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External Research Program

Urban Acupuncture

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URBAN ACUPUNCTURE:

A METHODOLOGY FOR THE SUSTAINABLE REHABILITATION OF 'SOCIETY BUILDINGS' IN VANCOUVER'S CHINATOWN INTO CONTEMPORARY HOUSING

針灸式城市重建:一個把溫哥華華埠傳統樓宇翻新爲現代建築,而又保留其文化及環境特質不變的方案.

CMHC ERP REPORT | Submitted By Inge Roecker + Kelty McKinnon | 12.14.2006

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Living lab.

Researchers:

Kelty Miyoshi McKinnon
Landscape Architect, BCSLA, CSLA, B.E.S., M.L.A.

Inge Roecker
Assistant Professor in Architecture, University of British Columbia, B.E.S., M.Arch.

Research Assistants:

Ting Pan
B.Eng.

Allie Sheil
B.L.A., M.Arch.

Vivian Tong
B.A., M.Arch.

Sengsack Tsoi
B.L.A., M.Arch.

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City of Vancouver

Jessica Chen-Adams, Planner, Central Area Planning
Helen Ma, Planning Assistant, Central Area Planning

Societies

Mah Society of Canada
Mr. Fred Mah

Lim Sai Hor (Kow Mock) Association
Mr. Hon Lam

Shon Yee Benevolent Association (May Wah Hotel)
Mr. Rick Lam

Yue Shan Society

RESEARCH HIGHLIGHT

October 2007 Socio-economic Series 07-008

Urban Acupuncture—A Methodology for the Sustainable Rehabilitation of "Society Buildings" in Vancouver's Chinatown into Contemporary Housing

One of the consequences of Vancouver's explosive real estate market is the pressure to find housing development opportunities within the urban core, a pressure being felt by Vancouver's Chinatown.

There is a need for careful and thoughtful research into the limitations and potentials of Chinatown's unique urban fabric. Without thoughtful research, Chinatown could face one of two fates: First, Chinatown could be replaced with standard, podium-point, tower condominiums. Second, redevelopment of Chinatown would retain only historic facades as cladding on new buildings, which would result in the loss of the cultural substance of one of Vancouver's oldest neighbourhoods.

This study proposes an economically, environmentally and culturally sustainable approach to the sustainable rehabilitation of four Chinatown "society buildings"—buildings built by benevolent societies and family clan associations that offered housing and assistance to community members—as contemporary housing.

CONTEXT

The growth of Chinatown is linked historically with the influence of Chinese immigration during the 1858 Gold Rush and CPR railway construction. It is now linked to the massive influx of business class immigrants in the 80s and 90s, even though recent immigrants move to less-urban communities in Richmond, Coquitlam and Burnaby.

The effects of drugs, homelessness and prostitution, and the collapse of nearby Hastings Street in the downtown East Side, forced Chinatown into a period of decline. Today, Chinatown is at a key moment in its evolution. It is a functioning community, not a tourist attraction as in some North American cities, but it has come of age. It must now choose to exist or risk disappearing altogether. As a symbol of the role of Asia in North America, Chinatown expresses where we have been, where we are, and what we will be in the future.

Figure 1 Chinatown Streetscape

Historically, Chinatown's Societies offered housing and assistance to community members in the form of bunkhouses and SROs (single resident occupancies). Many of the historic and heritage society buildings in Chinatown do not meet base standard of living and code requirements and are only partially operational. Society buildings are a complex and unique historic Chinatown architecture. Because of this, they were used as trial models for establishing a methodology to protect and preserve heritage buildings while accommodating adaptations for future inhabitation. The resulting methodology is called "Urban Acupuncture."

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Figure 2 Chinese Benevolent Association Building

HERITAGE AND SUSTAINABILITY

Sustainable rehabilitation of heritage buildings as housing carefully considers the implications of environmental, cultural and economic factors over time and their interrelationship within the overall project. Sustainable development is interdependent with cultural vitality, and should be seen as a vehicle for long-term economic growth, environmental health, poverty alleviation and community development. By viewing heritage as cultural capital, it can be a development asset that can help provide employment, mobilize communities and generate income.

A list of key questions was developed to guide the process, to help form alliances responsive to the unique local conditions of each project, and to help discover meaningful relationships that could direct the design.

These questions were posed from environmental, economic and cultural–social perspectives. It is important to note that there are overlaps and that each question could be asked from the perspective of each category.

APPROACH: URBAN ACUPUNCTURE

Urban acupuncture focuses on the selective redevelopment of appropriate sites within the historic fabric. It carefully removes what isn't working and inserts a contemporary, appropriate intervention to stimulate urban regeneration.

By capitalizing on its unique cultural assets, Chinatown can differentiate itself and set an example for a sensitive yet contemporary approach to historic community regeneration and the development of contemporary housing scenarios.

Urban acupuncture has four major characteristics:

1. Urban acupuncture grows out of interdisciplinary collaboration and research

While design can form the physical framework for sustainable community housing, a sustainable revitalization strategy is collaborative. It is developed with multiple partners through management, policy and community involvement. The project should be developed simultaneously from the top down and the bottom up.

Heritage is constantly evolving, shifting and belongs to many. Because of this, there will be many interpretations of its value. All resources and interested parties should be consulted for information, expertise and ideas. The interested parties include municipal, provincial and federal agencies and policy-makers; academic departments; university and college outreach departments; historians; community organizations; residents (past and present); finance groups; marketing consultants and businesses.

This shift in perspective, to working from within ("emic" approach), both metaphorically and physically, from looking in from the outside ("etic" approach), is the basis of urban acupuncture.

2. Urban acupuncture sees building form as multi-dimensional, not reduced only to the facade

The approach to historic rehabilitation in Canadian cities has tended to focus primarily on the preservation of the superficial exterior qualities of autonomous architectural objects—what has been described as "facadism."

But the facade is only a small part of the building and it is intimately connected to the structure of the whole. The building is a product of the people who inhabited it and the time and context in which it was built. If everything but the exterior is destroyed, not only is there a severing of the interior to the exterior, but any valuable insight into the history of the place is lost.

The urban acupuncture approach sees individual buildings not as a series of discrete artifacts, but as a living environment, interwoven with communal interior and exterior gathering and circulation routes, and a complex layering of public, semi-public, private, and semi-private space.

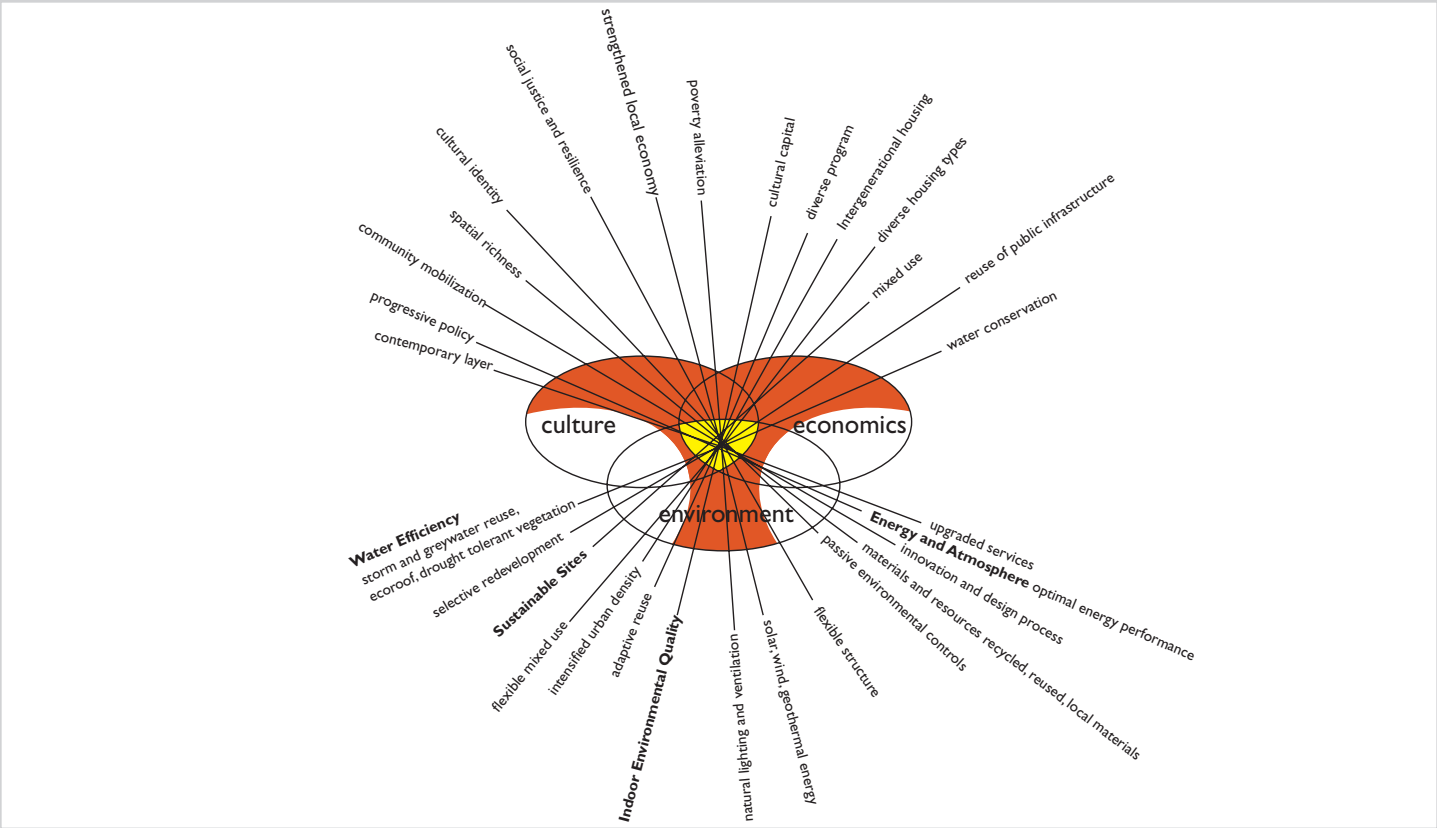


Figure 3 Key Questions

The urban fabric is a complex product and process of adaptation to structural need, technology, environmental factors, economics and sociability that evolves over time. Analyzing architecture from both the outside in and the inside out creates a sense of how building form is derivative of culture, economics and environmental practices.

3. Urban acupuncture supports diverse programs

Diversity is the key to a viable, resilient community. Decisions should be made that support long-term diversity and sustainability.

The Chinatown Revitalization Committee [1] has recommended that Chinatown should not be redeveloped as a tourist destination, but as a thriving, multi-generational community of both residents and visitors.

This means planning for diverse ages, communities, incomes and land uses, including commercial, institutional, light industrial and various types of affordable, intergenerational housing.

Providing a diversity of housing types and land uses allows greater flexibility. Because it does not rely on one market niche it is much more economically sustainable in the long term. By respecting intergenerational responsibility, heritage restoration addresses current community needs while respecting history and considering community sustainability for generations to come.

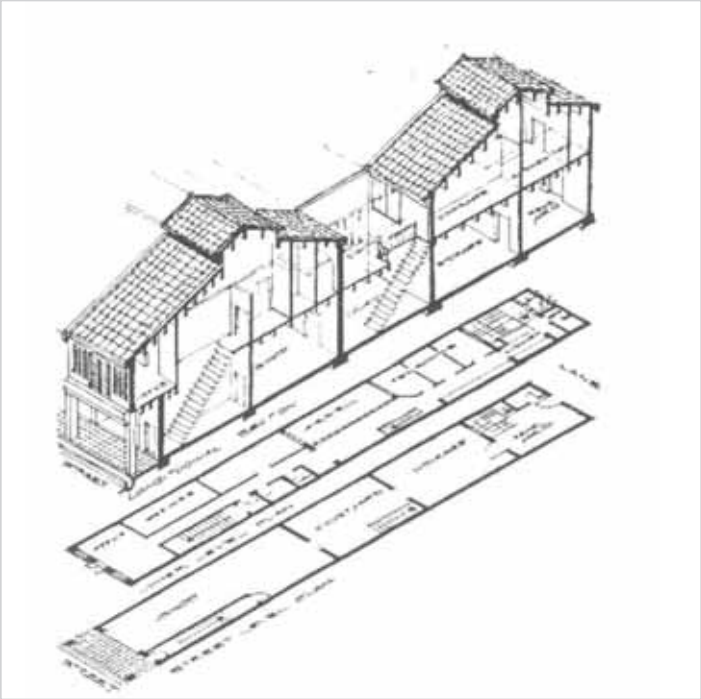
4. Urban acupuncture encourages the coexistence of a contemporary layer

The urban fabric embodies collective memory. Intergenerational responsibility connotes that what is present will one day become history.

This necessitates an understanding of architecture as never reaching a state of "completion" but as simultaneously reflective of, and responsive to, contextual conditions. Historic revitalization should include contemporary overlays that widen the historic context and add to a sense of continuity and connection to the past.

This approach allows new ideas to evolve that are relevant to contemporary needs. Revitalization interprets the existing in ways that are meaningful to both the past and present. This approach protects the unique histories and formal attributes of the community and contributes to the development of a community that is uniquely authentic.

1 The Vancouver Chinatown Revitalization Committee (VCRC) was officially formed in 2001, bringing together more than 20 of Chinatown's social, cultural, resident and business groups to work with the City of Vancouver to develop short-term revitalization initiatives and a long-term vision for Chinatown, along with strategies to implement that vision.



Courtesy of Penny Gurstein

Figure 4 Asian shophouse.

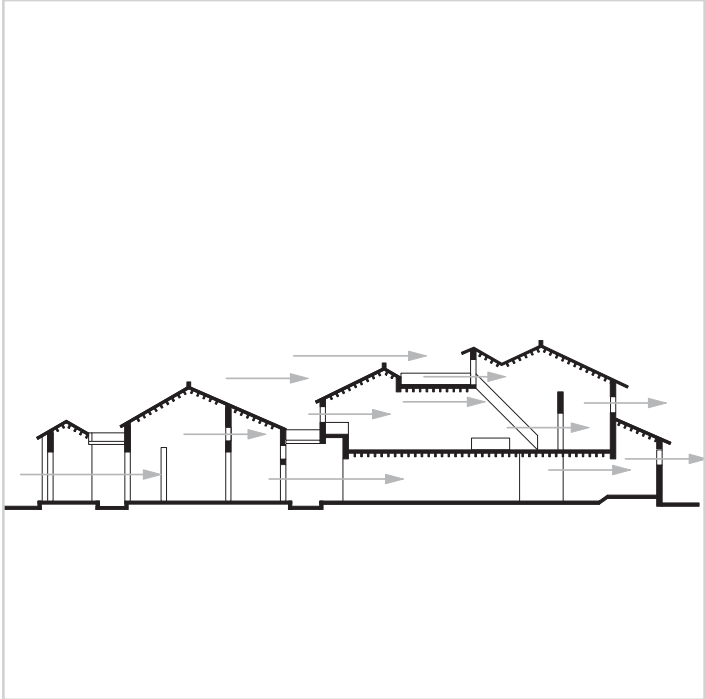


Figure 5 Interconnected environmental controls, circulation and social space

SOCIETY BUILDINGS

The society building is a type unique to North American Chinatowns, a true hybrid architecture that blends aspects of Chinese regional Asian Shophouse typology with western styles and building methods.

The Asian Shophouse is believed to have originated in Guangdong and Fujian Provinces—where many of Vancouver's society clansmen originate. It went through a multi-faceted, evolutionary process of transformation as trade flourished with China and became a popular building style in Malaysia, Singapore, Thailand and eventually North America.

The society building typology evolved based on climatic conditions, new technologies and shifting social patterns. A unique aspect of the Shophouse and the society building is how environmental controls (courtyards, breezeways and light wells) are connected to the circulation and gathering spaces within the building—from highly private living quarters to communal open spaces and commercial spaces. Complex, multifunctional spaces evolved consciously and subconsciously over time, accommodating and enabling varying levels of privacy and sociability.

There are several society building characteristics identified as derivative of the Asian Shophouse. Each of characteristics was considered for its relevance to the four redevelopment case studies:

- Networked urban circulation
- Mixed use
- Continuous street wall with undulating heights
- Double frontage/Accessible alleyways
- Courtyards and light wells
- Urban breezeways
- Alleyways
- Recessed entry and canopy
- Recessed balconies
- Interior breezeways.
- Mezzanines with prism glass
- Altar and shrines
- Symbolic use of colour and ornamentation

Image courtesy of Codrin Tabala

Figure 6 Yue Shan courtyard.

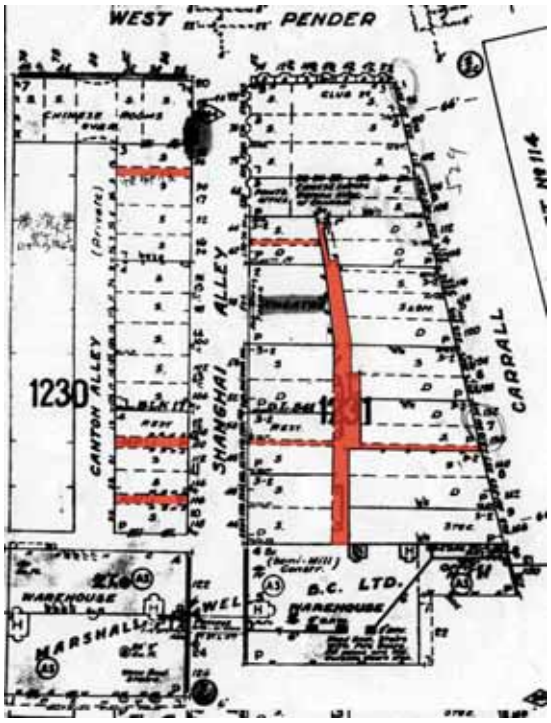


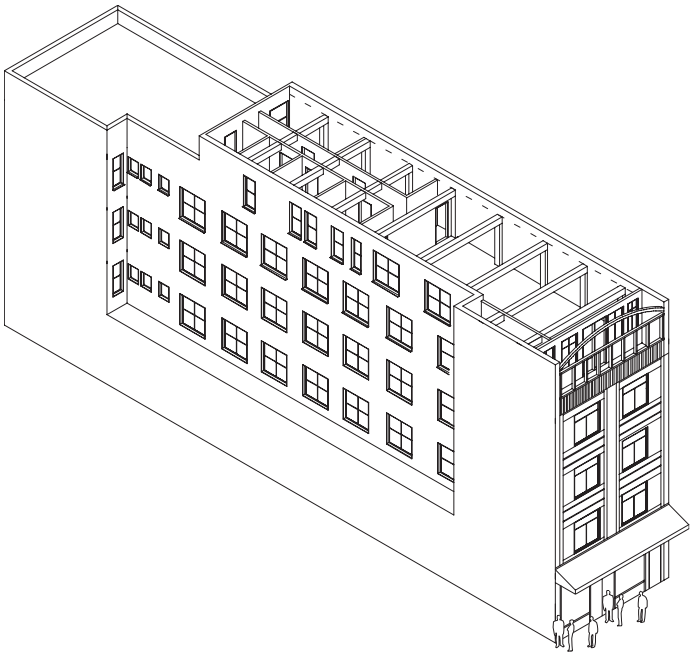
Figure 7 Fire insurance map showing breezeways prior to 1940

CASE STUDIES

The study makes specific rehabilitation recommendations for four society buildings:

- the Mah Society of Canada
- the Lim Sai Hor (Kow Mock) Society
- the Shon Yee Benevolent Society
- the Yue Shan Society.

Each project in the study focuses on one particular issue yet contributes to the generality of all the society buildings. The Mah Society Building discusses diversity in program as well as issues of light and ventilation; the Lim Sai Hor Society Building discusses adaptability and how it relates to new services; the Shon Yee Benevolent Society discusses the potential of a contemporary single-room typology; and the Yue Shan Society discusses networks and courtyards and how they relate to urban living.

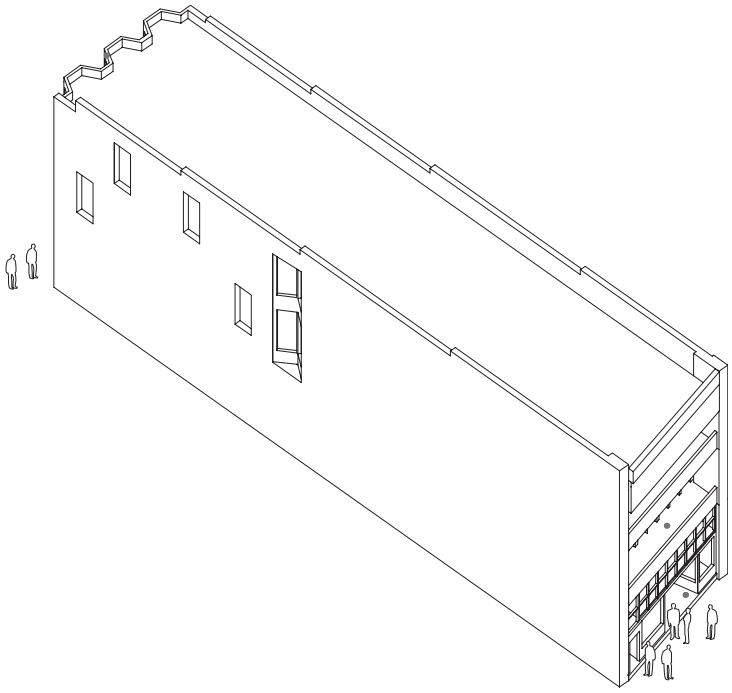


1. Mah Society of Canada

The Mah Society has a typical 7.6 m x 36.6 m (25 ft. x 122 ft.) long, narrow footprint. Exit requirements, light, ventilation, water and electricity need to be addressed to bring the building up to contemporary housing standards In addition, the Mah Society's single-room typology restricts occupancy to a very limited user group. This study focuses on the three mid-lying floors containing the single-room typology that historically provided a transient home for new immigrants.

A variety of unit types is accommodated by eliminating the middle section of the building to create a courtyard. The courtyard not only allows for a diversity of unit types but addresses lighting and ventilation. It also provides an additional means of egress and an outside social space for the residents. As a result of this, new facades could provide the support required for seismic upgrades.

The commercial activity at the ground level and the Society space on the top floor have been preserved for their cultural and economic value. Through preservation and integration, the diversity of uses and the stability that these spaces and their programs promote is maintained.



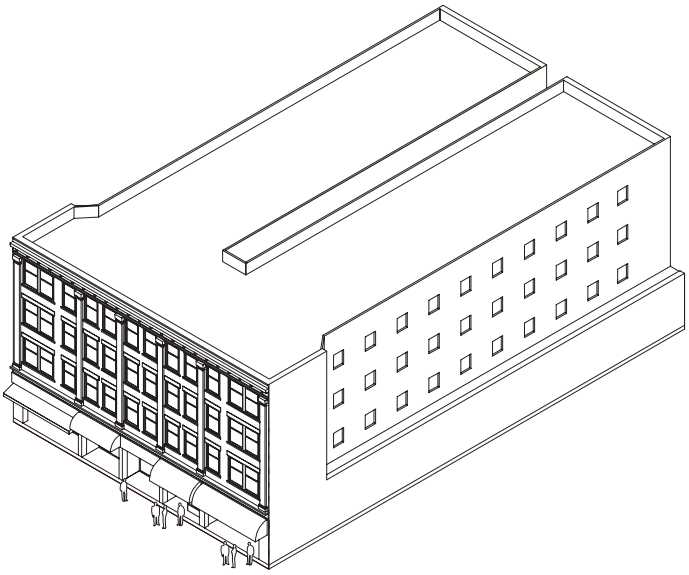
2. Lim Sai Hor (Kow Mock) Society

The significance of the Lim Sai Hor building is that it fronts two streets, with both facades designed as street frontage. All floors of the building are now occupied, but services are failing and there is visible damage to ceilings, walls and floors.

Like the Mah Society, this building also occupies a single, narrow, long lot but has a measurement of 8.2 m x 36.6 m (26 ft. 10 in. x 122 ft.)—slightly larger than the 7.6 m (24.9 ft.) width typical of Chinatown. This additional 60 cm (24 in.) width allows for a double-loaded corridor. The extra corridor, combined with the unique situation of having an alley park on one side and an open lot on the other, allows a variety of smaller apartments that receive ample natural light and ventilation.

In addition, the new service cores are added in an economically strategic manner to maximize long-term flexibility of unit sizes and divisions.

A new floor is added to the building to accommodate the Society's meeting space and to free the third floor for additional housing program. This gained space could provide the additional revenue to support installing an elevator, which would both benefit new residents and address the common issue of access for senior Society members to the top floor, a common problem in society buildings. Finally, this case study examines the effects on the Lim Sai Hor Building of potential future development of an adjacent empty lot in respect to the allowable building bylaws and regulations.



3. Shon Yee Benevolent Society

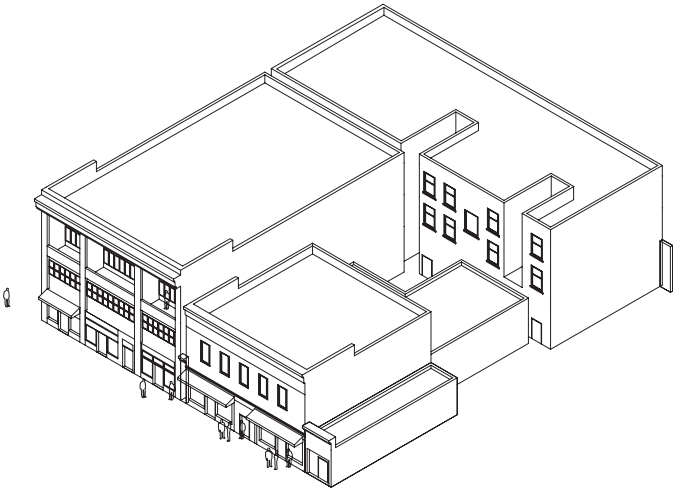
A significant difference between the Mah and Lim Sai Hor society buildings and the Shon Yee Benevolent Society is size. The Shon Yee building comprises three, 7.6 m x 36.6 m (25 ft. x 122 ft.) lots. As a consequence, the Shon Yee Society building is an even denser building typology.

The building contains 50 single rooms lit by narrow, long, lightwells on both sides and another running along the centre of the building. This unique layout was identified as a character to be preserved yet enhanced by better servicing the rooms with light, air and technical services.

The study identified a need for short-term accommodations, mainly for visiting members from around the country and abroad. The proposal looked into joining one, two and three rooms into single larger units. By providing these units with carved out, outdoor spaces that face the lightwells, an added spatial and environmental quality is afforded. Not only does it improve the living conditions it also makes this unique spatial condition visible and accessible.

In keeping with the social programming agenda of the Societies, some of the units could become subsidized housing, supported by the revenue generated by the short-term suites. Each floor has a unique common area. On the first floor, a multi-functional room connects common activities to the street, and on the second floor a glass tube punches perpendicularly to the hallways. Garden terraces occupy the third floor.

Similar to the Lim proposal and the Mah Society's post-1923 addition, an additional half floor is added on top of the Shon Yee Building. This additional space allows the Shon Yee Benevolent Society to move its offices and meeting space, now located outside Chinatown, back to their building. A rooftop garden extends out from the Society meeting area, providing outdoor social spaces where courtyards are non-existent.



4. Yue Shan Society

The main historical significance of the Yue Shan building complex is its street-level sociability and permeability. Breezeways from both Pender Street and Market Alley historically led to an interstitial, lateral breezeway, and a central courtyard, which was used as an intimate, semi-private open space and a space to bring air, daylight and rainwater collection to the interior of the block.

Today the courtyard is partially infilled, the breezeways are blocked, and the ground-level spaces facing the alleyway and courtyard are locked and used as storage. Since the existing housing is working quite well, the proposal re-establishes the block's street-level sociability and its internal permeability and connectivity between the street, alley, courtyard and breezeway.

In order to be livable, high-density living requires outdoor open space and amenities to act as an urban living room that recovers a critical relationship between the public and private realms. Ground-level courtyard spaces are opened up to accommodate the Society's diverse existing programming—martial arts, sports, music, mahjong, table tennis, karaoke and Chinese language lessons. The programming is accommodated with the introduction of a tearoom, youth and senior centre, and commercial studio spaces for society members, residents and the greater community. Trench gardens filter stormwater into underground cisterns for irrigation. Vertical mats of vegetation cleanse the air and ameliorate the climate and high-albedo paving reduces the urban heat island effect. The social, economic and environmental dimensions of the courtyard are re-established and the active life of the Society is stitched back into the greater fabric of Chinatown.

CMHC Project Manager: Brian Eames

Consultants: Inge Roecker and Kelty McKinnon

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Canada Mortgage and Housing Corporation
700 Montreal Road
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K1A 0P7

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LE POINT EN RECHERCHE

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L'acuponcture urbaine : méthode de transformation durable des « bâtiments des sociétés » du quartier chinois de Vancouver en logements modernes

L'explosion du marché immobilier de Vancouver a eu, entre autres conséquences, d'inciter à trouver des occasions d'aménager des logements dans le centre-ville.

Il faut mener une étude vraiment attentive des contraintes et des possibilités que présente le tissu urbain particulier du quartier chinois. Sans cette étude, le quartier chinois risque de subir l'un des deux sorts suivants : premièrement, ce quartier pourrait être remplacé par des tours de logements en copropriété. deuxièmement, il pourrait être réaménagé pour ne conserver que les façades des bâtiments patrimoniaux comme revêtement des nouveaux immeubles, et ainsi perdre le cachet culturel d'un des secteurs les plus anciens de Vancouver.

Cette étude propose une méthode durable sur les plans économique, environnemental et culturel pour le réaménagement durable de quatre « bâtiments de sociétés » du quartier chinois, c'est-à-dire des bâtiments construits par des sociétés de bienfaisance et des associations de clans familiaux qui offraient des logements et de l'aide aux membres de la collectivité, pour en faire des logements modernes.

Figure 1 Paysage urbain du quartier chinois

CONTEXTE

La croissance du quartier chinois est historiquement liée aux effets de l'immigration de Chinois durant la Ruée vers l'or de 1858 et la construction de la voie ferrée du CPR. Elle découle maintenant de l'afflux massif de gens d'affaires dans les années 80 et 90, même si les récents immigrants s'installent dans les collectivités moins urbaines de Richmond, de Coquitlam et de Burnaby.

Les effets de la drogue, de l'itinérance et de la prostitution, en plus de l'effondrement de l'économie de la rue Hastings située tout près dans le secteur est du centre-ville, ont entraîné la régression du quartier chinois. Aujourd'hui, le quartier chinois de Vancouver est à la croisée des chemins. La collectivité chinoise, qui fonctionne bien, n'est pas une simple attraction touristique comme certains quartiers chinois d'Amérique du Nord, mais elle a atteint son plein développement. Elle doit maintenant choisir d'exister ou risquer de disparaître totalement. Symbole de la présence asiatique en Amérique du Nord, le quartier chinois est l'expression de notre passé, de notre présent et de notre avenir.

Dans le passé, les sociétés du quartier chinois offraient aux membres de la collectivité du soutien et de l'hébergement sous forme de pavillons-dortoirs et de maisons de chambres. Bon nombre des immeubles historiques et patrimoniaux des sociétés du quartier chinois ne sont pas conformes aux normes minimales ni aux exigences du code du bâtiment, et ne sont que partiellement habitables. Les bâtiments de sociétés représentent la typologie la plus complexe et la plus particulière de l'architecture patrimoniale du quartier chinois.

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Figure 2 Immeuble d'une association de bienfaisance chinoise

Pour ces motifs, les bâtiments des sociétés ont servi de prototypes pour l'établissement d'une méthode visant à protéger et à préserver les bâtiments patrimoniaux tout en les adaptant pour les rendre habitables. La méthode qui en résulte est appelée « acuponcture urbaine ».

PATRIMOINE ET DURABILITÉ

La transformation durable des bâtiments patrimoniaux en logements demande un examen minutieux des répercussions des aspects environnementaux, culturels et économiques au fil du temps et de leur interrelation à l'intérieur du projet global. Le développement durable et le dynamisme culturel dépendent l'un de l'autre et doivent être considérés comme des moyens d'assurer à long terme la croissance économique, la santé environnementale, la réduction de la pauvreté et le développement communautaire. Assimiler le patrimoine au capital culturel permet de l'exploiter à titre de ressource de développement en vue de créer de l'emploi, de mobiliser les collectivités et de produire des revenus.

Une série de questions déterminantes a été préparée dans le but de guider cette démarche, d'aider à nouer des alliances qui répondent à la situation particulière de chaque projet et de faire ressortir les liens significatifs susceptibles d'orienter la conception.

Ces questions touchent les aspects environnementaux, économiques et socioculturels. Il importe de souligner qu'ils peuvent se recouper et que chacune peut être posée en fonction de l'un ou l'autre des angles retenus.

LA MÉTHODE : ACUPONCTURE URBAINE

L'acuponcture urbaine repose sur le réaménagement sélectif d'emplacements pertinents du tissu patrimonial. Elle en extirpe les éléments non fonctionnels et y déploie une modernisation dosée pour stimuler la revitalisation urbaine.

Grâce à son cachet culturel exceptionnel, le quartier chinois peut se démarquer et montrer comment rénover les bâtiments d'un quartier historique de façon réceptive, mais moderne, ainsi que proposer des scénarios de logement contemporains.

L'acuponcture urbaine comporte quatre grandes caractéristiques :

1. L'acuponcture urbaine est le fruit d'une collaboration et d'une recherche interdisciplinaires

Bien que la conception puisse constituer le cadre physique pour la création de logements communautaires durables, une stratégie de revitalisation durable est un processus collectif. Elle ne peut s'établir sans la collaboration de multiples partenaires grâce à la gestion, à des principes directeurs et à la participation de la collectivité. Le projet doit être mené à la fois de haut en bas et de bas en haut.

Le patrimoine évolue sans cesse et appartient à la multitude, d'où la diversité des points de vue sur sa valeur. Il convient de consulter toutes les personnes-ressources et les parties intéressées afin de recueillir leurs opinions, leur expertise et leurs idées. Parmi les parties intéressées, on trouve les organismes et les décideurs aux échelons municipaux, provinciaux et fédéral, les services de liaison d'universités et de collèges, les historiens, les organismes communautaires, les résidents (anciens et actuels), les groupes financiers ainsi que les consultants et les entreprises en marketing.

Ce changement de perspective, qui nous amène à œuvrer à partir de l'objet au propre comme au figuré, plutôt que de porter un regard extérieur, constitue le fondement de l'acuponcture urbaine.

2. L'acuponcture urbaine conçoit le bâtiment comme un tout multidimensionnel et ne se limite pas seulement à sa façade

Dans les villes canadiennes, la restauration des vieux bâtiments tend à privilégier la sauvegarde des qualités extérieures superficielles d'objets architecturaux autonomes; c'est ce qu'on appelle le « façadisme ».

Pourtant, la façade ne représente qu'une petite partie du bâtiment et est intimement liée à la structure de l'ensemble. Le bâtiment est le produit des gens qui l'ont habité, d'une époque et des circonstances de sa construction. Si l'on n'épargne que la façade, on se trouve non seulement à amputer l'intérieur au profit des murs extérieurs, mais encore à se couper de la mémoire des lieux.

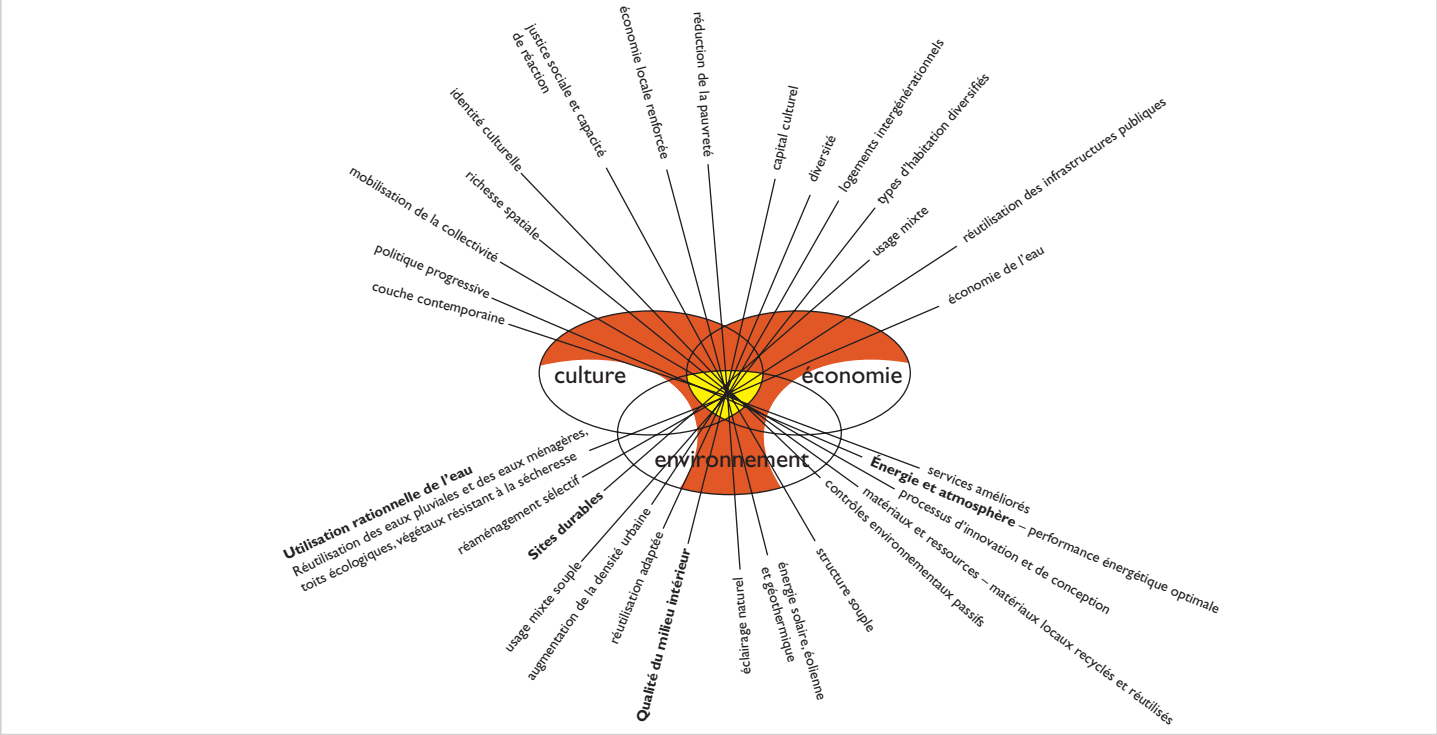


Figure 3 Questions principales

L'acuponcture urbaine vise à concevoir chaque bâtiment non comme une série d'artefacts distincts, mais comme un milieu de vie, où s'entremêlent des aires intérieures communes, des lieux de rassemblement extérieurs et des voies de circulation, et comme une superposition complexe d'espaces publics, semi-publics, privés et semi-privés.

Le tissu urbain est un produit complexe et un processus d'adaptation répondant à un besoin structurel, à une technologie, à des facteurs environnementaux, à des données économiques et à une fonction de socialisation qui évolue avec le temps. Examiner l'architecture des bâtiments autant de l'intérieur jusqu'à l'extérieur que de l'extérieur jusqu'à l'intérieur permet de déterminer à quel degré leur forme dérive de la culture, des conditions économiques et des pratiques environnementales.

3. L'acuponcture urbaine favorise la diversité

La diversité est essentielle à la viabilité et à la tolérance des collectivités. Les décisions prises doivent garantir la diversité à long terme et le développement durable.

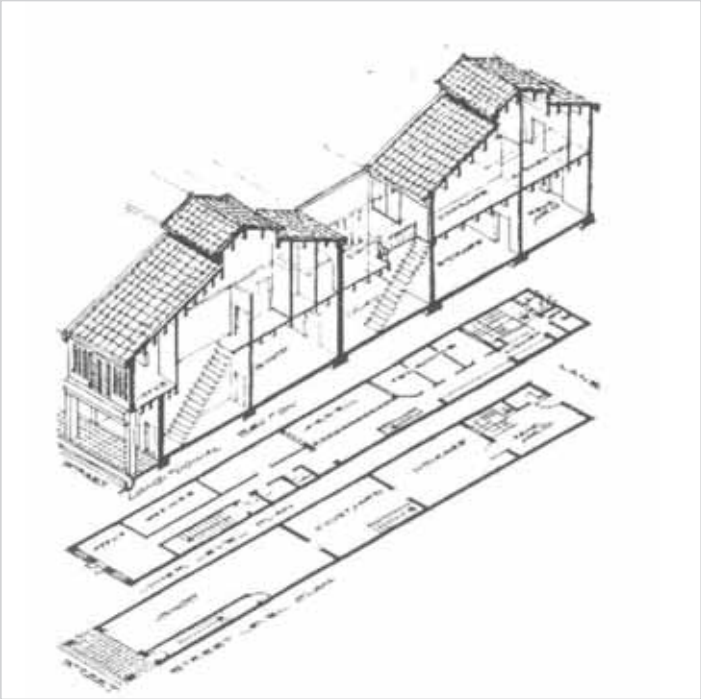
Le comité de revitalisation du quartier chinois[1] a recommandé de ne pas réaménager le secteur en destination touristique, mais d'en faire une communauté dynamique et multigénérationnelle de résidents et de visiteurs.

