CIVIC COMMONWEALTH OF THE BRITISH ISLES

Direct Democracy & Sortition Assemblies

CIVIC BUILDING ARCHITECTURE & FORESTRY SOVEREIGNTY FRAMEWORK

Document Reference: DD&SA-ARCH-001
Status: Constitutional Framework Instrument
Authority: National Sortition Assembly
Temporal Scope: Immediate to 1,000 Years
Classification: Public Civic Document

PREAMBLE: THE FOUNDING RATIONALE

This Framework establishes the constitutional foundation for how the Civic Commonwealth of the British Isles will design, construct, and maintain its built environment across a planning horizon of one thousand years. It is not a technical manual. It is a statement of civilisational intent.

For three centuries, the British Isles built its homes, halls, cathedrals, bridges, and civic structures from what grew in its own soil. Those buildings stand today. They did not require industrial concrete, imported steel, or petrochemical sealants. They were raised using timber, stone, earth, and rope — and they were joined without a single nail.

The DD&SA framework does not propose a romantic return to the past. It proposes the intelligent application of what was already proven to work, augmented by contemporary understanding of ecology, structural engineering, and long-cycle resource management. This Framework mandates that the future built environment of the New British Isles (NBI) shall be grounded in sovereign, renewable, naturally sourced materials — with a managed transition away from composite and industrial materials over a 100-to-200-year period.

The principal building material of the NBI's future is timber. Not because timber is primitive, but because it is sovereign, regenerative, carbon-sequestering, structurally excellent, and — when correctly managed — available in perpetuity. Supporting it will be stone, lime, clay, hemp, reed, and other materials native to the British Isles. None of these requires importation. None requires fossil fuel to produce. All of them have a multi-century record of accomplishment in this climate.

This Framework further establishes that no metallic fastenings — nails, screws, bolts, brackets, or wire — shall be used in the construction of any building within the NBI, excepting only those structures designated under national security or financial infrastructure classifications. This is not an arbitrary restriction. It is a materials philosophy: buildings that can be assembled without metal can be disassembled, repaired, and reused. They are buildings designed for permanence, not disposal.

PART I — CONSTITUTIONAL SCOPE & DEFINITIONS

1.1 Constitutional Standing

This Framework carries the standing of a Constitutional Framework Instrument under the DD&SA Civic Architecture framework. It may not be repealed, suspended, or materially amended without a full deliberative process conducted through the National Sortition Assembly (NSA), subject to a supermajority threshold of 75% and a mandatory 90-day public deliberation period.

The Framework applies to all civic, residential, commercial, educational, health, agricultural, and cultural buildings constructed within the jurisdiction of the Civic Commonwealth of the British Isles from the date of the Commonwealth's establishment.

1.2 Exemptions

The following categories of structure are exempt from the no-metallic-fastenings rule and the all-natural-materials mandate, provided they are specifically designated under the relevant civic security or financial infrastructure instrument:

- Structures designated as national security infrastructure by the National Defence Sortition Assembly
- Structures housing the Sovereign Digital Network's core computational infrastructure
- Structures designated as primary financial clearance or currency reserve infrastructure
- Emergency service vehicle maintenance depots and launch facilities

All other buildings — without exception — are subject to the full provisions of this Framework.

1.3 Definitions

The following terms carry specific meaning throughout this document:

Term	Definition
Civic Building	Any structure constructed for human habitation, commerce, education, health, civic assembly, culture, agriculture, or storage within the NBI, excluding designated exemptions.
Sovereign Timber	Timber grown, harvested, and processed within the territorial boundaries of the NBI under licence from the Civic Forestry Commission.
Legacy Forest	A designated forest stand managed on a rotation of 100 years or more, reserved for structural civic use.
Transition Period	The 100 to 200 year period during which composite and industrial materials remain permissible for specific uses whilst sovereign timber capacity is established.

Metal-Free Construction	The mandatory construction method for all civic buildings: all joints, fastenings, and structural connections achieved through timber joinery, wooden pegs, natural rope, lime mortar, or earth bonding.
Drawbore Peg	A hardwood peg (typically hornbeam or oak) driven through offset holes in a mortice-and-tenon joint to lock the joint without metal fastenings.
Civic Forestry Commission (CFC)	The DD&SA body responsible for managing all sovereign forestry land, licensing, planting, harvesting, and species protection within the NBI.
Ash Dieback Protocol	The specific legislative and management framework governing the protection, quarantine, research, and long-term recovery of Fraxinus excelsior (common ash) within the NBI.

PART II — THE MATERIAL PHILOSOPHY OF THE NBI

2.1 Why Timber-First

Timber is the only structural material that is simultaneously: renewable on a human timescale; carbon-sequestering in storage; workable without industrial processing; joinable without metal; and proven across a thousand years of use in the British climate. No other material satisfies all five conditions.

