



RAAJMARG1 PROJECTS PRIVATE LIMITED

Request for Proposal

Road Asset Performance and Information Dashboard System

Three month proof of concept | Chilakaluripet–Vijayawada | 69.408 km

RFP Ref. R1PPL/RFP/RAPIDS/2026/001

A phased road asset intelligence service, priced per centre-line kilometre, with separately instructed surveys and provision for approved additional projects at the accepted rates.

Bid summary

Event	Date and time
RFP issue date	16-09-2026
Last date for clarification requests	23-09-2026, 15:00
Bid submission deadline	28 September 2026, 15:00
Technical evaluation	After the submission deadline; schedule to be notified
Financial opening	To be notified to technically compliant bidders
Bid validity	90 days from the bid submission deadline

Issued by Raajmarg1 Projects Private Limited (R1PPL).

Correspondence: Mr. Mridul Dubey, CFO
 Raajmarg Infra Investment Managers Pvt. Ltd.
 Plot Nos. G-5 & 6, Sector-10, Dwarka, New Delhi – 110075
 Email: tender@raajmarginvit.in

Technical submission: email or sealed physical submission. Financial proposal: separate sealed physical envelope. See Clause 2.3.

Contents

Section or annexure	Page
Bid summary	1
Disclaimer and invitation	3
Project coverage and additional projects	4
Eligibility and clarifications	5
Submission and evaluation	6
Pricing and rate validity	7
Payment and future orders	8
Data ownership and cybersecurity	9
Service credits and safety	10
Project management and independence	11
Force majeure and disputes	12
Liability and indemnity	13
Service stages and survey coverage	14
Detection and condition assessment	15
Maintenance workflow and dashboard	16
Reporting and implementation	17
Client data and instructed orders	18
Instructed survey and inventory specifications	19
Definitions and interpretation	20
Annexures A and H — corridor and project manager	21
Annexure B — price schedule	22
Annexures C and D — declaration and checklist	23
Annexure E — consolidated compliance matrix	24
Annexure F — AI performance and validation	25
Annexure G — SLA matrix	26
Annexure J — security and hosting disclosure	27
Annexure L — evaluated cost and L1	28
Annexure M — stage outputs and acceptance	29

Disclaimer and invitation

Disclaimer

The information in this RFP and any subsequent clarification is provided to assist bidders in preparing proposals. This RFP is not an agreement or an offer to contract. R1PPL makes no representation or warranty as to the accuracy, adequacy or completeness of information supplied and shall not be liable for costs or losses arising from a bidder's use of it, subject to applicable law. Bidders shall make their own assessment of the requirements and information provided.

Bidders warrant that information supplied in their proposals is true to the best of their knowledge and belief and that they comply with applicable laws. They shall indemnify R1PPL for liabilities arising from their error, default, negligence or contravention in supplying statutory forms or other bid documents.

R1PPL may seek additional information, amend the requirements by notifying all invited bidders, accept or reject any proposal, or cancel the procurement before the Letter of Award or work order without incurring liability to bidders. All costs of bid preparation, submission and any requested presentation remain with the bidder, regardless of outcome.

1.1 Invitation

Raajmarg1 Projects Private Limited (R1PPL) invites eligible vendors to design, deploy and operate a Road Asset Performance & Information Dashboard System (RAPIDS) for a three-month proof of concept on the corridor in Annexure A. Bidders shall submit separate technical and financial proposals under Clause 2.3.

1.2 Background

R1PPL holds a portfolio of operating national-highway toll assets. The proposed service supports maintenance planning, safety management, capital and revenue expenditure decisions, and reporting to stakeholders and lenders. It connects survey evidence and AI/ML detection with condition assessment, risk prioritisation, maintenance recommendations, work-order tracking and verification.

1.3 Objective and responsibility

The POC shall establish a repeatable baseline, identify changes and intervention priorities, and demonstrate the complete management workflow. Camera-based intelligence is delivered first; supplied instrumented data is integrated next; multi-cycle analysis is delivered as survey history becomes available. The measurable outputs are set out in Annexure M.

The vendor detects, assesses, recommends, records, tracks and verifies. Physical road repairs remain with R1PPL and its O&M contractors. AI-derived outputs are decision support; engineering approval and execution decisions remain with R1PPL. The RFP is vendor-neutral and does not require a particular platform or an unsupported parameter count.

Project coverage and approved expansion

1.4 Project portfolio and measurement

The initial scope comprises three stretches of the Chilakaluripet–Vijayawada corridor in Andhra Pradesh, totalling 69.408 centre-line km, as listed in Annexure A. Survey coverage includes both carriageways and all lanes. R1PPL’s recorded chainages are the basis for linear referencing.

For pricing and payment, “km” means centre-line kilometre. Each quoted per-km rate includes both carriageways, all lanes and all passes needed to achieve the ordered coverage. No carriageway-km, lane-km, asset-count or structure-count multiplier applies. All priced Services use the units in Annexure B.

The vendor shall submit its mobilisation, route and capture plan. Any available lane configuration, chainage reconciliation, existing inventory, survey data and access dependencies shall be identified at mobilisation; these do not reduce the specified coverage obligation.

1.4A Additional projects at the same rates

Subject to satisfactory performance and prior approval of the competent authority, R1PPL may extend the Services to additional projects or stretches by written work order. For the same scope, specifications and service levels, the corresponding accepted unit rates shall apply without increase solely because another project is added.

Each order shall identify the project, centre-line length, applicable Service Stage, commencement date, duration, deliverables and approved value. Additional projects shall follow the applicable onboarding and Service Stages. Accelerated progression requires agreement on the suitability and availability of input data and acceptance of the corresponding outputs.

No minimum additional length or future award is guaranteed. Materially different scope requires prior written approval and agreed commercial terms before execution. Orders at the accepted rates may be placed only within the Order Placement Period in Clause 2.5.4, which also specifies the fixed-rate period for each order.

The same approval and written-order process applies to continuation on the initial corridor. The accepted applicable Stage and Instructed Service rates in Annexure B shall apply to the corresponding ordered scope. Future work is not included in the initial POC payment merely because its rates are quoted.

1.5 Contact and correspondence

All bid correspondence shall quote RFP Ref. R1PPL/RFP/RAPIDS/2026/001 and be addressed to Mr. Mridul Dubey, CFO, Raajmarg Infra Investment Managers Pvt. Ltd., Plot Nos. G-5 & 6, Sector-10, Dwarka, New Delhi – 110075; tender@raajmarginvit.in.

R1PPL’s approval of a technical document or deliverable does not itself authorise additional expenditure. Additional projects, Instructed Services and scope changes require the applicable approved written work order.

Eligibility and clarifications

2.1 Minimum eligibility

Requirement	Minimum evidence
Registration	Entity legally registered in India; valid PAN and GST registration.
Turnover	At least ₹10 lakh in the last audited financial year. An entity incorporated within the last two financial years may provide a CA-certified statement for the period since incorporation.
Similar capability	The bidder shall have been awarded, completed or be executing, during the last three years preceding the bid-submission deadline, at least one assignment involving the design, development, implementation, integration or maintenance of an enterprise software, AI, data-analytics, MIS, dashboard or digital-platform solution for a Government organisation, PSU, bank, financial institution or established enterprise in India/Abroad.
Resources	One named Project Manager under Clause 2.10, supported by adequate delivery capability for the offered Services.