Cela signifie que la planification doit tenir compte des multiples groupes d'âge, collectivités, classes de revenus et utilisations des terrains, notamment à des fins commerciales, institutionnelles industrielles légères, ainsi que des diverses catégories de logements intergénérationnels abordables. Assurer la mixité des types de logement et des zonages autorise davantage de souplesse. Parce qu'elle ne repose pas sur un seul créneau commercial, elle procure une plus grande viabilité économique à long terme. En répondant aux impératifs de la responsabilité intergénérationnelle, la restauration des bâtiments patrimoniaux comble les besoins courants des collectivités tout en préservant le patrimoine et en étant attentive aux préoccupations du développement durable pour les générations à venir.

4. L'acuponcture urbaine favorise la coexistence d'une couche contemporaine

Le tissu urbain incarne la mémoire collective. La notion de responsabilité intergénérationnelle traduit l'idée que les marques du présent sont appelées à devenir des vestiges.

1 Le Vancouver Chinatown Revitalization Committee (VCRC) a été officiellement créé en 2001, réunissant plus de 20 groupes sociaux et culturels, des résidents et des gens d'affaires du quartier chinois afin qu'ils travaillent avec la Ville de Vancouver dans le but d'élaborer des initiatives de revitalisation à court terme et une vision à long terme du quartier chinois, ainsi que des stratégies de mise en œuvre de cette vision.



Courtoisie de Penny Gurstein

Figure 4 Maison-boutique asiatique.

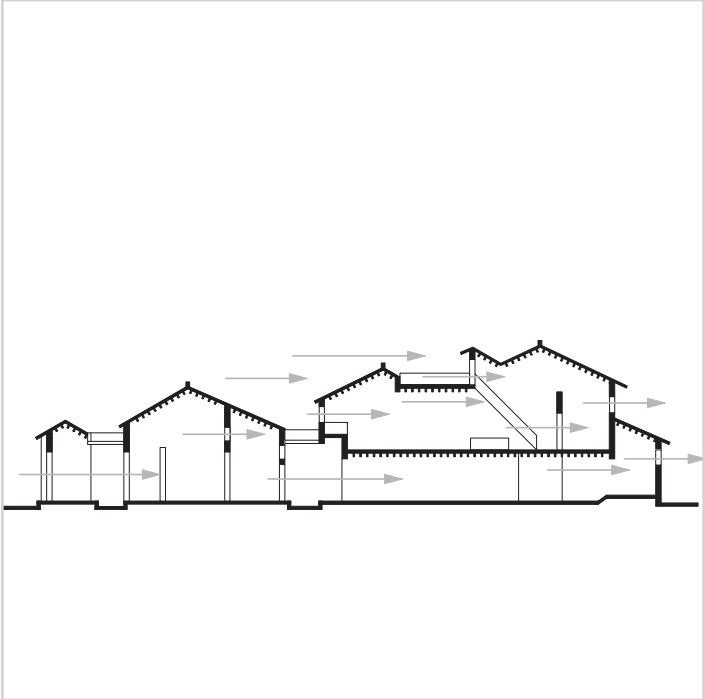


Figure 5 Contrôles environnementaux, aire de circulation et lieu de rassemblement interconnectés

On doit saisir que l'architecture ne parvient jamais au stade de « l'achèvement », mais qu'elle est au contraire à la fois le reflet et l'adaptation de conditions contextuelles. La revitalisation de bâtiments patrimoniaux se doit donc de préserver les revêtements contemporains de manière à élargir la trame historique et à renforcer le sentiment de continuité et de relation avec le passé.

Cette approche donne la possibilité d'évoluer à de nouvelles idées adaptées aux besoins du présent. La revitalisation interprète le cadre existant en des termes significatifs pour le passé comme pour le présent. Cette démarche permet de préserver les antécédents particuliers et les attributs d'usage de la collectivité et concourt à l'épanouissement d'une communauté d'une authenticité incomparable.

BÂTIMENTS DES SOCIÉTÉS

Les bâtiments des sociétés constituent des archétypes qu'on ne retrouve que dans les quartiers chinois d'Amérique du Nord. Ces ouvrages véritablement hybrides mélangent certains traits de la variante chinoise de la maison-boutique asiatique aux styles et aux techniques de construction occidentaux.

La maison-boutique asiatique serait née dans les provinces du Guangdong et du Fujian, dont sont issus de nombreux membres des clans représentés par les sociétés de Vancouver. Avec le développement du commerce chinois, la maison-boutique asiatique a connu un processus de transformation pluridimensionnel et est devenue un style de construction prisé, d'abord en Malaisie, à Singapour et en Thaïlande, puis en Amérique du Nord.

Sa forme a été adaptée aux conditions climatiques, aux nouvelles techniques et à l'évolution sociale. La maison-boutique asiatique et les bâtiments des sociétés se caractérisent par la manière dont les éléments d'agencement du milieu (cours, passages couverts, puits de lumière) se trouvent liés aux aires de circulation et aux lieux de rassemblement à l'intérieur des murs : depuis les pièces habitées les plus intimes jusqu'aux aires communes ouvertes et aux locaux commerciaux. Les aires polyvalentes complexes ont évolué consciemment et inconsciemment pour concilier et favoriser différents degrés d'intimité et de sociabilité.

Image fournie gracieusement par Codrin Tabala.

Figure 6 Cour de la société Yue Shan.

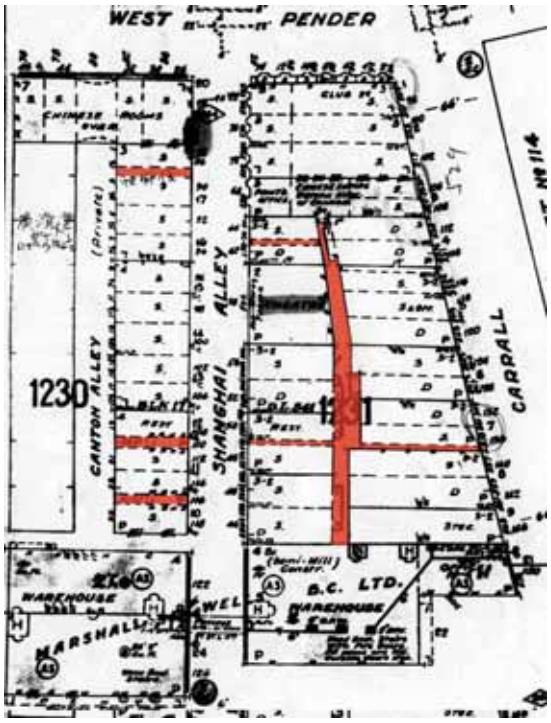


Figure 7 Carte d'assurance incendie montrant les passages couverts avant 1940.

Le bâtiment type des sociétés emprunte plusieurs de ses caractéristiques à la maison-boutique asiatique. Chacune d'entre elles a été évaluée afin d'en cerner la pertinence pour les quatre études de cas de réaménagement :

- circulation urbaine en réseau
- usage mixte
- mur extérieur continu à hauteur variée
- double façade et allées accessibles
- cours et puits de lumière
- passages couverts urbains
- allées
- entrée en retrait et auvent
- balcons en retrait
- passages intérieurs ouverts
- mezzanines avec verre à prisme
- autel et sanctuaires
- usage symbolique de la couleur et de l'ornementation

ÉTUDES DE CAS

L'étude formule des recommandations précises pour la remise en état de quatre bâtiments de sociétés :

- la société Mah du Canada;
- la société Lim Sai Hor (Kow Mock);
- la société de bienfaisance Shon Yee;
- la société Yue Shan.

Chaque projet à l'étude est centré sur un aspect particulier, mais propose également une contribution généralisable à l'ensemble des bâtiments de sociétés. Le projet du bâtiment de la société Mah traite de la diversité dans le programme de même que des questions d'éclairage et de ventilation, et celui du bâtiment de la société Lim Sai Hor fournit l'occasion de traiter d'adaptabilité et des rapports avec la prestation de nouveaux services. En ce qui concerne la société de bienfaisance Shon Yee, le sujet principal est celui de la typologie contemporaine des pièces individuelles, dont on mesure le potentiel. Enfin la société Yue Shan traite des réseaux, des cours, et de leur relation par rapport à la vie en milieu urbain.

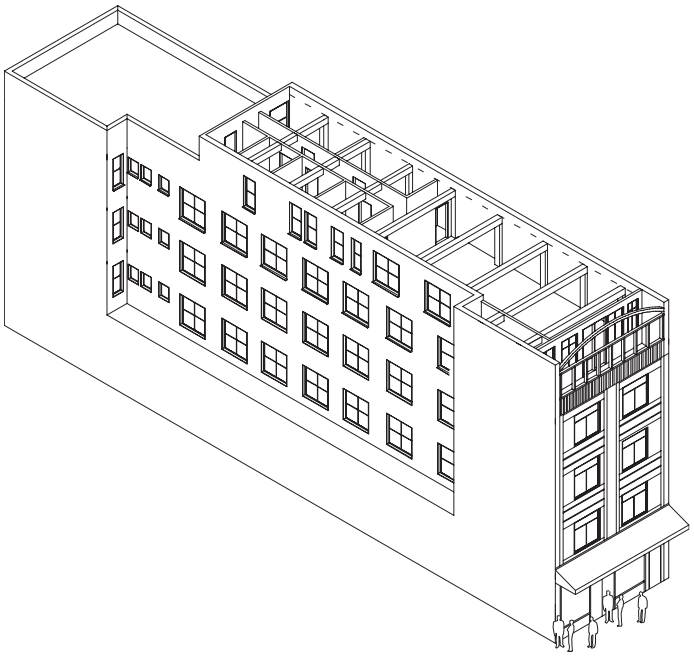
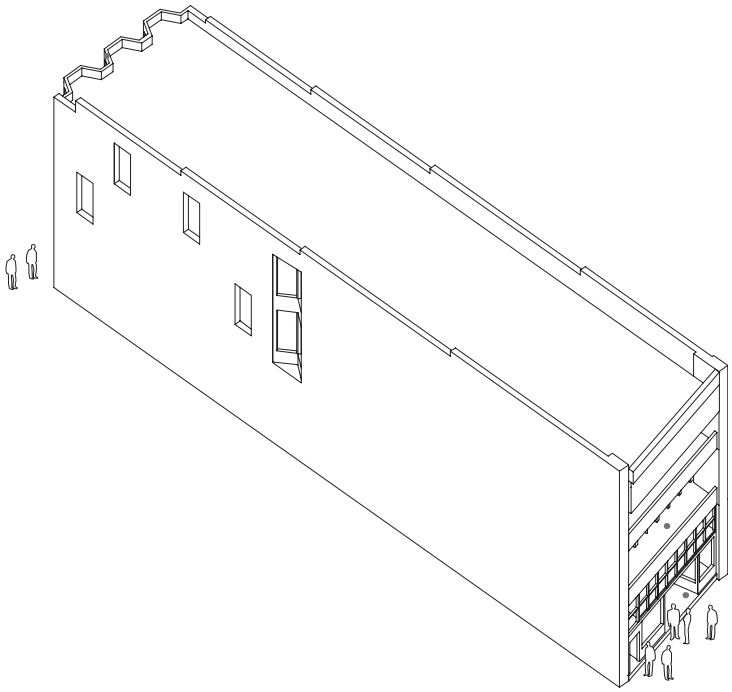


Figure 8 Bâtiment de la sociérté Mah du Canada

1. La société Mah du Canada

La société Mah a un long bâtiment étroit d'une largeur typique de 7,6 m (25 pi) et d'une longueur de 36,6 m (122 pi). Pour que le bâtiment soit conforme aux normes contemporaines du logement, il faudra y aménager des issues et satisfaire les exigences en matière d'éclairage, de ventilation, d'eau et d'électricité . Par ailleurs, l'agencement en pièces individuelles limite actuellement leur usage à un groupe très restreint d'occupants. L'étude porte essentiellement sur les trois étages à mi-hauteur abritant les chambres où étaient jadis hébergés provisoirement les nouveaux immigrants. Des logements de type différent sont aménagés en supprimant la partie médiane du bâtiment pour faire place à une cour. Cette cour permet non seulement d'aménager différents types d'habitation, mais aussi de résoudre les problèmes d'éclairage et de ventilation. Elle procure également aux occupants un moyen d'évacuation additionnel et un lieu de rencontres sociales à l'extérieur. Au terme de cette modification, les nouvelles façades pourraient offrir ce qu'il faut pour assurer la résistance antisismique.

Les locaux commerciaux du rez-de-chaussée et l'aire réservée à la société au dernier étage ont été préservés en raison de leur valeur culturelle et économique. Ce souci de préservation et d'intégration assure le maintien de la pluralité des usages et la stabilité des aires et des programmes.



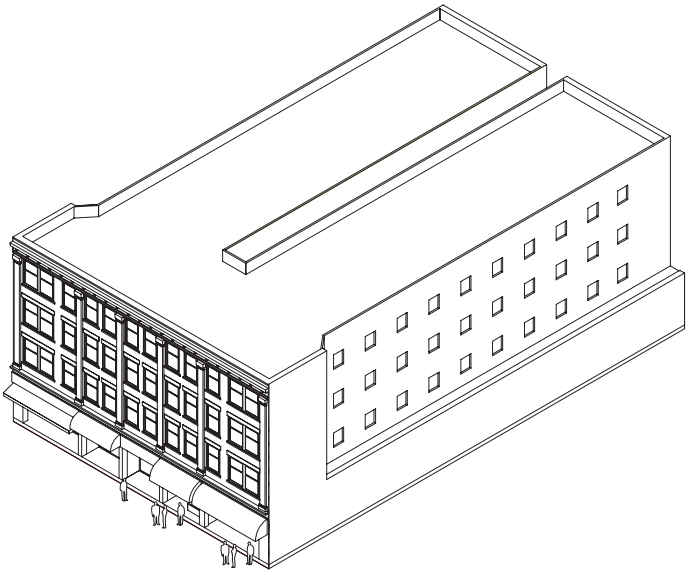
2. La société Lim Sai Hor (Kow Mock)

L'intérêt du bâtiment de la société Lim Sai Hor tient au fait que ses deux façades donnent sur deux rues. Actuellement, tous les étages du bâtiment sont habités, mais les services font défaut et les plafonds, les murs et les planchers montrent des signes visibles de dommages.

À l'instar du bâtiment de la société Mah, celui-ci occupe un seul lot long et étroit mesurant 8,2 m sur 36,6 m (26 pi 10 po sur 122 pi), soit légèrement plus large que les autres lots types (7,6 m) du quartier chinois. Ce surcroît de 60 cm (24 po) permet d'aménager un corridor bordé de part et d'autre de pièces. Ce couloir supplémentaire et le fait singulier que le bâtiment soit bordé d'un côté par un parc et, de l'autre, par un lot ouvert permet d'y aménager de petits appartements qui recevront amplement de lumière naturelle et de ventilation.

De plus, de nouveaux noyaux de services techniques sont ajoutés dans un souci stratégique d'économie afin de maximiser la flexibilité à long terme de la taille et de l'agencement des logements.

Le bâtiment compte désormais un nouvel étage dont la double vocation est d'abriter une salle de réunion pour la société et de libérer le troisième étage pour recevoir d'autres logements. L'aire additionnelle pourrait entraîner des revenus complémentaires qui financeraient l'installation d'un ascenseur qui profiterait aux nouveaux locataires tout en permettant aussi de vaincre les difficultés que rencontrent communément les membres âgés de la société pour se rendre aux salles de réunion du dernier étage, problème d'accès qui se pose souvent dans les bâtiments des sociétés du quartier chinois. En dernier lieu, l'étude de cas évalue l'incidence que le bâtiment de la société Lim Sai Hor exerce sur l'aménagement potentiel d'un terrain vacant voisin, compte tenu des arrêtés municipaux et des règlements en matière de construction.



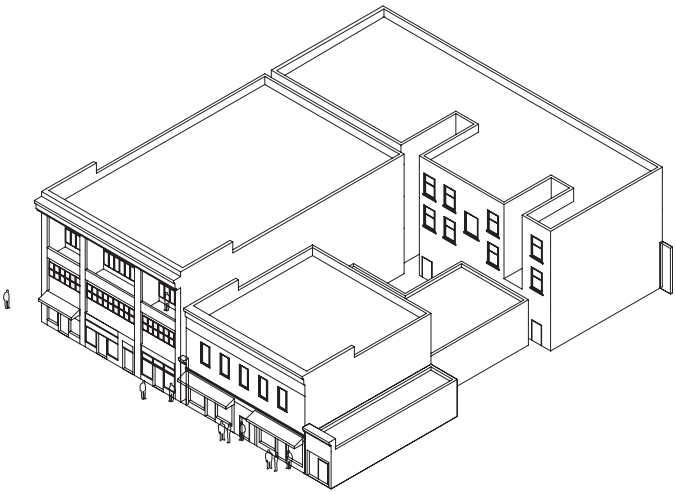
3. Société de bienfaisance Shon Yee

La grande différence entre les bâtiments des sociétés Mah et Lim Sai Hor et celui de la société de bienfaisance Shon Yee est la taille. Le bâtiment de la société de bienfaisance Shon Yee couvre trois terrains de 7,6 m sur 36,6 m (25 pi sur 122 pi). Il présente par conséquent une densité plus importante. Il comprend 50 chambres individuelles éclairées par des puits de lumière latéraux longiformes des deux côtés et un autre longeant le centre du bâtiment. Cet agencement unique constitue une caractéristique qui mérite d'être préservée et aussi améliorée, afin que les chambres soient mieux éclairées, mieux ventilées et mieux équipées.

L'étude a montré qu'il fallait aménager de l'hébergement de court séjour destiné surtout aux membres de passage venus de partout au pays ou de l'étranger. La proposition vise à réaliser des logements plus spacieux en combinant jusqu'à trois pièces. Doter ces logements d'espaces extérieurs façonnés vis-à-vis des puits de lumière permettrait d'accroître la superficie et la qualité des lieux. En plus d'améliorer les conditions d'habitation, ce choix favorise l'accessibilité de l'aménagement.

Pour ne pas rompre avec la mission sociale des sociétés, un certain nombre de logements pourraient être subventionnés, grâce aux revenus générés par les appartements à location à court terme. Chaque étage a sa propre aire commune. Au premier, une pièce polyvalente fait le lien entre les activités communes et l'espace public de la rue; au deuxième, un tube de verre fraie un passage perpendiculaire jusqu'aux corridors. Les terrasses-jardins occupent le troisième étage.

Comme dans le cas de la proposition de la société Lim et de l'ajout apporté au bâtiment de la société Mah après 1923, un demi-étage est ajouté au bâtiment de la société Shon Yee. L'aire supplémentaire permettra à la société d'y regrouper ses bureaux et sa salle de réunion, qui se trouvent actuellement à l'extérieur du quartier chinois. La toiture-terrasse qui prolonge la salle de réunion procure un espace extérieur de rencontre en l'absence de cour.



4. La société Yue Shan

L'importance historique de l'immeuble de la société Yue Shan tient principalement à sa sociabilité et à sa perméabilité communautaires. Les passages couverts qui partaient de la rue Pender et de l'allée Market conduisaient à un passage couvert latéral et débouchait sur une cour centrale qui servait d'espace, tour à tour, intime semi-privé et ouvert, et d'espace-relais pour assurer la ventilation et l'éclairage des pièces intérieures et la collecte des eaux de pluie.

De nos jours, la cour est partiellement remblayée, les passages couverts sont bloqués et les aires du rez-de-chaussée vis-à-vis de l'allée et de la cour sont fermés et utilisés comme lieu d'entreposage.

Puisque la fonction courante de logement donne plutôt de bons résultats, la proposition rétablit la communication entre l'immeuble et la rue ainsi que les liens entre la rue, l'allée, la cour et le passage couvert.

Pour être supportable, la vie dans un bâtiment densément peuplé nécessite des aires extérieures ouvertes et une aire d'agrément remplissant la fonction de lieu de séjour urbain où serait restaurée la relation cruciale entre les domaines public et privé. L'aire de la cour est décloisonnée pour accueillir diverses activités de la société, comme les arts martiaux, les activités sportives et musicales, le ping-pong, le karaoké, le mah-jong et les leçons de chinois. La programmation est complétée grâce à l'aménagement d'une salle de thé et d'un centre pour jeunes et personnes âgées et des studios commerciaux destinés aux membres de la société, aux résidents et à la collectivité. Des jardins aménagés en tranchées filtrent les eaux pluviales et les acheminent dans des citernes souterraines. Des tapis verticaux de végétation purifient l'air et améliorent le climat et le haut niveau d'albédo du pavé réduit l'effet d'îlot urbain. Les vocations sociales, économiques et environnementales de la cour sont restituées, et l'effervescence de la société retrouve sa place dans le tissu du quartier chinois.

Gestionnaire de projet à la SCHL : Brian Eames

Consultants pour le projet de recherche : Inge Roecker et Kelty McKinnon

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Ottawa ON K1A 0P7
Telephone: (613) 748-2000

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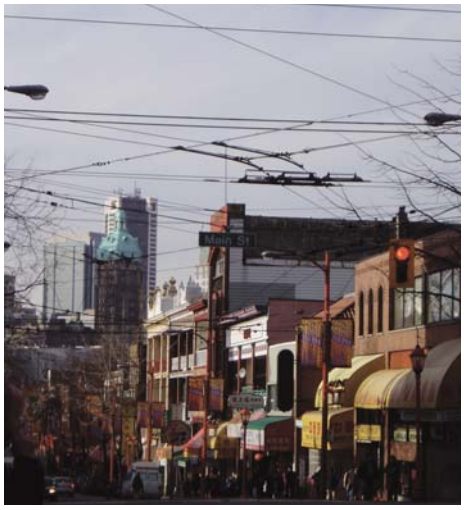
EXECUTIVE SUMMARY

One of the consequences of Vancouver's explosive real estate market is the pressure to find housing development opportunities within the urban core. Vancouver's Chinatown is experiencing a sudden pressure to redevelop more housing. Without careful and thoughtful research into the limitations and potentials of Chinatown's unique urban fabric, there is an inherent danger that Chinatown will be replaced with standard podium point tower condominiums, or redeveloped retaining only historic facades as cladding on new buildings, resulting in the loss of the cultural substance of one of Vancouver's oldest neighborhoods. This study proposes four housing redevelopment scenarios for four Society Buildings within Chinatown, and develops an economically, environmentally and culturally sustainable approach to the sustainable rehabilitation of these buildings into contemporary housing.

Context

The growth of Chinatown's urban fabric has been closely linked with the influences of both historic and current Chinese immigration from the gold rush and CP Railroad projects of the 1800's to the massive influx of business class immigrants of the 80's and 90's. While Chinatown was once the center of the Chinese community in Vancouver, recent immigrants have opted to move to less urban communities in Richmond, Coquitlam and Burnaby. In addition the collapse of nearby Hastings Street in the Downtown East Side and the effects of drugs, homelessness and prostitution forced Chinatown into a period of decline. Chinatown is at a key moment in its evolution. It must now choose to exist, or risk disappearing altogether. As a symbol of the role of Asia in North America, Chinatown expresses where we have been, where we are, and what we will be in the future.



Chinatown Streetscape

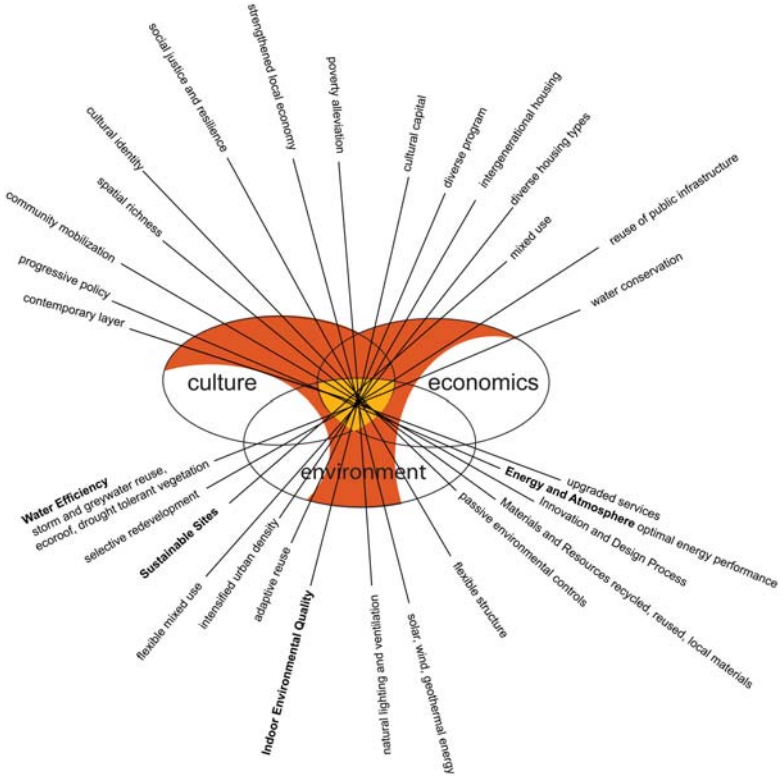
Historically, Chinatown's Societies offered housing and assistance to community members in the form of bunkhouses and SRO's (single resident occupancies). Today Chinatown is still a functioning community, not a mere tourist attraction as in some North American Chinatowns, but it has come of age. With an aging population and the majority of buildings not meeting base standard of living and code requirements, many historic buildings (including the Society Buildings) are only partially operational. Because the Society Buildings are the most complex and unique typology of Historic Chinatown architecture, they were used as a prototype for establishing a methodology as to how heritage buildings can be protected and preserved while accommodating adaptations to allow for future inhabitation. This methodology we call 'Urban Acupuncture'.

Chinese Benevolent Association Building

Heritage and Sustainability

The sustainable rehabilitation of existing heritage buildings into housing carefully considers the implications of environmental, cultural and economic factors over time and their interrelationship within the overall project. Sustainable development is interdependent with cultural vitality, and should be seen as a vehicle for long term economic growth, environmental health, poverty alleviation and community development. By viewing heritage as cultural capital, it can be utilized as a development asset that can help to provide employment, mobilize communities and generate income.

A list of key questions was developed to guide the process, form alliances that respond to the unique local conditions of each individual project, and to help discover meaningful relationships that can direct the design. These questions were posed from Environmental, Economic and Cultural/Social perspectives, but it is important to note that there will be overlaps between them, and that each question could be asked from the perspective of each category.



Approach: Urban Acupuncture

Urban Acupuncture is a strategy to maintain and build sustainable, authentic communities. It focuses on the selective redevelopment of appropriate sites within the historic fabric, carefully removes what isn't working, and inserts a contemporary, appropriate intervention to stimulate urban regeneration. By capitalizing on its unique cultural assets, Chinatown can differentiate itself and set an example for a sensitive yet contemporary approach to historic community regeneration and the development of contemporary housing scenarios.

4 major characteristics of Urban Acupuncture are:

1. Urban Acupuncture grows out of Interdisciplinary Collaboration and Research

While design can form the physical framework for sustainable community housing, a sustainable revitalization strategy is a collaborative process developed with multiple partners through management, policy, and community involvement. The project should be developed simultaneously from the top

down and the bottom up. Heritage is constantly evolving, shifting and belongs to many. Because of this, there will be many interpretations of its value. All resources and interested parties should be consulted for information, expertise and ideas including municipal, provincial, and federal agencies and policymakers; academic departments and outreach; historians; community organizations; residents (past and present); finance groups; marketing consultants and businesses. This shift in perspective from looking in from the outside (etic approach) to working from within (emic approach), both metaphorically and physically, is the basis of Urban Acupuncture.

2. Urban Acupuncture sees Building Form as Multidimensional, not Reduced only to the Facade

The approach to historic rehabilitation in Canadian cities has tended to focus primarily on the preservation of the surficial exterior qualities of autonomous architectural objects- what has been described as 'facadism'. But the façade is only a small part of the building, and it is intimately connected to the structure of the whole. The building is a product of the people who inhabited it and the time and context in which it was built. If everything but the exterior is destroyed, not only is there a severing of the interior to the exterior, but any valuable insight into the history of the place is lost. Likewise, the Urban Acupuncture approach sees individual buildings not as a series of discrete artifacts, but as a living environment, interwoven with communal interior and exterior gathering and circulation routes, and a complex layering of public, semi-public, private, and semi-private space. The urban fabric is a complex product and process of adaptation to structural need, technology, environmental factors, program, economics and sociability that evolves over time. By analyzing architecture from both the outside in and the inside out, one can get a sense of how building form is derivative of culture, economics and environmental practices.

3. Urban Acupuncture supports diverse programme

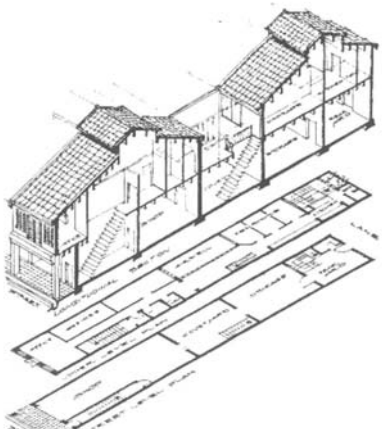
Diversity is the key to a viable, resilient community. Decisions should be made that support long term diversity and sustainability. The Chinatown Revitalization Committee recommends that Chinatown should not be redeveloped as a tourist destination, but as a thriving, multigenerational community of both residents and visitors. This necessitates planning for diverse ages, communities, incomes, and land uses including commercial, institutional, light industrial, and various types of affordable intergenerational housing. Providing a diversity of housing types and land uses allows greater flexibility and, by not relying on one market niche, in the long term is much more economically sustainable. By respecting intergenerational responsibility, heritage restoration addresses current community needs while respecting history and considering community sustainability for generations to come.

4. Urban Acupuncture encourages the coexistence of a contemporary layer

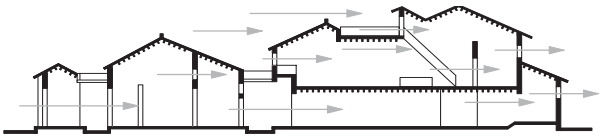
The urban fabric embodies collective memory. Intergenerational responsibility connotes that what is present, will one day become history. This necessitates an understanding of architecture as never reaching a state of 'completion' but as simultaneously reflective of and responsive to contextual conditions. Historic revitalization should include contemporary overlays that widen the historic context and add to a sense of continuity and connection to the past. This approach allows new ideas to evolve that are relevant to contemporary needs. Future memories can be carried forward in the urban fabric that interpret the existing in ways that are meaningful to both the past and present. This approach protects the unique histories and formal attributes of the community, and contributes to the development of a community that is uniquely authentic.

Society Buildings

The Society Building is a typology unique to North American Chinatowns, a true hybrid architecture that conflates aspects of the Chinese regional Asian Shophouse typology where the clan is from, with western styles and building methods. The Asian Shophouse is believed to have originated in Guangdong and Fujian Provinces (where many of Vancouver's Society clansmen originate from). It went through a multifaceted evolutionary process of transformation as trade flourished with China, and became a popular building style in Malaysia, Singapore, Thailand and eventually North America. The Society Building typology evolved based on climatic conditions, new technologies and shifting social patterns. A unique aspect of the Shophouse and the Society Building is how environmental controls (courtyards, breezeways and lightwells) are inseverably connected to the circulation and gathering spaces within the building- from highly private living quarters to communal open spaces and commercial spaces. Complex, multifunctional spaces evolved consciously and subconsciously over time, accommodating and enabling varying levels of privacy and sociability.



Asian Shophouse. Courtesy of Penny Gurstein.

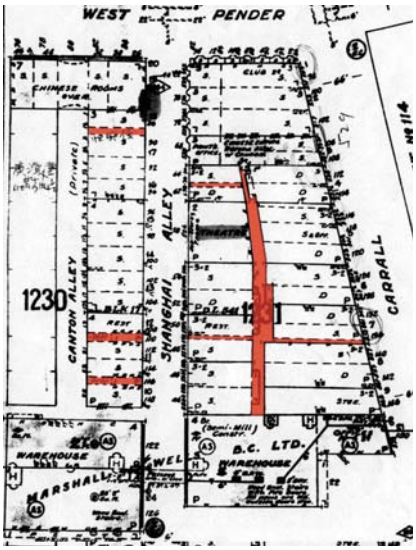


Interconnected Environmental Controls, Circulation and Social Space

There are several Society Building characteristics identified as derivative of the Asian Shophouse. Each of these characteristics were considered for their relevance to the four redevelopment case studies:

- Networked Urban Circulation
- Mixed Use
- Continuous Street Wall with Undulating Heights
- Double Frontage / Accessible Alleyways
- Courtyards and Lightwells
- Urban Breezeways
- Alleyways
- Recessed Entry and Canopy
- Recessed Balconies
- Interior Breezeways.
- Mezzanines with Prism Glass
- Altar and Shrines
- Symbolic Use of Colour and Ornamentation

Yue Shan Society Courtyard Image Courtesy of Codrin Tabala

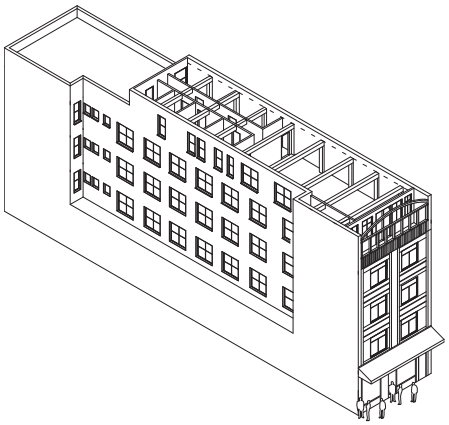


Fire Insurance Map Showing Breezeways Prior to 1940.

Case Studies

This study looks specifically at 4 Society Buildings, and makes specific rehabilitation recommendations for each: the Mah Society of Canada, the Lim Sai Hor (Kow Mock) Society, the Shon Yee Benevolent Society, and the Yue Shan Society. Each project in the study focuses on one particular issue yet contributes to the generalizability of all the Society Buildings. The Mah Society Building discusses diversity in program as well as issues of light and ventilation, the Lim Sai Hor Society Building conversion discusses adaptability and how it relates to new services, the Shon Yee Benevolent Society discusses the potential of a contemporary single room typology, and the Yue Shan Society discusses networks and courtyards and how they relate to urban living.

1. Mah Society of Canada

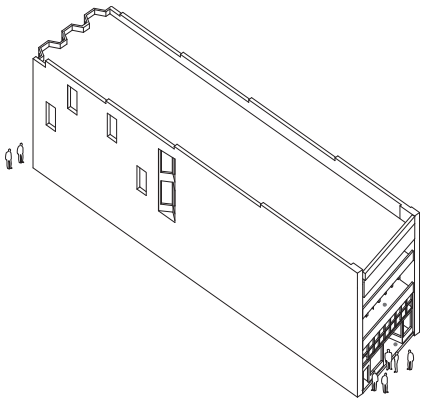


The Mah Society has a typical 7.6m x 36.6m (25'x122') long, narrow footprint. To bring the building up to contemporary housing standards, exit requirements and issues of light, ventilation, water and electricity need to be addressed. In addition, the Mah Society's single room typology presently restricts occupancy to a very limited user group. This study focuses on the 3 mid-lying floors containing the single room typology that historically provided a transient home for new immigrants.

A variety of unit types is accommodated by eliminating the middle section of the building to create a courtyard. The courtyard not only allows for a diversity of unit types but addresses issues of lighting and ventilation. It also provides an additional means of egress and an outside social space for the

residents. As a result of this operation, new façades could provide the support required for seismic upgrades. The commercial activity at the ground level and the Society space on the top floor have been preserved for their cultural and economic value. Through preservation and integration, the diversity of uses and the stability that these spaces and their programs promote is maintained.

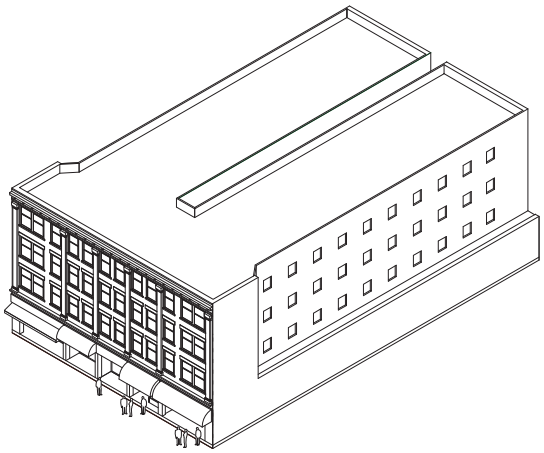
2. Lim Sai Hor (Kow Mock) Society



The significance of the Lim Sai Hor building is that it fronts two streets, with both facades designed as street frontage. The building is currently occupied on all floors but the services are failing, with visible damage to ceilings, walls and floors. Like the Mah Society, this building also occupies a single narrow long lot but has a measurement of 8.2m x 36.6m (26’10’’x122’) making it slightly larger than the 7.6 m lot width typical of Chinatown. This additional 60 cm (24”) width allows for a double loaded corridor. The extra corridor, combined with the unique situation of having an alley park on one side and an open lot on the other allows for a variety of smaller apartments that receive ample natural light and ventilation. In addition, the new service cores are added in an economically strategic manner to maximize long-term flexibility of unit sizes and divisions.

A new floor is added to the building to accommodate the Society meeting space, and to free the third floor to accommodate additional housing program. This gained space could provide the additional revenue to support the implementation of an elevator. An elevator would not only benefit new residents, but would address the common issue of access for senior Society members to top floor meeting rooms, a common problem within Chinatown’s Society Buildings. Finally, this case study examines the effects on the Lim Sai Hor Building of the potential future development of an adjacent empty lot in respect to the allowable building By-laws and regulations.

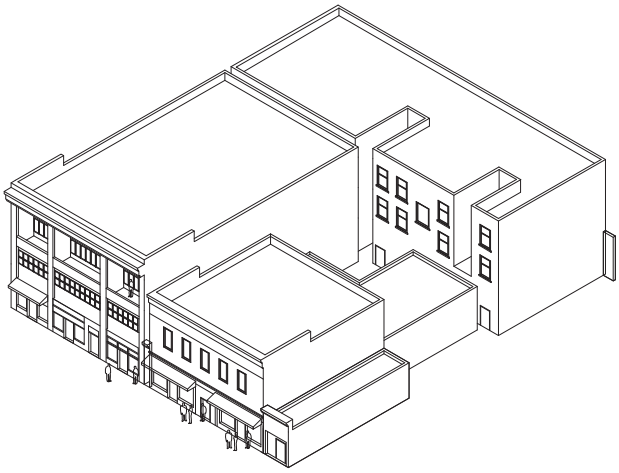
3. Shon Yee Benevolent Society



A significant difference between the Mah and Lim Sai Hor Society Buildings and the Shon Yee Benevolent Society is that it comprises three 7.6m x 36.6m (25'x122') lots. As a consequence, the Shon Yee Society building is an even denser building typology. The building contains 50 single rooms lit by narrow, long light wells on both sides and another running along the center of the building. This unique spatial layout was identified as a character to be preserved yet enhanced by better servicing the rooms with light, air and technical services. The study identified a need for short-term accommodations mainly to host visiting members from other Chinatowns around the country and abroad. The proposal looked into joining one, two and three rooms into single larger units. By providing these units with carved out, outdoor spaces that face the light wells, an added spatial and environmental quality is afforded. Not only does it improve the living conditions it also makes this unique spatial condition visible and accessible. In keeping with the social programming agenda of the Societies, some of the units could become subsidized housing, supported by the revenue generated by the hotel suites. Each floor has a unique common area. On the first floor a multi-functional room connects common activities to the street, and on the second floor a glass tube punches perpendicularly to the hallways. Garden terraces occupy the third floor.