Steel requires mining, smelting, and industrial processing that cannot be conducted without fossil fuel or extensive electrical infrastructure. Concrete requires quarried aggregate, Portland cement production (a major CO2 emitter), and leaves structures that cannot be repaired, disassembled, or returned to the soil. Glass, aluminium, and synthetic insulation materials all require energy-intensive processing and produce no pathway to civic sovereignty.

Timber, by contrast, grows. A well-managed forest planted today will supply structural oak in 2150. The same forest will still be supplying timber in 2350, 2500, and 2700 — provided the Civic Forestry Commission maintains the covenant established in this Framework.

2.2 The Supporting Materials Hierarchy

Beyond timber, the NBI construction system shall draw upon the following naturally-sourced materials, in order of structural priority:

Priority	Material	Principal Use
1	**Sovereign Timber**	All structural frames, floors, roofs, walls, joinery, and fastenings
2	**Lime Mortar & Lime Render**	Masonry bonding, wall render, and floor screeds
3	**Natural Stone**	Foundations, plinths, walls, lintels, and paving
4	**Clay & Cob**	Wall infill, floor surfaces, and thermal mass
5	**Hemp (Hempcrete)**	Non-structural wall infill, insulation, and acoustic barriers
6	**Reed & Thatch**	Roof coverings, insulation, and temporary structures
7	**Natural Rope & Binding**	Scaffold lashing, secondary fixings, and wattle ties
8	**Composite Materials (Transition)**	Permitted for structural spans only during the 100 to 200 year transition period under CFC licence

2.3 The No-Metal Fastening Mandate

All structural and non-structural connections in civic buildings shall be achieved by one or more of the following methods:

- Mortice-and-tenon joinery with drawbore hardwood pegs (hornbeam or oak)
- Lap joints, scarf joints, and bridle joints in structural timber frames
- Wooden dowels for floor and wall panel assemblies
- Natural fibre rope (hemp, jute, or twisted willow withies) for secondary bindings
- Lime mortar or clay mortar for masonry connections
- Timber wedges for adjustable or compressive connections
- Wattle-and-daub panels for non-structural infill

The Civic Building Authority (CBA) shall publish and maintain a Joinery Methods Register setting out approved connection details for each structural application. No connection detail absent from the Register may be used without prior CBA approval.

Violation of the no-metal mandate, whether by a contracted builder, a self-builder, or a civic authority, shall constitute a Civic Rule breach under Category B (Structural Civic Integrity) and shall trigger a mandatory consequence review.

PART III — THE CIVIC FORESTRY ARCHITECTURE

3.1 The Civic Forestry Commission

The Civic Forestry Commission (CFC) is hereby established as a permanent civic institution under the authority of the National Sortition Assembly. Its mandate is the long-term stewardship of all sovereign forestry resources across the NBI. The CFC is not a commercial body. It does not operate for profit. Its sole purpose is the perpetual provision of timber sovereignty for civic construction.

The CFC shall be governed by a Sortition-selected Forestry Stewardship Council of 45 residents, renewed on a staggered five-year cycle, supported by a permanent professional cadre of dendrologists, ecologists, and structural timber specialists drawn from the Independent Epistemic Secretariat.

3.2 The Four-Tier Forest Estate

The CFC shall manage the national forest estate in four tiers, each operating on a distinct rotation cycle:

Tier	Rotation	Primary Species	Primary Output
Tier 1 — Legacy	100 to 250 years	English Oak, Sessile Oak, Sweet Chestnut	Major civic frames, cathedrals, halls, bridges
Tier 2 — Structural	40 to 90 years	Douglas Fir, European Larch, Scots Pine	Housing, apartment blocks, roofs, floor systems
Tier 3 — Interior	40 to 120 years	Beech, Sycamore, Hornbeam, Ash	Flooring, joinery, dowels, pegs, stairs, panels
Tier 4 — Coppice	5 to 30 years	Hazel, Willow, Alder, Birch, Rowan	Fastenings, infill, wattle, temporary structures, light frames

The CFC shall ensure, as a constitutional obligation, that at all times the NBI's forest estate contains standing volume sufficient to meet 100 years of projected civic construction demand at the peak population planning figure. This reserve requirement shall be reviewed by the NSA every 25 years.

