiction in respect thereof;

(vii) All the information furnished in the Bid is, and shall be, true and correct as on the Appointed Date and COD and the Balance Sheet and Profit and Loss Account of the Concessionaire for each of its Accounting Years after the Appointed Date furnished to NHAI shall give true and fair view of the affairs of the Concessionaire;

(viii) It shall furnish a copy of the audited accounts of the Company within 120 (one hundred twenty) days of the close of its each Accounting Year after the Appointed Date and any material change subsequent to the date of such accounts shall be notified to NHAI by the Concessionaire within 30 (thirty) days of its occurrence and warrants that the accounts and the information furnished as aforesaid shall be true and correct;

(ix) 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 the terms of the Memorandum and Articles of Association of the Concessionaire or Single Entity or any Applicable Laws or any covenant, agreement, 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;

(x) There are no actions, suits, proceedings, or investigations pending or, to the Concessionaire's knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi judicial or other authority, the outcome of which may result in the breach of or constitute a default of the Concessionaire under this Agreement or which individually or in the aggregate may result in any Material Adverse Effect on its business, properties or assets or its condition, financial or otherwise, or in any impairment of its ability to perform its obligations and duties under this Agreement;

(xi) It has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Governmental Agency which may result in any Material Adverse Effect or impairment of the Concessionaire's ability to perform its obligations and duties under this Agreement;

(xii) It has complied with all Applicable Laws 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 Material Adverse Effect on its financial condition or its ability to perform its obligations and duties under this Agreement;

(xiii) The equity share holding of the Single Entity and their Associates in the issued and paid up equity share capital of the Concessionaire shall not be less than (a) 51% (fifty one percent) during the Construction Period and for 3 (three) years following COD, and (b) 26% (twenty six per cent) during the balance remaining Operations Period.

(xiv) Single Entity was and is duly organised and existing under the laws of the jurisdiction of its incorporation and has full power and authority to consent to and has validly consented to and requested NHAI to enter into this Agreement with the Concessionaire pursuant to the LOA and has agreed to and unconditionally accepted the terms and conditions set forth in this Agreement;

(xv) All rights and interests of the Concessionaire in and to the Project Highway shall pass to and vest in NHAI on the Termination Date free and clear of all liens, claims, and Encumbrances without any further act or deed on the part of the Concessionaire or NHAI and that none of Project Assets including materials, supplies or equipment forming part thereof shall be acquired by the Concessionaire subject to any agreement under which a security interest or other lien or Encumbrance is retained by any person save and except as expressly provided in this Agreement;

(xvi) No representation or warranty by the Concessionaire contained herein or in any other document furnished by it to NHAI, or to any Governmental Agency in relation to Applicable Permits contains or will contain any untrue statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading; and

(xvii) It warrants that no sums, in cash or kind, have been paid or will be paid by or on behalf of the Concessionaire, 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 NHAI, GOI or Government of Tamil Nadu in connection therewith.

(xviii) It warrants that it has deposited the Performance Security in accordance with the RFP and undertakes to keep the same or any replacements therefor in full force and effect in accordance with the provisions of this Agreement

11.2 Representations and Warranties of NHAI.

NHAI represents and warrants to the Concessionaire that:

(i) NHAI is duly organised and validly existing under the laws of India;

(ii) NHAI has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;

(iii) NHAI has taken all necessary action to authorise the execution, delivery and performance of this Agreement;

(iv) This Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with the terms hereof; and

(v) NHAI is subject to civil and commercial laws of India with respect to this Agreement and it hereby expressly and irrevocably waives any sovereign immunity in any jurisdiction in regard to matters set forth in this Agreement.

XII. DISCLAIMER

12.1 The Concessionaire acknowledges that prior to the execution of this Agreement, the Concessionaire has after a complete and careful examination made an independent evaluation of the traffic volumes, Specifications and Standards, Site and all the information provided by NHAI and has determined to the Concessionaire's satisfaction the nature and extent of such difficulties, risks and hazards as are likely to arise or may be faced by the Concessionaire in the course of performance of its obligations hereunder.

12.2 The Concessionaire acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth in Clause 12.1 above and hereby confirms that NHAI shall not be liable for the same in any manner whatsoever to the Concessionaire, the Single Entity or their Associates.

CHAPTER – IV
PROJECT DEVELOPMENT AND OPERATIONS

XIII. USE AND DEVELOPMENT OF THE SITE

13.1 NHAI hereby grants to the Concessionaire for the Development Period access to the Site for carrying out such surveys, investigations, soil tests, design, engineer, procure, construct, operate and maintain the Project Highway including the Project Facilities in accordance with Clause 13.2 below and the provisions of this Agreement as the Concessionaire may deem necessary at the Concessionaire's cost, expense and risk without causing disruption in the traffic on the existing lanes of the Project Highway.

13.2 NHAI hereby grants to the Concessionaire for the Concession Period the right and licence to enter upon all real estate comprised in the Site as briefly described in Schedule 'A' and to survey, design, engineer, procure, construct, operate and maintain the Project Highway including the Project Facilities in accordance with the

provisions of this Agreement. Such right and licence of the Concessionaire to the use the Site shall be subject to:

13.2.1 Any existing utilities on, under or above the Site are kept in continuous satisfactory use, if necessary by the use of suitable temporary or permanent diversions with the authority of the controlling body of that utility;

13.2.2 Any existing roads or right of ways are kept in continuous satisfactory use, if necessary, by the use of suitable temporary or permanent diversions with the authority of the controlling body of that road or right of way. For any diversion or construction, of temporary roads, NHAI will assist the Concessionaire in acquiring the right of way;

13.2.3 The rights of the road users to use the road in accordance with this Agreement;

13.2.4 A right of access by the NHAI itself and any of its agents to perform their obligations and rights under the Concession Agreement or any other functions that they have, and to conduct any study or trial for the purpose of research;

13.3 The license and the right to use the Site shall be granted for the purpose of carrying out the functions placed upon the Concessionaire under the Agreement and not for any other purposes;

13.4 The Concessionaire shall bear all costs and charges for special and temporary rights of way required by it in connection with access to the Site. The Concessionaire shall obtain at its cost such facilities on or outside the Site as may be required by it for the purposes of the Project Highway and the performance of its obligations under this Agreement.

13.5.1 Existing right of way

Existing right of way shall be made available to the Concessionaire pursuant hereto by NHAI free from all Encumbrances and without the Concessionaire being required to make any payment to NHAI on account of any costs, expenses and charges for the use of such Sites for the duration of the Concession Period save and except as otherwise expressly provided in this Agreement. NHAI shall procure for the Concessionaire access to the entire existing right of way for construction of main carriageway, free of Encumbrances, on or before the Appointed Date.. Provided, however, that if NHAI does not enable such access to any part or parts of the existing right of way for any reason other than a Force Majeure Event or breach of this Agreement by the Concessionaire, NHAI shall pay to the Concessionaire Damages at the rate of Rs. 1,000 (Rupees one thousand) per month per 1,000 (one thousand) sq.

meters or part thereof if such area is required by the Concessionaire for Construction Works. Such Damages shall be raised to Rs. 2,000 (Rupees two thousand) per month after COD if such area is essential for the smooth and efficient operation of the Project Highway. Provided further that the Completion Certificate or the Provisional Certificate, as the case may be, for the Project Highway shall not be affected or delayed as a consequence of such parts of the existing right of way remaining under construction after the Scheduled Project Completion Date.

13.5.2 **Additional right of way**

Additional right of way for construction of main carriageway shall be made available to the Concessionaire as per the handing over schedule mentioned herein free from all encumbrance and without the Concessionaire being required to make any payment to NHAI on account of any costs, expenses and charges for the use of such additional right of way for the duration of the Concession Period. 50% (fifty percent) of Additional Right of way for construction of main carriageway on or before 6 (six) months from the Appointed Date, balance 50% (fifty percecnt) of the Additional right of way for construction of main carriageway on or before 12 (twelve) months from the Appointed Date. Additional right of ways for service roads and other facilities shall be handed over to the Concessionaire on or before 18 (eighteen) months from the Appointed Date. On or after the Appointed Date, the Concessionaire shall commence, undertake and complete all Construction Works on the Project Highway in accordance with this Agreement. Provided, however, that if NHAI does not enable such access to any part or parts of the Additional right of way for any reason other than a Force Majeure Event or breach of this Agreement by the Concessionaire as per the schedule mentioned herein, NHAI shall pay to the Concessionaire Damages at the rate of Rs. 1,000 (Rupees one thousand) per month per 1,000 (one thousand) sq. meters or part thereof if such area is required by the Concessionaire for Construction Works. Such Damages shall be raised to Rs. 2,000 (Rupees two thousand) per month after COD if such area is essential for the smooth and efficient operation of the Project Highway. Provided further that the Completion Certificate or the Provisional Certificate, as the case may be, for the Project Highway shall not be affected or delayed as a consequence of such parts of the existing right of way remaining under construction after the Scheduled Project Completion Date.

13.6 Construction of the Project Highway shall be undertaken by the Concessionaire in conformity with the Project Completion Schedule 'H' and the Project milestones set forth in Schedule 'H' for completion of the Project Highway on or before the Scheduled Project Completion Date. If the Concessionaire fails to achieve any such Project milestone other than Project Completion, within a period of 90 (ninety) days from the date set forth in Schedule ''H' then it shall pay Damages to NHAI at the rate of Rs.1,000,000 (Rs. One million) per day until such milestone is achieved. NHAI

0041

may either recover such Damages from the Performance Security or demand payment thereof from the Concessionaire. The Concessionaire shall make such payment within 7 (seven) days of receiving such demand from NHAI and any delay in making such payment shall attract interest @ SBI PLR plus two per cent. In the event the Concessionaire achieves Project completion as per Scheduled Project Completion Date as set forth in Schedule 'H', such damages paid by the Concessionaire to NHAI shall be refunded by NHAI within 90 (ninety) days from the date of written request from the Concessionaire without any interest thereon, provided that the Scheduled Project Completion Date as set forth in Schedule 'H' has not been extended from the date defined at the time of the signing of this Concession Agreement for any reason. If the Concessionaire fails to achieve Project completion as per the Scheduled Project Completion Date as set forth in Schedule 'H', then it shall pay damages to NHAI as per Article XV.

XIV. MONITORING AND SUPERVISION OF CONSTRUCTION

14.1 During the Construction Period, the Concessionaire shall furnish to NHAI and the Independent Consultant monthly progress reports of actual progress of the Construction Works comprised in the Project Highway and shall give all such other relevant information as may be required by NHAI and/or the Independent Consultant.

14.2 The Independent Consultant shall inspect the Construction Works and the Project Highway at least once a week during the Construction Period and make out an Inspection Report of such inspection (the "Inspection Report"). It shall send a copy of its Inspection Report to NHAI and the Concessionaire. The Concessionaire shall take necessary action to remedy the lapses, if any, stated in the Inspection Report for ensuring compliance with the provisions of this Agreement. Such inspection or submission of Inspection Report by the Independent Consultant shall not relieve or absolve the Concessionaire of its obligations and liabilities hereunder in any manner whatsoever.

14.3 For the purposes of determining that Construction Works are being undertaken in accordance with Specifications and Standards and Good Industry Practice, the Independent Consultant shall undertake day to day supervision of the Works along with the quality control consultant of the Concessionaire in accordance with Schedule 'O' of this Agreement. The Independent Consultant shall also require the Concessionaire to carry out such Tests at such time and frequency and in such manner as may be necessary in accordance with Good Industry Practice for quality assurance. The Concessionaire shall with due diligence carry out, or cause to be carried out, all such Tests in accordance with the instructions of the Independent Consultant and furnish the results of such Tests forthwith to the Independent Consultant. The Concessionaire shall promptly carry out such remedial measures as may be necessary

to cure the defects or deficiencies, if any, indicated in such Test results and furnish a report to the Independent Consultant in this behalf.

14.4 If the Independent Consultant or NHAI shall reasonably determine that the rate of progress of the Construction of the Project Highway is such that the Project Completion is not feasible on or before the Scheduled Project Completion Date by the Concessionaire, it shall so notify the Concessionaire about the same and the Concessionaire shall within 15 (fifteen) days thereof notify the NHAI and the Independent Consultant about the steps it proposes to take to expedite progress and the period within which it shall achieve COD.

14.5 (a) Upon recommendation of the Independent Consultant or suo-moto, NHAI may by written notice require the Concessionaire to suspend forthwith the whole or any part of the Construction Works if in the reasonable opinion of the NHAI such work is being carried on in a manner which threatens the safety of the works or of the users of the Project Highway.

(b) The Concessionaire, shall upon instructions of the NHAI pursuant to sub-clause (a) above suspend the Construction Works or any part thereof for such time and in such manner as may be specified by NHAI and subject to sub-clause (c) below, the costs incurred during such suspension to properly protect and secure the Construction Works or such part thereof as is necessary in the opinion of the Independent Consultant ("Preservation Costs"), shall be borne by the Concessionaire.

(c) If the suspension pursuant to Sub-clause (a) above, is caused by:

(i) any reason other than default or breach of this Agreement by the Concessionaire including breach of any of the obligations of the Concessionaire under this Agreement, the Preservation Costs shall be borne by NHAI;

(ii) reason of default or breach of this Agreement by NHAI the Preservation Costs shall be borne by NHAI; or

(iii) reason of any Force Majeure Event, the Preservation Costs shall be borne by the Concessionaire save and except to the extent otherwise expressly provided in Article XXIX.

(d) If suspension of Construction Works is for reasons not attributable to the Concessionaire, the Independent Consultant shall determine any extension to the Project Completion Schedule, the Scheduled Project Completion Date and the Concession Period, to which the Concessionaire is reasonably entitled and shall notify NHAI accordingly. NHAI shall extend the Project Completion

Schedule, the Scheduled Project Completion Date and the Concession Period in accordance with the recommendations of the Independent Consultant.

XV. COMPLETION

15.1 The Project shall be deemed to be complete and open to traffic only when the Completion Certificate or the Provisional Certificate is issued in accordance with the provisions of Article XVI (the "Project Completion").

15.2 COD of the Project shall be the date on which the Independent Consultant has issued the Completion Certificate or the Provisional Certificate, as the case may be, under this Agreement and the Concessionaire shall not levy and collect any Fee until it has received such Completion Certificate or the Provisional Certificate.

15.3 The Concessionaire guarantees that the Project Completion shall be achieved in accordance with the provisions of this Agreement on a date not later than 30 (thirty) months from the Appointed Date ("Scheduled Project Completion Date").

15.4 If the Project Completion is not achieved by the Scheduled Project Completion Date for any reason other than conditions constituting Force Majeure or for reasons attributable to NHAI or any Governmental Agency, the Concessionaire shall pay to NHAI as weekly Damages for delay in the achievement of the COD, an amount calculated at the rate of 0.01% (point zero one per cent) of the Total Project Cost per week or part thereof.

15.5 If the COD does not occur within 12 (twelve) months from the Scheduled Project Completion Date, NHAI shall be entitled to Terminate this Agreement in accordance with the provisions of Clause 32.2.

XVI. TESTS

16.1 All Tests including but not limited to load test on structures shall be conducted in accordance with Schedule 'J' and the Applicable Laws and Applicable Permits. NHAI shall designate a NHAI Representative to witness and observe the Tests. All Tests shall be held in accordance with the schedule notified by the Concessionaire to the Independent Consultant and the NHAI Representative who may either witness the Tests themselves or designate their representatives for this purpose, if they choose.

16.2 The Independent Consultant shall monitor the results of the Tests to determine the compliance of the Project Highway with the Specifications and Standards. The Concessionaire shall provide to the Independent Consultant and the NHAI with copies of all Test data including detailed Test results.

0044

16.3 At least 30 (thirty) days prior to the likely completion of the Project Highway the Concessionaire shall notify the Independent Consultant and NHAI of the same and shall give notice of its intent to conduct any final Tests. The Concessionaire shall give to NHAI and the Independent Consultant at least 10 (ten) days' prior notice of the actual date on which it intends to commence the Tests and at least 7 (seven) days' prior notice of the commencement date of any subsequent Tests. The Independent Consultant shall have the right to suspend or delay any Test if it is reasonably anticipated or determined during the course of the Test that the performance of the Project Highway or any part thereof does not meet the Specifications and Standards.

16.4 Upon the Independent Consultant determining the Tests to be successful in respect of any stretch referred to in Clause 16.3 having been satisfied that such stretch of the Project Highway can be legally, safely and reliably placed in commercial operations, the Independent Consultant shall forthwith issue to the Concessionaire and NHAI a Certificate in respect of such stretch substantially in the form set forth in Schedule 'K' (the "Completion Certificate") after approval from NHAI and upon Completion Certificate having been issued in respect of all stretches referred to in Clause 16.3 issue a final Completion Certificate certifying the Project Completion.

16.5 Independent Consultant may at the request of the Concessionaire issue a provisional certificate of completion ("Provisional Certificate") after approval from NHAI, if the Tests are successful in respect of any stretch referred to in Clause 16.3 and such stretch of the Project Highway can be legally, safely and reliably placed in commercial operation though certain works or things forming part thereof are not yet complete. In such an event such Provisional Certificate shall have appended thereto a list of outstanding items signed jointly by the Independent Consultant and the Concessionaire ("Punch List"). Such Punch List shall be drawn up in consultation with NHAI, and NHAI may at its discretion through Independent Consultant may add or delete any items forming part of the Punch List at any time before issue of the Provisional Certificate. All Punch List items shall be completed by the Concessionaire within 120 (one hundred twenty) days from the date of issue of such Provisional Certificate. In case of any delay in completion of the Punch List items beyond the aforesaid period of 120 (one hundred twenty) days, NHAI shall, without prejudice to its rights under this Agreement, including Termination thereof, be entitled to undertake the completion of the Punch List items, based on the cost estimated by the Independent Consultant, at the risk and cost of the Concessionaire and to recover the same from the Concessionaire. In addition to recovery of the aforesaid cost of completion of the Punch List items by NHAI, a sum equal to 200% (two hundred percent) of such cost, subject to a minimum of Rs. 1,000,000 (Rs. One million) shall also be recovered by NHAI from the Concessionaire as Penalty. NHAI shall have the right and the Concessionaire hereby expressly grants to NHAI the right

0045

to recover the same directly from the Escrow Account and for that purpose the Concessionaire hereby expressly authorizes NHAI and hereby gives irrevocable instructions to the Escrow Bank to make payment from the Escrow Account in accordance with the instructions of NHAI under this Clause. Upon completion of all Punch List items to the satisfaction of the Independent Consultant, the Independent Consultant shall issue the Completion Certificate to the Concessionaire after approval from NHAI. Failure to complete the Punch List items in the manner set forth in this Clause 16.5 shall entitle NHAI to Terminate this Agreement in accordance with the provisions of Clause 32.2.

16.6 If the Independent Consultant certifies to NHAI and the Concessionaire that it is unable to issue the Completion Certificate or Provisional Certificate because of events or circumstances which excuse the performance of the Concessionaire's obligations in accordance with this Agreement and as a consequence thereof the Tests could not be held or had to be suspended, the Concessionaire shall re-schedule the Tests and hold the same as soon as reasonably practicable.

16.7 Upon receipt of a report from the Independent Consultant or after conducting its own review or inspection, if NHAI is not satisfied with the results of any Tests, it shall within 7 (seven) days thereof notify the Concessionaire of its reasons to conclude that the Completion Certificate should not be issued, in which case the Concessionaire shall promptly take such action as will achieve such satisfaction. Such procedure shall be repeated as necessary after rectification and remedy of reasons/ causes by the Concessionaire on account of which the Tests were unsuccessful, until the Completion Certificate or Provisional Certificate has been issued in accordance with this Agreement by the Independent Consultant.

16.8 The Concessionaire shall bear all the expenses relating to Tests under this Agreement. Provided, however, that if the NHAI Representative requires any Test to be conducted which is not specified in this Agreement and such Test is not necessary in the opinion of the Independent Consultant, then the expenses on such Test shall be reimbursed by NHAI to the Concessionaire.

XVII. CHANGE OF SCOPE

17.1 NHAI may, notwithstanding anything to the contrary contained in this Agreement, require provision of such addition /deletion to the works and services on or about the Project Highway, during the Construction Period, which are beyond the scope of the Project as contemplated by this Agreement ("Change of Scope"), provided such changes do not require any increase/ reduction in expenditure exceeding 10 %(ten per cent) of the Total Project Cost and do not adversely affect the COD. All such changes

shall be made by NHAI by an order (the "Change of Scope Order") issued in accordance with the procedure set forth in this Article XVII.

17.2 **Procedure for Change of Scope**

(a) NHAI shall whenever it desires provision of addition/deletion of works and services referred to in Clause 17.1, issue to the Concessionaire a notice of change of scope (the "Change of Scope Notice").

(b) Upon receipt of such Change of Scope Notice, the Concessionaire shall with in 15 days provide to NHAI and the Independent Consultant such information as is necessary and reasonable together with preliminary documentation in support of the following:

(i) the impact, if any, which the Change of Scope is likely to have on the Project Completion Schedule if the work is required to be carried out before COD, and

(ii) the cost implications to the Concessionaire of complying with such Change of Scope Notice The rates shall be worked out based on the concerned State PWD (NH) current schedule of rates based on MOSRTH data book. In case an item is not covered under the above-mentioned schedule of rates, the rate of such item shall be worked out on the basis of the prevailing market rate so far as found reasonable and competitive by the IC..

(iii) the options suggested for implementing the proposed Change of Scope and the effect, if any, each such option would have on the costs and time for the implementation thereof including a detailed breakdown by work classifications. Provided, however, that the cost of providing such information shall be reimbursed to the Concessionaire by NHAI to the extent such costs are certified to be reasonable by the Independent Consultant.

(c) If NHAI desires, after receipt of information set forth in sub-clause (b) to proceed with the Change of Scope, it shall convey the desired option (with or without modification) to the Concessionaire by issuing a Change of Scope Order with in 30(Thirty) days from the date of recommendation made by Independent Consultant and thereupon the Parties shall make good faith efforts to mutually agree upon the costs and time for implementing of the same. Upon reaching an agreement relating to such costs and time, NHAI shall issue a written confirmation of the Change of Scope and thereupon the Concessionaire shall proceed with performance of such order with NHAI making monthly payments for such works based on the physical progress and as approved and certified by Independent Consultant. In the event, the Parties are

unable to agree, NHAI may, by issuing a confirmation in writing of such Change of Scope Order, require the Concessionaire to proceed with the performance of the Change in Scope Order pending resolution of such dispute.

17.3 A Change of Scope Order will be effective and binding upon issuance of a confirmation of such Change of Scope Order by NHAI. Notwithstanding a dispute regarding cost and time for implementation of such Change of Scope Order, the Concessionaire shall proceed with the performance of such Change of Scope Order promptly following NHAI's confirmation pursuant to Clause 17.2 (c). Pending resolution of such dispute, NHAI shall either pay to the Concessionaire, if the Change of Scope Order involves increase in Bill of Quantities or recover from the Concessionaire if the said Change of Scope Order involves decrease in Bill of Quantities, an amount equal to the costs that are certified by the Independent Consultant to be reasonable plus/minus (as the case may be) one-half the difference between the amount certified by the Independent Consultant and the amount claimed by the Concessionaire with final adjustments to be made in accordance with the resolution of dispute under the Dispute Resolution Procedure. In case NHAI has to make payment it shall do so within 60 (sixty) days from the date of receipt of duly verified claims as per procedure given in this Clause. In case NHAI has to recover from the Concessionaire, the amount will be recovered directly from the Escrow Account and for that purpose the Concessionaire hereby expressly authroised NHAI and hereby gives irrevocable instructions to Escrow Bank to make payment from the Escrow Account in accordance with instructions of NHAI under this clause.

17.4 All claims by the Concessionaire pursuant to this Article XVII shall be supported by such documentation as is reasonably sufficient for NHAI/IC to determine the accuracy thereof, including invoices from Contractors and certification of such claims by the Statutory Auditors.

17.5 NHAI may request further improvements to the Project Assets and Project Highway, subject to a limit of 20% of the Project Cost, during the Operations Period in the form of a Change of Scope order that are required to make the Project Highway comply with the latest Specifications and Standards, and other requirements set forth in this Agreement, Good Industry Practice, Applicable laws and Applicable Permits during the entire Operations Period ("Value Additions"). The cost of such Value Additions shall be borne by NHAI and such costs shall be computed and the work for such Value Additions shall be carried out in the manner as set forth in this Article 17.

XVIII. OPERATION AND MAINTENANCE

18.1 The Concessionaire shall operate and maintain the Project Highway by itself, or through O&M Contractors and if required, modify, repair, improvements to the

0048

Project Highway to comply with Specifications and Standards, and other requirements set forth in this Agreement, Good Industry Practice, Applicable laws and Applicable Permits and manufacturer's guidelines and instructions with respect to toll systems, and more specifically:

(i) permitting safe, smooth and uninterrupted flow of traffic during normal operating conditions;

(ii) charging, collecting and retaining the Fees in accordance with this Agreement;

(iii) minimizing disruption to traffic in the event of accidents or other incidents affecting the safety and use of the Project Highway by providing a rapid and effective response and maintaining liaison procedures with emergency services;

(iv) undertaking routine maintenance including prompt repairs of potholes, cracks, concrete joints, drains, line marking, lighting and signage;

(v) undertaking major maintenance such as resurfacing of pavements, repairs to structures, repairs and refurbishment of tolling system and hardware and other equipment;

(vi) carrying out periodic preventive maintenance to Project Highway including tolling system;

(vii) preventing with the assistance of concerned law enforcement agencies unauthorised entry to and exit from the Project Highway;

(viii) preventing with the assistance of the concerned law enforcement agencies encroachments on the Project Highway including Site and preserve the right of way of the Project Highway;

(ix) maintaining a public relations unit to interface with and attend to suggestions from users of the Project Highway, the media, Government Agencies, and other external agencies; and

(x) adherence to the safety standards set out in Schedule 'S'.

18.2 The Concessionaire shall in consultation with the Independent Consultant prepare not later than 180 (one hundred and eighty) days before the Scheduled Project Completion Date, the repair and maintenance manual (the "Maintenance Manual") for the regular and periodic maintenance, and shall ensure and procure that at all

times during the Operations Period, the Project Highway is maintained in a manner that it complies with the Specifications and Standards and the minimum maintenance requirements set forth in Schedule 'L'. The Concessionaire shall supply, at least two months before the COD, 10 (ten) copies of the Maintenance Manual to NHAI and 3 (three) copies each to Government of Tamil Nadu and Independent Consultant. Copies of the Maintenance Manual shall also be made available by the Concessionaire for public inspection during office hours at a conspicuous place adjacent to each Toll Plaza on the Project Highway.

18.3 Not later than forty five (45) days before the beginning of each Accounting Year, the Concessionaire, shall in consultation with the Independent Consultant prepare and provide to NHAI, its proposed programme of preventive and other scheduled maintenance of the Project Highway subject to the minimum maintenance requirements set forth in Maintenance Manual and in Schedule 'L' necessary to maintain the Project Highway at all times in conformity with the Specifications and Standards (the "Maintenance Programme"). Such Maintenance Programme shall include but not be limited to the following:

(i) intervals and procedures for the carrying out of inspection of all elements of the Project Highway;
(ii) criteria to be adopted for deciding maintenance needs;
(iii) preventive maintenance schedule;
(iv) intervals at which the Concessionaire shall carry out periodic maintenance;
(v) intervals for major maintenance and the scope thereof; and
(vi) lane closures schedule for each type of maintenance (length and time).

18.4 Maintenance shall include replacement of equipment/consumables, horticultural maintenance and upkeep of all Project Assets in good order and working condition. Maintenance shall not include the extension of any existing pavements, bridges, structures and other civil works unless part of the Project.

18.5 The Concessionaire shall keep the carriageways, rest areas and other Project Facilities and Toll Plazas in a clean, tidy and orderly condition free of litter and debris.

18.6 During the Operations Period, the Concessionaire shall not carry out any material modifications to the Project Highway save and except where such (i) modification is required by Good Industry Practice; or (ii) modification is necessary for the Project Highway to operate in conformity with the Specifications and Standards prescribed under this Agreement. Provided that the Concessionaire shall notify NHAI of the proposed modifications along with details thereof at least fifteen days before commencing work on such modifications and shall reasonably consider such

suggestions as NHAI may make within 15 (fifteen) days of receipt of such details by NHAI.

18.7 The Concessionaire shall be responsible for the maintenance of the approach roads to and underpasses and overpasses upto 100 mtrs from the Project Highway in accordance with Good Industry Practice.

18.8 Safety, Vehicle Breakdown and Accident

18.8.1 In the case of unsafe conditions, vehicle breakdowns and accidents, the Concessionaire shall follow the relevant operating procedures, which shall include the setting up of temporary traffic cones and lights as well as the removal of obstruction and debris expeditiously. Such procedures shall be in accordance with Applicable Laws, Applicable Permits and provisions of this Agreement.

18.8.2 The Concessionaire shall ensure that any diversion or interruption of traffic is remedied without delay. The Concessionaire's responsibility for rescue operations on the Project Highway shall be limited to the removal of vehicles or debris or any other obstruction, which may endanger or interrupt the smooth traffic flow on the Project Highway.

18.8.3 The Concessionaire shall ensure that safety standards specified in Schedule 'S' are strictly complied with in the event of any lane closure or diversion of traffic. Compliance with Schedule 'S' will be monitored by the Independent Consultant and a breach by the Concessionaire of its obligations in respect of this Schedule identified by the Independent Consultant shall be notified immediately and is required to be cured within 24 hours of its notification notwithstanding inspection, reporting procedures outlined elsewhere in this Agreement. In addition, each notified breach shall lead to the award of a penalty point to the Concessionaire. A total of five penalty points in any continuous period of 365 days shall constitute a Material Breach of this Agreement.

18.9 Emergency De-commissioning

18.9.1 If, in the reasonable opinion of the Concessionaire there exists an emergency which warrants decommissioning and closure to traffic of whole or any part of the Project Highway, the Concessionaire shall be entitled to de-commission and close the whole or the relevant part of the Project Highway to traffic for so long as such emergency and the consequences thereof warrant, provided however that such emergency decommissioning will be notified to NHAI promptly. NHAI may issue directions to the Concessionaire for dealing with such situations and the Concessionaire shall abide by such directions.

18.9.2 The Concessionaire shall re-commission the Project Highway or the affected part thereof as quickly as practicable after the circumstances leading to its de-commissioning and closure have ceased to exist.

18.10 The Concessionaire shall not close any lane of the Project Highway for undertaking maintenance or repair works except with the prior written approval of the NHAI which may delegate its authority to the Independent Consultant. Such approval shall be sought by the Concessionaire through a written request to be made at least 7 (seven) days before the proposed closure of lane and shall be accompanied by particulars indicating the nature and extent of repair works, the length and section required to be closed and the period of closure. The Concessionaire shall also furnish particulars indicating the minimum time required for completing such repair works. Within 5 (five) days of receiving such request, NHAI or the Independent Consultant, as the case may be, shall grant permission with such modifications as it may deem necessary. Upon receiving such permission, the Concessionaire shall be entitled to close the lane in accordance with such permission and re-open it within the period stipulated in such permission. For any delay in re-opening such lane during the first Operations Year, the Concessionaire shall pay Damages to NHAI calculated at the rate of Rs.10,000 (Rs. Ten thousand), per day or part thereof for every stretch of 100 (one hundred) meters or part thereof in each lane until such time the stretch has been re-opened for traffic. These damages of Rs.10,000 (Rupees ten thousand) shall be applicable in the first Operations year and shall be revised by WPI in each subsequent Operations year. Provided, however, that these provisions shall not apply to Emergency decommissioning under Clause 18.9.

18.11 Save and except as otherwise be expressly provided in this Agreement, if the Project Highway including Construction Works or any part thereof shall suffer any loss or damage during the Concession Period, from any cause whatsoever, the Concessionaire shall, at its cost and expense rectify and remedy such loss or damage or forthwith in a manner so as to make the Project Highway conform in every respect to the Specifications and Standards, quality and performance as prescribed by this Agreement.

18.12 In the event the Concessionaire does not maintain and/ or repair the Project Highway or a part thereof upto and in accordance with the Specifications and Standards and/or in accordance with the Maintenance Programme or the Maintenance Manual, and shall have failed to commence remedial works within 30 (thirty) days of receipt of notice in this behalf from NHAI or the Independent Consultant, or the O&M Inspection Report, as the case may be, NHAI shall, without prejudice to its rights under this Agreement, including Termination thereof, be entitled to undertake the repair and maintenance of the Project Highway at the risk and cost of the

0052

Concessionaire and to recover the same from the Concessionaire. In addition to recovery of the aforesaid cost of repair and maintenance by NHAI, a sum equal to 25% (twenty five per cent) of such cost shall also be recovered by NHAI from the Concessionaire as Damages. NHAI shall have the right and the Concessionaire hereby expressly grants to NHAI the right to recover the same directly from the Escrow Account and for that purpose the Concessionaire hereby expressly authorises NHAI and hereby gives irrevocable instructions to the Escrow Bank to make payment from the Escrow Account in accordance with the instructions of NHAI under this Clause.

18.13 In the event NHAI does not exercise its option to undertake the required repair and maintenance after expiry of the 30 (thirty) days period stipulated in Clause 18.12 it shall recover Damages from the Concessionaire for default in operating and maintaining the Project Highway in conformity with this Agreement. Such Damages shall be payable after the aforesaid period of 30 (thirty) days and until the default is cured. The amount of Damages shall be calculated for each day of default at the higher of the following, namely (a) Rs.10,000 (Rs. Ten thousand), and (b) 0.1% (zero point one per cent) of the cost of such repair as estimated by the Independent Consultant. Recovery of such Damages shall be without prejudice to the rights of NHAI under this Agreement, including Termination thereof.

18.14 If the Concessionaire commences any works for curing any defects or deficiencies in the Project Highway, it shall complete such works expeditiously in accordance with Good Industry Practice. If such works are carried out in a manner that results in a delay of more than 30 (thirty) days as compared to the time required in accordance with Good Industry Practice, NHAI shall recover Damages from the Concessionaire as if a default had occurred under Clause 18.13.

18.15 The Concessionaire shall not be considered in breach of its obligations under this Agreement if any part of the Project Highway is not available tc traffic after the COD on account of any of the following for the duration thereof:

(i) an event of Force Majeure;

(ii) measures taken to ensure the safe use of the Project Highway except when unsafe conditions on the road occurred because of failure of the Concessionaire to perform its obligations under this Agreement; or

(iii) compliance with a request from NHAI or the directions of any Governmental Agency the effect of which is to close all or any part of the Project Highway.

Notwithstanding the above, the Concessionaire shall keep all unaffected parts of the Project Highway open to traffic and use provided they can be safely operated and kept open to traffic.

XIX MONITORING AND SUPERVISION DURING OPERATION

19.1 The Concessionaire shall undertake periodic (at least once every calendar month but once every week during monsoons) inspection of the Project Highway to determine the condition of the Project Highway including its compliance or otherwise with the Maintenance Manual, the Maintenance Programme, Specifications and Standards and the maintenance required and shall submit reports of such inspection ("Maintenance Reports") to NHAI and the Independent Consultant.

19.2 The Independent Consultant shall review the Maintenance Reports and inspect the Project Highway at least once a month during the Operations Period and make out an Inspection Report of such inspection (the "O&M Inspection Report"). The Independent Consultant shall send a copy of its O&M Inspection Report to NHAI and the Concessionaire. The Concessionaire shall within 30 (thirty) days of the receipt of the O&M Inspection Report remedy the defects and deficiencies, if any, set forth in such O&M Inspection Report and submit its report in respect thereof to the Independent Consultant and NHAI within the said 30 (thirty) days period. Where the remedying of such defects or deficiencies is likely to take more than 30 (thirty) days in accordance with Good Industry Practice, the Concessionaire shall undertake the works in accordance with such practice and submit progress reports of such works every fortnight. The O&M Inspection Report may also require the Concessionaire to undertake such tests as may be specified by the Independent Consultant for the purpose of determining that the Project Highway is at all times in conformity with the Specifications and Standards. The Concessionaire shall undertake such Tests without any delay and furnish a copy of the results thereof to the Independent Consultant and NHAI along with a written statement specifying in reasonable detail the measures, if any, that it proposes to undertake for curing the defaults or deficiencies indicated in such results. Such inspection or submission of O&M Inspection Report by the Independent Consultant or submission of O&M Inspection Compliance Report by the Concessionaire shall not relieve or absolve the Concessionaire of its obligations and liabilities hereunder in any manner whatsoever.

19.3 NHAI may inspect the Project Highway at any time for a review of the compliance by the Concessionaire with its maintenance obligations under this Agreement.

19.4 The Concessionaire shall furnish to NHAI within 7 (seven) days of completion of each calendar month during the Operations Period, a statement of Fees in the form set forth in Schedule 'M' (the "Monthly Fee Statement").

XX. INDEPENDENT CONSULTANT

20.1 NHAI shall appoint a consulting engineering firm or body corporate in accordance with the selection process set forth in Schedule 'N' to be the Independent Consultant to undertake and perform the duties, work, services and activities set forth in Schedule 'O'. In addition NHAI, at any time during the Concession Period at its own cost, may appoint a Technical Auditor in the nature of a Proof Consultant to review the work carried out by the Independent Consultant.

20.2 The appointment of the Independent Consultant pursuant to Clause 20.1 shall initially be for a period of 48 (forty eight) months from the date of its appointment. The date of such appointment shall be no later than 120 (one hundred twenty) days from the date of this Agreement. After the expiry of the aforesaid appointment, NHAI shall appoint for a term of maximum 3 (three) years as Independent Consultant such Firm as it may deem appropriate in accordance with Schedule 'N' as amended from time to time in consultation with the Concessionaire and who may or may not be the same Firm, who was Independent Consultant during the initial term. NHAI may in its discretion thereafter renew such appointment or appoint another Firm as per the provisions contained in Schedule 'N' out of the list determined pursuant to Schedule 'N', as NHAI may deem appropriate to be the Independent Consultant for a term of three years at a time.

20.3 The Independent Consultant shall report to NHAI about their work, services, and activities pursuant hereto through regular periodic reports (at least once every month) as the situation may warrant. Such report of Independent Consultant shall include but not be limited to the matters and things set forth in said Schedule 'O'.

20.4 The remuneration, cost and expenses of the Independent Consultant shall be paid by NHAI. One-half of such remuneration, cost and expenses shall be reimbursed by the Concessionaire to NHAI within 15 (fifteen) days of receiving a statement of expenditure from NHAI. In case the Concessionaire does not reimburse the remuneration, cost and expenses of the Independent Consultant to NHAI within 15 (fifteen) days of receiving a statement of expenditure from NHAI, NHAI shall have the right and the Concessionaire hereby expressly grants to NHAI the right to recover the same directly from the Escrow Account and for that purpose the Concessionaire hereby expressly authorizes NHAI and hereby gives irrevocable instructions to the Escrow Bank to make payment from the Escrow Account in accordance with the instructions of NHAI under this Clause.

20.5 NHAI may terminate the appointment of the Independent Consultant at any time subject to appointment of their replacement by another Independent Consultant in accordance with this Article XX.

20.6 If the Concessionaire has reason to believe that the Independent Consultant is not discharging its duties in a fair, efficient and diligent manner, it may make a written representation to NHAI, stating its reasons in detail, seeking termination of the appointment of the Independent Consultant. Upon receipt of such representation, NHAI shall hold a tripartite meeting with the Concessionaire and Independent Consultant for amicable resolution of the dispute. If the dispute remains unresolved, it shall be resolved in accordance with the Dispute Resolution Procedure. In case the appointment of Independent Consultant is terminated under this Clause, it shall be replaced by another Independent Consultant in accordance with this Article XX.

20.7 If either party disputes any advice, instruction or award of the Independent Consultant, the dispute shall be resolved in accordance with the Dispute Resolution Procedure.

XXI. TRAFFIC SAMPLING

21.1 For the purpose of determination and/or verification of the actual traffic on the Project Highway, NHAI shall, in addition to inspection of Concessionaire's records, be entitled to undertake traffic sampling at such frequency and in such manner as NHAI may deem appropriate including in the manner as set forth in Schedule 'P' hereto. The Concessionaire shall provide all facilities and assistance as NHAI may reasonably require for undertaking such traffic sampling.

21.2 If the data collected from traffic sampling undertaken pursuant to Clause 21.1 demonstrates that actual traffic is more than the traffic according to the records of the Concessionaire, the actual traffic for the purposes of this Agreement shall be deemed to be the traffic as determined by such NHAI traffic sampling pursuant to this Article XXI.

21.3 The Concessionaire may, in consultation with NHAI, commission an independent agency to conduct traffic sampling under this Article. The report of such agency shall be furnished to NHAI for such use as it may deem fit.

21.4 In the event of any dispute arising as to the actual traffic on the Project Highway the same shall be resolved in accordance with the Dispute Resolution Procedure under this Agreement.

CHAPTER - V
FINANCING ARRANGEMENTS

XXII. FINANCIAL CLOSE

22.1 The Concessionaire shall provide to NHAI, a copy of the Financing Package furnished by it to the prospective Senior Lenders. As and when such Financing Package is approved by the Senior Lenders, with or without modifications, a copy of the same shall be furnished by the Concessionaire to NHAI forthwith.

22.2 Notwithstanding anything to the contrary contained in this Agreement, the Concessionaire covenants with NHAI that it shall achieve Financial Close within 180 (one hundred eighty) days from the date of this Agreement. If the Concessionaire shall fail to achieve Financial Close within the said 180 (one hundred eighty) days period, the Concessionaire shall be entitled to a further period of 180 (one hundred eighty) days subject to an advance weekly payment by the Concessionaire to NHAI of a sum of Rs.100,000 (Rupees one hundred thousand) per week or part thereof for any delay beyond the said 180 (one hundred eighty) day period, as Damages on account of such delay in achieving Financial Close within the said 180 (one hundred eighty) day period by the Concessionaire.

22.3 Notwithstanding anything to the contrary contained in this Agreement, NHAI shall be entitled to terminate this Agreement forthwith, without being liable in any manner whatsoever to the Concessionaire, by a communication in writing to the Concessionaire pursuant to Clause 32.2 if the Concessionaire shall have failed to pay in advance the Damages to NHAI under and in accordance with Clause 22.2 above.

22.4 Notwithstanding anything to the contrary contained in this Agreement, if the Financial Close shall not occur within 360 (three hundred sixty) days as set forth in Clause 22.2 above, all rights, privileges, claims and entitlements, if any, of the Concessionaire under or arising out of this Agreement shall be deemed to have been waived by and to have ceased with the concurrence of the Concessionaire, and the Concession Agreement shall be deemed to have been terminated by mutual agreement of the Parties.

22.5 Upon Termination of this Agreement under any of the above Clause 22.2, 22.3, 22.4, NHAI shall be entitled to encash the Performance Security, as the case may be, and appropriate the proceeds thereof as Damages.

XXIII. GRANT

23.1 NHAI agrees to provide to the Concessionaire cash support by way of an outright Grant (the "Grant") equal to the sum set forth in the Bid of the Bidder and accepted by NHAI namely, Rs. 31.00 crores (Rupees thirty one crores only) in accordance with the provisions of this Article XXIII.

23.2 The Grant shall be paid by NHAI as proposed by the Concessionaire in its Bid as set forth below:
For Grant

Construction Period	30 Months
Grant	31.00 crores

23.3 Subject to provisions of the Clause 23.4, the Grant shall be applied by the Concessionaire for meeting the capital cost of the Project and shall be treated as part of the shareholders' funds ("the Equity Support").

23.4 The Equity Support shall:

(a) Be as proposed by the Concessionaire in his bid and as agreed by NHAI; and
(b) During the construction period, in no case be greater than total of equity capital actually subscribed and other amount which is in the nature of quasi-equity and both paid in cash by the shareholders for meeting the Total Project Cost as set forth in the Financing Package.

23.5 The Grant quoted by the Concessionaire and the balance of the Grant (if any) available after deducting there from the amount of actual Equity Support shall be provided to the Concessionaire in accordance with this Article XXIII for meeting O&M Expenses of the Project (the "O&M Support").

23.6 The whole or any part of the Grant shall be disbursed by NHAI to the Concessionaire if and only if

23.6.1 the Concessionaire is not in Material Breach of this Agreement at the time of such disbursement; and

23.6.2 the Concessionaire has contributed and spent on the Project at least 80% (eighty percent) of the total Equity (excluding Equity Support) and other amount, which is in the nature of quasi equity, required to be provided as part of the Total Project Cost.

0050

23.7 The disbursement of the Equity Support pursuant to this Article XXIII shall be made by NHAI to the Concessionaire proportionately along with the balance loan funds to be disbursed by the Senior Lenders under the Financing Documents for meeting the Total Project Cost subject to Promoters spending 80% of the total equity (excluding Equity Support) on Project and will be payable proportionately with debt disbursed by the Lenders. NHAI shall disburse each tranche of the Equity Support as aforesaid by credit to the Escrow Account within 15 (fifteen) days of the release of each loan installment by the Senior Lenders to the Concessionaire provided the Concessionaire has submitted to NHAI along with each disbursement request a certificate from its Statutory Auditors certifying the above particulars and has given at least 7 (seven) days to NHAI for processing such request.

23.8 The O&M Support shall be disbursed by NHAI to the Concessionaire by credit to the Escrow Account in quarterly installments and the first such installment shall be released within 30 (thirty) days of the COD. Each such installment shall be a sum equal to 1 (one) per cent of the Total Project Cost with the last installment being the balancing installment and such installments shall be paid by NHAI until the Grant is fully disbursed to the Concessionaire.

23.9 If NHAI shall fail to disburse any tranche of the Equity Support or the O&M Support within the periods set forth for the payment thereof to the Concessionaire, NHAI shall pay interest on such delayed tranche @ SBI PLR plus two per cent.

XXIV. REVENUE SHORTFALL LOAN

24.1 If the Realisable Fees in any Accounting Year during the Concession Period shall fall below the Subsistence Revenue Level as a result of an Indirect Political Event, or a Political Event as set forth in Article XXIX, NHAI agrees to provide to the Concessionaire such shortfall support, by way of a loan ("Revenue Shortfall Loan") with interest thereon @ SBI PLR per annum. Provided, however, that any reserves of the Concessionaire and any sums received or likely to be received by the Concessionaire through insurance claims (except insurance payments for physical loss used to carry out requisite repairs) or payments by NHAI under Article XXIX shall first be deducted and only the balance remaining shall be disbursed as the Revenue Shortfall Loan.

24.2 For the purposes of claiming disbursements on account of Revenue Shortfall loan pursuant to Clause 24.1 above in any Accounting Year, the Concessionaire shall:

(a) Submit a detailed account of the Indirect Political Event or the Political Event, as the case may be, and its impact on total revenues of the Concessionaire as soon as feasible and submit weekly reports thereafter;

(b) Provide to NHAI, the Schedule of Debt Service Payments under the Financing Documents for the Accounting year for which Revenue Shortfall Loan are claimed;

(c) Provide to NHAI the details of O&M Expense budget for such Accounting Year and the expenditure incurred in that year out of such budget;

(d) Within 15 (fifteen) days of the close of each Accounting Year in which the shortfall in the referred to in Clause 24.1 shall occur, provide a certificate from the Statutory Auditors of the Concessionaire certifying the Subsistence Revenue Level, the Realisable Fees and the Revenue Shortfall Loan requirement after deducting reserves of the Concessionaire, if any; and

(e) Submit a written request to NHAI under the hands of a Director of the Concessionaire requesting for disbursement of the Revenue Shortfall Loan to the Concessionaire by payment thereof into the Escrow Account.

24.3 Upon the receipt of the request and documents as set forth in Clause 24.2 above and provided the same is not found by NHAI to be wrong or incorrect, NHAI shall disburse the Revenue Shortfall Loan within 30 days (thirty) thereof.

24.4 In the event Realisable Fees during the first six months of an Accounting Year shall fall as a result of an Indirect Political Event or a Political Event and the amount of such Realisable Fees is less than the Debt Service Payments due for the first six months of such Accounting Year, NHAI shall upon request provide an advance to the Concessionaire for meeting the shortfall in such Debt Service Payments. For claiming such advance, the Concessionaire shall make a demand to NHAI accompanied by a certificate from the Statutory Auditors setting forth the Realisable Fees during the first six months of the Accounting Year, the reserves of the Concessionaire and the outstanding amount on account of Debt Service Payments due in the first six months of such year. The Statutory Auditors shall also certify the amount of advance required by the Concessionaire from NHAI for meeting such Debt Service Payments after deducting such Realisable Fees and the reserves of the Concessionaire. Within 15 (fifteen) days of receiving such demand, NHAI shall disburse the advance due to the Concessionaire at an interest rate equal to SBI PLR. Not later than 15 (fifteen) days after completion of such Accounting Year, the Concessionaire shall either refund such advance with interest to NHAI or adjust it against such Revenue Shortfall Loan as may be due to the Concessionaire under this Article.

24.5 The Revenue Shortfall Loan disbursed by NHAI pursuant hereto and the interest thereon shall be repaid by the Concessionaire in a sum equal to 50% (fifty per cent) of

0060

the Net Cash flow of the Concessionaire as and when made and such repayments shall be made in one or more years as necessary.

24.6 Notwithstanding anything to the contrary contained in Clause 24.5, the Concessionaire shall repay the entire Revenue Shortfall Loan and interest thereon at least two years before the expiry of the Concession Period. If any sum remains due or outstanding from the Concessionaire under this Article XXIV at any time during a period of two years preceding the Termination Date, it shall constitute a Concessionaire Event of Default under Article XXXII and NHAI shall be entitled to Terminate this Agreement under Clause 32.2.

XXV. ESCROW ACCOUNT

25.1 The Concessionaire shall within 60 days from the date of this Agreement open and establish the Escrow Account with a Bank (the "Escrow Bank") and all funds constituting the Financing Package for meeting the Total Project Cost shall be credited to such Escrow Account. During Operations Period all Fees collected by the Concessionaire from the users of the Project Highway shall be exclusively deposited therein. In addition, all Fees collected by NHAI in exercise of its rights under this Agreement during the Concession Period and all disbursements or payments by NHAI pursuant hereto shall also, subject to the rights of deductions and appropriations therefrom of NHAI under this Agreement, be deposited by NHAI in the Escrow Account.

25.2 Disbursements from Escrow Account

25.2.1 The Concessionaire shall give, at the time of the opening of the Escrow Account, irrevocable instructions by way of an Escrow Agreement substantially in form set forth in Schedule 'Q' (the "Escrow Agreement") to the Escrow Bank instructing, inter alia, that the deposits into the Escrow Account shall subject to Clause 25.2.3, be appropriated in the following order every month and if not due in a month then appropriated proportionately in such month and retained in the Escrow Account and paid out therefrom in the month when due unless otherwise expressly provided in the instruction letter:

(i) All taxes due and payable by the Concessionaire;

(ii) All expenses in connection with and relevant to the Construction of Project Highway by way of payment to the EPC Contractor and such other persons as may be specified in the Financing Documents;

(iii) O&M Expenses including Fees collection expenses incurred by the Concessionaire directly or through O&M Contractor and/or Tolling Contractor, if any, subject to the items and ceiling in respect thereof as set

0061

forth in the Financing Documents but not exceeding 1/12 (one twelth) of the annual liability on this account;

(iv) The whole of the expense on completion of Punch List items incurred by NHAI.

(v) The whole or part of the expense on repair work or O&M Expense including Fees collection expenses incurred by NHAI;

(vi) All Concession Fees due to NHAI from the Concessionaire under this Agreement;

(vii) Reimbursements of expenditure incurred by NHAI, if any, for payment of insurance premia, etc., which are otherwise Concessionaire's responsibility, on account of failure on part of the Concessionaire to keep such insurance(s) effective and in force.

(viii) Monthly proportionate provision of Debt Service Payments due in an Accounting Year and payment of Debt Service Payments in the month when due;

(ix) One-half of such remuneration, cost and expenses of the Independent Consultant in case the Concessionaire does not reimburse the remuneration, cost and expenses of the Independent Consultant to NHAI within 15 (fifteen) days of receiving a statement of expenditure from NHAI.

(x) Any payments and Damages due and payable by the Concessionaire to NHAI pursuant to this Agreement, including repayment of Revenue Shortfall Loans, recovery due to reduction in the scope of work, penalty for non completion of Punch List items, penalty for O&M expenses incurred by NHAI; and

(xi) Balance in accordance with the instructions of the Concessionaire.

25.2.2 The Concessionaire shall not in any manner modify the order of payment specified in this clause 25.2 except with the prior written approval of NHAI.

25.2.3 In the event the Grant, if any, to the Concessionaire shall exceed 10% of the Total Project Cost, all disbursements on account of Total Project Cost other than those to the EPC Contractor in accordance with the EPC Agreement, shall be made in accordance with the express provisions contained in that behalf in the Financing Documents. Provided, however, that if the total of such disbursements exceed 10% of the Total Project Cost, prior written consent of NHAI shall be required in respect

of the disbursement arrangements for such excess amounts, and such consent shall not be unreasonably withheld by NHAI.

25.3 Notwithstanding anything to the contrary contained in the Escrow Agreement and subject to the provisions contained in Clauses 33.5 and Article XXXIV, upon Termination of this Agreement, all amounts standing to the credit of the Project Escrow Account shall be appropriated and dealt with in the following order:

(a) all Taxes due and payable by the Concessionaire;
(b) all Concession Fees due and payable to NHAI under this Agreement;
(c) all accrued Debt Service Payment;
(d) any payments and Damages due and payable by the Concessionaire to NHAI pursuant to this Agreement, including Termination claims, Recovery due to reduction in Scope of Work and repayment of Revenue Shortfall Loans;
(e) all accrued O&M Expenses;
(f) any other payments required to be made under this Agreement; and balance, if any, on the instructions of the Concessionaire.

25.3.1 Not withstanding anything to the contrary contained in this agreement, any termination payments made by NHAI into the Escrow account shall not be appropriated therefrom for any purpose whatsoever, until the Vesting Certificate has been issued by NHAI. Provided, however, that this restriction shall not apply to appropriation in favour of the Senior Lenders to the extent of debt due.

25.3.2 From the date, which is two years prior to the expiry of the Concession period, a sum equal to the fees realizable during the last two years of the Concession period for a traffic volume calculated at the rate of 10,000 (ten thousand) PCUs per day per year, or, a higher sum estimated by the Independent Consultant for renewal works, shall not withstanding anything to the contrary contained in this Agreement, be retained in the Escrow Account provided that if a Bank Guarantee of an equivalent sum in the form and content acceptable to NHAI has been furnished by the Concessionaire to NHAI, no such retention shall be made. If following the second Inspection, it is agreed or determined that no renewal works are required, then within 14 days of such agreement, 50 % of the sums thus retained shall be released from the Escrow account to the Concessionaire. Within 14 days after the issue of Vesting Certificate (in accordance with Article XXXIII of the Concession agreement) the sums thus retained shall be released from the Escrow account to the Concessionaire.

25.4 The instructions contained in the Escrow Agreement shall remain in full force and effect until the obligations set forth in Clause 25.3 have been discharged.

XXVI. STATE SUPPORT AGREEMENT

26.1 The Concessionaire acknowledges that for the performance of its obligations under this Agreement, it requires support and certain services from Government of Tamil Nadu. The nature and scope of such support and services required by the Concessionaire from Government of Tamil Nadu are fully described in the draft State Support Agreement set forth at Schedule 'R'.

26.2 The Concessionaire acknowledges its obligation to enter into the State Support Agreement and accordingly the Concessionaire agrees and undertakes to enter into at its cost and expense the State Support Agreement with NHAI and Government of Tamil Nadu substantially in form and content as set forth in Schedule 'R'.

XXVII. INSURANCE

27.1 Insurance during the Construction Period: The Concessionaire shall effect and maintain, or cause to be effected and maintained, at no cost to NHAI during the Construction Period such insurances upto such maximum sums as may be required under and in accordance with the Financing Documents, Applicable Laws and such insurance as the Concessionaire may reasonably consider necessary or desirable in accordance with Good Industry Practice, which shall include, but not limited to (a) Contractor's All Risk, including design defect, (ii) Workmen Compensation, (iii) Construction Plant and Machinery, (iv) Advance Loss of Profits and (v) Third Party Liability. The Concessionaire shall also effect and maintain such insurance as may be necessary for mitigating the risks that may devolve on NHAI as a consequence of any act of omission by the Concessionaire during the Construction Period.

27.2 Insurance during the Operations Period: Not later than 4 months prior to the anticipated Completion of the Project Highway, the Concessionaire shall obtain and maintain at no cost to NHAI during the Operations Period in respect of the Project Highway and its operations such insurance as may be required under any of the Financing Documents, Applicable Laws and such insurance as the Concessionaire may reasonably consider necessary or desirable in accordance with Good Industry Practice, including but limited to (i) Standard Fire and Special Perils, (ii) Business Interruption, (iii) General Public Liability, (iv) Construction Plant and Machinery, (v) Accident (vi) Automobile and (vii) Workmen Compensation. Provided, however, the level of insurance to be maintained after satisfaction of Senior Lenders' dues in full, shall be determined on the same principles as applicable for determining the level of Insurance prior to such date. This level shall be agreed with NHAI within 120 days of date of this Agreement.

0064

For the sake of brevity, the aggregate of the maximum sums insured under the insurance taken out by the Concessionaire pursuant to this Article XXVII are herein referred to as the "Insurance Cover".

27.3 Evidence of Insurance Cover: All insurance obtained by the Concessionaire in accordance with this Article XXVII shall be maintained with insurer or reinsurers, and on terms consistent with Good Industry Practice. Within thirty days of obtaining any insurance cover, the Concessionaire shall furnish to NHAI, copies of certificates of insurance, copies of the insurance policies signed by an authorised representative of the insurer and copies of all premia payment receipts in respect of such insurance received from each insurance carrier, and such insurance will not be cancelled, changed or not renewed until the expiration of at least 45 (forty five) days after written notice of such cancellation, change of non-renewal has been received by NHAI.

27.4 Remedy on Failure to Insure: If the Concessionaire shall fail to effect and keep in force the insurance for which it is responsible pursuant hereto, NHAI shall have the option to keep in force any such insurance, and pay such premia and recover the costs thereof from the Concessionaire, or for the purposes of computation of payments to the Concessionaire pursuant to Article XXIX treat the insurance cover i.e. the maximum sums which such insurance was providing for had it been in force and effect as being deemed to have been received by the Concessionaire.

27.5 Waiver of Subrogation: All insurance policies supplied by the Concessionaire shall include a waiver of any right of subrogation of the insurers thereunder against, inter alia, NHAI, and its assigns, subsidiaries, affiliates, employees, insurers and underwriters and of any right of the insurers of any set-off or counterclaim or any other deduction, whether by attachment or otherwise, in respect of any liability of any such person insured under any such policy.

27.6 Concessionaire Waiver: The Concessionaire hereby further releases, assigns and waives any and all rights of recovery against, inter alia, the NHAI, and its affiliates, subsidiaries, employees, successors, permitted assigns, insurers and underwriters, which the Concessionaire may otherwise have or acquire in or from or in any way connected with any loss covered by policies of insurance maintained or required to be maintained by the Concessionaire pursuant to this Agreement (other than third party liability insurance policies) or because of deductible clauses in or inadequacy of limits of any such policies of insurance.

27.7 Application of Insurance Proceeds: The proceeds from all insurance claims, except life and injury, shall be paid to the Concessionaire by credit to the Escrow Account (unless otherwise required by the Financing Documents) who shall, subject to its

obligations under the Financing Documents, and notwithstanding anything contained in Article XXV, apply such proceeds for any necessary repair, reconstruction, reinstatement, replacement, improvement, delivery or installation of the Project Highway.

XXVIII. ACCOUNTS AND AUDIT

28.1 The Concessionaire shall maintain full accounts of all Fees including Realisable Fees and other revenues derived/collected by it from and on account of use of the Project Highway and of O&M Expenses and other costs paid out of the Project Escrow Account and shall provide copies of the said accounts duly audited and certified by the Concessionaire's Statutory Auditors within 120 (one hundred twenty) days of the close of each Accounting Year to which they pertain, during the subsistence of this Agreement. Such audited accounts shall form the basis of various payments by either Party under this Agreement. The Concessionaire shall also furnish, within one week of its publication, a certified copy of the audited accounts and annual report published by the Company under the Applicable Laws.

28.2 The Concessionaire shall appoint and have during the subsistence of this Agreement as its Statutory Auditors a firm of Chartered Accountants duly licensed to practice in India out of the mutually agreed list of 10 (ten) independent and reputable firms of Chartered Accountants in India (the "List of Chartered Accountants"). The criteria for preparing the List of Chartered Accountants are set forth in Schedule 'T'. Subject to a 30 days notice to NHAI and the replacement Statutory Auditors being appointed from the List of Chartered Accountants, the Concessionaire may terminate the appointment of any Statutory Auditor appointed in accordance with this Article. The fees and expenses of the Statutory Auditors shall be borne by the Concessionaire.

28.3 On or before the fifteenth day of May each Year, the Concessionaire shall provide for the preceding Accounting Year a statement duly audited by its Statutory Auditors giving summarized vehicle/user wise information on (i) the traffic count for each category of vehicles using the Project Highway and liable for payment of Fees therefore, and (ii) Fees charged and the amount of Fees received, Realizable Fees and other revenues derived from the Project Highway and such other information as NHAI may reasonably require.

28.4 Notwithstanding anything to the contrary contained in this Agreement, NHAI shall have the right but not the obligation to appoint at its cost another firm of chartered accountants from the List of Chartered Accountants (the "Additional Auditor") to audit and verify all those matters, expense, costs, realisations and things which the Statutory Auditors of the Concessionaire, are required to do, undertake or certify pursuant to this Agreement.

28.5 Where a Grant has been provided, NHAI shall have the right to appoint for the duration of the Construction Period as Concurrent Auditor a firm of Chartered Accountants from the List of Chartered Accountants (the "Concurrent Auditor") who shall undertake concurrent audit of the Concessionaire during the Construction Period. The charges and expenses of such Concurrent Auditor shall be borne by the NHAI. After such Construction Period, NHAI may at its option have concurrent audit done at such time and for such period as NHAI may deem appropriate at its cost and expenses.

28.6 In the event of their being any difference between the finding of the Additional Auditor or the Concurrent Auditor, as the case may be, and the certification provided by the Statutory Auditors of the Concessionaire, such Auditors shall meet to resolve such differences and if they are unable to resolve the same such disputed certification shall be resolved by recourse to the Dispute Resolution Procedure.

CHAPTER – VI
FORCE MAJEURE

XXIX. FORCE MAJEURE

29.1 Force Majeure Event: As used in this Agreement, a Force Majeure Event shall mean occurrence in India of any or all of Non Political Event, Indirect Political Event and/or Political Event as defined in Clauses 29.2, 29.3, and 29.4 respectively hereinafter which prevent the Party claiming Force Majeure (the "Affected Party") from performing its obligations under this Agreement and which act or event is (i) beyond the reasonable control and not arising out of the fault of the Affected Party, (ii) the Affected Party has been unable to overcome such act or event by the exercise of due diligence and reasonable efforts, skill and care, including through expenditure of reasonable sums of money and (iii) has a Material Adverse Effect on the Project.

29.2 Non Political Force Majeure Events: For purposes of Clause 29.1 Non-Political Events shall mean one or more of the following acts or events:

(i) acts of God or events beyond the reasonable control of the Affected Party which could not reasonably have been expected to occur, exceptionally adverse weather conditions, lightning, earthquake, cyclone, flood, volcanic eruption or fire (to the extent originating from a source external to the Site or beyond design specifications for the Construction Works) or landslide;

(ii) radioactive contamination or ionizing radiation;

(iii) strikes or boycotts (other than those involving the Concessionaire, Contractors or their respective employees/ representatives or attributable to any act or omission of any of them) interrupting supplies and services to the

Project Highway for a period exceeding a continuous period of 7 (seven) days in an Accounting Year, and not being an Indirect Indian Political Event set forth in Clause 29.3 hereof;

(iv) any failure or delay of a Contractor but only to the extent caused by another Non-Political Event and which does not result in any offsetting compensation being payable to the Concessionaire by or on behalf of such Contractor;

(v) Any judgement or order of any court of competent jurisdiction or statutory authority in India made against the Concessionaire in any proceedings for reasons other than failure of the Concessionaire to comply with any Applicable Law or Applicable Permits or on account of breach thereof, or of any contract, or enforcement of this Agreement or exercise of any of its rights under this Agreement by NHAI or any judgement or order of any court of competent jurisdiction or statutory authority in India made against the NHAI in any proceedings for reasons other than failure of the NHAI to comply with any Applicable Law or Applicable Permits or on account of breach thereof, or of any contract, or enforcement of this Agreement or exercise of any of its rights under this Agreement by Concessionaire;

(vi) Any event or circumstance of a nature analogous to any of the foregoing.

29.3 Indirect Political Force Majeure Events: For purposes of Clause 29.1, Indirect Political Event shall mean one or more of the following acts or events:

(i) an act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, riot, insurrection, terrorist or military action, civil commotion or politically motivated sabotage which prevents collection of Fees by the Concessionaire for a period exceeding a continuous period of 7 (seven) days in an Accounting Year;

(ii) industry wide or state wide or India wide strikes or industrial action which prevent collection of Fees by the Concessionaire for a period exceeding a continuous period of 7 (seven) days in an Accounting Year; or

(iii) any public agitation which prevents collection of Fees by the Concessionaire for a period exceeding a continuous period of 7 (seven) days in an Accounting Year.

29.4 Political Force Majeure Events: For purposes of Clause 29.1, Political Event shall mean one or more of the following acts or events by or on account of GOI, NHAI, Government of Tamil Nadu or any other Governmental Agency:

0168

(i) Change in Law, only when provisions of Article XXXVI cannot be applied;

(ii) expropriation or compulsory acquisition by any Governmental Agency of any Project Assets or rights of the Concessionaire or of the Contractors; or

(iii) unlawful or unauthorised or without jurisdiction revocation of, or refusal to renew or grant without valid cause any consent or approval required by the Concessionaire or any of the Contractors to perform their respective obligations under the Project Agreements (other than a consent the obtaining of which is Condition Precedent) provided that such delay, modification, denial, refusal or revocation did not result from the Concessionaire's or any Contractor's inability or failure to comply with any condition relating to grant, maintenance or renewal of such consents or permits.

29.5 Effect of Force Majeure Event before Financial Close: Upon the occurrence of any Force Majeure Event prior to Financial Close as set forth in Article XXII, the following shall apply:

(a) There shall be no Termination except as provided in Clause 29.8;

(b) The date for achieving Financial Close shall be extended by the period for which such Force Majeure event shall subsist; and

(c) The Parties shall bear their respective costs and no Party shall be required to pay to the other Party any costs arising out of such Force Majeure Event.

29.6 Effect of Force Majeure Event after Financial Close: Upon occurrence of any Force Majeure Event after Financial Close, the following shall apply:

(a) There shall be no Termination of this Agreement except as provided in Clause 29.8;

(b) Where the Force Majeure Event occurs before COD, the dates set forth in the Project Completion Schedule, and the Concession Period shall be extended by the period for which such Force Majeure Event shall subsist;

(c) Where a Force Majeure Event occurs after COD, the Concessionaire shall continue to make all reasonable efforts to collect Fees, but if he is unable to collect Fees during the subsistence of such Force Majeure Event, the Concession Period shall be extended by the period for which collection of Fees remains suspended on account thereof; and

(d) Costs arising out of or concerning such Force Majeure Event shall be borne in accordance with the provisions of Clause 29.7.

29.7 Allocation of costs during subsistence of Force Majeure: Subject to the provisions of clause 29.6, upon occurrence of a Force Majeure Event after Financial Close, the costs arising out of such event shall be allocated as follows:

(a) When the Force Majeure Event is a Non Political Event, the Parties shall bear their respective costs and neither Party shall be required to pay to the other Party any costs arising out of any such Force Majeure Event;

(b) Where the Force Majeure Event is an Indirect Political Event, the costs attributable to such Force Majeure Event and directly relating to the Project (the "Force Majeure Costs") shall be borne by the Concessionaire to the extent of the Insurance Claims, and to the extent such Force Majeure Costs exceed the Insurance Claims , one half of the same to the extent actually incurred and duly certified by the statutory Auditors of Concessionaire shall be reimbursed by NHAI to the Concessionaire in one lump sum or paid in three equal annual installments with interest @ SBI PLR plus two percent; and

(c) Where the Force Majeure Event is a Political Event, the Force Majeure Costs to the extent actually incurred and certified by the Statutory Auditors of Concessionaire shall be reimbursed by NHAI to the Concessionaire in one lump sum or paid in three equal annual installments with interest @ SBI PLR plus two percent, provided that no Force Majeure Costs shall be payable by NHAI if the Concession Period is increased under Clause 29.6.

For avoidance of doubt, Force Majeure Costs shall not include loss of Fee revenues or any debt repayment obligations but shall include interest payments on such debt, O&M Expenses and all other costs directly attributable to the Force Majeure Event.

29.8 Termination Notice: If a Force Majeure Event subsists for a period of 180 (one hundred eighty) days or more within a continuous period of 365 (three hundred sixty five) days, either Party may in its sole discretion terminate this Agreement by giving 30 (thirty) days Termination Notice in writing to the other Party without being liable in any manner whatsoever, save as provided in Clause 29.9.

29.9 Termination Payment for Force Majeure Events: Upon Termination of this Agreement pursuant to Clause 29.8, Termination Payment to the Concessionaire shall be made in accordance with the following:

(a) If the Termination is on account of a Non Political Event, the Concessionaire shall be entitled to receive from NHAI by way of Termination Payment an

amount equal to 90% of the Debt Due and the entire Subordinated Debt less due insurance claims, if any. Provided that in the event some insurance claims are not admitted, then 90% of such claims shall qualify for being included in the computation of Debt Due.

(b) If the Termination is on account of an Indirect Political Event, the Concessionaire shall be entitled to receive from NHAI by way of Termination Payment an amount equal to:

(i) the total Debt Due, less due insurance claims, if any. Provided, however, that if all or any of the insurance claims are not admitted and paid, then 80% (eighty per cent) of such unpaid claims shall qualify for being included in the computation of Debt Due, plus

(ii) the outstanding Subordinated Debt, plus

(iii) 110% (one hundred ten per cent) of the Equity (subscribed in cash and actually spent on the Project but excluding the amount of Equity Support referred to in Article XXIII) if such Termination occurs at any time during three years commencing from the Appointed Date and for each successive years thereafter, such amount shall be adjusted every year to fully reflect the changes in WPI during such year, and the adjusted amount so arrived at shall be reduced every year by 7.5% (seven and half per cent) per annum.

(c) If the Termination of this Agreement is on account of a Political Event, the Concessionaire shall be entitled to receive from NHAI by way of Termination Payment an amount equal to:

(i) the total Debt Due, plus

(ii) 120% (one hundred twenty per cent) of the Subordinated Debt plus

(iii) 150% (one hundred fifty per cent) of the Equity (subscribed in cash and actually spent on the Project but excluding the amount of Equity Support referred to in Article XXIII) the if such Termination occurs at any time during three years commencing from the Appointed Date and for each successive year thereafter, such amount shall be adjusted every year to fully reflect the changes in WPI during such year, and the adjusted amount so arrived at shall be reduced every year by 7.5% (seven and half per cent) per annum.

29.10 Dispute Resolution: 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 however 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.

29.11 Liability for other losses, damages etc: Save and except as expressly provided in this Article XXIX, neither Party hereto 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 to this Article XXIX.

29.12 Duty to Report: The Affected Party shall discharge the following obligations in relation to reporting the occurrence of a Force Majeure Event to the other Party:

(a) The Affected Party shall not claim any relief for or in respect of a Force Majeure Event unless it shall have notified the other Party in writing of the occurrence of the Force Majeure Event as soon as reasonably practicable, and in any event within 7 (seven) days after the Affected Party knew, or ought reasonably to have known, of its occurrence and the probable material effect that the Force Majeure Event is likely to have on the performance of its obligations under this Agreement.

(b) Any notice pursuant to this Clause 29.12 shall include full particulars of:

(i) the nature and extent of each Force Majeure Event which is the subject of any claim for relief under this Article XXIX with evidence in support thereof;

(ii) the estimated duration and the effect or probable effect which such Force Majeure Event is having or will have on the Affected Party's performance of its obligations under this Agreement;

(iii) the measures which the Affected Party is taking or proposes to take, to alleviate the impact of such Force Majeure Event; and

(iv) any other information relevant to the Affected Party's claim.

(c) For so long as the Affected Party continues to claim to be affected by such Force Majeure Event, it shall provide the other Party with regular (and not less than weekly) written reports containing information as required by this Clause 29.12, and such other information as the other Party may reasonably request the Affected Party to provide.

0172

29.13 Excuse from performance of obligations: 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 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;

(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 written notice to that effect and shall promptly resume performance of its obligations hereunder.

CHAPTER – VII
SUSPENSION AND TERMINATION

XXX. MATERIAL BREACH AND SUSPENSION

30.1 If the Concessionaire shall be in Material Breach of this Agreement NHAI, shall be entitled in its sole discretion and without prejudice to its other rights and remedies under this Agreement including its right of Termination hereunder, to (i) suspend all or any of the rights of the Concessionaire under this Agreement including the Concessionaire's right to collect and appropriate all Fees and other revenues from the Project Highway, and (ii) exercise the rights of the Concessionaire under this Agreement itself or authorise any other person to exercise the same during such suspension. Such suspension by NHAI shall be by a communication in writing to the Concessionaire and shall be effective forthwith upon the issue thereof to the Concessionaire. Any Fees or revenues collected by or on behalf of NHAI during such suspension shall be deposited in the Escrow Account to the exclusion of the Concessionaire. Provided, however, that the period of such suspension under this Article XXX shall not exceed 120 (one hundred twenty) days.

30.2 Subject to clause 30.1, NHAI shall have the right to utilise the proceeds of Fees and other revenues for meeting the costs incurred by NHAI to remedy and rectify the cause of such suspension and for defraying the O&M Expenses during such suspension period. Provided, however, that if the Concessionaire is making diligent efforts to remedy and rectify such cause, then NHAI shall allow the Concessionaire

reasonable time and opportunity for such remedy or rectification.

30.3 The suspension of the rights of the Concessionaire by NHAI pursuant to Clause 30.1 above shall be revoked by NHAI forthwith upon the Concessionaire having remedied the Material Breach during such suspension period to the satisfaction of NHAI unless in the meantime this Agreement has been terminated by NHAI in accordance with Article XXXII.

30.4 At any time during the period of suspension under this Article XXX, the Concessionaire may in writing notify to NHAI that it does not intend to cure the breach or default that had caused such suspension. Within 7 (seven) days of receipt of such notice, NHAI shall terminate this Agreement as if a Material Breach of this Agreement had occurred on account of a Concessionaire Event of Default.

XXXI. COMPENSATION FOR BREACH OF AGREEMENT

31.1 In the event of Concessionaire being in material default of this Agreement and such default is cured before Termination, the Concessionaire shall pay to NHAI as compensation, all direct additional costs suffered or incurred by NHAI arising out of such material default by the Concessionaire, in one lumpsum within 30 (thirty) days of receiving the demand or at the Concessionaire's option in 3 (three) equal semi-annual installments with interest @ SBI PLR plus 2% (two per cent).

31.2 In the event of NHAI being in material default of this Agreement and such default is cured before Termination, NHAI shall pay to the Concessionaire as compensation, all direct additional costs suffered or incurred by the Concessionaire arising out of such material default by NHAI, in one lumpsum within 30 (thirty) days of receiving the demand or at NHAI's option in 3 (three) equal semi-annual installments with interest @ SBI PLR plus 2% (two per cent).

XXXII. TERMINATION

32.1 Termination for the Concessionaire Event of Default.

32.1.1 Concessionaire Event of Default

The following events shall constitute an event of default by the Concessionaire (a "Concessionaire Event of Default") unless such Concessionaire Event of Default has occurred as a result of NHAI Event of Default or a Force Majeure Event;

(1) The Concessionaire fails to achieve Financial Close in accordance with the provisions of Article XXII;

(2) The Concessionaire fails to achieve any Project milestone other than Scheduled Project Completion Date within the period set forth in Schedule 'H' and fails to cure such default within a period of 180 (one hundred and eighty) days from the date of its occurrence.

(3) The Concessionaire is in Material Breach of this Agreement;

(4) The Concessionaire commits default in complying with any of the terms and conditions of this Agreement, save and except those defaults in respect of which Cure Period has been expressly provided in this Agreement and fails to remedy or rectify the same within the period provided in a notice in this behalf from NHAI which shall:

(i) require the Concessionaire to remedy the breach or breaches referred to in such notice within 1 (one) month (or such longer period as may be agreed by the NHAI at its absolute discretion); or

(ii) permit the Concessionaire to put forward within 15 days of such notice a reasonable programme for the remedying of the breach or breaches. such programme to specify in reasonable detail the manner in which such breach or breaches is or are proposed to be remedied and the latest date by which it is proposed that such breach or all such breaches shall be remedied.

(5) The Concessionaire creates any Encumbrance, charges or lien in favour of any person save and except as otherwise expressly permitted under Clause 35.2;

(6) The shareholding of the Single Entity and its associates falls below the minimum prescribed under Clause 11.1 (xiii) and the Concessionaire does not suo moto cure such default within 90 (ninety) days of its occurrence;

(7) The transfer, pursuant to law of either (a) the rights and or obligations of the Concessionaire under any of the Project Agreements, or (b) all or material part of the assets or undertaking of the Concessionaire except where such transfer in the reasonable opinion of NHAI does not affect the ability of the Concessionaire to perform, and the Concessionaire has the financial and technical capability to perform, its material obligations under the Project Agreements;

(8) A resolution is passed by the shareholders of the Concessionaire for the voluntary winding up of the Concessionaire;

(9) The Concessionaire is adjudged bankrupt or insolvent or if a trustee or receiver is appointed for the Concessionaire or for any of its property that has a material bearing on the Project;

(10) Any petition for winding up of the Concessionaire is admitted by a court of competent jurisdiction or the Concessionaire is ordered to be wound up by Court except for the purpose of amalgamation or reconstruction provided that, as part of such amalgamation or reconstruction, the property, assets and undertaking of the Concessionaire are transferred to the amalgamated or reconstructed entity and that the amalgamated or reconstructed entity has unconditionally assumed the obligations of the Concessionaire under this Agreement and the Project Agreements, and provided that:

(i) the amalgamated or reconstructed entity has the technical capability and operating experience necessary for the performance of its obligations under this Agreement and the Project Agreements;

(ii) the amalgamated or reconstructed entity has the financial standing to perform its obligations under this Agreement and the Project Agreements and has a credit worthiness at least as good as that of the Concessionaire as at the Financial Close; and

(iii) each of the Project Agreements remains in full force and effect;

(11) The Concessionaire is in Material Breach of any of the Project Agreements;

(12) An event of default of the Concessionaire under any of the Financing Documents has occurred or any of the Senior Lenders has recalled its loan under any of the Financing Documents;

(13) The Concessionaire abandons the operations of the Project Highway for more than 15 (fifteen) consecutive days without the prior consent of NHAI, provided that the Concessionaire shall be deemed not to have abandoned such operation if such abandonment was (i) as a result of Force Majeure Event and is only for the period such Force Majeure is continuing, or (ii) is on account of a breach of its obligations by NHAI.

(14) The Concessionaire repudiates this Agreement or otherwise evidences an intention not to be bound by this Agreement;

(15) The Concessionaire suffers an execution being levied on any of its assets/ equipment causing a Material Adverse Effect on the Project and allows it to be continued for a period of 15 (fifteen) days;

0175

(16) The Concessionaire has delayed any payment that has fallen due under this Agreement if such delay exceeds 90 (ninety) days; or

(17) The Concessionaire is in breach of its obligation to repay the Revenue Shortfall Loans in accordance with this Agreement.

32.1.2 Save and except as otherwise provided in Clause 32.2, and without prejudice to any other right or remedy which NHAI may have in respect thereof under this Agreement, upon the occurrence of any breach or default by the Concessionaire under this Agreement including any Concessionaire Event of Default, NHAI shall be entitled to terminate this Agreement by a communication in writing (the "Termination Notice") to the Concessionaire if the Concessionaire has failed to cure such breach or default within the period provided for the same in this Agreement provided that before issuing the Termination Notice, NHAI shall by a notice in writing inform the Concessionaire of its intention to issue the Termination Notice (the "Preliminary Notice") and grant 15 (fifteen) days time to the Concessionaire to make its representation, if any, against such intended Termination Notice and shall after the expiry of said 15 (fifteen) day period whether or not it is in receipt of such representation, in its sole discretion issue the Termination Notice.

32.1.3 Subject to Clause 32.2, the following shall apply in respect of cure of any of the defaults and/or breaches of this Agreement.

(i) The Cure Period shall commence from the date on which a notice in writing is delivered by NHAI to the Concessionaire asking the latter to cure the breach or default specified in such notice.

(ii) The Cure Period provided in this Agreement shall not relieve the Concessionaire from liability for Damages caused by its breach or default;

(iii) The Cure Period shall not in any way be extended by any period of suspension under this Agreement;

(iv) If the cure of any breach by the Concessionaire requires any reasonable action by Concessionaire that must be approved by NHAI or the Independent Consultant hereunder the applicable Cure Period (and any liability of the Concessionaire for damages incurred) shall be extended by the period taken by NHAI or the Independent Consultant to accord their required approval.

32.2 Notwithstanding anything to the contrary contained in this Agreement, in the event of the Concessionaire being in default under any of the provisions hereof expressly

providing for Termination under or in accordance with this Clause 32.2, NHAI shall be entitled to terminate this Agreement forthwith by issuing a Termination Notice to the Concessionaire and upon issue of such Termination Notice by NHAI this Agreement shall stand terminated forthwith. Provided, however, that prior to such Termination, NHAI shall by notice grant to the Concessionaire a Cure Period of one month for curing the relevant breach or default of the provisions of this Agreement.

32.3 Upon Termination by NHAI on account of occurrence of Concessionaire Event of Default during the Operations Period, the NHAI shall pay to the Concessionaire by way of Termination Payment an amount equal to 90% (ninety per cent) of the Debt Due less insurance claims, if any, provided, however, that if all or any of the insurance claims are not admitted and paid, then 80% (eighty per cent) of such unpaid claims shall qualify for being included in the computation of Debt Due.

32.4 Termination for NHAI Event of Default.

32.4.1 The Concessionaire may after giving 90 (ninety) days notice in writing to NHAI terminate this Agreement upon the occurrence and continuation of any of the following events (each a "NHAI Event of Default"), unless any such NHAI Event of Default has occurred as a result of Concessionaire Event of Default or due to a Force Majeure Event.

(1) NHAI is in breach of this Agreement and such breach has a Material Adverse Effect on the Concessionaire and NHAI has failed to cure such breach or take effective steps for curing such breach within 90 (ninety) days of receipt of notice in this behalf from the Concessionaire;

(2) NHAI repudiates this Agreement or otherwise evidences an irrevocable intention not to be bound by this Agreement;

(3) GoI or Government of Tamil Nadu or any Governmental Agency have by an act of commission or omission created circumstances that have a Material Adverse Effect on the performance of its obligations by the Concessionaire and have failed to cure the same within 90 (ninety) days of receipt of notice by NHAI in this behalf from the Concessionaire;

(4) NHAI has delayed any payment that has fallen due under this Agreement if such delay exceeds 90 (ninety) days.

32.4.2 Upon Termination by the Concessionaire on account of an NHAI Event of Default, the Concessionaire shall be entitled to receive from NHAI by way of Termination Payment a sum equal to:

(i) the total Debt Due, plus

0078

Toll Road Limited

(ii) 120% (one hundred twenty percent)the total Subordinated Debt, plus

(iii) 150% (one hundred fifty per cent) of the Equity (subscribed in cash and actually spent on the Project but excluding the amount of Equity Support referred to in Article XXIII) if such Termination occurs at any time during three years commencing from the Appointed Date and for each successive year thereafter, such amount shall be adjusted every year to fully reflect the changes in WPI during such year and the adjusted amount so arrived at shall be reduced every year by 7.5% (seven and a half per cent) per annum.

32.5 Upon Termination of this Agreement for any reason whatsoever, NHAI shall:

(i) take possession and control of Project Highway forthwith;

(iii) take possession and control forthwith of any materials, construction plant, implements, stores etc. on or about the Site;

(iii) restrain the Concessionaire and any person claiming through or under the Concessionaire from entering upon the Site or any part of the Project Highway; and/or

(iv) succeed upon election by NHAI without the necessity of any further action by the Concessionaire, to the interests of the Concessionaire under such of the Project Agreement as NHAI may in its discretion deem appropriate and shall upon such election be required to compensate such contractors only for compensation accruing and becoming due and payable to them under the terms of their respective Project Agreements from and after the date NHAI elects to succeed to the interests of the Concessionaire as aforesaid. All sums claimed by such Contractors as being due and owing for work and services performed or accruing on account of any act, omission or event prior to such date shall constitute debt between the Concessionaire and such Contractors and NHAI shall in no way or manner be liable or responsible for such sums.

32.6 Termination Payments: The Termination Payment pursuant to this Agreement shall become due and payable to the Concessionaire by NHAI within thirty days of a demand being made by the Concessionaire with the necessary particulars duly certified by the Statutory Auditors. If NHAI fails to disburse the full Termination Payment within 30 (thirty) days, the amount remaining unpaid shall be disbursed along with interest @ SBI PLR plus two per cent for the period of delay on such amount.

32.7 Mode of Payment: Payment of compensation of costs by NHAI pursuant to this Article XXXII shall be made by way of credit to the Escrow Account and such payment shall constitute valid discharge of NHAI's obligations for Termination Payment hereunder.

32.8 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 Payments and Divestment procedures, shall survive the Termination of this Agreement to the extent such survival is necessary for giving effect to such rights and obligations.

XXXIII. DIVESTMENT OF RIGHTS AND INTERESTS

33.1 Upon Termination of this Agreement, the Concessionaire shall comply with the following:

(a) notify to NHAI forthwith the location and particulars of all Project Assets;

(b) deliver forthwith actual or constructive possession of the Project Highway free and clear of all Encumbrances and execute such deeds, writings and documents as may be required by the NHAI for fully and effectively divesting the Concessionaire of all of the rights, title and interest of the Concessionaire in the Project Highway and conveying the Project Highway free of any charge or cost to NHAI; and

(c) comply with the Divestment Requirements set out in Clause 33.2.

33.2 Upon Termination of this Agreement, the Concessionaire shall comply and conform to the following Divestment Requirements in respect of the Project Highway:

(i) all Project Assets including the road, pavement, structure and equipment shall have been renewed and cured of all defects and deficiencies as necessary so that the Project Highway is compliant with the Specifications and Standards set forth in this Agreement;

(ii) all sections of each traffic lane (the "Carriageway") of the Project Highway shall have a roughness index of not more than 2500 mm per km and shall be free from defects in accordance with O&M requirements;

(iii) all lamps shall be in working condition;

0080

(iv) the Concessionaire delivers relevant records and reports pertaining to the Project Highway and its design, engineering, construction, operation, and maintenance including all operation and maintenance records and programmes and manuals pertaining thereto and complete as built Drawings on the Divestment Date;

(v) the Concessionaire executes such deeds of conveyance, documents and other writings as the NHAI may reasonably require to convey, divest and assign all the rights, title and interest of the Concessionaire in the Project Highway free from all Encumbrances absolutely and free of any charge or tax unto the NHAI or its Nominee; and

(vi) the Concessionaire complies with all other requirements as may be prescribed under Applicable Laws to complete the divestment and assignment of all the rights, title and interest of the Concessionaire in the Project Highway free from all Encumbrances absolutely and free of any charge or tax to NHAI or its nominee.

33.3 Not earlier than 3 (three) months before the expiry of the Concession Period but not later than 30 (thirty) days before such expiry, or in the event of earlier Termination of this Agreement, immediately upon but not later than 15 (fifteen) days from the date of issue of Termination Notice, the Independent Consultant shall verify, in the presence of a representative of the Concessionaire, compliance by the Concessionaire with the Divestment Requirements set forth in Clause 33.2 in relation to the Project Highway and, if required, cause appropriate tests to be carried out at the Concessionaire's cost for determining the compliance therewith. If any shortcomings in the Divestment Requirements are found by either Party, it shall notify the other of the same and the Concessionaire shall rectify the same at its cost. The provisions of Article XXXIV shall apply mutatis mutandis in relation to repair or curing of defects under this Article XXXIII.

33.4 Upon the Concessionaire conforming to all Divestment Requirements and handing over actual or constructive possession of the Project Highway to NHAI or a person nominated by NHAI in this regard, NHAI shall issue a certificate substantially in the form set forth in Schedule 'V' (the "Vesting Certificate") within 3 months of Concessionaire conforming to all Divestment Requirements and handing over actual or constructive possession of the Project Highway to NHAI, which will have the effect of constituting evidence of divestment of all rights, title and lien in the Project Highway by the Concessionaire and their vesting in NHAI pursuant hereto. Issue of the Vesting Certificate shall not be unreasonably withheld by NHAI. The divestment of all rights, title and lien in the Project Highway shall be deemed to be complete on the date when all the Divestment Requirements have been fulfilled and Vesting

Certificate has been issued, it being expressly agreed that any defect or deficiency in any Divestment Requirement shall not in any manner be construed or interpreted as restricting the exercise of any rights by NHAI or its nominee on or in respect of the Project Highway on the footing as if all Divestment Requirements have been complied with by the Concessionaire.

33.5 Notwithstanding anything to the contrary contained in this Agreement, any Termination Payments made by NHAI into the Escrow Account shall not be withdrawn therefrom for any purpose whatsoever until the Vesting Certificate has been issued by NHAI under this Article. Provided, however, that the aforesaid restriction shall not apply to withdrawals from the Escrow Account in favour of the Senior Lenders to the extent of Debt Due.

CHAPTER – VIII
MISCELLANEOUS

XXXIV. DEFECTS LIABILITY

34.1 Not less than 30 months nor more than 36 months prior to the expiry of the Concession Period, the Concessionaire and the Independent Consultant shall conduct a joint inspection (the "Initial Inspection") of the Project Highway and all Project Facilities.

34.2 Within 90 days after the completion of the Initial Inspection, the Concessionaire shall provide to the Independent Consultant a report on the condition of the Project Highway and the Project Facilities and a notice setting out the Concessionaire's proposals as to the renewal works required to comply with the Divestment Requirements.

34.3 The Independent Consultant may, within 90 days after receipt of the notice from the Concessionaire in accordance with Clause 34.2, by notice to the Concessionaire object to the proposals giving details of the grounds for such objection and shall give the Independent Consultant's proposals in respect of the renewal works.

34.4 If no agreement is reached between the Concessionaire and the Independent Consultant within 30 days of receipt of such notice, then either the Concessionaire or the Independent Consultant may refer the matter to the Disputes Resolution Procedure.

34.5 Upon agreement or determination in accordance with the Disputes Resolution Procedure, the Concessionaire shall carry out the renewal works at its own cost.

0082

34.6 Not less than 9 months nor more than 12 months prior to the expiry of the Concession Period, the Concessionaire and the Independent Consultant shall conduct a joint inspection (the "Second Inspection") of all elements of the Project Highway and Project Facilities (whether or not the Renewal Works have been carried out).

34.7 Within 30 days after the completion of the Second Inspection, the Concessionaire shall provide to the Independent Consultant a report on the condition of the Project Highway and Project Facilities and a notice setting out any revisions or additions to the renewal works required in order to ensure compliance with the Divestment Requirements.

34.8 The Independent Consultant may, within 30 days after receipt of the notice from the Concessionaire in accordance with Clause 34.7, by notice to the Concessionaire object to the proposed revisions giving details of the grounds for such objection and shall give the Independent Consultant proposals in respect of such matters.

34.9 If no agreement is reached between the Concessionaire and the Independent Consultant within 30 days of receipt of such notice, then either the Concessionaire or the Independent Consultant may refer the matter to the Dispute Resolution Procedure.

34.10 Upon agreement or determination in accordance with the Disputes Resolution Procedure, the Concessionaire shall carry out the renewal works (as so revised) at its own cost.

34.11 From the date which is 2 years prior to the expiry of the Concession Period a sum equal to the Fees realisable during the last two years of the Concession Period for a traffic volume calculated at the rate of 10,000 (ten thousand) PCUs per day per year or a higher sum estimated by the Independent Consultant for Renewal Works, shall notwithstanding anything to the contrary contained in this Agreement, be retained in the Escrow Account provided that if a Bank Guarantee of an equivalent sum in the form and content acceptable to NHAI has been furnished by the Concessionaire to NHAI, no such retention shall be made.

34.12 If following the Second Inspection, it is agreed or determined that no renewal works are required, then within 14 days of such agreement, 50% of the sums retained in accordance with Clause 34.11 shall be released from the Escrow Account to the Concessionaire.

34.13 Within 14 days after the issue of the Vesting Certificate issued in accordance with Article XXXIII the sums retained in accordance with Clause 34.11shall be released from the Escrow Account to the Concessionaire.

XXXV. ASSIGNMENTS AND CHARGES

35.1 Subject to Clauses 35.3 and 35.4, this Agreement shall not be assigned by the Concessionaire save and except with prior consent in writing of NHAI, which consent NHAI shall be entitled to decline without assigning any reason whatsoever.

35.2 Subject to Clause 35.3, the Concessionaire shall neither create nor permit to subsist any encumbrance over or otherwise transfer or dispose of all or any of its rights and benefits under this Agreement or any Project Agreements to which Concessionaire is a party except with prior consent in writing of NHAI, which consent NHAI shall be entitled to decline without assigning any reason whatsoever.

35.3 Restraint set forth in Clauses 35.1 and 35.2 shall not apply to:

(i) liens arising by operation of law (or by an agreement evidencing the same) in the ordinary course of business of the Project Highway;

(ii) mortgages/pledges/hypothecation of goods/assets other than Project Assets, and those covered by the Substitution Agreement and their related documents of title arising or created in the ordinary course of business of the Project Highway and as security only for indebtedness to the Senior Lenders under the Financing Documents and/or for working capital arrangements for the Project Highway;

(iii) assignment of rights, title and interest to or in favour of the Lenders pursuant to and in accordance with the Substitution Agreement in respect of financing by the Senior Lenders under the Financing Documents for the Project; and

(iv) liens or encumbrances required by any Applicable Law.

35.4 Senior Lenders may exercise the rights of step-in or substitution as provided in the Substitution Agreement to be entered into among the Concessionaire, NHAI and Senior Lenders in the form set forth in Schedule 'U' provided that the person substituting the Concessionaire shall be deemed to be the Concessionaire under this Agreement and shall enjoy all rights and be responsible for all obligations under this Agreement as if it were the Concessionaire. Provided, however, that in the event of such step-in or substitution, an additional Cure Period of 90 (ninety) days shall be provided by NHAI to enable the Concessionaire to cure any breach or default subsisting on the day of such step-in or substitution. Provided further that if the Senior Lenders step in to operate and manage the Concession for a period not exceeding 90 (ninety) days, their liabilities shall be restricted to the obligations

0084

DS Toll Road Limited

relating to and arising during such 90 (ninety) days period.

35.5 Notwithstanding anything to the contrary contained in this Agreement NHAI may assign any of its rights and benefits and/or obligations under this Agreement pursuant to any direction of GOI or by operation of law or in the course of its own business.

XXXVI. CHANGE IN LAW

36.1 If as a result of Change in Law, the Concessionaire suffers an increase in costs or reduction in net after tax return or other financial burden, the aggregate financial effect of which exceeds Rs.10 million (Rupees ten million) in any Accounting Year, the Concessionaire may notify NHAI and propose amendments to this Agreement so as to put the Concessionaire in the same financial position as it would have occupied had there been no such Change in Law resulting in such cost increase, reduction in return or other financial burden as aforesaid. Upon notification by the Concessionaire as aforesaid, the Parties shall meet as soon as reasonably practicable but no later than 30 (thirty) days and either agree on amendments to this Agreement or on alternative arrangements to implement the foregoing.

Provided that if no agreement is reached as aforesaid by the Parties within 90 (ninety) days of the meeting pursuant to this Clause 36.1, the Concessionaire may by notice in writing require NHAI to pay an amount that would put the Concessionaire in the same financial position it would have occupied had there been no such Change in Law resulting in such cost increase, reduction in return or other financial burden as aforesaid. Such notice shall be accompanied by necessary particulars duly certified by the Statutory Auditors of the Concessionaire. NHAI shall make payment of such compensation within 15 (fifteen) days of receiving such notice or with interest @ SBI PLR if the payment thereof is delayed beyond such 15 (fifteen) days. If NHAI shall dispute the quantum of such compensation claim of the Concessionaire, the same shall be finally settled in accordance with the Dispute Resolution Procedure.

36.2 If as a result of Change in Law, the Concessionaire enjoys a reduction in costs or increase in net after tax return or other financial benefit, the aggregate financial effect of which exceeds Rs.10 million (Rupees ten million) in any Accounting Year, NHAI may so notify the Concessionaire and propose amendments to this Agreement so as to put the Concessionaire in the same financial position as it would have occupied had there been no such Change in Law resulting in such decreased cost, increase in return or other financial benefit as aforesaid. Upon notification by the NHAI as aforesaid, the Parties shall meet as soon as reasonably practicable but no later than 30 (thirty) days and either agree on such amendments to this Agreement or on alternative arrangements to implement the foregoing.

Provided that if no agreement is reached as aforesaid by the Parties within 90 (ninety) days of the meeting pursuant to this Clause 36.2, NHAI may by notice in writing require the Concessionaire to pay an amount that would put the Concessionaire in the same financial position it would have occupied had there been no such Change in Law resulting in such decreased cost, increase in return or other financial benefit as aforesaid. Such notice shall be accompanied by necessary particulars duly certified by the NHAI Representative. The Concessionaire shall make such payment within 15 (fifteen) days of receiving such notice or with interest @ SBI PLR if the payment is delayed beyond such 15 (fifteen) days. If the Concessionaire shall dispute such claim of NHAI, the same shall be finally settled in accordance with the Dispute Resolution Procedure.

36.3 Notwithstanding anything to the contrary contained in this Agreement, NHAI shall not be liable to reimburse to the Concessionaire any sums on account of any Change in Taxes if the same are recoverable from the users of the Project Highway or if the aggregate financial effect of such changes in any Accounting Year is less than or equal to Rs.10 million (Rupees ten million).

XXXVII. LIABILITY AND INDEMNITY

37.1 General Indemnity

(i) The Concessionaire will indemnify, defend and hold NHAI harmless against any and all proceedings, actions and, third party claims (other than a claim by NHAI or GOI for loss, damage and expense of whatever kind and nature arising out of the design, engineering, construction, procurement, Operation and Maintenance of the Project Highway or arising out of a breach by Concessionaire of any of its obligations under this Agreement except to the extent that any such claim has arisen due to NHAI Event of Default).

(ii) NHAI will, indemnify, defend and hold harmless the Concessionaire against any and all proceedings, actions, third party claims for loss, damage and expense of whatever kind and nature arising out of defect in title and/or the rights of NHAI in the land comprised in the Site adversely affecting the performance of the Concessionaire's obligations under this Agreement and/or arising out of acts done in discharge of their lawful functions by NHAI, its Officers, servants, agents, subsidiaries and contractors ("NHAI Indemnified Persons") including NHAI Events of Default except to the extent that any such claim has arisen due to a negligent act or omission, breach of contract or breach of statutory duty on the part of the Concessionaire, its Subsidiaries, affiliates, contractors, servants or agents including due to Concessionaire Event of Default.

0086

37.2 Without limiting the generality of Clause 37.1 the Concessionaire shall fully indemnify, save harmless and defend NHAI including its officers, servants, agents and subsidiaries from and against any and all loss and damages arising out of or with respect to (a) failure of the Concessionaire to comply with Applicable Laws and Applicable Permits, (b) payments of taxes relating to the Concessionaire contractors, suppliers and representatives, income or other taxes required to be paid by the Concessionaire without reimbursement hereunder, or (c) non-payment of amounts due as a result of materials or services furnished to the Concessionaire or any of its Contractors which are payable by the Concessionaire or any of its contractors.

37.3 Without limiting the generality of the provisions of this Article XXXVII, the Concessionaire shall fully indemnify, save harmless and defend the NHAI indemnified Person from and against any and all damages which the NHAI Indemnified Persons may hereafter suffer, or pay by reason of any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign patent rights, copyrights or other intellectual property, proprietary or confidentiality rights with respect to any materials, information , design or process used by the Concessionaire or by the Concessionaire's Contractors in performing the Concessionaire's obligations or in any way incorporated in or related to the Project. If in any such suit, claim or proceedings, a temporary restraint order or preliminary injunction is granted, the Concessionaire shall make every reasonable effort, by giving a satisfactory bond or otherwise, to secure the suspension of the injunction or restraint order. If, in any such suit claim or proceedings, the Project, or any part, thereof or comprised therein is held to constitute an infringement and its use is permanently enjoined, the Concessionaire shall promptly make every reasonable effort to secure for NHAI a licence, at no cost to NHAI, authorizing continued use of the infringing work. If the Concessionaire is unable to secure such licence within a reasonable time, the Concessionaire shall, at its own expense and without impairing the specifications and standards either replace the affected work, or part, or process thereof with non-infringing work or parts or process, or modify the same so that it becomes non-infringing.

37.4 In the event that either Party receives a claim from a third party in respect of which it is entitled to the benefit of an indemnity under this Article XXXVII (the 'Indemnified Party') it shall notify the other Party ("Indemnifying Party") within 14 (fourteen) days of receipt of the claim and shall not settle or pay the claim without the prior approval of the Indemnifying Party, such approval not to be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim it may conduct the proceedings in the name of the Indemnified Party subject the Indemnified Party being secured against any costs involved to its reasonable satisfaction.

DS Toll Road Limited

37.5 Defence of Claims

37.5.1 The Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate 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 their reasonable costs and expenses shall be indemnified by the Indemnifying Party. If the Indemnifying Party acknowledges in writing its obligation to indemnify the person indemnified in respect of loss to the full extent provided by this Article XXXVII, the Indemnifying Party shall be entitled, at its option, to assume and control the defence of such claim, action, suit or proceeding liabilities, payments and obligations at its expense and through counsel of its choice provided it gives prompt notice of its intention to do so to the Indemnified Party and reimburses the Indemnified Party for the reasonable cost and expenses incurred by the Indemnified Party prior to the assumption by the Indemnifying Party of such defence. The Indemnifying Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnified Party unless the Indemnifying Party provides such security to the Indemnified Party as shall be reasonably required by the Indemnified Party to secure, the loss to be indemnified hereunder to the extent so compromised or settled.

37.5.2 If the Indemnifying Party has exercised its rights under Clause 37.4, the Indemnified Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

37.5.3 If the Indemnifying Party exercises its rights under Clause 37.4 then the Indemnified Party shall nevertheless 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:

(i) the employment of counsel by such party has been authorised in writing by the Indemnifying Party; or

(ii) 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

(iii) 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

0088

DS Toll Road Limited

(iv) the Indemnified Party shall have reasonably concluded and specifically notified the Indemnifying Party either:

(a) that there may be specific defences available to it which are different from or additional to those available to the Indemnifying Party; or

(b) 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 clauses (ii), (iii) or (iv) shall be applicable, counsel for the Indemnified Party shall have the right to direct the defence of such claim, 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.

XXXVIII. RIGHTS AND TITLE OVER THE SITE

38.1 The Concessionaire shall have exclusive rights to the use of the Site in accordance with the provisions of this Agreement and for this purpose it may regulate the entry and use of the Project Highway by third parties.

38.2 The Concessionaire shall allow access to, and use of the Site for telegraph lines, electric lines or such other public purposes as NHAI may specify. Where such access or use causes any damage to the Project Highway and consequent financial loss to the Concessionaire, it may seek compensation or damages from such user of the Site as per Applicable Laws.

38.3 The Concessionaire shall not be liable to pay any property taxes for the Site.

38.4 For the purposes of claiming tax depreciation, the property representing the capital investment made by the Concessionaire shall be deemed to be acquired and owned by the Concessionaire.

38.5 The Concessionaire shall not sublet the whole or any part of the Site save and except as may be expressly set forth in this Agreement provided however that nothing contained herein shall be construed or interpreted as restricting the right of the Concessionaire to appoint contractors for the performance of its obligations hereunder including for operation and maintenance of all or any part of the Project Highway including Project Facilities.

XXXIX. DISPUTE RESOLUTION

39.1 Amicable Resolution

(a) Save where expressly stated to the contrary in this Agreement, any dispute, difference or controversy of whatever nature howsoever arising under, out of or in relation to this Agreement including incompletion of the Project Highway between the Parties and so notified in writing by either Party to the other (the "Dispute") in the first instance shall be attempted to be resolved amicably in accordance with the conciliation procedure set forth in Sub-clause (b) below.

(b) In the event of any Dispute between the Parties, either Party may call upon the Independent Consultant to mediate and assist the Parties in arriving at an amicable settlement thereof. Failing mediation by the Independent Consultant or without the intervention of the Independent Consultant, either Party may require such Dispute to be referred to the Chairman of NHAI and the Chairman of the Board or Directors of the Concessionaire, for the time being for amicable settlement. Upon such reference, the said two Authorities shall meet not later than 7 (seven) days of the date of such request to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the said period or the Dispute is not amicably settled within 15 (fifteen) days of such meeting between the said two Authorities, either Party may refer the dispute to arbitration in accordance with the provisions of Clause 39.2.

(c) If the Dispute is not resolved as evidenced by the signing of the written terms of settlement within 30 (thirty) working days of the aforesaid notice in writing or such longer period as may be mutually agreed by the Parties then the provisions of Clause 39.2 shall apply.

39.2 Arbitration

39.2.1 Any Dispute, which is not resolved amicably as provided in Clause 39.1 shall be finally decided by reference to arbitration by a Board of Arbitrators, appointed pursuant to Clause 39.2.2. Such arbitration shall be held in accordance with the Rules of Arbitration of the Indian Council of Arbitration and shall be subject to the provisions of the Arbitration Act.

39.2.2 There shall be a Board of three arbitrators of whom each party shall select one and the third arbitrator shall be appointed in accordance with the Rules of Arbitration of the Indian Council of Arbitration.

0090

DS Toll Road Limited

39.2.3 The arbitrators shall issue a reasoned Award.

39.2.4 The venue of such arbitration shall be New Delhi, India.

39.3 Arbitration Awards to be Binding

39.3.1 The Concessionaire and NHAI undertake to carry out any decision or award of the arbitrators (the "Award") without delay. Awards relating to any Dispute shall be final and binding on the Parties as from the date they are made.

39.3.2 The Concessionaire and NHAI agree that an Award may be enforced against the Concessionaire and/or NHAI, as the case may be and their respective assets wherever situated.

39.3.3 This Agreement and rights and obligations of the Parties shall remain in full force and effect pending the Award in any arbitration proceeding hereunder.

XL. DISCLOSURE

40.1 The Concessionaire shall make available for inspection by members of public free of charge during normal business hours on all working days copies of this Concession Agreement, the O&M Contract, the Tolling Contract and the State Support Agreement (hereinafter collectively referred to as "Public Documents") at the Concessionaire's Site office during the subsistence of this Agreement. The Concessionaire shall prominently display at the Toll Plazas public notices about the availability of the Public Documents for inspection and shall make available upon request and payment in advance of copying charges on no profit no loss basis to members of public copies of the said Public Documents.

XLI. REDRESSAL OF PUBLIC GRIEVANCES

41.1 The Concessionaire shall maintain a public relations office adjacent to each Toll Plaza and keep it open to public access at all times. At each such office, the Concessionaire shall open and maintain a register (the "Complaints Register") for recording of complaints by any person (the Complainant") at any time of the day. The availability of and access to such office and the Complaints Register shall be prominently displayed by the Concessionaire at each Toll Plaza so as to bring it to the attention of all persons who are entering and exiting the Project Highway.

41.2 The Complaints Register shall be securely bound and kept in proper custody at the public relations office. Each page of the Register shall be duly numbered and each complaint recorded therein shall also be duly numbered. Soon after a complaint is registered the Complainant shall be given a receipt by such office stating the date and complaint number, which the Complainant may refer to in any subsequent correspondence or claim. The Complaints Register shall have appropriate columns including but not limited to the complaint number and date, name and address of the Complainant, the complaint and the action taken by the Concessionaire thereon.

DS Toll Road Limited

0091

41.3 The Concessionaire shall inspect the Complaints Register at reasonable intervals and take prompt steps for redressal of the grievances stated in each complaint. The action so taken by the Concessionaire shall be briefly noted in the 'Action taken' column of the Complaints Register and a suitable reply shall also be sent to the Complainant by post under a certificate of posting.

