

## **CIVIL ENGINEERING**

### **PRE-PLANNING**



#### **Full Engineering Site Appraisal.**

#### **Due Diligence/Viability Engineering Appraisal incl. Budget Costings.**

#### **Engineering Guidance Associated with Proposed Masterplan Layouts Including:-**

- Site Access Points incl. Visibility Requirements
- Format of Access Junction Requirements
- Onsite Highway Layouts
- Onsite Existing and Proposed Utility Requirements incl. Easement, Wayleaves, Substations, Pumping Stations etc.
- Proposed Building Layouts to overcome topography and environmental impacts
- Size, Location and Format of SUDS Features

#### **Flood Risk Assessment.**

#### **Drainage Assessments.**

- Preliminary Surface and Foul Water Drainage Design including SUDS and Attenuation Requirements (Outline Planning Application)
- Detailed Surface Water Drainage Design incl. SUDS, Attenuation Requirements and Hydraulic Modelling Calculations (Detailed Planning Application)

#### **Existing Topographical Survey.**

#### **Existing and Proposed Utility Assessment including Utility Ground Scans.**

#### **Swept Path Analysis using Autotrack.**

#### **Engineering support at Public Enquiries.**

#### **Pre-Construction Highway Dilapidation Survey.**

#### **Party Wall Appraisal.**

### **POST-PLANNING**

#### **S278/S38 Adoptable Road Design to Meet Highway Authority Requirements.**

#### **Detailed Roundabout Design.**

#### **Detailed Junction Design.**

#### **Traffic Calming Scheme Design.**

#### **Designer Responses to Road Safety Audits.**

#### **Swept Path Analysis using Autotrack.**

#### **Section 116 Highways Stopping Up/Diversion Design and Applications.**

#### **Post Construction Highway Dilapidation Surveys.**

#### **S104 Adoptable Surface and Foul Water Drainage Design to Meet Water Authority Requirements.**

#### **S102 Adoption of Existing Sewer Applications to Meet Water Authority Requirements.**

#### **S106 Sewer Connection Design and Applications to Meet Water Authority Requirements.**

#### **S185 Sewer Diversion Design and Applications to Meet Water Authority Requirements.**

#### **Detailed SUDS Design.**

#### **Proposed Levels Design.**

#### **Private Hard-standing Pavement Design.**

#### **Private Surface and Foul Water Drainage Design.**

#### **Cut and Fill Earthworks Design.**

#### **Foundation Schedules.**

#### **Civil Engineering Technical Support to Construction Teams incl. Site Visits/Inspections.**

#### **Party Wall Services.**