## **Tunnel Construction Method Statement**

### **1. Introduction**

This method statement covers the safe and systematic approach for the excavation, reinforcement, and lining of tunnels.

### **2. Scope of Work**

* Site preparation and setup
* Tunnel excavation
* Rock stabilization and lining
* Drainage and ventilation installation

### **3. Objectives**

1. Deliver a structurally sound and durable tunnel.
2. Ensure worker safety during excavation.
3. Minimize environmental impact and disruption.

### **4. Resources Required**

#### **4.1. Personnel**

Mining engineers, geotechnical experts, and tunneling crews.

#### **4.2. Equipment**

Tunnel boring machines, rock drills, and conveyors.

#### **4.3. Materials**

Reinforcement bars, shotcrete, and lining materials.

### **5. Work Methodology**

#### **Step 1: Site Setup**

* Mobilize equipment and set up utilities.

#### **Step 2: Excavation**

* Excavate using TBMs or drill-and-blast methods.

#### **Step 3: Stabilization**

* Apply shotcrete and install rock bolts.

#### **Step 4: Lining and Drainage**

* Cast concrete linings and install drainage systems

### **6. Safety Measures**

* Regular ventilation checks.
* Ensure blasting procedures are conducted safely.