

Scope Document

Title: Construction of 3-Story Hospital Project

1. Project Overview

This document outlines the comprehensive scope of work for the design, construction, and commissioning of a new 3-story hospital building. The facility will be designed to provide state-of-the-art medical services, focusing on patient care, operational efficiency, and sustainability. This project specifically excludes the construction of a helipad.

Project Name: Fenham Community Medical Centre

Location: 150 Tamworth Road

Client: Newcastle Upon Tyne Council

Project Goal: To deliver a functional, safe, and efficient 3-story hospital building, equipped with necessary medical infrastructure, within budget and schedule.

2. Project Scope Definition

2.1. Inclusions

The project scope includes, but is not limited to, the following:

- **Site Analysis and Preparation:**
 - Geotechnical investigations, environmental assessments, and utility surveys.
 - Site clearing, grading, excavation, and foundation preparation.
 - Temporary facilities for construction (e.g., offices, storage, utilities).
- **Architectural Design & Documentation:**
 - Conceptual design, schematic design, design development, and construction documents (drawings and specifications) for a 3-story hospital building.
 - Space planning for patient rooms, operating theatres, examination rooms, laboratories, imaging suites, administrative offices, waiting areas, and support services (e.g., pharmacy, kitchen, laundry).
 - Interior design, finishes, and casework.
 - Landscape design for immediate surroundings.
- **Structural Design & Construction:**
 - Design and construction of the building's foundation system (e.g., slab-on-grade, pile foundation).

- Design and construction of the 3-story structural frame (e.g., steel, reinforced concrete).
- Roofing system installation.
- **Mechanical, Electrical, and Plumbing (MEP) Systems:**
 - Design and installation of HVAC systems (heating, ventilation, air conditioning) suitable for a hospital environment (e.g., air filtration, pressure differentials).
 - Design and installation of electrical power distribution, emergency power generation, lighting, and low-voltage systems (e.g., data, telecommunications, security, nurse call).
 - Design and installation of plumbing systems, including domestic water, sanitary drainage, medical gas systems, and specialized waste disposal.
 - Fire protection and sprinkler systems.
- **Specialized Hospital Systems & Equipment:**
 - Coordination and installation of fixed medical equipment (e.g., MRI, CT scanners, X-ray machines, surgical lights, patient lifts).
 - Integration of specialized communication systems (e.g., PACS, EMR integration points).
 - Waste management systems specific to healthcare facilities.
- **Exterior & Interior Finishes:**
 - Exterior cladding, windows, doors, and curtain walls.
 - Interior finishes including flooring, wall coverings, ceilings, and paint.
 - Installation of all interior doors, frames, and hardware.
- **Accessibility & Safety:**
 - Compliance with all relevant building codes, accessibility standards (e.g., ADA, local equivalents), and healthcare regulations.
 - Life safety systems, including fire alarms, emergency exits, and signage.
- **Commissioning & Handover:**
 - Testing, balancing, and commissioning of all building systems (MEP, fire, security).
 - Training for hospital staff on building systems and equipment operation.
 - Provision of operation and maintenance manuals, as-built drawings, and warranties.

- **Project Management & Administration:**
 - Overall project planning, scheduling, cost control, and quality assurance.
 - Regulatory approvals, permits, and inspections.
 - Stakeholder communication and reporting.

2.2. Exclusions

The following items are explicitly excluded from this project scope:

- **Helipad Construction:** No helipad or associated infrastructure will be designed or constructed.
- **Off-site Infrastructure Upgrades:** Major off-site utility upgrades beyond the immediate connection points to the building.
- **Loose Medical Equipment:** Purchase and installation of movable medical equipment (e.g., beds, IV poles, diagnostic carts) unless specifically integrated into fixed systems.
- **Furniture, Fixtures, and Equipment (FF&E) - Non-Fixed:** Purchase and installation of non-fixed furniture (e.g., desks, chairs, waiting room seating).
- **IT Hardware (Non-Infrastructure):** Purchase and installation of end-user IT hardware (e.g., computers, monitors, printers) beyond network infrastructure.
- **Specialized Art Installations:** Decorative or artistic installations not directly related to building functionality.
- **Demolition of Existing Structures:** Unless explicitly stated in site preparation.
- **Long-term Maintenance Contracts:** Post-handover operational maintenance agreements.

3. Deliverables

Key deliverables at various stages of the project include:

- **Planning & Design:** Feasibility Study Report, Program of Requirements, Schematic Design Documents, Design Development Documents, Construction Documents (Architectural, Structural, MEP, Civil).
- **Pre-Construction:** Site Logistics Plan, Construction Schedule, Budget Baseline, Procurement Plan, Permitting Documentation.
- **Construction:** Foundation, Structural Frame, Building Envelope, MEP Systems, Interior Finishes, Fixed Medical Equipment Installation.
- **Commissioning & Handover:** Commissioning Report, System Test Reports, O&M Manuals, As-Built Drawings, Staff Training Records, Certificate of Occupancy.
- **Post-Construction:** Warranty Documentation, Post-Occupancy Evaluation Report (if applicable).