Similar to the Lim proposal and the Mah Society's post 1923 addition, an additional half floor is added on top of the Shon Yee Building. This additional space allows the Shon Yee Benevolent Society to move their offices and meeting space, currently located outside Chinatown, back to their building. A rooftop garden extends out from the Society meeting area providing outdoor social spaces where courtyards are nonexistent.

4. Yue Shan Society



The main historical significance of the Yue Shan building complex is its street level sociability and permeability. Breezeways from both Pender Street and Market Alley historically led to an interstitial, lateral breezeway, and a central courtyard which was used as an intimate semi-private open space and a space to bring air, daylight and rainwater collection to the interior of the block. Today the courtyard is partially infilled, the breezeways are blocked, and the ground level spaces facing the alleyway and courtyard are locked and used as storage.

Since the existing housing is working quite well within the Society, the proposal re-establishes the block's street level sociability and its internal permeability and connectivity between the street, alley, courtyard and breezeway. In order to be livable, high density living requires outdoor open space and amenity to act as an urban living room that recovers a critical relationship between the public and private realms. Ground level courtyard spaces are opened up to accommodate the Society's diverse existing programming- martial arts, sports, music, Mahjong, Ping-Pong, Karaoke, and Chinese language lessons are all accommodated with the introduction of a tearoom, youth and senior centre, and commercial studio spaces for society members, residents and the greater community. Littoral trench gardens filter storm water into underground cisterns for irrigation purposes, vertical mats of vegetation cleanse the air and ameliorate the climate and high albedo paving reduces the urban heat island effect. The social, economic and environmental dimensions of the courtyard are reestablished and the active life of the Society is stitched back into the greater fabric of Chinatown.

City of Vancouver Showing Historic Chinatown. Source: City of Vancouver VanMap. [Orthographic Photo]. 2004.

1.0 INTRODUCTION

In little over a decade, the population of downtown Vancouver has doubled to 85,000 people, and by 2010, it is predicted to climb to 125,000. In addition, there are over 170,000 workers, with an additional 60,000 expected in the next 15 years (Beasley 1). This steep growth curve has resulted in consecutive double-digit percentage increases in residential sale prices in the last three years, especially for high-rise condos (Hyslop 1). In downtown Vancouver, one of the consequences of this explosive real estate market is the pressure to find housing development opportunities within the urban core. Located just east of downtown, Chinatown is experiencing a sudden pressure to redevelop more housing. This study examines how Chinatown can protect its heritage and redevelop into a sustainable, culturally rich community that balances the need for housing with historic preservation. Without careful and thoughtful research into the limitations and potentials of Chinatown's unique urban fabric, there is an inherent danger that Chinatown will be replaced with standard podium point tower condominiums, or redeveloped retaining only historic facades as cladding on new buildings, resulting in the loss of the cultural substance of one of Vancouver's oldest neighborhoods. The trend toward 'facadism' is already at large in other parts of the city, and threatens the loss of the cultural substance of what makes Chinatown 'Chinatown'. It is necessary to recognize that the façade is only a small part of the building, and it is intimately connected to the structure of the whole. The building is a product of the people who inhabited it, and the time and context in which it was built. If everything but the exterior is destroyed, not only is there a severing of the interior to the exterior, but any valuable insight into the history of the place is lost. Facadism favors the instant economic benefit over the long-term cultural and economic benefits of what could be a collective cultural asset. This study examines how the architectural structures and systems of the Society Building are derivative of cultural practice, and develops a critical approach to historic redevelopment.

A critical heritage conservation practice stabilizes the community, giving a sense of permanence and place through the establishment of an economically, culturally, and environmentally sustainable neighborhood. It creates a new layer of history to the urban fabric, without erasing or obscuring what was left before. Heritage, like culture, should not be regarded as a permanent, absolute entity. "Heritage, must be constantly questioned, re-examined and re-evaluated, in living dialogue with contemporary reality. In order not to become merely an ossified vestige of a pre-modern past" (Hemer 10). Historical districts must be allowed to change over time to best suit the needs of the community.

Historically, the Societies of Chinatown offered housing and assistance to community members in the form of bunkhouses and SRO's (single resident occupancies). Today in Chinatown there are new

Residential Towers of Downtown Vancouver

social agencies that have adopted this role as community housing needs have changed. Chinatown is still a functioning community, not a mere tourist attraction as in some North American Chinatowns, but it has come of age. With an aging population and the majority of buildings not meeting base standard of living and code requirements, many historic buildings (including the Society Buildings) are only partially operational. Through the community development process that shaped the City of Vancouver's 'Chinatown Vision', conservation of heritage buildings and commemoration of Chinatown and Chinese-Canadian history are identified as goals. Heritage buildings are part of Chinatown's most important assets and make Chinatown unique from Vancouver's newly developed Asian commercial strips and malls. In addition, the Chinatown Revitalization Committee has recognized market housing as the key to long-term community sustainability and as the means to attract young people back into the community. Because the Society Buildings are the most complex and unique typology of Historic Chinatown architecture, they are used as a prototype for establishing a methodology as to how heritage buildings can be protected and preserved while accommodating adaptations to allow for future inhabitation. Four Society Buildings are documented, analyzed and partially redesigned in this study: the Mah Society of Canada, the Lim Sai Hor (Kow Mock) Society, the Shon Yee Benevolent Society, and the Yue Shan Society.

Historic Chinatown Showing Major Streets. Source: City of Vancouver VanMap. [Orthographic Photo]. 2004.

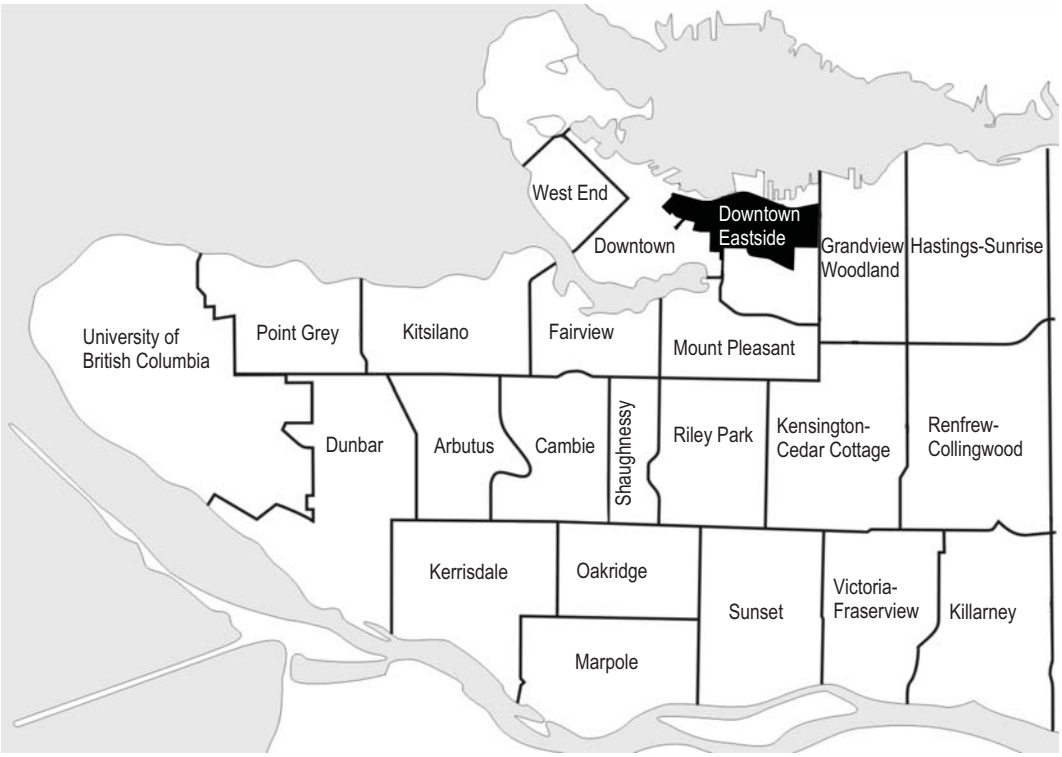
2.0 CHINATOWN CONTEXT

Vancouver's Chinatown is the largest in Canada and, in North America, second only to San Francisco. The historic Chinatown district lies just east of downtown Vancouver and is bounded by Hastings, Gore, Union, and Taylor Streets. Pender, Carrall and Main Streets once formed the commercial hub of the community, and today, Pender and Main form the vital commercial spine of the community. The growth of Chinatown's urban fabric has been closely linked with the influences of both historic and current Chinese immigration.

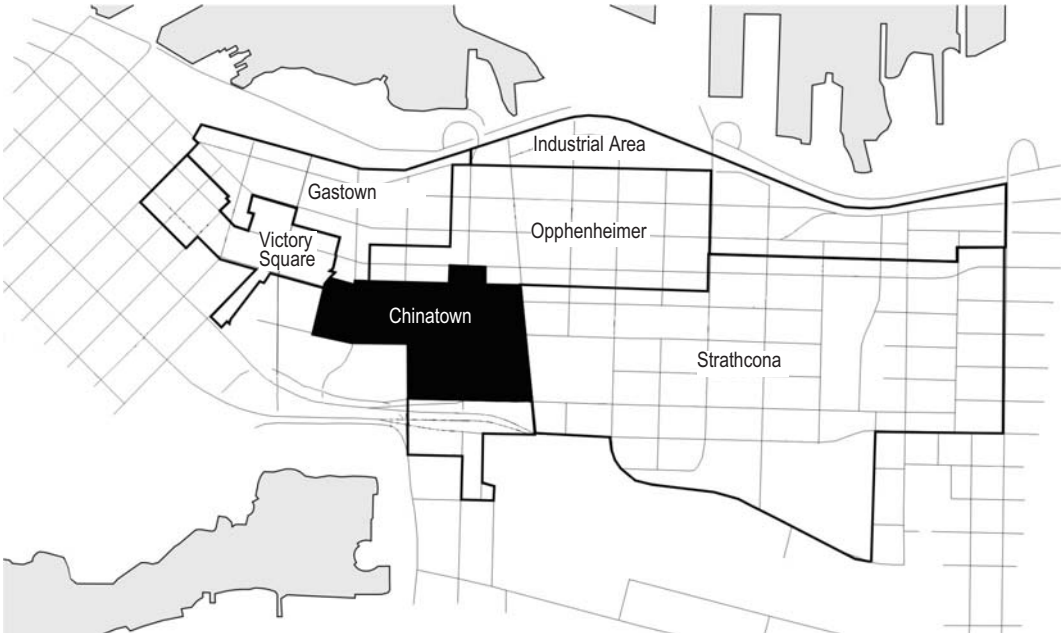
In the early 1800's, more than 15,000 Chinese, mostly from Guangdong province in the south, came to BC to work the gold mines and build the Canadian Pacific Railroad. Many of these labourers attempted to escape extreme poverty in China by working temporarily in Canada to save money for their families. Chinese labourers were paid less than white workers, and very few people were able to save the fare to return home. By 1886 the railroad was complete, and Gastown was the center of town. Chinese people, initially living throughout the city, were forced by racist and often violent practices to withdraw to one circumscribed ethnic enclave, which became known as Chinatown. To survive, many Chinese went into laundrey, housecleaning and the farming and selling of produce within the city. Despite external economic and social pressures, Chinatown grew into a rich and vital community, in part with the aid of the Societies.

Guangdong Province, China

City of Vancouver Within the Greater Vancouver Regional District
Source: GVRD website. Greater Vancouver Regional District [Map]. 2001.



Downtown Eastside Community Shown Within the City of Vancouver
Source: City of Vancouver. Vancouver Communities [Map].



Historic Chinatown Shown Within the Downtown Eastside Community
Source: City of Vancouver. Downtown Eastside Communities [Map].

Lee Association Building. Image Courtesy of the Vancouver Public Library, Special Collections, VPL 22643

Racism and discrimination were part of daily life, but in 1887 and 1907 there were major anti-Asian riots meant to pressure the Chinese to leave. Once the railroad was complete, the federal government passed the Chinese Immigration Act, placing a head tax on subsequent immigrants into Canada. This tax increased over the years, preventing wives and children from joining their husbands or fathers in Canada. In 1923, the Federal Exclusion Act imposed a 24 year total ban on Chinese immigration, isolating the community of men in Chinatown. After World War 2, the Exclusion Act was lifted and new waves of immigrants including women arrived. They worked mostly in restaurants, canneries, laundries and farmed and sold produce.

By the 1960's, Chinatown was a thriving community and entertainment hub, with well known late night restaurants and entertainment venues such as the Ho Ho, Yen Lock, Marco Polo and Kubla Khan. During this period, the City began to target Chinatown and the neighbouring community of Strathcona for 'urban renewal' redevelopment. In the early 1970's, the Chinese community successfully fought a municipal proposal to build a freeway through their community. Chinatown was designated an historic district by the Province of BC which, while helpful at the time for fighting massive urban renewal schemes, later proved a drawback to Chinatown's continued growth as it focused on preserving old buildings and strictly controlling new development. Community development has since been focused on surficial beautification projects (new street lights, street furnishings and banners), or large new buildings on cleared sites, while Societies have been limited in what they can do with their buildings due to heritage restrictions.

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In the 1980s, Canada added a new business class immigrant classification that made it easier to immigrate for those who would bring significant investment funds to Canada. The majority of business class immigrants to Vancouver during the 1980's and 90's were from Hong Kong. From 1983 to 1996, approximately 700,000 business people settled in the Greater Vancouver Regional District (GVRD) and brought billions of dollars worth of investment funds with them (Hansen 1). In addition, the 1989 Tiananmen Square massacre and the 1997 return of Hong Kong to China resulted in increased immigration, and over 8,000 mainlanders chose to remain in Canada. Many of these new immigrants settled outside of Chinatown, forming new polycentric Chinese communities in the Greater Vancouver Regional District (GVRD). From the 1980's to 2000, Chinatown entered into a period of decline due to the collapse of nearby Hastings Street, an exodus of Chinatown residents to the suburbs, and the effects of drugs, homelessness and prostitution in the Downtown Eastside.

Chinese Dragon Parade, Pender Street, 1960. Image Courtesy of the Vancouver Public Library, Croton Studio- Don LeBlanc, VPL 79795A

The most current Stats Canada profile for Vancouver indicates that nearly 700,000 of the overall population of 2,000,000 are foreign born citizens of Asian descent (1 Hansen). Both historic and current Chinese immigration has resulted in an 'Asian City', where over 45% of those who consider themselves a visible minority in the GVRD are Chinese (2001 Stats Canada). Vancouver's location on the Pacific Rim and it's unique history of immigration and trade relationships with Asia have launched Vancouver toward a unique North American urban condition as an 'Asian City' within Canada. Today, the Chinese population is completely integrated into the city, with more concentrated communities in Richmond, Coquitlam and Burnaby.

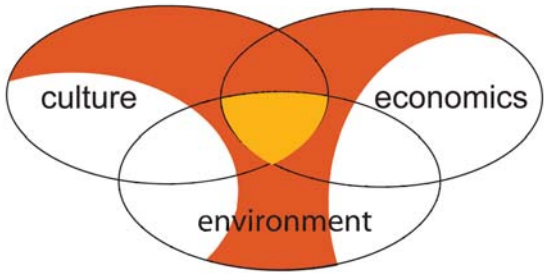
Chinatown is at a key moment in its evolution. It must now choose to exist, or risk disappearing altogether. Jessica Chen Adams, Central Area Planner at the City of Vancouver states, "Chinatown needs to change from a Chinese enclave to a global neighbourhood". As a symbol of the role of Asia in North America, Chinatown expresses where we have been, where we are, and what we will be in the future. The need to attract skilled workers and business class immigrants to the city necessitates a strategy that promotes diverse, high quality living environments. By capitalizing on its unique cultural assets, Chinatown can differentiate itself and set an example for a sensitive yet contemporary approach to heritage preservation.

3.0 HERITAGE AND SUSTAINABILITY

The Brundtland Commission's 1987 report on environment and development, 'Our Common Future', defined sustainability as development that involves "the economical use of existing resources without compromising the needs of future generations". Subsequent attempts to define sustainability have expanded this definition to recognize the impact of economic and cultural factors on long term environmental sustainability, and the subsequent importance of striving for long term economic and cultural sustainability. It is important to recognize that these three factors are mutually reinforcing and inseparable from one another. The sustainable rehabilitation of existing heritage buildings carefully considers the implications of environmental, economic and cultural factors and their interrelationship within the overall project. Also implicated in the Brundtland definition of sustainability is that of time. By respecting intergenerational responsibility, heritage restoration addresses current community needs while respecting history and considering the environmental, economic and cultural sustainability of the community for generations to come. Design is only one part of a holistic, sustainable redevelopment

The Chin Wing Chun Society, Designed by Architect R.A. McKenzie Who Practiced for 5 Years in China, Combines the Recessed Balconies of Southern China with Classical Western Pediment and Columns

process. While design can form the physical framework for a sustainable community, management, policy, and community involvement are all crucial factors in the effective orchestration of long term environmental, economic and cultural sustainability.



3.1 Environmental Sustainability

Environmental sustainability concerns the earth's capacity for regeneration. LEED (Leadership in Energy and Environmental Design) is used in this study as a measure of environmental sustainability. LEED was originally developed by the US Green Building Council to establish a common standard for green development, raise consumer awareness and stimulate green competition. Environmental sustainability is broken down into the following design criteria: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources and Indoor Environment Quality. Innovation and Design Process are also encouraged and rewarded by LEED.

Sustainable Sites

In this study, Sustainable Sites primarily includes the approach we call Urban Acupuncture. The selective redevelopment of appropriate sites within the historic fabric of Chinatown reduces site disturbance and is preferred over the historic modernist approach of demolishing entire community sectors in the interest of urban renewal. According to the Environmental Protection Agency in Washington, 36% of all energy consumption and 36% of all carbon dioxide emissions are directly or indirectly related to buildings and their construction. In addition, 20-30% of landfill space is taken up by demolition and construction debris. In terms of energy use and waste generated, the adaptive reuse of the existing architectural fabric is the more environmentally sustainable option. Urban Acupuncture attempts to intensify existing urban densities rather than building on undeveloped sites. This approach also intensifies the diversity of urban land use, providing the framework for flexible mixed uses of commercial, institutional, light industrial, and various types of affordable intergenerational housing. New spatial configurations could make more efficient use of space and also allow new uses to co-exist with existing uses.

Sustainable Sites also emphasizes on-site stormwater retention and infiltration with the use of permeable paving, eco roofs, cistern storage for stormwater and greywater for irrigation or flushing; reducing the urban heat island effect with the use of canopies, shade trees, and high albedo (light coloured) paving and roofing materials; usage of native, low allergy plant materials and organic management where appropriate; lowering light pollution by designing for minimum exterior footcandles; and the provision of bicycle storage while depending on offsite parking garages for local parking needs.

Water Efficiency

While Vancouver has the reputation of being a rainy city, its average annual rainfall is only about 1117 mm. Water conservation is important in Vancouver, particularly in summer months. In addition to stormwater and greywater reuse onsite, the usage of dual/low flush or composting toilets, waterless urinals, low flow faucets, drought and water tolerant indigenous vegetation and high efficiency drip irrigation systems are recommended in this study. Underground cisterns can be used to store winter stormwater for summer irrigation purposes.

Contemporary Redevelopment of the Wing Sang Building, the Oldest Building in Chinatown

Energy and Atmosphere

LEED's Energy and Atmosphere criteria emphasize optimal energy performance. Buildings will balance their energy needs with energy produced onsite, or actually produce more energy than they consume. While Chinatown's Society Buildings often utilized several passive environmental controls derivative from Asian building types, new technologies often replaced passive ones. This study proposes ways to replace high energy consuming technologies with rehabilitated and reinterpreted traditional environmental controls. Courtyards, solar chimneys, breezeways and lightwells are utilized for natural ventilation and lighting. Building overhangs, fins, and operable louvers and windows are recommended to keep the building cool in summer. Eco-roofs insulate the building, keeping it warmer in winter and cooler in summer. Renewable energy sources such as solar, wind, geothermal, low-impact hydro, biomass and bio-gas strategies should be explored for feasibility. Renovation or upgrades to services would not only improve living and social conditions but could also allow newer technologies that are more efficient in their use of resources. Mechanical cooling should not be used, but if necessary, All HVAC equipment should be free of CFC-based refrigerants.

Materials and Resources

The reuse of existing structures reduces the amount of materials and resources needed for redevelopment while retaining and capitalizing on cultural resources. Recycling and reusing materials found onsite; using locally harvested, locally manufactured, and rapidly renewable materials; and building flexible architectural structures that can be easily adapted to a diverse range of uses minimizes the usage of new materials and the amount of construction debris generated through demolition and construction. Materials such as certified wood, bamboo, wheatboard, strawboard, wool, cotton insulation, agri-fiber, and cork are encouraged.

Indoor Environment Quality

Enhanced indoor air quality for occupant health and safety is achievable through the use of carbon dioxide sensors, non-smoking regulations, solar chimneys and cross ventilation, low emission materials (paint, carpet, adhesives, sealants, composite wood and agri-fibre) and increased personal control over one's microclimate through the use of operable windows, personal airflow control, and dimming options for lights.

3.2 Economic Sustainability

Although there are significant costs attached to historic renovation, the costs of demolition and building anew can also be exceedingly costly. Expensive public infrastructure such as water, sewer,

gas and electric utilities can be reused or adapted. In addition, historic restoration is shown to increase property values within a neighbourhood by increasing the diversity of properties within the city. The heritage of the district becomes an asset and a trademark for the city at large, having larger economic consequences in terms of marketing and tourism. In terms of the Society Buildings, heritage revitalization could provide a range of housing types throughout the Chinatown District that provides intergenerational housing that includes young people and families, as well as seniors. A diversity of housing types allows greater flexibility and, by not relying on one market niche, in the long term is much more economically sustainable. Increasing the number and type of dwellings will increase the demand for goods and services within the neighbourhood, and enable businesses to thrive. Retaining the parts that are working, such as ground level retail and Society meeting spaces while adapting specific sites within the larger urban fabric that need repair, introduces change at a pace that can be absorbed by the community over time, while leveraging on what is already successful.

Overly focusing on tourism in an historic district may leave the community that remains vulnerable to off season economic lulls and above ground spaces that are unusable in a limited market. Simultaneously providing residential, institutional and commercial spaces diversifies the economic base of the community, and ensures a market base that can support new business during the day and in the evening.

3.3. Cultural and Social Sustainability

Historic districts often express a rich layering of historic architecture, places and events that constitute an important part of a city's cultural heritage. These districts, because of their location, spatial richness and cultural value draw positive attention to the city, but because of their age and potential dereliction, may be vulnerable to conflicting interests such as the demand for affordable housing, commercial exploitation, land speculation and the preservation of cultural heritage. Sustainable development is interlocked with cultural vitality, and should be seen as a vehicle for long term economic growth, poverty alleviation and community development. Historic cultural heritage is a resource that should be valued and integrated into the larger fabric of the functioning city. By viewing heritage as cultural capital, it can be utilized as a development asset that can help to provide employment, mobilize communities and generate income.

The global tourism industry makes it advantageous to support the preservation of historic districts, but at the same time there is a tendency to compromise the living fabric of communities by focusing on stereotypical historic images, turning the community into a two dimensional backdrop for exhibition.

This ‘disneyfication’ has been common in Chinatowns across North America, resulting in gentrification processes that push residents out to more affordable neighbourhoods, or turn them into an exotic tourist exhibition. Historic districts are more than just material and physical heritage, they also include landscapes, residents, customs, jobs, economic and social relations, beliefs and urban rituals (Mutal 25). Mechanisms should be put in place to ensure social equality and justice. The community should retain or obtain jobs, income and self pride with any tourism strategy.

Revitalization can also lead to higher land values and gentrification, where local residents are ousted and only buildings are safeguarded. Since knowledge of one’s history is important in the creation of identity, accessibility to one’s cultural heritage can be considered a human right. Any development project should be cognizant of the priorities and history of those who live in, and who have lived in, the neighbourhood, while respecting quality of life for future generations to come. A culturally sustainable approach contributes to long term social stability while enhancing the quality of the urban fabric. Heritage restoration projects should not only revitalize cultural and historic heritage, they should promote the local economy and good governance. It is important to recognize that design can only be one part of a successful strategy for sustainability, and that in order to be successful, it needs to be accompanied by thoughtful and progressive policy and enterprise.

The urban fabric embodies collective memory. Intergenerational responsibility connotes that what is present, will one day become history. Historic revitalization should include contemporary overlays that widen the historic context yet add to a sense of continuity and connection to the past. This approach allows new ideas to evolve that are relevant to contemporary needs. Future memories can be carried forward in our urban fabric that interprets the existing in ways that are meaningful to both the past and present. This approach protects the unique histories and formal attributes of the community, and contributes to the development of cities that are unique, and thus competitive.

Intergenerational Neighbourhoods in Chinatown

Run Down Building in Chinatown

4.0 METHODOLOGY: URBAN ACUPUNCTURE

Urban Acupuncture is a methodology designed to maintain and build sustainable, authentic communities. It focuses on the selective redevelopment of appropriate sites within the historic fabric, carefully removes what is not working, and inserts a contemporary, appropriate intervention to stimulate urban regeneration. While specific to the Society Building typology, this methodology is generalizable as a basis for rehabilitation projects in other historic contexts.

Through this process, four major characteristics of Urban Acupuncture were distilled:

1. Urban Acupuncture grows out of interdisciplinary collaboration and research
2. Urban Acupuncture sees building form as multidimensional, not reduced only to the facade
3. Urban Acupuncture supports diverse programme.
4. Urban Acupuncture encourages the coexistence of a contemporary layer

1. Urban Acupuncture grows out of interdisciplinary collaboration and research

Vancouver's Chinatown continues to be a vital, functioning community of residents and business owners, and should not be treated solely as a tourist destination. In anthropological terms, this necessitates an emic approach, rather than an etic approach to community revitalization. The traditional etic approach, sees the neighbourhood as a series of visual resources, and is primarily focused on the imageability of exterior surfaces and how the community appears to the 'outsider'. An emic approach recognizes the need to work from within the community in a collaborative process. While design can form the physical framework for sustainable community housing, a sustainable revitalization strategy is a collaborative process developed with multiple partners through management, policy, and community involvement. The project should be developed simultaneously from the top down and the bottom up. Heritage is constantly evolving, shifting and belongs to many. Because of this, there will be many interpretations of its value. All resources and interested parties should be consulted for information, expertise and ideas including municipal, provincial, and federal agencies and policymakers; academic departments and outreach; historians; marketing consultants, community organizations; residents (past and present); finance groups; marketing consultants and businesses.

This study builds on a recently completed City of Vancouver study, "Historic Study of the Society Buildings in Chinatown", a social history of Societies and their buildings completed by the Chinese Canadian Historical Society (CCHS). The individuals on the Steering Committee for this CCHS project included a UBC social historian, a UBC architectural historian, members of the Chinatown Revitalization Committee (CRC), a historian from the Vancouver Historical Society, two representatives from the Vancouver City Planning Department, and a team of researchers including Chinatown residents, architects and historical researchers.

The primary researchers for this study are UBC Assistant Professor in Architecture Inge Roecker and Landscape Architect Kelty Miyoshi McKinnon. Inge Roecker is also a member of the CCHS and the CRC, and both Kelty and Inge have taught UBC design studios in Chinatown. City of Vancouver Planner Jessica Chen-Adams, and planning assistant Helen Mah were the liaisons with the Societies and greater Chinese community. A team of research and design assistants, Sengsack Tsoi, Allie Sheil, Vivian Tong and Ting Pan assisted with research, design production, graphic design, layout and interpretation. Research included library, internet and archival research, direct architectural observation and analysis, and discussions with various individuals working and living in Chinatown.

At the core of Urban Acupuncture is research. The research for this study was gathered from multiple sources including (please see Bibliography for specific studies, journals and books):

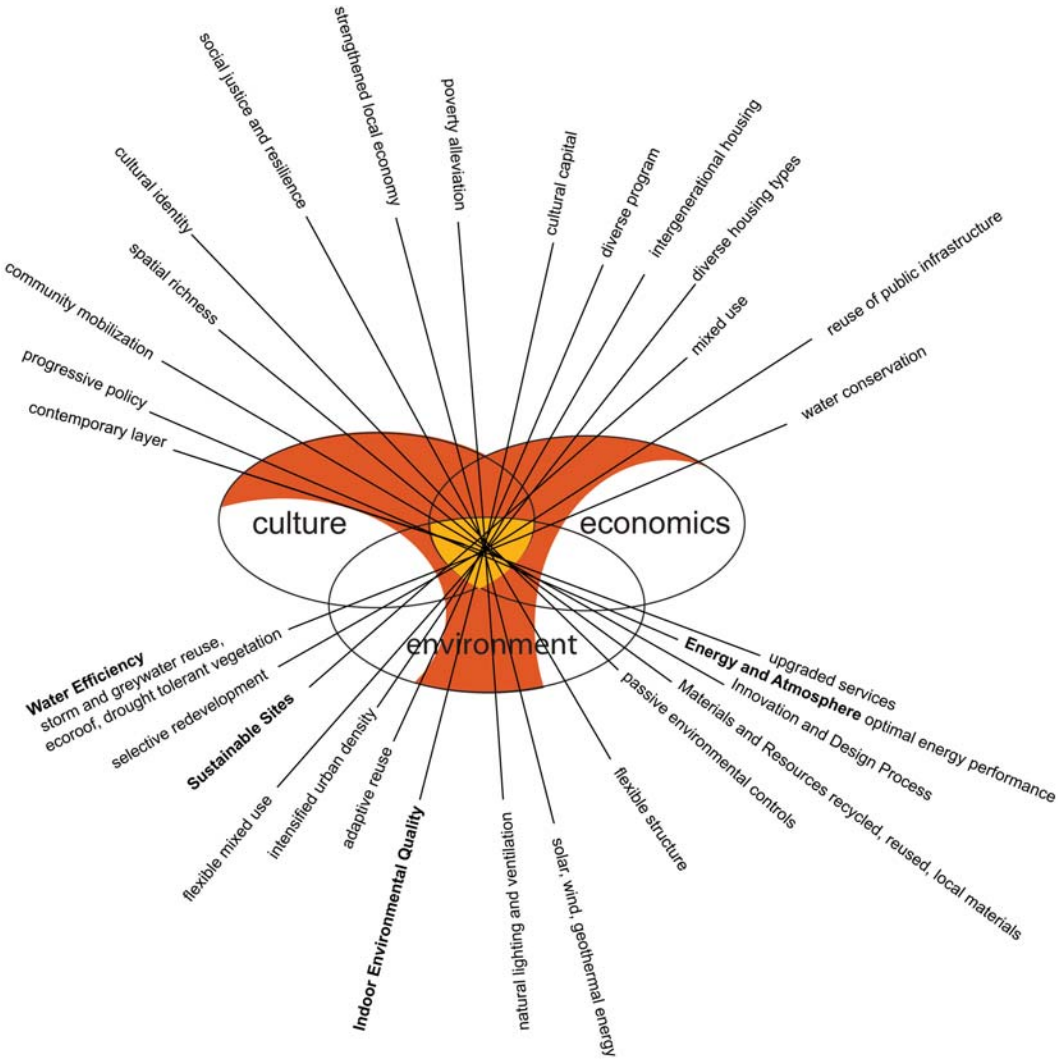
- City of Vancouver- Central Area Planning
- CRC (Chinatown Revitalization Committee)
- CCHS (Chinese Canadian Historical Society)
- Chinatown Community Center (CCC) and Archives
- SUCCESS (United Chinese Community Enrichment Services Society)
- Representatives from each Society: Mr. Fred Mah (Mah Society of Canada), Mr. Hon Lam (Lim Sai Hor Association), Mr. Rick Lam (Shon Yee Benevolent Association), and Mr. David Lam (Yue Shan Society)
- Business Owners in Chinatown
- Architects working in Chinatown
- Current residents of Chinatown and Society Buildings (seniors, youths, families, entrepreneurs, students, etc.)
- Vancouver Historical Society
- UBC School of Architecture and Landscape Architecture- Chinatown Studio
- Dissertations from various university departments (History, Architecture and Landscape Architecture, Urban Design, City Planning, Cultural Studies)
- Structural engineers (for seismic information)
- CMHC (past studies in sustainable design and historic restoration)
- LEED Canada
- Vancouver Public Library Historic Archives (Historic fire insurance maps)
- Vancouver Public Library, University of British Columbia Library (Books on Chinese vernacular architecture and its transformation over time, Chinese migration, Vancouver's historic development, sustainable architecture, urban design, historic revitalization, etc.)

2. Urban Acupuncture sees building form as multidimensional, not reduced only to the façade

Compared to Asia and Europe, Canadian cities are relatively young. The oldest Canadian city, Quebec City, is only 400 years old. Vancouver itself was incorporated in 1886. Despite the fact that the area has been occupied by first nations people for 3000 years, the urban fabric of Vancouver is only 200

years old. Comparatively, Guangzhuo in Guangdong province has been an urban settlement since 214 BC, when it was known as Panyu. The approach to historic rehabilitation in Canadian cities has tended to be prescriptive, focusing primarily on the preservation of the surficial, exterior qualities of autonomous architectural objects. This has been described as 'facadism'. But this approach reduces the life history of the building to a unidimensional representation of history, and ignores the fact that buildings are derivative and evolving spaces that adapt in response to shifting cultural, economic and environmental influences. Buildings are reflective of past, present and future conditions, and are therefore constantly in a state of becoming. This necessitates an understanding of architecture as never reaching a state of 'completion' but as simultaneously reflective and responsive of contextual conditions. The Society Building manifests these qualities over space and time. Despite the relatively young age of the Society Buildings in this study, as products of global migration and trade with China as described in Section 5.0, they demonstrate the importance of allowing building form to adapt over time. The Chinatown Revitalization Committee recommends that Chinatown should not be redeveloped as a tourist destination (etic approach), but should be re-established as a thriving, multigenerational community of both residents and visitors. This emic approach understands architecture as a complex product and process of adaptation to structural need, technology, environmental factors, program, economics and sociability that evolves over time. The neighbourhood should not be seen as a series of discrete artifacts, but as a living environment, interwoven with communal gathering and circulation routes, and a complex layering of public, semi-public, private, and semi-private space. These spaces are constantly shifting, opening up, and filling in.

A list of key questions was developed throughout the process of research, analysis and design for each of the four Society Buildings. These questions are seen as generalizable to other historic contexts and were used to guide the process, to help form alliances that respond to the unique local conditions of each individual project, and to help discover meaningful relationships that can direct the design. These questions can be broken down into Environmental, Economic and Cultural/Social categories, but it is important to note that just as historic architectural meaning is found in the embedded spatial relationships within buildings, meaningful information is found in the interrelationships between these questions. As demonstrated in the diagram, there is overlap, and each question could be asked from the perspective of each category. For example, one might ask "what spaces are underutilized?" from an environmental, economic and a cultural/social perspective, and begin to see how these categories influence one another.



The results of these questions can be found under the description of each Society, Society Building, and proposed design in Section 8.0.

Environmental

- What were the local site conditions and how did they change over time?
- How is the building heated, cooled, ventilated?
- How does the building handle stormwater collection and drainage? Was water re-used?
- How does the building receive sunlight? How does it protect from overheating and glare?
- How does the building handle seismic loading?
- Is there anything unique about the building systems (seismic, plumbing, electric, structural, stormwater drainage, ventilation, heating, etc.)?
- How were outdoor spaces used? Were there spaces for food production? Plantings?

Cultural/Social

- Who was the architect? Patron? Builder? Inhabitants over time?
- How was the building renovated/adapted over time?
- What spaces are not in good use, are underused or unusable?
- How are the spatial volumes expressed? How do they interface one another? What is the interface between interior and exterior of the building?
- How are private and public spaces structured within the building? How do interior public and private spaces and circulation interface with exterior public and private spaces?
- What program could be beneficial to the community? What is missing, what is needed, what is desired?
- What is particular about the building style or materials that is unique to this building?
- Does the building conform to specific cultural typologies? Have they been modified to local conditions?
- What are the distinctive characteristics of the building? Unique structural, technological, environmental, circulation, spatial allocation, form, façade, room dimensions / volumes, detailing, symbolism, program, etc? What is unique about this building?
- How did the building contribute to the greater urban fabric over time?

Economic

- How was the building funded? How is it supported today?
- What grants, incentives, tax breaks, zoning restrictions, requirements are there? What is working? What might be more effective?
- What program is economically viable? What are the market forces?
- What will maintain its inherent economic vitality?
- What are the immediate and long term needs of the community?

The analysis phase synthesizes information gathered through research in order to recognize relationships amongst the findings, and to see the interrelationships between the environmental, economic and cultural. Analysis evolves through discussion, experimentation and contemplation. The results of these questions can be found under the description of each Society, Society Building, and proposed design.

- How does the building contribute to the larger community environmentally, economically and culturally? Is it sustainable environmentally, economically and culturally?
- How does the building structure physically express social circulation and gathering?
- Is there a relationship between environmental controls and social spaces? How do they interface/overlap?
- Physically what is possible? What is the best fit? What is worth keeping / doing? What is the best space for a new addition (didactically, programmatically, environmentally, etc.)
- Who do we want to attract to the community? How can they best be accommodated?
- What parts of the architecture can most flexibly respond to changing need?

- What program could the existing structure support with little intervention?
- What interventions will respond best to the immediate and long term needs of the community?
- How can the spatial structure, program, materials, technology, interface between public and private realms best respond to the immediate and long term needs of the community?
- How can the public / semipublic / semiprivate / private spaces of the architecture be reinterpreted and relinked with the environmental systems of the building? How can the environmental systems be reconnected to the structure and programs of the building to reinforce social spaces?
- How can the intervention create more opportunity for social interaction between residents, businesses and the greater community while enhancing and maintaining the need for privacy in living spaces?
- Are there policy/incentive changes that need to occur at the municipal level to enable meaningful changes to occur?

3. Urban Acupuncture supports diverse programme

Diversity is the key to a viable, resilient community. Decisions should be made that respect intergenerational responsibility by addressing current community needs while supporting long term diversity and sustainability. Designing for a living community necessitates planning for diverse ages, communities, and incomes with various types of affordable intergenerational housing. Providing a diversity of flexible housing types resists relying on one market niche and in the long term is much more sustainable. A wide variety of unit sizes and configurations should be designed to accommodate a diverse range of people in various living scenarios: families, couples, individuals, seniors, and single parents. Increasing the number and type of dwellings will diversify the demand for goods and services within the neighbourhood, and enable businesses to prosper. Commercial and institutional uses should also be accommodated within the community to diversify the economic base of the community and maximize its long term longevity.

Each Society Building Case Study emphasized different opportunities and constraints for programmatic intervention. These opportunities and constraints were realized through research, analysis and testing. The results are described in Section 8.0, ‘Society Building Case Studies’.

4. Urban Acupuncture encourages the coexistence of a contemporary layer

The historic district is an evolving, accretive continuum, and any architectural intervention should be seen as yet another layer that will add to the patina of the community over time. This does not mean that history should be ignored; rather, it should be interpreted in a contemporary way formally, spatially, structurally, materially and programmatically. Not only does mimicking the past tell us nothing of where we have been, or where we place ourselves within the present; it fails to respect

the fact that our present will soon become another layer of community history, and that we are only part of larger process.

Urban Acupuncture also recognizes that not all historic changes to the buildings were advantageous. For example, the invention of air conditioning brought the most radical evolution to the built form of the Society Building as courtyards and breezeways were filled in because their purpose was identified as only to cool the building. The courtyards' multivalent functions of providing sunlight and fresh air to the inner depths of the building and accommodating movement and spaces for social interaction were lost. A critical approach to historic revitalization acknowledges that not all 'historic traces' are appropriate, and must make decisions about what to maintain, what to add, and what to discard.

The design phase emphasizes the analysis and synthesis of information gathered during the research phase. The problem with design processes that utilize public process as the primary form generator is that the design often reflects only the research. Design should recognize the training and expertise that designers bring to the rehabilitation process. By gathering information from individuals in their fields of experience and expertise, designers can then analyze and synthesize the information, and test solutions. Solutions may then be introduced to the broader community for feedback, further research, revision and redesign. Through the process of research, analysis, and design, several design principles have been formulated for the rehabilitation of the Society Buildings in Chinatown. The results of the design process can be found in section 8.0, 'Society Building Case Studies'.

