

## **Design Guidelines for Historic Dawson**





Parks Parcs Canada Canada

## **Design Guidelines for Historic Dawson**

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## **Table of Contents**

| 3-4   | Glossary                     |               | 4.3                                     |
|-------|------------------------------|---------------|---|
|       |                              | 27-58         | Commercial                              |
|       | 1.0                          |               | 4.4                                     |
| 7-8   | Introduction                 | 5 <b>9-69</b> | Residential                             |
|       |                              |               | 4.5                                     |
|       | 20                           | 70-76         | Public                                  |
| 10.14 | The Evolution of Dewson City | 70 -0         | 4.6                                     |
| 10-74 | The Evolution of Dawson only | 76-79         | Industrial                              |
|       | 3.0                          |               |   |
|       | Streeteene Analysis          |               | 5.0                                     |
|       | Streetscape Analysis         |               | Annendices                              |
| 16    | J. I                         |               | 5 1                                     |
| 10    | 9.2                          | 83-85         | Vegetation Survey                       |
|       | Streetscape Materials        | 85 65         | 5.2                                     |
|       | 3.3                          | 86-89         | Planting Techniques and Maintenance     |
| 16-22 | Streetscape Districts        |               | 5.3                                     |
| 10    | ••••••••••••••••             | 90-94         | Construction Techniques and Maintenance |
|       | 4.0                          |               | 5.4                                     |
|       | Component Analysis           | 95-102        | Index of Examples                       |
| 24    | A 1                          |               |   |
|       | Criteria for Development     |               | 6.0                                     |
|       | 4.2                          | 103           | Bibliography                            |
| 24-26 | Headings Defined             | 100           |   |
|       | Listen.9 suist               |               |   |

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#### Glossary

Adaptation: The repair and/or refinishing and/or reservicing of a structure or site so that it can house or perform a new function in compliance with modern standards for that function. The adapted structure or site need not necessarily preserve or restore its original appearance.

Architrave: See entablature

Blinds: an external louvered window shutter,

Bollards: A single post or one of a series, placed on the street side of the boardwalk to identify steps, loading areas.

Board and Batten: Roof or wall finish system in which a strip of wood is put over a seam between boards as a fastening or a covering.

Canopy: The covered area which extends from the wall of a building, protecting an entrance or loading dock.

Casing: The exposed trim molding, framing or lining around a door or window, either flat or molded.

Clapboarding: A type of wood siding, with one piece overlapping the lower one, with the top and thinner than the lower one.



Typical Clapboard Siding

Commercial: Includes trades transportation, entertainment, wholesale and retail, professional and semi-professional establishments.

Component: In this document a component is a landscape or architectural feature which is a part of the streetscape.

Coniferous: Belongs to the order of Coniferae usually evergreen, with cones and needle-shaped or scale-like leaves.

Cornice: The 3rd or upper most division of an entablature, resting on a frieze. Any projection which crowns or finishes the part to which it is affixed.

Deciduous: Plant which sheds all its leaves at the end of a growing season and remains dormant for a certain length of time.

Division Line: The line that divides the ground floor and the upper storey or stories of a building. The line might be anything from a simple plank to a complex assembly of signage and frieze.

Edwardian: This refers to the time period in which King Edward reigned - the early days of Dawson are included in this era.

Entablature: The relatively elaborate decorations on top of the corner boards or columns, horizontally divided into architrave, frieze and cornice. (Term evolved from classical architecture).



Facade: In architecture, an exterior face of a building especially the front or most important face.

Gable Roof: A double sloping roof forming a triangle at 2 ends.

Industrial: Industry includes warehousing and operations such as sawmills and brewers.

Lintel: A horizontal structural member (such as a beam) over an opening which carries the weight of the wall above it.

Mullion: A vertical member separating and often supporting windows, doors, or panels set in series.

Muntin: A secondary framing member to hold panes within a window, window wall, or glazed door, also called a division bar.

Node: A point of concentration, a central point, or a part of orientation.

Oriel Window: A bay window corbeled out on a bracket or a corbel.

Proportion: For buildings, proportion refers to a ratio between any dimension of the building in height, width or lengths. This ratio can be considered also between any of the building components and the overall facades. Proportions are generally established for aesthetic reasons and expressed mathematically. (i.e. Height to Width ratio; 1.2 to 1).

Public: Includes church buildings, all governmental buildings and those structures used for non-profit recreation such as libraries.

Reconstruction: The rebuilding of a structure or a landscape that has totaily or partially disappeared, based on historical evidence in order to return it to its appearance at a particular period in time.

Rehabilitation: The repair and/or refinishing and/or reservicing of a structure so that it can continue to house or to perform its original or a similar function in compliance with modern standards for that function; the rehabilitated structure need not necessarily preserve or restore its original appearance.

Renovation: The repair and refinishing and reservicing of a structure, so that it has a fresh or newly finished appearance, and is provided with modern services; the renovated structure need not necessarily reproduce its original appearance.

Restoration: The repair of defective existing fabric and structural and/ or service systems, and the reconstruction of missing fabric or systems, so as to return the whole or a specific part of a structure to its appearance at a particular period of time, while retaining as much as possible of the fabric surviving from that or earlier periods.

Residential: In this document the residential section covers log cabins, log and frame houses. Residential facilities on upper stories of stores are discussed in the commercial section,

Shed Roof: A roof shape having only one sloping plane.

Shutters: Small wooden "doors" on the outside of windows. They are panelled or louvered.

Streetscape: Many components together make up a streetscape. In this report, streetscapes have been divided according to the function of the buildings within the street, i.e. commercial, industrial, residential and public.

Symmetry: If an imaginary centre line could be drawn along the face of a building -- the left side of the structure would mirror the right. This principle was frequently applied in Dawson, although a lot of alterations could be made to it for functional reasons.

Victorian: In this report, Victorian refers to the landscape and architectural style which dominated in early Dawson City.

## Introduction 1.0



## 1.0 Introduction

On the basis of inventories and comparative studies of existing and vanished Dawson architectural and landscape architectural features, a set of design guidelines is presented in this report. The purpose of these guidelines is to provide information:

i) whereby the Dawson City Planning Board can judge whether a proposed development is in conformity with the architectural and landscape architectural style common in Dawson during and immediately following the "Gold Rush" of 1898, where such development is within "the historic control zone".

ii) for Dawson City residents and developers who wish to make renovations, additions and/or build new structures; and

iii) which will aid Parks Canada with their projects of restoration, renovation, or rehabilitation.

This report contains general guidelines or basic rules of thumb which will aid in the re-creation of the historic atmosphere of early Dawson. It is by no means an exhaustive study but rather an analysis of only the major elements which produced the unique character of Dawson City. Additions to the detail of the guidelines will be an ongoing process as research is continued. A file of architectural and landscape architectural construction drawings is being developed which will augment this report for examples see the appendices.

In order to provide a clear understanding of these guidelines, architectural jargon has been avoided and self-explanatory terms used wherever possible. A glossary has been provided for those terms which require clarification.

The guidelines put forward in the following pages are derived from an analysis of the architectural and landscape elements that went to make up the unique visual character of Dawson City in the year 1897-1918.

Because the guidelines are therefore based on historical examples, and on research into the early development of Dawson, the advice on architectural or landscape design contained in the study may in practice require some modification to take into account certain constraints now part of the general construction scene in modern Dawson. For instance: - The present zoning laws might conflict with an attempt to reproduce exactly the historic streetscape, especially with respect to building spacing.

- The high price of energy may make the construction of large windows in buildings, which are to be used on a year-round basis, seem unacceptably expensive in utility and other operational costs.

- High construction costs may limit the degree of architectural embellishment practicable for the modern builder.

Such constraints as these will of course affect those interested in historic buildings or localities in Dawson in varying ways, depending on their objectives and their resources. However, since it is clear that preservation of the historic character of Dawson is of great interest to many persons and quite possibly of prime importance to the economic survival of the city itself, it is worth noting some ways in which the contemporary problems might be overcome.

The visual discrepancy between historic practice and modern by-law provisions with respect to a building spacing can often be dealt with relatively inexpensively by:

Adding fencing and/or planting in the spaces required between buildings, or by

Various "Cosmetic" Treatments such as -

The empty spaces can be infilled with "false" façades, acting as a fence. The façade of a modern building that is too wide for historic precedent can be subdivided into two or more sub-façades more compatible in size with historic originals.

The large display windows were an essential feature of the historical appearance of the commercial district in Dawson. They are still obviously very practical for display purposes. Energy wastage might be avoided by:

Using thermal glazing (double glazing) to substitute for the original glazing.

Boxing the display window space off from the main room either with solid or glazed partitions.

Analysis of the historical scene in Dawson shows that many of the façade treatments were in fact simple, and inexpensive. Some basic elements, such as window casings, door surrounds, or weather boarding, for example, are items common to both the historic and contemporary design. In many cases the historic design can replace the contemporary fashion for very similar construction costs.

"Cosmetic" façade treatment may also help in giving an existing structure an appearance more compatible with its historic surroundings. By this is meant essentially the "making-up" of a façade – by choosing historical colour schemes, applying advertisements – bill boards, signs, lettering – of a historic character; or by applying architectural ornament or even whole elements such as windows (possible false windows) to the existing structure.

While exact reproductions of historical moulding or weatherboard profiles may require special orders, there are available from several national lumber or building material suppliers, mouldings and other items that are a reasonable approximation of historical types. In many cases, the use of these will give an entirely satisfactory effect.

Parks Canada in its own developments will also be encountering the problems raised by these modern constraints on producing historically appropriate designs and construction. The results of their studies and experiments are always available for the information of those interested in the historic architecture and landscape of Dawson, and Parks Canada staff will be willing to discuss and, if possible, assist with difficulties met in applying the following guidelines. In this study, some basic design criteria have been emphasized which were observed by early Dawsonites. Historically, for financial considerations, problems of supply, or to satisfy quirks of personal taste, each builder and gardener introduced his own variants within the basic design framework defined by these criteria.

The same freedom of design, within the general framework established by the guidelines set out in the subsequent chapters of this study, can be used by today''s builders and gardeners in meeting their own requirements and preferences, while still preserving the general historic visual character of Dawson City.



# **Evolution of Dawson City 2.0**

## 2.0 The Evolution of Dawson City

#### 2.1 Evolutionary Stages

In 1896, the only human habitations near the confluence of the Klondike and Yukon rivers were seasonal Indian fish-drying camps along the south bank of the former. Within the next two decades, this isolated location was transformed dramatically. Its day of glory was short and its decline long, thus ensuring an absence of later development which has allowed the ghost of its Edwardian glory to remain. By the First World War, the city had gone through four distinct stages of evolution, from seasonal habitation, to mining camp, then briefly boomtown, and finally a city of Edwardian sophistication that settled into decline, during which it moved rapidly from isolation to urban sophistication, and then gradually reverted to greater simplicity.

The first stage, that of seasonal habitation by local Indians and occasional visits by white miners, ended with the establishment of the Dawson mining camp in 1896. There was initially no indication that Dawson, in this second stage, would differ from the other mining camps that had come and gone along the river for twenty years, except perhaps, that it might prove richer and more boisterous than its predecessors.

One man who planned to profit from this was a merchant named Joseph Ladue who did not join the stampeders in staking his claim on the gold-bearing creeks, but rather chose a quarter section on the flats where the two rivers met, and transported his sawmill there in August 1896.

He picked a site north of the slough which cut across these flats. Here where fairly deep water provided a promising anchorage, he erected two log buildings that were to typify Dawson during the Gold Rush period, a warehouse and a saloon. Construction techniques were extremely basic and dependent upon readily available local material; most buildings were log cabins chinked with moss, a few of which had a façade of green milled lumber from Ladue''s mill. This first town was quickly submerged by later developments, although there may still remain a log cabin or two from this period, and it is quite llkely that lumber from these first structures was ''recycled'' into later buildings. (Figures 1 and 2).



figure 1. Dawson in the second stage, the mining camp seen from the East 1897. Public Archives, Canada.



figure 2. Dawson in the second stage from the north end of town 1897. Public Archives, Canada.