3.3 Planting Obligations & Replacement Ratios

The CFC shall enforce the following minimum replanting ratios for all harvested timber:

Tier	Replacement Ratio	Notes
Tier 1 (Legacy)	5:1	Five new trees planted for every legacy tree harvested: minimum 50-year establishment period before any Tier 1 harvest in a new stand
Tier 2 (Structural)	3:1	Three new trees planted per harvest; must include minimum 20% broadleaf component
Tier 3 (Interior)	2:1	Two new trees per harvest; hornbeam and beech require extended soil preparation
Tier 4 (Coppice)	Rotation maintenance	Coppiced stools not replaced but maintained; stool replacement triggered at 50% decline in yield

3.4 Geographic Distribution of Forest Zones

The CFC shall designate and manage the following forest zone categories across the NBI:

- Primary Legacy Zones: Ancient and semi-ancient woodland in England, Wales, and Scotland, extended by new planting on former agricultural land; minimum 40% of total NBI forest estate
- Structural Production Zones: Managed conifer and mixed woodland on upland and former plantation sites; minimum 30% of total forest estate
- Coppice & Rapid-Cycle Zones: Lowland coppice woodland, riparian zones, and community forest holdings; minimum 15% of total estate
- Research & Genetic Reserve Zones: Closed stands held for species diversity, disease research, and genetic banking; minimum 5% of total estate, non-harvestable
- Community Forestry Zones: Local Sortition Assembly-managed woodland for local building supply; up to 10% of total estate, governed by Regional Sortition Assembly licence

3.5 The 1,000-Year Planning Covenant

The CFC is required by this Framework to maintain a rolling 1,000-year forestry plan, reviewed and reaffirmed by the NSA every 50 years. This plan shall include:

1. A standing volume inventory for each species tier, updated every 10 years by aerial survey and ground sampling
2. A projected harvest schedule and yield forecast for each 25-year planning period across the full 1,000-year horizon
3. A climate adaptation track, modelling species performance under the full range of IPCC climate trajectories relevant to the British Isles
4. A soil health register for all forest estate land, updated every 20 years
5. A biodiversity index for each forest zone, assessed against baseline every 15 years
6. A species vulnerability register identifying all species under pathogen, climate, or ecological pressure and setting mandatory response thresholds

The 1,000-year plan shall be a public document, maintained on the Sovereign Digital Network and accessible to all residents. No future Sortition Assembly may alter the core planting ratios, harvest reserves, or species protection provisions of this plan without the supermajority threshold established in Part I.

PART IV — SPECIES-BY-SPECIES BUILDING FRAMEWORK

4.1 Tier 1: Primary Structural Legacy Trees

English Oak (Quercus robur) — The Civic Backbone

Growth to Harvest	120 to 250 years (minimum 120 years before structural harvest)
Wood Qualities	Extremely high crushing and bending strength; naturally rot-resistant when air-dried; tannin-rich grain resists insect attack without chemical treatment; very high durability in exposed conditions
Structural Uses	Principal posts, principal rafters, tie beams, wall plates, arcade frames, cruck blades, floor joists in heavy loadings
Civic Building Types	National Assembly halls, regional civic centres, long-span market halls, cathedrals and ceremonial buildings, major bridges, multi-storey civic residential blocks, educational institutions
Fastening Compatibility	Drawbore mortice-and-tenon with hornbeam or oak pegs; scarf joints for longitudinal connections; oak wedges for adjustable assemblies
NBI Planting Target	Minimum 50 million new trees within 50 years of NBI establishment; concentrated in former agricultural lowland and ancient woodland buffer zones

Sessile Oak (Quercus petraea) — The Upland Frame

Growth to Harvest	100 to 200 years
Wood Qualities	Straighter grain than English oak, making it superior for long-span beams; equivalent structural strength; excellent cleaving properties for riving shingles and panels
Structural Uses	Long beams, purlins, wind braces, and any application requiring straight-grained timber; riven shingles for roof coverings
Civic Building Types	Large institutional buildings, community halls, covered markets, upland civic structures where straight spans are required
NBI Planting Target	Preferred species for upland zones of Wales, northern England, and Scotland; minimum 20 million new trees within 50 years

Sweet Chestnut (Castanea sativa) — The Transitional Workhorse

Growth to Harvest	50 to 100 years (structural pole timber available from 25 years under coppice management)
Wood Qualities	Naturally rot-resistant due to high tannin content; lighter than oak; excellent for outdoor exposure without treatment; similar durability class to oak but faster to produce

Structural Uses	Beams, posts, cladding, shingles, external joinery, pergolas, covered walkways, outdoor civic furniture
Civic Building Types	Standard residential housing, outbuildings, community pavilions, covered markets, civic walkways and galleries; acts as the primary structural species during the 50 to 100 year gap between NBI establishment and first oak harvest
Framework Note	Sweet chestnut is the designated bridging species during the transition period. The CFC shall prioritise its planting in areas where oak and fir stocks are insufficient to meet immediate building demand.

