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REVIEWER'S REPORT

Manuscript No.: IJAR-59842

Title: AI-Driven Construction Quality Management and Intelligent Infrastructure Systems.

Recommendation:

Accept as it is .....

Accept after minor revision.....

Accept after major revision .....

Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity		✓		
Significance		✓		

Reviewer Id: JPR-284

Reviewer's Comment for Publication.

The manuscript presents a relevant and well-organised review of artificial intelligence applications in construction quality management and intelligent infrastructure systems. It examines 30 peer-reviewed journal articles published between 2020 and 2025, covering visual defect detection, geometric quality inspection, automated compliance checking, concrete quality monitoring, structural health monitoring, UAV-based inspection, pavement distress detection, and digital twins. The study's main contribution is the proposed Quality Continuity Framework, which connects design, construction, handover, and infrastructure operation through shared data, intelligent analysis, and decision-making. The manuscript demonstrates good subject knowledge, provides a useful synthesis of existing research, and identifies important challenges, including limited data availability, weak model generalisation, explainability, human judgement, and the lack of demonstrated economic value. The methodology and selection process are described in considerable detail, and the limitations of the review and the unvalidated status of the proposed framework are appropriately acknowledged. Overall, the paper is relevant and offers a meaningful contribution to construction engineering and infrastructure management. Minor revision is recommended to improve the consistency of the reported study-selection and corpus-classification details, clarify the relationship between AI-based methods and AI-enabling technologies, and strengthen the presentation of the evidence supporting the proposed framework.