5.0 SOCIETIES AND SOCIETY BUILDINGS

5.1 The Society

The concept of Jia, roughly translated as House, Home and Family, embodies an attitude toward identity quite different than western notions of individuality. “Chinese people define their own identity through understood interpersonal relationships, creating personal boundaries beyond the physical self to that of family and community. Chinese character is that of a clansman rather than a citizen, whose role relates to both local community concerns and its participants” (Ming Lee 2003, 7). The extended limits of social and physical identity were expressed in the form of the house, where several families, often descended from a common patrilineal ancestor, would live together, owning some common property and under the leadership of the most senior man. Kin groups were built around ancestral sacrifice, the sharing of common property, and eating together under one roof.

The Chinese Character for Jia Means House, Home and Family

The majority of Chinese who first came to Vancouver were from the Guangzhou (Canton) area, and Hong Kong in Guangdong province. It was common then for men to work and live in other countries in order to support their families in China. Land and wealth were transferred within families, so supporting one’s family was of utmost importance. Societies in Chinatown were formed around shared surnames or home counties, and worked to rent out collective local land, and to sponsor schools and build dykes in China (Yee 1998, 12). Family members in Canada were expected to contribute to the wealth of the clan, so that all members could benefit from the clan’s power and prestige. The Society was a familial structure that became a home away from home, enabling members to continue their familial roles while abroad.

There are four types of Societies or Associations in Chinatown:

1. Family or clan societies (zongqinhui, tongsuo or gongsuo) members share the same surname/ lineage. Common in the South of China were villages where all of the residents had the same surname. Our study looks at the Mah Society of Canada and the Lim Sai Hor Association, organised by the Mah family and Lim families respectively.

2. County (xian) society members came from the same county in China. Our study looks at the Yue Shan Society whose members originate from Poon Yue county, and the Shon Yee Society whose members originate from Zhongshan province.

3. Associations supporting the entire Chinatown community. Eg. The Chinese Benevolent Association's members were often also members of other county or clan societies.

4. Societies formed around hobbies or political, cultural, and athletic activities. Eg. The Ngai Lum Musical Society on the ground floor of the Lim Society building.

1. Mah Society of Canada

2. Yue Shan Society

3. Chinese Benevolent Association

4. Ngai Lum Musical Society

Many of the Associations and Societies in Chinatown started out as casual fraternal gatherings as men met informally in trading companies owned by friends from the same county in China. These connections became important links to home counties, families and friends, as they began to use business networks to send mail and remittances home. As the Societies were formalized, their role expanded to offer support, social security, protection from harassment, job assistance, affordable housing, and a sense of family and community to members. Societies operated on the ideals of loyalty, brotherhood, mutual respect, and charitable services. The Societies had a formalized welfare program long before Canada's was in place. The Society Building was a community centre where members could read books and newspapers, play games, and sing together. In addition to assisting members with everyday needs, deeper cultural traditions were often upheld through the creation of Chinese schools, cultural clubs, and community festivals; and the organization of ancestral altars, annual sacrifices to ancestors, and funerary services including the shipping of a member's bones and ashes back to their home village. Societies predominantly raised money through baizhui, the selling of shares to members and the larger community. Funds raised were used to build Society Buildings that housed headquarters and offered affordable housing for members. Rooms were rented to members and other organisations as a source of revenue for the Society. Revenue was then used to commission the building of schools and clinics in Chinatown, greater Vancouver, and China; and to fund Society events.

Today there are 16 Society Buildings in Chinatown, though the majority of their members now live outside of downtown Vancouver. The SRO's and bunkhouses on midlying floors of most Society Buildings are either inoperable or managed by an external rental company. Chinese immigrant services are now mainly provided by SUCCESS (United Chinese Community Enrichment Services Society), an organization that offers new immigrant settlement programs. Despite this fact, Societies continue to take a very active role in the organization of philanthropic activities, community activities, and meetings.

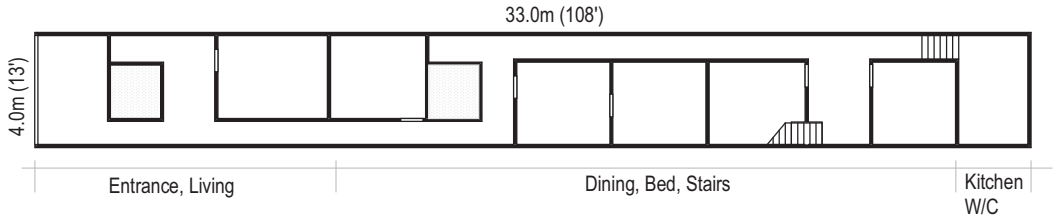
SUCCESS (United Chinese Community Enrichment Services Society)

5.2 Bamboo Tube House to Shophouse to Society Building

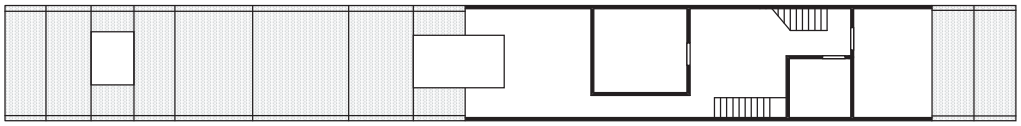
The Society Building is a typology unique to North American Chinatowns, a true hybrid architecture that conflates aspects of the Chinese regional Shophouse typology where the clan is from, with western styles and building methods. Within North America, Vancouver and San Francisco are the cities with the most Society Buildings, while Victoria and Seattle have only a few. Even within Chinatown there are great variations between Society Buildings, but they all share common vocabularies derived from the Asian Shophouse typology. The Shophouse traces back to early 19th century Fuijan and Guangdong provinces, where it's precursor is thought to be the Bamboo Tube House (Oliver 1997, ?), a narrow, deep, two storey urban dwelling. High real estate prices and taxes resulted in hundreds of narrow Tube Houses along primary urban arteries forming a tightly knit urban fabric and continuous urban street wall. The evolution of the Bamboo Tube House to Shophouse and then Society Building was a multifaceted process that responded to cultural, climatic, technological and social forces over time.

Culture

As trade flourished in Southern China, the Asian Shophouse typology developed from the residential Bamboo Tube House to accommodate mercantile live work spaces. The Shophouse is a mixed use building typology with retail on the ground floor and living area on the upper floor or retail in the front and living space in the back. Guangdong was an active trading port frequented by Europeans and migrant Chinese: extensive trade networks were established with Britain, Portugal, Italy, the Netherlands and France, while Chinese migrants left Guangdong for North America and other SE Asian countries such as Malaysia and Singapore. Traditional Guangdong Shophouses were being built in Batavia, Calcutta and Madras by the late 1800's, and throughout the 1900's, the Shophouse spread through Southeast Asia into Malacca, Penang, Hong Kong, Bangkok and Singapore. Sir Thomas Stamford Raffles, the British founder of Singapore, developed the masterplan for Singapore which emphasized a grid system of intersecting roads lined with Shophouses of uniform width, height and depth and walkways of standard dimension. Raffles' building codes "…provided the underlying architectonic principles that launched the development of the Singapore shophouse, enabling a South Chinese urban vernacular building form to be transformed into a new Anglo-Chinese architectural typology" (Lee 2003: 123). While considered a Chinese vernacular typology, the Asian Shophouse demonstrates the difficulty of historical periodization. There is much scholarly disagreement as to the 'origins' of the Shophouse typology. Some believe that its form was most influenced by Italian and Portuguese housing, while others insist on the lineage of the Bamboo Tube House. In any case, it attests to a globalized architecture that was constantly in flux, adapting to its surroundings,

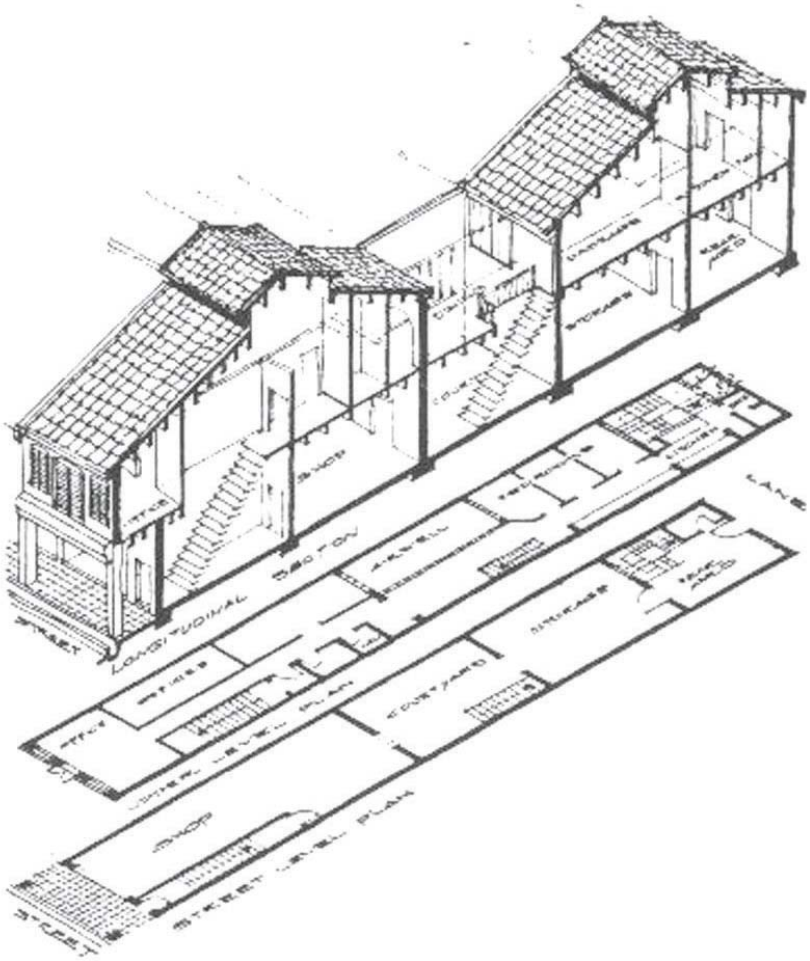


Ground Floor



Second Floor

Typical Bamboo Tubehouse



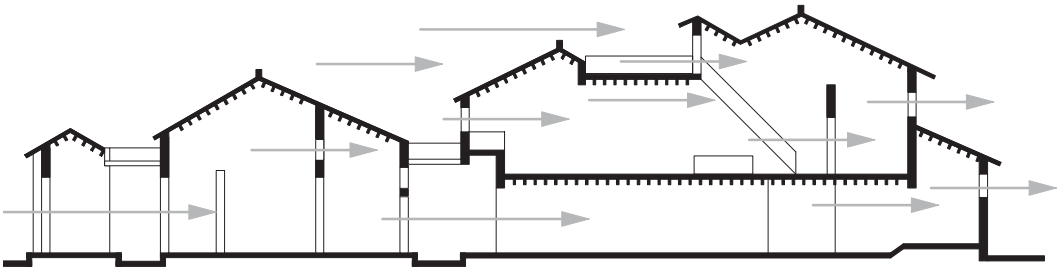
Asian Shophouse. Courtesy of Penny Gurstein.

and freely borrowing influences that allowed adaptation in new contexts: Even within Guangdong, there were differing articulations and design motifs from colonizing countries as well as other parts of China. Chinese vernacular architecture tends to be heterogeneous in style as is a result of China's 56 disparate nationalities.

Climate

Guangdong's climate is subtropical, rainy and hot. Architectural emphasis was placed on the control and usage of light, air and water through the capturing of shade, rainwater and fresh air. Passive techniques such as cantilevered balconies, courtyards, high ceilings, ventilating roof structures, lightwells, breezeways, double roofs, roof gardens , thick brick walls, and the use of hollow bricks on the building exterior were all used to minimize the effects of heat, rain and glare in a tropical climate. In addition, the continuous street wall formed by shared party walls and uniform setbacks cast a cooling shadow on narrow Guangdong streets, protecting from the sun and heat. Culturally accumulated wisdom resulted in an emergent building form carefully arranged to mitigate environmental factors, creating comfortable internal and urban microclimates.

On arrival in Canada, many of these elements were maintained in the Society Building typology. Elements of the building, originally meant to protect from the harsh sun of South China, were adapted to protect from BC's rain. Arcades and cantilevered balconies were replaced with recessed balconies and canopies overhanging the sidewalk. Thick brick and hollow walls were no longer necessary for cooling the building, and local materials and building methods were substituted.



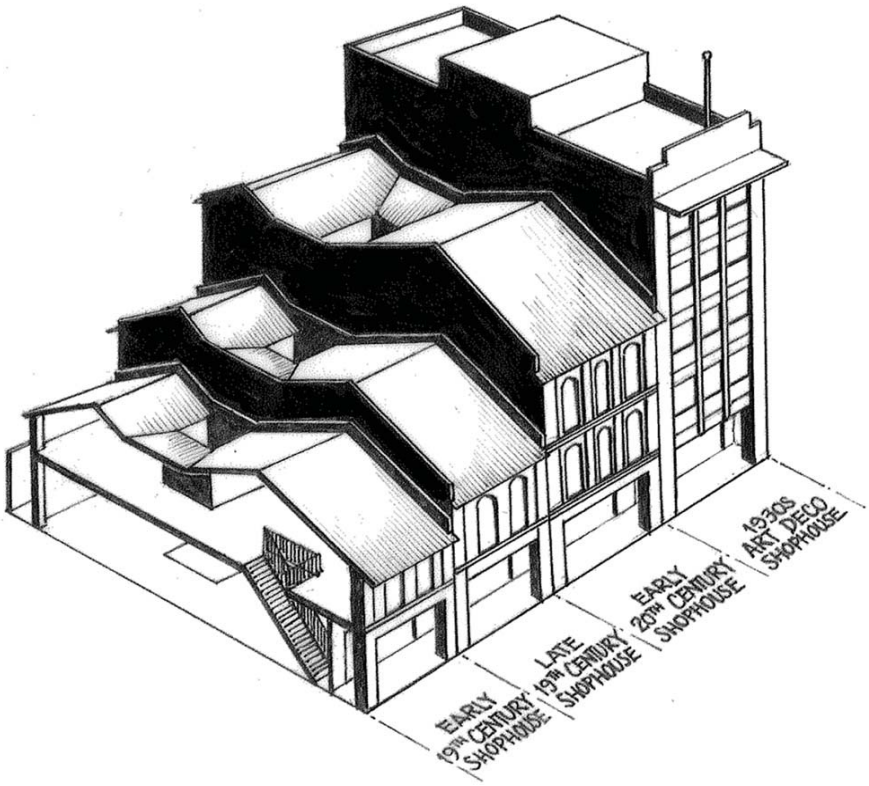
Interconnected Environmental Controls, Circulation and Social Space

Lee's Benevolent Association in Victoria, B.C.

A unique aspect of the Society Building is the manner in which environmental controls, such as courtyards, breezeways, lightwells, recessed balconies and fire escapes, are inseverably connected to the circulation and gathering spaces within the building. Complex, multifunctional spaces evolved, consciously and subconsciously, over time, accommodating and enabling varying levels of privacy and sociability. The microclimates created in and outside the building reinforce the sense of community within the Society.

New Technologies

The introduction of new technologies to the Shophouse typology often created opportunities to adapt and adjust building form to accommodate spatial uses not possible or advantageous before. With the introduction of electric ventilation, and air conditioning, multiple gable roofs were no longer needed for roof cooling, and the Shophouses could then be constructed with what was then considered to be the more fashionable flat roof. As systems for waste disposal and water drainage were developed at a city wide scale, alleys became more prevalent in Chinese cities. Buildings were no longer built back to back, but with both buildings backing onto an alleyway. Kitchens and lavatories were located at the rear of the buildings for easy collection and removal of waste.



Evolution of the Shophouse. Diagram Courtesy of Lee Ho Yin

Occasionally adaptations were made to the building, not recognizing intrinsic secondary uses of existing architectural spaces. The introduction of automatic ventilation and alley drainage systems also led to the disappearance of courtyards in the interest of maximizing rentable living space. While ventilation may have been maintained, vital semi public social spaces were lost, as well as access to sunlight and the outdoors. As spatial arrangements were altered, so were the invisible social networks previously facilitated by the structure of the building, resulting in diminished livability.

Shifting Social Patterns

Shifting programmatic needs in response to economic and demographic changes also brought about the evolution of the Bamboo Tube House and the Shophouse. The Bamboo Tube House, a narrow single bay residential structure, was usually divided into three zones. The front door opened onto a hall with a shrine and ancestral tablets, the central zone included the dining room, bedrooms and stairs leading to the first and second floors, while the back zone housed the kitchen and lavatory. These single family residences gradually evolved into three to four storey multifamily tenements with one family per floor.

As previously described, the Shophouse is believed to have evolved from the Tube House to accommodate a need for retail space within the dwelling to compete on the market. Primary village streets were ideal locations for merchants, and high real estate prices and the interest in lower tax assessments resulted in narrow, deep Shophouses forming a uniform street wall. The Shophouse accommodated retail on the first floor, with residential above. Similar to the Society Buildings in Chinatown, these Shophouses sometimes quartered up to 200 people (Kohl 1984:177). Shophouses and Society Buildings were sometimes expanded to the back as families and clans prospered and grew, and the family shrine and meeting rooms were located to the top floor of the complex.

The Society Buildings in Vancouver housed bachelor communities, with up to 6 men per room. When Chinese women were finally able to enter the Canada, bunkhouses and sro's were partially modified to accommodate families. Shifting tastes also resulted in building modifications over time. Society Buildings were adapted and modified as funds were raised.

6.0 SOCIETY BUILDING CHARACTERISTICS

Several characteristics demonstrate the Society Building's response to cultural, climatic, technological and social factors and its evolution from the Asian Shophouse:

- Scale, Proportion and Fine Grained Development Patterns
- Mixed Use
- Alleyways / Double Frontage
- Continuous Street Wall and Ratio of Building Height to Street Width
- Urban Breezeways
- Courtyards and Lightwells
- Recessed Balconies
- Arcades and Canopies
- Interior Breezeways
- Clerestory Lighting and Ventilation
- Mezzanines
- Staircases
- Altar and Shrines
- Materials
- Ornamentation

Scale, Proportion and Fine Grained Development Patterns

The classic Society Building in Chinatown is similar proportionally to the Asian Shophouse, though there are Society Buildings that deviate from this convention. The Asian Shophouse, like the Bamboo Tube House, had narrow frontage on a deep lot. The typical Tube House was only 4 m (13') (1 bay) wide, and between 10-20 m (32' to 64') deep, though depths could reach up to 33 m (108') as depths were not regulated. China's Shophouses were narrower than those in Singapore and Malaysia, due largely to accommodating the larger populations of cities and towns. Typical widths of Guangdong Shophouses were 4.5 m (14'-8"), versus 6.4 m (21') abroad. Depths were unregulated, and depended on necessity and what owners could afford. Although the depth of Guangdong Shophouses were typically between 12 m (39-4") and 20 m (64'), some houses could be as deep as 35 m (114') allowing a width-depth ratio to be as great as 1:9 (Wu 1997, 899). As building technology improved, Shophouses grew higher. Early Shophouses were generally 2 storey low-rises, eventually reaching 3 stories. In cities like Singapore, zoning regulations resulted in a continuous street wall with uniform ceiling, door and window heights. Shophouses often shared a party wall. Widths, depths and heights in Singapore, Malaysia and Vancouver were based on uniform building dimensions dictated by local planning. A more uniform building fabric resulted. Singapore regulations required Shophouses to be built in a linear fashion at a specific width, no more than three stories high and laid out using a grid system of intersecting roads.

The narrow façade, large depths and maximum possible heights evolved for purposes of taxation. As the population in Southern China expanded exponentially, so did urban land prices. Individual tracts of urban land were subdivided into plots of equal width in order to maximize the number of Shophouses that could be developed. The purchase of one plot meant that a shophouse had to be built at the prescribed width, but could be as deep as was needed (Lee 2003: 123, Wu 1997:900). The width of the Shophouse may also be linked to the maximum span of local timber used for beams and joists. These structural members would span dividing party walls between adjacent lots (Lee 2003: 123, Hancock 1986: 20).

In Vancouver, Society Buildings were built on 25' x 122' lots, with a width-depth ratio of 1:5. This lot size was not isolated to Chinatown - many of the lots in Gastown and Vancouver's Eastside had these dimensions. Larger buildings were made up of 2 or more of these lots. "Shophouses in Vancouver's Chinatown are clearly larger than those of its Asian counterparts. Despite the differences in physical size between buildings, however, there is nevertheless a comparable width-to-depth ratio between shophouses in different countries" (Lee 2006, 32). By the time the Society Buildings were built in Chinatown, building technology had improved enough to be able to build up 4 to 5 stories. Ghetto conditions meant limited space to build in Chinatown and building up was often the only way to gain more living space while remaining compact. What has resulted is a relatively fine grained development pattern that is integral to Chinatown's urban fabric.

Historic Chinatown. Source: City of Vancouver VanMap. [Orthographic Photo]. 2004.

CBA Building on Pender Street

Mixed Use

Like the Shophouses of Southern China, the typical Society Building had a commercial ground floor used to generate revenue to support midlying, residential floors. The ground floor retail space was rented to diverse businesses- from restaurants and newspapers to laundries and tailors. Restricted to ghetto like conditions, space was at a premium and Society Buildings were designed to house the maximum number of men within minimum spatial conditions. Society Buildings offered communal bunkhouses and SRO's (single resident occupancies) to their primarily bachelor members. Some Societies reserved a few rooms for non-members. Today these same rooms are rented out to non-members through an agency, as the majority of Society members now reside in their own apartments and homes outside of the downtown core.

The top floor was a large volume common space used for meetings, cultural gatherings and veneration of the ancestors. This floor was the equivalent of the tingtang, or main hall, of the classic Chinese dwelling. In the Bamboo Tube House, the tingtang was located in the front of the home on the ground floor and was considered "…a conference room, a court of judgment, and a miniature ancestral hall" simultaneously (Chiu 2000, 145).

Lim Society Meeting Room

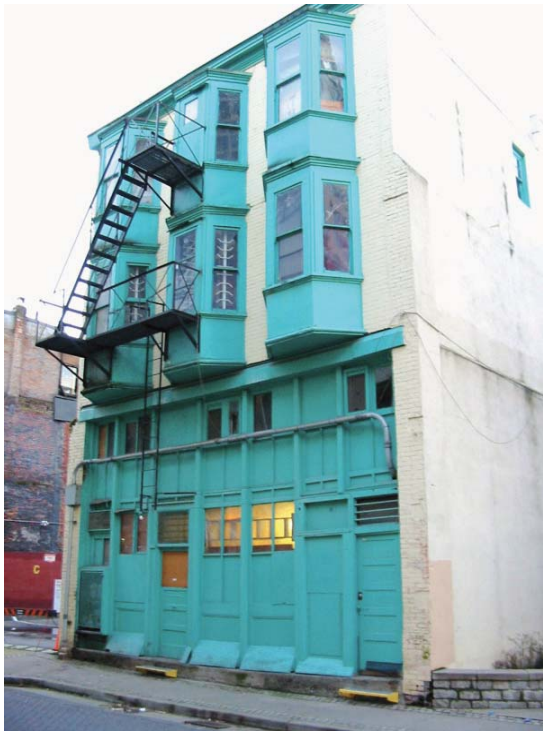
Mah Society SRO

May Wah Retail. Image Courtesy of the City of Vancouver

May Wah Travel Agency. Image Courtesy of the City of Vancouver

Alleyways / Double Frontage

Alleys were part of the greater Vancouver grid, intended for service activities. In Chinatown they were appropriated and intensively used, creating a fine grain of vibrant nightlife, shopping, Chinese opera, residential, and other cultural activities. Between 1890 and 1920, many Chinese immigrants settled into the thriving commercial and social corridors of Shanghai, Market and Canton Alleys. These alleys were part of the efficient functioning and economic exploitation of retail investments. For example, local merchant Yip Sang invested in the development of Market Alley, which acted as a short cut for anyone traveling from Gastown to Vancouver's Public Market, City Hall, Public Library and major banks along Main Street. By developing Market Alley, Yip Sang brought potential customers past Chinatown's barbers, bakeries and laundries (McKay 2000, http://ipr.univ-paris1.fr/spip/article.php3?id_article=143). Because of this, many buildings in Chinatown, including the Society Buildings, had double frontage opening onto both Pender Street and Market Alley, or both Carrall Street and Shanghai Alley.



Lim Society Alley Facade

Lim Society Street Facade

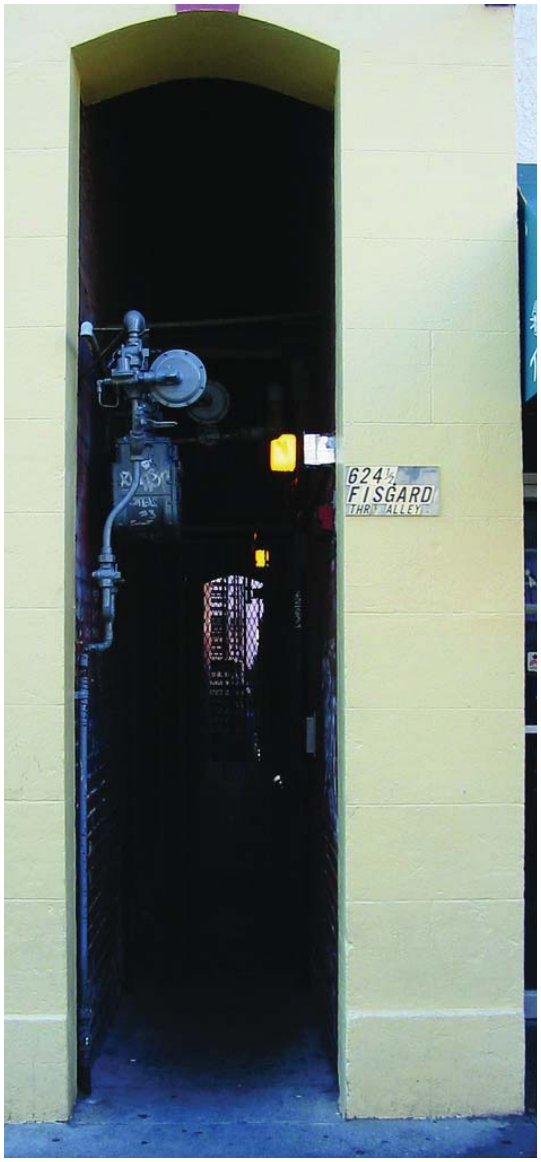
Continuous Street Wall and Ratio of Building Height to Street Width

Like the Shophouse lined streets of Guangzhou and Singapore, the main arteries of Chinatown have a fairly continuous streetwall of uniform setback, though Vancouver's Shophouses do not share party walls as they do in Asia. This density lends to the sense of Chinatown's vitality, as does the ratio of building height to street width. Research into the livability of Asian towns has concluded that in order to maintain a sense of activity on the street, the typical ratio of building height to street width is 0.6 to 0.7. If it gets any higher than this, the sense of activity disappears. The ratio of street width to building height in Chinatown is approximately 1:1.

Chinatown Streetscape

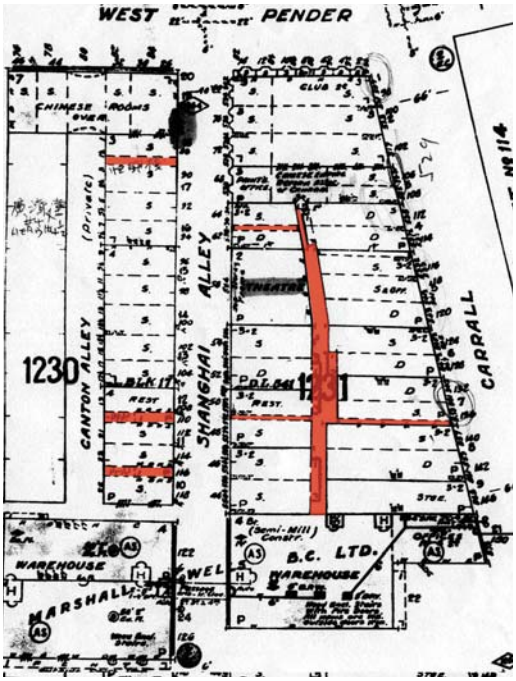
Urban Breezeways

The urban activity in Chinatown was intensified by the permeability between street, building, courtyard and alley. Alleyways in early 20th century were the heart of Chinatown, packed with restaurants, stores, opera and several tenements. Occasional narrow passages between buildings connected internal courtyards to street and alley. Similar to internal breezeways, they also aided in the ventilation of courtyards. Breezeways also ran parallel to the street, creating a kind of interstitial alley between the street and the alley. This lateral breezeway intensified the grain of activity within the typical city block, and created multiple connections between indoor and outdoor spaces.



Breezeway in Victoria's Chinatown

Blocked Outdoor Breezeway. Image Courtesy of Codrin Talaba



Fire Insurance Map Showing Breezeways Prior to 1940.

Courtyards and Lightwells

For 3000 years, courtyards have been an intrinsic part of Chinese dwellings. From a metaphysical perspective, the courtyard was considered the cosmological connection to nature and the sky, the balancing yang to the yin of the home. From a practical perspective, courtyards offered sensory relief from urban congestion and tight living quarters; provided an outdoor room for work, leisure and communal gathering; and mitigated the interior microclimate by catching passing breezes, evacuating interior heat, and collecting and draining rainwater into cisterns or drainage pipes. The courtyard and lightwell create a stack effect, drawing fresh air in and evacuating moisture and warm air before it can condense on interior surfaces. Courtyards in the South of China were much smaller than those in Northern China. These condensed courtyards were called tianjing, and varied in size from an occupiable room, to a 1-2 m sliverlike lightwell (Knapp 2005, 52). The terraced and deep shape of the Shophouse meant that without courtyards, natural light and ventilation could only be obtained from the front and back of the building. Because Shophouses shared party walls, there were no side windows, and small courtyards and lightwells were located every 10 m (32'-9"). Typically, the front courtyard was open and the rear covered but with the ability to be propped up to form an airshaft. In the interest of maximizing usable interior space, some lightwells were located along the sides of the building.

Yue Shan Society Courtyard. Image Courtesy of Codrin Tabala

In Vancouver, Society Buildings occupying one 25' x 122' lot tended to use narrow lightwells along the sides of the building as usable space was at a premium. Some buildings give evidence of an original courtyard between two separate buildings on one lot, which was eventually filled in to join the two buildings into one. The Yue Shan Building shares one courtyard between three different buildings. This meant an increase in outdoor space for each building, but it also meant that the courtyard was no longer completely private. Uniting the interior and exterior spaces of the buildings, this intermediate space allowed residents to mingle in a more intimate, semi private space than out in the street or alleyway. These communal spaces increased the sense of security, identity and community, helping to recreate a sense of home in Canada.

Technological advances, changing tastes and social need often resulted in the disappearance or mutation of traditional forms. Since Vancouver was neither hot nor humid, courtyards were seen as expendable. Bathrooms, kitchens or more living quarters filled some existing courtyards. In China traditionally peaked Shophouse roofs were eventually forfeited for the more fashionable modernist flat roof, which changed the way the buildings would be ventilated. Society Buildings often relied on peaked, glassed in lightwells that provided natural light and an internal stack effect that ventilated the building. While the internal space was now freely designed below these skylights, there remained a connection between the skylight and communal space. Below these covered airwells, small gathering spaces and circulation corridors were placed. By focusing on the Society Building as social space, rather than a static artifact, impalpable spatial relationships between social space and environmental controls were maintained.

May Wah Skylight (Interior)

May Wah Breezeway (Exterior)

Recessed Balconies

Many of Chinatown's Society Buildings, like the Asian Shophouse, have a covered arcade in the front with recessed balconies or verandas above. Chinatown architect R. A. McKenzie, who practiced for more than five years in China, included the recessed balconies common in Southern China in his buildings. The linkage between balconies, courtyards, breezeways, and backdoors facilitated the free passage of air through the building, controlling, heat, humidity and air quality. The covered balconies provided a zone protected from sun and rain, where one could dry laundry and preserve fish in rainy weather.

Recessed Balconies provided Society members with a semi-public communal gathering space with a strong connection to the street below. This kind of 'civic connectivity' is unique to the Society Building. Bay windows and fire escapes were occasionally built on the back of the buildings as well, also creating a strong social connection to the alley below. Balconies also functioned as a temporary altar to worship heaven during Chinese New Year.

Recessed Balconies of the Yue Shan Society During Chinese Year New Celebrations

Arcades and Canopies

Arcades were the transitional spaces between commercial interiors and the street that permitted activity to spill out into the semi public / semi private zone. The traditional Chinese Shophouse verandah formed a covered colonnade integral to the building, protecting pedestrians and shops from sun and rain, and creating a place to socialize. While early Asian Shophouses did not include covered arcades, later examples in Guangdong, Malaysia, Singapore and Hong Kong generally incorporated them. It is debatable whether the arcade was developed in China, or if it was a European invention. Arcades were typical in Portugal, though they were often expressed as arches instead of columns. City Planner Sir Thomas Stamford Raffles regulated the uniform frontage of all Shophouses in Singapore, requiring that a verandah be "open at all times as a continued and covered passage on each side of the street". This covered arcade was known as the "five-foot way", the minimum depth required for the public walkway by law (Lee 2003, 122. Kohl 1984, 176).

In Vancouver's Society Buildings, the Shophouse arcade was replaced with canopy signage that performs the same function as the arcade. Entrances are often slightly recessed while the sidewalks are covered with fabric canopies.

Canopy, Recess, Dentry. Image Courtesy of the City of Vancouver

Interior Breezeways

Front balconies were often linked by a breezeway corridor to a balcony, door or window on the back façade to allow cooling breezes to pass through each floor. The movement of air through the corridor allowed for a fresh and comfortable indoor climate using minimal energy.

Clerestory Lighting and Ventilation

To facilitate the flow of air, rooms often had clerestory ventilation: operable windows above interior doors, or wall partitions less than the full height of the room that when opened would allow air to pass through from a window connected to the exterior and, typically, into an interior breezeway corridor. In addition, the clerestory windows would allow some light to pass through, either to a hallway or into a room, depending on its position in the building and orientation. In either case, acoustic privacy was forfeited for fresh air and light.

Interior Breezeway Corridor

Interior Breezeway Doorway

Clerestory Lighting and Ventilation

Mezzanines

Most Societies had a mezzanine overlooking the ground floor. These were levels of short floor to ceiling height accessible by stair and open to the ground floor. Also known as Cheater Stories, mezzanines were a common way of avoiding tax assessments on floor space.

Mezzanine

Staircases

Many Society buildings have long, linear staircases that lead from the street up to the top floor. Most often they had a separate entrances at the front of the building for access to the residential floors or the Society room on the top floor.

Long Continuous Staircase

Altars and Shrines

The traditional historic main hall in South Chinese residences was used for ancestral rituals, family gatherings, festive meals, wedding and funereal gatherings, and entertainment. Kin groups were built around ancestral sacrifice. These functions were transferred to the top floor of Chinatown Societies. Most societies had a prominent wooden altar table that was either built in or freestanding. Ancestral tablets or images were traditionally placed along the north or back wall on the altar. Offerings were placed in front of the altar for spirits, gods and deceased ancestors. The traditional Chinese belief is that the world of the dead reflects that of the living, and ancestors are served as if still alive as though they require similar sustenance (Knapp 2005, 301). Descendents pay their respects to their ancestors through various rituals and offerings. The altar reflects the hierarchical and authoritative structure of the Society. In addition, several smaller shrines are placed throughout the Society to venerate various household gods.

Yue Shan Society Altar.
Image Courtesy of the City of Vancouver

Lim Society Altar

Materials

Residential structures historically changed from bamboo houses on stilts to having a stone foundation and tiled roof. Bricks were introduced to China between the 16th and 18th centuries and became the material of choice for Shophouses in South China. Exposed bricks were sometimes painted depending on who owned the building. Hollow bricks were developed in the South to help keep the house cool. Before Society Buildings were constructed, Chinatown, like Gastown, was made up of two storey wooden false front buildings. These were eventually replaced by brick buildings, sometimes clad in stone.

Materials: Floor Tiles

Materials: Granite, Plaster, Brick

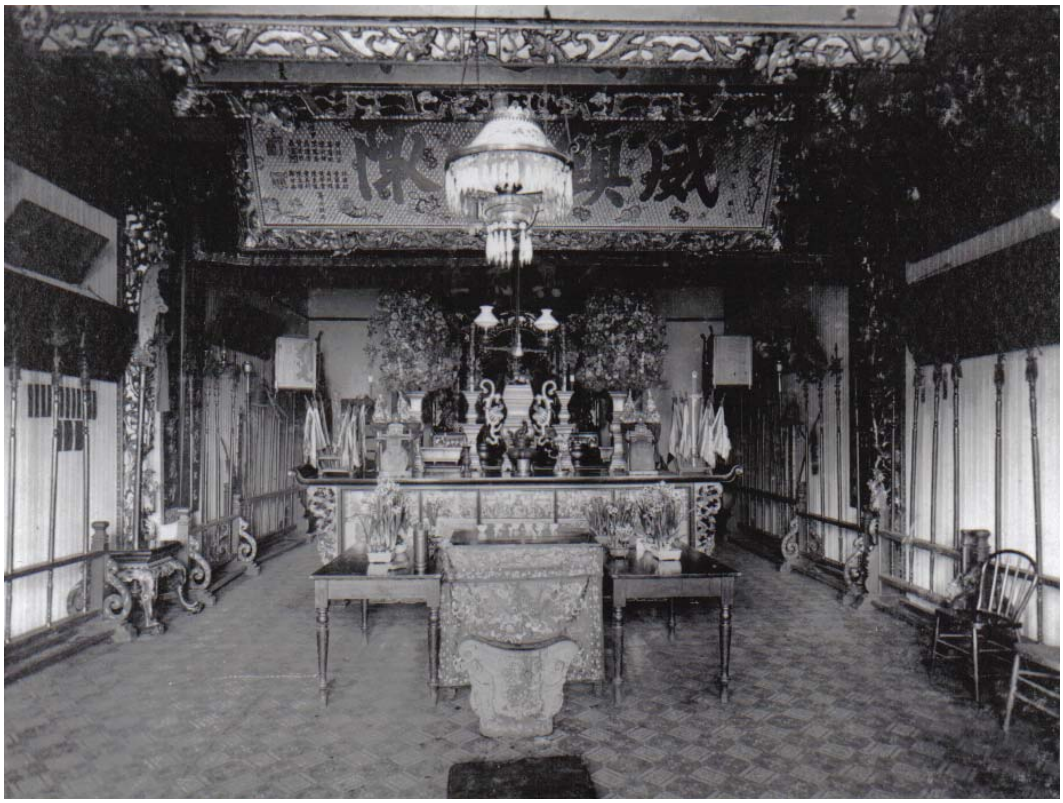
Wooden False Fronts with Newer Brick Buildings on Pender St. 1904.
Image Courtesy of the Vancouver Public Library, Philip Timms photo, VPL 7234

Ornamentation and Symbolism

Early Shophouses in China were fairly plain and did not include covered arcades. Ornamental motifs tended to be added on to the underlying structure. Differing styles of façade ornamentation revealed the international tastes and influences of each community. Singapore Shophouses combined both Chinese and Western ornamentation. Southern Chinese eaves were combined with Palladian fanlights and Fujian wall murals. Many Guangdong Shophouses featured Greek and Roman columns, with Neo-Classical and Victorian capitals and cornices, and additional Chinese motifs.

Similarly, Society Building exteriors remained fairly austere with some columns, painted inscriptions, signage and relief, while the Society meeting rooms on the top floor were lavishly decorated with carved wood, paint, shrines and scrolls.

Symbolism was used to invoke good fortune to those living in the household and to protect them from malevolent forces. Calligraphy, pictures and colours embodied the Society's aspirations for good fortune, longevity and peace, while odd numbers were believed to afford balance and symmetry. According to Feng shui principles, colour represented the four cardinal directions and four spiritual animals. North was a black tortoise (xuanwu) representing water, winter and maximum yin. West was a white tiger (baihu), representing metal, autumn harvest, and the birth of yin. Both North and West were considered unlucky, as Northern and Western winds were thought to destroy crops. South was a vermilion phoenix (zhuque), representing sun, fire, and the maximum yang. East was an azure dragon (qinglong), representing wood, spring, the rising sun, and the birth of yang (Knapp 2005, 105). In the center was yellow earth, representing dignity and prosperity. Red, green and yellow are prevalent colours in Chinatown today.



