



FORESTRY MANAGEMENT PLAN (2023–2033)

Site: Riverside Farm JK Limited, Bunny, Nottinghamshire

Holdings: Parcel SK5829 6035 Fairham Brook Lane

Total size 3,74 ha.

Total Managed Forest Area: 1.71 Hectares (0.51ha Established; 1.2 ha Proposed)

Lead: Mr Keith Geary (Commercial Forestry Contractor)

1. EXECUTIVE SUMMARY & BUSINESS CASE

This plan details the transition of Riverside Farm to a high-tech commercial forestry enterprise. This is a professional operation supported by:

- **National Funding:** Approved **England Woodland Creation Offer (EWCO)** (Ref: 5587293) and **Innovate UK** grant funding for the "ROOT" automation project (Successful Round 4 Bid, Dec 2025).
- **Professional Management:** Led by Mr. Keith Geary, a specialist contractor for **Forestry and Land Scotland**, with a documented history of commercial re-seeding (Rest and Be Thankful), vegetation control (Inverness/Huntly), and professional planting (Scottish Borders).
- **Operational Necessity:** The Forestry Storage Building (Ref: 23/02352/AGRIC) is a functional requirement. It provides essential secure housing for high-value prototype autonomous planters, GPS-integrated mowers, and the mycorrhizal infusion systems required for the ROOT project.

2. VISION AND STRATEGIC OBJECTIVES

- **Technological Innovation:** Serving as the primary UK test-bed for the **Robotic Operations for Optimising Tree-planting (ROOT)** project. This utilises "Digital Twin" monitoring to shift the industry standard from "numbers planted" to "verified survival rates."
- **Climate Resilience & Flood Mitigation:** Establishing a 2,000+ tree "biological sponge" to intercept run-off, protecting the Grade I listed Bunny Hall and the wider village from flash flooding.
- **Commercial Viability:** Accessing private sector funding through the **Woodland Carbon Code (WCC)** and **Biodiversity Net Gain (BNG)**, closing the UK Nature Finance gap by providing investors with high-integrity data.

3. SITE ANALYSIS & RECENT ENGAGEMENT

- **Contractor Track Record:** Mr. Geary's commercial experience in Scotland (2022–2025) informs the silvicultural techniques applied here, specifically regarding vegetation management and survival monitoring.
- **RPA Integration:** All land parcels are registered on the Rural Payment System, ensuring full statutory alignment.
- **Soil Remediation (2023–2025):** Completion of biological tillage and mechanical de-compaction to prepare for mechanised, sensor-tracked planting.

4. MANAGEMENT OPERATIONS (SCHEDULE)

Phase 1: Preparation & Innovation Funding (2023 – 2025)

- **Status:** Successful acquisition of **Innovate UK ADOPT Facilitator Support** (Sept 2025) followed by the **Full Project Grant** (Dec 2025).

- **Compliance:** EWCO application submitted (Nov 2025) and site-verified by Forestry Commission (Feb 2026).

Phase 2: Infrastructure & Precision Establishment (2026 – 2027)

- **Operational Base:** Completion of the forestry storage building to secure the ROOT project's prototype mechanised single-row tree planter.
- **ROOT Deployment:** Automated planting of new 1.2 ha woodland. Each sapling is GPS-tagged and infused with mycorrhizal fungi, with data uploaded to the site's Digital Twin.
- **Survival Survey:** Automated drone/sensor survey within 12 weeks of planting to identify and replace failed saplings immediately.

Phase 3: Active Maintenance & Autonomous Care (2027 – 2029)

- **Aftercare:** Two-year program of autonomous inter-row mowing and band spraying.
- **Health Scoring:** Use of Smart Cameras to collect individual plant health data, facilitating high-integrity WCC and BNG credit verification.

Phase 4: Commercial Maturity & Dissemination (2030 – 2033)

- **Knowledge Transfer:** Disseminating findings on mechanised establishment to the wider UK forestry sectors.
- **Monetisation:** Final verification of Carbon and Biodiversity units for private sector investment.