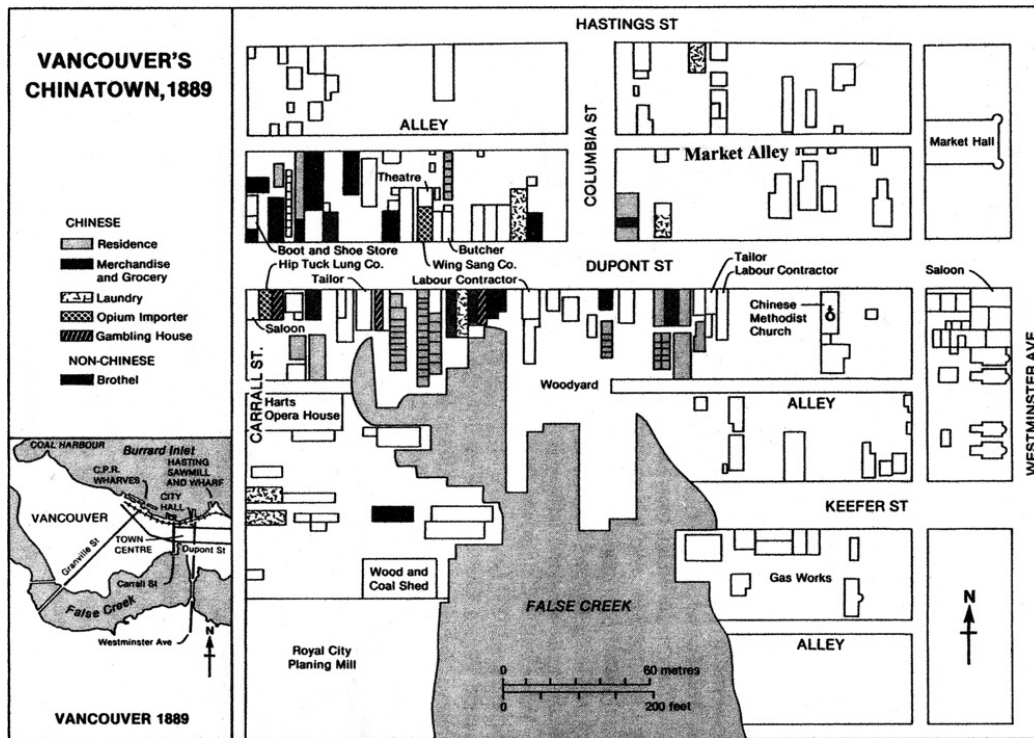


Chinese Society Buildings Rehabilitation Capacity Building Workshop Handout

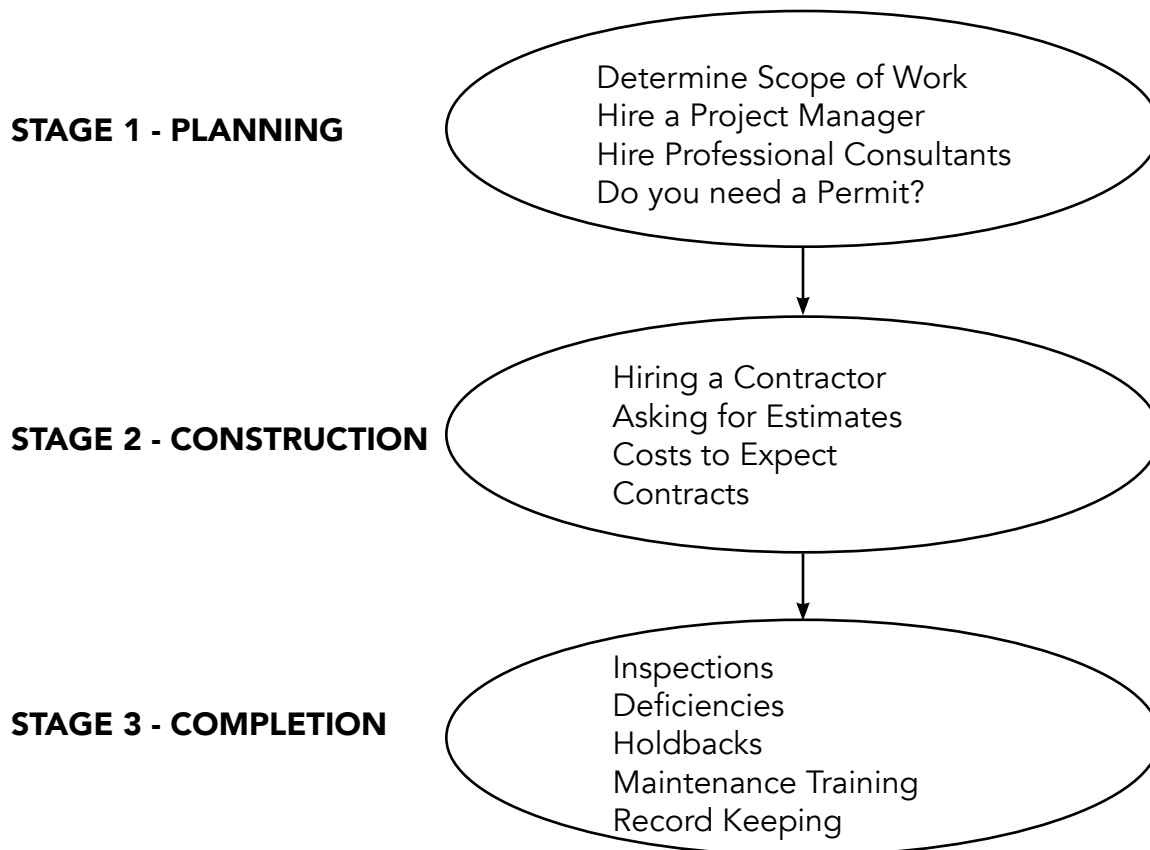


The Society buildings have provided important cultural, educational, housing, and social space in Vancouver's Chinatown for over a century. They are a physical testimony to our past and a legacy for future generations.

The soundness of the Society buildings contributes to the social fabric, architectural heritage and continued revitalization of Chinatown. To continue to function properly, regular maintenance and critical upgrades are needed.

- Regular and routine maintenance and upgrades can:
- protect the building;
 - prevent extensive and expensive repairs;
 - save money in the longer term;
 - extend the life of original materials, especially heritage;