Society Meeting Room in Victoria BC. Image Courtesy of the Vancouver Public Library, Special Collections, VPL 13115

May Wah Cornice Detail
Image Courtesy of the City of Vancouver

CBA Balcony
Image Courtesy of the City of Vancouver

Decorative Rail
Image Courtesy of the City of Vancouver

7.0 CITY OF VANCOUVER STRATEGIES FOR HISTORICAL REVITALISATION

The City of Vancouver has enacted various incentive programs for the revitalization of the city's valuable historic areas, including Chinatown. These programs are intended facilitate the rehabilitation of individual buildings, yet intend to contribute culturally, economically and environmentally to the greater community. The following are relevant extracts taken from the City of Vancouver incentive programs as well as urban and community based strategies that can be used as valuable tools in the rehabilitation of buildings in Chinatown. Many of the incentive programs are independent of each other, yet it is possible to apply to more than one program. A holistic view of revitalization would not see the strategies as singular individual solutions but rather agents working together, to provide sparks for cultural and economic activity to flourish.

7.1 Heritage Incentive Strategies

There are two major incentive programs, the Heritage Façade Rehabilitation Program and the Heritage Building Rehabilitation Program. Both programs are available from 2003 – 2008. Buildings listed on the Vancouver Heritage Register in Gastown, Chinatown, Hastings Corridor and Victory Square are eligible to the programs. Owners of eligible properties can apply to one or both of the programs.

The applicant must complete the work in accordance with the approved permit, and must comply with all heritage conservation standards, design guidelines, policies, By-laws or complementary standards and provisions that apply before the City disburses any grant and incentives to the applicant. These conditions apply to both Façade and Building Rehabilitation Programs.

7.2 Façade Rehabilitation Program

This program is to provide a total of $2.5 million for façade grants from 2003 – 2008. City Council has approved $1.5 million of this in the City's current Capital Plan. This program is available to assist owners and tenants with the costs of rehabilitating heritage building facades. The program covers 50% of costs up to a maximum of $50,000 per principal facade. A principal facade faces onto a primary street. The City deems buildings on corner sites to have more than one principal facade, and owners and tenants may apply for a grant for each principal facade. Tenants may apply for funding with written consent of the owner. The objective is to enhance the exterior appearance of buildings in a manner that is sympathetic to the heritage character of the area and to encourage economic revitalization opportunities by improving the appearance of the environment in the historic precinct.

Eligible heritage conservation work includes the cleaning, repair and maintenance of a building exterior and appropriate new design. The work may include ground floor shop fronts, facade materials (e.g. brick, stone), windows, doors, cornices and other architectural features, stabilization of parapets, signs and awnings, and lighting on principal facades. The façade conservation work should not trigger building code upgrade requirements.

See City of Vancouver Heritage Façade Rehabilitation Program Policies and Procedures for Gastown and Chinatown and Hastings Street Corridor. July, 2003.

7.3 Heritage Building Rehabilitation Program

This program has the ability to provide property tax exemption for up to 10 years, bonus density and residual density to facilitate a major rehabilitation of a heritage building. When a major upgrade of a building listed on the Heritage Register is completed, the owner can apply to transfer the bonus density and residual density amount to development sites in designated areas. Eligible work includes structural and foundation repair as well as seismic upgrades and facade rehabilitation. The objective of this program is to kick start economic activity in the historic areas through rehabilitation and active reuse of heritage buildings and ground floor storefronts.

To apply for the incentive program the following work must be included - heritage restoration work and a major building upgrade which involves upgrading to meet Building By-law requirements. This can include but is not limited to structural and foundation repair, seismic upgrades, and voluntary upgrades.

The total value of the incentives provided are intended to meet the “shortfall cost” of the renovation project, defined as the amount required to make a project viable when a major building upgrade is completed.

The City will determine the amount of each incentive through site-specific analysis based on objective measures of market values and costs, and anticipates that there will be some negotiation of the inputs to the incentive calculations between the applicant and the City. The Director of Planning, with advice from Real Estate Services, is responsible for making recommendations to City Council on the appropriate type and amount of incentive for each individual project. The City may also apply a facade grant toward the shortfall (Façade Rehabilitation Program). Owners may apply for the incentives on a coordinated basis.

Property Tax Exemption

Property Tax Exemption will provide a 100% property tax exemption for up to 10 years to cover the shortfall costs of Rehabilitating a Heritage Building. Applicants will be able to apply for property tax exemption during the 5 year period (2003- 2008). Tax exemptions will apply to property tax levies as per Section 396A of the Vancouver Charter but not to local improvement fees, business improvement fees, utility charges, or other like fees or charges.

Bonus Density

At the time of the application, should the estimated value of the tax exemption (as calculated below) be less than the agreed to shortfall cost of an applicant's project, the difference will be awarded to the applicant through a transferable density bonus. Relief or variance to Development Cost Levies may also be provided through the Heritage Revitalization Agreement. For more information refer to Section 592(2)(b)(ii) of the Vancouver Charter and the Development Cost Levies Administrative Bulletin. When a major upgrade of a building listed on the Heritage Register is completed, the owner can apply to transfer this bonus density amount. This also applies to the residual density component of the Heritage Building Rehabilitation Program. (See below).

Residual Density

In addition to providing incentives to meet shortfall costs, heritage buildings with a total density less than 5.5 FSR are eligible to apply for a residual density incentive. The award of residual density aims to help encourage smaller scale buildings that are compatible with the heritage character of the area. The property must be a protected heritage property, and subject to a Heritage Revitalization Agreement. The amount will be the difference between the existing built density and 5.5 FSR.

See City of Vancouver Heritage Building Rehabilitation Program Policies and Procedures for Gastown and Chinatown and Hastings Street Corridor. July, 2003.

7.4 Urban Design and Community Strategies

Live Work Zoning Amendment

A Live-Work Use permit can be used as a conditional approval in HA-1 and HA-1A and HA-2 districts in order to benefit their revitalization. The zoning enables property owners to make application for straight-forward, low impact live-work projects without needing a CD-1 rezoning or Heritage Revitalization Agreement (HRA).

Downtown Eastside Housing Plan

This plan for the Downtown Eastside presents a vision for the future of housing in Chinatown, the Downtown Eastside Oppenheimer District, Gastown, the Hastings Corridor, the Industrial Lands, Strathcona, Thornton Park and Victory Square. The Plan addresses specific housing types: SROs, social housing, market housing, supportive housing and special needs residential facilities.

Under the Plan, the existing 10,000 units of low-income housing will be retained in the long term, as SROs are replaced with better quality, self contained social housing units. The integration of supports will assist local residents to live stable and independent lives. Market housing will be encouraged to support economic revitalization and heritage rehabilitation, and the emphasis will be on affordable rental and owner-occupied projects. After 10 years, the amount of market housing is envisioned to nearly double (approximately 4000 units) making up one-third of the area's total housing stock.

In Chinatown, the plan aims to encourage more market housing, including both owner-occupied and rental, in restored heritage and non-heritage buildings, with an emphasis on affordability. Parking and height relaxations are identified as tools to help facilitate heritage building conservation and affordability. It is projected that by 2014, there will be 1400 housing units in Chinatown, split equally between market and non-market units.

The Chinatown Community Plan

This is a three-year action plan to implement the Chinatown Vision that was co-developed by the City and the community. This plan focuses on an expansion of residential development, including non-market housing, a strategy for the rehabilitation of family associations and benevolent societies, revitalization of the retail and business district of Chinatown, youth and senior involvement, and enhancement of Chinatown's role as a regional social and cultural hub.

Vancouver Chinatown Revitalization Committee (VCRC)

This committee was officially formed in 2001 to encourage collaboration between the community and the City in developing short-term revitalization initiatives and a long-term vision for Chinatown. The Chinatown Vision was adopted by Council in 2002 as a blueprint for the revitalization work in

Chinatown and repositioning itself within today's diverse, global community. The City has worked closely with the community to enhance Chinatown's cultural identity through heritage preservation, building cultural landmarks, arts and cultural programming, forming partnerships with education institutions and youth engagement. These initiatives will help bring new life and meanings into Chinatown, redefining it not only as a place for Chinese-Canadians but also a regional social and cultural hub for all members of Vancouver's multi-cultural communities

Urban Design Guidelines

The following criteria have been used by the City of Vancouver and Chinatown Historic Area Planning Committee since 1988 to evaluate development permits:

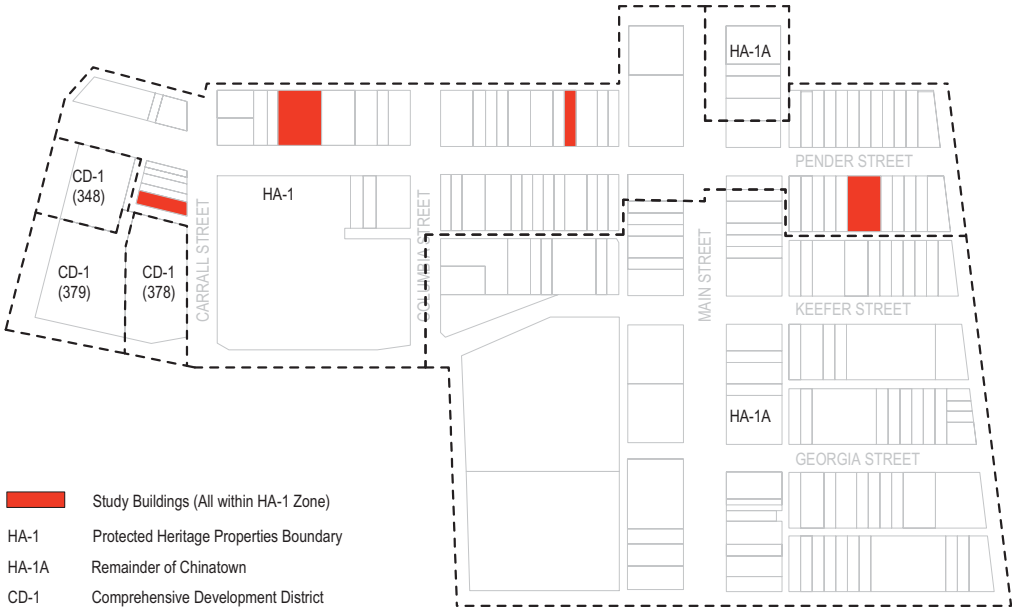
1. Applicant and Intent
2. General Design Consideration
3. Guidelines Pertaining t the Regulations of the Zoning and Development By-law
4. Architectural Components
5. Open Space

7.5 Recommendations

While the incentives and strategies are applicable to singular buildings, a sustainable approach to historical revitalization requires the participation of the wider community including neighbourhood residents, the city and external parties with a vested interest in the project. Working together also means this complex and difficult task is a community endeavour and worth pursuing. Each project should be acknowledged as part of the public space of the community, regardless of who owns the actual building. Each building contributes to the needs and identity of the greater community. Heritage is an important component of public space.

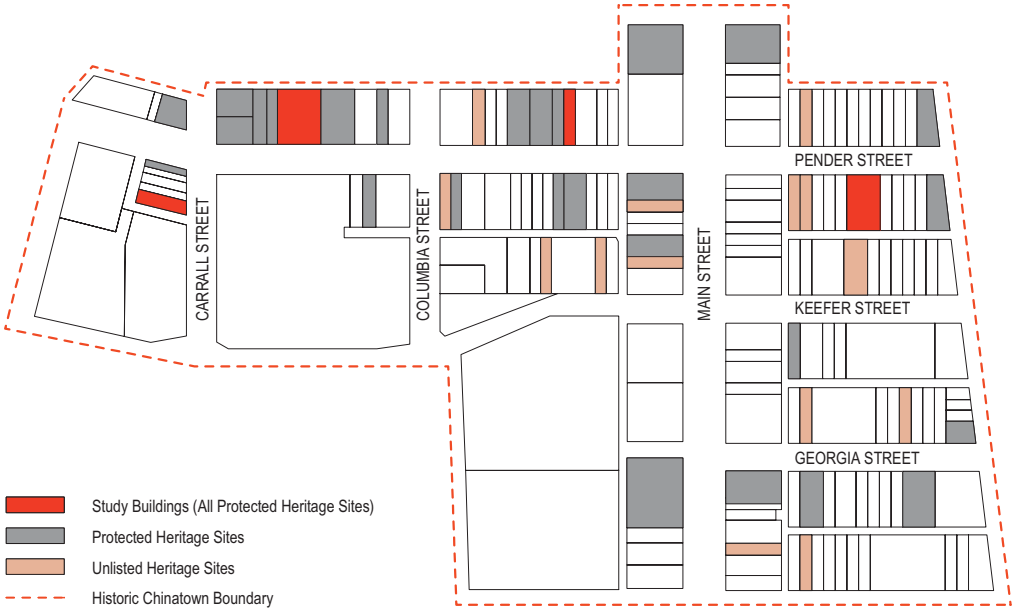
8.0 CHINATOWN DESIGN AND REGULATIONS AND GUIDELINES

Chinatown is one of Vancouver's oldest and most distinctive communities. This cultural and built significance has been recognized by the City of Vancouver through its development by-laws. Firstly, through the Zoning By-law, which regulates land uses and building forms. Within Chinatown there exist two major zoning districts: HA-1 and HA-1A that correspond to the provincially designated site boundary and the remainder of Chinatown, respectively. For each zone there are specific sets of related regulations and guidelines created to ensure the sensitivity deemed required for the two areas. The development of a specific zoning for Chinatown was intended to preserve its historic fabric and to guide new developments to be compatible with the existing.



Zoning Within the Chinatown Historical District

Secondly, many buildings that exist within Chinatown have heritage designations and are listed on the Heritage Register, and therefore subjected to the City's Heritage By-laws. The Heritage By-law regulates alterations and development of designated buildings. Municipally designated buildings can have their exteriors fully protected from alteration (Schedule 'A ' designation) or can have protection for specific features (Schedule 'B' designation). Within Chinatown there also exist many buildings of heritage value that have no designation or are not listed on the Heritage Register. The Heritage By-law also outlines the process through which a building can gain official designation.



Heritage Properties Shown Within the Chinatown Historical District

The following is a summary of the Vancouver Zoning By-law that is applicable to Chinatown and specific to this study. These regulations and guidelines provided a basis for exploring the rehabilitation of the Society buildings into contemporary housing.

Max. Height

HA-1 15.3m (50'-2"); 20.0m (65'-7") Upon conditional approval.

HA-1A 21.3m (69'-10"); 27.4m (89'-11") Upon conditional approval.

Max. Widths (Frontage)

HA-1 7.6m (25'-0"); except for individual buildings that are less than 15.0m (49'-2") in frontage.

Ground floor of new buildings with widths greater than 15.2m (50'-0") to be divided into multiple fronts, with the maximum width of 7.6m (25'-0")

Rear Setback

Setback only required for building portions that contain residential use, that portion shall be setback 7.0m (22'-11") across the full width.

Front Setback

Max. 45cm (1'-6") for architectural articulations.

Setbacks exceeding 45cm (1'-6") are permitted for passageways, recessed balconies and top floor.

Side Setback

Side setbacks are only permitted where the side property is beside a street, lane or park.

Side setbacks may be permitted for lightwells or open space at grade and are to be no closer than 4.0m (13'-1") from the street façade. Windows facing a lightwell should be setback 3.0m (9'-10")

Relaxations of Regulations

Conditional relaxation of frontage and rear yard regulations (section 4.2 and 4.6) may be granted if all applicable policies and guidelines are considered and there is approval of advisory board, owners or tenants.

See HA-1 and HA-1A Districts Schedule (Chinatown Historic Area). City of Vancouver Zoning and Development By-Law, for complete zoning regulations.

9.0 SOCIETY BUILDING CASE STUDIES

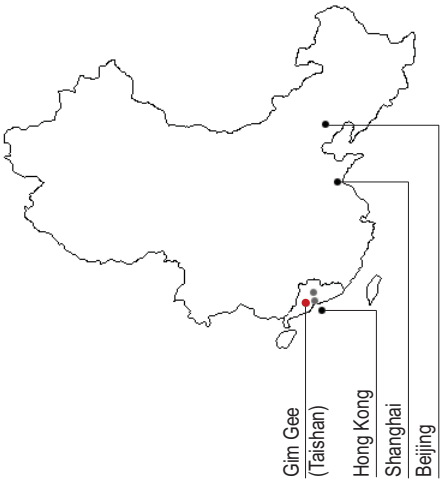
This study builds on the recently completed City of Vancouver and Chinese Canadian Historical Society's (CCHS'), 'Historic Study of the Society Buildings in Chinatown', which provides historical, sociological and architectural data for five historically significant Society Buildings in Vancouver's Chinatown. Interviews with Society members and historical photographs and narratives from the CCHS were collected and analyzed to understand how these buildings were used by the community. This CMHC study has collated this information with other researched documents to further understand how the unique architectural form of each Society Building is derivative of cultural practice. This section summarizes the social, cultural and architectural significance and proposes potential redevelopment scenarios for the Mah Society of Canada, the Lim Sai Hor (Kow Mock) Association, the Shon Yee Benevolent Association (May Wah Hotel), and the Yue Shan Society.

Study Buildings Shown Within Historic Chinatown. Source: City of Vancouver VanMap. [Orthographic Photo]. 2004.

Mah Society of Canada. Image Courtesy of Vancouver School Board K494

9.1 Mah Society of Canada
加拿大氏宗親總會

137-139 E Pender Street



Until 1919, the Mah Society was called Gim Gee Tong Bai Zi Hui, referring to both the Mah clan's geographic origins (Gim Gee in China), and to the practice of collecting donations to acquire a building for the Society (Bai Zi Hui). The Mah Society of Canada is the national headquarters and currently has branches in Vancouver, Edmonton, Calgary, Ontario, Regina and Manitoba. In 1993, there were 924 members across Canada.

The original four storey building was built in 1913, by owner William Dick. It was the tallest building on the block. Dick rented the first floor to the Kwong Yee Lung Company, a grocer, while the second, third and fourth floors (comprised of 39 rental rooms with shared kitchens and bathrooms) were rented to Ming Lee Rooms. In 1921, the Mah Society purchased the building, and used two rooms on the fourth floor for offices and meeting space, while they continued to rent out the rest of the rooms through a landlord for income. Atypically, these rooms were rented out to non-members as well as members. The rental income was used to finance the Society. In 1922, a Chinese contractor, Chen Yi, added a fifth floor that included an open balcony overlooking Pender Street, a 24.6m (81') deep meeting hall, and a double loaded corridor at the back of the building connecting 4 offices and a kitchen, leading to a flat roof, exterior fire escape and a service ladder to the upper roof. An arch was built over the top balcony, with the name of the Society pin mounted onto the façade. The roof parapet was of glazed tile with flying eaves topped with two Chinese pentagon lanterns and a horizontal cornice with dentils. These decorative details were later replaced with a simplified fascia band. The fifth floor balcony was eventually enclosed with aluminum sliding windows, though the original decorative iron balustrade remains intact. All five floors were connected with a linear, narrow stairwell, a unique feature of heritage buildings in Chinatown. The current usage of the building is retail at grade (restaurant), an SRO hotel on the second, third and fourth floors, and a Society meeting room on the fifth floor.

Mah Society of Canada

Mah Society of Canada | Design Approach

The Mah Society of Canada is a classic long and narrow Society building with a 7.6m x 36.6m (25'x122') footprint. Currently, its economic structure is the same as it has been traditionally, with income from rented rooms on the mid-lying floors supporting the Society space on the fifth floor. The proposed design scenarios for the Mah Society maintain both the commercial usage at ground level and the Society meeting space on the top floor but propose alterations to the mid-lying floors to accommodate a variety of unit types. The commercial and Society space have been preserved for their cultural and economic value. The commercial space is occupied by a restaurant that is a popular destination in the neighbourhood and is generally in an acceptable condition. Similarly, the Society space located on the fifth floor is well used by the community and is also in a generally acceptable condition. Through their preservation and integration, the diversity of uses that these spaces and their programs promote is insured even as the rest of the structure may evolve to accommodate the need for housing. The three mid-lying floors that consist of small single occupancy rooms (SROs) receive little natural light and have shared bathroom and kitchen facilities that are inadequate for their present use as living quarters. These floors present the biggest challenge for transformation due to their present condition, yet are where an appropriate opportunity lies for transformation into contemporary housing. In addition to concerns of light, ventilation and inadequate facilities, the size of the SROs is problematic, insofar as they limit occupancy to a single group and do not promote a stable and diverse community. In order for the Mah Society building to be upgraded to contemporary housing standards, issues of light, ventilation, services, unit sizes, and, accessibility must be addressed.

The current structure of the Mah Society building would allow the possibility of implementing 2 living units per floor. In this situation, the living rooms would be oriented toward the street or alley and bedrooms would face the lightwell. Although perhaps the most straightforward solution, it comes with a list of drawbacks. The units would be over 100 sq.m (1000 sq.f), limiting affordability for a range of incomes and thus, not support a diverse community. Moreover, the 3 units facing the alley would require and only have access stairs from the rear. This would be unappealing, particularly if upgrades to the alley were not immediately in the works.

Design ideas were explored that integrated a variety of unit types with improved environmental conditions and social spaces. This resulted in two proposals based on two circulation types, both

working with an 8.0m (26') courtyard in the center. The introduction of a courtyard on the second floor has a number of advantages. The court would provide improved lighting and ventilation, create opportunities for interior/exterior relationships, provide a semi-private social space and allow for the possibility of a variety of unit sizes.

Circulation Type 1

In the first proposal, Circulation Type 1, an external staircase is introduced and situated in the courtyard. The cut in the building used to create the courtyard would require that there be additional structural bracing to the original structure, which could simultaneously fulfill the requirements for seismic upgrades. Both the front and back portions of the building would be accessible by a central stairwell. In addition, a fire exit located on the alley side would provide a second and sufficient means of egress. In this proposal, only one additional floor on the alley side is recommended because of the open circulation type. This additional floor would ideally be used as an additional Society space, with possibilities for interaction with the existing Society space located on the same level.

Circulation Type 2

In the second proposal, Circulation Type 2, the existing circulation in the front is retained and an additional stair and elevator is added in the rear. The internal circulation type permits the addition of 3 floors to the maximum allowable height of 20.0 m (65') (HA-1 Zoning) to the rear of the building. This would mean that historic renovation occurs on the front building, while the rear of the building is completely new. The revenue gained from additional floor space could finance what would be required for an elevator. In addition, an elevator would allow the building to be accessible by all including the seniors in the community. In this proposal, an additional Society space would be ideally located on the courtyard level toward to the street side. This would allow the courtyard to be used by the community as a social space. Floors 2, 3 and 4 on the rear side would be suitable for office or live/work situations as these spaces would receive less direct sunlight and create a more public situation for the courtyard. Moreover, this proposal has possibilities for higher densities in buildings with a similar typology in the HA-1A zones of Chinatown, as the conditional maximum height in these areas is 27.4 m (90').

Living Units

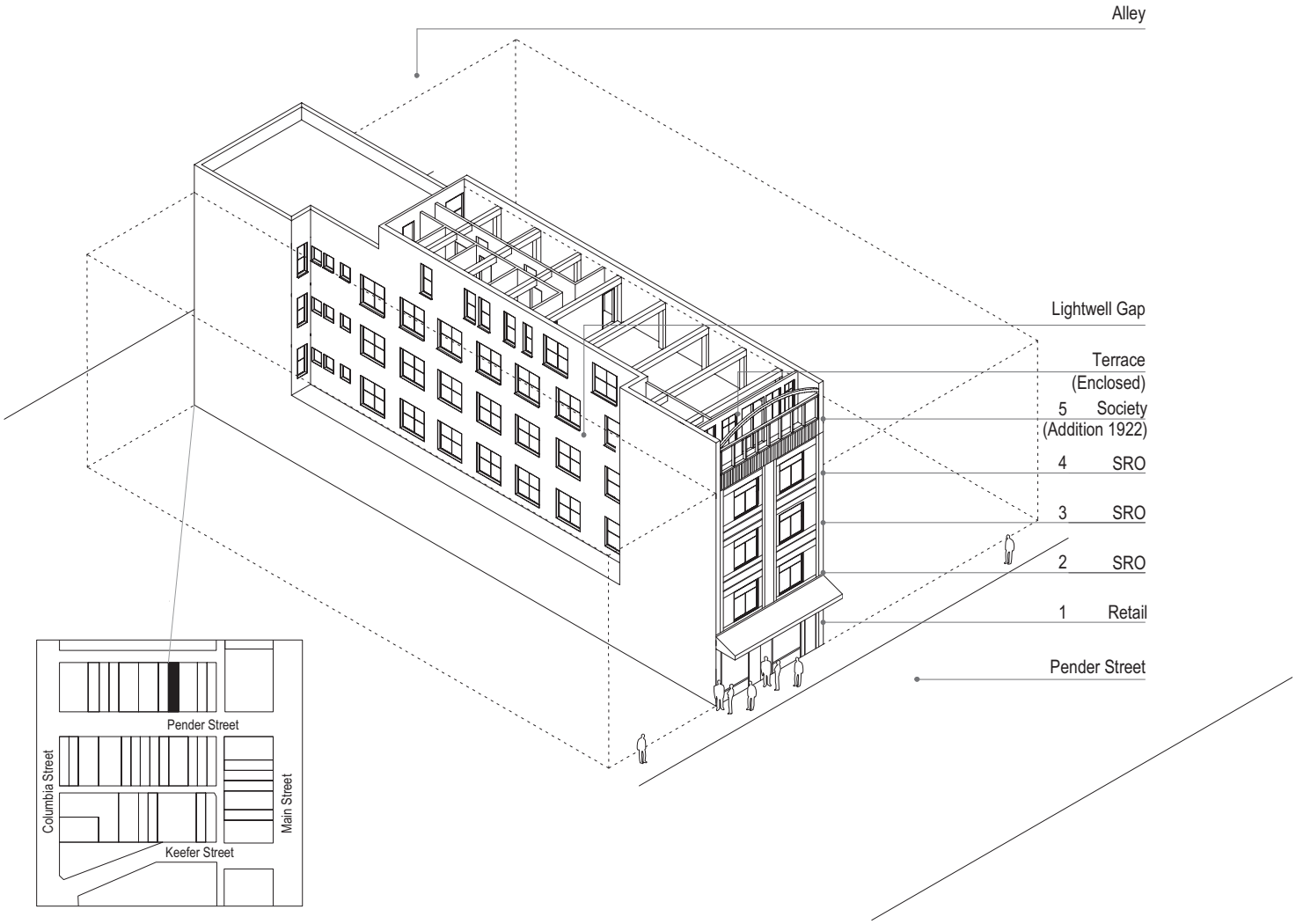
In both proposals, the principle for the living units is the same: to provide flexible, intergenerational housing for a variety of incomes. This has been achieved with a variety unit types that include studio suites and one, two and three bedroom apartments. This resulted in a kit of parts, providing a set of

units that could be interchangeable across floors. The wide variety of unit sizes and configurations are designed to accommodate a diverse range of people in various living scenarios: families, couples, individuals, seniors, and single parents. Incorporating a variety of housing types for a variety of income types within one building promotes a healthy, heterogeneous community.

Moreover, many buildings in Chinatown historically had double frontage, opening onto both the street and alley or courtyard. The design of each unit incorporates either a balcony or terrace that overlooks the courtyard thus providing an interior/exterior connection as well as increasing the connection between the public and private realms.

Services

Essential to the structure as a whole are the services, which in the entire building should be replaced with up-to-date technologies. The integration of new service walls would not only function for the living units, but would also be used to improve the services of the retained spaces such as the at grade commercial space. Likewise, the roof would require replacement, providing the opportunity to improve environmental conditions. A green roof would not only provide environmental benefits such as controlling stormwater run-off but would also contribute socially as an additional activity space for the building's residents. Furthermore, the integration of new technologies such as solar collectors would contribute to the overall sustainability of the building.

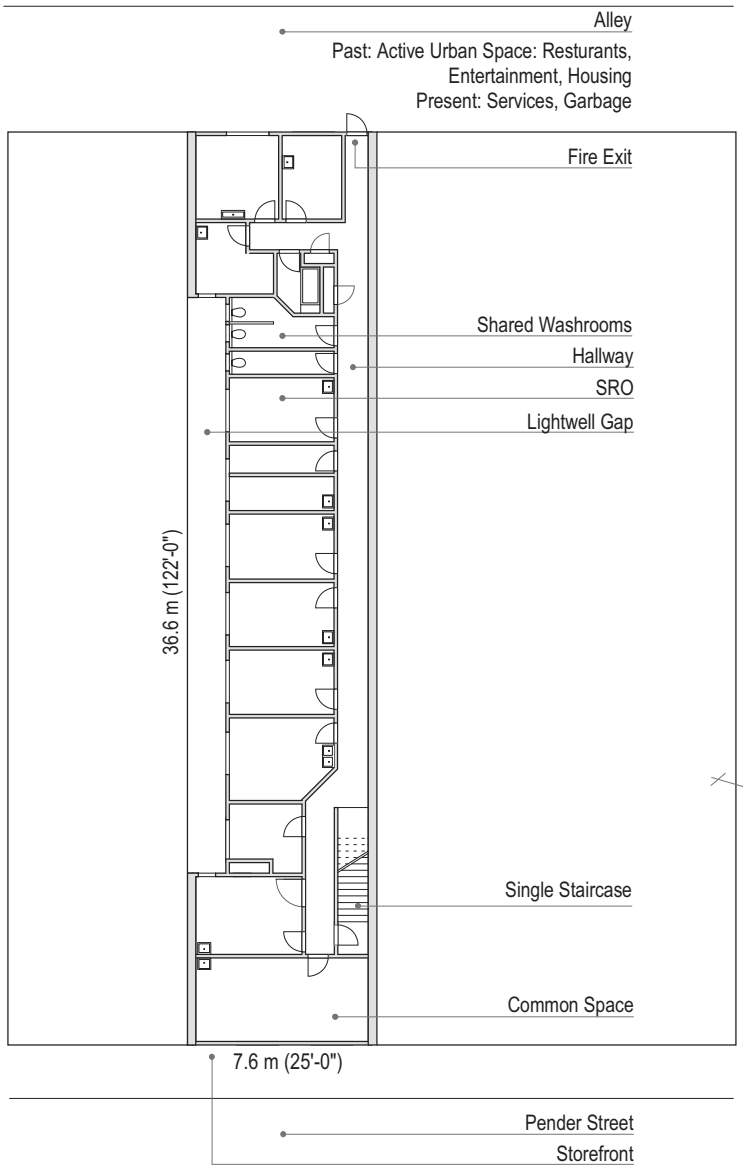


Context

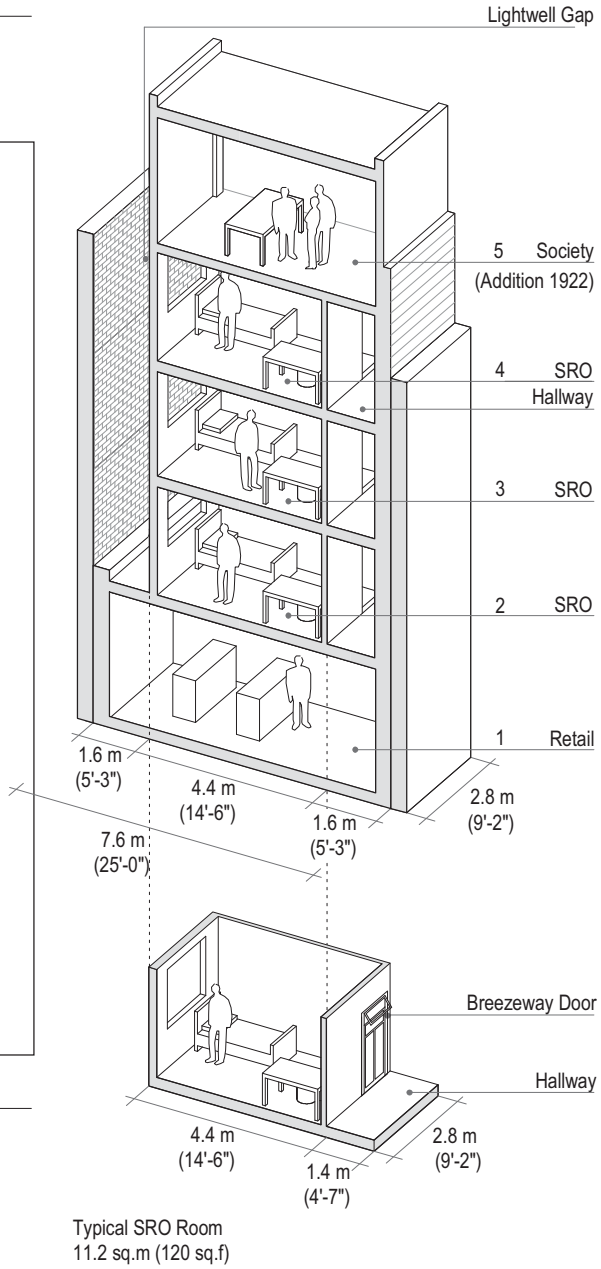
Society Space

Enclosed Terrace

Roof and 1922 Addition



Existing Typical SRO Floor M:1:300



Existing Cross Section

SRO Room

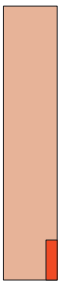
Breezeway Hallway

Lightwell Gap

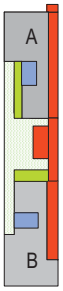
Circulation Type 1 - Courtyard + Open Central Stair

Alley

Pender Street



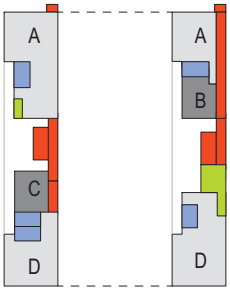
Existing Retail
(To Remain)



Unit A (1 Bed)
66.7 sq.m (717 sq.f)

Unit B (2 Bed)
73.8 sq.m (794 sq.f)

Living Units / Court Specific



Unit A (3 Bed)
119.4 sq.m (1285 sq.f)

Unit B (Studio)
29.9 sq.m (321 sq.f)

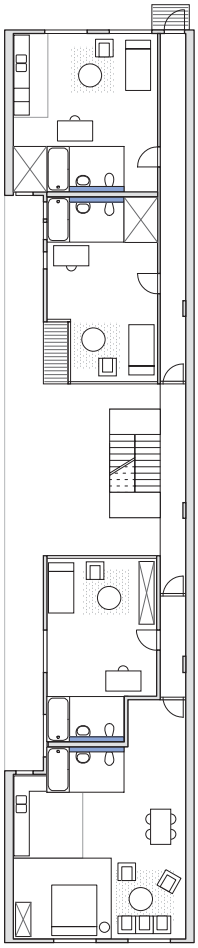
Unit C (Studio)
29.8 sq.m (321.sq.f)

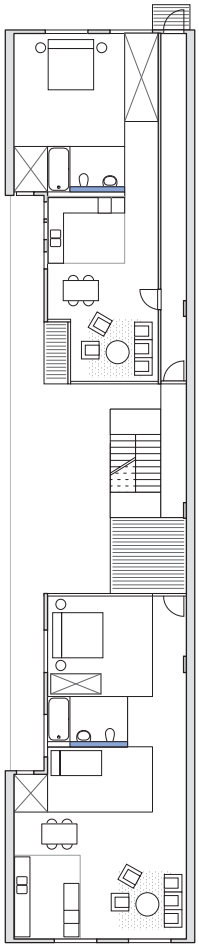
Unit D (3 Bed)
130.2 sq.m (1401 sq.f)

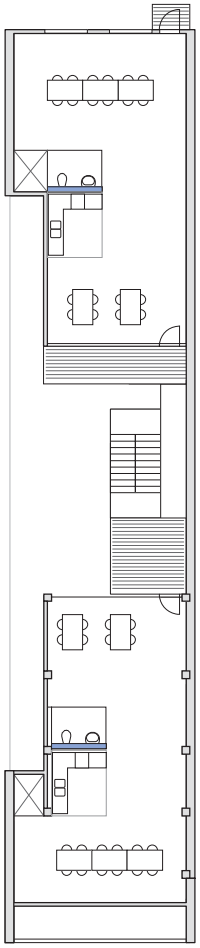
Interchangeable Living Units

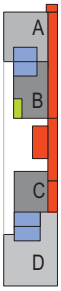
Floor Plans M:1:300

	Circulation		3 Bedroom
	Services		Terrace / Balcony
	Studio / Bachelor		Courtyard
	1 Bedroom		Additional Society Space
	2 Bedroom		Existing to Remain









Unit A (Studio)
35.5 sq.m (382 sq.f)

Unit B (Studio)
32.2 sq.m (346 sq.f)

Unit C (Studio)
29.1 sq.m (313 sq.f)

Unit D (1 Bed)
55.2 sq.m (594 sq.f)

Interchangeable Living Units

Unit A (1 Bed)
68.2 sq.m (734 sq.f)

Unit B (2 Bed)
88.8 sq.m (955 sq.f)

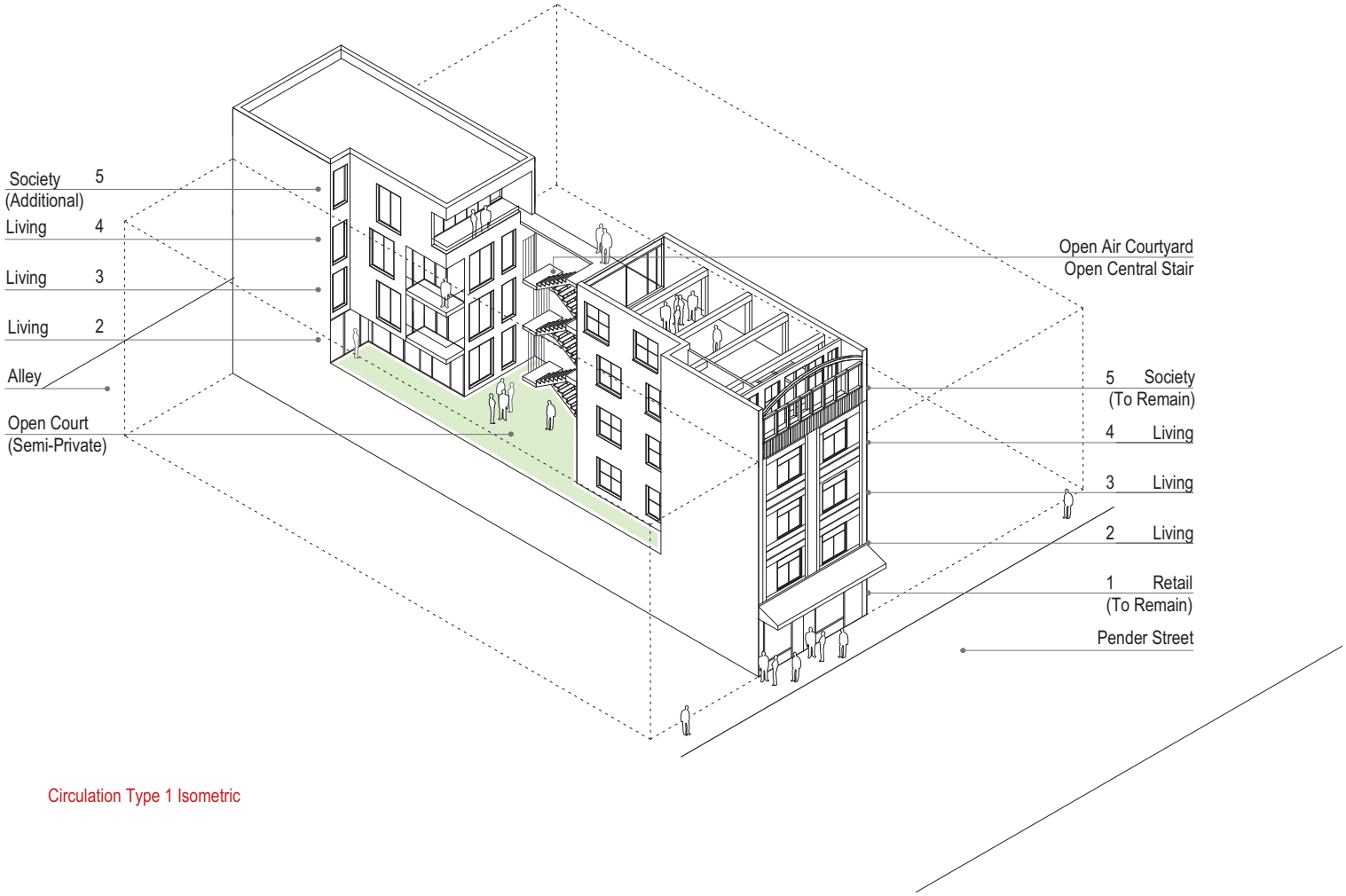
Interchangeable Living Units

Unit A (Additional Society)
80.7 sq.m (868 sq.f)

