William I “The Conqueror”
Norman Invasion 1066

Humphrey de Tilluel
Prefab fort

Gundulf of Bec
Father of Royal Engineers

Building Castle + Building Abbey
Early Engineer Duties

- Miners - Seige Warfare
- Carpenters/Woodcutters/Fossatores (Pioneers) - Siege Roads
- Early float bridges
- Ordnance
- Trenchmasters
- Surveyors of the Kings Works
- Master Masons
- Sappers
- Chemical
Engineers 1800-WWI

Peninsular War
Siege of Banajoz
War of 1812
Russian War
China War (Hong Kong)
Afghanistan- Siege of Kandahar
South Africa
Egypt
Sudan

Engineers Given Motto “Umbique” (everywhere) by William IV
WW I

Mobile warfare gives way to Siege
Tunnelling/Mining
Trenches (Sappers)

Geologic Input
London Tunnellers (Kickers)
Rail Workers
Use of Piles
Tubbing

CLAY-KICKER, WITH GRAFTING TOOL (LEFT) AND "CROSS" (RIGHT)
ALTERNATIVE DIAGRAMMATIC ORGANIZATION OF A FRONT LINE.
WW II

William Bernard Robinson King 1939
First Appointed Military Geologist
Operation Overlord – Normandy vs Cherbourg and Cotentin Peninsula

Quarrying
Topography
Mulberry Harbor