TERMS OF REFERENCE

SUBSCRIPTION, INSTALLATION, DEPLOYMENT AND DELIVERY OF *"SEERMO: A HIGHLY TECHNICAL PRODUCT/SOFTWARE AND SUPPORTING SCIENTIFIC SERVICES FOR THE AI CITY PLANNER"*

The **City Government of Naga City**, through the efforts of the ***City Planning and Development Office (CPDO)*** intends to procure an information and decision support system that aims to utilize the latest available technologies in improving its transport and urban planning capabilities. This procurement is inline with the granted funds from the Department of Economy, Planning, and Development (DEPDev) for the project: **Naga City AI City Planner: AI-Empowered People-Centric Sustainable Transport and Land Use Planning, Monitoring, and Evaluation System for Naga City.** The project's main objective: Justifying sustainable mobility and urban development in Naga City is difficult because evidence is slow and fragmented. Limited technical capacity and LGU empowerment force costly, unsustainable reliance on external consultants. Data across mobility, land use, tourism, and informal vendor activity—especially in public-space markets and event surges like Peñafrancia—is rarely integrated; cross-office fieldwork is hard to coordinate, producing weak accessibility and project-justification analyses and misidentified problems. These errors hurt everyone and implicitly prioritize vehicles over people. Without a science-driven Naga tailor-fit platform, cost-effective people-centric interventions are sidelined and car-centric practices persist – eroding livability, safety, equity, and climate resilience within three-year LGU cycles.

I. BACKGROUND

The procurement of a **subscription** to the Seermo Platform is essential to rapidly address the critical challenges in **transport and urban planning** faced by Naga City. The Naga **City Planning and Development Office** and other concerned departments struggle with limited technical capabilities and personnel, making efficient and rapid in-house urban and transport development planning and monitoring difficult. Additionally, the high costs of conducting individual urban studies without an integrated planning and database system further complicate efforts. Disaggregated and often inaccurate data collection practices also hinder informed decision-making. These issues collectively impede the city's ability to effectively plan and manage its transportation systems and urban redevelopment.

The Platform has been developed in collaboration with a Department of Science and Technology (DOST) Balik Scientist, Dr.-Ing. Syrus Borja Gomari under the Balik Scientist Program in August 2022-2025 (Pasig City LGU 2022-2023 and Quezon City LGU 2024-2025) and through the National Economic and Development Authority (NEDA) Innovation Fund for the entire year of 2024. The Seermo Platform is tailored specifically to Philippine cities' unique needs and goals. This software incorporates

international best practices and advanced technologies such as video artificial intelligence (AI), data science techniques, machine learning recommender systems, and AI scientist features, among others. By enhancing the efficiency and accuracy of data collection and analysis, the Platform provides comprehensive and reliable data and recommendations that is crucial for informing decision-making processes. This improvement in data quality will significantly enhance the prioritization of infrastructure and policy measures to improve mobility and development within the city.

This Platform provides comprehensive insights into transportation and mobility patterns and urban development impacts, assists in decision-making, and offers robust planning tools. The Seermo Platform will provide unparalleled benefits to the City's planning departments and help drive the vision of sustainable mobility and livability in **Naga City**.

II. STATEMENT OF THE PROBLEM

Progressively cities in the Philippines are being tasked to take over more responsibility of developing solutions to improve the urban mobility situation in their cities. There is a gap between the tall order to internalize the urban mobility problems within the city and the current capacity to make sound evidence-based decisions.

Traditionally, a transport planning team and its attached consultants take up to a year or more (impacted by delays) to conduct 4 traffic/transport/development impact studies costing up to fifteen million pesos or more (Php 15,000,000/year), that is Php 3,750,000 per study. By the time the studies are completed, the results are already outdated. This specific approach leads to the implementation of solutions that are reactive rather than proactive, and are often misaligned with current realities. Paired with expensive cost and lengthy completion times, the traditional transport planning approach wastes valuable public funds and ultimately hinders the sustainable urban development of a city. Clearly, there is an urgent need for a more sustainable approach to conducting transport and urban development studies that will empower local government units to effectively address their pressing urban mobility challenges.

The Seermo Platform will enable the City to generate as many as 30 studies of varying sizes in a year for much less than the amount traditional consultancies charge for far less accurate and less timely output. A subscription to the Platform will expedite the completion of transport and mobility studies by leveraging its fast data collection, processing, and analysis capabilities. This quick turnaround is critical for timely and informed decision-making in transport planning and infrastructure development.

III. OBJECTIVES

1. **Utilize the Seermo Platform to Conduct End-to-End Planning Tasks:**
   Data collection, analysis, and decision recommendations for transport and urban planning studies.

2. **Enhance Data Collection and Analysis:**
   Improve the efficiency and accuracy of data collection and analysis for transport planning, infrastructure development, and traffic management. The Platform utilizes advanced technologies, such as video artificial intelligence, data science techniques, and machine learning recommender systems, to provide comprehensive and reliable data and recommendations that informs decision-making processes.