 - avoid potential hazards that cause health, safety or security issues; and,
 - provide/maintain the value of the building.

STEPS TO A COHERENT CONSTRUCTION PROJECT



STAGE 1 - PLANNING

Determine Scope of Work

What is the project?

What work (Maintenance, Repair, Upgrades, Renovation, Rehabilitation) are you hoping to do?

Things to consider:

- budget
- timeline
- priority of work
- board approval
- contractual agreements
- insurance

For Society buildings, the Society and its board are *responsible, liable and accountable* for the Legal, Land and Financial aspects of the project.

STAGE 1 - PLANNING

Develop a Priority List - Every building will have its OWN set of priorities

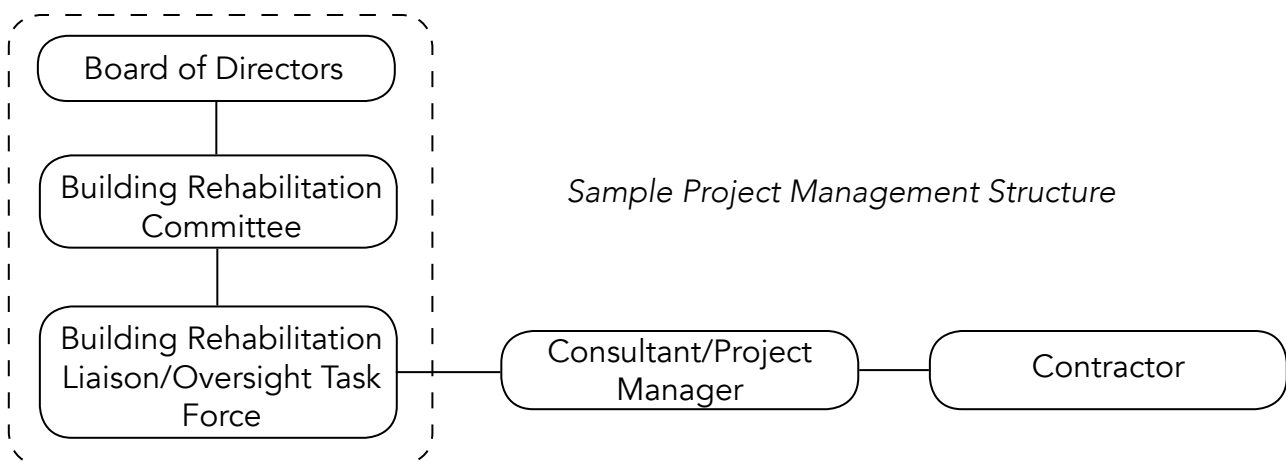
Some scopes of work to consider:

