

SBQ 2423

# General Components of Construction Costs

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# General components of construction costs



# Construction Development costs

- Construction development consists of 2 types of development costs;
- Initial/Capital costs
- Maintenance and opera



*Researches indicate that future running costs can constitute more than 2/3 of total cost of an asset.*



# Initial/Capital Costs

- Land costs (land costs, stamp duty, lawyers')
- Site clearance & earthworks
- infrastructure
- Building works
- External works
- Landscape works
- Preliminaries



# Initial/Capital Costs (cont'd)

- Design risks & contingencies
- Professionals Fees & Lawyers Fees
- Administrations
- Marketing (depends on government/private project)
- Financial (for loan purposes)
- Contribution to Local Authorities



# Maintenance and operations costs

- Insurance
- Tax (land/bldgs)
- Repair & replace
- Cleanings
- Depreciations of fixed asset (built-in, machineries)
- Administration and managing costs (manager's & staff's salaries)





# Components of building costs

There are several construction items that make up the total costs of a building. The followings are some of the common items;

- Preliminaries
- Earthworks – site clearance, demolition
- Piling works
- Main building works (elemental)
- Infrastructure works



# Components of building costs (cont'd)

- Ancillary buildings
- Recreational facilities (parks, playgrounds, therapeutic park)
- PC and Provisional Costs)
- All other works not explicitly mentioned but deemed to be necessary in the overall execution and successful implementation of the contract





## Components of building costs (cont'd)

- Within the building works, it constitutes of several elements.
- The following slide depicts the most common building elements in any typical building.



# Elemental Main buildings work

I. Work below lowest floor finish

II. Frame

III. Upper floors

IV. Roof

V. Stairs

VI. External walls

VII. Windows & external doors

VIII. Internal walls & partitions

IX. Internal doors

X. Internal wall finishes

XI. Internal floor finishes

# Elemental Main buildings work (cont'd)

XII. Internal ceiling finishes

XIII. External finishes

XIV. Fittings & furnishings

XV. Sanitary appliances

XVI. Plumbing installation (water, soil, waste and vent)

XVII. Special installations including AC & ventilation, electrical, fire protection, lift & conveyor and communication

XVIII. Builder's profit & attendance on services

XIX. Builder's work in connection with services

XX. External works(within the boundary of the premises) including retaining walls, roads & footpaths, car park, turfing, landscaping, fencing & gates, surface water drainage, foul drainage etc.

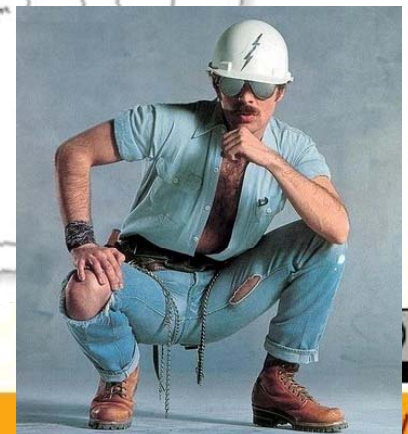


# Final stage of estimating a construction project

- Once each of the construction items has been calculated, the next steps will be the filling in costs in tender document
- Prepare company's profile
- Submit tender document

Bill of Quantities  
 Part 2 - Building works

Qty	Description	Unit	Rate	Amount
	ROOF COVER			
	DISPOSAL SYSTEMS (CONT)			
	WELDED GALVANIZED STEEL ROOFING SYSTEM (CONT)			
	Aluminum (Kaiser Products Ltd) of equal strength and size support aluminum structure system in S.S. 4097. Containing rafter, including all accessories and brackets, fixing in accordance with manufacturer's recommendations. (200)			
4.	Pipe, galvanized as drawing 0300/201 100 nominal size	232	m	
5.	Extra for 100 adaptors to 100 diameter vitrified clay drainage	106	no	
6.	Extra for 100 adaptors to 100 diameter vitrified clay drainage	106	no	
	Roofing system, including all accessories and brackets, fixed in accordance with manufacturer's recommendations. (200)			
	Pipes, straight 100 nominal size	210	m	
	Extra for			
7.	adaptors to 100 diameter vitrified clay drainage	55	no	
8.	roof penetrations with connection joint	83	m	
	Waterfall installation			
	working quantities of form, material and other prime structure			
9.	generally			
	testing and commissioning			
10.	performance			
11.	water tightness			



# Concluding Remarks

- All of the costs within the construction developments need to be carefully prepared, plan and monitored in order to ensure success execution of project.



# Reference and further readings

- Ahamad Abdullah – Anggaran Kos Kerja Bangunan, 2<sup>nd</sup> Edition, Pearson Prentice Hall, 2011.
- Edition, Peurifoy, R.L and Oberlander, G.D. – Estimating Construction Costs, 5<sup>th</sup> Edition McGraw-Hill, 2002.
- Popescu, C.M, Phaobunjong, K, Ovararin, N – Estimating Building Costs, Marcel Dekker Inc 2003.