4.2 Tier 2: High-Strength Structural Conifers

Douglas Fir (Pseudotsuga menziesii) — The Primary Housing Timber

Growth to Harvest	50 to 90 years
Wood Qualities	Among the highest strength-to-weight ratios of any UK-growable timber; very consistent grain; takes joinery well; moderate natural durability requiring covered details for long-term external use
Structural Uses	Floor joists, roof structures, wall studs, glued laminated beams (where adhesive is certified natural), engineered panel systems
Civic Building Types	All standard civic residential buildings; apartment blocks up to eight storeys with appropriate engineering; schools, health centres, community halls, commercial premises
Fastening Compatibility	Dowels, mortice-and-tenon with hornbeam pegs, natural adhesives derived from lime or casein where structural engineering permits

European Larch (Larix decidua) — The Weatherproof Cladder

Growth to Harvest	40 to 80 years
Wood Qualities	Highly resinous; naturally resistant to rot and insect attack in external exposure; excellent durability without chemical treatment; denser than most conifers
Structural Uses	External cladding, decking, external beams, structural members in exposed or partially exposed conditions, bridges, coastal structures
Civic Building Types	Weather-exposed civic buildings, coastal civic infrastructure, upland structures, agricultural buildings, ferry terminals, harbour buildings
Framework Note	Larch is the mandated external cladding material for all civic buildings in coastal and upland exposure zones. No composite cladding shall be permitted where larch of appropriate grade is available.

Scots Pine (Pinus sylvestris) — The Northern Building Standard

Growth to Harvest	40 to 70 years
Wood Qualities	Straight, workable, predictable grain; historically, the backbone of northern European housing; accepts pegged joinery well; moderate natural durability
Structural Uses	Studs, floor systems, roof members, light frames, internal partitions
Civic Building Types	Standard housing in Scotland and northern England; workshops, storage buildings, community meeting rooms, agricultural structures

4.3 Tier 3: Interior and Joinery Hardwoods

Beech (Fagus sylvatica)

Growth: 60 to 120 years. Uses: Flooring, staircases, interior framing, workshop surfaces, and acoustic panels. Beech is not weather-resistant and is mandated for interior use only. Its high density makes it ideal for heavily-trafficked civic floor surfaces. NBI Framework: preferred flooring material for all public civic buildings.

Sycamore (Acer pseudoplatanus)

Growth: 40 to 80 years. Uses: Interior joinery, decorative panels, window surrounds, furniture-grade components, and food-preparation surfaces in civic kitchens. Sycamore's pale, stable timber is mandated for all civic kitchen and food-service surfaces, replacing synthetic laminates.

Hornbeam (Carpinus betulus) — The Peg Timber

Growth: 30 to 60 years. Hornbeam is constitutionally designated as the primary fastening timber of the NBI. Its extreme density and hardness make it the optimal material for drawbore pegs, structural dowels, and wear surfaces. The CFC shall maintain a dedicated hornbeam estate of sufficient size to supply the projected peg demand for all civic construction. No civic building using a drawbore connection may be built without a verified supply of hornbeam or oak pegs from the CFC register.

4.4 Tier 4: Coppice and Rapid-Cycle Timbers

Hazel (Corylus avellana) — The Constant Provider

Coppice rotation: 7 to 15 years. Hazel is the fastest large-volume timber resource in the NBI estate. Properly managed hazel coppice under a 10-year rotation produces a continuous and inexhaustible supply of straight poles for dowels, pins, wattle panels, and light-frame infill. The CFC shall ensure that every community of 500 or more residents has access to a managed hazel coppice within 10 kilometres. Hazel coppice management shall be one of the designated community participation activities under the DD&SA Civic Contribution framework.

Alder (Alnus glutinosa) — The Foundation Timber

Growth: 15 to 30 years. Alder possesses the remarkable property of hardening underwater rather than rotting. It is the designated foundation pile material for all NBI structures built on waterlogged, riparian, or poorly-drained ground. The use of alder piles in wet-ground foundations is mandatory; the use of concrete piles on such sites is prohibited from NBI establishment. CFC shall maintain riparian alder stands along all major river systems.

Willow (Salix spp.)

Growth: 5 to 20 years. Uses: Woven panels, light frames, temporary housing, agricultural buildings, and rapid-deployment emergency structures. Willow's exceptional growth rate makes it the material of first resort for emergency or temporary civic structures. The CFC shall maintain a strategic reserve of willow osier beds sufficient to construct temporary accommodation for 10,000 persons within 90 days of a declared civic emergency.

Birch (Betula spp.)

Growth: 20 to 40 years. Uses: Flooring, wall panels, furniture, and interior parts. Birch is a pioneer species particularly well-suited to post-industrial reclamation sites in northern and upland Britain. The CFC shall designate former industrial land as priority birch planting zones, both for timber production and for soil remediation.

Rowan (Sorbus aucuparia) and Hawthorn (Crataegus monogyna)

Growth: 20 to 40 years. Dense, tough timber used for small structural pegs, tool handles, mallet heads, and wedges. Both species are mandatory components of hedgerow and field-boundary planting schemes across all NBI agricultural land. Their timber is a by-product of proper ecological management and shall not be wasted — all cleared hedgerow timber shall be assessed by the local CFC register before disposal.