#### figure 3. Dawson in the third stage; the boom town with recognizable districts developing 1898. Public Archives. Canada.



#### figure 4.

By the end of the third stage the districts of Dawson were fully evident 1899. Public Archives, Canada. The third stage, the boomtown of the Gold Rush myths, was shortlived, lasting only from 1898 to 1899. During this period, definite districts emerged, which although shrunken in size remain recognizable today. (Figure 3 and 4).

## 2.2

## **Various Districts**

Starting from the north end of town, the first district lay north of King Street and back from the waterfront. It comprised two distinct parts. The first was the residential complex that grew up around St. Mary 's Church and Hospital at the extreme northern end of town. The individuals who built this were attracted to the area by its distance from swamp that covered much of the townsite. The second part was a warehousing and minor industrial district extending along the waterfront from King Street north. The residents of Dawson were totally dependent upon the outside world for supplies, and upon the warehouses for storage of these supplies during the six months when navigation along the river was impossible. Almost all of these warehouses are now gone; the only survivors of this kind of structure are the two east of Fifth Avenue, which escaped the fires that destroyed the rest along the waterfront.

The second district, directly south of the first, was a "square" which extended from King Street south to Princess and from the waterfront back to Fourth. Men came to the Yukon to mine for gold, but they had to pass through this small area on arrival and departure, and it was to the establishments located here that they turned for their various needs. This square provided services for a population of young, generally male transients who flooded into the Klondike from 1897 to 1900. Besides accommodation and dining facilities of all possible varieties, and miscellaneous banking, laundry, repair, grocery, hardware, and dry goods outlets, there were services catering to less basic needs of both the wealthy and the unsuccessful, Saloons, dance halls, theatres and gambling halls mushroomed and did a thriving business with men rich in gold but starved for diversion from their numbing toil out on the claims, Saloon keepers, gamblers, and dancehall girls mined the miners, extracting their wealth from the most productive "claims" in the Yukon. Here also were brothels, a standard feature of contemporary urban society, which guickly found a niche in the boisterous mining camp. These were initially located in "Paradise Lane" behind Front between King and Queen, but were later moved to

Fifth Avenue when their presence offended Dawson''s increasingly respectable citizenry. Later still, they were sent "over the bridge" to Klondike City.

During the boom period the core of the city was constantly transformed. Fires swept away older wooden buildings, which were quickly replaced by newer, more complex ones. "Cheechakos" unable (or unwilling) to mine provided an abundant labour force, or, if they had the necessary capital and skills, they set up businesses of their own, Also, superior building materials were available to all who could afford them. These were of particular importance since Dawson provided a profitable market for building supplies, initially from the West Coast and later from eastern Canada, when advances in transportation technology made such goods available at high, but affordable, prices. Various sheet metal building products, massproduced wooden and metal ornaments, and good quality milled lumber from the Pacific North West enabled merchants and others to place impressive facades over their crude log buildings. Modern technology made possible electric lighting, telephones, daily newspapers and telegraphic communications with the "outside" which resulted in Dawson taking on the appearance of a modern city. Yet, in spite of its great wealth and the increasing availability of raw materials. transportation costs and climatic conditions imposed restrictions upon construction in Dawson. Few brick and no stone buildings were erected as they were even more liable to frost heave damage than wooden buildings. Façades over log buildings meant that small amounts of milled lumber were used to create an illusion of urban sophistication.

Probably more is known about this second district than the other because its streets were central to the myth of boomtown Dawson, and were more photographed than were those elsewhere in town. King and Queen Streets, Front, Second and Third Avenues were the scenes of milling crowds, of parades and celebrations, of masses of men, animals and vehicles, and of the mélange of poles and wires, banners, and street and shop signage. High rental rates demanded maximum utilization of sites which meant either that many shops, with small frontages, were built, or that large "blocks" were divided among many tenants. Throughout this core area, most small cabins and residences were eventually eliminated. Little remains of this once busy central area and nothing survives along Front Street. A reconstructed Palace Grand Theatre, and the "Monte Carlo" sign on Front are all that are left of Dawson''s once extensive entertainment facilities. The only survivors of the many commercial structures in this area are Winaut's and the Dawson Hardware Co., and these have not been positively identified with Dawson before 1900.

A third district, centred on the Government Reserve, was located at the south end of the townsite, several hundred yards from Ladue 's mill and near the mouth of the Klondike River. Initially Fort Herchmer consisted of the usual crude log structures which were suitable for housing an immediate administrative and para-military presence. When it became obvious that Dawson would not suffer the usual early demise of other mining camps, the government more than matched the grand buildings of the city with the Commissioner's Residence, the Court House and the Administration Building in 1901. It also cleared off most of the buildings which had been built on the Reserve in early days, and laid out imposing formal grounds both within the police compound and around the Administration Building. On the edge of the Reserve the Anglican "Cathedral," as well as the Presbyterian and Methodist Churches were built. This combination of temporal and spiritual authority in the community attracted Dawson 's wealthier residents to what eventually became the city 's most fashionable district. Real growth in this area only occurred, however, after the turn of the century when the swamp and part of the slough were drained.

The first residential areas formed a semi-circle along the hillside and were separated from the townsite by the swamp. There were also residential districts in West Dawson and Klondike City. The dwellings varied in complexity from tents (especially in 1898 and 1899) and crude log cabins, to more substantial Victorian homes of milled lumber. There were always a number of empty cabins on the hillside, but initially this meant seasonal use of the sites instead of actual depopulation.

### 2.3

#### Edwardian Dawson

The boomtown settled down, and during the fourth stage of its development, after 1900, Dawson was an Edwardian city, not dissimilar in structure from other Canadian cities of its day, and unique only in its isolated location and weak economic base. From the turn of the century until the First World War, the city "settled down", losing the stampeders of earlier years to other gold rushes. This involved a

decline of population but it can be interpreted as a "maturing process" rather than a collapse. Dawson was now more than a mere mining camp and it could become, according to its partisans, the metropolis for a large area. Those with money, investments in the city, or aspirations towards greatness wanted a typical "outside" city. They sought, and obtained, a municipal charter for Dawson City in 1902 without understanding the expenses that lay behind the accompanying responsibilities; they relinquished the charter two years later.

Members of the permanent community finally brought in their wives and children, thus bringing the age and sex ratio of the community into line with the norm. This also had the effect of intensifying the pressure on the authorities to eliminate the racier forms of entertianment, especially the dance halls and gambling, and to restrict the saloons and brothels. With the arrival of women from the outside who saw Dawson as a permanent home, came the more complete social environment of the Edwardian city, reflected in socially distinct residential areas, the building of a public school, and more development for social, athletic and cultural associations. The Arctic Brotherhood and the Oddfellows Halls are surviving examples of such associations.

All the districts of Dawson which had developed by 1900 remained, if slightly shrunken in size. Thus the area north of King was predominatly residential, although many of the hillside cabins were abandoned as the residents moved onto land reclaimed from the swamp. The St. Mary''s complex remained, taking on a more established air, as did the warehouses and minor industrial establishments like the Yukon Sawmill, which still stands on Front Street.

In the centre of the city, there were few dramatic changes, and the earlier pattern was consolidated. Remnants of Dawson 's recent gaudy past were gradually removed as building codes and by-laws improved the standards of fire protection, sanitation and construction. Many buildings with boomtown façades remained, but newer ones, such as the Bank of Commerce and the Carnegie Libary, could have fitted easily into any cityscape in southern Canada. The city centre became a more sedate place as the large façades became less ostentatious. Dawson was becoming a quieter city, but this was not necessarily a positive development. Aiready the number of empty, or under utilized buildings was increasing, the tax base shrinking, and property value declining. At the turn of the century, the centre of the city had been full of many small shops and firms competing in an open market. As the population melted away, property holdings and the number of firms consolidated in a process of "rationalization". Gradually, a few companies provided many different services in a much less specialized manner. The town core receded, and buildings damaged by fire, or simply abandoned, were left derelict.

The residential areas did not demonstrate the same decline; indeed the reverse was true as isolated hillside cabins were abandoned in favour of the former swamp area, thus consolidating the townsite and making possible the greater provisions of services. (Figure 5). During the period, substantial residences were built for the elite of the administration and business, who were joined at the top of Dawson society by the professional and managerial classes of the mining companies.

A similar, though rather later, decline took place on the Government Reserve. It was not however as obvious as in the centre of the city because its maintenance did not depend entirely upon the local economy. The old fort disappeared, building by building, resulting in a more formal, neater site. When the ornate Commissioner's Residence was damaged in 1906, it was replaced by a less gradiose structure, indicating that the Federal Government no longer entertained the hopes it had had for Dawson's future.

#### figure 5.



Dawson had become a representative Canadian Edwardian City by the end of the fourth period.

Public Archives, Canada.

After about 1907, there continued to be changes in Dawson, although never so dramatically as before. Gaps in the streetscapes appeared, as abandoned buildings were allowed to run down, and many destroyed by fire were not replaced. (Figure 6). The period from about 1907 until the First World War was one of slow decline, which only accelerated, and became obvious to all, after 1918. Yet, even as the city declined, the spatial arrangement of districts, the distinction between commercial, public, residential and, to a limited extent, industrial areas remained intact. The model established at the beginning remained constant through expansion and decay, and remains evident to this day.



**Dawson City:** During the fourth period growth ceased figure 6. although Dawson's decline was not evident. Duke St. Suzzallo Library, University of Washington. General Land Use 1903. King St. Dome Rd. Church St. Third Ave. First Ave. Klondike R. Yukon River Horth Public Industrial 253 m. Residential Commercial Source: D.I.N.A. 1974.

## Streetscape Analysis 3.0



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## 3.0 Streetscape Analysis

#### 3.1 Introduction

The streetscape will involve a review of the numerous components of the street - from buildings to boardwalks. It is an analysis of the character and spatial relationships formed by the elements. The street is considered as a whole rather than a collection of pieces.

Such an analysis is particularily important as it will reveal the character that pervaded early Dawson streetscapes. This, in turn, will provide a model for future development which will enhance this historic feeling.

## 3.2 Streetscape Materials

Streetscape materials played a significant part in giving Dawson''s streetscapes a visual coherence and organization.

As mentioned in the Structural History section, before 1899, buildings were of log construction, but as transportation to Dawson improved and capital became available, pressed tin, corrugated metal, mass-produced wooden and metal ornaments, and better quality milled lumber became available.

The false façades of commercial bulldings were usually of wood clapboarding applied horizontally, or occasionally vertical or diagonal planking was used. There was a clear definition between first and upper storeys and a border often framed the building outline and openings.

Residential buildings were of log construction or wooden frame with horizontal clapboarding.

Although public structures were made from the same materials, they were generally larger, more elaborate and more expensively finished than commercial buildings while industrial areas were more functionally orientated in design.

## 3.3

## Streetscape Districts

Within this section, commercial, residential, public and industrial areas will be discussed with respect to rhythm of building spacing and streetscape components.

## 3.3.1

## Commercial

Rhythm of building spacing:

The spacing between buildings was influenced by the high cost of frontage in the commercial district. As a rule, buildings abutted one another in order to minimize lot costs, but an occasional space between structures broke this continuous band of buildings. In order to minimize frontage costs and therefore reduce land costs, commercial structures were deep and narrow.

As a result of this spacing and excessive frontage costs, a street was basically a series of strong building masses periodically broken by small gaps. While these gaps are visually weak in relation to the streetscape, they punctuate the structural mass of buildings



Commercial street profile: A continuous span of buildings broken periodically by gaps. These gaps along with the varied height of buildings and different roof lines added interest.