The successful bidder shall furnish Performance Security equivalent to 3% of the Initial Term Contract Value, in the form of a Bank Guarantee, Fixed Deposit Receipt or Demand Draft, valid for the Initial Term plus Six months. The notional evaluated-cost basket is not the contract value and shall not itself create a payment or security obligation for unawarded work.

No Earnest Money Deposit (EMD) or Bid Security is required for this RFP.

2.2 Clarification and amendment

Requests for clarification must reach the contact in Clause 1.5 by the deadline in the Bid Summary. R1PPL may circulate written replies to all invited bidders without identifying the questioner. Any amendment shall be issued in writing or electronically and shall bind all bidders.

Bidders shall monitor <https://raajmarginfratrust.in/> for corrigenda and acknowledge them in the bid. Where an amendment materially affects preparation, R1PPL may extend the deadline. No oral explanation changes this RFP. Unclear scope or pricing assumptions should be raised before submission.

Submission and evaluation

2.3 Proposal submission

Part 1 — Technical Submission: methodology, three-stage work plan, Project Manager profile/CV, sample evidence, Annexures C–F, H and J, and responses to Annexure E. Include no prices. Submit by email to tender@raajmarginvit.in or in a sealed physical cover at Clause 1.5.

Part 2 — Financial Proposal: signed Annexure B, in a separate sealed physical envelope marked with the RFP reference, bidder name and “Financial Proposal”. Email financial submissions are not permitted. Both parts must be received by the Bid Summary deadline. Late bids shall be rejected.

The authorised signatory shall sign the proposal. Bid validity is 90 days from the submission deadline. Physical technical submission is not mandatory. The financial schedule must contain every required rate; an omitted rate constitutes commercial non-compliance.

A bidder may substitute or withdraw its complete bid before the deadline. A replacement must be clearly identified as “Revised Bid”, with the financial proposal separately sealed. After the deadline, unsolicited modifications are disregarded; only clarifications expressly requested by R1PPL may be considered. Withdrawal or modification during bid validity may result in disqualification.

2.4 Evaluation and award

Stage	Decision
1 Eligibility	Pass/fail against Clause 2.1 and the submission checklist.
2 Technical compliance	Pass/fail against Annexure E, including the stage outputs, methodology, resources, instructed capability and SLA commitments.
3 Financial compliance	Open only technically eligible bids. Check all rates, units, GST treatment, validity, unconditional pricing and arithmetic consistency.
4 L1 comparison	Compute Annexure L using fixed comparison quantities. Lowest Evaluated Cost among compliant bids is L1. No technical marks or weighting.
5 Award	R1PPL normally proceeds with L1, subject to approvals and the RFP conditions; it may seek clarification, negotiate with L1, reject bids or cancel the procurement.

For mandatory items, only “Compliant” passes. Partial compliance or non-compliance fails the item. A price advantage cannot cure a mandatory technical or commercial failure. Annexure E is the single compliance matrix; there is no separate duplicate Annexure K.

The accepted proposal and resulting services agreement/work order shall identify the agreed scope, rates and service levels. A comparison quantity is not an order. Contract execution and performance security are award requirements, not evidence that future quantities are guaranteed.

Commercial structure and rate validity

2.5.1 Core and Instructed Services

Core Services are delivered at separate all-inclusive Stage 1, Stage 2 and Stage 3 rates in ₹/centre-line km/month. Instrumented field surveys, consolidated asset inventory and drainage inventory are Instructed Services, paid separately only when ordered. Their acquisition is distinct from data analysis included in Core Services.

2.5.2 Price schedule

Quote only the nine rates in Annexure B in Indian Rupees, excluding GST. Stage rates include routine camera surveys, vehicles and crews, personnel, mobilisation, onboarding, camera calibration, linear referencing, processing, QA, hosting, platform access, GIS, API, reporting, training and support. No additional platform licence, per-user or mobilisation charge applies.

Instructed rates include the fieldwork, travel, equipment, processing, reporting and required data handover for that item. No second charge may be made for camera-based inventory or analytics already included in a paid Core Service. Scope beyond the specified item requires approved change control.

2.5.3 Evaluated cost

Annexure L is the sole evaluated-cost basket and formula. The core comparison cost is 69.408 multiplied by the sum of the three Stage rates. Fixed quantities of Instructed Services are added solely for comparison. Actual payment follows accepted services and written orders, not the comparison basket.

2.5.4 Contract term and rate validity

The Initial Term is three calendar months from the Effective Date of the services agreement, including mobilisation and three monthly survey/reporting cycles. Rates are firm for the Initial Term. Continuation and additional projects require approval under Clause 1.4A.

Rate commitment	Period to be completed before issue
Order Placement Period	12 months from the Effective Date, during which approved additional orders may use the accepted rates.
Fixed-rate period per additional order	6 months from commencement of each additional order.

No increase arises solely from adding a project. Within the applicable fixed-rate period, a rate adjustment requires an approved change of scope or a change in law with demonstrable cost impact, prior written approval and the applicable contract amendment. Changes in survey frequency or reporting cadence are scope changes. Rates beyond the applicable fixed-rate period require written agreement before further work.

2.5.5 General commercial terms

The vendor shall rectify deficiencies within the agreed period without additional cost. Confidential information supplied for bidding may be used only for proposal preparation. Subject to compliance with this RFP, applicable approvals and the right of R1PPL to reject any or all bids or cancel the procurement, the award shall ordinarily be made to the L1 bidder

Payment and future orders

2.5.6 Invoicing and acceptance

Submit monthly invoices with the accepted deliverables, section acceptance register and any instructed-work measurement record. R1PPL shall pay undisputed invoices within 30 days of receipt with supporting documents. GST is separately payable at the applicable rate; statutory deductions apply.

For each service month and section, only one Core Service rate is payable. A higher Stage rate applies only when its additional outputs are delivered and accepted under Clause 3.9 and Annexure M. The rates are not cumulative add-ons. A delayed review subsequently resulting in acceptance relates to that service month and does not create another service month.

For mixed acceptance, calculate the monthly fee as accepted length at Stage 1 $\times$ S1, plus accepted length at Stage 2 $\times$ S2, plus accepted length at Stage 3 $\times$ S3. Do not count the same length twice. Measure through the 100 m section register and actual residual lengths at stretch ends; the initial corridor total may not exceed 69.408 km.

Unavailable or partial instrumented data

Stage 2 acceptance requires the continuing Stage 1 outputs and the laser/LiDAR, structural and aerial outputs specified in Annexure M for the section. Sampled structural information may represent a section only through a disclosed engineering mapping to a homogeneous section; unsurveyed measurements shall not be presented as measured data.

If only some sections have the required accepted outputs, the Stage 2 rate applies only to those sections. Activating one layer alone does not trigger the full Stage 2 rate. Where client data is missing or unusable, the preceding applicable rate continues; this is not vendor default and does not trigger delay deductions for that dependency.