3. **Expedite Mobility Studies:**
   Accelerate the completion of mobility studies by leveraging The Platform's fast data collection, processing, and analysis capabilities. This allows the **Naga City CPDO and other concerned Departments** to conduct studies faster, supporting timely and informed decision-making in transport planning and infrastructure development.

4. **Optimize Resource Allocation:**
   Provide valuable insights and recommendations through data-driven analysis and reports, enabling **Naga City** to allocate resources more effectively. This helps prioritize interventions and maximize the impact of transport planning initiatives.

5. **Promote Sustainable Mobility and Urban Development:**
   Support the identification of priority areas for urban redevelopment, sustainable transport options, enhance active modes of transport, and reduce traffic congestion and its environmental impacts. The Platform's capabilities align with **Naga City**'s vision and goals for sustainable urban development.

6. **Improve Decision-Making Processes:**
   Enhance the quality of decision-making in transport planning, urban planning, infrastructure development, and traffic management by providing comprehensive reports, visualizations, and data-driven insights. This empowers the **Naga City** Government to make informed decisions that lead to more efficient and effective transport systems.

7. **Strengthen Collaboration and Stakeholder Engagement:**
   Facilitate stronger collaboration and engagement with stakeholders by providing accessible and easily-interpretable data and reports. This promotes transparency, inclusivity, and cooperation in the development of transport initiatives, ensuring that the needs and perspectives of various stakeholders are considered in the planning process.

8. **Foster Innovation and Best Practices:**
   Adopt best practices in urban mobility and leverage cutting-edge technologies and approaches. The Platform's integration of international best practices and expertise in transport planning and data science will enable Naga City to advance its urban mobility strategies.

9. **Support Continuous Improvement:**

Benefit from regular updates and optimizations based on feedback from the community and stakeholders, ensuring that the Platform remains a valuable and effective tool for Naga City.

IV. SCOPE/COVERAGE OF THE PROJECT

The following scope of work is intended to fulfill the requirements needed to successfully **conduct and upgrade an existing** transport and urban planning **platform** version for the project: Naga City AI City Planner: AI-Empowered People-Centric Sustainable Transport and Land Use Planning, Monitoring, and Evaluation System for Naga City.

1. Software Acquisition and Deployment

- Purchase a 12-month software license for the project deployment through the technical partner,
- Configure the software for deployment by providing access to relevant personnel.

2. Continuous Improvement and Updates

- Provide regular updates to the Seermo Platform based on feedback from the stakeholders to ensure continuous improvement for the usage of the **Naga City** Government.

3. Support and Maintenance

- Provide 12 months of maintenance and support services for the Seermo Platform.
- Conduct the necessary capacity building requirements for the **Naga City** personnel involved.
- Ensure that the data and analytics generated can be utilized in future studies and reports of the City beyond the current scope.

IV. MINIMUM MANDATORY REQUIREMENTS

REQUIREMENT TYPE	
1. Novelty of the System	● A signed certification from the company attesting to the system's novelty. ● Proof of filed utility model application to the Intellectual Property Office of the Philippines (IPOPHL) that covers the features shown in Requirement number 2.
2. Platform Features for End-User and Admin Users	● The platform subscription should include an Urban Mobility and Infrastructure Planning Reporting App Feature. ● The platform subscription should include a Violation Reporting App Feature.

	● The platform subscription should have an Incident/Report Web Dashboard for monitoring of reports made through the Mobile App. ● The platform subscription should include an Advanced analytics dashboard for traffic demand, transportation supply, and infrastructure asset management ● The platform subscription should provide on-demand maintenance, technical, and scientific support and consultation. ● The platform subscription should include traffic video processing (on the backend) and analytics ● The platform subscription should include data collection equipment (e.g., smart phones and portable cameras) when necessary with the addition of data storage. ● The platform subscription should include AI and machine learning quality control and analysis by a transport data scientist and AI expert. ● The platform subscription should include data extraction from the Mobile App including generation of GPS tracks maps, public transport boarding and alighting survey maps, and other relevant statistics and/or graphs. ● The platform subscription should deploy relevant training personnel for data collection strategy development and analytics training.

V. PROJECT DURATION

The Project shall commence upon issuance of the Notice to Proceed (NTP). All required deliverables shall be completed and submitted within twelve (12) months from issuance thereof.

VI. APPROVED BUDGET FOR THE CONTRACT

The Approved Budget for the Contract is Six Million Two Hundred Twenty-Three Thousand Philippine Pesos Only (₱ 6,223,000.00). The project cost shall be fixed and there shall be no adjustments applicable for the duration of the contract.