The cornice along the top of commercial buildings significantly contributed to the overall rhythm created by the building spacing. This linear pattern was broken occasionally by gable roofs and variations in building height. Streetscape components:

A typical commercial streetscape was composed of a continuous band of buildings on either side of the street. Even though the street pattern was linear and generally predictable, the streetscape components created interesting pedestrian movement patterns through a sequence of implied spaces, such as the space under the awnings for which the dimension, the type of enclosure and the furnishings relates to the building occupancy. The buildings, a mixture of 1, 2 and 3 storeys, formed a "wali" on either side of the roadways and thus enclosed the street. Because of the height of buildings and the width of the streets, a comfortable human scale was created within the streetscape. Because of the spaces between residential buildings, and the predominance of one-storey buildings, the enclosed feeling of the streetscape was not as strong as in the commercial districts. Smallscale landscape features such as fences, boardwalks and plantings reinforced the human scale in the residential areas. These elements not only defined the front yard and created a transition zone into the house, but they also added a "wall" to the street.



Note the 'walls' the rows of buildings form along the streetscape; giving an enclosed feeling to the pedestrian

The upper storeys are fairly uniform while the ground floor facade and boardwalk area addvariety, interest, and human scale to the streetscape



Vast display windows provided people with close contact with the stores

.



### 3.3.2 Residential

#### Rhythm of building spacing:

Land costs also affected the building spacing in residential areas. The homes were generally one storey and closely spaced. Siting of buildings varied depending on the slope and access and they were roughly in a line with other houses on the street.

The rhythm created by the typical residential streetscape was one of recurrent building masses with spaces between them. However, this predictable rhythm was made interesting by the unscreened views and the vistas created by the openings between the houses.

#### Streetscape components:

Because of the spaces between residential buildings, and the predominance of one-storey buildings, the enclosed feeling of the streetscape was not as strong as in the commercial districts.

Small-scale landscape features such as fences, boardwalks and plantings reinforced the human scale in the residential areas. These elements not only defined the front yard and created a transition zone into the house, but they also added a "wall" to the street.



Residential street profile: buildings were positioned close together with small side lots. Fences often ran along the front property line, thus visually tying the structures together.



Because the houses are spaced the enclosed, human scale of the commercial streets is not as evident. However, the introduction of fances, plants, and boardwalks create more of a human scale and thus add pedestrian qualities to the streetscape.

## 3.3.3 Public

#### Rhythm of building spacing:

Some public structures - such as the Post Office and the banks - were situated in the commercial district and conformed somewhat to the commercial character. However, they were frequently larger and more elaborate in design, and therefore stood out from the commercial buildings.

Most public buildings in Dawson were located in the Government Reserve with large open spaces surrounding them and were not oriented towards a street.

#### Streetscape components:

When located in commercial districts, public buildings related to the adjacent structures, with associated features such as benches, signs and posts.

On the Government Reserve, the large ornate public buildings were complimented by the formal Victorian plantings and by lines of trees edging the large lots in which these structures were set.

#### The large structures and open spaces of the government reserve were softened and given human scale with the use of tree plantings. Public Archives, Canada.



## 3.3.4 Industrial

#### Rhythm of building spacing

Industrial areas were very similar to commercial areas with the exception that there were few false façades. Rather, the gable ends were evident. Although spaces were usually left between buildings, it was common to close these alleys with fences. Therefore, unlike commercial areas, the roofline was not continuous. The ground level was sometimes lowered or raised at doorways to accomodate loading and unloading. The similarities in building design created a rhythm which was distinctly associated with industrial areas.

#### Streetscape components:

Industrial streetscapes were similar to commercial streets; however, there was less attraction for the passer-by except in the downtown area. In the downtown area where there was a mixture of industrial and commercial the character of the streetscape resembled commercial with a variety of streetscape features. These were usually much less elaborate than in the strictly commercial areas. Such streetscape features as oriel windows, balconies, self-supporting signage, and clocks, which helped create smaller areas within the commercial street, are absent from the industrial streetscape. Boardwalks in the industrial areas were elevated above the street sometimes to the height of a persons waist to facilitate loading.



Industrial (warehouses) street profile: these dominately gable roofed buildings (without false facades) were often joined by fences or false walls.



The enclosed atmosphere created by the 'wail' of buildings was not as pronounced in the industrial area as it was in the commercial area. This was caused by the fack of boomtown facades as well as the fack of streetscape components like oriel windows, clocks and awnings (except warehouses with storefronts), is the cause.

# **Component Analysis 4.0**



## 4.0 Component Analysis

In order to achieve a sensitive re-creation of the character of early Dawson City in at least a visual sense, an awareness of the historic design features is essential.

Although alterations to existing buildings and new buildings for modern uses are necessary, the traditional building forms and materials must be respected. Also such characteristic principles as proportion, symmetry, and design elements must be maintained.

A general character pervaded early Dawson and at the same time, certain areas had their own unique atmosphere. For this reason, the discussion has been divided into four sections - commercial residential, public and industrial areas.

## 4.1

#### Criteria for Development in Dawson

Under certain headings specific design features and practises have been identified which can form the basis for criteria and guidelines that would ensure that the modern development can be made compatible with the historic development of an area.

It is hoped that these criteria and guidelines will become working tools for architects, builders, and those reviewing proposed development. They should be studied and evaluated before design work begins so that the desired relationships can be established as design objectives, properly relating the individual building to the city environment, including vehicular access, parking and building function.

## 4.2 Headings Defined

#### 4.2.1

General notes:

This section gives a brief description of the area, explaining functions and general principles which characterize it.

## 4.2.2

#### Building siting:

This refers to the setback and the spaces between buildings giving the area a characteristic atmosphere.



## 4.2.3

Proportion:

When considering architecture, proportion implies a comparison such as the relationship of the dimensions of the building in elevation or plan. When similar proportions appear in building designs within a certain area, there will be a desirable sense of harmony. Similarly any new buildings or elements added to older structures should be of consistent proportions in order to produce a unified design.



## 4.2.4

#### Axis relation:

This is a discussion of symmetry which will be related to buildings in the various areas studied. Symmetry appears to be a major design principle used throughout Dawson with variations depending on the use(s) within the structure.

## 4.2.5

Solids to openings:

The proper relationship between the size and number of openings to the amount of solid wall on a façade will give a building a desirable rhythm. This characteristic, when repeated from building to building, will contribute to the architectural unity of the area.





## 4.2.6

#### Design elements:

Each architectural detail of an individual building contributes or detracts from the total visual impact of the area. This section will describe the important elements and how they relate to the building. Entrances, cornices, windows, doors, and so on should never appear as a series of elements with individual emphasis, but rather, as parts of a total design.

## 4.2.7

#### Signage:

Although there are numerous types of signs and lettering which can be used in the city, there are also some which would not contribute to the historic character of Dawson. Streets in early Dawson were filled with signs and it is important to realize the type of signage that would be appropriate.







## 4.2.8

General planting schemes:

In certain areas there was a predominance of a particular quality and quantity of plantings. These should be considered to achieve the appropriate continuity within and between properties. See appendices for specific planting information.

## 4.2.9

Placement of streetscape components:

Features such as benches, bollards, and boardwalks not only influence the street's character, but also create smaller spaces and units of scale to which the pedestrian can relate. The function of the units and the building is expressed by the displays signage and awnings.





## 4.3 Commercial

## 4.3.1

#### General notes:

Commercial structures were never more than 3 storeys in height, with the upper 2 storeys serving as residential, office or storage space. The ground floor was used for mercantile or service purposes. These commercial enterprises included saloons, dress shops, grocery stores, ice cream parlours, theatres and barber shops as well as other services.



## 4.3.2

#### Building siting:

In commercial districts the buildings were generally positioned close to the property line along the street, as frontage in the Downtown area was expensive. Structures in the commercial core had a congested appearance with one building jammed against the next. Buildings were generally rectangular with the narrow side facing the street. While some structures had the shed style roof, most had gable roofs - but regardless of roof style an elaborate false façade was usually attached to the street face of the building.



Lots were originally surveyed to be 50 by 100 feet but entrepreneurs only purchased enough frontage to construct their building. As a result there was not only one structure per lot but perhaps two to three buildings per lot. This practise resulted in various sized gaps between buildings



## 4.3.3

Proportion:

The use of rectangular forms, which are vertical in emphasis, is common to Dawson, including building outline, doors, and upper floor windows.

Single storey commercial buildings were generally roughly constructed with a façade added onto a shed or gable roofed building. They were usually taller than wide in a ratio of 1:1.2 - the height being 1.2 times the width.



A large type of single storey building was generally used for mercantile purposes. The gable end of the roof was sometimes partly showing, or the façade was built high enough to cover this feature. This type of building, although common, departs from the typical vertical emphasis and is generally wider than tall in a ratio of 1.2:1.

The two-storey commercial building served a number of functions. The ground floor was mercantile while the second level was used for offices, residences, or hotel rooms. (There is photographic evidence of one-storey buildings having a two-storey façade giving the structures more prominence on the street). These structures were rectangular with the height to width ratio of 1.1:1.



#### Two-storey (1:1.1)



Like two-storey buildings, the three-storey commercial structures had a mercantile function on the ground floor, while the upper floors were offices, residences or hotel rooms. These buildings show vertical emphasis with a width to height ratio of 1:1.5.



Since the buildings varied in finished floor level and ceiling height, as well as roof slope, a 10 percent variance in overall height would be acceptable and still conform to the period design. (i.e. for a 20 ft. wide (6 metre) two-storey building the width to height ratio of 1.1:1 dictates a 22 ft. high (6.5 metre) building but the final design height could be 20 to 24 ft high (6 to 7.2 metres). There are 3 general areas where this height flexibility took place on the façade:

The first area is the space between the finished floor level and the window sill. This distance varied between 1 foot 6 inches to 2 feet 8 inches (.4 to .8 metres), depending on the building type.

The second area of variation is the gap between the top of the door and the ceiling. This space changed between 1 foot 8 inches and 2 feet 8 inches (.4 to .8 metres) and was usually filled with transom lights or panels above the doors and windows.



Area of variation (1 storey building)

The third area of variance was the building entablature. On one-storey structures they were usually between 4 and 6 inches (10 to 15 cm), while on tailer buildings they were between 6 and 18 inches (15 to 45 cm). Occasionally buildings were decorated with more ornate entablatures up to 8 feet (2.4 metres) in height.



## 4.3.4

Axis relation:

The axis relation refers to symmetry. If an imaginary centre line could be drawn along the face of a building, as illustrated, the left side of the structure would mirror the right. This rule does have exceptions depending on building height and function, and the symmetry is sometimes altered by such additions as doors, windows, and other elements.



Three-storey building in perfect symmetry

7

Area of variation (2 or more storey building)



## 4.3.5

Solids to openings:

On a building facing two streets an independent axis of symmetry is formed at the angle of the building. It applies usually to only the ground floor and does not usually extend further than the first set of display windows. The remainder of the ground floor is usually related to the upper floor facades following their own symmetry rules.

This particular street corner axis is used to take advantage of the circulation coming from the two streets. An inset double door at the corner, signage and sometimes an awning both oriented on the 45° angle reinforced this axis. By studying the placement and size of openings (i.e. doors and windows) on the façades of commercial buildings, a number of characteristic relationships become evident. When dealing with solids to openings in commercial façades, it is apparent that there are 2 distinct areas to consider. They are the ground floor shop fronts and the upper floors.

The shop front had a series of openings which spanned the entire width of the façade. The windows generally followed a straight line, along both the top and bottom, facilitating maximum display space.

The upper storeys had fewer windows but these were set in consistent horizontals and verticals on two levels,



In designing new facades sufficient space should be left above upper windows in order that roof structure clears the side windows 1. 2. 3. The roof ridge may be anywhere from the bottom of the frieze to the top of the entablature.



Centre line

One-storey building symmetry

The ground floor of commercial buildings had up to 70 percent of front façade in windows and doors. With a few exceptions these openings formed a continuous band across the building. This band was usually divided into 3 units - an entrance and 2 main windows flanking the entrance. The solid areas of the ground floor were usually confined to a horizontal band along the base of the façade below the windows, and narrow vertical structural solids, called mullions, between the windows and doors.