PART V — THE ASH DIEBACK PROTOCOL

CRITICAL SPECIES PROTECTION — MANDATORY PROVISIONS

Ash (Fraxinus excelsior) is among the most ecologically and structurally significant native trees of the British Isles. It constitutes approximately 30% of all broadleaf woodland by canopy coverage and underpins hundreds of woodland ecosystem relationships. The arrival and spread of Hymenoscyphus fraxineus — ash dieback disease — represents the most severe native woodland catastrophe since the arrival of Dutch elm disease in the 1970s. Left unmanaged, it has the capacity to eliminate 95% of the NBI's ash population.

this Framework establishes legally binding provisions under DD&SA Civic Rule 7(b) (Protection of Civic Natural Infrastructure) for the preservation, genetic banking, research, and eventual recovery of the ash population across the NBI.

5.1 Immediate Protective Measures (Years 0 to 20)

5.1.1 Identification and Quarantine

7. The CFC shall conduct a complete national ash census within 5 years of NBI establishment, mapping every ash stand, hedgerow tree, and woodland component by GPS coordinate and health status
8. All ash trees shall be classified into one of four categories: Healthy Unaffected, Mildly Symptomatic, Severely Symptomatic, and Dead or Dying
9. Quarantine buffer zones of minimum 5 kilometres radius shall be established around all disease-free ash populations
10. No movement of ash timber, cuttings, or soil from symptomatic zones to healthy zones is permitted; violation constitutes a Category A Civic Rule breach
11. All ash nursery stock within the NBI shall be subject to mandatory CFC health certification before any planting or sale

5.1.2 Genetic Banking

12. The CFC shall establish a National Ash Genetic Repository, housed at minimum three geographically separate secure locations
13. Seed, tissue, and pollen samples from all ash trees identified as tolerant or resistant to Hymenoscyphus fraxineus shall be collected and stored within 3 years of NBI establishment
14. A minimum of 2,000 individual trees from genetically diverse populations across all NBI regions shall be banked before the disease front reaches their location
15. The genetic repository shall be cross-referenced with those maintained by the Royal Botanic Gardens Kew, the seed vaults at Svalbard, and equivalent European institutions; formal agreements for mutual access shall be part of the International Civic Compact obligations

5.2 Medium-Term Recovery (Years 20 to 100)

5.2.1 Resistance Breeding Programme

16. The CFC shall commission a continuous ash resistance breeding programme through the Independent Epistemic Secretariat, targeting natural tolerance alleles identified in field surveys and genetic analysis
17. Resistant specimens identified in the national census shall be propagated under controlled conditions and planted in isolation forests for performance monitoring
18. Cross-pollination trials between the most resistant specimens from across the British Isles, Ireland, Denmark, and Scandinavia (where natural resistance populations have been identified) shall be conducted under IES supervision
19. Results shall be published openly on the Sovereign Digital Network and shared with all international partners under the International Civic Compact

5.2.2 Assisted Colonisation Programme

20. From year 30, where resistance breeding has produced verified tolerant stock, the CFC shall begin a programme of assisted colonisation, replanting ash in sites from which it has been lost
21. Replanting shall be conducted at a minimum rate of 500,000 resistant-stock ash per year from year 30 until ash canopy cover in relevant woodland types returns to 50% of pre-disease baseline
22. All replanting shall use only CFC-certified resistant stock from the national repository

5.3 Utility of Ash During the Crisis Period

Ash timber remains usable and of high structural value even from trees that have died of the disease, provided they are harvested promptly before structural decay sets in. CFC Framework direction during the crisis period shall be:

- All dead or dying ash trees of pole size or above shall be assessed for structural timber value before clearance
- Harvestable ash timber shall enter the CFC structural timber register and be allocated to civic building projects
- Ash shall remain the preferred material for wedges, curved structural members, tool handles, and structural joints for as long as viable supplies persist
- Ash in hedgerows and isolated field trees shall be preferentially protected and not harvested unless mortality is inevitable

5.4 Long-Term Ash Recovery Target

The NBI's constitutional target for ash is a full population recovery to 75% of pre-disease canopy baseline by year 200 of the Commonwealth, using resistant-stock trees. This target shall be incorporated into the CFC's 1,000-year plan and reported against every 25 years. The recovery is not aspirational — it is a civic obligation.

PART VI — CIVIC BUILDING STANDARDS & CONSTRUCTION REQUIREMENTS

6.1 The Civic Building Authority

The Civic Building Authority (CBA) is hereby established as the regulatory body responsible for all civic construction standards within the NBI. It operates under delegation from the National Sortition Assembly and publishes, maintains, and enforces the NBI Civic Building Code. The CBA is not a commercial licensing body; it is a civic standards guardian.