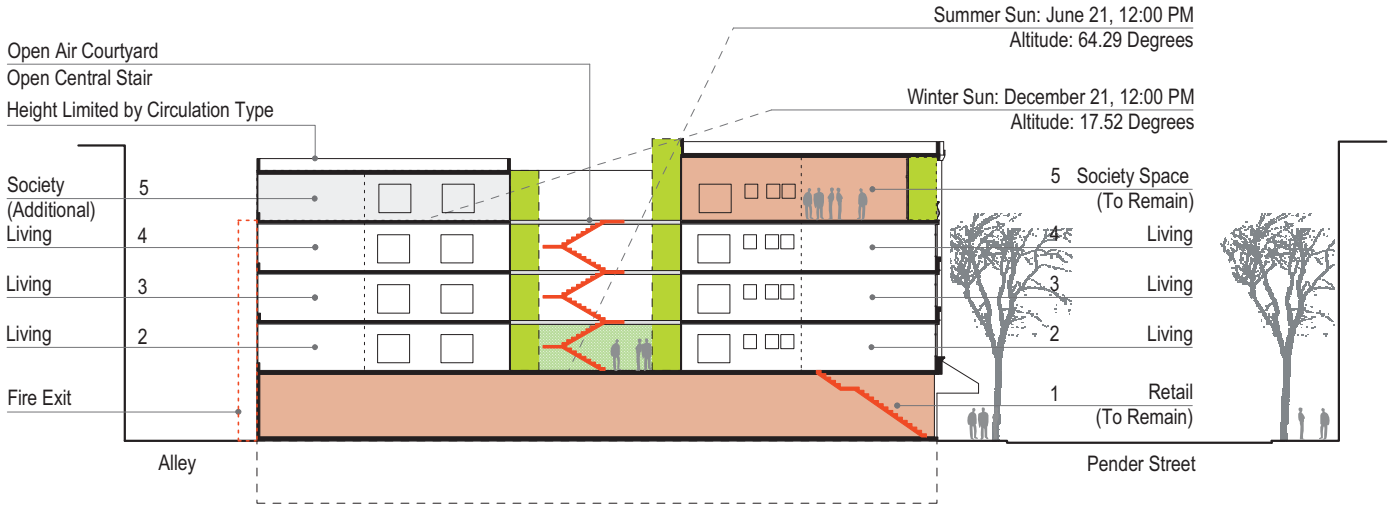
Unit B (Existing Society)
85.6 sq.m (921 sq.f)

Specific Community Space

Circulation Type 1_Courtyard + Open Central Stair



Circulation Type 1 Isometric

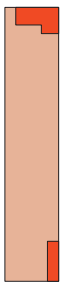


Circulation Type 1 Section M1:400

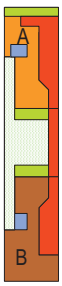
Circulation Type 2 - Existing Front Stair + Additional Stair + Elevator

Alley

Pender Street



Existing Retail
(Elevator in Rear)



Unit A (Office or Live/Work)
57.4 sq.m (567 sq.f)
Suitable for Floors 2-4

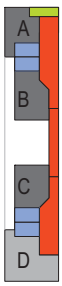
Unit B (Additional Society)
66.8 sq.m (719 sq.f)
Suitable for Floor 2
Possible Double Volume

Society + Office Option / Court Specific

Unit A (1 Bed)
57.6 sq.m (620 sq.f)

Unit B (1 Bed)
66.8 sq.m (719 sq.f)

Living Units Option / Court Specific



Unit A (Studio)
29.7 sq.m (319 sq.f)

Unit B (Studio)
30.9 sq.m (332 sq.f)

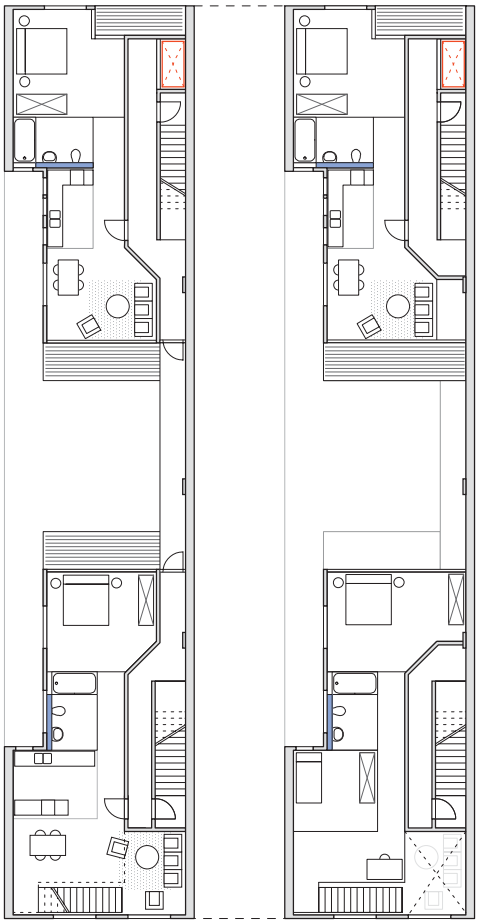
Unit C (Studio)
29.1 sq.m (313 sq.f)

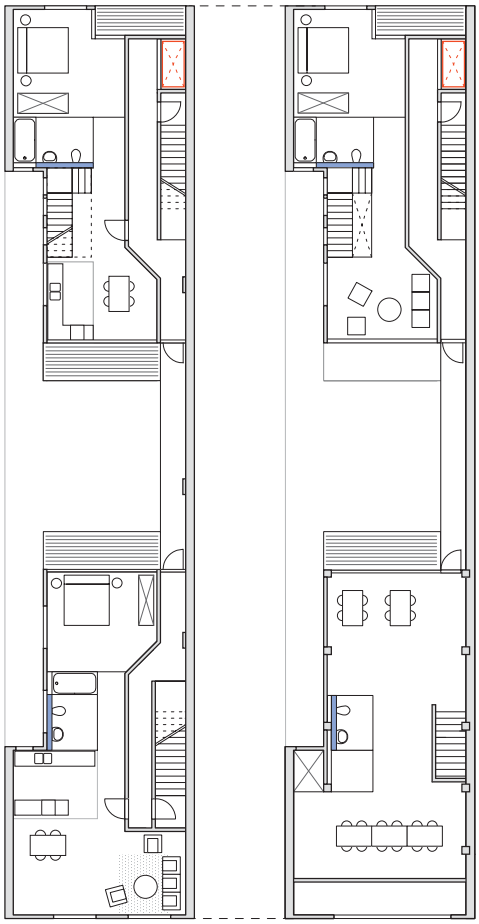
Unit D (1 Bed)
40.2 sq.m (432 sq.f)

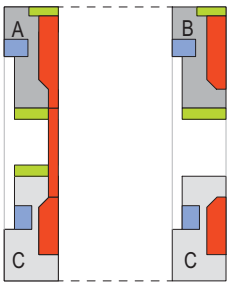
Interchangeable Living Units

Floor Plans M:1:300

- Circulation
- Services
- Studio / Bachelor
- 1 Bedroom
- 2 Bedroom
- 3 Bedroom
- Terrace / Balcony
- Courtyard
- Additional Society Space
- Existing to Remain
- Office





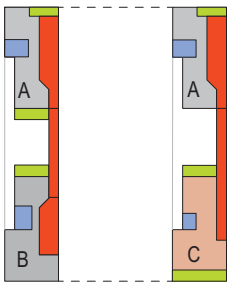


Unit A (1 Bed)
57.6 sq.m (620 sq.f)

Unit B (1 Bed)
61.4 sq.m (660 sq.f)

Unit C (3 Bed)
120.3 sq.m (1294 sq.f)

Interchangeable Living Units



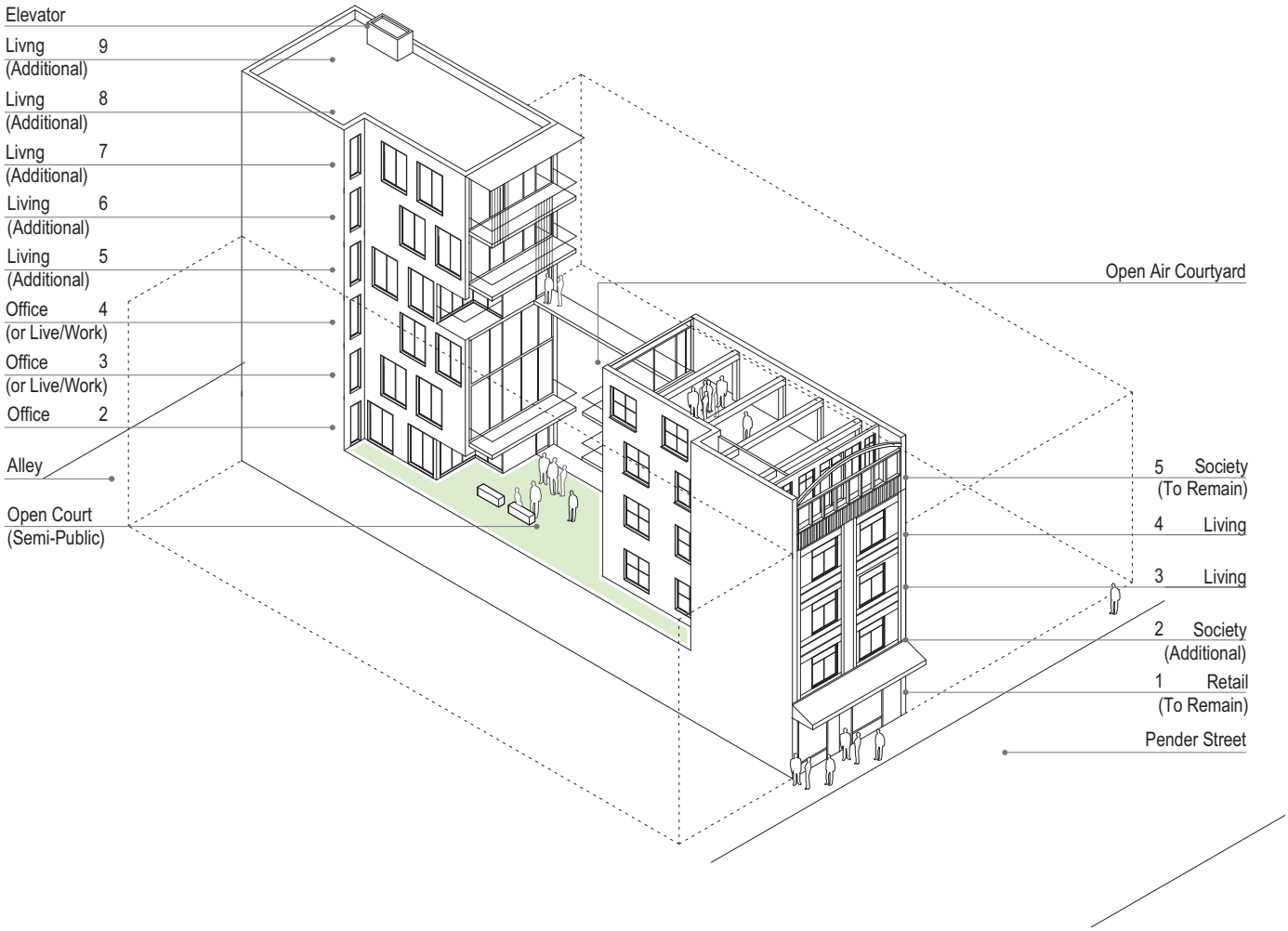
Unit A (2 Bed)
105.7 sq.m (1137 sq.f)

Unit B (1 Bed)
66.8 sq.m (719 sq.f)

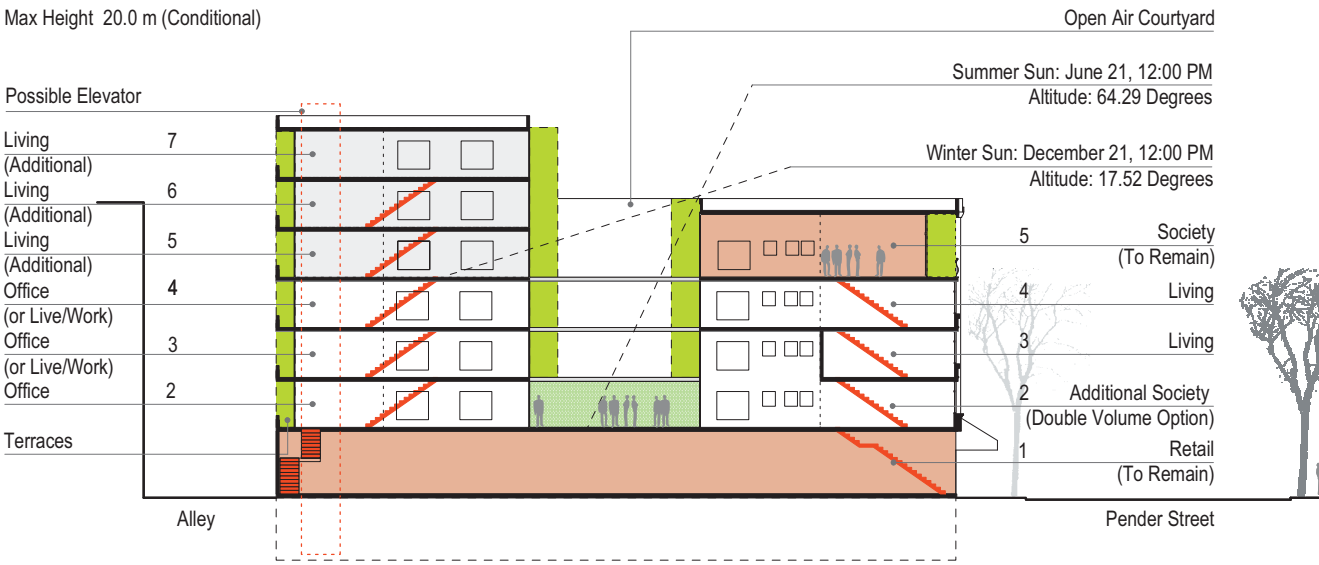
Unit C (Existing Society)
88.2 sq.m (949 sq.f)

Interchangeable Living Units
Specific / Community Space (Front)

Circulation Type 2_Existing Front Stair + Additional Stair + Elevator



Circulation Type 2 Isometric

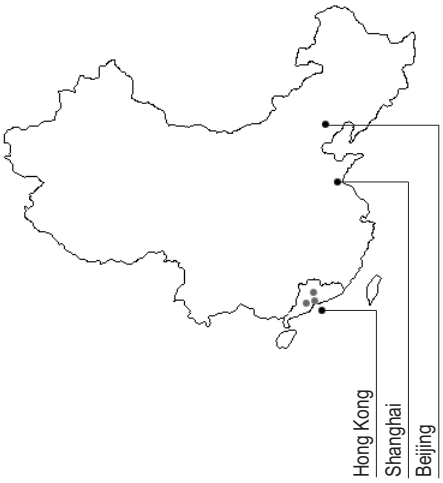


Circulation Type 2 Section M1:400

Chinese Empire Reform Association of Canada later to become the Lim Sai Hor (Kow Mock) Society, 1906.
Image Courtsey of the Vancouver Public Library, Philip Timms photo, VPL 5240

9.2 Lim Sai Hor (Kow Mock) Association
林西何總堂九牧公所

525-531 Carrall Street



The four storey Lim Sai Hor Association building was originally constructed in 1903 for the Chinese Empire Reform Association, whose members were the elite of early Chinatown. Highly influential, the members of the Chinese Empire Reform Association had close ties to Chinese politics, politics in Vancouver and in other Chinatowns located internationally. From 1911-1945, the Empire Reform Society supported the Reformers in China, who gradually lost support to Dr. Sun Yat Sen's revolutionaries. In 1911, Revolution rather than Reform came to China, and by 1945, the Empire Reform Association sold their building to the Lim Sai Hor Kow Mock Association. In 1923, the Lim Sai Hor Association became the Canadian headquarters, and in 1926 the Kow Mock Association (Jiumu Gongsuo) formed as an assisting subsidiary to Lim Sai Hor. The two associations held separate offices until 1933, when the cost of maintaining two addresses became too high, and they amalgamated into the Lim Sai Hor Kow Mock Benevolent Association.

The early Chinese Empire Reform Association building was the tallest building on Carrall, and broke the horizontal street line with its semi circular pediment, ornate cornice and dentils at the roof line. The ground floor had a cheater floor (mezzanine loft) with full double height glazing on both the Carrall Street and Shanghai Alley facades. The second and third floors had recessed balconies with decorative metal balustrades, circular columns and half round arches. The party walls, though constructed in brick, were clad in granite on the Carrall Street façade. The building capitalized on natural light and ventilation by maximizing the width of windows to ceiling height on Carrall, projecting bay windows out over Shanghai Alley, recessing v-shaped bay windows on the south façade (which previously overlooked the internal light well of an adjacent building), using tall windows on the third floor of the north façade, and utilizing skylights on the third floor and top of the stairs.

Lim Sai Hor (Kow Mock) Association

The building originally housed a restaurant and tailor shop (Quan Yee Gee Co), merchant firm (Wing Lee), club (Leing Nam Club), residential units, and second restaurant (Yen Hong Low Restaurant). It backed onto both Carrall Street (at the time the most important business street in Chinatown) and Shanghai Alley (then a thriving district of restaurants, shops, and a Chinese Opera). At the time, the building facing Shanghai Alley may have been an existing separate building acquired by the Association for a Chinese School and for printing its newspaper, the Chinese Reform Gazette. Evidence suggesting that there were two buildings joined into one include a thick existing interior masonry wall and a blocked window on the mezzanine floor of the Carrall Street building that faces Shanghai Alley.

The Lim Sai Hor Association purchased the building at 531 Carrall in 1944 and renovated it by 1945. The decorative features of the original building facade may have been lost at this time. The first floor housed a grocer, Ruiyingchang. The second and third floors, except for a space reserved for Association use, was a dormitory partitioned and rented out to members. Floor two had eighteen double and single occupancy rooms, and floor three had another eight rooms at the back of the building behind a meeting hall, office, reading room, and a storage and cloak room. Both dormitory floors had kitchens, toilets, baths, hot water tanks and washing basins. The green accents on the interior and exterior of the building were chosen because the surname “Lim” or “Lam” means “forest” in Chinese.

Lim Sai Hor (Kow Mock) Association Carrall Street Entrance to Upper Floors

Lim Sai Hor (Kow Mock) Association | Design Approach

The Lim building occupies a singular Chinatown lot similar to that of the Mah Society building but has a slightly larger building footprint of 8.2 m (26'-10") x 35.6 m (117'-6"). Its building width is 60 cm (2') greater than the width of the Mah Society building at 7.6 m (25'-0"). This additional width and the absence of a typical light well allows for a double loaded corridor on its upper floors. Presently, the ground floor is occupied by a Music Society and an artist studio facing Carall Street and another artist studio fronting Shanghai Alley. On the second floor, the large room facing Carall Street is currently used as a Pilates studio. The Third floor contains the Society space and its amenities. In addition to this diversity of use, all the spaces within the building are presently occupied. However, some parts of the Lim Society building would benefit from upgrades and repair. In particular, the services and some of the building structure and envelope need to be restored or replaced.

The design investigation for the Lim Society building began by working with its existing structure. The central circulation corridor provided an existing structure that would allow the integration of units into the long and narrow spaces on both sides of the corridor. This corridor leads to an external fire exit, and in maintaining this requirements for egress are met. In addition, each unit would have adequate lighting conditions as provided by the projecting bay windows on the west façade and regular windows on the north and south facades. Currently, there is a small park on the south side and an empty parking lot on the north that allows for this lighting condition. Given that the park remains, units on the south side would receive ample natural light. On the north façade, the empty lot could eventually be in-filled. In this situation, the in-fill would be required to have a light well in order for the north side to still receive natural light. Two variations on the implications of an in-fill are presented in this study. The first variation uses a light well and shows the conditions that would result from the city's By-law regulations. The second, still working within these regulations, uses a courtyard instead of a light well to retain lighting conditions. From this structure, possibilities for integrating living units into the Lim Society building were developed.

Variation A – Circulation As Existing

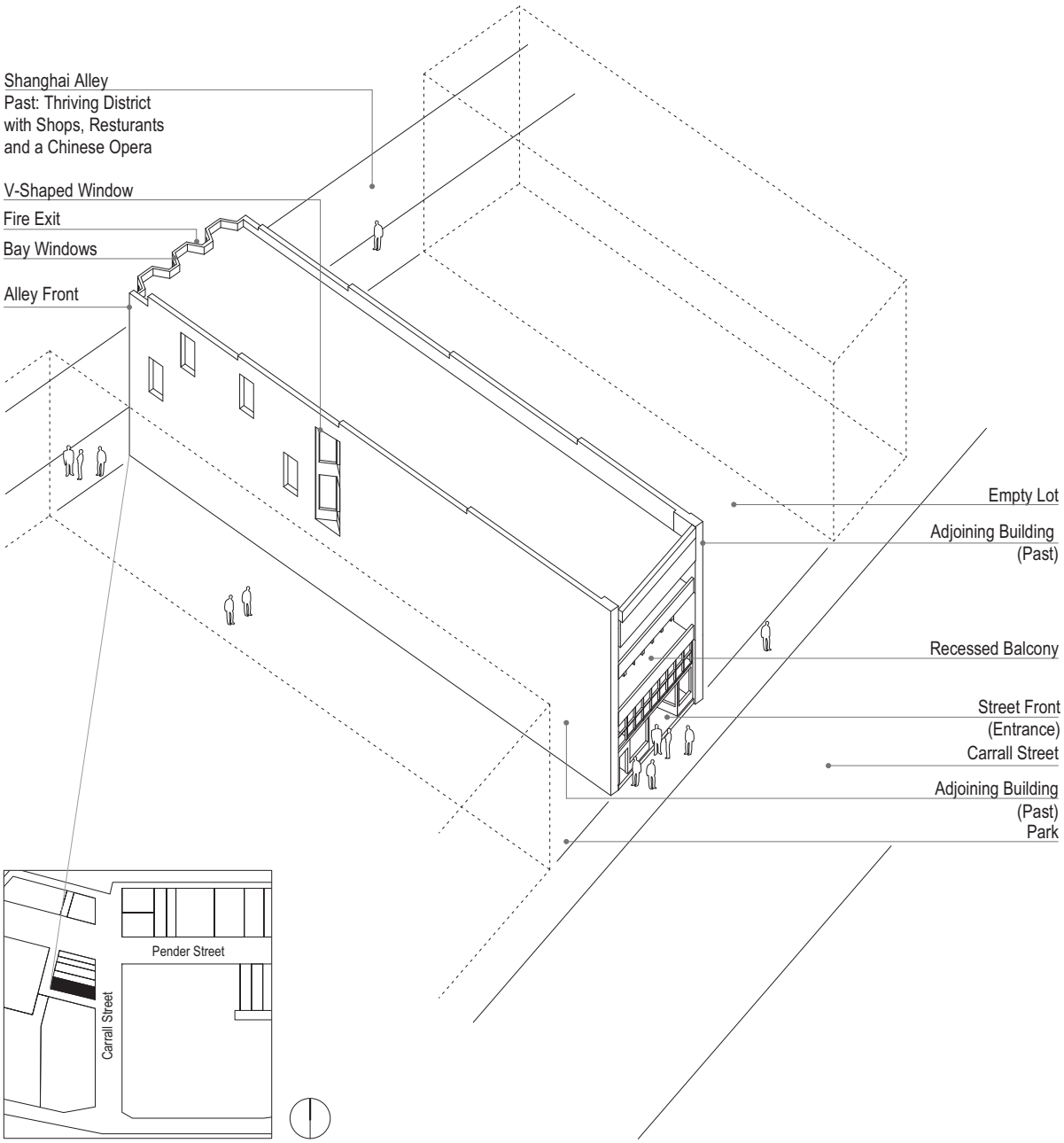
In the first variation, living units were only integrated into the long linear spaces created by the central circulation corridor. The ground floor uses, the Pilates studio and the Society space would remain, with the exception of the artist studio on the ground floor that fronts Shanghai Alley, which could become an active restaurant or teahouse. The long linear spaces, which measure 3.5 m (11'-6") in width, resulted in possibilities for a single 1 bedroom apartment or 2 studio / bachelor units. The bedroom apartments would be ideal for small families and the studio units for the elderly and singles

Lim Sai Hor (Kow Mock) Association Pilates Studio

or suit more temporary stays of students or visitors. Furthermore, the units were developed with a new service wall that would allow the spaces to be flexible over time by accommodating changing needs. New services could include more efficient technologies and environmental strategies such as rainwater harvesting to be used as grey water in toilets. In addition to servicing the new living units, the service walls have been integrated into the existing structure and would function for the spaces that have been preserved.

Variation B – Elevator + Additional Floor

The second variation builds on the first but attempts to intensify the building's residential possibilities. In this scenario, an elevator and an additional floor are proposed. The elevator would provide access for all and would be supported by the additional square footage gained from an extra floor. Requirements for seismic upgrading could be addressed concurrently with the bracing required for the additional floor. Similar to the first variation, the second addresses layout flexibility through a diversity of unit types. In order to accommodate more living units, this variation proposes living units where the Pilates studio and Society space are currently. The size of these two spaces would accommodate 2 bedroom apartments and thus increase the unit type diversity within the building. However, these spaces would still be suitable for commercial or cultural uses given economic and social demands. The Society space would move to an added top floor and also have a new roof garden for stormwater mitgation and social space.

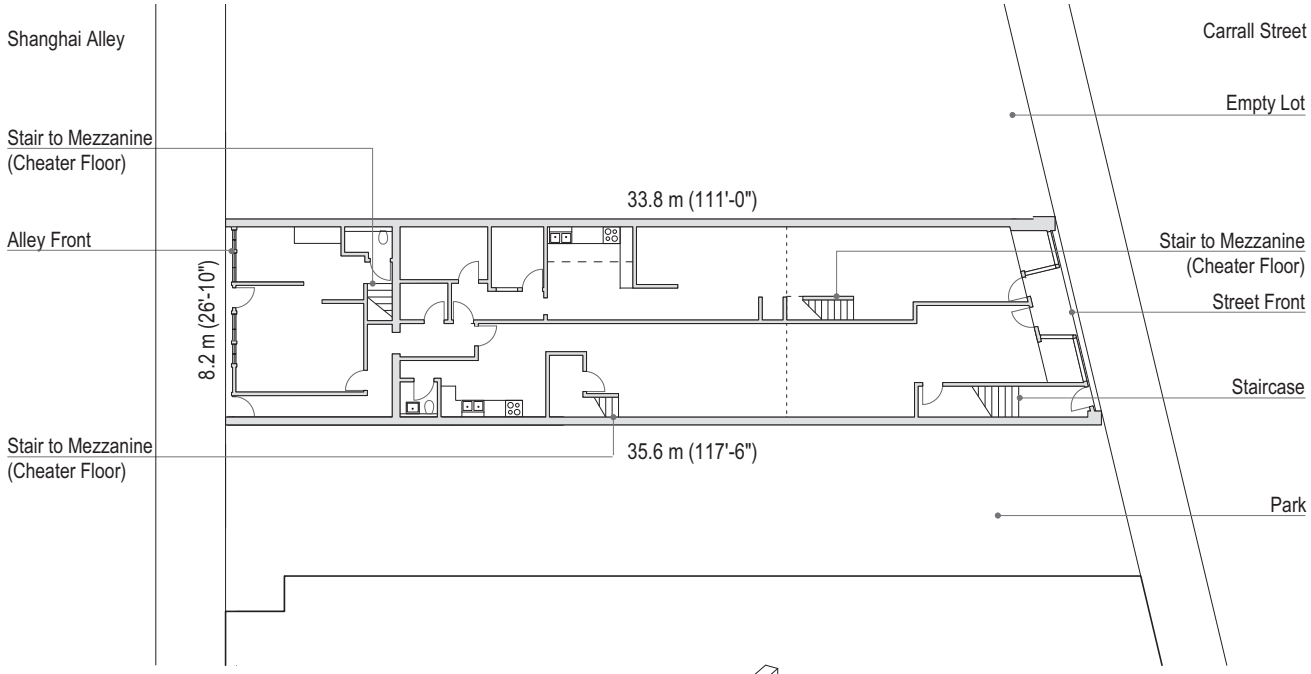


Context

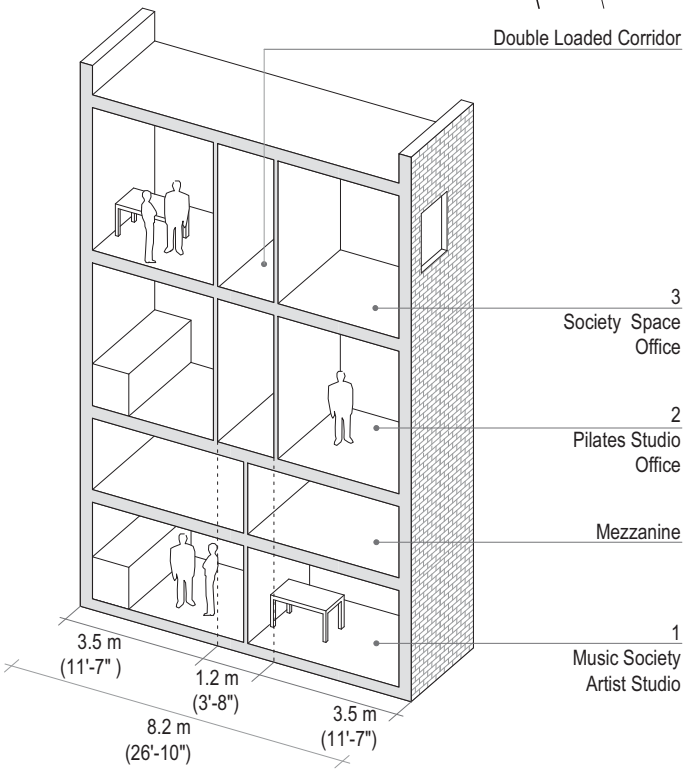
Bay Windows and Fire Exit

Evidence of Adjoining Building

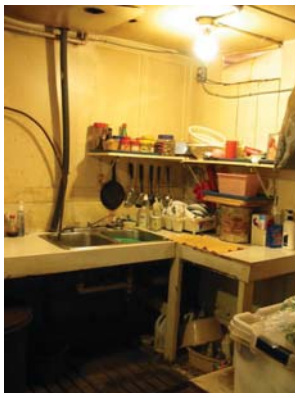
Recessed Balconies



Existing Ground Floor M1:300



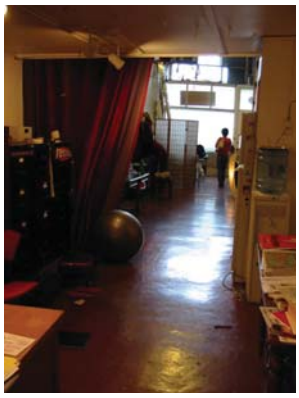
Existing Cross Section



Kitchen

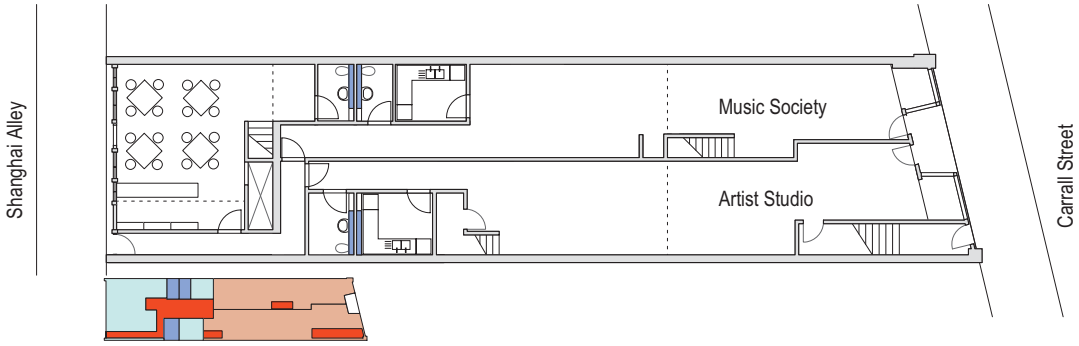
Water Damaged Ceiling

Music Society

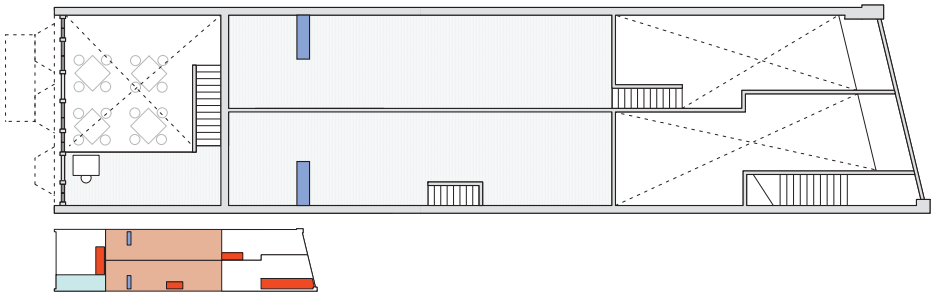


Artist Studio

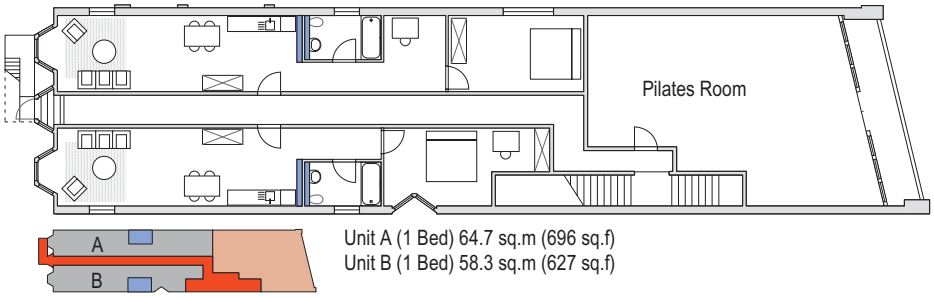
Variation A - Circulation As Existing



Ground Floor Plan M1:300

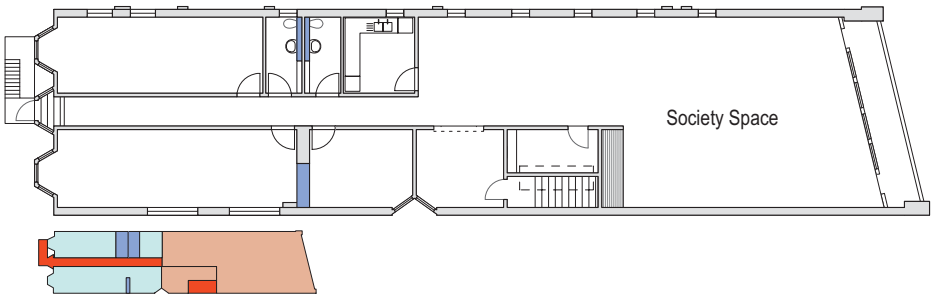


Mezzanine



Unit A (1 Bed) 64.7 sq.m (696 sq.f)
Unit B (1 Bed) 58.3 sq.m (627 sq.f)

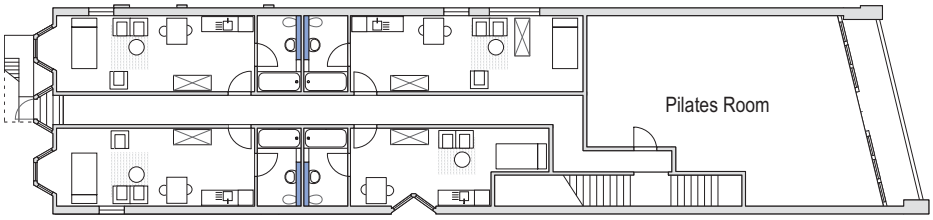
Second Floor

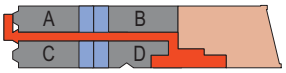


Third Floor

- Circulation
- Services
- Studio / Bachelor
- 1 Bedroom
- Existing to Remain
- Renovated Space

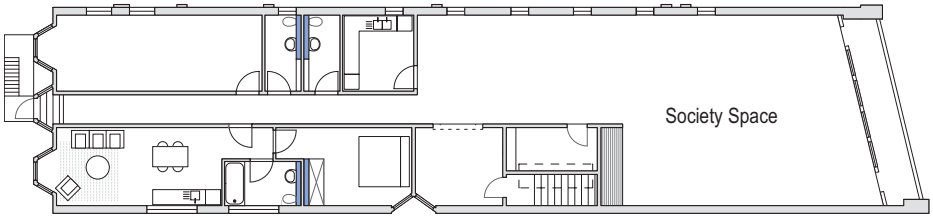
Alternate Unit Types for Second and Third Floor





Second Floor

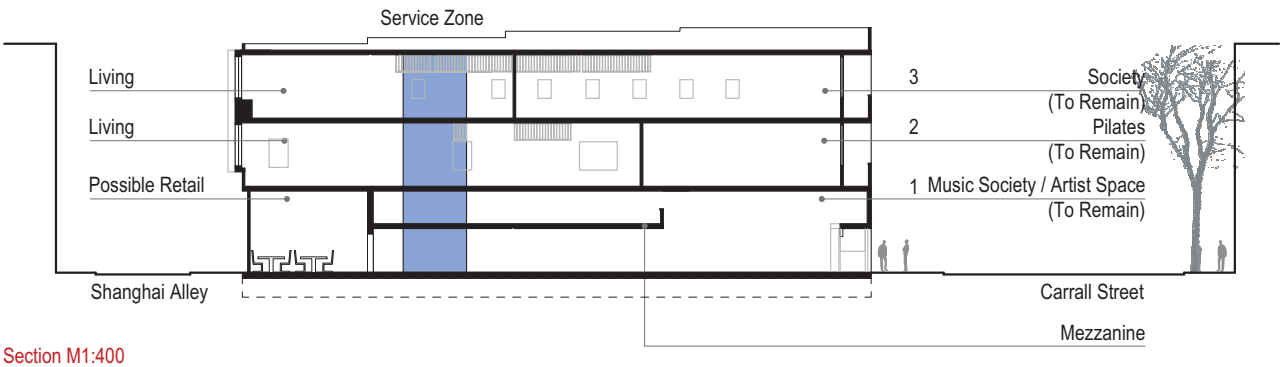
Unit A (Studio) 30.3 sq.m (326 sq.f)
Unit B (Studio) 33.5 sq.m (360 sq.f)
Unit C (Studio) 31.0 sq.m (333 sq.f)
Unit D (Studio) 26.6 sq.m (286 sq.f)