41.4 Within one week following the close of each calendar month, the Concessionaire shall send to NHAI a true photocopy of such pages of the Complaints Register on which any entries have been recorded of any Complaint on the Concessionaire during the course of such month. NHAI may in its discretion direct the Concessionaire to take such further reasonable action as NHAI may deem appropriate for a fair and just redressal of any grievance. Where NHAI is of the opinion that the Complainant is entitled to any further redressal or compensation beyond what the Concessionaire is willing to provide, NHAI may refer the matter to the Consumer Redressal Forum having jurisdiction for its disposal in accordance with the provisions of the Consumer Protection Act, 1986.

XLII. ADVERTISING ON THE SITE

42.1 This shall be governed by Applicable Laws, rules, regulations, guidelines and instructions of GOI, NHAI and Government Agency.

XLIII. GOVERNING LAW AND JURISDICTION

43.1 This Agreement shall be construed and interpreted in accordance with and governed by the laws of India and the Courts at New Delhi, India shall have jurisdiction over all matters arising out of or relating to this Agreement.

XLIV. MISCELANEOUS

44.1 Video Recording

During the Construction Period, the Concessionaire shall provide a video recording to NHAI every calendar quarter which will be compiled into a 3 (three) hour cassette, covering the construction of the Project Highway in that quarter. Such video recording shall be provided no later than fifteen days after the close of each quarter.

44.2 Waiver

(a) Waiver by either Party of any default by other Party in the observance and performance of any provision of or obligations of or under this Agreement.

DS Toll Road Limited

0092

(i) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Agreement;

(ii) shall not be effective unless it is in writing and executed by a duly authorised representative of the Party; and

(iii) shall not affect the validity or enforceability of this Agreement in any manner.

(b) 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.

44.3 Survival

Termination of this Agreement (a) shall not relieve the Concessionaire or NHAI 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.

All obligations surviving the cancellation, expiration or Termination of this Agreement shall only survive for a period of 5 (five) years following the date of such Termination or expiry of this Agreement.

44.4 Entire Agreement:

The Agreement and the Schedules together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof and no amendment or modification hereto shall be valid and effective unless expressly previously approved in writing by NHAI and executed by the person expressly authorised by a resolution of NHAI in this behalf.

44.5 Notices

Any notice or other communication to be given by Party to the other Party under, or in connection with the matters contemplated by this Agreement shall be in writing and shall:

0193

DS Toll Road Limited

(a) in the case of the Concessionaire, be given by letter delivered by hand to the address given and marked for the attention of the person set out opposite the corresponding signature below or to such other address marked for such other attention as the Concessionaire may from time to time designate by notice to NHAI, provided that notices or other communications to be given to an address outside New Delhi may (if they are subsequently confirmed by sending a copy thereof by first class registered airmail or by courier) be sent by facsimile to the number as the Concessionaire may from time to time designate by notice to NHAI; and

(b) in the case of NHAI, be given by letter delivered by hand and be addressed to the Chairman, NHAI. Copies of all notices shall also be sent by facsimile and by registered acknowledgement due pre-paid post or courier. Copies of all notices shall also be sent to the NHAI Representative.

44.6 Severability

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 one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to dispute resolution under this Agreement or otherwise.

44.7 No Partnership

Nothing contained in this Agreement shall be construed or interpreted as constituting a partnership between the Parties. Neither Party shall have any authority to bind the other in any manner whatsoever.

44.8 Language

All notices required to be given by one Party to the other Party and all other communications, documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in English language.

44.9 Exclusion of Implied Warranties etc.

This Agreement expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by either Party not contained in a binding legal agreement executed by both Parties.

44.10 Counterparts

This Agreement may be executed in two counterparts, each of which when executed and delivered shall constitute an original of this Agreement.

IN WITNESS WHEREOF THE, PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN

SIGNED SEALED AND DELIVERED
For and on behalf of
NATIONAL HIGHWAYS AUTHORITY OF INDIA
By

(Signature) In the presence of:

प्राणवंत / PRANAVANT (Name) 1. (A.K. JAIN) Member (Fin.), NHAI
(तकनीकी) / General Manager (Tech.)
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
परिवहन और राजमार्ग मंत्रालय
(Ministry of Road Transport & Highways)
(Designation) 2. (Santosh Nautiyal), Chairman, NHAI

SIGNED, SEALED AND DELIVERED
For and on behalf of
DS TOLL ROAD LIMITED
By:
For DS Toll Road Limited
Authorised Signatory

(Signature) In the presence of:

P. CHALASANI (Name) 1. (MOHAN GURUNATH)

AUTHORISED SIGNATORY (Designation) 2. (SANJAY DIVAKAR JOSHI)

0065

SITE OF THE PROJECT

1. GENERAL

1.1 The Site

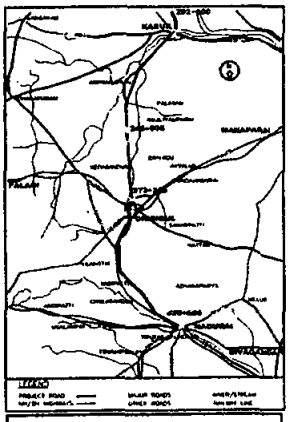


Fig A-1: Index Plan Project Highway

The Govt. of India (GoI) through Ministry of Roads & Highways (MORT&H) is contemplating to enhance the traffic capacity and safety for efficient transshipment of goods as well as passenger traffic on the heavily trafficked National Highway sections. GoI has entrusted National Highways Authority India (NHAI) with the responsibility of improving the quality of highways of national importance. The project under consideration aims at developing Dindigul – Madurai Section of NH-7, located in Tamilnadu state to four lane divided carriageway standards including with strengthening of existing two-lane road.

In order to provide a better level of service to the vehicular traffic, it has been decided to augment the capacity of the Dindugul – Madurai Section of NH-7 from Km 373.275(Start of thr proposed Dindigul bypass) to Km 426.600 (Samyanallore) in the State of Tamil Nadu by widening the existing 2 lanes to 4 lane divided carriageway facility, including strengthening of the existing 2-lanes on Build, Operate and Transfer (BOT) basis.

Thus the Construction package for the project includes developing the existing two lane Carriageway to four lane divided Carriageway standards including with strengthening of existing two lane between Km 373.275(Start of thr proposed Dindigul bypass) to Km 426.600 (Samyanallore) in the State of Tamil Nadu. Therefore, the entire Project would involve construction and strengthening of existing two lane road to four lane road in section from Km 373.275(Start of thr proposed Dindigul bypass) to Km 426.600 (Samyanallore) in the State of Tamil Nadu,

The Construction package chainages are given as follows:

		Existing Chainage	Proposed Chainage	Remarks
Construction Package Part of BOT package-11	From (Km)	373.275	373.725	Near Sports Stadium
	To (Km)	426.600	426.750	
	Length (Km)	**53.325**	**53.025**	

This Schedule describes features of the Project Highway pertaining to construction package from Km 373.275 to Km 426.600. The Chainages mentioned in this schedule refers to existing chainages. The Index Plan of the construction package is shown in Fig A-1.

DS Toll Road Limited

1.2 Disclaimer

The data presented below in this schedule is for an initial understanding and guidance of the concessionaire. NHAI will not be responsible for any inaccuracy in the information provided and shall not be liable for or be bound by the data used by concessionaire in evaluating the project viability. The Concessionaire will carry out his own independent surveys for assessing actual situation on the Project Highway.

The Concessionaire acknowledges that prior to the execution of this Agreement, the Concessionaire has satisfied himself (based on his own independent assessment) of the data, specifications and standards, site and all information provided by the NHAI. The Concessionaire acknowledges and accepts the difficulties, risks and hazards likely to arise or that may be faced by the Concessionaire in the course of performance of his obligations hereinunder.

2. DESCRIPTION OF PROJECT HIGHWAY

2.1 Road Inventory

The project highway stretch is a two lane road of 7 m wide carriage way with 1.5m to 2.0m wide earthen shoulder on both sides and; in its entire length, geometry of the road is found to be generally conforming to the National Highway standards. The radius of majority of horizontal curves is in the range of 400 to 1000 m. Chainage of the Project Highway is increasing from Dindigul to Madurai.

The existing road passes through predominantly agricultural land with patches of built-up areas , industrial areas etc. Terrain of this project road section is generally characterized as plain. The highway already has one bypass at Dindigul town.

The embankment along the project road stretch is generally observed to be about 0.5 m to 2.0m height and in considerable length of road stretch the Finished Road Level (FRL) is confluence with original ground level and longitudinal are buried in natural soil. However, no drainage problems were observed due to excellent cross country slope, which is effectively draining off the rain water into adjoining cross-drainage (CD) structures.Nallahs. This could be the main factor attributed to the good condition of existing pavement.

A total of 40 intermediate, minor and major intersections were noted along this road. There are three major intersections exist at km 374+000, km376+600 and km 379+500 respectively. All these major intersections are situated on Dindigul Bypass only. The Project Road is also crossing the railway line at three locations, viz: Km 375+000 (MG Level Crossing), Km 390+600 (BG three spans RUB) and at Km 394+900 (MG, 2-Lane ROB). Details of junctions are as given in table A-1 below:

Table A-1: Details of Junctions

Description	Numbers
Cross road junction (Four Road Intersection)	5

0097

DS Toll Road Limited

Description	Numbers
T – Junction	27
Y – Junction	8
Total	40

2.2 Road Geometry

The Project Highway generally has good geometrics conforming to the standards of IRC for a design speed of 100Kmph. The Project Highway has reverse S curves with a low degree of curvature at some locations which are of concern. Project Highway has smooth vertical gradients for most of its length except for a very few locations where they require some improvement. Super elevation exists on the Project Highway and appears to be in conformity with IRC provisions. The details of poor geometry are mentioned in the Table A-2 below:

Table A-2: Details of horizontal curves

Radius Range	Numbers
< 100	0
100 – 250	8
250 – 400	25
400 – 700	48
700 – 1000	29
1000 – 1500	11
1500 – 2000	8
2000 – 2500	3
2500 – 3000	2
> 3000	1

2.3 Abutting land use

Adjoining land is predominantly used for agriculture. Several educational institutions, medium and heavy industries, hatcheries, poultry farms have also been observed along the Project Highway. There

are many settlements and ribbon developments along the Project Highway. Generally commercial and residential land use is seen in most of them. Details of land use pattern are given in Table A-4 below:

Table A-3: Settlements along the Project Highway

Sl. No	From, Km	To, Km	Name

Table A-4: Land use pattern along the Project Highway.

Land use	%
Barren	24 %
Agricultural	35 %
Commercial	23 %
Residential	18 %
Total	100 %

2.4 Drainage

The drainage along the roadside is found to be very poor over the entire road stretch. The roadside drainage along the Project Highway needs improvement, predominantly in urban stretches. However, stagnation of water on road surface has not been reported on the Project Highway. Most of the water bodies like tanks are in dry state. Majority of the side drains along the Project Road are open and unlined.

2.5 Soil Characteristics

The Project Highway generally runs through agricultural fields. For most of the length soil along the Project Highway has been observed to be sandy loam except over few sections where soil appears to be lateritic type. Wherever such red soils are encountered, the adjacent land remains barren without agriculture. Only wild bushes are seen at such sections.

2.6 Environment and Climate

The Project Highway and its vicinity experiences low rainfall and the climate is semi-arid. The mean daily maximum and minimum temperatures recorded in the vicinity of Project Highway are 38.0 °C and 20 °C respectively. The air is highly humid throughout the year, the relative humidity (RH) being generally over 70%. The afternoon humidity during the period of January to April is less than 40%. The duration of the various seasons is as follows:

- December to March: Dry season
- March to May: Hot Season
- June to September: South-west monsoon

September to November: North east monsoon

2.7 Land Details

Details of available land width as per revenue records are given in Table A-5 below. However, NHAI has submitted Load Acquisition (LA) plans to concerned revenue authorities for acquisition of a total land width of 60m along the Project Highway. Additional land width is also proposed near Toll Plaza, intersections and wayside amenities etc. However, the Concessionaire shall also identify and submit proposals for acquiring land in accordance with relevant Land Acquisition (LA) act and pursue early completion of land acquisition.

Table A-5: Details of Available Land Width (RoW)

Sl.No.	Chainage		ROW in m
	From	To	
1	373+800	374+000	30 to 45
2	374+000	381+100	45 to 60
3	381+100	394+750	30 to 45
4	394+750	400+000	30 to 45
5	400+000	402+000	20 to 30
6	402+000	409+500	45 to 60
7	409+500	411+500	30 to 45
8	411+500	414+600	18 to 25
9	414+600	417+800	30 to 45
10	417+800	427+000	20 to 30

2.8 Traffic

The classified mid block traffic volume counts were recorded in January-2004 at the following locations along the Project Highway. Table A-6 presents the observed traffic volume on NH-7 at two locations.

Table A-6: Average Daily Traffic

Vehicle Category	Km 375 (Dindigul Bypass)		Km 420 (Tanicheyam)	
	(In Numbers)	(In PCU)	(In Numbers)	(In PCU)
Two Wheeler	1,314	657	771	385.5

C-00

Three Wheeler		65	65	115	115
Car.Jeep.Van		1,753	1,753	2,226	2,226
Tempo		101	101	234	234
Bus	Mini	809	2,427	544	1,632
	Standard	270	810	1,720	5,160
LCV		615	922	795	1,192
Trucks	2-Axle	1,876	5,628	1,664	4,992
	3-Axle	697	3,136	615	2,767
	Semi Art.	128	576	208	936
	MAV	5	22.5	47	211.5
Agri. Tractor	without trailor	8	12	16	24
	With trailor	17	76.5	18	81
Total Fast Moving Vehicle (FMV)		7,657	16,187	8,972	19,957
Cycle		562	281	417	208.5
Cycle Rickshaw		14	28	20	40
Animal Drawn Veh.	Bullock	8	64	14	112
	Horse	0	0	0	0
Hand Drawn Vehicle		0	0	0	0
Total Slow Moving Vehicle (SMV)		584	373	451	360
Total ADT		8,241	16,560	9,423	20,321

Source: Primary survey, BCEOM, January 2004

DS Toll Road Limited

3.) Pavement Composition and Condition

The pavement composition along the Project Highway is different for main carriageway and paved shoulders. Pavement is mainly composed of a BT layer, WBM base over subgrade; at a few places sub base is present in the form of granular material or stone soling.

Pavement crust thickness has been measured by digging trial pits at an interval of 500m. The test pits were staggered. Traffic regulations were made while doing this survey and trial pits were filled with M15 grade concrete after the completion of survey work. Test pit investigations were carried out at junctions of pavement and shoulder. There were two categories of test pits as under:

Large pits (1 mx1 m), where apart from in-situ tests, detailed soil tests were carried out at laboratory. These pits were located as per homogeneous sections and type of soil.

Small pits, which are staggered in between large pits at 1km intervals for in-situ and laboratory tests.

The existing pavement thickness as observed at pit locations has been recorded. In addition, test pits were dug at natural ground, by the side of existing road embankment. The samples collected were tested in the Laboratory.

By and large, the existing pavement structure mostly comprises of two to four layers, namely, wearing course, base course sub-base and occasional occurrence of soling. The wearing course consists of bituminous concrete (BC) and dense bituminous macadam (DBM). The base course mostly comprises of Water Bound Macadam (WBM). The following layer is Granular Sub-base and.or soling. The total pavement thickness varies from 450mm to 910mm with an average and standard deviation value of 640mm and 72mm, respectively. Details of pavement Composition is presented in Figure A-1 overleaf.

The overall condition of the pavement is fair. Cracking is the predominant distress along the Project Highway. Project road is having IR in the range of 3 to 4.The overall condition of the pavement as observed from visual condition surveys is depicted in Table A-7 below:

Table A- 7: Pavement Distress along the Project Highway

Rut-Type		Percentage Road length
Class	Size	
I	0-10 mm	78
II	10-20 mm	14
III	>20mm	8

Table 8: Pavement Distress along the Project Highway

Index Cracking Range	Frequency %
0-10	68.0%

DS Toll Road Limited

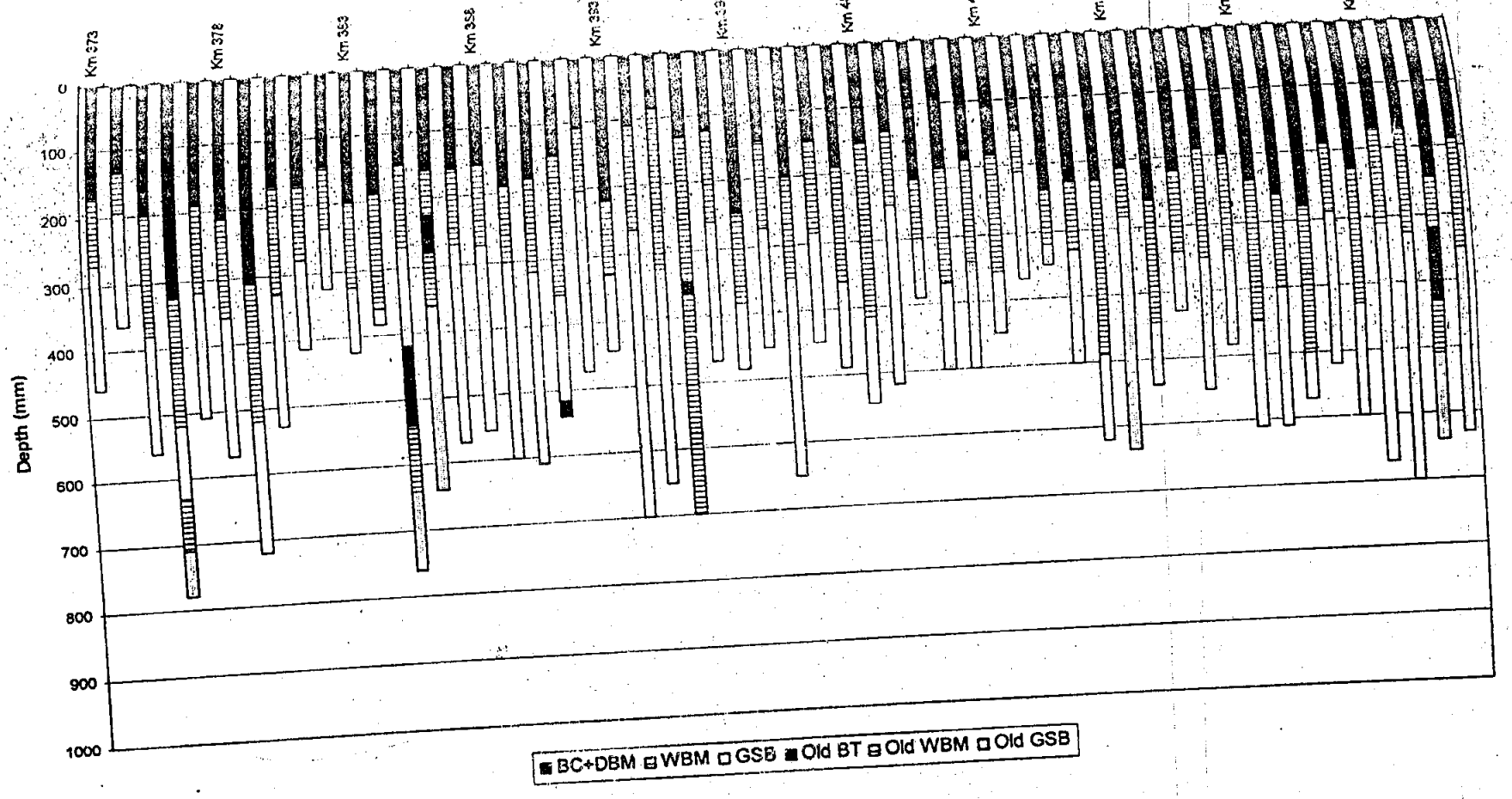
A-7

10-25	27.0%
25-40	5.0%
40-60	0.0%
>60	0.0%

Table A-9: Roughness values along the Project Highway

Roughness (IRI) Range	Length in Kilometer
2-2.5	24.3
2.5-3	40.2%
3-3.5	29.3
3-4	6.2
Total Length	53

Figure A-1: Pavement Composition along the Project Highway



Cross Drainage Structures

...re are 134 structures on the project road. Out of these, 25 nos. are Minor Bridges (6.0 m < Total ...gth < 60.0m) and the remaining 109 nos. structures are culverts. The summary of the structures ...ntory is given in Table A-11 below:

Table A-10: Details of Culverts:

	Chainage (Km)	Structure No.	Type	Span Arrangement (No X Span mm) or pipe dia	Length (m)	Condition of Culvert	Recommendations
	374+800	375.1	Pipe	2-900mm dia pipe	9.0	Fair	Widen & Retain
	375+050	376.1	Pipe	1 – 900mm dia pipe	1.5	Fair	Widen & Retain
	375+200	376.2	Pipe	2-900mm dia pipe	3.0	Fair	Widen & Retain
	376+200	377.1	Slab	3.0x1.0	4.6	Fair	Widen & Retain
	376+600	377.2	Pipe	2 - 900 mm dia pipe	1.5	Fair	Widen & Retain
	376+800	377.3	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
	377+000	378.1	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
8	377+300	378.2	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
9	377+700	378.3	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
10	377+900	378.5	Pipe	1 - 900 mm dia pipe	2.0	Fair	Widen & Retain
11	378+200	379.1	Pipe	Chocked		Burried	New 1 m dia pipe culvert

Sl. No.	Chainage (Km)	Structure No.	Type	Span Arrangement (No X Span mm) or pipe dia	Length (m)	Condition of Culvert	Recommendations
12	378+350	379.2	Pipe	2-900 mm dia pipe	9.0	Fair	Widen & Retain
13	378+400	379.3	Slab	4.0x1.0	5.0	Fair	Widen & Retain
14	378+600	379.4	pipe	1 - 900 mm dia pipe	2.5	Fair	Widen & Retain
15	379+100	380.1	Pipe	2-900 mm dia pipe	3.0	Fair	Widen & Retain
16	379+400	380.2	pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
17	379+900	380.2	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
18	380+250	381.1	pipe	1 - 900 mm dia pipe	2.4	Fair	Widen & Retain
19	381+300	382.1	Slab	3.0x0.5	4.0	Inadequate in hydrology	Replace by 3m x 1m Slab
20	381+700	382.2	Slab	2.5 x 2	3.4	appron broken	Replace appron & Retain
21	383+500	384.1	Slab	1.7 x 1.0	2.3	Fair	Widen & Retain
22	384+450	385.1	Slab	1.5 x 0.2	2.5	Inadequate in hydrology	Replace by 1.5 x 1 Slab
23	384+850	385.2	Slab	4 x 2	5.2	Fair	Widen & Retain
24	385+450	386.1	Slab	3 x 2	4.2	Fair	Widen & Retain
25	385+400	386.2	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain

DS Toll Road Limited

C-05

	Chainage (Km)	Structure No.	Type	Span Arrangement (No X Span mm) or pipe dia	Length (m)	Condition of Culvert	Recommendations
5	385+800	386.3	Slab	3 X 2	4.2	Fair	Widen & Retain
7	386+100	387.2	Slab	2 X 1	2.6	Inadequat in hydrology	Replace by 2 x 2 Slab
5	387+800	388.1	Burried			Burried	New 1 m dia pipe culvert
5	388+500	389.2	Pipe	2 - 900 mm dia pipe	3.2	Fair	Widen & Retain
30	389+100	390.1	Slab	2 X 1.2	3.2	Fair	Widen & Retain
31	389+600	390.3	Pipe	2 - 900 mm dia pipe	2.5	Slab extended with pipe. No connection between pipe & Slab	Replace with 2 - 1000 dia pipe
32	390+600	391.1	Pipe	3 - 900 mm dia pipe	6.3	Fair	Widen & Retain
33	390+900	391.2	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
34	392+050	393.1	Slab	1.2 X 2	2.7	Fair	Widen & Retain
35	392+450	393.2	Pipe	3 - 900 mm dia pipe	4.7	Fair	Widen & Retain
36	392+650	393.3	Slab	2 X 1	2.7	Fair	Widen & Retain
37	393+200	394.1	Pipe	3 - 900 mm dia pipe	4.8	Fair	Widen & Retain
38	394+800	395.1	Pipe	1 - 900 mm	6.0	Fair	Widen & Retain

DS Toll Road Ltd

Sl. No.	Chainage (Km)	Structure No.	Type	Span Arrangement (No X Span mm) or pipe dia	Length (m)	Condition of Culvert	Recommendations
				dia pipe			
39	395+000	396.1	Box	3x3	3.9	Fair	Widen & Retain
40	395+200	396.2	Box	- do -	3.9	Fair	Widen & Retain
41	395+850	396.1	Slab	2V - 2.5 X 1	6.0	Slab extended with 5 Nos.pipe. No connection between pipe & Slab	Replace with 2 x 2 box culvert
42	396+500	397.1	Slab	3 X 1	3.2	Fair	Widen & Retain
43	397+400	398.1	Pipe	2 - 900 mm dia pipe	3.0	Fair	Widen & Retain
44	397+600	398.2	Pipe	2 - 900 mm dia pipe	3.0	Fair	Widen & Retain
45	397+800	398.3	Slab	5 X 2	5.8	Slab in poor condition	Replace Slab & Widen
46	399+800	400.1	Pipe	3 - 900 mm dia pipe	4.6	Pipe Choked and Overflowing	Replace with 3-1200mm dia pipe
47	400+850	401.1	Pipe	1 - 900 mm dia pipe	1.5	Pipe Choked 80% on both sides	Replace with 1000mm dia pipe
48	403+400	403.1	Slab	1.5x1.7	2.5	Fair	Widen & Retain
49	404+810	405.1	Slab	6 X 3	7.3	Fair	Widen & Retain
50	405+100	406.1	Pipe	1 - 900 mm	1.5	Fair	Widen & Retain

DS Toll Road Limited

0108

Chainage (Km)	Structure No.	Type	Span Arrangement (No X Span mm) or pipe dia	Length (m)	Condition of Culvert	Recommendations
			dia pipe			
405+250	406.2	Pipe	6 - 900 mm dia pipe	9.3	Fair	Widen & Retain
405+500	406.3	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
405+700	406.4	Pipe	1 - 900 mm dia pipe	6.3	Fair	Widen & Retain
405+800	406.6	Slab	5 X 2	6.2	Minor repairs in slab	Widen & Retain
405+900	406.7	Pipe	1 - 900 mm dia pipe	9.3	Fair	Widen & Retain
406+250	407.1	Pipe	1 - 900 dia pipe	9.3	Fair	Widen & Retain
406+350	407.2	Pipe	1 - 900 mm dia pipe	8.0	Fair	Widen & Retain
406+400	407.4	Pipe	1 - 900 mm dia pipe	9.3	Fair	Widen & Retain
406+800	407.5	Pipe	1 - 900 mm dia pipe	9.3	Jts. Between pipes broke.	Replace with 1000 dia pipe
406+900	407.6	Pipe	1 - 900 mm dia pipe	9.3	Fair	Widen & Retain
408+900	409.1	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
409+500	410.2	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain

Chainage (Km)	Structure No.	Type	Span Arrangement (No X Span mm) or pipe dia	Length (m)	Condition of Culvert	Recommendations
109+800	410.3	Pipe	Burried		Burried	New 1 m dia pipe culvert
110+200	411.1	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
110+450	411.2	Slab	2V - 2 X 1.5	5.4	Fair	Widen & Retain
111+100	412.1	Slab	6 X 1.0	7.2	Fair	Widen & Retain
111+550	412.2	Slab	6 X 2	7.2	Abutments spalling and poor slab	Replace with 6 x2 Slab culvert
111+900	412.3	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
111+900	412.4	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
112+300	413.1	Pipe	1 - 900 mm dia pipe	1.5	Culver blocked 90%	Replace with 1000 dia pipe
113+300	414.1	Slab	2 X 0.5	3.0	Inadequate in hydrology	Replace with 2 x2 Slab culvert
114+500	415.1	Slab	2V - 2 X 2.5	6.8	Fair	Widen & Retain
114+600	415.3	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
114+650	415.3	Pipe	2 - 900 mm dia pipe	3.0	Fair	Widen & Retain
115+400	416.1	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
115+600	416.2	Pipe	1 - 900 mm	1.5	Fair	Widen & Retain

DS Toll Road Limited

Chainage (Km)	Structure No.	Type	Span Arrangement (No X Span mm) or pipe dia	Length (m)	Condition of Culvert	Recommendations
			dia pipe			
415+650	416.	Pipe	2 - 900 mm dia pipe	3.0	Fair	Widen & Retain
416+600	417.2	Slab	4 X 3	5.2	Fair	Widen & Retain
416+850	417.3	Pipe	2 - 900 mm dia pipe	3.0	appron broken	Widen & Retain
416+900	417.4	Pipe	2 - 900 mm dia pipe	3.0	Fair	Widen & Retain
417+250	418.1	Pipe	2 - 900 mm dia pipe	3.0	Fair	Widen & Retain
417+850	418.2	Slab	5 X 2	6.0	Fair	Widen & Retain
418+150	419.1	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
418+300	419.2	Pipe	2 - 900 mm dia pipe	5.3	Fair	Widen & Retain
418+600	419.3	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
418+900	419.4	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
418+950	419.5	Pipe	1 - 900 mm dia pipe	1.5	Pipe Choked	Replace with 1 - 1000 dia pipe
419+100	420.1	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
419+300	420.2	Slab	4 X 2	5.2	Fair	Widen & Retain
419+400	420.3	Pipe	1 - 900 mm	1.5	Fair	Widen & Retain

DS Toll R

Sl. No.	Chainage (Km)	Structure No.	Type	Span Arrangement (No X Span mm) or pipe dia	Length (m)	Condition of Culvert	Recommendations
				dia pipe			
91	419+500	420.4	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
92	419+600	420.5	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
93	419+900	420.6	Slab	2 X 0.5	3.2	Fair	Widen & Retain
94	420+600	421.2	Slab	4 X 0.5	3.2	Fair	Widen & Retain
95	420+600	421.3	Slab	4 X 3	3.3	Fair	clean , retain& Widen
96	421+600	422.3	Slab	2 X 2	3.2	appron broken	Widen & Retain
97	422+900	423.1	Slab	2 X 2	3.2	Fair	Widen & Retain
98	422+700	423.2	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
99	422+800	423.3	Pipe	2 - 900 mm dia pipe	3.0	Fair	Widen & Retain
100	423+100	424.1	Pipe	2 - 900 mm dia pipe	3.0	Fair	Widen & Retain
101	423+300	424.2	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
102	423+600	424.3	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
103	423+800	424.4	Pipe	1 - 900 mm dia pipe	1.5	Fair	clean , retain& Widen
104	424+300	425.1	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain

S. No.	Chainage (Km)	Structure No.	Type	Span Arrangement (No X Span mm) or pipe dia	Length (m)	Condition of Culvert	Recommendations
95	424+600	425.2	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
96	424+900	425.3	Slab	2 X 1.5	3.2	Fair	Widen & Retain
97	425+000	426.1	Pipe	1 - 900 mm dia pipe	1.5	Fair	Widen & Retain
103	425+600	426.3	Slab	2 X 1.5	4.2	Fair	Widen & Retain
109	426+500	427.1	Slab	3 X 2.5	4.4	Fair	Widen & Retain

Table A-11: Details of Minor Bridges are given below:

S. No.	Chainage (Km.)	Structure No.	Crossing	Type	Arrangement	Length	Foundation type	Remarks
1	383+800	384.2	Canal	Slab	1 X 8.4	8.4	Open	Retain & Widen
2	386+300	387.1	Canal	Slab	4 X 6.6	26.4	Open	Retain & Widen
3	387+500	388.1	Stream	Slab	2 X 5.7	11.4	Open	Retain & Widen
4	388+100	389.1	Canal	Slab	3 X 5.1	15.3	Open	Retain & Widen
5	389+400	390.2	Stream	Slab	2 X 6.5	13	Open	Retain & Widen

Chainage (Km.)	Structure No.	Crossing	Type	Arrangement	Length	Foundation type	Remarks
390+600	RUB	Railway line	Slab	13 + 14.3 + 13	40.3	Open	Retain
394+200	395.1	Stream	Slab	2 X 7.2	14.4	Open	Retain & Widen
394+900	395.4	Railway line	Precast Box	2 (45° skew)	24	Open	Retain
401+850	402.1	Canal	Slab	1 X 10 (30° skew)	10	Open	Retain & Widen
402+500	403.1	Canal	Slab	2 X 3.4	6.8	Open	Retain & Widen
403+100	404.1	None	Slab	1 X 10.6	10.6	NA	Retain & Widen
404+300	405.1	Canal	Slab	1 X 6	6	NA	Retain & Widen
404+450	405.2	Canal	Slab	2 X 5.8	11.6	Open	Retain & Widen
405+700	406.5	Canal	Slab	4 X 8.7	34.8	Open	Retain
406+350	407.2	Canal	Slab	1 X 10	10	Open	Retain & Widen
407+200	408.1	Flat Fields	Slab	2 X 8.4	16.8	Open	Retain & Widen

0114

DS Toll Road Limited

Chainage (Km.)	Structure No.	Crossing	Type	Arrangement	Length	Foundation type	Remarks
407+500	408.2	Flat Fields	Slab	2 X 8.4	16.8	Open	Retain & Widen
409+100	410.1	Canal	Slab	2 X 6	12	Open	Retain & Widen
409+900	410.4	Canal	Slab	2 X 6	12	Open	Retain & Widen
411+550	412.2	Canal	Slab	1 X 6	6	NA	Retain & Widen
412+900	413.2	Canal	Slab	6 X 2.5	15	Open	Retain & Widen
414+750	415.4	Irrigation Canal	Slab	2 X 5.5	11	Open	Retain & Widen
416+300	417.1	Canal	Slab	3 X 8.8	26.4	Open	Retain & Widen
420+950	421.3	Flat Irrigation Fields	Slab	1 X 10.5	10.5	NA	Retain & Widen
426+100	427.1	Stream	Slab	3 X 5.7	17.1	Open	Retain & Widen

condition of all minor bridges is generally good. General distress of bridges are damaged expansion joints, choked drainage spouts, etc. Minor distresses like spalling, exposed reinforcement, crumbling and corroded reinforcement were observed in some of the minor bridge substructures superstructures.

DS Toll Road

In general the condition of all culverts is satisfactory except a few. The general distress of culverts are exposed reinforcement, corroded reinforcement, honey combing etc in the slab portion and damaged pointing, exposed joints, cracks in PCC substructures head walls, parapets and PCC wing walls. All the parapets were found either of brick masonry or of plain cement concrete; but most of them are in good condition. The summary of the culverts inventory is presented in Table A-10.

3. 3 EXISTING FACILITIES

Though there are number of bus stops along the Project Highway, few bus bays have been provided.

Apart from the above, number of dhabas, petrol pumps, vehicle repair shops, telephone booths etc. have come up along the Project Highway

SCHEDULE B

SCOPE OF THE PROJECT

1. GENERAL

The following sections of this Schedule briefly highlight the scope of the work of the Project Highway for the information of the Concessionaire. The description of the requirements for the various elements of the Project Highway given herein under are the bare minimum requirements that the Concessionaire needs to undertake/provide for improvement of the same.

The designs for different Project facilities shall follow the Specifications and Standards outlined in Schedule D. The maintenance of the different elements of Project Highway and facilities thereon shall follow the minimum maintenance requirements as described in Schedule L. All the designs and drawings shall be reviewed by the Independent Consultant prior to execution of the Project.

2. CORE CONSTRUCTION REQUIREMENT

a. enable the NHAI to provide an acceptably safe highway in respect of its condition (structural safety) and use (road safety) ; and

b. enable the NHAI to fulfil its statutory and common law obligations ; and

c. enable the NHAI to provide a congestion free uninterrupted flow of traffic on the Project Highway;

d. enable the NHAI to provide a level of highway service to the public not inferior to that provided on the trunk road during construction or improvement works;

e. enable the police, local authorities, and others with statutory duties or functions in relation to the Project Highway or adjoining roads to fulfil those duties and functions ;

f. minimise the occurrence and adverse effects of accidents and ensure that all accidents and emergencies are responded to as quickly as possible;

g. minimise the risk of damage, destruction or disturbance to third party property

h. ensure that members of the public are treated with all due courtesy and consideration;

i. provide a safe, clear and informative system of road signs;

j. comply with any specified programme requirements, including for the completion of the new road;

k. enable standards of reliability, durability, accessibility, maintainability, quality control and assurance, and fitness for purpose appropriate to a highway of the character of the Project Highway to be achieved throughout the Contract Period;

l. ensure adequate off-street parking facilities for both passenger and goods vehicles;

m. provide adequate bus bays for stopping of buses and bus shelters for commuters to wait under protection ; and

n. achieve a high standard in the appearance and aesthetic quality of the Project Highway and achieve integration of the Project Highway with the character of the surrounding landscape through both sensitive design and sensitive management of all visible elements including those on the existing road.

o. Undertake proper safety audit through an appropriate consultant (i.e. apart from the Independent Consultant) before C.O.D.

p. Carry out accident recording and reporting (to IC/NHAI) by type on regular basis.

q. Ensure adequate safety of the Project Workers on the work site.

3. CROSS SECTIONS

The Project Highway shall be widened to have a 4 lane divided carriageway facility. Four types of typical cross sections have been proposed for rehabilitation and upgradation of the highway. These typical cross sections are summarized below and Table B-1 indicates the location of different types of road cross sections, which shall be followed along with the minimum construction criterion, mentioned below for the development of the Project Highway.

(i) Type-I : Four lane divided carriageway (4.5m median) without service road (Eccentric widening) - Rural Areas
(ii) Type-II : Four lane divided carriageway with service road (4.5m median) - Semi Urban Areas
(iii) Type-III : Four lane divided carriageway (4.5m median) - Bypasses
(iv) Type-IV : Four lane divided carriageway with slip road (4.5m median) - Underpasses/ Flyover approaches

Table B-1: Cross Section Type and Widening Scheme along the Project Highway

Sl. No.	Proposed Chainage		Length (m)	Type of cross section	Remarks
	From	To			
1.	373.200	373.818	618	Type-II	Shall be matched with adjoining section.
2.	373.818	374.600	782	Type-IV	Underpass- (Type-II)
3.	374.600	375.450	850	Type-IV	Flyover, NH-45 junction & ROB (4-Lane)
4.	375.450	376.539	1089	Type-II	
5.	376.539	377.342	803	Type-IV	Flyover at NH-209 junction (Palani-Dindigul)
6.	377.342	379.247	1905	Type-II	
7.	379.247	381.000	834	Type-IV	Flyover at SH-36 Junction(Coimbatore-Dindigul)
8.	381.000	381.000	919	Type-II	

0118

Sl. No.	Proposed Chainage		Length (m)	Type of cross section	Remarks
	From	To			
9.	381.000	381.200	200	Type-III	
10.	381.200	381.500	300	Type-III	
11.	381.500	382.200	700	Type-I	
12.	382.200	383.200	1000	Type-III	
13.	383.200	384.000	800	Type-I	
14.	384.000	384.400	400	Type-III	
15.	384.400	384.600	200	Type-I	
16.	384.600	385.200	600	Type-III	
17.	385.200	385.650	450	Type-I	
18.	385.650	386.300	750	Type-III	
19.	386.300	387.300	1000	Type-III	
20.	387.300	387.575	275	Type-I	
21.	387.575	388.000	425	Type-III	
22.	388.000	388.350	350	Type-II	
23.	388.350	388.891	541	Type-IV	Underpass- (Type-II)
24.	388.891	389.320	429	Type-II	Gandhigramam semi urban area
25.	389.320	390.000	680	Type-I	
26.	390.000	390.225	225	Type-III	
27.	390.225	394.400	4175	Type-I	
28.	394.400	395.350	950	Type-III	Two lane ROB
29.	395.350	396.700	1350	Type-I	
30.	396.700	398.950	2250	Type-III	
31.	0.000	3.560	3560	Type-III	Kodai bypass with different chainage as shown in DPR
32.	402.450	402.800	350	Type-III	
33.	402.800	403.450	650	Type-I	
34.	403.450	403.775	325	Type-III	
35.	403.775	404.500	725	Type-I	
36.	404.500	404.625	125	Type-III	
37.	404.625	405.000	375	Type-I	

DS Toll Road Limited

Sl. No.	Proposed Chainage		Length (m)	Type of cross section	Remarks
	From	To			
38.	405.000	405.150	150	Type-III	
39.	405.150	406.225	1075	Type-I	
40.	406.225	406.375	150	Type-III	
41.	406.375	408.400	2025	Type-I	
42.	408.400	409.003	603	Type-III	
43.	409.003	409.520	517	Type-IV	Underpass (Type-I)
44.	409.520	409.700	180	Type-II	
45.	409.700	413.164	3464	Type-III	Vadipatti Bypass Starts
46.	413.164	414.001	837	Type-IV	Underpass (Type-II)
47.	414.001	415.800	1799	Type-III	Vadipatti Bypass Ends
48.	415.800	416.400	2399	Type-III	
49.	416.400	416.900	500	Type-I	
50.	416.900	418.200	1300	Type-III	
51.	418.200	419.200	1000	Type-II	Vadugupatti semi urban area
52.	419.200	420.500	1300	Type-III	
53.	420.500	421.000	500	Type-II	
54.	421.000	421.350	350	Type-I	
55.	421.350	421.899	549	Type-II	
56.	421.899	422.489	590	Type-IV	Underpass (Type-I)
57.	422.489	423.300	811	Type-II	
58.	423.300	423.700	400	Type-III	
59.	423.700	424.600	900	Type-II	
60.	424.600	425.700	1100	Type-I	
61.	425.700	426.660	960	Type-II	

Figures B-1 to B-4 presents the typical cross sections that shall be followed for the improvement of Project Highway.

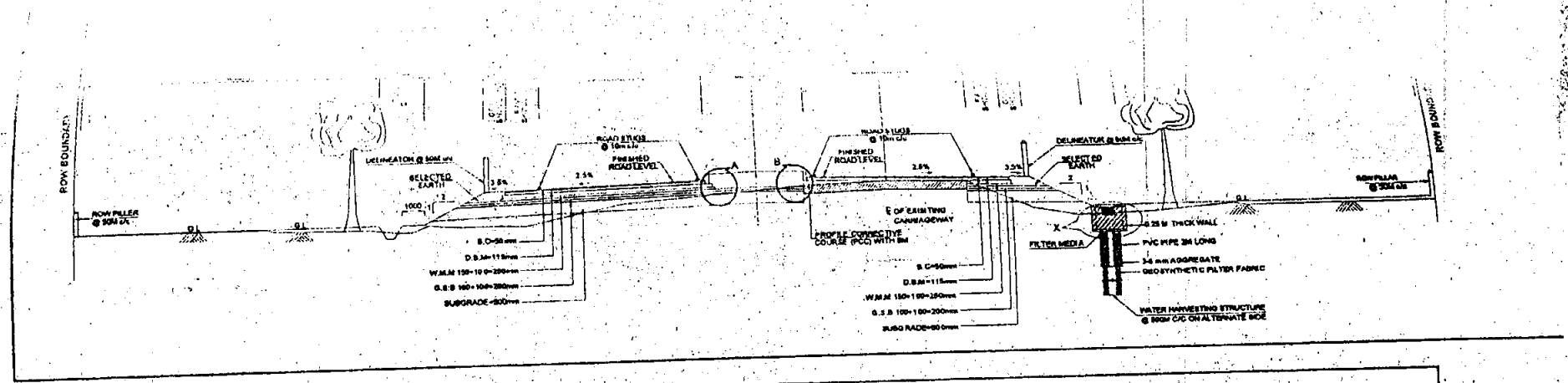


Fig. B1 - TYPICAL CROSS SECTION TYPE – I, FOUR LANE DIVIDED CARRAIGEWAY WITHOUT SERVICE ROAD

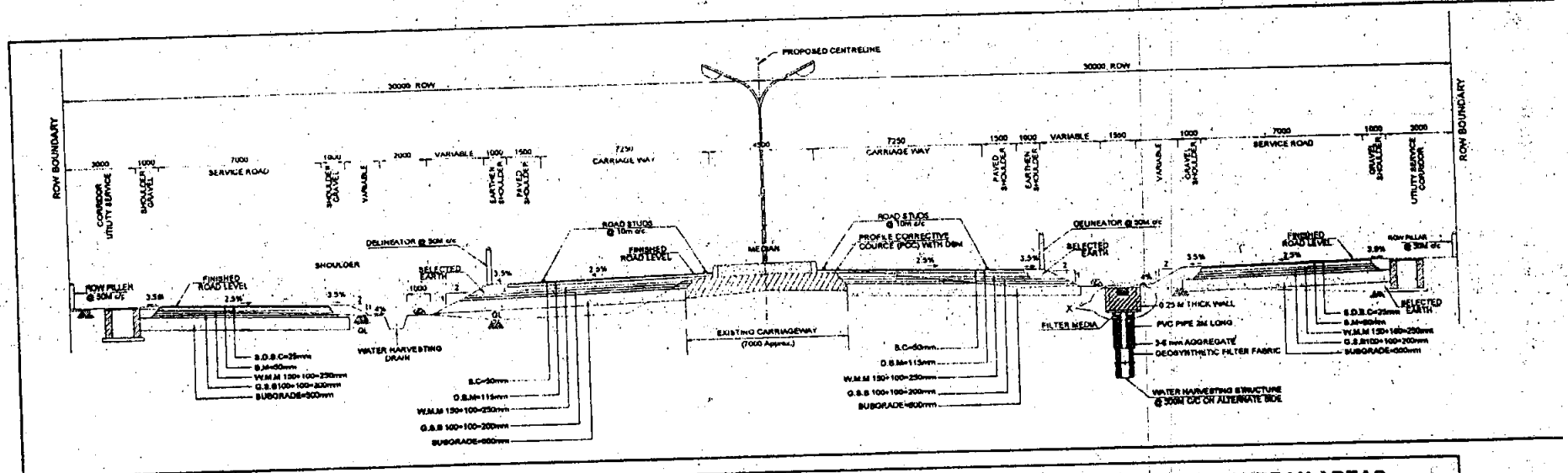


Fig. B2 - TYPICAL CROSS SECTION TYPE – II, FOUR LANE DIVIDED CARRAIGEWAY WITH SERVICE ROAD AT URBAN / SEMI URBAN AREAS

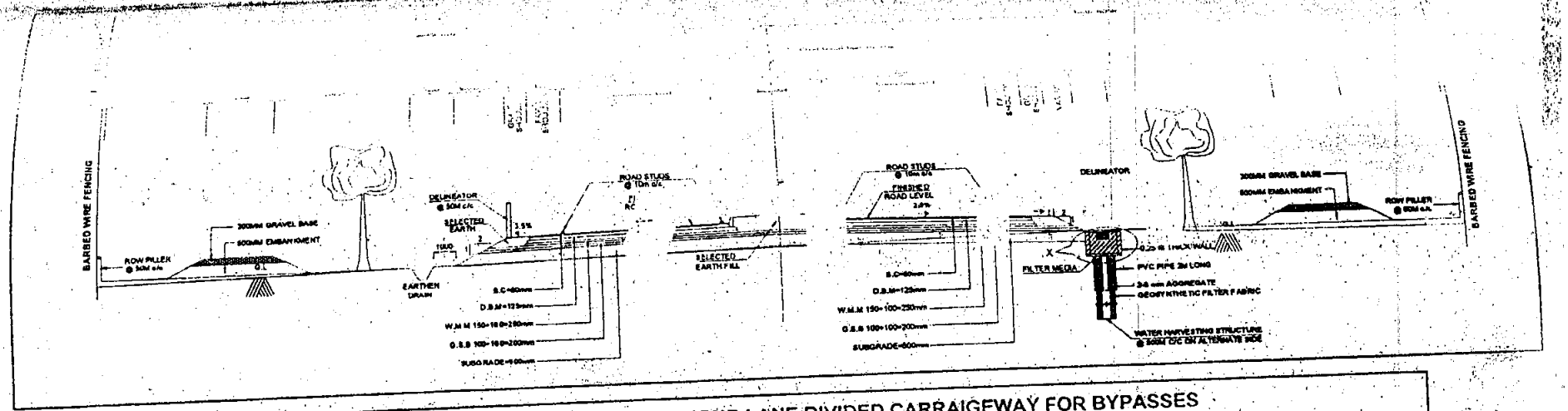


Fig. B3 - TYPICAL CROSS SECTION TYPE – III, FOUR LANE DIVIDED CARRAIGEWAY FOR BYPASSES

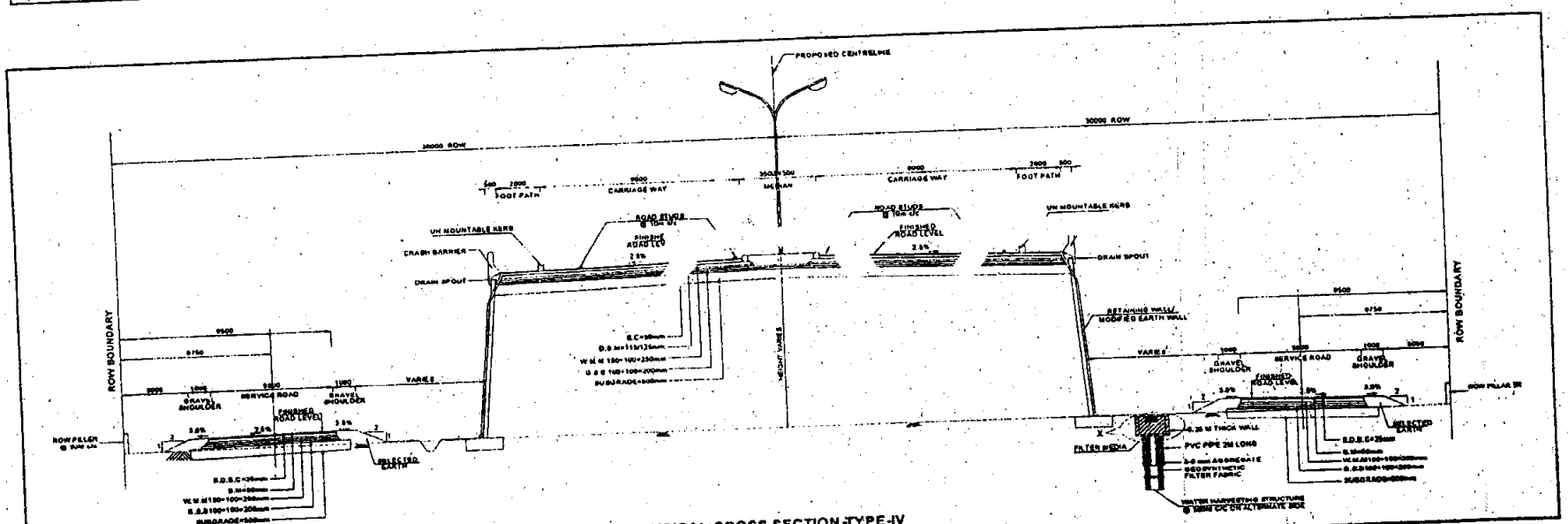


Fig. B4 - TYPICAL CROSS SECTION TYPE – IV, FOUR LANE DIVIDED CARRAIGEWAY

vices, including optical fibre cables, shall be provided in the utility corridor on the side where ent to the Concessionaire or the concerned Authority with the approval of Independent HAI. In urban sections the utility services shall be provided through underground ducts this purpose. For cross connection it shall be carried through the nearest cross drainage le crossing below its deck slab and above HFL. In absence of such a structure in the vicinity of location, it shall pass through separate underground ducts. Location and design of the cross shall be finalized at the detailed design stage in consultation with the Independent Consultant

OMETRIC IMPROVEMENT

attention shall be given while designing the centre line to ensure that the existing trees with h along the Project Highway are saved as far as possible.

gradients shall be corrected in such a way so as to attain an appropriate longitudinal gradient to achieve longitudinal drainage. Also, vertical curves shall be improved/introduced so that the curves meet IRC 73-1980 standards.

rizontal alignment along the Project Highway shall be improved as per the standards set out in le D

the horizontal alignment shall be eliminated

RVICE ROADS/SLIP ROADS

esents the details of proposed Service roads and the details of proposed rural service/slip roads.

Table B-2: Details of Urban/Semi urban service Roads

Sl. No.	Proposed Chainage		Length (m)	Service road width "m"	Remarks
	From	To			
1.	373800	375360	1560	7.0	Existing Dindigul bypass semi urban area
2.	375450	381000	5500	7.0	Existing Dindigul bypass semi urban area
3.	388000	389320	1320	7.0	Underpass
4.	399500	401800	2300	5.5	Underpass
5.	408950	409450	500	5.5	Underpass
6.	418200	419200	1000	5.5	Vadugupatti Semi urban area
7.	420500	421000	500	7.0	Semi urban area
8.	421400	423300	1900	7.0	Underpass

0123

DS Toll Road

Sl. No.	Proposed Chainage		Length (m)	Service road width "m"	Remarks
	From	To			
9.	424000	426600	2600	7.0	Semi urban area
	Total		17180		

accessibility to important village roads along the proposed bypass, slip roads shall be provided roposed Kodai Road bypass and Vadipatti bypass as per DPR drawings.

ted that the service road details given in above tables are minimum required. For any additional ls/slip roads if required shall be finalized in consultation with IC during execution.

YPASS CANDIDATES

Kodai Bypass:

several urban areas and ribbon developments along the Project Highway. Amongst them, Bypass Road (Km 400), falls in Nilakottai taluk of Dindigul District. Nearest Railway station to nal (hill resort) is located at the Kodai Road and it is a transition place to the tourists. In this area, asses through many commercial establishments on both sides causing congestion. The existing l/residential belt is from Km 399.000 to Km 401.000 the Right of Way available varies from m. But most of the stretch is having Right of Way more than 25m. BG & MG Railway line runs the Project Highway on western side. There is a state highway (SH) leading to Kodaikkanal from the Project Highway within the town area at km 401.400. On western side no option can ered as the railway line is traversing parallel to existing road and bypass has to cross the railway . A 4 lane bypass of about 3.6 km from existing Km: 398.800 to Km 402.400 shall be on eastern side of the Project Highway. Separate chainage system has been followed. For pass alignment different chainage has been given as shown in the DPR.

Table B-3: Details of Bypass Candidates

Proposed			Name
From (Km)	To (Km)	Length (km)	
398.800	402.400	3.600	Kodai Road
409.700	415.800	6.100	Vadipatti

Bypass at Vadipatti (Km 413)

m falls in Vadipatti taluk of Madurai district and has developed extensively on both sides of the Highway. The extent of existing commercial/residential activity is from Km 412.400 to Km The existing ROW varies from 16.7 to 44.0 m. But an average of 25m ROW is available for most tch. However, the clear width available is much less because of encroachments. A 4 lane bypass

0124

of about 6.1 km from Km 409.700 to Km 415.800 shall be provided on Eastern side of the Project Highway.

7.0 PAVEMENT

7.1 General

The detailed pavement design including overlay and pavement characteristics requirements of the Project Highway and that of the service roads in urban /semi urban sections shall be done in accordance with Schedule D. Pavement will be flexible for new two lanes, overlays, paved shoulders, service roads and for cross roads up to 100m from carriageway edge. Interconnected concrete blocks shall be provided for truck layby's, busbays. Rigid pavement shall be adopted at Toll Plaza.

DPR does not recommend any reconstruction sections due to fairly good condition of the existing pavement however at the time of construction it shall be carried out in some sections with the consultation of Independent Consultant.

7.2 Pavement Composition for New Construction/Reconstruction

The minimum composition of the new flexible pavement shall be as shown in Table B-3 below for subgrade strength of 10% CBR at 97% Modified Proctor Density. The indicated pavement composition is for the purpose of bidding only. Any additional thickness in the design over that indicated in the bidding documents shall not constitute a change in scope of work, nor qualify for a variation order.

However, concessionaire is free to choose the design option for flexible or rigid pavement for new carriageway construction in consultation with Independent Consultant/NHAI.

Nevertheless, bid evaluation shall be based on minimum flexible pavement thickness mentioned in the table B-4.

Table B-4: Pavement Composition for New Construction/Reconstruction

Section	New Pavement (mm)			
	GSB	WMM	DBM	BC
Km 373.275 – Km 426.600	200 mm	250 mm	125 mm	50 mm

7.3 Strengthening of Existing Pavement

Overlay thickness of strengthening of the existing flexible pavement shall not be less than 50 mm Bituminous Concrete (BC) and 125 mm Dense Bituminous Macadam (DBM) over the profile corrective course for the section. If the required thickness of profile correction course (PCC) is more than 150 mm, it can be laid with both granular and bituminous layers by completely removing the existing bituminous layers. No grooving and furrowing technique shall be adopted for laying granular layer on existing bituminous layers.

If the Concessionaire desires to use geosynthetics, geonets etc as part of strengthening of the existing carriageway, the same shall be finalised in consultation with IC before execution of work. The above-prescribed minimum thickness for overlay shall be laid even with such special provisions.

The composition of profile corrective course shall be as follows.

- If the level difference between the underside of total overlay thickness and existing centre line level is: Up to 150 mm – PCC is by BM
- More than 150 mm and up to 300 mm – Dismantle the existing bituminous course and provide 75mm BM. rest with WMM as PCC
- More than 300 mm and up to 500 mm- Dismantle the existing bituminous course and Provide 75mm BM. 250mm WMM . Remaining with GSB (min. 100mm) as PCC
- More than 500 mm – Reconstruction with new carriageway pavement thickness by dismantling of existing pavement to requisite depth
- More than 1600mm- Reconstruction with new carriageway pavement thickness without dismantling the existing bituminous course.

7.4 Paved Shoulder composition

The paved shoulder shall be designed as an integral part of the pavement for the main carriageway. Therefore, the total pavement thickness in the paved shoulder would be the same as in the carriageway

7.5 Service Road/Slip Road Pavement Composition

The minimum pavement thickness for urban/semi urban service roads and for slip roads in rural areas shall be as follows:

Table B-5: Pavement Composition for Service Roads/Slip Roads

Layer	Thickness
SDBC	25 mm
BM	50 mm
WMM	250 mm
GSB	200 mm

7.6 Rigid Pavement

The suggested pavement composition of the Rigid Pavement for toll plaza shall be as under for a subgrade of 10% CBR value with an effective K-value of 1000 pci for a design life of 30 years.

300 mm Pavement Quality Concrete (PQC) with M-40 grade concrete.

100 mm Dry Lean Concrete (DLC) with M-10 grade concrete

150 mm Granular Sub Base (GSB)

500 mm Select Subgrade material (10% CBR at 97% MDD)

DS Toll Road Limited

Notwithstanding the above, the Concessionaire shall keep all unaffected parts of the Project Highway open to traffic and use provided they can be safely operated and kept open to traffic.

XIX MONITORING AND SUPERVISION DURING OPERATION

19.1 The Concessionaire shall undertake periodic (at least once every calendar month but once every week during monsoons) inspection of the Project Highway to determine the condition of the Project Highway including its compliance or otherwise with the Maintenance Manual, the Maintenance Programme, Specifications and Standards and the maintenance required and shall submit reports of such inspection ("Maintenance Reports") to NHAI and the Independent Consultant.

19.2 The Independent Consultant shall review the Maintenance Reports and inspect the Project Highway at least once a month during the Operations Period and make out an Inspection Report of such inspection (the "O&M Inspection Report"). The Independent Consultant shall send a copy of its O&M Inspection Report to NHAI and the Concessionaire. The Concessionaire shall within 30 (thirty) days of the receipt of the O&M Inspection Report remedy the defects and deficiencies, if any, set forth in such O&M Inspection Report and submit its report in respect thereof to the Independent Consultant and NHAI within the said 30 (thirty) days period. Where the remedying of such defects or deficiencies is [illegible] (thirty) days in accordance with Good Industry Practice, the Concessionaire shall undertake the works in accordance with such practice and submit progress reports of such works every fortnight. The O&M Inspection Report may also require the Concessionaire to undertake such tests as may be specified by the Independent Consultant for the purpose of determining that the Project Highway is at all times in conformity with the Specifications and Standards. The Concessionaire shall undertake such Tests without any delay and furnish a copy of the results thereof to the Independent Consultant and NHAI along with a written statement specifying in reasonable detail the measures, if any, that it proposes to undertake for curing the defaults or deficiencies indicated in such results. Such inspection or submission of O&M Inspection Report by the Independent Consultant or submission of O&M Inspection Compliance Report by the Concessionaire shall not relieve or absolve the Concessionaire of its obligations and liabilities hereunder in any manner whatsoever.

19.3 NHAI may inspect the Project Highway at any time for a review of the compliance by the Concessionaire with its maintenance obligations under this Agreement.

19.4 The Concessionaire shall furnish to NHAI within 7 (seven) days of completion of each calendar month during the Operations Period, a statement of Fees in the form set forth in Schedule 'M' (the "Monthly Fee Statement").

Concessionaire and to recover the same from the Concessionaire. In addition to recovery of the aforesaid cost of repair and maintenance by NHAI, a sum equal to 25% (twenty five per cent) of such cost shall also be recovered by NHAI from the Concessionaire as Damages. NHAI shall have the right and the Concessionaire hereby expressly grants to NHAI the right to recover the same directly from the Escrow Account and for that purpose the Concessionaire hereby expressly authorises NHAI and hereby gives irrevocable instructions to the Escrow Bank to make payment from the Escrow Account in accordance with the instructions of NHAI under this Clause.

18.13 In the event NHAI does not exercise its option to undertake the required repair and maintenance after expiry of the 30 (thirty) days period stipulated in Clause 18.12 it shall recover Damages from the Concessionaire for default in operating and maintaining the Project Highway in conformity with this Agreement. Such Damages shall be payable after the aforesaid period of 30 (thirty) days and until the default is cured. The amount of Damages shall be calculated for each day of default at the higher of the following, namely (a) Rs.10,000 (Rs. Ten thousand), and (b) 0.1% (zero point one per cent) of the cost of such repair as estimated by the Independent Consultant. Recovery of such Damages shall be without prejudice to the rights of NHAI under this Agreement, including Termination thereof.

18.14 If the Concessionaire commences any works for curing any defects or deficiencies in the Project Highway, it shall complete such works expeditiously in accordance with Good Industry Practice. If such works are carried out in a manner that results in a delay of more than 30 (thirty) days as compared to the time required in accordance with Good Industry Practice, NHAI shall recover Damages from the Concessionaire as if a default has occurred under Clause 18.13.

18.15 The Concessionaire shall not be considered in breach of its obligations under this Agreement if any part of the Project Highway is not available to traffic after the COD on account of any of the following for the duration thereof:

(i) an event of Force Majeure;

(ii) measures taken to ensure the safe use of the Project Highway except when unsafe conditions on the road occurred because of failure of the Concessionaire to perform its obligations under this Agreement; or

(iii) compliance with a request from NHAI or the directions of any Governmental Agency the effect of which is to close all or any part of the Project Highway.

18.9.2 The Concessionaire shall re-commission the Project Highway or the affected part thereof as quickly as practicable after the circumstances leading to its de-commissioning and closure have ceased to exist.

18.10 The Concessionaire shall not close any lane of the Project Highway for undertaking maintenance or repair works except with the prior written approval of the NHAI which may delegate its authority to the Independent Consultant. Such approval shall be sought by the Concessionaire through a written request to be made at least 7 (seven) days before the proposed closure of lane and shall be accompanied by particulars indicating the nature and extent of repair works, the length and section required to be closed and the period of closure. The Concessionaire shall also furnish particulars indicating the minimum time required for completing such repair works. Within 5 (five) days of receiving such request, NHAI or the Independent Consultant, as the case may be, shall grant permission with such modifications as it may deem necessary. Upon receiving such permission, the Concessionaire shall be entitled to close the lane in accordance with such permission and re-open it within the period stipulated in such permission. For any delay in re-opening such lane during the first Operations Year, the Concessionaire shall pay Damages to NHAI calculated at the rate of Rs.10,000 (Rs. Ten thousand), per day or part thereof for every stretch of 100 (one hundred) meters or part thereof in each lane until such time the stretch has been [illegible] Rs. [illegible] (Rs. [illegible] thousand) shall be applicable in the first Operations Year and shall be revised by WPI in every subsequent Operations Year. Provided that [illegible] shall not apply to Emergency decommissioning under Clause 18.9.

18.11 Save and except as otherwise be expressly provided in this Agreement, if the Project Highway including Construction Works or any part thereof shall suffer any loss or damage during the Concession Period, from any cause whatsoever, the Concessionaire shall, at its cost and expense rectify and remedy such loss or damage or forthwith in a manner so as to make the Project Highway conform in every respect to the Specifications and Standards, quality and performance as prescribed by this Agreement.

18.12 In the event the Concessionaire does not maintain and/ or repair the Project Highway or a part thereof upto and in accordance with the Specifications and Standards and/or in accordance with the Maintenance Programme or the Maintenance Manual, and shall have failed to commence remedial works within 30 (thirty) days of receipt of notice in this behalf from NHAI or the Independent Consultant, or the O&M Inspection Report, as the case may be, NHAI shall, without prejudice to its rights under this Agreement, including Termination thereof, be entitled to undertake the repair and maintenance of the Project Highway at the risk and cost of the

suggestions as NHAI may make within 15 (fifteen) days of receipt of such details by NHAI.

18.7 The Concessionaire shall be responsible for the maintenance of the approach roads to and underpasses and overpasses upto 100 mtrs from the Project Highway in accordance with Good Industry Practice.

18.8 Safety, Vehicle Breakdown and Accident

18.8.1 In the case of unsafe conditions, vehicle breakdowns and accidents, the Concessionaire shall follow the relevant operating procedures, which shall include the setting up of temporary traffic cones and lights as well as the removal of obstruction and debris expeditiously. Such procedures shall be in accordance with Applicable Laws, Applicable Permits and provisions of this Agreement.

18.8.2 The Concessionaire shall ensure that any diversion or interruption of traffic is remedied without delay. The Concessionaire's responsibility for rescue operations on the Project Highway shall be limited to the removal of vehicles or debris or any other obstruction, which may endanger or interrupt the smooth traffic flow on the Project Highway.

18.8.3 The Concessionaire shall ensure that safety standards specified in Schedule 'S' are strictly complied with in the event of any lane closure or diversion of traffic. Compliance with Schedule 'S' will be monitored by the Independent Consultant and a breach by the Concessionaire of its obligations in respect of this Schedule identified by the Independent Consultant shall be notified immediately and is required to be cured within 24 hours of its notification notwithstanding inspection, reporting procedures outlined elsewhere in this Agreement. In addition, each notified breach shall lead to the award of a penalty point to the Concessionaire. A total of five penalty points in any continuous period of 365 days shall constitute a Material Breach of this Agreement.

18.9 Emergency De-commissioning

18.9.1 If, in the reasonable opinion of the Concessionaire there exists an emergency which warrants decommissioning and closure to traffic of whole or any part of the Project Highway, the Concessionaire shall be entitled to de-commission and close the whole or the relevant part of the Project Highway to traffic for so long as such emergency and the consequences thereof warrant, provided however that such emergency decommissioning will be notified to NHAI promptly. NHAI may issue directions to the Concessionaire for dealing with such situations and the Concessionaire shall abide by such directions.

times during the Operations Period, the Project Highway is maintained in a manner that it complies with the Specifications and Standards and the minimum maintenance requirements set forth in Schedule 'L'. The Concessionaire shall supply, at least two months before the COD, 10 (ten) copies of the Maintenance Manual to NHAI and 3 (three) copies each to Government of Tamil Nadu and Independent Consultant. Copies of the Maintenance Manual shall also be made available by the Concessionaire for public inspection during office hours at a conspicuous place adjacent to each Toll Plaza on the Project Highway.

18.3 Not later than forty five (45) days before the beginning of each Accounting Year, the Concessionaire, shall in consultation with the Independent Consultant prepare and provide to NHAI, its proposed programme of preventive and other scheduled maintenance of the Project Highway subject to the minimum maintenance requirements set forth in Maintenance Manual and in Schedule 'L' necessary to maintain the Project Highway at all times in conformity with the Specifications and Standards (the "Maintenance Programme"). Such Maintenance Programme shall include but not be limited to the following:

(i) intervals and procedures for the carrying out of inspection of all elements of the Project Highway;
(ii) criteria to be adopted for deciding maintenance needs;
(iii) preventive maintenance schedule;
(iv) intervals at which the Concessionaire shall carry out periodic maintenance;
(v) intervals for major maintenance and the scope thereof; and
(vi) lane closures schedule for each type of maintenance (length and time).

18.4 Maintenance shall include replacement of equipment/consumables, horticultural maintenance and upkeep of all Project Assets in good order and working condition. Maintenance shall not include the extension of any existing pavements, bridges, structures and other civil works unless part of the Project.

18.5 The Concessionaire shall keep the carriageways, rest areas and other Project Facilities and Toll Plazas in a clean, tidy and orderly condition free of litter and debris.

18.6 During the Operations Period, the Concessionaire shall not carry out any material modifications to the Project Highway save and except where such (i) modification is required by Good Industry Practice; or (ii) modification is necessary for the Project Highway to operate in conformity with the Specifications and Standards prescribed under this Agreement. Provided that the Concessionaire shall notify NHAI of the proposed modifications along with details thereof at least fifteen days before commencing work on such modifications and shall reasonably consider such

Project Highway to comply with Specifications and Standards, and other requirements set forth in this Agreement, Good Industry Practice, Applicable laws and Applicable Permits and manufacturer's guidelines and instructions with respect to toll systems, and more specifically:

(i) permitting safe, smooth and uninterrupted flow of traffic during normal operating conditions;

(ii) charging, collecting and retaining the Fees in accordance with this Agreement;

(iii) minimizing disruption to traffic in the event of accidents or other incidents affecting the safety and use of the Project Highway by providing a rapid and effective response and maintaining liaison procedures with emergency services;

(iv) undertaking routine maintenance including prompt repairs of potholes, cracks, concrete joints, drains, line marking, lighting and signage;

(v) undertaking major maintenance such as resurfacing of pavements, repairs to structures, repairs and refurbishment of tolling system and hardware and other equipment;

(vi) carrying out periodic preventive maintenance to Project Highway including tolling system;

(vii) preventing with the assistance of concerned law enforcement agencies unauthorised entry to and exit from the Project Highway;

(viii) preventing with the assistance of the concerned law enforcement agencies encroachments on the Project Highway including Site and preserve the right of way of the Project Highway;

(ix) maintaining a public relations unit to interface with and attend to suggestions from users of the Project Highway, the media, Government Agencies, and other external agencies; and

(x) adherence to the safety standards set out in Schedule 'S'.

18.2 The Concessionaire shall in consultation with the Independent Consultant prepare not later than 180 (one hundred and eighty) days before the Scheduled Project Completion Date, the repair and maintenance manual (the "Maintenance Manual") for the regular and periodic maintenance, and shall ensure and procure that at all

unable to agree, NHAI may, by issuing a confirmation in writing of such Change of Scope Order, require the Concessionaire to proceed with the performance of the Change in Scope Order pending resolution of such dispute.

17.3 A Change of Scope Order will be effective and binding upon issuance of a confirmation of such Change of Scope Order by NHAI. Notwithstanding a dispute regarding cost and time for implementation of such Change of Scope Order, the Concessionaire shall proceed with the performance of such Change of Scope Order promptly following NHAI's confirmation pursuant to Clause 17.2 (c). Pending resolution of such dispute, NHAI shall either pay to the Concessionaire, if the Change of Scope Order involves increase in Bill of Quantities or recover from the Concessionaire if the said Change of Scope Order involves decrease in Bill of Quantities, an amount equal to the costs that are certified by the Independent Consultant to be reasonable plus/minus (as the case may be) one-half the difference between the amount certified by the Independent Consultant and the amount claimed by the Concessionaire with final adjustments to be made in accordance with the resolution of dispute under the Dispute Resolution Procedure. In case NHAI has to make payment it shall do so within 60 (sixty) days from the date of receipt of duly verified claims as per procedure given in this Clause. In case NHAI has to recover from the Concessionaire, the amount will be recovered directly from the Escrow Account and for that purpose the Concessionaire hereby expressly authorised NHAI and hereby gives irrevocable mandate to the Escrow Bank to make payment from the Escrow Account in accordance with instructions of NHAI under this clause.

17.4 All claims by the Concessionaire pursuant to this Article XVII shall be supported by such documentation as is reasonably sufficient for NHAI/IC to determine the accuracy thereof, including invoices from Contractors and certification of such claims by the Statutory Auditors.

17.5 NHAI may request further improvements to the Project Assets and Project Highway, subject to a limit of 20% of the Project Cost, during the Operations Period in the form of a Change of Scope order that are required to make the Project Highway comply with the latest Specifications and Standards, and other requirements set forth in this Agreement, Good Industry Practice, Applicable Laws and Applicable Permits during the entire Operations Period ("Value Additions"). The cost of such Value Additions shall be borne by NHAI and such costs shall be computed and the work for such Value Additions shall be carried out in the manner as set forth in this Article 17.

XVIII. OPERATION AND MAINTENANCE

18.1 The Concessionaire shall operate and maintain the Project Highway by itself, or through O&M Contractors and if required, modify, repair, improvements to the

shall be made by NHAI by an order (the "Change of Scope Order") issued in accordance with the procedure set forth in this Article XVII.

17.2 Procedure for Change of Scope

(a) NHAI shall whenever it desires provision of addition/deletion of works and services referred to in Clause 17.1, issue to the Concessionaire a notice of change of scope (the "Change of Scope Notice").

(b) Upon receipt of such Change of Scope Notice, the Concessionaire shall with in 15 days provide to NHAI and the Independent Consultant such information as is necessary and reasonable together with preliminary documentation in support of the following:

(i) the impact, if any, which the Change of Scope is likely to have on the Project Completion Schedule if the work is required to be carried out before COD, and

(ii) the cost implications to the Concessionaire of complying with such Change of Scope Notice. The cost shall be worked out based on the concerned State PWD (NH) current schedule of rates based on MOSRTH data book. In case an item is not covered under the above-mentioned schedule of rates, the rate of such item shall be worked out on the basis of the prevailing market rate so far as found reasonable and competitive by the IC..

(iii) the options suggested for implementing the proposed Change of Scope and the effect, if any, each such option would have on the costs and time for the implementation thereof including a detailed breakdown by work classifications. Provided, however, that the cost of providing such information shall be reimbursed to the Concessionaire by NHAI to the extent such costs are certified to be reasonable by the Independent Consultant.

(c) If NHAI desires, after receipt of information set forth in sub-clause (b) to proceed with the Change of Scope, it shall convey the desired option (with or without modification) to the Concessionaire by issuing a Change of Scope Order with in 30(Thirty) days from the date of recommendation made by Independent Consultant and thereupon the Parties shall make good faith efforts to mutually agree upon the costs and time for implementing of the same. Upon reaching an agreement relating to such costs and time, NHAI shall issue a written confirmation of the Change of Scope and thereupon the Concessionaire shall proceed with performance of such order with NHAI making monthly payments for such works based on the physical progress and as approved and certified by Independent Consultant. In the event, the Parties are

to recover the same directly from the Escrow Account and for that purpose the Concessionaire hereby expressly authorizes NHAI and hereby gives irrevocable instructions to the Escrow Bank to make payment from the Escrow Account in accordance with the instructions of NHAI under this Clause. Upon completion of all Punch List items to the satisfaction of the Independent Consultant, the Independent Consultant shall issue the Completion Certificate to the Concessionaire after approval from NHAI. Failure to complete the Punch List items in the manner set forth in this Clause 16.5 shall entitle NHAI to Terminate this Agreement in accordance with the provisions of Clause 32.2.

16.6 If the Independent Consultant certifies to NHAI and the Concessionaire that it is unable to issue the Completion Certificate or Provisional Certificate because of events or circumstances which excuse the performance of the Concessionaire's obligations in accordance with this Agreement and as a consequence thereof the Tests could not be held or had to be suspended, the Concessionaire shall re-schedule the Tests and hold the same as soon as reasonably practicable.

16.7 Upon receipt of a report from the Independent Consultant or after conducting its own review or inspection, if NHAI is not satisfied with the results of any Tests, it shall within 7 (seven) days thereof notify the Concessionaire of its reasons to conclude that the Completion Certificate should not be issued, in which case the Concessionaire shall promptly take such [illegible] to achieve such satisfaction. Such procedure shall be repeated as necessary upon rectification and remedy of reasons or causes by the Concessionaire on account of which the Tests were unsuccessful, until the Completion Certificate or Provisional Certificate has been issued in accordance with this Agreement by the Independent Consultant.

16.8 The Concessionaire shall bear all the expenses relating to Tests under this Agreement. Provided, however, that if the NHAI Representative requires any Test to be conducted which is not specified in this Agreement and such Test is not necessary in the opinion of the Independent Consultant, then the expenses on such Test shall be reimbursed by NHAI to the Concessionaire.

XVII. CHANGE OF SCOPE

17.1 NHAI may, notwithstanding anything to the contrary contained in this Agreement, require provision of such addition/deletion to the works and services on or about the Project Highway, during the Construction Period, which are beyond the scope of the Project as contemplated by this Agreement ("Change of Scope"), provided such changes do not require any increase/ reduction in expenditure exceeding 10 %(ten per cent) of the Total Project Cost and do not adversely affect the COD. All such changes

16.3 At least 30 (thirty) days prior to the likely completion of the Project Highway the Concessionaire shall notify the Independent Consultant and NHAI of the same and shall give notice of its intent to conduct any final Tests. The Concessionaire shall give to NHAI and the Independent Consultant at least 10 (ten) days' prior notice of the actual date on which it intends to commence the Tests and at least 7 (seven) days' prior notice of the commencement date of any subsequent Tests. The Independent Consultant shall have the right to suspend or delay any Test if it is reasonably anticipated or determined during the course of the Test that the performance of the Project Highway or any part thereof does not meet the Specifications and Standards.

16.4 Upon the Independent Consultant determining the Tests to be successful in respect of any stretch referred to in Clause 16.3 having been satisfied that such stretch of the Project Highway can be legally, safely and reliably placed in commercial operations, the Independent Consultant shall forthwith issue to the Concessionaire and NHAI a Certificate in respect of such stretch substantially in the form set forth in Schedule 'K' (the "Completion Certificate") after approval from NHAI and upon Completion Certificate having been issued in respect of all stretches referred to in Clause 16.3 issue a final Completion Certificate certifying the Project Completion.

16.5 Independent Consultant may at the request of the Concessionaire issue a provisional certificate of completion ("Provisional Certificate") after approval from NHAI, if the Tests are successful in respect of any stretch referred to in Clause 16.3 and such stretch of the Project Highway can be legally, safely and reliably placed in commercial operation though certain works or things forming part thereof are not yet complete. In such an event such Provisional Certificate shall have appended thereto a list of outstanding items agreed jointly by the Independent Consultant and the Concessionaire ("Punch List"). Such Punch List shall be drawn up in consultation with NHAI, and NHAI may at its discretion through Independent Consultant may add or delete any items forming part of the Punch List at any time before issue of the Provisional Certificate. All Punch List items shall be completed by the Concessionaire within 120 (one hundred twenty) days from the date of issue of such Provisional Certificate. In case of any delay in completion of the Punch List items beyond the aforesaid period of 120 (one hundred twenty) days, NHAI shall, without prejudice to its rights under this Agreement, including Termination thereof, be entitled to undertake the completion of the Punch List items, based on the cost estimated by the Independent Consultant, at the risk and cost of the Concessionaire and to recover the same from the Concessionaire. In addition to recovery of the aforesaid cost of completion of the Punch List items by NHAI, a sum equal to 200% (two hundred percent) of such cost, subject to a minimum of Rs. 1,000,000 (Rs. One million) shall also be recovered by NHAI from the Concessionaire as Penalty. NHAI shall have the right and the Concessionaire hereby expressly grants to NHAI the right

Schedule, the Scheduled Project Completion Date and the Concession Period in accordance with the recommendations of the Independent Consultant.

XV. COMPLETION

15.1 The Project shall be deemed to be complete and open to traffic only when the Completion Certificate or the Provisional Certificate is issued in accordance with the provisions of Article XVI (the "Project Completion").

15.2 COD of the Project shall be the date on which the Independent Consultant has issued the Completion Certificate or the Provisional Certificate, as the case may be, under this Agreement and the Concessionaire shall not levy and collect any Fee until it has received such Completion Certificate or the Provisional Certificate.

15.3 The Concessionaire guarantees that the Project Completion shall be achieved in accordance with the provisions of this Agreement on a date not later than 30 (thirty) months from the Appointed Date ("Scheduled Project Completion Date").

15.4 If the Project Completion is not achieved by the Scheduled Project Completion Date for any reason other than conditions constituting Force Majeure or for reasons attributable to NHAI or [illegible] the Concessionaire shall pay to NHAI as [illegible] the achievement of the COD, an amount calculated at the rate of [illegible] point zero one per cent of the Total Project Cost per week or part thereof.

15.5 If the COD does not occur within 12 (twelve) months from the Scheduled Project Completion Date, NHAI shall be entitled to Terminate this Agreement in accordance with the provisions of Clause 32.2.

XVI. TESTS

16.1 All Tests including but not limited to load test on structures shall be conducted in accordance with Schedule 'J' and the Applicable Laws and Applicable Permits. NHAI shall designate a NHAI Representative to witness and observe the Tests. All Tests shall be held in accordance with the schedule notified by the Concessionaire to the Independent Consultant and the NHAI Representative who may either witness the Tests themselves or designate their representatives for this purpose, if they choose.

16.2 The Independent Consultant shall monitor the results of the Tests to determine the compliance of the Project Highway with the Specifications and Standards. The Concessionaire shall provide to the Independent Consultant and the NHAI with copies of all Test data including detailed Test results.

to cure the defects or deficiencies, if any, indicated in such Test results and furnish a report to the Independent Consultant in this behalf.

14.4 If the Independent Consultant or NHAI shall reasonably determine that the rate of progress of the Construction of the Project Highway is such that the Project Completion is not feasible on or before the Scheduled Project Completion Date by the Concessionaire, it shall so notify the Concessionaire about the same and the Concessionaire shall within 15 (fifteen) days thereof notify the NHAI and the Independent Consultant about the steps it proposes to take to expedite progress and the period within which it shall achieve COD.

14.5 (a) Upon recommendation of the Independent Consultant or suo-moto, NHAI may by written notice require the Concessionaire to suspend forthwith the whole or any part of the Construction Works if in the reasonable opinion of the NHAI such work is being carried on in a manner which threatens the safety of the works or of the users of the Project Highway.

(b) The Concessionaire, shall upon instructions of the NHAI pursuant to sub-clause (a) above, suspend the Construction Works or any part thereof for such time and in such manner as may be specified by NHAI and subject to sub-clause (c) below, the costs incurred during such suspension to properly protect and secure the Construction Works or such part thereof as is necessary in the opinion of the Independent Consultant ("Preservation Costs"), shall be borne by the Concessionaire.

(c) If the suspension pursuant to Sub-clause (a) above, is caused by:

(i) any reason of default or breach of this Agreement by the Concessionaire including breach of any of the obligations of the Concessionaire under this Agreement, the Preservation Costs shall be borne by NHAI;

(ii) reason of default or breach of this Agreement by NHAI the Preservation Costs shall be borne by NHAI; or

(iii) reason of any Force Majeure Event, the Preservation Costs shall be borne by the Concessionaire save and except to the extent otherwise expressly provided in Article XXIX.

(d) If suspension of Construction Works is for reasons not attributable to the Concessionaire, the Independent Consultant shall determine any extension to the Project Completion Schedule, the Scheduled Project Completion Date and the Concession Period, to which the Concessionaire is reasonably entitled and shall notify NHAI accordingly. NHAI shall extend the Project Completion

may either recover such Damages from the Performance Security or demand payment thereof from the Concessionaire. The Concessionaire shall make such payment within 7 (seven) days of receiving such demand from NHAI and any delay in making such payment shall attract interest @ SBI PLR plus two per cent. In the event the Concessionaire achieves Project completion as per Scheduled Project Completion Date as set forth in Schedule 'H', such damages paid by the Concessionaire to NHAI shall be refunded by NHAI within 90 (ninety) days from the date of written request from the Concessionaire without any interest thereon, provided that the Scheduled Project Completion Date as set forth in Schedule 'H' has not been extended from the date defined at the time of the signing of this Concession Agreement for any reason. If the Concessionaire fails to achieve Project completion as per the Scheduled Project Completion Date as set forth in Schedule 'H', then it shall pay damages to NHAI as per Article XV.

XIV. MONITORING AND SUPERVISION OF CONSTRUCTION

14.1 During the Construction Period, the Concessionaire shall furnish to NHAI and the Independent Consultant monthly progress reports of actual progress of the Construction Works comprised in the Project Highway and shall give all such other relevant information as may be required by NHAI and/or the Independent Consultant.

14.2 The Independent Consultant shall inspect the Construction Works and the Project Highway at least once a week during the Construction Period and make out an Inspection Report ("such inspection and inspection Report"). It shall send a copy of its Inspection Report to NHAI and the Concessionaire. The Concessionaire shall take necessary action to remedy the lapses, if any, stated in the Inspection Report for ensuring compliance with the provisions of this Agreement. Such inspection or submission of Inspection Report by the Independent Consultant shall not relieve or absolve the Concessionaire of its obligations and liabilities hereunder in any manner whatsoever.

14.3 For the purposes of determining that Construction Works are being undertaken in accordance with Specifications and Standards and Good Industry Practice, the Independent Consultant shall undertake day to day supervision of the Works along with the quality control consultant of the Concessionaire in accordance with Schedule 'O' of this Agreement. The Independent Consultant shall also require the Concessionaire to carry out such Tests at such time and frequency and in such manner as may be necessary in accordance with Good Industry Practice for quality assurance. The Concessionaire shall with due diligence carry out, or cause to be carried out, all such Tests in accordance with the instructions of the Independent Consultant and furnish the results of such Tests forthwith to the Independent Consultant. The Concessionaire shall promptly carry out such remedial measures as may be necessary

meters or part thereof if such area is required by the Concessionaire for Construction Works. Such Damages shall be raised to Rs. 2,000 (Rupees two thousand) per month after COD if such area is essential for the smooth and efficient operation of the Project Highway. Provided further that the Completion Certificate or the Provisional Certificate, as the case may be, for the Project Highway shall not be affected or delayed as a consequence of such parts of the existing right of way remaining under construction after the Scheduled Project Completion Date.

13.5.2 **Additional right of way**

Additional right of way for construction of main carriageway shall be made available to the Concessionaire as per the handing over schedule mentioned herein free from all encumbrance and without the Concessionaire being required to make any payment to NHAI on account of any costs, expenses and charges for the use of such additional right of way for the duration of the Concession Period. 50% (fifty percent) of Additional Right of way for construction of main carriageway on or before 6 (six) months from the Appointed Date, balance 50% (fifty percecnt) of the Additional right of way for construction of main carriageway on or before 12 (twelve) months from the Appointed Date. Additional right of ways for service roads and other facilities shall be handed over to the Concessionaire on or before 18 (eighteen) months from the Appointed Date. On or after the Appointed Date, the Concessionaire shall commence, undertake and complete all Construction Works on the Project Highway in accordance with this Agreement. Provided, however, that if NHAI does not enable such access to any part or parts of the Additional right of way for any reason other than a Force Majeure Event or breach of this Agreement by the Concessionaire as per the schedule mentioned herein, NHAI shall pay to the Concessionaire Damages at the rate of Rs. 1,000 (Rupees one thousand) per month per 1,000 (one thousand) sq. meters or part thereof if such area is required by the Concessionaire for Construction Works. Such Damages shall be raised to Rs. 2,000 (Rupees two thousand) per month after COD if such area is essential for the smooth and efficient operation of the Project Highway. Provided further that the Completion Certificate or the Provisional Certificate, as the case may be, for the Project Highway shall not be affected or delayed as a consequence of such parts of the existing right of way remaining under construction after the Scheduled Project Completion Date.

13.6 Construction of the Project Highway shall be undertaken by the Concessionaire in conformity with the Project Completion Schedule 'H' and the Project milestones set forth in Schedule 'H' for completion of the Project Highway on or before the Scheduled Project Completion Date. If the Concessionaire fails to achieve any such Project milestone other than Project Completion, within a period of 90 (ninety) days from the date set forth in Schedule 'H' then it shall pay Damages to NHAI at the rate of Rs.1,000,000 (Rs. One million) per day until such milestone is achieved. NHAI

0041

provisions of this Agreement. Such right and licence of the Concessionaire to the use the Site shall be subject to:

13.2.1 Any existing utilities on, under or above the Site are kept in continuous satisfactory use, if necessary by the use of suitable temporary or permanent diversions with the authority of the controlling body of that utility;

13.2.2 Any existing roads or right of ways are kept in continuous satisfactory use, if necessary, by the use of suitable temporary or permanent diversions with the authority of the controlling body of that road or right of way. For any diversion or construction, of temporary roads, NHAI will assist the Concessionaire in acquiring the right of way;

13.2.3 The rights of the road users to use the road in accordance with this Agreement;

13.2.4 A right of access by the NHAI itself and any of its agents to perform their obligations and rights under the Concession Agreement or any other functions that they have, and to conduct any study or trial for the purpose of research;

13.3 The license and the right to use the Site shall be granted for the purpose of carrying out the functions placed upon the Concessionaire under the Agreement and not for any other purposes.

13.4 The Concessionaire shall bear all costs and charges for special and temporary rights of way required by it in connection with access to the Site. The Concessionaire shall obtain at its cost such facilities on or outside the Site as may be required by it for the purposes of the Project Highway and the performance of its obligations under this Agreement.

13.5.1 Existing right of way

Existing right of way shall be made available to the Concessionaire pursuant hereto by NHAI free from all Encumbrances and without the Concessionaire being required to make any payment to NHAI on account of any costs, expenses and charges for the use of such Sites for the duration of the Concession Period save and except as otherwise expressly provided in this Agreement. NHAI shall procure for the Concessionaire access to the entire existing right of way for construction of main carriageway, free of Encumbrances, on or before the Appointed Date.. Provided, however, that if NHAI does not enable such access to any part or parts of the existing right of way for any reason other than a Force Majeure Event or breach of this Agreement by the Concessionaire, NHAI shall pay to the Concessionaire Damages at the rate of Rs. 1.000 (Rupees one thousand) per month per 1.000 (one thousand) sq.

(iii) NHAI has taken all necessary action to authorise the execution, delivery and performance of this Agreement;

(iv) This Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with the terms hereof; and

(v) NHAI is subject to civil and commercial laws of India with respect to this Agreement and it hereby expressly and irrevocably waives any sovereign immunity in any jurisdiction in regard to matters set forth in this Agreement.

XII. DISCLAIMER

12.1 The Concessionaire acknowledges that prior to the execution of this Agreement, the Concessionaire has after a complete and careful examination made an independent evaluation of the traffic volumes, Specifications and Standards, Site and all the information provided by NHAI and has determined to the Concessionaire's satisfaction the nature and extent of such difficulties, risks and hazards as are likely to arise or may be faced by the Concessionaire in the course of performance of its obligations hereunder.

12.2 The Concessionaire acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth in Clause 12.1 above and hereby confirms that NHAI shall not be liable for the same in any manner whatsoever to the Concessionaire, the Single Entity or their Associates.

CHAPTER – IV
PROJECT DEVELOPMENT AND OPERATIONS

XIII. USE AND DEVELOPMENT OF THE SITE

13.1 NHAI hereby grants to the Concessionaire for the Development Period access to the Site for carrying out such surveys, investigations, soil tests, design, engineer, procure, construct, operate and maintain the Project Highway including the Project Facilities in accordance with Clause 13.2 below and the provisions of this Agreement as the Concessionaire may deem necessary at the Concessionaire's cost, expense and risk without causing disruption in the traffic on the existing lanes of the Project Highway.

13.2 NHAI hereby grants to the Concessionaire for the Concession Period the right and licence to enter upon all real estate comprised in the Site as briefly described in Schedule 'A' and to survey, design, engineer, procure, construct, operate and maintain the Project Highway including the Project Facilities in accordance with the

Due to meager length of rigid pavement involved in the Project Highway, the construction of rigid pavement at toll plaza locations can be done with pavers or manual means to the satisfaction of Independent Consultant, as per design standards/specifications mentioned in Schedule D.

7.7 Joints

Expansion, Contraction and longitudinal joints shall be provided as per specification.

8. INTERSECTIONS

The major intersections mentioned in Table B-6 shall be designed individually in accordance with standards mentioned in Schedule-D. Treatment at additional intersections if any, on the Project Highway shall be decided by the Concessionaire in consultation with the Independent Consultant

Table B-6: Improvement Measures for Major Intersections

Proposed Chainage	Existing System	Cross Road	Proposed Improvement Scheme
374.925	4-legged rotary	NH-45 to Trichy	Integrated scheme having flyover and ROB
376.970	4-legged rotary	NH-209 to Coimbatore / Palani	Flyover (Length = 30m) with slip roads on both sides
379.775	4-legged rotary	SH-36 to Kodaikanal	Flyover (Length = 30m) with slip road on both sides
381.300	"Y" Intersection		Dindigul
401.490	-		Kodai Kanal
409.880	-	-	At grade intersection (Vadipatti Bypass Start)
415.710	-	-	At grade intersection (Vadipatti Bypass end)

Table B-7: Improvement Measures for minor Intersections

Proposed Chainage	Type of Intersection	Side	Major / Minor	Villages	Type of Road
373.730	6	R	Minor	Indiranagar (Dindigul)	WBM
373.850	6	R	Minor	Indiranagar (Dindigul)	WBM
374.125	Underpass	L/R	Minor	To Collector Office	BT
374.420	4	R	Minor	To Chinnamanayakampatti	BT
374.490	3	L	Minor	To SP office	BT
374.650	4	R	Minor	Ramanagarishi Nagar	WBM
376.340	4	L	Minor	Street to Town	BT
376.455	3	R	Minor	Street to Town	BT

Proposed Chainage	Type of Intersection	Side	Major / Minor	Villages	Type of Road
376.700	4	R	Minor	Mananchiyakampatti	BT
377.170	6	L	Minor	To Dindigul	BT
377.170	6	R	Minor	Kottapatty	BT
378.880	6	L	Minor	Palapadi	BT
378.880	6	R	Minor	Lathar	BT
379.130	6	L	Minor	Parappatti	BT
379.130	6	R	Minor	Putthupatti	BT
381.225	3	R	Minor	Poothamarathupattipudu r	BT
381.420	3	L	Minor	To town	BT
382.620	3	R	Minor	Pilayarpatti	BT
382.715	3	L	Minor	Pilayarpatti	BT
383.320	3	L	Minor	Siravakapatti	BT
384.520	3	R	Minor	Alamarathupatti	BT
384.640	3	L	Minor	Vellado	BT
385.150	3	L	Minor	Veliado	BT
385.730	3	L	Minor	Kalikampatti	BT
386.725	3	R	Minor	Kottapatty	BT
386.670	6	L	Minor	Chetiyarpatti	BT
386.670	6	L	Minor	Kottapatty	Mud
387.510	3	R	Minor	Kela Kottai	BT
388.030	3	L	Minor	Gandhigram Univ.	BT
388.320	5	R	Minor		
388.660	Underpass	L/R	Minor	Chinnalapatti	BT
388.850	5		Minor	Chinnalapatti	BT
389.000	5	R	Minor	Thirunagar	Mud
389.020	5	L	Minor	Samiyar patti	BT
389.070	5	R	Minor	Chinnalapatti	BT
389.080	5	R	Minor	Chinnalapatti	BT
389.140	5	R	Minor	Chinnalapatti	BT
389.190	5	R	Minor	Chinnalapatti	BT
389.230	5	L	Minor	Ambathur	BT
389.315	4	R	Minor	Chinnalapatti	BT
389.330	4	R	Minor	Chinnalapatti	BT
389.560	4	R	Minor		Mud
390.300	4	R	Minor	Muruganpatti	BT
390.950	3	L	Minor	Sathi Goudhanpatti	BT
391.370	3	L	Minor		BT
391.490	3	R	Minor	Perumalpatti	BT
392.210	3	L	Minor	Ammali Nagar	BT
392.270	3	R	Minor	J. Uthapatty	BT
394.325	4	R	Minor	Palani	BT
395.930	3	L	Minor	Vallimman Koel	BT
395.930	4	R	Minor	Jai patti	BT
397.220	3	R	Minor	Vannampatti	BT

Proposed Chainage	Type of Intersection	Side	Major / Minor	Villages	Type of Road
397.280	3	L	Minor	Ramrajapuram	Mud
397.680	3	R	Minor	Sallipatti	BT
398.920	4	R	Minor		BT
399.180	3	L	Minor	Chirumalai	BT
399.580	3	R	Minor		Mud
399.630	3	R	Minor		Mud
399.720	3	R	Minor	Mallaikottai	BT
399.775	3		Minor		Mud
400.020	3	L	Minor		BT
400.080	3	L	Minor		BT
400.380	3	R	Minor	Nilakottai	BT
401.260	4	R	Minor	Ammayanayakannur	BT
401.700	5	R	Minor	Ammayanayakannur	BT
401.780	5	L	Minor	Nakkampatty	BT
401.900	4	R	Minor		BT
402.970	6	L	Minor	Putikulam	BT
402.970	6	R	Minor	Malaykodampatti	BT
403.730	6	L	Minor	Saptakanni Mkt.	BT
403.730	6	R	Minor	Podusirvatti	BT
404.790	3	R	Minor		
404.840	3	L	Minor	Saadiyadipuram	BT
405.690	3	R	Minor	Vathalakundu	BT
405.830	4	L	Minor		
406.430	4	L	Minor		
407.020	4	L	Minor		
408.650	4	R	Minor	Kodaikanal	BT
408.975	5	L	Minor		
409.230	Underpass		Minor	Sanampatti	
409.330	5	R	Minor	Sanampatti	
409.410	5	L	Minor	Sanampatti	
409.590	3	R	Minor	Burial Ground	BT
410.380	6	L/R	Minor	Balathandayuthapani, Vadipatti	BT
411.740	6	L/R	Minor		Mud
411.860	6	L/R	Minor		Mud
412.890	3	L/R	Minor	Virallipatti , Vadipatti	BT
413.000	Underpass	L/R	Minor	Virallipatti , Vadipatti	BT
413.850	6	L/R	Minor		
416.410	3	L	Minor	Andipatti	BT
416.550	3	R	Minor	Cholavandan	BT
417.290	4	L	Minor	Andipatti	BT
417.680	4	R	Minor	Kattakulam	BT
420.200	3	L	Minor	Azhanga Nallur	BT

DS Toll Road Limited

Proposed Chainage	Type of Intersection	Side	Major / Minor	Villages	Type of Road
420.590	5	L	Minor		
420.750	5	L	Minor	Street to Town	
421.920	5	R	Minor		BT
422.110	Underpass		Minor		BT
423.210	5	R	Minor	Nagari	BT
423.250	5	L	Minor	Town	BT
423.800	4	R	Minor	Old Road	BT
424.100	5	R	Minor	Old Road	BT
424.700	5	R	Minor	Thiruvayanallur	BT
425.750	5	L	Minor		Mud
426.400	5	L	Minor	Kattupulli Nagar	Concrete
426.470	5	L	Minor	Kattupulli Nagar	Concrete
426.510	5	R	Minor	Dhenur	WBM
426.705	4	R	Minor	Old Road	BT

The Concessionaire shall take up 'Detailed Engineering Study' to ascertain further details of all intersections based on conceptual designs as suggested above. The treatment at the intersections shall be designed in accordance with the latest IRC/ MORT&H guidelines spelt out in Schedule D.

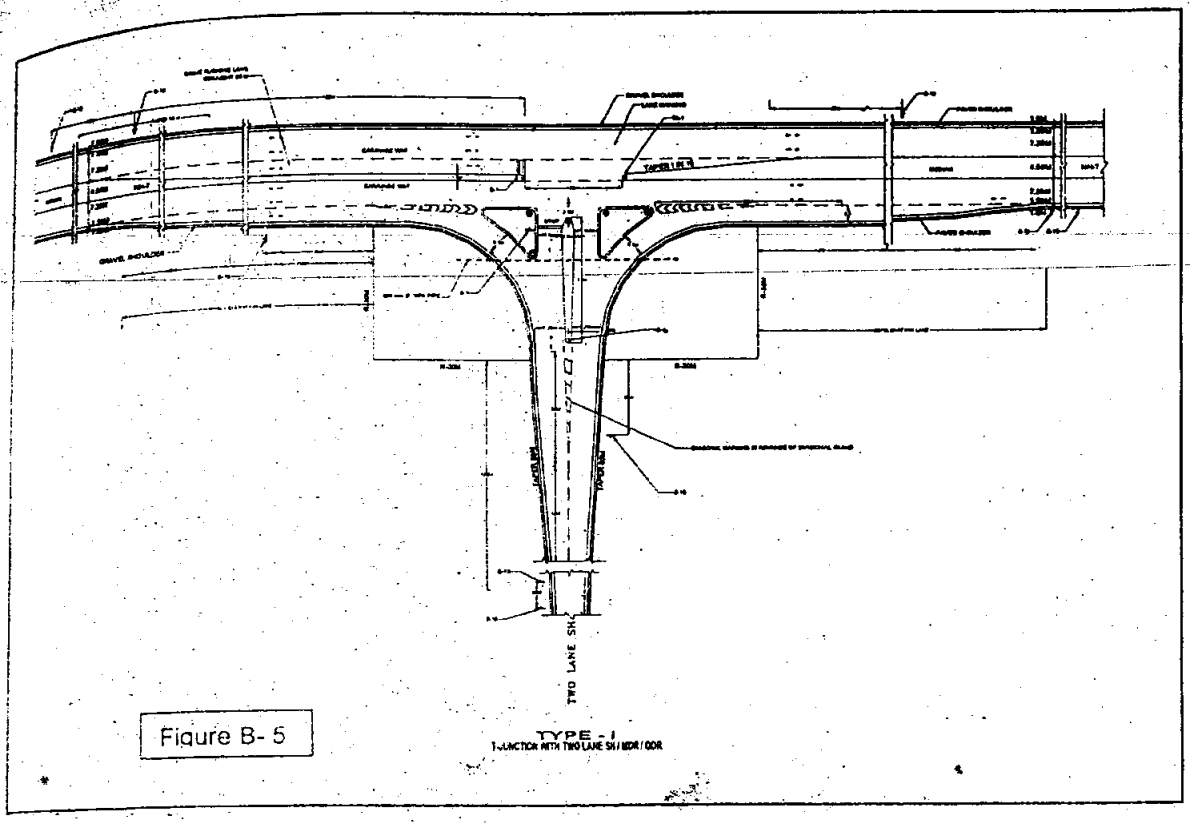


Figure B- 5

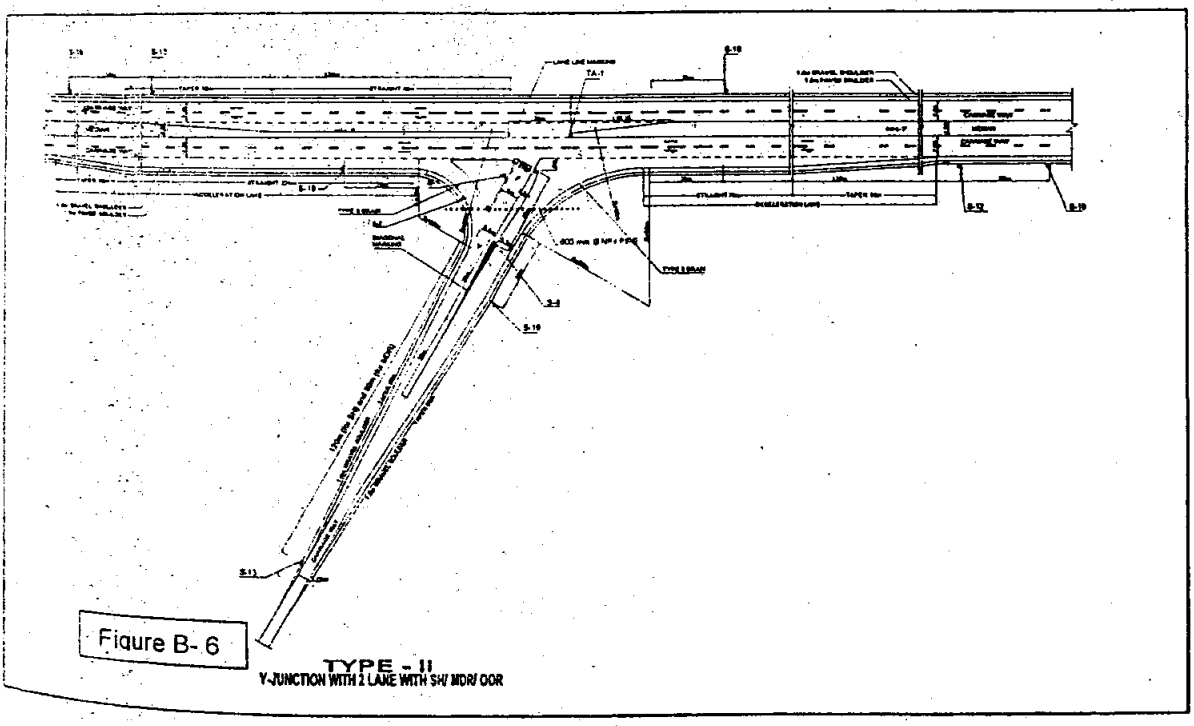


Figure B- 6

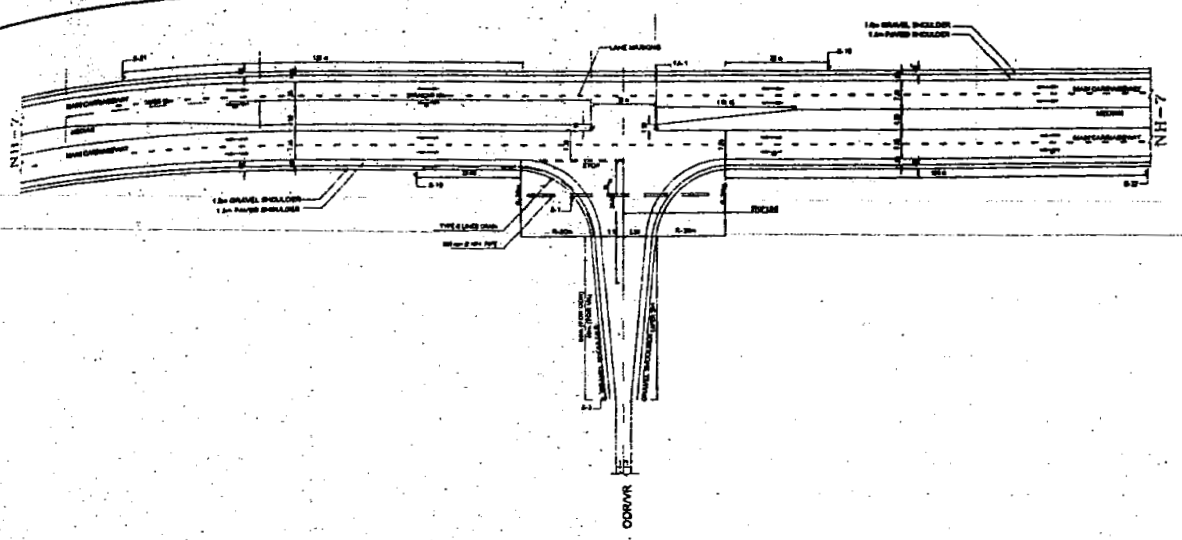


Figure B- 7

TYPE - III
T-JUNCTION WITH SINGLE LANE VR

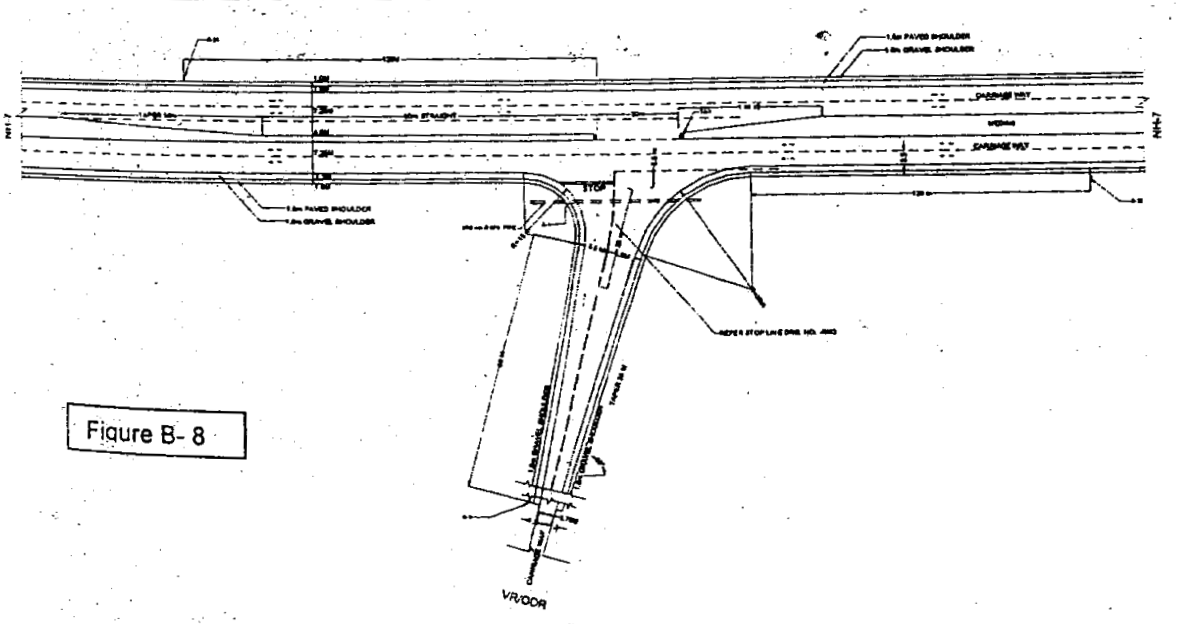


Figure B- 8

TYPE - IV
T-JUNCTION WITH SINGLE LANE VR

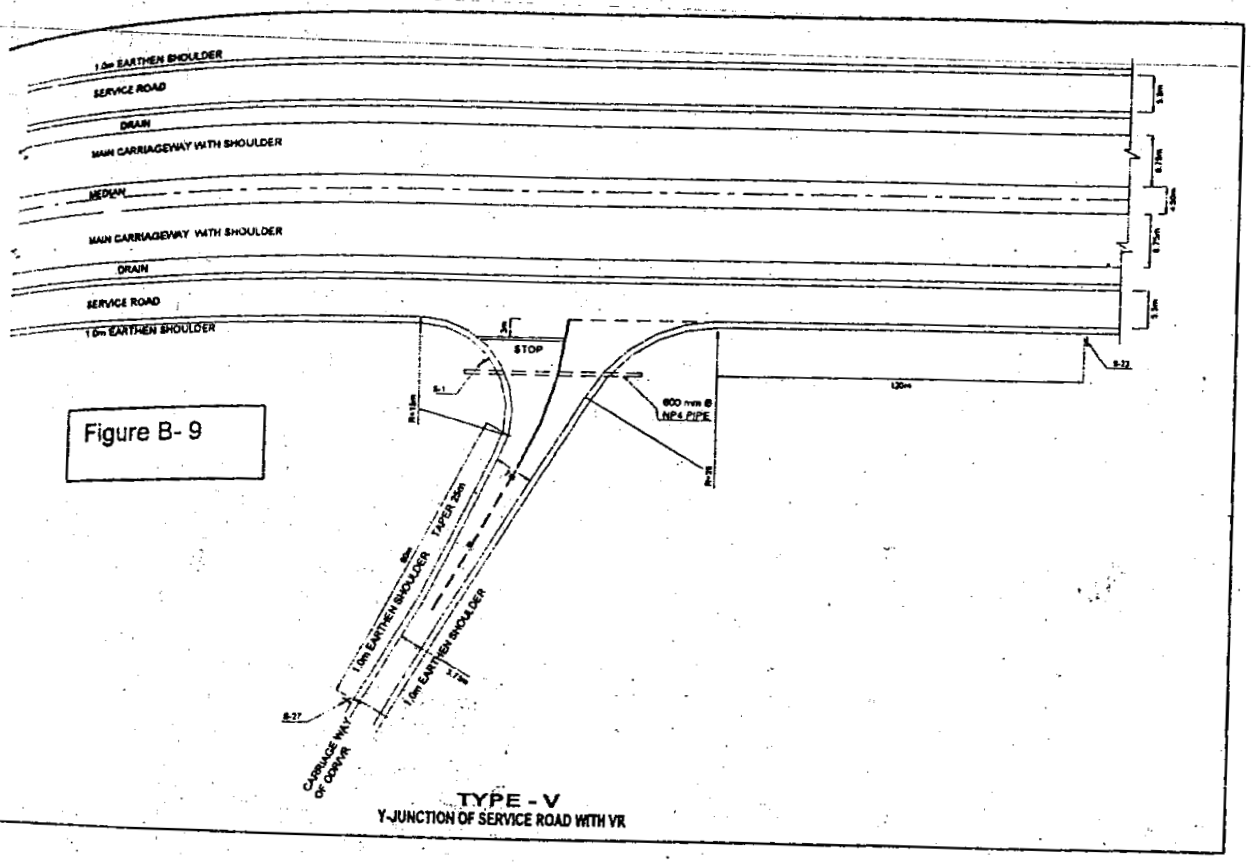


Figure B- 9

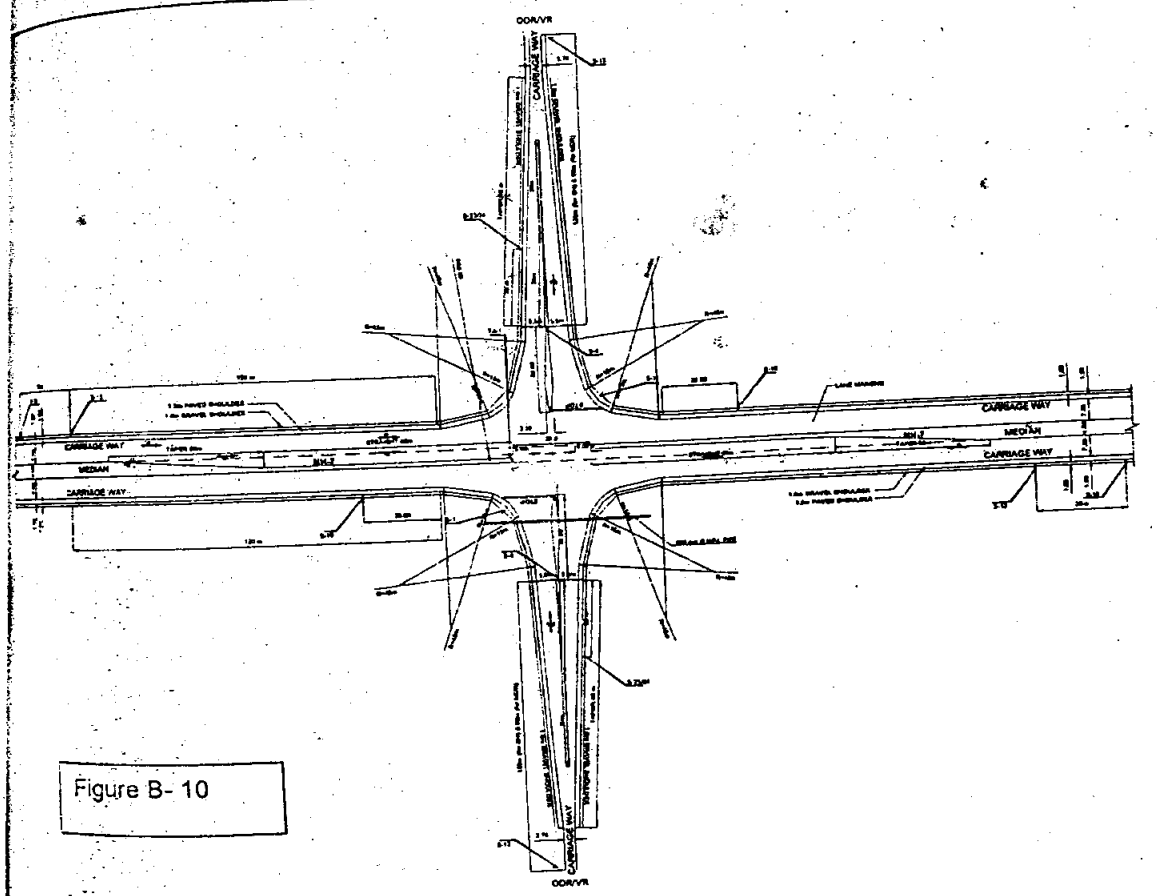


Figure B- 10

TYPE - VI
CROSS ROAD INTERSECTION WITH SINGLE LANE VR

STRUCTURES

...ss sectional elements for structures shall follow the drawings mentioned in figures B-11 to B-13. All the cross-drainage structures and other structures shall be designed in accordance with the design standards set in Schedule D. All the cross drainage structures for the new carriageway shall be designed for 2 lane capacity. Improvement for the existing cross-drainage structures shall be made as mentioned in Table B-8. However, the existing structures shall be widened to match the new road cross sections as required.

