

## **DESCRIPTION OF THE STRUCTURE**

### **Samples Description**

#### Example 1 :

#### **Structural Investigation on 2-Storey Concrete Office building Affected by Reinforcement Corrosion**

*The building under investigation is a 2-storey office block of reinforced concrete construction built in 1982 and is located on LotPTB133 close to the main road running from Kota Batu town to Kota Besi. On plan, the building structure covers an area of 60' x 64' with 2' wide concrete apron on all sides. The main structural members are reinforced concrete with 4" to 6" thick concrete floor slabs and 4.5" thick plastered brick walling and concrete block screen walls. The columns are of various dimensions ranging from 9" x 12" at ground level to 9" x 9" at first floor level. Column bases are supported on RC footing which in turn founded on bakau piles in most cases. Beams are generally of size 9" x 18" or 16". The reference grids for the structure used in this report is as shown in Figure 1.1 which contains some other important details.*

#### Example 2 :

#### **Report on the Instrumentation Work for Structural Assessment of Concrete Bridge in XY Town**

*The Sungai Kayu Bridge carries the A23 road over the Sungai Kayu river in Pekan Jati and joins the A5 Bypass. It has a single span of about 21m with a slightly skewed configuration. The site location is as shown in Figure 1. The bridge carries a one-way two-lane traffic way with a clear width of 8.6m and footways of 2m and 1.6m on its sides. Nine longitudinal reinforced concrete beams 305mm wide support the concrete slab of 230mm thickness; the seven internal beams are spaced at 1500mm intervals while the outer beams are at 1800mm from the nearest internal beams. The depth of the beams varies in a slightly curved manner having a minimum depth of 380mm from the soffit at mid-span. Transverse beams measuring 250mm x 305mm are spaced at 3050mm centres at various distances from the soffit. In cross-section, the reinforcement comprises of rib and Kahn bars with fins bent up to form additional shear reinforcement.*