On the ground floor the building function generally determined the amount of openings in the façade. Mercantile business strove for maximum display space, while service business did not need such large areas of windows. Hotels generally had windows spanning the ground floor façade. If the building was located on a corner, the main façade usually conformed to the above norms, while the secondary façade had an irregular spacing of openings to suit interior functions. A number of buildings had a corner entrance. Upper storeys of the commercial building had 20 to 50 percent of the façade in openings. These openings were smaller in width but were generally the same height as the ground floor windows.

On symmetrical façades, the solid areas between the windows (Y) and the building edge (X) were almost equal. The vertical distance (Z) was determined by window relation to floor or ceiling. The top of the window to the centre line of joists (N) varied from 0'6' to 2'0' (15 cm to 61 cm).



The vertical distance 'Z' was determined by standard window relation to floor or ceiling. 'Z' varied from 6" to 2'-0" (15 cm - 61 cm) from the centre line of joist.

## 4.3.6

Design elements:

Design elements are the features which make up the entire building façade. The following is a description of these features as they apply to Dawson''s commercial buildings.

## 4.3.6.1

#### Façade sections:

The front façade of these buildings can generally be divided into 3 main façade sections. The ground floor, used for service or mercantile business, usually had much of the facade in glass and was separated by a horizontal line from the upper floors. The upper floors, used for offices, hotels and residences, had smaller windows and did not necessarily relate to the design of the ground floor façade. These elements were surrounded by a frame composed of corner boards, frieze, and cornices.

The following illustrates some characteristic upper storey façade sections which can be used interchangeably when designing - depending on the functions within the structures.



2 storey



3 storey













Interchangeable upper atorey facade sections. On 3 storey buildings the 2nd and 3rd floor sections will be the same.





3 storey

2 storey



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|         | (P 44 4) |        |

(unsymmetrical example not very frequent)







There are a number of characteristic ground floor commercial facade elements which could be applied to one, two, or three-storey buildings. This is not meant to be a complete listing but rather to provide some typical examples.



Any of these ground floor facades could fill the gaps in the buildings to create a characteristic commercial Dawson structure.



Exploded isometric of typical commercial facades showing composition & component organization
## 4.3.6.2

Entablature:

Lateral bracing

The exterior trim at the top of the façade is referred to as the entablature. The entablature emphasizes the linear pattern of the street and provides a strong, visual termination of the building façade.



Ornate roofline treatment

projecting up to 8 feet

above facade

Facade

There were 3 basic types of roof line entablatures for commercial buildings with the characteristic boomtown facades.



If the preservation of the original entablature is not possible or a new building is constructed, the new entablature should be appropriately designed and should respect the correct proportions in massing. The best material is wood, as this was the original material. If contemporary materials are used, they should be painted in colours sympathetic to the historic period in Dawson. While entablatures were occasionally quite ornately constructed, most were simple and from 4 to 8 inches (10 to 20 cm) in height depending on the scale of the building. Single storey structures generally had entablatures between 4 and 6 inches (10 and 16 cm) high, while taller buildings' entablatures were between 6 and 18 inches (15 to 45 cm). In some instances the entablatures was used to support signage.

## 4.3.6.3

Roof Style:

Roof style was not normally evident to the pedestrian in Dawson as the roof was often concealed by false façades. Some commercial structures had the shed style roof but most were of the gable roof type.

Roof pitches of the gable roof varied from 4:12 (4 units rise to 12 units run) to 12:12. The most common pitches were 6:12, 8:12 and 10:12.



As mentioned earlier, false façades usually covered the gable end of the street side of the building. However, a portion of the gable peak was emphasized from time to time on the false façades, or a false gable peak was incorporated into the façade.

# False gable incorporated into false facade





Gable emphasized on false facade

# 4.3.6.4

Balconies:

Balconies were not prevalent in Dawson and were only seen on a few hotels or some upper residential storeys. Of the 2 charactertistic balcony designs, the most common was a small platform, usually cantilevered and centered over the main door, thus also serving as a canopy. The balustrade for these, approximately 3 feet high (.9 metre), was open and ornate in design.



K. Lausman

Some buildings had larger balconies projecting from the second and/ or third floor. These extended across the main façade, and the secondary façade if located on a corner. The balustrades were also ornate and open in design, and approximately 3 feet (.9 metre) high. Depending on the size, these larger balconies were either cantilevered or supported by columns.



Balcony supported by columns

## 4.3.6.5

Α.

C.

Entrances:

Entrances to Dawson's commercial buildings were usually one of five basic designs. The variations were developed to provide maximum window display space and draw the pedestrian into the store.

Doorway style "A" was the most common commercial entrance used in Dawson as it was the simplest and cheapest to construct. Styles "B", "C", and "D" were less frequently used, but were periodically built to attract clientele. Style "E", the corner door entrance, was often utilized on corner buildings in order to attract customers from both streets.







## 4.3.6.6

#### Doors:

Doors in Dawson City were traditionally approximately 7 feet (2.1 metres) in height with a transom extending from the top of the door to the ceiling. The transom height was usually between 1 foot 8 inches and 2 feet 8 inches, (.5 to .8 metres) the transom and door were always made of wood and glazing with a minimum of hardware.

Double doors were often found on hotels, saloons, and other buildings with the main entrances at the corner.





















**Characteristic doors - Dawson City** 

Transom Glass Wood panel



Doors not used in early Dawson



Commercial or residential usually coupled to form a double door Commercial or residential

Commercial or residential

Typical Dawson doora (small sampling) casings not drawn

## 4.3.6.7

#### Windows:

In Dawson, the vertical dimension of windows was generally greater proportioned than the horizontal dimension. They were defined by their window casings, and occasionally by sills and lintels, with a minimum of embellishments.

ceiling to within 1 foot 6 inches and 2 feet 8 inches (.45 and .8 metres) from the floor. Occasionally a row of transom lights or panels spanned the top 1 foot 8 inches to 2 feet 8 inches (.5 to .8 metres) below the 1st and 2nd floor division.

Windows were generally composed of a number of glass panes divided by wooden muntins or division bars. Major display windows were commonly composed of 12 or 16 panes in rows of 4 panes each, which did not open.

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16 panes
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Narrow windows, the same height as the display windows, were sometimes located adjacent to the door. These windows accentuated the entranceways and were usually 1, 2, or 3 panes wide.





Double-hung sash windows were very common on the second and third storey. These windows usually had 2 or 3 pane rows which were arranged in a couple of typical styles. Window casings were important in determining window styles.



Oriel windows were occasionally part of the upper storey. These projections were comprised of either 3 or 4 windows, each of the double-hung sash type having a total of 4 or 8 panes.





6 panes







Typical oriel & bay windows

Upper storey windows were frequently limited to one style per building.





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Windows not used in early Dawson

Note should also be taken that shutters or blinds were rarely, if ever, used on window exteriors.

Division bars between panes were quite narrow, while window casings were frequently 5 1/2 inches (14 cm) wide.





Windows will look more authentic if wood is used for their construction, but if aluminum windows are chosen, they should conform to the correct styles and be painted the same colour as the window casing.



Typical Dawson windows





Note: upper & lower fascias are interchengeable, decorated ones usually mixed with 4 or 15

## 4.3.6.8

#### Corner Boards:

Corner boards are used as trim on the external corners of wood frame structures to give them a finished appearance. Corner boards were usually between 4 and 7 inches (10 and 17 cm) wide depending on the size of the building. The larger the building the wider the corner boards. Pilasters were often substituted for corner boards





K. Lausman



K. Lausman

Corner boards

#### 4.3.7

#### Signage:

Signs were of a variety of sizes, shapes, and styles but were usually pedestrian oriented. Some signage located on roof tops was largely for the benefit of those travelling on sternwheelers on the Yukon River but this was usually associated with industrial enterprises.

Lettering styles in Dawson were simple and bold. Upper case lettering dominated all signage.



Alaska State Museum.

Signage was displayed in several basic forms. Advertisements were painted on glass, on awnings, directly on the façade or roof, on wooden or canvas panels supported by wooden frames, or on selfsupported wooden signs.



Free standing signs and signs cantilevered over the street gave a three dimensional quality. University of Washington, Hegg No. 746.





2: Signage painted on upper storey windows



3: Signage projecting from end of building





6: Signage on free standing pole

7: Signage attached to fascia board





Often signage was combined with a logo or symbol such as these antiers over the door. Vancouver Public Library Album 1, p.72.

Signage was bold often covering the whole facade of a building. Signage at street level tended to be cluttered. University of Washington.



Signage and advertisements were frequently located on awning and canvas banners which were either draped across the street or hung on buildings. Public Archives, Canada. P.A. 13403. Awnings provided space for signs. The traditional logo of the barbershop a candy-striped pole was frequently seen. "Labbe Hotel", University of Washington, Adams and Larkin





As well as permanent signs, notices and advertisements were tacked onto buildings, onto poles or were free standing. Alaska State Museum.

## 4.3.8

General planting schemes:

Flowering herbaceous plants were not a common feature throughout the commercial area. However, planters and hanging pots were scattered here and there.

Flowers and vines were grown in these planters and hanging pots. Planter boxes were located on the boardwalks against the buildings or attached to the building under windows or on balconies. Occasionally planter boxes were placed at the outer edge of the boardwalk just under the awnings. Pots hung from façades, balconies or from special brackets. There were very few tree or shrub plantings in the commercial zone.

## 4.3.9

Placement of streetscape components:

Seating facilities and displays were generally placed along the side of buildings allowing sufficient room for pedestrian traffic along the boardwalk.

Benches were quite common outside hotels and saloons but wooden chairs were often brought outside as well. Crates of goods just unloaded onto the boardwalks or ready for shipment also were used as seats.



Herbaceous plants were occasionally used to decorate commercial structures



Many commercial buildings had awnings covering the boardwalk. Awnings were made of canvas supported by a wooden or metal pipe frame.



Boardwalks always abutted against the building they fronted. Bylaws of the time required commercial boardwalks to be 8 to 12 feet (2.4 to 3.6 metres) wide.



Boardwalks were elevated 6 inches to 3 feet (15cm to .9 metres) from the road surface, depending on location and period and related to the finished floor level of the building. Acute changes in elevation were accommodated by the use of ramps or steps. Where necessary, ramps or steps were also used to allow access from the road to the boardwalk.

Elevation changes will probably exist in contemporary Dawson because of different types of foundation systems. These systems may cause finished floor levels to be at a higher level than they were historically. This problem can be dealt with in a historic manner by using steps from the street to a raised boardwalk or installing steps between a lower boardwalk and a building.

At major intersections, boardwalks with a gravel pad for a base continued across the street to protect pedestrians from the mud or dust. Frequently, in front of stores the boardwalk was widened to provide more room for pedestrians, outdoor storage, display, and loading.



Utility poles were an obvious visual element in early Dawson streetscapes. Telephone poles were between 25 and 35 feet (7.5 and 10.5 metres) in height and supported 5 to 10 ten-foot (1.5 to 3 metres) cross-members. Generally each cross-member had 8 to 14 insulators attached. Electricity poles ranged between 20 and 30 feet (6 and 9 metres) in height but were generally lower than the telephone poles. They usually had 1 to 3 cross-members. All utility poles were located in a linear pattern along the streets close to the boardwalk edge.



Barrels and crates were frequently left on the boardwalk for short-term storage or loading. These provided informal seating in front of shops and also created spaces adding to the visual relief and boomtown atmosphere of the streetscape. Possibly some barrels were used as garbage containers.



Barrels and crates were common components of the commercial straetscape

Early utility access covers were wooden, as they are today. They were placed along the roadside as required and protruded above the ground from a few inches to a couple of feet.



Bollards were sometimes placed in the ground at the edge of the boardwalk. They were often ornamental in design, approximately 3.5 feet (1 metre) high and about 6 to 8 inches (15 to 20 cm) in diameter. Bollards were occasionally used to indicate steps from an elevated boardwalk to the road surface.



Candy striped poles were used to indicate barber shops. Most barber poles were 6 to 7 feet (1.8 to 2.1 metres) high and topped with an ornate cap.

The lighting in the commercial sector usually consisted of freestanding lights and lights attached to buildings or utility poles. The latter was most frequently seen in early Dawson.