...detailed design for rehabilitation shall be as per standards mentioned in Schedule D. These measures ...existing CD structures shall be finalized in consultation with IC at the time of execution.

Table B-8: Details of Structures

S.No.	Proposed Chainage	Crossing	Proposed Span Arrangement (m)	Proposed superstructure depth	Type of Superstructure	Design span
1	374.550	Flyover (NH45)	2 x 34 m Curve 100	2.2	PSC Box Girder	34.0
2	375.000	ROB	1 x30 m Skew=32deg	1.6	PSC I Girder	30
3	376.585	Flyover (NH209)	1 x 30 m	1.6	PSC Voided Slab	30
4	379.950	Flyover (SH36)	1 x 30 m	1.6	PSC Voided Slab	30
5	359.36	Vedasandur Bypass	1 x 12.5	1.3	RCC I Girder	12.5
6	358.45	Vedasandur Bypass	1 x 20.06	1.3	PSC I Girder	21
7	383.8	Canal	1x8.4	0.6	Slab without Bearings	9
8	386.3	Canal	2x13.2	1.3	RCC I Girder	13.5
9	387.5	Stream	1x11.4	0.75	Slab with Bearings	11.5
10	388.1	Canal	1x15.3	1.3	RCC I Girder	15.5
11	389.4	Stream	1x13.0	1.3	RCC I Girder	13.5
12	394.2	Stream	1x14.4	1.3	RCC I Girder	14.5
13	395	ROB	2 x 43 m . 1 x 24.0 (Sk=71deg)	3.0 / 1.6	Box / PSC I girders	43 / 24
14	401.85	Canal	1 X 10	0.75	Slab with Bearings	10.5
15	402.5	Canal	1x6.8	0.5	Slab without Bearings	7.5
16	403.1	None	1x10.6	0.75	Slab with Bearings	10.5
17	404.3	Canal	1x6		Box	6.2
18	404.45	Canal	1x11.6	0.75	Slab with Bearings	11.5
19	405.7	Canal	2x17.4	1.3	PSC I Girder	17.5
20	406.35	Canal	1x10	0.75	Slab with Bearings	10.5
21	407.2	Flat Fields	1x16.8	1.3	PSC I Girder	17.5
22	407.5	Flat Fields	1x16.8	1.3	PSC I Girder	17.5

S.No.	Proposed Chainage	Crossing	Proposed Span Arrangement (m)	Proposed superstructure depth	Type of Superstructure	Design span
23	409.4	Canal	1x12	1.3	RCC I Girder	12.5
24	409.9	Canal	1x12	1.3	RCC I Girder	12.5
25	416.3	Canal	1 x 35	1.6	PSC Voided slab	35
26	420.95	Flat Irrigation Fields	1x10.5	0.75	Slab with Bearings	10.5
27	426.1	Stream	1x17.1	1.3	PSC I Girder	17.5
28	410.1	Vadipatti ByPass	1 x 20.06	1.3	PSC I Girder	21
29	410.895	Vadipatti ByPass	1 x 20.06	1.3	PSC I Girder	21
30	410.9	Vadipatti ByPass	1x 12.5	1.3	RCC I Girder	12.5
31	412.485	Vadipatti ByPass	1 x 12.5	1.3	RCC I Girder	12.5
32	412.675	Vadipatti ByPass	1 x 10.5	0.75	Slab with bearings	10.5
33	414.88	Vadipatti ByPass	3 x 5	0.5	Box	15
34	0.050*	Field channel & Road-side drain	1 X 7 (Skew)		Minor Bridge	7.0
35	1.400*	Existing water tank	1 X 10		Minor Bridge	10.5

* Indicates Kodai bypass alignment chainage

Note: 1. Chainages referred to in this section are proposed road chainages along the proposed Project alignment

2. Training works to be provided for all the CD works shall be finalised in consultation with Independent Consultant.

3. In case of existing bridges which are retained and widened, the total width shown includes the extra width of existing bridge on account of widening and new 12.0 m wide bridge by the side of existing bridge with a median gap of 3.5 m.

4. Increase in spans due to change in skew angle of cross road/ stream / river shall be deemed to be included in the scope of Project.

9.1 Proposed Major Structures (ROB, Flyover)

The Project crosses the railway at three locations, viz: Km 375.000 (MG Level Crossing), Km 390.600 (BG three span RUB) and at Km 394.900 (MG, 2-Lane ROB). A 4-Lane ROB is proposed at level crossing (Km 375.000). This structure is integrated with flyover/ grade separator at Km 374.500 as described in 'Improvements at Junction'. An additional 2-Lane ROB is proposed besides existing ROB at Km 394.900.

DS Toll Road Limited

Table B-9: Details of Proposed Flyovers and ROB

S.No.	Proposed Chainage	Crossing	Proposed Span Arragement (m)	Proposed superstructure depth	Type of Superstructure
1	374.550	Flyover (NH45)	2 x 34 m Curve 100	2.2	PSC Box Girder
2	375.000	ROB	1 x30 m Skew=32deg	1.6	PSC I Girder
3	376.585	Flyover (NH209)	1 x 30 m	1.6	PSC Voided Slab
4	379.950	Flyover (SH36)	1 x 30 m	1.6	PSC Voided Slab
5	394.850	ROB	2 x 43 m , 1 x 24.0 (Skew=71deg)	3.0 / 1.6	Box / PSC I girders

Note: 1. Chainages referred to in this section are proposed road chainages along the proposed Project alignment

2. Increase in spans due to change in skew angle of railway line / crossroad shall be deemed to be included in the scope of Project.

3 Concessionaire to enter into a tripartite agreement with Railways for the maintenance of ROBs and shall deposit the cost of maintenance for the concession period with the Railways as per the Railway rules.

4. The details of span arrangement, opening height and total width of structure shown in the above table are indicative only and shall be finalized in consultation with IC during execution.

9.2 Vehicular Underpass

Six vehicular underpasses along the Project Highway have been proposed. The locations and size of all proposed underpasses are tabulated below.

Table B-10: Details of Proposed Underpasses along the Project Highway

Sl. No.	Proposed Chainage	Type	Size	Remarks
1	374.130	Type – II	12.00 X 5.0	Dindigul semi-urban area
2	388.664	Type – II	8.50 X 5.0	Gandhigramam, Chennalampatti JN
3	400.260	Type – II	8.50 X 5.0	Sadiyandipuram, Sudandirapuram, Near Kodai road
4	409.265	Type – I	6.50 X 3.5	Kuranguthoppu
5	413.504	Type – II	8.50 X 5.0	Kulasekarankottai, Vadipatti (On Vadipatti Bypass)
6	422.108	Type – I	6.50 X 3.5	Nagari Village
7	0.200*	Type - III	12.00 X 5.0	Existing BT road leading to village on Kodai bypass
8	3.020	Type – II	8.50 X 5.0	Existing BT road leading to Nakkampatti village on Kodai bypass

* Indicates Kodai bypass alignment chainage

9.3 Culverts

Table B -11 (i) presents the details of proposed rehabilitation/reconstruction and new Construction of scheme that shall be adopted for existing slab/box culverts.

Table B.-11 (i): Details of Proposed Slab/BOX Culverts along the Project Highway

Existing Type	Existing arrangement	Proposed Chainage	Invert level	Bed Level	Proposal Culverts on existing road	TYPE	VENT
Slab	3.0x0.5	373.826	250.524	250.900	Retain & Widen	Slab	3.0 M
Pipe	2-900dia	375.193	256.917	256.800	Dismantle & Repl	Box	3x3 M
Slab	3.0x1.0	376.715	252.587	253.550	Retain & Widen	Slab	3.0 M
Pipe	1 - 900 dia	377.403	253.139	253.750	Dismantle & Repl	Box	2x2 M
Pipe	1 - 900 dia	377.548	253.453	253.200	Dismantle & Repl	Box	2x2 M
Slab	4.0x1.0	378.898	255.764	257.241	Retain & Widen	Slab	4.0 M
Slab	3.0x0.5	381.735	275.037	275.250	Retain & Widen	Slab	3.0 M
Slab	2.8x20	382.240	277.775	277.600	Retain & Widen	Slab	2.5 M
Slab	2.10x1.0	383.512	278.996	279.200	Retain & Widen	Slab	2.1 M
Slab	2.0 x 0.2	384.750	284.976	284.610	Retain & Widen	Slab	2.0 M
Slab	4 x 2	385.136	285.475	286.500	Retain & Widen	Slab	4.0 M
Slab	3 x 2	385.770	289.874	290.795	Retain & Widen	Slab	3.0 M
Slab	3 X 2	386.031	291.186	292.900	Retain & Widen	Slab	3.0 M
Slab	2 X 1	387.157	292.866	292.820	Dismantle & Repl	Slab	2.0 M
Buried					Dismantle & Replace	Slab	1.5 M
Slab	2 X 1.2	389.400	296.986	296.400	Retain & Widen	Slab	2.0 M
Pipe	2 - 900 dia	389.800	296.055	296.114	Dismantle & Replace	Box	2x2 M
Slab	1.2 X 2	392.226	282.599	282.300	Dismantle & Replace	Box	1.5x1.5
Slab	2 X 1	392.838	279.183	278.100	Retain & Widen	Slab	1.5 M
Box	3x3	395.130	260.263	261.410	Dismantle & Replace	Box	3x3 M
Box	3x2	395.420	257.473	259.210	Dismantle & Replace	Box	3x3 M
Slab	2V - 2.5 X 1	396.004	252.121	252.630	Dismantle & Repalce	Slab	5.0 M

Existing Type	Existing arrangement	Proposed Chainage	Invert level	Bed Level	Proposal Culverts on existing road	TYPE	VENT
Slab	3 X 1	396.820	247.697	248.600	Retain & Widen	Slab	3.0 M
Slab	5 X 2	397.750	243.734	243.780	Retain & Widen	Box	5x3 M
Pipe	3 - 900 dia	399.917	236.979	237.011	Retain & Widen	Slab	3.0 M
					NEW	Box	2x2 M
Slab	1.5x1.7	403.490	212.601	213.650	Retain & Widen	Slab	1.5 M
Slab	6 X 3	404.450	207.934	210.264	Retain & Widen	Slab	6.0 M
Pipe	6 - 900 dia	405.385	206.074	206.067	Dismantle & Repalce	Slab	6.0 M
Slab	4.8x2	405.985	204.829	207.011	Dismantle & Repalce	Slab	5.0 M
		409.880		201.59	New	Box	2x2 M
		410.380		201.61	New	Slab	6.0 M
		411.513		199.2	New	Box	2x2 M
		412.485			New	Slab	6.0 M
		412.890		192.900	New	Box	2x2 M
		413.813		191.600	New	Slab	2.0 M
		414.880			New	Box	2x2 M
		415.690		194.32	New	Slab	1x2.0 M
Slab	4 X 3	416.954	178.895	180.200	Retain & Widen	Slab	4.0M(N)
Slab	5 X 2	418.080	178.629	180.670	Retain & Widen	Slab	5.0 M
Slab	4 X 2	419.519	175.917	177.360	Retain & Widen	Slab	4.0 M
Slab	2 X 0.5	420.096	175.616	173.950	Retain & Widen	Slab	1x2.0 M
Slab	4 X 0.5	420.800	174.255	176.000	Retain & Widen	Slab	1x4.0 M
Slab	2 X 2	421.874	169.246		Retain & Widen	Slab	1x2.0 M
Slab	2 X 2	422.627	165.45	167.430	Retain & Widen	Slab	1x2.0 M
Pipe	2 - 900 dia	423.146	163.249	163.382	Replace by new	Box	2x2
Pipe	2 - 900 dia	423.363	162.252	162.480	Replace by new	Box	2x2
Slab	2 X 1.5	425.060	157.811	157.800	Retain & Widen	Slab	1x2.0 M
Slab	2 X 1.5	425.783	156.601	155.944	Retain & Widen	Slab	1x2.0 M
Slab	3 X 2.5	426.685	155.551	154.200	Retain & Widen	Slab	1x3.0 M
		0.315*			Slab Culvert	Slab Culvert	1 X 6 (Skew)

* Indicates Kodai road bypass alignment chainage

Note: Any other culverts, which require reconstruction other than mentioned in above table, shall be finalized in consultation with Independent Consultant.

Table B-11 (ii) presents the details of proposed rehabilitation/reconstruction and new Construction of scheme that shall be adopted for existing pipe culverts.

Table B- 11 (ii): Details of proposed Pipe culverts along the Project Highway

Existing Type	Existing arrangement	New chainage	Invert level	Bed Level	Proposal Culverts on existing road	TYPE	VENT (No x Dia)
Pipe	1 - 900 dia	375.435	257.778	257.778	Retain & Widen	Pipe	1x0.9 M
Pipe	2-900dia	375.598	255.991	255.550	Retain & Widen	Pipe	2x0.9 M
Pipe	2 - 900 dia	376.998	255.42	255.510	Retain & Widen	Pipe	2x0.9 M
Pipe	1 - 900 dia	378.030	254.473	254.700	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	378.350	255.981	256.515	Retain & Widen	Pipe	1x0.9 M
pipe	1 - 900 dia	379.137	257.241		Retain & Widen	Pipe	1x0.9 M
Pipe	2-900dia	379.585	259.753	260.210	Retain & Widen	Pipe	2x0.9 M
pipe	1 - 900 dia	379.796	262.28		Retain & Widen	Pipe	1x0.9 M
pipe	1 - 900 dia	380.597	271.474	272.110	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	385.870	291.157	291.650	Retain & Widen	Pipe	1x0.9 M
Pipe	2 - 900 dia	388.569	294.005	293.1	Retain & Widen	Pipe	2x0.9 M
Pipe	3 - 900 dia	390.800	292.803	294.000	Retain & Widen	Pipe	3x0.9 M
Pipe	1 - 900 dia	391.100	291.54	291.466	Retain & Widen	Pipe	1x0.9 M
Pipe	3 - 900 dia	392.537	281.289	281.289	Retain & Widen	Pipe	3x0.9 M
Pipe	3 - 900 dia	393.400	273.595	273.850	Retain & Widen	Pipe	3x0.9 M
Pipe	1 - 900 dia	394.716	264.528	264.430	Replace by new	Pipe	1x1.0 M
Pipe	2 - 900 dia	397.520	245.848	246.241	Retain & Widen	Pipe	2x0.9 M
Pipe	2 - 900 dia	397.588	245.85	246.331	Retain & Widen	Pipe	2x0.9 M
Pipe	1 - 900 dia	401.015	230.66	231.060	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	405.295	206.238	207.116	Dismantle & Repalce	Pipe	1x1.0 M

DS Toll Road Limited

Dindigul – Madurai Section of NH -7 from Km 373.725 to Km 426.600

Existing Type	Existing arrangement	New chainage	Invert level	Bed Level	Proposal Culverts on existing road	TYPE	VENT (No x Dia)
Pipe	1 - 900 dia	405.413	206.376	207.718	Dismantle & Repalce	Pipe	1x1.0 M
Pipe	1 - 900 dia	405.605	206.099	206.099	Dismantle & Repalce	Pipe	1x1.0 M
Pipe	1 - 900 dia	406.080	204.778	205.786	Dismantle & Repalce	Pipe	1x1.0 M
Pipe	1 - 900 dia	406.244	205.036	205.500	Dismantle & Repalce	Pipe	1x1.0 M
Pipe	1 - 900 dia	406.510	204.894	205.220	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	406.595	204.655	204.655	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	406.822	204.416	205.377	Dismantle & Repalce	Pipe	1x1.0 M
Pipe	1 - 900 dia	406.988	204.202	204.202	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	408.590	200.55	201.376	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	409.175	199.551	200.005	Retain & Widen	Pipe	1x0.9 M
Pipe		409.465	200.272	200.600	New	Pipe	1x0.9 M
		410.000			New	Pipe	1x1.0 M
		411.240		201.75	New	Pipe	1x1.0 M
		411.350			New	Pipe	1x1.0 M
		411.550			New	Pipe	1x1.0 M
		412.000			New	Pipe	1x1.0 M
		412.200			New	Pipe	1x1.0 M
		412.710			New	Pipe	1x1.0 M
		412.750			New	Pipe	1x1.0 M
		414.080		190.2	New	Pipe	1x1.0 M
		414.175			New	Pipe	1x1.0 M
		414.475			New	Pipe	1x1.0 M
		414.695			New	Pipe	1x1.0 M
		415.025			New	Pipe	1x1.0 M
		415.490		184.11	New	Pipe	1x1.0 M
Pipe	2 - 900 dia	417.111	180.351	181.108	Retain & Widen	Pipe	2x0.9 M
Pipe	2 - 900 dia	417.156	180.415	180.871	Retain & Widen	Pipe	2x0.9 M
Pipe	2 - 900 dia	417.592	180.711	180.656	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	418.310	179.883	180.689	Replace by new	Pipe	1x1.0 M
Pipe	2 - 900 dia	418.647	178.229	178.739	Replace by new	Pipe	2x1.0 M
Pipe	2 - 900 dia	418.774	177.892	178.406	Replace by new	Pipe	2x1.0 M
Pipe	1 - 900 dia	419.090	177.216	177.759	Retain & Widen	Pipe	1x0.9 M

Existing Type	Existing arrangement	New chainage	Invert level	Bed Level	Proposal Culverts on existing road	TYPE	VENT (No x Dia)
Pipe	1 - 900 dia	419.188	176.811	177.611	Dismantle & replace	Pipe	1x1.0 M
Pipe	1 - 900 dia	419.342	176.457	177.257	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	419.716	175.981	176.900	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	419.742	175.92	176.263	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	419.948	175.998	175.946	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia			171.222	Retain & Widen	Pipe	1x0.9 M
Pipe	2-900 dia	421.500		169.700	Retain & Widen	Pipe	2x0.9 M
Pipe	1 - 900 dia	422.917	164.398	164.646	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	423.444	161.96	162.371	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	423.566	161.88	161.880	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	423.665	161.135	161.246	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	423.900	160.333	161.133	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	424.448	159.52	159.520	Retain & Widen	Pipe	1x0.9 M
Pipe	1 - 900 dia	424.762	159.385	159.815	Replace by new	Pipe	1x1.0 M
Pipe	1 - 900 dia	425.590	157.395	157.433	Retain & Widen	Pipe	1x0.9 M
		1.480*			New	Pipe	1x1.0 M
		1.650*			New	Pipe	1x1.0 M
		2.280*			New	Pipe	1x1.0 M
		2.400*			New	Pipe	1x1.0 M
		2.650*			New	Pipe	1x1.0 M
		2.690*			New	Pipe	1x1.0 M
		2.850*			New	Pipe	1x1.0 M
		3.180*			New	Pipe	1x1.0 M
		3.400*			New	Pipe	1x1.0 M

* Indicates Kodai bypass alignment chainage

Note: Any other culverts, which require reconstruction other than mentioned in above table, shall be finalized in consultation with Independent Consultant.

9.4 Typical Cross Sections for structures

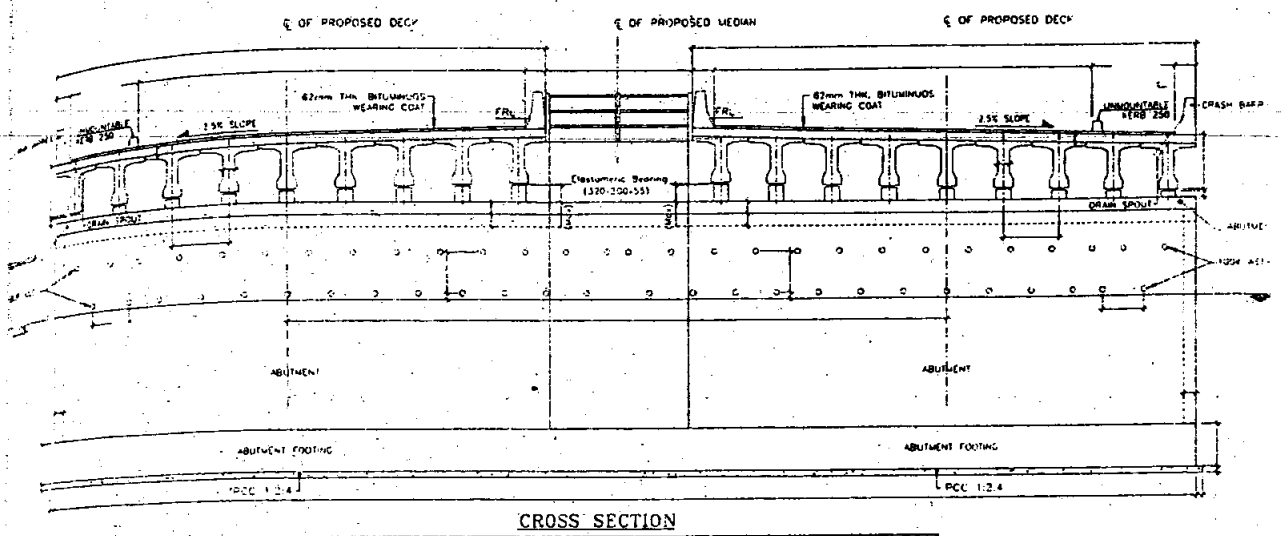


Figure B-11: Typical Cross Section of T – Bridge

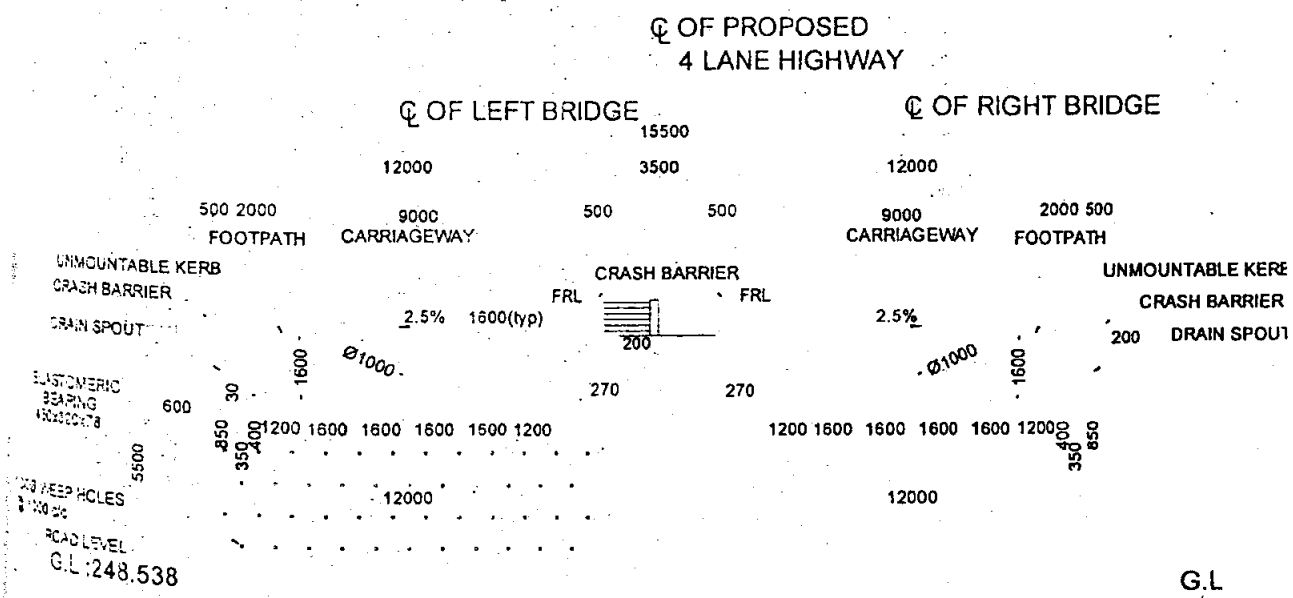


Figure B-12: Typical Cross Section of Voided

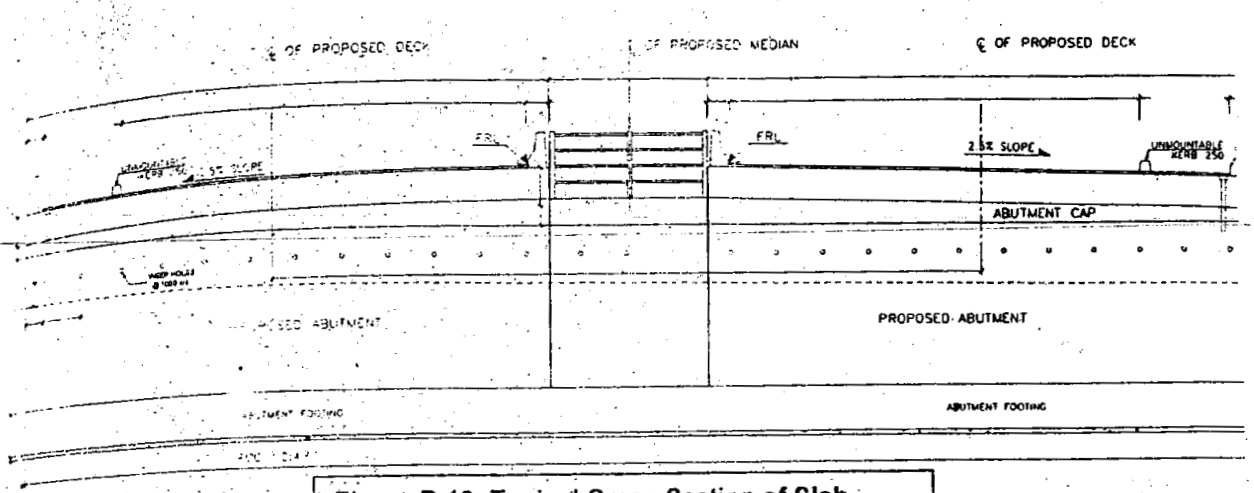


Figure B-13: Typical Cross Section of Slab

10 DRAINAGE AND SLOPE PROTECTION AND MEASURES

The improvements in the drainage and the slope erosion shall be made as per the following norms:

10.1 Drainage Measures

Following measures shall be adopted:

- Side ditches of required cross-section for drainage on both sides of carriageway in rural sections.
- Open pucca drains underneath the median between main carriageway and service road with proper connection to the outfall location in the urban sections;
- Chute drains along with shoulder drains in high embankment (3m and above);
- Median drains at super elevated sections with proper outfall connections; and
- Covered pucca drains underneath the sidewalk of proposed facility (bus bays, truck lay bye etc.) in rural sections.

In addition to the culverts mentioned above, if there is any requirement based on the urban/rural drain outlets or for any other reason same to be provided in consultation with Independent Consultant.

10.2 Slope Protection Measures

Slope protection in the form stone pitching and turfing shall be provided on the embankment slopes. The pitching shall be provided for embankment heights greater than 3m and turfing in the form of local grass and bushes has been provided for the remaining embankment height lower than 3m.

0144

11. Traffic Signage and Pavement Markings

11.1 Pavement Markings

Traffic signs and pavement markings shall include roadside signs, overhead signs, kerb mounted signs and road markings along the Project Highway. The design of traffic signs and pavement markings for the Project Highway shall be as per the design standards indicated in Schedule D and the locations for various treatments shall be finalized in consultation with the Independent Consultant.

11.2 Traffic signage

All signs shall be the reflectorised type with high intensity retro-reflective sheeting of encapsulated type. The height, lateral clearance, location and installation shall be as per relevant clauses of MORT&H specifications. Overhead signs shall be installed ahead of major intersections, toll plazas and urban areas as per detailed design requirement.

12. Highway Lighting

- Non-conventional energy like solar lighting system shall be provided at all major intersections as per the design standards indicated in Schedule D.
- High mast lightings shall be provided at toll plaza locations and at all grade separated intersections as per the design standards indicated in Schedule D.
- The design of lighting system on the Project Highway for different locations shall be as per the design standards indicated in Schedule D.

13. Speed Breaker on Side Roads

Speed Breakers shall be provided on all cross roads intersecting the Project Highway as per the design standards indicated in Schedule D.

14. Traffic Blinker Signal (L.E.D) at Intersection

Traffic Blinker signal (L.E.D) shall be provided at all at grade intersections as per the design standards indicated in Schedule D.

15. **Delineators and Guard Posts**

Delineators shall be provided at all Horizontal curves on either side of the carriageway as per specifications and the design standards indicated in Schedule D.

Guard post shall be provided on either side of the carriageways, at locations where the embankment height varies between 2 to 3 m. as per the specifications and design standards spelt out in Schedule D.

16. **Studs**

Road studs shall be provided at all curves on both carriageways, at median openings and at intersections as per the design standards spelt out in Schedule D.

17. **Pedestrian Guard Rail and Safety Barrier**

Pedestrian Guard Rail and Safety Barrier shall be provided as described in Schedule D.

18. **Road Land Boundary**

Road land (RoW) boundary shall be demarcated on the Project Highway. For this purpose nail wires and angle posts shall be used in rural section and poles and chain shall be used in urban section. All the components used in delineating road land boundary shall be aesthetically pleasing, sturdy and vandal-proof. A system for the identification of chainages along the Project Highway shall be done in consultation with Independent Consultant.

0146

DS Toll Road Limited

SCHEDULE-C

PROJECT FACILITIES

GENERAL

following sections of this Schedule provide the minimum spatial and functional requirements of facilities to be provided on the Project Highway with an aim to cater to the envisaged demand till end of the concession period. The concessionaire shall review the adequacy of the proposed ilities at regular intervals of 5 years and accordingly provide additional facilities with necessary proval from the Independent Consultant in order to meet the demand of the road users till the end of concession period

present Schedule briefly highlights the minimum spatial and functional requirements of the cilities to be provided on the Project Highway in construction package from Km 373.725 to Km 76.600 only.

TOLL PLAZA

One Toll Plaza has been proposed at Km 419.700. Semi-automatic toll collections system has been recommended for collection of user fees. The proposed toll plaza has 6 nos of toll serving lanes and administrative building with adequate lighting and parking facilities. The Toll Plaza will have separate service lanes for toll traffic and toll free traffic. The lane width is kept as 3.0m except for the outer lane for oversized vehicles, which is kept as 4.5m. Initially it is proposed that the fee collection system should be manual/semi-automatic and would subsequently converted into a semi automatic/ fully automatic system. The service lanes are designed for the maximum queue length of vehicles and service time for each vehicle. Normally the service time allowed is 15 seconds for manual/ semi automatic system with a queue length of not more than 5 vehicles at any point of time. The typical layout of Toll Plaza is given in Fig C-1 attached with this report.

It should be noted that the Toll Plaza should be developed in stages. Initially only a few service lanes would be required. These would need to be expanded to accommodate the traffic projected for the later half of the Project life. In order to accommodate this expansion, the supervision and administration building would be set back at a sufficient distance as shown in the drawing.

3. WAYSIDE AMENITY COMPLEX

There is no comprehensive wayside amenity complex.

Rest Area

One rest area shall be provided at Km 421.600 as mentioned in the DPR. Additional land has been proposed to for acquisition.

DS Toll Road Limited

development of wayside amenity centers, the norms recommended in "Planning norms and lines for Wayside and Terminal Facilities" MORTH shall be used. According to these norms, following facilities shall be provided:

- Separated eating places for crew and passengers, drinking water and toilets;
- Dormitory for short duration rest;
- Other facilities such as telephone, pan shop etc;
- Sufficient parking for different categories of vehicles;
- Repair shops (electrical and mechanical) and spare parts shop and
- Trauma care centre for victims of accident

Truck Layby

Truck layby shall be constructed at proposed chainage Ch: 383.600 and Ch: 402.200 as shown in the DPR.Basic facilities such as drinking water and toilets, with proper disposal system, shall be provided at suitable location for the layby. The proposed layby is located where substantial truck parking, dhabas, petrol pumps presently exists. Drawing showing the typical details of truck lay-by is presented in figure C-2 at the end of this Schedule:

Table C-1: Locations of Truck Bays

Sl. No.	Proposed Chainages
1	383.600
2	402.200

Bus Bays and Bus Shelters

Bus bays and bus shelters shall be provided on the Project Highway at the following locations. The typical lay out of bus bays and Bus stops conform to IRC Publication are shown in Fig. C-3 at the end of this Schedule.

However, Concessionaire can change the location and design of shelter with approval from IC and NHAI. The locations of bus bays and bus stops are presented in Table C-2

Table C-2: Locations of Bus Bays and Bus Stops

Sl. No.	Proposed Chainage	Villages serving
1	375.500	Dindigul EB Office
2	382.400	S.R. Nagari
3	385.000	Transport township
4	387.800	Gandhigramam
5	391.300	Rengasamipuram
6	394.200	Mettur

Sl. No.	Proposed Chainage	Villages serving
1	375.500	Dindigul EB Office
7	400.000	Kodai Road
8	409.800	Koranguthoppu
9	416.500	Andipatti
10	418.800	Vadugupatti
11	420.600	Tanicheyam
12	422.000	Iyyan Kottai
13	423.200	Nagari
14	426.350	Kattupuli Nagar

HIGHWAY TRAFFIC MANAGEMENT SYSTEM (HTMS)

Project Highway shall be provided with Highway Traffic Management Systems (HTMS) to

Collect/disseminate information for traffic and incident management and for the safety of users. The system shall comprise following sub-systems:

i) Emergency Communication System.

ii) Mobile Communication System.

iii) Variable Message Sign System.

iv) Meteorological Data system.

v) Automatic traffic counter- cum-classifier system

vi) Power Supply System.

(i) Emergency Communication System shall have Emergency Call Boxes (ECBs) installed at the spacing of 2 kms in a staggered manner on either side of the highway for both direction of travel and connected to the control centre through the transmission system of optical fibre cable and copper cables with suitable interfacing. The main control centre shall be equipped so as that any user making emergency call from ECBs can be provided the assistance of ambulance, crane and highway patrol unit depending upon the location of caller.

(ii) Mobile Communication System shall have mobile sets provided on ambulances, cranes and patrolling vehicles for facilitating speedy communication even when they are on the move.

(iii) Variable Message Signs shall be provided at an interval of 10Km in each direction of traffic to guide and forewarn the users about the traffic and weather conditions on highways. These messages can be varied from control centers based on the data received through surveillance system, highway patrolling, traffic censors etc. The locations shall be decided for their maximum utility to the users.

Meteorological Data System shall be installed at an interval of 25 Km to provide weather information on temperature, wind speed, humidity and visibility. These informations shall be available to the users through variable message signs as per requirements.

Automatic Traffic Counters cum-classifier shall be installed at minimum two locations for traffic data collection and monitoring.

Provision for installing of video cameras shall be made available at all major intersections and at least 4 video cameras shall be made available for use at any of the identified locations on need basis.

These systems shall have outdoor equipments consisting of ECBs, VMS panels, weather sensors, traffic sensors, video camera etc. The outdoor equipment shall be connected to the control centre through transmission system preferably comprising optical fibre cable, copper cable and interface equipment. The control centre shall have monitoring equipment, on line information acquisition equipment, processing equipment etc. It shall also have a graphic display board showing the highway and the locations of equipments and of incidents. The main control centre and sub-centre would also have ambulance, tow away trucks and cranes, and fire tenders for dispatching these emergency services to the required locations.

ADMINISTRATIVE, OPERATION AND MAINTENANCE BASE CAMP

The location of a base camp shall be finalized in consultation with IC, however preferably provided at toll plaza as described herein under.

The main administrative, operation and maintenance base camp shall be provided to cater to the requirement of the following services.

- Central Traffic Control
- Central Toll Control
- Highway Maintenance
- Facilities for storage and repair of maintenance equipments, vehicles, and materials

The main base camp shall be housed adjacent to the toll complex. An area of 4000 sqm shall be earmarked for this purpose. The layout of the different buildings and facilities shall be finalized in consultation with the Independent Consultant.

The Administrative building shall primarily house the Control Center, the security headquarters, the central store, the toll audit and data processing units in addition to other secondary facilities such as computer room, office space, stores, sanitary facilities, canteen etc. The base camp shall have adequate parking space for staff and visitors.

In addition, the base camp shall have an electric room and supplies room to cater to the power requirements of the camp. The electric room shall house a standby generator to provide the required power in case of failure of normal power.

The camps shall have adequate lighting during dark periods and night.

DS Toll Road Limited

There shall be underground fuel storage area with delivery facilities at the campsites to be adequate to cater to the demands of maintenance and patrolling activities.

The base camps shall not have more than one entry and one exit point. Both of these shall be manned by security personnel at all times.

The camp shall be landscaped so as to protect the area from dust and noise from the Project Highway

6. **HIGHWAY LIGHTING**

The lighting in classified urban areas on the Project Highway, grade separators, Toll Plaza and main administrative base camp. Traffic aid posts shall be provided in accordance with the standards set in Schedule D

7. **LANDSCAPING**

Landscape treatment of the Project shall be undertaken through planting of trees and ground cover of appropriate varieties and landscaping on surplus land in the ROW and median in accordance with Schedule D.

Shrubs of low height shall be planted in the median of highway. Plantation scheme shall be prepared in consultation with Forest Department, Government of Tamil Nadu and the Independent Consultant in accordance with Schedule D.

8. **ENVIRONMENT**

In view of the statutory requirement of environmental clearance for Highway Project, The DPR Consultant has already carried out environmental and social studies of the Project Highway and the details are presented in Volume-IVA and Volume IVB of Detailed Project Report.

The said report brings out the baseline environmental and social conditions, envisaged impacts of the Project, mitigation measures proposed and suitable management plan for monitoring and implementation of measures.

The Project Highway during design, construction, operation and maintenance shall conform to the environmental rules and regulations in force. The Concessionaire shall be responsible for the same. As such a copy of the report in question is enclosed herewith for guidance of the Concessionaire. However this does not absolve the Concessionaire from performing according to the laws on environment.

9. **ROAD FURNITURE AND FACILITIES ON ROADSIDE**

Roadside facilities such as Litter bins, Pubic Toilets and Drinking water Kiosks shall be provided in accordance with the standards set in Schedule D.

DS Toll Road Limited

FACILITIES TO BE PROVIDED FOR NHAI

The Concessionaire shall provide the following facilities for NHAI

i. The Concessionaire shall provide a new 4x4 driven A.C. Vehicle to the PIU and all the expenses made against vehicle maintenance including fuel charges, salary of drivers etc shall be borne by Concessionaire for the entire concession period.

ii. The concessionaire shall provide at least two latest mobile phones with connection

iii. The Concessionaire shall also provide following supporting staff for NHAI including their wages and additional benefits

- One stenographer
- One Office attendant/Peon

1. LAB FACILITIES FOR IC

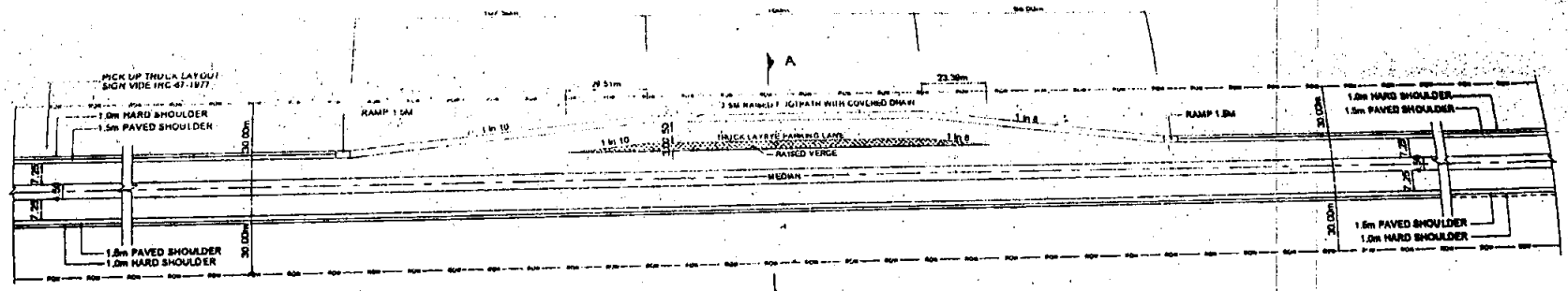
The Concessionaire shall provide a well-established highway/material engineering laboratory with latest state-of-art material testing equipments to enable the IC to check the quality of construction. This lab will be manned and operated by IC for quality control. The Lab shall also have stand by power supply system. The list of equipments required for the lab shall be finalized in consultation with NHAI/IC.

2. PEDESTRIAN/CATTLE CROSSINGS FACILITIES

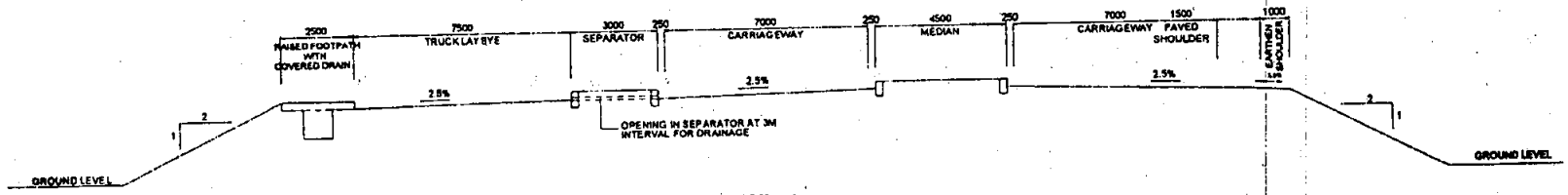
Cattle/pedestrian underpasses having inner dimensions 6.5 x 3.5 m size shall be provided at the locations indicated in the Table below in close vicinity of these locations in consultation with the Independent Consultant. The specifications and standards specified in Schedule-D shall be followed.

Location of Cattle/Pedestrian Underpasses

Sl. No.	Proposed Chainage	Type	Size	Remarks
1	409.265	Type - I	6.5 X 3.5 m	Kuranguthoppu
2	422.108	Type - I	6.5 X 3.5 m	Nagari Village

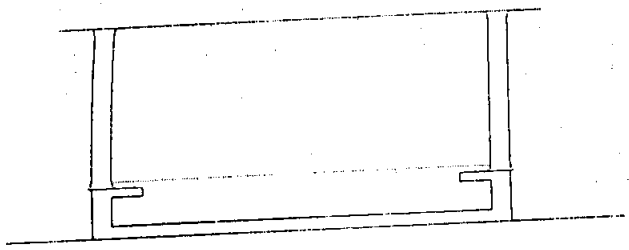


LAYBYE ON ONE SIDE FOR TRUCK PARKING
SCALE 1:1000

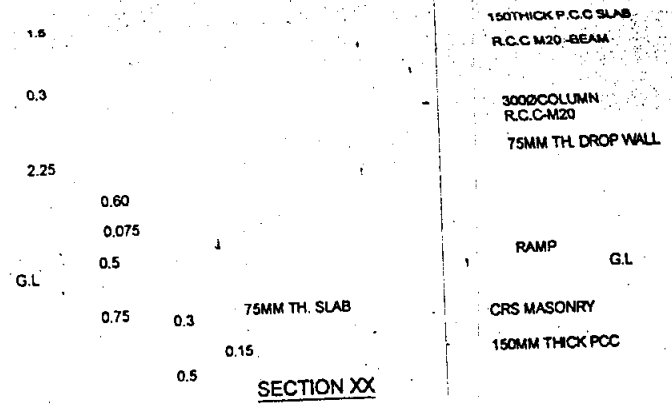


SECTION A-A
SCALE 1:100

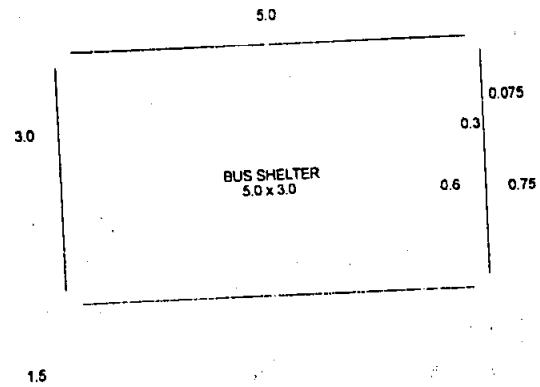
Figure C-2



FRONT ELEVATION



SECTION XX



PLAN FOR BUS SHELTER

Figure C-3

0154

SCHEDULE D

SPECIFICATIONS AND STANDARDS

INTRODUCTION

1. 1.1 The Designs for various elements of the Project including facilities shall conform to the minimum design requirements set out in DPR and this Schedule. Alternative or additional designs submitted by the Concessionaire shall also meet these requirements.

1.2 Concessionaire in consultation with and approval of Independent Consultant / NHAI can adopt alternative designs for Bridges, Culverts, Flyovers, Retaining Earth Walls, Overpass and Underpass. In case the Concessionaire follows the DPR designs it shall carry out its own engineering surveys and shall be solely responsible for such designs. However, total length of viaduct portion of structure should not be reduced from that of mentioned in Schedule B. Notwithstanding anything to the contrary contained herein, the Concessionaire shall carry out its own engineering surveys and designs and shall be responsible for design, engineering and construction of the Project Highway as per the Specifications and Standards in accordance with the provisions of this Agreement

1.3 The Concessionaire shall strictly follow the horizontal alignment given in the DPR. In case DPR alignment design is deficient in terms of standards to be followed for the design speed of 100 kmph, improvements to alignment can be done with consultation and approval of Independent Consultant.

1.4 In no case the FRL of the Project Highway be less than the FRL proposed in the DPR. The vertical profile shall conform to the standards mentioned in this Schedule. In no case the depth of cut shall be more than that mentioned in DPR at any section of the Project Highway.

1.5 The Cross sectional elements specified for the Project shall be strictly followed.

1.6 All works related to the Project Highway shall conform to the Guidelines and Special Publications as applicable to National Highways and Ministry of Shipping, Road Transport and Highway earlier Ministry of Road Transport and Highway (MORT&H) Specifications and Indian Roads Congress (IRC) standards, Codes, with all updates till 30 days before the date of bid submission by the Concessionaire. In the absence of any definite provisions on any particular issue related to the Specifications and/or standards, reference may be made to the latest codes and Specifications of Bureau of Indian Standards, British Standards, AASHTO, ASTM or any other International standard in that order. But, where even these are silent, the construction and completion of the works shall conform to sound engineering practice with the approval of the Independent Consultant / NHAI.

1.7 Amendments and/ or modifications carried out by the Ministry of Road Transport and Highway in the MORT&H Specifications and IRC standards, and codes and available to public 30 days before the date of receipt of bids shall be applicable.

1.8 Whenever any specific provision for any building works is given in the MORT&H Specifications, IRC standards and codes, those shall apply. All building works shall conform to Central Public

0155

Works Department (CPWD) Specifications for class 1 building works or standards given in the National Building Code (NBC) as amended and/or modified from time to time. For the purpose of this clause, building works shall be deemed to include road furniture, landscape elements and /or any other works incidental to the building works.

In case, any further amendments and/ or modifications in the said Specifications and/or standards and/or codes come into force after the said date (clause 1.7 above) and have financial impact, the matter shall be settled according to the Concession Agreement.

In so far as amended/modified/added clause supersedes a clause or part thereof in the said specifications and standards, then any reference to the superseded clause elsewhere shall be deemed to refer to the amended/modified /added clause or part there of.

If amended/modified/added clause provision comes in conflict or be inconsistent with any of the provisions of the said Specifications and standards, the amended/modified/ added clause shall always prevail.

The Concessionaire shall plan and implement the quality assurance programme for the Project Highway and finalize it in consultation with the Independent Consultant at least one month prior to the commencement of the work.

The quality and/ or the quantities of various items shall primarily be the responsibility of the Concessionaire. The Independent Consultant shall, however, ensure and/ or verify it by devising suitable means. On noticing any deficiency in the quality and/ or quantity, corrective measures as ordered by the Independent Consultant shall be carried out by the Concessionaire at the Concessionaire's cost to the satisfaction of the Independent Consultant. In case of any disagreement or non-compliance by the Concessionaire, the dispute will be referred to NHAI to resolve it in terms of the Concession Agreement.

2. DESIGN STANDARDS

2.1 Design Standards comprise of MORT&H policy circulars and IRC codes, guidelines and special publications applicable to National Highways. The design standards adopted in DPR shall be generally followed. NHAI policy guidelines and respective State government current requirements and guidelines shall be adopted for landscaping and tree plantation along the corridor. Where the said standards are silent on any item, the following standards in order of preference shall be adopted with the approval of the Independent Consultant/NHAI.

i. Bureau of Indian Standards (BIS)
ii. American Association of State Highway and Transport Officials (AASHTO)
iii. American Society of Testing Materials (ASTM)
iv. British Standards (BS)
v. Any other National or International Standard suggested by the Concessionaire.

Designs offered by the Concessionaire shall comply with the standards as spelt out in clause 2.1 above.

DS Toll Road Limited

0156

The list of Codes in Annexure 1 is given to serve as a guide for design of various elements of Project Highway.

2.3 **Geometric Design Standards**

2.3.1 Geometric design standards shall be adopted as per IRC codes as applicable to the National Highways. The design Standards and design criteria adopted in DPR shall be followed.

2.4 **Geotechnical Design**

2.4.1 Cut and fill slopes shall be appropriate to the nature of the material and the height of embankment or depth of cut. The slopes shall be safe against failure.

2.4.2 Material used in the fill and its compaction requirements shall conform to IRC - 36-1970. Where these Specifications are in variance with the MORT&H Specifications the latter shall govern and be followed.

2.5 **Pavement Design**

2.5.1 The Pavement crust thickness requirement as mentioned in Schedule B for various elements shall be the bare minimum requirement for the Project. Any additional thickness above and over that mentioned in Schedule B shall be finalised in consultation with Independent Consultant.

2.5.2 The new flexible pavement shall have Bituminous Concrete (BC) [also termed Asphaltic concrete (AC)] wearing course laid over Dense Bituminous Macadam (DBM). Underneath DBM a bituminous base course of Bituminous Macadam (BM) shall be provided if necessary as per design requirements. It will be laid on Wet Mix Macadam (WMM) base course. The subbase granular material shall conform to the grading, density and other physical requirements stipulated in MORT&H Specifications and shall have a minimum CBR of 30% at 97% Maximum Dry Density (MDD). Material Chosen for subgrade shall have CBR not less than that suggested in DPR at 97% MDD.

2.5.3 Refinery Modified bitumen shall be used for bituminous concrete wearing courses in accordance with the stipulations of relevant and latest IRC & MORT&H guidelines.

2.5.4 The minimum requirement of thickness for Cement concrete pavement shall be as mentioned in Schedule-B for Toll Plaza Locations. The flexural strength of concrete used for PQC should not be less than 45 Kg/cm^2. In case Concessionaire desires to adopt rigid pavement for new carriageway or any other facilities other than toll plaza, the above mentioned minimum thickness shall be provided in consultation with Independent Consultant.

2.5.5 Rigid pavement should be provided below the underpass locations where the Project Highway is flying over the crossroad and proposed underpass is not a RCC box structure. In case the crossroad is NH or SH the rigid pavement of at least same thickness as that of Toll Plaza as mentioned in

Schedule B shall be provided. In case the crossroad is MDR/ODR the rigid pavement shall be designed and finalised in consultation with Independent Consultant.

2.5.6 To ensure internal drainage of the pavement structure, the lower drainage layer of the road subbase shall extend upto full formation width.

2.5.7 Unevenness index of the pavement on completion shall not be more than 2000 mm per km measured with Bump Integrator fitted in a vehicle or an equivalent device approved by the Independent Consultant/NHAI. The instrument used in the measurement of roughness shall be calibrated as per guidelines given in the World Bank Technical Note No.46.

2.6 Drainage System

2.6.1 An effective surface and sub surface drainage system of pavement structure shall be designed as stipulated in IRC SP: 42 (1994).

2.6.2 Rainwater Harvesting System shall be provided all along the Project Highway as per provisions of DPR and IRC SP 50:1999.

2.6.2 Drainage system as designed and adopted in DPR for the drainage of carriageways in urban areas, rural areas, medians, toll plazas, wayside amenities, truck parking areas, bus-bays, rain water harvesting systems and other highway features are the minimum requirement for the Project and shall be followed. Any further requirement for ensuring more effective drainage system shall be designed and finalised in consultation with Independent Consultant.

2.7 Design Standards for Culverts, Bridges, Underpasses, Over bridges

2.7.1 The design standards and loading to be considered for culverts, bridges, underpasses and over bridges shall be those laid down in the latest relevant IRC codes and / or IS codes. Where the said codes are found wanting or are silent other codes as stipulated in Clause 2.1 above shall be followed.

2.7.2 MORT&H specification (Clause 2607.2) shall be followed for the material of strip seal expansion joints.

2.7.3 Design of POT/PTFE bearings design shall be done in accordance with IRC 83 (Part-III) Specifications.

2.7.4 Specifications for structural Concrete shall be as per IRC 21: 2000.

2.7.5 HDPE sheathing shall be used for pre-stressing.

2.7.6 Pre-stressing anchorages shall confirm to the latest BS code CEB-FIP recommendations.

0158

2.7.7 Design of voided slabs shall conform to the draft Specifications as considered by the IRC council.

2.7.8 Provision of pile foundations if proposed by Concessionaire shall have the approval of Independent Consultant. Pile load test shall be performed by conventional load testing method and not by high-energy method.

2.7.9 Conduct of Field Pull Out test for RE walls is mandatory. In addition to this, Specifications given in DPR shall be followed for RE wall design and construction.

2.8 Existing Culverts, Bridges

2.8.1 The unsafe and/or deficient bridge and culvert structures on the existing 2 lane carriageway shall be rehabilitated or replaced by sound structures to carry the IRC design loads spelt out in clause 2.7.1 above. The recommendations for rehabilitation of CD structures mentioned in DPR and Schedule-B are the bare minimum and any additional structure, which is required to be reconstructed, or any additional requirement for rehabilitation other than those mentioned in DPR and Schedule-B shall be finalised in consultation with Independent Consultant.

2.8.2 Where the existing structures are retained and extended, the extension shall be done with same type of structure and properly adjusted and matched with the existing structure. The guidelines provided in DPR shall be followed for this purpose.

2.9 Intersections

2.9.1 At-grade intersections shall be designed according to IRC Special Publication 41 'Guidelines for the Design of At-grade Intersections in Rural & Urban Areas' and the MORT&H Type Designs for Intersections on National Highways, with modifications where required. The designs set out in DPR for intersections shall form the basis for the design. Treatment at any additional intersection other than those mentioned Schedule-B, shall be finalized in consultation with Independent Consultant.

2.9.2 For elements not covered in DPR and the said publication, Guidelines of IRC-92-1985 supplemented by relevant MORT&H and the AASHTO publication 'A Policy on Geometric Design of Highways and Streets' shall be used.

2.9.3 Geometric design standards for elements of grade-separated intersections given in DPR shall be adopted.

2.10

2.10.2 Bins

2.10.1 The litterbins shall be located at no more than 100 m intervals in the rest area and the truck-parking lay-byes. The bus stops shall be provided with at least one litterbin.

2.10.2 The capacity of the litterbin shall be as per requirement, subject to a minimum of 30 litres.

2.11 Public Toilets

2.11.1 Requisite number of urinals, WC and bathing places supported by adequate water supply and sewerage facilities and appurtenances as per the National Building Code (NBC) shall be provided at truck parking lay-byes, subject to a minimum of 4 WC, 5 urinals and 3 bathing places. Number of urinals, WC and bathing spaces in all other places including the rest areas will be as per the NBC. The entrance of the ladies toilet shall be clearly marked and segregated from the men's toilet.

2.11.2 At least 2-m wide area around the toilet blocks shall be paved with adequate cross slopes and drainage to ensure speedy disposal of water. Arrangement for sewage disposal shall be provided.

2.12 Drinking Water Kiosk

2.12.1 Drinking water kiosks at the Truck Lay byes and Bus shelters shall have a minimum of 4 taps of push button type. The drinking water kiosks shall be easily accessible to children and handicapped people. The water kiosks shall be properly segregated and shall be at least 3 m away from the toilet blocks, if any. Water supply shall be through existing water pipe line. In absence of this, provisions for ground water extraction shall be made.

2.12.2 Water storage in the drinking water kiosks shall be as per the National Building Code (NBC), subject to a minimum of 200 litres. At least 2 sq.m. area around the drinking water kiosks shall be paved with adequate cross slopes and drainage to ensure speedy disposal of spilt water.

2.13 Highway Lighting System

2.13.1 The night-time illumination in the areas used by pedestrian shall not be less than 10 lux. In urban areas, it is recommended that semi-cut-off luminaries shall be provided. Arrangement of lighting installations shall be staggered except at curves. High mast lighting shall be adopted for lighting of Toll Plazas, all Grade Separated Junctions and any other locations as mentioned in Schedule-B.

2.13.2 The layout of masts, their height and spacing shall be fixed in consultation with the Independent Consultants so that the minimum illumination level prescribed in 2.13.1 above is achieved.

2.13.3 Non-Conventional Sources of lighting system shall be provided at all At-grade Intersections as mentioned in Schedule-B with solar energy. The general Specifications mentioned in DPR shall be followed for this purpose.

2.14 Highway Traffic Management System (HTMS)

HTMS shall provide facilities to the highway users to make emergency calls through Emergency Call Booths (ECBs) to control centre in case of accidents, break down of vehicle and fire and to pre-warn the highway users about unusual conditions on the road. It shall provide information / data to traffic managers on traffic flow, conditions, speed and weather conditions, location of any incident and help required and on incoming calls. Based on these, the traffic managers should be able to exercise control on changing the variable message signs, mobilising the movement of ambulances, cranes, highway patrol units and fire tenders. HTMS shall also provide on line recording and reviewing of the voice and individual information for record and analysis.

2.14.1 All equipment shall comply and be installed in accordance with IEC 364, with minimum of CENELEC standards EN 50128 software integrity level 2.

2.14.2 The HTMS shall have an overall system mobility of better than 99% and shall be considered unavailable if any of the functions can not be properly executed. The mean time to restore to the normal operation following a failure shall be less than four hours all inclusive. The service life of HTMS shall be 10 years.

2.14.3 All outdoor equipment for the facility of the users such as Emergency Call Booths (ECB) and Message Signs (MS) shall be installed at locations which shall be clearly visible to the approaching drivers. The ECBs shall have proper sign identifications

2.15 Traffic Safety Measures

2.15.1 Highway Patrolling

The Concessionaire is required to provide round the clock route patrols to assist motorists. The patrol personnel should be adequately trained to the satisfaction of the Independent Consultant in traffic management, road safety and in primary First Aid. The purpose of these patrols is to:

- Provide the users of the Project Highway with basic mechanical help for vehicles that break down on the National Highway Section. and protect other motorists from such vehicles
- Immediately identify traffic hazards of whatever nature, such as unauthorised parking, public transport vehicles obstructing traffic during passenger loading and unloading, debris, stray animals and the like. The Concessionaire shall take the necessary measures to remove such obstructions.
- Provide emergency management at accident scenes until such time as the appropriate authorities arrive,
- Assist the motorist , for the removal of damaged or mechanically impaired vehicles from the Project Highway,
- Provide road user information and to further the image of the National Highway Section in a professional and friendly manner.
- Maintain daily records of assistance provided to motorists

- Observe, record and report suspect aspects of the highway, hazards and incidental damage caused by vehicles, floods, storms, or other random events, such that the highway maintenance records and data base are continuously improved.

2.15.1.1 Patrol vehicles

The Concessionaire will provide 4x4 drive Patrol vehicles as stipulated in the Contract. Each vehicle shall accommodate a minimum 3 persons including the driver. The Concessionaire will also make arrangements for standby vehicles.

2.15.1.2 Ambulances

The Concessionaire will provide ambulances having all facilities of emergency assistance required like stretcher to carry the patient, Emergency Medicines, oxygen etc.

2.15.1.3 Cranes

The Concessionaire will provide cranes of 15 MT capacity having all requisite arrangements of pulling and lifting of accidental/break down vehicles. Table D-1 presents the serviceability indicators, required maintenance level that shall be followed by Concessionaire as part of highway patrolling.

Table D-1: Serviceability Indicators and required maintenance level for Patrolling

Sl. No	Serviceability Indicator	Required Maintenance Level	Frequency of Inspections by Engineer to Ensure Required Level of Service
1.	Tow trucks, cranes & ambulances etc.	within 30 minutes of incident occurrence	Daily on regular basis followed by weekly & monthly inspections
2.	Frequency of highway patrol	Every 4/6 hours on each carriageway for entire stretch (logging system)	Daily on regular basis followed by weekly & monthly inspections

2.15.2 **Pedestrian Guard Rails and Safety Barriers**

2.15.2.1 Pedestrian guardrail shall be provided at the following locations

i. At the places where pedestrian activity is high

ii. On raised foot path on the side of carriageway at bus stops and bus bays mentioned in Schedule-C, for adequate length for pedestrain safety, not less than 20 m on either side

The layout of pedestrian guard-rails at crossings, road intersections shall be as per the drawing given in DPR. On kerbed road sections, guard-rails shall be at least 15 cm away from the edge of carriageway.

0162

2.15.2.2 Safety barriers shall be located at the following locations

i. At high embankments which have height > 3m when measured from the top of the pavement to the natural ground.

ii. At sharp horizontal curves whose radius is less than 500 m by the side of ponds, lakes, open wells even when the height of embankment is less than 3 m.

iii. Along the central median at places where median width is 1.5 m and also in the lengths where median tapers from 5.0 m to 1.5 m. Typical layout for safety barriers is given in DPR.

iv. On the approaches of major and minor bridges for a length of at least 25m on both sides even if the embankment height is less than 3m.

2.15.3 **Traffic Blinker Signal with Liquid Electromagnetic Display (LED)**

The road traffic signals, its configuration, size, location and other requirements shall be as per IRC: 93 - 1985 and IS: 7537 - 1974.

Blinker Signal shall be provided at all intersections with SH/MDR/ODR category roads in rural areas with non-conventional energy sources like solar energy. The general Specifications mentioned in DPR shall be followed for this purpose.

2.15.4 Road Studs

2.15.4.1 Nineteen degree (19°) tilted one-way reflective road studs with anchor and with 1x43 glass elements etc. complete shall be provided at 1 m c/c on pedestrian crossing with red reflective panel as per EN 1463 and BS873 part IV (1987). Road studs shall also be provided at 9 m c/c on edge lanes, lane lines for a length of at least 130 m on the approaching side of the intersection with white reflective panels as per BS873 part IV (1987) replaced partly with BS EN 1463-1: 1998.

2.16 **Highway Signs**

2.16.1 The design and location of route marker signs for National Highway shall be as per the IRC: 2-1968. The design and placement of highway kilometre stones, the dimensions of stones, size, color, arrangement of letters shall be as per IRC: 26-1967 and IRC: 8-1980. The design, location and materials to be used for Road delineators shall be as per IRC: 79-1981. The color, configuration, size and location of size of traffic signs shall be as per IRC: 67-2001.

2.16.2 For the road signs the standards set in IRC: 67-2001, Code of Practice for Road Signs shall be followed. As regards, the overhead signs the standards prescribed by MORT&H shall be followed. Where these are silent, standards prescribed in BIS/British Standards/AASHTO/ASTM or any other international standard in that order shall be adopted in consultation with the Independent Consultant / NHAI.

2.16.3 All the cautionary/mandatory signs shall be provided on shoulder and median for each direction of traffic for clear visibility during overtaking operations.

2.17.3 On kerbed road sections the edges of the road signs shall be at least 60 cm away from the edge of the kerb, where as on un-kerbed road sections the edge of the signs shall be at a distance of 2 m from the edge of the carriageway.

0168

2.17 Pavement Markings

2.17.1 Pavement markings shall be designed and provided in accordance with IRC: 35-1997 "Code of Practice for Road Markings" in consultation with the Independent Consultant.

2.17.2 Centre line, Edge line (outer), Edge line (inner) and pedestrian crossing shall follow the guidelines mentioned in BS EN 1436 - 1998.

2.18 Pickup Bus Stops & Bus Bays

2.18.1 The layout, design and location of the pickup bus stops shall be as mentioned in Schedule C and shall follow the Specifications of IRC: 80 - 1981. The sizes of the bus shelters shall be 0.6 m^2 per person during peak load depending on the frequency of buses to be handled by each stop. Bus stops shall be provided on both sides of the road for either direction of traffic. The plinth height of the bus stop shall be 0.3 m from the bus bay level and shall be 2 risers high. The minimum ceiling height of the structure shall be 2.1 m. The height of seating shall be 0.4 m from floor level while the back of the seat shall be 0.35 m high. Seating space per person shall be 0.45m X 0.45m, while minimum leg and circulation space for each seat shall be 0.6 m. Each bus stop shall have at least one litter bin. The pedestrian guard rails shall be provided as described earlier in this Schedule.

2.18.2 No raised medians shall be constructed at bus bay locations. Chevron marking and bollard system shall be provided at the median portion between main carriageway and bus bay for delineation of bus bay from main carriage way.

2.19 Truck Parking Facility

2.19.1 The parking length at bays for each vehicle shall not be less than 15 m and parking width for each vehicle shall be 2.75 m. The length of the lay-bye shall be as per parking requirement subject to a minimum of 100 m and the minimum width of the raised separator between the lay-bye and the carriageway shall be 3m in rural sections. The parking spaces shall be parallel to the road. Parking lots shall be adequately illuminated and nighttime illumination shall not be less than 10 lux.

2.20 Landscaping

2.20.1 Trees shall be planted in rows and on either side of the road with staggered pitch as per the IRC: SP: 21-1979. A range of 10-15 m c/c is recommended for spacing of trees (parallel to the road). Setback distance of trees needed in different situations shall be as per the IRC: SP: 21-1979 and the IRC: 66-1976. The distance between the kerb, if any, and the nearest edge of tree trunk shall be at least 2 m. Shrubs in medians shall not normally exceed 1-1.5 m in height and shall be as per IRC: SP: 21-1979.

2.20.2 Relevant provisions of NHAI policy guidelines and respective State Government current requirements and guidelines shall be followed for landscaping.

2.20.3 The Environment and Social Impact Assessment Report, (Clause 8 Schedule C) attached shall be followed in respect of plantation.

0164

For safe traffic operation vertical clearance between the crown of the carriageway and lowest part of the overhang of the tree available across the roadway shall conform to the standards set down in IRC: SP: 21-1979. The pit size, fencing, watering and maturing requirements shall also conform to the above standard. Planting shall be such that it does not obstruct the visibility of traffic from any side and shall be pleasing in appearance.

2.21 Utility Ducts

Two (2) Numbers of Utility ducts shall be provided at an interval of 500m in urban sections and 2000m in rural sections for cross connection. These ducts shall be made of NP4 pipes of minimum 300mm diameter and shall be provided below the ground level. The above mentioned size of the pipe is bare minimum. It shall be increased if necessary in consultation with respective service departments and Independent Consultant. Location and level of the cross utility ducts shall be finalized in consultation with the Independent Consultant and NHAI

3. SPECIFICATIONS

3.1 'Specifications' herein under mean the Specifications relating to the quality and other requirements for the Project Highway as set forth in this Schedule and any modifications there-of, or additions there-to as included in the Specifications of DPR for the Project Highway.

3.2 All Specifications (Additional & Modified) for materials used shall be consistent with DPR Specifications and other publications referred to therein.

3.3 The materials to be used in the work of the Project Highway (including facilities thereon) shall conform to DPR and MORT&H Specifications. However, where the said Specifications are silent in regard to Specification for the material in question in that case. Specifications under Bureau of Indian Standard/British Standards/AASHTO/ASTM shall apply in that order. But even where these standards are silent, the Concessionaire shall get the Specifications for the material in question approved by the Independent Consultant prior to its use in the work.

3.4 Fly ash shall be utilised in the road construction if it is available in adequate quantity within a radius of 100 Km from the Project corridor as per Ministry of Environment and Forest regulations.

3.5 In addition to road and bridge works, there will be other works, described herein under, on the Project Highway. Wherever the tailor made Specifications are not available for these works, specific approval of the Independent Consultant shall be obtained by the Concessionaire in respect to that particular item of work.

3.5.1 HIGHWAY LANDSCAPING

3.5.1.1 Planting of trees along the Project Highway shall follow a variety of schemes depending upon location requirement as per the IRC: SP: 21-1979. The choice of trees to be planted shall also be made as per IRC: SP: 21-1979: "Manual on Landscaping". Eucalyptus (all species) is not

0165

recommended for planting. Local, indigenous species that grow in high salinity microclimate shall be planted.

3.5.1.2 On medians and as under-crop, planting of dust and gaseous substance-absorbing shrubs such as nerium oleander album is recommended. To ensure survival from herbivorous animals, shrubs/plants containing latex shall only be planted.

3.5.1.3 Preparation of schemes for Project Highway development, restriction on building lines, control lines, control of access, prevention unauthorised occupation of land and removal of encroachment shall be as per IRC: SP : 15-1996.

3.5.1.4 The treatment of the highway embankment slopes shall be as per the recommendations of IRC: 56-1974, depending upon the soil types involved. Pitching works on the slopes shall be as per the MORT&H Specifications.

3.5.1.5 Construction of CC (M-20) footpaths for pedestrians shall be as per MORT&H Specifications.

3.5.1.6 No advertisement shall be allowed to be erected within the RoW.

3.5.1.7 It shall be ensured that any sign, signal or any other device erected for traffic control, traffic guidance and/or traffic information shall not obscure any other traffic sign.

3.5.2 BUILDINGS

3.5.2.1 All building works shall be designed to meet the functional requirements and shall be compatible with the regional architecture and microclimate. Locally available materials shall be given preference but not at the cost of construction quality. All brick and stone masonry works shall be of first class type and as per good practice. All steel works shall conform to section 6, Part VI of the NBC and section 1900 and 2000 of MORT&H Specifications.

3.5.2.2 Whenever any specific provision for any building works is given in the MORT&H Specifications, IRC standards and codes, those shall apply. All building works shall conform to Central Public Works Department (CPWD) Specifications for class 1 building works or standards given in the National Building Code (NBC) as amended and/or modified from time to time. For the purpose of this clause, building works shall be deemed to include road furniture, landscape elements and /or any other works incidental to the building works.

3.5.2.3 All the open spaces around the building(s) shall be landscaped. Boundary walls, fencing, controlled entry points and cattle-catches at all entry and exit points to the buildings shall be provided to protect them from intruders and animals.

0166

3.5.2.4 The design of water distribution and storage systems, laying of mains and pipes, cleaning and disinfecting of the water supply system shall be as per relevant clauses of section 1, Part IX of the NBC.

3.5.2.5 The design, layout and construction of drains for sewage disposal system with all ancillary works such as connections, manholes and inspection chambers and septic tanks shall be as per relevant clauses of Section 2, Part IX of the NBC. Each septic tank, if provided, shall have a soak pit of adequate size. The location of the septic tanks and subsurface absorption system shall be as per clause 12.15.1 of part I of NBC.

3.5.2.6 The design and location of all electrical installations, distribution system, wiring, fittings, accessories and lightning protection of buildings shall be as per relevant clauses of Section 2, Part VI of the NBC.

3.5.3 HIGHWAY LIGHTING SYSTEM

3.5.3.1 The following codes shall be followed while designing the lighting system on the Project Highway for different locations such as urban areas, junctions, bridges, junction of slip roads with elevated roads, pedestrian crossing, toll plazas, base camps etc.

i) IS: 1944 (Parts 1 and 11) - 1970
ii) IS: 1944 (Part V) - 1981; and
iii) IS: 1944 (Part VI - 1981)

The layout of the lighting system together with type of luminaries and level of illumination for different locations shall be determined in consultation with the Independent Consultant.

3.5.3.2 Overhead electric power and telecommunication lines erected within the Right of Way (ROW) by the Concessionaire shall be provided with adequate clearance so that safe use of road is not affected. Vertical and horizontal clearances shall conform to the IRC:32-1969.

3.5.4 HIGHWAY TRAFFIC MANAGEMENT SYSTEM

3.5.4.1 The system and the equipment shall meet the following main climatic and environmental requirements as specified in IS 9000.

i) Temperature Range of Operation - Low of 0°C (± 3° centigrade) to high of 60°C (± 2° centigrade)
ii) Relative Humidity of 95%
iii) Vibration - Frequency Range of 10 Hz - 55 Hz.

3.5.4.2 The Emergency Communication System shall comprise Emergency Call Boxes with loud speaker, micro phone, activation button with LED indicating conversation and housed in a vandal proof fibre glass casing. They shall operate in full duplex mode in a noise level of up to 95 DB and would have in built diagnostic feature for detection in case of damage by any object. They shall be placed at an interval of 2 Km (± 100 meters) on left side of the carriagway for each direction of Traffic. They

0167

shall be connected to the transmission system through the integrator by means of copper cable. The System shall have a product support guarentee of 10 years from the manufacturers.

3.5.4.3 The mobile communication system shall comprise of mobile radio base station and control centre equipment. Mobile radio shall have provision for mounting mobile set on ambulances, cranes and patrolling vehicles. The system shall neither affect functioning of other telecom equipment nor get affected by the presence of other equipment. The system shall have the facility to connect mobile to mobile, mobile to controller and controller to mobile along with the system for waiting, holding and transfer of calls. The system shall use single frequency to be allotted by NHAI with the approval of Wireless planning and co-ordination, Department of Telecom. The equipment shall operate in semi duplex mode at 12V ±10% DC.

3.5.4.4 The design for Variable Message Signs (VMS) will be modular with sign panels using LEDs / High Gain Trans Reflective LCDs, for outdoor ambient lights. The sign panel should be such that a display is legible from a distance of about 200 m. For this purpose, panel shall have minimum dimensions of 3m length x 1.8 m height x 0.2 m depth. The minimum height of the characters shall be 300 mm. The contrast ratio shall be more than 30: perpendicular to the bold face and more than 10 at an angle of ± 70 minutes to perpendicular. The equipment shall be capable of storing minimum 10 frames than can be triggered on receiving the tele command. The sign panel shall be installed on structures, which are aesthetically pleasing and can withstand wind pressure. The equipment shall be capable of storing minimum semi duplex mode and other known forces. The minimum vertical clearance available at VMSs shall be 5.5 m from the road surface. Power supply shall be fed from the integrator locations.

3.5.4.5 The meteorological sensors shall comprise thermocouple / pyranometer, humidity meter, anemometer meter, visibility meter and sensor for measuring pavement surface temperature. They shall be installed on a single pole with a specific attachment and power supply fed from integrator. They shall have the facility to communicate on PIJF/Optical Fibre Cable.

3.5.4.6 The Automatic Traffic Counter-cum-Classifier shall be capable of detecting and recording all types of vehicles plying on the Project Highway, based on their length and number of axles. It shall be capable of taking input from portable sensors. The system shall be robust and capable of operating with minimum maintenance.

The temperature range of pavement in which the sensor shall work are -40° Centigrade to +80° Centigrade. The recording and display unit shall work accurately between -20° centigrade to +60° Centigrade. The sensor shall be combination of piezo electric sensor and inductive loops enabling counting / classification of up to four/six-lane traffic with user set time periods. The logic units shall be micro processors based. Vehicle counting / classification interval shall be programmable from one minute to 1440 minutes (24 hours). The system should be able to record and store vehicle data for a period of at least two weeks with Daily Traffic Volume upto 30,000 vehicles. The system shall have compatibility to transfer the data on PIJF/ Optical Fibre cable.

3.5.4.7 The control centre shall be designed for round the clock operations of monitoring, on line information acquisition and processing the same for decision taking. The control centre shall have equipment of central computer, call centre, terminal junction box, uninterrupted power supply (UPS), console operator with monitors and joy sticks, rack accommodation, large display board, line printer and general purpose office computer with monitor, printer, fax and telephone. The system shall also have Network Management System (NMS) for real time monitoring of ECBs and network diagnostic.

3.5.5 TOLL PLAZA

3.5.5.1 Toll Plaza Complex

Tollbooth shall be visually pleasing structurally sound and capable of withstanding extreme weather conditions of the region. It shall have clear visibility of approaching vehicles and shall be strong enough to withstand all forces as per relevant clauses of Section 1, Part VI of NBC. The buildings of the Toll Plaza complex shall conform to clause 3.5.2 of this Schedule.

3.5.5.2 The Toll Plaza complex including its canopy shall have 6 m clear height. Toll gates shall be provided with check barriers, which can be electrically operated from the Tollbooths. High mast lighting shall be provided. Power supply will be from the public power supply system but standby diesel generating sets of adequate capacity shall be provided as mentioned in DPR.

3.5.5.3 The Toll Plaza Complex shall have surface and sub surface drainage system.

3.5.5.4 Fire fighting equipment including smoke detectors and audio visual alarm system shall be planned and installed as per section 4.17.1 of NBC.

3.5.5.5 The pavement of the service lanes shall be of rigid type for at least a length of 27.5m on either side of centre of Toll plaza and shall be designed as stipulated under pavement design.

3.5.5.6 The toll collection system shall be at least semi automatic type and it shall be equipped with a vehicle detector on entry lane which counts the number of vehicles and their axle numbers, a ticket-issuing machine which issues a toll ticket at the press of a button on the touch panel and an entry lane controller which controls these equipments of the entry lane and sends the data to the data processing equipment of the Toll Plaza Office. The electronic toll collection system shall be provided on one toll lane in each direction within a period of 5 years from the date of commissioning the commercial traffic and it shall consist of a tag fitted on vehicle which transmits radio waves to antenna for its identification code and other stored data, an antenna fitted on canopy which relays the received signal from tag to reader and a reader which transmits all information to the customer's information management system. The Electronic Toll Collecting (ETC) system shall also be compatible with the technology to be adopted by NHAI for all the Toll Plazas throughout the country.

0069

3.5.5.7 Toll plaza shall be provided with Low speed weigh-in-motion (WIM) system, which should be capable of determining the axle weights either statically or dynamically up to a speed of 5 KMPH. WIM system should consist of a weigh beam permanently installed into a concrete lane. WIM should also have piezo electric axle detection sensors for accurate automatic vehicle classification and should be provided in all truck lanes & over sized vehicle lanes at toll plaza for both directions of traffic. The WIM system should have traffic signal control, configurable alarm outputs and user-friendly operator control unit.

3.5.5.8 The weigh beam used in the WIM shall have following Specifications:

- Accuracy:
  - Weigh-in-motion — Typically < 1% error
  - Static — Typically < 1% error
  - Block Weight — 10Kg (Up to 5 KMPH)
- Capacity
  - Structural Strength — 70 tonnes
  - Weighing Capacity — 30 Tonnes
- Load Cell
  - Weighing Capacity of 10 Tonnes, rated for 50% overload and should be 100% water and dust proof
- Standards
  - Should conform to the standards of OIML R 60 class III (US standards)

3.5.5.9 The WIM system shall have compatible software and be connected to a PC for data management and storage. It should be capable of weighing in both modes of operation. The system should be capable of printing and multi language display for local use. There should be facilities for data back-up, and archive functions to facilitate saving monthly operations.

3.5.6 TRAFFIC SAFETY MEASURES

3.5.6.1 Highway Patrolling

3.5.6.1.1 The location and number of patrol control room centers shall be finalised with Independent Consultant. Highway patrolling establishment should have three shifts of 8 hours each. It would consist of at least 3 persons including driver.

3.5.6.1.2 Control Centers (Main & Sub) for HTMS would have a crane mounted on truck, Diesel Jeep or Station Wagon, ambulance, Motorcycle and other equipments as per requirement. All the vehicles shall conform to the Motor Vehicles Act 1988. The ambulance unit shall have 1 (one) nurse, 1 (one) compounder, 1 (one) photographer and 1 (one) driver.

3.5.6.2 **Pedestrian Guard Rails and Safety Barriers**

3.5.5.2.1 The Pedestrian Guard Rails along the Highway shall be constructed as per DPR.

0170

3.5.6.2.2 The Safety Barrier shall conform to MORT&H Specifications Clause 810 and shall be constructed as mentioned in DPR. In case not mentioned in DPR it shall be W-beam metal crash barrier.

3.5.7 TRAFFIC CONTROL

3.5.7.1 Traffic Signals

3.5.7.1.1 There shall be no traffic signals on National highway except at the locations of major intersections mentioned in Schedule B, where pedestrian Zebra crossing facilities are to be provided in urban areas. Where provided as pedestrian facility and on the side road crossing/meeting the Project Highway, it will be governed by clause 3.5.7.1.2 herein under.

3.5.7.1.2 The signal foundation shall be constructed as per clause 13 of IRC: 93 - 1985. Constructional requirements shall conform to IS: 7537- 1974, unless otherwise stated in IRC: 93-1985. Posts shall be painted and protected as per clause 3.7 of IS: 7537-1974. Traffic signals shall have a complete electronic mechanism with an auxiliary manual controller.

3.5.7.2 Highway Signs

3.5.7.2.1 The road signs erected on the Project Highway shall conform to IRC 67-2001, Code of Practice for Road signs. Road signs such as Chevron, overhead etc. not covered by IRC 67-2001 will be as per BIS/British Standard/AASHTO/ASTM in that order after approval by the Independent Consultant.

3.5.7.2.2 All road signs shall be with retro-reflective sheeting of high intensity grade with encapsulated lens fixed over aluminium substrata as per Clause 801 of MORT&H Specifications. Hi-intensity grade (micro prismatic type) retro reflective sheeting may also be used for road signage.

3.5.7.2.3 The overhead signs shall be placed on a structurally sound gantry or cantilever structure made of circular pipes or steel sections approved by the Independent Consultant. The said sign shall be with high intensity retro reflective sheeting. The height, lateral clearance and installation shall be as per the MORT&H Specifications.

3.5.7.3 Pavement Markings

3.5.7.3.1 Pavement markings shall be as per IRC: 35-1997. These markings shall be applied to road centre lines, edge line, continuity line, stop lines, give way lines, diagonal/chevron markings, zebra crossing and at parking areas by means of an approved self-propelled machine which has a satisfactory cut-off value capable of applying broken lines automatically.

3.5.7.3.2 Road markings shall be of hot applied thermoplastic paints with glass reflectorising beads as per relevant clauses of Section 803 of MORT&H Specifications.

DS Toll Road Limited

0171

3.5.7.3.3 Titanium of rutile grade, minimum 40% glass beads, bead size of 1-1.5 mm, glass beads with minimum 95% true spheres with minimum reflectivity of 100 mcd/lx/sqm for a period of 12 months and minimum wet reflectivity after rain of 25 mcd/lx/sqm on centre line and pedestrian crossing shall be used. It should also have at least a life warranty of 24 months.

3.5.7.3.4 Instruments such as reflectometers shall be available in mobile battery operated units to check the reflectivity in the site.

3.5.8 PROJECT VEHICLES AND EQUIPMENT FOR OPERATION

3.5.8.1 All the vehicles used for activities pertaining to the highway operation shall conform to the Motor Vehicles Act 1988.

3.5.8.2 All the gadgets, equipment or any systems used for operation and maintenance of the highway shall be of standard make and shall conform to international standards

3.5.9 ROAD FURNITURE AND FACILITIES ON ROADSIDE

3.5.9.1 Road furniture on the Project Highway provided as per IRC Codes shall meet requirements of MORT&H Specifications. Where any item is not covered by it, then its specification shall conform to BIS/British standard/AASHTO/ASTM in that order after approval by the Independent Consultant.

3.5.9.2 Noise barriers and other measures as suggested in EMP for the Project in DPR shall be strictly adhered to.

3.5.9.3 Low height easily mountable kerb shall be placed at locations of pedestrian crossings and other facilities to accommodate physically handicapped people. These locations should be designed suitably to avoid usage of vehicular traffic, particularly two-wheelers. Design of such facilities shall be finalised in consultation with Independent Consultant.

3.5.9.2 Roadside facilities such as Litter bins, Pubic Toilets and Drinking Water Kiosks where provided shall follow the Specifications spelt out hereinunder.

3.5.9.3 **Litter Bins:** The litter-bin shall be simple in shape and its colour and finish shall be conspicuous. Litter-bin shall be post mounted and/or swivel type. The mounting and fixing components shall be robust. The bin shall have drainage holes for periodic flushing. It shall also be theft, vandal and fire proof. It shall be resistant to wear and tear and the material and design shall be such as to require minimal maintenance.

3.5.9.4 **Public Toilets:** The public toilet shall be simple in design and the area around the toilet block shall be paved with cement concrete tiles or any other suitable material, and have cross slope so as

to ensure speedy disposal of water. The structure shall conform to relevant sections of clause 3.5.2 of this Schedule.

3.5.9.5 **Drinking Water Kiosk:** The design of the water kiosk shall be such as to require minimal maintenance. Area around the kiosk shall be paved with cement concrete tiles or any other suitable material, and have cross slope so as to ensure speedy disposal of water. The water supplied shall conform to IS: 10500:1991 for quality and purity of potable water.

3.5.10 PICKUP BUS STOPS

3.5.10.1 The bus stop layout shall provide safe entry and exit of buses from Project Highway and movement of passengers. The shelter structure shall be structurally safe and functional so as to protect the waiting passengers adequately from sun, rain and wind. The seating and plinth of the structure shall be of coursed stone masonry. The bus bay area shall be provided with an effective drainage system.

3.5.10.2 The bus bays shall be paved with flexible pavement as that of new carriageway.

3.5.11 TRUCK PARKING FACILITIES

3.5.11.1 The layout of the truck lay-byes and facilities thereon shall be as mentioned in Schedule C to cater to the estimated parking demand and shall be got approved by the Independent Consultant. Parking shall be parallel to the road and the lay-bye shall be setback from the edge of the carriageway. The lay-byes shall be landscaped with low-density plantation to provide shade.

3.5.11.2 The parking spaces shall have flexible pavement as that of main carriageway. Parking bays/lots shall have proper cross slope and drainage. They shall be marked with paint as per IRC: 35-1997 to demarcate parking and circulation spaces. Lighting shall be provided as per IS: 1944 (Part 1 and 11) - 1970.

3.5.11.3 The parking lay-bye shall have drinking water kiosk, independent of other existing facilities and of required capacity. The kiosk shall be well sheltered from the sun and rain and area around it shall be suitably and adequately paved with proper drainage to ensure disposal of spilt water.

3.5.11.4 The parking lay-bye shall have toilet facility to suit the requirement. It shall have covered soak pits and shall be away from the drinking water facility.

4. **Safety During Project Execution, Operation and Maintenance**

4.1 The Concessionaire shall ensure complete safety of construction staff during the construction work of the Project Highway. It shall also ensure minimum interference to the flow of traffic during widening of the existing 2-lane pavement. The additional lanes shall be constructed first and the traffic diverted to it before improvements to the existing road are taken up. Detailed plan for traffic management shall be worked out in consultation with the Independent Consultants prior to

implementation. During construction, the Concessionaire shall take all necessary measures for the safety of traffic by providing and maintaining barricades, traffic signs and illumination during night.

1.2 The Concessionaire shall also ensure complete safety of the Road Users during the construction work of various nature spelt out in Schedule L

1.3 Guidelines for safety measures during construction, operation and maintenance as given in Schedule S, shall be followed.

1.4 A situation arising at site not covered in Schedule L shall be carefully studied for solution, in consultation with Independent Consultant.

0174

Annexure-1

LIST OF IRC CODES FOR THE DESIGN OF BRIDGE STRUCTURES AND CULVERTS

IRC:5-1998	Standard Specifications & Code of Practice for Road Bridges. Section 1 - General Features of Design (Seventh Revision)
IRC:6-2000	Standard Specifications & Code of Practice for Road Bridges. Section 11 - Loads and Stresses (Fourth Revision)
IRC:7-1971	Recommended Practice for Numbering Bridges and Culverts (First Revision)
IRC:18-2000	Design Criteria for Pre-stressed Concrete Road Bridges (Post-Tensioned Concrete) (Third Revision)
IRC:21-2000	Standard Specifications and Code of Practice for Road Bridges. Section III Cement Concrete (Plain and Reinforced) (Third Revision)
IRC:22-1986	Standard Specifications and Code of Practice for Road Bridges. Section VI Composite Construction (First Revision)
IRC:24-2001	Standard Specifications and Code of Practice for Road Bridges. Section V Steel Road Bridges. (Second Revisison)
IRC:45-1972	Recommendations for Estimating the Resistance of Soil Below the Maximum Scour Level in the Design of Well Foundations of Bridges.
IRC:54-1974	Lateral and Vertical Clearances at Underpasses for Vehicular Traffic.
IRC:73-1980	Geometric Design Standards for Rural (Non-Urban) Highways
IRC:78-2000	Standard Specifications and Code of Practice for Road Bridges. Section VII Foundations & Substructure (Second Revision)
IRC:83-1999	Standard Specifications and Code of Practice for Road Bridges. Section IX Bearings, Part 1 : Metallic Bearings (First Revision)
IRC:83-1987	Standard Specifications and Code of Practice for Road Bridges, (Part-II) Section IX-Bearings, Part II: Elastomeric Bearings
IRC:89-1997	Guidelines for Design & Construction of River Training & Control Works for Road Bridges.(First revision)
IRC:SP:13-1973	Guidelines for the Design of Small Bridges and Culverts
IRC:SP:18-1978	Manual for Highway Bridge Maintenance Inspection
IRC:SP:33-1989	Guidelines on Supplemental Measures for Design, Detailing & Durability of Important Bridge Structures.
IRC:SP:35-1990	Guideline for Inspection and Maintenance of Bridges
IRC:SP:40-1993	Guidelines on Techniques for Strengthening and Rehabilitation of Bridges

LIST OF IRC CODES/STANDARDS/ACTS FOR ROAD WORKS

IRC:2-1968	Route Marker signs for National Highways (First Revision)
IRC:8-1980	Type Designs for Highway Kilometer Stone (Second Revision)
IRC:12-1983	Recommended Practice for Location and layout of Roadside Motor Fuel Filling and Motor Fuel Filling-cum Service Stations (Second Revision)
IRC:15-2002	Standard Specification and Code of Practice for Construction of Concrete Roads (Third Revision)

0175

IRC: 16-1989	Specification for Printing of Base Course with Bituminous Primers (First Revision)
IRC: 21-2000	Standard Specifications and Code of Practice for Road, Bridges, Section III-Cement Concrete (plain and Reinforced) (Third Division)
IRC: 25-1967	Type Designs for Boundary Stones
IRC: 26-1967	Type design for 200-meter stones
IRC: 30-1968	Standard Letters and Numbers of Different Heights for Use on Highway signs
IRC: 32-1969	Standards for Vertical and Horizontal Clearances of Overhead Electric Power and Telecommunication Lines as Related to Roads
IRC: 35-1997	Code of Practice for Road Markings
IRC: 36-1970	Recommended Practice for the Construction of Earth Embankment for Road Works
IRC: 37-2001	Guidelines for the Design of Flexible Pavement (Second Revision)
IRC: 38-1988	Guidelines for Design of Horizontal Curves for Highways and Design Tables (First Revision)
IRC: 56-1974	Recommended Practice for Treatment of Embankment Slopes for Erosion Control
IRC: 58-2002	Guidelines for the Design of Plain Jointed Rigid Pavements for Highways.
IRC: 62-1976	Guidelines for Control of Access on Highways
IRC: 64-1990	Guidelines for Capacity of Roads in Rural Areas (First Revision)
IRC: 66-1976	Recommended Practice for Sight Distance on Rural Highways
IRC: 67-2001	Code of Practice for Road Signs (First Revision)
IRC: 69-1977	Space Standards for Road in Urban Areas
IRC: 73-1980	Geometric Design Standards for Rural (Non Urban) Highways
IRC: 75-1979	Guidelines for the Design of High Embankments
IRC: 79-1981	Recommended practice for Road Delineators
IRC: 80-1981	Type Designs for Pick-up Bus Stops on Rural (i.e. Non-Urban) Highways
IRC: 81-1981	Tentative Guidelines for Strengthening of Flexible Road Pavements Using Benkelman Beam Deflection Techniques
IRC: 84-1983	Code of Practice for curing of Cement Concrete Pavements
IRC: 86-1983	Geometric Design Standards for Urban Roads in Plains
IRC: 92-1985	Guidelines for the Design of Interchanges in Urban Areas
IRC: 93-1985	Guidelines on Design and Installation of Road Traffic Signals
IRC: 98-1997	Guidelines on Accommodation of Under Ground Utility Services Along and Across Roads in urban Areas (First Revision)
IRC: 103-1988	Guidelines for Pedestrian Facilities
IRC: 106-1990	Guidelines for Capacity of Urban Roads in Plain Areas
IRC: 108-1996	Guidelines for Traffic Prediction on Rural Highways
IRC:SP: 11-1988	Hand Book of Quality Control for Construction of Roads and Runways (Second Revision)
IRC:SP:15-1996	Ribbon Development along Highways and its Prevention

0176

SP:21-1979	Manual on Landscaping of Roads
SP:23-1983	Vertical curves for Highways
SP:31-1992	New Traffic signs
SP:41-1994	Guidelines on Design of At-Grade Intersections in Rural and Urban areas
SP:42-1994	Guidelines on Road Drainage
SP:44-1994	Highway Safety Code
SP:50-999	Guidelines on Urban Drainage
SP:53-2002	Guidelines on the use of Polymer and Rubber Modified Bitumen in Road Construction
SP:58-2001	Guidelines for the use of Fly Ash in Road Embankment
SP:59-2002	Guidelines for the use of Geotextiles in Road Embankments and Associated Works.
SP:63-2004	Guidelines for the use of Interlocking Concrete Block Pavement.

Ministry of Road Transport and Highway Publications

MORT&H, Manual for maintenance of roads, 1983

MORT&H, Specifications for Road and Bridge Works, 2001 (Fourth Revision)

MORT&H, Addendum to Technical Circulars and Directives on National Highways and Centrally Sponsored Road and Bridge Works Projects (Jan 1995 to Dec 1997)

MORT&H, Type Designs for Intersections on National Highways, 1992

MORT&H, Addendum to Ministry's Technical Circulars and Directives on National Highways and Centrally Sponsored Road and Bridge Projects (August 1988 to December 1992), 1993

MORT&H, Addendum to Ministry's Technical Circulars and Directives on National Highways and Centrally Sponsored Road and Bridge Projects (Jan. 1993 to Dec. 1994) 1996

IS Publications

IS:7537-1974	Road traffic signals
IS:10500-1991	Drinking Water
IS: 1944(Parts I&II) 1970	Code of Practice for lighting of Public Thoroughfare: Parts land 2 for main and secondary roads (Group A and B) (first revision) (Amendments No. 1 and 2) Parts 1 and 2 in one volume) (Amendments 2)
IS:1944 (Parts V) 1981	Code of Practice for Lighting of Public Thoroughfares: Parts 5 Lighting for Grade separated junctions, Bridges and Elevated roads (Group D)
IS: 1944 (Parts VI) 1981	Code of Practice for lighting of Public Thoroughfare: Part 6 Lighting for Towns and city centres and areas civic importance (Group E)
IS: 10748-1995	Hot rolled steel for welded tubes and pipes (First Revision)

NBC	**National Building Code**
Part III, NBC:	Development Control rules and general building requirements
Part VI, NBC:	Structural Design
Part VIII, NBC:	Building Services
Part IX, NBC:	Plumbing Services

0177

rt IV, NBC:	Fire Protection
ritish Standards	
BS 873 part IV (1987)	Road traffic signs and internally illuminated bollards. Specification for road studs
BS EN 1463-1: 1998	Road traffic signs and internally illuminated bollards. Specification for road studs
BS EN 1436:1998	Road marking materials. Road marking performance for road users.

0178

Part IV, NBC:	Fire Protection
British Standards	
BS 873 part IV (1987)	Road traffic signs and internally illuminated bollards. Specification for road studs
BS EN 1463-1: 1998	Road traffic signs and internally illuminated bollards. Specification for road studs
BS EN 1436:1998	Road marking materials. Road marking performance for road users.

SCHEDULE E

APPLICABLE PERMITS

(to be obtained before/ on financial closure)

1. **Ministry of Finance / RBI**

   i) Approval for foreign investment and foreign loans, if required
   ii) Approval for import of equipment and machinery for construction and operation, if required
   iii) Exemption of Excise duty on construction material, if required.

2. **Department of Telecommunication**

   i) Permission / clearance for setting up of wireless system, if required
   ii) Clearance / permission for the use of optical fibre cables of DOT, if required

3. **State Government Permits**

   Quarrying Permits:
   - Permits for extraction of boulder from quarry from Additional District Magistrate (ADM) Mines
   - Permit for installation of crusher from village Panchayat and State/Central Pollution Control Board
   - License for explosives from the office of Explosive controller
   - Explosive license for storing diesel

   Electricity:
   - Permission required from State Electricity Board (SEB) for installation of Diesel Generator (DG)
   - Permission for electrical connection, if power source is available

   Water:
   - If water has to be taken from river/ reservoir, permission to be obtained from State Irrigation Department

   Batching Plant:
   - License from inspection of factories
   - NOC consent from pollution department

0179

Asphalt Plant:

- Clearance required from village panchayats & State/Central Pollution Control Board

Borrow Earth:

- Permission from irrigation department if land taken from irrigation land
- Permission required from village panchayat and ADM mines for Government & private land
- Permission from Local Municipalities and Development Authorities.

Cutting of trees and other environment clearances:

- Permission from Forest Department and other applicable agencies.

Sewage Lines and Water Mains:

- Permission from Local Municipalities and Development Authorities.

Reliance Energy
A Dhirubhai Ambani Enterprise

Jayarama Prasad Chalasani
Director (Business Development)

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: (022) 3009 9999, Extn: 9526
Fax: (022) 3009 9775
Email: jayarama.chalasani@rel.co.in
www.rel.co.in

October 29, 2005

Mr. Pranavant
General Manager (NS-II)
National Highways Authority of India
G-5 and G-6, Sector 10, Dwarka
New Delhi – 110 075

Sub: **Award of Concession for Project Reference NS-2/BOT/TN-5 – Issue of Performance Security**

Ref: **Letter of Acceptance issued by NHAI vide Letter No. NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 dated September 30, 2005**

Dear Sir:

With reference to above referred Letter of Acceptance and in conformance with Clause 1.37.1 of Part-I and Data Sheet of the Request for Proposal document, we are pleased to submit the Performance Security of an amount of **Rs. 14,17,60,000** (Rupees Fourteen Crores Seventeen Lakhs Sixty Thousand only), as a Bank Guarantee issued by ICICI Bank, valid upto November 14, 2008, for the project under reference NS-2/BOT/TN-5.

Kindly acknowledge receipt of the Bank Guarantee as above.

Thanking you,

Yours faithfully,

(J P Chalsani)

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

INDIA NON JUDICIAL

Bank Guarantee No. : 00043G00243605
Date of Issue : 29.10.2005
Expiry Date : 14.11.2008
Claim Expiry Date : 14.11.2008

DELHI

A 0296

BANK GUARANTEE FOR PERFORMANCE SECURITY

From:
ICICI Bank Limited, having its Branch Office at:
Free Press House, 215 Nariman Point,
Mumbai-400 021
Tel No.: 22842947 / 22853325

To:
National Highways Authority of India (NHAI)
G-5 and G-6, Sector 10,
Dwarka
New Delhi – 110 075

Reliance Energy Limited ("REL") has agreed in accordance with the Letter of Acceptance (LOA) dated September 30, 2005 issued by NHAI for Design, Construction, Development, Finance, Operation and Maintenance of Km 373.725 (Start of proposed Dindigul bypass) to Km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu under North-South Corridor (NHDP Phase II) on Build, Operate and Transfer (BOT) basis (the "Project")

We understand that REL shall incorporate a Special Purpose Vehicle as a limited liability company (the "Concessionaire") to enter into the Concession Agreement with NHAI for undertaking the design, engineering, financing, procurement, construction, operation and maintenance of the Project. The Concessionaire is required to give ("NHAI") a guarantee by a recognized bank or financial institution based in India in the sum of Rs. 8,50,60,000 (Indian Rupees Eight Crores Fifty Lacs and Sixty Thousand only) as security for compliance with its obligations under the Concession Agreement during the Construction Period.

For ICICI BANK LIMITED

Authorised Signatory
9A, Connaught Place, N. Delhi-1

GAUTAM KAPUR
Asst. Manager K-815

RAGHAV BHATNAGAR
MANAGER B-228

0182

Bank Guarantee No. : 0004BG00243605
Date of Issue : 29.10.2005
Expiry Date : 14.11.2008
Claim Expiry Date : 14.11.2008

At the request of REL, the Guarantor has agreed to give NHAI the abovementioned guarantee on the terms set out herein.