- Fire and life safety e.g. fire exits, fire escape stairs, fire alarms
- Envelop repairs e.g. roof, cladding, windows, doors
- Removal of hazardous materials e.g. asbestos
- Structural upgrades and/or seismic upgrades for basic life safety
- New plumbing and electrical infrastructure
- Heritage rehabilitation
- Remediation of harmful infestations e.g. bedbugs and rodents
- Interior room upgrades
- Renew living and program spaces

A set of drawings of the building may be useful to plan projects and keep track of work done.

Develop a Project Management Structure

- Who will manage the project from the Society? A committee? A nominated person?
- Who will be the key contact person?
- Who will be the contact person should the key contact be unavailable?
- Consider reporting on a regular basis to update scope, timeline, budget, unforeseen issues.



STAGE 1 - PLANNING

Do you need to hire a Project Manager, Professional consultants, Construction Manager?

Role of a Project Manager

- To represent you (the owner) and be responsible for the day-to-day management of the whole project and be a liaison between the client and all vendors, designers, engineers and contractors
- Project Manager should be considered for large projects with complex scopes of work.

Role of Professional Consultants (Architects, Engineers, Landscape Architects, Interior Designers...)

- To work with you to perform expert tasks on the project i.e. develop and coordinate design, prepare drawings and documentation, contract administration, field reviews.
- Consultants may be required for certain City permitting requirements, heritage building rehabilitation projects.

Role of a Construction Manager

- To advise to the owner with the preliminary planning of the project's construction requirements.
- Works with the team to provide expert advice on developing a construction strategy; sets up the estimates, the budgets and the construction timetable for the owner, selects contractors and trades, collaborates with architects and engineers.
- Provide expert advice potential savings, supply, and design specifications;
- Ensure that all services and specialty trade contractors carry out the work accordingly.
- Coordinate and supervise the work of specialty trade contractors.
- Help manage the project by providing clerical and technical services.
- Coordinate inspection, implementation, and delivery of the project and manage warranties issued by specialty trade contractors.
- Manager is only present from construction onwards but best to bring on in early stages

Does your project need a City permit?

Contact the *Development and Building Services Centre* at 604-873-7611 for information. Translation is available. There are different types of permits: development permits, building permits and trades permits.

Examples of work requiring Building Permits:

- Major renovation
- Windows/doors - if size of opening changes
- Moving interior walls and partitions
- Moving existing plumbing, electrical or gas lines
- Installing new plumbing, electrical or gas lines
- Making structural repairs, doing renovations, or building additions

You may need a *Development Permit* if the building or use is a designated heritage building or site, or is located in the Chinatown or Downtown Eastside area.

Examples of work requiring Trades permits:

- Any work on a fire sprinkler system
- Any work on a gas system
- Most work on an electrical system
- Most work on a plumbing system

Vancouver Heritage Registry
Find out if your building is on the Vancouver Heritage Register:
vancouver.ca/files/cov/V001-vancouver-heritage-register.pdf

STAGE 2 - CONSTRUCTION

Hiring a Contractor

The type, scale and complexity of a project will determine if a single contractor/tradesperson such as carpenter, plumber or electrician who specializes in certain areas of construction is required or a general contractor.

Role of a General Contractor (GC)

- To oversee the entire construction project and facilitate all day-to-day tasks.
- To work with your architect/consultant to review plans, ensure everything is in place before work is started, as well as arrange for permits and necessary inspections.
- Responsible for hiring subcontractors for the majority of jobs, e.g. electrical work, painting or plumbing.
- Should be on-site regularly to inspect the progress and resolve issues as they arise.

Difference between a “handy-man” and a licensed contractor

- Handy-men typically do not have formal qualifications, licenses or certificates. They will do variety of small jobs and usually work alone e.g. small repairs, painting, fix leaky pipes, test wiring, fix broken tiles
- A General Contractor (GC) works with a team (sub-contractors) and is required for larger jobs such that would require more than 1 person e.g. renovation, new building, work requiring multiple disciplines (structural, mechanical, electrical).
- Neither a handy-man nor licensed contractor are plumbers, electrical or professional consultants

Where to find reputable contractors?