Occasionally lighting was provided by means of removable lamps on free standing posts 7' - 8' high (2.1 to 2.4 metres). The posts had pegs on top to secure the lamps. Their main purpose seems to have been for loading or unloading supplies when it was dark.

Street lights in Dawson were simply a bulb with a reflecting disc above it. They were supported on a utility pole about 12 feet (3.6 metres) above the ground by a wooden frame.



Glass, globe-shaped lights were common in the commercial area. They sometimes had advertising lettering on the glass but their main purpose was to light up the entrance to the building.



Similar light fixtures to those used for street lights was also used to illuminate boardwalks in commercial areas. They were the bulb and reflector disc style but usually had a crooked pipe support (shepherd''s staff) to attach them to the building façade. These lights were often situated above building entrances.



Flag poles, from 7 to 20 feet (2.1 to 6 metres) in height, dotted commercial rooftops. These poles added vertical variety to the horizontal form of the roofline. Poles were attached either to the top of the cornice or the roof ridge. Flags were not always flown from these poles as some proprietors saved them for festive occasions such as Dominion Day.





Flags were also displayed along the false facade

### Commercial design example:

Above structure built after historic period



Height Width

#### Step 2:

False facade added, width to height proportion is within the acceptable tolerance (le 10% of 1:2:1) See proportion criterion section 4.3.3



#### Step 3:

Principle of symmetry applied. (From "Axis Relation" criterion). Note continuous span of display windows. (From "Solids to Openings" criterion). Door and window styles. (From "Design Elements" criterion).





Addition of cornics and corner boards (from "Design Elements" criterion). Awning, (from "Placement of Streetscape Features" criterion).



#### Step 5:

The addition of crates, barrels, boardwalk and flagpole as well as appropriate signage are necessary additions to give the physical character of an early Dawson Streetscape. See Signage criterion section 4.3.7 and Streetscape components section 4.3.9

## 4.4 Residential

#### 4.4.1

#### General notes:

As a result of its development the residential districts of Dawson had a number of house styles but they could all be categorized as log buildings or wood frame structures. The first dwellings were simple tents used as an interim shelter during construction of log cabins. More permanent structures, such as log houses and frame houses appeared later. Log cabin construction persisted through this stage but frame houses gradually outnumbered log buildings in the flatter sections of the city as compared to the hillside.

# 4.4.2

Building siting:

The position of the house on the lot with respect to frontage was often dictated by the position of adjacent houses, as new houses conformed to existing structures on the street. The immediate topography also influenced siting. There was a general tendency for smaller homes to be closer to the street as they seldom had large lots.





The house and lot sizes varied and the house shape conformed to the lot shape with the longest side of the house parallel to the longest side of the lot.





Residential lots were surveyed to be 50 by 100 feet (15.24 by 30.48 m) but few accommodated only one house. Lots were subdivided into as many as 4 parcels providing only the required building space. Companies often bought a number of adjoining lots in order to build units to house their employees. These units were typically small and similar in design with very little frontage.



Side lots were seldom developed because homes were usually centered width-wise on the lot leaving 5 to 10 feet (1.5 to 3 metres) on each side. This space was utilized for access to the backyard and seldom had another purpose.



Houses were generally situated between 10 and 20 feet (3 to 6 metres) from the boardwalk. This provided larger backyards for gardens and outbuildings, including outhouses, sheds, and greenhouses. Front yards were kept clear of structures and were usually highly maintained ornamental garden areas. On the more rugged topography in the east side of Dawson, the house was positioned to make construction simpler and reduce the number of steps.



Verandahs were common features on many houses. They provided outdoor space for the summer months, often containing tables, chairs, benches, hanging plants, planter boxes, or various combinations of these.



## 4.4.3

#### Proportion:

Log cabins were one storey and rectangular in plan. The longest wall varied from 1.5 to 2.25 times the length of the shorter wall which was usually between 10 and 16 feet (3 to 4.8 metres). Wall lengths were often determined by the length of available logs. Log cabins had medium pitched roofs and were oriented according to the slope. The shorter gable wall running parallel or perpendicular to the slope. This front façade was usually square (width to height ratio of 1:1) with the gable end and extending beyond the structure forming a canopy. Generally, the overall height was 8 to 11 feet (2.4 to 3.3 metres) above floor level, although the side wall was not always as high as the door, as the rafters sometimes began at 4.5 feet (1.3 metres). Additions to the structure altered these basic proportions.

Log houses were generally larger than cabins and had better detailing in construction. They were generally more square in plan than the cabin, and often had additions to the structure.

Frame houses in Dawson do not reflect any particular style which would distinguish them from houses built elsewhere in Canada at the same time. Most were consistent with the Victorian architecture of the time and therefore had a multitude of shapes and sizes.



Single storey log home (1:1)

#### 4.4.4

#### Solids to openings:

Because of the type of construction, log structures had few openings as compared to the frame houses. A common front façade would consist of an entrance slightly to one side of the gable end flanked by a window, which created a balance. If the door was centered on the façade it was often flanked by two windows. Tops of windows and doors of log houses were more frequently aligned than those of log cabins.

In log cabins window sills began approximately 4 feet (1.2 metres) above floor level and window openings were typically 2 to 3 feet high (.6 to .9 metres).

Smaller frame houses, although often the same size as log houses, usually had more and larger windows. These openings usually started lower and were taller. As with log units, the door was generally located to one side of the front façade and balanced by a window on the other.

The larger frame houses, although different in design, had common basic window proportions. While the position of the openings depended on interior function, windows were generally built in a 1:2 or 1:1 ratio of width to height. Two-storey homes had the ground and upper floor windows vertically aligned, when possible.



For more detailed information on windows and window surrounds refer to section 4.3.6.7 for information on doors refer to section 4.3.6.6.

## 4.4.5

Axis relation:

Whenever function permitted, a dominant design principle for residential units was symmetry. Doors on the front façade were either balanced by a window or flanked by windows on each side. This symmetry was most prevalent in structures with gable roofs and particularly evident in log houses.

As a Victorian feature the frame house was usually designed for preferential or 3/4 view (seen from two sides at a time). Rather than having an overall symmetry each of its components were symmetrical (e.g. gable ends, verandahs).

Symmetry was also the main design principle on victorian frame houses



Typical Victorian frame house Sears & Roebuck 1908 (page 595)

## 4.4.6

Design elements:

## 4.4.6.1

#### Roof style:

Roof shapes varied in residential buildings, but as mentioned earlier, log structures whether single or two-storey houses, were commonly gable roofed. Frame houses had simple gable roofs or were complex Victorian buildings, often with combinations of roof styles such as hip, gable, and shed, and additions such as dormer windows, bay windows, oriel windows, and cornices. Roof pitches varied widely as many were constructed by their owners, thereby reflecting their individual tastes.

The roofs of the earlier structures were either made of sod or staggered layers of logs or planks. Later, as with most Dawson buildings, wood shingles, corrugated or pressed metal was used on the roofs. Other roofing materials consistent with the more detailed construction of log and frame houses - with more permanence in mind - were board and batten, and shingles.



"Mrs. Worden gathers lettuce from her vegetable roof garden". Minnesota Historical Society, St. Paul Minn. Knute Nelson Papers, manuscript department.

## 4.4.6.2

#### Balconies:

Balconies were not common in Dawson as a majority of residential buildings were one storey. However, some two-storey houses were designed with a balcony often spanning the front façade - thus also functioning as a canopy for a verandah below. The balustrade on frame homes were generally more ornate than those on two-storey log structures.



Balcony spanning the front facade; doubling as a canopy for the verandah below

#### 4.4.6.3

#### Porches:

A structure which shelters an entrance to a building is referred to as a porch. Dawson''s severe winters necessitate having such shelters on entrances, but because of the many verandahs which serve a similar purpose (as well as the added function of cool sitting areas in summer), porches were not frequently built. Porches were usually associated with small, company-built homes. They were often enclosed and were either of the gable, mansard, hip, or shed roof styles. In later stages verandahs were crosed into form porches such as at the C.O.'s residence.







Porch styles

## 4.4.6.4

#### Verandahs:

Verandahs were quite a common feature in Dawson. In addition to the two-storey homes which had a combination balcony/verandah, many one and two-storey residences had verandahs spanning the front facade and occasionally wrapping around an adjacent facade. In most instances, an extension of the roof on a gable facade served as the canopy of the verandah for log structures. For some log homes, this canopy-accompanied by a board flooring-comprised the verandah, while others were more refined with railings, trellises, planters, benches, etc. Some log buildings also had verandahs of separate construction - usually in the form of a shed roof. The verandahs of wood frame cabins were of two common styles. They were either of separate construction with a shed or hip roof, or built right into the house. This latter style was either an extension of the roof on a gable end, as with the log homes. The verandah floor was not always related to the floor of the building and sometimes stood independently on the slope.



K. Lausman verandah

Frame Houses had verandah either spanning almost completely the front facade or wrapping around 2 sides of it. The latter option provided the "3/4 view" typical of the Victorian type of architecture and its immediate adaptation. In some cases the angle joining the 2 sections of the verandah was infilled by a bay window. In most cases the verandah was contained within the corner boards of the building, and the posts where symmetrically located with a variance of a few inches.



A verandah could either be enclosed with wire for plants or drapes and later on with glass. When they were enclosed with drapes, the drapes were supported by a railing at top and bottom. The bottom one was generally at the top of the handrail, sometimes on the floor. Railings could be tubing but more generally wire was used.



# 4.4.7

#### Signage:

Signage was not common in the residential districts, but occasionally house numbers would be placed on the front façade; located either above the door, directly on the door, or to one side of the doorway. Another sign type in residential areas was street signage, which was sometimes located on corner houses.



## 4.4.8

#### General planting schemes:

Flowering herbaceous material was generally planted along the base of the house whether in raised beds or flush with the ground. These often consisted of climbing vines (e.g. canary vine) edged with border plants (e.g., alysum, marigold). In some cases flowers were also used to border the walkway leading to the house from the street. They were usually low plantings contained with wooden headers or white painted rocks. Flowers and vines were also commonly displayed by means of containers (i.e. hanging pots and planters of all sorts situated on steps, railings, etc.).



Hanging planter



As most houses had fences, perimeter plantings along them were popular. The many avid gardeners in Dawson would plant flowers in such convenient locations as around flag poles, trees, etc. Some took a keen interest in Victorian gardens with their elaborate designs and plantings.

Shrub hedges were commonly used to define properties, and often in conjunction with a fence. Hedges were usually planted at the front of homes, but shrubs were seldom used alone as a specimen planting. The shrub species common in early days were the native wild rose and the introduced Siberian peashrub (Caragana).

The planting of trees in Dawson became a common practice as the city evolved into a community of permanence after 1900.

Around smaller homes the owners usually planted the easily transplanted white spruce. They were placed at the front of the lot in either one or both corners and/or one or both sides of the entrance walk. Alaska birch were more difficult to transplant, and were usually associated with larger homes and yards. The birch was considered more ornamental and was often used in a row planting along the front property line. Balsam poplar were occasionally used in place of spruce and/or birch.





Planter and bench on verandah

## 4.4.9

Placement of streetscape components:

Boardwalks generally extended directly from the street to the front door. Occasionally a common entrance walk ran between two houses sharing the same lot, then laterals ran to the separate dwellings.



Flag poles were placed at the front of some houses and were centered in an open space. Occasionally they were put in other locations such as at the corner of buildings or on the fence lines or on the roof of the house at the front of the peak.



Outbuildings, including outhouses, sheds for storage or workshops, and greenhouses were positioned in the backyard, generally at the edge of the property in one of the corners. This allowed larger areas for vegetable gardens. Rocks, up to 1 foot in diameter, were used to border flower gardens, or gravel walks and drives. These rocks were often painted white.



**Outbuilding location** 

Boardwalks were also constructed around houses to provide access to the rear yard. These walks were between 2 to 3 feet wide (.6 to .9 metres).

Fences were frequently used to define property. They followed the property line around the house. Fences ranged between 2.5 to 4 feet (.75 to 1.2 metres) high and not only served aesthetic purposes but kept dogs and children away from gardens.