6.2 Building Categories and Material Requirements

Building Category	Primary Material	Structural System
Standard Residential (1 to 3 storeys)	Douglas Fir / Sweet Chestnut	Post-and-beam or stud frame with drawbore pegs; lime render or clay infill; larch or chestnut cladding
Medium Residential (4 to 8 storeys)	Douglas Fir (mass timber)	Cross-laminated or nail-laminated timber panels using natural adhesive; exposed frame with hardwood dowel connections
Civic Halls & Assembly	Oak / Sessile Oak	Heavy timber frame with principal post-and-truss system; cruck or aisled hall form; natural stone plinth
Educational Buildings	Douglas Fir / Larch	Modular post-and-beam frames designed for future adaptation; natural ventilation through timber louvre systems
Health Centres	Douglas Fir / Beech (interior)	Easily cleanable surfaces mandated; beech flooring throughout clinical areas; hempcrete infill for acoustic and thermal performance
Agricultural Buildings	Scots Pine / Sweet Chestnut / Larch	Traditional cruck or portal frame; open-sided bays permitted; earth floor with stone edgings
Bridges (pedestrian/light)	Oak / Sweet Chestnut / Alder (piers)	Traditional kingpost or queenpost timber truss; alder piers for wet sites; lime-grouted stone abutments
Temporary Structures	Willow / Hazel / Birch	Pole frame with wattle-and-daub or woven panel infill; designed for disassembly and material reuse

6.3 Structural Design Standards

All civic buildings subject to this Framework shall be designed to the following minimum standards:

- Design life: minimum 200 years for all permanent civic buildings; minimum 500 years for all National Sortition Assembly buildings and designated civic heritage structures
- Repairability: all structural members must be replaceable in situ without demolition of adjacent fabric; this principle governs all design decisions

- Disassembly: all buildings must be fully dismantlable at end of life, with 95% material recovery rate; pegged joinery facilitates this requirement
- Adaptability: structural bays must be sized to permit internal reconfiguration without structural alteration; minimum 6m x 6m bay recommended for all civic non-residential buildings
- Fire safety: all buildings to comply with NBI Civic Fire Strategy; natural lime plaster on internal surfaces, compartmentalisation using stone or clay-block walls, and controlled burn compartments are the mandated approach
- Thermal performance: hempcrete infill, turf roofing, and triple-layer natural glazing shall be the reference specification; performance targets to be set by CBA
- Acoustic performance: hempcrete infill and timber frame naturally achieve high acoustic attenuation; CBA to set specific targets for health and educational buildings

6.4 The Joinery Licence

No person may design or oversee the structural joinery of a civic building without a valid Joinery Licence issued by the CBA. The Joinery Licence is not a commercial qualification; it is a civic competence certification. It is earned through a combination of apprenticeship, examination, and portfolio review, and is renewed every 10 years. The CBA shall publish a public register of all active Joinery Licence holders.

6.5 Transition Period Provisions

During the 100 to 200 year transition period established by this Framework, the following composite and industrial materials may be used under specific, licensed conditions:

- Structural steel or reinforced concrete: permitted only in foundation systems below ground level where spans exceed the structural capacity of available sovereign timber; must be accompanied by a CFC certificate confirming insufficient timber supply for the specific application
- Synthetic waterproof membranes: permitted as secondary protection beneath natural roof coverings only, until a sufficient national supply of natural alternatives is established
- Mineral wool or synthetic insulation: permitted only where certified hempcrete, cork, or natural fibre insulation is demonstrably unavailable from the CFC register; phased out entirely by year 100
- All transition period exemptions require CBA approval and are recorded on the national building register

PART VII — SUPPLEMENTARY NATURAL MATERIALS FRAMEWORK

7.1 Hemp and Hempcrete

Industrial hemp (Cannabis sativa) shall be established as a primary agricultural crop across the NBI for the production of hempcrete, rope, and natural fibre insulation. Hemp is among the fastest-growing biomass crops available in the British climate, producing harvestable material within a single season. Its use as a construction material in hempcrete form — hemp hurds mixed with lime binder and water — produces walls of excellent thermal mass, acoustic performance, and humidity regulation.

The CFC shall work with the Civic Agricultural Commission to establish a minimum national hemp cultivation area sufficient to supply the projected insulation and infill demand for all new civic buildings within 25 years of NBI establishment. Hemp cultivation requires no specialist land and may be rotated with food crops without soil depletion.

7.2 Lime

Lime mortar and lime render shall replace all Portland cement-based products in civic construction. Lime is produced by burning limestone — a widely available resource across the British Isles — and produces a breathable, flexible, and repairable bonding material far superior to cement for use with natural materials. Unlike cement, lime mortar can be repaired rather than replaced, extending building life indefinitely. The CBA shall specify lime as the standard bonding material in the NBI Civic Building Code, and no civic building permit shall be issued for a masonry structure specifying cement mortar.