- Reputable contractors should have a Business License, Insurance Certificate and WorkSafe BC coverage.
- Contractor Associations
- Referrals from others who have undertaken similar types of projects

Asking for Estimates

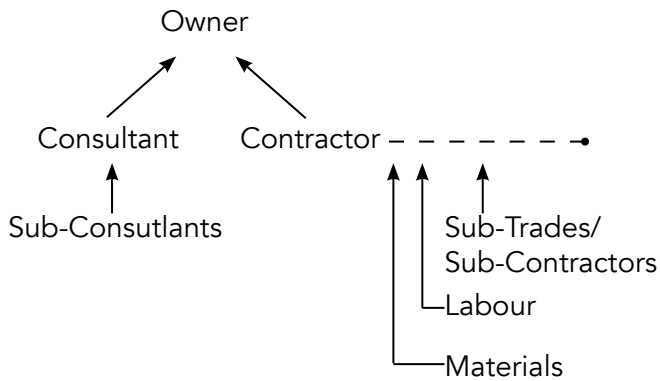
- Invite the contractor on-site and provide them with a detailed scope of work (type of work, timeline, expectations).
- Ask for estimates that are clearly itemized, include fees for permitting and inspections. There should not be a fee for an estimate.
- Contractors should be responsible for verifying with the City if permits are required.
- Find 2 or more contractors to provide estimates for comparison.

Cost of Work - What costs to expect?

- Project Manager, Construction Managers, Professional Consultants
- Insurance
- Permits - ask contractors to include in their estimates
- Contingency fund - typically 10% of the estimate for an unforeseen event or circumstance as they come up throughout the project
- Construction costs - demolition, removal of old material, new work, general contracting mark-ups (to be included in estimates)

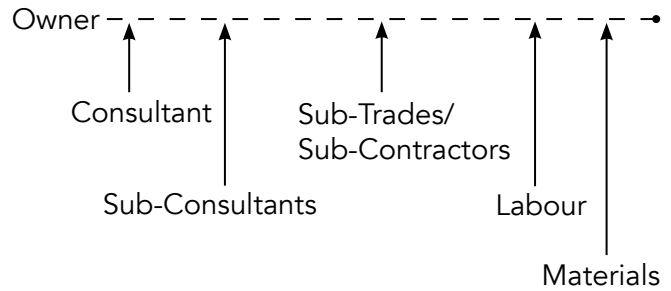
TYPICAL CONTRACTUAL AGREEMENTS

Contractor's Bid/Stipulated Price/Fixed Price



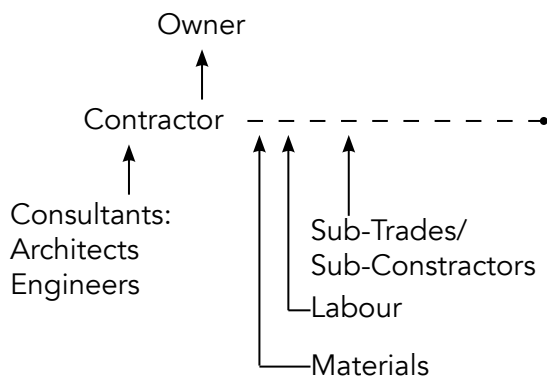
- Fixed time and price
- Price or schedule can only be changed with Change orders, issued by client or client's consultants
- Deficiencies will be corrected by the contractor, who takes responsibilities for work, suppliers, and personnel under each subcontracted speciality.

Owner-Builder



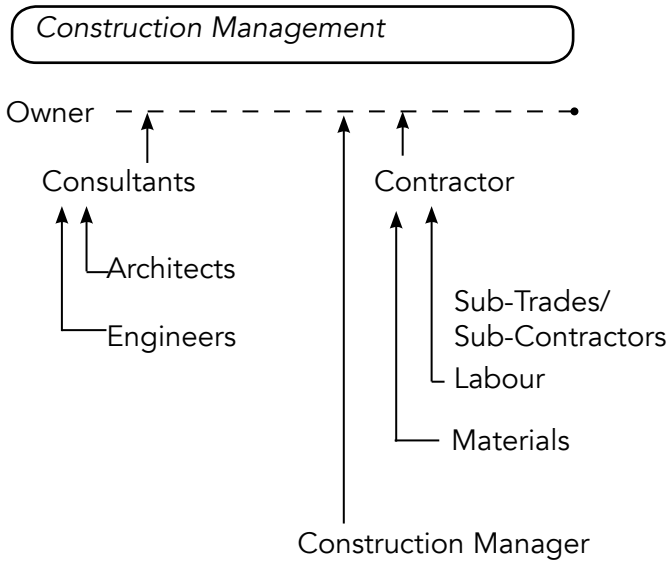
- If you take on the role of the hiring of sub-contractors yourself, you will act as the General Contractor.
- Be aware of insurance and legal responsibilities