By Month 3, camera-based historical comparison, deterioration analysis and updated recommendations remain due wherever comparable survey history exists, even if instrumented data has not arrived. Full Stage 3 payment requires all its outputs, including the applicable Stage 2 integration. Until then, the preceding accepted rate applies; no additional analytics surcharge is payable. Vendor-caused failure remains subject to Clause 2.8.

2.5.7 Continuation after the POC

R1PPL may, with prior approval of the competent authority, continue the Services or add projects through a written order under Clause 1.4A. The order shall identify the applicable Stage and any Instructed Services. The corresponding accepted Annexure B rates shall apply; there is no separate continuing-service rate or unlisted charge.

R1PPL is not obliged to order continuation. Approved work is invoiced only against the ordered, measured and accepted quantities at the applicable Annexure B rates.

Data ownership and information security

2.6.1 R1PPL data ownership

R1PPL owns all engagement-generated survey data, raw and processed imagery, GIS layers, defect records, condition indices, risk data, work-order data, reports, historical datasets and derived R1PPL-specific detections and analytics. This includes data produced under Instructed Services. Ownership of data does not transfer ownership of the vendor's pre-existing software or model architecture.

2.6.2 Vendor background intellectual property

The vendor may retain its background intellectual property in its platform, software, model architecture and methodology, but shall provide unrestricted contractual access to R1PPL's data during the engagement and the agreed transition. Proprietary software shall not prevent R1PPL from extracting or using its own records.

2.6.3 Retention and exit

- Provide bulk export of current and historical structured data at any time during the engagement, without requiring data to be viewed solely in the vendor platform.
- Provide documented authenticated read API access for R1PPL or its incoming vendor. Export tabular data in CSV/Excel and GIS data in Shapefile, GeoJSON or KML, with field definitions and identifiers.
- Include raw and processed imagery, image-to-record links, work-order history, every delivered survey cycle, and the adopted condition/risk methodologies in the handover.
- Agree the transition period, support effort and retention schedule in the services agreement before commencement. Keep access needed for open deliverables and accepted work orders through their completion.
- After R1PPL confirms successful transition, delete R1PPL data from vendor systems where applicable and provide a verifiable deletion certificate, accounting for agreed backup retention and applicable legal retention requirements.

2.7 Cybersecurity

The mandatory controls and bidder disclosure form are consolidated in Annexure J. They cover India hosting, encryption, role-based access, privileged-access MFA, logging, backups, disaster recovery, continuity, vulnerability management, incident response and deletion.

The Technical Submission shall identify hosting model, provider and region, data flows and subprocessors. Material hosting-architecture changes require written notice to R1PPL. The vendor remains accountable for its partners and service providers within the contracted service.

The vendor shall nominate a security contact and provide the incident/escalation channels before live operation. Confirmed incidents affecting R1PPL data shall be notified within 24 hours of confirmation under Annexure J; the incident response and resolution service levels are in Annexure G.

Performance deductions and safety

2.8 Performance management

Measure service performance using objective, auditable evidence: coverage logs, QA records, committed AI performance, delivery dates, availability monitoring and incident records. The service levels are consolidated in Annexure G. No deduction shall rest solely on an unmeasurable or subjective criterion.

Event	Deduction basis and limit
Monthly availability shortfall	0.5% of the relevant monthly Core Service fee for each one percentage-point shortfall against the applicable availability threshold; maximum 5% for the month.
Late deliverable	0.5% of the relevant monthly Core Service fee per day of vendor-caused delay beyond the applicable deadline; maximum 5% for the reporting cycle.
Aggregate service credits	Total deductions under this clause shall not exceed 10% of the monthly Core Service fee. A Severity 1 label does not itself create an unspecified monetary penalty.

For staged or mixed billing, “monthly Core Service fee” means the accepted applicable Stage fees for that month before service-credit deductions, excluding GST and separately instructed work. Do not apply duplicate availability deductions to the same outage under overlapping measurement windows.

Approved scheduled maintenance is excluded from uptime calculations up to 18 hours in a calendar month. The vendor shall obtain written approval and record the maintenance period. Incident restoration, rework, escalation and other express contractual remedies continue to apply; liability is addressed in Clauses 2.15–2.16.

2.8.5 Exceptions

No deduction applies to the extent failure or delay is caused by R1PPL’s missing data, approvals or access; review comments requiring work beyond agreed scope; force majeure; or an approved extension of time. The vendor shall document the dependency and affected deliverable promptly. Ordinary rework of defective output remains the vendor’s responsibility.

2.9 Health and safety

- Conduct surveys under live traffic without lane closure or disruption to tolling or highway operations. Vehicles shall be roadworthy and duly permitted and drivers licensed.
- The vendor is responsible for personnel and equipment safety, compliance with traffic-safety requirements and third-party liability arising from its operations, and shall maintain adequate insurance.
- For instructed UAV work, hold and produce applicable registrations and permissions and comply with civil-aviation and airspace requirements.
- Identify access, traffic-management and permit dependencies before accepting the fieldwork schedule. No instruction permits unsafe or unlawful operations. Any necessary change in method or scope shall be agreed in writing.

Project management and independence

2.10 Project Manager

The bidder shall name one Project Manager as the single accountable contact for delivery, schedule, dependencies, acceptance, reporting and escalation. Submit the Project Manager's profile/CV and availability in Annexure H. Substitution requires R1PPL's prior written consent.

The vendor remains responsible for providing all personnel, specialists, survey crews, partner resources and support needed to meet the RFP. R1PPL does not require separate named-resource forms or CVs for any role other than the Project Manager.

2.11 Conflict of interest and confidentiality

Bidders and the appointed vendor shall provide professional, objective and impartial advice, hold R1PPL's interests paramount in the assignment and avoid conflicts with other assignments or corporate interests. Disclose any actual or potential conflict, including involvement in preparation of the RFP. Non-disclosure or canvassing may lead to disqualification.

RFP information shall be used only for proposal preparation and kept confidential. The issuing entity and successful bidder shall execute an NDA after the Letter of Award where applicable. Information accessible to declared partners shall remain subject to the same confidentiality obligations.

2.12 Fraud and corruption

Bidders shall observe the highest ethical standards during selection and execution. "Corrupt practice" means offering, giving, receiving or soliciting anything of value to influence a public official's action in selection or execution. "Fraudulent practice" means misrepresenting facts to influence selection or execution to R1PPL's detriment, including collusion designed to undermine genuine competition and deprive R1PPL of its benefits.

Force majeure and dispute resolution

2.13 Force majeure

A Force Majeure (FM) means extraordinary events or circumstance beyond human control such as an event described as an act of God (like a natural calamity) or events such as a war, strike, riots, crimes (but not including negligence or wrong-doing, predictable/seasonal rain and any other events specifically excluded in the clause). In the case of an FM, the contract frees both parties (R1PPL & the Agency/Firm) from contractual liability or obligation when prevented by such events from fulfilling their obligations under the contract. However, this does not excuse a party's non-performance entirely, but only suspends it for the duration of the FM. The parties have to give notice of FM as soon as it occurs, and it cannot be claimed ex-post facto. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of FM for a period exceeding 90 (Ninety) days, R1PPL may at its option terminate the contract without any financial repercussion on other side. Notwithstanding the punitive provisions contained in the contract for delay or breach of contract, the Agency/Firm would not be liable for imposition of any such sanction so long as the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event covered in the FM clause.

