4.3 Live/Work – Work/Live Areas

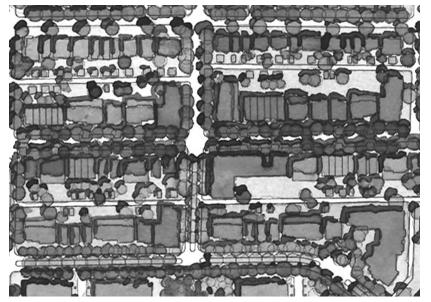
The intent of the Live/Work and Work/Live areas is to provide a transition from the Business Park area into residential areas. This designation permits and encourages the development of a medium-density neighbourhood alongside a wide array of compatible business, wholesale, limited retail, production. The following objectives support the development of a functional, liveable, and safe live/work and work/live environments.

Objectives

- to provide a diversity of housing types and tenures in order to accommodate a wide range of households and family types;
- to provide housing/business accommodation in order to foster the development of small businesses and artisans in Surrey;
- to provide more job opportunities in Surrey, thus reducing work trips to Vancouver and reducing automobile usage;
- to provide an innovative form of affordable housing by allowing home owners to live and work at home;
- to provide the opportunity for home owners to increase their quality of life by eliminating commuting times and, possibly, child care costs;
- to facilitate a transition between residential land-uses and predominantly business/office uses;
- to encourage walking and cycling to local destinations and, thereby, reduce dependence on the car;
- to include on-street parking, street trees, infiltration devices, and sidewalks; and
- to encourage building design that emphasizes the pedestrian realm through compressed front setbacks, pedestrian weather protection, and human-scale detailing.

1. Live/Work Area 1

The intent of the Live/Work area is to provide a place for people to both live and work at densities between 15 and 25 units per acre. The Live/Work area will provide a transition between the residential areas north of 68th Avenue and the predominantly business/office uses to the south. Flexibility of use will be encouraged at the ground level which will accommodate either residential or business uses associated with a residence. The area is structured around a fine-grained modified grid of streets and lanes, ensuring easy access to local destinations, rear-unit access and storage, street parking, and maximum street frontage of buildings. A vibrant business atmosphere is envisioned along 68th Avenue, with residential uses occupying upper storeys. The difference between live/work use and mixed-use commercial/residential uses is that in the live/work area, the residential use is tied in tenure to the business use.



An average density of 20 units per acre is proposed for the live/work area, shown in this plan view. Buildings accommodate up to 70 percent residential use with up to 30 percent accommodating opportunities for home-based businesses and ground floor office/studio/retail use. Residences associated with ground-floor retail/ commercial uses are provided either behind the residential unit or in upper storeys. Sixty-Eighth Avenue is envisioned as pedestrian-oriented street with parking pockets for on-street parking, street trees, and business on the ground-



Image of a live/work streetscape. Limited retail and offices occupy ground-floor units with associated residential units above or behind these spaces. The massing, roof forms, and window proportions reflect a residential character. At the ground level, recessed entries, generous glazing, awnings, and signage animate the streetscape and identify ground-floor uses. On-street parking is used for commerical/office use while street trees and wide sidewalks enhance the pedestrian scale of the street.

¹ Policies and regulatory standards for live/work and work/live area are currently under review.

2. Work/Live Area ²

The intent of the Work/Live area is to provide a transition to the Business Park area into a mixed-use work/live community. It will encourage the development of a high-density mixed use neighbourhood combining some residential uses with compatible light industrial/office uses at densities between 15 and 25 units per acre. A variety of small-scale services will be encouraged with limited larger offices and commercial uses being permitted in ground-level units, but tied in tenure with the residential component of the unit. The area is structured around a fine-grained modified grid of streets and lanes, ensuring easy access to local destinations, rear unit access and storage and maximum continuous street frontage for buildings.

An average density of 20 units per acre is proposed for the Work/Live area. Up to 70 percent of floor area can be used for office/commercial/light industrial (i.e., high-tech) or other compatible uses. Residences associated with these groundfloor uses are provided either behind the business unit or in upper storeys.



Work/live buildings are to accommodate ground-level retail/commercial/office spaces with residences above. Façades are articulated with a high proportion of windows, both to allow maximum light into each unit and to provide visual access into street level shops and businesses. Materials and massing are to be complementary with the adjacent Business Park while also being compatible in scale and character with the adjoining live/work area.