Design Build



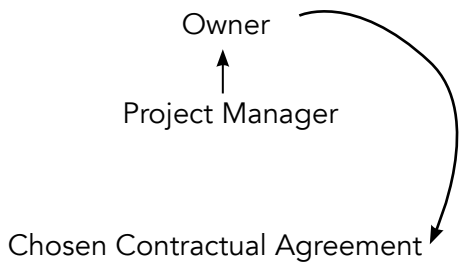
- Contractor provides both design and construction
- Benefits: reduced costs, and tighter control over budget and scheduling right from the start of the project
- Disadvantages: Less control, need for earlier requirements definition
- Good for small/medium projects that are not complex

TYPICAL CONTRACTUAL AGREEMENTS CONT'D



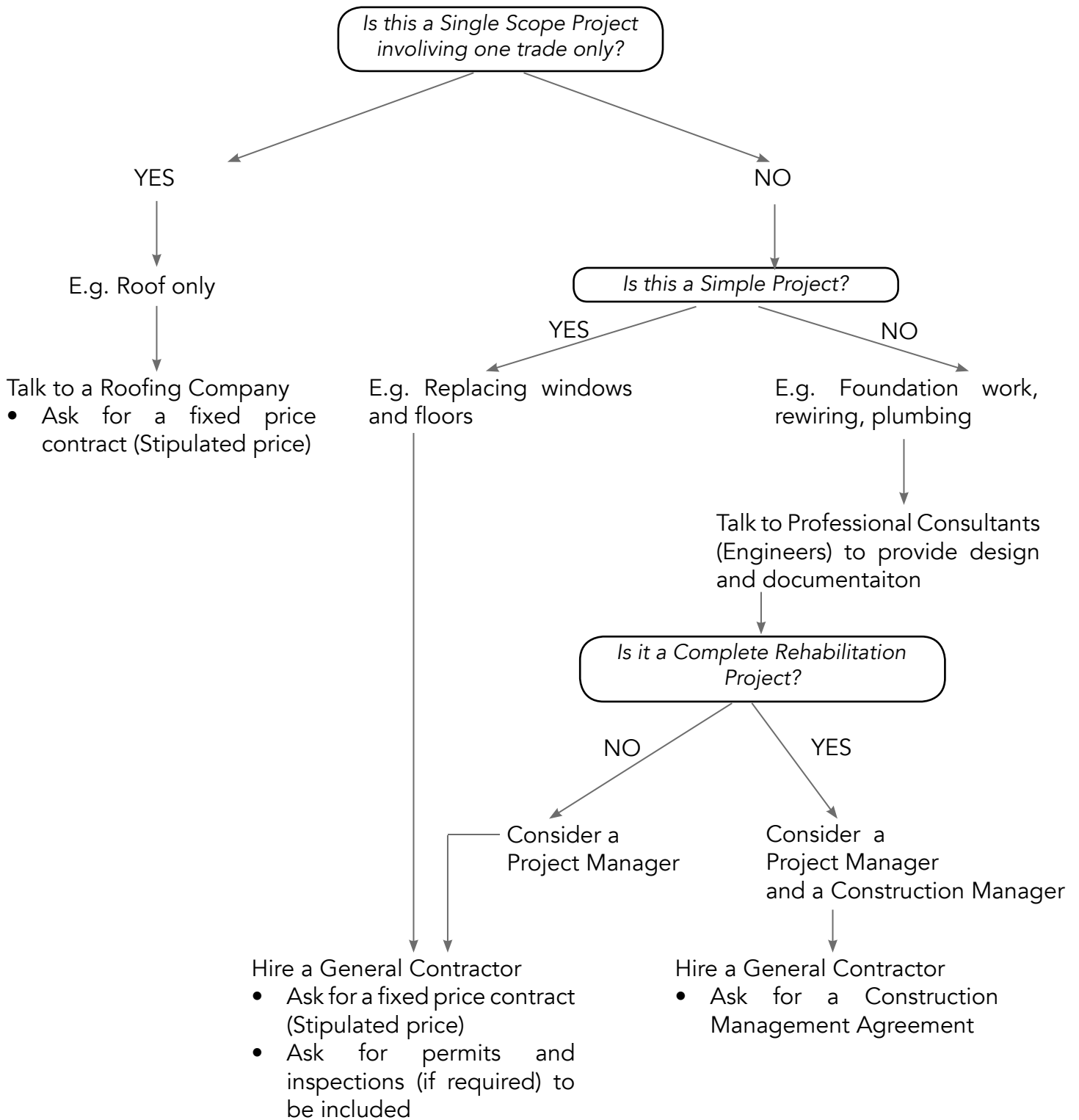
- Owner names a manager as an advisor, preferably in the pre-construction phase.
- The fee for the Construction Manager is fixed, or percentage basis and everything else is the cost of the work. Any cost savings should be given back to the owner.
- Owner and CM share common objective to get the best price, contractor for the cost of work.
- Owner, Architect and CM work together
- May have individual bid packages to enable fast track construction
- Beneficial to projects that are complex, that may not have well defined scope or phased work.