#### Residential design example:



Step 1: An existing residence in Dawson can be modified relatively easily



#### Step 3:

Addition of plant material, hanging plants, flowers along the boardwalk and appropriate trees see General planting schemes criterion 4.4.8 and appendices lists 5.1



Step 2: Construction of a verandah from Design Elements criterion section 4.4.6.4



Step 4: Addition of fence hedge and boardwalk along road are additional features which enhance the historic character. See Streetscape components criterion, section 4.4.9

## 4.5 Public

#### 4.5.1

#### General notes:

Public structures in Dawson were generally larger and more ornate than other types of buildings. Most were built by the government once it was realized in 1900 that Dawson was to be a permanent settlement.



## 4.5.2

Building siting:

When situated in a commercial area, public buildings generally conformed to the adjacent structures with respect to the building setback.

The Government Reserve was a large public land unit distinct from the rest of Dawson. It contained the N.W.M.P. compound, Yukon Territorial Government buildings and several church buildings. Buildings on the Reserve were large, with generous open spaces. For buildings facing the road setbacks from the road were greater than that found in the rest of the city, as were the amounts of frontage. Lots did not conform to the grid pattern of the rest of the city, and the size and shape of lots depended on the amount of land required by the structure.



# 4.5.3

Proportion:

There were many building designs used for public structures, but the main façade was generally either wider than tall or approximately square. This added to the solid appearance of these buildings and was consistent with the government and bank's desire for permanence.



#### 4.5.4

Axis relation:

The main façades of the public buildings were usually symmetrical with the left side mirroring the right. This type of symmetry was also common to most commercial buildings and some of the houses in Dawson.



# 4.5.5

Solids to Openings:

Although never more than 2 storeys high, public buildings were generally built on a larger scale than commercial structures. The openings (doors and windows) were also larger with more elaborate trimming. As with commercial buildings, windows were larger on the ground floor but did not span the width of the façade. This meant that the façades of public buildings did not have as much of a distinction between the first and second floor as did commercial structures.



Harmonious design between both levels. Appears as one unit.

The height of the ground floor of the public buildings was greater than that of commercial structures and therefore the windows and doors were proportionately larger. This was accomplished by larger panes rather than more of them,

The windows on one façade were all the same height and width forming a horizontal band across the façade with even spacing between windows. This horizontal band of windows generally began higher above the floor level than in commercial buildings, and often had a transom light or pediment associated with it.

The second storey windows of these buildings related to the ceiling height and were therefore generally shorter than the ground floor windows. They were evenly spaced and usually vertically aligned with the ground-floor windows.



Design harmony between both storeys.



Harmonious design between floors
## 4.5.6

Design elements:

## 4.5.6.1

Façade sections:

As with commercial buildings, public structures consisted of 3 major divisions on the front façade. The first floor was used for public service, the second level for offices, meeting rooms and residences, and the third was the rooffine of the façade. Unlike the commercial buildings, public structures did not have false façades concealing the rooffine and it was therefore treated with more care than others.

# 4.5.6.2

Windows:

Windows in public buildings were generally treated more lavishly than on other buildings, with moulded trim and ornate lintels and sills. This gave the buildings a more solid appearance and emphasized the symmetrical design of the façade.

The ground floor windows were usually trimmed more ornately than the second floor windows but the basic window treatment was consistent on each floor.

Transoms appeared above windows on both floors but were generally only on ground floor windows.



Less ornamentation on upper windows

A transom and/or padiment were common on ground floors.

The storeys were considerably higher than in commercial buildings. This, along with the more ornate and solid design of the façades gave the public buildings a permanent and stable appearance. Windows were generally the double-hung sash style with 4 panes. These panes tended to be larger than those in the commercial buildings because of the large window size.

it should also be noted that oriel or bay windows were not used on public structures in Dawson.

## 4.5.6.3

Entrances and doors:

As with windows, the entrances of public buildings were more ornate than their commercial counterparts. In addition to this more ornate character, there were usually steps leading to the main door. The portal was quite elaborate in most instances.

# 4.5.7

Signage:

The signs on public buildings were generally less obvious than commercial signs. There function was to identify the purpose of the structure. Signs never projected from the buildings, and they were usually designed along with the façade rather than as an afterthought. They were either painted directly onto the building façade or applied to a wooden base which was then attached to the building.

As with commercial buildings, lettering on public signs was generally upper case.







Signage was designed as part of the facade

**Public portals** 

# 4.5.8

General planting schemes:

Very little planting was done around public buildings in the commercial areas. However, more interest was shown in landscaping the Government Reserve than in any other area in Dawson.

Tree plantings were formal and linear along property lines. For this purpose they used birch, poplar and spruce. As in residential areas, shrubs (Caragana and wild rose) were often used for hedges. These hedges were sometimes associated with rows of trees and/or a fence.

Residences and public open spaces in the Reserve used herbaceous plantings in the same manner as in the residential areas, with the exception that they were generally more elaborate in design. The Government Reserve landscape was comparable to the Victorian public grounds of most Canadian cities. However, the slough portrayed a more natural atmosphere with willow and wild rose covering and stabilizing its banks.





Typical planting scheme in government reserve at street

## 4.5.9

Placement of landscape components:

Fences in the N.W.M.P. compound and around governmental buildings were simple in design and not decorative (e.g. simple picket or wire and wood construction). More ornate fences were associated with the church buildings and the Commissioner''s Residence.

Public buildings usually flew flags. Flagpoles in the commercial area were attached to the top of the roof (from 10 to 20 feet (3 to 6 metres) high), while on the Reserve they were either anchored in the ground or flown from roofs.



Many benches were situated within the N.W.M.P. grounds of the Government Reserve. These were usually situated against a building.

Boardwalks edged both sides of all roads in the Reserve area, varying from 4 to 8 feet (1.2 to 2.4 metres) to accommodate the amount of pedestrian traffic.



Rocks were frequently used in landscaping as headers for gravel or dirt drives and flower beds. These rocks were commonly painted white. It should be noted at this time that wooden headers were also very common and performed the same function as the rocks.

Boardwalks also served as entrances to buildings, where they were usually very wide, extending beyond the sidewalk onto the road to act as a drop-off area and/or a bridge over the drainage ditch.

# 4.6 Industrial

## 4.6.1

#### General notes:

The industrial structures in Dawson can be categorized into either warehousing or other - the latter including sawmills and breweries. Due to climatic conditions and the absence of new supplies during the winter months, the warehouses were important structures in the city. They were generally located to the north end of Front Street close to the docks, although a number were spread throughout Dawson. These buildings had a number of typical characteristics while the productive industrial structures, such as sawmills, were built to reflect their specific functions. Because of the lack of uniformity in the latter structures this section will provide a component analysis of warehouses only.



# 4.6.2

Building siting:

Aside from dock-side warehouses, most warehouses in Dawson were oriented with their gable ends facing the road, thereby maximizing the number of buildings with street frontage. The warehouses were built close to the front property limit and in line with the rest of the buildings on the block.



# 4.6.3

Proportion:

Most warehouses were built in a proportion of 1:1-width to gable height. This, along with the typical roof pitch of 10:12 to 12:12, produced a characteristic shape for these buildings.



## 4.6.4

Axis relation:

As with commercial buildings, the front façade of warehouses was symmetrical about a central axis. If a small entrance door was required it was usually located in vertical alignment with an upper storey window.



# 4.6.5

Solids to openings:

Warehouses often served a dual purpose housing commercial outlets at their fronts. Because of this there are two types of typical front façades for their buildings. Buildings used solely as warehouses generally had a centrally located loading bay flanked by small windows which started 7 to 10 feet (2.1 to 3 metres) above the floor. If these warehouses had a second storey, the windows were generally evenly spaced across the front façade and were either very small and square or tail and narrow with a doublehung sash.



#### Warehouse function only

Warehouses with storefronts were generally similar to the commercial groundfloor façades. Windows usually spanned the length of the front and started between 2 to 3 feet (.6 to .9 metres) above the floor. They usually extended to the ceiling height with a transom light or panel and were always in line with the top of the transom over the entrance.



# 4.6.6

#### Design elements:

Warehouses were typically plain in design unless they served other purposes as well. While buildings owned by more prominent firms were often designed with more attention to such details as windows, doors, and cornices, they were never designed to include false façades.

# 4.6.7

### Signage:

Signs indicating the company name and business were usually painted directly onto the building in large upper case letters. They appeared on the front, sides, or roof of these structures. Sometimes on 2 or 3 locations.

# 4.6.8

General Planting Scheme:

Since plantings was not prevalent on industrial sites it was not judged necessary to comment on it.

# 4.6.9

Placement by landscape components:

Warehouses were built to be very functional, and this was reflected in the elements around these structures.

As security was important, spaces between buildings were frequently blocked off by board fences to prevent public access to the building sides. In addition, such fences provided more controlled storage space.



Crates and barrels were often stored for a short time outside of the warehouses, and the fronting boardwalks were normally 12 feet (3.6 metres) wide to provide adequate short-term storage space. Unloading was sometimes facilitated either by changing the ground level in front of the sidewalk or loading dock or by raising the loading dock.

If the ground floor was used for mercantile purposes, awnings, benches, and other elements common to the commercial areas were associated with these buildings. Awnings did not always span the entire facade but rather sheltered the loading entrance.



Streetscape componenta



# 5.0 Appendices

# 5.1

## **Vegetation Survey**

The following is a list of trees and shrubs found within the Yukon environment around Dawson City, Characteristics are given for each. The inventory hopefully will provide a list of species which are suitable for new plantings.

## Deciduous trees:

## Trembling aspen (Populus tremuloides)

Trembling aspen is a fast-growing native tree common on south slopes, well-drained beaches and creek bottoms. It is a quick volunteer to cleared or burnt-over areas.

Trembling aspen is usually a small tree growing to 40 feet (12 metres) with a diameter of up to 8 inches (20 cm). The bark is whitish to greenish grey, smooth on younger trees and becoming furrowed on old trees. The south-facing bark bleaches to white resembling the bark of a white birch, while the north facing bark remains a greenish grey.

## Balsam poplar (Populus balsamitera)

Balsam poplar is native and very common in the Boreal Forest, growing best on rich, moist soils, it is frequently found along streams and on alluvial flats along rivers. It is hardy, fast-growing, easy to transplant, and easily propagated by cuttings. It is often used for windbreaks or as a specimen in gardens.

Balsam poplar is a medium-sized tree, but in the Dawson area it is the largest deciduous tree, attaining a height of 70 feet (21 metres) and a diameter of 24 inches (.6 metres).

## Alaska birch (Betula neoalaskana)

This indigenous species has been the subject of much confusion in past years as it is often confused with white birch (*Betula papyrifera*). It often interbreeds with white birch to create populations that are a mixture of the two. It is found throughout the Boreal Forest Region and prefers poorly-drained soils as a habitat.

Alaska birch is a small to medium-sized tree attaining a height of 50 feet (15 metres) and diameters of up to 14 inches (35 cm). It is distinguished from white birch by the triangular shape of the leaf, the numerous resin-glands on the young twigs, and the weeping form of the branch tips.

Larger birch than those with 14 inch (35 cm) diameters do occur on the Government Reserve. It is probable that they are a cross with the white birch. However, they still predominatly exhibit the characteristics of Alaska birch.

## Mountain alder (Alnus tenuitolia)

The mountain alder is usually from 20 to 30 feet (6 to 9 metres) in height and under 6 inches (15 cm) in diameter when mature, but in its native Yukon habitat it is more commonly found to be a spreading, multi-steinmed shrub thriving in moist habitats and along streams. It is quite useful in the natural habitat through its stabilizing influence upon the soils via erosion minimization. Wildlife also utilize alder for cover and for browsing.

## Water birch (Betula accidentalis)

Water birch will grow on dry soils but prefers and gorws best on moist soils along streams and other water sources. It is often associated with poplars, willows, and alders but will also form dense pure thickets. In its native environment of the Yukon the water birch usually approaches 20 feet (6 metres) in height with a diameter of approximately 7 inches (17 cm). It can grow to 35 feet (10.5 metres) under ideal conditions.