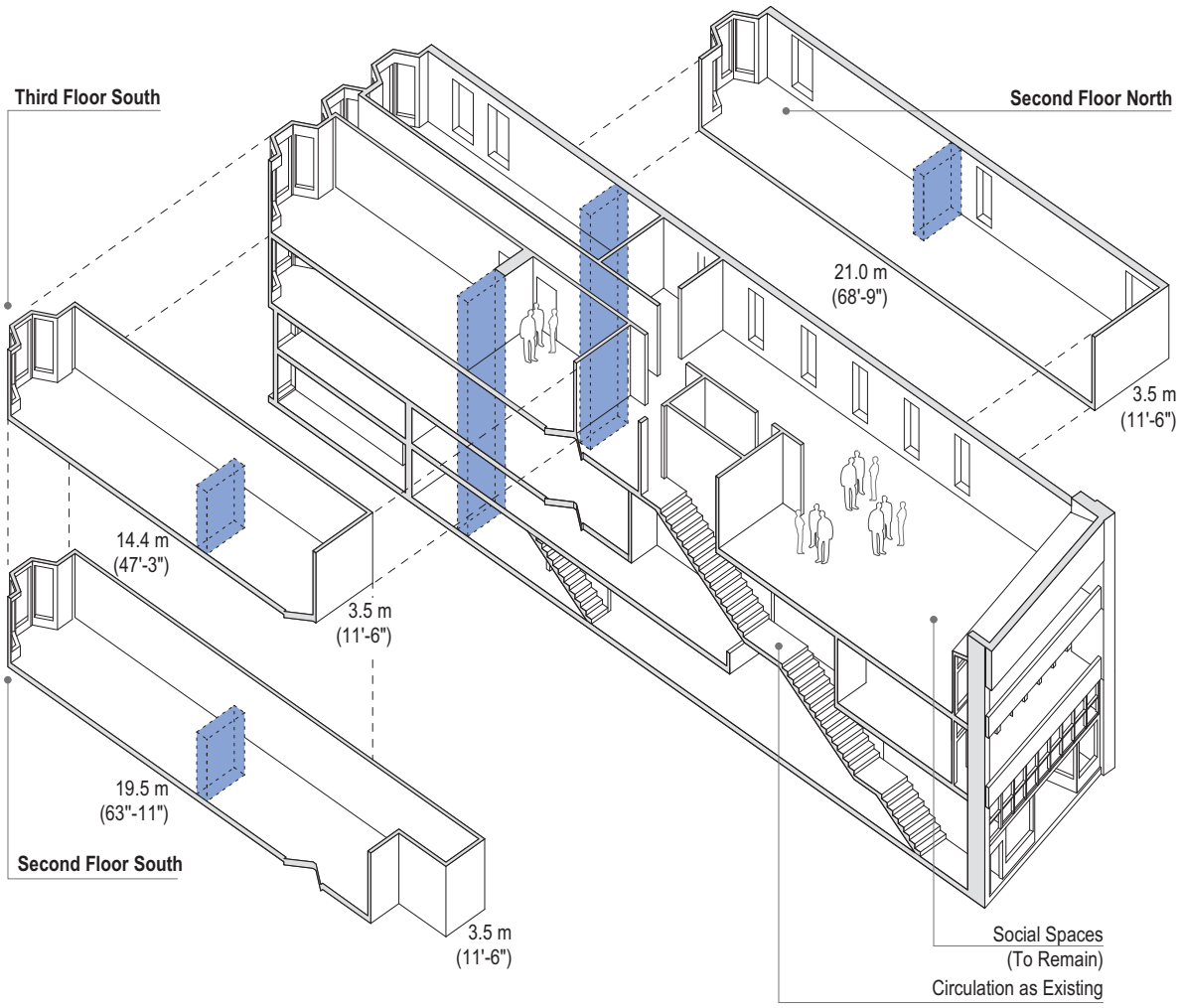
Third Floor

Unit A (1 Bed) 45.2 sq.m (486 sq.f)

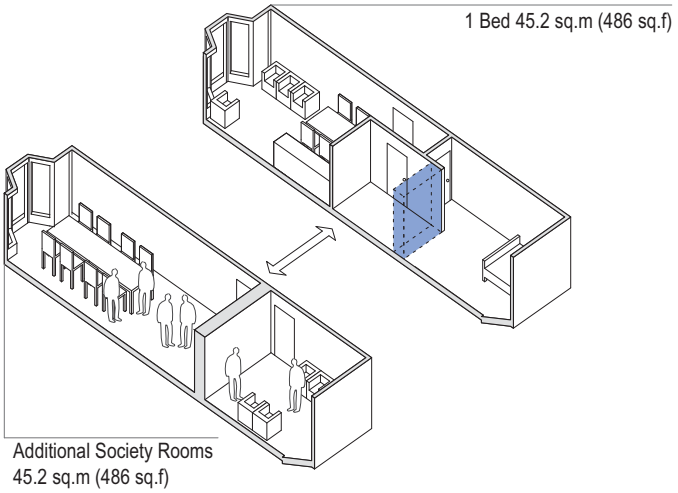
Variation A - Circulation As Existing



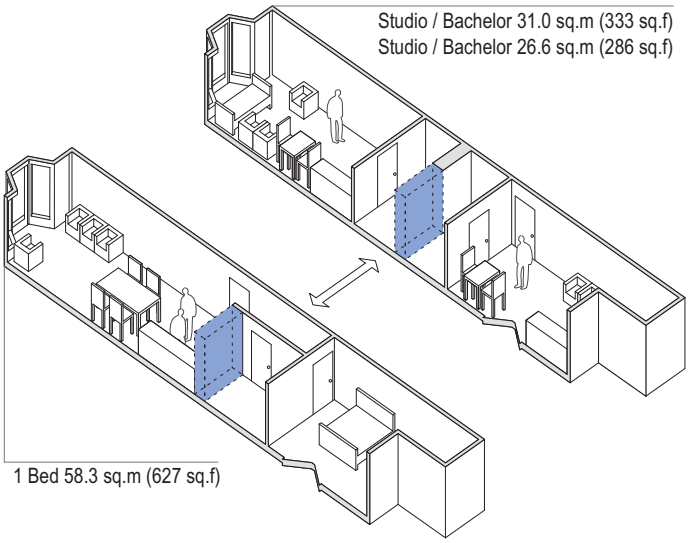
Section M1:400



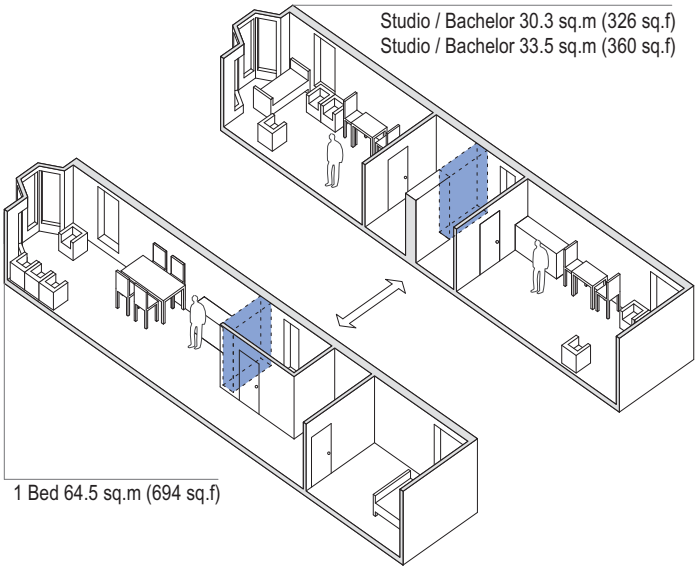
Isometric Showing Service Wall and Living Locations



Third Floor South



Second Floor South

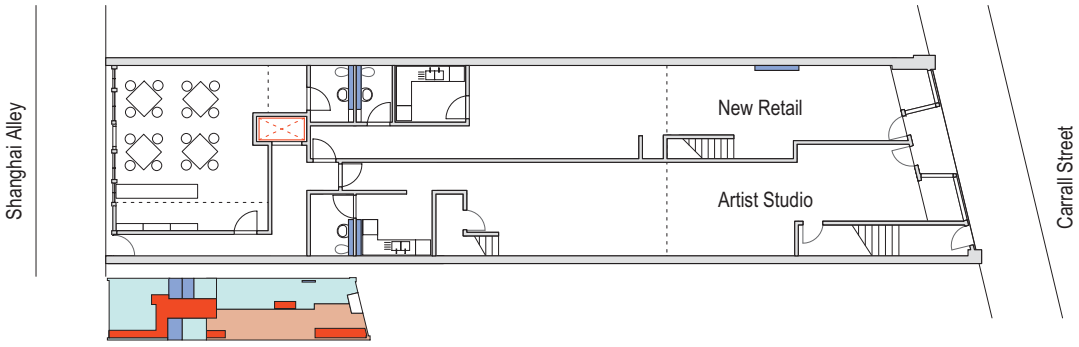


Second Floor North

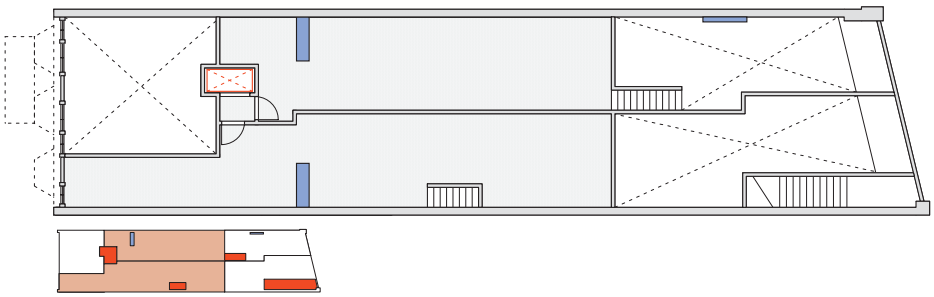
Isometric Showing Service Wall and Alternate Living Unit Configurations

Lim Sai Hor (Kow Mock) Association | Proposed

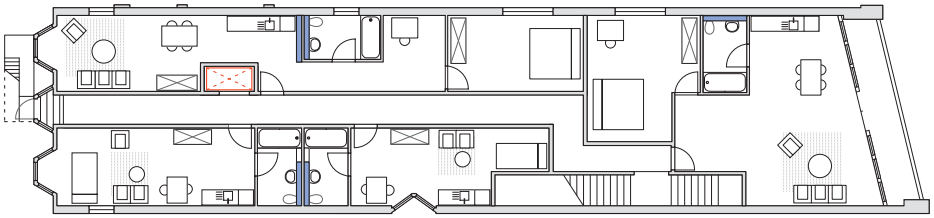
Variation B - Elevator + Additional Floor

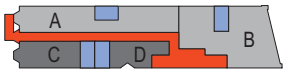


Ground Floor Plan M1:300



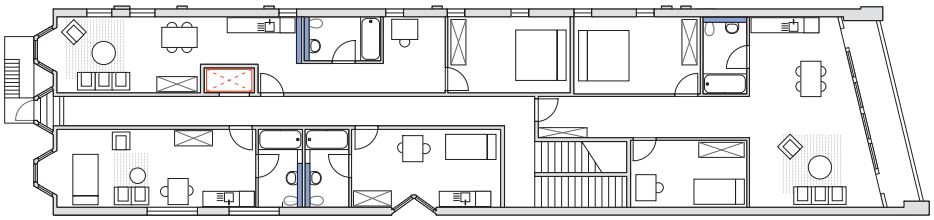
Mezzanine

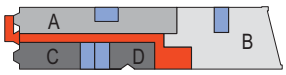




Second Floor

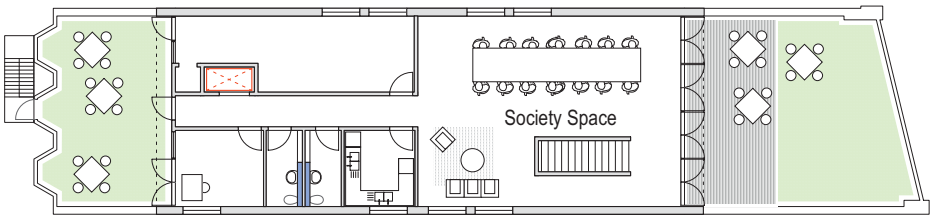
Unit A (1 Bed) 61.5 sq.m (661 sq.f)
Unit B (1 Bed) 74.9 sq.m (806 sq.f)
Unit C (Studio) 31.0 sq.m (333 sq.f)
Unit D (Studio) 26.6 sq.m (286 sq.f)

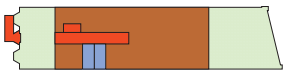




Third Floor

Unit A (1 Bed) 60.0 sq.m (645 sq.f)
Unit B (2 Bed) 87.6 sq.m (943 sq.f)
Unit C (Studio) 31.0 sq.m (333 sq.f)
Unit D (Studio) 23.5 sq.m (253 sq.f)

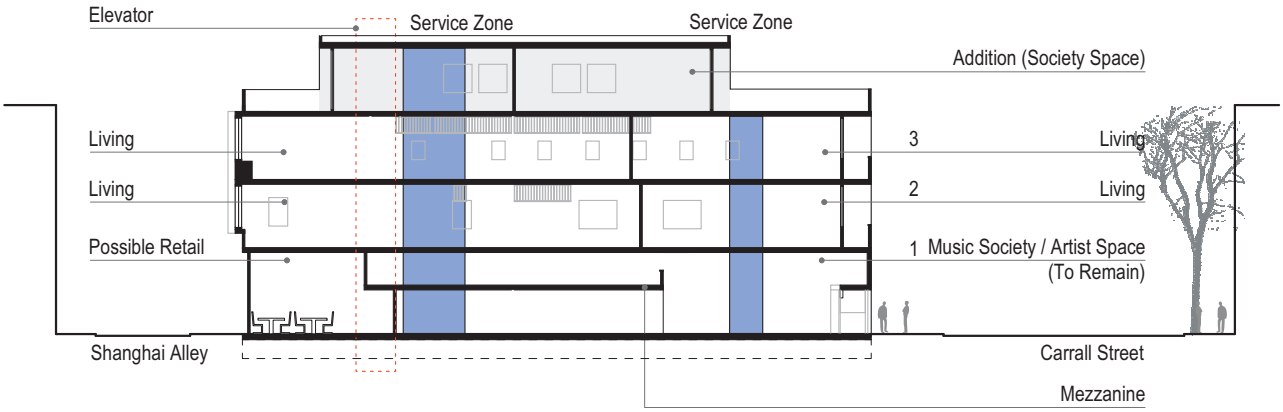




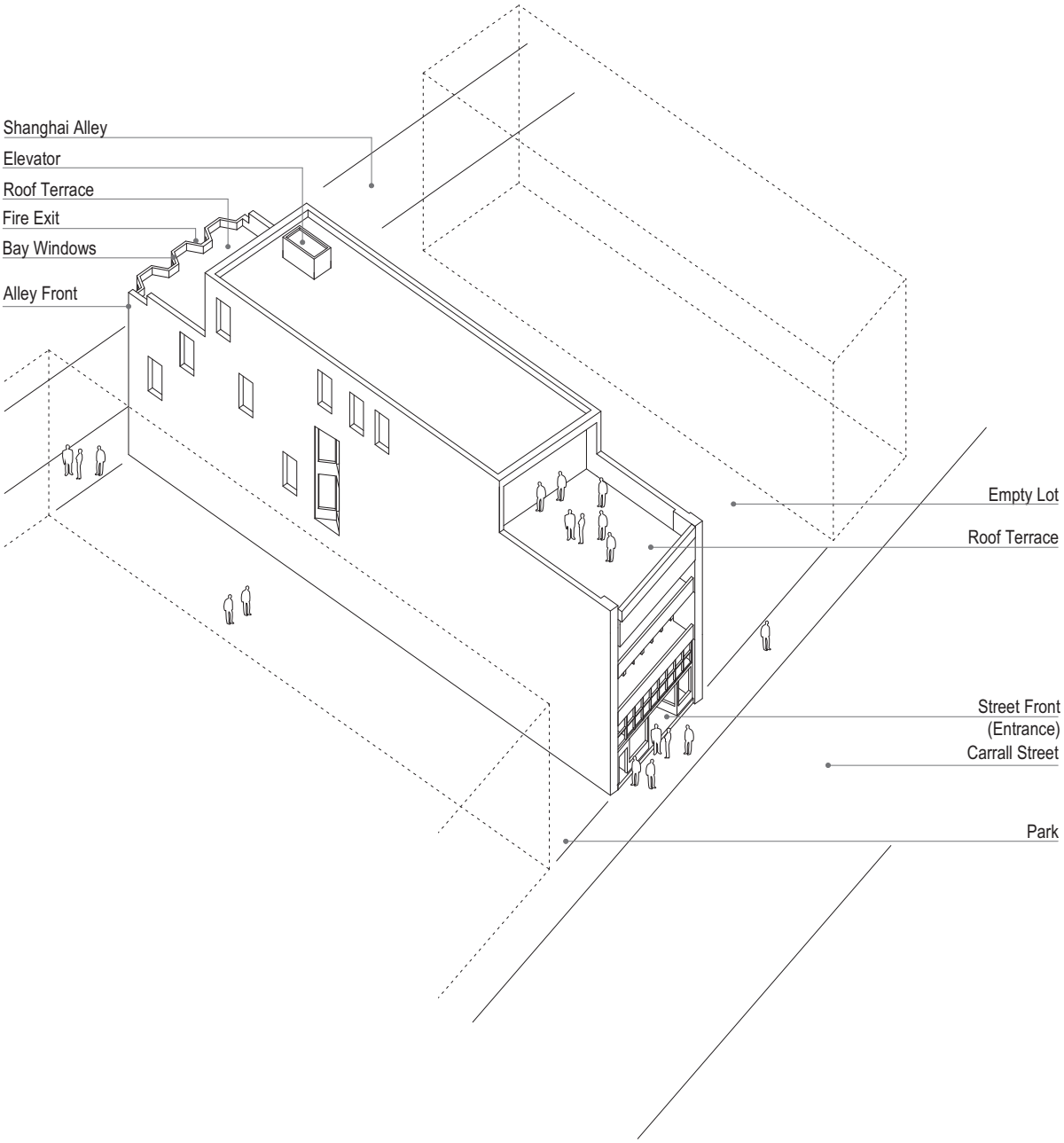
Society Space 143.0 sq.m (1539 sq.f)
Roof Terrace 102.6 sq.m (1104 sq.f)

Fourth Floor

- Circulation
- Services
- Studio / Bachelor
- 1 Bedroom
- 2 Bedroom
- Existing to Remain
- Addition (Society Space)
- Renovated Space
- Landscape

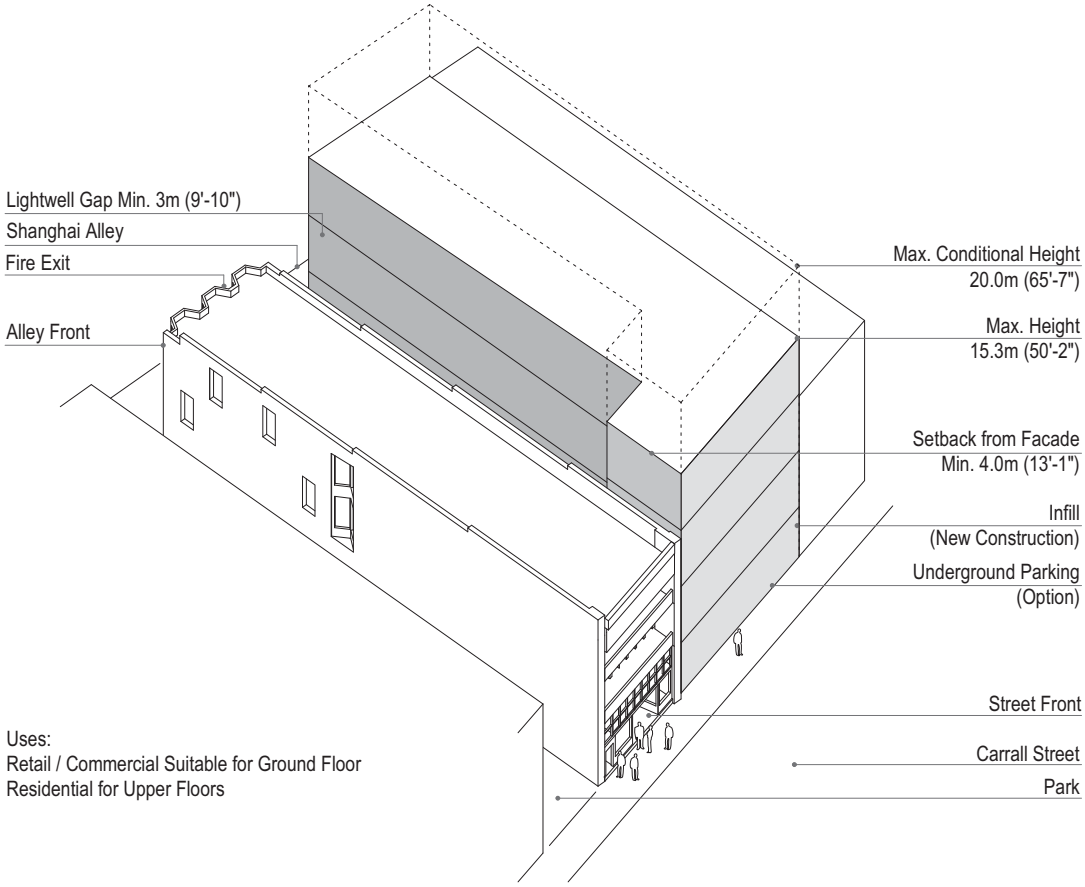


Section M1:400

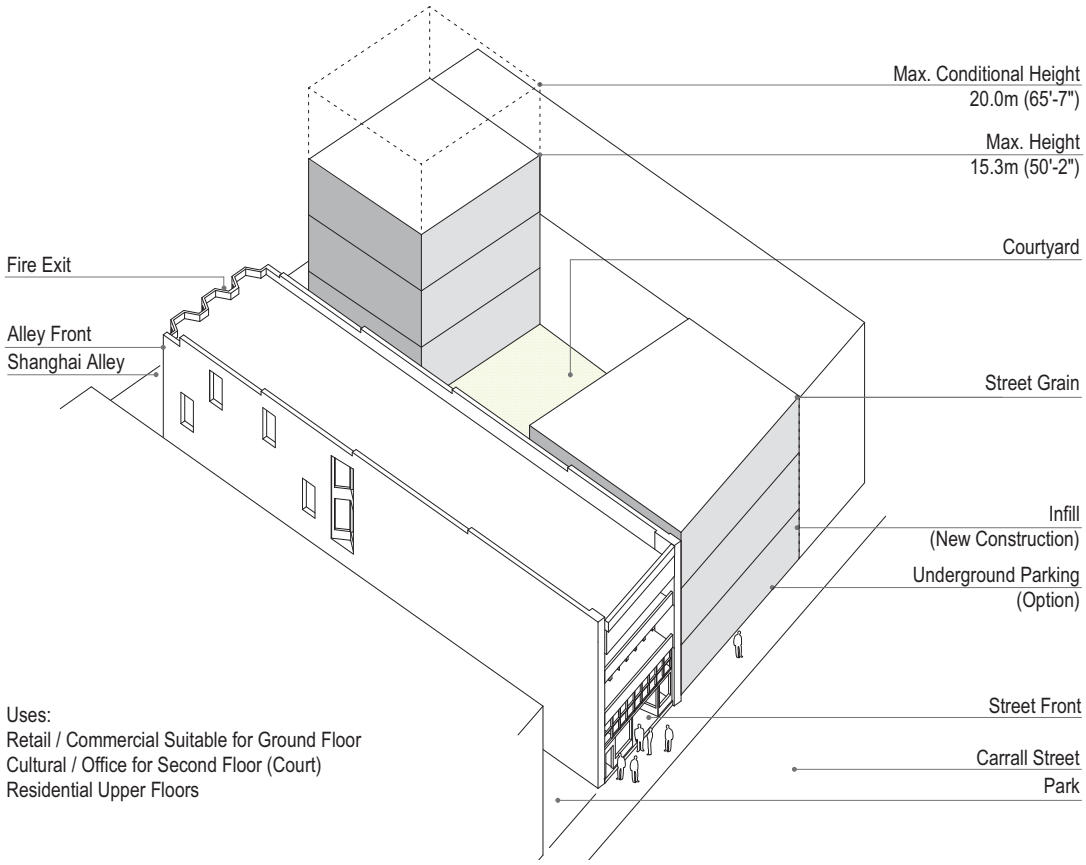


Isometric Showing Additional Floor

In-fill Possibilities



Isometric Showing Possible Infill in Adjacent Empty Lot. Variation 1

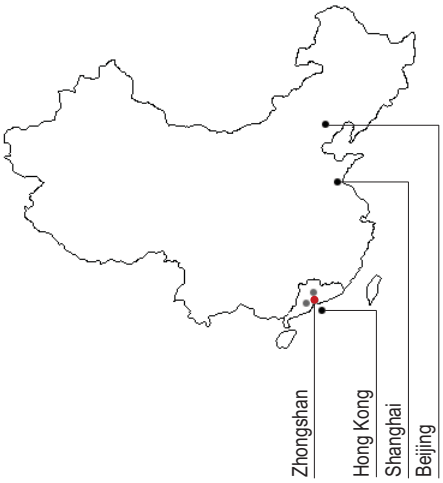


Isometric Showing Possible Infill in Adjacent Empty Lot. Variation 2

Shon Yee Benevolent Society (May Wah Hotel). Image Courtesy of CCCMA: CCC

9.3 Shon Yee Benevolent Association
鐵城崇義總會

258 E Pender Street



The Shon Yee Benevolent Association was formed in Vancouver in 1914. Its name comes from the Shon Yee Shrine in Shek Kei town in Zhongshan County adjacent to Macau. The shrine was built to encourage young people to uphold the reputation of Zhongshan by being good citizens. Like other Societies, Shon Yee Benevolent Association's role was to provide protection, a sense of community and family, funerary services, social services, and fundraising for Zhongshan people in both Vancouver and China. Members could receive help with reading, writing and translation. These services were provided by the young to the elderly. The Shon Yee Benevolent Association also held 'kangaroo courts' to protect members from other societies, but also to uphold diplomacy within the Chinatown community. Since 1930, the Association has trained young people for leadership roles within the Society and larger community. After WWII, when members were able to bring their families to Canada, the Association extended membership to the wives and children of members. In 1973, a Women's Club and Youth Club were created, and an athletic club, open to the Chinatown community, was established in 1975. Today, the Association has about 100 members, and continues to be unusually active with wide ranging initiatives. Scholarships are made available to children of members, and a multitude of classes and activities are provided such as lion and dragon dancing, theatre club, athletic club, martial arts, Mandarin language, ballroom dancing, cooking, flower arranging, picnics, movie nights, Senior's birthday celebrations, and Christmas and karaoke parties. Inter-Society activities such as summer picnics, Chinese chess and table tennis tournaments are organized for the greater Chinese community in Vancouver, and the Association also organizes tri-city annual conferences between Vancouver, Victoria and Calgary. The Shon Yee Benevolent Association also fundraises for the Chinese Benevolent Association and the Chinese Cultural Centre. Members continue to get assistance with acquiring welfare and other social services. In 1988, the Association built a seniors housing facility for those with diabetes, and seniors over 55. A daycare was built for members in 1991.

Shon Yee Benevolent Association (May Wah Hotel)

The May Wah Hotel, originally known as the Loyal Hotel, was built in 1913 by Architect William Frederick Gardiner. It has always been a hotel, but has been known over the years by different names: New Orient Hotel (1947), Le-Kiu Hotel (1950), Garden Hotel (1956), Sydney Hotel (1969), and May Wah Hotel (1980-present). The Shon Yee Benevolent Association bought the building in 1926 but did not move their office to the ground floor until 1946. They then moved to Jackson St. in 1977 in order to bring in rent from the hotel. Five storeys tall with a 22.8m x 37.2m (75' x 122') building footprint, the May Wah Hotel occupies three lots and was one of the largest rooming hotels in Chinatown. The Pender Street façade has six classical pilasters with a strong horizontal cornice. The building has a U-shaped plan to incorporate three lightwells (one in the middle and two on the sides of the building) to maximize natural light to the interior of the hotel. These lightwells are narrow compared to By-law requirements at the time of construction. Within the hotel, there are four floors that have hotel rooms, with a total 130 rooms in the entire building. Each floor has a common kitchen with a coin-operated stove and two shared bathrooms. There are two communal rooms on the second floor where residents gather to read and participate in mahjong tournaments. Historically, most rooms had one window for light and fresh air with open wood grilles above the doors for ventilation, though some did not have windows or ventilation, and were much cheaper to rent. Typical rooms were approximately 2.7m x 3.7m (9' x 12'-4") with a 2.4m (8'-0") ceiling. Most of the rooms were rented to residents from Zhongshan County in China, though four or five rooms were left for homeless people needing temporary accommodations. While the majority of residents were single men, there were also single women and families living in the Hotel. Double loaded corridors had fire escapes at both ends which were occasionally used to dry clothes and preserve fish. All rooms had hot water, radiant heating and a basin for hot and cold water. Electric appliances were not (and still are not) allowed in the rooms. The building was designed with a full basement and retail on the ground floor. The first floor was occupied by the Ho Sun Hing printing company from 1920's to the 1940's and since 1947, by the Le-Kiu Poultry Co. Ltd.

Presently, overnight guests coming to Chinatown have sought accommodations outside of the community, as there are few attractive hotels within Chinatown. Notwithstanding, the May Wah Hotel, with its small rooms and shared services (with a ratio of 40 rooms to 3 washrooms) does not meet contemporary living standards. In addition to inadequate service facilities, the rooms are fairly dark and introverted, with only tiny windows facing a lightwell.

Contemporary Lofts

The proposed intervention revives and expands upon the original function of the hotel; to accommodate visiting clan members from other Chinatowns for national conferences, business and social exchange. The hotel is re-interpreted as contemporary loft spaces for short term visits with the option of longer term rentals and re-introduces the Shon Yee Benevolent Association meeting rooms back into the building. In many centers around the world, this new typology of temporary housing has emerged as a way of providing increasingly mobile individuals a home way from home. In addition, providing up-to-date technologies would enable travelers to conduct business while away, increasing their appeal. In approaching the rehabilitation of the May Wah Hotel, the design proposal addresses both the contemporary needs of the local Chinatown community and the global community, while working within the building's existing structure. In its renovation, three unit types are proposed to accommodate temporary stays; single bed studio, double bed studio and switch rooms. These units were developed within the existing structure and maintain the existing circulation system. The studio units have new services that allow them to be self-contained with a small kitchenette and bathroom. The switch rooms provide additional beds and increase the flexibility of accommodating larger groups.

Each studio unit is given a terrace facing onto a lightwell, providing private access to an exterior space. The long linear lightwells are a unique characteristic of the May Wah Hotel and, in this proposal is further accentuated through the integration of terraces that face this distinctive space. The terraces are carved from the mass of building and thus maintain the historical form of the lightwells, yet enhance the quality of the rooms. Additionally, visitors are afforded a closer experience of this unique spatial condition. Traditionally, buildings in Chinatown used colour applications in a more symbolic manner. In this scheme, colour is used for spatial effect. By applying a layer light blue colour to the underside of each terrace, a spatial exchange between the terrace and sky is made.

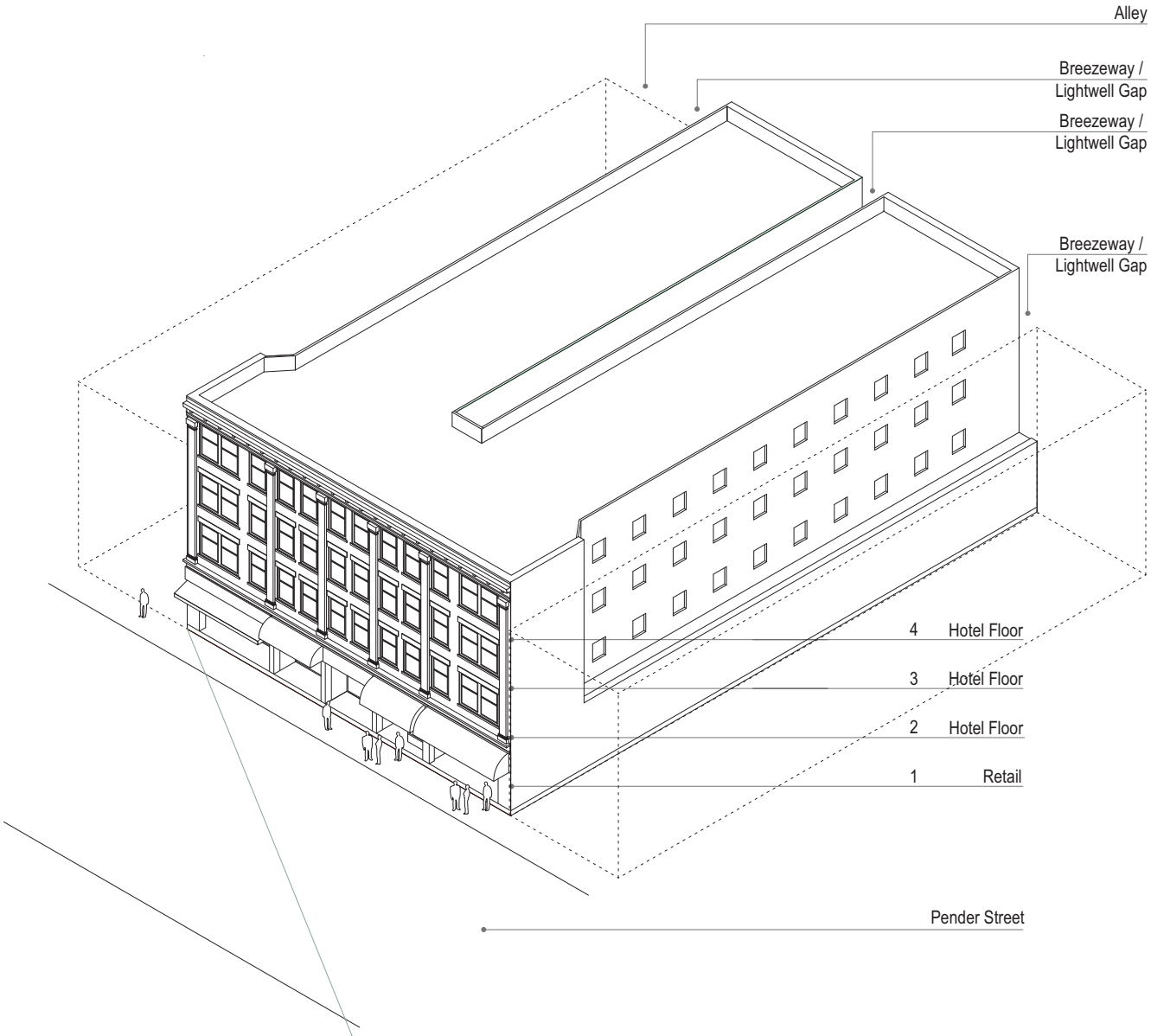
Communal and Cultural Spaces

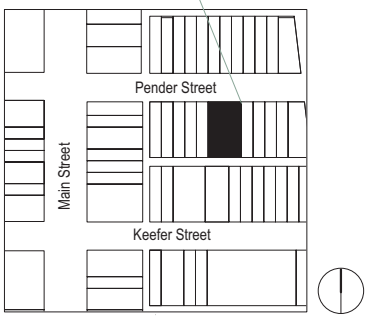
Addressing the social and cultural dimensions of the May Wah Hotel, communal spaces have been inserted that disrupt the regularity of the existing structure. Aside from providing places for social interaction these insertions create a unique identity for each floor. On the second floor, a series of flexible gathering spaces span the front of the building, maintaining a strong visual connection to Pender Street. The third floor features a linear glass conference and office room that pushes perpendicularly to the lightwells and has a dual function of permitting additional light into the hallways. The fourth floor has two communal terraces that are open to the sky, and, allow visitors to peer down into the garden below. The insertion of these communal spaces, infuse the introverted life of the building with places for social interaction and moments of relief from the repetitious interior.

The study proposes an additional top floor to create a home for the Shon Yee Benevolent Association. Currently, the Association meets outside of Chinatown and this new addition would contribute immensely to the cultural life of the building by bringing back the rich activities of the Association. The addition takes advantage of the roof and is seen as a pavilion set within a garden. The meeting rooms open on to a series of garden spaces and outdoor terraces and provide a place for traditional activities and celebrations to take place, yet could equally serve as space for new activities and programs to occur.

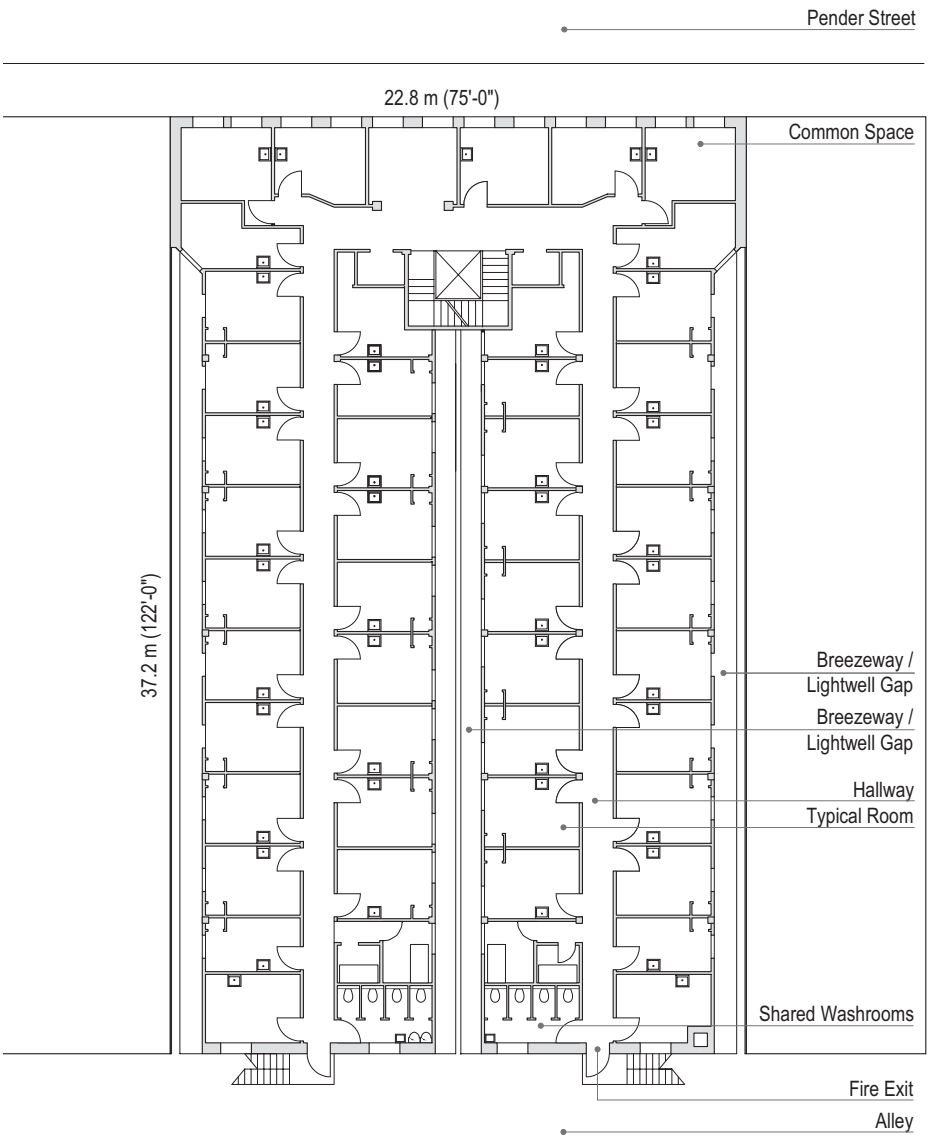
The study found that the May Wah Hotel's structure is more suitable for short term accommodations. The study works within this structure, yet investigates possibilities for its transformation into an active part of the community. The proposal capitalizes on increasing demands for innovative short-term accommodations, developing a synergy between the old and new that would not only bring new life to the community but would also be an instrument in sustaining its accumulated history.

