

Karin Dom Competition Project Cost Estimate Notes

The exercise of cost estimation has a close tie with the local market resource and material availability, below section represents a guide for setting up parameters for the cost model, and potential cost saving areas by applying universal applicable design concept.

I. Architectural

- i. Precast concrete panel wall (If local code requires insulation for thermal performance, then choose insulated precast concrete panel)
- ii. Thermally broken Aluminum storefront and curtain wall system
- iii. Concrete floor
- iv. Wood ceiling
- v. Gypsum wall partition
- vi. Wood door
- vii. Metal Roof
- viii. Elevator

II. Structural

- i. Structural foundation design needs to be chosen based on geotechnical report of site
- ii. Concrete columns at basement level
- iii. Engineered wood columns and beams at levels above grade
- iv. Concrete slab on grade at basement

III. Mechanical

- i. Heating system
- ii. Ventilation system
- iii. Air conditioning system
- iv. Various mechanical systems have their own specific advantages and shortcoming, along with facility maintenance crew capability, proper system should be selected and design by mechanical engineers with knowledge on local conditions.

IV. Plumbing

- i. High efficient plumbing fixture

V. Electrical

- i. LED lighting

VI. Fire Protection

- i. Sprinkler system
- ii. Fire alarm and smoke protection

VII. Landscape and Civil

- i. Site survey for underground utility, avoid conflicted and major utility lines, and select proper location for incoming utility connect for the project.
- ii. Stormwater management system.
- iii. Convert existing garden element into fountain.
- iv. Native plants for green space
- v. Preserve existing vegetation wherever it is possible

VIII. Interior Finishes and Furniture

- i. Raw architectural material as interior finish, mostly polished concrete floor, wood ceiling and white wall serves as the base of design.
- ii. Ergonomic furniture system

IX. Building automation and security

Overall, the cost estimation should be done in a holistic method that include all aspects of the building components.