## .

#### Bebb willow (Salix Bebbiana)

The Bebb willow is a fast-growing shrub or small tree which chooses poorly drained areas such as stream banks. This indigenous willow, along with others of the same genus provides a valuable wildlife habitat, supplying food and shelter to birds and animals. It attains a height of up to 30 feet (9 metres) with trunk a diameter of 8 inches (20 cm). This is the most common willow in Dawson.

#### Peachleaf willow (Salix amygdaloides)

Like all willows the peachleaf willow thrives in moist, poorly-drained locations. It can attain heights of 40 feet (12 metres) but is not a very common tree in the area.

#### Willows (Salix spp.)

Willows hybridize readily and also are extremely variable in form and vegetative characteristics, making them very difficult to differentiate from one another. There are other willow species in Dawson but they were difficult to key because of this hybridization.

#### Coniferous trees:

#### White spruce (Picea glauca)

White spruce is the dominant conifer in Dawson, This tree grows on a variety of sites, but in the Yukon it does best on the alluvial flats of rivers and streams. The tree's trunk has a pronounced taper and its low branches, which it retains when growing in the open, will droop slightly to conceal the trunk. The white spruce is a large tree averaging a 60 foot (18 metres) height and 16 inches (.4 metres) in diameter.

#### Black spruce (Picea mariana)

Black spruce is a slow growing tree preferring a poorly drained soil. It is often associated with bogs but in the North it also grows on welldrained flats and slopes. It is known by its columnar shape and a clublike crown. The club-like crown is a result of slow growth. Black spruce ranges between 30 and 50 feet (9 and 15 metres) in height and 6 to 8 inches (15 to 20 cm) in diameter. The colder the microclimate the smaller the tree.

#### Shrubs:

#### Wild rose (Rosa acicularis)

This native rose has medium-size pink flowers which bloom in May and June, after which the attractive red hips form, remaining on the shrub during the winter. It will grow to 6 feet (1.8 metres) and can be easily transplanted. This rose grows well in Dawson and was used frequently in gold rush days.

#### Siberian peashrub (Caragana arborescens)

The Siberian peashrub was brough to Dawson by the early settlers and it has adapted very well. The attractive yellow flowers bloom in early June and the legume fruit form in early July. The Siberian peashrub will tolerate a wide range of soils and is easily grown from seed.

#### Urat false-spirea (Sorbaria sorbifolia)

There is no evidence to date that the false-spirea was introduced by early settlers. It does quite well in Dawson. Creamy-white clusters of flowers borne in July develop into a fruit similar to a sumac. This stoloniferous plant will reach 5 feet (1,5 metres) in height and can be propagated from cuttings.

#### Shrubby cinquefoil/tundra rose (Potentilla truiticosa)

Shrubby cinquefoil is a native to the Dawson area. A hardy little shrub approaching 3 feet (.9 metres) in height it makes a fine hedge or mass planting. Yellow flowers are prolific all summer from June through September. It will tolerate poor, dry soil, is easily transplanted, and can be grown from seed or cuttings.

#### Canada buffaloberry (Shepherdia canadensis)

The buffaloberry is native to Dawson. This attractive plant is covered with bronze-coloured scales on its twigs, silvery-coloured leaves on the underside, and the upper leaf surface is green. From July to late August the plant produces red berries, which add to the plant''s beauty. It grows to 2 feet (.6 metres) providing a handsome low shrub. The shrub is rarely cultivated.

#### Dwarf birch (Betula nana)

The dwarf birch is commonly associated with alpine regions, but has adapted to the Dawson subarctic climate. Only one person in town has used a dwarf birch in his yard. This birch grows to 5 feet (1.5 metres) and can produce a thick hedge.

#### Lilac (Syringa spp.)

The species of Illac is now known, but it is probably either a cultivar of the Preston Illac (*Syringa prestoniae*), selected around 1924 in Ontario, or a Syringa villosa hybrid which was introduced shortly after the Preston Illac. These are the two hardiest lilacs (Zone 2) both are late introductions and would not have been available at the turn of the century. When they flower, the bloom is unattractively pale and dwarfed relative to those found in southern locations. Perhaps a location which has maximum insulation and is sheltered from cold winds would improve the flowers. Lilac bushes in Dawson reach 5 feet (1.5 metres) in height and make a nice shrub despite the poor quality of its bloom. The leaves remain green well into the fall. The plant can be propagated from cuttings.

#### Tatarian honeysuckle (Lonicera tatarica)

This honeysuckle was introduced to North American from souther Russia but it is not known when it came to Dawson. As is the case with the lilac, the tatarian honeysuckle''s maturation is limited by severity of the Dawson climate. It does, however, get to be 4 to 5 feet (1.2 to 1.5 metres) high and flowers in mid-June. Two cultivars of the tatarian honeysuckle "Alba", with white flowers, and "Rosea", with pink are grown in Dawson. After blooming, a showy red fruit develops and hangs on until the summer''s end, then turns brown in the fall. This honeysuckle will survive in a wide range of soils and can be reproduced from cuttings.

### Spirea (Spiraea spp.)

A species of spirea was found on the outskirts of the city but was in poor condition. It was probably not hardy enough to survive the severe winters. It is not known if a spirea was used in Dawson at the turn of the century.

### Willows (Salix spp.)

Any of the willows from the Dawson area could be used as shrubs. They are all native, easily transplanted or propagated from cuttings and can be attractive if maintained.

# 5.1.1

Plant material grown in early Dawson:

The following is a list of plants which were commonly used between 1898 and 1918. Sources of these facts are documents by L.B. Berfon (1), M.L. Black (2), E.T. Adney (3), and photographs taken during Dawson''s early years. Cultivation of these plants should add to the historic character of the Dawson landscape.

Dansy nasturtium schizanthus astor delphinium lupine larkspur monkshood baby"'s breath sweet pea canary vine canterberry bell hollyhock Alaska poppy magenta vine maidenhair fern daffodil tulips iris

ionauil lilv-of-the-vallev bleeding heart snapdragan scarlet poppy Califoria shirley oriental poppy wild currant wild gooseberry wild raspberry wild blueberry wild cranberry wild rose Siberian peashrub white spruce balsam poplar birch

## **Footnotes**

1. Berton, L.B., I Married the Klondike, Little, Brown and Co., Toronto, 1954.

2. Black, M.L., *My Seventy Years*, Thomas Nelson and Sons Ltd., Toronto, 1939; and *Yukon Wildflowers*, Price, Templeton Syndicate, Vancouver, no date.

3. Adney, E.T., *The Klondike Stampede of 1897-1898*, Ye Galleon Press, Fairfield, Washington, 1968.

# 5.2 Planting Techniques and Maintenance

## 5.2.1

Transplanting trees and shrubs:

Early spring, before new growth begins is generally the best time for transplanting trees and shrubs in the Yukon. However, conifers can be relocated during the summer if special care is taken. Deciduous plant material greater than 1 1/4 inch (3 cm) caliper and evergreen plants greater than 5 feet (1.5 metres) in height should be balled and burlapped (B & B) prior to moving. Others can be transplanted bareroot. The following balling schedule gives the approximate size of the root ball required in relation to the caliper of the plant material.

Large trees Caliper: diameter of tree 1 foot (.3 metres) Minimum ball above ground diameter Depth of ball 1 1/4 - 1 1/2''(3 cm) 18"(.45 m) 14" (.35 m) 1 1/2 - 1 3/4"(4 cm) 20''(.5 m) 15" (.37 m) 1 3/4 - 2"(5 cm) 22"(.55 m) 16'' (.40 m) 2 - 2 1/2"(6 cm) 17" (.42 m) 24''(.60 m) 1 1/2 - 3"(7 cm) 18'' (.45 m) 28''(.70 m) 20'' (.5 m) 3 - 3 1/2"(8 cm) 33''(.82 m) 31/2 - 4''(10 cm)38''(.5 m) 23" (.6 m) 4 - 4 1/2"(11 cm) 43''(1 m) 26" (.65 m)

#### Note

1. Material dug from the forest should have figures regarding balling that are 20% greater than those shown.

2. Tall columnar evergreen shrubs, deciduous shrubs and small trees should all have at least a 16 inch (.4 m) ball diameter even if they are smaller than 5 feet (1.5 metres) in height.

# 5.2.2

Ball and burlapping procedure:

Cut into the soil around the tree forming a circle of the required diameter. Dig under the root ball as much as possible. Keep the roots moist with a hose, if necessary. Tag the north facing limbs so when relocating the same side will face north. Plants adjust to weather conditions and it is safest to coincide with nature as much as possible.

Now wrap the burlap around as much of the root ball as possible and secure it with rope. Then the ball can be safely lifted out of the hole and transplanted to its new location. Deciduous trees should be pruned back about 1/3 to compensate for the loss of roots and roothairs. Conifers should not be pruned because they will disfigure.

# 5.2.3

Mulch

– Topsoil mixture

#### Planting procedures:

Planting procedures for deciduous, coniferous trees and for shrubs are illustrated. When transplanting balled and burlapped or bare-root plants try to retain as much of the root system as possible and do not allow the roots to dry out. Dig a hole to the required size. Put 6 inches (15 cm) of topsoil in the bottom, place the tree preferably with its originally-north-facing side still in that direction. Judgement will have to be used here because the original position may be the poorest and exposed to full view. Next, fill to the existing grade with a mixture of good topsoil, compacting it firmly but gently as you proceed. Form a saucer around the dug hole so that needed moisture will be contained. Finally, add an inch or two of mulch to the saucer surface. The mulch can be subsoil from the hole. It should be removed each spring and replaced in the fall.



Note: seucer should be soaked with water and mulched immediately following planting

Typical shrub planting (bare root)



## 5.2.4

Preparing a hole for transplanting in an area containing permafrost: Another point to be noted about transplanting trees in Dawson is the problem of permafrost. It is often within a couple of feet below the surface in the Downtown area. To combat the frozen condition of the soil, the vegetation covering the proposed location of the tree should be stripped as soon as the snow melts in the spring. This allows the soil to warm up quickly. As the soil thaws it should be dug out and piled where it is exposed to the sun. This process should be continued throughout the summer if necessary until a hole a couple of feet wider and a foot deeper than what is actually needed, is made. Depending upon the species, the tree may be transplanted that fall, but it is safer to wait until the following spring. To protect the excavated soil over winter it should be covered with straw and then blanketed with polyethylene. This should keep the soil dry and allow it to be usable in early spring. At this time the tree can be dug and transplanted to its prepared location according to the directions given earlier. The top two inches (5 cm) of soil should be cultivated around the base of the tree. Cultivation keeps an insulating layer of vegetation from forming and this allows the active layer to remain thick. If possible, a cultivated circle to the dripline should be created. This will keep the permafrost from infiltrating the root zone. Each fall a mulch of straw or woodchips a few inches thick should be added to the cultivated circle to help protect the roots from the cold. The mulch should be removed each spring to allow the sun to warm up the soil.



## 5.2.5

Protection of plant material during construction: All plant material which is to be saved on the site should be flagged and fenced off in order to protect it from maneuvering construction equipment and stock piles of construction materials. If plants are located so that there is no chance for construction damage, a brightly coloured flag indicating its preservation will suffice. The fencing will ensure that the existing plants are not scarred, bent over, uprooted, or mistreated in any way. It will also avoid compaction of the soil within the dripline of the vegetation, thus preventing damage to plant function. In most instances the standard 3 foot (.9 metres) snow fencing will be adequate for the job.



Snow fencing supported with metal rods is a flexible easily erected barrier

Fencing should be located along dripline to avoid damage to the root system.

Minimum diatance depends on tree size with a ratio of 6" (15 cm.) radius setback of the fence from the trunk for every 1" (2.5 cm.) die. caliper of the tree

iron rode driven into ground 2' - 3' (6 - 9 m.),

Temporary protection of tree during construction

Tree planting in permafrost

# 5.2.6

Grade changes near trees:

Grade changes are often necessary on a site but such shifts in gradewithin the dripline of a tree can be fatal to that tree. Therefore, it is wise to maintain the existing grade within the dripline of the tree. The minimum radius from the trunk to the fill or cut around the tree is about 24 inches (.6 metres). In the fill situation feeders should be dug to compensate for the existing grade not being maintained to the dripline.