Fire Exit of the Shon Yee Benevolent Association (May Wah Hotel)


Alley
Breezeway / Lightwell Gap
Breezeway / Lightwell Gap
Breezeway / Lightwell Gap
4 Hotel Floor
3 Hotel Floor
2 Hotel Floor
1 Retail
Pender Street


Pender Street
Main Street
Keefer Street

Context

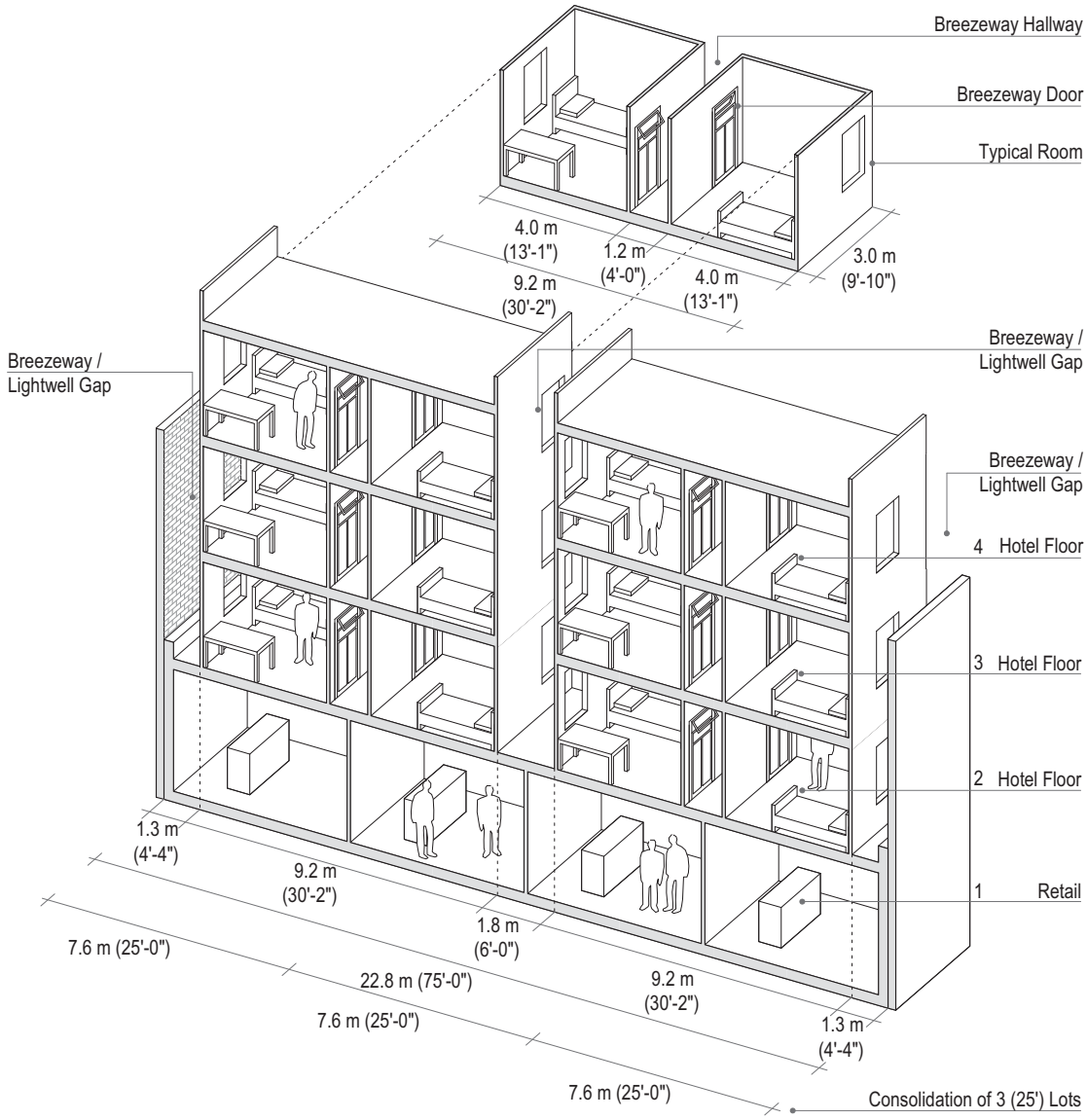


NOTES:
Tiny Social Spaces
No Exterior Social Spaces
Inadequate Santitary Facilities
No Society Space in Building
Society Meets Outside of Chinatown

Existing Typical Floor M1:300

Retail on Pender Street

Fire Exit



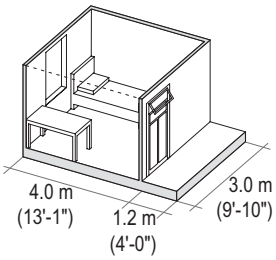
Existing Cross Section

Staircase

Breezeway Door

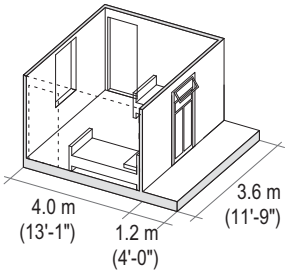
Breezeway (Exterior)

Contemporary Lofts

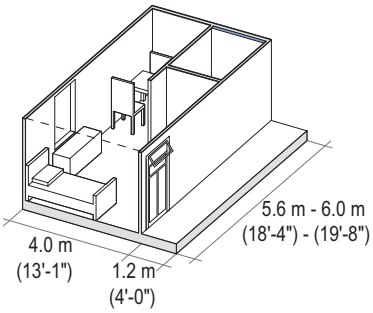


Typical Existing Room
12.0 sq.m (129 sq.f)

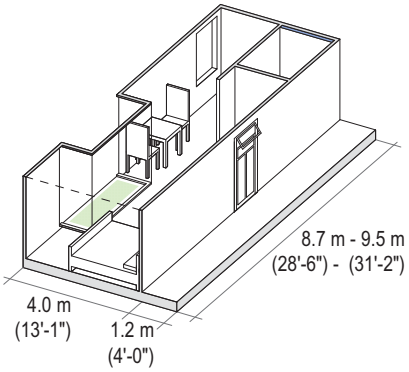
- Circulation
- Services
- Terrace
- Landscape
- Common Space
- Additional Society Space
- Existing to Remain



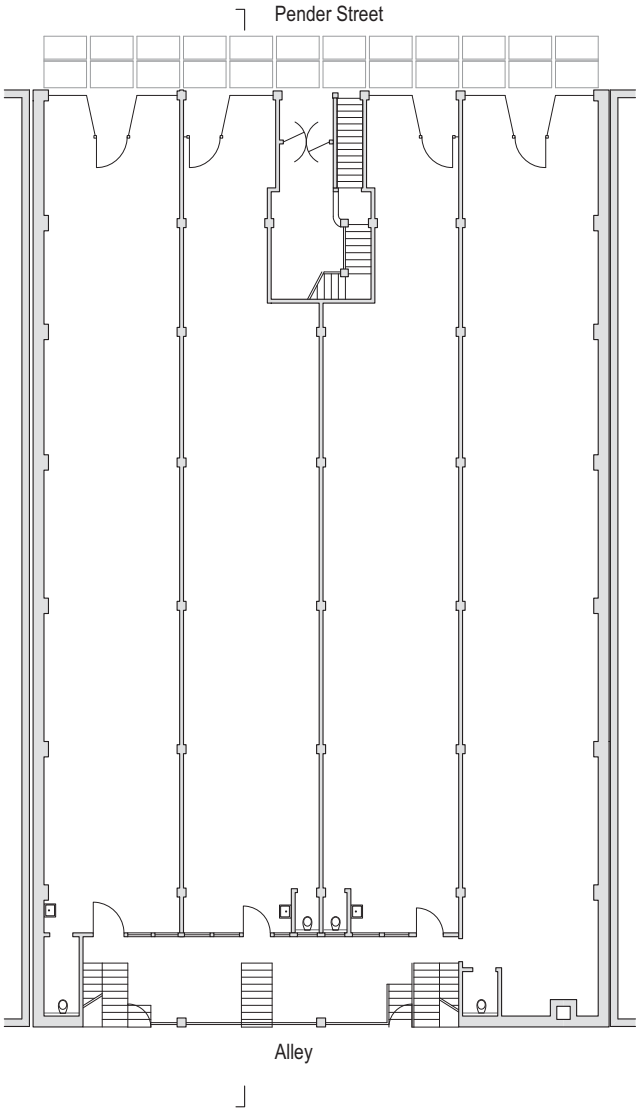
Switch Room
14.4 sq.m (14.4 sq.f)

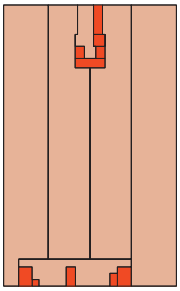


Single Bed Studio / Bachelor
22.4 sq.m - 24.0 sq.m
(241 sq.f) - (247 sq.f)



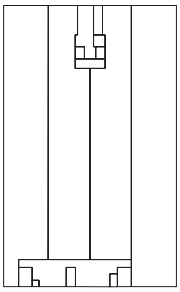
Double Bed Studio / Bachelor
34.8 sq.m - 38.0 sq.m
(365 sq.f) - (409 sq.f)



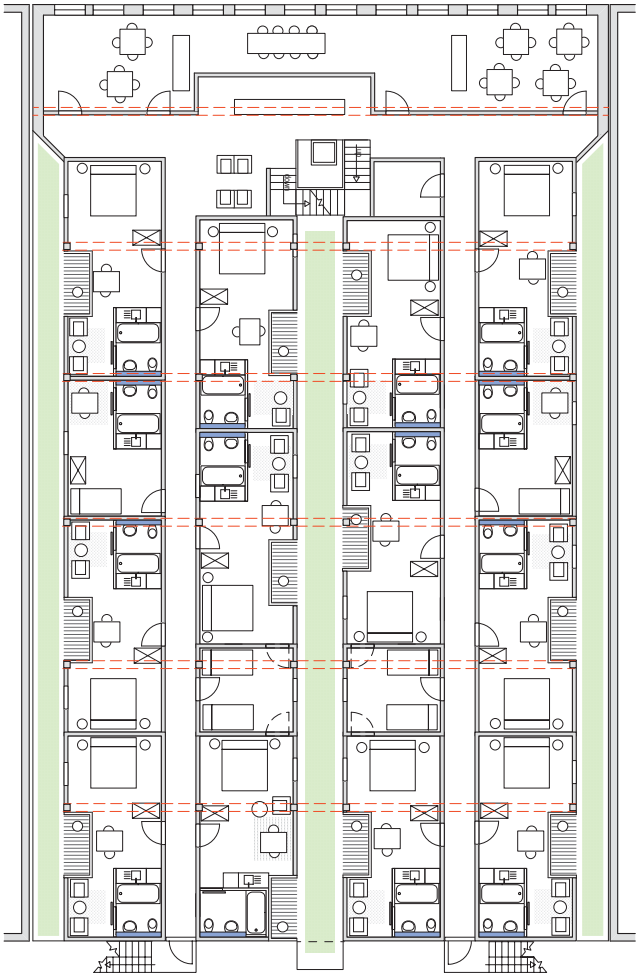


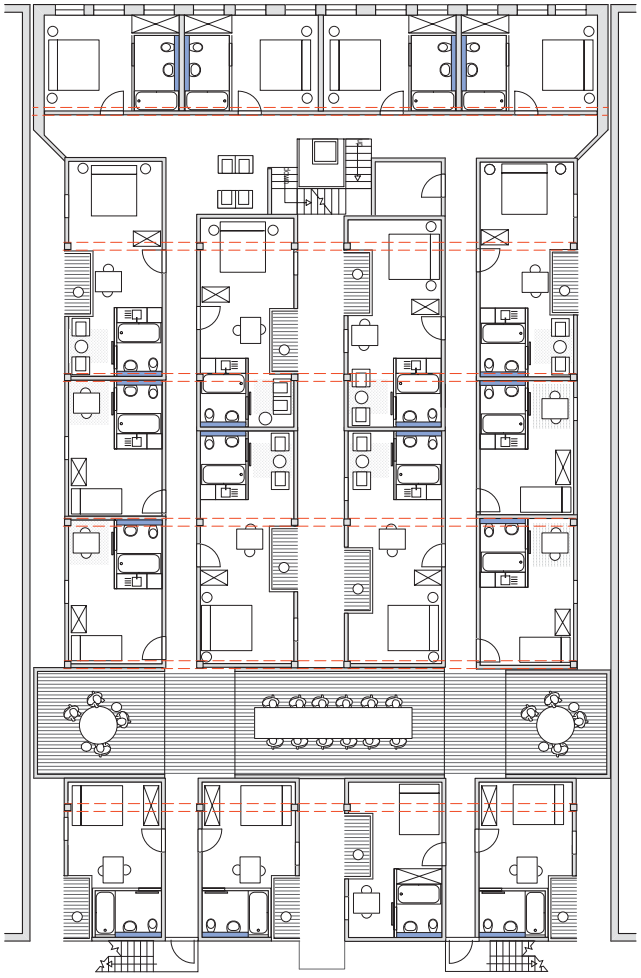
Ground Floor Plan M1:300

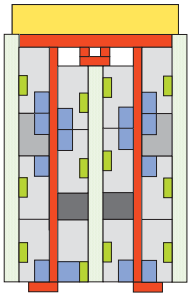
Existing Retail to Remain
Circulation as Existing



No Units

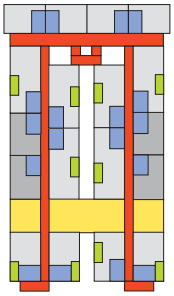






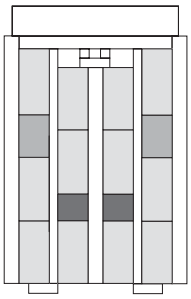
Second Floor Plan

Units + Common Space + Landscape
Circulation as Existing

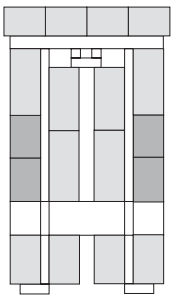


Third Floor Plan

Units + Common Space
Circulation as Existing

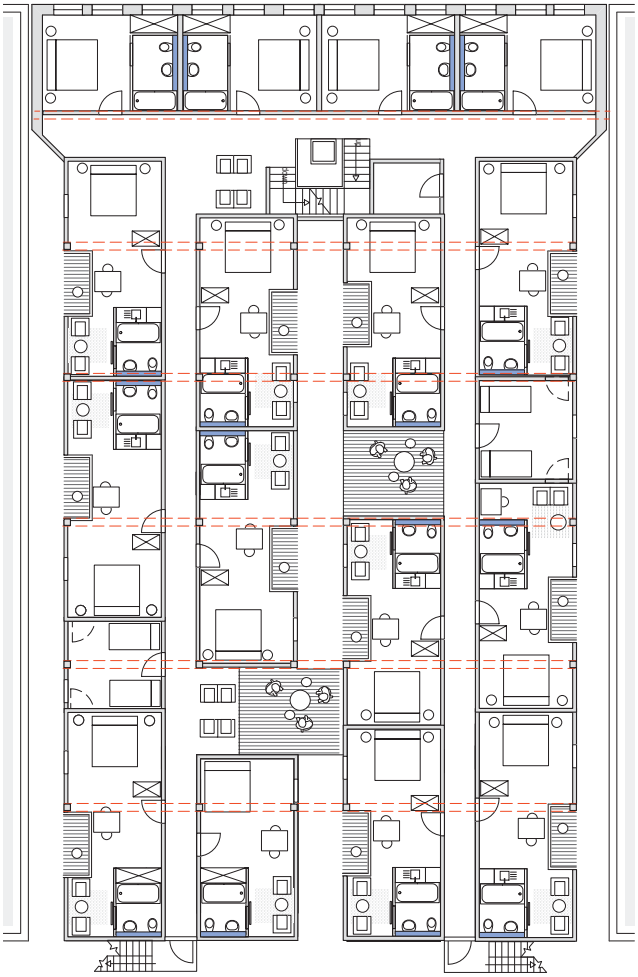


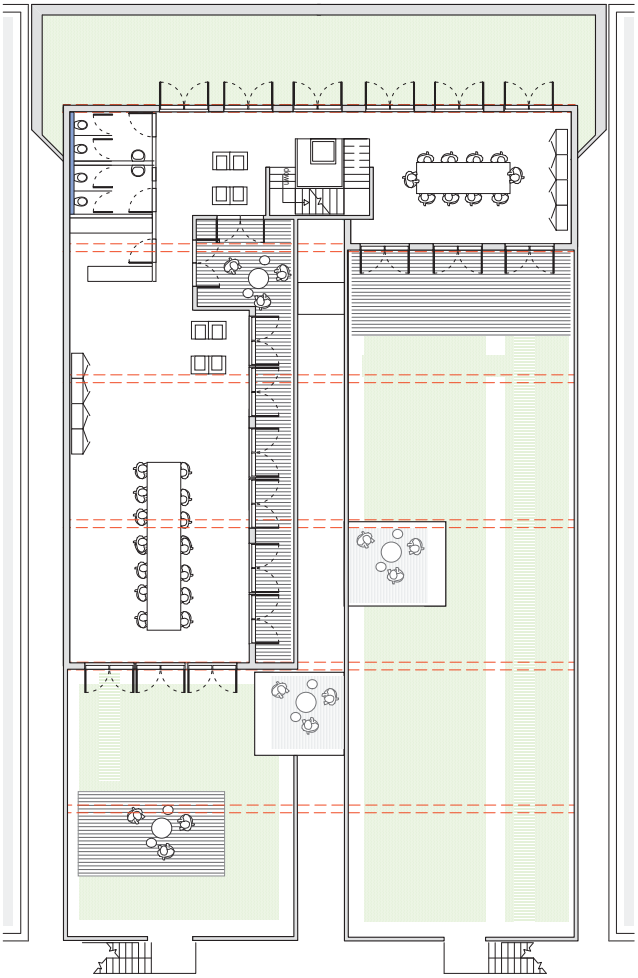
Units

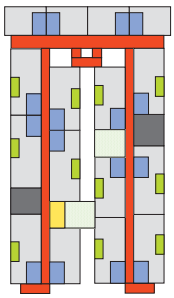


Units

Contemporary Lofts

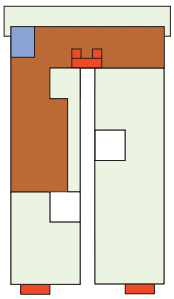






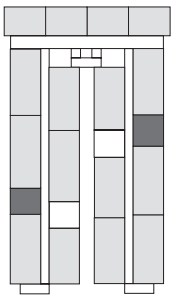
Fourth Floor Plan

Units + Landscape
Circulation as Existing

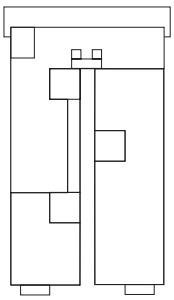


Fifth Floor Plan

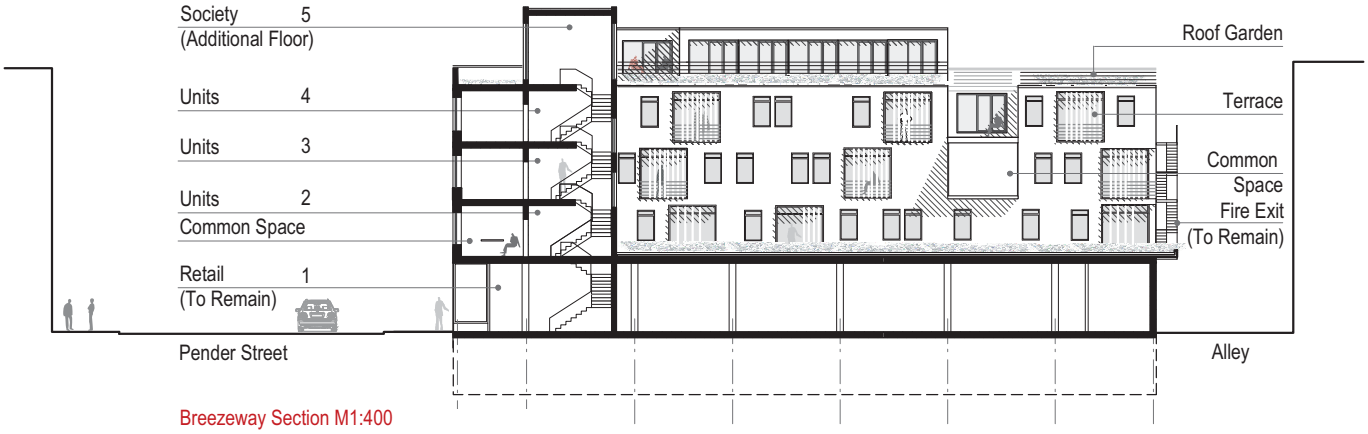
Society Space + Landscape
Additional Circulation



Units



No Units



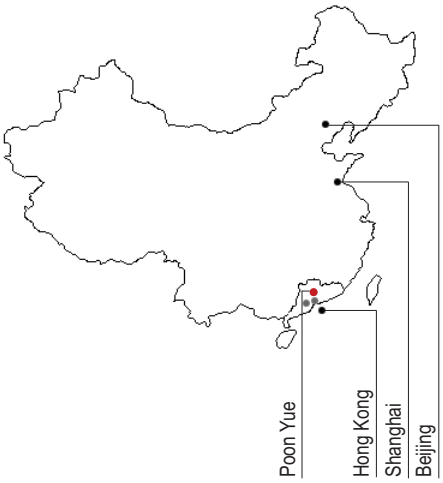
Breezeway Section M1:400

Breezeway Perspective Collage

Yue Shan Society, 1904. Image Courtesy of the Vancouver Public Library, Philip Timms photo, VPL 7234

9.4 Yue Shan Society
禺山總公所

33-47 E Pender St.



The Yue Shan Society was formed circa 1939 by and for clan members from Poon Yue County near Guangzhou in China. The Society acquired its building headquarters by 1943. In the early days, the society helped members with medicine, letters, remittances, funerary preparations, inter-Tong dispute resolution, funerary preparations and transportation fees. After World War II, the services provided by the Yue Shan Society became more recreational and social. A recreational department organized martial arts, sports, music and other activities for youth. For Seniors, Mahjong, Ping-Pong and Karaoke groups were (and still are) organized. The Yue Shan Society recognized early on the need to attract youth to the association. There were several unsuccessful attempts in the 40's and 50's. Since 1987, the Society has given annual scholarships to children of members. In the late 80's, the Society organized a summer camp for Vancouver youth to Poon Yue County. They have also collected and distributed donations to welfare projects there such as hospitals, schools, and roads. They have also been active in greater Vancovuer, contributing to such places as St. Joseph Hospital, the Childrens' Hospital, the Chinese Public School, and the Chinese Cultural Centre. Today the Society rents living quarters to international immigrants, old couples, overseas students and people from Poon Yue County.

The Yue Shan Society building is a complex of three buildings that was built over time: 33-39 E Pender; 41-47 E Pender, and 30-50 Market Alley. Its main historical significance was a central courtyard between these three buildings, which was a common feature of early 20th century Chinatown buildings. Fronted on the south by the two Pender Street buildings and to the north by the building on Market Alley, this courtyard was the only one remaining for residential use in Chinatown. It offered a more intimate semi-private open space for residents and allowed for more exposure to daylight and ventilation to enter the building, as well as providing a space to collect rainwater.

Yue Shan Society

Built in 1898, 41-47 E. Pender is one of very few remaining 19th century Chinatown buildings. It is a two storey, 13.7m (45') wide, five bay building with a one storey portion to its east. The ground floor of the two storey portion was used as a grocery store, drugstore, dry goods and tailor shop. The second floor was used as residences for single working Chinese men. In its present use, the first floor is an oriental goods store, and the second floor is the Shirian Society and the Chinese Fisherman's Society. In 1975 the building underwent a major renovation to upgrade fire safety, repair its foundation as well as alterations to its interior.

Built in 1920, 33-39 E Pender is a three storey brick building designed by W.H. Chow, a Chinese contractor and builder. The first floor was retail (Chinese medicine and a grocery and dry goods store) while floors two and three were living quarters. Between 1931 and 1943, the second floor was leased to a Chinese restaurant and the Chinese Workers Protective Association. Chow added dentils on the cornice, brick pilasters, and a lighter wrought iron balcony railing on the third floor. Currently, the first floor houses a beauty salon, furniture store and coffee shop. The second floor is leased to The Association of Lau Clansmen of Canada, while the remaining portion of the floor is used by the Yue Shan Society. The third floor has been used by the Yue Shan Society since 1943.

It is unknown when the 3 storey brick building at 30-50 Market Alley was built. Market Alley was a commercial district with an active mix of shops, laundries and restaurants. Entrances to the building off of Market Alley are now locked and unused. Today, the ground floor is used for storage while floors two and three have fourteen rooms including four bachelor, two 1 bedroom, seven 2 bedroom and one 3 bedroom units. These units are accessed from the third floor of the Yue Shan Society, or from a narrow gated alley entrance off of Pender Street.

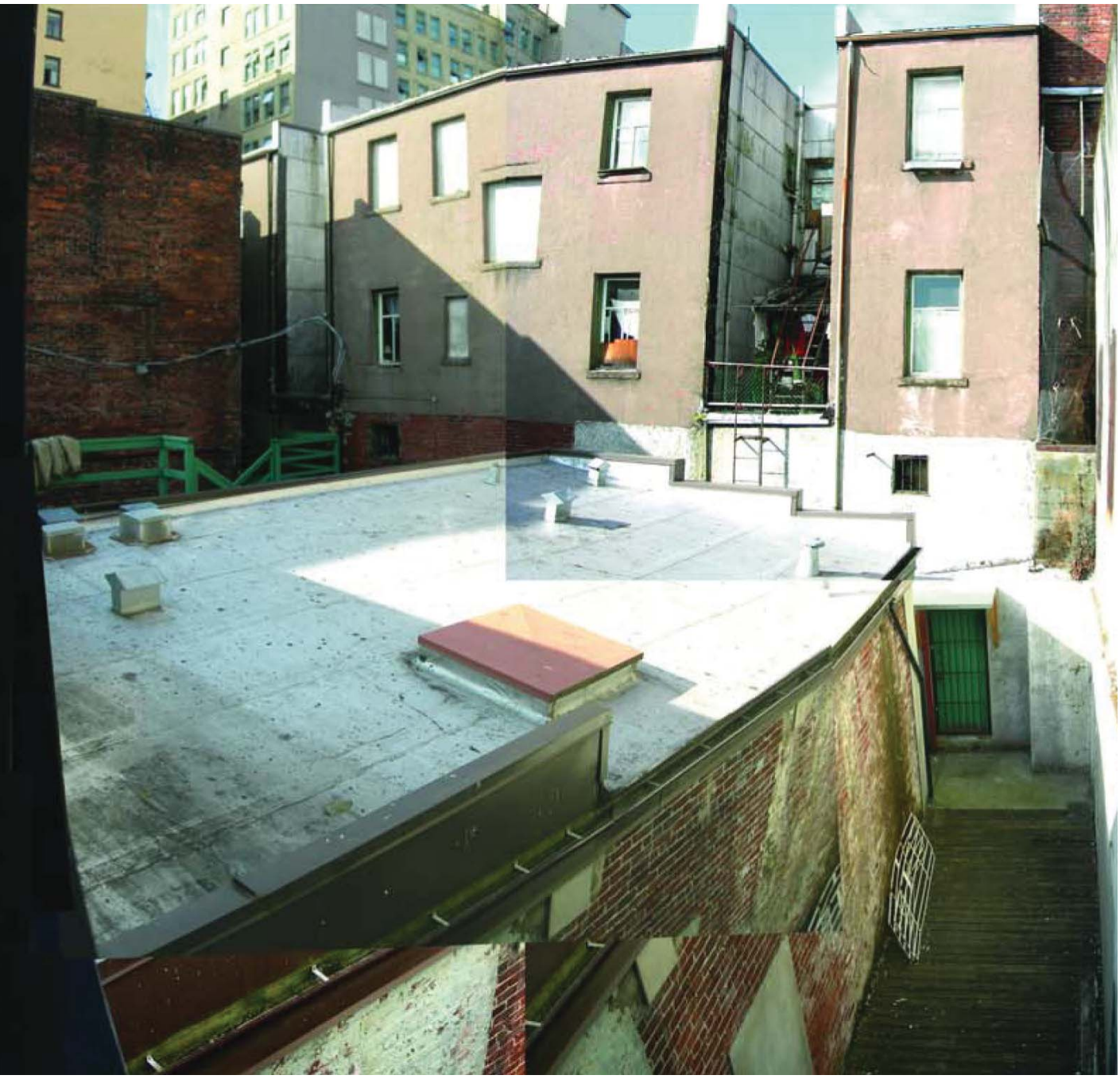
View of Blocked Breezeway. Image Courtesy of City of Vancouver

Yue Shan Society | Design Proposal

Currently, a large portion of the Yue Shan Society's central courtyard has been in-filled with an addition that was built on the back of the 41-47 E. Pender Street building. In addition, the historical breezeways that allowed access into this space have also been blocked off. This in-filling has reduced the quality of daylight and ventilation into the space and surrounding Society buildings. As a result, the once active courtyard is no longer used for social and cultural engagements by the residents. Moreover, its urban function has been lost as an interstitial space that mediated and allowed permeability between building, street and alley, with breezeways connecting Pender Street, Market Alley and adjacent buildings inside the complex. This once thriving network of restaurants, stores and tenements is now lost, as evident in inactive ground floor uses such as storage.

Re-opened Courtyard

The design approach for the Yue Shan Society focuses on the importance of urban design and open space as an important component of sustainable high-density residential living. In examining possibilities for the Society's rehabilitation into contemporary housing, the approach was to recover a critical relationship between the public and private realms. By proposing to re-open the courtyard through the removal of the addition and the un-blocking of the breezeways to Pender Street and Market Alley, the proposal re-stitches the active life of the Yue Shan Society with the greater Chinatown community and emphasizes more fluid and flexible interactions between public and private. In addition to the re-opening of the courtyard, the ground floor of the Market Alley building (currently storage) is proposed to house a tearoom, youth centre and commercial studio spaces. The mix of programmed spaces is intended to accommodate the Yue Shan Society's members, as well as to add a public component to the space, bringing with it a new social and economic dimension. The programmed spaces and the courtyard are inter-connected, as activities such as tai chi, mah jong, martial arts, ping-pong, karaoke and community gatherings may spill in and out depending on needs. The re-activated courtyard becomes an amenity for the Society and residents of the building complex – a space they can actively participate and take pride in. Additionally, Society meeting rooms and a conglomerate of bachelor, one and two bedroom units on the upper floors can now look down on the courtyard, extending the living quarters above into a semi-public zone, and forging a more nuanced intermingling of the communal and domestic.



View of Existing Courtyard. Image Courtesy of Codrin Tabala

In being an amenity, the quality of the courtyard is an important consideration. In the proposal, permeable paving, a littoral trench garden and vertical mats of vegetation provide a lush atmosphere within the courtyard as well as promote environmental consciousness, illustrating concepts such as stormwater management. Large, swinging doors that permit fluid exchange of activity between inside and outside also improves interior air quality by allowing increased ventilation to occur. Moreover, benches provided in the courtyard offer places for residents to sit, read or have informal conversations: a feature that contributes to the quality of living.

The proposal for the Yue Shan Society investigated an opportunity that would bring new life to the buildings, Society and residents, while still working within its existing and historical structure. The renewal of a once active space, into a quality part of the urban environment suggests that such spaces are a critical component of dense contemporary living, just much as they were in the past. However, the renewal process also requires re-interpretation through negotiations with the culture of today; whether in programming, environmental concerns, aesthetics and so on.

41-47 E Pender Street
1F Retail
2F Office

33-39 E Pender Street
1F Retail
2F Office / Society Space
3F Office / Sociey Space

30-50 Market Alley
1F Storage
2F Living
3F Living

Fire Exits

Addition
(Historical Courtyard)

Gate
(Historical Breezeway)

Gate
(Historical Breezeway)

Market Alley

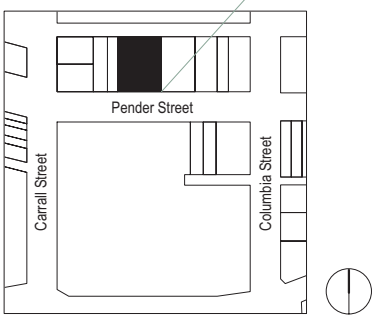
Store Front

Gate
(Historical Breezeway)

Store Front

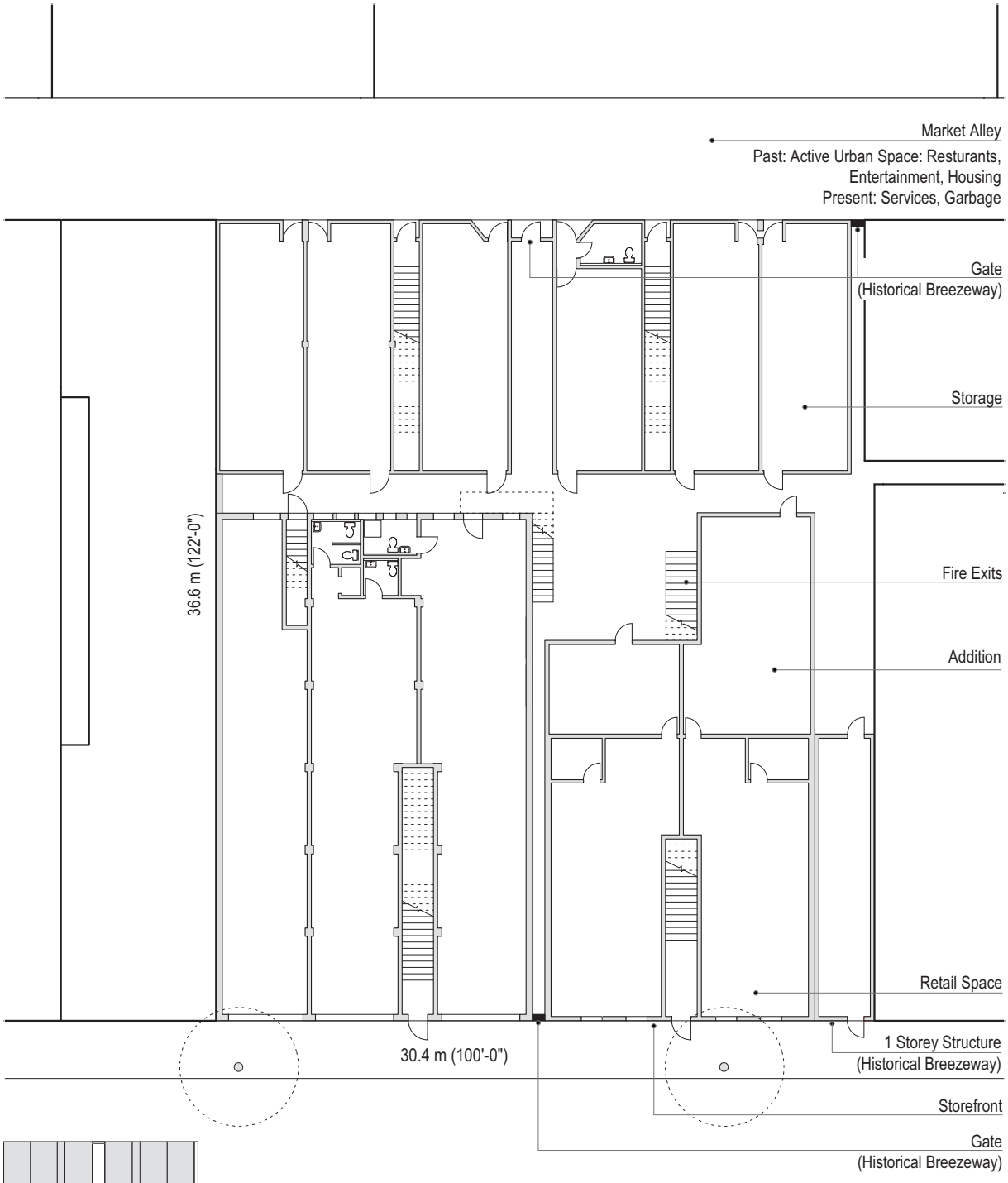
1 Storey Structure
(Historical Breezeway)

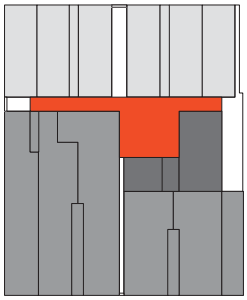
Pender Street



Context

Fire Exits and Addition. Image Courtesy of Codrin Tabala



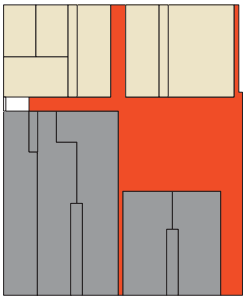


Circulation
Storage
Retail
Additions

Notes:
Consolidation of 4 (25') Lots
Entrances Off Both Street and Alley Front
Cluster of Separate Buildings

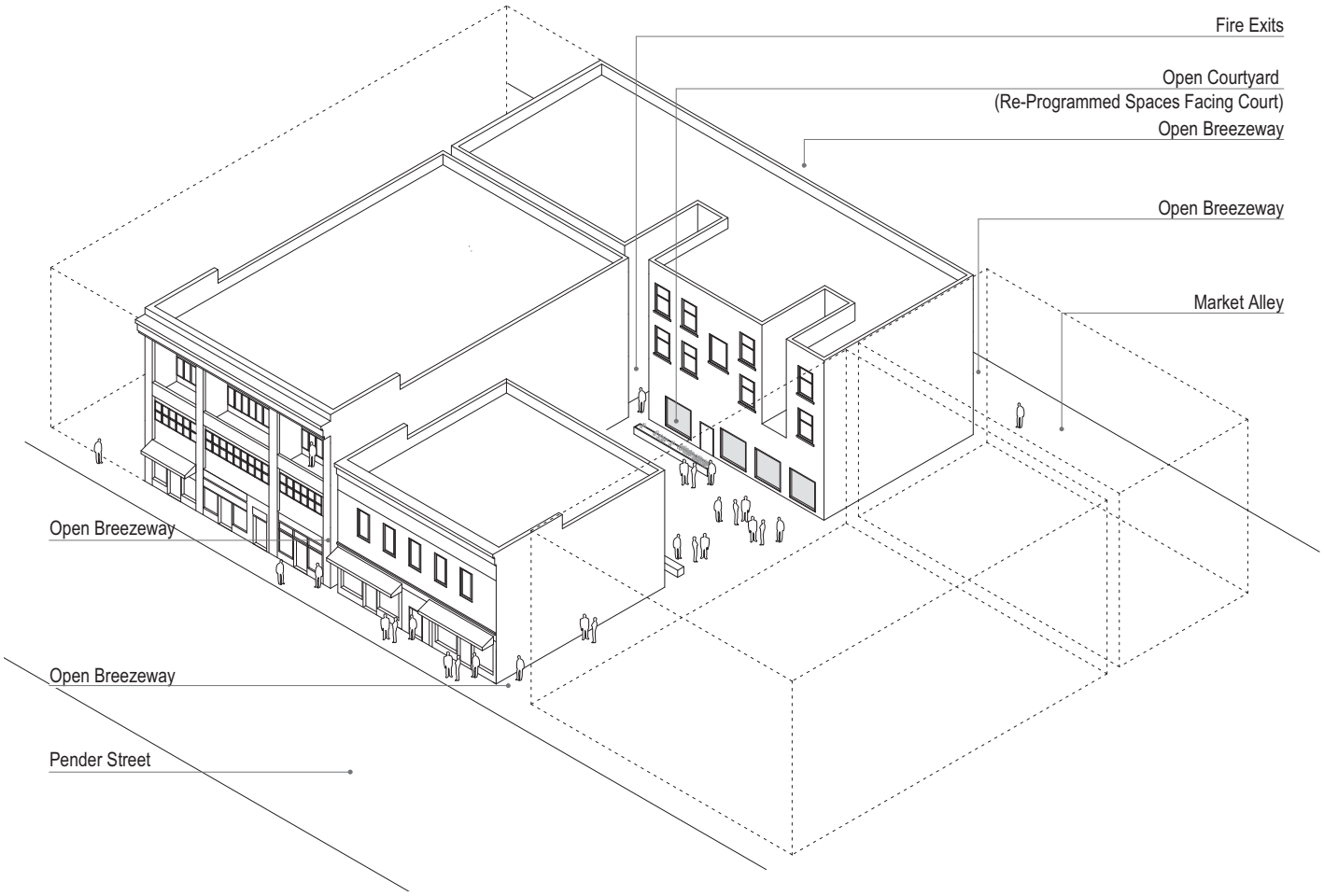
Ground Floor Plan M1:300

Re-opened Courtyard



Circulation
Re-programmed Space
Retail to Remain

Ground Floor Plan M1:300



Isometric of Re-opened Courtyard and Urban Situation

Perspective of Re-opened Breezeways Looking From Pender Street

Re-opened Courtyard

Perspective of Re-opened Courtyard Looking Toward Renovated Ground Floor

Perspective of Courtyard Being Used for Group Activities

10.0 CONCLUSION

Chinatown, past and present, has simultaneously been influenced by global and local conditions. The forces of globalization embodied in the international flows of Chinese capital, goods and migrant labour, forged the very local conditions of Chinatown's original urban fabric. Because of this unique hybridity, today's Chinatown is a neighbourhood with strong cultural capital. Currently it is faced with two major challenges: the need to protect these assets from the adverse effects of the booming global and local economy and the need to express and sustainably accommodate contemporary community needs in a meaningful way.

Urban Acupuncture, as a critical approach to historic rehabilitation, moves beyond mere building restoration and reasserts the residential building as an interconnected, vigourous part of the community network. If the neighborhood is understood as a living organism, in constant flux and adaptable to new conditions, one can add a contemporary layer to historic buildings in an integrative way without compromising their integrity. Focus in this study is on the overlap, or relationships between, the environmental, cultural, social and economic factors that form and transform buildings and sites.

The Chinatown Revitalization Committee's mandate to attract young people to the Chinatown community can be fulfilled with diverse types of affordable housing, and has great potential to reconnect the generations. A strong effort should be made to attract a diverse and active community to support vitality and long-term community stability. The Society Buildings would benefit from this new energy in many ways including revenue and shared services and upgrades as a result of reconnecting of the community and the urban fabric. The economic benefits of implementing market program such as housing should be used to support the system upgrades needed to make historic buildings and sites habitable again.

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