VII. TIMELINE OF ACTIVITIES

Month 1: Setup and Training	1. Purchase and Access to the Mobile App and Platform Dashboard a. Procure the software license and subscription for the Seermo Platform. b. Provide access to relevant personnel and teams

	2. Training and Capacity Building a. Organize and conduct training events for staff and volunteers. b. Deploy the Seermo Platform with relevant stakeholders and implement the data collection strategy for the year of subscription.
Month 2-12: Continuous Data Collection and Dashboard Deployment	1. Data collection completion and analytics a. Train and guide the on the ground staff to collect data b. Process and analyze the data collected 2. Deployment of the dashboard to present the data collected a. Post-process all data and analytics and visualize all on the deployed dashboard b. Provide access to the online dashboard of Naga City
Month 2-12: Co-Creating Recommendations for the Areas of Study	1. Analyze the data collected together a. Conduct sessions to go through the study creation process b. Analyze the data and generate preliminary recommendations 2. Documentation of results a. Put the data, analytics, and recommendations into the necessary reports/presentations b. Feed the results to the recommender system that will be developed for **Naga City**
Months 1-12: Continuous Improvement and Updates Feedback and Updates	1. Provide regular updates to the Seermo Platform based on feedback from the stakeholders (especially, internal teams). 2. Ensure continuous improvement of the software's capabilities. 3. Remedy minor errors or bugs in the Seermo Platform as soon as practicable to ensure that downtimes, if any, are no longer than 48 hours. Major bugs should be resolved within 2 weeks from identification and initial assessment of bugs.

VIII. PRICING AND PAYMENT TERMS

The table below shows the DepDev Innovation Fund Work and Financial Plan Aggregated Costs split by two parties of the project.

Item	Technical/Scientific Partner – Seermo (This Procurement's Terms of Reference)	Naga LGU *(Separate Procurement)*
1. Meals, Venue, Training Expenses		**₱ 570,000.00**
2. **Platform/Software License & Subscription Costs** including **Data Collection Expenses**, **Internet Costs for Data Collection**, (12 months), **Scientific and Technical Support Services**	**₱ 6,223,000.00**	
Total Funds Available from DepDev	**₱ 6,793,000.00**	

SCHEDULE OF PAYMENT

PAYMENT AND DELIVERY SCHEDULE	Progress Billing 1: ₱4,356,100.00 (70%) of the total contract price as certified by the end-user. This should cover the following: ● Annual subscription and license to software and scientific services, relevant materials/equipment and technical assistance ● Dedicated data collection expenses (e.g., internet costs, temporary staff, fare, meals, materials, etc.) ● Technical & scientific support services required for 12 months Progress Billing 2: ₱1,866,900.00 (30%) of the total contract as certified by the end-user. Completion terms of Progress Billing 2, which will be paid upon: a. Successful configuration, and deployment and testing of the Platform with the various teams in **Naga City** Government, as well as the completion of initial training sessions for staff and volunteers; b. Provision of access to the exclusive web-based dashboard customized for the **Naga City** Government, including training on analytics using data collected by the LGU personnel trained in letter (a) above. c. Delivery Terms: immediately upon issuance of NTP
ESTIMATED BUDGET	**₱6,223,000.00**

OTHER CONDITIONS	**Recommending Negotiated Procurement (Highly Technical and Scientific Product)**

IX. DUTIES AND OBLIGATIONS OF QUEZON CITY GOVERNMENT AND THE SERVICE PROVIDER

RESPONSIBILITIES OF THE SUBSCRIPTION PROVIDER	1. Installation and Configuration: Ensuring that the software is properly installed and configured for use according to the specifications agreed upon in **this Section IV**. 2. Training and Support: Regularly provide training for the procuring entity's staff and volunteers on how to effectively use and integrate the Seermo Platform for sustainable transport and urban planning processes within Naga City LGU. This includes ongoing support and troubleshooting to address any issues that arise during the subscription period. 3. Updates and Maintenance: Regularly updating the software to incorporate new features and improvements, and maintaining its functionality and security throughout the subscription period. 4. Data Security and Privacy: Safeguarding the data collected and processed by the Seermo Platform, ensuring compliance with relevant data protection regulations and maintaining confidentiality. 5. Technical Assistance: Offering timely technical assistance and user support to address and resolve any operational concerns related to the software. 6. Performance Monitoring: Monitoring the performance of the software to ensure it meets the operational needs of the procuring entity, and making adjustments as necessary to optimize its use.
RESPONSIBILITIES OF THE PROCURING ENTITY	1. Timely Payments: Ensuring that the subscription fee is paid in full and on time as per the agreed amount and payment terms. 2. Provision of Necessary Information: Providing the subscription provider with all necessary information and access required to customize and configure the software to meet the specific needs of the procuring entity. 3. Collaboration and Communication:

	Maintaining open lines of communication with the subscription provider for efficient management of any issues or updates related to the software. 4. Adherence to Usage Guidelines: Using the software in accordance with the terms and guidelines provided by the subscription provider to avoid breaches of contract or misuse that could affect functionality or security. 5. Feedback and Reporting: Offering timely feedback on the software's performance and reporting any issues or challenges encountered to allow for prompt resolution and continuous improvement. 6. Training Participation: Ensuring that relevant staff, City Government teams, and volunteers participate in training sessions provided by the subscription provider to fully understand and effectively utilize the software. 7. Ground Staff Deployment: Ensuring the deployment of City Government ground staff for the data collection activities required for the successful implementation of the project and usage of the subscription to the AI City Planner.

Prepared by:

WILFREDO B. PRILLES, JR.
CGDH, CPDO

Approved:

MARIA LEONOR G. ROBREDO
City Mayor