GUARANTEE

We, ICICI Bank Limited having its Branch Office at Free Press House, 215 Nariman Point, Mumbai - 400 021 and its Corporate office at ICICI Bank Towers, Bandra-Kurla Complex, Mumbai - 400 051, Tel. No. 022-26536495 - 6484 (the "Guarantor"), with its registered office at Landmark, Race Course Circle, Vadodara - 390 007 Tel No. 0265 2339923 / 24 /25 /27, unconditionally guarantee to pay NHAI upon first written demand and without any deduction any sum claimed by NHAI up to a maximum of Rs. 8,50,60,000 (Indian Rupees Eight Crores Fifty Lacs and Sixty Thousand only) (the "Guaranteed Sum") subject to the conditions set out below.

The Guarantor unconditionally and irrevocably promises to pay on demand the Guaranteed Sum, without protest or demur whatsoever upon being served a written demand from NHAI, which shall be final and conclusive as against the Guarantor requiring the Guarantor to make the payment to NHAI.

The Guarantor waives any requirement that NHAI demand any debt or payment from the Concessionaire before presenting it with a demand under this Guarantee.

NHAI shall notify the Guarantor of its demand for payment of the Guaranteed Sum without any deduction of whatsoever nature and without reference to any claim or counter claim or set off, in accordance with the Concession Agreement.

Such notification served by NHAI shall be conclusive and binding on the Guarantor.

Upon encashment and appropriation of the whole or any portion of the Guaranteed Sum by NHAI in accordance with the Concession Agreement, the Guarantor shall be obliged to replenish the existing Guarantee or provide fresh guarantee of the Guaranteed Sum and the Concessionaire is deemed to have made the request for such fresh guarantee upon the execution and furnishing of this Guarantee in the first instance.

No underlying dispute as between NHAI and the Concessionaire nor any pending application for interim relief or arbitration proceedings or other legal proceedings shall constitute any ground for prevention, delay or obstruction for making payment to NHAI by the Guarantor and the existence of any disputes or differences or claims in arbitration or otherwise shall not constitute any ground for non-payment on this Guarantee.

This Guarantee is valid and effective from its date. This Guarantee and the Guarantor's obligations under it will terminate on upon issuance of the Completion Certificate by the Independent Consultant for the Project as advised to the Guarantor in writing by NHAI.

The Guarantor agrees that its obligation to pay any demand made by NHAI before the termination of this Guarantee will continue until the amount demanded has been paid in full.

This Guarantee shall be valid and effective up to November 14, 2008 for enabling NHAI to lodge a claim for payment under the Guarantee till the date of expiry of the term of the Guarantee. The Guarantor shall be obligated to make payment upon the Guarantee forthwith on demand, if the claim is lodged within the claim validity period and the

For ICICI BANK LIMITED

Authorised Signatory
9A, Connaught Place, N. Delhi-1

0183

GAUTAM KAPUR
Asst. Manager K-815

RAGHAV BHATNAGAR
MANAGER B-228

Bank Guarantee No. : 0004BG00243605
Date of Issue : 29.10.2005

obligation to pay is subject to normal limitation for payment of claims upon a Guarantee. Time is of essence for payment and in the event of failure to make payment, Guarantor shall be obligated to pay compound interest at 2% above the prime lending rate of the Guarantor institution, compounding quarterly in the event of the Guarantor's failure to make payment upon the Guarantee for any reason whatsoever. Payment of interest as provided is no excuse for delayed payment or non-payment of the Guaranteed Sum.

No change in the constitution of the Concessionaire or of the Guarantor shall be a ground for release of the Guarantee and no variation in the concession agreement made post selection of the bidder or post making of the bid, shall constitute a variation, which would, subject to the terms and conditions of this agreement, discharge the Guarantor. The Guarantor shall notwithstanding such change, be bound to make payment upon the Guarantee on demand.

The Guarantor agrees that no change, addition to or other modifications to the terms of the Concession Agreement or to any documents which have or may be made between NHAI and the Concessionaire will in any way release it from any liability under this Guarantee and that it waives any requirement for notice of any such change, addition or modification.

The Guarantor agrees that it will not assign its obligations under this Guarantee without the prior written consent of NHAI. NHAI will not unreasonably withhold its consent if the proposed assignee is of at least equal financial standing to the Guarantor and the assignee assumes in writing the obligations of the Guarantor under this Guarantee at the same time or before the assignment.

This Guarantee binds the Guarantor, its successors and permitted assigns.

NOTWITHSTANDING ANYTHING CONTAINED HEREINABOVE

Our liability under this bank guarantee shall not exceed Rs. 8,50,60,000 (Indian Rupees Eight Crores Fifty Lacs and Sixty Thousand only)

This bank guarantee shall be valid up to November 14, 2008

We shall be liable to pay any amount under this bank guarantee or part thereof only if you serve upon us a written claim or demand under this guarantee on or before **November 14, 2008** at ICICI Bank Limited having its Branch Office at Free Press House, 215, Nariman Point, Mumbai - 400 021.

SEAL

FOR ICICI BANK LIMITED

SIGNATURE .....

NAME .....

TITLE .....

PLACE NO. .....

DATE 29.10.2005

ICICI Bank Ltd CIBD 9-A Conn Place N. Delhi

For ICICI BANK LIMITED

Authorised Signatory
9A, Connaught Place, N. Delhi-1

GAUTAM KAPUR
Asst. Manager K-815

RAGHAV BHATNAGAR
MANAGER B-22

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

INDIA NON JUDICIAL

A 029660

Guarantee No. : 0004BG00243405
Date of Issue : 29.10.2005
Expiry Date : 14.05.2006
Claim Date : 14.05.2006

BANK GUARANTEE FOR PERFORMANCE SECURITY

[illegible] ICICI Bank Limited having its Branch Office at:
[illegible] House, 215 Nariman Point,
[illegible] 400 021
[illegible] 22842947 / 22853325

[illegible] National Highways Authority of India (NHAI)
[illegible] 3-5, Sector 10,
[illegible]
[illegible] - 110 075

Reliance Energy Limited ("REL") has agreed in accordance with the Letter of Acceptance [illegible] dated September 30, 2005 issued by NHAI for Design, Construction, Development, [illegible], Operation and Maintenance of Km 373.725 (Start of proposed Dindigul bypass) [illegible] Km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu under North-South Corridor (NHDP Phase II) on Build, Operate and Transfer (BOT) basis (the "Project").

We understand that REL shall incorporate a Special Purpose Vehicle as a limited liability company (the "Concessionaire") to enter into the Concession Agreement with NHAI for undertaking the design, engineering, financing, procurement, construction, operation and maintenance of the Project. The Concessionaire is required to give ("NHAI") a guarantee [illegible] a recognized bank or financial institution based in India in the sum of Rs. 5,67,00,000 (Indian Rupees Five Crores Sixty Seven Lacs only) as security for compliance with its obligations under the Concession Agreement during the Construction Period.

For ICICI BANK LIMITED

Authorised Signatory
9A, Connaught Place, N. Delhi-1

GAUTAM KAPUR
Asst. Manager K-815

RAGHAV BHATNAGAR
MANAGER B-228

0185

Bank Guarantee No. : 0004BG00243405
Date of Issue : 29.10.2005
Expiry Date : 14.05.2006
Claim Expiry Date : 14.05.2006

At the request of REL, the Guarantor has agreed to give NHAI the abovementioned guarantee on the terms set out herein.

GUARANTEE

We, ICICI Bank Limited having its Branch Office at Free Press House, 215 Nariman Point, Mumbai - 400 021 and its Corporate office at ICICI Bank Towers, Bandra Kurla Complex, Mumbai - 400 051, 022-26536495 / 6484 (the "Guarantor") with its registered office at Landmark, Race Course Circle, Vadodara - 390 007 Vadodara - 390 007 0265 2339923 / 24 / 25 / 27, unconditionally guarantee to pay NHAI upon first written demand and without any deduction any sum claimed by NHAI up to a maximum of Rs. 5,67,00,000 (Indian Rupees Five Crores Sixty Seven Lacs only) (the "Guaranteed Sum") subject to the conditions set out below.

The Guarantor unconditionally and irrevocably promises to pay on demand the Guaranteed Sum, without protest or demur whatsoever upon being served a written demand from NHAI, which shall be final and conclusive as against the Guarantor requiring the Guarantor to make the payment to NHAI.

The Guarantor waives any requirement that NHAI demand any debt or payment from the Concessionaire before presenting it with a demand under this Guarantee.

NHAI shall notify the Guarantor of its demand for payment of the Guaranteed Sum without any deduction of whatsoever nature and without reference to any claim or counter claim or set off, in accordance with the Concession Agreement.

Such notification served by NHAI, shall be conclusive and binding on the Guarantor.

Upon encashment and appropriation of the whole or any portion of the Guaranteed Sum by NHAI in accordance with the Concession Agreement, the Guarantor shall be obliged to replenish the existing Guarantee or provide fresh guarantee of the Guaranteed Sum and the Concessionaire is deemed to have made the request for such fresh guarantee upon the execution and furnishing of this Guarantee in the first instance.

No underlying dispute as between NHAI and the Concessionaire nor any pending application for interim relief or arbitration proceedings or other legal proceedings shall constitute any ground for prevention, delay or obstruction for making payment to NHAI by the Guarantor and the existence of any disputes or differences or claims in arbitration or otherwise shall not constitute any ground for non-payment on this Guarantee.

This Guarantee is valid and effective from its date. This Guarantee and the Guarantor's obligations under it will terminate on upon issuance of the Completion Certificate by the Independent Consultant for the Project as advised to the Guarantor in writing by NHAI.

The Guarantor agrees that its obligation to pay any demand made by NHAI before the termination of this Guarantee will continue until the amount demanded has been paid in full.

This Guarantee shall be valid and effective up to May 14, 2006 for enabling NHAI to lodge a claim for payment under the Guarantee till the date of expiry of the term of the Guarantee. The Guarantor shall be obligated to make payment upon the Guarantee

For ICICI BANK LIMITED

Authorised Signatory
9A, Connaught Place, N. Delhi-1

GAUTAM KAPUR
Asst. Manager K-815

RAGHAV BHATNAGAR
MANAGER B-228

Bank Guarantee No. : 00048G00243405
Date of Issue : 29.10.2005

forthwith on demand, if the claim is lodged within the claim validity period and the obligation to pay is subject to normal limitation for payment of claims upon a Guarantee. Time is of essence for payment and in the event of failure to make payment, Guarantor shall be obligated to pay compound interest at 2% above the prime lending rate of the Guarantor institution, compounding quarterly in the event of the Guarantor's failure to make payment upon the Guarantee for any reason whatsoever. Payment of interest as provided is no excuse for delayed payment or non-payment of the Guaranteed Sum.

No change in the constitution of the Concessionaire or of the Guarantor shall be a ground for release of the Guarantee and no variation in the concession agreement made post selection of the bidder, or post making of the bid, shall constitute a variation, which would, subject to the terms and conditions of this agreement, discharge the Guarantor. The Guarantor shall notwithstanding such change, be bound to make payment upon the Guarantee on demand.

The Guarantor agrees that no change, addition to or other modifications to the terms of the Concession Agreement or to any documents which have or may be made between NHAI and the Concessionaire will in any way release it from any liability under this Guarantee and that it waives any requirement for notice of any such change, addition or modification.

The Guarantor agrees that it will not assign its obligations under this Guarantee without the prior written consent of NHAI. NHAI will not unreasonably withhold its consent if the proposed assignee is of at least equal financial standing to the Guarantor and the assignee assumes in writing the obligations of the Guarantor under this Guarantee at the same time or before the assignment.

(i) This Guarantee binds the Guarantor, its successors and permitted assigns.

NOTWITHSTANDING ANYTHING CONTAINED HEREINABOVE:

Our liability under this bank guarantee shall not exceed Rs. 5,67,00,000 (Indian Rupees five crores sixty seven lacs only)

This bank guarantee shall be valid up to May 14, 2006

We shall be liable to pay any amount under this bank guarantee or part thereof only if you serve upon us a written claim or demand under this guarantee on or before May 14, 2006 at ICICI Bank Limited having its Branch Office at Free Press House, 215, Nariman Point, Mumbai - 400 021.

ICICI Bank Ltd. CIBD 9-A Conn. Place, N. Delhi

For ICICI BANK LIMITED

Authorised Signatory
9A, Connaught Place, N. Delhi-1

GAUTAM KAPUR
Asst. Manager K-815

RAGHAV BHATNAGAR
MANAGER B-228

BANK LIMITED
SIGNATURE .....
NAME .....
TITLE .....
DESIGNATION .....
DATE 29.10.2005

0187

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(पोत परिवहन, सड़क परिवहन और राजमार्ग मंत्रालय)
National Highways Authority of India
(Ministry of Shipping, Road Transport & Highways)
G-5 & 6, Sector-10, Dwarka, New Delhi-110075

Phone : 91-11-25074100/25074200
Fax : 91-11-25093507/25093514
Extn. : 2223/2318/2468/2553

Tech/NS-2/Bids/BOT/2005

3rd November, 2005

Branch Manager,
ICICI Bank Ltd.
Free Press House, 215
Free Press Journal Marg,
Nariman Point, Mumbai 400021
Fax: (022) 22853591

Sub: Confirmation of Bank Guarantees favoring National Highways Authority of India issued on behalf of M/s Reliance Energy Ltd in respect of Package No. NS-2/BOT/TN-5.

M/s Reliance Energy Ltd. has submitted the Bank Guarantees favoring National Highways Authority of India as Performance Security for the project of Design, Construction, Development, Operation and Maintenance of Km 373.275 (Start of proposed Dindigul bypass) to Km [illegible] (Samyanallore) on NH-7 in the State of Tamil Nadu: Package NS2/Annuity/TN-5, as per the details given below:

S. No	BG No & Date	Amount (Rs)	Valid upto
	0004BG00243605 dated 29.10.2005	8,50,60,000	14.11.2008
2	0004BG00243405 dated 29.10.2005	5,67,00,000	14.05.2006

It is noted that although the Bank Guarantees have been issued by Branch Office of ICICI Bank Ltd., Mumbai-21, the Authorised Signatories on the Bank Guarantees pertain to Branch at 9A, Connaught Place, New Delhi, which may please be confirmed along with issuance of above Bank Guarantees immediately indicating Name, Designation & Code Number of the Officer(s) on the printed official letter head with full details of the Bank and its address. **It is also requested to quote the reference number of this letter specifically while confirming the issuance as above.**

Yours faithfully

(Pranavant)
General Manager (NS-2)

Copy for similar action to:
ICICI Bank Ltd., ICICI Bank Towers, Bandra-Kurla Complex, Mumbai-400051
[illegible]20

Manager (Tech.), PIU (PC), National Highways Authority of India, Mumbai. He is requested to personally obtain the confirmation from the issuing Branch of the Bank and forward the confirmation report to the undersigned urgently in pursuance to NHAI Circular No. 91/2004 dated 18.11.2004.

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(पोत परिवहन, सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Shipping, Road Transport & Highways, Govt. of India)
Project Implementation Unit, Panvel
Survey No. 63, 'D' Point on NH - 4B, Chinchpada,
Kalamboli - Panvel Bypass Road, Panvel - 410 206.

☎ : 022 - 2787940
Fax : 022 - 2786115

NHAI/PIU/PANVEL/PKG-II/2005/205 Dated 10.11.05

The General Manager (NS)-II
National Highways Authority of India,
G 5 & 6, Sector-10,
Dwarka, New Delhi-75

Kind Attn: Shri Pranavanth

Sub: Confirmation of Bank Guarantees – Reg

Ref: 1. Lr. No. NHAI/Tech/NS-2/Bids/BOTS/2005 dt. 03.11.05 received from GM (NS-II), NHAI, New Delhi
2. Lr. No. NHAI/Tech/NS-2/NS-39 (TN)/2005 dt. 03.011.05 received from GM (NS-II), NHAI, New Delhi

Dear Sir,

With reference to the above letters, the undersigned has visited the **Industrial Development Bank of India Ltd.**, Andheri (E), Mumbai and **ICICI Bank**, Free Press House, 215, Free Press Journal Marg, Nariman Point, Mumbai on 04.11.05 for confirmation of the Bank Guarantees. The details of the confirmed BGs are as follows:

S.No	Name of the Bank & address	BG Received from	Confirmed BG No. & Date	Amount in Rs.	Valid upto
1	Industrial Development Bank of India Ltd., Central Processing Unit, Central Road, Elemacch Bldg., Plot No. 82/83, Road No. 7, Street No. 15, Andheri (E), Mumbai – 400 093	M/s Patel Engineering Ltd., - M/s KNR Construction Ltd (JV)	20050391BGA0007/ 22.10.2005	7,06,46,078/-	31.03.2008
			20050391BGA0008/ 22.10.2005	7,06,46,078/-	31.03.2008
2	ICICI Bank Ltd., Free Press House, 215, Free Press Journal Marg, Nariman Point, Mumbai – 400 021	M/s Reliance Energy Ltd	0004BG00243705/ 29.10.2005	4,11,20,000/-	14.05.2006
			0004BG00243505/ 29.10.2005	6,17,00,000/-	14.11.2008
			0004BG00243605/ 29.10.2005	8,50,60,000/-	14.11.2008
			0004BG00243405/ 29.10.05	5,67,00,000/-	14.05.2006

The confirmation letters obtained for the above BGs received from the above banks - (2 Nos) are enclosed herewith for further action at your end pl.

Encl: as above

Thanking you,

Yours faithfully,

(A. Srinivasulu)
Manager (Tech.)

CC: The GM &PD, PIU, NHAI, Pune (PC) for information please.

Corporate Office : G 5 & 6, Sector 10, DWARKA, New Delhi - 110075
Tel. : 011 - 25074100 / 25074200 Fax : 25093507 / 25093514
E - mail : nhai@vsnl.com Website : http://www.nhai.org

ICICI Bank

3/11/05

Pranavail (General Manager NS-2)
National Highways Authority of India
F-6, Sector 10
Dwarka, New Delhi - 110075

Re: Bank Guarantee (s) Issued by us.

Dear Madam,

Ref: No. NHAI/Tech/NS-2/Bids/BOT/2005 dt. 3/11/05

We are having issued / amended the following guarantee (s) favouring
us on behalf of M/s Reliance Energy Ltd.

Guarantee No.	Expiry date (inclusive of claim period)	Amount (Rs.)
0G0243605	14.11.2008	Rs 8,50,60,000/-
0G0243605	14.05.2006	Rs 5,67,00,000/-
0G0243705	14.05.2006	Rs 4,11,20,000/-
0G0243505	14.11.2008	Rs 6,17,00,000/-

We confirm that the persons who have signed the above guarantee (s) are duly authorised signatories.

Sir,
This confirmation letter has been obtained by the undersigned during the visit to the bank on 09.10.05

(H. SRINIVASULU)
Manager (Tech),
NHAI, PIU, Panvel

Yours faithfully,

Authorised Signatory.

ICICI Bank Limited
Bank House
Cuffe Parade Marg
Cuffe Parade
Mumbai 400 005
Tel. (22) 22853594/95/97
Fax (22) 22853591
Regd. Off.: Landmark, Race Course Circle, Vadodara 390007.
Corp. Off.: ICICI Bank Towers, Bandra-Kurla Complex

ICICI Bank

25/11/05

National Highways Authority of India
F-5 + 6 Sector 10
Dwarka
New Delhi 110075

Re : Bank Guarantee (s) Issued by us.

Dear Sir/Madam,

Ref. No: NHAI/Tech/NS-2/Bids/BOT 2005 dt. 3/11/05

We are having issued / amended the following guarantee (s) favouring us on behalf of M/s Reliance Energy Ltd.

Guarantee No.	Expiry date (inclusive of claim period)	Amount (Rs.)
1BG/02/43605	14.11.2008	Rs 8,50,60,000/-
1BG/02/43405	14.05.2006	Rs 5,67,00,000/-

We confirm that the persons who have signed the above guarantee (s) are duly authorised signatories.

Authorised Signatory.

ICICI Bank Limited
ICICI Bank House
Bank Press Marg
Bandra Point
Mumbai 400 051, India.

Tel. (22) 22853594/95/97
Fax (22) 22853591
Website www.icicibank.com

Regd. Off. : Landmark, Race Course Circle, Vadodara 390007.
Corp. Off. : ICICI Bank Towers, Bandra-Kurla Complex
Mumbai 400051, India. Tel. (+91-22) 2653 1414 Fax (+91-22) 2653 1122.

Reliance Energy
A Dhirubhai Ambani Enterprise

Jayarama Prasad Chalasani
Director (Business Development)

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: (022) 3009 9999, Extn: 9526
Fax: (022) 3009 9775
email: jayarama.chalasani@rel.co.in
www.rel.co.in

January 19, 2006

Shri Pranavant,
General Manager (NS-2)
National Highways Authority of India
G-5 & 6, Sector-10, Dwarka
New Delhi 110 075

For comments pl.
M/s PWC
Pranavant
19/01/06

Sub: Award of Concession for Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul bypass) to km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu called the "Project" on Build Operate and Transfer (BOT) basis: **Project Reference No: NS2/BOT/TN-5** - Performance Security

Ref: Your letter No. NHAI/Tech/NSEW/NS-2/BOT/TN-1/2006 dated 10th January 2006

Dear Sir,

With reference to your above cited letter on the captioned subject, we are pleased to furnish the required amendment to the following Performance Bank Guarantees.

0004BG00243405 dated 29th Oct 05 for Rs.5,67,00,000.

0004BG00243605 dated 29th Oct 05 for Rs.8,50,60,000.

Thanking you,

Yours faithfully,

J P Chalasani

भारतीय गैर न्यायिक

सौ रुपये

Rs. 100

ONE HUNDRED RUPEES

रु. 100

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

DELHI

A 460244

...onal Highway Authority of India,
...6
...r 10 Dwarka Delhi 110075
...ndment to the Bank Guarantee No. 0004BG00243605Dt.29.10.2005

...e request of our client M/s Reliance Energy Ltd Limited, Mumbai we hereby ...d the above referred Guarantee as follows:

...e amendment issued on dtd. 17.01.2006 to the above referred Bank Guarantee ...use No.A is deleted & amended .It should be read as follows:

A.) NHAI vide letter no NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 dt. 30th September 2005 has issued the Letter of Acceptance (LOA) to Reliance Energy Limited "REL" (the "Successful Bidder") for Design, Construction, Development, Finance, Operation and Maintenance of Km 373.725 (Start of proposed Dindigul bypass) to Km 426.6 (Samyanallore) on NH-7 together called the "Project" in the State of Tamil Nadu under North-South Corridor (NHDP Phase II) on Build, Operate and Transfer (BOT) basis.

REL has promoted and incorporated a Special Purpose Vehicle in the form of a limited liability company DS Toll Road Limited (the "Concessionaire") having its registered office at 3rd Floor, Reliance Energy Centre, Santa Cruz (E), Mumbai, to enter into the Concession Agreement with NHAI for undertaking inter alia, the Project and to perform and discharge all its obligations there under.

~~Signature Verified as per our records~~
For ICICI Bank Limited

Authorised Signatory
9A, Conn. Place, N.Delhi

ICICI Bank Ltd. CIBD 9-A Conn. Place N.Delhi

For ICICI BANK LIMITED

Authorised Signatory
9A, Connaught Place, N. Delhi-1

DHIRAJ TRIVEDI
Asst. Manager

RITESH ABBI
MANAGER

Amendment to the Bank Guarantee No. 0004BG00243605Dt.29.10.2005

All other terms and conditions governing the above Guarantee & amendments issued before remain unchanged. This letter forms an integral part of the original guarantee mentioned herein above and may be kept attached thereto.

1) This Bank Guarantee shall be valid upto 28.02.2009
2) We shall be liable to pay any amount under this bank guarantee or part thereof only if we receive a written claim or demand under this guarantee on or before 28.02.2009 at ICICI Bank Ltd. 215 Free Press House, Free Press Marg, Nariman Point, Mumbai 400021.

For ICICI BANK LIMITED

Authorised Signatory
9A, Connaught Place, N. Delhi-1
DHIRAJ TRIVEDI RITESH ABBI
Asst. Manager T-111 MANAGER A-61

भारतीय गैर न्यायिक

एक सौ रुपये

Rs. 100

ONE HUNDRED RUPEES

रु. 100

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

A 460222

DELHI

...nal Highway Authority of India,

...or 10 Dwarka Delhi 110075

...ndment to Bank Guarantee No. 0004BG00243605Dt.29.10.2005

...he request of our client M/s Reliance Energy Ltd Limited, Mumbai we hereby ...end the above referred Guarantee as follows:

...age No.1 & 2 the clause A,B & C of above referred Guarantee is deleted & ...nded .It should be read as follows:

...HAI vide letter no NHAI/Tech/NSEW/NS-2/BOT/TN-3/2005 dt. 30th September ...5 has issued the Letter of Acceptance (LOA) to Reliance Energy Limited "REL" ... "Successful Bidder") for (i) Design, Construction, Development, Finance, ...ation and Maintenance of km 258.645 (End of Namakkal Bypass) to km 292.4 ...t of Karur Bypass) and (ii) Improvement, Operation and Maintenance of km ...525 (Start of proposed flyover on Namakkal Bypass) to km 258.645 (End of ...kkal Bypass) on NH-7 together called the "Project" in the State of Tamil Nadu ...North-South Corridor (NHDP Phase II) on Build, Operate and Transfer (BOT)

For ICICI BANK LIMITED

Authorised Signatory

9A, Connaught Place, N. Delhi-1

DHIRAJ TRIVEDI
Asst. Manager T-111

RITESH ABBI
MANAGER A-61

0195

Amendment to Bank Guarantee No. 0004BG00243605Dt.29.10.2005

REL has promoted and incorporated a Special Purpose Vehicle in the form of a limited liability company DS Toll Road Limited (the "Concessionaire") having its registered office at 3rd Floor, Reliance Energy Centre, Santa Cruz (E), Mumbai, to enter into the Concession Agreement with NHAI for undertaking interalia, the Project and to perform and discharge all its obligations thereunder.

In order to perform and discharge all its obligations concerning the Project, the Successful Bidder is required to give ("NHAI") a guarantee by a recognized bank or financial institution based in India in the sum of Rs. 8,50,60,000 (Indian Rupees Eight Crores Fifty Lacs Sixty thousand only) as security for compliance with its obligations under the Concession Agreement during the Construction Period.

At the request of the Successful Bidder , the Guarantor has agreed to give NHAI the abovementioned guarantee on the terms set out herein.

The validity of the said Guarantee is extended from 14.11.2008 to 28.02.2009

After the sentence NOTHWITHSTANDING ANYTHING CONTAINED HEREINABOVE at page No.3 the sub clause No.1 stands deleted and at clause No.2 & 3 the validity date is amended and it is 28.02.2009

All other terms and conditions governing the above Guarantee remain unchanged. This letter forms an integral part of the original guarantee mentioned herein above and may be kept attached thereto.

1) This Bank Guarantee shall be valid upto 28.02.2009
2) We shall be liable to pay any amount under this bank guarantee or part thereof only if we receive a written claim or demand under this guarantee on or before 28.02.2009 at ICICI Bank Ltd. 215 Free Press House, Free Press Marg, Nariman Point, Mumbai 400021.

For ICICI BANK LIMITED

Authorised Signatory
Connaught Place, N. Delhi-1

DHIRAJ TRIPATHI
Asst. Manager

RITESH ABBI
MANAGER A-61

भारतीय गैर न्यायिक

सौ रुपये Rs. 100

ONE HUNDRED RUPEES

रु. 100

भारत INDIA

INDIA NON JUDICIAL

A 460243

DELHI

National Highway Authority of India,
Sector 10 Dwarka Delhi 110075

Amendment to the Bank Guarantee No. 0004BG00243405Dt.29.10.2005

At the request of our client M/s Reliance Energy Ltd Limited, Mumbai we hereby amend the above referred Guarantee as follows:

1) The amendment issued on dtd. 17.01.2006 to the above referred Bank Guarantee the clause No.A is deleted & amended .It should be read as follows:

NHAI vide letter no NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 dt. 30th September 2005 has issued the Letter of Acceptance (LOA) to Reliance Energy Limited "REL" (the Successful Bidder") for Design, Construction, Development, Finance, Operation & Maintenance of Km 373.725 (Start of proposed Dindigul bypass) to Km 426.6 (Bangalore) on NH-7 together called the "Project" in the State of Tamil Nadu as North-South Corridor (NHDP Phase II) on Build, Operate and Transfer (BOT)

Signature Verified as per our records
For ICICI Bank Limited
Authorised Signatory
9A, Conn. Place, N.Delhi

ICICI Bank Ltd. CIRD 9A, Conn. Place, N.Delhi

For ICICI BANK LIMITED
Authorised Signatory
9A, Connaught Place, N. Delhi
RITESH ABBI
MANAGER
DHIRAJ TRIVEDI
Chief Manager T-II

1

...ndment to the Bank Guarantee No. 0004BG00243405Dt.29.10.2005

...has promoted and incorporated a Special Purpose Vehicle in the form of a ...ted liability company DS Toll Road Limited (the "Concessionaire") having its ...stered office at 3rd Floor, Reliance Energy Centre, Santa Cruz (E), Mumbai, to ...er into the Concession Agreement with NHAI for undertaking interalia, the Project ...to perform and discharge all its obligations there under.

...other terms and conditions governing the above Guarantee & amendments issued ...re remain unchanged. This letter forms an integral part of the original guarantee ...tioned herein above and may be kept attached thereto

1) This Bank Guarantee shall be valid upto 31.08.2006
2) We shall be liable to pay any amount under this bank guarantee or part thereof only if we receive a written claim or demand under this guarantee on or before 31.08.2006 at ICICI Bank Ltd. 215 Free Press House, Free Press Marg, Nariman Point, Mumbai 400021.

For ICICI BANK LIMITED

Authorised Signatory

9A, Connaught Place, N. Delhi-1

DHIRAJ TRIVEDI
Asst. Manager

RITESH ABBI
MANAGER A-61

0198

भारतीय गैर न्यायिक

एक सौ रुपये

Rs. 100

ONE HUNDRED RUPEES

रु. 100

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

DELHI

A 460223

...al Highway Authority of India,

...10 Dwarka Delhi 110075

...ndment to Bank Guarantee No.0004BG00243405Dt.29.10.2005

...request of our client M/s Reliance Energy Ltd Limited, Mumbai we hereby ... the above referred Guarantee as follows:

...ge No.1 & 2 the clause A,B & C of above referred Guarantee is deleted & ...ded it should be read as follows:

...AI vide letter no NHAI/Tech/NSEW/NS-2/BOT/TN-3/2005 dt. 30th September ...ssued the Letter of Acceptance (LOA) to Reliance Energy Limited "REL" ...ssful Bidder") for (i) Design, Construction, Development, Finance, ... and Maintenance of km 258.645 (End of Namakkal Bypass) to km 292.4 ... Karur Bypass) and (ii) Improvement, Operation and Maintenance of km ... Start of proposed flyover on Namakkal Bypass) to km 258.645 (End of ... Bypass) on NH-7 together called the "Project" in the State of Tamil Nadu ...-South Corridor (NHDP Phase II) on Build, Operate and Transfer (BOT)

For ICICI BANK LIMITED

Authorised Signatory

9A, Connaught Place, N. Delhi-1

DHIRAJ TRIVEDI — RITESH ABBI

Manager — MANAGER A-51

0199

Amendment to Bank Guarantee No.0004BG00243405Dt.29.10.2005

... has promoted and incorporated a Special Purpose Vehicle in the form of a ...ed liability company DS Toll Road Limited (the "Concessionaire") having its ...tered office at 3rd Floor, Reliance Energy Centre, Santa Cruz (E), Mumbai, to ...ter into the Concession Agreement with NHAI for undertaking interalia, the Project ...d to perform and discharge all its obligations thereunder.

... order to perform and discharge all its obligations concerning the Project, the ...ssful Bidder is required to give ("NHAI") a guarantee by a recognized bank or ...cial institution based in India in the sum of Rs. 5,67,00,000 (Indian Rupees Five ...es Sixty Seven Lacs only) as security for compliance with its obligations under ...Concession Agreement during the Construction Period.

... the request of the Successful Bidder ; the Guarantor has agreed to give NHAI ...ovementioned guarantee on the terms set out herein.

The validity of the said Guarantee is extended from 14.05.2006 to 31.08.2006

After the sentence NOTHWITHSTANDING ANYTHING CONTAINED HEREINABOVE at page No.3 the sub clause No.1 stands deleted and at clause No.2 & 3 the validity date is amended and it is 31.08.2006

... other terms and conditions governing the above Guarantee remain ...changed. This letter forms an integral part of the original guarantee mentioned ...rein above and may be kept attached thereto.

1) This Bank Guarantee shall be valid upto 31.08.2006
2) We shall be liable to pay any amount under this bank guarantee or part thereof only if we receive a written claim or demand under this guarantee on or before 31.08.2006 at ICICI Bank Ltd. 215 Free Press House, Free Press Marg, Nariman Point, Mumbai 400021.

For ICICI BANK LIMITED

Authorised Signatory

9A, Connaught Place, N. Delhi-1

DHIRAJ TRIVEDI RITESH ABBI
MANAGER A-61

0200

Reliance Energy
A Dhirubhai Ambani Enterprise

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: +91 (022) 3009 9999
Fax: +91 (022) 3009 9775
www.rel.co.in

January 24, 2006

Mr Pranavant
General Manager (NS-2)
National Highway Authority of India
G-5 and G-6, Sector 10, Dwaraka
New Delhi-75

Subject: Amendments to Bank Guarantees for TN3 and TN5 projects as required by NHAI on 23/01/06

Dear Sir,
With reference to the necessary amendments required by yourself on 23/01/06, amendments have been done and enclosed.

Following amendments are enclosed:

1. Amendment to 0004BG00243405 Dt 18/01/06 for Clause C
2. Amendment to 0004BG00243505 Dt 17/01/06 for Clause C
3. Amendment to 0004BG00243505 Dt 17/01/06 for Clause A line No.5
4. Amendment to 0004BG00243605 Dt 18/01/06 for Clause C
5. Amendment to 0004BG00243705 Dt 17/01/06 for Clause C
6. Amendment to 0004BG00243705 Dt 17/01/06 for Clause A Line No.4

Thanking You.

Yours faithfully,

Authorised Signatory

INDIA

INDIA NON JUDICIAL

A 417380

way Authority of India,

arka Delhi 110075

to 0004BG00243405Dt.29.10.2005

st of our client M/s Reliance Energy Ltd Limited, Mumbai we hereby
ove referred Guarantee as follows:

dment issued on dtd. 17.01.2006 to the above referred Bank Guarantee
). C is deleted & amended .It should be read as follows:

request of the Successful Bidder and / or the Concessionaire, the
ntor has agreed to give NHAI the abovementioned guarantee on the
set out herein.

ns and conditions governing the above Guarantee & amendments issued
n unchanged. This letter forms an integral part of the original guarantee
erein above and may be kept attached thereto

This Bank Guarantee shall be valid upto 31.08.2006
We shall be liable to pay any amount under this bank guarantee or part
thereof only if we receive a written claim or demand under this
guarantee on or before 31.08.2006 at ICICI Bank Ltd. 215 Free Press
House, Free Press Marg, Nariman Point, Mumbai 400021.

anuary 2006

RITESH ABE
MANAGER A-61

INDIA NON JUDICIAL

417377

way Authority of India,

ka Delhi 110075

0004BG00243605Dt.29.10.2005

of our client M/s Reliance Energy Ltd Limited, Mumbai we hereby ve referred Guarantee as follows:

ment issued on dtd. 17.01.2006 to the above referred Bank Guarantee C is deleted & amended .It should be read as follows:

request of the Successful Bidder and / or the Concessionaire, the tor has agreed to give NHAI the abovementioned guarantee on the et out herein.

s and conditions governing the above Guarantee & amendments issued unchanged. This letter forms an integral part of the original guarantee rein above and may be kept attached thereto.

This Bank Guarantee shall be valid upto 28.02.2009
We shall be liable to pay any amount under this bank guarantee or part thereof only if we receive a written claim or demand under this guarantee on or before 28.02.2009 at ICICI Bank Ltd. 215 Free Press House, Free Press Marg, Nariman Point, Mumbai 400021.

uary 2006

Authorised Signatory
Connaught Place, N. Delhi
RITESH ABBI
MANAGER

0203

ICICI Bank

Jan 06

Highways Authorities of India,

Delhi 110075.

firmation of Date of amendment

endment to BG No 0004BG00243405 and 0004BG00243605.

issued amendments to the afore mentioned guarantees and by over sight of amendment was not mentioned therein.

firm that the date of amendment was 18th January 2006.

I Bank Ltd.

ed Signatory

ICICI BANK LIMITED Nariman Point Branch

ICICI Bank Limited
Free Press House
215, Free Press Marg
Nariman Point
Mumbai-400 021, India.

Tel. : (022) 2285594/95/97
Fax : (022) 2285599
Website www.icicibank.com

Regd. Office : "Landmark", Race Course Circle, Vadodara 390007.
Corp. Office : ICICI Bank Towers, Bandra-Kurla Complex, Mumbai 400051, India.

0204

य राष्ट्रीय राजमार्ग प्राधिकरण
, सड़क परिवहन और राजमार्ग मंत्रालय)
nal Highways Authority of India
f Shipping, Road Transport and Highways)
सेक्टर-10, द्वारका, नई दिल्ली-110 075
ector-10, Dwarka, New Delhi-110075

दूरभाष / Phone : 91-11-25074100/25074200
फैक्स / Fax : 91-11-25093507 / 25093514
एक्स. / Extn : 2223 / 2318 / 2468 / 2553

-2/TN-5/2006

25th January, 2006

er

Place, New Delhi-110001

f Bank Guarantees favoring National Highways Authority of India issued on Reliance Energy Ltd in respect of Package No. NS-2/BOT/TN-5.

Energy Ltd. has submitted the Bank Guarantees favoring National Highways Performance Security for the project of Design, Construction, Development, and Maintenance of Km 373.275 (Start of proposed Dindigul bypass) to Km on NH-7 in the State of Tamil Nadu: Package NS2/Annuity/TN-5, as per the

& Date	Amount (Rs)	Valid upto
00243605 dated 29.10.2005 and ents dated 17.01.2006 & 24.01.2005	8,50,60,000	28.02.2009
00243405 dated 29.10.2005 and ents dated 17.01.2006 & 24.01.2005	5,67,00,000	31.08.2006

t although the Bank Guarantees have been issued by Branch Office of ICICI 1, the Authorised Signatories on the Bank Guarantees pertain to your Branch at may please be confirmed along with issuance of above Bank Guarantees Name, Designation & Code Number of the Officer(s) on the printed official tails of the Bank and its address. **It is also requested to quote the reference specifically while confirming the issuance as above.**

Yours faithfully

Pranavant
(Pranavant)
General Manager (NS-2)

ion to:

td., Free Press House, 215, Free Press Journal Marg, Nariman Point, Mumbai - (022) 22853591)

td., ICICI Bank Towers, Bandra-Kurla Complex, Mumbai-400051

tional Highways Authority of India, New Delhi. He is requested to personally on from the issuing Branch of the Bank and forward the confirmation report to ently in pursuance to NHAI Circular No. 91/2004 dated 18.11.2004.

0205

ICICI Bank

CO/ND/CIBD/TFO/2005-06/BG CONFIRMATION 25.01.2006

To
Mr. Pranavant
General manager (NS-2)
National Highways Authority of India,
(Ministry of Shipping, Road Transport & Highways)
G-5&6 Sector –10,Dwarka,New Delhi-75

REF No. NHAI/TECH/NSEW/NS-2/TN-5/2006, Dated 25.01.2006

Dear Sir

Sub: Confirmation of Bank Guarantee issued on behalf of M/s Reliance Energy Ltd

Please refer to NHAI/TECH/NSEW/NS-2/TN-5/2006 respect of the captioned subject. In this regard, we confirm having issued the following Bank Guarantee and amendments thereof favoring Chairman, National Highways Authority of India, on behalf of M/s Reliance Energy Ltd

S. No	BG No	Dated	Amount	Valid upto	Claim Expiry date
1	1.04BG00243605	29.10.2005	INR 8,50,60,000/-	28.02.2009	28.02.2009
2	0004bg00243405	29.10.2005	INR 5,67,00,000/-	31.08.2006	31.08.2006

Further we also confirm that the signatories who have signed the above Bank Guarantee, Mr. Shivam Kapoor, Asst. Manager ,(Specimen code No.K-815) and Mr. Raghav Bhanagar ,Manager (Specimen Code No.B-228) and amendment to the said bank Guarantee Mr. Dhiraj Trivedi (T-111) & Mr. Ritesh Abbi (Specimen Code No.A-61) are the authorized signatories of our Bank.

Yours faithfully,
For ICICI Bank Ltd

(Authorised Signatories)

RITESH ABBI
MANAGER A-61

Received personally in originally from Bank 25/01/2006

ICICI Bank Limited
Corporate & Institutional Banking Division
9A, Connaught Place
New Delhi - 110 001 India
CIBD Extension Counter : 17-18, Indraprastha Bhawan, Azad Pur, NSM, Delhi - 110033
Tel : (+91-11) 55310400
Fax : (+91-11) 55310410
Website : www.icicibank.com
Regd. Office : 'Landmark' Race Course Circle, Alkapuri, Vadodara - 390007, India
Tel:(+91-265) 339923-24 Fax:(+91-265) 339926

SCHEDULE G

SCHEDULE OF USER FEE

TO BE PUBLISHED IN THE GAZETTE OF INDIA EXTRAORDINARY PART – II – SECTION 3 SUB SECTION (ii)

GOVERNMENT OF INDIA

MINISTRY OF SHIPPING, ROAD TRANSPORT & HIGHWAYS

DEPARTMENT OF ROAD TRANSPORT AND HIGHWAYS

NEW DELHI the ....., 2006

Whereas, by the notification of the Government of India in the Ministry of Shipping, Road Transport & Highways (MoSRT&H), number S.O. 465 (E) dated 26/04/2002 issued under Section 11 of the National Highways Authority of the India Act, 1988 (68 of 1988), the Central Government has entrusted the section from **Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore)**, of the National Highway number NH 7 in the State of Tamil Nadu to the National Highways Authority of India (herein after referred to as the "Authority")';

AND, WHEREAS, the Authority has entered into an agreement with **DS Toll Road** Limited and having its registered office at **3rd Floor, Reliance Energy Centre, Santa Cruz (E), Mumbai-400055** (herein after referred to as the "Concessionaire") for the development of the **Dindigul – Samyanallore** stretch from **Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore)** to four lanes which forms part of the said section of the said National Highway;

AND, WHEREAS, the Central Government has entered into an agreement with the Authority for the development of the said section of the said National Highway and to issue a Fee Notification to levy and collect the Fees from the said National Highway in terms of the aforesaid agreement entered into between the Authority and the said Concessionaire;

NOW, THEREFORE, in exercise of powers conferred by section 8A of the National Highways Act, 1956 (48 of 1956), read with rule 3 of the National Highways (Collection of Fees by any person for the use of section of National Highways/permanent bridge/temporary bridge on National Highway) Rules, 1997, the Central Government, having regard to the expenditure involved in building, maintenance, management and operation of the said section of the said National Highway No 7, interest on the capital invested, reasonable return, the volume of traffic and the period of such agreement entered into between the Authority and the

Concessionaire, hereby notifies that there shall be levied and collected Fees on mechanical vehicles for the use of the said section starting from Km 373.275 (**Start of proposed flyover at Dindigul bypass**) to Km 426.6 (**Samyanallore**) of the National Highway number NH7 in the State of Tamil Nadu at the rate specified in the Schedule below, and authorizes the said Concessionaire to collect and retain the said Fees on and from the date of commercial operation or publication of this notification in the Official Gazette whichever is later and till the termination date as mentioned in the Agreement.

Definitions, - In the notification, unless the context otherwise requires, -

(i) "Actual Fees" means the Fees actually charged on the road users for using **Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore)** of the Project Highway as may be approved by the Authority and the base Fee given in the schedule to this notification;

(ii) "date of commercial operation or COD" means the date on which the commercial operations of the said section of the National Highway number NH7 in the State of Tamil Nadu begins, which shall be the date on which the Independent Consultant has issued the Completion Certificate or the Provisional Certificate upon completion of the said section of the said National Highway in accordance with the provisions of the Agreement entered into between the Authority and the Concessionaire;

(iii) "Termination Date" means the date on which the said Agreement entered into between the Authority and the Concessionaire expires pursuant to the provisions of the said Agreement or is terminated by Termination Notice;

(iv) "Local Traffic" means the following type of traffic in relation to the fee payable for car/jeep/van.

(a) "Local Traffic category I" means and includes local users falling into any of the following categories

(1) Residents of villages/towns/cities whose boundary falls within a radius of 10 Km of the fee collection booths (toll plaza).

(2) Establishments /Industrial units located within a radius of 10 Km of the fee collection booths (toll plaza).

(3) Employees of Establishments /Industrial units located or which have their office, within a radius of 10 Km of the fee collection booths (toll plaza); and

(4) Self employed persons/ businessmen having a place of work within a radius of 10 Km of the fee collection booth (toll plaza).

0208

(b) "Local Traffic category II" means and includes local users falling into any of the following categories

(1) Residents of villages/towns/cities whose boundary falls within a radius of more than 10 Km but upto 20 Km of the fee collection booths (toll plaza).

(2) Establishments /Industrial units located within a radius of more than 10 Km but upto 20 Km of the fee collection booths (toll plaza).

(3) Employees of Establishments /Industrial units located or which have their office, within a radius of more than 10 Km but upto 20 Km of the fee collection booths (toll plaza); and

(4) Self employed persons/ businessmen having a place of work within a radius of more than 10 Km but upto 20 Km of the fee collection booth (toll plaza).

(v) Words and expressions used in this notification but not defined but defined in the Agreement entered into between the Authority and the Concessionaire in respect of section from Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) of the National Highway number NH7 in the States of Tamil Nadu shall have the same meaning as assigned to them respectively in the said Agreement.

SCHEDULE

Rates of base Fees to be recovered from the users of the National Highway number 7 from Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) in the State of Tamil Nadu, applicable as on 1st July, 1997.

The Fee shall be collected at plaza

S. No.	Category of Vehicle	Rate of base Fees per vehicle per one way trip (in rupees per km.)
(1)	(2)	(3)
1.	A car, passenger van or jeep	0.40
2.	Light Commercial Vehicle (LCV)	0.70
3.	Bus, Truck	1.40
4.	MAV (>2 Axle)	2.25

Notes:-

1. Actual amount of fee to be charged for a particular year (from 1st September of a year to 31st August of the following year) will be computed as under:

2. The aforesaid Fee will be revised once in every year. The revised Fee shall be computed ("Computed Fee") as follows:-

$$\text{Base Fee} \times \frac{\text{WPI-B}}{\text{WPI-A}} \times \text{....Km for one way journey}$$

Where

- WPI-B = is the Wholesale Price Index available for the end of the preceding financial year.
- WPI-A = is the Wholesale Price Index on June 1997 i.e (131.4%)

WPI means Wholesale Price Index as released by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India or any other index replacing the same.

3. When the same vehicle has to cross the said stretch of the National Highway more than once in a day, the user shall have the option to pay the Fee for multiple trips at 1.5 times the rates as given in the Schedule above while crossing the Toll Plaza in the first trip itself. If the vehicle has to use the said stretch continuously and frequently for entire month or even beyond that, the vehicle owner can have a monthly pass on payment of charges equal to thirty (30) times rate applicable for single trip as applicable to it as specified in the aforesaid Schedule.

   For the purpose of this notification "day" shall be counted as continuous period of twenty-four hours.

4. The actual Fees to be charged shall be rounded off to the nearest rupee.

5. The following type of vehicles shall be exempted from the fee specified above in the Schedule, namely: -
   (a) Defense Vehicles;
   (b) Police vehicles;
   (c) Fire fighting vehicles;
   (d) Ambulances;
   (e) Funeral vans;
   (f) Post and Telegraph Department's vehicles;
   (g) Central and State Government vehicles on duty
   (h) Vehicles with "VIP" symbols or officially belonging to:-
      i. President of India,
      ii. Vice-President of India
      iii. Governor of a State and Lt. Governor of a Union Territory
      iv. A Foreign dignitary on State visit to India, and
      v. A Foreign Diplomat stationed in India using cars with "CD"/ "CC" symbols

0210

vi. Chairman of Rajya Sabha or Speaker of Lok Sabha or Chairman of a State Legislative Council or Speaker of a State Legislative Assembly or a Minister for the Union or State or Leader of Opposition in Lok Sabha or Rajya Sabha or State Legislatures having the Status of Cabinet Minister if he is sitting in the vehicle; Or

vii. Members of Parliament in the entire country or a Member of Legislative Assembly of a State or a Member of Legislative Council of a State, in the respective State if he produces his Identity Card issued by the Parliament or concerned Legislature of a State as the case may be.

viii. Belonging to winner of Gallantry awards such as Param Vir Chakra, Ashok Chakra, Maha Vir Chakra, Kirti Chakra, Vir Chakra and Shaurya Chakra, if such awardee produces his photo Identity Card duly authenticated by the Competent Authority for such award

(i) Different class of Defence personnel and vehicle carrying cargo meant for them in accordance with Indian Tolls (Army and Air Force) Act, 1901, rules including any amendments thereto.

6. The rates of Fees, the Categories of vehicles exempted from payment of Fee and the name, address and telephone number of Concessionaire to whom complaints, if any, should be addressed, shall be conspicuously and prominently displayed 500 meters ahead of the toll booths, 100 meters ahead of the toll booths and at the toll booths also, the height of the display boards and size of letters being such that it is easy for drivers to read the display boards and they shall be legibly written or printed in English, Hindi and the regional language of the area in which the stretch is situated.

7. The Concessionaire shall nominate an officer as in-charge of fee collection. The Concessionaire and also the said officer shall be responsible to ensure that Fees are collected at not more than the agreed rates and the Fee collected is smooth without causing undue hardship to the road users and for all matters connected therewith.

8. Concessionaire shall not collect any Fees from Local Traffic in excess of the following discounted rates;

(a) Car/Jeep/ Van:

i)	Local Traffic Category I:	Monthly pass of Rs 150.00
ii)	Local Traffic Category II:	Monthly pass of Rs 300.00

(b) Buses:

Monthly passes for the State Transport buses may be given at the specified rate in favor of the State Government Transport on the certification of the competent authority (not less than General Manager, State Government Road Transport) certifying the number of buses plying in the route per day. In case of private local operators monthly passes shall be issued on production of

0211

their route permit and timetable of the route operation duly certified by the District Transport Authority.

(c) School Buses:
Monthly Passes for School buses, for school students, crossing the toll plaza at a monthly rate of Rs 1000 (Rupees one thousand) after obtaining written request of the School Principal along with the recognition of the school and the registration of the bus.

(d) LCV/Trucks (Local Transport Operators):
Concessional Fee shall be from Local Transport Operators on production of proof for plying within 20 Km i.e. goods challan for origin and destination clearly specifying the return details of the vehicle. The Fee for such transport shall be Rs 25 (Rupees twenty five) for trucks for each entry and Rs 15 (Rupees fifteen) for LCV for each entry.

Provided however, that if a separate service lane is opened for free use by local traffic, the Concessionaire shall levy and collect Fee from such local traffic, if they use the four lane highway.

9. The Fee schedules mentioned in serial numbers 8 are applicable for the time being and will undergo change as and when announced by NHAI

10. As and when a service lane is constructed, the Concessionaire shall not collect any fee from the users of such lane(s)

11. The Concessionaire shall publish substance of this notification and the scheme of discount to frequent and local users, as provided in the Concession Agreement, in two local newspapers (one of which shall be in vernacular language), which shall also state the date of commercial operation as per the provision of this notification, at least ten days prior to the date of commercial operation. Such substance shall also be repeated ten days prior to giving effect to revised Fees as per this notification.

13. The actual Fees to be charged to users shall be computed by the Concessionaire and sent to Authority for validation as soon as possible after 31st March in every year, but at least forty-five days before the rate increase is to be effective. Authority shall provide any comments or request clarifications as soon as possible upon receipt of the Fee revision proposal but not later than fifteen days of receipt of the Fee revision proposal. If the Authority does not offer comments or seek clarification during this period the revised Fee, as proposed by the Concessionaire, shall be deemed to have been confirmed by the Authority.

0919

PROJECT COMPLETION SCHEDULE

S. No.	Project Mile Stone	Months																														
		1	2	3	4	5	6	7	8	9	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	30
Preconstruction Activities																																
1	Achievement of Financial Closure																															
2	Project Design																															
3	Handing Over the site to the Concessionaire																															
4	Mobilisation at site by concessionaire																															
5	Shifting of utilities including tree cutting																															
Construction Activities																																
6	Bridges and CD Structures																															
7	ROB, Underpass & Grade Separator																															
8	New Carriageway																															
9	Existing Carriageway																															
10	Toll Plaza and Administrative Blocks																															
11	Safety Features																															
12	C.O.D.																															

SCHEDULE-I: DRAWINGS

1. The Project Highway Drawings, as defined in Clause 1.1, Definitions of the Concession Agreement shall consist:

   A. Working drawings of all the components/elements of the Project Highway as determined by Independent Consultant and/or NHAI, and

   B. As-Built drawings for the Project Highway components/elements as determined by Independent Consultant and/ or NHAI.

   As-Built drawings shall be duly certified by the Independent Consultant.

2. Annexure "A" of this Schedule gives the list of drawings (only drawing as defined in Dictionary) of the main components/elements of the Project Highway required to be submitted by the Concessionaire.

0214

DS Toll Road Limited

Annexure A

LIST OF DRAWINGS TO BE SUBMITTED BY CONCESSIONAIRE SHALL INCLUDE BUT NOT BE LIMITED TO:

a) Drawings of horizontal alignment, vertical profile and cross-sections..

b) Drawings of interchanges, major intersections and grade separators.

c) General arrangement drawings of toll plaza layout, toll collection system and roadway near toll plaza.

d) Drawings of Administrative Base Camps and Control Centre.

e) Drawing of a bus-bay and bus shelters with furniture and drainage system.

f) Drawing of a truck parking layby with furniture and drainage system.

g) Drawings of road furniture items including traffic signage, markings, safety barriers etc.

h) Drawing of traffic diversion plans and traffic control measures.

i) Drawings of road drainage measures.

j) Drawings of typical details of slope protection measures.

k) Drawings of landscaping and horticulture.

l) Drawings of Pedestrian Crossings.

m) Drawings of Street Lighting.

n) Drawings of general arrangement of cross-drainage works.

o) Layout/ Configuration of HTMS.

0215

TESTS TO BE CONDUCTED

During the Construction Period/Operations Period, the Concessionaire shall carry out the Tests and Independent Consultant will carry out quality audit of the tests carried out by the Concessionaire. Independent Consultant may carry out more tests as per a pre-determined programme. These tests and quality audit shall include but not be limited to the following:

Sl. No.	Item	Test	Testing Procedure
1.0	**Earthwork for embankment, subgrade construction and cut formation**		
1.1	Embankment and subgrade borrow materials	Quality Audit of the following tests performed during construction for soil type, density, moisture content and CBR as required by Ministry of Surface Transport specifications for Road and Bridge works • Moisture Content test as per IS : 2720 (Part 2) • Sand Content Test according to IS : 2720 (Part 4) • Plasticity Characteristics of soils according to IS : 2720 (Part 5) • Moisture Content-Dry Density relationship using heavy compaction according to IS: 2720 Part 8. • Determination of total soluble sulphate content as per IS : 2720 Part 37 • IS : 2720 (Part 40): Determination of Free Swelling Index of solutions	As per relevant parts of IS - 2720
1.2	Compaction	Quality Audit of the following Tests performed during construction as required by MORT&H specifications for Road and Bridge works. • Compaction density and • Determination of dry density of soils in place according to IS-2720, Part 28 by the Sand Replacement Method	As per IS-2720, Part 28

2.0	Pavement Structure		
2.1	Granular Sub base and base courses	Quality Audit of quality control tests on soils, aggregate and moisture content - density tests and CBR tests as required by MORT&H specifications for Road and Bridge works. • Plasticity Characteristics of soils according to IS : 2720 Part 5 • Dry density of soils in place according to IS : 2720 Part 28 • Determination of total soluble sulphate content as per IS : 2720 Part 37 • CBR test as per IS : 2720, Part 16 • Dry density-moisture content relationship as per IS: 2720 Part 8 • Aggregate grading as per Job Mix Formula • Aggregate Impact value as per IS: 2386 (Part 4) or IS : 5640 • Particle size and shape as per IS : 2386 (Part I)	As per relevant parts of IS - 2720, IS 2386 and IS 5640
2.2	Bituminous base and wearing courses	Quality Audit of quality control tests on aggregates and bitumen and on bituminous mixes as laid down in clause 903.4 of MORT&H specifications for Road and Bridge works. • Aggregate Impact Value as per IS2386 (Part 4) • Particle size and shape as per IS : 2386 (Part I) • Stripping value test as per AASHTO T182 • Water absorption as per IS : 2386 (Part 3) • Soundness Test as per IS : 2386 Part 5 • Marshall stability test as per ASTM D-1559	As specified in the codes IS 2386, parts 1,3,4 and 5, AASHTO T182 and ASTM D-1559
2.3	Cement concrete Pavement	Quality audit of sampling and testing of cubes and beams for strength of concrete and quality control tests on aggregates • Aggregate Impact Value as per IS : 2386 (Part 4) • Soundness Test as per IS: 2386 (Part 5) • Alkali Aggregate Reactivity IS : 2386 (Part 7) • Strength of Concrete (Tests on Cubes and beams) as per IS : 516 • Workability of fresh Concrete - Slump Test IS : 1199	As per relevant parts of IS 2386, IS 516 and IS1199

0217

Sl. No.	Item	Test	Testing Procedure
2.4	Riding Quality of Surface	Checking International Roughness Index of the finished pavement surface for compliance with the requirement stated in clause 2.5.7 of Schedule D.	Roughness measurement by bump integrator (Annexure A) or an equivalent device approved by NHAI/IC
3.0	**Bridges**		
3.1	Cement, aggregate, reinforcement pre-stressing steel and Concrete	Tests and Standards of Acceptance as per MORT&H Specifications of Tests performed during construction	The Auditing shall be carried out in accordance with the IRC special publication on Quality Assurance
3.2	Superstructure	Static load testing of any one span of the structure for carrying design load as per IRC SP 37-1991	Test shall be carried out in accordance with Annexure B
3.3	Bearings	Checking and verification of the bearings to ascertain proper functioning as per MORT&H Specifications.	The inspection shall be carried out in accordance with requirement laid in MORT&H specifications for Road and Bridge works and shall meet the prescribed criteria.
3.4	Expansion Joints	Checking and verification of the Expansion joints to ascertain proper functioning as per MORT&H Specifications	The inspection shall be carried out in accordance with requirement laid in MORT&H specifications for Road and Bridge works and shall meet the prescribed criteria.
3.5	Foundation & Substructure	Checking and verification of the Foundation settlement and rotation	The settlement of foundation for superstructure load at completion shall be measured with reference to a fixed datum. (For this purpose, the records of measurements taken before the superstructure concreting should also be available.)
4.0	Highway Lighting System	Level of illumination	The illumination level shall be measured with luxmeter following the method as specified in its manual (Annexure C).
5.0	Traffic Signals	Test in accordance with the relevant clauses of IRC:93 and IS 7537	Meet the prescribed criteria in IRC 93 and IS 7537

[illegible]	[illegible]	[illegible]	[illegible]
6.0	Toll System Operations.	1. Certified report of Factory Acceptance Test (FAT) 2. Post installation site test to conform to the functionality and specifications of the contract	[illegible] test for individual functionality of each component which should conform both specifications / codes stipulated in the country of manufacture. It should include manual operations in case of no power.
7.0	Rest Area Operations	Test in accordance with the functioning of facilities built in RAO	Standard building safety procedures as presented by NBC
8.0	Emergency Telephone System	Independent Systems to be developed to operate on the Project site	Real time test to be carried out to conform to the designed system.
9.0	Traffic Signage and Pavement Marking	Tests in accordance with ASTM standard E:810 relevant clauses of section 800 of MORT&H specifications for Road and Bridge works published by IRC 1997	To follow ASTM Standard E:810 as per section 800 of MORT&H specifications for Road and Bridge Works published by IRC 1997

0219

DS Toll Road Limited

Schedule for Tests

1.1 The Concessionaire shall, not later than 30 (thirty) days prior to the likely completion of [Four-Lanning], notify the Independent Consultant and NHAI of its intent to subject the Project Highway to Tests, and not later than 10 (ten) days prior to the actual date of Tests, furnish to the Independent Consultant and NHAI a detailed inventory and particulars of all works and equipment forming part of [Four-Lanning].

1.2 The Concessionaire shall notify the Independent Consultant of its readiness to subject the Project Highway to Tests at any time after 10 (ten) days from the date of such notice, and upon receipt of such notice, the Independent Consultant shall, in consultation with the Concessionaire, determine the date and time for each Test and notify the same to NHAI who may designate its representative to witness the Tests. The Independent Consultant shall thereupon conduct the Tests itself or cause any of the Tests to be conducted in accordance with Article 16 and this Schedule-J.

2 Tests

2.1 **Visual and physical Tests:** The Independent Consultant shall conduct a visual and physical check of [Four-Lanning] to determine that all works and equipment forming part thereof conform to the provisions of this Agreement.

2.2 **Test Drive:** The Independent Consultant shall take test drive of the Project Highway by a Car and a fully loaded Truck to determine that the quality of service conforms to the provisions of this Agreement.

2.3 **Riding quality Test:** Riding quality of each lane of the carriageway shall be checked with the help of a calibrated bump integrator as mentioned at annexure A of this Schedule.

2.4 **Pavement Composition Test:** The thickness and composition of the pavement structure shall be checked on a sample basis by digging pits to determine conformity of such pavement structure with Specifications and Standards. The sample shall consist of one pit in each direction of travel to be chosen at random in each stretch of 5 (five) kilometers of the Project Highway. The first pit for the sample shall be selected by the Independent Consultant through an open draw of lots and every fifth kilometer from such first pit shall form part of the sample for this pavement quality Test.

Cross-section Test: The cross-sections of the Project Highway shall be checked on a sample basis through physical measurements of their dimensions for determining the conformity thereof with Specifications and Standards. For the road portion, the sample shall consist of one spot to be selected at random in each stretch of 1 (one) kilometer of the Project Highway. The first spot shall form part of the sample shall be selected bye the Independent Consultant through an open draw of lots and the spots located at every one kilometer from such first spot shall form part of the sample. For the bridge portion, one spot shall be selected at random by the Independent Consultant in each span of the bridge.

Structural Test for bridges: All major and minor bridges constructed by the Concessionaire shall be subjected to the Rebound Hammer and Ultrasonic Pulse Velocity tests, to be conducted in accordance with the procedure described in Special Report No. 17; 1996 of the IRC Highway Research Board on Non-destructive Testing Techniques, at two spots in every span, to be chosen random by the Independent Consultant.

Environmental audit: The Independent Consultant shall carry out a check to determine conformity of the Project Highway with the environmental requirements set forth in Applicable Laws and Applicable Permits.

Safety Review: Safety audit of the Project Highway shall have been undertaken by the Safety Consultant as set forth in Schedule-L and on the basis of such audit, the Independent Consultant shall determine conformity of the Project Highway with the provisions of this Agreement.

Completion/Provisional Certificate

Upon successful completion of Tests, the Independent Consultant shall issue the Completion Certificate or the Provisional Certificate, as the case may be, in accordance with the provisions of Article 16.4.

Schedule J

Annexure-A

TEST PROCEDURE FOR MEASURING ROUGHNESS INDEX OF THE RIDING SURFACE OF A FLEXIBLE PAVEMENT

EQUIPMENT – Bump Integrator Fitted in a Vehicle

Test Procedure:

The following test procedure shall be adopted for the test

1) Check that the installation and operation of the equipment is in order and meets the requirements prescribed in its operational manual. The tyre pressure of wheels should be as prescribed.

2) The instrument shall be calibrated prior to its use for measurement as prescribed in its operational manual.

3) The operators shall familiarise themselves with the Bump Integrator & other equipment associated with its operation using its Test Mode before commencing a survey.

4) Generally a speed varying between 30 km./hour-40 Km/hour shall be maintained during measurements. The readings shall be taken for each carriageway independently.

5) The equipment shall run on a lane in both the directions once and the average of two values taken for its roughness index.

6) Pavement unevenness/roughness of 2/3 lane carriageway shall be obtained from the average of the values of the 2/3 lanes recorded.

7) The roughness index value is obtained by using the internationally accepted software associated with the equipment from the measured Bumps.

8) All data shall be properly recorded with appropriate referencing and stored in a prescribed manner as in the operational manual.

9) The roughness measurements shall be properly calibrated using the procedure recommended in the World Bank Technical Publication No. 46.

DS Toll Road Limited

Annexure-B

LOAD TESTING OF A BRIDGE SUPERSTRUCTURE

The load test shall be carried out to check and establish the serviceability and working strength of the superstructure.

1.0 Test Load

The "Test Load" is the equivalent static load equal to the impacted working design Live Load (applied in addition to all dead loads) placed for maximum effect (bending moment, shear, deflection, etc. as the case may be) and applied either through an appropriate test loading truck or through loading platforms resting on tyre-contact-area plates simulating the actual areas of wheels.

2.0 Load Application and Testing Procedure

I. Fix deflection gauges (supported on unyielding supports) under the superstructure, just touching its soffit, at the pre-marked critical 'points'.

II. Apply the test load in five equal increments (including the weight of platforms of trucks in the first increment), allowing about two hours in between completion of one load increment and commencement of the next. About an hour after completing a load increment, note the deflections and any crack patterns together with maximum crack widths.

III. After measuring the deflections, etc, one hour after applying the fifth increment, i.e. the final load increment, keep the test load maintained for about 24 hours and again measure the deflections and crack widths (if any)

IV. Remove the test load in five equal decrements, allowing about two hours in-between completion of one load decrement and commencement of the next. Note the deflections and crack widths (if any) at the end of each load decrement.

V. Note the deflection and crack widths (if any) 24 hours after removal of the test load in order to see whether the recovery is complete or there is any residual deflection, etc.

3.0 Acceptance Criteria

i. Increase and decrease in deflections at a point shall follow a linear relation, with actual deflections not exceeding the theoretically estimated ones by more than 10%;

ii. The maximum crack width in reinforced concrete shall not exceed 0.25 mm to 0.30 mm (but no cracks in case of prestressed concrete);

iii. The deflections at the end of the 24 hours of maintaining the test load shall not exceed the corresponding values at the start of this 24 hour period by 5% and

the residual deflection [illegible]
the maximum observed deflection at that point (i.e. recovery: 90% or more);

Observation

The cracks in reinforced concrete shall close upon removal of test load but may not completely disappear.

Annexure-C

Testing Procedure for Illumination intensity by Luxmeter

Instrument	:	Luxmeter (make of renowned company)
Basis	:	Comparison with a calibrated Luxmeter through a standard lamp by renowned Photometric Lab.

Test Procedure:

Following steps shall be taken for the test

- Calibration of the luxmeter.
- Put off the lights to be tested.
- Take calibrated luxmeter reading.
- Put on the lights in the area to be tested
- Observe the luxmeter reading
- Difference (positive or negative) in addition with standard light luminance level will give the actual luminance of existing lighting system.

Note: The testing procedure shall be as per the Manual of the Luxmeter used.

SCHEDULE - K

COMPLETION CERTIFICATE

(In case the Completion Certificate is being issued without the Provisional Certificate already being issued.)

I/We, **(Name of Independent Consultant)** acting as Independent Consultant on the Project "Design, Construction, Development, Finance, Operation and Maintenance of Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) section of NH7 in the State of Tamil Nadu, India on BOT basis" through the Concessionaire, DS Toll Road Limited hereby issue this Completion Certificate in-terms of sub-clause 16.4 of Concession Agreement since the said Project has been completed and successfully tested as per Schedule 'J' as stipulated in the said Concession Agreement and is ready for commissioning of traffic commercially as provided in the Concession Agreement dated **(Date of Agreement between the said Concessionaire and the NHAI)**. The date of issue of this Completion Certificate shall be the COD, as defined in the said Concession Agreement.

Dated _____

(Date of Issue)

_____
Team Leader

_____
Authorised Representative of the Independent Consultant

DS Toll Road Limited

(In case the Completion Certificate is being issued with the Provisional Certificate already issued.)

I/We, (Name of Independent Consultant) acting as Independent Consultant on the Project "Design, Construction, Development, Finance, Operation and Maintenance of Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) section of NH7 in the State of Tamil Nadu, India on BOT basis" through the Concessionaire, DS Toll Road Limited hereby issue this Completion Certificate in-terms of sub-clause 16.4 of Concession Agreement since the said Project has been completed and successfully tested as per Schedule 'J' as stipulated in the said Concession Agreement and all the Punch List items as mentioned in the Provisional Completion Certificate issued on .....completed as provided in the Concession Agreement dated (Date of Agreement) between the said Concessionaire and the NHAI. .

Dated _____

(Date of Issue)

Team Leader

Authorised Representative of the Independent Consultant

0227

DS Toll Road Limited

SCHEDULE – K_1

PROVISIONAL COMPLETION CERTIFICATE

Provisional Completion Certificate

I/We (Name of Independent Consultant) acting as Independent Consultant on the Project, "Design, Construction, Development, Finance, Operation and Maintenance of Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) section of NH7 in the State of Tamil Nadu, India on BOT basis" through the Concessionaire, DS Toll Road Limited hereby issue this Provisional Certificate of Completion in-terms of sub-clause 16.5 of Concession Agreement dated (Date of Agreement), between the said Concessionaire and the NHAI, on the request of the said Concessionaire subject to the appended Punch List containing a list of outstanding items since the tests stipulated in Schedule 'J' have been successfully carried-out and all parts of Project Highway can be legally, safely and reliably placed in commercial operations though certain works and things forming part thereof are not yet complete as indicated in the said Punch List. All the items of the said Punch List shall be completed by the said Concessionaire with in 120 (one hundred and twenty) days of the date of issue of this Provisional Certificate of Completion. The date of issue of this Provisional Completion Certificate shall be the COD, as defined in the said Concession Agreement.

Dated _____

(Date of issue)

Team Leader

Authorised Representative of the Independent Consultant

SCHEDULE L

OPERATION AND MAINTENANCE REQUIREMENTS

1. **Introduction**

The Concession Agreement stipulates that length of Project Highway shall be constructed, operated and maintained during the Concession Period by the Concessionaire in accordance with scope defined in Schedules B & C and thereafter transferred to National Highways Authority of India (NHAI). In addition, the Concessionaire is also responsible for improvement and operation and maintenance of the **Additional Highway** considered for the BOT package as mentioned in Schedule A. This Schedule elaborates the operation and maintenance requirements of the Concession and is to be read together with the Concession Agreement for this purpose. For clarification of doubt, the period during which the Concessionaire shall comply with the O&M requirements covers the entire Concession Period including the Construction Period. In particular, during the Construction Period, the Concessionaire is required to operate and maintain the existing two lanes as provided in the Concession Agreement and this Schedule. The Concessionaire shall operate and maintain the Project Highway such that during the Construction Period, at least two lanes are ordinarily open to traffic at all times and from Commercial Operations Date (COD), lane availability at the end of each year of the Concession will be a minimum of 99% on a cumulative basis. For this purpose, lane availability at the end of each year will be computed as follows:

$$\frac{\text{(Length in Km x no. of lanes x number of days since COD)} - \Sigma\text{ (lane kms closed x number of days for which closed)}}{\text{(Length in Km x no. of lanes x number of days since COD)}}$$

Note:

- In the above formula the lane Km closed does not include the Additional Highway considered for BOT package if the same has not been completed by the time the Concessionaire completes developments to Project Highway.
- If the Additional Highway considered for BOT package is completed in all respects and handed over to Concessionaire, the above formula shall include total length of BOT package from the day of handing over the Additional Highway to the Concessionaire.
- Any Lane closure due to emergency reasons shall be excluded for computing lane availability.

2. **Operation and Maintenance (O&M) Requirements**

2.1 The Concessionaire shall take all such actions and do all such things (including without limitation, organising itself, adopting measures and standards, executing procedures such as

0229

inspection procedures, highway patrols, and engaging and managing contractors, agents and employees) as will secure:

a) The safety of users of the Project Highway, workers or other persons on the Project Highway and/or facilities thereon;

b) Unimpaired performance of statutory duties and functions of NHAI and other Authorities in relation to the Project Highway and/or other adjoining roads and facilities;

and, subject to paragraphs a) and b), above, ensure that:

2.1.1. adequate safety measures, taking into account Schedule 'S', are taken up on the Site during the Construction and Operation periods.

2.1.2. delay to users of the Project Highway and of adjoining roads or facilities is minimised;

2.1.3. risk of adverse effects on the environment and on the amenity enjoyed by the owners and occupiers of property and/or land adjacent to the Project Highway, adjoining roads and facilities is minimised;

2.1.4. accidents and emergencies on the Project Highway and facilities thereon are responded to as quickly as possible and their adverse effects minimised;

2.1.5. risk of disturbance or damage or destruction to property of third party is minimised;

2.1.6. members of the public are treated with due courtesy and consideration;

2.1.7. users are given adequate information and forewarning of any event on or any other matter affecting the Project Highway which will enable them to minimise any adverse consequences on them of that event or matter;

2.1.8. members of the public and others are given adequate opportunity to bring to the attention of the Concessionaire any matters affecting its ability to meet the O&M Requirements;

2.1.9. Traffic data and data relating to the operation and maintenance of the Project Highway and Project Facilities and events on the Project Highway are collected and disseminated such that NHAI and other persons or bodies with statutory duties or functions in relation to the Project Highway or adjoining roads are able to perform those duties and functions efficiently;

2.1.10. the Project Facilities shall be operated and maintained in order to fulfil the requirements set forth in the Concession Agreement and in this Schedule L;

2.1.11. The Scope for operation and maintenance includes but not limited to following:

- Improvement – this includes improvement in the existing assets as per requirement of this Agreement and safety audit if any in consultation with IC.
- Road maintenance – this includes routine maintenance, major maintenance, periodic preventive maintenance, disaster maintenance and inspections;

DS Toll Road Limited

- Traffic Management – incident management; enforcement of regulations together with the relevant authorities, hazard response; information gathering and dissemination, road patrols and surveillance;
- Safety – accident prevention; after care; user behaviour; education; enforcement; data collection and analysis.
- Facility management – including periodic inspections, routine maintenance, rehabilitation and expansion planning.
- Road property management – management of access, encroachment and ribbon development
- Toll fee collection – provision of the appropriate equipment and systems, revenue collection, administration and auditing.
- General responsibilities – including budgeting, compliance with legal and accounting requirements, and public relations
- Planning of Operations and Maintenance Centre. – including the basic planning, comment on the detail design, and design co-ordination.
- Maintaining public relations unit to interface with and attend to suggestions from users of the Highway, the media, Govt. agencies and other external agencies.

The broad limit of responsibilities of the Concessionaire shall be as described below:

(a) In general the limit of the Concessionaire's responsibility is to maintain all areas within the Right-of-Way (RoW) of the Project Highways inclusive of all facilities such as interchanges, street lighting facilities, traffic light facilities, emergency telephone networks and other facilities constructed by the Concessionaire within the Project Highways.

(b) Limit of maintenance by the Concessionaire for another road joining or crossing the concession limit, shall be according to the following conditions:

(i) Where the other road crosses an underpass, the Concessionaire shall be responsible to maintain the crossing structure, viz., culverts, bridges and their abutments and related facilities, such as drainage, turfing, etc. The Concessionaire shall not be responsible for maintenance of the road surface, or the roadside drains of the other roads that are 100m beyond the RoW of Project Highway.

(ii) For the road that crosses an overhead bridge, and the bridge is not a part of an interchange, the Concessionaire shall be responsible for maintenance of the surface of the bridge, joints repairs, drainage linked to the bridge and its abutments.

(c) The Concessionaire shall operate and maintain all the street lighting, traffic light system, structures, roadway surface and the related facilities such as drainage, turfing, etc within the interchanges, and such maintenance shall be extended until the end of the flare and the deceleration and acceleration lanes of the interchanges.

(d) The Concessionaire shall be responsible for maintaining all cross roads indicated in Schedule B up to a length of 100 meters from the Right-of-Way of the Project Highways, and their flares to junctions at any interchange within the Project Highway, whichever is more.

(e) For setting out the limit of maintenance for the Concessionaire, National Highways Authority of India shall be responsible for negotiating with the local authorities or where required, with other relevant third parties. The Concessionaire shall maintain all the drainage system within the Right-of-Way including the culvert crossings and the drains. However, the Concessionaire shall not be liable to maintain rivers and the streams under the jurisdiction of Irrigation Department, except when such maintenance is required as a result of exceptional discharge.

2.2. TRAFFIC MANAGEMENT AND LANE CLOSURE

2.2.1. Traffic Management during the entire Concession Period is an important activity that the Concessionaire has to attend to ensure safety of the road users as well as the construction workers simultaneously throughout the concession period. It is an usual activity to carryout various types of construction works at different stages and at different periods as per site requirements. Also, it is a vital activity during unforeseen and/or emergency situations arising on account of natural causes or accidents or administrative reasons.

2.2.2. Traffic Management is required during planned / scheduled construction and maintenance activities. However, traffic management will also be called for during unscheduled activities such as

(i) Emergency situation arising on account of
   a) Force Majeure;
   b) Accident/Incident on the Project Highway;
(ii) Special repairs required on account of failure of an element of the Project Highway; and
(iii) Default of the Concessionaire with respect to an operational activity on the Project Highway.

2.2.3. The basic principles to be followed for traffic management and lane closure on the Project Highway shall be as follows:

2.2.3.1. Work programme schedule shall be prepared such that diversion roads for the main traffic are minimized. The existing two lane carriageway is utilized to the maximum extent possible.

2.2.3.2. Measures shall be taken that the traffic is guided from a closed lane onto the operating lane without its conflict with the traffic from the opposite direction.

2.2.3.3. The activity of renewal of pavement surface and/or strengthening of the pavement structure shall not be taken up in a continuous length of more than 2 kilometres at a time to avoid long detour of the traffic.

2.2.3.4. The traffic diversion road where provided shall be appropriately designed for the traffic plying on the highway. It shall also be properly maintained during its operation period.

2.2.3.5. During Traffic detour involving traffic diversion adequate safety measures, as in Schedule 'S' shall be followed.

2.2.3.6. Proper and adequate information about the maintenance activity shall be notified to the users of the Project Highway in advance and displayed at the Site during the Operation Period.

2.2.4. Traffic Management plan and programme for a planned scheduled construction and/or maintenance activity shall be prepared in advance of that activity keeping 2.2.1 above in view and got approved by the Independent Consultant/NHAI as the case may be.

2.2.5. In case of un-scheduled activities, described in 2.2.2 (i) to (iii) above, an emergency traffic management for the affected reach of the highway shall be prepared and implemented in consultation with the Independent Consultant immediately. This emergency traffic management plan shall take into account the various requirements spelt out in the Concession Agreement as well as in this Schedule.

2.4. Lane closure is a vital activity during construction and/or maintenance in the Concession Period that the Concessionaire shall carryout in an organized, planned and disciplined manner.

2.4.1. Lane Closure involves traffic management in the affected reach of the highway, as such it is always a time bound activity and the Operation and Maintenance Manual incorporates it accordingly. In case where the Concessionaire fails to perform in time, a penalty shall be levied on the Concessionaire for the delay in reopening the closed lane to the traffic in terms of the Concession Agreement.

0233

2.4.2. The basic principles to be followed in preparation of a planned lane closure shall be as follows:

2.4.2.1. The activity of renewal of pavement surface and/or strengthening of the pavement structure shall be taken up in one lane of the 2/3 lane carriageway so that at least one lane of that carriageway is available to the traffic.

2.4.2.2. The activity of renewal or strengthening, item 2.5.1 below, shall not be carried out in a continuous length of more than 2 km in rural section and 1 km in urban section so that the closure of a lane is not more than 2 days and 1 day in rural and urban sections respectively.

2.4.2.3. Lane closure adopted for diverting the main traffic on account of the traffic management during construction works of the Project Highway shall be governed by the approved programme of Construction Works.

2.4.2.4. Lane Closure in short lengths less than or equal to 500 metres for carrying out a routine maintenance activity defined in item 4.2.1.1 of this Schedule shall not be for more than a continuous period of 1 day.

2.4.2.5. The lane closure needed on account of emergency shall be distinguished from the lane closure described in item 2.4.2.3 above. The lane closure on account of the Emergency shall be dealt with under sub clause 18.9, Emergency De-Commissioning, Article XVIII Operation and Maintenance, Chapter IV, Project Development and Operation of this Agreement.

Traffic Management and Lane Closures Requirements during various situations arising on the Project Highway needing Traffic Management are detailed below:

2.5. Initial Construction Stage

2.5.1. *Rural Section*

i) The widening of the existing 2 lane carriageway shall be generally eccentric to make a four/six (4/6) lane divided carriageway facility. A new 2/3 lane carriageway separated from the existing carriageway with a 4.5m central median will be constructed in the first instance and then strengthening and widening of existing 2 lane carriageway shall be undertaken.

ii) The construction sequence in this case will be as under:

a) 2/3 new lanes will be constructed initially. There will be no conflict area for the main traffic using the existing two lanes during this construction stage. It shall be ensured that the construction traffic does not conflict with the main traffic in this stage.

b) On completion of the 2/3 new lanes throughout, the total traffic will be diverted on it and the existing 2 lanes will be widened with paved shoulders /additional lane with paved shoulder depending upon the new carriageway configuration upto the existing road level. Thereafter, entire width including the existing 2 lanes and the widened portion shall be given bituminous base courses uniformly.

2.5.2 *Urban Section*

i) The widening of the existing 2 lane carriageway shall be generally concentric to make it a 4/6 lane divided carriageway facility. The divider will be a 1.5 m wide central median.

In addition, service road will be provided on either side of the 4/6 lane carriageway facility.

ii) The construction sequence in this case will be as under:

a) Service roads and side drains on both the sides will be constructed initially. There will be no conflict area for the main traffic, which will be using the existing two lanes. It will be ensured that the construction traffic does not conflict with the main traffic at exit and entry points.

b) On completion of the service roads on both sides, the main traffic will be diverted on them direction wise and the existing 2 lanes will be widened to 2/3 lanes on each side duly accounting for the 1.5 m wide central median. On completion of the widening upto the existing road level, the median will be constructed. On its completion, the existing road will be strengthened in such a manner that the bituminous base courses and the wearing course layers are laid uniformly in 2/3 lanes and paved shoulder on either side of the 1.5 m wide central median. During this operation, the construction traffic will not be conflicting with the main traffic on the service roads.

c) On completion of the divided lane carriageway of the Project Highway, the main traffic from the service roads shall be restored on them.

2.6. Operation and Maintenance Stage

2.6.1. This is applicable for the entire Operations Period for the Project Highway during the entire Concession Period. Various important activities to be carried out during this stage are:

a) Regular periodic maintenance activities:

0235

i) Renewal of the wearing surface of the road pavement once every 5 years;

ii) Strengthening course to be provided on 'as required' basis.

b) Maintenance activities arising out of the specific need(s) on account of the site conditions are:

i. Strengthening course required on account of the Benkelman Beam Deflection (B.B.D). values in excess of the prescribed criteria obtained during regular testing as per the Concession Agreement requirement;

ii. Wearing course required on account of the IRI values higher than the prescribed criteria obtained during regular testing as per the Concession Agreement requirement;

iii. Localized repairs in short lengths less than 500 m on account of pot holes, cracking, subsidence in isolated spots or in scattered areas.

2.6.2. In order to cater to the execution of the said activities, para 2.6.1 above the main traffic will have to be diverted to an extent dependent on the site requirement.

2.7 EMERGENCY STAGE

2.7.1. This stage could arise any time in an emergency situation and shall have to be addressed to on its own merits. The extent of the traffic management shall be assessed as per the site requirement and situation.

2.7.2. The emergency situation could be faced in the following three situations.

a) During the period between the award of the work and commencement of the construction works on financial close.

In this situation the existing two lane facility is only available. The traffic management will have to be tailored accordingly. Either the existing one lane will have to be closed passing the traffic on another lane and its adjoining shoulder or both the existing lanes will be closed and a diversion road provided.

b) During the period when construction works are in progress.

In this case the availability of the carriageway at site shall decide the nature and extent of the traffic diversion.

c) During the period when the Project Highway is under operation and/or maintenance, the nature of emergency requirement in this case will determine the type and extent of the traffic diversion.

2.7.3. Traffic Management in emergency situation shall be provided immediately in consultation with the Independent Consultant

0236

3. OPERATIONS

3.1 Introduction

3.1.1 The Concessionaire shall in consultation with the Independent Consultant evolve an Operations and Maintenance Manual (Maintenance Manual) as per sub-clause 18.2 of this Agreement.

3.1.2. The said Maintenance Manual shall have two separate sections, namely

(i) Section I - Operations; and

(ii) Section II - Maintenance

These are briefly described in items 3.2 and 4 of this Schedule respectively.

3.2 Section I - Operations

It shall prescribe procedures and systems for activities including but not limited to the following for the regular and emergency operations of the Project Highway and Project Facilities thereon.

3.2.1 Regular Operations

- Permitting smooth and uninterrupted flow of traffic during normal operating conditions.
- Functioning of the Toll System including charging and collecting the fees from the road user in accordance with this Agreement.
- Functioning of the lighting system;
- Functioning of the Patrolling System
- Functioning of rescue and medical aid services
  - Ambulance
  - Fire Brigade
  - Tow away truck and cranes
- Functioning of the Highway Traffic Management System
  - Emergency Call Boxes (ECBs) for Road Users
  - Central Control System
- Functioning of the Project Facilities
  - Administrative, Operational and Maintenance Base Camp
  - Rest Areas
  - Truck Parking Laybys
  - Electrical Services at Laybys, Bus Stops and Rest Areas
  - Potable Water supply system including supply of drinking water at truck parking laybys, rest areas etc.
  - Public toilets and other sanitary facilities
  - Pickup Bus Stops

0237

- Solid waste disposal system including those from litterbins.

Emergency Operations

Minimising disruption to traffic in the event of accidents and/or incidents affecting the safety and use of the Project Highway by providing a rapid and effective response and maintaining liaison procedures with emergency services.

- Reasonably smooth and safe movement of traffic during emergency activities such as special repairs during floods, storms, hurricanes and earthquakes.
- Failure of a system due to human error, electrical or mechanical failure.

The Concessionaire shall keep regular record of accidents that occur including the nature of accident, location of occurrence, time and date in the prescribed format, included in the Maintenance Manual and shall forward the monthly particulars of the same to the Independent Consultant and NHAI regularly in the first week of the following month.

The Concessionaire shall programme inspections of the Project Highway for its smooth operations in terms of the Concession Agreement classified in the following categories :

- Visual Inspection
- Close Inspection
- Thorough Inspection

and described herein under

Visual Inspection

Visual Inspections are broad general inspections carried out quickly and frequently by highway /bridge maintenance engineers having knowledge of road structures. The purpose of this visual inspection is to report the obstacles to traffic and fairly obvious deficiencies, which could lead to accidents or maintenance problems. Such inspections should be frequent. The visual inspection may be carried out by visual assessment with careful observation of the specific object/item of the Project Highway for identification and for quantification of the deficiencies or damages of the Project Highway.

Close Inspection

The close inspection may be visual and/or supplemented by standard instrumental aids for assessment of defects / deficiencies of Project Highway with careful observation of specific element(s). The close inspection may be daily / periodic but it is more intensive and would require detailed examination of elements of the Project Highway. It should cover all the aspects

0238

of the specific element of Project Highway against a checklist. The close inspections are to be carried out quite frequently depending upon the nature of structure of Project Highway. This inspection is to be carried out by the Highway/Bridge Engineer having good knowledge of road structures with theoretical background to analyse the nature, and extent of defects/deficiencies, suggest suitable remedial measures to rectify/remedy them and quantify repair work.

3.7. Thorough Inspection

A thorough inspection is comprehensive and detailed for assessment of defects/deficiencies of the Project Highway by visual inspection or with aid of standard equipment and non-destructive testing where necessary. Such an inspection is to be carried out on the basis of comprehensive checklist of items related to the materials, condition and situation of the structure etc. The checklist is to be prepared meticulously well in advance of inspection. The thorough inspection should be undertaken during the most critical weather condition, which is generally rainy season in India. During rainy season the Road/Bridge structures are under severe condition, thereby the damage and deficiencies of the Project Highway are more pronounced. The inspection carried out during the said period offer the most critical evaluation of the performance of the structure.

The thorough inspections are all the more important for Bridges, Culverts and drainage structures, as well as road pavements during adverse weather condition of monsoon period.

Besides being a qualified Highway/Bridge engineer; the inspection team leader must be familiar with design and construction features of the Highway /Bridges to be inspected so that the condition can be properly and accurately assessed for a meaningful report and quantification of repair works. The competence of team leader to recognise any structural distress/deficiencies and assess its seriousness with complete recommendation for appropriate repairs are important pre-requisites for entrusting this assignment to him.

3.8. Frequency of Inspections

The inspection frequency of various items of Project highway has been indicated in the Table L-1 hereunder. The frequency of inspection can be suitably revised in consultation with the Independent Consultant if the emergencies so warrant.

Table L-1: Objective and Frequency of Inspection

(The objective and minimum frequency of inspections under normal circumstances shall be as under. If some exigencies arise, the interval of inspection may be reduced)

0239

Object	Item	Daily	Monthly	Quarterly	Before and after rainy season
Riding Surface	Pavement	+	++		●
	Expansion joints	+	++		●
Median	Kerb	+	++		●
Side Slopes	Shape	+		++	●
	Turfing		+		●
	Pitching & masonry		+		●
	Retaining wall		++		●
Drainage	Shoulder drain	❖	++		
	Median drain	❖	++		
	Side slope drain	❖	++		
	Bridge catch basin	❖	++		
	Gullies and catch pits	❖	++		
Bridges	Superstructure		+	++	●
	Substructure		+	++	●
	Head walls and aprons		+	++	●
	Painting		+		●
	Hand rail		++	●	
Culverts	RC Culverts				●
	HP Culverts				●
Guard rails	Shoulders	+		++	●
	Medians	+		++	●
Traffic operation facilities	Signs	❖	●		●
	Marking	❖	++	++	●

0240

Object	Item	Daily	Monthly	Quarterly	Before and after rainy season
	Delineator	❖	++	++	
	Lighting	❖	++	++	
Other facilities	Vegetation / landscaping	❖	++	●	
	Toll plaza	❖	++	++	●
	Way side amenities	❖	++	●	
Traffic conditions		❖	●	++	
Encroachments		❖	●		

LEGEND

+ *visual inspection*

++ *close inspection*

● *thorough inspection*

❖ *visual inspection during rainy season only*

MAINTENANCE

I. Introduction

I.1. The Concessionaire shall maintain the Project Highway in traffic-worthy condition and the Project Facilities in usable condition throughout the Concession Period or any extension thereof in terms of the Concession Agreement through regular maintenance and preventive maintenance of the various items and elements of the Project Highway.

I.2. The Concessionaire shall maintain the existing 2/3 lanes of the Project Highway and already constructed 4/6 lanes of the Project Highway during construction of new lanes in such a manner that the unevenness index of the pavement does not exceed 3000 mm per km, or the present roughness value of the existing pavement, whichever is lesser and it is free of pot holes.

I.3 The following MORT&H and IRC publications shall be referred for preparation of the said Section - II Maintenance of the "Operation and Maintenance Manual"

- MORT&H Manual for Maintenance of Roads.
- IRC-SP-35-1990, Guidelines for Inspection and Maintenance of Bridges.

0241

- The manufacturer's Maintenance manual(s) of the equipment including that of the Toll Collection System to be used in the Project Highway Operations shall form part of the said O&M Manual.

Maintenance Section of Maintenance Manual

The Section II-Maintenance, of the Operation and Maintenance Manual, shall include the activities described hereinunder amongst other activities required for the regular and preventive maintenance of the equipment during the Operations Period, so that the Project Highway is maintained in a manner that at all times it complies with the specifications and standards and at the time of Divestment of Rights and Interests by the Concessionaire in terms of Article XXXIII of this Agreement it is in sound, durable and functional condition.

Regular Maintenance

It consists of the routine maintenance and periodic maintenance throughout the Concession Period and extension thereof, if any, for all elements of the Project Highway.

Routine Maintenance

The Concessionaire is required to perform all routine maintenance activities along the project road. The Routine Road Maintenance means planned ongoing works and activities required to ensure public safety, repair small defects and to maintain the road and the entire RoW in the required condition.

The Concessionaire is required to develop maintenance sheets for each component of the works. The Concessionaire has to utilise mechanised equipment, method and innovative solutions and technology to perform these obligations and include such process in the Maintenance Manuals.

All maintenance activities are to be carried out in accordance with relevant IRC Codes, Guidelines and Special Publications as are applicable to National Highways, MORT&H specifications and Technical circulars with all updates. In the absence of any definite provisions on any particular issue related to the specifications and/or standards, reference may be made to the latest codes and specifications of the Bureau of Indian Standards (BIS), AASHTO, ASTM, British Standards or any other International Standards. But where even these are silent, the work shall conform to sound engineering practice with the approval of the IC. The requisite Quality Control Tests as per specifications and codes are to be carried out by the Concessionaire at his cost as per the directions of the IC.

Routine Maintenance broadly includes:

(i) Maintenance of pavement
(ii) Maintenance of turfed areas.
(iii) Maintenance of landscaping
(iv) Maintenance of drainage system
(v) General cleaning including CD structures
(vi) Cleaning, maintenance of toll plaza and other buildings within concession limits.
(vii) Maintenance of main line structures.
(viii) Maintenance of Right-of-Way fences.
(ix) Maintenance of Highway Accessories.
(x) Maintenance of guardrails.
(xi) Other miscellaneous responsibilities such as stand by/on-call, emergency plant & equipment, stray animal catching operations etc.
(xii) Provision of traffic and safety control devices during the routine maintenance works or any accidents.

4.3. Periodic Maintenance of Pavement

The framework of activities relating to pavement maintenance and rehabilitation in respect of flexible and rigid pavement are given in the flow charts in Appendix 3.1 and Appendix 3.2 respectively. The Concessionaire shall set forth in the Operations and Maintenance Manual the detailed procedures to be followed under each of these activities, and also choose the operational and performance criteria from the performance standards set forth in this Schedule.

4.3.1. Pavement Riding Quality

The riding quality of the pavement shall be ensured by satisfying the minimum requirements given herein under.

i) Surface roughness of the Project Highway on completion of construction shall be 2000 mm/km as measured by vehicle mounted Bump Integrator.

ii) Surface roughness shall not exceed 3000 mm/km during the service life of pavement at any time. A renewal coat of bituminous concrete shall be laid every 5 years after initial construction or where the roughness value reaches 3000 mm/km whichever is earlier to bring it to the initial value of 2000 mm/km.

4.3.2. Structural Condition of the Pavement

I) The structural condition of the flexible pavement of the Project Highway shall be assessed every year by taking Benkelman Beam Deflections and working out

0243

characteristic deflections of homogeneous sections of the Project Highway as per IRC-81-1997. Wherever the characteristic deflection exceeds 1.2 mm a bituminous overlay shall be provided appropriately designed according to IRC-81-1997 or its latest versions or amendments to it.

II) Recycling of existing crust using milling as an option can be explored by the Concessionaire in consultation with the IC to maintain the FRL at the same level throughout the concession period. However, while adopting such measures, the residual strength of existing pavement shall be estimated and equivalent thickness of new material added before laying the designed overlay. The design of profile with altered pavement treatments shall be finalised in consultation with IC.

III) In the case of cement concrete pavement, joints shall be thoroughly inspected every year and the loss of sealing compounds made good.

4.3.3. Preventive Maintenance

Preventive Maintenance shall include the activities related to each element and the system as a whole of the Project Highway to ensure that during the Concession Period and at its end, it is in sound, durable and functional condition.

4.3.4. Special Repairs

Damages occurring due to natural calamities like heavy floods, sand storms, hurricanes, cyclones, earthquakes to any element or system of the Project Highway, shall be rectified and the system restored to function as per programme prepared in consultation with Independent Consultant. All such activities shall fall under 'Maintenance' and shall form a part of the said Maintenance Manual.

4.4. Minimum Requirements of Maintenance Activities

4.4.1. Major Breaches in the Roadway

Major breaches in the roadway of any type endanger safety of traffic and cause obstruction in movement of vehicles. These breaches shall be repaired urgently. Steps as mentioned in O&M manual shall be followed by the Concessionaire for repairing the breaches.

The Concessionaire shall ensure speedy restoration of traffic and take immediate action to repair the damages as permanent measures for the Project Highway. The restoration of traffic shall be made within 24 hours of its occurrence. The permanent measures shall be completed within a period of one week.

4.4.2. **Minor cuts, rutting or blockage**

Minor cuts, rutting and damages on Project Highway which do not completely obstruct the traffic but endanger the safety of traffic, shall be attended to on an urgent basis. For this purpose any cut which is in width more than 1 m shall be repaired within 24 hours. Any minor blockage, which partially obstructs the traffic and endangers safety, shall be removed by the Concessionaire immediately.

4.4.3. **Branches of trees**

The branches of the roadside trees if hanging closer than 5.5m over the road level of the Project Highway shall be cut, trimmed or lopped within 24 hours.

4.4.4. **Shoulders**

The shoulder (Earthen/Hard) shall be maintained in such a way that the shoulder drop off shall not be more than 25 mm for a length of 10m in a section length of 100m and/or there shall not be any false ditch causing the water to drain in reverse direction i.e. towards pavement instead of away from pavement surface, the same shall be rectified within 2 days as described below:

If the shoulders are deformed or scoured and are lower than 25mm from the adjacent carriageway, these shall be corrected by excavation, filling, dressing and compacting a material matching the existing material and it shall conform to the relevant MORT&H Specifications. In case of earthen shoulder repairs shall be carried out as per MORT&H Specifications 3003.

4.4.5. **Drainage / Side Drains.**

4.4.5.1. The Concessionaire must ensure that all drainage elements and structures are without any obstructions, which may reduce their normal cross section and impede the free flow of water. They should not have silting more than 25% of their size at any part of length.

4.4.5.2. All the Pipe and Box culverts shall have less than 10% deteriorated barrel and have more than 90% of the diameter/size open. There should be no evidence of flooding with end protection intact and no dip on the road over culvert indicating structural weakness.

4.4.5.3. Routine maintenance under this category shall cover pipe drainage system, slot drains, porous drains, gullies, catch-pits, open grills, ditches, side drains and median drains etc.

4.4.5.4. If the side drains / median drains where provided, and other drainage structures have been silted up in such a manner that it is causing obstruction in flow of water, the same shall be cleared off

regularly within 7 days after detection in order to keep the drains free from obstructions all the time.

4.1.5.5. If the drainage system of Project Highway is covered and damaged, it obstructs the flow of water causing damage to the road pavement. Such damaged structures shall be reconstructed to required shape, size and proper slope within 21 days after detection or as instructed by IC.

4.1.6. Cross Drainage Works & Other Structures

4.1.6.1. The Concessionaire shall set forth in the Operation and Maintenance Manual, the detailed procedures to be followed for the maintenance and repairs of bridges and other structures keeping in view IRC-SP-35: 1990 Guidelines for the Inspection and Maintenance of Bridges' in consultation with the Independent Consultant. The flow chart for Bridge and Culverts maintenance activities in given in Appendix 3.3.

4.1.6.2. The scouring of piers and abutments of bridges and culverts shall be observed carefully particularly before and after rainy season and suitable remedial measures as deemed fit looking to site conditions shall be taken in consultation with IC.

4.1.6.3. The bridge deck must be clean and have minimal spalls, cracks or scaling. The drains /scuppers on the deck must be clean and functional always.

4.1.6.4. The Super-structure should not have any cracks or loss of section. There should be no spalling and have proper vertical clearance and opening height. Paint on the super structure must be in good shape.

4.1.6.5. The sub-structure should not have spalls, cracks and scaling. The bearing assembly should be functional and lubricated periodically. Abutment /pier seats should be clean and sound.

4.1.6.6. The joints on the structures shall not be loose and should be sealed always.

4.1.6.7. Retaining walls should not have spalling or cracks and its weep holes must be open always. There should be no indication of settlement or rotation.

4.1.6.8. If any settlement cracks are appearing in substructure and superstructure of the CD works beyond permissible limits, the same shall be carefully observed and suitable remedial measures as per sound engineering practice taken.

0246

4.4.5.9. The treatment for the damaged culverts/bridges shall be assessed at site after ascertaining the damaged portion as per site exigencies. The repair shall be carried out expeditiously in consultation with IC.

4.4.7. **Pavement**

As part of pavement maintenance the pavement shall be treated for various distresses occurring as described below:-

4.4.7.1. **Cracking**

Cracking of bituminous pavements shall include all types of cracks such as hairline, alligator, longitudinal, transverse, shrinkage, reflective and edge cracking, linear and slippage etc. For any 50 m section of the pavement, the cracked area should not be more than 10% of the pavement surface of that section and/or the cracked area shall not exceed 0.5 sq.m at a place. The treatment shall be completely done within 7 days after their detection. The treatment shall be followed as described below:

i. If the width of the cracks is less than 3mm and resulting into settlement of pavement up to 10 mm in depth and exceeding in area more than 0.5 sq.m. at a place, such cracking shall be sealed by fog sealing in accordance with the MORT&H Specification 3004.

ii. If the width of the cracks is more than 3mm and resulting into settlement of pavement up to 10 mm in depth and exceeding in area more than 0.5 sq.m. at a place, such cracked surface shall be repaired by slurry sealing in accordance with MORT&H Specification 516.

iii. If the cracked portion has settled more than 10mm and its area exceeds 0.5 sqm, such areas shall be repaired by patching as per MORT&H Specification 3004.

iv. In case of alligator cracks, the permanent repair by full depth patching shall be carried out. The slippage cracks shall be repaired by removing the affected bituminous layer and replacing it with surface patch. In edge cracking, if shoulders are not providing adequate lateral support, the shoulder shall be reconstructed with good quality materials.

4.4.7.2. **Rutting**

For any 50 m section of the pavement, there shall not be ruts deeper than 10 mm and/or the length of rutting should not be more than 5m. The treatment shall be completely done within 15 days after their detection. The pavement surface shall be rectified/corrected as per directions laid out in IRC 82-1982 and based on sound engineering practice at such locations.

0247

1.1.3. Corrugations and Shoving

If corrugations and shoving in the pavement area exceeds 1 sq. m at any place and depth / height of corrugation / shoving exceeds 10mm, the same shall be rectified/corrected within 2 days after its detection, as per directions laid out in IRC 82-1982 and based on sound engineering practice.

1.1.4. Settlement or Grade Depressions

If the settlements and grade depressions exceed 1 sqm in area and their depth is within 10mm, such defects shall be treated within 3 days after detection as per directions laid out in IRC 82-1982 and based on sound engineering practice.

1.1.7.5. Upheaval or Swell

For any 50 m section of the pavement, there shall not be upheaval or swell that exceeds 0.5 sq. m in area; if its height is more than 10mm, the same shall be treated within 7 days after its detection as per as per directions laid out in IRC 82-1982 and based on sound engineering practice.

1.1.7.6. Ravelling

For any 50 m section of the pavement, if the ravelling of bituminous surface is not more than 3% of the pavement surface of that section and/or the ravelled area does not exceed 1 sq.m. at a place, the same shall be rectified within 7 days after their detection by slurry seal treatment in accordance with the MORT&H Specification.

1.1.7.7. Potholes

There shall not be any pothole on the pavement surface. Irrespective of the size and depth, the potholes shall be repaired by patching / pothole filling in accordance with MORT&H Specification 3004. The potholes shall be repaired immediately if causing a threat to safety; other potholes shall be repaired within 2 days after their detection.

1.1.7.8. Skid Hazards

The skid resistance of the pavement surface shall be maintained in such a way that the skid number is a minimum of 55 when tested as per BS-812 Part 114ASTM-274. Skid hazards, irrespective of size, shall be corrected by improving the surface drainage and skid resistance including cleaning the surface of contamination, surface treatments or milling or resurfacing.

4.1.7.9. **Bleeding or Flushing**

For any 50 m section of the pavement, if the bleeding surface area is more than 1% of the pavement surface of that section and/or the bleeding surface area does not exceeds 0.25 sq.m. at a place, the same shall be treated immediately within a day after its detection in accordance with IRC:82-1982 or any other relevant guidelines in consultation with the IC.

4.1.7.10. **Edge deformation/Breaking**

For any 100 m section of the pavement, if the edge breaking is more than 1m and/or the width of edge breaking is more than 0.1m at a place, the same shall be treated immediately within a day after its detection in accordance with IRC:82-1982 or any other relevant guidelines in consultation with the IC.

4.1.7.11. **Loss of Cover Aggregate**

If the loss of cover aggregate occurs in area exceeding 1 sqm of the pavement, treatment of seal coat shall be applied.

4.1.7.12. **Longitudinal / Transverse Streaking**

If the longitudinal and transverse streaking appears on the pavement surface in area exceeding 5sqm. the same shall be treated by application of new surface treatment or by a second treatment over the streak surface.

4.1.8. If any defects other than those mentioned above occur on the pavement of the Project Highway, the same shall be rectified/corrected by the Concessionaire as per directions laid out in IRC 82-1982 and based on sound engineering practice.

4.5. **Other Maintenance Activities**

4.5.1. **Maintenance of Traffic Signals**

The traffic signals shall be maintained at all times as per clause 18 of IRC: 93 -1985 and shall be periodically inspected, maintained and repaired so as to be in satisfactory working condition all the time.

4.5.2. **Maintenance of Highway Lighting System**

4.5.2.1. Maintenance of all lighting installations and related appurtenances shall be as per relevant clauses of IS : 1944 (Part I-V) 1981.

0249

DSC Toll Road Limited

4.5.2.2. Lighting wherever provided shall be maintained by the Concessionaire in a condition nearly similar to original condition.

4.5.2.3. The faults shall be repaired instantly and lighting restored. Missing and damaged items shall be replaced instantly.

4.5.2.4. Cleaning shall be done at regular intervals to be mentioned in the Maintenance Manual to ensure that lighting is not below the specified standard.

4.5.2.5. All installations shall be safeguarded against weathering and ageing effects by repainting and other preventive measures.

4.5.2.6. The servicing of stand-by power generation units shall be carried out in accordance with the manufacturer's instructions.

4.5.3. **Maintenance of Highway Signs and Pavement Markings**

4.5.3.1. All traffic signs and markings shall always be kept clean, visible and in correct alignment and position.

4.5.3.2. Any damage to traffic signs, which reduces or threatens to reduce full and clear visibility shall be rectified within twenty four (24) hours of its occurrence. If they are used as base for posters, the posters shall be removed and the signs cleaned within 24 hours. Signs shall be washed using detergent solution followed by clean water to maintain their visibility and reflectivity unimpaired due to dust etc.

4.5.3.3. Any part of traffic signs damaged due to weathering, corrosion, vandalism or any other cause shall be replaced by the Concessionaire within seven days.

4.5.3.4. Any mandatory signs including those for traffic safety and toll, 'damaged beyond repair' shall be replaced within 2 days and all other signs with similar condition shall be replaced within 3 days.

4.5.3.5. Appropriate devices for measuring the luminosity and reflectivity shall be used to check visibility and reflectivity of signs, delineators and markings. These shall be replaced by similar material if the reduction in the level of these two requirements falls below 50% of the original level.

0250

1.5.3.6. Pavement marking with thermo plastic paint shall be carried out soon after any overlay/renewal coat is provided.

1.5.4. **Maintenance of Pickup Bus Stops**

1.5.4.1. Maintenance of pickup bus stops shall include attending to repairs to the bus-bay pavement and also to various parts of the passenger shelter and connected facilities as and when necessary. Replacement of irreparable items shall be done within 2 days.

1.5.5. **Maintenance of Control Centre**

1.5.5.1. There shall be periodic inspection and maintenance of the Control Centres. This shall include attending to repairs and maintenance (both regular and periodic) to various parts of the building and connected services and facilities as and when necessary, and replacement of irreparable items of work. Cleaning & disinfecting of the water supply systems, inspection and maintenance of drainage/sanitation systems and electrical installations shall be as per relevant clauses of National Building Code (NBC).

1.5.5.2. Maintenance of Emergency Telephone system including its equipment shall include periodic servicing, checking of the system, replacement of components, attending to all necessary repairs and other incidentals to keep the system in working condition.