2.14 Governing law and dispute resolution

This RFP and any resulting contract shall be governed by the laws of India, subject to the jurisdiction of the courts at New Delhi.

Any dispute arising out of the RFP, which cannot be amicably settled between the parties, shall be referred to arbitration in accordance with the Arbitration and Conciliation Act, 1996 through a panel of three arbitrators, with each of Raajmarg 1 Project Private Ltd. and the remaining disputing party(s) appointing one arbitrator and the two arbitrators so appointed appointing a third arbitrator. Provided that in the event that any disputing parties fail to appoint an arbitrator within 15 days from the dispute being referred to arbitration, the other parties shall be at liberty to appoint an arbitrator for such disputing party(s) and such appointment shall be final and binding on the other disputing parties. The venue of the arbitration shall be at New Delhi.

Liability and indemnity

2.15 Limitation of liability

2.15.1 Parties comprising of R1PPL and successful bidder, mutually agree;

2.15.1.1 That upon issuance of Letter of Award (“LoA”), neither party excludes any liability arising from its own fraud or fraudulent misrepresentation.

2.15.1.2 That neither party shall in any way be held liable towards the other party for any of the other party’s or its affiliates’ consequential or indirect loss, including but not limited to interruption or loss of business, contract or revenue, loss of goodwill, loss of profit, loss of production, wasted overhead, cost of substitute equipment, downtime costs or other special, punitive or other forms of indirect losses, howsoever such may arise, whether under contract, tort (including negligence), strict liability or otherwise.

2.15.1.3 Subject to Clause 2.15.1.1, the successful bidder's maximum cumulative liability, whether in contract, tort (including negligence), breach of statutory duty, under any indemnity or otherwise howsoever, arising out of or in connection with a Work or Service Order under this RFP and the performance or non-performance of any Work or Deliverables, shall be limited to a sum equal to the remuneration paid and payable to the successful bidder under the relevant Work or Service Order. Nothing in this Clause 2.15 operates to limit liability for fraud, fraudulent misrepresentation, or any other liability that cannot lawfully be limited under applicable law.

2.15.1.4 That, no claims shall be set forth later than twenty-four (24) months following the delivery of the Deliverables, or if none, notice of the completion of the Work under the relevant Work / Service Order

2.16 Indemnity

The Service Provider shall indemnify, defend and hold harmless R1PPL, its affiliates, directors, officers, employees and representatives from and against any losses, claims, damages, liabilities, penalties, costs and expenses (including reasonable legal fees) arising out of or in connection with:

- (a) any breach of the Contract by the Service Provider;
- (b) any negligent act, omission, fraud, wilful misconduct or violation of applicable laws by the Service Provider, its employees, agents or subcontractors;
- (c) any third-party claim relating to bodily injury, death or damage to property arising from performance of the Services;
- (d) any infringement or alleged infringement of intellectual property rights arising from the use of the Service Provider's software, platform, tools, reports, deliverables or other materials provided under the Contract; and
- (e) any unauthorized access to, disclosure, loss, corruption, destruction or misuse of R1PPL data resulting from the acts, omissions or failure of the Service Provider to comply with its obligations relating to confidentiality, cybersecurity, data protection or information security.

The obligations under this Clause shall survive the expiry or termination of the Contract.

Scope and service stages

3.1 Scope overview

Stage	Delivery obligation
Stage 1 — Month 1	Vendor camera survey, AI distress detection, included furniture inventory, human QA, condition/PCI and risk assessment, baseline report, GIS/dashboard/API, maintenance decision support and work-order tracking.
Stage 2 — Month 2	Repeat survey and continuing Stage 1 services; baseline comparison; ingestion, validation and integrated analysis of supplied laser/LiDAR, structural and aerial datasets.
Stage 3 — Month 3	Repeat survey and continuing Stage 1/2 services; multi-cycle comparison, deterioration analysis and updated maintenance recommendations. Label predictions with assumptions and limitations.

Each Stage rate includes the preceding services; do not add Stage rates together on an invoice. Change detection starts with the second comparable survey. Maintenance decision support and defect/work-order tracking operate from Stage 1. Data availability and payment follow Clause 2.5.6.

3.2 Survey and coverage

Capture high-resolution, GPS-tagged imagery once each monthly cycle over both carriageways and all lanes. A single pass per carriageway is acceptable only if all lanes have usable imagery for detection, lane attribution and manual audit. Additional passes are included. Map detections to chainage within ± 5 m. Report by 100 m section, carriageway and lane, including residual end sections.

If weather, flooding, an accident, closure, authority restriction, roadworks, force majeure or equipment failure prevents coverage, identify the affected chainages and cause, mark them “not surveyed”, and recover in the next cycle; recover Critical/open-work-order sections within ten working days. Agree recovery of final-cycle exceptions before closing the engagement. No inferred measurement shall replace missing capture.

3.2A Included furniture inventory

From Stage 1 imagery, record traffic signage; delineators/road studs; barriers/guardrails; longitudinal/transverse markings; and lighting poles. Record class, type, approximate size or length, count, visible Good/Fair/Poor condition, chainage/GPS, carriageway, side and dated image reference. Deliver GIS and CSV/Excel records and update visible changes in subsequent surveys.

Invisible assets and attributes needing separate field measurement or verification are excluded from camera-only capture and may be instructed under Clause 3.14B. Do not charge additional inventory rates for already included attributes.

Detection and condition assessment

3.3 Distress detection and validation

Use AI/ML automated detection supported by documented human QA. Each detection shall carry a stable identifier, category, severity, extent, location and supporting imagery. Minimum detection coverage comprises the following twelve categories; combined labels below constitute one category each.

Safety critical defects	Other pavement distress
1 Potholes	5 Alligator/fatigue cracking
2 Depression/settlement	6 Longitudinal cracking
3 Edge break	7 Transverse cracking
4 Bleeding	8 Block cracking
	9 Edge cracking
	10 Ravelling/fretting
	11 Shoving/corrugation
	12 Patching

Disclose precision, recall and severity accuracy for each category, with validation context, under Annexure F. A blended percentage alone is unacceptable. Audit samples each cycle, retain QA evidence and correct detected errors. The vendor shall ensure competent technical review of the adopted engineering interpretation.

3.4 Baseline and change detection

The first cycle is the dated Baseline Condition Assessment, quality-checked and accepted under Clause 3.9. Mark coverage exceptions; establish their baseline on first actual survey. Once accepted, baseline changes require written approval and an audit trail.

PCI shall be computed per lane once lane-level NSV data, including IRI, is available for the section. Calculate PCI and supporting distress sub-indices per 100 m section and lane using the disclosed methodology and applicable IRC:82 requirements. Before qualifying lane-level NSV data is available, report the camera-derived condition assessment as provisional and do not represent it as final lane-level PCI. State any departure and its engineering basis; no undisclosed black-box score is acceptable.

From the second comparable cycle, identify new, worsening, unchanged, improved, disappeared and recurring defects. Recurrence means reappearance within 5 m of a location previously closed as rectified, supported by the evidence record. Show current/previous condition, change, rate of change and risk implication. Distinguish genuine change from missing data or survey variation.