² Policies and regulatory standards for the work/live area are currently under review.

4.3.1 Density and Diversity

The Live/Work and Work/Live areas will accommodate between 15 and 25 units per acre. Live/work and work/live developments will be comprehensively designed. Developers/builders will be required to achieve at least the average densities in each area.

The distinction between Live/Work and Work/Live is in the amount of the total building given over to either work-related or residential uses. In the Live/Work area, approximately 30 percent of the floor area will be permitted for work-related uses. Examples of allowable work-related uses include independent professional offices; artist/craft studios; and street oriented uses such as grocery, cafe, restaurant, small-scale printing, and desktop publishing. The remaining 70 percent of floor space will be permitted for residential use. Conversely, in the Work/Live area, approximately 70 percent of the floor space will be permitted for work-related uses similar to the Live/Work area although with a greater emphasis on uses that also are compatible with the adjoining Techno-business Park, such as light manufacturing, assembling and finishing, and small-scale wholesale uses.

4.3.1.1 Land-Use Compatibility

The compatibility of live/work and work/live units is of concern when adjacent uses generate noise, vibrations, or odours that could affect liveability in the residential portions of units. All new development within and abutting the live/work and work/live areas may be asked to demonstrate, through a report from a qualified acoustical and/or environmental engineer, either that there are no negative impacts on residential liveability or that they can be mitigated through appropriate design. All projects must be designed comprehensively and the permitted uses must be defined to avoid conflict and to promote symbiotic lane use compatibility.

4.3.2 Relation of Buildings to Streets – Building Footprint Standards

4.3.2.1 Building Coverage

Buildings in Live/Work and Work/Live areas should not cover more than 65 percent of the lot and should achieve as continuous a street frontage as possible (especially in Live/Work development that fronts onto 68th Avenue).

4.3.2.2 Building Height

Buildings in both areas shall be a minimum height of 2 and a half storeys and should not exceed a height of 3 storeys.

4.3.2.3 Orientation

- The massing, setbacks, and orientation of buildings are to reinforce the pedestrian street.
- It is anticipated that residential units will only be provided above the main floor; however, if properly designed to mitigate conflicts concerning liveability and privacy, ground-floor or partial ground-floor units would be considered.
- Physical connection between working and living units is mandatory.

4.3.2.4

Entries and Private Outdoor Space

- Each residential unit should provide some useable outdoor space, in the form of a garden patio or deck, of at least $10\text{m}^2(108 \text{ sq. ft.})$ and with a minimum depth of 1.8 metres (6 feet).
- There is to be direct pedestrian access at the fronting street at or near grade level to each individual business occupancy and/or (in the case of live/work units) a residential unit that abuts the fronting street of the development.
- Upper-floor units can be accessed through a central entry off the public street or through individual entries.

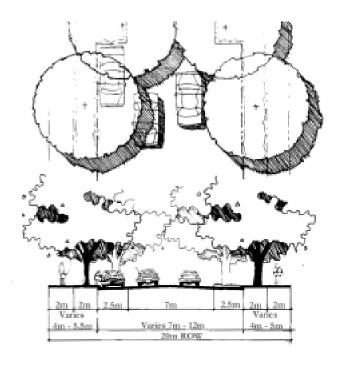
Live/work units are to be accessed from individual entries or through central entries or courtyards off the street as shown in the image at the near right. Parking is accessed via the rear lane, either underground or attached to each unit, as shown in the image at the far right.





4.3.2.4 Parking and Storage

- Parking access to units is to be provided in individual garages at the rears of units, underground, or on the street. Access to garages and underground parking is to be via lanes or side streets.
- On-street parking is a convenience and can improve the pedestrian realm at the street edge by providing a buffer to moving traffic. The amount of adjacent on-street parking should be maximized (especially along 68th Avenue).
- Garbage container storage areas, heating and mechanical equipment, and off-street parking and loading facilities are to be enclosed or screened so as not to be visible from the street.



Conceptual plan and section of the proposed live/work collector along 68th Avenue. Elements include two travel lanes, on-street parking in parking pockets, street trees, and 2 metre (6.6 feet) wide sidewalks.