1.5.5.3. All the vehicles shall be maintained in smooth running condition at all times. In the event of any vehicle being off the road for maintenance or on account of breakdown, substitute vehicle shall be provided immediately.

1.5.5.4. At the end of the Concession Period or the extended period thereof, Control Centres together with all equipment in working order shall be handed over to NHAI.

1.5.6. **Maintenance of Buildings**

1.5.6.1. Maintenance of buildings shall include routine maintenance and attending to repairs to various parts of the building and connected services as and when necessary, and replacement of irreparable items of work, cleaning & disinfection of the water supply systems, inspection and maintenance of drainage/sanitation systems and electrical installations shall be as per relevant clauses of NBC.

1.5.6.2. At the end of the concession period or the extended period thereof, all buildings shall be in useable condition and handed over to NHAI.

0251

4.5.7. **Maintenance of Road Furniture and Facilities**

4.5.7.1. Maintenance of road furniture and facilities shall include attending to repairs to various parts of the road furniture and connected services as and when necessary, and replacement of irreparable items of work in reasonable period.

4.5.7.2. All the hectometre stones, Kilometre stones and 5th Km stones shall be kept 100% clear of obstruction; and up to 5% surface damage shall be rectified within 3 days after detection and shall bring it to its original state. If the surface damage is more than 10%, the same shall be removed and replaced with new ones meeting IRC standards.

4.5.7.3. At the end of the concession period or extended period thereof, all road furniture and facilities in useable and in working order shall be handed over to NHAI.

4.5.8. Maintenance of Highway Landscape

4.5.8.1. Maintenance of Highway Landscape shall include attending to repairs to elements of the landscape connected services as and when necessary, and replacement of irreparable items of work.

4.5.8.2. Trees shall be maintained as per the guidelines in IRC: SP: 21-1979 and no indiscriminate felling of trees shall be resorted to while upgrading, widening and improving the highway. The felling of trees shall be undertaken in consultation with the Independent Consultant and after obtaining due permission of the Forest Department, as applicable.

4.5.8.3. While borrowing earth from roadside land for routine maintenance it shall be ensured that no earth is removed around root of trees. All borrowing operations shall be as per IRC : 10-1961.

4.5.8.4. Maintenance operations include numbering and maintaining a register of all road side trees within the Right of Way.

4.5.8.5. The routine maintenance such as trimming and shaping shall also cover those hedges and trees within the RoW, which affect the performance of the Project Highway.

4.5.8.6. Cutting or clearance to safeguard visibility at intersections, road bends, accesses and signs shall be carried out in such a way as to avoid permanent damage to hedges and trees. Hedges and trees overhanging carriageways shall be trimmed to provide a minimum headroom of 5.5 metres at all times.

0252

1.5.8.7. Turfing within the RoW shall be mown as to achieve a visual pattern in harmony with adjacent areas. Mowing shall be done when the height of cut reaches 150 mm.

1.5.8.8. The grass/turf within RoW shall be maintained in such away that the roadway is free of obstruction and the availability of sight distance is ensured at intersections, passing zones, curves etc. The grass/turf around crash barrier, headwalls, paved ditches etc. shall be maintained neatly.

1.5.8.9. The Operation and Maintenance Manual shall include a maintenance and management plan for trees, shrubs, turfing and hedges to sustain their development in a manner pleasing in appearance.

1.5. Incident Management

1.5.1. Scope

- The Concessionaire shall initiate, co-ordinate and maintain an Incident Management System (IMS) and supply regular incident statistics to NHAI.

- Incident Management entails a set of co-ordinated activities initiated by the Concessionaire when an incident (an extraordinary event resulting in the reduction of road capacity or creates a hazard for users) occurs, in order to minimise the effects of the incident and restore normal capacity and safety levels to all affected road facilities as efficiently as possible.

- If at the commencement date, there is no existing IMS at the site, then the Concessionaire should develop and implement an IMS within a period of not more than 3 months from the commencement date.

- NHAI shall assist the Concessionaire to identify relevant agencies (e.g. rescue, fire, hazardous materials, traffic, police, ambulance, alternative routes, cleanups) and their representatives and to liase with these representatives on behalf of the Concessionaire.

- The Concessionaire shall set up a steering committee, which shall include representatives of the various relevant agencies, to identify current & potential issues and problem areas which need addressing.

DS Toll Road Limited

0253

- The incident management centre shall be continuously staffed on a 24 hour basis. The Concessionaire shall record all incoming calls, along with the description of the nature of the call and the corresponding action taken.

- The Concessionaire shall record and maintain records of the details of all the SOS calls received (e.g. collision, hazardous material, breakdown, etc)

- After occurrence of any major incident, resulting in multiple loss of life, significant periods of road closure or major route rehabilitation work, an incident debriefing report shall be produced and forwarded to NHAI within one month of occurrence.

1.5.2. Levels of Service

The following levels of service apply to the incident management system:

- Implementation of fully functioning IMS system – 3 months after commencement
- Staffing – 24 hrs/day and 365 days/year
- Response time to a single incident – ½ an hour after receiving notification
- Multiple incidents – as soon as possible
- Incident debriefing reports – 1 month
- Steering committee monitoring report – quarterly

1.6. Safety Management

1.6.1. Scope & Levels of Service.

The following scope of operations and levels of service applies to facilities under management:

- The Concessionaire shall comply with all the requirements of the relevant Indian Laws on Occupational Health and safety, and the necessary certification/documentation proving compliance shall be made available by the Concessionaire at any time.

- The Concessionaire shall take all necessary measures to minimize accident occurrences on the highway section. For this purpose he shall liaise with the relevant local agencies such as Police, Hospital, Fire Brigade, Highway Police, etc. as required.

- The Concessionaire shall maintain a comprehensive register and database of all accidents occurring on the Project Highway Section. The Concessionaire shall utilize this data to define

and identify "Black Spots" and the like, make the necessary analysis of the cause of the "Black Spot" and make appropriate recommendations to NHAI for counter measures.

- The Concessionaire shall provide educational programs for the improvement of safety for the Users of Roads under operation. This shall occur four times per annum. This shall be carried out by the issuing of pamphlets, billboards, etc. The Road Patrols shall in addition take every opportunity at events such as accidents and the like to educate Users.

- The Concessionaire shall repair all damaged fencing that prevents access to animals and pedestrians to the highway. In addition the Concessionaire shall recommend to NHAI for installation of additional fencing where necessary to prevent access to the Highway.

In addition, the Concessionaire shall assume full responsibility for the safety of employees by providing competent training, safety clothing and safety equipment.

In addition, the Concessionaire shall be responsible for the security of the project:

- Security guards shall patrol the toll plazas and route facilities areas shall be provided by the Concessionaire. These guards shall operate on a 24 hour basis, for 365/6 days per year.
- The Concessionaire shall be responsible for maintaining/upgrading all facilities for site security, including fencing, intercom system, emergency communications system, access control system and the like.

4.3. Road Asset Management

4.3.1. Scope

The Concessionaire shall ensure the maximum availability and efficient utilisation of the assets for NHAI. This shall also include the protection of the right of way from encroachments and other unauthorised activities.

In addition to the main carriageways, the Concessionaire shall also provide for the management of rest areas, bus bays, bus parking areas and other facilities for highway users, so that these facilities operate without hindrance to the through traffic.

The Concessionaire shall maintain the buildings, plaza facilities in a manner that projects a well managed professional image to the motoring public. This shall require the Concessionaire to:

- Keep the plaza neat and litter free at all times.

0255

DS Toll Road Limited

- Maintain the vegetation, lawns and shrubs etc
- Maintain the parking areas and approaches neat and litter free.
- Maintain all the toll plaza such that the walls remain freshly painted, the woodwork neat, and all structural defects immediately attended to.
- The Concessionaire shall ensure that any visual defects of the buildings, occasioned by accident or wear and tear are rectified within one week.

4.8.2. Encroachments:

The Concessionaire's enforcement of the requirements of NHAI shall be a significant obligation under the Contract. NHAI shall define the Right of Way and their requirements with respect to unauthorised accesses, encroachments and the like".

From the date of the commencement of O&M period, the Concessionaire shall be required to determine all encroachments and unauthorised accesses to the highway. The Concessionaire shall list the encroachments with a description, location and extent of each encroachment, draw up a method statement and programme for the removal of the accesses or encroachments for approval by NHAI. All encroachments shall be removed, and unauthorised accesses closed within 3 months of the commencement of O&M period.

4.8.3. Inspections

Full and component inspections of the highway section shall be undertaken at appropriate intervals. The Concessionaire shall draft Inspection procedures for each part and component of the National Highway Section that requires periodic inspection.

4.9. Inspection Reports and Remedial Measures

4.9.1. Periodicity of inspections for maintenance activities by the Concessionaire shall be regulated as per this Agreement and governed by the exigencies of the situation. The said inspections shall be followed by reports to the Independent Consultant and NHAI. Based on reports, detailed investigations shall be undertaken by the Concessionaire itself and/or on advice of the Independent Consultant and NHAI as the case may be.

4.9.2. The Concessionaire shall carry out any maintenance, repair or rehabilitation works found necessary by these investigations in accordance with the Maintenance Manual and this Agreement.

4.10. **Maintenance of Facilities for Road Users**

4.10.1. The Concessionaire shall ensure that all the Project Facilities provided for users of all categories are kept in a neat, hygienic and tidy condition. Special attention shall be given to the preparation of food items so that they are cooked with unadulterated ingredients in a hygienic manner.

4.11. **Items of Maintenance**

4.11.1. The Concessionaire shall maintain the Project Highway, Project Facilities and Project Assets in working and orderly condition at all times during the Concession Period or any extension thereof.

4.12. The specifications and standards for maintenance items shall be governed and regulated as per Schedule 'D' of this Agreement.

5. **DIVESTMENT**

5.1. The Concessionaire shall take action(s) in terms of Article XXXIV Defects Liability and Article XLIV Miscellaneous of this Agreement prior to proceeding with Transfer of the Project Highway, Facilities and Assets thereon to NHAI.

5.2. The Concessionaire shall obtain a Transfer Certificate as per Schedule L_1 appended to this Schedule, from the Independent Consultant, who shall issue it after satisfying itself that the Project Highway and Facilities and Assets thereon have been constructed, operated and maintained in terms of this Agreement during the Concession Period and meet the divestment requirements as per this Agreement for the issue of Vesting Certificate (Schedule V) by NHAI.

5.3. The Concessionaire shall take action(s) under Article XXXIII Divestment of Rights and Interests of this Agreement after obtaining the Transfer Certificate (Schedule L_1) from the Independent Consultant as spelt out in 5.2 above in order to obtain Vesting Certificate (Schedule V) from NHAI.

5.4. The issuance of the Vesting Certificate (Schedule V) by NHAI as per sub clause 33.4 of Article XXXIII Divestment of Rights and Interest, to the Concessionaire shall result in the completion of the transfer of the Project Highway in terms of this Agreement.

0257

Schedule L

TRANSFER CERTIFICATE

I/We,_____(name of the Independent Consultant) issue this certificate, designated Transfer Certificate for widening of the existing 2-lanes to 4/6 lanes divided carriageway facility including rehabilitation of existing 2-lanes, from Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) section of National Highway No. 7 in the State of Tamil Nadu, India on Build, Operate and Transfer (BOT) basis by the Concessionaire DS Toll Road Limited on Build, Operate and Transfer (BOT) basis as per the Concession Agreement between the National Highway Authority of India (NHAI) and the said Concessionaire, being satisfied that the Project Highway has been constructed, operated and maintained during the Concession Period is in sound, durable and operational condition on completion of the said concession period, and it is in a fit condition for transfer by the said Concessionaire to NHAI or its nominee. The transfer of the said Project Highway together with facilities thereon shall be effected on the strength of this certificate.

Place of issue _____

Date of Issue _____

(Independent Consultant)

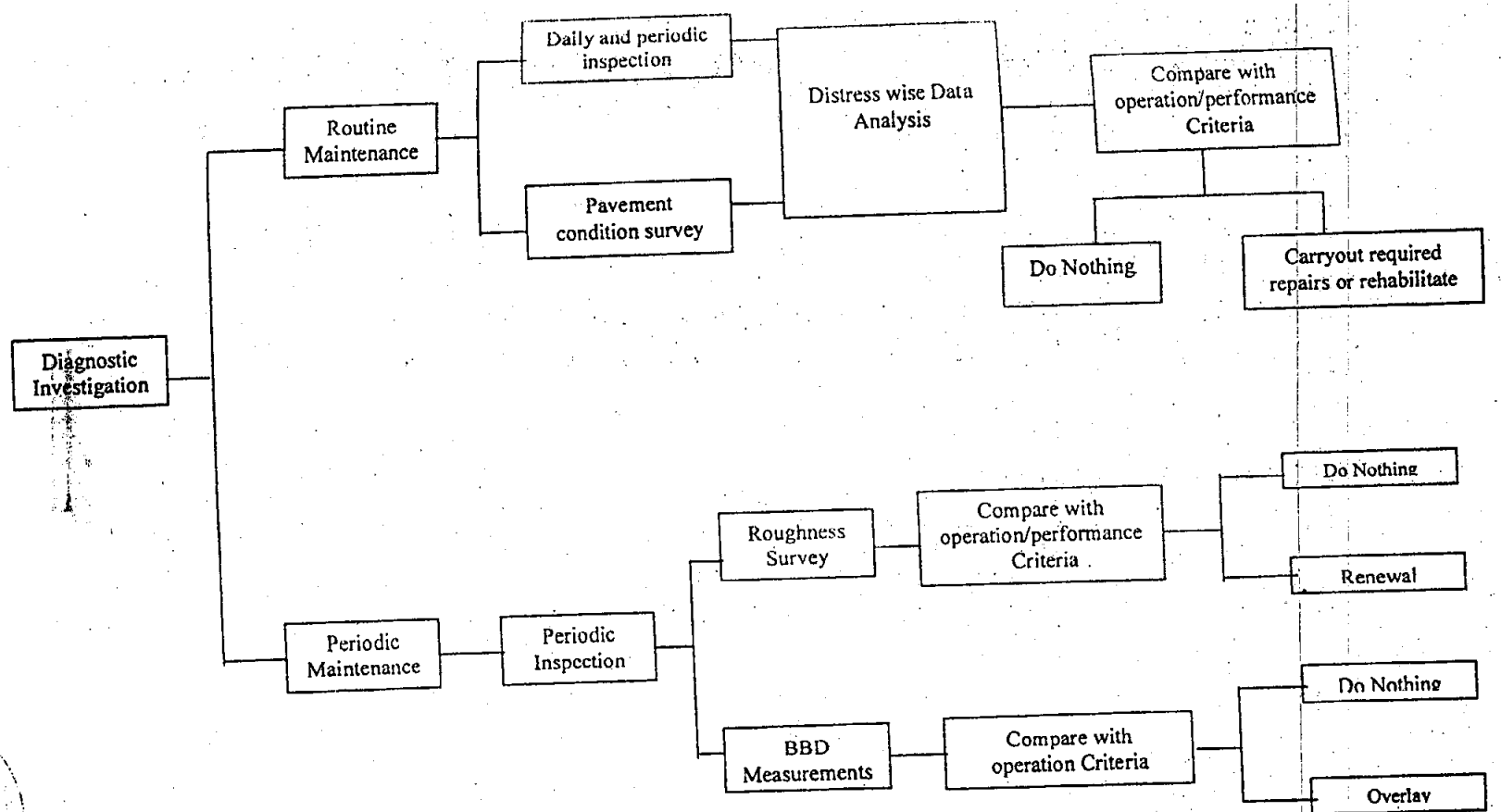
Schedule L **Appendix – 3.4**

Equivalent Rating Conditions

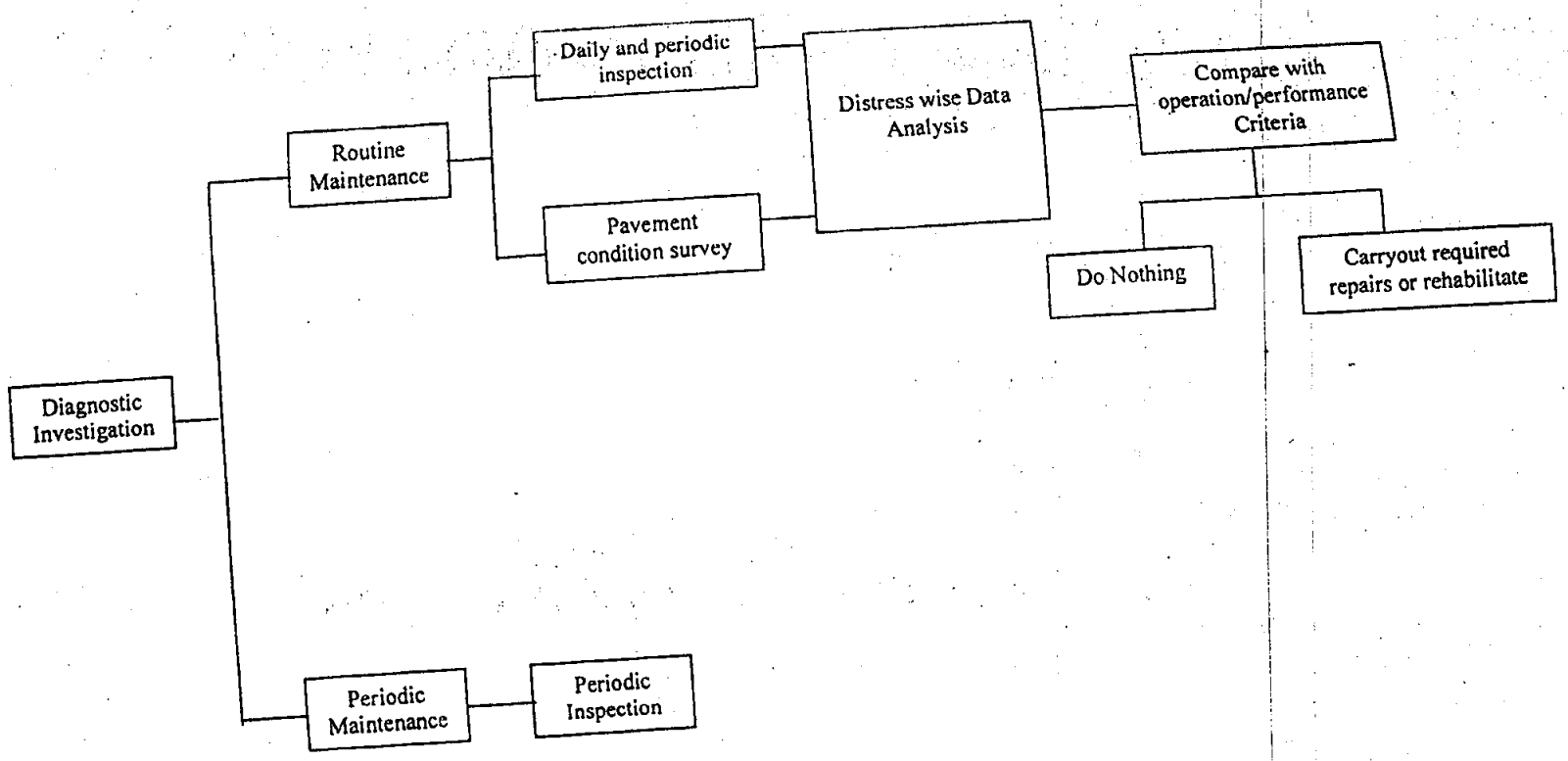
Category	Status	Rating
Very Good condition	on completion as per specification and standards	9
Good Condition	no repairs needed	8
Generally good condition	potential exists for minor maintenance	7
Fair condition	potential exists for major maintenance	6
Generally fair condition	potential exists for minor rehabilitation	5
Marginal condition	potential exists for major rehabilitation	4
Poor Condition	repair or rehabilitation required immediately	3
Critical condition	need for repair or rehabilitation is urgent. Facility should be closed until the indicated repair is complete	2
Very Critical condition	facility is closed. Study should determine the feasibility for repair	1
Unserviceable	facility is closed and is beyond repair	0

Sufficiency Rating System

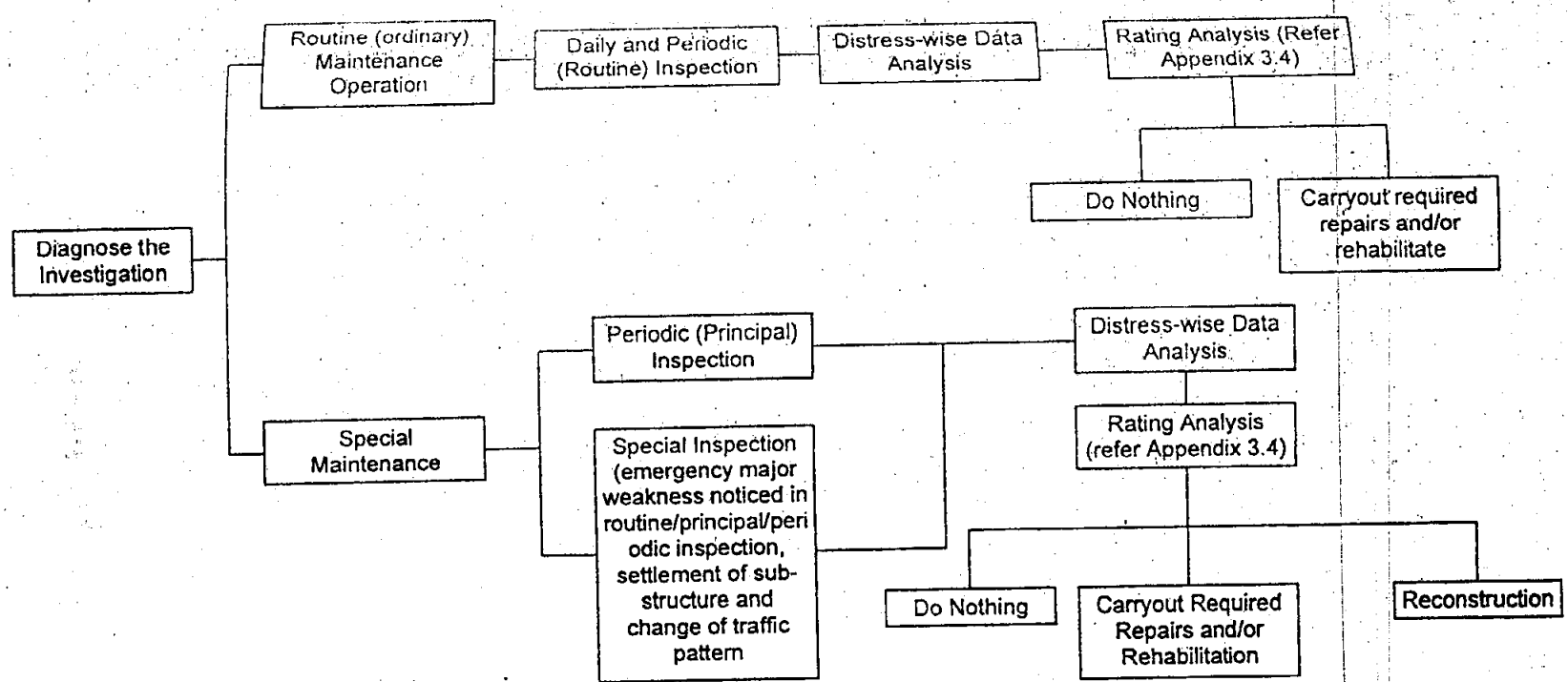
1. Load Performance
2. Safety Performance
3. Remaining Life



FLOW CHART FOR FLEXIBLE PAVEMENT MAINTENANCE



FLOW CHART FOR RIGID PAVEMENT MAINTENANCE



FLOW CHART FOR BRIDGES AND CULVERTS MAINTENANCE

SCHEDULE M

MONTHLY FEE COLLECTION STATEMENT

1. **Name of Work:** "widening the existing 2 lane portion from Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) covering 53.025 Kms, on National Highway No.7 in the State of Tamil Nadu, to 4 lanes through a concession on Build, Operate and Transfer (BOT) basis"
2. Date of commencement of fee collection: ..... (D/M/Y)
3. Report for month ending.....
4. Fee rates (in Rs.)

Vehicle Type	Fee rates on commencement	Rates during year before last year w.e.f. ..... (Date)	Rates during previous year applied w.e.f. ..... (Date)	Present rates applied w.e.f. ..... (Date)
Car, passenger van or jeep				
Light Commercial Vehicle				
Truck				
Bus				
Multi Axle Vehicle(>2 axle).				

5. Collection during month under report (Amount in Rs. Lacs)

Vehicle Type	Previous Month		Corresponding Month during Previous Year		Current Month	
	Nos.	Amount	Nos.	Amount	Nos.	Amount
Car, passenger van or jeep						
Light Commercial Vehicle						
Truck						
Bus						
Multi Axle Vehicle(>2 axle).						
Gross Total						

Note: Information at '4' and '5' to be provided separately for Through Tolled Traffic, Local Tolled Traffic and Total Tolled Traffic on the Project Highway.

DS Toll Road Limited

Evaluation Criteria for Technical Proposal

S.No.	Description	Marks
1	Specific Experience of the firm related to the assignment	20
2	Adequacy of the proposed work plan and methodology in response to the ToR	05
3	Qualifications and competence of the key staff for the assignment	75
	Total	100

Sub criteria for Specific Experience of the firm related to the assignment

Experience as Independent Consultant / Construction Supervision in Highway Projects	12
Experience in DPR preparation for Highway Projects	4
Experience in Construction Supervision/DPR /Design Review of Major structures having length of more then 200 meter.	4

Sub criteria for Adequacy of the proposed work plan and methodology in response to the ToR

Comments & Suggestions on TOR	1
Quality of Approach and Methodology	3
Work Programme & Manning Schedule	1

Sub criteria for qualification of key staff

General qualifications	25
Adequacy for the project	70
Experience in Region and language	5

Qualification and competence of key staff for the assignment. The weightage for various key staff are as under:-

Key Personnel	Marks.
Team Leader Cum Senior Highway Engineer	20
Senior Pavement Specialist	7
Senior Bridge Design Engineer	8
Highway Design Engineer	8

DS Toll Road Limited

Bridge/Structural Engineer	10
HTMS/Toll Expert	6
Road Safety Expert	6
Senior Quality cum Material Expert	10

The technical proposal should score at least 75 points to be considered responsive for financial evaluation.

4. **Evaluation of Financial Proposal**

The Financial proposals (Part 3 of the proposal) of the firms shall be opened and evaluated as under:

The financial score of the lowest bidder shall be 100 marks. The financial score for the remaining bidders shall be calculated in proportionate to the lowest bidder by the following formula:

Financial Score of 'X' = {100 X Bid price of lowest bidder} / {Bid price of 'X'}

5. **Calculation of the combined score of a firm**

The combined score of the firm will be calculated as under:

The weightage given to the technical proposal : 80%

The weightage given to financial proposal : 20%

The combined score of bidder 'X' = 0.20{Financial score of bidder 'X'} + 0.80{Technical score of bidder 'X'}

6. **Negotiation and Selection of Independent Consultants**

The combined score of technical and financial proposals shall be calculated and the firm scoring maximum marks shall be called for negotiations. After satisfactory agreement of all matters by both the parties, NHAI will appoint the said firm as Independent Consultant for the initial term of 48 months.

DS Toll Road Limited

0267

SCHEDULE N

SELECTION CRITERIA FOR INDEPENDENT CONSULTANT

Selection of the Independent Consultant shall consist of the following steps:

1. Issue of Request of Proposal for selection of Independent Consultant by NHAI
2. Evaluation of Firms Credentials
3. Evaluation of Technical Proposal.
4. Evaluation of Financial Proposal of the firm.
5. Calculation of the combined score of a firm based on Technical and Financial score
6. Negotiation and selection of Independent Consultant.

SELECTION COMMITTEE

A selection committee shall do the selection; NHAI shall nominate the members of this committee.

DETAILS OF THE SELECTION PROCESS

1. **Issue of Request of Proposal for selection of Independent Consultant by NHAI**

   NHAI will issue a Request for Proposal (RFP) for selection of Independent Consultant through single stage bidding process. This RFP shall include a Letter of Intent (LoI) and the Terms of Reference (ToR) besides information (Data Sheet) to the firms and the proposed form of contract. It shall contain the guidelines for the preparation of proposals by the firms and submission. ToR shall include the following details:

   1. Project background
   2. Objectives
   3. Scope of services
   4. Interaction with NHAI
   5. Reporting requirement
   6. Performance clause
   7. Consultant's Proposal
   8. Period of Services

1.1 The LoI shall state the intention of the NHAI to enter into a contract for the provision of consulting services and the date, time and address for submission of proposals. The Proposal should be submitted in Three Parts in 3 separate envelopes / packages and put together in one single outer envelope/package. The three parts of the proposal will be:

Part 1: Firms Credentials,
Part 2: Technical Proposal, and
Part 3: Financial Proposal

The proposal must be submitted in a hard bound form (hard bound implies binding between two covers through stitching or otherwise whereby it may not be possible to replace any paper without disturbing the document - spiral bound form, loose form, etc. will be not accepted) with all pages numbered serially, along with an index of submissions. All figures quoted in the financial Proposal should be covered with a transparent adhesive tape

2. **Evaluation of Firms Credentials**

The envelop containing the firms credentials (Part 1 of the proposal) would first be opened and evaluated based on the following criterion

S.no	Description	Marks
1	Year of Establishment of Firm	10
2	Average annual turnover (last three years)	10
3	Number of Key personnel	10
4	Experience of the firm in DRP preparation for Highways projects during the last 7 years.	10
5	Experience of the firm in DPR preparation/design review/supervision of major highway structures of length more than 200m during the last 7 years.	10
6	Experience of the Firm in as Independent Consultant or in Construction Supervision for Highway projects during the last 7 years.	50
	TOTAL	100

The firms should score at least 70 marks for qualifying to the next stage.

3. **Evaluation of Technical Proposal**

The technical proposals (Part 2 of the proposal) received from short listed firms shall be evaluated for selection of firms based on the following:

0265

SCHEDULE O

TERMS OF REFERENCE OF INDEPENDENT CONSULTANT

SECTION 1. LETTER OF INVITATION

Independent Consultancy Services for 4/6 laning of 15 projects on North-South & East-West Corridors (NHDP - Phase II) in the States of Tamil Nadu, Andhra Pradesh, Karnataka, Kerala and Uttar Pradesh on BOT or BOT (Annuity) Basis

The National Highways Authority of India (NHAI) invites proposals for Independent Consultancy Services on the basis of international Competitive Bidding for the following 15 packages in the State of Tamil Nadu, Andhra Pradesh, Karnataka, Kerala and Uttar Pradesh on North-South & East – West Corridor under NHDP programme.

The BOT projects basically comprises up-gradation and construction of 4/6-lane highways, construction and rehabilitation of bridges and culverts, construction of high embankment/elevated structures/ROBs etc. along the existing highways including realignment and bypasses. The proposed construction work will involve use of modern equipments and construction practices.

NHAI intend to appoint Consultants to act as Independent Consultants for implementation of the above BOT projects. As per Terms and Conditions of the Concession Agreement (s), the Independent Consultant is required to: (i) independently review activities associated with design, design review, construction and operation and maintenance of the project on behalf of both NHAI and Concessionaire so as to ensure compliance of requirements of Concession Agreement (ii) report to NHAI on the Financial and Technical aspects of the project, (iii) assist the parties to the Concession Agreement in arriving at an amicable settlement of disputes, if any.

The interested consultancy firms may obtain the RFP from NHAI office from address given below up to [ ] on all working days within 1000 hrs and 1700 hrs. IST by payment of non-refundable Demand Draft amounting to Rs. 5,000/- drawn in favour of "National Highways Authority of India" payable at any schedule bank in New Delhi. The RFP document is also available on NHAI website from [ ]. The Consultant who down load the RFP document from the website will be required to pay the non-refundable fee of Rs. 5,000/- at the time of the submission of the document.

5. For submission, evaluation and selection of Consultant a "single stage" process has been planned. The proposal should be submitted in three parts in three separate envelopes/packages and put together in one single outer envelope/package. The three parts of the proposal are (i) Part 1: Firms credential, (ii) Part 2: Technical Proposal and (iii) Part 3: Financial Proposal. Part 1 of the proposal would be first opened and evaluated and the firms scoring the qualifying marks as mentioned in RFP would be considered for further evaluation. The financial proposal of only those firms, who score qualifying marks in the technical proposal would be opened and evaluated. The final selection of the firm would be based on combined score of technical and financial proposal. The weightage to technical and financial score would be 80% & 20% respectively.

6. The total time period for the assignment as independent consultant will be for [48] months.

7. A firm either individually or in joint venture/association may apply for _____. A firm cannot be a part of other joint venture/association for applying in more than _____ package. In case of Joint venture/association, maximum _____ firms are permitted.

8. NHAI will not be responsible for any delay, loss or non-receipt of RFP document sent by post/courier. Further, NHAI shall not be responsible for any delay in receiving the Proposal and reserves the right to accept/reject any or all applications without assigning any reason thereof.

9. The three parts of the Proposal (firms credentials, technical proposal and financial proposal) must be submitted in a hard bound form (hard bound implies binding between two covers through stitching or otherwise whereby it may not be possible to replace any paper without disturbing the documents-spiral bound form, loose form, etc. will be not accepted) with all pages numbered serially, along with an index of submission. All figures quoted in the financial Proposal should be covered with a transparent adhesive tape. In the event, any of the instructions mentioned herein have not been adhered to, NHAI will reject the Proposal.

10. *RFP submission must be received not later than 1100 hrs on [ ] in the manner specified in* the RFP document at the addressed given below.

Mr. Pranavant
General Manager (NS-2)
National Highways Authority of India
G-5 & G-6, Sector 10, Dwarka
New Delhi 110 075.
Tel:- 011-25074100/4200 Ext 1312
Fax:- 011-25074100/4200 Ext 2423

0269

SECTION 2. INFORMATION TO CONSULTANTS

INTRODUCTION

1.1 You are hereby invited to submit a proposal for consulting services required for the assignment named in the attached Letter of Invitation. Your proposal could form the basis for future negotiations and ultimately a contract between your firm and the NHAI.

1.2 A brief description of the assignment and its objectives are given in the Terms of Reference (TOR).

1.3 The assignment shall be implemented in various stages such as Design, Construction supervision, and Operation and Maintenance supervision. Continuation of services for the next stage shall be subject to satisfactory performance of the previous stage, as determined by the NHAI.

1.4 To obtain first hand information on the assignment and on the local conditions, you are encouraged to pay a visit to the NHAI before submitting a proposal and attend a pre proposal conference as specified in the data sheet. You must inform yourself of local conditions and take them into account in preparing your proposal.

1.5 Please note that (i) the costs of preparing the proposal and negotiating for the contract, including a visit to site, are not reimbursable as a direct cost of assignment and (ii) NHAI is not bound to accept any of the proposals received by it and reserves the right to annul the selection process at any time prior to contract award, without thereby incurring any liability to the Consultants.

1.6 We wish to remind you that in order to avoid conflict of interest situations, any firm associated with the Concessionaire of the Project Highway and its Design and/or Supervision Consultant and/or the Contractor(s) as Design Consultant and/or Construction Supervision Consultant is not eligible to participate in the bidding.

1.7 Consultant have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Client, or than may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of its Contract.

1.8 It is the NHAI's policy that the consultants observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, the NHAI:

1.9 Defines, for the purpose of this paragraph, the terms set forth below as follows:

(i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in contract execution;

(ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract;

0270

(iii) "collusive practices" means a scheme or arrangement between two or more consultants with or without the knowledge of the Client, designed to establish prices at artificial, noncompetitive levels;

(iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.

(b) will reject a proposal for award if it determines that the Consultant recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question;

(c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract; and

(d) will have the right to require that a provision be included requiring consultants to permit the NHAI to inspect their accounts and records relating to the performance of the contract and to have them audited by authorized representatives of NHAI.

1.9 Consultants, their Sub-Consultants, and their associates shall not be under a declaration of ineligibility for corrupt and fraudulent practices. Furthermore, the Consultants shall be aware of the provisions on fraud and corruption stated in the specific clauses in the General Conditions of Contract.

1.10 Consultants shall furnish information on commissions and gratuities, if any, paid or to be paid to agents relating to this proposal and during execution of the assignment if the Consultant is awarded the Contract, in the Financial Proposal.

1.11 The Data Sheet indicates how long Consultants' Proposals must remain valid after the submission date. During this period, Consultants shall maintain the availability of Professional staff nominated in the Proposal. The Client will make its best effort to complete negotiations within this period. Should the need arise, however, the Client may request Consultants to extend the validity period of their proposals. Consultants who agree to such extension shall confirm that they maintain the availability of the Professional staff nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, Consultants could submit new staff in replacement, who would be considered in the final evaluation for contract award. Consultants who do not agree have the right to refuse to extend the validity of their Proposals.

2. CLARIFICATIONS AND AMENDMENT OF RFP DOCUMENTS

2.1 Consultants may request a clarification of any of the RFP documents up to the number of days indicated in the Data Sheet before the Proposal submission date. Any request for

clarification must be sent in writing by paper mail, cable, telex, facsimile, or electronic mail to the Client's address indicated in the Data Sheet. The Client will respond by cable, telex, facsimile, or electronic mail to such requests and will send copies of the response (including an explanation of the query but without identifying the source of inquiry) to all invited consultants who intend to submit proposals.

2.2 At any time before the submission of Proposals, the Client may for any reason, whether at its own initiative or in response to a clarification requested by an invited firm, modify the RFP documents by amendment. Any amendment shall be issued in writing through addenda. Addenda shall be sent by mail, cable, telex, facsimile or electronic mail to all invited consultants and will be binding on them. The Client may at its discretion extend the deadline for the submission of Proposals.

3. PREPARATION OF PROPOSAL

3.1 You are requested to submit your proposal in Three Parts in 3 separate envelopes / packages and put together in one single outer envelope/package. The three parts shall be:

Part 1: Firms Credentials,
Part 2: Technical Proposal and
Part 3: Financial Proposal.

The proposal shall be written in the language specified in the data sheet.

Part 1: Firms Credentials

3.2 This submission shall contain the following information/ details and should not include any other information

- Year of Establishment of Firm
- Average annual turnover (last three years)
- Number of Key personnel
- Experience of the firm in DRP preparation for Highways projects during the last 7 years.
- Experience of the firm in DPR preparation/design review/supervision of major highway structures of length more than 200m during the last 7 years.
- Experience of the Firm as Independent Consultant or Supervision Consultant for Highway projects during the last 7 years.

Part 2: Technical Proposal

3.3 You are expected to examine all terms and conditions included in the documents. Failure to provide all requested information will be at your own risk and may result in rejection of your proposal.

3.4 During preparation of the technical proposal you may give particular attention to the following:

i. The estimated man months for the assignment is stated in the Terms of Reference for your information. The proposal shall however be based on the number of professional staff months estimated by the firm.

ii. The majority of the key professional staff proposed must be permanent staff of the firm.

iii. No alternative to key professional staff may be proposed and only one Curriculum Vitae (CV) may be submitted for each position and

iv. A good working knowledge of the language specified in the data sheet is essential for key professional staff on this assignment. Reports must be in the language (s) specified in the data sheet.

v. Joint venture are allowed as detailed in the data sheet

3.5 Your technical proposal must provide the following information, using but not limited to the formats attached in the Appendix I.

i. A brief description of the firm's organisation and an outline of recent experience of the Consultants and, in the case of Joint Venture, for each partner, on assignments of a similar nature. The information which you shall provide on each assignment should indicate, *inter-alia*, the profiles of the staff provided, duration, contract amount and firm's involvement.

ii. Any comments or suggestions on the ToR and a description of the methodology (work plan) which the firm proposes to execute the services, illustrated with bar charts of activities.

iii. The composition of the proposed staff team, the tasks which shall be assigned to each and their timing;

iv. **CVs recently signed in blue ink on each page** by both the proposed professional staff and the authorised representative submitting the proposal. Key information should include years with the firm and degree of responsibility held in various assignments. **Photocopy or unsigned CVs shall not be evaluated.**

v. Estimates of the total time effort (person x months) to be provided for the services, supported by bar chart diagrams showing the time proposed (person x months) for each professional staff and

vi. Any additional information requested in Data Sheet.

3.6 The technical proposal must not include any financial information.

Part 3: **Financial Proposal**

3.7 In preparing the Financial Proposal, consultants are expected to take into account the requirements and conditions of the RFP documents. The Financial Proposal should follow Standard Forms. It lists all costs associated with the Assignment, including (a) remuneration

0223

for staff (foreign and local, in the field and at headquarters), and (b) rentals/fixed rates/reimbursable such as subsistence (per diem, housing), transportation (international and local, for mobilization and demobilization), services and equipment (vehicles, office equipment, furniture, and supplies), office rent, insurance, printing of documents, surveys, and training, if it is a major component of the assignment. If appropriate, these costs should be broken down by activity and if appropriate into foreign and local expenditures.

3.3 The Financial Proposal should clearly identify as a separate amount, the local taxes (including social security), duties, fees, levies and other charges imposed under the applicable law, on the consultants, the sub-consultants, and their personnel (other than nationals or permanent residents of the government's country); unless the Data Sheet specifies otherwise.

3.4 Consultants may express the price of their services in the Local currency (Indian Rupees) and/or US Dollar at the rate prevalent at the time of submission of the proposals. The Client may require consultants to state the portion of their price representing local cost in the national currency if so indicated in the Data Sheet.

4. SUBMISSION, RECEIPT AND OPENING OF PROPOSALS

4.1 The original proposal shall be prepared in indelible ink. It shall contain no inter-lineation or overwriting, except as necessary to correct errors made by the firm itself. Any such corrections must be initialed by the person or persons who sign(s) the Proposals.

4.2 An authorized representative of the firm shall initial all pages of the Proposal. The representative's authorization in *original notarized* is confirmed by a written power of attorney accompanying the Proposal.

4.3 You must submit one original proposal only. The envelope must be clearly marked.

"DO NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE"

4.4 This outer envelope shall include three separate envelopes, each clearly marked as "Part 1: Firms Credentials", "part 2: Technical Proposal" or "Part 3: Financial Proposal" (each envelope indicating original or copy as appropriate).

4.5 The proposal must be submitted in a hard bound form (hard bound implies binding between two covers through stitching or otherwise whereby it may not be possible to replace any paper without disturbing the document - spiral bound form, loose form, etc. will be not accepted) with all pages numbered serially, along with an index of submissions. All figures quoted in the financial Proposal should be covered with a transparent adhesive tape

4.6 Your completed proposal must be delivered on or before the time and date stated in the data sheet.

5 PROPOSAL EVALUATION

5.1 A three -stage procedure shall be adopted in evaluating the proposals : (i) Firms Credentials, firms securing the qualifying marks mentioned in Clause 5.2 will be eligible for Technical and Financial evaluation (ii) Technical Evaluation, firms securing the qualifying marks mentioned in Clause 5.3 will be eligible for Financial evaluation and (iii) Financial Evaluation.

Firms Credentials

5.2 The Evaluation Committee appointed by the NHAI shall carry out its evaluation applying the evaluation criteria and point system specified in the data sheet. The firms should score at least 70 marks for qualifying to the next stage

Technical Proposal

5.3 The Evaluation Committee appointed by the NHAI shall carry out its evaluation applying the evaluation criteria and point system specified in the data sheet. Each responsive proposal shall be attributed a technical score (St.) The technical proposal should score at least 75 points to be considered responsive for financial evaluation.

Financial Proposal

5.4 After the evaluation of technical proposal is completed, the Client may notify those consultants whose proposals were considered non-responsive to the RFP and Terms of Reference, indicating that their Financial Proposals will be returned unopened after completing the selection process. The Client shall simultaneously notify the consultants that have secured the minimum qualifying mark, indicating the date and time set for opening the Financial Proposals. The opening date should allow Consultants sufficient time to make arrangements for attending the opening. The notification may be sent by registered letter, cable, telex, facsimile, or electronic mail.

5.5 The Financial Proposals shall be opened publicly in the presence of the consultants' representatives who choose to attend. The name of the consultant, the quality scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. The Client shall prepare minutes of the public opening.

5.6 The Evaluation Committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures the formers will prevail. In addition to the above corrections, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items. In case an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal, (i) if the Time-Based form of contract has been included in the RFP, the Evaluation Committee shall correct the quantification indicated in the Financial Proposal so as to make it consistent with that indicated in the Technical Proposal, apply the relevant unit price included in the Financial

0275

Proposal to the corrected quantity and correct the total Proposal cost, (ii) if the Lump-Sum form of contract has been included in the RFP, no corrections are applied to the Financial Proposal in this respect. Prices shall be converted to a single currency using the selling rates of exchange, source and date indicated in the Data Sheet. The evaluation shall exclude those taxes, duties, fees, levies, and other charges imposed under the applicable law; and those applied to foreign and non-permanent resident consultants.

5.7 The Evaluation Committee shall determine if the financial proposal is complete and without computational errors. The lowest financial proposal (Fm) shall be given a financial score (Sf) of 100 points. The financial score of the proposals shall be computed as follows : Sf = 100 x Fm/F (F-amount of financial proposal).

5.8 Proposals shall finally be ranked according to their combined technical (St) and financial (Sf) scores using the weights indicated in the data sheet.

6 NEGOTIATIONS

6.1 Prior to the expiration period of validity of proposal, the NHAI shall notify the successful firm who submitted the highest scoring proposal in writing by registered letter, cable telex or facsimile and invite it to negotiate the contract.

6.2 Negotiations normally take two to five days. The aim is to reach agreement on all points, and initial a draft contract by the conclusion of negotiations

6.3 Negotiations shall commence with a discussion of your technical proposal, the proposed methodology (work plan), staffing and any suggestions you may have made to improve the ToR. Agreement must then be reached on the final ToR, the staffing and bar charts, which shall indicate activities, staff, periods in the field and in the home office, staff months, logistics and reporting. Special attention shall be paid to optimise the required outputs from the firm within the available budget and to define clearly the inputs required from the NHAI to ensure satisfactory implementation of the assignment.

6.4 It is the responsibility of the Consultant, before starting financial negotiations, to contact the local tax authorities to determine the local tax amount to be paid by the Consultant under the Contract. The financial negotiations will include a clarification (if any) of the firm's tax liability in the Client's country, and the manner in which it will be reflected in the Contract; and will reflect the agreed technical modifications in the cost of the services. Unless there are exceptional reasons, the financial negotiations will involve neither the remuneration rates for staff nor other proposed unit rates.

6.5 Changes agreed upon shall then be reflected in the financial proposal, using proposed unit rates (no negotiation of the unit rates, including the man months rates).

6.6 Having selected a firm, among other things, on the basis of an evaluation of proposed key professional staff, the NHAI expects to negotiate, a contract on the basis of the staff named in the proposal and, prior to contract negotiations, will require assurance that this staff shall be

actually available. NHAI shall not consider substitutions during contract negotiations except in cases of unexpected delays in the starting date or incapacity of key professional staff for reasons of health.

6.7 The negotiations shall be concluded with a review of the draft form of Contract. The NHAI and the firm will finalise the contract to conclude negotiations.

7 AWARD OF CONTRACT

7.1 After completion of negotiations with the consultants, the Client shall award the Contract to the selected Consultant. However, after signing of the Contract, the Client may return the unopened Financial Proposals to the unsuccessful Consultants.

7.2 The successful firm with whom the contract is signed is expected to commence the assignment on the date and at the location specified in the data sheet.

8. CONFIDENTIALITY

Information relating to evaluation of proposals and recommendations concerning awards shall not be disclosed to the consultants who submitted the proposals or to other persons not officially concerned with the process, until the winning firm has been notified that it has been awarded the contract.

0277

DATA SHEET
(As Mentioned in Information to Consultants)

Sub clause No. in Information to Consultants

1.4 Pre-Proposal Conference shall be held at: no pre-proposal conference shall be held.

1.11 The proposal shall be valid for 120 days after the last date of submission.

2.1 Clarification may be requested 15 days prior to last date of submission. The address for requesting clarification is:

Mr. Pranavant,
GM (NS-II)
National Highways Authority of India
G-5&6; Sector 10, Dwarka,
New Delhi
Tel : 91-11-25074100

3.1 The Language of documents and correspondence will be English

3.4 Limitations to joint ventures or sub-consultant are: Joint Venture consisting of maximum two firms are permitted. In case of JV the experience of both the firms shall be counted. In case of association/sub-consultant the experience of associated firm/sub-consultant shall not be counted whereas the key personnel of the associated firm would be considered for evaluation.

All the personnel shall have working knowledge of English and all the reports etc shall be written in English.

3.8 Taxes – consultants are requested to consult Tax Consultants for details.

3.9 The Consultants to state local cost in INR.

4.4 The time and date of submission: 1100 hrs on 16.8.2005.

5.2 Firms Credentials

S. No.	Description	Marks
1	Year of Establishment of Firm	10
2	Average annual turnover (last three years)	10
3	Number of Key personnel	10
4	Experience of the firm in DRP preparation for Highways projects during the last 7 years.	10
5	Experience of the firm in DPR preparation/design review/supervision of major highway structures of length more than 200m during the last 7 years.	10

0279

5	Experience of the Firm as Independent Consultant or Supervision Consultant for Highway projects during the last 7 years.	50
	TOTAL	100

The firms should score at least 70 marks for qualifying to the next stage.

ii) The points assigned to Technical Evaluation criteria are :

S.No.	Description	Marks
1	Specific Experience of the firm related to the assignment	20
2	Adequacy of the proposed work plan and methodology in response to the ToR	05
3	Qualifications and competence of the key staff for the assignment	75
	Total	100

Sub criteria for Specific Experience of the firm related to the assignment

Experience as Independent Consultant / in Construction Supervision in Highway Projects	12
Experience in DPR preparation for Highway Projects	4
Experience in Construction Supervision/DPR /Design Review of Major structures having length of more then 200 meter.	4

Sub criteria for Adequacy of the proposed work plan and methodology in response to the ToR

Comments & Suggestions on TOR	1
Quality of Approach and Methodology	3
Work Programme & Manning Schedule	1

Qualification and competence of key staff for the assignment. The weightage for various key staff are as under:-

Key Personnel	Marks.
Team Leader Cum Senior Highway Engineer	20
Senior Pavement Specialist	7
Senior Bridge Design Engineer	8

0279

Highway Design Engineer	8
Bridge/Structural Engineer	10
HTMS/Toll Expert	6
Road Safety Expert	6
Senior Quality cum Material Expert	10

Criteria for qualification of key staff

General qualifications	25
Adequacy for the project	70
Experience in Region and language	5

Technical proposal should score at least 75 points to be considered responsive for financial evaluation.

The single currency for price conversion is INR. The conversion rate shall be RBI Reference rate as was applicable 7 days prior to the last date for submission of proposal.

The weightage given to technical proposal is 80%

The weightage given to financial proposal is 20%.

Commencement of Assignment: The firm shall begin carrying out the services within one month of signing of the Consultancy Agreement.

SECTION 3. FORMATS FOR SUBMISSION OF FIRMS CREDENTIALS

Proposal should contain the following information in enclosed format attached at Appendix A.

- Year of Establishment of Firm
- Average annual turnover (last three years)
- Number of Key personnel
- Experience of the firm in DRP preparation for Highways projects during the last 7 years.
- Experience of the firm in DPR preparation/design review/supervision of major highway structures of length more than 200m during the last 7 years.
- Experience of the Firm as Independent Consultant or Supervision Consultant for Highway projects during the last 7 years.

Note: The Firm shall submit Certificate of Incorporation and audited balance sheet for the last three years (FY 2002-2003, FY 2003-2004 and FY 2004-2005). In case audited balance sheet FY 2004-2005 is not available, firm may submit the audited balance sheet of 2001-2002. For claiming experience of Highway projects completion certificate from employer should be enclosed. The

Proposal should also contain the details of the key personnel viz. their name, qualification, expertise and experience and years of association with the firm.

Appendix A

Firms credentials (to be filled by each of the constituent firm in case of JV).

Name of the packages to be applied for:-

Year of establishment of firm.

Consultant	Year of Establishment	Country	Type of Organisation			
			Individual	Partnership	Corporation	Other
Lead Partner						
Other Partner						

Office/Business Address/Telephone nos./Cable Address.

Consulting firm's former name and year of establishment.

Narrative description of firms (Use other sheet, if necessary)

Name of, not more than two (2) principals who may be contacted with title and telephone number /fax number.

Number of Personnel in the Organisation.

Discipline	Number
Key Personnel	With experience more than 10 years and associated with the firm with at least 1 year.

Financial Statement of the last three years.

Particulars	2004-2005	2003-2004	2002-2003
Annual turnover from Consulting business			
Total Assets			
Current Assets			
Total Liabilities			
Current Liabilities			
Net Worth			
Working Capital			

Toll Road Limited

0281

viii.	Net Profit.			

Note: i) The amount shall be stated in INR.

ii) The currency conversion rate for the respective years shall be mentioned for other international currencies.

iii) **The application with amount sated in currencies other than INR shall be treated as non responsive.**

HIGHWAY PROJECTS HANDLED BY THE CONSULTING FIRMS DURING THE LAST SEVEN YEARS (Only those projects be included, which are supported the certificated of the Engineer/Employer mentioning that the consultancy work has been completed satisfactorily or has been substantially completed in case of project supervision works (substantial completion means 90% works in financial value having been executed) satisfactorily.

Sl. No.	Projects Name/Year	Type of Services Rendered	Length of Projects (kms)	Employer	Duration.
1	2	3	4	5	6

Supporting Statements to Employer's Certificates may be furnished giving full details of the projects carried out as below:

Name of the Project: _____

Owner's Name and Address: _____

_____

Completion (Actual and Estimated): _____

Description of Project: _____

Description of Services Provided by the Firm:

_____

I certify that the information in the above Expression of Interest forms is true to the best of my knowledge.

PRESIDENT/MANAGING DIRECTOR OR AUTHORIZED SIGNATORY#

SUBSCRIBED AND SWORN to before me this _____ date of _____, 2005 _____ at _____.

Please attach Power of Attorney as described or valid authorization.

NOTARY PUBLIC

SECTION 4. FORMAT FOR SUBMISSION OF TECHNICAL PROPOSAL

Appendix B-1	Technical proposal submission form.
Appendix B-2	Firm's references
Appendix B-3	Firm's comments and suggestions on the Terms of Reference and on data, services, and facilities to be provided by the NHAI.
Appendix B-4	Approach paper on methodology and work plan for performing the assignment.
Appendix B-5	Composition of the team and task(s) of each team member
Appendix B-6	Curriculum vitae of proposed professional staff.
Appendix B-7	Time schedule for deployment of professional personnel
Appendix B-8	Activity (works) schedule.

BS Toll Road Limited

0283

APPENDIX B-1

Technical Proposal submission Form.

FROM (Name of Firm)

To: (Name and Address of Client)

Ladies/Gentlemen:

Subject:

We, the undersigned, offer to provide the consulting services for the above in accordance with your Request for Proposal dated (Date), and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and a Financial Proposal sealed under a separate envelope.

If negotiations are held during the period of validity of the Proposal i.e. before (Date) we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from contract negotiations.

We understand you are not bound to accept any Proposal you receive

We remain,

Yours sincerely,
Authorised Signature
Name and Title of Signatory:
Name of Firm:
Address:

0284

APPENDIX B-2: FIRM'S REFERENCES

Relevant Services Carried Out in the Last Seven Years
That Best Illustrate Qualifications

Using the format below, provide information on each reference assignment for which your firm/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted.

Assignment Name :		Country :
Location within Country :		Professional Staff Provided by Your Firm:
Name of Client :		No. of Staff :
Start Date (Month/Year)	Completion Date (Month/Year)	No. of Staff-Months :
		Approx. Value of Services (in Current INR)
Name of Associated Consultants, if any:		No. of Months of Professional Staff. Provided by Associated Consultants :
Name of Senior Staff involved :		
Narrative Description of Project :		
Description of Actual Services Provided by Your Staff :		

Firm's Name: _____

Note: In case of claiming experience of Highway projects completion certificate from employer must be enclosed.

DS Toll Road Pvt. Ltd.

0285

APPENDIX B-3 : COMMENTS AND SUGGESTIONS OF CONSULTANTS ON THE TERMS OF REFERENCE AND ON SERVICES AND FACILITIES TO BE PROVIDED BY THE NHAI

On the Terms of Reference:

1.

2.

3.

4.

....

On the services and facilities to be provided by the NHAI

1.

2.

3.

4.

....

APPENDIX B-4 : APPROACH PAPER ON METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

APPENDIX B-5 : COMPOSITION OF THE TEAM PERSONNEL, AND TASK(S) OF EACH TEAM MEMBER

Technical/Managerial Staff

Sl. No.	Name	Position	Task
1			
2			
3			
4			
..			
..			

Support Staff

Sl. No.	Name	Position	Task
1			
2			
3			
4			
..			
..			

Road Limited

APPENDIX B-6 : FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

Proposed Position : .....

Name of Firm : .....

Name of Staff : .....

Profession : .....

Date of Birth : .....

Years with Firm/Entity : ..... Nationality : .....

Membership of Professional Societies : .....

Detailed Task Assigned : .....

Key Qualifications :

[Give an outline of staff member's experience and training most pertinent to tasks on assignment. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations. Use about half a page.]

Education :

[Summarize college/university and other specialized education of staff member, giving their names, dates attended, and degrees obtained. Use about one quarter of a page.]

0289

...ployment Record:

...arting with present position, list in reverse order every employment held. List all positions held by ...staff member since graduation, giving dates, name of employing organizations, titles of positions held, ...locations of assignments. For experience in last ten years, also give types of activities performed ...client references, where appropriate. Use about three-quarters of a page.]

Languages:

[For English language indicate proficiency : excellent, good, fair, or poor; in speaking, reading, and ...ing]

Certification

I, the undersigned, (Name and Address) certify that I have not left any assignment with the ...tants engaged by NHAI / contracting firm (firm to br supervised now) for any continuing work ...NHAI without completing my assignment. I will be available for the entire duration of the current project (named.....). if I leave this assignment in the middle of the complition of the work, NHAI would be at liberty to debar me from taking any assignment in any of the NHAI works for an appropriate period of time to be decided by NHAI. I have no objection if my services are extended by NHAI for this work in future.

..... Date :.....

...ature of staff member or authorised representative of the Firm] *Day/Month/Year.*

...Toll Road Limited

0200

APPENDIX B-7: TIME SCHEDULE FOR PROFESSIONAL PERSONNEL

A. Activity Schedule

Sl. No.	Name	Position	Monthwise Program (in form of Bar Chart) [1st, 2nd, etc. are months from the start of assignment]												Number of Months
			1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th and subsequent years	
															Subtotal (1)
1															Subtotal (2)
2															Subtotal (3)
3															Subtotal (4)
4															-
-															-
-															

0291

APPENDIX B-8 : ACTIVITY (WORKS) SCHEDULE

A. Activity Schedule

		Monthwise Program (in form of Bar Chart) *[1st, 2nd, etc. are months from the start of assignment]*											
Sl. No.	Item of Activity (Works)	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
1	.....												
2	.....												
3	.....												
4	.....												
-	.....												
-	.....												

B. Completion and Submission of Reports

S.No	Reports :	Programme : (Date)
1	Monthly reports (Design and Construction)	
2	Quarterly Reports	
3	Various others reports as provided in the Concession Agreement such as Completion Report	

SECTION 5. FORMAT FOR SUBMISSION OF FINANCIAL PROPOSAL.

Appendix C-1 Financial proposal submission form

Appendix C-2 Summary of costs

Appendix C-3 Breakdown of local currency costs

Appendix C-4 Breakdown of foreign currency cost.

APPENDIX C-1 : FINANCIAL PROPOSAL SUBMISSION FORM

FROM : (Name of Firm)

TO :
National Highways Authority of India
G-5&6, Sector-10, Dwarka
New Delhi (India) - 110045

Subject :

We, the undersigned, offer to provide the consulting services for the above in accordance with your Request for Proposal dated [Date], and our proposal. Our attached financial proposal is for the sum of [Amount in words and figures]. This amount is exclusive of the local taxes which we have estimated at [Amount in Words and Figures).

Our financial proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to the expiration of the validity period of the proposal, i.e., [Date].

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

Commission and gratuities, if any, paid or to be paid by us to agents relating to this proposal and contract execution, if we are awarded the contract, are listed below :

Name and Address of Agents	Amount and Currency	Purpose of Commission or Gratuity
.....	.....	.....
.....	.....	.....

We understand you are not bound to accept any proposal you receive.

We remain,

Yours sincerely,

Authorised Signature :
Name and title of Signatory :

0294

APPENDIX C-2 : SUMMARY OF COSTS

No.	Description	Amount (:LC)*	Amount (FC**)
	Local Consultants		
I	Remuneration for Local Key Personnel		
II	Supporting Staff		
III	Transportation		
IV	Duty Travel to Site		
V	Office Rent		
VI	Office supplies, Utilities and communication		
VII	Office Furniture and Equipment		
VIII	Reports and Document Printing		
	Survey Equipment		
	Subtotal Local Consultants		
	Foreign Consultants		
F-I	Remuneration for Expatriate Staff		
F-II	Mobilization and Demobilisation		
F-III	Accommodation for Consultants' Staff		
F-IV	Other Costs		
	Subtotal Foreign Consultants		
	Total Cost Net of Tax (Local & Foreign Consultants)		
Local Taxes and Duties	Tax payable in India on fees for technical services provided by foreign consultants, including duties on equipment imported.		
	Consultancy Services Tax payable in India		

DS Toll Road

0295

	TOTAL COSTS (Including Tax)**		

LC*Local Currency FC** in US Dollar (1+1)

Note: The ceiling cost of the consultancy is as shown in the Summary of Costs. Payments will be made as per stipulations of the Conditions of Contract.

REMUNERATION FOR STAFF

No.	Position	Name	Year 1			Year 2			Year 3			Year 4		
			Rate	SM	Amount	Rate	SM	Amount	Rate	SM	Amount	Rate	SM	Amount
	Key Personnel													
1.														
2.														
3.														
4.														
5.														
6.														
7.														
8.														
	Sub - Total													
	Sub-professional													
1.		TBN												
2.		TBN												
3.		TBN												
4.		TBN												
5.		TBN												
6.		TBN												

7.		TBN													
8.		TBN													
9.		TBN													
10.		TBN													
	Sub-Total														
	TOTAL														

SM = Staff Month
TBN = To be Named

II. **Support Staff**

No.	Position	Name	Staff Months	Billing Rate ( )	Amount ( )
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
				Total :	

III Transportation (Fixed costs)

S.No	Description	Qty.	Nos. of months	Rate/ Month	Amount
1	The vehicles provided by the Consultants shall include the cost for rental, drivers, operation, maintenance, repairs, insurance, etc. A. For use of consultants				
	Total				

IV. Duty Travel to Site (Fixed Costs)

Trips	NO	Rate	Amount

V. Office Rent (Fixed Costs)

The rent cost includes maintenance, cleaning, repairs, etc.

__ months x

Total

VI. Office Supplies, Utilities and Communication (Fixed Costs)

0299

DS Toll Road Limited

No	Item	Months	Monthly Rate	Amount in Rs.
1.	Office Supplies			
2.	Drafting Supplies			
3.	Computer Running Costs			
4.	Domestic and International Communication			

TOTAL : ----------

VII. **Office Furniture and Equipment (Rental)**

No.	Description (*)	Unit	Quantity	Rate ( )	Amount ( )
	Office Furniture (Purchase)				
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
	Office Equipment (Purchase)				
1					
2					
3					
4					
5					
6					

DS Toll Road Limited

	Description (*)	Unit	Quantity	Rate ( )	Amount ( )
				Total	

VII. Reports and Document Printing

No.	Description*	No. of Volumes	No. of Copies per Volume	Rate per Copy ( )	Amount
	Monthly reports (Design and Construction)				
	Quarterly Reports				
	Various others reports as provided in the Concession Agreement such as Completion Report				
				Total	

0301

APPENDIX C-4 BREAK UP OF COSTS IN FOREIGN CURRENCY

No.	Description	Currency*	Amount
I.	Remuneration for Expatriate Staff		
II.	Mobilisation and Demobilisation		
	1. International Airfares		
	2. Inland travel in Home Country		
	3. Inland Travel in Overseas Country		
	4. Excess Luggage Allowance		
	5. Unaccompanied Luggage Allowance		
	6. Relocation/Storage Allowance		
	7. Miscellaneous Travel Expense		
	8. Temporary Lodging during Mobilisation/demobilization		
	9. Establishment		
	10. Exit charges		
	Accommodation of Consultant's Expatriate Staff		
	Other costs		
	TOTAL COSTS ( )		

*US Dollar plus local currency (INR).

DS Toll Road Limited

1. **Remuneration to Expatriate Staff**

No.	Position	Name	Years 1 to 3		
			Rate ( )	SM	Amount ( )
			Total:		

2. **Mobilization and Demobilization**

1. International Airfares (Reimbursable)
(Economy Class)

Position	Round trips	Dependents
Total:		

Total costs for round trips home office to site at cost per person per round trip conform to the official IATA economy class fares

2. Inland Travel in Home Country (Fixed Rate)

Total cost for travel between consultants' Head office and airport

____x_____ _____

3. Inland Travel in Overseas Country (Fixed Rate)
local cost for travel from the airport to hotel

___x___x_____ ___- _____

DS Toll Road Limited

0303

1. Excess Luggage Allowance (Reimbursable)

At cost per person per single trip to conform to the Official IATA rates

___x___kg. x____ _____

2. Unaccompanied Luggage Allowance (Fixed Rate)

At cost per family per round trip

___x___kg x____ _____

3. Relocation/Storage Allowance (Fixed Rate)

For long term staff with an assignment of more than 12 months

- family(es) x____ _____

4. Travel Documents and Miscellaneous Costs (Fixed Rate)

Travel documents, visa, health certificates, etc.

(a) Short term staff, first trip

___x____ _____

(b) Short term staff subsequent trips

____x_____ _____

(c) Long term staff first trip

- Family (es) x____ _____

(d) Long term staff subsequent trip

- Family(es) x____ _____

Total _____

8. Temporary Lodging during Mobilization/Demobilization (Reimbursable)

___Family x_____ day(s) x_____

9. Establishment allowance (Fixed Rate)

Expenses for legal documents in country extension
Of permits, work permits, etc.

(a) For short term staff assignments less than 6 months

___x_____ _____

(b) Long term staff

___person(s) x___trip (s)_____

Total: _____

10. Exit Charges (Reimbursable)

Allow for expatriate staff with assignments of
More than 6 months _____ per exit at cost

____person(s) x_____trip(s) ____ _____

3. **Accommodation for Consultants' Expatriate Staff (Fixed Rate)**

1. Per Diem allowance Short Term Staff

Total____ staff months of _____ days is_____ days
Reimbursement of the cost will be on actual day basis.

____days x_____ _____

2. Housing of Long Term Expatriate Staff (Fixed Rate)

Housing including furniture, costs for utilities and maintenance has to be
Arranged for 1 family

___months x ____ _____

4. **Other Costs (Reimbursable)**

Purchase of documents

Budget for purchase of documents, books, maps Software, International standards etc. to be Reimbursed at cost. Allow as ceiling amount _____

TOTAL _____

SECTION 6: TERMS OF REFERENCE

1. PROJECT BACKGROUND

(1) The Govt. of India (GoI) through Ministry of Shipping, Roads & Highways (MoSRT&H) is contemplating to enhance the traffic capacity and safety for efficient transportation of goods as well as passenger traffic on the heavily trafficked National Highway sections. The Project under consideration aims at developing section of NH-___ as mentioned in Schedule A, by widening the existing 2-lanes to 4/6 lanes dual carriageway, including strengthening of the existing 2-lanes on Build, Operate and Transfer (BOT) basis/ BOT (Annuity) basis.

(1) NHAI has started the process of Land Acquisition for acquiring land to accommodate the Project facilities along the Project corridor and shall make the land available to the Concessionaire as per the provisions of the Concession Agreement. NHAI will bear the cost of land to be acquired on the award of concerned Revenue Authority.

(2) The Concessionaire shall make necessary arrangements clearing the encumbrances along the Project corridor under the directions of the concerned agencies and officials at his own cost.

(3) The Concessionaire shall operate and maintain the Project Highway by itself, or through O&M Contractors including tolling contractor, if any, after carrying out improvements to comply with Standards and Specifications spelled out by the NHAI in the Concession Agreement.

(4) NHAI intends to appoint an Independent Consultant (IC) to oversee the activities of the Concessionaire during Design, Construction, Operation and Maintenance of the Project Highway.

2. OBJECTIVES

The objectives of consultancy service are to:

i) Act independently and on behalf of the NHAI to review all activities associated with Design Review, Construction and O&M to ensure compliance of requirements of Concession Agreement in order to have a sound Project.

ii) Report to NHAI on the financial and technical aspects of the project, after visiting the site at least once a week.

iii) Assist the parties to the Concession Agreement in arriving at an amicable settlement of dispute.

iv) Act, if required on behalf of the lenders and fulfil various reporting requirements of the lenders.

0307

SCOPE OF SERVICES

3. The Project Highway provides for widening and strengthening of existing two lanes Section of NH ____ and its Operation and Maintenance (O&M) on BOT / BOT (Annuity) basis. The work also includes the widening of existing bridges and culverts and construction of new bridges and culverts for new carriageway. The Project Highway shall include but not be limited to the following:

- Road works
- Fee Collection system including buildings and related structures, hardware and software
- Communication systems
- Administration and Maintenance Depots
- Rest Area and Fuel and Service facilities
- Rest areas
- Lighting system
- Interchanges
- Bridges
- Service Roads
- Lay byes, Bus bays
- Traffic safety, Landscaping, arboriculture and other Project facilities.

The Concession Agreement envisage the appointment of an Independent Consultant (IC) by the National Highways Authority of India (NHAI). The IC shall be, in principle, responsible for review of Designs, Drawings, Construction, Progress Monitoring, affirmation of all certifications done by the Concessionaire, etc. The IC shall be involved in day-to-day implementation of the Project. The Concession Agreement also envisages the appointment of a Consultant by the Concessionaire to undertake the design related work and the day-to-day technical audit and quality control of Construction, monitoring of progress, certification of works of the Contractor(s) to be appointed by the Concessionaire for the Project Highway.

The Independent Consultant shall supervise that all the requirements of the Concession Agreement and various schedules are met by the Concessionaire and in case of any discrepancy/ deviations, he shall inform NHAI and the Concessionaire. The responsibility of the IC during various stages of Design Review, Construction and Operation and Maintenance shall be as follows but not be limited to :

3.1 Design Review Stage

i) Review the adequacy of the geotechnical and sub-soil investigations for road, bridge and other structures and building works, hydrological investigation and the topographical survey.

0808

ii) Review the Design and working drawings prepared for the construction of various components of the highway, bridges / structures, analysis of rates, estimates, reports and other deliverables.

iii) Review the impact of widening proposal on the Archaeological structures, if any.

iv) Review the Project report prepared by the Concessionaire, with respect to the traffic, toll management (only for BOT Projects), traffic management, etc.

v) Review the implementation schedule of Engineering, Design, Procurement and Construction of the Project submitted by the Concessionaire.

vi) Review the Planning and Design of way-side amenities, toll plazas, toll collection system (only for BOT Projects), communication facilities, emergency relief arrangements, traffic operation and safety arrangements.

vii) Review all Project contracts including Detailed Engineering and Design Consultancy Contract, Construction Supervision Consultancy contract , any other EPC contract, O & M Contract and Tolling contract (only for BOT Projects), made by the Concessionaire.

viii) Review the environmental management plan for the Project Highway during Construction and Operation and Maintenance phases.

ix) Review quality assurance and quality control provisions during the design, construction and maintenance stages.

x) Audit the safety of the Project Highway both during Construction and Operation and Maintenance stages.

xi) To mediate and assist in resolving disputes between NHAI and Concessionaire.

xii) Provide Management Information System to NHAI.

3.2 Construction Stage

3.2.1. The duties of the IC are to supervise the works on a day-to-day basis and to approve the materials and workmanship of the works. During the construction phase it should be made mandatory that, IC's key staff should check at least 25-30% of Request for Inspection (RFI) pertaining to each item of construction and close them. IC's Team Leader should at least close 5-10% of RFI as per such provisions of Inspection in the Concession Agreement. He/she shall have no authority to relieve the Concessionaire of any of their duties or to impose additional obligations. The IC shall administer the works contracts and ensure that the Contractual Clauses, whether related to quality or quantities of works, are respected. Request for Inspection (RFI) is a formal application from the Concessionaire (or EPC contractor) to Independent Consultant to examine all the aspects of work or activity pertaining to construction or development of the Project Highway. Submission of a RFI for construction activity must be made a minimum of 48 hours in advance of the time the Concessionaire (or EPC contractor) plans to begin work on the RFI activity.

0309

3.2.2 Review and approve works programme.

3.2.3 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 materials and/or works as required.

3.2.4 Review quality assurance and quality control during Construction period.

3.2.5 Ensure that the Construction work is accomplished in accordance with the technical specifications.

3.2.6 Identify Construction delays and recommend to the NHAI the remedial measures to expedite the progress.

3.2.7 Review and certify the 'As Built' drawings for each component of the works prepared by the Concessionaire.

3.2.8 Review the safety measures provided for the traffic and Project workers.

3.2.9 Determine any extension of the Project Completion Schedule and the Concession period, to which the Concessionaire is entitled and shall notify the NHAI accordingly.

3.2.10 To mediate and assist in resolving disputes between NHAI and Concessionaire during Construction stage.

3.2.11 Assist the NHAI in arriving at any cost variation and its impact on Concession Agreement.

3.2.12 Evolve MIS and provide it to the NHAI

3.2.13 Issue Completion Certificate after checking the results of prescribed tests, with the approval of NHAI.

3.2.14 Issue Provisional Certificate duly appended with a list of outstanding items (Punch List, as defined in the Concession Agreement) established after joint inspection with the Concessionaire, if the Concessionaire requests for it, after approval of NHAI. .

3.2.15 In case of Change in scope, while calculating the cost implications to the Concessionaire of complying with such Change of Scope Notice, the rates shall be worked out by based on the concerned State PWD (NH) current schedule of rates based on MORTH data book. In case an item is not covered under the above-mentioned schedule of rates, the rate of such item shall be worked out by the Concessionaire on the basis of the prevailing market rate so far as found reasonable and competitive by the IC.

3.2.16 To direct the Concessionaire in all matters concerning construction safety and care of the works and if required, to request the concessionaire to provide any necessary lights, guard, fencing etc.

3.3 Operations and Maintenance Stage

Maintenance shall include cleaning, replacement of equipment/consumables, roadside facilities, horticultural maintenance and repairs to equipment, pavements, bridges, structures, HTMS and other civil works. Maintenance shall not include the extension

DS Toll Road Limited

of any existing pavements, bridges, structures and other civil works unless part of the Project Highway.

3.3.1 Review work plan and schedules of various operation and maintenance activities.

3.3.2 Review Operation and Maintenance manual prepared by the Concessionaire.

3.3.3 Review the performance of Operation and Maintenance (O & M) activities including equipment, service, traffic operation and safety, toll plazas and fees collection system (only for BOT Projects), landscaping, environmental issues and way side amenities.

3.3.4 To mediate and assist in resolving disputes between NHAI and Concessionaire during O&M stage.

3.3.5 Initiate necessary action to undertake maintenance obligations of the Concessionaire at risk and cost of the Concessionaire in the event of his failure to carry out O&M.

3.3.6 Undertake audit of the traffic using the Project Highway at least once a month.

3.3.7 Review and inspect the Project Highway at least once a month during the O&M period and issue an Inspection Report of such inspections.

3.3.8 Review the accident record on the Project Highway and suggest remedial measures.

3.4 **Transfer/Termination**

Satisfy itself that the entire divestment requirement have been met by the Concessionaire.

3.5 All other activities as per provisions of the Concessionaire Agreement

4. INTERACTION WITH NHAI

The Independent Consultants shall interact with the NHAI on a regular basis. NHAI shall generally hold meetings every month to review the progress etc. during the phase of Design and Construction, and every second month during the Operation and maintenance stage. Within 30 days of the receipt of the Drawings, the Independent Consultant shall review the same and convey its comments/observations to the Concessionaire with particular reference to the conformity or otherwise with the specifications and standards setforth in the Agreement.

5. REPORTING REQUIREMENT

The Independent Consultants shall prepare and submit to the NHAI three copies and Concessionaire two copies each of the following reports.

(a) Design Review Phase

- Monthly Progress Report.

(b) Construction Phase

0311

- Monthly and Quarterly Inspection Report covering all aspects such as Progress Monitoring, Quality Assurance (QA)/Quality Control (QC) etc.

(c) Operation and Maintenance Phase

- Monthly and Quarterly report on existing condition of facility including advise on all aspects of Operation And Maintenance, Toll Booths, Bridges or other Structures, Traffic Management & Safety, Telephone, Ambulance, etc.
- Monthly report on audit of the traffic using the Project Highway at least once a month.
- Monthly and quarterly reports for Lane Availability (Including non-availability) (only in case of BOT (Annuity))
- Certification of Annuity Claims (only in case of BOT (Annuity))

(d) Various other reports as provided in the Concession Agreement such as Completion Report.

5. PERFORMANCE CLAUSE

Independent Consultants shall be expected to fully comply with all the provisions of the 'Terms of Reference', and shall be fully responsible for supervising that Designs, Construction and maintenance and operation of the facility takes place in accordance with the provisions of the Concession Agreement and other schedules. Any failure of the Independent Consultant in notifying to NHAI and the Concessionaire on non-compliance of the provisions of the Concession Agreement and other schedules by the Concessionaire, non-adherence to the provision of ToR and non-adherence to the time schedule prescribed under ToR shall amount to non-performance.

7. CONSULTANT'S PROPOSAL

7.1 Apart from the list of the key professionals, as mentioned herein below, the Independent Consultant shall appoint its authorised representative, who shall issue on behalf of the IC, the Provisional Completion Certification and Completion Certificate along with the Team Leader and shall carry out any such task as may be decided by NHAI. The IC shall take prior approval of NHAI before issuing Provisional Completion Certification and Completion Certificate. The proposal submitted shall also include the name of the authorised representative along with the authorisation letter and power of attorney.

7.2 List of key personnel to be fielded by the Consultants shall be as below :

i. Team Leader Cum Senior Highway Engineer
ii. Senior Pavement Specialist
iii. Senior Bridge Design Engineer

DS Toll Road Limited

iv. Highway Design Engineer
v. Bridge/Structural Engineer
vi. HTMS/Toll Expert
vii. Road Safety Expert
viii. Senior Quality cum Material Expert

7.3 In addition to above, consultants are required to propose other key personnel, sub-professional staff and other field engineers as detailed in **Enclosure B.** and the minimum qualification requirements for the same is enclosed in **Enclosure–A.**

7.4 Broad job-description and minimum qualification for key personnel mentioned above is enclosed as **Enclosure–A.** However, higher marks shall be accorded to the Candidate with higher relevant qualification and experience. The Consultant should feel free to submit their proposal on the basis of the man-months which they consider to be necessary to undertake the assignment. All the key personnel mentioned in para 7.1 above shall be evaluated at the time of evaluation of technical proposal. Consultants are advised in their own interest to frame the technical proposal in an objective manner as far as possible so that these could be properly assessed in respect of points to be given as part of evaluation criteria. The bio-data of the key personnel should be signed on every sheet by the personnel concerned and the last sheet of each bio-data should also be signed by the authorised signatory for the Consultant. The key personnel shall also certify at the end of their bio-data proforma that they have not left any of the NHAI works without completing of their assignment and have not accepted any other offer at the time of signing of the bio-data and as such shall be available to work with the Independent Consultant, if the Project is awarded. In case the key personnel leaves the assignment without approval of NHAI, NHAI would be at liberty to take any appropriate action against that key personnel including debarment.

8. PERIOD OF SERVICES

8.1 The services of an Independent Consultant will be in phases as per Article XX - Independent Consultant, of Concession Agreement.

8.2 The appointment of the Independent Consultant shall initially be for a period of **48 months.** Estimated Design and Construction schedule for completion of the Project for commercial operation is **30 months.** The proposed manpower deployment for this period shall be matching the activities to be performed during the said period. The time frame for services during the deployment of key personnel during this period shall be as shown in **Enclosure B.**

8.3 Thereafter, the services of the Independent Consultant shall be for a maximum period of 3 years each time till completion of the Concession period and transfer of the Project Highway.

Enclosure A

MINIMUM QUALIFICATION OF KEY PERSONNEL

TEAM LEADER CUM SENIOR HIGHWAY ENGINEER

This is the senior most position and the expert engaged as the team leader shall be responsible for reviewing the entire Project preparation and implementation activities of the Concessionaire. He shall check all the Designs being prepared by the Concessionaire, ensure execution of works on site as per specification and standards, and continuously interact with the NHAI and the Concessionaire. He shall undertake Project site visits and shall guide, supervise, coordinate and monitor the work of other experts in his team as well as those of the Concessionaire. The candidate should have a proven record of supervising, organizing and managing of Project preparation and construction of highway projects of large magnitudes, as defined below, financed by international lending agencies and others. Knowledge of Project management shall be an added advantage.

This position requires a Senior Highway Engineer who shall be a graduate in Civil Engineering with higher qualifications and specialization in highway engineering. He should have a minimum 20 years of experience of highway engineering including 5 years of experience in similar capacity. He should have involved for at least 5 years for Highway Development Projects in developed countries. He should have handled as Team Leader or similar capacity at least two Project Preparation and Construction supervision work of major highway Project of four laning/ six-laning/ expressway costing more than Rs. 2000 million or of at least 50 km length.

SENIOR PAVEMENT SPECIALIST

The expert shall be continuously interacting with the Concessionaire, to ensure life cycle cost effectiveness and viable design of pavement including appropriate rehabilitation / strengthening of the existing two lane pavement which is significantly distressed. He shall also be responsible for ensuring complete adherence to maintenance standards during Construction and Operation period. Thus, the position requires a pavement specialist with thorough knowledge and understanding of international 'best practices' in the field of Design, Construction and maintenance of flexible/rigid type of pavements including latest codal stipulations and specifications.

The candidate should be a graduate in Civil Engineering with higher qualification and specialization in Pavement Design. He should have a minimum of 15 years of professional experience of pavement Design, Construction and its maintenance out of which 5 years should be in similar capacity for 4 laning of major highway projects. This position also requires experience of developed countries. The candidate should have involved in at least 2 major highway projects.

Road Limited

0211

SENIOR BRIDGE DESIGN ENGINEER

The Senior Bridge Design Engineer shall be responsible for checking the designs of bridges, ROBs, interchanges and any other structure to be constructed in the Project highway. He shall also review the rehabilitation measures to be proposed by the Concessionaire for existing structures based on site condition and structural requirement basis. His expertise shall include computer aided design methods for Civil/Structural Engineering with particular reference to Structural design.

He should be a graduate in Civil Engineering from a recognized University. Post Graduation in Structural Engineering would be preferred. Bridge Design Engineer should have a minimum of 15 years experience in Bridge Design out of which a minimum of 10 years experience in similar capacity for major highway bridges is required. He should have handled at least 4 major highway bridges. Experience in other countries, involvement in innovative bridge designing works with use of computer aided software and involvement in designing of bridges more than 200m span would be preferred.

HIGHWAY DESIGN ENGINEER

The Highway Design Engineer shall be responsible for the review of highway designs and drawings using sophisticated computer software. Should be a graduate in Civil Engineering from a recognized University (higher qualifications will be preferable); His expertise shall include computer aided design methods for Civil/Highway Engineering with particular reference to CAD application to the geometric design for highway rehabilitation and/or upgrading projects.

Highway Design Engineer should have a minimum of 15 years experience in Highway Designing work out of which a minimum of 5 years in major highway engineering projects. He should have handled at least 2 major road four laning improvement projects. He should have exposure of computer software programmes for design of highways. Experience in other countries would be preferred.

BRIDGE /STRUCTURAL ENGINEER

The Bridge Engineer shall be responsible for supervising the works of bridges, interchanges and any other structure to be constructed by the Concessionaire for this project. He shall also inspect the bridge rehabilitation and repair works to be undertaken by the Concessionaire.

The position requires a graduate in Civil Engineering, (preference would be given to Post Graduation in Structural Engineering). He should have minimum 15 years experience out of which at least 10 years in Construction of bridges/interchanges/any other structures including rehabilitation. He should have supervised at least two major highway bridges. The candidate should have a thorough understanding and experience with international 'best practices', and of modern bridge construction technology.

0315

HTMS/TOLLING SYSTEM EXPERT

The candidate should be a senior Systems Engineer having experience of at least 15 Years. He should be an expert in preparation of standards for projects of toll collection and HTMS. He should have bachelors degree in Civil Engineering/Electronics/Computer Science/other relevant areas. He should have experience of international latest practices in the field of HTMS and tolling. He should have work experience on at least 2 similar projects in similar capacity.

ROAD SAFETY EXPERT

The candidate should be a graduate in Civil Engineering preferably Post Graduation in Traffic/Transportation/Safety Engineering. He should have at least 15 years of experience out of which 5 years should be in road safety works. The candidate should have undertaken at least 2 projects of roads safety audits, including at least 1 in design stages. The candidate should have international exposure in the fields of road safety management plan. Preference would be given to the candidates who have been involved in preparation of road safety policy for any national/state/city. The experience for preparing road safety management plan for inter-urban highways in both developed and developing countries would be desirable.

SENIOR QUALITY/MATERIAL EXPERT

The Quality/Material Expert shall review the test results of bore holes, quarry and borrow area material to find out their strength characteristics and suitability for using them in construction. He shall inspect the Concessionaire's field laboratories to ensure that they are adequately equipped and capable of performing all the specified testing requirements of the contract. He shall look into the quality assurance aspect of the construction works and supervise the setting-up of the various Concessionaire's rock crushers and bituminous mixing plants to ensure that the specified requirements for such equipments are fully met.

The position requires a graduate in Civil Engineering, preferably Post Graduation in Geotechnical Engineering. He should have a minimum of 15 years of professional engineering experience including 5 years in similar capacity for major highway projects. He should have handled at least 2 similar highway projects in similar capacity. He should have exposure quality assurance programs in highway projects using modern technology.

SUB PROFESSIONAL

SURVEY ENGINEER

The candidate should be Graduate in Civil Engineering/Survey Engineering. He should have at least 6 years experience in the field of surveying out of which 3 years should be for highway projects. He should have involved in at least 1 similar highway projects. This position requires

0316

thorough understanding of modern computer based method of surveying with total station digital level etc.

ASSISTANT HIGHWAY ENGINEER

The Candidate should be Graduate in Civil Engineering with 3 years experience. He should have handled at least 1 road project.

CAD EXPERT

He should be Graduate in Civil Engineering/Computer Science having experience in computer related design method for highway engineering. The incumbent should have 3 years experience and should have handled at least 1 road project.

ENVIRONMENTAL ENGINEER

The Candidate should be Graduate in Civil Engineering/Environmental Engineering or other relevant qualification. He should have at least 6 years experience out of which 2 years in highway projects. He should have good knowledge of MOEF guidelines/requirements for mitigation measures.

ASSISTANT BRIDGE ENGINEER

The Candidate should be Graduate in Civil Engineering with 3 years experience. He should have handled at least 1 major bridge project.

ASSISTANT QUALITY CUM MATERIAL ENGINEER

The Candidate should be Graduate in Civil Engineering with 3 years experience or diploma in Civil Engineering with 5 years experience. He should have handled at least 1 road project.

ELECTRICAL ENGINEER

The Candidate should be Graduate in Electrical Engineering from recognised institute. He should have at least 6 years experience.

Enclosure B

MANMONTH INPUT FOR KEY PERSONNEL OF
INDEPENDENT CONSULTANTS

S.No.	Key Personnel	Man month in Construction	Man month in O & M
1.	Team Leader Cum Senior Highway Engineer	33	3
2.	Senior Pavement Specialist	7	2
3.	Senior Bridge Design Engineer	7	0
4.	Highway Design Engineer	30	12
5.	Bridge/Structural Engineer	30	6
6.	HTMS/Toll Expert	3	2
7.	Road Safety Expert	3	1
8.	Senior Quality cum Material Expert	30	6
	Sub Total	**143**	**32**
	Sub Professional		
1.	Survey Engineer	30	2
2.	Assistant Highway Engineer	2 X 30	12
3.	CAD Expert	8	0
4.	Environmental Engineer	8	2
5.	Assistant Bridge Engineer	2 X 30	6
6.	Assistant Quality cum Material Engineer	2 X 30	6
7.	Electrical Engineer	6	2
	Sub Total	**232**	**30**
	Total	**375**	**62**

Note: The qualification and experience of Sub Professional would not be accounted in the evaluation. However, Consultant would have to get their CVs approved from NHAI before mobilization. The other inputs like traffic engineer, financial expert, legal expert etc. would also be provided by the Consultant as a Head Quarters input out of the contingency provision.

0318

SCHEDULE P

TRAFFIC SAMPLING

NHAI through Independent Consultant shall have the right to undertake traffic sampling for the purpose of determination and/ or verification of the actual traffic on the Project Highway. This shall be done through Automatic Traffic Count -cum-classifier.

For the purpose of traffic sampling, the Concessionaire shall procure a portable type automatic traffic count-cum-classifier and provide it to the Independent Consultant. The traffic count -cum-classifier shall be light weight and portable with weather resistant casing. The system shall be capable of detecting and recording all types of vehicles plying on the Project Highway and of classifying any other vehicle category as per user needs. The vehicle classification shall be user selectable based on length of vehicle and number of axles. It would have the following main components:

Sensor - combination of piezo electric sensor and inductive loops. The sensor shall be portable as well as permanent so that either of these could be used as per the needs.

Electronic - the logic unit shall be micro processor based and programmable through a key board. It shall have legible electronic display with requisite number of entry ports and exit to communication system. The vehicle counting/classification interval shall be programmable from one minute to 1440 min. (24 hours). The system shall count and classify vehicle by each lane.

Data Collection - The system shall be capable of recording for later analysis on an individual vehicle basis time, date, speed, direction, lane, number of axles, axles spacing and site identification. The system should be able to record and store vehicle data for a period of at least two weeks.

Data Retrieval - The system shall have the capability of data retrieval through removable floppy diskette, data catridge, direct data transfer through a serial link to a portable computer and telemetory transmission via telephone link by modem.

Software - The system shall have software and manuals to analyse the data from output of vehicle count, classification speed and head-way. It should have capability of graphic/tabular representation of analysis data.

Before the use of portable automatic traffic counter cum classifier, it shall be validated and calibrated through sample counts to establish the reliability and acceptability of Automatic Traffic Counter-cum-Classifier both by Concessionaire and the Independent Consultant.

The sampling shall be done at intervals of 15 days by continuous 24 hrs counting for three days. If no abnormal trends are observed in three days counting at the frequency of 15 days, the frequency would be increased to 1 month after a period of one year. The sensor/loops shall be permanently installed to capture the traffic on all the approaching lanes, in accordance with the instructions of the supplier. They shall be located about 5 kms away from the toll plaza transitions taking care that no diversion of traffic is possible in between. The portable logic unit shall be plugged to these sensors whenever counting is to be done. Portable sensor can be utilised for traffic counting at any other location as per the need.

Apart from these periodical counts, the Independent Consultant shall have the right for traffic counting at a request from the NHAI. The traffic count as obtained from the samples shall be taken as actual traffic on the Project Highway at the locations of the counting.

0320

DS Toll Road Limited

SCHEDULE Q

DRAFT
ESCROW ACCOUNT AGREEMENT

Among

DS Toll Road Limited (THE COMPANY)

And

.....

As Lenders Representative

And

.....

As Escrow Agent

And

NHAI

(Subject to terms of the facility Agreement(s) between the Concessionaire and Senior Lenders. However, NHAI position in the cashflows shall not be changed)

THIS AGREEMENT (the "Agreement") is made on the ..... day of ..... 200... by and among:

NS Toll Road Limited a company incorporated in India whose registered office is at 3rd Floor, Reliance Energy Centre, Santa Cruz (E), Mumbai-400055, India (the "Company");

and

..... and having its registered office at ....., as Senior Lenders Representative (the "Lenders Representative");

and

...., and having its registered office at ..... (the "Escrow Agent").

and

National Highways Authority of India (NHAI), Government of India, as Employer and Subordinate Lender (the "NHAI").

WHEREAS:

- The Company is undertaking a project for "NS2/BOT/TN5 in the state of Tamil Nadu, India on BOT basis"
- The Company has entered into a Concession Agreement dated as of ..... 200... with NHAI (the "Concession Agreement") wherein NHAI has granted Concession to Company for the work referred to above, on BOT basis.
- The Company has entered into Financing Documents with Senior Lenders wherein Senior Lenders (the "Lenders") have agreed to lend and advance to the Company Rupee amounts aggregating ..... crores and foreign currency amounts aggregating US Dollars ..... in terms thereof;
- One of the terms of the Concession Agreement and the Financing Documents is that the Company is required to establish an Escrow Account, inter alia, on terms and conditions satisfactory to Senior Lenders.

Toll Road Limited

NOW IN CONSIDERATION FOR THE PREMISES IT IS AGREED BY THE PARTIES AS FOLLOWS:-

1. **Definitions and Construction**

1.1 **Definitions:** Each capitalized term used herein and not otherwise defined shall have the definition assigned to such term in the Concession Agreement or the Substitution Agreement as the case may be

- "Account" means the Escrow Account to be opened by the Company in accordance with this Agreement;
- "Authorised Investment" means any authorised investments which Lenders Representative may, from time to time permit the Company to make in accordance with this Agreement;
- "Business Day" means any day on which banks are open for business in ..... or in relation to any notice or communication to be made under this Agreement, a day on which banks are open for business in the place of receipt of such notice or communication;
- "Company Account" shall mean any bank account of the Company, other than the Escrow Account.
- "Enforcement Notice" means any enforcement procedure commenced by the Lenders Representative under any of the Security Documents;
- "Escrow Account" means an Escrow Account established in terms of and under this Agreement;
- "Event of Default" means an event of default as defined and detailed in the Financing Documents;
- "INR" means the lawful currency of India;
- "Payment Date" means in relation to any Permitted Payment, the date(s) specified for such payment;
- "Permitted Payment" means the Payments Agreed to in this Agreement excluding payment to the Company Accounts as more particularly given in clause3.3.1;
- "Required Balance" means on any Date in relation to the Sub-Account of the Escrow Account, an amount in INR/Dollars which if proportionately built over the months, would

be sufficient to meet Permitted Payment on the Payment Date(s).

- "Security Documents" means all or any of the Documents executed, delivered or furnished to secure the Financial Assistance under the Financing Documents including but not limited to the Deed of Hypothecation, Mortgage Deed, Equitable Mortgage, Deed of Guarantee, Pledge Agreement, Undertakings, Negative Lien and other incidental or supplemental documents related thereto.

- "Sub-Accounts" means the Sub-Accounts of the Escrow Account, into which the monies due in relation to Permitted Payment would be credited every month and paid out if due and if not due in a month then appropriated proportionately in such month and retained in the Sub Account and paid out therefrom on the Payment date.

- "Year" means each twelve month period ending on March 31.

1.2 Construction

In this Agreement:

- Unless the context otherwise requires, the singular includes the plural and vice versa;
- Headings and the use of bold typeface shall be ignored in its construction;
- A reference to a Clause, or Schedule is, unless indicated to the contrary, a reference to a clause or schedule to this Agreement;
- References to this Agreement shall be construed as references also to any separate or independent stipulation or agreement contained in it;
- The words "other", "or otherwise" and "whatsoever" shall not be construed to be as any limitation upon the generality of any preceding words or matters specifically referred to;
- References to the word "includes" or "including" are to be construed without limitation;
- References to a person shall include such person's successors and permitted assignees or transferees;
- All references to agreements, documents or other instruments include (subject to all relevant approvals) a reference to that agreement, document or instrument as amended, supplemented, substituted, novated or assigned from time to time.

- The words "herein", "hereto" and "hereunder" refer to this Agreement as a whole and not to the particular Clause in which such word may be used;

- Words importing a particular gender include all genders;

- "person" includes any individual, partnership, firm, trust, body corporate, government, governmental body, authority, agency, unincorporated body of persons or association;

- any reference to a public organisation shall be deemed to include a reference to any successor to such public organisation or any organisation or entity which has taken over the functions or responsibilities of such public organisation;

- references to "Party" means a party to this Agreement and references to "Parties" shall be construed accordingly; and

- references to any law shall include references to such law as it may, after the date of this Agreement, from time to time be amended, supplemented or re-enacted.

- terms and expressions not expressly defined herein shall subscribe the meanings ascribed thereto in the Concession Agreement

2. THE ACCOUNTS

2.1 Acceptance of Appointment of Escrow Agent

(a) The Escrow Agent hereby agrees to act as such and to accept all payments and other amounts to be delivered to or held by the Escrow Agent pursuant to the terms of this Escrow Agreement. Escrow Agent shall hold and safeguard the Escrow Account during the term of this Escrow Agreement and shall treat the amount in the Escrow Account as monies deposited by Company / NHAI with the Escrow Agent, as agent for the benefit of the Lenders Representative, or its nominee, successors or assigns, in trust in accordance with the provisions of this Escrow Agreement. In performing its functions and duties under this Escrow Agreement, the Escrow Agent shall act as agent for the Lenders Representative.

The Company also hereby declares that all right, title and interest in and to the Escrow Account, the Authorised Investments and Permitted Payments made from the Escrow Accounts shall be vested in the Escrow Agent and held in trust for the Senior Lenders acting through Lender's Representative, NHAI and the Company in accordance with the terms of this Agreement and as their respective interests are provided for herein. Amounts deposited in the Escrow Account from time to time shall be held by the Escrow Agent in trust and received and applied as provided in and in accordance with the Agreement. No person other than the Lenders Representative, NHAI and the Company shall have any

rights hereunder as the beneficiaries of or as third party beneficiaries under this Agreement.

(b) The rights of Company/NHAI in the monies held in Escrow Account are set forth in their entirety in this Escrow Agreement and Company/NHAI shall have no other rights against or to the monies in the Escrow Account.

2.2 Establishment of Escrow Account

At least thirty (30) days prior to seeking any disbursement (including issue of guarantees or all forms of Financial Assistance), the Company shall establish the Escrow Account with the Escrow Agent.

2.3 Maintenance of the Account

The Escrow Agent shall maintain the Escrow Account in accordance with the terms of this Agreement and its usual practices and applicable regulations and pay the maximum rate of interest payable to its customers on the balance in the said account from time to time.

2.4 Operating Procedures

The Escrow Agent and the Company shall agree (after consultation with the Lenders Representative) on the detailed mandates, terms and conditions and operating procedures for the Escrow Account but in the event of any inconsistency between this Agreement and such mandates, terms and conditions or procedures, this Agreement shall prevail.

3. Currency

3.1 The Escrow Account shall be established with the ..... Branch of the Escrow Agent. The Escrow Account shall be denominated in INR.

3.2 Deposits

3.2.1 The Company

(A) agrees, confirms and undertakes that it shall deposit and/or credit the Escrow Account with:

(i) all its receivables;

(ii) all proceeds received pursuant to any insurance claims; and

0326

(iii) all monies received from any other sources in relation to and in respect of the Project.

(B) may make other deposits of the Company's other funds into the Escrow Accounts at any time. Provided however that the terms of this Agreement shall apply to such other funds deposited in the Escrow Account by the Company.

The NHAI agrees, confirms and undertakes that it shall deposit and/or credit the Escrow Account with:

(i) all Fees collected by NHAI in exercise of its rights under Concession Agreement;

(ii) Revenue Shortfall Loan;

(iii) Grant, termination payments and other monies paid or disbursed in accordance with the provisions of the Concession Agreement and/or the Substitution Agreement..

3.2.2 The Escrow Agent shall ensure that all interest, if any, on the balances of the Escrow Accounts and interest on Authorised Investments made from the Escrow Accounts shall be credited to or deposited in the Escrow Account.

3.3 Withdrawals

3.3.1 The Escrow Agent shall withdraw amounts from the Escrow Accounts and appropriate in the following order every month as more particularly given in the Bank Proforma in Schedule 1 and deposit in the relevant Sub-Account for payments and if not due in a month then appropriate proportionately in such month and retain in the Sub-Account and pay out therefrom on the Payment Date(s):

(a) All taxes due and payable by the Company;

(b) All expenses in connection with and relevant to the Construction of Project Highway by way of payment to the EPC Contractor and such other persons as may be specified in the Financing Documents.

(c) O&M Expenses including Fees collection expenses incurred by the Company directly or through O&M Contractor and/or Tolling Contractor, if any, subject to the items and ceiling in respect thereof as set forth in the Financing Documents but not exceeding one twelfth (1/12) of the annual liability on this account;

(d) The whole of the expense on completion of Punch List items incurred by NHAI and 2.0 times of such expenses subject to a minimum of Rs. 1,000,000 (Rs. One million) in case the Punch List items are not completed by the Concessionaire within 120 days from the issue of the provisional completion certificate in accordance with the Specifications and Standards and as detailed in clause 16.5 of the Concession Agreement

(e) The whole or part of the expense on repair work or O&M Expenses including Fees collection expenses incurred by NHAI, and 1.25 times of the O&M expenses incurred by the NHAI, if any, in the event of repair and maintenance work being carried out by NHAI (pursuant to the failure on part of the Company in doing so) to maintain and / or repair the Project Highway or a part thereof up to and in accordance with the Specifications and Standards and / or failure on part of the Company to commence remedial works within 30 (thirty) days of receipt of notice in this regard from NHAI or the Independent Consultant, if any, including those on account of exercise of any of its rights under this Agreement provided NHAI certifies to the Escrow Agent that NHAI had incurred such expenses in accordance with the provisions of this Agreement;

(f) All Concession Fees and Negative Grants payments due to NHAI from the Company under this Agreement.

(g) Monthly proportionate provision of Debt Service Payments due in an Accounting Year and payment of Debt Service Payments in the month when due;

(h) Reimbursements of expenditure incurred by NHAI, if any, for payment of insurance premia, etc.. which are otherwise company's responsibility, on account of failure on part of the Company to keep such insurance(s) effective and in force.

(i) One-half of such remuneration, cost and expenses of the Independent Consultant in case the Concessionaire does not reimburse the remuneration, cost and expenses of the Independent Consultant to NHAI within 15 (fifteen) days of receiving a statement of expenditure from NHAI.

(j) Any payments and Damages due and payable by the Company to NHAI pursuant to this Agreement including Recovery due to reduction in Scope of Work and repayment of Revenue Shortfall Loans; and.

(k) Balance in accordance with the instructions of the Company.

The amounts specified in Clause 3.3.1 (a) to (i) constitute the Permitted Payments.

For each year, Bank Proforma would be separately provided by the Company to the Escrow Agent, with the permission of Lenders Representative, not later than 60 days prior to the first day of each year.

3.3.2 Notwithstanding anything to the contrary contained in this Agreement upon the earlier of (i) issue of Termination Notice (ii) termination of Concession Agreement, or (iii) the expiry of Concession Period, all amounts standing to the credit of the Escrow Account shall be appropriated and dealt with in the following order:-

(a) all taxes due and payable by **DS Toll Road Limited;**

(b) all Concession Fees (including Negative Grant) due and payable to NHAI under this Agreement;

(c) all accrued Debt Service Payments;

(d) any payments and Damages due and payable by the Company to NHAI pursuant to this Agreement, including Recovery due to reduction in Scope of Work, Termination claims and repayment of Revenue Shortfall Loans;

(e) all accrued O&M Expenses;

(f) any other payments required to be made under this Agreement; and

(g) balance, if any, on the instructions of the Company.

3.3.3 Not withstanding anything to the contrary contained in this agreement, any termination payments made by NHAI into the Escrow account shall not be appropriated therefrom for any purpose whatsoever, until the Vesting Certificate has been issued by NHAI. Provided, however, that this restriction shall not apply to appropriation in favour of the Senior Lenders to the extent of debt due.

3.3.4 From the date, which is two years prior to the expiry of the Concession period, a sum equal to the fees realizable during the last two years of the Concession period for a traffic volume calculated at the rate of 10,000 (ten thousand) PCUs per day per year, or, a higher sum estimated by the Independent Consultant for renewal works, shall not withstanding anything to the contrary contained in this agreement, be retained in the Escrow Account provided that if a Bank Guarantee of an equivalent sum in the form and content acceptable to NHAI has been furnished by the Company to NHAI, no such retention shall be made. If

DS Toll Road Limited

0329

following the second Inspection, it is agreed or determined that no renewal works are required, then within 14 days of such agreement, 50 % of the sums thus retained shall be released from the Escrow account to the company. Within 14 days after the issue of Vesting Certificate issued (in accordance with Article XXXIII of the Concession agreement) the sums thus retained shall be released from the Escrow account to the Company.

3.4 Application of Insufficient Funds

As provided in Clause 3.3, the application of funds in the Escrow Account shall be in the serial order of priority set forth therein. If the funds available for payment to the Sub-Accounts are sufficient to pay a portion, but not all, of the amount required to be paid to any Sub-Account, the Escrow Agent shall apply such funds in the serial order of priority set forth in Clause 3.3, until exhaustion thereof.

4. Authorised Investments

4.1 Power to Invest

The Escrow Agent shall invest the amounts standing to the credit of any of the Sub-Accounts in Authorised Investments on the instructions of the Company as approved by the Lenders Representative, from time to time, in accordance with the provisions of the Agreement. The Escrow Agent shall not be bound to and shall not make investments under the Indian Trusts Act, 1882 without prior approval of the Lenders Representative.

4.2 Procedure for Investments

4.2.1 All Authorised Investments shall be made and/or realised by the Escrow Agent on the instructions of the Company as approved by the Lenders Representative from time to time, in accordance with the provisions of this Agreement.

4.2.2 All documents of title or other documentary evidence of ownership with respect to Authorised Investments made out of any Escrow Account will be held in the custody of the Escrow Agent.

4.3 Realisations

Upon the realisation of any investment made under this Clause, the proceeds of realisation shall immediately be credited to the relevant Sub-Account by the Escrow Agent or immediately invested in another Authorised Investment in accordance with the Company's

0330

instructions as approved by the Lenders Representative.

4.4 **Mandatory Realisations**

In the event that the Company becomes aware that any Authorised Investment has ceased to be an Authorised Investment, the Company shall immediately instruct the Escrow Agent on a best efforts basis to realise such Authorised Investment on its maturity date or earlier if possible under intimation to the Lenders Representative or NHAI.

4.5 **Accounts include Investments**

Any reference in this Agreement to the balance standing to the credit of the Escrow Account shall be deemed to include a reference to the amount of the Authorised Investments in which all, or part of, such balance is for the time being invested.

4.6 **Interest on Investments**

Any interest or other income received on account of Authorised Investments shall be to the credit of the Escrow Account.

4.7 **Enforcement Notice**

On receipt of an Enforcement Notice from the Lenders Representative, the Escrow Agent shall realise the Authorised Investments, whether such investments have matured or not on a best effort basis, and apply the proceeds as directed by the Lenders Representative.

5. **Withdrawals following Event of Default**

5.1 If the Lenders Representative notifies the Escrow Agent that an Event of Default is likely to occur or has occurred, and is continuing, then, until such time as the Lenders Representative has notified the Escrow Agent that the Event of Default has been cured or waived under the Financing Documents, the Escrow Agent shall only make withdrawals from the Escrow Accounts which constitute Permitted Payment and shall not make any payments from the Escrow Account to the Company Accounts.

6. **Escrow Agent Provisions**

6.1 **The Escrow Agent and the Lenders**

The Company hereby appoints the Escrow Agent to act as trustee for the Lenders Representative in connection herewith and authorises the Escrow Agent to exercise such

Toll Road Limited

0331

rights, powers, authorities and discretion as are specifically delegated to the Escrow Agent by the terms hereof together with all such rights, powers, authorities and discretion as are reasonably incidental hereto, and the Escrow Agent accepts such appointment pursuant to the terms hereof.

6.2 **Particular Duties of the Escrow Agent**

The Escrow Agent:

(A) may, in the absence of bad faith or gross negligence on its part, rely as to any matters of fact which might reasonably be expected to be within the knowledge of the Company upon a certificate signed by or on behalf of the Company;

(B) may, in the absence of bad faith or gross negligence on its part, rely upon the authenticity of any communication or documents believed by it to be authentic;

(C) shall, within five (5) Business Days after receipt, deliver a copy to the Lenders Representative of any notice or document received by the Escrow Agent in its capacity as the Escrow Agent from the Company or any other person hereunder or in connection herewith; and

(D) shall, within five (5) Business Days after receipt, deliver a copy to the Company of any notice or document received by the Escrow Agent from the Lenders Representative in connection herewith.