3.5 Risk prioritisation

Compute a section-level Road Asset Risk Score using severity/extent, deterioration, recurrence and safety criticality. Disclose weights and Critical/High/Medium/Low thresholds and obtain written agreement for changes. Identify newly Critical sections and use ranking to support maintenance sequencing. Where no prior cycle exists, state that deterioration and recurrence inputs are unavailable rather than fabricate them.

Maintenance workflow and dashboard

3.6 Maintenance recommendations

For prioritised sections or defects, recommend routine, preventive, corrective or rehabilitation intervention; explain the reason, priority and timeframe. Provide indicative quantities and costs where the data permits, with quantity assumptions and rate basis. Identify where further investigation is needed before an engineering decision.

All AI/analytics-derived recommendations shall be identified as decision support subject to R1PPL's engineering validation. R1PPL or its O&M contractor decides and performs physical rectification. Recommendations do not constitute approval to execute works.

3.7 Defect and work-order lifecycle

Maintain a persistent register from detection and validation through work-order issue, assignment, target date, reported rectification, survey verification and closure. Record stable ID, category, location, severity/extent, evidence, relevant dates and responsible user; retain history rather than overwrite it.

The vendor records, verifies and reports. R1PPL/contractors execute works. Reflect R1PPL-confirmed rectifications in the register within five working days, but distinguish "reported rectified" from "verified closed". Physical verification occurs at the next survey unless a separately agreed instruction requires earlier fieldwork.

Retain before/after imagery and a traceable basis for closure. Report open, overdue, rectified-pending-verification and closed defects, with ageing. Support reopened/recurring defects and identify the previous related record.

3.8 GIS platform and reporting

- Provide a web GIS with defect, condition and risk layers; drill down from portfolio to corridor, section and defect with linked imagery.
- Provide corresponding dashboard views, current status, historical comparisons, risk distribution and maintenance/work-order summaries. New projects shall use the same project-to-section structure.
- Provide R1PPL-configurable role-based access. Include platform access and users within the applicable service rate.
- Provide documented authenticated read REST API access to condition, defect and work-order records and bulk export in CSV/Excel; GIS export in Shapefile, GeoJSON or KML.
- Retain model/method version and source-date information sufficient to reproduce delivered outputs and distinguish measured, derived and predicted results.

Each monthly report shall include coverage exceptions, QA findings, condition/risk changes, action priorities and the work-order position. Deliverable and access requirements are consolidated in Annexure M, supplemented by the service levels in Annexure G.

Reporting and implementation

3.9 Reporting and acceptance cycle

Working day	Required action
Day 0	Survey Completion, excluding documented coverage exceptions.
Days 1–3	AI/ML processing.
Days 4–5	Validation and QA.
Day 6	Condition, risk and deterioration analysis.
Day 7	Dashboard update and report submission.

R1PPL shall provide consolidated acceptance or reasoned rejection within ten working days of submission. If not rejected in writing in that period, the submitted deliverable is deemed accepted. Acceptance does not invent data for a missing layer or convert a lower-stage submission into a higher-stage deliverable.

Correct identified deficiencies within five working days, unless otherwise agreed in writing. R1PPL shall review a corrected submission within five working days; absent reasoned written rejection, it is deemed accepted. Identify the deliverable, affected sections and specific unmet criterion in rejection comments. Recovery of coverage exceptions follows Clause 3.2.

3.10 Applicable standards

Surveys, distress classification and condition reporting shall follow applicable IRC standards, including IRC:82 and IRC:SP:16 and applicable subsequent revisions. State departures and their basis in the methodology. Changes in requirements with cost/time impact follow the written change-control provisions. The RFP does not reproduce or substitute for the referenced standards.

3.11 Implementation

Complete mobilisation, methodology/survey-plan agreement and platform/GIS/API provisioning within ten working days of the Effective Date. Deliver the baseline survey and report within Month 1, with the platform populated and work-order/API capability operational. Deliver the next surveys/reports within Months 2 and 3.

Schedule each survey to allow Day 7 submission within its service month. Review/correction may conclude after the month or Initial Term without automatically creating another chargeable month. Maintain the access needed to complete those outstanding obligations. Submit a dated plan, recording R1PPL dependencies and approved extensions.

3.12 Training and knowledge transfer

Train R1PPL users and provide user documentation before steady-state operation, no later than before the second cycle. Refresh training after material platform changes and on reasonable request during the term. Cover dashboard use, workflow, output interpretation, API/export access and incident reporting.

Client data and instructed work orders

3.13 Client-supplied instrumented data

From Stage 2, R1PPL or its survey agency supplies laser/LiDAR, structural/FWD and aerial datasets. Their ingestion, validation, integration and analysis are included in Stage 2, continue in Stage 3, and are included within the defined continuing service. Their field acquisition is separate.

R1PPL shall provide documented machine-readable formats agreed before Stage 2, the coverage and chainage reference, capture dates, instruments/methods and available source QA information. Agree the delivery date in time for the relevant reporting cycle. The vendor shall provide the interface/file schema requirements at mobilisation.

Acknowledge receipt within three working days. Within seven working days, perform documented completeness and plausibility checks and report unusable, incomplete, misreferenced or inconsistent data with affected chainages. Integrate the usable balance; record provenance and limitations. Client-data delivery dependencies and section-level acceptance shall be visible in the monthly register.

The vendor is responsible for competent processing and for flagging defects it identifies or ought reasonably to identify; it is not responsible for the accuracy of measurements it did not take. Missing client data and vendor-caused processing failure are treated separately under Clause 2.5.6.

3.14 Ordering Instructed Services

Every bidder shall demonstrate capability and quote firm rates for all items in Annexure B, directly or through declared partners. R1PPL may order none, some or all of these services. No fieldwork or extra charge is authorised solely by inclusion in the evaluation basket.

Each written work order shall identify the approved service/item code, project and chainages, quantities, outputs, relevant source information, commencement and delivery dates, accepted rate and approved value. Commence within seven days and deliver within 21 days of commencement unless a longer period is agreed in writing.

Mobilisation, travel, equipment and reporting are included in the unit rates. Measure only the ordered, completed quantity. Work validly ordered within the applicable order-placement period continues to completion notwithstanding expiry of the Initial Term, including delivery, acceptance, platform/data access and payment obligations.

Before field deployment, record method, access, safety and permission dependencies and the measurement basis. Differences from the defined item require written agreement before execution; no duplicate charge applies to work already included in Core Services.

3.15 Output and acceptance register

Annexure M consolidates the stage outputs and acceptance evidence. It supplements and does not exclude obligations expressly stated elsewhere. Its rows are defined deliverables, not a claim to an arbitrary parameter count. The vendor's detailed field dictionary shall map to these outputs and disclose additional proposed analytics separately.