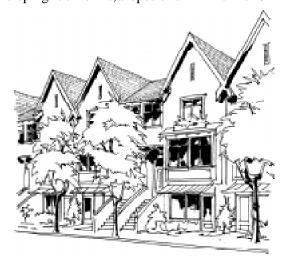
4.3.3 Built Form and Materials

4.3.3.1 Massing

- Changes in massing should relate to the building's structural systems and to reflect the interior arrangement of space.
- A strong residential character for live/work units is recommended in order to achieve a transition to residential uses to the north.

4.3.3.2 Roof Forms

- Roof forms of live/work buildings should reinforce the overall residential character of the area.
- For sloping roof forms, slopes of a minimum of 8 in 12 are encouraged, with steeper



These live/work units incorporate massing and roof elements characteristic of residential architecture. Ground levels are used for offices, studios and shops with associated living spaces either recessed behind or on upper floors.

- roofs preferred on dominant and primary roofs.
- Work/live buildings should incorporate roof forms that are compatible with the primarily commercial/office character of the area.
- Consideration should be given to the roofing materials so as to achieve an appropriate fit with the building's structural massing and roof forms.

4.3.3.3 Weather Protection and Signage

- Street frontages should include canopies or awnings approximately 3 metres (10 feet) above grade and protruding a minimum of 1.5 metres (5 feet) from the building face.
- It is recommended that canopies have a minimum slope of 30 degrees (35 to 45 degree is preferred).
- Fascia signs and window signs are encouraged.
- Sign size, location and information thereon is to be designed and oriented to pedestrians and is to relate to the scale and character of the live/work or work/live area.
- Signage should be integrated into the detailing of the building (and not applied as an afterthought).

4.3.3.4 Windows

- Windows on all ground street-facing façades should cover at least 60 percent of the façade area. Glazing, with high transparency, should be used to encourage visual connections between street/open spaces and building users.
- The treatment of windows should be consistent with the architectural style of the building. On live/work buildings, the scale, placement and trim of windows should reinforce a residential character while allowing visibility and light into street front business and office spaces. Similarly, work/live buildings should have high amounts of glazing, especially at the ground level so as to allow maximum light and visibility into street front offices and commercial spaces.

4.3.3.5 Building Finishes

• Building material should reflect the regional climate and landscape and be compatible with surrounding land uses. For live/work units, buildings should use materials that are compatible with the surrounding residential character. Appropriate materials include wood and vinyl siding, brick masonry, concrete, and stucco. Work/live units should use materials that reflect the surrounding office/light industrial/commercial character while also being sensitive to the adjacent live/work area. Appropriate materials include brick/masonry, stucco, concrete, metal cladding. Where ground floor uses include commercial/business uses, cladding on the lower level should be sturdy and appropriate to the commercial/business establishment.

4.3.4 Environmental Design

4.3.4.1 Climatic response

 All units are to be oriented so that most of the primary living space receives direct sunlight, and they should incorporate terracing, overhangs, and awnings or trellises that allow the low winter sun, but not the high summer sun, to penetrate the unit.

4.3.4.2 Light and Ventilation

- Adequate lighting and ventilation is required for all live/work and work/live units.
- Solar shading and light shelves are recommended, especially on south facing façades, as part of an energy-efficient design that also animates façades.

4.3.4.3 Crime Prevention Through Environmental Design

- A high level of safety and a sense of security are important aspects of liveability. Live/work developments are required to consider the following CPTED principles:
 - Live/work units are to be designed so that areas of the highest daily use address the public street.
 - Adequate lighting is to be provided on streets and in lanes.
 - Functional upper-storey terraces and balconies are to be provided on both the street and lane-facing elevation of dwellings in order to increase safety and "eyes on the street."
 - Public, private, and semi-private areas are to be clearly defined. Public and semi-private spaces are to be designed to maximize surveillance.
 - Buildings are to provide maximum opportunity for surveillance of sidewalks, entries, circulation routes, semi-private areas and parking entrances.
 - Any recessed entries in the rear of buildings and/or blind corners are to be avoided. It should be possible to see into stairwells and halls. Servicing, amenity, and storage rooms are to be grouped together in a visible locale for easy surveillance.

4.3.4.4 Policy and Regulation Review

The City of Surrey Department of Planning and Development, in consultation with the development and design industries, is in the process (as of April, 2000) of preparing policies and guidelines for live/work developments. This policy review is focused upon issues such as design, building code requirements, permitted uses, etc. Information on the status of this review and any new policy development can be obtained from the City of Surrey Department of Planning and Development.