6.3 **Segregation of Funds**

Monies and other property received by the Escrow Agent under this Agreement shall, until used or applied in accordance with this Agreement, be held by the Escrow Agent in trust for the purposes for which they were received, and shall be segregated from other funds and property of the Escrow Agent.

6.4 **Termination**

6.4.1 This Agreement shall remain in full force and effect so long as amounts remain outstanding from the Company in respect of the Financial Assistance received by it from the Senior Lenders or its obligations to NHAI, unless terminated earlier by the mutual consent of the parties or otherwise in accordance with the provisions of this Clause.

6.4.2 The Company may, by not less than 45 days prior notice to the Escrow Agent, NHAI and the Lenders Representative, terminate this Agreement and appoint a new Escrow Agent,

provided that the new Escrow Agent is acceptable to the Lenders Representative and arrangements are made satisfactory to the Lenders Representative for transfer of amounts deposited in the Escrow Account to a new Escrow Account established with the successor Escrow Agent.

6.5 **Fees**

The Company shall pay the Escrow Agent fees in an amount and at such times as may be agreed between the Escrow Agent and the Company.

7. **Escrow Agreement Defaults**

7.1 If the Company is in breach of any of its obligations under this Agreement and, following a notice of default from the Lenders' Representative, fails to remedy the same:

(A) in the case of a failure to deposit funds received by the Company in the Escrow Account, by depositing the same in the Escrow Account within five Business Days of receipt of such notice;

(B) in the case of a breach consisting of causing the Escrow Agent to transfer funds to any Company Account in breach of the terms of this Agreement, by depositing the relevant funds in the Escrow Account or any Sub-Account in which such transfer should have been made within five Business Days of receipt of such notice.

(C) in the case of a breach of the Company's obligations under Clause 4, by instructing the Escrow Agent to realise any investment made in breach of Clause 4 within five (5) Business Days of receipt of such notice; or

(D) in the case of any other breach, by remedying the same within five (5) Business Days to the satisfaction of the Lenders Representative.

7.2 The Company and the Escrow Agent agree and confirm that any default by either the Company or the Escrow Agent in the performance of their respective obligations under this Agreement resulting, in the opinion of the Lenders Representative, in a breach of this Agreement, shall qualify as an Event of Default under the Financing Documents/Security Documents.

8. **Miscellaneous**

8.1 **Closure of Accounts**

0333

The Escrow Agent shall, at the request of the Company made on or after the payment by the Company of all outstanding amounts under the Financing Documents / Concession Agreement and upon confirmation of receipt, close the Escrow Accounts and pay any amount standing to the credit thereof to the Company.

Notwithstanding anything to the contrary contained in this Agreement, this Agreement shall remain in full force and effect till the Transfer Date provided however if NHAI shall certify to the Escrow Agent that Concession Agreement and/or the Concession has been terminated on account of default of the Concessionaire under this Agreement, then notwithstanding anything to the contrary contained herein, all the amounts standing to the credit of the Escrow Account shall be dealt with in accordance with provisions of Clause 3.3.2.

3.2 Successors and Assignors

This Agreement shall be binding on and shall enure to the benefit of the Parties and their respective successors and permitted assigns.

3.3 No Set Off

The Escrow Agent agrees not to claim or exercise any right of set off, banker's lien or other right or remedy with respect to amounts standing to the credit of the Escrow Accounts. For the avoidance of doubt, it is declared by the Escrow Agent that the monies and properties held by the Escrow Agent shall not be considered as part of the assets of the Escrow Agent and being trust property, shall in the case of bankruptcy or liquidation of the Escrow Agent be wholly excluded from the assets of the Escrow Agent in such bankruptcy or liquidation.

3.4 Notices

3.4.1 All notices or other communications to be given or made under this Agreement shall be in writing, shall either be delivered personally or sent by courier, registered or certified mail or facsimile. The address for service of each Party and its facsimile number is set out under its name on the signing pages hereto. All notices shall be effective upon actual receipt save that where a notice is received after 5.30 p.m. on a Business Day or on a day that is not a Business Day, such notice shall be deemed to be received on the first Business Day following the date of actual receipt. Without prejudice to the foregoing a Party giving or making a notice or communication by facsimile shall promptly deliver a copy of such notice or communication personally, by courier or mail to the addressee of such notice or communication.

3.1.2 Any party may by notice change the addresses and/or addresses to which such notices and communications to it are to be delivered or mailed. Such change shall be effective when all the Parties have notice of it.

3.5 **Waiver**

Failure by any Party at any time to enforce any provision of this Agreement or to require performance by other Parties of any provision of this Agreement shall not be construed as a waiver of such provision and shall not affect the validity of this Agreement or any part of it or the right of the relevant Party to enforce any provision in accordance with its terms.

3.6 **Severability**

If any condition, Clause or provision of this Agreement not being of a fundamental nature, is held to be illegal or unenforceable, the validity or enforceability of the remainder of this Agreement shall not be affected thereby.

3.7 **Amendments**

No amendment to this Agreement shall be binding unless in writing and signed by the duly authorised representatives of the Parties.

3.8 **Governing Law**

This Agreement shall be governed by and construed in accordance with Indian law.

3.9 **Regulatory Approvals**

The Escrow Agent shall use its best efforts to procure and shall thereafter maintain and comply with all regulatory approvals required for it to establish and operate the Escrow Accounts. The Escrow Agent represents and warrants that it is not aware of any reason why such regulatory approvals will not be ordinarily granted to the Escrow Agent.

3.10 **Notification of Balances**

Seven Business Days prior to each Payment Date (and for this purpose the Escrow Agent shall be entitled to rely on an affirmation by the Company and/or the Lenders Representative as to the relevant Payment Dates), the Escrow Agent shall notify the Lenders Representative of the balance of the Escrow Account as at the close of business on the immediately preceding Business Day.

IN WITNESS whereof the Company has caused its Common Seal to be affixed hereto and

0335

to a triplicate hereof on the date first above written and the Escrow Agent, NHAI and the Lenders Representative have caused the said triplicate to be executed by the hand of an authorised official.

SIGNED AND DELIVERED BY)
..... within named Escrow Agent)
by the hand of)

an authorised official of the Account)
Trustee)
Address:

Fax Number:

Attention:.....

SIGNED AND DELIVERED by THE)
..... within named Lenders)
Representative by the hand of)
)
an authorised official of the Lenders)

Representative

Address:

Fax Number:

Attention: .....

SIGNED AND DELIVERED by)
NHAI within named by the hand of)
)
an authorised official of the NHAI)

Address:

0336

Fax Number:
Attention:.....

THE COMMON SEAL OF .....)
has pursuant to the Resolution)
of its Board of Directors passed in)
that behalf on the ..... day of .....200)
hereunto been affixed in the presence of)
Shri ..... and Shri .....)
Directors who have signed these)
Presents in token thereof and)
Secretary/authorised)
Person who has countersigned the)
Same in token thereof.)

Address:

Fax Number:

Attention:.....

0337

SCHEDULE R

STATE SUPPORT AGREEMENT

THIS SUPPORT AGREEMENT is made on this _____ day of _____ 200_ AMONG

1 THE GOVERNOR OF THE STATE OF TAMIL NADU through the Secretary, Ministry of _____, Government of Tamil Nadu, (hereinafter referred to as "GOTN" which expression shall unless repugnant to the context or meaning thereof include its successors and assigns),

2 National Highways Authority of India, Government of India , (hereinafter referred to as "NHAI" which expression shall unless repugnant to the context or meaning thereof include its administrators, successors and assigns),

AND

3. DS Toll Road Limited, a company incorporated under the provisions of the Companies Act, 1956 and having its registered office at 3rd Floor, Reliance Energy Centre, Santa Cruz (E), Mumbai-400055 (hereinafter referred to as the "Concessionaire", which expression shall unless repugnant to the context or meaning thereof include its successors and substitutes).

WHEREAS

A. The NHAI intends to take up the improvement of NS2/BOT/TN5 in the state of Tamil Nadu, India on BOT basis.

B. NHAI had invited Request for Proposals for selection of BOT Entrepreneurs for executing the Project on BOT basis.

D. After evaluation of the bids so received, NHAI had accepted the bid of the Consortium and issued its Letter of Acceptance No. NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 dated 30th September 2005 (the"LOA") to the Consortium requiring, inter alia, the execution of a Concession Agreement pursuant thereto.

E. The Consortium has promoted and incorporated the Concessionaire as a limited liability company to enter into the Concession Agreement pursuant to the LOA for undertaking, inter alia, the design, engineering, financing, procurement, utility shifting , tree cutting,

0338

construction, operation and maintenance of the Project Highway, as defined hereinafter on BOT basis as referred to in Recital 'A' and to fulfill other obligations of the Concessionaire pursuant to the LOA and has requested NHAI to accept the Concessionaire as the entity which shall undertake and fulfill and perform the obligations and exercise the rights of the Consortium under the LOA, including the obligation to enter into the Concession Agreement for the design, engineering, financing, procurement, Utility Shifting , Tree cutting, construction, operation and maintenance of the Project Highway on BOT basis.

F. NHAI has agreed to the said request of the Consortium and has accordingly agreed to enter into the Concession Agreement with the Concessionaire pursuant to the LOA for, inter alia, the design, engineering, financing, procurement, Utility Shifting , Tree cutting, construction, operation and maintenance of the said Project Highway on BOT basis.

G. GOTN, NHAI and the Concessionaire agree that the implementation of the Concession including performance of its obligations by the Concessionaire under and in accordance with the Concession Agreement requires extensive continued support and grant of certain rights and authorities as hereinafter set forth by GOTN and is an essential pre-condition for mobilization of resources therefore by the Concessionaire.

NOW THEREFORE THE PARTIES HERETO HEREBY AGREE AND THIS AGREEMENT WITNESSETH AS FOLLOWS:

1 DEFINITIONS AND INTERPRETATIONS

1.1 For the purposes of this Agreement the following terms shall have the meaning hereinafter respectively assigned to them.

1.1.1 "Agreement" means this Support Agreement and all annexures hereto and amendments if any thereto made in accordance with the provisions contained herein in this behalf.

1.1.2 "Concession Agreement" means the Concession Agreement dated _____ entered into between NHAI and the Concessionaire, and shall include all of its annexures and appendices and any amendments made thereto in accordance with the provisions contained in this behalf therein.

1.1.3 "MOSRTH" means Ministry of Shipping, Road Transport and Highways, earlier Ministry of Road Transport & highways

1.1.4 "Substitution Agreement" means the Substitution Agreement dated _____ entered into between the Senior Lenders, NHAI and the Concessionaire providing for substitution

0339

of the Concessionaire by the Selectee selected by the Senior Lenders in the manner and subject to and on the terms and conditions set forth therein. A copy of the said Substitution Agreement is annexed hereto and marked as "Annexure 'B'."

1.1.5 "GOTN Support" means the obligations assumed and the facilities agreed to be provided by GOTN to the Concessionaire hereunder or pursuant hereto.

1.2 The words and expressions beginning with or in capital letters used in this Agreement and not defined herein but defined in the Concession Agreement shall have, unless repugnant to the context, the meaning respectively assigned to them in the Concession Agreement. Words and expressions used in this Agreement and neither defined herein nor in the Concession Agreement but defined in the Substitution Agreement shall have the meaning respectively assigned to them in the Substitution Agreement.

1.3 In this Agreement unless the context otherwise requires-

(a) any reference to a statutory provision shall include such provision as is from time to time modified and re-enacted or consolidated so far as such modification or re-enactment or consolidation applies or is capable of applying to any transactions entered into hereunder;

(b) the words importing singular shall include plural and vice versa, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal entity);

(c) the headings are for convenience of reference only and shall not be used in and shall not affect the construction or interpretation of this Agreement;

(d) terms beginning with capital letters and defined in this Agreement shall have the meaning ascribed thereto herein;

(e) the words "include" and "including" are to be construed without limitation;

(f) any reference to a "day" shall mean reference to a calendar day;

(g) any reference to "month" shall mean reference to a calendar month;

(h) the Annexures and appendices 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;

0340

(i) any reference at any time to any agreement, deed, instrument, license or document of any description shall be construed as reference to that agreement, deed, instrument, license or other document as amended, varied, supplemented, modified or suspended at the time of such reference provided that this clause shall not operate so as to increase liabilities or obligations of **GOTN** hereunder or pursuant hereto in any manner whatsoever.

(j) References to Recitals, Clauses, Sub-clauses, Paragraphs, Annexures or Appendices in this Agreement shall, except where the context otherwise requires, be deemed to be references to Recitals, Clauses, Sub-clauses, Paragraphs, Annexures and Appendices of this Agreement.

(k) Any agreement, consent, approval, authorization, proposal, notice, communication, information or report required under or pursuant to this Agreement from or by any Party or Senior Lender(s) shall be valid and effectual only if it is in writing under the hands of duty authorized representative of such Party or the Senior Lender(s), as the case may be, in this behalf and not otherwise; and

(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 days or dates.

(m) "Concessionaire" shall include Selectee under the Substitution Agreement.

2. TERM

2.1 This Agreement shall come into force the date hereof and shall continue to be in full force and effect for the period the Concession Agreement is in force and effect including any extension thereof.

3. SUPPORT OF GOTN

3.1 Upon and with effect from the date hereof, GOTN agrees:

(i) so long as the Concessionaire is not in breach of its obligations under this Agreement, **GOTN** agrees to enable access to the Site to the Concessionaire for peaceful use of and operations at the Site by the Concessionaire under and in accordance with the provisions of the Concession Agreement without any let or hindrance from **GOTN** or persons claiming through or under it;

Toll Road Limited

0341

(ii) subject to the Concessionaire complying with Applicable Laws, provide to the Concessionaire Applicable Permits to the extent **GOTN** or any Governmental Agency of GOTN is entitled to issue;

(iii) upon written request from the Concessionaire, assist the Concessionaire in obtaining access to all necessary infrastructure facilities and utilities, including water, electricity and telecommunication facilities at rates and on terms no less favorable to the Concessionaire than those generally available to commercial customers receiving substantially equivalent services;

(iv) ensure that no barriers are erected or placed by **GOTN** or any Governmental Agency of GOTN that interrupts free flow of traffic on the Project Highway except on account of any law and order situation or upon national security considerations;

(v) provide the Concessionaire with assistance through a dedicated team against payment of prescribed fee and charges, if any, for regulation of traffic on the Project Highway;

(vi) provide the Concessionaire with police assistance in the form of dedicated highway patrol parties against payment of prescribed costs and charges, if any, for patrolling and provision of security on the Project Highway;

(vii) observe and comply with its obligations set forth in this Agreement;

(viii) support, cooperate with and facilitate NHAI and the Concessionaire in the implementation of the Project;

(ix) subject to and in accordance with the Applicable Laws, assist the Concessionaire in the procurement of all Applicable Permits required from any municipal and other local authorities and bodies including Panchayats in the State of Tamil Nadu for the implementation of the Project;

(x) ensure, subject to and in accordance with the Applicable Laws, that all relevant municipal and other local authorities and bodies including Panchayats in the State of Tamil Nadu do not put any barriers or other obstructions that interrupt free flow of traffic on the Project Highway; and

(xi) not do or omit to do any act, deed or thing which may in any manner be violative of or cause the Concessionaire to violate any of the provisions of the Concession Agreement.

3.2 Notwithstanding anything to the contrary contained in the Agreement, **GOTN** may construct and operate either itself or have the same, inter alia, built and operated on BOT basis or otherwise any Expressway or other toll road, not being a bye-pass, between inter alia, **NS2/BOT/TN5** (the "Additional Tollway"), provided that such Additional Tollway shall not be opened to traffic before expiry of 8 (eight) years from the Appointed Date

3.3 **GOTN** agrees and undertakes that it shall not levy any additional toll, fee, charge or tax on the use of whole or any part of the Project Highway. **GOTN** acknowledges the rights of Senior Lenders and NHAI under the Substitution Agreement and hereby covenants that upon substitution of the Concessionaire by the Selectee pursuant to the Substitution Agreement, it shall be deemed for the purposes of this Agreement that as if Selectee is a Party hereto and the Selectee shall accordingly be deemed to have succeeded to the rights and obligations of the Concessionaire under this Agreement on and with effect from the date of substitution of the Concessionaire by the Selectee.

4. CONCESSIONAIRE'S OBLIGATIONS

4.1 Concessionaire agrees and undertakes to perform, observe and comply with the following :

(i) All Applicable Laws and Applicable Permits;

(ii) The provisions of the Concession Agreement, the Substitution Agreement, and the Project Agreements; and

(iii) Observe, comply and perform its obligations under this Agreement.

5. REPRESENTATIONS AND WARRANTIES

5.1 The Concessionaire represents and warrants to **GOTN** that :

(i) It is duly organized, validly existing and in good standing under the laws of India.

(ii) It has power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;

Toll Road Limited

0343

(iii) It has taken all necessary corporate and other action under Applicable Laws and its constitutional documents to authorize the execution, delivery and performance of this Agreement;

(iv) This Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with the terms hereof;

(v) It is subject to civil and commercial laws of India with respect to this Agreement and it hereby expressly and irrevocably waives any immunity in any jurisdiction in respect thereof.

(vi) All the information furnished to the GOTN pertaining to the Concessionaire including its constitution and existing and proposed shareholding structure is now and shall be true and correct as on the Appointed Date and COD and the Balance Sheet and Profit and Loss Account of the Concessionaire for each of its Accounting Year after the Appointed Date furnished to GOTN shall give true and fair view of the affairs of the Concessionaire.

(vii) The Concessionaire shall furnish a copy of its audited Balance Sheet within 120 (one hundred twenty) days of the close of its each Accounting Year after the Appointed Date and any material change subsequent to the date of such Balance Sheet shall be notified to **GOTN** by the Concessionaire within 30 (thirty) days of its occurrence and warrants that the Balance Sheet and the information furnished as aforesaid shall be true and correct;

(viii) 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 the terms of the Concessionaire's Memorandum and Articles of Association or any member of the Consortium or any Applicable Laws or Applicable Permits or any covenant, agreement, 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;

(ix) There are no actions, suits, proceedings or investigations pending or, to the Concessionaire's knowledge, threatened against it at law or in equity before any court or before any judicial, quasi judicial or other authority, the outcome of which may result in the breach of or constitute a default of the Concessionaire under this Agreement or which individually or in the aggregate may result in any material adverse effect on its business,

properties or assets or its condition, financial or otherwise, or in any impairment of its ability to perform its obligations and duties under this Agreement;

(x) The Concessionaire 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 Governmental Agency which may result in any material adverse effect or impairment of the Concessionaire's ability to perform its obligations and duties under this Agreement;

(xi) The Concessionaire has complied with all Applicable Laws and Applicable Permits, 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 material adverse effect on its financial condition or its ability to perform its obligations and duties under this Agreement;

(xii) Each Consortium Member was and is duly organized and existing under the laws of the jurisdiction of its incorporation and has full power and authority to consent to and has validly consented to the Concessionaire entering into this Agreement with the GOTN;

(xiii) No representation or warranty by the Concessionaire contained herein or in any other document furnished by it to GOTN, or to any Governmental Agency in relation to Applicable Permits contains or will contain any untrue statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading;

(xiv) The Concessionaire warrants that no sums have been paid or will be paid, by or on behalf of the Concessionaire, to any Person by way of fees, commission or otherwise for entering into this Agreement or for influencing or attempting to influence any officer or employee of NHAI, GOI or GOTN in connection therewith; and

(xv) The Concessionaire is subject to civil and commercial laws of India with respect to this Agreement.

5.2 **GOTN** represents and warrants to the Concessionaire that :

(i) It has full power and authority to execute, deliver and perform this Agreement.

0315

(ii) It has taken all necessary governmental action to authorize the execution, delivery and performance of this Agreement; and

(iii) This Agreement constitutes the legal, valid and binding obligation of GOTN enforceable against it in accordance with its terms.

6. SOVEREIGN IMMUNITY

6.1 **GOTN** hereto unconditionally and irrevocably:

(i) Agrees that the execution, delivery and performance by it of this Agreement do not constitute sovereign acts;

(ii) Agrees that should any proceedings be brought against it or its assets in relation to this Agreement or any transaction contemplated by this Agreement, no sovereign immunity 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, to the extent permitted by law; and

(iii) to the extent permitted by law, waives any right of sovereign immunity, which it or its assets now has or may acquire in the future.

6.2 Notwithstanding anything to the contrary herein contained such waiver of right of immunity shall not apply to

a) Property and assets of any consular or diplomatic mission or consulate or

b) Property belonging to the Defence services and such assets of the Union of India.

7. Breach and Compensation

7.1 In case **GOTN** is in breach of any of its obligations under this Agreement, which breach is not cured within 30 days of receipt of a notice in writing from the Concessionaire to **GOTN** and NHAI and which has not occurred as a result of Concessionaire's breach of its obligations under this Agreement or the Concession Agreement, **GOTN** shall pay to the Concessionaire, all direct additional costs suffered or incurred by the Concessionaire, determined by MOSRTH as arising out of such material default by **GOTN**.

0346

7.2 In case of any dispute by GOTN on admissibility of the claim or extent of compensation determined by MOSRTH, the claim shall be settled as per provisions of the Dispute Settlement mechanism provided in Article IX of this Agreement.

7.3 Any such compensation payable shall be paid to the Concessionaire, in one lumpsum within 90 (ninety) days of receiving MOSRTH's determination of compensation.

8. INDEMNITY

8.1. The Concessionaire will indemnify, defend and hold GOTN harmless against any and all proceedings, actions and claims for any loss, damage, cost and expense of whatever kind and nature arising out of design, engineering, construction, operation and maintenance of the Project Highway or arising out of any breach by the Concessionaire of any of its obligations under this Agreement or on account of failure of the Concessionaire to comply with, and observe Applicable Laws and Applicable Permits;

8.2. GOTN will, indemnify, defend and hold harmless the Concessionaire against any and all proceedings, actions and third party claims for any loss, damage, cost and expense arising out of failure of GOTN to fulfill any of its obligations under this Agreement adversely affecting the performance of the Concessionaire's obligations under the Concession Agreement other than any loss, damage, cost and expense, arising out of acts done in discharge of their lawful functions by GOTN, its officers, servants and agents;

8.3. Without limiting the generality of Clause 8.2, the GOTN shall indemnify the Concessionaire and shall save it harmless from and against any payments required to be made by the Concessionaire with respect to levy of any Local Taxes provided nothing contained herein shall be construed or interpreted as restricting in any way or manner the right of GOTN or any municipal, panchayat or other local authorities to levy any taxes which they or any of them are lawfully entitled to levy, impose or collect (the "Expected Taxes"). The Concessionaire shall not be entitled to and GOTN shall be under no obligation to reimburse Expected Taxes to the Concessionaire or any person claiming through or under the Concessionaire;

8.4. In the event that either party hereto receives a claim from a third party in respect of which it is entitled to the benefit of an indemnity under Clause 8 or in respect of which it is entitled to reimbursement (the "Indemnified Party") within 14 (fourteen) days of receipt of the claim or payment, as the case may be, shall not settle or pay the claim without the prior approval of the Indemnifying Party. In the event that the Indemnifying Party wishes to contest or dispute the claim, it may conduct the proceedings in the name of the Indemnified Party and shall bear all costs involved in contesting the same. The Indemnified Party shall provide all cooperation and assistance in contesting any claim and

shall sign all such writings, and documents as the Indemnified Party may reasonably require.

9. GOVERNING LAW AND DISPUTE SETTLEMENT

9.1. This Agreement shall be governed by and construed and interpreted in accordance with the laws of India. The provisions contained in Clause 8 shall survive the termination of this Agreement.

9.2. Any dispute, difference or claim arising out of or in connection with or in relation to this Agreement which is not resolved amicably shall be decided finally by reference to arbitration to a Board or Arbitrators comprising of one nominee of each party to the dispute. Such arbitration shall be held in accordance with the Rules of Arbitration of the Indian Counsel of Arbitration and shall be subject to the provisions of the Arbitration and Conciliation Act, 1996. The Arbitrators shall issue a reasoned award. The venue of such arbitration shall be New Delhi, India. The Award shall be final and binding on the Parties.

10. MISCELLANEOUS

10.1. Alteration of Terms

All additions, amendments, modifications and variations to this agreement shall be effectual and binding only if in writing and signed by the duly authorized representatives of GOTN and the Concessionaire.

10.2. Time or Indulgence Allowed

An indulgence by one Party to the other in respect of any obligation or matter hereunder including time for performance to the other party hereunder or to remedy any breach hereof shall not be construed as a waiver of any of its rights hereunder Party may be on such terms and subject to such conditions as the Party giving it may specify and shall be without prejudice to that Party's then accrued rights under this Agreement except to the extent expressly varied in writing when giving such time or other indulgence.

10.3. Severance of Terms

If any provisions of this Agreement are declared to be invalid, unenforceable or illegal by any competent arbitration tribunal or court, such invalidity, unenforceability or illegality shall not prejudice or affect the remaining provisions of this Agreement, which shall continue in full force and effect.

10.4. Language

All notices, certificates, correspondence or other communications under or in connection with the Agreement shall be in English

10.5. Notices

Any notice or communication hereunder shall be in writing and shall either be delivered personally or sent by registered post, with copy by facsimile transmission or other means of telecommunication in permanent written form. A copy of all the notices and communications will also be forwarded to the Lenders Representative. The service of notice shall unless otherwise notified by a notice hereunder to the parties at their following address:

IF to GOTN :
Attn :
Fax no :
Tel no.

IF to the NHAI
Attn:
Fax no.
Tel no.

IF to the Concessionaire:
Attn :
Fax no.
Tel no.

The notice pursuant hereto will be deemed to have been received on the date when such notice is in fact received by the addressee.

10.6. Authorized Representatives

Each of the Parties shall by notice in writing designate their respective authorized representatives through whom only all communications shall be made. A Party hereto shall be entitled to remove and/or substitute or make fresh appointment of such authorised representative by similar notice.

0349

10.7. Original Document

This Agreement is made in two counterparts, each of which shall be deemed to be an original.

IN WITNESS WHEREOF THE PARTIES HERETO HAVE PUT THEIR HANDS HEREUNTO ON THE DAY, MONTH AND YEAR FIRST ABOVE WRITTEN.

FOR CONCESSIONAIRE

BY :_____
Name :_____
Title:_____

FOR **GOVT. OF (Tamil Nadu)**

BY : _____
Name:_____
Title:_____

FOR NHAI

BY :_____
Name :_____
Title:_____

In the presence of :
1. 2.

0350

SCHEDULE-S

SAFETY REQUIREMENTS

1. OBJECTIVE

1.1 Safety of road users and Project workers is a vital requirement which the Concessionaire has to attend during the Concession Period under the Concession Agreement.

2. SAFETY STANDARDS

2.1 Objective

2.1.1 The objective of Safety Standards is to provide safe travel to the drivers of vehicles plying on the Project Highway at all times of the day, throughout the year and provide protection to the Project workers when they are on the work. This Schedule delineates the Safety Standards in terms of construction zones, signs and safety measures in work zones and during normal operations.

2.1.2 The guiding principles for safety measures shall include

(i) warning to the drivers unambiguously and sufficiently in advance of the situation on the highway.

(ii) providing clear demarcation for movement of vehicles;

(iii) providing devices to guide the drivers and their movements through construction zones/lane closures/traffic diversions etc.

(iv) protection to Project workers on work site.

2.2 Construction zone

In order to plan and provide appropriate traffic management and safety measures, it is necessary to appreciate the concept of a construction zone. A construction zone can be defined as an area of the Project Highway which involves the conflict of the right of use between the road users and authority responsible for the maintenance /improvement of the Project Highway. From traffic safety point of view, a construction zone comprises four sub-zones as described hereinunder:

2.2.1 Advance Warning Sub-Zone

The advance warning sub-zone is meant to prepare the driver for an alert behaviour and is an essential part of any traffic control system. The warning system shall prepare the driver well in advance by providing information regarding distance, extent and type of hazard ahead so that the can gradually reduce the speed of his vehicle. For the operating speeds on the Project

Highway, length of this sub-zone shall be 100m and 500m, in plain and hilly terrain respectively. Information in this sub-zone will be conveyed through a series of traffic signs, which will include "Men at Work" and the speed reduction signs at the start and middle of this sub-zone.

2.2.2 Transition Sub-Zone

The transition sub-zone is the area in which the traffic is steered and guided into and out of the diverted path around the work sub-zone. This is the most crucial sub-zone from safety point of view since most of the movements are turning movements. The traffic in this sub-zone is mostly taken across with the help of barricades and channelizers.

The elements for designing this sub-zone are speed of the vehicles, extent of lateral shift and elevation difference between the normal and the diverted paths. The essential safety measures shall include delineation of the travel path and prevention of wayward movements of vehicles by means of barricades, channelizers, red cones, and red lamps during hours of darkness etc., as appropriate.

In the design of this sub-zone adequate attention shall be paid for providing necessary turning radius of the curves, grade to permit for safe passage of animal driven vehicles, drainage and dust-proofing. Where necessary traffic control shall be affected through manual flagging and by (electrically / Battery operated) traffic lights during hours of darkness. Where vehicles have to wait, the waiting area shall be demarcated by stop lines. Length of the sub-zone will generally be between 50 and 100m.

2.2.3 Work Sub-Zone

This is the actual area where construction or maintenance activity is taking place and the main concern, therefore, is the safety of the workers at the site from the plying traffic. The path of the traffic must, therefore, be very clearly delineated to avoid intrusion of vehicles moving into the work area. The work sub-zones shall not be close to each other and the distance between the two work sub-zones shall be such that the flow of traffic can return to normal stream by permitting fast moving traffic to overtake slow moving vehicles. These distances shall preferably be 2 km on urban sections and 5 to 10 km on rural sections of the highway. The length of work sub-zones will vary. The length of warning and transition sub-zones shall be basically governed by the speed of approaching vehicles and shall be regulated as shown in table S-1 below:

0352

Table S-1: Recommended Length of Construction Zones

Average Speed (Kmph)	Length of Advance Warning Sub-Zone (m)	Length of Transition Sub-Zone (m)	Length of Work Sub-zone (m)
50	100	50	Varies
51-80	100-300	50-100	
81-100	300-500	100-200	
Over 100	1000	200-300	

The traffic across these sub-zones is guided and taken with the help of various traffic control devices erected at the site.

2.2.4 Termination Sub-Zone

The sub-zone is intended to inform the road users of the end of the construction zone. An information signboard shall be erected to inform road users of the end of construction Zone.

2.3 Traffic Control Devices

Traffic control devices in the construction zones perform the crucial task of warning, informing and alerting the driver apart from guiding the vehicle movements so that the driver of the vehicle as well as the workers on site are protected and safe passage to the traffic is possible.

The primary traffic control devices used in work sub-zones are signs, delineators, barricades, cones, pylons, pavement markings, flashing lights etc. They shall be such that they are easily understood without any confusion, are clearly visible during day and night, conform to the prevailing speeds in immediate vicinity, stable against sudden adverse weather conditions and are easy in installation, removal and maintenance.

2.3.1 Signs

The construction and maintenance signs fall into the same three major categories viz. regulatory signs, warning signs and guide signs as other traffic signs do. The IRC: 67-2001 (Code of Practice for Road Signs) gives a comprehensive list of traffic signs to which the size, colour and placement of signs shall conform. IRC: SP: 55-2001 gives details of special signs and other safety devices to be used in construction. These signs shall be placed on the left hand side of the road. Some of the common types of signs, which shall be provided in construction zones, are discussed in the following paragraph.

13.1.1 Regulatory signs

Regulatory signs mean legal restrictions on the traffic. They shall be used only in consultation with the local police and /or authorities. The most common types for use in construction zones are "Do not Enter", "Road Closed", Give Way to Pedestrians", "Speed limit" etc.

13.1.2 Warning Signs

The most common type of warning signs to alert the drivers of the possible dangers ahead in construction zones are "Lane Closed", "Diversion to other Carriageway", "Divided Carriageway Starts", "Divided Carriageway Ends" and "Two Way Traffic" etc. Sometimes it might be advisable to explain these signs with the help of a rectangular definition plate of size appropriate to the size of warning triangle and placed 0.15 m below, from the bottom of the triangle.

13.1.3 Guide Signs

Guide signs in construction zones shall have different background colour than the normal informatory signs of IRC: 67-2001. These signs shall have black messages and arrows on yellow (Traffic Yellow of IS: 5-1978) background. The commonly used guide signs are: "Diversion", "Road Ahead Closed" and "Sharp Deviation of route" etc. (As per IRC: SP: 55-2001).

13.2 Delineators

These channelising devices such as cones, traffic cylinders, tapes are placed in or adjacent to the roadway to guide the drivers along a safe path and to control the flow of traffic. These shall normally be retro-reflectorised for night visibility. IRC: 79-1981 (Recommended Practice for Road Delineators) gives details of some of the delineators. The other delineators are discussed below.

13.2.1 Traffic Cones and Cylinders

Traffic cones shall normally be 0.5m to 0.75m high and 0.3m to 0.4m in diameter or in square shape at the base. These are mostly made of plastic or rubber with retro reflectorised red and white band and have suitable anchoring so that they are not easily blown over or displaced, it might be preferable to use double cones, one over the other. The cones shall be placed close enough together to give an impression of the continuity. The spacing shall be 3m (close) to 9m (normal). Larger size cones can be used for high speeds or where more conspicuous guidance is required.

0854

New Jersey type plastic barrier of height 0.6m to 0.75m and 0.3m x 0.9m rectangular base could also be used with retro-reflectorised red and white band. Water or sand can be filled to stay in position without displacement. The spacing shall be 3m to 4m.

13.2.1 Barricades

Whenever the traffic has to be restricted from entering the work areas, such as excavations or material storage sites so that protection to workers is provided or there is a need for separating the two way traffic, barricades can be used. The barricades can be portable or permanent type and can be made of iron Jolly, metal or other suitable material. Size of the frame shall be 1.2m x 1m. Suitable support or ballasting shall be provided so that they do not over turn or are not blown away in strong winds. In case of a permanent type barricade, a gate or movable section shall be separately provided to allow the movement of construction/supervision vehicles. Red retro reflective stickers shall be affixed to barricade boards.

13.4 Flagmen

In large construction sites, flagmen with flags and sign paddles shall be effectively used to guide the safe movements. The flags for signalling shall be 0.60 m x 0.60 m size, made of a good red cloth and securely fastened to a staff of approximately 1m in length. The sign paddles shall conform to IRC: SP: 55-2001 and provided with a rigid handle.

For one-way traffic operation at a time during hours of darkness, battery operated red/green lights shall be used at either end of the affected section.

13.5 Road studs and Blinkers (L.E.D.)

Road studs with red flashers shall be provided across the road on either side of the construction zone and Blinkers (L.E.D) shall also be proved at appropriate locations as per the direction of IC and/or NHAI.

14 Safety & Management Practices

Measures for providing safe movement of traffic in some of the most commonly occurring work zones on highways shall be as follows:

14.1 Detour on Temporary Diversion

In the cases of major repairs or reconstruction of cross drainage structures on a highway section, damaged due to flood etc., the traffic may have to pass on a diversion, moving parallel to the highway.

Toll Road Limited

0355

2.4.1.1 **A temporary diversion road shall basically satisfy the following requirements:**

i) It shall have smooth horizontal and vertical profile with smooth vertical and horizontal curves;
ii) It shall not get overtopped by flood or drainage discharge under any conditions;
iii) It shall have adequate capacity to cater for the diverted traffic;
iv) It shall be dust free and shall ensure clear visibility at all times of day and night;
v) It shall be provided with the required safety standards; and
vi) It shall be provided with suitable barricades to prevent intrusion affecting the movement of the traffic.

2.4.1.2 The warning for the construction ahead shall be provided by the sign "Men at Work" about 1 km earlier to the work zone. In addition, a supplementary plate indicating "Diversion 1 km ahead" and a sign "Road Closed Ahead" shall be placed. "Compulsory Turn Right/Left Sign" shall follow it. The "Detour" and "Sharp Deviation" sign shall be used to guide the traffic onto the diversion. Hazard markers shall be placed just where the railings for the cross drainage structures on the diversion starts.

2.4.2 Partial Closure of existing two lane Carriageway

2.4.2.1 Such an eventuality will arise only in a special situation where the existing two lanes in use for the main traffic need emergency repairs and the new lanes under construction are not available for diversion of the traffic. It will become necessary to carryout special repairs through partial closure of the existing two lane facility.

2.4.2.2 In the said situation care shall be taken that the traffic is guided from the closed lane onto the operating lane without conflicting with the traffic from opposite direction.

2.4.2.3 The warning sign for "Men at Work" shall be the first sign to be seen by the drivers of the approaching vehicles. This sign shall have supplementary plate also showing the distance of work zone. The next warning sign shall be for the "Road Narrowing" (depending upon the lane closure). Compulsory "Keep Right" or "Keep Left" sign depending upon the situation, shall be provided at the beginning of the transition zone and taper. The point from where the traffic is to deviate from its normal path, the channel for traffic shall be clearly marked with the aid of painted drums or traffic cones. The spacing of these cones and/or drums shall be about 9 m or closer as per site requirement.

"The traffic lane or carriageway closed" sign shall also be provided at barricades along with "Keep Right/Left" sign.

0356

2.4.3 Closure for Work on one side Carriageway of a 4/6 lane divided carriageway

The first sign shall be for the "Men at Work" alongwith distance plate for construction zone. Thereafter the sign for "Road Narrowing" shall be provided, followed by the signs for lane closure one after another. This shall be followed by sign for compulsory "Keep right/Left (depending upon site situation). The sign for the "Closure of carriageway" along with that for "keep Left/Right" shall be provided at the point from where the vehicle is expected to change the lane for the diversion. The sign for the "Diversion to the other carriageway" shall be provided between the "Carriageway Closure" sign and the median gap. The sign for "Sharp Diversion of Route" along with compulsory "Turn right/Left" shall be provided at the location where the gap in median opening starts and traffic is expected to get diverted to the other carriageway. The warning signs for "Two way traffic" alongwith the plate indicating the distance, up to which the two way traffic is allowed, shall be placed at the median, which shall be to the left of the moving traffic. Cones or painted drums shall be placed for delineation, starting from the sign location for "Carriageway Closed".

2.4.4 Carriageway Repairs

When the work is of small magnitude, to be done in the middle of the carriageway, such as minor repairs of potholes, cracks and patches, then the traffic control measures shall mainly consist of providing cautionary signs of "Men at Work", about 500m before the work zone for the approaching vehicle and other cautionary sign of "Road Narrows", shall be placed at 100m ahead of work area. Regulatory sign of "Keep Left/Right" shall be placed at the commencement point of the work zone and next to the barriers for the approaching vehicles. Movable type of barriers shall also be placed on both sides of the work area. Cones or drums shall be placed at suitable interval to demarcate the work area. The "Work Zone Ends" sign shall be installed 120m beyond the work area. If the operation is to continue during nighttime, necessary lighting arrangements with flashing lights shall be provided.

2.4.5 Construction of New Carriageway

2.4.5.1 Urban Section of the Project Highway

(i) The service roads on either side together with side drains shall be constructed initially. During this period the main traffic shall use the existing two lane carriageway. The construction traffic in the work zone shall be safely brought out from the mainstream traffic by erecting appropriate signs at the beginning of the work site. Also on return it will be amalgamated with the mainstream traffic by erecting appropriate signs at the end of the work site. It shall be ensured that there shall be identified entry and exist points duly designed so that haphazard entry or exit of construction traffic is avoided. Conflicting turning movements shall be avoided.

0357

(b) On completion of the Stage-I, the main traffic shall be diverted on their respective directions on to the newly constructed service roads and the additional 4/6 lanes shall be constructed (2/3 lanes on each side) of the existing carriageway duly including the 1.5m wide central median.

(c) On completion of the divided 4/6 lane carriageway of the Project Highway, the main traffic from the service roads shall be restored on them and informatory signs shall be installed.

2.4.5.2 Rural Section of the Project Highway

In rural section the new 2/3 lane carriageway and the central median shall be constructed eccentric to the Centre line of the existing carriageway. During this construction phase, the existing two lane carriageway shall be used for the main traffic. The construction traffic using the existing highway shall be guided on to the work zone and allowed to return to the main traffic stream safely. For this purpose identified exist and entry points duly designed shall be provided. It shall ensure against haphazard entry or exist of the Construction Traffic to/from the existing highway. Conflicting turning movements of the Construction traffic shall be avoided. During this phase, sign/barricading shall be on the construction side of the road.

On completion of the new 2/3 lane carriageway and the median throughout, the traffic on the existing highway shall be diverted on it and the strengthening and widening of the existing carriageway shall be taken up.

At the construction stages described above, situations may arise requiring diversion of traffic for cross over from the new carriageway to the existing carriageway when construction of new lanes is done in stretches, during which suitable traffic safety measures shall adopted.

2.5 Safety Measures During Normal Operation

2.5.1 Introduction.

It is observed that the drivers park their vehicles on the carriageways leading to accidents. Many a times, the accidental vehicles and/or debris on the carriageway are the cause of further accidents besides obstructing the smooth flow of the traffic. For smooth and normal flow of the traffic on the Project Highway, the actions stated hereinunder in 2.5.2 would be taken for the normal operation of the Project Highway.

2.5.2 Highway Patrol

Highway Patrolling shall be done to ensure safe, uninterrupted and smooth traffic flow so that:

(i) No parking of a vehicle on any of the divided carriageway takes place at anytime;

(ii) Immediate assistance is provided to accident victims and their rescue as per clause 18.8.2 of the Concession Agreement.

(iii) Minor debris and stalled vehicles are removed from carriageway within an hour's time;

(iv) In the event of traffic congestion, adequate measures shall be taken to mitigate the same in maximum one-hour's time and the approaching traffic is duly cautioned about it.

2.5.3 Safety, Vehicle Breakdown and Accident

2.5.3.1 In case of unsafe condition, vehicle breakdowns and accidents, the Concessionaire shall follow the relevant operating procedures, which shall include the setting up of temporary traffic cones and lights as well as the removal of obstruction and debris expeditiously as per clause 18.8.1 of the Concession Agreement.

2.5.3.2 The Concessionaire shall ensure that any diversion or interruption of traffic is remedied without delay as per clause 18.8.1 of the Concession Agreement.

2.5.6 Safety Measures During Concession Period

2.6.1 During the Concession Period or extension thereof as per the Concession Agreement many activities are involved at different stages and at various periods in respect of construction, operation and maintenance of the Project Highway. Safety of the road users and the Project workmen at site is of paramount importance and obligatory for the Concessionaire throughout the said period.

2.6.2 In Emergency arising on account of Force Majeure due to nature or administrative reasons special safety measures may be called for the traffic and/or the workmen at site to be taken by the Concessionaire.

2.6.3 The following principles shall be kept in view in Emergency situations from safety considerations:

2.6.3.1 Where part width of the existing 2/3 lane carriageway is envisaged to be used for passage of two way traffic, paved shoulders shall be used on the side on which work is not proposed. A maximum of one lane (3.5 m wide) closure shall be allowed for a short duration depending on the extent on Emergency.

2.6.3.2 At the points where traffic is to deviate from its normal path, the channel for traffic shall be clearly marked with the aid of pavement markings or other similar device as directed by the

Independent Consultant. At night the passage shall be delineated with lamps or lanterns or any suitable light source..

2.6.3.3 On the approach of any type of closure suitable regulatory/warning signs as approved by the Independent Consultant shall be installed for guidance of road users. At least two signs shall be put-up one close to the carriageway where transition of carriageway begins and the other 120 m ahead. The signs shall be of approved design and of reflectory type as directed by Independent Consultant.

2.6.4 The Concessionaire shall ensure that safety standards specified in this Schedule are strictly complied with in the event of any lane closure or diversion of traffic.

2.7 Safety of Project workmen at Site

2.7.1 Safety of the Project Workers at site during duty hours is the responsibility of the Concessionaire. It shall be ensured by him that safety measures appropriate for the job a workman performs shall be provided.

2.7.2 Also, safety measures against accidents of the Workers by the traffic using the highway and/or diversions shall be taken. The Concessionaire shall provide helmets and protective chest vests to its workmen at site and make it compulsory for them to wear the same.

2.7.3 The Concessionaire shall insure all the Project Workers against accident.

2.7.4 Labour Laws in force shall be followed.

2.8 Safety Requirements

2.8.1 Safety of Road users and workers on the Project Highway during its Construction, Operation and Maintenance is obligatory and the Concessionaire shall be fully responsible to discharge it in terms of the Concession Agreement including its Schedules.

2.8.2 In case of emergency situations the Concessionaire shall take action(s) for the safety of the road users and the workers as required by the site conditions immediately without waiting for consultation with the Independent Consultant and/or NHAI because any delay in it will not absolve the Concessionaire of its responsibilities under the Concession Agreement including its Schedules.

2.8.3 A breach by the Concessionaire of its obligations in respect of the safety standards shall be dealt with in terms of clause 18.8.3 of the Concession Agreement

9.0 Safety of workers

In respect of all labour directly or indirectly employed in the work for the performance of the Concessionaire's part of this agreement, the Concessionaire shall at his expense arrange for the safety provisions as per Indian Standard Safety codes shown below and shall at his own expense provide for all facilities in connection there with. In case the Concessionaire fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay penalty prescribed under relevant clauses of this concession agreement for each default and in addition the IC shall be at liberty to make arrangement and provide facilities as aforesaid and recover the cost incurred on that behalf from the Concessionaire, and no claims whatsoever shall be entertained.

1. IS: 3696 (part I) - 1966 Safety code for scaffolds and ladders.
2. IS: 3696(part II) - 1966 Safety code for scaffolds and ladders
3. IS: 3764-1966 Safety code for excavation work.
4. IS: 4081-1967 Safety code for blasting and drilling operations.
5. IS: 4138 -1977 Safety code, for working in compressed air
6. IS: 5121 Safety code for piling and other deep foundations.
7. IS: 5916 - 1970 Safety codes for construction involving use of hot bituminous materials.
8. IS: 7293-1974 Safety code for working with construction machinery.
9. IS: 7969 -1975 Safety code for storage and handling of building materials.
10. Any other code and/or as per directions of IC.

10.0 Safety Precautions

Since heavy loads have to be handled over moving traffic during erection of superstructure, safety is of utmost importance. The Concessionaire shall enforce a strict Safety System with all necessary precautions and instructions (safety tools, nets, railings, personal protection equipment, proper training of workers, first aid, etc.). No unskilled / untrained personnel shall be engaged at site to perform the critical activities above the flowing traffic at GL. The Concessionaire shall be solely responsible for ensuring safety at site during entire construction period.

SCHEDULE T

CRITERIA FOR LIST OF CHARTERED ACCOUNTANTS

Selection of the Chartered Accountants for a mutually agreed list shall consist of the following steps :

1. Shortlisting of Chartered Accountants by the NHAI
2. Issue of Letter of Invitation (LoI) along with Terms of Reference to shorlisted Chartered Accountants.
3. Evaluation of Technical Proposal and selection of maximum of 15 (fifteen) Chartered Accountants.
4. Forwarding list of maximum 15 (fifteen) selected Chartered Accountants to Concessionaire to further select a maximum of 10 (ten), from which a Statutory Auditor shall be appointed.

SELECTION COMMITTEE FOR SHORTLISTING

A Selection Committee shall do the selection; the members of this committee shall be nominated by the NHAI.

1. **Shortlisting by NHAI**

For shortlisting, NHAI shall advertise for Expression of Interest (EoI) to serve as Statutory Auditors/ Chartered Accountants for the ongoing National Highway **(NH-7)** improvement project. The EoI will ask for summary information on

- Number of Partners and Professional Staff
- Experience of the firm on roads project
- Presence in India and in the region
- Experience of the firm on other similar work in other sectors.

2. **Request for Technical Proposal**

The request for technical proposals shall be sent to the shortlisted firms. This shall include a ToR besides information (Data Sheet) to the firms. It shall contain the guidelines for the preparation of technical proposals by the firms and submission.

0362

The ToR shall include the following details:

1. Project background
2. Objectives
3. Scope of services
4. Interaction with NHAI
5. Reporting requirement
6. Performance clause
7. Consultant's Proposal
8. Period of Services

3. **Evaluation of Technical Proposal**

The technical proposals received from shortlisted firms shall be evaluated based on the following:

- Specific experience of the firm related to the assignment
- Adequacy of the proposed work plan and methodology in response to the ToR
- Qualifications and competence of the key staff for the assignment.

SCHEDULE U

SUBSTITUTION AGREEMENT

THIS SUBSTITUTION AGREEMENT is made at New Delhi on this the _____ day of _____ 200_.

BETWEEN

1. THE National Highways Authority of India (hereinafter referred to as "NHAI" which expression shall unless repugnant to the context or meaning thereof include its successors and assigns),

2. DS Toll Road Limited, a company incorporated under the provisions of the Companies Act, 1956 and having its Registered Office at 3rd Floor, Reliance Energy Centre, Santa Cruz (E), Mumbai-400055 (hereinafter referred to as the "Concessionaire" which expression shall unless repugnant to the context or meaning thereof include it successors and assigns),

AND

3. _____, _____ and having its registered office at _____ acting for itself and for and on behalf of the Senior Lenders listed in Schedule I hereto (hereinafter referred to as the "Senior Lenders").

(NHAI, the Concessionaire and the Senior Lenders are hereinafter collectively referred to as the "Parties" and individually are hereinafter referred to as "Party").

WHEREAS

A. By the Concession Agreement dated ..... entered into between the NHAI and the Concessionaire, NHAI has granted to the Concessionaire the Concession for **NS2/BOT/TN5 in the State of Tamil Nadu**, India on Build, Operate and Transfer (BOT) basis subject to and on the terms, conditions and covenants setforth in the said Concession Agreement or forming part thereof.

B. With a view to help facilitate obtaining of financing for the said Project by the Concessionaire so as to enable the Concessionaire to build, operate and maintain the same pursuant to and in accordance with the Concession Agreement, the Parties have agreed subject to the terms and conditions of the Concession Agreement and the Financing Documents, that the Senior Lenders shall have the right to substitute the Concessionaire by a Selectee for the residual period of the Concession on the terms, conditions and covenants mentioned hereinbelow.

C. As a condition to making any disbursement pursuant to the Financing Documents, the Senior Lenders have required and it is deemed necessary and expedient to record the terms, conditions and covenants of the above agreement between the Parties.

NOW THEREFORE THE PARTIES HITHERTO HEREBY AGREE AND THIS AGREEMENT WITNESSES AS FOLLOWS:

ARTICLE 1

DEFINITIONS

1.1 For the purpose of this Agreement, the following terms shall have the meaning hereinafter respectively assigned to them :

1.1.1 "Concession" means the bundle of rights, obligations and covenants of the Concessionaire under and as setforth in the Concession Agreement.

1.1.2 "Concession Agreement" means the Concession Agreement dated ..... entered into between NHAI and the Concessionaire granting the Concession to the Concessionaire in respect of the Project Highway and includes without limitation any amendments thereto made in accordance with the provisions contained in this behalf therein.

1.1.3 "Event of Default" means occurrence of any of the following events :

(i) A Material Breach by the Concessionaire of the Concession Agreement, or the occurrence of a Concessionaire Event of Default as defined in the Concession Agreement.

(ii) A material default in payment by the Concessionaire to all or any of the Senior Lenders under the Financing Documents of any two instalments, either of principal or interest or both, due and payable by it on account of Lenders Dues.

(iii) Any event of default under or breach of any of the terms of any of the Financing Documents or Project Agreements concerning the Project which in the sole opinion of the Lenders Agent is material or major and which may seriously affect the ability of the Concessionaire to meet its payment obligations to the Senior Lenders under the Financing Documents or to design engineer, construct, complete, operate and maintain the Project Highway pursuant to and in accordance with the Concession Agreement.

1.1.4 "Financial Assistance" means the loans, advances and other funding assistance including any syndicated/ participation facility provided by the Senior Lenders as setforth in Schedule II hereto for financing the whole or any part of the Project Cost.

1.1.5 "Financing Documents" means the documents executed/ to be executed by the Concessionaire or entered/to be entered into by the Concessionaire with the Senior Lenders and/or the Lenders Agent in respect of the Financial Assistance and include loan agreements, guarantees, notes, debenture, bonds and other security agreements and other documents relating to the Financial Assistance and brief particulars whereof are setforth in Schedule II hereto in relation to each Senior Lender.

1.1.6 "Lenders Agent" means ....., a company established under the provisions of the ..... and having its principal office ..... and any replacement thereof appointed by all the Senior Lenders, inter alia, on the condition that as security for the Financial Assistance they shall have the right to

0365

seek transfer and assignment of the Concession Agreement including the Concession in accordance with the provisions of this Agreement.

1.1.7 "Lenders Certificate" shall have the meaning ascribed thereto in Clause 2.2(b).

1.1.8 "Lenders Dues" means the aggregate of all monies owned by the Concessionaire to the Senior Lenders under the Financing Documents on account of principal thereunder for funding the Project Cost, and all accrued interest, additional interest, liquidated damages, commitment fees, commission, prepayment premium, costs, charges and other monies including financing charges and fees owed by the Concessionaire to the Senior Lenders under the Financing Documents for the Project upto the Transfer Date payable under the Financing Documents.

1.1.9 "Notice of Default" shall have the meaning ascribed thereto in Clause 2.2(a).

1.1.10 "Proposal" shall have the meaning ascribed thereto in Clause 3.1(iii).

1.1.11 "Project Agreements" means this Agreement, the Concession Agreement and certain other agreements and contracts entered into by the Concessionaire with NHAI and others relating to the Project and brief particulars whereof are setforth in Schedule III hereto.

1.1.12 "Project Cost" means the total capital cost of the Project upto the COD as approved by the Senior Lenders.

1.1.13 "Senior Lenders" means the financial institutions, trusts, funds, banks and such other persons who have provided or agreed to provide the finance to the Concessionaire under any of the Financing Documents for meeting all or any part of the Total Project Cost and who hold pari passu charge on the Project Assets.

1.1.14 "Selectee" means a new Concessionaire proposed by the Senior Lenders pursuant to this Agreement and approved by NHAI for substituting the Concessionaire for the residual period of the original Concession by amendment of the Concession Agreement or by execution of a fresh Concession Agreement.

1.1.15 "Substitution Notice" means the notice given by the Lenders Agent pursuant to Clause 2.2 (c) of this Agreement.

1.2 The words and expressions beginning with or in capital letters used in this Agreement not defined herein, shall have, unless repugnant to the context, the meaning respectively assigned to them in the Concession Agreement.

1.3 In this agreement unless the context otherwise requires :

a) any reference to a statutory provision shall include such provision as is from time to time modified or re-enacted or consolidated so far as such modification or re-enactment or consolidation applies or is capable of applying to any transactions entered into hereunder;

b) the words importing singular shall include plural and vice versa, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint

ventures, trusts, associations, organisations or other entities (whether or not having a separate legal entity);

c) the headings are for convenience of reference only and shall not be used in and shall not affect the construction or interpretation of this Agreement;

d) terms beginning with capital letters and defined in this Agreement shall have the meaning ascribed thereto herein;

e) the words "include" and "including" are to be construed without limitation;

f) any reference to a "day" shall mean reference to a calendar day;

g) any reference to "month" shall mean reference to a calendar month;

h) the Schedules 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;

i) any reference at any time to any agreement, deed, instrument, license or document of any description shall be construed as reference to that agreement, deed, instrument, license or other document as amended, varied, supplemented, modified or suspended at the time of such reference provided that this clause shall not operate so as to increase liabilities or obligations of NHAI hereunder or pursuant hereto in any manner whatsoever;

j) references to Recitals, clauses, sub-clauses, paragraphs, or schedules in this Agreement shall, except where the context otherwise requires, be deemed to be references to Recitals, Articles, clauses, sub-clauses, paragraphs, Annexures, appendices of this Agreement;

k) any agreement, consent, approval, authorisation, proposal, notice, communication, information or report required under or pursuant to this Agreement from or by any Party or Senior Lender(s) shall be valid and effectual only if it is in writing under the hands of duly authorised representative of such Party or the Senior Lender(s), as the case may be, in this behalf and not otherwise; and

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 days or dates.

ARTICLE 2

SUBSTITUTION OF THE CONCESSIONAIRE BY A SELECTEE

2.1 NHAI hereby irrevocably agrees to substitute the Concessionaire by a Selectee (selected by the Senior Lenders in accordance with the provisions of this Agreement and approved by NHAI) by amendment of the Concession Agreement or by execution of a fresh Concession Agreement in favour of the Selectee for the purpose of securing the payments of the Lenders Dues, provided that nothing contained herein shall entitle the Senior Lenders to operate the Concession themselves as a Concessionaire

0367

under and in accordance with Concessionaire Agreement either individually or collectively. However, Senior Lenders may exercise the right of step-in to cure any breach or default subsisting on the day of such step-in or substitution. Provided further that if the Senior Lenders step in to operate and manage the Concession for a period not exceeding 90 (ninety) days, their liabilities shall be restricted to the obligations relating to and arising during such 90 (ninety) days period.

2.2 (a) The Lenders Agent shall notify by a notice in writing to the Concessionaire, with a copy thereof simultaneously to NHAI, about the occurrence of an Event of Default and requiring the Concessionaire to remedy and cure such default within 30 (thirty) days from the date of delivery of such notice of the Concessionaire (the "Notice of Default"). The Notice of Default shall be accompanied by the Lenders Certificate.

(b) A certificate under the hands of an authorised officer of the Lenders Agent annexed to the Notice of Default certifying –

(i) the occurrence of an Event of Default, and

(ii) the Lenders Dues.

(the "Lenders Certificate") shall be conclusive evidence of occurrence of such Event of Default and of such Lenders Dues. Such Lenders Certificate shall be final, conclusive and binding upon the Concessionaire for the purposes of this Agreement and the Financing Documents.

(c) NHAI and the Concessionaire hereby irrevocably agree that the Lenders Agent may within 30 (thirty) days of the date of delivery of the Notice of Default of the Concessionaire and without prejudice to any other right or remedy available to the Senior Lenders under the Financing Document, notify NHAI and the Concessionaire on behalf of all the Senior Lenders about the Senior Lenders decision to invite, negotiate and procure offers, either through private negotiations or public auction or process of tendering for the residual period of the Concession and the rights and obligations of the Concessionaire under the Concession Agreement, by a Selectee, subject to the approval of such Selectee by NHAI (the "Substitution Notice").

(d) Upon assumption by the Selectee of the liability and obligations of the Concessionaire under the Financing Documents and the Concession Agreement including obligation to pay any sums then due and payable to NHAI under the Concession Agreement, NHAI shall grant the Concession to the Selectee on the same terms and conditions for the residual period of the original Concession, by amendment of Concession Agreement or, if required by the Lenders Agent by a separate agreement with the Selectee.

2.3 The Lenders Agent shall apply in the selection of the following criteria:

(i) the Selectee shall be capable of properly discharging the duties, obligations and liabilities of the Concessionaire under the Concession Agreement;

0560

(ii) the Selectee shall provide security to the satisfaction of Senior Lenders for repayment of the Lenders Dues;

(iii) the Selectee shall have the capability and shall unconditionally consent to assume the liability for the payment and discharge of dues of the Concessionaire to NHAI under and in accordance with the Concession Agreement and of Lender's Dues upon terms and conditions as agreed to with the Senior Lenders ;

(iv) the Selectee shall have the net worth, experience and technical equity parameters as setforth in the Concession Agreement or prescribed by NHAI thereunder in respect of the Concessionaire or as relaxed subsequently by NHAI;

(v) the Selectee shall have not been in breach of any agreement between the Selectee and NHAI ; and

(vi) any other appropriate circumstance, whereby continuity in the performance of the Concessionaire's obligations under the Concession Agreement is maintained and the security in favour of Senior Lenders under the Financing Documents is preserved.

14 At any time prior to the acceptance of the Selectee by NHAI pursuant to this Agreement, the NHAI may require the Lenders Agent to satisfy NHAI as to the eligibility of the Selectee and the decision of the NHAI in this behalf (which shall be reasonable), shall be final, conclusive and binding on the Senior Lenders and the Selectee.

ARTICLE 3

MODALITY FOR SUBSTITUTION

15 The following modalities shall be applicable to any substitution of the Concessionaire by the Selectee pursuant to this Agreement

(i) The Lenders Agent may invite, negotiate or procure offers either through private negotiations or public auction or process of tender or otherwise for the substitution of the Concessionaire by the Selectee.

(ii) The Lenders Agent shall on behalf of the Senior Lenders propose to NHAI pursuant to sub-clause (iii) below, the name of the Selectee for acceptance and shall apply as necessary to NHAI for :

a) grant to the Selectee (as substitute for the Concessionaire) the right to build, construct, complete, maintain, and operate the Project Highway under and in accordance with and subject to and on the terms and conditions setforth in the Concession Agreement,

b) amendment of the Concession Agreement so as to grant to the Selectee on the same terms and conditions, the residual period of the Concession under original Concession Agreement,

c) the execution of a new Substitution Agreement with the proposed Selectee for the residual period of Concession on the same terms and conditions, and

0363

(iii) The Lenders Agent on behalf of the Senior Lenders shall be entitled, within a period of 120 (one hundred twenty) days from the date of delivery to NHAI of the Substitution Notice pursuant to Clause 2(c) above, to select and propose to NHAI for its approval a Selectee (the "Proposal"). The Proposal of the Lenders Agent pursuant to this sub-clause (iii) shall contain the particulars and information in respect of the Selectee, the Lenders Dues and other data and information, all as prescribed in Schedule IV hereto. Without prejudice to the foregoing the Lenders Agent agrees and undertakes to provide to NHAI such further and other information and such clarifications in respect of any data, particulars or information furnished pursuant hereto by the Lenders Agent as NHAI may reasonably require. NHAI shall convey its approval or otherwise of such Proposal, including of Selectee, in its sole discretion within 60 (sixty) days of (a) the date of receipt of the Proposal by NHAI, or (b) the date when last of further and other information and such clarifications in respect of any data, particulars or information comprised in the Proposal, as have been provided in the Lenders Agent to NHAI, whichever is later. It is expressly agreed that the Proposal shall be accompanied by an unconditional undertaking of the Selectee that it shall upon approval by NHAI of the Proposal including the Selectee, observe, comply, perform and fulfill the terms, conditions and covenants of the Concession Agreement which according to its terms are required to be observed, complied with, performed and fulfilled by Concessionaire thereunder on the footing as if such Selectee were the concessionaire under the Concession Agreement and shall be liable for and shall assume, discharge and pay the Lenders Dues to the Senior Lenders under and in accordance with the Financing Documents. Upon approval of the Proposal including of the Selectee by NHAI, such Selectee shall become the Selectee hereunder.

(iv) NHAI shall, upon its satisfaction of the eligibility of the Selectee and in accordance with the provisions of this Agreement and subject to the provisions of Sub-clause (v) below proceed to substitute the Concessionaire or the Selectee by amendment of the Concession Agreement or by execution of fresh agreement or such other writing as NHAI may reasonably require on the same terms and conditions for the residual period of the Concession in favour of the Selectee.

(v) The substitution as aforesaid shall be subject to the Selectee obtaining requisite Indian Government approvals, clearances and permission necessary for operating the Concession under and in accordance with the Concession Agreement.

(vi) The objection if any of NHAI to the substitution as aforesaid shall be reasoned and be made after hearing the Lenders Agent, provided however, that in the event of a refusal as stated above, the Lenders Agent may propose another Selectee. In the event that no objection is raised with respect to the Selectee by NHAI within the period setforth in sub-clause (iii) above, the Selectee shall be deemed to have been accepted by NHAI. NHAI shall, subject to the provisions of Sub-clause (v) above, grant the

Concession for the residual period within 15 days of its acceptance/deemed acceptance of the Selectee.

(vii) The substitution as aforesaid, pursuant to the security interest hereby created in favour of the Senior Lenders, shall be deemed to be complete only upon the Selectee as Concessionaire accepting and complying with the terms and conditions stipulated in the Concession Agreement.

(viii) The decision of the Senior Lenders and NHAI in the selection of the Selectee shall be final and binding on the Concessionaire and shall be deemed to have been made with the concurrence of the Concessionaire and the Concessionaire hereby expressly waives all rights to objects to or challenges such selection of the Selectee on any ground whatsoever. No third party shall have the right to question the decision of the Senior Lenders/Lenders Agent and NHAI.

(ix) All actions of the Lenders Agent hereunder shall be deemed to be on behalf of the Senior Lenders, and be binding upon them. The Lenders Agent is authorised to receive payment of compensation, payment to cure default and any other payments, consideration for transfer in accordance with the Substitution Notice and the Financing Documents and give valid discharge on behalf of all Senior Lenders.

3.2 The terms and conditions for substitution of the Concessionaire by the Selectee shall be proposed by the Senior Lenders through the Lenders Agent to the NHAI, on the occurrence of an Event of Default and continuance thereof for six months but atleast 2 months prior to the anticipated date of substitution as aforesaid for the residual period of the Concession.

3.3 The Concessionaire hereby irrevocably agrees and waives any right to challenge the Senior Lender's decision to apply to NHAI for substitution as aforesaid and neither the Concessionaire nor NHAI shall be entitled to prevent the Lenders Agent from proceeding to seek such a substitution of the Concessionaire by Selectee as hereinbefore provided. Notwithstanding NHAI's permission for substitution pursuant to Lenders Agent's request, the Concessionaire agrees and confirms that the Concessionaire shall not have any right to seek re-valuation of the Concessionaire's assets including the Concession under the Concession Agreement, otherwise than as contracted in the Financing Documents. The Parties acknowledge that the rights of the Senior Lenders hereunder are irrevocable and shall not be contested in any proceedings before any court of authority and the Concessionaire shall have no right or remedy to prevent, obstruct, injunct or restrain NHAI and/or the Senior Lenders from effecting or causing the substitution as aforesaid.

3.4 Where no suitable Selectee can be found by the Lenders Agent or NHAI shall decide to take over the concession then NHAI shall advise the Lenders Agent of all steps it proposes to take under the Concession Agreement for determination of Termination Payments thereof.

3.5 (i) If NHAI decides to substitute the Concessionaire by any other person (NHAI Nominee), it shall take into account the Senior Lender's Dues while considering offers from such persons and shall include a suitable condition as agreed to by the Lenders Agent on behalf of the

0371

Senior Lenders for payment or take over of such dues by such NHAI nominee to the extent agreed by the Lenders Agent while substituting the Concessionaire by the NHAI nominee. The NHAI nominee shall similarly be bound to execute a supplementary/fresh substitution agreement on the same terms and conditions as provided herein.

(ii) Notwithstanding anything contained in Clause 3.4 and this Clause 3.5, NHAI shall not be required to take over, upon Termination of the Concession Agreement including the Concession, the liabilities representing the Lender's Dues save and except to the extent of Termination Payments due and payable upon such Termination under the Concession Agreement. In such an event NHAI's obligation shall be limited to assumption of such liabilities and payments of dues as NHAI has agreed to bear under the Concession Agreement.

3.5.1 Nothing contained in these presents shall mean or be interpreted as provision of any guarantee or surety by NHAI and it is expressly agreed that NHAI has not provided any surety, guarantee or counter guarantee whether directly or indirectly for the recovery of amount of Financial Assistance advanced by the Senior Lenders to the Concessionaire.

ARTICLE 4

INTERIM PROTECTION OF SERVICE AND PRESERVATION OF SECURITY

4.1 In the event of the Senior Lenders notify NHAI and the Concessionaire of the Event of Default (and the Concessionaire has not cured the default for a period of 30 days) or in special circumstances affecting the security of the Senior Lenders, the Senior Lenders shall be entitled to institute protective legal proceedings for a receivership (the "Receiver") to maintain, preserve and protect the assets (other than the Concession Agreement including the Concession) held as security by the Senior Lenders provided always that such receiver shall be NHAI if such assets are in the opinion of NHAI necessary and required for the operation and maintenance of the Project Highway and the Parties hereby consent and agree to the same. The Lenders Agent shall in such an event notify NHAI to assume receivership of the assets held as security and NHAI shall operate and maintain the same pending the substitution of the Concessionaire by the Selectee. In the event NHAI does not assume receivership and declines the request of the Lenders Agent, the Lenders Agent shall for itself and each of the Senior Lenders, be entitled to seek the appointment of a Court Receiver for the Concessionaire's assets held as security and NHAI shall operate and maintain the same pending substitution as aforesaid and/or the takeover of the Concession Agreement including the Concession and the Project Highway in accordance with the Concession Agreement or this Agreement by the NHAI. All the receivables shall be deposited by the Receiver in the Escrow Account and shall be dealt with in accordance with the Concession Agreement. The Receiver shall be responsible for protecting the assets in receivership and shall render a true and proper account of the receivership to the Senior Lenders in accordance with the terms of its appointment. The Receiver shall make best efforts to operate and maintain the Project Highway, in accordance with the obligations of the Concessionaire under the Concession Agreement. Any person other than NHAI may be appointed as Receiver only with the prior

consent of NHAI. In a declaratory suit for appointment of a Receiver, notwithstanding that no recovery or mortgage suit or any suit or proceeding for enforcement of the Senior Lenders' security under the Financing Documents is instituted by the Lenders Agent for itself or the Senior Lenders, any action for appointment of NHAI as Receiver or appointment of an Independent Court Receiver shall be without prejudice for the other rights and remedies of NHAI, and of the Senior Lenders under the Financing Documents.

ARTICLE 5

TERMINATION OF THE CONCESSION BY THE NHAI

5.1 If under the Concession Agreement an event occurs which shall entitle NHAI to Terminate the Concession Agreement, NHAI shall intimate the Senior Lenders prior to exercising of its decision to Terminate the Concession and advise the Senior Lenders to ensure the cure of the event which otherwise can result in termination of the Concession and the Concession Agreement. Such a notice shall entitle the Senior Lenders to cure any financial or other default of the Concessionaire within a period of two months from the date of the notice received from the NHAI failing which NHAI without any further notice to either the Concessionaire or the Lenders Agent/Senior Lenders, shall be entitled to Terminate the Concession Agreement.

5.2 Upon receipt of the Notice as referred to in Clause 5.1, intimating occurrence of an event which can entail Termination of the Concession Agreement including the Concession, the Senior Lenders shall be entitled to consider such notice as an Event of Default and may initiate steps to invite, negotiate and procure offers for the substitution of the Concessionaire by a Selectee in accordance with the procedure set forth in this Agreement.

ARTICLE 6

SENIOR LENDERS RIGHT TO RECEIVE TERMINATION PAYMENTS

6.1 NHAI and Concessionaire hereby agree and confirm that without prejudice to any other right or remedy, NHAI shall be entitled to deposit the Termination Payments into the Escrow Account and the Senior Lenders shall be entitled to receive the same without any further reference to or consent of the Concessionaire under and in accordance with the Concession Agreement towards the satisfaction of the Senior Lenders Dues out of and limited to the sum of Termination Payments worked out under and in accordance with the Concession Agreement. The Senior Lenders shall be entitled to appropriate any consideration received for the substitution as hereinabove provided from the Selectee towards the payment of their and NHAI's respective dues to the exclusion of the Concessionaire.

6.2 The Concessionaire hereby nominates, constitutes and appoints the Lenders Agent as its constituted attorney for doing all acts, deeds and things as may be required to be done for the substitution of the Concessionaire by the Selectee pursuant hereto and for receiving consideration for discharge of the Lenders' Dues pursuant to Clause 6.1.

6.3 The Concessionaire hereby expressly authorises payment of sums by NHAI on account of Termination Payments into Escrow Account and the Lenders Agent to draw the same

0373

therefrom for and on behalf of the account of the Senior Lenders notwithstanding the pendency of any dispute or objection or claim that the Concessionaire may have against the Senior Lenders and/or NHAI. The deposit by NHAI into the Escrow Account and payment to the Senior Lenders directly or through the Lenders Agent in accordance with this Agreement, made or caused to be made by NHAI shall constitute a valid discharge of its obligation of the payment thereof to the Concessionaire. All such payments shall stand charged to the Senior Lenders under the Financing Documents and shall be receivable by the Lenders Agent from the Escrow Account on behalf of the Senior Lenders to the exclusion of any receiver or liquidator appointed.

ARTICLE 7

GENERAL

The Parties hereto expressly represent and warrant that they are duly empowered to sign and execute this Agreement and the Lenders Agent is duly and fully authorised by each of the Senior Lenders to enter into this Agreement on their behalf.

Notices under this Agreement shall be sent to the Addresses first hereinabove mentioned. Any change in the address of any Party shall be duly notified by a Registered post acknowledgement due and delivered to the other Parties.

The expressions "NHAI", the "Concessionaire", the "Senior Lenders" and the "Lenders Agent" herein used shall unless there be anything repugnant to the subject or context include their respective successors, legal representatives, administrators and permitted assigns.

This Agreement shall not be affected by reorganisation of any Senior Lender, Lenders Agent or NHAI and the successor – in interest of such Senior Lender, Lenders Agent or NHAI shall have the benefit of this Agreement.

No amendment, variation or modification to this Agreement shall be valid and effectual unless made in writing and executed by the duly authorised representatives of all the Parties hereto.

All stamp duties or other imposts and charges as are applicable on this Agreement or on amendment of the Concession Agreement or execution of fresh Concession Agreement for the purpose of substitution as aforesaid shall be borne by and be to the account of the Concessionaire. In the event of the Senior Lenders making such payment for the time being, it shall be deemed to be a part of the Lenders Dues.

The Parties hereby expressly agree that for the purpose of giving full and proper effect to this Agreement, the Concession Agreement and this Agreement shall be read together and construed harmoniously. The terms of this Agreement shall prevail in the event of any inconsistency with the Concession Agreement.

The consultation, recommendation or approval of the Lenders Agent under this Agreement shall always be taken as consultation, recommendation or approval of every concerned Senior Lender and each such Senior Lender shall be bound by the same and hereby waives its right to question or dispute the same.

9 This Agreement shall be in addition to and shall not be in derogation of the terms of the Financing Documents.

10 It shall not be necessary for the Senior Lenders or the Lenders Agent to enforce or exhaust any other remedy available to them before invoking the provisions of this Agreement.

11 Any dispute, difference or claim arising out of or in connection with or in relation to this Agreement which is not resolved amicably shall be decided finally by reference to arbitration to a Board of Arbitrators comprising of one nominee of each party to the dispute. Such arbitration shall be held in accordance with the Rules of Arbitration of the Indian Council of Arbitration and shall be subject to the provisions of the Arbitration and Conciliation Act, 1996. The arbitrators shall issue a reasoned award. The venue of such arbitration shall be New Delhi, India. The Award shall be final and binding on the Parties. The Parties agree and undertake to carry out the award of the arbitrators (the "Award") without delay.

This Agreement and rights and obligations of the Parties shall remain in full force and effect pending the Award in any arbitration proceeding hereunder. The Courts in New Delhi alone shall have jurisdiction over all matters arising out of or relating to the arbitration agreement contained herein or proceedings arising out of or relating to the arbitration proceedings thereunder.

IN WITNESS WHEREOF THE PARTIES HITHERTO HAVE SET THEIR HANDS HEREUNTO ON THE DAY, MONTH AND YEAR HEREIN ABOVE MENTIONED.

SIGNED AND DELIVERED ON BEHALF OF

DS TOLL ROAD LIMITED

BY : _____

Name :

Title :

SIGNED AND DELIVERED ON BEHALF OF

THE NATIONAL HIGHWAYS AUTHORITY OF INDIA

BY : _____

Name :

Title :

SIGNED AND DELIVERED ON BEHALF OF

SENIOR LENDERS

BY: _____

Name :

Title :

DS Toll Road Limited

0375

Schedule V

VESTING CERTIFICATE

National Highway Authority of India ("NHAI") hereby acknowledges:

1. Compliance and fulfillment by the Concessionaire of the Divestment Requirements set forth in Clause 33.4 of the Concession Agreement in respect of the Project Highway;
2. Receipt of actual possession of the Project Highway from the Concessionaire; and
3. Receipt from the Concessionaire of a certificate confirming that there are no liens or Encumbrances whatsoever on the Project Highway including Project Assets;

on the basis that upon the issue of this Vesting Certificate, NHAI shall be deemed to have acquired, and all title and interest of the Concessionaire in or about the Project Highway shall be deemed to have vested, unto NHAI free from all Encumbrances, charges and liens whatsoever.

Notwithstanding anything to the contrary contained hereinabove it shall be a condition of this Vesting Certificate that in the event of any defect or efficiency in any of the Divestment Requirements set forth in Clause 33.4 of the Concession Agreement being found or discovered at any time hereafter, nothing contained in this Vesting Certificate shall be construed or interpreted as waiving the obligation of the Concessionaire to rectify and remedy the same and/or relieving the Concessionaire in any manner of the same.

Agreed and accepted

For DS TOLL ROAD LIMITED	**For National Highway Authority of India**
By:.....	By:.....
Name:	Name:
Title:	Title:
Dated:	Dated:

0376

SCHEDULE W

PASSENGER CAR UNIT FACTORS

The equivalency factor for the conversion of different types of vehicles into equivalent Passenger Car Units (PCUs) based on their relative interference value shall be as per the following table:

Sl. No.	Vehicle Type	Equivalency factor**
Fast Vehicles		
1.	Motor Cycle or Scooter	0.50
2.	Passenger Car, Pick-up Van or Auto-rickshaw	1.00
3.	Agricultural Tractor, Light Motor Vehicle	1.50
4.	Truck or Bus	3.00
5.	Truck-trailer, Agricultural Tractor-trailer	4.50
Slow Vehicles ***		
6.	Cycle	0.50
7.	Cycle-rickshaw	2.00
8.	Hand Cart	3.00
9.	Horse-drawn vehicle	4.00
10.	Bullock Cart*	8.00

* *For smaller bullock-carts, a value of 6 shall be appropriate.*

** *Recommended PCU factors for various types of vehicles in accordance with IRC:64-1990 on "Guidelines for Capacity of Road in Rural Areas"*

*** *While computing the Design service volumes and the capacity of highway, slow vehicles (of the table) shall not be considered for the sections where Service Roads are provided.*

DS Toll Road Limited

0377

SCHEDULE X

REPORTING AND RECORD REQUIREMENTS

1.0 INTROUDUCTION

The reporting and records requirements spelt out hereinunder have been provided in terms of the indicative type of information required. The Independent Consultant shall determine the following:

- Format of such reports and record requirements
- Software standards
- Number of Copies required
- The Language of the reports and records shall be English

2.0 Part I
Reporting Requirements

From the date of the Concession Agreement until the end of the Concession Period, the Concessionaire shall prepare and submit to the NHAI and Independent Consultant 1 copy each of the following reports/ Documents/ Drawings else otherwise stated in the Concession Agreement.

A. Design & Construction Stage

1 A detailed work plan supported with CPM/PERT charts for completion of all project activities related to the Project Highway, at the beginning of the Design Works.

2 **Monthly Progress Report**: Within 5 Days of end of each month or a part thereof, which falls within the Construction Period, the Concessionaire shall provide to the NHAI and the Independent Consultant the monthly report, which shall at least identify the following:

- Working drawings submitted/ resubmitted to NHAI/ Independent Consultant during the month ended
- NHAI/ Independent Consultant's comments there on, if any.
- Concessionaire's compliance with NHAI/ Independent Consultant's comments on the drawings submitted to NHAI/ Independent Consultant, during the month ended.
- "As built" drawings submitted to NHAI/ Independent Consultant during the month ended.
- Progress of pre-construction activities such as utility relocation and other obstructions.

0378

DS Toll Road Limited

- Concessionaire' compliance with the Inspection Report during the month ended, if any.
- Construction Constraints.
- Progress data with 'S' curves, if applicable; Project Data with contract detail and sectional completion details.
- Tests carried out during the month ended, if any; results of these Tests furnished to the NHAI/ Independent Consultant during the month ended, if any.
- Remedial measures taken by the Concessionaire on the basis of these Tests, if any.
- Traffic management steps undertaken by the Concessionaire during the month (particularly on the existing two lanes of the Project highway).
- Achievement of a Project milestone (Schedule H) during the month, if any. The Concessionaire shall also provide information on delay in achievement of such milestone, if any.
- Any suspension of the Construction Works by NHAI as per provisions of the Concession Agreement, if any. The Concessionaire shall also provide information on reason of such suspension, duration of such suspension and the steps undertaken by it to revoke such suspension.
- Any Change of Scope Notice issued by NHAI and status thereof.
- All actual or potential departures from the Project Completion Schedule (Schedule H).
- All grounds for a substantial Dispute which have occurred or which may reasonably be foreseen as likely to occur.
- All substantial disagreements among the Concessionaire, and the NHAI and/or Independent Consultant to the design/ construction of the Project Highway.
- The proposed measures to be taken by the Concessionaire to overcome such departures or to resolve such grounds for a Dispute.
- The date on which the Concessionaire expects the Project Highway to be completed.
- The Concessionaire is required to maintain the existing two lanes during the Construction Period. This monthly construction report shall also contain information in respect of maintenance activity, if any, carried out by the Concessionaire during the month ended in respect of these existing two lanes. The Concessionaire and the Independent Consultants shall agree on the information requirements in respect of these two existing lanes during the Construction Period.
- Monthly Weather Report giving daily temperature maximum and minimum value; rain fall and any other significant event.

3 Detailed Engineering Design Report including working drawings, and Environmental Management Plan.

4 Video Recording as per Clause 44.1 of the Concession Agreement.

5 Monthly Escrow Account Report: With in 5 Days of end of each month which falls within the Operations Period, the Concessionaire shall provide to the NHAI and the Independent Consultant a copy of the report containing the summary of the receipts in and payments from the Escrow Account for the month ended.

6 The Concessionaire shall supply to the NHAI free of charge the following documents prior to requesting the issue of the Completion Certificate:

6.1 Detailed, accurately scaled, and sequentially numbered plans of the Project Highway "As Built" covering all relevant engineering features, which in relation to structures shall also include cross sections in each plane; and

6.2 Copies of all geo-technical and borehole reports obtained by the Concessionaire in preparation for and during the construction of the Project Highway.

7 All other reports in accordance with the provisions of the Concession Agreement.

8 Such other reports as may be reasonably required by NHAI/ Independent Consultant.

9 Additional Reports: The Concessionaire shall supply to the NHAI free of charge copies of all information, records and test results (including any interpretation of such test results) resulting from any ground, physical or geophysical investigation or archaeological or ecological survey of the Site or Adjacent Areas.

B. <u>Operation Phase</u>

1 Monthly Traffic Report: With in 5 Days of end of each month which falls within the Operations Period, the Concessionaire shall provide to the NHAI and the Independent Consultant a copy of the report containing the following information:

- Total traffic count by mode for each day of the month; and
- Tollable traffic count by mode for each day of the month.

2 Monthly Escrow Account Report: With in 5 Days of end of each month which falls within the Operations Period, the Concessionaire shall provide to the NHAI and the Independent Consultant a copy of the report containing the summary of the receipts in and payments from the Escrow Account for the month ended.

3 Monthly Operations Report: With in 5 Days of end of each month or a part thereof, which falls within the Operations Period, the Concessionaire shall provide to the NHAI and the Independent Consultant a copy of the report, which shall identify the following, at the minimum:

- Inspections undertaken by the Concessionaire during the month ended, if any.
- Maintenance Reports submitted to the Independent Consultant during the month ended, if any.

- O&M Inspection Compliance Report submitted to NHAI/ Independent Consultant during the month ended, if any.
- Preventive/ Periodic maintenance undertaken during the month ended, if any.
- Any material modifications made to the Project Highway during the month ended, if any.
- All the accidents or incidents on the Project Road during the month under report (including all accidents on which a report has previously been made to the Concession Agreement).
- Tests performed during operation and maintenance stage along with the defects identified on the Project Highway, if any.
- Number and type of the complaints received from Users and others in respect of the Project Highway and the conduct of Operations.
- Incidents of emergency de-commissioning of the Project Highway during the month ended, if any.
- Incidents of lane-closure on the Project Highway during the month ended, if any. The Concessionaire shall provide information on reason, time of such lane-closures.
- all actual or potential departures from the O&M Requirements as specified in 'Schedule L'.
- all grounds for substantial Dispute which have occurred or may reasonably be foreseen as likely to occur.
- the proposed measures to be taken by the Concessionaire to overcome such departures or to resolve such grounds for a Dispute.

4. An annual report on the working of the toll collection system. This report will provide information on method of toll collection (semi-automatic, automatic, etc.), usage of pass system (manual, electronic, etc.), average time taken in toll-collection, Concessionaire's suggestions on improvements in the toll-collection system, which would be considered by NHAI appropriately.

5. Accident Reports: As soon as practicable and in any event no later than 7 days following the occurrence of any accident on the Project Highway involving a fatality or serious personal injury or substantial property damage, the Concessionaire shall investigate the circumstances of such accident and submit to the NHAI and Independent Consultant a report setting out details of such accident and, to the extent they are known, the causes of such an accident, and the Concessionaire shall thereafter promptly report to the NHAI and/or Independent Consultant any additional details of such accident or its causes which become known to it.

0381

6. Concessionaire shall submit a copy of the audited accounts within 120 days of the close of each Accounting Year after the Appointed Date.

7. All other reports in accordance with the provisions of the Concession Agreement.

8. Such other reports as may be reasonably required by NHAI/ Independent Consultant.

9. Additional Reports: The Concessionaire shall supply to the NHAI/Independent Consultant free of charge copies of all information, records and test results (including any interpretation of such test results) resulting from any ground, physical or geophysical investigation or archaeological or ecological survey of the Site or Adjacent Areas.

0382

3.0 Part II

Record Requirements

The Concessionaire shall take the following action(s) in respect of preparation of the record, its submission to NHAI and retention by the Concessionaire itself.

		Retention Period of the Concessionaire
1.	**Design**	
1.1	Design standards containing all relevant design assumptions, codes of practice, design loadings, design parameters and product data sheets for all components of Project Highway.	Till handover to NHAI at Termination of the Concession
1.2	Full set of final design calculations for all parts of the Project Highway including details of the influence on design of actual construction methods, and any changes or any remedial works during construction.	Till handover to NHAI at Termination of the Concession
1.3	Full set of working drawings	Until 2 years after issue of the Completion Certificate
1.4	Full specification for construction and all revisions made thereto.	Until 2 years after issue of the Completion Certificate
1.5	Change of Scope Order(s)	Till handover to NHAI at Termination of the Concession
2.	**Construction**	
2.1	Video recording submitted to NHAI	Until 2 years after the issue of Completion Certificate
2.2	Full set of construction site records relating to progress, testing of materials, monitoring of standards of workmanship, meteorological conditions, instructions issued and other site correspondence.	Till handover to NHAI at Termination of the Concession
2.3	Full set of "As-Built" drawings and schedules incorporating all changes to the design and all remedial measures applied to the Project Highway during construction, and all final As-built details and dimensions of the Project Highway. These drawings shall include permanent modifications made to suit the construction method.	Till handover to NHAI at Termination of the Concession
2.4	Full set of Tests results	Till handover to NHAI at Termination of the Concession

0383

3.5	The appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes and systems used or incorporated into the Project Highway.	Till handover to NHAI at Termination of the Concession
3.6	Monthly Progress Reports	Till handover to NHAI at Termination of the Concession.
4.	**Operations and Maintenance**	
4.1	Full records of all incidents which affect the operation and/or maintenance of the Project Highway including traffic accidents.	Till handover to NHAI at Termination of the Concession
4.2	Full records of inspections and surveys and results of such inspections and surveys (including photographs where applicable).	Till handover to NHAI at Termination of the Concession
4.3	Details of all repairs to the Project Highway and/or replacement, including photographs. As-built drawings and other documentary records.	Till handover to NHAI at Termination of the Concession
4.4	Full sets of all Monthly Reports	Till handover to NHAI at Termination of the Concession
4.5	Adequate records of adverse meteorological conditions.	Till handover to NHAI at Termination of the Concession
4.6	Records of landscape planting.	Till handover to NHAI at Termination of the Concession
4.7	Schedule and strip plan of grassed areas with details of the Routine Maintenance required in the normal course.	Till handover to NHAI at Termination of the Concession
4.8	Record of all permanent traffic signs on the Project Highway.	Till handover to NHAI at Termination of the Concession
4.9	All traffic (both total and tollable) count for each day of the Operations Period	Till handover to NHAI at Termination of the Concession
4.10	Record of daily toll collection at each toll plaza	Till handover to NHAI at Termination of the Concession
4.11	All financial and accounting records to be maintained as per Applicable Laws	Till handover to NHAI at Termination of the Concession
4.12	Encroachment particulars and details	Till handover to NHAI at Termination of the Concession

4. All other records in accordance with the provisions of the Concession Agreement.

0384

5. Additional Requirements

5.1 When there is a conflict between the Reporting and Record Requirement of Schedule 'X' and a requirement in respect of these stated elsewhere in this Agreement, the latter shall take precedence.

5.2 The requirements set out in Reporting and Record Requirements of this Schedule 'X' indicate the minimum requirements to be complied with but are not limited to else only.

5.3 Availability of Records shall be as follows:

5.3.1 All records of operational aspects of the record keeping system shall be retained.

5.3.2 Operations' Records shall be systematically and periodically up-dated and filed so as to be readily retrievable.

5.3.3 All records which have been superseded but are still of historical, contractual or legal importance shall be retained and filed systematically so as to be available anytime.

5.3.4 Texts of all documents shall be prepared and recorded using agreed software systems and retained in hard form and on diskette, with full back-up diskettes available in case of diskette corruption.

0385

GMR Tolll Road Limited

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(पोत परिवहन, सड़क परिवहन और राजमार्ग मंत्रालय)
National Highways Authority of India
(Ministry of Shipping, Road Transport and Highways)
जी-5 एवं 6, सेक्टर-10, द्वारका, नई दिल्ली-110 075
G-5 & 6, Sector-10, Dwarka, New Delhi-110075

दूरभाष / Phone: 91-11-25074100/25074200
फैक्स / Fax: 91-11-25093507 / 25093514
एक्स. / Extn.: 2223 / 2318 / 2468 / 2553

Tech/NSEW/NS-2/BOT/TN-5/2005 30th September, 2005

Reliance Energy Ltd.
Reliance Energy Centre,
Santa Cruz East, Mumbai-55
Fax: 022-30099775
[Kind Attention: Sh. J.P. Chalasani, Director (Business Development)]

Award of Concession for Design, Construction, Development, Finance, Operation and Maintenance of Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu called the "Project" in the State of Tamil Nadu on Build Operate & Transfer (BOT) basis: **Project Reference No. NS2/BOT/TN-5**
Letter of Acceptance

This is to notify that based on your original price proposal submitted on 17.08.2005 [illegible] Design, Construction, Development, Finance, Operation and Maintenance of Km 373.275 [illegible] of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) on NH-7 in the State of [illegible] Nadu for a Positive Grant of Rs.31.00 Crores is hereby accepted by NHAI declaring you as [illegible] Successful Bidder".

In accordance with the Contract clause 1.36.1 (Refer Part-1), you are hereby requested to [illegible] us of your acceptance of this LOA within 15 days of its issue. Thereafter, you are required [illegible] the Concession Agreement within 30 days of your acceptance of LOA.

You are also required to furnish the Performance Security within the period expiring on the [illegible] from the date of issue of this LOA but prior to the execution of the Concession Agreement [illegible] Clause 1.37.1 of Part-1 and Data Sheet).

In case of default on your part, action as stated in clause 1.14.5 and 1.37 (Part-1) of RFP [illegible] taken.

Yours faithfully

Pranavant

(Pranavant)
General Manager (NS-2)

0386

Reliance Energy
Dhirubhai Ambani Enterprise

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: +91 (022) 3009 9999
Fax: +91 (022) 3009 9775
www.rel.co.in

15th Oct 2005

To,
Mr. Pranavant
General Manager (NS-II)
National Highways Authority of India
G-5 and G-6, Sector 10, Dwarka
New Delhi – 110 075

Sub: Award of Concession for Design, Construction, Development, Finance, Operation and Maintenance of Km 373.725 (Start of proposed Dindigul bypass) to Km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu under North-South Corridor (NHDP Phase II) on Build, Operate and Transfer (BOT) Basis. **Project Reference No – NS2/BOT/TN-5**

Ref: Your letter no. NHAI/Tech/NSEw/NS-2/BOT/TN-5/2005 dt.30th September 2005.

Dear Sir,

We acknowledge with thanks receipt of your above referred Letter of Acceptance (LOA) for declaring us as "Successful Bidder" for the award of concession for Design, Construction, Development, Finance, Operation and Maintenance of Km 373.725 (Start of proposed Dindigul bypass) to Km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu under North-South Corridor (NHDP Phase II) on Build, Operate and Transfer (BOT) Basis.

DS Toll Road Limited

0387

In accordance with the clause 1.36.1 of the RFP Part – I, we hereby confirms our acceptance of the LOA.

We also confirm that we will arrange to furnish Performance Security before 30th Oct 2005 and to execute the Concession Agreement before 14th Nov 2005.

Thanking you,
Yours faithfully,

J.P. Chalasani
Director (Business Development)

DS Toll Road Limited

0388

Reliance Energy
Dhirubhai Ambani Enterprise

Jayarama Prasad Chalasani
Director (Business Development)

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: (022) 3009 9999, Extn: 9526
Fax: (022) 3009 0775
email: jayarama.chalasani@rel.co.in
www.rel.co.in

November 09, 2005

Mr. Pranavant
General Manager (NS-II)
National Highways Authority of India
G-5 and G-6, Sector 10, Dwarka
New Delhi - 110 075

Copy sent to M/s PWC for examination & legal vetting
DGM(NS-2)SK
14/11

Sub: **Award of Concession for (i) Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul Bypass) to km 426.6 (Samyanallore), covering 53.025 km on NH-7 in the State of Tamil Nadu (the Project) on BOT basis. Project Reference No. NS2/BOT/TN-5**

Ref.: Our letter dated November 09, 2005

Dear Sir:

Further to our above referred Letter, we are pleased to submit the Certificate of Incorporation and Articles of Association for the Special Purpose Company (SPC) "**DS Toll Road Limited**" set up by us to domicile the Project Reference No. NS2/BOT/TN-5.

We have gone through the Draft of the Concession Agreement and wish to confirm that the said is in order, except the clause 6.1, as explained below:

"Clause 6.1 last line of the Concession Agreement states that "the Fees will be rounding off to nearest five rupee", whereas in revised Schedule G issued by NHAI (as Addendum) para 4, it is stated that "Fees will be rounded off to nearest rupee". The Concession Agreement, Clause 6.1 last line needs correction to this effect."

We now request you to kindly confirm a convenient date for signing of the Concession Agreement. We propose that two (2) copies of the Agreement could be signed in original, so that each Party can keep one original copy.

Thanking you,

Yours faithfully,

JP Chalasani

J P Chalasani
Director–Business Development

0389

DS Toll Road Ltd

Reliance Energy
A Dhirubhai Ambani Enterprise

Jayarama Prasad Chalasani
Director (Business Development)

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: (022) 3009 9999, Extn: 9526
Fax: (022) 3009 9775
email: jayarama.chalasani@rel.co.in
www.rel.co.in

November 09, 2005

Mr. Pranavant
General Manager (NS-II)
National Highways Authority of India
G-5 and G-6, Sector 10, Dwarka
New Delhi – 110 075

Sub: Award of Concession for (i) Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul Bypass) to km 426.6 (Samyanallore), covering 53.025 km on NH-7 in the State of Tamil Nadu (the Project) on BOT basis.

Project Reference No. NS2/BOT/TN-5

Ref: Your letter NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 dated September 30, 2005

Dear Sir,

With reference to above referred Letter of Acceptance, we have submitted the Performance Security of an amount of Rs. 14,17,60,000 on 31/10/2005 in conformance with Clause 1.37.1 of Part-I and Data Sheet of the Request for Proposal document.

We are now pleased to inform you that we have incorporated a Special Purpose Company (SPC) in the name and style of "**DS Toll Road Limited**" to domicile the above Project (Project Reference No. NS2/BOT/TN-5), in conformance with Clause 1.5 of the Part-I of the Request for Proposal document. A letter from RoC Mumbai dated 08/11/2005 is enclosed for your ready reference. A certificate of incorporation along with a copy of Articles of Association will be submitted to you in due course.

We further undertake and confirm that M/s **DS Toll Road Limited** shall have equity shareholding of not less than 51% by Reliance Energy Limited and its Associates during construction period and for 3 years following Commercial Operations Date and 26% during the balance remaining Operation Period, in conformance with Clause 1.5 of the Part-I of the Request for Proposal document.

With the foregoing, we wish to inform you that we are now ready to sign the Concession Agreement for the project. The draft of the Concession Agreement is prepared by us and is enclosed for your confirmation and acceptance.

We also request you to kindly confirm a convenient date for signing of the Concession Agreement.

Thanking you,

Yours faithfully,

(J P Chalasani)

DS Toll Road Limited

0390

Energy is life

CHANGE OF NAME

File No. AN/ 186343
GOVERNMENT OF INDIA
REGISTRAR OF COMPANIES
100, 'EVEREST' BUILDING,
MARINE DRIVE, MUMBAI - 400 002
TELEPHONE - 2281 2627, 2281 2645

SL-CHANGE Date : 08/11/2005

TO

KANGAROO CORPORATE SERVICES LT
3RD FLOOR, RELAINCE ENERGY CENTRE,
SANTACRUZ EAST, MUMBAI-400055

Sir(s)

Sub: Availability of name for Change of Name :
Ref: Your application/letter received dated 07/11/2005

With reference to the above, I am to inform you that the undermentioned name is made available for CHANGE OF NAME OF THE COMPANY :

DS Toll Road Limited c/n

2. The name is valid for a period of six months from the date of issue of this letter. Hence documents for registration is to be submitted well in time to ensure that name is valid & in force at the time of registration

3. The name is liable to be withdrawn at any time before registration of the company, if it is found later on that the name ought not to have been allowed.

4. This letter should be enclosed in original to the application under section 21.

5. For the sake convenience & early reference. Please file the relevant Form 23 concurrently with the filing of the application under section 21.

6. In case where the Change of name to include Software business Applicant company is advised to produce a certificate from the auditors of the company stating that substantial income had actually come from a software industry in the latest financial year.

7. Existing companies which are engaged in other business and which want to function as Non Banking Financial Company shall carry on its business as NBFC only after obtaining certificate of Registration from Reserve Bank of India and the net owned fund of such comapny should be Rs 200 Laks or such amount as prescribed by RBI from time to time before commencement of the business of NBFI.

Yours faithfully,

N. Chinnachamy

(N. CHINNACHAMY)
ASSIT. REGISTRAR OF COMPANIES,
MAHARASHTRA, MUMBAI

NOTE:- SUBJECT TO THE COMPLIANCE OF SECTION 17, IF ANY, AND SECTION 21/23 OF COMPANIES ACT 1956.

DS Toll Road Limited

0391

[redacted]

No. 11-154360

FRESH CERTIFICATE OF INCORPORATION CONSEQUENT ON CHANGE OF NAME

IN THE OFFICE OF THE REGISTRAR OF COMPANIES, MAHARASHTRA, MUMBAI.

In the Matter of Kangaroo Corporate Services Limited

I hereby approve and signify in writing under Section 21 of the Companies Act, 1956 (Act 1 of 1956) read with the Government of India, Department of Company Affairs, Notification No. G.S.R. 507E dated the 24th June 1985 the change of name of the Company

from Kangaroo Corporate Services Limited

to DS Toll Road Limited

and I hereby certify that Kangaroo Corporate Services Limited

which was originally incorporated on 29th day of June 2005 under the Companies Act, 1956 and under the name RELIANCE FUEL MANAGEMENT LIMITED having duly passed the necessary resolution in terms of section 21/22/(1)(a)/22(1)(b) of the Companies Act, 1956 the name of the said Company is this day changed to DS Toll Road Limited and this certificate is issued pursuant to Section 23(1) of the said Act/

Given under my hand at MUMBAI this 9th day of NOVEMBER 2005

(M.R.BHAT)
Dy. Registrar of Companies
Maharashtra, Mumbai.

DS Toll Road Limited

0392

No. 11 — 154360

(Section 18(1) of the Companies Act, 1956)

CERTIFICATE OF REGISTRATION OF SPECIAL RESOLUTION PASSED FOR ALTERATION OF OBJECTS

M/s. Kangaroo Corporate Services Limited having by Special Resolution passed on 8th November 05 altered the provisions of its Memorandum of Association with respect to its objects, and a copy of the said resolution having been filed with this office on 8th November 05 I hereby certify that the Special Resolution passed on 08/11/05 together with the printed copy of the Memorandum of Association, as altered, has this days been registered.

Given under my hand at MUMBAI

this 9th day of NOVEMBER 2005

DY. (M.R.BHAT)

REGISTRAR OF COMPANIES,

MAHARASHTRA, MUMBAI.

DS Toll Road Limited

0393

No. 11- 154360

FRESH CERTIFICATE OF INCORPORATION CONSEQUENT ON CHANGE OF NAME

IN THE OFFICE OF THE REGISTRAR OF COMPANIES, MAHARASHTRA, MUMBAI.

In the matter of RELIANCE FUEL MANAGEMENT LIMITED

I hereby approve and signify in writing under Section 21 of the Companies Act, 1956 (Act of 1956) read with the Government of India, Department of Company Affairs, Notification No. G.S.R. 607E dated the 24th June 1985 the change of name of the Company.

from RELIANCE FUEL MANAGEMENT LIMITED

to Kangaroo Corporate Services Limited

and I hereby certify that RELIANCE FUEL MANAGEMENT LIMITED

which was originally incorporated on 29th day of June 2005 under the Companies Act, 1956 and under the name RELIANCE FUEL MANAGEMENT LIMITED having duly passed the necessary resolution in terms of section 21/22/(1)(a)/22(1)(b) of the Companies Act, 1956 the name of the said Company is this day changed to Kangaroo Corporate Services Limited and this certificate is issued pursuant to Section 23(1) of the said Act/

Given under my hand at MUMBAI this 25th day of [illegible] 2005 one thousand nine hundred [illegible]

([illegible])
Registrar of Companies
Maharashtra, Mumbai.

DS Tel Rose Limited

0394

No. 11— 154360

(Section 18(1) of the Companies Act, 1956)

CERTIFICATE OF REGISTRATION OF SPECIAL RESOLUTION PASSED FOR ALTERATION OF OBJECTS

M/s. RELIANCE FUEL MANAGEMENT LIMITED

having by Special Resolution passed on 21st July 2005

altered the provisions of its Memorandum of Association with respect to its objects, and a copy of the said resolution having been filed with this office on 22nd July 2005

I hereby certify that the Special Resolution passed on 21/07/05 together with the printed copy of the Memorandum of Association, as altered, has this days been registered.

Given under my hand at MUMBAI

this 25th day of JULY

~~One thousand Nine hundred Ninety~~ 2005

BY (M.R. BHAT)
ASSTT/ADDL REGISTRAR OF COMPANIES,
MAHARASHTRA, MUMBAI.

Reliance Fuel Management Limited

0395

प्रारूप. आई. आर.
Form I.R.
निगमन का प्रमाण-पत्र

CERTIFICATE OF INCORPORATION

U 23300 MH 2005 PLC 154360
सं. _____ की. सं.
No. _____ of Date _____

मैं एतद्द्वारा प्रमाणित करता हूं कि आज _____

कम्पनी अधिनियम (1956 का. सं. 1) के अधीन निगमित की गई है और कम्पनी परिसीमित है।

I hereby certify that RELIANCE FUEL MANAGEMENT LIMITED

is this day incorporated under the Companies Act, 1956 (No. 1 of 1956) and that the Company is limited.

मेरे हस्ताक्षर से आज सं. _____ को दिया गया।

Given under my hand at MUMBAI this TWENTYNINTH day of JUNE Two Thousand FIVE

N. Chinnachamy
(N. CHINNACHAMY)
कम्पनियों का रजिस्ट्रार
ASSTT. Registrar of Companies
Maharashtra, Mumbai

जे. एस. सी.
J. S. C.
119/एम. एच. एल. /लिमिटेड/ 92-20-000-3-4-93-GIPG/नवम्बर
119/MHS/CMM/Ltd/92-20-000-3-4-93-GIPG

DS Toll Road Limited

0396

CO.NO.11-154360

सत्यमेव जयते

कारबार प्रारम्भ करने के लिए प्रमाण-पत्र

Certificate for Commencement of Business

कम्पनी अधिनियम, 1956 की धारा 149 (3) के अनुसरण में

Pursuant of Section 149 (3) of the Companies Act, 1956

मैं एतद्द्वारा प्रमाणित करता हूँ कि .....

.....

.....को निगमित की गई थी

जो कम्पनी अधिनियम, के अधीन तारीख .....

और जिसने आज विहित प्ररूप में सम्यक रूप से सत्यापित घोषणा फाईल कर दी है कि उक्त अधिनियम की धारा 149 (1) (क) से लेकर (घ) तक/149 (2) (क) से लेकर (ग) तक की शर्तों का अनुपालन किया गया है, कारबार प्रारम्भ करने की हकदार है।

I hereby certify that the RELIANCE FUEL MANAGEMENT LIMITED

which was incorporated under the Companies Act, 1956, on the 29th day of JUNE 2005 and which has this day filed a duly verified declaration in the prescribed form that the conditions of Section 149 (1)(a) to (d)/149(2)(a) to (c) of the said Act, have been complied with is entitled to commence business.

मेरे हस्ताक्षर से यह तारीख .....को

में दिया गया।

Given under my hand at Mumbai this 30th day of JUNE Two thousand and FIVE

M. JAYAKUMAR

कम्पनियों का रजिस्ट्रार

ASSTT. Registrar of Companies

Maharashtra, Mumbai

रजिस्ट्रार

Registrar

STT-S3-99-5000

DS Toll Road Limited

0397

Memorandum Of Association

And

Articles Of Association

Of

DS Toll Road Limited

CERTIFIED TRUE COPY

For DS Toll Road Limited

Director

DS Toll Road Limited

THE COMPANIES ACT, 1956

COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION

OF

DS TOLL ROAD LIMITED

I. The name of the Company is DS TOLL ROAD LIMITED

II. The Registered Office of the Company will be situated in the State of MAHARASHTRA i.e within the jurisdiction of Registrar of Companies, Maharashtra, Mumbai.

III. The objects for which the Company is established are :

A. MAIN OBJECTS OF THE COMPANY TO BE PURSUED BY THE COMPANY ON ITS INCORPORATION

1. To carry on the business of finance design, engineer, procure, construct, fabricate, build improve, strengthen, operate, maintain roads, bridges, culverts, over bridges, underpasses, flyovers, toll plaza, traffic management systems and equipment, rest and recreation structures, buildings and other infrastructures, acquire equipment by purchase, lease sale, exchange, sub-lease, rent or otherwise, or sell or let equipment on lease or hire or otherwise or services in connection therewith, provide horticulture and landscaping, provide advertising, hoardings, displays, lighting and any other amenities and collect toll, fees, or charges, carry out surveys, investigations, polls and regulate traffic in connection with the project to be taken up by the Company on Build, Operate and Transfer basis for Reconstruction, Strengthening, Widening and Rehabilitation on National Highway No. 7 from Namakkal Bypass to Karur Bypass as per tender floated by National Highway Authority of India.

2. To design, build, erect, construct, operate on construction contract, EPC contract, Build-Operate-Transfer (BOT), Build-Own-Operate-Transfer (BOOT), Built-Own-Lease-Transfer (BOLT) basis or any other variants thereof, repair, execute, develop infrastructure facility project including roadways, bridges, road over-bridges, underpasses, canals or any kind of work for and on behalf of government, NGOs or bodies corporate or individual.

3. To provide consultancy, toll collection, traffic management, survey and investigation services in relation to roadways, bridges, flyover, road over-bridges, underpasses and other infrastructure facilities.

4. To acquire by purchase, lease, sale, exchange, sub-lease, rent or otherwise and to deal anywhere in India, property of any description and any estate or interest therein and any rights over or connected with lands so situated and to build own, operate and transfer or to build own operate and to turn the same to account as may seem expedient and in particular by laying out, developing or assist in developing and preparing building sites and by constructing, pulling down, altering, improving, decoration, furnishing and maintaining offices, flats, houses, restaurants, bungalows, chawls, factories, warehouses,

0399

shops, amusements parks, technology parks, building works and conveniences and by sublet all or any contract from time to time by leasing, letting, renting, selling (by installments, ownership, hire basis or otherwise) and to disposing off the same on any other terms or conditions and entering into contract and arrangement of any types with builders, tenants, occupiers, governments, semi-government, municipal and local authorities".

Inserted vide Special Resolution passed at the Extraordinary General Meeting held on 8th November, 2005

B. OBJECTS INCIDENTAL OR ANCILLARY TO THE ATTAINENT OF THE MAIN OBJECT.

2. To establish, maintain, conduct, provide, procure or make available services of every kind globally including commercial, statistical, financial, accountancy, medical, legal, management, educational, engineering, data processing, communication and other technological or social services.