Project Management



- Owner chooses a third party company to take on the entire design, management and execution of the project and its construction
- Project manager will act as the Owner's advocated and representative, sometimes referred to as an Owner's Rep.
- Project Manager will assist in hiring of contractor and/or construction manager
- Benefits: Extensive expertise, from the onset of the project, better control over budget and scheduling, fast-track design and construction, lower management and construction risks and better price/quality ratio
- Beneficial to projects that are large and complex.

EXAMPLES OF PROJECT DELIVERY



STAGE 3 - COMPLETION

Permit Inspections

Inspections ensure that the work done matches the work described under the permit and that it complies with relevant bylaws. Contractors will arrange for inspections as required throughout and when the work is complete (Final Inspection).

Deficiencies

Poor quality work result in all sorts of problems e.g. leaks, mold, code violations, peeling paint, sub-standard foundations, substandard workmanship and health and safety violations.

Holdbacks

Usually 10% of the final payment. The reason for the holdback is so that if the general contractor or the client finds any issues with the work that has been completed, then they are able to get the sub-trade to return and fix any problems or mistakes.

Maintenance Training

Learn how to use and maintain new systems.

Record Keeping

Permits, Warranties, Product and Operation Manuals - obtain copies from the contractor and keep in a safe place

As-Builts/Record Drawings

Revised set of drawings submitted by a contractor upon completion. They reflect all changes made in the specifications and working drawings during the construction process and show exact dimensions, geometry, and location of all elements of the work completed under the contract.

RESOURCES

City of Vancouver Development and Building Service Centre 515 West 10th Ave
604-873-7611 www.vancouver.ca

Heritage BC www.heritagebc.ca

AIBC - Architectural Institute of BC	www.aibc.ca
APEGBC - Association of Professional Engineers and Geoscientists of British Columbia	www.apegbc.ca
BCSLA - British Columbia Society of Landscape Architects	www.bcsla.ca
PIBC - Planning Institute of British Columbia	www.pibc.ca
Vancouver Regional Construction Association of BC	www.vrca.bc.ca
Electrical Contractors Association of BC	www.eca.bc.ca
Roofing Contractors Association of BC	www.rcabc.org
Mechanical Contractors Association of BC	www.mcabc.org

GRANT RESOURCES

City of Vancouver

- Chinese Society Buildings Matching Grant* <http://vancouver.ca/files/cov/chinese-society-buildings-matching-grants-program-summary-application-guidelines.pdf>
- Downtown Eastside Capital Project Grants vancouver.ca/people-programs/capital-grants-program.aspx
- Heritage Building Rehabilitation Grant <http://former.vancouver.ca/commsvcs/guidelines/H009.pdf>
- Heritage Facade Rehabilitation Grant <http://former.vancouver.ca/commsvcs/guidelines/H010.pdf>
- Single Room Accommodation Upgrading Grant* vancouver.ca/files/cov/sra-upgrading-grant-application.pdf
- Cultural Infrastructure Grant vancouver.ca/people-programs/cultural-infrastructure-grant-program.aspx

*application form available in Chinese

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