7.3 Natural Stone

Stone extraction for civic construction shall be conducted under licence from the CFC in its capacity as custodian of natural resources. All stone used in civic buildings shall be sourced within 50 kilometres of the building site wherever geologically possible, reducing transport impact. Reclaimed stone from demolished structures shall be given first preference in all new civic construction. The CBA shall maintain a national reclaimed materials register on the Sovereign Digital Network.

7.4 Reed and Thatch

Norfolk reed (Phragmites australis) and water reed thatching shall be re-established as primary roof covering materials for residential and civic buildings of up to three storeys. The CFC shall designate and manage national reed bed estates in appropriate wetland zones, with a long-term production target sufficient to supply all new residential construction. A well-laid reed thatch has a functional life of 25 to 40 years; a secondary wheat-straw undercoat extends this further. All thatching work on civic buildings shall be conducted under CBA Joinery Licence equivalents for thatching.

7.5 Natural Rope and Binding Materials

Hemp rope, jute rope, and twisted willow withies shall be the mandated binding materials for all wattle, infill, and secondary fixing applications. The CFC shall ensure these materials are available through the national materials supply register. The use of synthetic rope or plastic binding in civic construction is prohibited from NBI establishment.

PART VIII — GOVERNANCE, ENFORCEMENT & ACCOUNTABILITY

8.1 The Civic Building Register

The CBA shall maintain a Civic Building Register on the Sovereign Digital Network, containing a permanent record of every civic building in the NBI. Each entry shall include the design life, materials specification, joinery details, responsible Joinery Licence holder, inspection history, and planned maintenance schedule. The register is a public document. Any resident may access the full record of any civic building.

8.2 Inspection and Maintenance Obligations

All civic buildings shall be subject to the following mandatory inspection schedule:

- Structural inspection: every 25 years, conducted by a CBA-registered structural assessor
- Roof and weatherproofing inspection: every 10 years
- Joinery and fastening inspection: every 25 years, specifically checking peg integrity and joint tightness
- Heritage structure inspection (500-year design life): every 10 years, conducted by a specialist heritage timber assessor

The cost of all mandatory inspections on civic buildings is borne by the Civic Commonwealth from general civic allocation. The cost of maintenance and repair of privately owned civic buildings is borne by the owner, with access to interest-free civic maintenance loans where financial hardship is demonstrated.

8.3 Enforcement Provisions

The following constitute Civic Rule breaches under this Framework:

Breach	Category	Consequence
Use of metallic fastenings in a civic building without exemption	Category B	Mandatory remediation within 12 months; suspension of Joinery Licence pending review
Use of prohibited materials outside transition licence	Category B	Mandatory remediation; CBA-ordered material replacement at builder's cost
Construction of civic building without valid CBA approval	Category A	Stop order; assessment for demolition or remediation; civic consequence hearing
Movement of ash plant material from quarantine zone in breach of Ash Dieback Protocol	Category A	Immediate quarantine; civic consequence hearing; potential revocation of land use rights
Harvesting of Tier 1 Legacy Forest without CFC licence	Category A	Immediate stop and seizure; full civic consequence hearing; replanting obligation at 10:1 ratio
Failure to maintain mandatory replanting ratios	Category B	Replanting notice within 6 months; CFC assumption of management responsibility if not complied with

8.4 The 50-Year Review

This Framework shall be subject to a mandatory full review by the National Sortition Assembly every 50 years. The review shall include a published State of the NBI Forest report, a Civic Building Performance Audit assessing the long-term performance of all building materials used in the preceding 50 years, and a forward revision of the 1,000-year forestry plan. The review may recommend amendment to material specifications, replanting ratios, or inspection schedules, but may not reduce the core protections established in this Framework without the supermajority provisions set out in Part I.

PART IX — THE 1,000-YEAR BUILDING CIVILISATION TIMELINE

The following timeline represents the projected development of the NBI's sovereign timber civilisation. It is not a guarantee; it is a civic covenant. Each generation of residents inherits the obligation to maintain it.