Instructed service specifications

3.14A Instrumented field surveys

Service	Minimum work and deliverables
NSV / laser profilometry	Rut depth, roughness (IRI), texture and cracking across the full ordered length, both carriageways/all lanes; results per 100 m. Processed data and summary report. ₹/km.
Accelerometer eIRI	Continuous estimated roughness over both carriageways; report per 100 m with method, calibration/validation basis and limitations. Label the output eIRI, not a direct laser measurement. Processed data and report. ₹/km.
Structural / FWD	500 m spacing per lane in each direction, staggered between lanes; at least nine sensors and three drop loads per point. Deflection bowls, back-calculated moduli and residual-life or overlay assessment per homogeneous section. Disclose input assumptions. ₹/km.
Drone / aerial	GSD 3 cm or better; at least 70% forward and 60% side overlap; carriageway and road land width where access permits. Orthomosaic, digital surface model and geotagged raw images. ₹/km.

Bidders may exceed the minimums; a lesser basis is a deviation. Record gaps, inaccessible areas and accuracy limitations. Disclose any underlying thickness, traffic or material assumptions used for structural analysis rather than present them as measured facts.

3.14B Additional inventory

Provide GIS, CSV/Excel and dated photographs with chainage, GPS, carriageway and side. Rate A is one consolidated per-km rate for the complete additional asset inventory below, excluding drainage. Rate G is the separate per-km drainage rate. No asset-count, structure-count or duplicate measurement is payable.

Item	Additional fieldwork and attributes
Asset inventory under rate A	Signage; delineators/studs; barriers/guardrails; markings; lighting poles; bridges; flyovers; underpasses; and cross-drainage of clear span 6 m or more. Capture applicable type, count, dimensions, material, identifiers, visible condition, spans and structure attributes beyond camera-only records. Applicable reflectivity checks and otherwise invisible assets shall be identified in the order.
Drainage	Side drains, catch pits and cross-drainage with clear span below 6 m, including pipe/slab culverts. Type, span/diameter, material, visible invert condition, blockage, condition and images.

Inventory is visual/imagery based with required field verification. Exclude destructive testing, load rating, survey-grade levelling and structural design. Record inaccessible attributes explicitly; do not invent them.

Definitions and interpretation

Term	Meaning
R1PPL / Client	Raajmarg1 Projects Private Limited, the issuing entity.
Bidder / vendor	An entity submitting a proposal; after award, the Service Provider.
RAPIDS	Road Asset Performance & Information Dashboard System: the contracted data, analytics and platform service.
Core Services	Routine services included in the applicable Stage rate.
Instructed Services	Mandatory offered capability and firm unit rates; performance only under an approved written order, outside the Core Service fee.
Service Stage	Stage 1 baseline, Stage 2 integrated assessment or Stage 3 historical analysis under Clause 3.1; distinct from bid-evaluation stages.
Initial Term	Three calendar months from the Effective Date.
Effective Date	Commencement date specified in the executed services agreement.
Centre-line km	Billing length along the project alignment. Both carriageways/all lanes are included in the quoted per-km rate.
Section	100 m reporting segment per carriageway/lane; actual remaining length at a stretch end.
Chainage	Linear referencing against R1PPL's project records.
Survey Completion	Field capture completed for mandatory sections, excluding documented exceptions under Clause 3.2.
Baseline	First accepted measured condition record; exception sections gain a baseline when first surveyed.
PCI	Pavement Condition Index using the disclosed condition methodology under Clause 3.4.
Risk Score	Section prioritisation under Clause 3.5; distinct from PCI.
IRI / eIRI	Roughness in m/km; eIRI is an accelerometer-derived estimate.
NSV / FWD	Network Survey Vehicle / Falling Weight Deflectometer.
GIS / API	Geographic Information System / Application Programming Interface.
SLA / VAPT	Service Level Agreement / Vulnerability Assessment and Penetration Testing.
RBAC / MFA	Role-based access control / multi-factor authentication.
RTO / RPO	Recovery time objective / recovery point objective.
L1	Lowest Evaluated Cost among technically and commercially compliant bids.
Work order	An approved procurement instruction; within the dashboard, a separate maintenance instruction to the O&M party. Context determines which is meant.

References to annexures form part of this RFP. Evaluation quantities do not create orders. Technical acceptance does not authorise additional expenditure. Date/time entries in the Bid Summary are in IST. "Working day" follows the working-day calendar agreed for the service; elapsed-hour incident targets follow Annexure G.

Annexures A and H

Annexure A Project portfolio

Stretch	From	To	Length km
Chilakaluripet–Vijayawada	355+000	357+342	2.342
Chilakaluripet–Vijayawada	372+038	422+605	50.567
Chilakaluripet Bypass	0+000	16+499	16.499
Total centre-line length			69.408

State: Andhra Pradesh. Survey both carriageways and all lanes. Reconcile chainage references during mobilisation without changing the ordered billing length unless R1PPL approves a measured scope change.

Annexure H Project Manager

Name only the Project Manager and attach the relevant profile/CV. The vendor shall deploy other personnel and specialists as needed without separate named-resource forms.

Required resource	Name, availability and CV reference
Project Manager	

Relevant qualifications/experience and availability shall be evidenced in the Technical Submission. Substitution of the Project Manager requires R1PPL's prior written consent.

Bidder: _____ Authorised signatory: _____

Date: _____

Annexure B Commercial price schedule

Quote only the nine rates below, in Indian Rupees excluding GST. Stage rates are all-inclusive under Clause 2.5.2 and are not cumulative. Every listed rate enters the Annexure L evaluation; no other financial rate shall be requested or evaluated.

Code	Service	Unit	Rate ₹
S1	Stage 1 baseline	₹/km/month	
S2	Stage 2 integrated assessment	₹/km/month	
S3	Stage 3 historical analysis	₹/km/month	
N	NSV / laser profilometry	₹/km	
E	Accelerometer eIRI	₹/km	
F	Structural / FWD	₹/km	
D	Drone / aerial	₹/km	
A	Consolidated asset inventory	₹/km	
G	Drainage inventory	₹/km	

All rates use centre-line kilometres and cover both carriageways and all required lanes/passes. Rate A covers the complete additional non-drainage asset inventory in Clause 3.14B, including listed structures, without an asset-count or structure-count multiplier. Camera-based inventory in Clause 3.2A is included in S1, S2 and S3.

Financial summary	Bidder amount ₹
Three-month core POC: $69.408 \times (S1 + S2 + S3)$	
Instructed comparison basket: formula at Annexure L	
Total Evaluated Cost excluding GST	

Instructed rates include mobilisation, equipment, travel, processing and reporting. No unquoted charges apply. Payment is for accepted Core Services and work actually instructed and delivered. Rates remain valid under Clause 2.5.4; no additional project is guaranteed.

Bidder: _____ Signatory: _____

Name/designation: _____ Date: _____

Annexures C and D

Annexure C Bidder declaration

Having examined RFP Ref. R1PPL/RFP/RAPIDS/2026/001 and its notified amendments, we declare that:

- Our proposal information is true and correct. We accept the scope and terms except deviations expressly identified in our Technical Submission; mandatory deviations may make the bid non-compliant.
- Our proposal remains valid for 90 days from the bid submission deadline. All required rates are quoted in the separate Financial Proposal.
- We are not blacklisted or debarred by a Government/public-sector entity on the submission date.
- We have disclosed conflicts of interest, prior involvement in RFP preparation and all delivery partners.
- R1PPL owns engagement data and deliverables as set out in Clause 2.6. Background vendor IP is treated under that clause.
- AI-derived recommendations are decision support subject to R1PPL's engineering validation.
- We can provide every Core and Instructed Service specified, subject to the express data and ordering dependencies. Quoting rates does not create a guaranteed order.