3. To enter into any arrangement with the Government of India or with any State Government or with other authorities / commissions, local bodies or public sector or private sector undertakings, Financial Institutions, Banks, International Funding Agencies and obtain such charters, subsidies, loans, advances or other money, grants, contracts, rights, sanctions, privileges, licenses or concessions whatsoever (whether statutory or otherwise) which the Company may think it desirable to obtain for carrying its activities in furthering the interests of the Company or its members.

4. To buy building or buildings comprising of flats, shops, sheds, galas, etc., for allotment to the members of the company for their authorised use and to sell, improve, manage, develop, exchange, lease, rent, mortgage, enfranchise, abandon, dispose of turn to account or otherwise deal with all or any part of the property and right of the Company.

5. To build, construct, acquire, erect, install, own, purchase, hire, sell, exchange, operate, maintain, develop, promote, mange, repair, administer, provide communication infrastructure facilities for the purpose of business of the Company

6. To establish, provide, encourage, maintain, conduct, do research and development activities including multimensional activities and such other tests, studies, thesis, investigations, inventions and improvements or information technology which is likely to assist any business of the company and for industrial use in general.

7. To purchase, take on lease or otherwise, acquire all or any part of the business or undertaking or property and assets of any other such person, firm, company or corporation carrying on similar business and agree to discharge their liabilities and to conduct, carry on or liquidate all or any of such business.

8. To establish branches or appoint in or outside India for or in connection with any of the objects of the Company and in particular in relation to the investment of money the sale of property and the collection and receipt of money.

9. To discount bills, advance money on the security of goods lying with or under the control of the company, to receive goods for sale and to do all other such acts that may be usual or necessary in order to market the same in connection with the business of the Company

10. To enter into any arrangements with any Government or authorities supreme, municipal, local or otherwise, or any person or company that may seem conducive to the Company's Objects or any of them to obtain from any such Government, authorities, person or company any rights, privileges, charters, contracts, licenses and concessions which the

Road Limited

Company may think it desirable to obtain, and to carry out, exercise and comply with any such arrangements, rights, privileges, charters, contracts, licenses and concessions.

11. To take part in the management, supervision and control of the business or operations of any company or undertaking having similar objects and for that purpose to appoint and remunerate any directors, trustees, accountants or other experts.

12. To pay all preliminary expenses of any company promoted by the Company or any Company in which this company is or may contemplate being interested including in such preliminary expenses all or any part of the cost and expenses of owners of business or property acquired by the Company.

13. To procure the Company to be registered or recognised in any foreign country or place and to procure incorporation, registration or other recognition of the Company in any country, state or place outside India, and to establish and maintain local registers of any branch, places of business in any part of the world.

14. To enter into negotiations with and enter into arrangements and contracts and conclude the same with foreign and/or Indian parties and other persons for obtaining by grant, licence and/or on other terms, formulate and other rights and benefits, and to obtain technical and engineering information, assistance, and service, know-how, and expert advice for installation of plant and machinery, production and manufacture of any products.

15. To pay for technical know-how, technical engineering assistance and information and/or service rights or privileges acquired by the Company either in shares of the Company or partly in shares or partly in cash or otherwise.

16. To pay to promoters such remuneration and fees and otherwise remunerate them for their time and for the services rendered by them.

17. To amalgamate or enter into any arrangement for sharing of profits or entering into partnership, union of interest, co-operation, reciprocal concession, lease, license or otherwise with any person carrying on or transaction which the Company is authorised to carry on or engage in for sharing or funding of profits in a cooperative or joint venture subject to compliance of existing law in force.

18. To provide generally for the administration and management of the buildings or any other property in which the company may at any time have an interest of whatever nature, or which may be under its control, in such manner as may be deemed expedient or proper.

19. To buy or to take on lease plot or plots of land and to construct flats, office, houses, bungalows, cottages, factories, warehouses, shops, shed, barns, farms, stables, areas, work and conveniences of all kinds thereon for allotment to the members of the Company for their authoirsed use.

20. To secure, promote, organise, manage or enter into joint venture agreement, collaboration, agreement in all its branches with any person, firm, company, corporation, authority, body or other entity in India or abroad for any purpose whatsoever.

21. To Invest surplus funds of the Company in all kinds of securities, shares, stocks, debentures, debenture-stocks, bonds, real estate and to finance industrial enterprises.

22. Subject to the provisions of the Companies Act, 1956, to borrow or raise with or with out interest or secure the payment of money for any of the purposes of the Company and at such time and from time to time and in such manner as may be thought fit and in particular by the issue of debenture, or debenture-stocks convertible into shares of any other company or perpetual annuities and as security for any such money so borrowed,

raised or received for any such debentures or debenture stock so issued to mortgage, pledge or change the whole or any part of the property, assets or revenue and profit of the Company present or future including its uncalled capital by special assignments or otherwise or to transfer or convey the same absolutely or in trust and to give the lender powers of sale and other powers as may seem expedient and to purchase, redeem, or pay-off any such securities, and also by a similar mortgage, charge or lien to secure and guarantee the performance by the Company or any other person or company as the case may be provided that the Company shall not carry on banking business as defined in the Banking Regulation Act. 1949.

23. To form, constitute, float, lend money to assist and control similar companies, associations or undertaking whatsoever.

24. To establish, provide, maintain, improve, work or aid in and conduct or otherwise, subsidise, assist research and developments, laboratories, design institute, pilot plants and experiments, and undertake and carry on all scientific and technical, experiments and tests of all kinds and to promote studies and research both scientific and technical investigations and inventions by providing subsidising endowing or assisting laboratories, workshops, libraries, lectures, meetings and conferences and by providing the remuneration of scientific or technical professors or teachers and by providing for the award or exhibitions, scholarships, prises and grants to students or independent studies or otherwise and to encourage, promote and reward studies, researches, investigations, experiments, tests and inventions of any kind of the business which Company is authorised to carry on.

25. To establish, promote or concur in establishing or promoting any company or companies for the purposes of acquiring all or any of the Properties, rights and liabilities of the company and the to place or guarantee the placing of, subscribe for or otherwise acquire all or any part of the shares.

26. To pay for any properties, rights or privileges acquired by the Company either in shares of the Company or partly in shares and partly in cash or otherwise

27. To insure with any other company or person against losses, damages, risks and liabilities of all kinds which may affect the company and to insure the whole or any part of the property of the company either fully or partially to protect and indemnify the company from liability or loss in any respect either fully or partially and also to insure and to protect and indemnify and part of portions thereof either on mutual principle or otherwise.

28. To form, promote, subsidise and assist companies, and partnerships of all kinds in any manner as may be thought fit in connection with any of the objects of the Company.

29. To search for and to apply for, purchase, protect, prolong, renew or otherwise acquire from any Government, State or authority any patents, brevets, d'invention, protection, licenses, concessions, grants, decrees, rights, powers and privileges whatsoever which may seem to the Company capable of being turned to account to work, develop, carry out, exercise and turn to account the same.

30. To apply for, promote and obtain any act of parliament or legislature, charter, privilege, concession, licenses or authorisation of Government, state or Municipality provisional order or license of the Board of Trade or other authority for enabling the company to carry any of the object into effect or for extending any of the powers of the company or for any other purpose which may seem calculated, directly or indirectly to prejudice the interests of the company and to apply for purchase or otherwise acquire any patents, brevets, d'invention, licenses, concessions and the like conferring an exclusive on not-exclusive or limited right to use any secret or other information as to any investing which may seem capable of being used for any of the purposes of the Company or the acquisitions of which may seem calculated directly or in directly to benefit the Company and to use,

exercise, develop, grant licenses in respect of otherwise turn to account the property, rights and information so acquired.

31. To sell, mortgage or otherwise to deal with or dispose of the property, assets or undertaking of the Company or any part thereof, in such manner and upon such terms and conditions in all respects, for such consideration as the Company may think fit and in particular for securities, shares, stocks, debentures and other securities of any other company whether or not having objects altogether or in part similar to those of the Company.

32. To enter into partnership or into any arrangements for sharing of profits, amalgamation, merger, demerger, arrangement, reconstruction, union of interest, reciprocal concession or co-operation with any person, partnership, entity, body or company and to promote and aid in promoting constituting, forming and organising companies or partnerships of all kinds for the purpose of acquiring and undertaking any property and liabilities of the Company or of advancing directly or indirectly the objects thereof for any other purpose which this company may think expedient. And also to pay for any properties, rights or privileges acquired by this Company either in shares of the Company or partly in shares and partly in cash or otherwise and to give shares or stock of this Company in exchange for shares of stock of any other company.

33. To lend, invest or otherwise employ or deal with money belonging to or entrusted to the Company in securities and shares or other movable or immovable property or with or without security upon such terms and in such manner as may be thought proper and from time to time to vary such transactions and investments in such manner as the Directors may think fit subject to the provisions of the Companies Act, 1956.

34. To pay, or satisfy the consideration for any property rights, shares, securities or assets whatsoever which the company is authorised to purchase or otherwise acquire either by payment in cash or by the issue of shares, or other securities of the Company or in such other manner as the Company may agree or partly in one mode and partly in another or others.

35. To draw, make, accept, endorse, discount, execute, issue, negotiate, assign and otherwise deal with cheques, drafts, bills of exchange, promissory notes, hundies, debentures, notes, bonds, bills of lading, railway receipts, warrants and all other negotiable or transferable instruments.

36. To open account or accounts with any firm or with any bank or banks or bankers or shroffs and to pay into and to withdraw money for such accounts.

37. To apply for tender, purchase or otherwise acquire any contracts, sub-contracts, licences and concessions for or in relation to the objects or business herein mentioned or any of them, and to undertake, execute, carry out, dispose of or otherwise turn to account the same.

38. To employ experts to investigate and examine into the conditions, prospects, value, charter and circumstances of any business concerns and undertakings and of any assets, property or rights.

39. To carry on business or branch of a business which this company is authorised to carry on by means or through the agency of any subsidiary company or companies and to enter into any arrangement with such subsidiary company for taking the profits and bearing the losses of any business branch so carried on, or for financing any such subsidiary company or guaranteeing its liabilities, or to make any other arrangement which may seem desirable with reference to any business or branch so carried on including power at any time and either temporarily or permanently to close any such branch or business.

40. To make and/or receive donations, gifts or income to or from such persons, institutions or Trusts and in such cases and whether of cash or any other assets as may be thought to benefit the Company or any other objects of the Company or otherwise expedient and also to remunerate any person or corporation introducing or assisting, in any manner the business of the Company.

41. To establish and support or aid in the establishment of and support associations, institutions, companies, societies, funds, trusts and conveniences for the benefit of the employees or ex-employees or of persons having dealings with the Company or the dependents, relatives or connections of such persons and in particular friendly or other benefit societies and to grant pensions, allowances, gratuities and bonuses either by way of annual payments or by way of lump sum and to make payments towards insurance and to form and contribute to provident and benefit funds, to or such persons.

42. To form, subscribe or contribute to or otherwise to assist, aid donate, or guarantee money to public, charitable, benevolent, religious, scientific, national or other institutions, funds, objects or purposes and to any other institutions, funds, objects or purposes which in the opinion of the Board of Directors are likely to promote the interests or the business of the Company and/or to further its objects and/or to any other institutions, funds, objects or purposes whatsoever directly relating to the business of the Company.

43. To create any depreciation fund, reserve fund, sinking fund, insurance fund, educational fund or any other special fund or reserves whether for depreciation or for repairing, improving, extending or maintaining any of the properties of the Company or for redemption of debentures or redeemable preference shares or for any other purposes conducive to the interest of the Company.

44. In the event of winding up to distribute any of the property of the Company amongst the members in specie or kind subject to the provisions of the Companies Act, 1956.

45. To place, to reserve or to distribute as bonus shares among the members or otherwise to apply as the Company may from time to time think fit, any money received by way of premium on shares or debentures issued at a premium by the Company and any money received in respect of forfeited shares and moneys arising from the sale by the Company of forfeited shares, subject to Section 78 of the Companies Act, 1956.

46. To accumulate capital from the profits of the Company for any of the purposes of the Company and to use and appropriate the same or any of the Company's assets either conditionally or unconditionally to specific purposes.

47. To pay out of the funds of the Company all costs, charges and expenses of and incidental to the promotion, formation, registration, advertisement and establishment of this Company and the issue and the subscription of the shares or loan capital including brokerage and/or commission for obtaining applications for placing or guaranteeing the placing of shares or any debentures, debenture-stock and other securities of this company and also all expenses attending the issue of any circular or notice and the printing, stamping and circulating of proxies and forms to be filled up by the members of the Company and to remunerate by cash or allotment of fully or partly paid shares to any person, firm or company for services rendered in introducing any property or business to the Company or in placing, assisting to place shares, debentures, debenture-stock or other securities of the Company or in or about the formation of the Company or the acquisition of property by the Company or the conduct of its business or for any other reason which the Company may, think proper.

48. To provide for the welfare of Directors or employees of the Company or its predecessors in business and the wives, widows and families or the dependents or connections of such persons by building or contributing to the building or houses or dwellings or quarters or by grants of money, pensions, gratuities, allowances, bonuses, profit sharing bonuses or benefits or any other payments or by creating and from time to time subscribing or

contributing towards places or instruction, recreation, hospitals and dispensaries, medical and other attendance and assistance as the Company shall think fit.

49. To establish and maintain or procure the establishment and maintenance of any contributory or non-contributory pension or superannuation funds for the benefit of, and give or procure the giving of donations, gratuities, pensions, allowances, or emoluments to any persons who are or were at any time in the employment or service of the Company or of any company which is subsidiary of the company or its allied to or associated with the Company or with any such subsidiary company or who are or were at any time Directors or officers of the Company or of any such other company as aforesaid and the wives, widows, families and dependents of any such persons, and also to establish and subsidies and subscribe to any institutions, associations, clubs or funds calculated to be for the benefit of or to advance the interests and well being of the company or of any such other company as aforesaid and make payments to or towards the insurance of any such person as aforesaid and do any matters aforesaid either alone or in conjunction with any such other company as aforesaid.

50. To subscribe, for, take or otherwise acquire and hold shares, stocks, debentures or other securities of any other company having objects altogether or in part similar to those of the Company and to acquire and undertake all or any part of the business property and liabilities of any person or company carrying on or proposing to carry on any business which the company is authorised to carry on or which can be carried or in conjunction therewith and to subsidise or assist any such persons or company financially or otherwise and in particular by subscribing for shares, stock, debentures, debenture-stock or other securities of such company.

51. To undertake and execute any trust, the undertaking of which may seem to the company desirable and either gratuitously or otherwise and to vest any movable or immovable property, rights or interests acquired by or belonging to the Company in any person or company and with or without any declared trust in favour of the Company, subject to the provisions of the Act.

52. In relation with the business of the Company to guarantee the payment of money secured or unsecured by or payable under or in respect of promissory notes, bonds, debentures, debenture-stocks, contracts, mortgages, charges, obligations, instrument and securities of any company or any authority, supreme, municipal, local or otherwise or of any person howsoever, whether incorporated or not incorporated and generally to guarantee or become sureties for the performance of any contracts or obligations.

53. To advance, deposit or lend money, securities and properties or to give credit to such persons or companies, bodies corporate, firms or associations and on such terms as may seem expedient and in particular to customers and others having dealings with the Company and to guarantee the performance of any contract or obligation and the payment of money of or any such person or companies bodies corporate, firms or associations and generally to give guarantee and indemnities.

54. To deal in stone, sand, lime, brick, timber and hardware, cement and other building requisites, tile and tera-cotta makers, job masters, carriers.

55. To aid, pecuniarily or otherwise, any association, body or movement having for an object, the solution, settlement, or labour problems or troubles or the promotion of industry or trade.

56. To undertake and execute any contracts for work involving the supply or use of any machinery and to carry out any ancillary or other works comprised in such contracts.

57. To borrow or raise money other than public deposits or to receive money from persons, bodies corporate, financial institutions, banks and such other lenders and in security of any such money so borrowed raised or received to mortgage, pledge or charge the whole

or any part of the property assets or revenue of the company present or future by special assignment or otherwise or to transfer or convey the same absolutely or in trust and to give the lenders powers of sale and other powers as may seem expedient, by executing negotiable or transferable instrument and deal with all documents mercantile or otherwise, in the ordinary course of business subject to the provisions of Section 58A and directive of the Reserve Bank of India.

58. To establish agencies in India and abroad for sale and purchase and regulate and discontinue the same and to act as agents, principals, contractors, brokers, trustees or otherwise and to undertake and perform sub-contracts and also to act in any of the business of the company through or by means of agents, principals, contractors, brokers, trustees, sub-contractors or others either alone or in conjunction with others.

59. To carry on the business of financing and advancing short-term and long-term loans and credits to individuals , companies or association of individuals by whatever name called and either on securities such as lands, buildings or part thereof, machinery, plants, chattles, vehicles, shares, debentures, government securities, stock certificates, life insurance policies and unit stock-in-trade or on guarantee or clean without securities.

60. To carry on and undertake the business of finance including financial restructuring / reorganisation and all activities and facilities of every description including all those capable of being provided by bankers, stockbrokers, merchant-bankers, trutees, agent, advisor including investment and hire-purchase, leasing and to finance lease operations of all kinds, purchasing, selling, hiring or letting on hire all kinds of plant and machinery and equipment and to assist in financing of all and every kind and description of hire-purchase or deferred payment or similar transactions and to subsidize, finance or assist in subsidizing or financing the sale and maintenance of any goods, articles or commodities of all and every kind and description upon any terms whatsoever and to purchase or otherwise deal in all forms of movable property including plant and machinery, equipments, ships, aircrafts, automobiles, computers, and all consumer, commercial, medical and industrial items with or without security and to lease or otherwise deal with them including resale thereof, regardless of whether the property purchased and leased is new and/or used and from India or abroad.

61. To carry on business as financiers, concessioners, merchants and the business of hire purchase in all its branches and to undertake and carry on and execute all kinds of financial, industrial, commercial, trading and other operations.

62. To carry on the business of Investment Company and to invest in and acquire, hold or otherwise deal in any shares, stocks, debentures, debenture stock, bonds obligations and securities issued or guaranteed by any company constituted or carrying on the business in India or elsewhere and debentures, debenture-stock, bonds, obligations and securities, issued or guaranteed by any Government, State, Dominion sovereign, Ruler, Commissioner, Public body or authority, Supreme, Municipal, Local or otherwise, whether in India or elsewhere, and to invest funds in Post Office Savings Accounts, Unit Trust of India and other Corporations, whether privately owned or owned jointly and to carry on and undertake the business of finance, Investment and hire-purchase, leasing and to finance lease operations of all kinds, purchasing, selling, hiring or letting on hire all kinds of plant and machinery and equipment and to assist in financing of all and every kind and description of hire- purchase or deferred payment or similar transactions and to subsidize, finance or assist in subsidizing or financing the sale and maintenance of any goods, articles or commodities of all and every kind and description upon any terms whatsoever and to purchase or otherwise deal in all forms of immovable and movable property including lands and buildings, plant and machinery, equipments, ships, aircrafts, automobiles, computers, and all consumer, commercial, medical and industrial items and to lease or otherwise deal with them including resale thereof, regardless of whether the property purchased and leased is new and/or used and from India or from any part of the world.

63. To promote the formation and mobilization of capital, to manage capital savings and investment, to undertake bills discounting business, to purchase, finance, discount, re-discount, bills of exchange, to act as a discount and acceptance house, to arrange acceptance or co-acceptance of bills, to borrow, to lend, to negotiate loans, to transact business as promoters, financiers, monetary agents, to carry on the business of a company established with the object of financing industrial enterprises within the meaning of section 370 of the Companies Act, 1956 to invest the capital or other funds of the Company in the purchase or acquisition of or rights in movable and immovable property, to use the capital, funds and assets of the Company as security for borrowing and the acquisition of or rights in movable or immovable property, or shares, stocks, debentures, debenture stock, bonds, mortgages, obligations, securities, revolving under-writing facilities and issue, acceptance and registration of all types of instruments, or to finance their acquisition by leasing or hire purchase or in any other manner, to raise or provide venture capital, to promote or finance the promotion of all types of instrument, or to finance their acquisition by leasing or hire purchase or in any other manner, to raise or provide venture capital, to promote or finance the promotion of joint stock companies, to invest in, to underwrite, to manage the issue of, and to trade in, shares or other securities, to undertake portfolio management, advisory and counseling services, to finance assist industrial and other enterprises in India and abroad, to provide finance and loan syndication, to revolve investments computer programming and software manufacture and services television and communication software. development of financial service supermarket, inter corporate bills and unit braking import-export financing, consultancy assignments, factoring, consumer financing and foreign exchange broking and securities dealing.

64. To carry on the business of a leasing Company, hire purchase company, finance company, to undertake and/or arrange or syndicate all types of leasing and hire purchase business, relating to all kinds of machinery, plant, equipment, ships, vehicles, aircraft, rolling stock, computers, storage tanks, toll roads, communication satellites and communication lines, factories, movable and immovable property, to undertake real estate business, to buy, sell, rent, lease or finance and buying and selling and trading in immovable property, land, buildings, real estate, factories.

65. To carry on business to invest, own, operate, lease, install, develop, promote, manage, finance, maintain projects in the infrastructure sectors like airports, terminals, roads, highways, flyovers, bridges, buildings, walls, dams, barrages, weirs, tunnels, canals, hydro power stations and reservoirs, inter linking projects of rivers, setting up of power plant, installation of equipment, handling equipment, loading equipment to support any of the infrastructure project and to act as consultants, surveyors, service providers, engineers and advisors in the infrastructure sector either singly or jointly with others, and either by or through agents, contractors, sub-contractors, trustees or otherwise.

C OTHER OBJECTS:

66. To transmit, distribute, purchase, sell, trade, import, export or accumulate or otherwise deal in all forms of electrical power in all aspects and to plan, promote, develop, establish transmission and distribution networks or systems, trading platforms and to acquire, in any manner, these networks or systems or trading platforms from power generating and transmission companies, Central or State Government undertakings, local authorities or statutory bodies or other persons within India or abroad and to act as agent or representative of any person, public or private sector enterprises, financial institutions, banks or Central Government or State Government undertakings engaged in the planning, development, generation, transmission, distribution, supply, trading or financing of power and to engage in activities of investigation, research, design and preparation of feasibility, appraisal or other project reports for generation, transmission, distribution, supply, purchase, sale, trading, import, export, storage and accumulation of all forms of electrical power, both conventional and non-conventional and to engage in all activities incidental thereto.

67. To carry on the business of electricians and electrical, mechanical engineers, suppliers of electricity for the purposes of light, heat, motive power or otherwise, and dealers in apparatus and things required for or capable of being used in connection with the generation, distribution, supply, accumulation and employment of electricity, galvanism, magnetism, or otherwise.

68. To carry on all or any of the business of producers, manufacturers, generators, suppliers, distributors, transformers, converters, transmitters, processors, developers, storers, procurers, carriers and dealers in electricity, all form of energy and any such products and by-products derived from such business including without limitation, steam, fuels, ash, conversion of ash into bricks and any products derived from or connected with any other form of energy, including, without limitation to conventional sources such as heat, thermal, hydel and/or from non-conventional sources such as tidalwave, wind, solar, geothermal, biological, biogas and coal bed methane.

69. To carry on in India or abroad the business of establishing, commissioning, setting up, operating and maintaining electric power transmission systems/networks, power systems, generating stations based on conventional/ non-conventional resources for generation, evacuation, transmission, distribution, trading or supply of power through establishing or using stations, tie-lines, sub-stations and transmission or distribution lines in any manner including build, own and transfer (BOT), and/or build, own and operate (BOO) and/or build, own, lease and transfer (BOLT) and/or build, own, operate and transfer (BOOT) basis or otherwise ,and to acquire in any manner power transmission systems/networks, power systems, generation stations, tie-lines, sub-stations and transmission or distribution systems from State Electricity Boards, Vidyut Boards, Power Utilities, Generating Companies, Transmission Companies, Distribution Companies, Central or State Government Undertakings, Licensees, other local authorities or statutory bodies, other captive or independent power producers and distributors and to do all the and/or related or connected activities as may be considered necessary or beneficial or [illegible] for or along with any or all of the aforesaid purposes which can be conveniently [illegible] on these systems, networks or platforms.

70. To [illegible] ch, collaborate, survey, design, study and evaluate all steps, process, avail or provide techniques and methods for setting up of all types of Infrastructure Projects, facilities or works and to finance, build, construct, install, erect, undertake, lay down, commission, establish, own, operate, manage, control, and administer, lease, transfer, all Infrastructure Projects in the capacity of principals, contractors, advisors, engineers, consultants, service providers, surveyors or otherwise in India or abroad.

71. To carry on the business to construct, execute, carry out, equip, improve, work, develop, administer, manage or control, in India and abroad, public works and conveniences of all kinds includes railways, tramways, docks, harbours, piers, canals, reservoirs, embankments, irrigations, reclamations, improvement, sewage, drainage, sanitary, water, gas, electric light, telephone, telegraphic and power supply works, and hotels, warehouses, markets and public buildings and all other works or conveniences of public utility.

72. To carry on in India or elsewhere the business of production, distribution, supply, import, export or otherwise dealing in potable water including mineral water, raw water, industrial water and process water and the business of raw water treatment, including desalination, from various sources like rivers, canals, lakes, wells, sea, ground water etc., and the business of treatment and disposal of waste water, sewages and liquid wastes, and the business of establishing, operating, maintaining water production, distribution and supply systems/networks, water treatment plants, sewage treatment plants, pumping stations, water tanks, reservoirs and other storage units, water bottling units, water transmission lines, water pipelines on any commercial basis including build, own and transfer (BOT), and/or build, own and operate (BOO) and/or build, own, operate and maintain (BOOM), and/or build, own, lease and transfer (BOLT), and/or build, own, operate and transfer

SD Toll Road Limited

(BOOT) basis and/or takeover, acquire, manage or maintain any existing plant/utility from State Governments, Jal (water) Boards, Muncipal Corporations, Local authorities, Utility companies, Licensees, Statutory Bodies and other organizations and for any or all the aforesaid purposes, to do all the necessary or ancillary activities as may be considered necessary, beneficial or desirable.

73. To carry on in India or elsewhere the business of development of water resources projects including dams, barrages, weirs, tunnels, canals, hydro power stations and reservoirs and inter-linking projects of rivers and other water bodies, irrigation, flood control, drainage, sanitation, water navigation and transportation or any other projects relating to water logistics or usage and the business of manufacturing, importing, exporting, marketing and dealing in all chemicals and raw materials required for water conditioning, treatment, storage or usage.

74. To carry on in India or elsewhere, the business of buying, selling, marketing, supplying, importing, exporting, trading, storing, distributing, transporting or otherwise dealing in all kinds of petroleum, petroleum products and by products, petrochemicals, fuel, oil, crude including other related products and to act as selling agents, commission agents, sales organizers, distributors, stockists, del-credre agents, C & F agents, wholesalers and retailers for aforesaid products and designing, developing, erecting, installing, setting up, operating, maintaining, managing, owning, leasing, hiring retail or wholesale outlets, pumps, terminals, depots, showrooms, storage tanks, warehouses, godowns, objects, equipment, devices, facilities, infrastructure and to provide other related and ancillary services, facilities, assets or infrastructure, including but not limited to value added services of garage, service station, shop, office, parlours, hotel, motel, restaurant, guest house, rest house, facilities for communication, entertainment, insurance and banking and to plan, establish, develop, provide, promote, use, operate, conduct, procure, facilitate, maintain, do business, provide infrastructure and act as consultants, agent for attaining the above object.

75. To carry on in India and/or elsewhere the business of processing, converting, refining, producing, manufacturing, formulating, fermentation, distillation, using, buying, acquiring, importing, storing, packaging, supplying, selling, transporting, distribution, exporting, dealing and disposing all kinds of chemicals, chemical compounds, petroleum products, gases reformat, distillate fractions, all petrochemicals, building block, derivatives, polymers, elastomers, resins, copolymer, polymer processing chemicals, rubber, synthetic fibres, solvents, essences, flavours perfumery materials, detergents, pesticides, micronutrients, refrigerants, catalysts and intermediates of all types, grades, formulations and in all forms whether liquid, solid or gaseous, including products of any nature and kind whatsoever including by-products, derivatives and mixtures thereof.

76. To carry on in India or elsewhere, the business of buying, selling, marketing, supplying, importing, exporting, trading, hedging, storing, distributing, transporting manufacturing, compressing, producing, processing, refining, mixing, formulating, purifying, disinfecting, converting, compounding, developing, deriving, discovering, searching, mining, quarrying, releasing, manipulating, preparing, or otherwise dealing in fuels required or used in industries, household, agriculture, laboratories, hospitals, aviators, vehicles, space rockets, communications, power plants, energy generation, water works, forest/plant protection and all other purposes whatsoever, including petroleum, petroleum products and by products, petrochemicals, oil, crude, oxygen, hydrogen, nitrogen, carbonic acid and all sorts of gases including natural gas (NG), liquified natural gas (LNG), compressed natural gas (CNG), liquified petroleum gas (LPG) and associated gaseous substance, hydro-carbons, coal, coal bed methane, lignite, coke, petrol, naphtha, high speed diesel, aviation turbine fuel, superior kerosene oil, including other related products and to act as selling agents, commission agents, sales organizers, distributors, stockists, del-credre agents, C & F agents, wholesalers and retailers for aforesaid products and designing, developing, erecting, installing, setting up, operating, maintaining, managing, owning, leasing, hiring retail or wholesale outlets, pumps, terminals, depots, showrooms, storage tanks, warehouses, godowns, objects,

equipment, devices, facilities, infrastructure, and to carry on the business of transportation and distribution, designing, setting up, erecting, maintaining, and operating in India or abroad, pipes, pipelines, cross country piping systems, cylinders and other allied facilities for distribution of fuels, gases, natural resources, and to provide other related and ancillary services, facilities, assets or infrastructure, including but not limited to value all sorts of added services, and to plan, establish, develop, provide, promote, use, operate, conduct, procure, facilitate, maintain, do business, provide infrastructure and act as consultants, agent for attaining the above object.

77. To plan, establish, develop, provide, promote, use, operate, conduct, procure, maintain, market, distribute, do business and to act as service provider, consultant for, all types of telecommunication and other related services, software and other content for networking, e-commerce, e-business, system design, information technology, intranet, internet services, internet connectivity, other communication related services and applications including system, application product in the fields of business, education, health care, public services, engineering, technology, technical know how, chemical, mechanical, electrical, electronics, civil, industrial, commercial, statistical, banking and financial, accountancy, medical, legal, production, marketing, distribution, materials, personnel planning, transportation, tourism, computers, data processing, data base creation and management including spectrum management, customer relation management, knowledge management & strategic enterprises management, supply chain management and also to provide all other value added services like providing integrated, netserv, network connectivity solutions and cost effective and other allied solutions, data processing, direct to home services, electronic media, Cellular Mobile Telephone Services (CMTS), Fixed Telephone Services (FTS), Cable Service Provider, Basic Telephone Services (BTS), VSAT Services, Internet Service Provision (ISP), Global Mobile Personal Communications by Satellite (GMPCS), wireline and wireless systems and other value added services including Paging Services, Radio Paging Service Providers, Public Mobile Radio Trunking Service Provider, National Long Distance Operator, DTM, communication methods telecommunication, basic and cellular telephone, voice mail, internet, electronic mail, data communication services, intranet, internet connectivity, internet telephoning, interconnect and interface services, applications like tele-banking, tele-medicine, tele-education, tele-trading e-commerce, e-business and system design, management information systems and to act as access providers, national and international long distant operators and to plan, establish, develop, provide, promote, use, operate, conduct, procure, maintain, do business and to act as consultant for, establishment and development of infrastructure required for the provision of above services.

78. To plan, establish, develop, provide, operate, manage, maintain, deal, supply, take on lease, give on lease, hire or let on hire and to carry on the business of running(whether under licence or otherwise), telecommunication, infrastructure, telecommunication systems, telecommunication networks and telecommunication services, of all kinds, within India as well as outside India, including but not limited to telephony, telex, wireless, date communication, telematic and other like forms of communication, transmission, emission or reception through the agency of electricity or electromagnetism or light, or otherwise, of signs, signals, writing images, sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems whether or not such signs, signals, writing, sound or intelligence have been subject to management, computation or other processes by any means in the course of their transmission, emission or reception and of all kinds.

79. To carry on all or any of the businesses of building, developing, maintaining, supplying, operating, managing and dealing in services, facilities and infrastructure for communications of all kinds, within India as well as outside India, such as telephony, data transmission, information technology and video services and facilities management including spectrum management, social or other value-added services like providing and to and integrated solutions, netserve solutions, network connectivity solutions, cost effective solutions, other allied solutions, other allied solutions for data transfer,

administrative and effective communication.

80. To carry on the business, buy, sell, deal, take on lease, give on lease, hire, let on hire and otherwise participate in the launching of satellites as well as the provision of all associate services, for communications, Geographical Information Systems (GIS) services, Global Positioning Systems (GPS) services, Satellite Imaging, Remote Sensing for various applications for usage, other commercial use, or otherwise and to promote, seek investment, partner, participate in joint ventures and to invest in such ventures, within India as well as outside India and for similar such projects in the field of telecommunications and to carry on all or any of the businesses of running, operating, managing and supplying data processing and information systems, including videotext, viewdata and teletext systems and systems utilizing, or utilizing in or for the capture, storage, retrieval, processing, conversion, transmission, receipt or presentation of messages and signals including but not limited to date, sounds and visual images, with the aid of in conjunction with, or in anyway whatsoever utilizing computers or similar equipment and computer programs and databases and to carry on the businesses of operating, managing, supplying and dealing in services and facilities of all kinds which incorporate, use or are used in conjunction with, in connection with, or ancillary to, systems of such descriptions as aforesaid or any of the apparatus and equipment comprised therein.

81. To establish, maintain develop, conduct, procure, buy, sell, import, export, trade, or otherwise deal in, or to act as service providers of every kind in the fields of engineering, technology, technical know how, chemical, mechanical, electrical, electronics, civil, industrial, commercial, statistical, financial, accountancy, medical, legal, educational, production, marketing, distribution, materials, personnel, planning, computers, software and software solutions of all kinds, system integration, data processing, multi media services, direct to home services, entertainment media, cable television services, interactive television services, content for various uses, electronic media, Cellular Mobile Telephone Services (CMTS), National Long Distance Operator Services (NLDO), Fixed Telephone Services (FTS), Cable Service Provider, Basic Telephone Services (BTS) with or without the use of Wireless Local Loop (WLL) Technology, VSAT Services, Internet Service Provision (ISP), Global Mobile Personal Communications by Satellite (GMPCS), wireline and wireless systems and other value added services including paging services, Radio Paging Service Providers, Public Mobile Radio Trunking Service Provider, DTM communication methods, telecommunication, basic and cellular telephone, voice mail, internet, electronic mail, data communication services, intranet, internet connectivity, internet telephoning, interconnect and intraface services applications like tele-banking, tele-medicine, tele-education, tele-trading, e-commerce, e-governance, e-business and system design, kiosks, management information systems and other types of management including spectrum management, social or other value added services like providing and to end integrated solutions, netserv solutions, network connectivity solutions, cost effective solutions, other allied solutions for data transfer, administrative and effective communication".

82. To provide information technology to any person, firm, company, trusts, association, institution, society, body corporate, government or government department, public or local authority in India and outside India, in the field of information technology and related areas and/or to develop procedures, methods, and principles for, and engage in research relating thereto to carry on the business of designers and manufacturers, buyers, sellers, assemblers, exporters, importers, distributors, agents, hirers, and dealers of and as maintenance of service engineers, and system engineers, of mainframe, mini, micro and personal computer systems and process control systems and computer peripherals and accessories including floppy disk drives, hard disk drives, printers, readers, tape drives, cartridge, plotters, magnetic or otherwise, recording heads, CRT terminals and display systems, cables, interfaces, computer ribbons, stationery, furniture and control walves, instruments, transducers, recorders, measuring devices and computer hardware including large systems, mini, micro-systems and personal computers and process control systems and hardware in computer and electronics.

83. To plan, establish, develop, provide, promote, procure, implement, install, use, operate, conduct, maintain, market, distribute, do business and to act as service provider, consultant for, all types of information technology and other related services, software, software solutions and other content for networking, e-commerce, e-business, system design, information technology, intranet, internet services internet connectivity, other communication related services, solutions and applications including application of systems and products in the fields of business, entertainment, education, health care, public services, engineering, technology, technical know how, chemical, mechanical, electrical, electronics, civil, industrial, commercial, statistical, banking and financial, accountancy, medical, legal, production, marketing, distribution, materials, personnel planning, transportation, tourism, computers, data processing, data base creation and management including spectrum management, customer relation management, knowledge management & strategic enterprises management, supply chain management on turnkey basis or otherwise and also to provide all other value added services like providing integrated, netserv, network connectivity solutions and cost effective and other allied solutions, and to act as internet services provider, access providers, national and international long distant operators and to plan, establish, develop, provide, promote, use, operate, conduct, procure, maintain, do business and to act as consultant for, establishment and development of infrastructure required for the provision of above services.

84. To carry on all kinds of businesses of designers, manufacturers, processors, assemblers, dealers, traders, distributors, importers, exporters, agents consultants, system designers and contractors for erection and commissioning on turn key basis or to deal in any other manner including storing, packing, transporting, converting repairing, installing, training, servicing, maintenance of all types, varieties and kinds of (i) telephone instruments, intercoms, accessories and components thereof for telecommunications, (ii) radio communication equipments like receivers, transmitters, trans-receivers, walkie talkie radio relay equipment, point to point communication equipments, antennas and associated equipment single channel, multi-channel, fixed frequency, variable frequency, static, mobile, airborne, shipborne equipments in HF, VHF, UHF and Microwave, spectrum, TV systems, receivers, transmitters, pattern generators and associated equipments, amplifiers, oscillators synthesizers, waveform generating, measuring and associated equipments, sonic, ultrasonic and radio frequency ranging and depth finding sonar and Telemetry coding and data transmission equipments, data acquisition, processing and logging equipments, calculators, computers, minicomputers and microcomputers, printers, readers, display terminals, facsimile transmitting and receiving equipments and systems, (iii) signaling, telecommunication and control equipments used in roads, railways, ships, aircrafts, ports, airports, railway stations, public places along with associated accessories and test rigs, (iv) instruments, testing equipments, accessories for repair, maintenance, calibration and standardization of all the above items in laboratories, service centers, processing plants, manufacturing plants and at customers places.

85. To carry on the business of a teleprint, television and heat and power supply company, and in particular to establish, work manage, control and regulate telephone exchanges and works for the supply of heat and motive powers to transmit and facilitate the transmission of telephonic and telegraphic communication, and messages, and to undertake the lighting of towns, buildings, streets, and other places and the supply of heat and motive power for public or private purposes.

86. To manufacture, market, distribute and sell all types, varieties and kinds of (i) telephones instruments including mobile telephones, Fixed wireless Terminals, any type of mobile communication devices, Personal Digital Assistants (PDA) with or without communication facilities, dial-type phone, car phone, corded phones, cordless phone, mini corded phone, radio phone, speakerphone, videophone, wireless systems desk top and wall type pay phones, headsets, office systems, conferencing equipment, fax, answering machines, intercoms, accessories and components thereof for

telecommunications (ii) radio communication equipment like receivers, transmitters, transmitters, trans-receiver, walkie – talkie radio relay equipment, point to point communication equipment, antennas and associated equipment single channel, multi channel, fixed frequency, variable frequency, facsimile transmitting and receiving equipment and systems.

87. To carry on business of distribution, sales, marketing, purchasing, production, advertising, intermediating, providing, delivering of diverse varieties of goods, products, services by and through E-commerce, Internet, Intranet, Web, Networks, Physical Transfers, Direct Mailing, and such like other traditional and emerging methods and channels and and in, designing, providing, hosting, supporting, operating, managing, consultancy, marketing, of all types of Electronic and other Network and Network Systems and emergant systems and technologies.

88. To acquire, establish and maintain one or more hospitals for the reception and treatment of persons suffering from sickness, disease, ailment, malady, disorder, affliction, infirmity or any ill health of any nature whatsoever and persons requiring medical attention or rehabilitation and to provide medical relief and allied facilities to the public in all the branches of medical science by all available means and to engage in the research and development in all fields of medical sciences and in all therapies of medical treatment.

89. To found, acquire, take over establish, construct, erect, maintain, run, manage, develop, own, acquire, purchase, undertake, improve, equip, promote, initiate, encourage, subsidise and organise dispensaries, clinics, diagnostic centres, polyclinics, pathology, laboratries, research centres, operation theatres, chemists shops, blood banks, eye banks, kidney banks, nursing homes, physiotherapy centres, investigations centres and other similar establishments for providing treatment and medical reliefs in all its branches by all available means to public at large on suitable fees, concessional fees or on free of charge basis.

90. To carry out medical Research by engaging in the research and development of all fields of medical sciences, and in all therapies of medical treatment; so as to afford medical relief in a better way and to provide, encourage, initiate or promote facilities for the discovery, improvement or development of new methods of diagnosis, understanding and prevention and treatment of diseases and to endow research fellowships or grant financial assistance to persons or institutions engaged in medical research.

91. To carry out, organize, develop, exploit and manage in any part of India or abroad any or all businesses relating to and allied to the discovery, development, manufacture, production, store, maintain, sell or buy biological products and services based on advanced chemistry, plant/agricultural biotechnology, industrial biotechnology, medical biotechnology, bioinformatics, proteomics, biophysics, cell sciences, material sciences, information technology, genetics and to establish and maintain laboratories and carry on analytical, experimental and other work or undertaking in relation to other works and the objects of the company, or otherwise.

92. To carry on the business or vocation of acting as advisers and consultants in India or abroad, on all matters and problems relating to technical industries, engineering, technology, technical know how, execution of turnkey projects, chemicals, process know how, mechanical, electrical, electronics, petrochemicals, refining of Petroleum Crude Oil, manufacture of refined oil, extracting by-products, pipes and pipelines for the transportation of gas, petrol and other petroleum products, energy, oil and gas sector, industrial sector, power, energy, commercial sector, statistics, civil, administration, finance, factoring, accountancy, medical fields, legal, education, and organisation management, taxation, administration, secretarial, accounting, information systems, market research, operations research, financial and project engineering studies, techniques of production, procurement, administration, recruitment, etc in order to obtain optimum use of the factors of production, commencement or expansion of industry, purchasing techniques and business (including construction of plants and buildings),

production, purchases, sales, materials and cost control, marketing, distribution, advertisement, publicity, personnel, labour, planning, computers, data processing, multi-media services, direct to home services, entertainment media, electronic media, exports and imports to and for any concerns, bodies, associations (incorporated or unincorporated) departments and services of the Government, public or local authorities, trusts, scientific research and Development Centers, and to be appointed as technical, financial, legal, economic, public relation, sales promotion, industrial administration, civil consultants, provide training in consultancy including consultancy services in the areas of computer management and engineering covering computerised information systems, feasability studies, system design and development, computer based management information system, on line real time systems, process control, data base design, industrial engineering applications and all other related areas of computer technology and any other consultancy services for the projects sponsored by international organisations, Government of India or Government of any other country, as the Company may from time to time deem fit.

93. To carry on, acquire, take over the business of engineering , procurement and construction, whatsoever now known as, in different disciplines including agricultural, civil, chemical, electrical, electronics, mechanical, instrumentation and to provide other associated services and facilities such as project management, process technology, process engineering, detailed engineering, fabrication and fabrication facilities to design, develop, maintain and manufacture plant and equipment and to act in India or elsewhere in the world as engineers, consultants, developers, design engineers, and to provide, engineering, procurement and construction services to turn-key projects, large scale infrastructure projects including petrochemicals, hydrocarbons, oil and gas and its derivatives, power, telecom, transportation, ports, structures, housing/industrial sectors and to install, develop, implement, provide hardware and software in connection therein.

94. To construct, erect, build, repair, re-model, demolish, develop, purchase for investment or resale, acquire, take on lease or in exchange or in any lawful manner any area, land, buildings, houses, structures and other property wherever situated of any tenure and any interest therein and to turn the same into account, develop the same and dispose of or maintain or make advances upon the security of the same and improve grades, curve, pave, macadamize, cement and maintain buildings, structures, houses, apartments, hospitals, schools, places of worship, highways, roads, paths, streets, sideways, courts, alleys pavements and to build townships, bungalows, cottages, water houses, sheds, factories, barns, farms, complex, markets, offices, educational centers like schools and colleges or buildings residential and commercial or conveniences thereon and to equip the same or part thereof with all or any amenities or conveniences, drainage facility, electric, telephonic, television installation and to deal with the same in any manner and by advancing money to and entering into contracts and arrangements of all kinds with builders, and construction leveling or paving work and for these purpose to purchase, take on lease or otherwise acquire and hold any lands and prepare lay-out thereon or buildings of any tenure or description wherever situate or rights or interests therein or connected therewith.

95. To provide, develop, establish, maintain, run, manage, operate fire fighting services which shall include short circuits, building collapses, mishaps, accidents and also carry out rescue operations and any other cases of emergency and to act as advisors consultants for providing safety measures for construction of structural buildings, complexes including infrastructure projects and to maintain fire equipments for residential, commercial and industrial buildings & complexes including for factories, plants and display, provide training services, safety awareness and for prevention, control of fire.

96. To carry on business of underatking fire protection, turnkey jobs, istalling hydrant lines, control panels, smoke detectors, automatic sprinklers, fire alarm system for use in industries, ships oil jetties, oil platforms, buildings and other places according to specific requirements of the customers.

97. To build, construct, acquire, erect, install, operate, maintain, develop, promote, manage, repair, administer, provide, infrastructural facilities for ports, jetties, wharfs, piers, docks, embankments, bulk, break bulk, dry bulk cargo, multipurpose and specialized cargo berths, stackyard and rail infrastructure, terminals, general terminals, marine terminals, cargo terminals, container terminals, transport systems, clearing and handling systems, cargo handling, berths, shorecrains, ship manifolds, fork lifts, bunkers, cargo hoses, navigational channels, depth maintenance, navigation marks, dredging, dry docking, tunnels, canals, work shops, shipways, hangers, derricks, pipe lines for supply of water, oil, fuel, sewage, petrochemicals, chemicals, warehouses, cold storages, godowns, ship stores, sheds, container freight stations and services, port crafts and equipment, tank farms, tugs, pilotage and camage services, container handling facilities, floating dry dock and vessel repair facilities, setting up of captive power plant, installation of equipment, handling equipment, loading equipment and supporting infrastructure, to acquire marine related technology and undertake underwater work on ports, docks, tugs, terminals, jetties and ship repairs, establish and maintain work lines of power, fuel, steam, aerial communications between ports, ships and other transports and to act as marine consultants, marine engineers and advisors.

98. To build, construct, acquire, maintain, develop, promote, manage, repair, provide, terminals and administer terminals Industrial Estates, housing, constructions, buildings, ports, roads, bridges, sub-ways, express ways, tunnels, shopping complexes or centres, recreational facilities such as theatre, clubs, sports centres, gardens, parks, resorts, medical centres like hospitals and dispensaries, educational centres like schools and colleges, libraries, infrastructural facilities for village, town/city developments, other construction such as parking spaces, to promote and participate in ecological development, preservation and betterment of environment through plantation of trees, effluent treatment and disposal systems and to carry on the business of proprietors, managers and renters either separately or in collaboration with others and to render technical and managerial advice in building construction, maintaining, repairing and managing such places including terminals.

99. To purchase, sell, develop, take in exchange, or on lease, hire or otherwise acquire, whether for investment or sale, or working the same, any real or personal estate including lands, mines, business, building, factories, mill, houses, cottages, shops, depots, warehouses, machinery, plant, stock in trade, mineral rights, concessions, privileges, licences, easement or interest in or with respect to any property or interest in or with respect to any property whatsoever for the purpose of the Company in consideration for a gross sum or rent or partly in one way and partly in the other or for any other consideration and to carry on business as proprietors of flats and buildings and to let on lease or otherwise apartments therein and to provide for the conveniences commonly provided in flats, suites and residential and business quarters.

100. To purchase or otherwise acquire and sell, dispose-off and deal in real or personal property of all kinds and in particular lands, buildings, hereditaments, business concerns, and undertakings, mortgages, charges, annuities, patents, licences, shares, stocks, debentures, debenture stock securities, concessions, options, produce, policies, book debts, and any interest in real or personal property and any claims against such property or against any persons or company.

101. Subject to the provisions of Foreign Exchange Management Act, 1999, the Directions of the Reserve Bank of India and other applicable laws in force, to carry on in India or elsewhere, the business of full fledged and/or restricted money changers and authorized dealers of all foreign currencies and to buy, sell, and deal in foreign currencies of all kinds and types whether in the form of coins, bank notes or travelers cheques; to conduct transactions of all types and description in foreign currencies and to convert foreign currencies into Indian rupees and vice versa.

102. To undertake money market operations, treasury managements, research and analysis to undertake/promote sale and purchase of shares and stocks, portfolio management, act as share and stock brokers, sub-brokers, finance brokers with the object of financing industrial enterprises, agents for accepting, holding, dealing in, converting stocks and shares and securities of all kinds, act as brokers and procuring agents for Unit Trust of India, Mutual Funds, Government bonds, small saving schemes and generally for all kinds of securities and to carry on these businesses in India and abroad.

103. To represent international merchant bankers, investment bankers, foreign investment institution, to carry on the business in the domestic and international capital markets, to act as authorized dealers (subject to RBI approval) and full fledged money changers, to undertake all types of foreign exchange operations, arrange for suppliers/buyers credit, advice on foreign exchange cover operations, such as swap deals, cross currency foreign contracts/options, advise and guidance on foreign currency accounts, arranging foreign equity participation by individuals, companies, from institutions such as Asian Development Banks, International Finance Corporation, commonwealth development corporation, OECD and others; arrange for and provide commercial, economic and financial information/reports to importers and exporters-foreign and Indian.

104. To establish a market place providing specialized, advanced, electronic, automated, facilities for trading, clearing, settlement, risk management in all types of direct and derived commodities, securities, financial instruments, merchandise and services, goods and all other contracts and instruments including financial instruments and to ensure a transparent and fair trading mechanism with access to market participants including manufacturers, distributors, dealers, agents, traders, exporters, importers, consumers, clients, investors in or outside India on its own or using contractors or facilitate all these services and all other logisitcs or any other services, goods or anything else that may be required to provide a market place in or outside India and to plan, establish, develop, provide, promote, use, operate, conduct, procure, maintain, do business and to act as consultant for, establishment and development of centres, training facilities, infrastructure facilities required for the provision of above services and to initiate, facilitate and undertake all such steps in relation to all types of exchange as required for better service and protection including but not limited to taking measures for ensuring greater liquidity and easier access to the market participants, facilitating inter-market dealing and generally to facilitate transactions in aforesaid commodities, securities, financial instruments, and services, goods, all other instruments and to support, develop, promote and maintain a fair and orderly market in the best interest of the market participants and the general public and the economy and to introduce high standards of professionalism among themselves and the market place in general.

105. To acquire any estates or lands by purchase, lease, concession, grant, licence or otherwise and utilize, grow, plant, cultivate, produce, refine and exploit for agriculture/forest produce, floricultural, horticultural, plantation, sericultural, poultry farming, dairy, nursery, planting, animal husbandry, pisciculture, fishing, other plants, trees, crops, natural products of any kind, seeds and other farming purposes and agro industrial purposes and to carry on business as agriculturists, producers, planters, processors, contract growers, growers, cultivators, refiners, traders, buyers, sellers, importers, agents, consultants, dealers, marketers, storekeepers, forest farming, distributors and exporters for any ordinary or specialized agricultural/forest produce, floricultural, horticultural, sericultural and agro-industrial products and commodities, including flowers, fruits, vegetables, coconut, spices, cardamon, jute, hemp, cotton, sugarcane, linsed, oilseeds, food-grains, pulses, seeds, cash crops, cereal products, flora, seeds, plants, trees, timber crops, natural products and agricultural crops of any kind whether produced or not and to develop forests and trees and do value addition by means of land management, farm management, by putting up agro processing facilities and processing manufacturing, marketing and financing forestry, dairy farming, poultry, farming, gardening, tillage, agronomy, herbs, spices, floriculture, horticulture, tissue

culture, sericulture, pisciculture, apiculture, animal husbandry, soil culture, farm housing, ranching and to do rural, countrified, pastoral and agrarian activities .

106. To aid, assist, promote, develop and manufacture agricultural implements, agricultural machinery and other equipments and technological development in equipments used in agricultural field and to organize, conduct, or manage engineering or repair shop or workshops of all description and to manufacture, import, export, buy, sell or otherwise deal in, agricultural machinery, of all kinds and to adopt such means of making known the uses thereof.

107. To carry on business as manufacturers, producers, processors, makers, convertors, importers exporters, traders, buyers, sellers, retailers, wholesalers, suppliers, indenters, packers movers, preservers, stokists, agents, sub-agents, merchants, distributors, consignors, jobbers, brokers, concessionaires or otherwise deal in cheese, yogurt, butter, margarine, cream, paneer, milk, condensed milk, power milk, skimmed milk and generally to do the businesses of dairymen, poultry and livestock breeders, butchers, bakers, confectioners, refreshment contractors, farmers, grocers, and general provision merchants and dealers.

108. To exhibit, distribute, give or take on hire, exchange, purchase or sell and to deal in any manner in films both of own manufacture or other manufacture, Indian or Foreign, in India or elsewhere outside India and also to engage agents or representatives for the above or any other purposes of the company and to remunerate such agents, representatives and servants of the Company and to manufacture, produce and exhibit Cinematographic films and pictures and to engage Directors, Actors and other servants, Authors, Play- writers, Dramatists, Dialogue and Scenario writers, Film Editors, Story writers and other persons, Technicians, Engineers, Sound Experts, Cameramen, Musicians, Art Directors, Artists, Painters, Carpenters and other experts necessary for conducting the business of the Company and to pay, remunerate persons so engaged.

109. To carry on the business of proprietors and operators of amusement parks, and as promoters, organizers and managers of all kinds of entertainments, sports, recreations, indoor and outdoor amusements, including funfairs, circuses, amusement arcades, exhibitions, sideshows and games, competitions, tournaments, concerts, cinema and television performances, stage and variety shows, dancing, skating, aquatic and equestrian events, and pyrotechnic, aerial and other displays.

110. To manufacture and carry on the business of film productions, silent as well as talking in all or any of the languages spoken in the world which may be Topical, News, Educational, Dramatic, Comic, Advertisement, Cartoons, Coloured Synchronized and film or film of any other kind to be hereinafter devised and to construct, purchase or take on lease Cinematograph theatres, cinema halls and other buildings and works convenient for the purposes thereof and to manage, maintain and carry on such theatres and other buildings, when so erected on.

111. To do, act, perform, undertake, pursue, practise, achieve or carry on in India or elsewhere the business, vocation or calling of detectives, guards, security agents, investigators, examiners, explorers, inspectors in the industrial, business, trade, management, legal, social or any other area or field and to provide security, body guard services, detective services or consultancy to ascertain, vigil, catch, disclose, identify, notice, observe, recognise, scent, cross examine, grill, inquire, interrogate, probe, explore, sift, canvass any matter, question, subject, or activity and to manufacture, produce, assemble, dismantle, design, develop, equip, fabricate, modify, mould, machine, repair, service and to act as agent, broker, stockists, distributor, licensor, importer, exporter, buyer, seller, supplier, vendor or otherwise to deal in all shapes, sizes, varieties, capacities, descriptions, specifications and facilities or revolvers, pistols, artillery weapons, guns, machine guns, stenguns, rifles, linethrowing guns, bullets and other similar weapons used for detective, security services, body guard services or consultancy.

112. To carry on the business of fire, accident, indemnity and general insurance company, and insurance in all branches (excepting life assurance), and especially in relation to motor vehicles and motorists, and to grant or effect assurances against or upon the contingency of injury, damage or loss by reasons of accidents of any description to human beings, and to grant or effect insurance against or upon the contingency of injury, damage or loss by reason of accidents of any description to real or personal property of any kind.

113. To undertake, carry on and transact in any manner whatsoever, whether in India or elsewhere throughout the world all or any kinds of assurance, insurance, indemnity or guarantee business (including engaging in retrocession and for the purposes of the clauses mentioned herein, general insurance shall have the meaning assigned to it in the Insurance Act, 1938 as amended from time to time) of all kinds, classes, nature and description whether of a kind now known or hereafter devised including Fire, Marine, Accident, Aviation, Transit, Motor Vehicles, Engineering, Health and Miscellaneous and insurance covering any liability under any law, convention or agreement and to grant any contract of guarantee or indemnity against any kind of loss or damage to property or person occasion in any manner whatsoever and against any other kind of risk or liability whether direct or indirect arising from happening of any event or the fulfilment or non fulfilment of any contract, obligation or undertaking whatsoever upon such terms as to security or otherwise as the company may decide.

114. To carry on, establish, organise, manage, promote, provide, operate, conduct and develop life insurance in all its branches & manifestations in India or elsewhere and for this purpose to operate various schemes including whole life insurance, endowment insurance, double benefit and multiple benefit insurance, medical insurance, accidental insurance, limbs and organ insurance, annuity plans, gratuity plans, fixed income plans and such other schemes and plans as may be considered expedient and necessary from time to time.

115. To carry on the business of life insurance (including engaging in reinsurance and for the purposes of the clauses mentioned herein, life insurance shall have the meaning assigned to it in the Insurance Act, 1938 as amended from time to time) or effect assurances on lives either jointly or severally or on survivorship and endowments for infants or other persons and in particular to grant or effect insurances of all kinds for payment of money by way of a single payment, or by several payments, or by way of immediate or deferred annuities or otherwise, to the insured person or his legal heirs or to such person who has been nominated by the insured to receive monies, upon the happening of all or any of the events causing loss or damage to human life or human body including natural death or otherwise, accident, disablement partial or permanent or failure of an issue of or the attainment of a given age by any person or persons, or the expiration of any fixed or ascertainable period, or the occurrence of any contingency or event which would or might be taken to affect the interest whether in possession, vested, contingent, expectant, prospective or otherwise, of any person or persons in any property, or the loss or recovery of contractual or testamentary capacity in any person or persons, and any contract which is subject to payment of premiums for a term dependent on human life or not.

116. To grant purchase and sell annuities either for lives or otherwise; to receive investments of money for the provision of sinking funds or otherwise; to effect assurances with other companies; to grant or effect assurances against loss or damage whether arising from accidents or otherwise and generally to grant or effect all such other assurances whether connected with life or not and to all such assurance business as may be legally granted, effected or transacted, to sell and to purchase reversionary interests, capital payable on the expiration of a definite period or otherwise and interests depending on contingencies unconnected with life; to undertake and execute any trusts or other fiduciary offices the undertaking whereof may seem desirable, either gratuitously or otherwise, and to enter into and carry into effect contracts for amalgamating with or purchasing or taking over the whole or any part of the business of another assurance or Company or for undertaking paying and performing all or any of the assurances, annuities and engagements of

another or Company; and to transact financial business of all kinds.

117. To carry on all or any of the business of manufacturers importers, exporters, buyers, sellers, retailers and distributing agents of and dealers in all kinds of pharmaceutical, medicinal and medicated preparations, patent medicines, drugs, herbs, and in pharmaceutical, medicinal and medicated preparations, patent medicines, drugs, herbs, and in pharmaceutical, medicinal proprietary and industrial preparations, compounds, and articles of kinds, chemists, druggists and chemical manufacturers, and to manufacture, makeup, prepare, buy, sell and deal in all articles, substances, and things commonly or conveniently used in or for making up preparing, or packing any of the products in which the Company is authorised, to deal or which may be required by customers or persons having dealings with the Company.

118. To manufacture, sell, purchase, export, imports and deal in drugs, pharmaceuticals, vaccines, fine chemicals, enzymes, personal hygiene and public health products

119. To purchase, take on lease or otherwise acquire any mining rights, mines and lands in India or elsewhere and to pump, refine, raise, dig and quarry all natural resources including oil, gas, petroleum, gold, silver, diamonds, precious stones, coal, earth, limestone, iron, aluminium, titanium, vanadium, mica, apalite, chrome, copper, gypsum, lead, manganese, molybednum, nickel, platinum, uranium, rutile, sulphur, tin, zinc, zircon, bauxite and tungsten and other ores and minerals and believed to contain metallic, or mineral, saline or chemical substances, kisselghur, french chalk, china clay, bentonite and other clays, boryles, calcite and such other filler materials, earths or other ingredients including coal, lignites, rock phosphate, brimstone, brine, rare earths which may seem suitable or useful or for any of the Company's objects and any interest therein and to explore, work, exercise, develop and turn to account the same and to carry on business as producers, buyers, and acquire, obtain, refine, cut, polish, prepare, melt, import, export or otherwise deal in gold, silver, bullion, jewellery, diamonds, precious stones, artificial man made jewellery, gems and novelties

120. To act as Registrars and share transfer agents, Issue Managers, Trustees and Underwriters to the issue of all kinds of securities and deal with all kinds of work connected with issue, transfer and transmission of shares, debentures, and other securities; and to act as investment consultants/advisers and to provide services related theretoto and to promote the formation and mobilization of capital for trade and industry and to act as advisors to multinationals for the promotion and issue of capital in India and abroad and to make direct investment in securities, stocks, shares, industrial and other business ventures and in financial instruments of all types.

121. To act as financial intermediaries/portfolio managers, fund managers, asset managers, and to pool, mobilise and manage the funds of any person or company by investment in various avenues like Growth Fund, Income Fund, Risk Fund, Tax Exempt, Funds, Pension/Superannuation Funds and to pass on the benefit of portfolio investments to the investors as dividend, bonus interest and to provide complete range of personal financial services.

122. To undertake the business of financial and investment consultants, management consultants, portfolio managers, fund managers, asset management for individuals, trade and industry and provide advice and consultancy in investment management, property management, leasing, and hire purchase.

123. To carry on the business of common carriers, Transport Contractors, and Delivery Agents in all their branches and carry goods, animals and passengers on land, water or by air by means of vehicles, conveyances and mode of carriage of all kinds and description whatsoever.

124. To carry on all or any of the business of transport, Lorry operator, Oil tank operators,

cartage and haulage contractors, Garage Proprietors, Service Stations, Spares and accessories shop, Owners and charters of road vehicles, aircrafts, ships trucks, barges and boats of every description, Lighterman, Carriers of goods and passengers by road, rail, water or air, Carmen, cartage contractors, stevedores, wharlingers cargo superintendents, packers, haulers, warehousemen, store-keepers and job masters.

125. To carry on the business of running motor lorries, motor taxies, motor omnibuses tank, Lorries Coaches, Tankers, Tractors, Combines, Jeeps, Trailors, Trolleys, and conveyances of all kinds and on such lines and routes as the Company may think fit and to transport passengers and goods and generally to do the business of common carriers.

126. To carry on all or any of the business of transport, catage, and haulage contractors, garage proprietors, owners and charterers of road vehicles, aircrafts, ships tugs, barges and boats, of every description, lighter men, carriers of goods and passengers by road, rail, water or air, car men, cartage contractors, stevedores, carts, superintendents, packers, hauliers, warehousemen, storekeepers, job masters, hotel and motel owners and to carry on the business as forwarding agents, freight contractors, public carriers, and owners of motors, lorries, trucks, vessels, boats, steam launches, planes, taxies, barges, and to act as warehousemen, wharfhouseman and otherwise as carriers by land, air and water.

127. To carry on the business as tourists, agents and contractors and to facilitate traveling and to provide for tourists and travels and promote the provision and convenience of all kind in the way of through tickets, sleeping cards or berths, reserved places, hotel and lodging accommodation guidance, safe deposits, enquiry bureaus, libraries, lavatories, reading room, baggage transport and otherwise.

128. To carry on the business of designing, setting up, erecting, maintaining, repairing, improving and operating or managing in India or abroad, pipes, pipelines, cross country piping systems, jetties, single buoy moorings, all other kinds of onshore and offshore port facilities, storage and distribution terminals, storage, loading and unloading facilities for the storage and transportation of natural gas, crude oil, petroleum products including but not limited to liquified petroleum gas, petrol, naphtha, high speed diesel, aviation turbine fuel, superior kerosene oil and all products as may be conveniently transported through pipelines and, for the purpose, enter into any technical or financial collaboration as may be desired.

129. To own, purchase, charter, hire or otherwise acquire, sell exchange, let or otherwise deal with, operate, trade in or with steam and other ships, aircrafts, boats, tugs, vessels, trawlers, drifters, other transports and conveyances propelled or worked or capable of being propelled or worked by steam, electricity, petrol, oil gas or any other motive power or power producing substance, with all equipments and furniture, build steam of other ships, and vessels and to employ the same in the carriage or conveyance by land or sea in or between any place or places or port or ports or any seas, rivers, canals, or elsewhere, of passengers, mails, troops, munitions of war, livestock, corn and other produce and of treasure and merchandise and food articles and goods, and things between such ports and places in any part of the world, as may seem expedient, and to establish, maintain and work lines of steam and other ships air services and lines of aerial communications between ports and other transports and conveyances between and ports, countries or places which may seem to the Company from time to time expedient and to acquire any postal and other subsidies

130. To carry on the business of ship-owners, shipbuilders, ship brokers, shipping agents, ship managers, ship charterers, barge owners, dock owners, stevedores, warehousemen, wharfiner, saslvors, marine consultants, crew recruitments ship delivers, ship repairers, loading brokers, freight contractors, haulage and general contractors, marine engineers, surveyors or any other work connected with the shipping business.

131. To carry on in India the business of advertising agents, consultants and contractors.

new agents, newspapers cutting agents, bill posters, commission agents, promoters or organizers of or agents for advertisement or publicity scheme or methods, newspapers proprietors, newspapers reports, printers, publishers and sellers of newspapers, journals, periodicals, magazines, books and all kinds of literary, artistic, musical, scientific, commercial and other publications in English or Indian vernaculars or any foreign language and of general printers, engravers, lithographers, stereotype, electrotype, photographers, photo teachers, photographic printers, designers, draughtsmen and type founders and to carry on business of collecting, editing, summarising, amplifying and disseminating international trade and commercial information for the private use of clients, subscribers, associates or others for general or restricted publication in any language any in any medium and to undertake or co-operate in market research and other marketing assignment or activities.

132. To carry on, in any part of India, the business of spinners, weavers, manufacturers, ginners, pressers, packers, and bales and cotton; jute, hemp, silk, wool, and any other fibrous material, and the cultivation thereof, and the business of weaving or other wise manufacturing, bleaching, dyeing, printing and selling yarn, cloth, linen, and other goods and fabrics, whether textile, fabric, netted or looped and of buying, selling and dealing in cotton and other fibrous materials, yarn, cloth, linen, and other goods and merchandise made thereof, and generally to carry on the business of cotton spinners and doublers, linen manufacturers, cotton, flax, hemp, jute, silk, wool, yarn, and cloth merchants, bleachers, & dyers, makers of vitriol, bleaching and dyeing materials, and to transact all manufacturing or curing and preparing processes, and mercantile business that may be necessary or expedient, and to purchase and vend raw materials and manufactured articles.

133. To carry on the business of ginning, spinning, weaving, hyeing, printing, bleaching, finishing, chemical processing of Grey fabrics, synthetic and man-made fibre, yarn, fabric, silk, cotton, wool, flax, hemp, tents and similar fabrics and the business of buyers and sellers of any such fibrous substances or manufacturing, curing, preparing, dyeing or colouring processes and mercantile business that may be necessary or expedient thereto and to purchase and vend raw materials and manufactured articles.

134. To carry on business as manufacturers and suppliers and dealers in, tassels, robe, dress and mantle, gold lace, lace braids, cords, embroiders, furs, ribbons, fans, perfumes, and flowers, buttons, thread, ornaments, fringers, chalk, pattern, cards, springs, sewing machines, squares, measures, lingerie and trimmings of every kind and fittings, equipment and requisites of all kinds.

135. To carry on the business of sizers, texturisers, spinners, weavers, manufacturers, twisters of various kinds of yarns silk, artificial silk, rayon, nylon, strechlon, manmade, synthetic fibers, staple fibers, wood and fibrous materials and the business of manufacturing, texturising, spinning, weaving, combing, ginning, pressing, twisting, doubling, dyeing, bleaching, colouring, mercerizing, printing, scouring, finishing, packing, baling and selling cloth of all types, linen and fabrics of all types, whether knitted or looped and of importing, exporting, buying, selling and/or dealing in silk, art silk, rayon, nylon, strechlon, man-made synthetic fibers, staple fibers, wool, hemp and other fibrous materials, cloth, linen, rayon and to buy sell, import/export act as agents and/or to deal in finished fabrics/grey fabrics made of cotton/blended worsted/synthetic, cotton/blended/worsted polyester filament yarn or partially oriented yarn and other kinds of yarn and generally to carry on the business of processors, of linen, flax, hemp, silk, artificial silk, rayon, man-made synthetic fibers, staple fibres, wool and cloth merchants, cleaners, combers, spinners, weavers, bleachers, dyers, printers, sizers, importers, exporters, materials and to transact all and preparing process and to give any special treatment to any of the referred materials at any stage of production such as texturising, dying, twisting, crimping on own materials.

136. To manufacture, export, import, buy, sell or otherwise deal in jams, jellies, marmalades, canned or bottled products preserved food and fruit products of any kind, biscuits,

chocolates, pastries and sweetmeats of all kinds, asavas, avalehas, murambas, pickles, crushes, squashes, or any kinds of edible products made from any material.

137. To carry on business of manufacturing, processing, buying, trading or otherwise dealing in plastics, selling plastic products of all kinds and all sorts of plastic materials including thermosetting and thermo-plastic materials and adoption of all processes including blow moulding, injection, extrusion, compression vacuum forming, fabrication coating, brushing, spraying, laminating, dipping, impregnating or any other application by any method whatsoever.

138. To carry on the business as consultants, agents, service providers and to plan, establish, set up, market, develop, provide, promote, use, operate, conduct, procure, maintain, implement, install, create all types of healthcare facilities and products in all fields including health portals providing web based commerce and services in India and abroad, health education and information in any languages, including development of content in various languages, Internet content provider (ICP) to various health portals provide platform for e commerce in drugs, established digital clinics, new and refurbished health care equipments and other health care products and supplies, facilities including genetics, genetic engineering, biotechnology, for herbal medicines and nutrition products to Indian and global markets and to participate, organize, attend chat rooms, panel discussions, Multimedia presentations, expert answers to health related questions from site visitors and to plan, establish, provide, promote, use, operate, conduct, procure, manufacture, maintain, implement, trade, act as agents, distributors, stockists, provide after sale services, create, develop, sell, market, store anywhere in the world all kinds of services and products, medical data, electronic medical records, ERP based on clinical pathways to optimize clinical and financial outcome, products including products in 3D and to implement, consult, supply applications integration, regulatory changes in medical data storage and retrieval chain for hospital equipments, supplies, and drugs and to develop mobile wireless platforms for transmission, provide services for ERP and EAI products for health care facilities and to develop, create and market services and products for, transmission of large volume of medical data over long distances, radiographic and other images and engines, data engines of various configurations, for e commerce in medical products, dealing with creation, storage and retrieval of medical data, supply chain management based on the hospital ERP and provide scan the web services for all kinds of queries and to provide medical consultation to remote locations, Mutimedia education, web based education, Home care monitoring, and to do business of outsource developer of software products, educational products for publishers and medical Schools, and also to provide all other value added services, netserv solutions, integrated solutions and to act as consultant for establishment and development of software centres and training facilities and infrastructure required for the provision of above services.

139. To carry on business as manufacturers, producers, importers, exporters, traders, buyers, sellers, suppliers, indenters, agents, sub-agents, jobbers, brokers, repairers, cleaners, or otherwise deal in automobiles, motor cars, lorries, vans, motor-cycles, cycle-cars, motors, scooters, and other vehicles suitable for propulsion on land, sea, or in the air or in any combination thereof and vehicles of all description whether propelled or assisted by means of petrol, spirit, steam, gas, electrical, animals or other power, engines, chassis, bodies, other parts and components, accessories and all machinery, implements, utensils, appliances, apparatuses, lubricants, solutions, enamels and all things capable of being used for, in, or in connection with the manufacture, maintenance and working of motors or other vehicles and other things or in the construction of any track or surface adapted for the use thereof.

140. To carry on business as manufacturers, producers, processors, makers, convertors, refiners, importers, exporters, traders, buyers, sellers, retailers, wholesalers, suppliers, indenters, packers, movers, preservers, stockists, agents, sub-agents, merchants, distributors, consignors, jobbers, brokers, concessionaires or otherwise deal in either solely or in partnership with others, all types and kinds of cements ordinary, white, colored, Portland, Pozzolana Aluminium, Blast furnace, Silica, and all other varieties of

cements, lime and limestone, clinkers and/or by-products thereof, as also cement products of any or all descriptions, such as pipes, poles, slabs, asbestos, sheets, blocks, tiles, gardenware, plaster of paris, lime pipes, building materials and otherwise, and articles, things compounds, and preparations connected with the aforesaid products, and in connection therewith to take on lease or otherwise acquire, erect, construct, establish, work, operate and maintain factories, quarries, mines and workshop.

141. To carry on in India and elsewhere the trades or businesses of ironmasters, steel makers, steel converters, manufacturers of ferro-manganese, colliery proprietors, coke manufacturers, miners, smelters, engineers, tin plate makers and ironfounders, in all their respective branches. To search for, get, work, raise, maker merchantable, sell and deal in iron, coal, iron-stone, limestone, manganese, ferro-manganese, magnesite clay, fire-clay, brick earth, bricks, and other metals, minerals and substances, and to manufacture and sell briquettes and other fuel, and generally to undertake and carry on any business, transaction or operation commonly undertaken or carried on by explorers, prospectors or concessionaires and to search for, win, work, get, calcine, reduce, amalgamate, dress, refine and prepare for the market any quartz and ore and mineral substances, and to buy, sell, manufacture and deal in minerals and mineral products, plant and machinery and other things capable of being used in connection with mining or metallurgical operations or required by the workmen and others employed by the Company.

142. To carry on business as manufacturers, producers, processors, makers, inventors, convertors, importers, exporters, traders, buyers, sellers, retailers, wholesalers, suppliers, indenters, packers, movers, preservers, stockists, agents, sub-agents, merchants, distributors, consignors, jobbers, brokers, concessionaires or otherwise deal in oil, distemper, plastic paints, varnishes, limestones, spirit, thinner, turpentine, oxide, zinc, brush, chemicals and articles used in manufacturing paint and all kinds of paints.

143. To carry on the business of chartering aircrafts, helicopters and allied air vehicles in scheduled and unscheduled manner to institutions, concerns, bodies corporate, associations (corporated and unincorporated). Governments, public and local bodies and authorities, societies and trusts and persons in India and abroad and to promote and carry on the business of air travel in all its manifestations and for this purpose to undertake and operate air services and air taxi operations subject to the permission and control of appropriate Government and their agencies as may be required.

144. To carry on all types and kinds of aviation activities including survey and air photography, publicity and promotion, search and rescue relief operations, tourism, communications for institutions, concerns bodies corporate associations (incorporated or unincorporated), Departments and services of the Governments, public and local authorities and persons and to provide training in all areas of aviation and to carry on the business of integrated activities for maintenance of all types of aeronautical equipments, aircrafts, helicopters and other air vehicles and to carry on general purpose activities connected therewith.

145. To carry on in India and elsewhere the business of banking including the acceptance of deposits of money in saving and current account or to draw, accept, endorse, discount, buy, sell, and deal in business, exchange, promissory notes, bonds, debentures coupons and other negotiable instruments and securities and to transact and do all matters and things incidental thereto or which may at any time and at any place where the Company shall carry on its business be usual in connection with the business of banking or dealing in money or securities for money, as permitted by Banking Regulation Act, 1949 and guidelines and policy of the Central Government and the Reserve Bank of India from time to time.

146. To advance and lend money on real personal and mixed securities on cash and credit or other accounts on policies, bonds, debentures, bills of exchange, promissory notes, letters of credit or other obligations or on the deposit of title deeds and merchandise, bills of sale and lading, delivery orders or warehouse certificates and to invest money in shares or stocks of other companies or in movable property and to act as agents for the

sale and purchase of any stocks and securities or of any other mercantile transaction, with in the framework of the guidelines issued by the Reserve Bank of India.

147. To act individually or to act in consortium to contract for public and private loans, negotiate and issue the same and to issue on commission or otherwise subscribe for take, acquire and hold, sell, exchange and deal in shares, stock, bond, obligations of securities or any Government, Local Authority or Company; to deal in foreign exchange and to promote services of all kinds related thereto and to act as executors and trustees of wills, settlement and trust deeds of all kinds made by customers and others and undertake to execute trusts of all kinds and to act as agents for any Government or local authority and for other public and private bodies and persons.

148. To carry on the business of banking in all its branches and for this purpose to establish, promote, form, float, organise and manage companies within the meaning of Banking Regulations Act, 1949 and the guidelines and policies of the Central Government and the Reserve Bank of India in force from time to time and to operate current, saving, recurring, fixed term and other types of term deposit accounts and to lend, provide and advance loans, term loans, cash credit and overdraft facilities, guarantees with or without securities and to provide services of safe deposit vaults and lockers.

149. To establish, open, manage run branches, and training centers and to provide specialized banking services to the customers and constituents.

150. To act as Merchant bankers, managers to the issue, transfer agents, financial advisor and to provide consultancy services; to invest, subscribe, sell, purchase, acquire or otherwise deal in share, stocks and securities and to carry on money market operations and to establish, run, manage, and operate mutual funds and float other schemes permissible under the laws, regulations and guidelines in force and to deal in foreign exchange and to provide services of all kinds related thereto.

151. To carry on the business of buying, selling, reselling, importing, exporting and trading of all kinds of goods finished, semi-finished, raw material items, articles, merchandise, products such as agricultural, industrial, chemical or marine, stones, pieces of arts, antiques, handicrafts, machinery, equipments, capital goods and any other item capable of purchasing, selling, importing, exporting and trading and to be appointed as agents and/or distributors on commission, allowance, retainership, incentive basis.

152. To procure the Company to be registered or recognized in any part of the world and to apply for recognision as export house, apply for import entitlements, export incentives, drawbacks and exercise such other rights and undertakings in which the Company will be interested for its business and/or to act as an Import and Export house and to perform all the functions and undertake all activities connected therewith including obtaining and dealing in licenses, quotas, certificates and other rights.

153. To carry on all or any of the business of importers, exporters, refrigerators, ship owners, shipbuilders, caterers of ship of other vessels, warehousemen, merchants, ship and insurance brokers, carriers, forwarding agents, wharfingers, sheep farmers, stock owners, breeders, pasturers and graziers.

154. To carry on business if biotechnology involving the development of biological organisms or their components for commercial or industrial processes involving molecular biology, genetic engineering, and recombinant DNA and also agricultural biotechnology, gene mapping, agricultural engineering, genetic engineering, animal biotechnology, genetic recombination, bioengineering, marine biotechnology, bioethics, microbial genetic engineering, biotechnology, molecular cloning biotechnology, industries pharmaceutical biotechnology, cell nuclei-transplantation plant biotechnology, cloning protein engineering DNA.

155. To engage in and carry on anywhere in India or abroad the business of warehousing,

transporting and carriage of goods and to provide storage and protection of goods against insects, ants, rats, moisture, rain, fire and other natural or man-made calamities and to construct warehouses, storage facilities whether covered or uncovered and to undertake the custody and warehousing of merchandise, goods, and materials and to provide cold storage and other special storage facilities.

156. To carry on the business of warehousemen stores, custodians, surveyors, assessors, provisions of safe deposit vaults and auctioneers of good and articles of every description and to issue receipts, certificates and warrants to persons warehousing goods and articles with the Company.

157. To establish, purchase or otherwise acquire, run, conduct and operate a cold storage warehouse, dry storage warehouses, bonded warehouses for the preservation, storage and treatment merchandise, food products.

158. To undertake all sorts of diving services and underwater technology including: (i) Underwater construction, repair, maintenance including saturation diving, (ii) Underwater welding, including hyperbaric techniques, (iii) Non-destructive testing, inspection and monitoring, (iv) Underwater video systems and remote controlled vehicles (v) Maintenance of Pipelines and SBM's, (vi) One atmosphere systems, (vii) General design and engineering services, (viii) Underwater work on dams, railway bridges, jetties salvage and ship repair.

159. To carry on the business of investments whether by means of entering into a partnership or otherwise, and to buy, underwrite, invest in, acquire, hold and deal in properties including equity, preference, deferred and other types of shares, stocks, debentures, debenture stock, bonds, obligations and securities issued or guaranteed by any Company constituted or carrying on business in India or elsewhere and debentures, debenture-stock, bonds, obligations and securities issued or guaranteed by any Government, State, Dominions, sovereign rulers, commissioners, firms, persons, body or authority, supreme, municipal, local or otherwise either in India or elsewhere.

IV The liability of the members of the Company is limited.

V (a) The Authorised Share Capital of the Company is Rs.5,00,000 (Rupees Five Lakhs only) divided into 50,000 (Fifty Thousand) Equity Shares of Rs. 10 each.

(b) The minimum paid up capital of the Company shall be Rs. 5,00,000 (Rupees Five Lakhs only).

****

the several persons whose names, addresses and descriptions are subscribed, are desirous of being ed into a Company in pursuance of this Memorandum of Association and we respectively agree to take umber of shares in the Capital of the Company set opposite to our respective names:

Name, address, description and occupation of each Subscriber	Number of Equity Shares taken by each subscriber	Signature of Subscriber	Signature of witness and his name, address, description and occupation
Shri Anil D Ambani S/o Shri Dhirubhai Ambani 'Sea Wind', 39 Cuffe Parade, Colaba Mumbai 400 005 Occupation: Industrialist	49,930 (Forty nine thousand nine hundred and thirty)	Sd/-	Witness for 1 to 8 Shri Ashish Agarwal S/o Shri Ramesh Agawal B-301, Krishna Residency Sunder Nagar Malad (West) Mumbai 400 064 Occupation: Service
Shri Ramesh Shenoy S/o Shri Ganpati Shenoy E 115, Bussa Apartments 8 M Bhargav Marg Santa Cruz (West) Mumbai 400 054 Occupation: Service	10 (Ten)	Sd/	
Shri Hasit Shukla S/o Shri Navinchandra Shukla 222, St. Andrews Road, Pali Hill, Bandra (West) Mumbai 400 050 Occupation: Service	10 (Ten)	Sd/	
Shri Surendra Pipara S/o Shri Kanmal Pipara 1702, Raheja Classique Bldg No.1 New Link Road, Andheri (W) Mumbai - 400 053 Occupation: Service	10 (Ten)	Sd/	
Shri Himanshu Agarwal S/o Shri Govindram Agarwal B 504, 5th floor, Silver Palace, Alka Society J B Nagar, Andheri (W) Mumbai 400 059 Occupation: Service	10 (Ten)	Sd/	
Shri Ashish Karyekar S/o Shri Sudhakar Karyekar 703, BSES Quarters Chembur Receiving Station Mumbai 400 082 Occupation: Service	10 (Ten)	Sd/	
Shri Prakash Shenoy S/o Shri B Das Shenoy 306, Sai Ganesh CHS. Ltd. Devrathna Nagar Swadeshi Mill Road Sion-Chunnabatti (E) Mumbai 400 022 Occupation: Service	10 (Ten)	Sd/-	
Ms. Dipti Dhariwal D/o Shri Snehdeep Dhariwal 2/117 Ramjharukha S V Road, Andheri (W) Mumbai 400 058 Occupation: Service	10 (Ten)	Sd/-	
Total	**50,000 (Fifty thousand**		

Date : 29th June, 2005

Place : Mumbai

DS Toll Road Limited

0413

THESE ARTICLES WERE ADOPTED IN SUBSTITUTION FOR AND TO THE EXCLUSION OF THE ENTIRE EXISTING ARTICLES OF ASSOCIATION AT THE EXTRA ORDINARY GENERAL MEETING OF THE COMPANY HELD ON 8th November, 2005

THE COMPANIES ACT, 1956

COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION

OF

DS TOLL ROAD LIMITED

Provisions of Table "A" applicable

The Regulations contained in Table 'A' in the First Schedule to the Companies Act, 1956, shall apply so far as they are applicable to a Public Limited Company and so far only as they are not inconsistent with any of the provisions contained in these Regulations.

Certain clauses of Table "A" not applicable.

Clause Nos. 2, 66, 71, 84 and 99 of Table 'A' shall not apply to this Company.

Interpretation

In the interpretation of these Articles, the following words expressions shall have the following meanings, unless repugnant to the subject or context :

"The Company" or "This Company" means DS TOLL ROAD LIMITED.

"These Articles" means these Articles of Association of the Company as originally framed or as altered from time to time.

"Auditors" means and includes those persons appointed as such for the time being of the Company.

"Beneficial owner" means the beneficial owner as defined in clause (a) of sub-section (1) of Section 2 of the Depositories Act, 1996."

"The Act" or "The said Act" means the Companies Act, 1956 (Act 1 of 1956) and subsequent amendments thereto or any statutory modifications or re-enactments thereof for the time being in force.

"Capital" means the Share Capital for the time being raised or authorised to be raised, for the purposes of the Company.

" Depositories Act, 1996" includes any statutory modification or re-enactment thereof; and
"Depository" means a Depository as defined under clause (e) of sub-section (1) of Section 2 of the Depositories Act, 1996."

Words importing the masculine gender also include, where the context requires or admits, the feminine gender.

"Meeting" or "General Meeting" means a meeting of Members

"Month" means a calendar month.

"Persons" include firms and corporations as well as individuals.

Words importing the plural number also include, where the context requires or admits, the singular number, and vice versa.

"Secretary" means any individual possessing the prescribed qualifications appointed to perform the duties which may be performed by a Secretary under the Act and any other ministerial or administrative duties

"Section" or "Sections" means a section of the Act for the time being in force including any statutory modification or re-enactment thereof for the time being in force.

"These Presents" means the Articles of Association as originally framed and as

DS Toll Road Limited

altered from time to time.

"Written" and "in Writing" include printing, lithography and other mode or modes of representing or reproducing words in a visible form or partly one and partly the other.

Unless the context otherwise requires, words or expressions contained in these Articles shall bear the same meaning as in the Act or any statutory modification thereof in force at the date on which the Articles become binding on the Company.

SHARES

a. Subject to the provisions of Section 80 of the Act, the Company shall have the power to issue preference shares which are liable to be redeemed and the redemption of preference shares may be effected in accordance with the terms and conditions of their issue and failing that in such manner as the directors may think fit. ***Issue and Redemption of Preference Shares***

b. Whensoever the Company has, with the previous approval of the members, issued any securities entitling the holders thereof to apply for shares in the capital of the Company, the members of the Company shall be bound to ensure that the share capital of the Company will be adequate to absorb the increase in the capital that would arise consequent to such holders exercising their right to apply for and be allotted shares in the Company. For this purpose, the members of the Company are bound to cause the authorised capital of the Company to be suitably increased and shall exercise their voting rights to vote unanimously in favour of the resolution to be passed by the Company in general meeting for increasing its authorised capital, such resolution to be passed prior to the date on which (or the period during which) such option is exercisable by the holders of such instruments. Towards that objective, the members acknowledge that any votes cast by a member against such a resolution shall be disregarded and be deemed to be invalid. ***Issue of Convertible Instrument***

c. Subject to the provisions of section 86 of the Act the Company shall have power to issue Share Capital with differential voting rights as to dividend or voting and the resolution authorising such issue shall prescribe the manner, terms and conditions of issue." ***Issue of Shares with differential voting rights***

d. The Company shall be entitled to treat the person whose name appears on the Register of Members as the holder of any share or whose name appears as the beneficial owner of shares in the records of the Depository; as the absolute owner thereof and accordingly shall not (except as ordered by a court of competent jurisdiction or as by law required) be bound to recognize any benami trust or equity or equitable, contingent or other claim or interest in such share on the part of any other person whether or not it shall have express or implied notice thereof. ***Issue of shares in Demat form***

5. The Company shall have power to buy-back its own shares or other securities subject to the provisions of Section 77A, 77AA and 77B of the Act and the guidelines as may be laid down in this regard, from time to time. ***Buy-back of shares***

TRANSFER AND TRANSMISSION OF SECURITIES

6. The provisions of Table A in relation to transfer and transmission of shares shall, mutatis mutandis, apply to the transfer of or the transmission by operation of law of the right to all securities of the Company. ***Transfer of Securities***

DIRECTORS

7. Unless otherwise determined by the Company in the General Meeting, the number of Directors shall not be less than 3 (three) and not more than such number as may be stipulated by the Act for the time being in force. ***Number of directors***

8. a. If it is provided by any trust deed or other document securing or otherwise in connection with any issue of debentures or other borrowings of the Company that any person(s) shall have power to nominate Director(s) of the Company then in case of any and every such issue of debentures or borrowings as the case may be the person(s) having such power may exercise such power from time to time and appoint Director(s) accordingly. Such Director(s) may be removed from office at any time by the person(s) in whom for the time being is the power vested under which he was appointed. ***Nominee Directors***

b. The Company shall, subject to the provisions of the Act, be entitled to agree with any person, firm, body corporate, corporation, government or authority that he or it shall have the right to appoint his or its nominee(s) on the Board of Directors of the Company upon such terms and conditions as the Directors may deem fit. Such nominee(s) and their successors if appointed under this Article shall be called Special Director(s). Special Director(s) shall be entitled to hold office until requested to retire by the authority, which nominated him/them and he/they will not be bound to retire by rotation. As and whenever a Special Director(s) vacate(s) office, whether upon request as aforesaid or by death, resignation or otherwise, the person, firm, body corporate, corporation, government or authority who appointed such Special Director(s) may if the agreement(s) so provides, appoint another Director in his/their place. ***Special Director***

c. The Board of Directors of the Company may appoint an alternate director to act for a director (hereinafter in this Article called "the original director") during his absence for a period of not less than three months from the state in which the meetings of the Board are ordinarily held. An alternate director appointed under this Article shall not hold office as such for a period longer than that permissible to the original director in whose place he has been appointed and shall vacate office if and when the original director returns to the state in which the meetings of the Board are ordinarily held. ***Alternate Director***

9. The Directors shall not be required to hold any qualification share(s). ***Share qualification.***

10. Subject to provisions of the Act and these Articles, the Board shall have power to appoint from time to time any of its members as Managing Director(s) and / or Whole time Director(s) and / or Special Director(s) like Technical Director(s), Finance Director(s) etc. of the Company for fixed term not exceeding five years at a time and upon such terms and conditions as Board think fit, and the board may by resolution vest in Managing Director(s), Whole time Director(s) Special Director(s), Technical Director(s), Finance Director(s) such of the power hereby vested in the Board generally as it thinks fit, and such power may be made exercisable for such period(s) and upon such condition(s) and subject to such restriction(s) as it may determine. The remuneration of such Director(s) may be by way of monthly remuneration and / or fee for each meeting and / or participation in profit or by any or all of those modes, or of any other mode not expressly provided by the Act. ***Managing Director***

SEAL

11. The Directors shall provide a Common Seal for the purpose of the Company and shall have power from time to time to destroy the same and substitute a new Seal in lieu thereof and the Directors shall provide for the safe custody of the Seal for the time being and the Seal shall never be used except by or under the authority of the Directors or a Committee of Directors previously given and every deed or other instrument to which the Seal of the Company is required to be affixed shall, be affixed in the presence of atleast one Director or the Manager or the Secretary or such other person as the Board/Committee of the Board may appoint for the purpose, who shall sign every instrument to which the Seal is so affixed in his presence; Provided that the certificates of shares or debentures shall be sealed in the manner and in conformity with the provisions of the Companies (Issue of Share Certificates) Rules, 1960 or any statutory modification thereof for the time being in force. ***Seal***

MEETINGS

A consent or approval in writing granted or a resolution in writing agreed to by or on behalf of all the Members of the Company who would be entitled to vote upon it, if it had been proposed to General Meeting of the Members shall be as effectual as if it had been passed at a General Meeting duly convened and held and may consist of several instruments in the like form each executed by or on behalf of one or more members. ***Proceedings at general meetings.***

The Board may, if the circumstances so require, meet by means of telephone, television or through any other audio-visual links. The provisions relating to notice, agenda, quorum and minutes stated herein, shall *mutatis mutandis* apply to the meetings held through such audio-visual media. ***Proceedings of the Board***

INDEMNITY

a. Every Director, Managing Director, Whole-time Director, Manager, Secretary or Officer of the Company or any person (whether an officer of the Company or not) employed by the Company and any person appointed by the Company as Auditors shall be indemnified out of the assets of the Company against all liabilities incurred by him as such Director, Managing Director, Whole-time director, Manger, Secretary, Officer or Auditor in defending any proceedings, whether civil or criminal, in which judgement is given in his favour or in which he is acquitted or in connection with any application under Section 633 of the Act in which relief is granted to him by the Court. ***Indemnity***

b. Subject to the provisions of the Companies Act, no Director, Auditor or other officer of the Company shall be liable for the Acts, receipts, neglects or defaults of any other Director or Officer or for joining in any receipt or other act for conformity or for any loss or expense happening to the Company through the insufficiency or deficiency of title to any property acquired by order of the Directors or on behalf of the Company or for the insufficiency or deficiency of any security in or upon which any of the moneys of the Company shall be invested or for any loss or damage arising from the bankruptcy, insolvency or tortious act of any person, firm or company to or with whom any moneys, securities, or effects shall be entrusted or deposited or for any loss occasioned by any error of judgement, omission, default or oversight on his part or for any other loss, damage or misfortune whatsoever, which shall happen in the execution of the duties of his Office or in relation thereto unless the same shall happen through his own dishonesty. ***Individual responsibility of Directors***

SECRECY

a. No member or other person (not being a director) shall be entitled to visit or inspect any works of the Company without the permission of the Directors or any other person authorised on that behalf by the Director to require discovery of or any information respecting any details of the Company's trading or any matter which is or may be in the nature of a trade secret, mystery of trade secret process or of any other matter which may relate to the conduct of the business of the Company which in the opinion of Directors, would be inexpedient in the interest of the Company to disclose. ***Secrecy***

b. Every Director, Manager, Auditor, Treasurer, Trustee, Member of Committee, Officer, Servant Agent, Accountant or other persons employed in the business of the Company shall if so required by the Directors, before entering upon his duties sign a declaration pledging himself to observe a strict secrecy respecting all transactions and affairs of the Company, with the customers and the state of accounts with individuals and in matters relating thereto and shall by such declaration pledge himself not to reveal any of the matters which may come to his knowledge in the discharge of his duties except when required to do so by the Board or by law or by the person to whom such matters relate, except so far as may be necessary in order to comply with any provisions of these presents contained.

GENERAL AUTHORITY

General Authority

Wherever in the Companies Act, 1956, it has been provided that any Company shall have any right, privilege or authority or that any Company cannot carry out any transaction unless it is so authorised by its Articles, then and in that case this Article hereby authorises and empowers this Company to have such right, privilege or authority and to carry out such transaction as have been permitted by the Companies Act, 1956, without there being any other specific Article in that behalf herein provided.

****

0416

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(पोत परिवहन, सड़क परिवहन और राजमार्ग मंत्रालय)
National Highways Authority of India
(Ministry of Shipping, Road Transport & Highways)
G-5 & 6, Sector-10, Dwarka, New Delhi-110075

Phone : 91-11-25074100/250742
Fax : 91-11-25093507/250935
Extn. : 2223/2318/2468/25

W/Tech/NSEW/NS-2/BOT/TN-5/2005 24th November, 2005

Reliance Energy Ltd.
Reliance Energy Centre,
Santa Cruz East, Mumbai-55
Fax: 022-30099775
[Kind Attention: Sh. J.P. Chalasani, Director (Business Development)]

Award of Concession for Design, Construction, Development, Finance, Operation and Maintenance of Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu called the "Project" in the State of Tamil Nadu on Build Operate & Transfer (BOT) basis: **Project Reference No. NS2/BOT/TN-5**

1. Memorandum & Articles of Association of DS Toll Road Limited.
2. Fresh Certificate of Incorporation consequent on change of Name of Kangaroo Corporate Services Limited to DS Toll Road Limited dated 09.11.2005
3. Certificate of Registration of Special Resolution passed for Alteration of Objects of Kangaroo Corporate Services Limited dated 09.11.2005
4. Fresh Certificate of Incorporation consequent on change of Name of Reliance Fuel Management of Kangaroo Corporate Services Limited
5. Certificate of Registration of Special Resolution passed for Alteration of objects Reliance Fuel Management Limited dated 25.07.2005
6. Certificate of Incorporation of Reliance Fuel Management Limited dated 29.06.2005
7. Certificate of Commencement of business of Reliance Fuel Management Limited dated 30.06.2005

With reference to the above mentioned subject, it is requested to furnish the following

Present shareholding pattern of the SPV
Certified copy of Members Register of the SPV
Certified copies of the Board resolutions of the Shareholders (if companies) for investment in the SPV.
If any of the shareholders are group companies and the inter-se shareholding to determine if any one of them is an Associate as per the definition in the Concession Agreement.

Contd..2

DS Toll Road Limited

0418

We, the several persons whose names, addresses and descriptions are subscribed, are desirous of being formed into a company in pursuance of this Articles of Association

Sr. No.	Names, address, description and occupation of each subscriber	Signature of Subscriber	Signature of witness and his name, address, description and occupation
1	Shri Anil D Ambani S/o Shri Dhirubhai Ambani'Sea Wind', 39 Cuffe Parade, Colaba Mumbai 400 005 Occupation: Industrialist	Sd/	Witness for 1 to 8 Shri Ashish Agarwal S/o Shri Ramesh Agawal B-301, Krishna Residency Sunder Nagar Malad (West) Mumbai 400 064 Occupation: Service
2	Shri Ramesh Shenoy S/o Shri Ganpati Shenoy E 115, Bussa Apartments B.M Bhargav Marg Santa Cruz (West) Mumbai 400 054 Occupation: Service	Sd/	
3	Shri Hasit Shukla S/o Shri Navinchandra Shukla 222, St. Andrews Road, Pali Hill, Bandra (West) Mumbai 400 050 Occupation: Service	Sd/	
4	Shri Surendra Pipara S/o Shri Kanmal Pipara 1703, Raheja Classique Bldg No.1 New Link Road, Andheri (W) Mumbai - 400 053 Occupation: Service	Sd/	
5	Shri Himanshu Agarwal S/o Shri Govindram Agarwal B 504, 5th floor, Silver Palace, Alka Society J.B Nagar, Andheri (W) Mumbai 400 059 Occupation: Service	Sd/	
6	Shri Ashish Karyekar S/o Shri Sudhakar Karyekar 703, BSES Quarters Chembur Receiving Station Mumbai 400 082 Occupation: Service	Sd/	
7	Shri Prakash Shenoy S/o Shri B. Das Shenoy 306, Sai Ganesh CHS. Ltd. Devashna Nagar Swadeshi Mill Road Sion-Chunnabatti (E) Mumbai 400 022 Occupation: Service	Sd/-	
8	Ms. Dipti Dhariwal D/o Shri Snehdeep Dhariwal 2/117 Ramjharukha S V Road, Andheri (W) Mumbai 400 058 Occupation: Service	Sd/-	
	Total		

Date : 29th June, 2005
Place : Mumbai

0417

It is also requested to submit declarations from the SPV that it has no pending ory or employee dues, all statutory dues have been paid within the prescribed time is, there are no threatened or pending litigation, no asset of the SPV is mortgaged or ed to any person including a bank or financial institution, the SPV has not given any ntees or sureties to any other company or person including a bank or financial ion. In addition to the above, it is requested to submit personal guarantees from the nt directors and shareholders (sole applicant and associates within the meaning of e 1.5.2 of the RFP) to discharge any such liability of the SPV. It is further requested to out a search at the Registrar of Companies to determine the status of the SPV and the same to this office. Necessary compliance in the matter is requested on or before 2005 so as to examine the aspect of equity support and its adequacy in terms of the Concession Agreement.

Yours faithfully

Pranavant

(Pranavant)
General Manager (NS-2)

Reliance Energy
A Dhirubhai Ambani Enterprise

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: +91 (022) 3009 9999
Fax: +91 (022) 3009 9775
www.rel.co.in

November 29, 2005

The General Manager (NS-2),
National Highways Authority of India
G-5 & 8, Sector 10, Dwarka
New Delhi-110 075

For comments pl.
M/s PwC
29/11/05

Sub: **Award of Concession for Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul bypass) to km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu called the "Project" in the state of Tamil Nadu on Build Operate & Transfer (BOT) basis: Project Reference No. NS2/BOT/TN5**

Ref: Your letter No.NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 dated 24th November,2005

Dear Sir:

With reference to your above cited letter on the captioned subject, we are pleased to furnish the following:

1. Present shareholding pattern of DS Toll Road Limited;
2. Certified copy of Register of Members of DS Toll Road Limited;
3. Certified copy of the Board resolution of corporate shareholders of DS Toll Road Limited;
4. We hereby undertake and confirm that 51% of the shareholding of DS Toll Road Limited is being held by Reliance Energy Limited (REL) and Reliance Last Mile Communication Pvt. Ltd. (RLMCPL) in proportion of 19% and 32% respectively, as per the requirement of the Concession Agreement. RCMCPL is an "Associate" of REL, being its shares held by REL and a Trust, constituted for the sole benefit of REL;
5. Declaration of DS Toll Road Limited that it has no pending Statutory dues, Litigations, Mortgage/Charge on company's assets & that it has not given Guarantees /Sureties;
6. Since there is no outstanding statutory liability of DS Toll Road Limited, there is no need to furnish personal guarantees from the present directors and shareholders; and
7. Search Report from M/S Chandanbala Jain & Associates, Practicing Company Secretaries carried out at the office of the Registrar of Companies, Maharashtra.

We hope the above information will meet your requirements. We will now await for your confirmation for signing of the Concession Agreement.

Document No 7 will be submitted shortly
29/11

Thanking you,

Yours faithfully,

J.P. Chalasani
Director (Business Development)

Reliance Energy Limited

Shareholding Details

DS Toll Road Limited

Sr. No.	Name of the Member	No. of Shares	% of Paid up equity
1	Reliance Energy Limited	9500	19.00
2	Reliance Last Mile Communication Private Limited *	16000	32.00
3	Reliance Energy Management Services Private Limited	6800	13.61
4	Reliance Energy Global Private Limited	8300	16.6
5	Powersurfer Interactive (India) Private Limited	9330	18.66
6	Ramesh Shenoy	10	0.02
7	Hasit Shukla	10	0.02
8	Surendra Pipara	10	0.02
9	Himanshu Agarwal	10	0.02
10	Ashish S Karyekar	10	0.02
11	Prakash Shenoy	10	0.02
12	Dipti Dhariwal	10	0.02
	Total	50000	100.00

Reliance Last Mile Communication Pvt.Ltd. is an Associate of REL with its shares held by REL and a Trust constituted for the sole benefit of REL.

DS Toll Road Limited

Director

0421

Occupation Industrialist Father's / Husband's Name Late Shri Bhimchandra Ankam

No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Description of payment or No. of Call	Amount per Share	Total Amount
1	29.6.05	49930	1	49930	01					10	499300

Name Shri Ramesh Shenoy

Address E/115, Bueen Apartments, B M Bhargava Marg Santa Cruz (W), Mumbai 54

Occupation Service Father's / Husband's Name Shri Ganapati Shenoy

2	29.6.05	10	49931	49940	02					10	100

Status Individual

Date at which ceased to be a Member

Date when due	Date of payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares held	REMARKS
			499300	9	25.08.05	16300	01	16300	9	163000	499300	
				10	25.08.05	16300	16301	32600	10	163000		
				11	25.08.05	173300	32601	49930	11	173300	Nil	

Folio No. 2

Name of Joint Holders : None

Date at which entered as a Member 29.06.2005

Status Individual

Date at which ceased to be a Member

			100								10

0422

Occupation Service Father's / Husband's Name [illegible]

Dr. SHARES ACQUIRED								Dr. CASH PAYABLE			
No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of Certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Description of payment or No. of Call	Amount per Share	Total Amount
3	29.6.05	10	49941	49950	03					10	100

Status Individual Date of which ceased to be a Member

CASH PAID ON SHARES				Cr. SHARES TRANSFERRED (or FORFEITED)								Cr.	
Date when due	Date of payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares held	REMARKS
											10	

Folio No. 4

Name Shri Surendra Pipara Member - 53

Address 1702, Rahejja Classique, Bldg No. 1, New Link Rd, Andheri (West)

Occupation Service Father's / Husband's Name Shri Kanmal Pipara

Name of Joint Holders : None

Date at which entered as a Member 29.06.2005

Status Individual Date at which ceased to be a Member

4	29.6.05	10	49951	49960	04								10	100

0423

Address [illegible]

Occupation Service Father's / Husband's Name Shri [illegible]

Status Individual Date at which ceased to be a Member

Dr. SHARES ACQUIRED								Dr. CALL PAYABLE			
No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Description of payment or No. of Call	Amount per Share	
5	29.6.05	10	49961	49970	05					10	100

CASH PAID ON SHARE				SHARES TRANSFERRED (or FORFEITED)								
Date when due	Date of payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares held	REMARKS
											10	

Folio No. 6

Name of Joint Holders : None

Date at which entered as a Member 29.06.2005

Name Shri Ashish Kanyekar

Address 702, BSES Quarters, Chembur Receiving Stn, Mumbai 400 088

Occupation Service Father's / Husband's Name Shri Sudhakar Kanyekar

Status Individual Date at which ceased to be a Member

6	29.6.05	10	49971	49980	06					10	100	

											10	

D.S. Toll Roads Limited

0424

Occupation Service Father's / Husband's Name Shri Sneh Deep Dhariwal

Date at which ceased to be a Member

Dr. SHARES ACQUIRED									Cr. CASH PAYABLE		
No. of Allotment or Transfer	Date of Allotment or Transfer	No of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Ledger Folio	Nominal Value of Shares acquired	Date when called	Description of payment for No. of Call	Amount per Share	Total Amount
7	29.6.05	10	49981	49990	07					10	100

CASH PAID ON SHARES				SHARES TRANSFERRED or FORFEITED							Cr.	
Date when due	Date of payment	Cash Book Folio	Amount	No of Transfer	Date of Transfer or Forfeiture	No of Shares Transferred or forfeited	Distinctive Number (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares held	PERMIT
											10	

Folio No. 8

Name Ms. Dipti Dhariwal

Address 2/117, Ramjhanutha S.V. Road, Andheri (W) Mumbai - 400058

Occupation Service Father's / Husband's Name Shri Snehdeep Dhariwal

Name of Joint Holders : None

Date at which entered as a Member 29.06.2005

Status Individual Date at which ceased to be a Member

8	29.6.05	10	49991	50000	08									10	100
														10	

0425

Occupation ... Father's / Husband's Name ...

Status Private Company — Date at which ceased to be a Member

Dr. SHARES ACQUIRED								Dr. CASH PAYABLE				CASH PAID ON SHARE				Cr. SHARES TRANSFERRED (or FORFEITED)									
No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Description of payment on No. of Call	Amount per Share	Total Amount	Date when due	Date of payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares transferred or forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares transferred or forfeited	Balance Shares held	REMARKS
9	25.08.05	16300	01	16300	09	1				10	1,63,300					12	13.10.05	1500	01	1500	12	95000	6800	

10

Folio No. ...

Name Reliance Energy Global Private Limited

Address 3rd floor, Reliance Energy Centre, Santacruz (E), Mumbai-400 055

Occupation Business Father's / Husband's Name N.A.

Name of Joint Holders : None

Date at which entered as a Member 25.08.2005

Status Private Company Date at which ceased to be a Member

10	25.08.05	16300	16301	32600	10	1				10	1,63,300					13	13.10.05	800	16301	17100	13	80000	8300	

DS Toll Road Limited

0426

Occupation ... Father's / Husband's Name N.A.

No. of Allotment or Transfer	Date of Allotment or Transfer	Total Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Description of payment of No. of Calls	Amount P.S. Share	Total Amount
11	25.08.05	17330	32601	49930	11	1				10	173300

Date at which ceased to be a Member

Status Private Company

Date when due	Date of payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares held	REMARKS
				14	13.10.05	8000	42601	40600	13	80000	9930	

Name Reliance Energy Limited

Address Reliance Energy Centre, Santa Cruz East Mumbai - 55

Occupation Business Father's / Husband's Name N.A.

