SiteVoice: The Virtual Project Coordinator

Consolidated Vision State Document

1. Executive Summary

SiteVoice is a high-integrity, voice-first "System of Intelligence" designed to eliminate information leakage, financial loss, and timeline deviations in construction projects. By transforming raw site communication into structured data, SiteVoice acts as an autonomous assistant that automates follow-ups, predicts risks, and secures project finances.

2. The Core Problem

Construction communication is unstructured, multilingual, and transient. Builders lose 15–20% of their margin to "unrecorded small data": undocumented petty cash, unverified labour headcounts, and process deviations (e.g., finishing starting before waterproofing is verified).

3. The Four Pillars of SiteVoice

I. Immutable Truth & Human Control

- **Immutable Audio:** The raw voice note remains the permanent "System of Record."

- **Validation Gate:** A one-time-only edit logic ensures that AI summaries are corrected by the creator but never tampered with thereafter.

- **Auditability:** Every interaction (approvals, forwards, edits) is logged in a "Stakeholder Trail."

II. Autonomous Site Orchestration

- **The Proactive Assistant:** SiteVoice doesn't wait for queries; it "nags" for status updates on overdue tasks and alerts managers when expected material arrivals aren't logged.

- **Process Integrity:** AI understands the sequence of construction. It flags deviations when dependent tasks are started out of order.

- **Dynamic Staging:** AI suggests project blueprints and milestones based on site types, which are then refined through team voice logs.

III. Financial Integrity & Anomaly Engine

- **Voice Ledger:** Real-time recording of purchases, labour payments, and petty cash via natural language.

- **Anomaly Detection:** AI compares site unit prices against city averages and cross-references labour payouts against morning headcount reports to identify "leakage."

IV. Frictionless Intelligence

- **Multilingual Processing:** Native handling of Hinglish, Tamil, Telugu, and other regional dialects, translated into a structured English executive dashboard.

- **Natural Language Querying (RAG):** Builders can "ask" their project history questions like, *"What was the reason for the rebar delay last Tuesday?"*

4. Strategic Advantage

SiteVoice turns site chaos into a searchable, actionable asset. It moves the builder from "Management by Crisis" to "Management by Exception," where the AI highlights only the risks, deviations, and approvals that require human judgment.