Bidder/company: _____

Authorised signatory and designation: _____

Signature and company seal: _____ Date: _____

Annexure D Submission checklist

Include with technical proposal	Check / reference
Incorporation/registration, PAN and GST evidence	
Eligibility evidence and sample dataset/dashboard access	
Methodology, three-stage implementation plan and instructed capability	
Signed Annexure C and acknowledgment of amendments	
Completed Annexure E compliance matrix	
Annexure F category performance and QA/validation method	
Annexure H Project Manager profile/CV	
Annexure J hosting/security disclosure	
Mapping to Annexure M outputs and acceptance evidence	
Deviation statement, if any; no prices in technical proposal	
Separate physical Financial Proposal in Annexure B format	

Annexure E Consolidated compliance matrix

Complete every row with C (Compliant), P (Partially Compliant) or N (Not Compliant) and the Technical Submission page/evidence reference. Only C passes a mandatory item. R1PPL may record its pass/fail finding against the submitted evidence. This matrix also performs the former Annexure K function.

No.	Mandatory requirement	Reference	C/P/N and evidence
1	Eligibility and signed declarations	2.1; C/D	
2	Both carriageways/all lanes and per-km pricing basis	1.4; 3.2	
3	Stage 1 survey, QA, baseline and furniture inventory	3.1–3.4	
4	All 12 distress categories; category performance	3.3; F	
5	Lane-level PCI after NSV/IRI availability	3.4	
6	Disclosed risk score and thresholds	3.5	
7	Change detection from second comparable survey	3.4	
8	Stage 2 data ingestion, validation and integration	3.13; M	
9	Stage 3 historical analysis and labelled predictions	3.1; M	
10	Data-dependency and section acceptance method	2.5.6; M	
11	Maintenance recommendations and decision-support label	3.6	
12	Persistent defect and work-order lifecycle	3.7	
13	GIS and portfolio-to-defect dashboard views	3.8	
14	Authenticated REST read API and bulk export	3.8; 2.6	
15	Ownership, retention and exit portability	2.6	
16	Security and hosting controls/disclosure	2.7; J	
17	All SLA commitments and support channels	G	
18	Implementation and training plan	3.11–3.12	
19	Named Project Manager and CV	2.10; H	
20	All four instructed field-survey capabilities	3.14A	
21	Consolidated asset and drainage inventory capability	3.14B	
22	Same-rate expansion and future-order controls	1.4A; 2.5	
23	Output register mapped to deliverables/evidence	M	
24	Complete nine-rate schedule and commercial compliance	B; L	

Evaluation is pass/fail, not a technical score. Financial compliance is checked after technical qualification; do not include pricing in this matrix. Bidder/signatory: _____

Annexure F AI performance and validation

F1 Category performance disclosure

No common minimum accuracy is prescribed for qualification. Disclose actual precision, recall and severity-classification accuracy by category; a blended figure is insufficient. The successful bidder's stated figures become contractual commitments.

Distress category	Precision %	Recall %	Severity %
Potholes			
Depression / settlement			
Edge break			
Bleeding			
Alligator / fatigue cracking			
Longitudinal cracking			
Transverse cracking			
Block cracking			
Edge cracking			
Ravelling / fretting			
Shoving / corrugation			
Patching			

Attach model version, validation date, dataset geography/road type, sample size by category and survey conditions. State the proportion of detections expected within ± 5 m and how location accuracy is tested against project chainage.

F2 Validation and quality assurance

Before baseline capture, agree a written protocol covering sampling, ground-truth labelling, detection matching, severity rules, minimum sample sizes, location checks and treatment of insufficient observations. Describe manual audit sampling, the reviewer's role and how false positives/negatives feed into correction.

R1PPL may conduct or commission an independent ground-truth audit. Material underperformance means an audited precision, recall or severity accuracy more than five percentage points below its committed figure using the agreed protocol. If samples are insufficient, obtain additional validation before determining non-compliance.

The vendor shall recalibrate and reprocess affected outputs at its own cost where material underperformance is established. There is no automatic audit-cost transfer under this annexure. Revalidate material model/training-data/pipeline changes before using them in deliverables and disclose revised results. Changes to commitments require written approval.

Annexure G Service level matrix

Severity	Example	Response	Restore / resolve
1 Critical	Platform unavailable; confirmed data incident; complete survey/data-pipeline failure without workaround	1 hour	4 hours
2 High	Major feature or corridor pipeline degraded with workaround	4 hours	1 business day
3 Medium	Partial non-critical degradation/report deficiency	1 business day	3 business days
4 Low	Cosmetic/documentation/configuration query	2 business days	5 business days

Response means acknowledgment and named engineer assignment; resolution means restoration or a compliant fix/workaround. Timers start at the logged incident report. Elapsed-hour targets require coverage beyond business hours. Provide one helpdesk/ticket channel and escalation from support to project manager to senior management.

Parameter	Target and evidence	Remedy
Coverage	100% each cycle, subject to Clause 3.2 exceptions; route/chainage logs	Recovery under 3.2; repeated shortfall Sev 2
Image/location quality	Disclosed usable-image standard; ± 5 m chainage/GPS; sample audit	Correct/re-capture under recovery plan
AI/severity	Category commitments and agreed validation protocol in F	Recalibrate/reprocess under F
Record completeness	At least 99% of records have all mandatory fields; system check	Correct under 3.9
Report delivery	Within seven working days of Survey Completion	Clause 2.8 delay credits
Availability	At least 99% in 08:00–20:00 IST and 96% over 24x7; monitoring logs	Clause 2.8 availability credits
Rectification status	All R1PPL-confirmed updates recorded within five working days	Correct within five working days
Backup/restore	Frequency and retention disclosed in J; evidenced restore test	Immediate remediation; failed integrity Sev 1
Security incident	Notify within 24 hours of confirmation; incident log	Sev 1 response/restoration; J
Critical escalation	Unresolved Severity 1/2 beyond target	Escalate to vendor senior management

Business-hour availability applies daily from 08:00–20:00 IST. Record approved maintenance separately, limited to 18 excluded hours/month. Review and deductions follow Clause 2.8; no unspecified liquidated-damages formula is imported by this matrix.

Annexure J Security and hosting disclosure

Complete the evidence/reference column. These controls consolidate Clause 2.7. State proposed retention, backup, recovery and patching values in the bid; finalise them in the services agreement before live operation.

Control	Requirement	Evidence / proposal
Residency	R1PPL data hosted/stored in India; disclose provider and region.	
At rest	Industry-standard encryption such as AES-256 or equivalent.	
In transit	TLS 1.2 or higher/equivalent successor for dashboard/API and data transfer.	
Access	Role-based least privilege; control privileged access and review/de-provision users.	
MFA	Mandatory for administrators/privileged users; recommended for standard users.	
Logging	Log data access and changes; disclose retention.	
Backup	Disclose frequency/retention; periodically test restoration.	
Recovery	Propose RTO/RPO and recovery method for approval.	
Continuity	Document how service delivery continues through disruption.	
Vulnerabilities	Disclose patch/remediation cadence by severity.	
VAPT	At least annual vulnerability assessment/penetration testing; summary on request.	
Incident response	Notify R1PPL within 24 hours of confirmation; process and named contact.	
Exit deletion	Verifiable deletion and written certification under Clause 2.6.	