Phase	Actions and Milestones
Phase 1 Years 0 to 25	Establishment. CFC constituted. National ash census completed. Tier 1 oak planting programme launched at 10 million trees per year. Sweet chestnut and Douglas fir planted as transition-period structural species. Hazel coppice networks established in every civic district. Hemp cultivation mandated on 5% of all agricultural land. Joinery Licence programme launched. National Ash Genetic Repository established at three sites. Civic Building Authority constituted and first Civic Building Code published.
Phase 2 Years 25 to 75	First Structural Harvest. Sweet chestnut and Scots pine reaching first structural harvest. Douglas fir first harvest in mature plantations. Composite materials use declining under transition licence framework. Ash resistance breeding programme producing first verified tolerant stock. Alder riparian estates fully established. Reed bed estates at 50% production target. Larch and sweet chestnut cladding standard in all external construction. First civic buildings constructed entirely from sovereign materials.
Phase 3 Years 75 to 150	Composite Phase-Out. All composite and industrial material licences expired and cancelled. All civic buildings constructed from 100% sovereign natural materials. Ash resistant-stock replanting programme at full pace. Douglas fir second rotation producing mature structural timber. Hemp production supplying 100% of insulation demand. Lime mortar manufacturing a major civic industry. Reed thatch supply meeting residential roof demand. Civic Building Register containing records of all extant NBI buildings.
Phase 4 Years 150 to 250	First Oak Harvest. The first planted generation of English and sessile oak reaching structural maturity. First civic halls, regional assembly buildings, and long-span structures built entirely from sovereign first-generation oak. Ash population recovery at measurable progress against 75% target. The NBI's first true legacy forest cycle complete. Residents living in buildings their great-great-grandparents planted the timber for.
Phase 5 Years 250 to 500	Civilisational Sovereignty. The NBI forest estate supplying all structural timber needs from a fully managed sovereign estate on continuous rotation. Multiple oak generations in harvest. Ash population returned to 75% of pre-dieback baseline. All NBI buildings designed for 200 to 500 year lifespans performing as expected. The full four-tier forestry system operating in a closed loop. First buildings of this civilisation approaching the midpoint of their designed lives.
Phase 6 Years 500 to 1,000	The Mature Commonwealth. Buildings constructed in Phase 1 still standing and in use. The NBI's oldest deliberately-planted legacy forests now reaching their third oak generation. A built environment of universal quality, repairability, and beauty — one that has required no imported materials, no fossil fuel products, and no industrial fastening for five centuries. The British Isles, once again, building itself from what grows in its own earth.

PART X — MASTER SPECIES REFERENCE TABLE

The following table provides a single-reference summary of all species covered by this Framework, their rotation cycles, structural applications, and civic building types.

Species	Tier	Rotation	Structural Uses	Building Types	Framework Note
English Oak	1	120-250 yrs	Posts, beams, trusses, pegs	Halls, civic centres, cathedrals, bridges	Constitutional backbone species
Sessile Oak	1	100-200 yrs	Long beams, purlins, shingles	Institutional, large span	Preferred for upland zones
Sweet Chestnut	1	50-100 yrs	Beams, posts, cladding, shingles	Housing, pavilions, walkways	Primary transition-period species
Douglas Fir	2	50-90 yrs	Joists, roofs, studs, lam. beams	Housing, apartments, schools	Primary housing timber
European Larch	2	40-80 yrs	External cladding, beams, decking	Coastal, upland, exposed	Mandated cladding in exposed zones
Scots Pine	2	40-70 yrs	Studs, floor systems, roof members	Housing, workshops, storage	Northern standard timber
Beech	3	60-120 yrs	Flooring, stairs, interior framing	Public interiors, civic halls	Interior only — not weatherproof
Sycamore	3	40-80 yrs	Joinery, panels, food surfaces	Houses, civic kitchens	Mandated for civic food surfaces
Hornbeam	3	30-60 yrs	Drawbore pegs, dowels, wear surfaces	All timber-framed buildings	Constitutional fastening timber
Ash	3	30-60 yrs	Wedges, curved members, tools	Structural joints, temporary works	PROTECTED: Ash Dieback Protocol
Hazel	4	7-15 yrs (cop.)	Dowels, pins, wattle panels	Walls, light structures, infill	Community coppice mandate
Alder	4	15-30 yrs	Wet foundations, piles	Bridges, river structures	Mandated for wet-ground foundations
Willow	4	5-20 yrs	Woven panels, light frames	Temporary housing, agriculture	Strategic emergency reserve species
Birch	4	20-40 yrs	Panels, interior parts	Floors, walls, furniture	Priority for reclaimed land
Rowan / Hawthorn	4	20-40 yrs	Small pegs, tool handles, wedges	Fastening components	Hedgerow by-product; no waste.

CLOSING DECLARATION

This Framework is not a technical specification. It is a civilisational act.

Every generation of residents that has ever lived in the British Isles has inherited the land, the forests, and the buildings of those who came before them. We are, in the most literal sense, living in what our ancestors grew and built. The obligation this creates is not sentimental; it is structural. We are the stewards of what exists, and we are the planters of what will exist.

The DD&SA framework does not permit us to consume our future. It does not permit us to build with materials that poison the soil, require global supply chains, or leave a landscape of degraded land and unsalvageable structures for those who follow us. It requires instead that we build as the medieval builders built: with intelligence, craft, and generosity toward people we will never meet.

The oak we plant today will be harvested in 2150. We will not see it. That is the point. Civic democracy is not government for today. It is governance across time — the only institution capable of holding a 1,000-year covenant with the people who will inherit what we leave.

This Framework establishes that covenant. It is now the obligation of every resident of the Civic Commonwealth of the British Isles to honour it.