#### Lowering grade around mature tree

In cut situations feeder roots may be broken off or exposed to the air and dried out from excavation. Death of the plant could result. By retaining the soil at the same grade to the dripline the tree will remain healthy. A tree well is built to retain the existing grade. If the retaining wall is filled with rubble on the backside more oxygen gets to the roots and toxic gases are allowed to escape more quickly. If the grade is maintained to the dripline the feeders are not necessary.



Raising grades around mature trees

# 5.2.7

Compaction:

Soil is made up of aggregates and pore spaces. If soils are compacted the soil aggregates are forced closer together, preventing air and water from entering the soil and toxic gases (given off by the roots) from escaping, eventually resulting in the death of the plant.

Design and construction specifications should restrict movement of heavy machinery or storage of material within the dripline of the existing tree.

If the soil is compacted, a series of holes should be made along the dripline of the tree. The holes, filled with sand, provide water and food passage to the root system and allow toxic gases to escape. The holes should penetrate the compacted soil layer and enter the layer which was not tightly packed and thus still have relatively good drainage.

# 5.3 Construction Techniques and Maintenance

## 5.3.1

#### Colour:

The choice of colour for building exteriors should be consistent with the historical character of early Dawson City and should be based on historical precedent. Painting done on building exteriors should harmonize with the other colours of the building. Exterior colours should support the overall historic character of the streetscape.

Unfortunately, little research has been conducted on the actual colours of buildings, and since all photographs of the era were black and white, only tonal differences can be analysed.

Aside from the unpainted log cabins common to the residential district, the majority of structures in the commercial, residential, public and industrial districts were painted with a light tone on the façades, with mid-range to dark-toned trimmings.

Trimmings in most cases included window and door surrounds, corner boards, and cornices. Mid-range toned façades with light trim and light façades with the same tone of trim, were occasionally found in the commercial and industrial districts.

Without specific information on building colours, the task of accurately representing historical Dawson becomes more difficult. However, there are some basic rules of thumb concerning colour. Paint colours that were not produced during the period of concern, particularly bright new colours and high gloss paints, should be avoided.

Questions concerning exterior colours should be directed to Parks Canada personnel in Dawson.

## 5.3.2

### Cut and fill:

In cuts and fills of any material, swelling and shrinkage must be taken into account. Each type of material will have a different "swell" and "shrinkage" factor. Recently-excavated or blasted material lies more loosely packed than in its original state, because the rearrangement of the soil aggregates create larger voids.

"Material cut out of the ground fluffs up to as much as 145% of its original volume."<sup>6</sup> Fill that is compacted by applied loads will shrink.

## 5.3.3

Log home foundations on sloping topography:

There were 3 methods used to level log building floors on hillsides the foundation could counterbalance the slope; a retaining wall could be used to create a terrace for the structure; or a mud sill could be used either along or in conjunction with a foundation wall.

The most common method used was the first, where the foundation was constructed to counterbalance the slope. These foundations were susceptible to rot and shifting due to ground movement and erosion, but they were quickly and easily constructed with a minimum of expense. If they are used on new buildings today, care must be taken to preserve the wood and brace the logs together to minimize shifting.





Building foundation counterbalances the slope

Use of a mud sill to overcome slope



a terrace for the structure

Retaining walls were built of either wood logs, planks or stones. More impervious materials would not allow water seepage and therefore would not be suitable.

Mud sills were used on gentle slopes or in combination with foundations. It is not advisable to use this type of construction as it is not durable.



5.3.5

Fences in Dawson:

Fence design usually reflected the appearance of the structure(s) it was associated with, and elaborate fences complemented more ornate structures. Picket fences were generally between 2.5 and 4 feet (.75 and 1.2 metres) in height and were used to define property lines. Wire and wood frame fences conformed to these generalizations but were not as common as the picket fence. 6 foot (1.8 metres) high board fences or board and batten fences were usually employed to screen backlots, work areas, or storage areas.



Note: height of wall varies up to 7' (2.1 m.) maximum. Timbers are held in place with 10" (25 cm.) spikes.

Timber retaining wall

## 5.3.4

#### Macadamization of roads:

In early Dawson, roads were macadamized with a cement clay taken from nearby hills. The macadam consisted of layers of compacted small stones and were bound with clay. This method of construction provided a smooth road that had the virtue of being practically dustless.





Fences in Edwardian Dawson were typified by a number of characteristics. Picket and wire and wood frame fences were usually painted white or left unpainted, abutted against a boardwalk, and had a 1 by 6 inch facer board along the fence bottom. The points on fence pickets usually began more then 2 inches (5 cm) above the top rail and posts did not extend above the pickets except at gates and corners. On board fences, planks often extended more than 5 inches (12.5 cm) above the top rail.





Typical fence and gate details

## 5.3.6

Fence post design:

Gate posts and fence corner posts were often "capped" to stand out from the rest of the fence. The builders always took care in their design and construction to provide a finished touch to a new fence. Some were very ornate but most were simple and solid in design.

Scale is the most important aspect in designing these features - too small or large a cap will detract from the fence. The post caps should reflect the design of the fence - if the fence is very ornamental the cap should complement it.

The following are a number of historic examples of post design. Studying them will give one an Idea of the design and scale used in early Dawson.





Posts were most often made with  $6 \times 6$  inch (15 cm x 15 cm) timbers, although this varied with the fence design. The caps could be turned with a lathe or pieced together in sections.

## 5.3.7

Gate design:

Early Dawson gates usually conformed to a few basic rules. First, the materials used for the fence were consistent with those of the gate. Therefore, if a fence was made of wood, the gate was also wooden. Secondly, gates were generally designed to stand out from the fence to clearly mark the entrance. This was done by altering the gate height relative to the fence, by changing the design of the gate, or by providing larger or more ornate gate posts. Thirdly, gates generally swung inward. In this way they did not obstruct the boardwalk if left open.

Gates received more wear and tear than other parts of the fence and thus were built solidly with good hardware.

Gate posts were usually constructed of 6 by 6 inch (15 by 15 cm) timbers as they took a lot of strain.

# 5.3.8

Fence joint types:

There were five typical types of joints used in fence construction - lap joint, notched joint, butt joint, dado or groved joint and mitered joint.

The butt joint was the most common fence joint used in early Dawson probably due to ease of construction.





# 5.3.9

Wood preservatives:

The purpose of a preservative is to make the wood waterproof and/or immune against attack by insects. The more common preservatives are creosote, pentachlorophenol, and copper napthenate.

Creosote: This is a cheap preservative but it has some disadvantages. Paint cannot be applied over it, it gives off a strong medicinal odour, and it is toxic to plants.

Pentachlorophenol: This toxic chemical is harmful to plants but it has the virtue of being clean, odourless, and a reliable preservative.

Copper napthenate: This non-corrosive preservative is not harmful to plants. Paint can also be applied over it.

# 5.3.10

#### Post erection:

Historically, fence posts and bollards were simply placed in a hole in the ground and backfilled with earth. Although quick and inexpensive this method led to the rapid decay and shifting of the post. These conditions were caused by constant contact with moisture and frost heaving.

The above problems can be reduced by backfilling the holes with gravel to eliminate the constant contact of moisture with the wood. This reduction of water inhibits the formation of ice, thus providing a flexible medium between the post and the heaving ground.

To retain the historical appearance of the fence a thin layer of soil could be spread over the gravel.



Note: treat all posts to 8" (20 cm.) above surface level

# 5.4 Index of Examples













3: Bracket



4: Round cornice with signage



5: Entablature with exposed gable



6: Corner treatment of entablature 7: Brackets and cornice





8: Entablature and cornerboard



9: Corner treatment of entablature



10: Entablature on gable roof end

## 5.4.1 Entablatures: Commercial

1. Perspective view of projecting cornice on commercial facade

- 2. Note entablature ends at corner with bracket
- 3. Bracket under cornice visually supported by column
- 4. Rounded cornice (not originally on this building)
- 5. Gable end exposed and emphasized by the entablature
- Also common to woodframe houses.

- 6. Note cornice wraps around the corner brackets placed
- at 90 at corner
- 7. Entablature built on 2 facades
- of a building on a corner
- 8. Bracket is visually in line with frieze horizontally
- and in line with corner board vertically
- 9. Entablature follows gable and partially turns corner
  - 10. Entablature emphasizes gable



1: Horizontal panelled door with window



2: Vertical panelled door with window

## 5.4.2 Doors: Commercial-Residential:

1. Door is common to commercial and residential

2. Most commercial and residential doors were shipped in







3: Central placement of door

4: Double door

5: Door hinge detail

# Warehousing

- 3.-6. Most large warehouse doors were made on site
- 4. Horizontal board door
- 5. Diagonal board door 6. Vertical board door

Three types of construction - common to large doors



6: Door glide



1: Typical residential window



6: Side window

## 5.4.3 Windows: Commercial/Residential/Public

- 1. Common to wood frame houses and the 2nd and 3rd
- storey of commercial buildings 2. Typical commercial building bay window
- 3. Note detailing around window
- 4. Ornamented column between bay windows
- 5. Public buildings had more ornamentation around windows
- with more elaborate surrounds.



2: Detailing at base of bay window

7: Oriel window

and corner window



3: Bay window

8: Bay window



4: Detailing between bay windows



9: Window casing detail



5: Window pediment



10: Window pediment

6. Typical window on the side facade of a building 7. Inset corner window - note base of oriel window 8. Note panel detail extending past window 9. Variation in casing detail - top and bottom Elaborate window surrounds for commercial buildings 10. Pediment above window was common to public buildings





6: Corner detail

2: Board roof cabin



Solution of the second se

5: Log joinery at corner

# 5.4.4 Log Cabin Details

overhang

1. Log cabin sheathed in clap board note sod roof and overhang

- 2. Typical log cabin with front overhang
- 3. Wood frame addition to logs
- 4. Note sod roof ends at front facade roof boards under sod and tin on overhang



3: Addition to log building



7: Corner detail



8: Door detail



9: Window detail

5. Logs at corner - note extension of top log to support roof overhang

- 6. Corner detail lap joint
- 7. Corner detail most common construction method
- 8. Note framing detail around door

9. Illustration of window placement on side of log cabin top of windows in line window frame notched into logs - top and bottom



1: Elaborate entablature and gable end



4: Entablature and veranda at hip roof

## 5.4.5 Entablatures: Residential

 A complete entablature with cornice/frieze/architrave supported by column - note shingled gable
Note simple detailing of veranda entablature
Elaborate Entablature carries over to Bay Window although not very common.
Cornice and frieze project over column supported architrave
Very simple entablature - ornate bracket at top of column, not very common
Simple entablature with inset architrave



2: Veranda - column treatment - hip roof



5: Entablature of veranda



3: Entablature on bay window



6: Entablature and column of veranda



7: Pressed tin column and entablature



B: Pressed tin, first storey division detail

## Public

 7. Entablature and column very detailed on most public buildings
8. 1st storey division detail - note placement of sign as an element of elaborate detailing of front facade.

99



1: Veranda and balcony



6: Veranda column and balusters

5.4.6 Veranda, Column and Balcony Details: Residential

1.2 storey log house with veranda and balcony

- 2. Note detailing on column and top of column 3. Cantilevered balcony over 1st storey entrance
- common ballister detailing.
- 4. Note detailing of balusters 5. Most common detail for baluster



2: Veranda column detail



7: Veranda column



3: 2nd storey balcony



8: Veranda column and balusters



4: Balusters



9: Veranda balustrade



5: Veranda balustrade



10: Column and balustrade

6. Simple detailed column and balusters 7. Veranda missing balustrade 8. More ornate detailing on column and balustrade common to larger houses 9. Note detailing on post at step - more elaborate detailing was common to larger wood frame houses 10. Baluster spacing very Important

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