

# <u>RISK</u>

Risk is an element in all things in life .It is essential to be aware of the existence of risk and assess the appropriate level of risk being entered into in contracting or providing landscape services.

Risk is generally assessed in terms of firstly the likelihood of a situation or event occurring and the severity of the consequences of its occurrence.

A great deal of examination of risk occurs in the management of O H and S these days. The attached Risk assessment matrix has been adapted from the standard OH and S hazard and risk assessment system to indicate the type of analysis required to assess risk in Landscape contracting and for that matter design.

Different degrees of risk pertain to the different input components: The principal areas of risk are Technical, Financial and Contractual.

### **Technical**

- Direct labour cost and time calculations
- Materials- availability, cost and durability.
- Sub-contract costs and management
- Plant and equipment required
- Familiarity with a task or operation
- Location of the work

### **Contractual**

- Standard contract- special Conditions??
- Time required or allowed to complete the work.
- Financial penalties applicable.
- Number of other competitors.
- Type of contract- Lump sum, Schedule of rates , Cost plus

### <u>Financial</u>

- Current work status.
- Client type- quality, familiarity, potential for repeat business
- Resources required and / or available.
- Payment terms
- Liquidated damages
- Provisional/Monetary sums
- Percentage of retention / form of retention / duration of DLP

Risk can be offset in a number of ways.

The obvious one is insurance, however not all risks in contracting are insurable hence the need to apply a risk margin or potential profit margin.



The degree of risk will affect the likely profit margin to be applied. For contracting there needs to be an appropriate level of reward for the risk undertaken.

Risk apportioning in contracting differs in the nature of contract method entered see Table 1 below

		Risk Apportionment						
	Client				Contractor			
Type of contract	-							
Design and Construct								
Lump Sum - No qtys								
Lump sum with Qtys								
Schedule of rates								
Cost Plus								

Table 1 – Risk Apportionment for various forms of Contract

### **Risk Management**

#### Step 1-- Eliminate the Risk

Can the risk be eliminated by offsetting to another party e.g. the client or other contractor, sub contractor. This is achieved by the notes and conditions appended to the tender and or covering the risk with a firm sub contract price

### Step 2 -- Alter the Work Method , Materials or Timing

By amending the proposed method of installation to one the tenderer is more familiar with, the risk can be minimised.

By substituting alternative materials or products to those specified.

Reduce or extend the allowable time frame for carrying out the works.

### Step 3 – Apply higher risk margin

Where it is likely that other strategies to minimise the risk profile aren't possible it is advisable to apply a higher % mark - up to the costs calculated for a job or items of work within a job to cover the potential higher risk.



The alternative is to examine whether to bid or tender on the job.

The above strategies relate to tendering on fixed lump sum price works.

Alternative risk management approaches for Tendering and Construction can be --

1. Works can also be undertaken on a schedule of rates basis where agreed rates to perform the likely tasks are provided by a contractor and the works are undertaken as required and measured at completion.

This can be appropriate for say excavations in materials of unknown type e.g. rock, contaminated filling or similar.

It is also useful where site conditions may require a revised detail for construction or installing plants subject to what is found after preliminary site works. Rates can be provided for different alternative treatments of finishes.

2. Another risk minimization strategy is to offer to do works on a **cost plus basis.** This involves the risk being shared by both parties.

The client in return for having an undefined total cost agrees to pay for an item of work or a project on the basis of reimbursement of all costs plus a business profit margin on cost. The tenderer or contractor would be expected to charge a lower labour rate and a relatively low mark-up % on other associated costs in return for the reduced risk.

In the attached Matrix the higher the risk, the lower the risk number. A class 1 risk should attract a higher margin or allowance for profit to offset the potential higher risk relative to a lower risk item, project or client. This assessment is relative to RISK only and is separate from other margins, which may relate to other business overhead margins to be applied.



## **RISK ASSESSMENT MATRIX**

CONSEQUENCE OR IMPACT	<b>LIKELIHOOD</b> How often will the business be exposed to the risk under assessment and how likely is it that these circumstances will occur during the works?						
What type of impact do you expect could result from exposure to this risk?	Very Likely The event could happen at any time	Likely The event could happen sometime	Unlikely The event could occur but very rarely	Very Unlikely The event may happen but probably never will			
Catastrophic Huge financial loss.	1	1	2	3			
<b>Major</b> Major financial loss.	1	2	3	4			
Moderate High financial loss.	2	3	4	5			
Minor Medium financial loss.	3	4	5	6			
Insignificant Low financial loss.	4	5	6	6			

Highest risk =1 lowest Risk = 6