4. Phases of the Project

The project will be executed in the following sequential phases:

4.1. Phase 1: Planning & Design

- **Activities:** Feasibility studies, site selection (if applicable), detailed programming of spaces, architectural concept development, structural engineering, MEP engineering, civil engineering, regulatory compliance review, cost estimating, and development of all design documentation.
- **Outcome:** Approved and fully permitted construction documents.

4.2. Phase 2: Pre-Construction

- **Activities:** Contractor selection, detailed scheduling, budget finalization, procurement of long-lead items, site mobilization, and initial site preparation (e.g., demolition, rough grading).
- **Outcome:** Ready site for construction, established project controls.

4.3. Phase 3: Construction

- **Activities:** Foundation work, structural erection (3 stories), building envelope completion, rough-in of MEP systems, interior framing, installation of specialized medical infrastructure, interior and exterior finishes, installation of fixed medical equipment, landscaping.
- **Outcome:** Completed physical building structure and systems.

4.4. Phase 4: Commissioning & Handover

- **Activities:** Comprehensive testing and balancing of all building systems, final inspections, regulatory sign-offs, staff training on new systems and equipment, preparation of operation and maintenance manuals, and official handover to the client.
- **Outcome:** Fully functional and compliant hospital building ready for occupancy.

4.5. Phase 5: Post-Construction

- **Activities:** Warranty management, post-occupancy evaluation (reviewing building performance and user satisfaction), and ongoing support as per contract.
- **Outcome:** Ensured long-term performance and client satisfaction.

5. Key Assumptions

- Availability of all necessary permits and regulatory approvals in a timely manner.
- Timely access to the construction site without unforeseen encumbrances.
- Availability of qualified labor and materials.

- Stable economic conditions and material costs.
- Clear and timely decision-making from the client and stakeholders.
- Existing utility connections (water, sewer, electricity, data) are sufficient or can be upgraded within the project's defined scope and budget.

6. Constraints

- **Budget:** Project budget is fixed at £1.2million pound.
- **Schedule:** Project completion target date is 48weeks
- **Regulatory Compliance:** Adherence to all local, national, and healthcare-specific building codes and regulations.
- **Site Limitations:** Construction activities must respect adjacent properties and environmental regulations.
- **Resource Availability:** Dependence on the availability of specialized contractors and medical equipment vendors.

7. Risks

- **Cost Overruns:** Unforeseen site conditions, material price fluctuations, scope creep.
 - *Mitigation:* Detailed cost estimating, contingency planning, strict change order management.
- **Schedule Delays:** Permitting delays, labor shortages, adverse weather, material delivery issues.
 - *Mitigation:* Robust scheduling, proactive communication with authorities, buffer time, diversified supply chain.
- **Regulatory Non-compliance:** Failure to meet healthcare-specific building codes.
 - *Mitigation:* Early engagement with regulatory bodies, experienced consultants, thorough review processes.
- **Quality Issues:** Substandard workmanship or materials.
 - *Mitigation:* Comprehensive quality assurance/control plan, regular inspections, qualified contractors.
- **Stakeholder Misalignment:** Differing expectations or communication breakdowns.
 - *Mitigation:* Clear communication plan, regular stakeholder meetings, defined decision-making protocols.

8. Success Criteria

The project will be deemed successful if it meets the following criteria:

- Completion within the approved budget.

- Completion on or before the target schedule date.
- Full compliance with all relevant building codes, healthcare regulations, and safety standards.
- Delivery of a fully functional and operational 3-story hospital building.
- High satisfaction from the client and end-users (hospital staff and patients).
- Minimal post-handover defects and warranty claims.

9. Stakeholders

- **Client/Hospital Administration:** Primary decision-makers, end-users, and funding source.
- **Project Management Team:** Responsible for overall project execution.
- **Architectural & Engineering Firms:** Responsible for design and documentation.
- **General Contractor:** Responsible for construction execution.
- **Subcontractors:** Specialized trades (e.g., MEP, medical gas).
- **Regulatory Authorities:** Permitting, inspections, and compliance.
- **Medical Equipment Vendors:** Suppliers and installers of specialized equipment.
- **Local Community:** Affected by construction activities (noise, traffic).

10. Budget and Schedule (High-Level)

A detailed budget and schedule will be developed and maintained separately, serving as critical baselines for project control and progress tracking. This scope document provides the framework upon which those detailed plans will be built.