Hosting architecture submission

- Cloud/on-premises model, providers, hosting regions and locations of backups.
- Subprocessors with access to R1PPL data and their role.
- Data flow from camera or instrument acquisition through ingestion, storage, analytics, user access and export.
- Support/security contacts, access administration and escalation path.

Material hosting-architecture changes require written notice to R1PPL. Keep agreed controls in force during data retention and exit obligations. Bidder/signatory: _____

Annexure L Evaluated cost and L1

Evaluate only technically and commercially compliant bids. Use Annexure B rate codes and the fixed quantities below. GST is excluded. Comparison quantities are not annual frequencies, guaranteed orders or a promise to complete that basket within the three-month POC.

Component	Fixed comparison quantity	Rate code
Stage 1	69.408 km × one month	S1
Stage 2	69.408 km × one month	S2
Stage 3	69.408 km × one month	S3
NSV	69.408 km	N
eIRI	69.408 km	E
FWD	69.408 km	F
Drone	69.408 km	D
Inventory	69.408 km	A
Drainage	69.408 km	G

L1 Formula

Evaluated Cost = $69.408 \times (S1 + S2 + S3 + N + E + F + D + A + G)$.

Every listed component is evaluated once at the fixed quantity above. Actual payment remains limited to Services ordered, delivered, measured and accepted. No unlisted rate or quantity enters L1.

L2 Determination and record

Rank compliant bidders by ascending Evaluated Cost: L1, L2 and so on. There are no technical marks, financial marks or combined weights. R1PPL shall retain the rate input sheet, compliance decision, arithmetic and ranking record. A low computed cost does not cure an omitted rate, conditional price or mandatory deviation.

Rate A is the consolidated asset-inventory rate and rate G is the drainage-inventory rate. No duplicate asset, drainage or structure measurement is allowed. Award and any additional project remain subject to Clause 2.4 and competent-authority approval under Clause 1.4A.

Annexure M Stage outputs and acceptance

This register consolidates deliverables already required by Section 3; it supplements rather than limits the RFP. The vendor shall provide its field dictionary, file schemas and output-to-source mapping. R1PPL reviews the listed evidence under Clause 3.9. Additional proprietary parameter counts create no obligation unless expressly incorporated.

Ref and stage	Output and reporting basis	Acceptance evidence
M1 S1 onward	Monthly imagery and coverage; measured. Centre-line/route, carriageway and lane coverage with capture dates.	Route/coverage log reconciles Annexure A; readable dated imagery; exceptions identified without fabricated coverage.
M2 S1 onward	Distress register; derived and human-validated. Per defect and 100 m/lane: ID, category, severity, extent, location, image.	All 12 categories supported; records/export checked; QA and location audits under F/G.
M3 S1 onward	Camera furniture register; imagery-derived. Five classes under 3.2A; point/linear records with counts and visible condition.	GIS and tabular register linked to dated images; approximate dimensions labelled; unavailable attributes marked.
M4 S1/S2 onward	Baseline and condition indices; derived. Camera condition is provisional until lane-level NSV data including IRI is available; PCI is then computed per 100 m/lane.	Dated report; NSV/IRI availability identified; disclosed PCI computation and technical QA; exception sections identified.
M5 S1 onward	Risk priorities; derived. Section score, band, drivers and intervention sequence.	Weights/bands disclosed; sample calculation traceable; unavailable historical inputs marked.
M6 S1 onward	Maintenance recommendations; derived. Intervention, reason, priority, timeframe, quantities/cost where supported.	Decision-support label, assumptions and quantity/rate basis; investigation needs identified.
M7 S1 onward	Defect/work-order workflow; recorded. Assignment, due dates, status, verification, closure and audit trail.	Lifecycle demonstrated; stable IDs, evidence and ageing; reported rectification distinct from verified closure.
M8 S1 onward	Platform, GIS and API; delivered capability. Portfolio-to-defect access, role controls and exports.	R1PPL access test; working GIS/imagery links; authenticated API/export test; usable documentation.
M9 S1 onward	Monthly report and QA pack; recorded/derived. Coverage, condition, risk, exceptions and action status.	Day 7 submission; section and source dates reconcile; QA evidence and issue register supplied.

All recurring Stage outputs shall be updated monthly where the underlying survey or status changes. Training evidence and support/security readiness are also mandatory under Clauses 3.12 and 2.7 and Annexures G/J.

Annexure M Integrated and historical outputs

Ref and stage	Output and reporting basis	Acceptance evidence
M10 Second comparable cycle	Change detection; derived. New, worsening, unchanged, improved, disappeared and recurring defects; section changes.	Current/previous IDs, locations and images reconcile; time interval and missing-data limitations visible.
M11 S2 onward	Laser/LiDAR integration; derived from supplied measurements. Location-linked roughness, rutting, texture/cracking and other agreed supplied fields.	Receipt/QA report, source dates and units; processed values traceable to supplied file; section mapping and gaps disclosed.
M12 S2 onward	Structural integration; derived from supplied FWD results. Deflection/condition interpretation linked to test points and homogeneous sections.	Source values and assumptions retained; competent technical review explains section representation and applicability; no fabricated test at unsampled sections.
M13 S2 onward	Aerial integration; derived from supplied imagery/products. Georeferenced layer linked to the corridor and relevant asset/condition evidence.	Layer opens in GIS; chainage/coverage alignment checked; source date, resolution and gaps recorded.
M14 S2 onward	Integrated section assessment; derived. Joint interpretation of M11–M13 with camera condition, risks and recommended further investigations.	For each accepted section, all required source layers and their QA/mapping are available; section acceptance register supports Stage 2 billing.
M15 S3	Multi-cycle analysis; derived. Condition progression, deterioration rate, recurrence and updated maintenance priorities.	Available comparable cycles and dates displayed; change/time basis reproducible; missing-data effects stated.
M16 S3 if forecasts offered	Forecasts and likely intervention need; predicted. Section/maintenance horizon as supported by the available history.	Predictions expressly labelled with method, assumptions and limitations; no claim that three months proves long-term predictive accuracy.
M17 Approved continuation	Recurring deliverables ordered under 2.5.7 at the applicable accepted Stage and Instructed Service rates.	Ordered Stage outputs and monthly survey/report evidence accepted under the same register.

Stage 2 requires M11–M14 for the relevant section in addition to continuing Stage 1 outputs. Structural coverage may be established through justified homogeneous-section mapping, not invented per-100 m measurements. Missing or unusable source layers keep the section at the preceding rate under Clause 2.5.6.

Camera-based M10/M15 remain due as history permits, even when client instrumented data is unavailable. Stage 3's full rate requires its additional outputs and applicable Stage 2 acceptance. A vendor is not penalised for missing client data but remains accountable for its own survey, QA and reporting.