Folio No. 12

Name of Joint Holders : None

Date at which entered as a Member 13.10.2005

Status Private company Date at which ceased to be a Member

12	13.10.05	2500	14	9500	12	9				10	95000

DS Toll Free Limited

0427

Occupation [illegible] Father's / Husband's Name [illegible]

Dr. No. of Allotment or Transfer	Date of Allotment or Transfer	SHARES ACQUIRED: No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Cr. Date when called	CASH PAYABLE: Description of payment or No. of Call	Amount per Share	Total Amount
13	13.10.05	8000	16301	24300	13	10				10	80000
14	13.10.05	8000	32601	40600	14	11				10	80000

Name

Address

Occupation Father's / Husband's Name

Status [illegible] Date at which ceased to be a Member

CASH PAID ON SHARE: Date when due	Date of payment	Cash Book Folio	Amount	SHARES TRANSFERRED (or FORFEITED): No. of Transfer	Date of Transfer or Forfeiture	No. of Shares (Transferred/ forfeited)	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares transferred or forfeited	Balance Shares held	REMARKS

Folio No. 14

Name of Joint Holders :

Date at which entered as a Member

Status

Date at which ceased to be a Member

CERTIFIED TRUE COPY

For DS Toll Road Limited

Authorised Signatory

DS Toll Road Limited

0428

Reliance Energy
A Dhirubhai Ambani Enterprise

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: +91 (022) 3009 9999
Fax: +91 (022) 3009 9775
www.rel.co.in

Extracts from the Minutes of the Board Meeting held on 19th October, 2005

Implementation of Tn1 and TN 3 projects on BOT basis for National Highway of India (NHAI):

RESOLUTION NO. VIII

"RESOLVED THAT the Board do hereby ratify the submission of bids by the Company to National Highway Authority of India (NHAI) for participating in the Competitive Bidding Process of NHAI for undertaking construction of roads and management of the same on Built-own-transfer (BOT) comprising two projects viz. (i) Namakkal Bypass-Karur Bypass and (ii) Dindigul-Samayanallur in Tamil Nadu.

RESOLVED FURTHER THAT the Letter of Acceptance dated 30th September, 2005 received from NHAI awarding the above two projects to the Company be and is herby accepted.

RESOLVED FURTHER THAT the Company do implement the above two projects through separate special-purpose Companies to be formed for the project.

RESOLVED FURTHER THAT pursuant to the applicable provisions of the Companies Act, 1956, the Company do invest by way of subscription, purchase or otherwise of securities in the proposed special purpose companies to be formed for the Project as also make any loans to any of the said companies or give any guarantee or provide security in connection with a loan made by any other person to or to any other person to the said companies in one or more tranches and such investments, loans or guarantees shall not exceed aggregate of Rs. 165 crore, representing 51% of the equity share capital of each of the Special Purpose Company.

RESOLVED FURTHER that any of Shri Satish Seth, Executive Vice Chairman, Shri S C Gupta and Shri J P Chalasani Directors of the Company, Shri Madhukar, Shri Ramesh Shenoy and Shri Himanshu Agarwal the executives of the Company be and are hereby severally authorised to agree, settle/execute any deed, documents, agreements, applications etc. in relation to the aforesaid projects as also to negotiate, agree and

Reliance Energy
A Dhirubhai Ambani Enterprise

finalise terms and conditions of investment including instrument, tenor, etc and to make / file / submit necessary application, form, deed and document as also to liquidate the said instruments and to do all acts, deeds, things and matters necessary and incidental in this regard and that the Common Seal by the Company, if required on any deed, application, paper, documents, etc., be affixed in presence of any of the above Directors and the executives of the Company."

RESOLVED FURTHER THAT the Company to submit necessary Performance Security to the appropriate authorities as and when required.

/// Certified True Copy \\\

For Reliance Energy Limited

Ramesh Shenoy
Company Secretary

DS Toll Road Limited

RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED AT THE MEETING OF THE BOARD OF DIRECTOR OF RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED HELD ON 24TH OCTOBER,2005.

INVESTMENTS – LONG TERM

"RESOLVED THAT the Company do acquire 32,000 Equity Shares of Rs. 10 each of the following companies at a total consideration of Rs. 3,20,000/-.

Sr. No	Name of the Company	No of Shares	Nominal Value (Rs)
1	NK Toll Road Limited	16,000	Rs. 1,60,000
2	DS Toll Road Limited	16,000	Rs. 1,60,000
	Total	**32,000**	**Rs. 3,20,000/-**

RESOLVED FURTHER THAT Shri Hasit Shukla and Shri Surendra Pipara, the Directors of the Company, be and are hereby severally authorised to sign the relevant documents and do all such acts, matters, things and deeds as may be necessary incidental or consequential to give effect to this resolution".

Certified to be true
For RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

Director

Date: 26-11-05
Place: Mumbai

DS Toll Road

0431

Powersurfer Interactive (India) Private Limited

Registered Office : 3rd Floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022 3009 9374 Facsimile : 022 3009 9763

Extracts from the minutes of the Board Meeting of the Company held on Wednesday, 17th August , 2005

Subscription to the Memorandum of Association:

RESOLUTION NO. VIII

"RESOLVED THAT the Company do subscribe to the Memorandum of Association and Articles of Association of following new Companies proposed to be incorporated within the jurisdiction of Registrar of Companies, Maharashtra.

Sr. No	Name of the Company	No of Shares
1	Jaguar Corporate Services Limited	17,330
2	Elephant Consultants Limited	17,330
3	Kangaroo Corporate Services Limited	17,330
4	Deer Corporate Services Limited	17,330

RESOLVED FURTHER THAT any of the Directors of the Company and Shri Himanshu Agarwal be and are hereby severally authorised to sign as a subscriber on behalf of the company, to the Memorandum of Association and Articles of Association of the above mentioned Companies and are further authorised to issue and sign a Power of Attorney in favour of Shri Ashish Karyekar, Ms. Dipti Dhariwal or Shri Bimal Pathak for making corrections, alterations, modifications in documents submitted to the office of Registrar of Companies, Maharashtra for incorporation of above mentioned companies and to collect the certificate of incorporation thereof."

\\ Certified True Copy //

For Powersurfer Interactive (India) Private Limited

Bharat Amberkar
Director

DS Toll Road Limited

Reliance Energy Management Services Private Limited

Registered Office : 3rd Floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022 3009 9374 Facsimile : 022 3009 9763

Extracts from the minutes of the Board Meeting of the Company held on Friday, 7th June , 2005

Acquisition of Equity Shares:

RESOLUTION NO. VIII

"RESOLVED THAT the Company do acquire 65,200 Equity Shares of Rs. 10 each of the following companies at a total consideration of Rs. 6,52,000.

Sr. No	Name of the Company	No of Shares	Nominal Value (Rs)
1	Jaguar Corporate Services Limited	16,300	Rs. 1,63,000
2	Elephant Consultants Limited	16,300	Rs. 1,63,000
[illegible]	Ka[illegible] Corporate Services Limited	16,300	Rs. 1,63,000
4	Deer Corporate Services Limited	16,300	Rs. 1,63,000
	Total	65,200	**Rs. 6,52,000**

[illegible]R HER THAT Shri Lalit Jalan and Shri Mahesh Chand be and are hereby [illegible]sed to sign the relevant documents and do all such acts, matters, things and [illegible] incidental or consequential to give effect to this resolution as well as [illegible]ste[illegible] [illegible]se dispose off any or all of the aforesaid shares and receive [illegible]nsideration thereof at any time and from time to time in the best interest of the Company."

\\ Certified True Copy //

[illegible] Reliance Energy Management Services Private Limited

[illegible]
[illegible]esh Chand
[illegible]ector

Reliance Energy Global Private Limited

Registered Office : 3rd Floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022-3009 9374 Facsimile : 022 3009 9763

Extracts from the minutes of the Board Meeting of the Company held on Friday, 1st August , 2005

Acquisition of Equity Shares:

RESOLUTION NO. VIII

"RESOLVED THAT the Company do acquire 65,200 Equity Shares of Rs. 10 each of the following companies at a total consideration of Rs. 6,52,000.

Sr. No	Name of the Company	No of Shares	Nominal Value (Rs)
1	Jaguar Corporate Services Limited	16,300	Rs. 1,63,000
2	Elephant Consultants Limited	16,300	Rs. 1,63,000
3	Kangaroo Corporate Services Limited	16,300	Rs. 1,63,000
4	Deer Corporate Services Limited	16,300	Rs. 1,63,000
	Total	**65,200**	**Rs. 6,52,000**

RESOLVED FURTHER THAT Shri Lalit Jalan and Shri Mahesh Chand be and are hereby severally authorised to sign the relevant documents and do all such acts, matters, things and deeds as may be necessary incidental or consequential to give effect to this resolution as well as to transfer, sell or otherwise dispose off any or all of the aforesaid shares and receive consideration thereof at any time and from time to time in the best interest of the Company."

\\ Certified True Copy //

For Reliance Energy Global Private Limited

Mahesh Chand
Director

DS Tell Road

DS Toll Road Limited

Registered Office :3rd floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022 3009 9999 Facsimile : 022 3009 9763

26th November, 2005

To
The National Highways Authority of India
Ministry of Shipping, Road Transport & Highways
G-5 & 6, Sector-10,
Dwarka,
New Delhi

Sir,

We hereby declare that :

1. The Company has no pending statutory or employee dues.
2. All statutory dues have been paid within the prescribed time periods.
3. There are no threatened or pending litigation.
4. The Company has not mortgaged or charged to any person including a bank or financial institution, any of its asset.
5. No guarantee or surety to any other company or person including a Bank or financial institution has been given by the Company.

For DS Toll Road Limited

Director

DS Toll Road Limited

Reliance Energy
A Dhirubhai Ambani Enterprise

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: +91 (022) 3009 9999
Fax: +91 (022) 2616 0437
www.rel.co.in

December 7, 2005

The General Manager (NS-2),
National Highways Authority of India
G-5 & 8, Sector 10, Dwarka
New Delhi-110 075

for comments pl.
Already forwarded thro' mail
M/s PwC
Sreenivasan
7/12

Sub: **Award of Concession for Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul bypass) to km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu called the "Project" in the state of Tamil Nadu on Build Operate & Transfer (BOT) basis: Project Reference No. NS2/BOT/TN5**

Ref: Your letter No.NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 dated 24th November,2005

Dear Sir:

With reference to your above cited letter we have already submitted relevant documents except the Search Report from M/S Chandanbala Jain & Associates, Practicing Company Secretaries carried out at the office of the Registrar of Companies, Maharashtra vide our letter dated Nov 29, 2005.

The Search report has been obtained and is enclosed herewith.

We hope the above information will meet your requirements. We will now wait for your confirmation for signing of the Concession Agreement.

Thanking You,
Yours faithfully,

(Authorized Signatory)

Encl: Search Report for D S Tall Road Ltd.

0436

DS TOLL ROAD LIMITED
Regn No. 11-154360

DATE OF INCORPORATION: 29.6.2005
SEARCH REPORT AS ON 30.11.2005

SR. NO.	DOCUMENT	DOCUMENT DATE	FILING DATE	REGD. DATE	DOCUMENT NO.	PARTICULARS
1	2	3	4	5	6	7
1.	Memorandum & Articles of Association	28.6.2005	28.6.2005	29.6.2005	1& 2	Authorised Capital: Rs.5,00,000/- divided into 50,000 Equity Shares of Rs.10/- each

Details of Subscribers :

Sr. No.	Name of Subscribers	Address	Number of Equity Shares
1	Shri Anil Ambani S/o Shri Dhirubhai Ambani	'C' Wing, 39, Cuffe Parade Colaba, Mumbai 400 005	49930
2	Shri Ramesh Shenoy S/o Shri Ganpati Shenoy	E-115, Bussa Apartments B.M. Bhargava Marg Santa Cruz (West) Mumbai 400 054	10
3	Shri Hasit Shukla S/o Shri Navinchandra Shukla	222, St. Andrews Road Pali Hill, Bandra (West) Mumbai 400 050	10
4	Shri Surendra Pipara S/o Shri Kanmal Pipara	1702, Raheza Classique Bldg.No.1, New Link Road Andheri (West) Mumbai 400 053	10
5	Shri Himanshu Agarwal S/o Shri Govindram Agarwal	B-504, 5th Floor Silver Palace, Alka Society J.B. Nagar, Andheri (West) Mumbai 400 059	10

DS Toll Road Ltd.

Chandabhai Jain & Associates MUMBAI ACS No 17400 CP No 6409 Company Secretaries

SR. NO.	DOCUMENT	DOCUMENT DATE	FILING DATE	REGD. DATE	DOCUMENT NO.	PARTICULARS
1	2	3	4	5	6	7

Sr. No.	Name of Directors	Address	Date of Appointment
6	Shri Ashish Karyekar S/o Shri Sudhakar Karyekar	703, BSES Qtrs. Chembur Receiving Station Mumbai 400 082	10
7	Shri Prakash Shenoy S/o Shri B. Das Shenoy	306, Sai Ganesh CHSL. Devrathna Nagar Swadeshi Mill Road Sion – Chunnabhatti (East) Mumbai 400 022	10
8	Ms. Dipti Dhariwal D/o Shri Snehdeep Dhariwal	2/117, Ramjharukha S.V. Road, Andheri (West) Mumbai 400 058	10

SR. NO.	DOCUMENT	DOCUMENT DATE	FILING DATE	REGD. DATE	DOCUMENT NO.	PARTICULARS
2.	Form 1	28.6.2005	28.6.2005	29.6.2005	3	Declaration by Shri Ramesh Shenoy
3.	Form 32	28.6.2005	28.6.2005	29.6.2005	4	Details of Directors :

Sr. No.	Name of Directors	Address	Date of Appointment
1	Shri Ramesh Shenoy S/o Shri Ganpati Shenoy	E-115, Bussa Apartments B.M. Bhargava Marg Santa Cruz (West) Mumbai 400 054	Since Incorporation
2	Shri Hasit Shukla S/o Shri Navinchandra Shukla	222, St. Andrews Road Pali Hill, Bandra (West) Mumbai 400 050	Since Incorporation
3	Shri Surendra Pipara S/o Shri Kanmal Pipara	1702, Raheza Classique Bldg.No.1, New Link Road Andheri (West) Mumbai 400 053	Since Incorporation

0638

Toll Road Limited

Chandrapreeta Jain & Associates MUMBAI ACS No 17400 CP No 6445 Company Secretaries

SR. NO.	DOCUMENT	DOCUMENT DATE	FILING DATE	RECD. DATE	DOCUMENT NO.	PARTICULARS
1	2	3	4	5	6	7
4.	Form18	28.6.2005	28.6.2005	29.6.2005	5	Registered Office : 3rd Floor, Reliance Energy Centre Santa Cruz (East) Mumbai 400 055 With effect from Incorporation.
5.	Form 29	28.6.2005	28.6.2005	29.6.2005	6, 7 & 8	Consent to act as Director by Shri Ramesh Shenoy S/o Shri Ganpati Shenoy, Shri Hasit Shukla S/o Shri Navinchandra Shukla and Shri Surendra Pipara S/o Shri Kanmal Pipara
6.	Statement in lieu of Prospectus	29.6.2005	29.6.2005	30.6.2005	9	Statement in lieu of Prospectus filed for Commencement of Business
7.	Form 20	29.6.2005	29.6.2005	30.6.2005	10	Declaration by Director for completion of all the formalities for Commencement of Business
8.	Form 23	21.7.2005	22.7.2005	25.7.2005	11	Change of name of the Company from 'Reliance Fuel Management Limited' to 'Kangaroo Corporate Services Limited' and Change of Objects Clause of the Memorandum of Association of the company by passing Ordinary / Special Resolution in its EGM held on 21.7.2005.
9.	Form 23	8.11.2005	8.11.2005	9.11.2005	12	Change of name of the Company from 'Kangaroo Corporate Services Limited' to 'DS Toll Road Limited' and Change of Objects Clause of the Memorandum of Association of the company by passing Ordinary / Special Resolution in its EGM held on 8.11.2005.

For Chandanbala Jain & Associates
Practicing Company Secretaries

Chandanbala Jain & Associates MUMBAI ACS No 17400 CP No. 6400 Company Secretaries

Chandanbala Jain
Proprietor

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(पोत परिवहन, सड़क परिवहन और राजमार्ग मंत्रालय)
National Highways Authority of India
(Ministry of Shipping, Road Transport & Highways)
G-5 & 6, Sector-10, Dwarka, New Delhi-110075.

Phone : 91-11-25074100/25074200
Fax : 91-11-25093507/25093514
Extn. : 2223/2318/2468/2553

NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 14th December, 2005

To

Reliance Energy Ltd.
Reliance Energy Centre,
Santa Cruz East, Mumbai-55
Fax: 022-30099775
[Kind Attention: Sh. J.P. Chalasani, Director (Business Development)]

Sub: Award of Concession for Design, Construction, Development, Finance, Operation and Maintenance of Km 373.275 (Start of proposed flyover at Dindigul bypass) to Km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu called the "Project" in the State of Tamil Nadu on Build Operate & Transfer (BOT) basis: **Project Reference No. NS2/BOT/TN-5**

Sir,

Further to this office letter of even No. dated 24.11.2005 and clarifications/documents furnished by you vide your letter dated 29.11.2005, our comments are as under:

(i) **Shareholding :**

There is no specific resolution for the investment by REL of 9500 shares in the SPV. It is also noted that although the expression used in the certified copy of Board resolution dated 19.10.2005 is "Special Purpose companies to be formed for the Project", in fact REL has invested in an already existing company whose name has been changed to DS Toll Road Limited. It is further noted from the ROC search report that the Promoters shareholding is as per the Memorandum of Association already available with us. The last entry in the search report relates to the change in name of the company from "Kangaroo Corporate Services Ltd" to "DS Toll Road Limited" and the change in the Object clause passed at the Company's EGM held on November 8, 2005. However the search report does not reflect the shareholding of REL and RLMCPL in the SPV, which shareholding is effective from October 13, 2005 as per the extract of the Register of Members.

(ii) **Register of Members:**

It is seen from the copy of the Register of the Members that 49930 shares held by Mr. Anil D Ambani in the SPV have been transferred on 25.08.2005 to three different transferees, and none of these transferees have been declared to be Associates. The Register of Members also refers to transfer of shares to REL on 13.10.2005. It is required to furnish certified copies of the Board Resolution of the SPV recording the said transfer of shares.

Received
14/12/05
0440

DS Toll Road Limited

(iii) **Compliance with clause 1.5.2 of RFP:**

It is required to submit evidence showing shareholding of REL in RLMCPL as also certified copies of the Board resolution of REL for investment in RLMCPL, latest audited Balance Sheet, extract of the Register of Members and Board Resolutions of RLMCPL approving the allotment alongwith the copy of Form 2 and the ROC Filing Receipt.

(iv) **Undertaking from SPV:**

It is also noted from the Undertaking given by the SPV that it does not have any liabilities on account of statutory dues, loans, pending or threatened litigations etc. Based on above undertaking, it is accepted that the company would have no financial liabilities as on the date of signing of the Concession Agreement.

(v) **Authority to execute Concession Agreement:**

No certified copy of resolution of the Board of the SPV has been furnished authorizing any director/employee of the SPV to sign the Concession Agreement on its behalf. This resolution is mandatory to ensure that the execution of the Concession Agreement on behalf of the SPV is not repudiated by the SPV for want of authority. It is advised to submit a certified copy of such resolution before the Concession Agreement is executed.

Yours faithfully

(Pranavant)
General Manager (NS-2)

Reliance Energy
A Dhirubhai Ambani Enterprise

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: +91 (022) 3009 9999
Fax: +91 (022) 3009 9775
www.rel.co.in

December 22, 2005

Shri Pranavant
General Manager (NS-2)
National Highways Authority of India
G- 5 & 6, Sector-10, Dwarka
New Delhi 110 075

Dear Sir,

Sub: Award of Concession for Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul bypass) to km 426.6 (Samyanallore) on NH-7 in the State of Tamil Nadu called the "Project" on Build Operate and Transfer (BOT) basis: Project Reference No: NS2/BOT/TN-5

Ref: Your letter No.NHAI/Tech/NSEW/NS-2/BOT/TN-5/2005 dated December 14, 2005

In response to your above referred letter, we are pleased to furnish our pointwise clarifications as under:

1. **Shareholding**

The Board of Directors of the Reliance Energy Limited (REL) at the meetings held on October 19, 2005 has passed the resolution to make investment in Special Purpose Companies viz. Elephant Consultants Limited (the name of the Company subsequently changed to "NK Toll Road Limited") and Kangaroo Corporate Services Limited (the name of the Company subsequently changed to "DS Toll Road Limited"). The certified copy of the Resolution is attached as Annexure A.

As you are aware the share transfers taking place during the year are not reflected in ROC's records until Annual Return of the SPV is filed with ROC. The ROC search report of M/s Chandanbala Jain & Associates dated November 30, 2005 does not therefore reflect the shareholding of REL and Reliance Last Mile Communications Private Limited (RLMCPL) in the SPV.

2. **Register of Members**

It may please be noted that in the Register of Members, the date of transfer of shares of SPV to various companies was shown as October 13, 2005 by oversight, which actually should be October 24, 2005. A revised copy of the extract of the Register of Members noting the revised date of transfer are enclosed collectively marked as Annexure B.

As desired, a certified copy of the Board Resolution of the SPV dated October 24, 2005 recording the above transfer of shares is enclosed at Annexure C.

DS Toll Road Limited

0442

Reliance Energy
A Dhirubhai Ambani Enterprise

3. **Compliance with clause 1.5.2 of RFP**

RLMCPL is an "Associate" of REL in conformance with Clause 1.5.2 of the RFP. REL holds 100% of share capital of RLMCPL - 49% directly and 51% indirectly through Energy Trust, which has been set up for the sole benefit of REL.

In this connection, we submit the following documents:

(h) The Board of Directors of REL during its meeting held on July 21, 2004 have passed a Resolution inter alia authorizing the Company to invest in securities of various Companies, pursuant to which REL has made investment in RLMCPL. The Board Resolution is attached as Annexure D;

(a) Latest Audited Balance Sheet of RLMCPL as Annexure E;

(b) Extract of Register of Members as Annexure F;

(c) Board Resolution of RLMCPL recording the transfer of shares as Annexure G;

(d) Trust Deed of "Energy Trust" as Annexure H;

(e) Present Shareholding pattern of RLMCPL as Annexure I;

(f) Form 2 and ROC Filing Receipt: Since the Company has acquired these shares by way of transfer, the procedure to file these documents is not applicable.

4. **Undertaking from SPV**

We have noted acceptability of the undertaking given by SPV and thereby dispensation of personal guarantees of the Directors.

5. **Authority to Execute Concession Agreement**

A certified copy of the Board Resolution of SPV authorizing Shri J P Chalasani / Sanjay D Joshi to sign the Concession Agreement on behalf of SPV is enclosed at Annexure J.

We trust the above clarifications meet your requirements. For answering any further queries, we will be happy to meet with you or your Advisors in order to expedite the process.

We will now await your confirmation for signing the Concession Agreement.

Thanking you,

Yours faithfully,

(J. P. Chalasani)
Director (Business Development)

Encl.

ANNEXURE A

Reliance Energy
A Dhirubhai Ambani Enterprise

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: +91 (022) 3009 9999
Fax: +91 (022) 3009 9775
www.rel.co.in

Extracts from the Minutes of the Board Meeting held on 19th October, 2005

"RESOLVED THAT the Board do hereby ratify the submission of bids by the Company to National Highway Authority of India (NHAI) for participating in the Competitive Bidding Process of NHAI for undertaking construction of roads and management of the same on Build-own-transfer (BOT) comprising two projects, viz. (i) Namakkal Bypass-Karur Bypass and (ii) Dindigul-Samayanallur in Tamil Nadu.

RESOLVED FURTHER THAT the Letter of Acceptance dated 30th September, 2005 received from NHAI awarding the above two projects to the Company be and is herby accepted.

RESOLVED FURTHER THAT the Company do implement the above two projects through two separate Special Purpose Companies viz. Elephant Consultants Limited and Kangaroo Corporate Services Limited, who would change their names to reflect such special purpose.

RESOLVED FURTHER THAT pursuant to the applicable provisions of the Companies Act, 1956, the Company do invest by way of subscription, purchase or otherwise of securities in the aforesaid Special Purpose Companies as also make any loans to any of the said companies or give any guarantee or provide security in connection with loans made by any other person to or to any other person to the said companies in one or more tranches and such investments, loans or guarantees shall not exceed aggregate of Rs. 165 crore representing 51% of the equity share capital of each of the Special Purpose Comp[illegible]

RESO[illegible]VED FURTHER that any of Shri Satish Seth, Executive Vice Chairman, Shri S C Gupta and Shri J P Chalasani Directors of the Company, Shri Madhukar, Shri Ramesh Shenoy and Shri Himanshu Agarwal the executives of the Company be and are hereby severally authorised to agree, settle, execute any deed, documents, agreements, applications, etc. in relation to the aforesaid projects as also to negotiate, agree and finalise terms and conditions of investment including instrument, tenor, etc. and to make / file / submit necessary applications, forms, deeds and documents as also to liquidate the said instruments and to do all acts, deeds, things and matters necessary and incidental in this regard and that the Common Seal by the Company, if required on any deed, application, paper, documents, etc., be affixed in the presence of any of the above Directors and the Executives of the Company.

RESOLVED FURTHER THAT the Company do submit necessary Performance Security to the appropriate authorities as and when required."

/// Certified True Copy ///

for Reliance Energy Limited

Ramesh Shenoy
Company Secretary

20th December, 2005

Occupation Industrialist Father's / Husband's Name Late Shri Dhirubhai Ambani

Status Individual Date at which ceased to be a Member

Dr. SHARES ACQUIRED								Dr. CASH PAID ON SHARE			Cr. SHARES TRANSFERRED/DERELICTED										Cr.		
No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Date of payment of Cash Paid on Share	Amount per Share	Total Amount	Date when due	Date of payment	Cash Paid on Share Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ Forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or Forfeited	Balance shares held	REMARKS
1	29.6.05	49930	1	49930	01					10	499,300				499300	9	25.08.05	16300	01	16300	9	163000	49930	
																10	25.08.05	16300	16301	32600	10	163000		
																11	25.08.05	17330	32601	49930	11	173300	Nil	

Name Shri Ramesh Shenoy

Address E/115, Buss Apartments, B. M. Bhargava Marg, Santa Cruz (W) Mumbai 54

Occupation Service Father's / Husband's Name Shri Ganapati Shenoy

Folio No. 2

Name of Joint Holders None

Date at which entered as a Member 29.06.2005

Status Individual Date at which ceased to be a Member

2	29.6.05	10	49931	49940	02						10	100												10	

CERTIFIED TRUE COPY

For DS Toll Road Limited

Director

0445

Occupation Service Father's / Husband's Name Shri Navin Chandra Shyata

Status Individual Date at which ceased to be a Member

Dr. SHARES ACQUIRED								Dr. CASH PAYABLE			
No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Description of payment or No. of Call	Amount per Share	Total Amount
3	29.6.05	10	49941	49950	03					10	100

Cr. CASH PAID ON SHARE				Cr. SHARES TRANSFERRED (or FORFEITED)								
Date when due	Date of payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares held	REMARKS
											10	

Folio No. 4

Name Shri Surendra Pipara

Address 1702, Raheja Classique, Bldg. No. 1, New Link Road, Andheri (W) Mumbai - 53

Occupation Service Father's / Husband's Name Shri Kamal Pipara

Name of Joint Holders None

Date at which entered as a Member 29.06.2005

Status Individual Date at which ceased to be a Member

4	29.6.05	10	49951	49960	04					10	100							10

0446

Occupation Service Father's / Husband's Name Shri Govindram Agarwal

Status Individual Date at which ceased to be a Member

Dr. SHARES ACQUIRED								Dr. CASH PAYABLE			
No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Date up to which payment on No. of Call	Amount per Share	Total Amount
5	29.6.05	10	49961	49970	05					10	100

Cr. CASH PAID ON SHARE				Cr. SHARES TRANSFERRED or FORFEITED							
Date when due	Date of payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ Forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares held	REMARKS
											10	

Folio No. 16

Name Shri Ashish Karyekar

Address 703, BSES Quarters, Chembur Receiving Stn., Mumbai - 400 088.

Occupation Service Father's / Husband's Name Shri Sudhakar Karyekar

Name of Joint Holders : None

Date at which entered as a Member 29.06.2005

Status Individual Date at which ceased to be a Member

6	29.6.05	10	49971	49980	06						10	100					10

0447

Address [illegible]

Occupation Service Father's / Husband's Name Shri. B. Dev Sheroy

Date at which entered as a Member [illegible]

Status Individual Date at which ceased to be a Member

Dr. SHARES ACQUIRED								Dr. CASH PAYABLE			
No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Description of payment or No. of Call	Amount per Share	Total Amount
7	29.6.05	10	49981	49990	07					10	100

CASH PAID ON SHARE Cr				SHARES TRANSFERRED (or FORFEITED) Cr								
Date when due	Date of payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares Held	REMARKS
											10	

Folio No. 08

Name MS Dipti Dhariwal

Address 2/117, Ramjhakukha, S.V. Road, Andheri (West), Mumbai – 400058

Occupation Service Father's / Husband's Name Shri. Snehdeep Dhariwal

Name of Joint Holders: None

Date at which entered as a Member 29.06.2005

Status Individual Date at which ceased to be a Member

8	29.6.05	10	49991	50000	08					10	100		
												10	

0448

Occupation Business Father's / Husband's Name N.A.

Dr. SHARES ACQUIRED

No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired
9	25.08.05	16300	01	16300	09	1	

Dr. CASH PAYABLE

Date when called	Description of payment or No. of Call	Amount per Share	Total Amount
		10	163300

Status Private Company Date at which ceased to be a Member

CASH PAID ON SHARE Cr.

Date when due	Date of payment	Cash Book Folio	Amount

SHARES TRANSFERRED (or FORFEITED) Cr.

No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares held	REMARKS
12	24.10.05	9500	01	9500	12	95000	6800	

10

Name Reliance Energy Global Private Limited

Address 3rd floor, Reliance Energy Centre, Santacruz (E), Mumbai-400 055

Occupation Business Father's / Husband's Name N.A.

Folio No.

Name of Joint Holders : None

Date at which entered as a Member 25.08.2005

Status Private Company Date at which ceased to be a Member

10	25.08.05	16300	16301	32600	10	1				10	163300

13	24.10.05	8000	16301	24300	13	80000	8300						

0449

Address [illegible]

Occupation Business Father's / Husband's Name N.A.

Status Private Company Date at which ceased to be a Member

Dr. SHARES ACQUIRED: No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Dr. CASH PAYABLE: Date when called	Description of payment or No. of Call	Amount per Share	Total Amount
11	25.08.05	17330	3261	49930	11	1				10	173300

CASH PAID ON SHARES: Date when due	Date of payment	Cash Book Folio	Amount	SHARES TRANSFERRED (or FORFEITED): No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ Forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of Shares Transferred or forfeited	Balance Shares Held	REMARKS
				14	24.10.05	8000	3261	40600	13	80000	1330	

Folio No. 12

Name Reliance Energy Limited

Address Reliance Energy Centre, Santacruz (E), Mumbai 400 055

Name of Joint Holders : None

Date at which entered as a Member 13.10.05

Status Private Company Date at which ceased to be a Member

Occupation Business Father's / Husband's Name N.A.

12	24.10.05	9500	01	9500	12	9				10	95000

0450

Father's / Husband's Name N/A

SHARES ACQUIRED								CASH PAYABLE			
Date of Allotment or Transfer	No. of Shares allotted / Transferred	Distinctive Numbers (inclusive) From	To	No. & date of issue of certificate	Transferor's Folio	Nominal Value of Shares acquired	Date when called	Description of payment or No. of Call	Amount per Share	Total Amount
24.10.05	8000	16301	24300	13	10				10	80000
24.10.05	8000	32601	40600	14	11				10	80000

Date at which entered as a Member 13.12.05

Status Private Company Date at which ceased to be a Member

CASH PAID ON SHARE				SHARES TRANSFERRED OR FORFEITED								
Date when due	Date of payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/ forfeited	Distinctive Numbers (inclusive) From	To	Transferee's Folio	Total Nominal value of shares Transferred or forfeited	Balance Shares held	REMAR

Folio No. 14

Name of Joint Holders :

Date at which entered as a Member

Status Date at which ceased to be a Member

on Father's / Husband's Name

0451

ANNEXURE C

DS Toll Road Limited

Registered Office :3rd Floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022 3009 9999 Facsimile : 022 3009 9763

Extracts from the Minutes of the Board Meeting held on 24th October,2005

Transfer of Shares:

"RESOLVED THAT transfer of the following equity shares covered under transfer no. 12 to 14 be and are hereby approved

Sr. No.	Name of the Transferor	Cert. No.	Dist. Nos.	No. of shares	Name of the transferee
1	Reliance Energy Management Services Private Limited	12	01-9500	9500	Reliance Energy Limited
2	Reliance Energy Global Private Limited	13	16301-24300	8000	Reliance Last Mile Communication Private Limited
3	Powersurfer Interactive (India) Private Limited	14	32601-40600	8000	Reliance Last Mile Communication Private Limited

RESOLVED FURTHER THAT Shri Ramesh Shenoy and Shri Ashish Karyekar be and are hereby severally authorised to sign the endorsement on the share certificates duly transferred."

\\\ Certified True Copy ///

For DS Toll Road Private Limited

Hasit Shukla
Director

Date : 21.12.2005

DS Toll Road Limited

0452

ANNEXURE D

Reliance Energy
A Dhirubhai Ambani Enterprise

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: +91 (022) 3009 9999
Fax: +91 (022) 3009 9775
www.rel.co.in

Extracts from the Minutes of the Board Meeting held on 21st July, 2004

RESOLUTION NO. IV

"RESOLVED THAT in partial modification of Resolution No. X passed at the meeting of the Board of Directors held on 22nd February, 2004 and in accordance with the provisions of Sections 292, 372A and all other applicable provisions of the Companies Act- 1956 and the Articles of Association of the Company, Shri Anil D Ambani, Chairman and Managing Director and Shri Satish Seth, Executive Vice Chairman of the Company be and are hereby severally authorised to invest and deal with the moneys of the Company in debt / money market instruments, such as Debentures / Bonds / Instruments / Securities issued by bodies corporate / institutions / corporations / government / others whether in India or abroad from time to time provided that the outstanding amount of such investments made by the Company shall not at any time exceed Rs.7,000 crore and that they are hereby severally authorised to realise the same from time to time and to open, operate and close relevant 'Constituent Subsidiary General Ledger Account' or other types of accounts for the purpose and that they are hereby further authorised to delegate any of the powers herein conferred to one or more executives and/or the authorised persons.

RESOLVED FURTHER THAT any of the above Directors and the executives/authorised persons, authorised by such Directors be and are hereby authorised to approve and execute any deeds, documents, papers, writings as may be required from time to time and that the Common Seal of the Company, if required, be affixed on such deed, document, etc. in accordance with the provisions contained in the Articles of Association of the Company."

/// Certified True Copy ///

for Reliance Energy Limited

Ramesh Shenoy
Company Secretary

ANNEXURE 'E'

RELIANCE LAST MILE COMMUNICATIONS PVT. LTD.

ANNUAL REPORT 2004-2005

ANNUAL GENERAL MEETING HELD ON 30TH SEPTEMBER,2005

CERTIFIED TRUE COPY
For RELIANCE LAST MILE COMMUNICATIONS PVT. LTD.

DIRECTOR/AUTHORISED SIGNATORY

CERTIFIED TRUE COPY

For Reliance Last Mile Communications Private Limited

Director/Authorised Signatory

DS Toll Road Limited

0454

RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

DIRECTORS' REPORT

To
The Members,

Your Directors present the Annual Report and the audited accounts for the financial year ended 31st March, 2005.

OPERATIONS

During the year under review your Company has incurred a loss of Rs 8,716/- as against loss of Rs 8,842/- incurred during the last financial year.

During the year your Company has further reviewed the possibilities of carrying out business as per object of the Company; however no major operations have been carried out.

Your Directors have not recommended any dividend on equity share for the financial year under review.

FIXED DEPOSITS

The Company has not accepted any deposits from the public. Hence no information is required to be appended to this report.

DIRECTORS

Shri Ashok Jain had resigned from the Board of Directors of the Company with effect from 10th August,2005. The Board of Directors place on record their appreciation for the valuable services rendered by them during the tenure of there office.

Shri Hasit Shukla had been appointed as additional Director of the Company with effect from 10th August,2005 and in terms of Section 260 of the Companies Act, 1956, he hold office upto the date of the ensuing Annual General Meeting. Necessary resolution have been set out in the notice for appointment of Shri Hasit Shukla as Director, at the ensuing Annual General Meeting.

DIRECTORS' RESPONSIBILITY STATEMENT

Pursuant to the requirement under Section 217(2AA) of the Companies Act, 1956 with respect to Directors' Responsibility Statement, it is hereby confirmed that :

- in the preparation of the annual accounts for the financial year ended 31st March, 2005, the applicable accounting standards have been followed ;
- the Directors have selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at the 31st March, 2005 and of the Loss of the Company for the year ended on that date;

- the Directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities; and

- the Directors have prepared the annual accounts of the Company on a 'going concern' basis.

AUDITORS

M/s Pathak H. D. & Associates, Chartered Accountants, who have been appointed as the Auditors of the Company, retire at the ensuing Annual General Meeting. The Company has received a consent letter from them for their reappointment. Accordingly, M/s Pathak H. D. & Associates, Chartered Accountants, are proposed to be appointed as Auditors of the Company at the ensuing Annual General Meeting.

PARTICULARS OF EMPLOYEES

There were no employee in respect of whom information is required to be given pursuant to Section 217(2A) of the Companies Act, 1956 read with the Companies (Particulars of Employees) Rules, 1975.

CONSERVATION OF ENERGY, RESEARCH AND DEVELOPMENT, TECHNOLOGY ABSORPTION, FOREIGN EXCHANGE EARNINGS AND OUTGO

Information in accordance with the provisions of Section 217(1)(e) of the Companies Act, 1956, read with Companies (Disclosure of Particulars in the Report of Board of Directors) Rules, 1988 regarding conservation of energy, research and development and technology absorption are not applicable since the Company is not a manufacturing company. There were no foreign exchange earnings and outgo during the year under review.

ACKNOWLEDGEMENTS

Your Directors wish to place on record their immense appreciation for the assistance and co-operation received from various Banks & Statutory authorities.

For and on behalf of the Board of Directors

Sd/-
Shri Hasit Shukla
Chairman

Place : Mumbai
Date : 10th August, 2005

CERTIFIED TRUE COPY
For Reliance Last Mile Communications Private Limited

0456

Auditors' Report

To the Members of Reliance Last Mile Communications Private Limited.

We have audited the attached Balance Sheet of Reliance Last Mile Communications Private Limited as at 31st March, 2005 and the Profit and Loss Account for the year ended on that date annexed thereto. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Auditing Standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

This report does not incl[illegible]ment on the matters specified in paragraph 4 of the Companies (Auditors Rep[illegible]e, 2003, issued by the Central Government of India, in terms of section 227(4A) of the [illegible]panies Act, 1956, since in our opinion and according to the information and explanatio[illegible] the said Order is not applicable to the Company.

Further, we report that :

a) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

b) In our opinion, proper books of account, as required by law, have been kept by the Company, so far as appears from our examination of those books;

c) The Balance Sheet and Profit and Loss Account referred to in this report are in agreement with the books of account;

d) In our opinion the Balance Sheet and the Profit and Loss Account dealt with by this report comply with the requirements of the mandatory accounting standards referred in sub-section (3C) of section 211 of the Companies Act, 1956;

e) In our opinion, and based on information and explanations given to us, none of the directors are disqualified as on 31st March, 2005 from being appointed as directors in terms of clause (g) of sub-section (1) of section 274 of the Companies Act 1956;

f) In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the notes thereon give the information required by the Companies Act, 1956, in the manner so required, and present a true and fair view, in conformity with the accounting principles generally accepted in India:
   (i) in so far as it relates to Balance Sheet, of the state of affairs of the Company as at 31st March, 2005;
   (ii) in so far as it relates to the Profit and Loss Account, of the "Loss" of the Company for the year ended on that date.

For Pathak H.D. & Associates
Chartered Accountants

PATHAK H. D. & ASSOCIATES MUMBAI

Gyandeo Chaturvedi
Partner
Membership No.: 46806

Mumbai
Dated: 14th May, 2005

0457

RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

Balance Sheet as at 31st March, 2005

	Schedule	As at 31st March, 2005		As at 31st March, 2004	
		Rs.	Rs.	Rs.	Rs.
Sources of Funds					
Shareholders' Funds					
Share Capital	A		100,000		100,000
Loan Funds					
Unsecured Loan from a Body Corporate			40,000		5,000
Total			140,000		105,000
Application of Funds					
Investments	B		44,000		71,000
Current Assets, Loans and Advances	C				
Current Assets					
Cash and Bank balance		45,233		4,409	
Loans And Advances		14,000		-	
		59,233		4,409	
Less : Current Liabilities and Provisions					
Current Liabilities					
Sundry Creditors					
Dues to creditors other than small scale industrial undertakings		6,612		6,480	
		6,612		6,480	
Net Current Assets			52,621		(2,071)
Miscellaneous Expenditure (To the extent not written off or adjusted)					
Preliminary Expenditure			343		1,751
Profit and Loss account			43,036		34,320
Total			140,000		105,000
Notes on Accounts	D				

As per our Report of even date

For Pathak H. D. & Associates
Chartered Accountants

Gyandeo Chaturvedi
Partner

Mumbai
Dated : 14th May, 2005

For and on behalf of the Board

Ashok C. Jain
Surendra Pipara
) Directors

CERTIFIED TRUE COPY

D.S. Toll Road Limited

0458

RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

Profit and Loss Account for the year ended 31st March, 2005

	Schedule	2004-2005		2003-2004	
		Rs.	Rs.	Rs.	Rs.
Income			-		-
Expenditure					
Audit Fees		6,612		6,480	
Filing Fees		400		600	
General Expenses		296		354	
Preliminary expenses written off		1,408		1,408	
			8,716		8,842
Loss for the year			(8,716)		(8,842)
Add : Balance brought forward from last year			(34,320)		(25,478)
Balance carried to Balance Sheet			(43,036)		(34,320)
Basic and Diluted Earnings per share (Rupees)			(0.87)		(0.88)
Notes on Accounts	D				

As per our Report of even date

For Pathak H. D. & Associates
Chartered Accountants

Gyandeo Chaturvedi
Partner

PATHAK H. D. & ASSOCIATES MUMBAI

Mumbai
Dated : 14th May, 2005

For and on behalf of the Board

Ashok C. Jain

Surendra Pipara

) Directors

CERTIFIED TRUE COPY

0459

RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

Schedules forming part of the Balance Sheet

Schedule 'A'

Share Capital	As at 31st March, 2005		As at 31st March, 2004	
		Rs.		Rs.
Authorised :				
10,000 Equity Shares of Rs.10 each		100,000		100,000
		100,000		100,000
Issued, Subscribed and Paid up:				
10,000 Equity Shares of Rs.10 each fully paid up		100,000		100,000
		100,000		100,000

Schedule 'B'

Investments	As at 31st March, 2005		As at 31st March, 2004	
		Rs.		Rs.
Long Term Investments (Other Investments)				
Unquoted				
In Equity Shares - fully paid up				
1,500 (--) Arthik Commercial Pvt. Ltd. of Rs.10 each		15,000		-
-- (1,400) Reliance Broadband Communications Pvt. Ltd. of Rs.10 each		-		14,000
-- (1,400) Reliance Broadcom Pvt. Ltd. of Rs.10 each		-		14,000
1,500 (1,500) Avalanche Fuels Pvt. Ltd. of Rs. 10 each *(Formerly Reliance Cyber Technology.com Pvt. Ltd.)*		15,000		15,000
1,400 (1,400) Reliance Distrigas Pvt. Ltd. of Rs.10 each		14,000		14,000
-- (1,400) Reliance Petromarketing Infrastructure Pvt. Ltd. of Rs.10 each		-		14,000
		44,000		71,000

* Investment in Company under same management.

Schedule 'C'

Current Assets, Loans and Advances	As at 31st March, 2005		As at 31st March, 2004	
	Rs.	Rs.	Rs.	Rs.
Current Assets				
Cash and Bank Balances :				
Balance with a Schedule Bank in a Current Account		45,233		4,409
Loans and Advances				
Advances recoverable in cash or in kind or for value to be received		14,000		-
		59 233		4 409

0460

RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

Schedule 'D'
Notes on Accounts

1. Significant Accounting Policies

a) General
The financial statements have been prepared under the historical cost convention in accordance with the generally accepted accounting principles and the provisions of the Companies Act, 1956 as adopted consistently by the Company.

b) Revenue recognition
The Company follows mercantile system of accounting and recognises significant items of income and expenditure on accrual basis.

c) Investments
Long term investments are carried at cost.

d) Provision for Current and Deferred Tax
Provision for Current Income Tax is made on the taxable income under the Income Tax Act, 1961. Deferred tax arising on account of "timing difference" and which are capable of reversal in one or more subsequent periods, is recognised using the tax rates and tax laws that are enacted or substantively enacted. Deferred tax assets is recognised only to the extent there is reasonable certainty with respect to reversal of the same in future years as a matter of prudence.

e) Preliminary expenses are amortised over a period of 5 years on pro-rata basis.

2. As no Manufacturing and/or Trading activities were carried out during the year, information required under para 3 and 4 of schedule VI to the Companies Act, 1956 are not applicable.

3. The previous year's figures have been reworked, regrouped, rearranged and reclassified wherever necessary.

4. Earnings per share

	2004-2005	2003-2004
Basic, as well as diluted, earnings per equity share (Rs.)	(0.87)	(0.88)
Numerator - profit/ (Loss) after tax (Rs.)	(8,716)	(8,842)
Denominator - weighted average number of equity shares	10000	10000
Nominal value per equity share (Rs.)	10	10

5. The Company has no deferred tax assets or liabilities in accordance with Note 1 (d) above.

6. Balance sheet abstract and Company's General Business Profile as per Part IV of Schedule VI to the Companies Act, 1956.

1. Registration Details :

Registration No	127479	State Code	11
Balance Sheet Date	31.03.2005		

2. Capital raised during the year : (Rs. In thousand)

Public Issue	--	Rights Issue	--
Bonus Issue	--	Private placement	--

3. Position of mobilisation and deployment of fund (Rs. In thousand)

Total Liabilities	140	Total Assets	140
Source of Funds			
Paid up Capital	100	Reserves & Surplus	--
Secured Loans	--	Unsecured Loan	40
Application of Funds			
Net Fixed Assets	--	Investments	44
Net Current Assets	53	Miscellaneous expenditure	0
Accumulated Losses	43	(Rs.343/-)	

4. Performance of Company: (Rs. In thousand)

Turnover	--	Total Expenditure	9
Profit / (Loss) before tax	(9)	Profit / (Loss) after tax	(9)
Earnings per Share (Rs)	(0.87)	Dividend per Share (Rs)	--

5. Generic Names of principal products, services of the Company:

Item Code	N.A.
Product Description	N.A.

As per our Report of even date

For Pathak H. D. & Associates
Chartered Accountants

Gyandeo Chaturvedi
Partner

Mumbai
Dated : 14th May 2005

For and on behalf of the Board

Ashok C. Jain

Surendra Pipara

Directors

CERTIFIED TRUE COPY

0461

RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

REGISTER OF MEMBERS AND SHARE LEDGER

Name: Reliance Energy Limited

Name of Joint Holder(s) N.A.

Folio No. 21

Address 3rd Floor, Reliance Energy Centre, Santacruz(East),Mumbai-400055

Date at which entered as a Member: 19.12.2005

Date at which ceased to be a Member:

Occupation: Business

Father's/Husband's Name N.A.

Status: Body Corporate

Dr. SHARES ACQUIRED								Dr. CASH PAYABLE CASH PAID ON SHARE Cr.								SHARES TRANSFERRED (or) FORFEITED							Cr.	Remarks
		Dist. Numbers (Inclusive)																Dist. Numbers (Inclusive)						
No. of Allotment or Transfer	Date of Allotment or Transfer	No. of Shares Allotted/Transferred	From	To	No. & Date of Issue of Certificate	Transferor's Folio	Nominal Value of Shares Acquired	Date when called	Description of Payment or No. of Call	Amount per Share	Total Amount	Date when due	Date of Payment	Cash Book Folio	Amount	No. of Transfer	Date of Transfer or Forfeiture	No. of Shares Transferred/Forfeited	From	To	Transferee's Folio	Total Nominal Value of Shares Transferred or Forfeited	Balance Shares Held	
16/05	19-12-05	100	0001	0100	1/10.7.00	17	1000																100	
16/05	19-12-05	1400	5601	7300	9/25.8.01	17	14000																1500	
17/05	19-12-05	1400	3101	4500	7/25.8.01	19	14000																2900	
18/05	19-12-05	500	0701	1200	4/25.8.01	13	5000																3400	
18/05	19-12-05	500	4901	5400	13/15.3.04	13	5000																3900	
18/05	19-12-05	500	5401	5900	14/15.3.04	15	5000																4400	
19/05	19-12-05	500	1201	1700	5/25.8.01	15	5000																4900	

0462

Certified To Be True
For Reliance Last Mile Communications Pvt Ltd

Hasit Shukla
Director

DS Toll Road Limited

ANNEXURE G

RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

Extracts from the Minutes of the Board Meeting held on 21st December,2005

Transfer of Shares:

"RESOLVED THAT transfer of the following equity shares covered under transfer no. 20 to 23 be and are hereby approved

Sr. No.	Name of the Transferor	Cert. No.	Dist. Nos.	No. of shares	Name of the transferee
1	Reliance Coverage Communications Pvt. Ltd.	06	1701-3100	1400	Reliance Energy Management Services Pvt Ltd
2	Reliance Coverage Communications Pvt. Ltd.	02	101-200	100	Reliance Energy Management Services Pvt Ltd
3	Reliance Virtual Designs Pvt. Ltd.	11	8701-10000	1300	Reliance Energy Management Services Pvt Ltd
4	Reliance Intelligent Solutions Provider Private Limited	03	201-700	500	Reliance Energy Management Services Pvt Ltd
5	Reliance Intelligent Solutions Provider Private Limited	12	4501-4900	400	Reliance Energy Management Services Pvt Ltd
6	Reliance Distrigas Private Limited	10	7301-8700	1400	Reliance Energy Management Services Pvt Ltd

RESOLVED FURTHER THAT Shri Hasit Shukla and Shri Tulsi Dadlani be and are hereby severally authorised to sign the endorsement on the share certificates duly transferred."

Certified to be True
For RELIANCE LAST MILE COMMUNICATIONS PVT. LTD.

Hasit Shukla
Director
20/12/05

0463

ANNEXURE H

DEED OF TRUST

OF

ENERGY TRUST

THIS DEED OF TRUST made at Mumbai on this 13 day of December 2005

BETWEEN

AAA Project Ventures Pvt. Ltd., a Company registered under the Companies Act 1956 and having its registered office at 3rd Floor Reliance Energy Centre, Santa Cruz (E), Mumbai - 400055 hereinafter called "the Settlor" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and assigns) of the First Part

AND

(1) Reliance Energy Management Services Private Ltd., having its registered office at 3rd Floor Reliance Energy Centre, Santa Cruz (E), Mumbai - 400055 hereinafter called "the Trustee" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and assigns) of the Second Part, the Trust being constituted for the sole benefit of Reliance Energy Ltd., a Company registered under the Companies Act 1956 having its registered office at Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055 hereinafter called the "Beneficiary"/"REL" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and assigns) ;

WHEREAS:

(A) The National Highways Authority of India (NHAI) has rewarded to REL, the following two road projects (the "Projects") on NH-7 in the State of Tamil Nadu for a specified concession period (the "Concession Period"):

(1) (i) Design, Construction, Development, Finance, Operation and Maintenance of km 258.645 (End of Namakkal bypass) to km 292.4 (Start of Karur bypass) and (ii) Improvement, Operation and Maintenance of km 248.625 (Start of proposed flyover on Namakkal bypass) to km 258.645 (End of Namakkal bypass);

(2) Design, Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul Bypass) to km 426.6 (Samyanallore), covering 53.025 km.

THE SEAL OF THE SUB-REGISTRAR BOMBAY

INDIA STAMP DUTY MAHARASHTRA

मुंबई - 2

Toll Road Limited

0464

(B) The said Projects are going to be executed through Special Purpose Vehicles (hereinafter referred to as the "SPVs") in which 19% equity contributions to the Share Capital are to be made by REL and 32% equity contributions to the Share Capital are to be made by an Associate Company of REL namely 'Reliance Last Mile Communications Pvt. Ltd.' (hereinafter called "Associate Company / RLMCPL") In order to support REL to execute the said Projects and for the benefit of REL, this Trust is being formed to contribute 51% of the equity contribution in the Share Capital of the said Associate Company, the balance 49% of the equity in the Share Capital to be contributed by REL.

(C) The Settlor and Trustee hereto are desirous of recording the terms of the Trust by and between them as follows:

NOW THIS DEED OF TRUST WITNESSETH as under:-

DECLARATION:

The Settlor hereby constitutes the Trust herein contained and transfers the initial corpus of the Trust to the Trustee to be held by the Trustee unto and for the benefit of the sole beneficiary REL on the following terms and conditions and the Trustee hereby declares that it will hold the Trust corpus, properties, rights and privileges in trust for the benefit of the sole beneficiary REL:

1. NAME OF THE TRUST

1.0 The name of the Trust shall be "Energy Trust" (hereinafter referred to as the "Trust") and its office shall be at Nagin Mahal (6th Floor) 82 Veer Nariman Road, Mumbai 400020 and at such other place / places as the Trustee herein may decide from time to time.

2. OBJECTS

2.0 The objects of the Trust are as under:

2.1 to make investments to the extent of 51% of the Equity Share Capital of a company named Reliance Last Mile Communications Pvt. Ltd. which shall in turn make investments in the SPVs that will execute the said road Projects as aforesaid.

2.2 to manage the corpus of the Trust, Trust Fund and collect and receive the interest, dividend, bonus shares and other income, rights and privileges attached to the said equity share holdings by the Trust.

बबई-2
99292/2
२००५

2.3 to distribute annually on finalization of audited Accounts, the net income of Trust to the sole beneficiary REL, after retaining suitable amount for meeting futu

administrative expenses and other requirements as the Trustee may deem fit ir discretion.

2.4 to transfer the corpus of the Trust and all Trust funds, rights, privileges, assets a properties to REL on expiry of the Trust.

3. CORPUS OF THE TRUST

3.0 The corpus of the Trust shall comprise of Rs. 1, 00,000 (rupees one lakh only) be transferred by the Settlor to the Trustee by cheque no. 707559 dated 11/11/2 drawn on ICICI Bank Ltd. simultaneous to the execution of this Trust Deed; and

4. BENEFITS UNDER THE TRUST

4.0 The benefits arising from the investments made by the Trust as a member of the s Associate Company / RLMCPL shall be provided by the Trustee in favour of Rl The 51% equity share holdings in the equity Share Capital of the said Associ Company / RLMCPL shall be non-transferable till the expiry of the term of the Tr and shall be held by the Trust during its entire term.

4.1 On expiry of the term of this Trust, the corpus, forming the shares in the s Associate Company / RLMCPL along with the accretions and other Trust funds a properties shall be transferred by the Trustee to REL and the Trust shall sta dissolved.

5. SOLE TRUSTEE

5.0 The aforesaid Trustee i.e. Reliance Energy Management Private Ltd., shall act a Sole Trustee for the Trust and shall perform its functions as Sole Trustee through authorized executives in this respect.

6. MANAGEMENT OF THE TRUST

6.0 The Trustee shall manage and administer the affairs of the Trust diligently and w due care and caution as per the objectives of the Trust.

6.1 The Trustee shall be entitled to receive reasonable remuneration as may be approv by the Settlor for the services rendered by the Trustee.

6.2 The Trustee shall have the right to ensure its voting rights in the shares held by including for the purpose of appointment of Directors in the said Associate

नवसर्ई - 2
99252/13
१००६

0466

Company / RLMCPL in such manner as the Trustee considers appropriate with being bound by the wishes of the sole beneficiary REL.

6.3 The Trust shall have the right to hold properties, funds, securities and shares in name of the Trustee and shall have the right to borrow money for administrative a other purposes from time to time.

6.4 The Trustee shall be responsible to maintain proper accounts of the Trust as per accounting standards as applicable, have it audited periodically by repu Auditors, file necessary returns and complete any assessments as may be required.

6.5 The Trustee shall be responsible for all legal compliances with regard to the Tr and to pay any fees, tax, duties and charges and any such other outgoings as may necessary and make any disclosures as may be legally necessary in respect of t affairs of the Trust.

6.6 The Trustee shall take all legal actions as may be necessary to protect the interest the Trust without in any way prejudicially effecting the interests of the sc beneficiary REL and for that purpose engage any Advocate, Counsel or profession in this respect.

7. BANK ACCOUNTS

7.0 The Trust shall open and operate Bank Accounts in its name and deposit all revenu receipts into the Account and disburse its expenses from the said Account. The Bar Account shall be operated by such persons as authorized by the Trustee.

8. INFORMATION TO BENEFICIARY

8.0 The Trustee shall send periodical details relating to the corpus it holds, the Ban Account, revenues and expenditure and other Trust properties, privileges c activities and any such other information, to the sole beneficiary REL from time t time and in any case in intervals not exceeding 3 (three) months.

9. REMISSION OF THE OFFICE OF TRUSTEE

9.0 In case the Trustee shall have at any time any legal disability to act as a Trustee or th Trustee wishes to remit the office for any reason, the Settlor shall have the right t name the new Trustee.

बबई-2
9929/1 ४
२००५

10. TERM OF THE TRUST

10.0 The Trust has come into existence with effect from 11th November 2005. The duration of the Trust shall be for a period of 25 (twenty five) years or for such shorter period as may be determined by the Trustee at its sole discretion.

IN WITNESS WHEREOF the parties hereto have hereunto set and subscribed their respective hands the day and year first hereinabove written.

Witnesses:

1.) (C. MARTIS)

2.)

(For AAA Project Ventures Pvt. Ltd.)
(Settlor)

(For Reliance Energy Management Pvt. Ltd.)
(Trustee)

THE SEAL OF THE SUB-REGISTRAR BOMBAY

99252

ICICI BANK LTD FRANKING DEPOSIT SLIP

Customer Copy

Deposit Br. Date :

Pay to: Acct Stamp Duty Mumbai

Franking Value	Rs.	
Service Charges	Rs.	
Total	Rs.	

Name of Stamp duty paying party : AAA Project Ventures Pvt. Ltd.

DD / Cheque No.

Drawn on Bank

Received With Thanks Rs. ..... Towards Payment of Stamp Duty

For Bank's use only)

Franking Sr. No.

Officer

0468

TRANSFER

PAD 101
Para 4.6

RESERVE BANK OF INDIA
PUBLIC ACCOUNTS DEPARTMENT, MUMBAI

Token No. № 120511

Date

Date of Delivery

IMPORTANT

1. Exchange this token for the Bank's receipt within fifteen working days from the date of delivery failing which a search fee of Rs 10/- will be charged.
2. In case of loss of this token a fee of Rs. 10/- will be charged.
3. In case the loss of this token is reported after the due date, an aggregate amount of Rs. 20/- to search fee and penalty will be charged.
4. In case receipted challan is not collected within 3 months from the date of delivery indicated above, the challan will be destroyed without reference to the remitter and the token issued will be treated as lasped.
5. Delivery of the receipted challans will be made at counter Nos. 1 to 3 of R. B. I. Amar Bldg.

19 DEC 2005

26 DEC 2005

बबई-2
99242 / E
२००५.

THE SEAL OF THE SUB-REGISTRAR
BOMBAY

DS Toll Road Limited

0469

A/c Payee Only

सा/व खा जारी - भुगतान पत्रिका
G/L A/c Payslip Issued

VALID FOR SIX MONTHS FROM THE DATE OF ISSUE

न मोडें DO NOT FOLD

14-12-20

Pay J.T. SUB-REG. MUMBAI CITY

रुपये Rupees One Thousand only

या उनके आदेश पर

अदा करे

Rs. 1,000

र.र LF.	19410 INTLS	

1000.00

बैंक ऑफ इंडिया BANK OF INDIA

खोदादाद सर्कल शाखा
बम्बई 400 014
KDC

KHODADAD CIRCLE BRANCH
BOMBAY 400 014

अधिकृत हस्ताक्षरकर्ता Authorised

"019410" 4000130701: 12

दाखले - 2
47252 / 11 6

खर्च नगर ६१०२००२००

नमुना म. को. नि. ६
[नियम १११ पहा]
चलन क्रमांक

प्रधानशीर्ष : ००३० मुद्रांक व नोंदणी

नोंदणी महानिरीक्षक व मुद्रांक नियंत्रक,
महाराष्ट्र राज्य

या शिल्लकी कोषागारात / उपकोषागारात भरण्यात आलेल्या पोच रकमेचे चलन
[illegible] / भारतीय स्टेट बँकेकडे मुंबई

भरणा करणाऱ्याने भरावयाचे	विभागीय अधिकाऱ्याने किंवा कोषागाराने भरावयाचे	कोषागारात/उपकोषागारात/भारतीय स्टेट बँकेत/भारतीय स्टेट बँकेत भरावयाचे
शिल्लकीचे रकम भरण्यात आली आहे त्या व्यवहाराचे नाव/रकम आणि वेळ J.t. Sub.Reg. Mumbai City Old Custom House S.B. Road, Mumbai 400 035	लेखाचे बाबी कलम विभाग : नोंदणी व मुद्रांक विभाग प्रधानशीर्ष : ००३० मुद्रांक व नोंदणी फी उपप्रधानशीर्ष : ०१ नोंदणी फी	रकम मिळाली. (आकडेवारी) (अक्षरी)
भरणा करण्यासंबंधीच्या प्राधिकाऱ्याचा तपशील आणि भरणा करण्याचा हेतू. दस्तऐवज नोंदणी फी RF	मोगरशीर्ष : १०४ दस्तऐवजाच्या नोंदणीसाठी फी सर्व साधारण वसुली	लेखापाल
भरणा केलेली रक्कम रुपये 1000/-	संगणक संकेतांक 0 3 0 0 1	कोषागार / उपकोषागार अधिकारी / बँकेचा व्यवस्थापक
(अक्षरी) रुपये एक हजार फक्त One Thousand only भरणा करणाऱ्याची स्वाक्षरी 19/12/05	नोंदणी झाले. पैसे स्वीकारावे व पावती द्यावी. अधिकारी	दिनांक

[illegible]

नोंदणी खर्च रु. २

0470

Reliance Energy Management Services Private Limited
Registered Office : 3rd floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022 2663 9311 Facsimile : 022 2663 9763

Certified True Copy of the resolution passed by the
Board of Directors of the Company held on 14th November, 2005

Trustee of Trust named "Energy Trust" : The Board considered the proposal to act as a Trustee of the Trust named "Energy Trust". It was

RESOLUTION NO. I

"RESOLVED THAT approval of the Board be and is hereby accorded to act as trustee of a Trust named "Energy Trust".

RESOLVED FURTHER THAT Shri Ramesh Shenoy, Shri Himanshu Agarwal and Shri Sangameshwar Iyer be and are hereby severally authorized to negotiate, finalise, approve, execute and deliver the Trust Deed between AAA Project Ventures Private Limited (as settlor of the Trust) with Reliance Energy Management Services Private Limited as the sole trustee of Energy Trust; and

RESOLVED FURTHER THAT Shri Ramesh Shenoy, Shri Himanshu Agarwal and Shri Sangameshwar Iyer be and are hereby severally authorised in the name of and on behalf of the Company to do all such other acts, matters, deeds and things and execute all such documents as may be necessary or desirable in connection with or incidental to giving effect to the above resolution."

\\\ Certified True Copy ///

For Reliance Energy Management Services Private Limited

Director

बम्बई-2
9929/C
२००५.

0471

AAA Project Ventures Private Limited

Registered Office : 3rd floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022 2663 9999 Facsimile : 022 2663 9763

Extracts of the Board meeting minutes dated 11th October, 2005

Settlement of Trust in the name of "Energy Trust" : The Board considered the proposal to do settle a Trust under the Indian Trusts Act, 1881 in the name of "Energy Trust". It was

RESOLUTION NO. I

"RESOLVED THAT the Company do settle a Trust under the Indian Trusts Act, 1881 in the name of "Energy Trust" in India and the Company do make an initial contribution of Rs. 1,00,000 towards the initial corpus of such Trust.

RESOLVED FURTHER THAT Shri Ramesh Shenoy and Shri Sangameshwar Iyer be and hereby are severally authorized, to take any and all actions that the Board of Directors may take, to negotiate, finalise, approve, execute and deliver and to delegate to named individuals designated by them in writing from time to time the authority to negotiate, approve, finalise, execute and deliver in respect of following specific transactions:

(a) To appoint Reliance Energy Management Services Private Limited as a Trustee of the above Trust; and

(b) To execute the Trust Deed and other necessary documents between the Company (as settlor of the Trust) with Reliance Energy Management Services Private Limited as the sole trustee of Energy Trust; and

RESOLVED FURTHER THAT Shri Ramesh Shenoy and Shri Sangameshwar Iyer be severally authorised in the name of and on behalf of the Company to do all such other acts, matters, deeds and things and execute all such documents as may be necessary or desirable in connection with or incidental to giving effect to the above resolution."

THE OFFICE OF THE SUB REGISTRAR BOMBAY

/// Certified True Copy \\\

For AAA Project Ventures Private Limited

Director

बम्बई - 2
49242 / e
२००५.

0472

19/12/2005 दुय्यम निबंधक:
4:06:01 pm मुंबई शहर 2 (वरळी)

दस्त गोषवारा भाग-1

बबइ2
दस्त क्र 11252/2005
१०

दस्त क्रमांक : 11252/2005
दस्ताचा प्रकार : विश्वस्त व्यवस्था

अनु क्र.	पक्षकाराचे नाव व पत्ता	पक्षकाराचा प्रकार	छायाचित्र	अंगठ्याचा
1	नाव: मेसर्स रिलायन्स एनर्जी मॅनेजमेंट सर्व्हिसेस प्रा लि (ट्रस्टीज़साठी) हिमांशु अग्रवाल पत्ता: घर/फ्लॅट नं: तिसरा मजला गल्ली/रस्ता: इमारतीचे नाव: रिलायन्स एनर्जी सेंटर इमारत नं: गाव/वसाहत: स.	लिहून घेणार वय 48 सही		
2	नाव: मेसर्स एएए प्रोजेक्ट वेंचर्स प्रा लि (सेटलर्स) साठी सोमेश्वर अय्यर पत्ता: घर/फ्लॅट नं: 12/डि202 गल्ली/रस्ता: इमारतीचे नाव: अनिता नगर इमारत नं: गाव/वसाहत: लोखंडवाला कॉम्प्लेक्स कांदिव	लिहून देणार वय 46 सही		

सह दुय्यम निबंधक
मुंबई शहर क्र. २.

THE SEAL OF THE SUB-REGISTRAR
BOMBAY

0473

दस्त गोषवारा भाग - 2

बबइ2
दस्त क्रमांक (11252/2005
१९

दस्त क्र. [बबइ2-11252-2005] चा गोषवारा
बाजार मुल्य :100000 मोबदला 100000 भरलेले मुद्रांक शुल्क : 3000

दस्त हजर केल्याचा दिनांक :19/12/2005 04:01 PM
निष्पादनाचा दिनांक : 19/12/2005
दस्त हजर करणाऱ्याची सही :

दस्ताचा प्रकार :61) विश्वस्त व्यवस्था
शिक्का क्र. 1 ची वेळ : (सादरीकरण) 19/12/2005 04:01 PM
शिक्का क्र. 2 ची वेळ : (फी) 19/12/2005 04:04 PM
शिक्का क्र. 3 ची वेळ : (कबुली) 19/12/2005 04:05 PM
शिक्का क्र. 4 ची वेळ : (ओळख) 19/12/2005 04:05 PM

दस्त नोंद केल्याचा दिनांक : 19/12/2005 04:05 PM

ओळख :
खालील इसम असे निवेदीत करतात की, ते दस्तएवज करुन देणा-याना व्यक्तीशः ओळखतात, व त्यांची ओळख पटवितात.
1) विनय फडणीस ,घर/फ्लॅट नं: 170
गल्ली/रस्ता:
इमारतीचे नाव: हिंदू कॉलनी
इमारत नं:
पेठ/वसाहत: दादर
शहर/गाव: मु
तालुका:
पिन: 14
2) प्रसाद फडणीस ,घर/फ्लॅट नं: वरीलप्रमाणे
गल्ली/रस्ता:
इमारतीचे नाव:
इमारत नं:
पेठ/वसाहत:
शहर/गाव:
तालुका:
पिन: -

पावती क्र.:11309 दिनांक:19/12/20
पावतीचे वर्णन
नांव: मेसर्स एएए प्रोजेक्ट वेंचर्स प्रा लि (सं
साठी संगमेश्वर, अय्यर

1000 :नोंदणी फी
220 :नक्कल (अ. 11(1)), पृष्ठांकनाः
(आ. 11(2)),
रुजवात (अ. 12) व छायाचित्रण (अ. 13)
एकत्रित फी

1220: एकूण

दु. निबंधकाची सही, मुंबई शहर 2 (वरळी)

प्रमाणित करतो की, या
दस्तामध्ये एकूण ....१....पाने आहेत

दुय्यम क्रमांक ३, बबई-२ ..१७२४२..२००५
नोंदला
दिनांक
१९/१२/०५

सह. दुय्यम निबंधक मुंबई शहर-२
माहितीची खात्री करण्या सोबत
निबंधकाचे सर्व अधिकार राखीव.

दु. निबंधकाची सही
मुंबई शहर 2 (वरळी)

THE SEAL OF THE SUB-REGISTRAR
दुय्यम निबंधक, मुंबई शहर विभाग
BOMBAY

Dadar Tilli Road Limited

0474

Original
नोंदणी 39 म.
Regn. 39 M

Monday, December 19, 2005
4:04:35 PM

पावती

पावती क्र. : 11309

गावाचे नाव फोर्ट दिनांक 19/12/2005

दस्तऐवजाचा अनुक्रमांक बबई2 - 11252 - 2005

दस्ता ऐवजाचा प्रकार विश्वस्त व्यवस्था

सादर करणाराचे नाव:मेसर्स एएए प्रोजेक्ट वेंचर्स प्रा लि (सेटलर्स) साठी संगनेश्वर. अय्यर

नोंदणी फी	:-	1000.00
नक्कल (अ. 11(1)), पृष्टांकनाची नक्कल (आ. 11(2)), रुजवात (अ. 12) व छायाचित्रण (अ. 13) -> एकत्रित फी (11)	:-	220.00
एकूण	रु.	1220.00

आपणास हा दस्त अंदाजे 4:19PM ह्या वेळेस मिळेल

दुय्यम निबंधक
मुंबई शहर 2 (वरळी)
सह दुय्यम निबंधक
मुंबई शहर क्र. २

बाजार मुल्य: 100000 रु. मोबदला: 100000रु.
भरलेले मुद्रांक शुल्क: 3000 रु.

देयकाचा प्रकार: डीडी/धनाकर्षद्वारे;
बँकेचे नाव व पत्ता: बँक ऑफ इंडिया;
डीडी/धनाकर्ष क्रमांक: 019410; रक्कम: 1000 रु.; दिनांक: 14/12/2005

0475

ANNEXURE - I

RELIANCE LAST MILE COMMUNICATIONS PRIVATE LIMITED

DETAILS OF SHARES HELD AS ON 21st December,2005

Sr. No	Name of the Member	Address	Number of Equity Shares of Rs.10/- each fully paid-up	%
1	Reliance Energy Limited	3rd floor, Reliance Energy Centre Santa Cruz (East), Mumbai 400 055	49,000	49.00%
2	Reliance Energy Management Services Private Ltd *	3rd floor, Reliance Energy Centre Santa Cruz (East), Mumbai 400 055	51,000	51.00%
	TOTAL		1,00,000	100.00%

* Trustee of Energy Trust

For Reliance Last Mile Communications Private Li

Director/Authorised Sign

0476

ANNEXURE II

DS Toll Road Limited

Registered Office :3rd Floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022 3009 9999 Facsimile : 022 3009 9763

Extracts from the Minutes of the Board Meeting held on 24th October,2005

Execution of documents for NHAI project

"RESOLVED THAT the Board do undertake construction of roads and management of the same on Build-own-transfer (BOT) comprising two projects, viz. (i) Namakkal Bypass-Karur Bypass and (ii) Dindigul-Samayanallur in Tamil Nadu as per the letter of acceptance dated 30th September, 2005 issued by National Highway Authority of India (NHAI) to Reliance Energy Limited.

RESOLVED FURTHER THAT Shri J P Chalasani and Shri Sanjay D Joshi, Authorised representatives of the Company, be and are hereby severally authorised to agree, settle, execute any deed, documents, agreements, applications, etc. in relation to the aforesaid projects and to do all acts, deeds, things and matters necessary and incidental in this regard and that the Common Seal by the Company, if required on any deed, application, paper, documents, etc., be affixed in the presence of any of the above Executives of the Company."

\\\ Certified True Copy ///

For DS Toll Road Private Limited

Hasit Shukla
Director
20/12/05

DS Toll Road Limited

0477

Reliance Energy
A Dhirubhai Ambani Enterprise

Reliance Energy Limited
Reliance Energy Centre
Santa Cruz (E)
Mumbai 400 055

Tel: +91 (022) 3009 9999
Fax: +91 (022) 3009 9775
www.rel.co.in

January 20, 2006

Shri Pranavant,
General Manager (NS-2)
National Highways Authority of India
G- 5 & 6, Sector-10, Dwarka
New Delhi 110 075

Fax: 011 2509 3512
Pages: 1+8=9

Sub: Award of Concession for TN-3 and TN-5

Dear Sir:

With reference to our discussion during last week with NHAI's Advisors M/s Price Waterhouse and M/s Singhania, we are pleased to enclose a Supplemental Trust Deed in respect of Energy Trust.

Thanking you,

Yours faithfully,

Sanjay Divakar Joshi
Additional Vice President

CC: Mr. Hripesh Kumar 011 - 41250250
PWC

CC: Mr. Dipak Rao 011 - 51510200
Singhania & Partners

Roads Limited DS Toll

0478

Thursday, January 19, 2006

1:04:34 PM

Original

नोंदणी 39 म.

Regn. 39 M

पावती

पावती क्र. : 579

गावाचे नाव फोर्ट

दिनांक 19/01/2006

दस्तऐवजाचा अनुक्रमांक वबइ2 - 00570 - 2006

दस्ता ऐवजाचा प्रकार विश्वस्त व्यवस्था

सादर करणाराचे नाव: मे/- ए ए ए प्रोजेक्ट व्हेचर्स प्रा लि तर्फे संगमेश्वर अय्यर . .

नोंदणी फी	:-	100.00
नक्कल (अ. 11(1)), पृष्टांकनाची नक्कल (आ. 11(2)), रुजवात (अ. 12) व छायाचित्रण (अ. 13) -> एकत्रित फी (20)	:-	400.00
एकूण	रु.	500.00

आपणास हा दस्त अंदाजे 1:19PM ह्या वेळेस मिळेल

दुय्यम निंबधक
मुंबई शहर 2 (वरळी)

बाजार मुल्य: 1 रु. मोबदला: 0रु.

भरलेले मुद्राक शुल्क: 200 रु.

दुय्यम निबंधक
मुंबई सहर क्र. २.

0479

Supplemental Trust Deed

THIS SUPPLEMENTAL DEED OF TRUST made at Mumbai on this 19th day of January, 2006.

BETWEEN

AAA Project Ventures Private Limited, a Company registered under the Companies Act, 1956 and having its registered office at 3rd Floor Reliance Energy Centre, Santa Cruz (East), Mumbai – 400 055 hereinafter called "the Settlor" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and assigns) of the First Part;

AND

Reliance Energy Management Services Private Limited, having its registered office at 3rd Floor Reliance Energy Centre, Santacruz Cruz (East), Mumbai – 400 055 hereinafter called "the Trustee" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and assigns) of the Second Part.

The Trust being constituted for the sole benefit of Reliance Energy Limited, a Company registered under the Indian Companies Act, 1913 having its registered office at Reliance Energy Centre, Santa Cruz (East), Mumbai - 400 055 hereinafter called the "Beneficiary" / "REL" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and assigns).

कवर-2
790/19
२००६

SUB-REGISTRAR

The Cosmos Co-operative Bank Ltd., Vile Parle Branch, Mumbai
D-3/STP(V)/C.R.1004/05/200
1762-64,

भारत 24472 Special Adhesive महाराष्ट्र
147168 JAN 17 2006
Rs.0000200/-P85114
STAMP DUTY MAHARASHTRA INDIA
For The Cosmos Co-op. Bank Ltd.
Authorised Signatory

THE COSMOS CO-OPERATIVE BANK LTD., PUNE
FRANKING DEPOSIT SLIP

Customer Copy 21985

Branch: V. le Parle Date 17/01/06

Pay to

Franking Value	Rs.	2000/-
Service Charges	Rs.	11
Total	Rs.	2011

Name & Address of Stamp duty paying party
AAA Project Ventures Pvt. Ltd.
3rd Flr. Reliance Energy Centre Santa Cruz (E), M-55

Tel.No.: / Mobile No.:

Purpose of Transaction

in cash for Franking Documents

Rs. 2011/-

(For Bank's Use only)

Tran ID

WHEREAS:

The Settler by a Deed of Trust dated 19th December, 2005 constituted the Trust ("Energy Trust") which is duly registered with the Sub-Registrar, Mumbai, and the Trustees are appointed to administer the Trust of which Reliance Energy Limited are the sole Beneficiaries.

It is felt that in order to give full effect to the intent of the Trust, Clause No. 6.2 of the Trust Deed needs be amended.

With the consent of the Trustees and the Beneficiaries, it is decided to delete the said clause No.6.2 of the said Trust Deed and to substitute the clause with amendment as mentioned hereinbelow (Copy of the Record of discussions of the meeting held on 09th January, 2006 between the Settlor, Trustees and the Beneficiaries by which it was unanimously decided to effect the said amendment is Annexed as Annexure 'A' hereto).

NOW THIS SUPPLEMENTAL TRUST DEED WITNESSETH THAT:

The existing Clause No.6.2 of the Trust Deed shall stand deleted and replaced by the following:

"Clause No. 6.2. Trustees shall exercise their voting rights in RLMCPL in the same manner as exercised by Reliance Energy Limited".

All remaining clauses of the Trust Deed shall remain unaltered.

The aforesaid amendment shall come into effect immediately after execution of this Supplemental Trust Deed.

बम्बई-2
५७० / १२
२००६

THE SEAL OF THE SUB-REGISTRAR
0481

DS Toll Road Limited

This Supplemental Trust Deed shall form an integral part of the Energy Trust Deed dated 19th December, 2005 and shall always be read together.

IN WITNESS WHEREOF the Settler and the Trustees have signed this Deed on the date and the year above mentioned in the presence of:

Witnesses:

1. Prasad V. Phadnis.

2. Vinay K. Phadnis.

(For AAA Project Ventures Pvt. Ltd.)
(Settler)

(For Reliance Energy Management Pvt. Ltd.
(Trustee)

बबई-2
960/13
२००६

THE SEAL OF THE SUB-REGISTRAR
मुंबई शहर जिल्हा
BOMBAY

0482

Annexure A

Record of Discussion of the Meeting held on January 09, 2006 at Mumbai between the Settler of the Energy Trust (AAA Project Ventures Pvt. Ltd.), the Trustees of the said Trust (Reliance Energy Management Services Pvt. Ltd.) and the Sole Beneficiary (Reliance Energy Limited) -Collectively referred as "Parties"

The Parties noted that the Energy Trust was formed for holding 51% beneficial interest in Reliance Last Mile Communication Pvt. Ltd. (RLMCPL) who have invested in 32% of the paid-up capital of the two SPVs, namely DS Toll Road Limited and NK Toll Road Limited, which have been set up for financing and implementation of two road projects awarded by National Highways Authority of India (NHAI) to REL on BOT basis.

One of the key requirements of the Concession Agreement, to be signed by the SPVs with NHAI, is that the said SPVs will have to complete the project in given time and cost. Necessarily this will require clarity about quick decision making thereby leading to efficient implementation of the Projects. Keeping these objectives in mind it was considered prudent for Reliance Energy Limited to take a consolidated view on behalf of all the stakeholders in the RLMCPL.

In view of this, it was agreed by the Parties that the Trustees will exercise their voting rights in RLMCPL in the same manner as exercised by Reliance Energy Limited and it is agreed that the Trustee shall convey this decision to NHAI by a suitable letter.

Dated: January 09, 2006

For AAA Projects Ventures Pvt. Ltd.

Sd/-
(Hasi Shukla)
Director

For Reliance Energy Mgmt. Services Pvt. Ltd.
(Trustee of Energy Trust)

Sd/
(Ramesh Shenoy)
Authorised Signatory

Reliance Energy Limited

Sd/
(J P Chalasani)
Director

THE SEAL OF THE SUB-REGISTRAR

बनई-2
५६० / / ४
२००६

Original
नोंदणी 39 म.
Regn. 39 M

Monday, December 19, 2005
4:04:36 PM

पावती

पावती क्र. : 11309

गावाचे नाव : फोर्ट

दिनांक 19/12/2005

दस्तऐवजाचा अनुक्रमांक : बबई2 - 11252 - 2005

दस्ताऐवजाचा प्रकार : विश्वस्त व्यवस्था

सादर करणाराचे नाव.मेसर्स एएऐप्रोजेक्ट वेंचर्स प्रा लि (सेटलर्स) साठी संगमेश्वर. अय्यर

नोंदणी फी	-	1000.00
नक्कल (अ. 11(1)), पृष्टांकनाची नक्कल (आ. 11(2)), रुजवात (अ. 12) व छायाचित्रण (अ. 13) -> एकत्रित फी (11)	-	220.00
एकूण	रु.	1220.00

आपणास हा दस्त अंदाजे 4:19PM ह्या वेळेस मिळेल

दुय्यम निबंधक
मुंबई - क्र. 2 (वरळी)

सह दुय्यम निबंधक
मुंबई शहर क्र. २

बाजार मुल्य: 100000 रु. मोबदला: 100000रु.
भरलेले मुद्रांक शुल्क: 3000 रु.

दस्ताचा प्रकार :डीडी/धनाकर्षद्वारे
बँकेचे नाव व पत्ता: बँक ऑफ इंडिया
डीडी/धनाकर्ष क्रमांक: 019410, रक्कम:1000 रु., दिनांक: 14/12/2005

बबई-2
960
२००५

THE SEAL OF THE SUB-REGISTRAR

DS Toll Road Limited

0484

DEED OF TRUST

OF

ENERGY TRUST

THIS DEED OF TRUST made at Mumbai on this 12 day of December 2005

BETWEEN

AAA Project Ventures Pvt. Ltd., a Company registered under the Companies Act 1956 and having its registered office at 3rd Floor Reliance Energy Centre, Santa Cruz (E), Mumbai - 400055 hereinafter called "the Settlor" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and assigns) of the First Part

AND

(1) Reliance Energy Management Services Private Ltd., having its registered office at 3rd Floor Reliance Energy Centre, Santa Cruz (E), Mumbai - 400055 hereinafter called "the Trustee" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and assigns) of the Second Part, the Trust being constituted for the sole benefit of Reliance Energy Ltd., a Company registered under the Companies Act 1956 having its registered office at Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055 hereinafter called the "Beneficiary" / "REL" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and assigns)

WHEREAS:

The National Highways Authority of India (NHAI) has awarded to REL, the following two road projects (the "Projects") on NH-4 in the State of Tamil Nadu for a specified concession period (the "Concession Period"):

(i) [illegible] Construction, Development, Finance, Operation and Maintenance of km 258.645 ([illegible] Namakkal bypass) to km 292.4 (Start of Karur bypass) and (ii) Improvement, Operation and Maintenance of km 248.625 (Start of proposed flyover on Namakkal bypass) to km 258.645 (End of Namakkal bypass);

(ii) [illegible] Construction, Development, Finance, Operation and Maintenance of km 373.275 (Start of proposed flyover at Dindigul bypass) to km [illegible] (Samyanallore), covering 53.025 km

THE SEAL OF THE SUB-REGISTRAR [illegible] BOMBAY

बम्बई-2 460 / E

बम्बई-2 792.52 / 11 / 2005

0485

(B) The said Projects are going to be executed through Special Purpose Vehicles (hereinafter referred to as the "SPVs") in which 19% equity contributions to the Share Capital are to be made by REL and 32% equity contributions to the Share Capital are to be made by an Associate Company of REL namely 'Reliance Last Mile Communications Pvt. Ltd.' (hereinafter called "Associate Company / RLMCPL"). In order to support REL to execute the said Projects and for the benefit of REL, this Trust is being formed to contribute 51% of the equity contribution in the Share Capital of the said Associate Company, the balance 49% of the equity in the Share Capital to be contributed by REL.

(C) The Settlor and Trustee hereto are desirous of recording the terms of the Trust by and between them as follows:

NOW THIS DEED OF TRUST WITNESSETH as under:-

DECLARATION:

The Settlor hereby constitutes the Trust herein contained and transfers the initial corpus of the Trust to the Trustee to be held by the Trustee unto and for the benefit of the sole beneficiary REL on the following terms and conditions and the Trustee hereby declares that it will hold the Trust corpus, properties, rights and privileges in trust for the benefit of the sole beneficiary REL:

1. NAME OF THE TRUST

1.0 The name of the Trust shall be "Energy Trust" (hereinafter referred to as the "Trust") and its office shall be at Nagin Mahal (6th Floor), 32 Veer Nariman Road, Mumbai 400020 and at such other place / places as the Trustee herein may decide from time to time.

2. OBJECTS

2.0 The objects of the Trust are as under:

2.1 to make investments to the extent of 51% of the Equity Share Capital of a company named Reliance Last Mile Communications Pvt. Ltd. which shall in turn make investments in the SPVs that will execute the said road Projects as aforesaid.

2.2 to manage the corpus of the Trust, Trust Fund and collect and receive the interest dividend, bonus shares and other income, rights and privileges attached to the said equity share holdings by the Trust.

THE SEAL OF THE SUB-REGISTRAR

THE SEAL OF THE SUB-REGISTRAR BOMBAY

बबई-2

बबई-2

0486

2.3 to distribute annually on finalization of audited Accounts, the net income of the Trust to the sole beneficiary REL, after retaining suitable amount for meeting future administrative expenses and other requirements as the Trustee may deem fit in its discretion.

2.4 to transfer the corpus of the Trust and all Trust funds, rights, privileges, assets and properties to REL on expiry of the Trust.

3. CORPUS OF THE TRUST

3.0 The corpus of the Trust shall comprise of Rs. 1, 00,000 (rupees one lakh only) being transferred by the Settlor to the Trustee by cheque no. 707559 dated 11/11/2005 drawn on ICICI Bank Ltd. simultaneous to the execution of this Trust Deed; and

4. BENEFITS UNDER THE TRUST

4.0 The benefits arising from the investments made by the Trust as a member of the said Associate Company / RLMCPL shall be provided by the Trustee in favour of REL. The 51% equity share holdings in the equity Share Capital of the said Associate Company / RLMCPL shall be non-transferable till the expiry of the term of the Trust and shall be held by the Trust during its entire term.

4.1 On expiry of the term of this Trust, the corpus, forming the shares in the said Associate Company / RLMCPL along with the accretions and other Trust funds and properties shall be transferred by the Trustee to REL and the Trust shall stand dissolved.

5. SOLE TRUSTEE

5.0 The aforesaid Trustee i.e. Reliance Energy Management Private Ltd., shall act as a Sole Trustee for the Trust and shall perform its functions as Sole Trustee through its authorized executives in this respect.

6. MANAGEMENT OF THE TRUST

6.0 The Trustee shall manage and administer the affairs of the Trust diligently and with due care and caution as per the objectives of the Trust.

6.1 The Trustee shall be entitled to receive reasonable remuneration as may be approved by the Settlor for the services rendered by the Trustee.

6.2 The Trustee shall have the right to ensure its voting rights in the shares held by it including for the purpose of appointment of Directors in the said Associate

THE SEAL OF THE SUB-REGISTRAR

बम्बई-2
460 / 11
२००६

बम्बई-2

2.3 to distribute annually on finalization of audited Accounts, the net income of the Trust to the sole beneficiary REL, after retaining suitable amount for meeting future administrative expenses and other requirements as the Trustee may deem fit in its discretion.

2.4 to transfer the corpus of the Trust and all Trust funds, rights, privileges, assets and properties to REL on expiry of the Trust.

3. CORPUS OF THE TRUST

3.0 The corpus of the Trust shall comprise of Rs. 1,00,000 (rupees one lakh only) being transferred by the Settlor to the Trustee by cheque no. 707559 dated 11/11/2005 drawn on ICICI Bank Ltd. simultaneous to the execution of this Trust Deed; and

4. BENEFITS UNDER THE TRUST

4.0 The benefits arising from the investments made by the Trust as a member of the said Associate Company / RLMCPL shall be provided by the Trustee in favour of REL. The 51% equity share holdings in the equity Share Capital of the said Associate Company / RLMCPL shall be non-transferable till the expiry of the term of the Trust and shall be held by the Trust during its entire term.

4.1 On expiry of the term of this Trust, the corpus forming the shares in the said Associate Company / RLMCPL along with the accretions and other Trust funds and properties shall be transferred by the Trustee to REL and the Trust shall stand dissolved.

5. SOLE TRUSTEE

5.0 The aforesaid Trustee Reliance Energy Management Private Ltd., shall act as a Sole Trustee for the Trust and shall perform its functions as Sole Trustee through its authorized executives in this respect.

6. MANAGEMENT OF THE TRUST

6.0 The Trustee shall manage and administer the affairs of the Trust diligently and with due care and caution as per the objectives of the Trust.

6.1 The Trustee shall be entitled to receive reasonable remuneration as may be approved by the Settlor for the services rendered by the Trustee.

6.2 The Trustee shall have the right to ensure its voting rights in the shares held by it including for the purpose of appointment of Directors in the said Associate

THE SEAL OF THE SUB-REGISTRAR

बम्बई-2
460 / 2
२००६

बम्बई-2
992 / 3
२००६

0488

Company / RLMCPL in such manner as the Trustee considers appropriate without being bound by the wishes of the sole beneficiary REL.

6.3 The Trust shall have the right to hold properties, funds, securities and shares in the name of the Trustee and shall have the right to borrow money for administrative and other purposes from time to time.

6.4 The Trustee shall be responsible to maintain proper accounts of the Trust as per the accounting standards as applicable, have it audited periodically by reputed Auditors, file necessary returns and complete any assessments as may be required.

6.5 The Trustee shall be responsible for all legal compliances with regard to the Trust and to pay any fees, tax, duties and charges and any such other outgoings as may be necessary and make any disclosures as may be legally necessary in respect of the affairs of the Trust.

6.6 The Trustee shall take all legal actions as may be necessary to protect the interest of the Trust without in any way prejudicially effecting the interests of the sole beneficiary REL and for that purpose engage any Advocate, Counsel or professional in this respect.

7. BANK ACCOUNTS

7.0 The Trust shall open and operate Bank Accounts in its name and deposit all revenue receipts into the Account and disburse its expenses from the said Account. The Bank Account shall be operated by such persons as authorized by the Trustee.

8. INFORMATION TO BENEFICIARY

8.0 The Trustee shall furnish personal details relating to the corpus it holds, the Bank Account, revenues and expenditure and other Trust properties, privileges or activities and any such other information, to the sole beneficiary REL from time to time and in any case in intervals not exceeding 3 (three) months.

9. REMISSION OF THE OFFICE OF TRUSTEE

9.0 In case the Trustee shall have at any time any legal disability to act as a Trustee or the Trustee wishes to remit the office for any reason, the Settlor shall have the right to name the new Trustee.

THE SEAL OF THE SUB-REGISTRAR OF ASSURANCES BOMBAY

बबई - 2
960 / 90
बबई-2
492941
२००५

0489

10. TERM OF THE TRUST

10.0 The Trust has come into existence with effect from 11th November 2005. The duration of the Trust shall be for a period of 25 (twenty five) years or for such shorter period as may be determined by the Trustee at its sole discretion.

IN WITNESS WHEREOF the parties hereto have hereunto set and subscribed their respective hands the day and year first hereinabove written.

Witnesses:

1.) (C. MARTIS)

2.)

(For AAA Project Ventures Pvt. Ltd.)
(Settlor)

(For Reliance Energy Management Pvt. Ltd.)
(Trustee)

THE SEAL OF THE SUB-REGISTRAR BOMBAY

बबई - 2
960 / 92
२००५

बबई - 2
99252 / 4
२००५.

ICICI BANK LTD FRANKING DEPOSIT SLIP

Customer Copy

Deposit Br. Date

Pay to: Acct Stamp Duty Mumbai

Franking Value Rs. 3000.00

Service Charges Rs.

Total Rs. 3010.00

Name of Stamp duty paying party: AAA Project Ventures Pvt. Ltd.

DD / Cheque No.

Drawn on Bank

Received With Thanks Rs. 3000/- Towards Payment of Stamps Duty

Franking Sr. No. 7627

Officer

0490

TRANSFER

PAD 101
Para 4.6

RESERVE BANK OF INDIA
PUBLIC ACCOUNTS DEPARTMENT, MUMBAI

Token No. Date

№ 120511

Date of Delivery

IMPORTANT

1. Exchange this token for the Bank's receipt within fifteen working days from the date of delivery failing which a search fee of Rs. 10/- will be charged.
2. In case of loss of this token a fee of Rs. 10/- will be charged.
3. In case the loss of this token is reported after the due date, an aggregate amount of Rs. 20 will be charged as penalty
4. In case the receipted challan is not collected within 3 months from the date of delivery indicated above, the challan will be destroyed with no reference to the remitter and the token issued will be treated as lapsed.
5. Delivery of the receipted challans will be made at counter Nos. 1 to 3 of R. B. I. Amar Bldg.

18 DEC 2005

26 DEC 2005

THE SEAL OF THE SUB-REGISTRAR

बबई-2
992/92
२००५.

बबई-2
960 / 92
२००५

THE SEAL OF THE SUB-REGISTRAR
BOMBAY

0491

G/E A/c Payslip Issued — VALID FOR SIX MONTHS FROM THE DATE OF ISSUE

DO NOT FOLD

14-12-200

Pay JT. SUB-REG. MUMBAI CITY

रुपये Rupees One Thousand only

या उनके आदेश पर

Rs********1,000

अदा करें

1000

बैंक ऑफ इंडिया BANK OF INDIA

खोदादाद सर्कल शाखा KHODADAD CIRCLE BRANCH
मुंबई 400 014 BOMBAY 400 014
KDC

अधिकृत हस्ताक्षरकर्ता Authorised S

"C 19410" 4000130701

नवबई-2
49242 / 6

नोंदणी महानिरीक्षक व मुद्रांक नियंत्रक,
महाराष्ट्र राज्य

[नियम १२ पहा]

THE SEAL OF THE SUB-REGISTRAR

भरणा करणाऱ्याचे भरणाचे कारण

विभागीय अधिकाऱ्याचे किंवा कोषागाराचे नाव

Jt. Sub Reg. Mumbai City
Old Custom House
S.B. Road, Mumbai
400035

लेखाचे वर्गीकरण

प्रधानशीर्ष : ००३० मुद्रांक व नोंदणी

उपप्रधानशीर्ष : ०१ नोंदणी फी

गौणशीर्ष : ३०४ दस्त वजा ५% नोंदणीठोक फी

सर्वसाधारण वसुली

लेखाशीर्ष

संगणक संकेतांक

0 3 0 0 1

BOMBAY

भरणा केलेली रक्कम रुपये 1000/-

(अक्षरी) रुपये एक हजार फक्त
One Thousand only

19/12/05

नवबई-2
4560 / 93

0492

Reliance Energy Management Services Private Limited
Registered Office : 3rd floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022 2663 9311 Facsimile : 022 2663 9763

Certified True Copy of the resolution passed by the Board of Directors of the Company held on 14th November, 2005

Trustee of Trust named "Energy Trust" : The Board considered the proposal to act as a Trustee of the Trust named "Energy Trust". It was

RESOLUTION NO. I

"RESOLVED THAT approval of the Board be and is hereby accorded to act as trustee of a Trust named "Energy Trust"

RESOLVED FURTHER THAT Shri Ramesh Shenoy, Shri Himanshu Agarwal and Shri Sangameshwar Iyer be and are hereby severally authorized to negotiate, finalise, approve, execute and deliver the Trust Deed between AAA Project Ventures Private Limited (as settlor of the Trust) with Reliance Energy Management Services Private Limited as the sole trustee of Energy Trust; and

RESOLVED FURTHER THAT Shri Ramesh Shenoy, Shri Himanshu Agarwal and Shri Sangameshwar Iyer be and are hereby severally authorised in the name of and on behalf of the Company to do all such other acts, matters, deeds and things and execute all such documents as may be necessary or desirable in connection with or incidental to giving effect to the above resolution."

Certified True Copy

For Reliance Energy Management Services Private Limited

Director

बम्बई-2
4929 / C
२००५.

बम्बई-2
460 / 98
२००५

0493

AAA Project Ventures Private Limited

Registered Office : 3rd floor, Reliance Energy Centre, Santa Cruz (East), Mumbai 400 055
Telephone : 022 2663 9999 Facsimile : 022 2663 9763

Extracts of the Board meeting minutes dated 11th October, 2005

Settlement of Trust in the name of "Energy Trust" : The Board considered the proposal to do settle a Trust under the Indian Trusts Act, 1881 in the name of "Energy Trust". It was

RESOLUTION NO. I

"RESOLVED THAT the Company do settle a Trust under the Indian Trusts Act, 1881 in the name of "Energy Trust" in India and the Company do make an initial contribution of Rs. 1,00,000 towards the initial corpus of such Trust.

RESOLVED FURTHER THAT Shri Ramesh Shenoy and Shri Sangameshwar Iyer be and hereby are severally authorized, to take any and all actions that the Board of Directors may take, to negotiate, finalise, approve, execute and deliver and to delegate to named individuals designated by them in writing from time to time the authority to negotiate, approve, finalise, execute and deliver in respect of following specific transactions:

(a) To appoint Reliance Energy Management Services Private Limited as a Trustee of the above Trust; and

(b) To execute the Trust Deed and other necessary documents between the Company as settlor of the Trust with Reliance Energy Management Services Private Limited as the sole Trustee of Energy Trust; and

RESOLVED FURTHER THAT Shri Ramesh Shenoy and Shri Sangameshwar Iyer be severally authorised in the name of and on behalf of the Company to do all such other acts, matters, deeds and things and execute all such documents as may be necessary of desirable in connection with or incidental to giving effect to the above resolution."

Certified True Copy

For AAA Project Ventures Private Limited

Director

बबई - 2
9924 2 / e
२००५.

बबई - 2
460 94

0494

बबइ2

दस्त क्र 11252/2

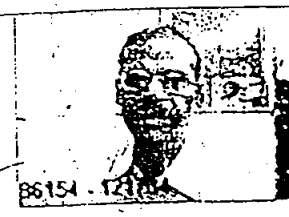
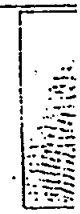
१०

दस्त गोषवारा भाग-1

19/12/2005 दुय्यम निबंधक:
4:06:01 pm मुंबई शहर 2 (वरळी)

दस्त क्रमांक : 11252/2005

दस्ताचा प्रकार : विश्वस्त व्यवस्था

अनु क्र.	पक्षकाराचे नाव व पत्ता	पक्षकाराचा प्रकार	छायाचित्र	अंगठ्या
1	नाव: मेसर्स रिलायन्स एनर्जी मॅनेजमेंट सर्व्हिसेस प्रा लि (ट्रस्टीज करंटी) हिमांशु अग्रवाल पत्ता: घर/फ्लॅट नं: तिसरा मजला गल्ली/रस्ता: इमारतीचे नाव: रिलायन्स एनर्जी सेंटर इमारत नं: पेठ/वसाहत: स	लिहून देणार वय 48 सही		
2	नाव: मेसर्स एएए प्रोजेक्ट वेंचर्स प्रा लि (सेटलर) साटी रामनेश्वर, अय्यर पत्ता: घर/फ्लॅट नं: 12/डि202 गल्ली/रस्ता: इमारतीचे नाव: अनिता नगर इमारत नं: पेठ/वसाहत: लोखंडवाला कॉम्प्लेक्स कांदिव	लिहून देणार वय 46 सही.		

सह दुय्यम निबंध
मुंबई शहर क्र. :

बबई-2
५६० ९६

पोचपावती भाग - 2

वव३2

दस्त क्रमांक (11252/2

९५

दस्त क्र. (वव३2-11252-2005)
बाजार मुल्य :100000 मोबदला :1500

दस्त हजर केल्याचा दिनांक :19/12/2005
निष्पादनाचा दिनांक : 19/12/2005
दस्त हजर करणाऱ्याची सही :

पावती क्र.:11309 दिनांक:19/
पावतीचे वर्णन
नांव: मेसर्स एएए प्रोजेक्ट वेंचर्स प्रा
साटी संगमेश्वर, अय्यर

1000 :नोंदणी फी
220 :नक्कल (अ. 11(1)), पृष्ठां (आ. 11(2)).
रुजवात (अ. 12) व छायाचित्रण (अ. एकत्रित फी

1220: एकूण

दु. निबंधकाची सही, मुंबई शहर 2 (व

दस्ताचा प्रकार :61) विश्वस्त व्यवस्था
शिक्का क्र. 1 ची वेळ : (सादरीकरण) 19/12/2005 04:01 PM
शिक्का क्र. 2 ची वेळ : (फी) 19/12/2005 04:05 PM
शिक्का क्र. 3 ची वेळ : (कबुली) 19/12/2005 04:05 PM
शिक्का क्र. 4 ची वेळ : (ओळख) 19/12/2005 04:05 PM

दस्त नोंद केल्याचा दिनांक : 19/12/2005 04:05 PM

ओळख :
खालील इसम असे निवेदीत करतात की, [illegible] ओळखतात, व त्यांची ओळख पटवितात
1) विनय पळणीस घर/फ्लॅट नं: 170
गल्ली/रस्ता:
ईमारतीचे नाव: हिंदू कॉलनी
ईमारत नं:
पेठ/वसाहत: दादर
शहर/गाव: मु
तालुका:
पिन: 14
2) प्रसाद [illegible]
गल्ली/रस्ता:
ईमारतीचे नाव:
ईमारत नं:
पेठ/वसाहत:
शहर/गाव:
तालुका:
पिन:

THE SEAL OF THE SUB-REGISTRAR मुंबई शहर-२

बघ्ई-2
५६० / १९७
२००६

[illegible] परभेव येते की, या
[illegible] पाने जोडिले
[illegible] २००५
[illegible]

[illegible] निबंधक मुंबई शहर-२
[illegible] नोंदणी करण्या सेरीज
[illegible] सर्व अधिकार मसलेला.

दु. निबंधकाची सही
मुंबई शहर २ (वरळी)

THE SEAL OF THE SUB-REGISTRAR
दुय्यम निबंधक, मुंबई शहर जिल्हा
BOMBAY

THE COSMOS CO-OPERATIVE BANK LTD., PUNE
FRANKING DEPOSIT SLIP

Customer Copy 218650

Branch : V. le Park Date : 7/7/06

Pay to :

Franking Value	Rs.	200.00
Service Charges	Rs.	11
Total	Rs.	211

Name & Address of Stamp duty paying party
AAA Project ventures Pvt. Ltd
3rd flr. Reliance Energy centre
Santa Cruz (E), M-Sr

Tel.No.: / Mobile No.:

Purpose of Transaction

In cash for Franking Documents

Rs. 200/-

(For Bank's Use only)

Tran ID

Franking Sr. No. 3221472

For The Cosmos Co-op. Bank Ltd. Pune

Authorised Signatory

SEAL OF THE SUB-REGISTRAR

बस्ती - 2
460 / 95
२००६

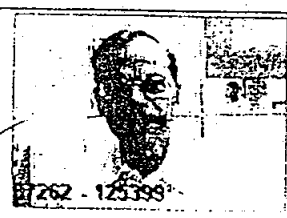
0497

19/01/2006 दुय्यम निबंधकः
1:05:27 pm मुंबई शहर 2 (वरळी)

दस्त गोषवारा भाग-1

बबइ2
दस्त क्र 570/2006

दस्त क्रमांक : 570/2006
दस्ताचा प्रकार : विश्वस्त व्यवस्था

अनु क्र.	पक्षकाराचे नाव व पत्ता	पक्षकाराचा प्रकार	छायाचित्र	अंगठ्याचा ठसा
1	नावः मे/- ए ए ए प्रोजेक्ट व्हेंचर्स प्रा लि तर्फे संगमेश्वर अय्यर पत्ता: घर/फ्लॅट नं: 12 डी 202 गल्ली/रस्ता: लोखंडवाला ईमारतीचे नावः अनिमा नगर ईमारत नं: - पेठ/वसाहत: - शहर/गाव: मुंबई	लिहून देणार वय 46 सही		
2	नावः मे/- रिलायन्स एनर्जी मॅनेजमेंट सर्विसेस प्रा लि तर्फे हिमांशु अग्रवाल पत्ता: घर/फ्लॅट नं: - गल्ली/रस्ता: - ईमारतीचे नावः रिलायन्स एनर्जी सेंटर ईमारत नं: - पेठ/वसाहत: - शहर/गाव: मुंबई	लिहून घेणार वय 48 सही		

सह दुय्यम निबंधक
मुंबई शहर क्र. २.

THE SEAL OF THE SUB-REGISTRAR
दुय्यम निबंधक, मुंबई शहर जिल्हा
BOMBAY

Sea Toll Road Limited
0498

दस्त गोषवारा भाग - 2

बबइ2
दस्त क्रमांक (570/2006)
21

दस्त क्र. [बबइ2-570-2006] चा गोषवारा
बाजार मुल्य :1 नोंदवलां 0 भरलेले मुद्रांक शुल्क : 200

दस्त हजर केल्याचा दिनांक :19/01/2006 12:57 PM
निष्पादनाचा दिनांक : 19/01/2006
दस्त हजर करणा-याची सही :

दस्ताचा प्रकार :61) विश्वस्त व्यवस्था
शिक्का क्र. 1 ची वेळ : (सादरीकरण) 19/01/2006 12:57 PM
शिक्का क्र. 2 ची वेळ : (फी) 19/01/2006 01:04 PM
शिक्का क्र. 3 ची वेळ : (कबुली) 19/01/2006 01:05 PM
शिक्का क्र. 4 ची वेळ : (ओळख) 19/01/2006 01:05 PM

दस्त नोंद केल्याचा दिनांक : 19/01/2006 01:05 PM

ओळख :
खालील इसम असे निवेदीत करतात की, ते दस्तऐवज करुन देणा-यांना व्यक्तीशः ओळखतात, व त्यांची ओळख पटवितात.
1) [illegible] कडणीस ,घर/फ्लॅट नं: -
गल्ली/रस्ता: -
इमारतीचे नाव: [illegible] कॉलनी
इमारत नं: -
पेठ/परिसर: -
शहर/गाव: [illegible]
तालुका: -
[illegible]
2) [illegible] कडणीस ,घर/फ्लॅट नं: -
गल्ली/रस्ता: -
इमारतीचे नाव: वरीलप्रमाणे
इमारत नं: -
पेठ/परिसर: -
शहर/गाव: -
तालुका: -
[illegible]

दु. निबंधकाची सही
मुंबई शहर 2 (वरळी)

पावती क्र.:579 दिनांक:19/01/2006
पावतीचे वर्णन
नांव: मे/- ए ए ए प्रोजेक्ट व्हेचर्स प्रा लि तर्फे संगमेश्वर अय्यर

100 :नोंदणी फी
400 :नक्कल (अ. 11(1)), पृष्टांकनाची नक्कल (आ. 11(2)),
रुजवात (अ. 12) व छायाचित्रण (अ. 13) ->
एकत्रित फी

500: एकूण

दु. निबंधकाची सही, मुंबई शहर 2 (वरळी)

प्रमाणीत करणेत येते की,
दस्तामध्ये एकूण 20 पाने आहेत
पुस्तक क्रमांक १, बबई-२/ 450 /२००६
नोंदला
दिनांक 19/1/06

सह. दुय्यम निबंधक मुंबई शहर-२
[illegible] निबंधकाचे सर्व अधिकार असलेला

THE SEAL OF THE SUB-REGISTRAR
सह दुय्यम निबंधक, मुंबई शहर जिल्हा
BOMBAY

0499