RAIC SYLLABUS
COURSE 233
DESIGN THESIS PROBLEM 9

GERRY AGREY

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INDEX

ABSTRACT

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ABSTRACT

The City of Saskatoon added on to the existing City Hall in 1982. This thesis offered an opportunity to explore the possibilities of what could have been done if the City had opted for a totally new building.

The intent of the design was to create a building that was not only a symbolic and identifiable structure to the citizens of also to create a pleasant and friendly Saskatoon, but atmosphere within and without the building that would encourage public use. The creation of the civic square, that is landscaped to include a stage, outdoor restaurant, farmer's market and casual gathering areas, plays an important role in achieving this. The building itself was conceived around the main user groups, i.e., the public areas and the departmental areas. The most important public area is symbolically the Council Chamber, which is set on a pedestal and occurs on the intersection of viewing points.

The building motifs and exacting symmetry borrows from the time-honoured forms of past civic architecture and as such attempts to create a sense of permanence and symbolic value.

INTRODUCTION AND ACKNOWLEDGEMENTS

The program for Saskatoon City Hall is based on "The City Hall Addition Building Program to 1985" with modifications and additions made to bring it into line with present day requirements. Throughout the process from initial research, to final design solution many people have been involved and I would formally like to recognize the following:

- John Holliday Scott, Architect, who has been my Principal throughout the Syllabus Program and is one of my advisors.
- · Dave Edwards, Architect, Advisor and Mentor.
- · Terry Maunu, Architect, Syllabus Co-ordinator.
- · Peter Holdstock, Architect, City Hall.
- · Brian Brownlee, Structural Engineer.
- · Bob Cowan and Ron Lefebvre, Mechanical Engineers.
- · Ravi Abraham, Electrical Engineer.
- · Rob Cosby, Landscape Architect.
- · Wayne Scott, Supervising Architect.

In addition to these people a number of individuals at City Hall helped with their advice during the Programming Stage. Finally, and most of all, I want to thank my wife and children who have supported me throughout not only the thesis but the entire Syllabus Program.

1.1 PRELIMINARY STATEMENT

What is a City Hall? What makes a City Hall unique from another building? Is it just the "numbers" in the program? Of course there is more to determining the final design solution of a building than just numbers. It must serve its client and since most clients are unique so it follows that most buildings are unique. I don't think anyone would argue the fact that Saskatoon is a unique city. It must then follow also that its City Hall should be unique. In this thesis I am going to attempt to analyse or define Saskatoon as a client and from this research, in turn design the City Hall that meets its needs.

1.2 PRELIMINARY OBJECTIVES

As I have indicated in the proposal statement, I will not confine myself to just a program of numbers that would fulfill mostly space requirements for the people that work in the building. Lewis Mumford has said that "Art, Culture, and Policial purpose define a city, not just numbers". I would like to extend this thought and its implications to the City Hall, and explore some additional forces and objectives that may shape the final design. I think that some of these may be:

- 1. Creating a building that becomes the hub that it is meant to be and a role model or symbol of what the city is and wants to be.
- 2. Involving a greater segment of the city population, by expanded active and passive activities and amenities. Somehow to finally capture the interest and imagination of the people so they will feel this is a welcoming space they can and should relate to.
- 3. Relating the City Hall and site to other downtown activities in a mutually reinforcing manner. Maybe this also means physical linkages with other adjacent buildings i.e. Library and Policy Station and maybe Post Office.

4. Making the building efficient, not only from a monetary point of view, but also for the day to day client, i.e. the building must have good orientation and be comprehensible to the casual user.

The preceding thoughts have implied that there should be considerable thought given to the exterior function of the building and site. Perhaps twenty-third street will be closed (as has been suggested in the past) so that a sort of downtown square can be developed in conjunction with City Hall to provide for some additional amenities such as outdoor theatre, restaurant, conservatory, kiosks, vendors, etc.

1.3 THE SITE

The site is that of the existing City Hall with perhaps the additional space gained by closure of 23rd Street to the South.

This site was selected because:

- 1. It is in a logical location being owned by the City and it is in a central and potentially active area of the downtown core.
- 2. Some mention has been made by people at City Hall that shared facilities with the Library and Police Station should be investigated.

1.4 ESTIMATED TIME SCHEDULE .1 PRELIMINARY PHASE

November	1,	1986	Stage	1	Proposal Preparation
November	17,	1986	Stage	2	Thesis Advisors
November	30,	1986	Stage	3	Proposal Submission
December	30,	1986	Stage	4	Approval to Proceed

.2 CONCEPTUAL PHASE

January 1,	1987	Stage	5	Research,
				Documentation and
				Analysis
October 1,	1987	Stage	6	Make First
				Presentation
December 17	7, 1987	Stage	7	Sketch Plans
September 3	30, 1987	Stage	8	Second Presentation

.3 FINAL PHASE

January 1, 1988	Stage 9	Final Development
February 29, 1988	Stage 10	Thesis Submission
		and Arrange for
		Final Submission
April 6, 1988	Stage 11	Final Presentation
April 11, 1988	Stage 12	Submission to
		Director

1.5 METHOD OF PRESENTATION

- .1 PRESENTATION OF BOARDS SHOWING:
 - a) A regional/locale plan
 - b) A site plan
 - c) Floor plans at each level
 - d) Elevations and sections
 - e) Perspectives as required to illustrate the massing and form of the design
 - f) Functional diagrams as required to explain the design
 - g) Sufficient structural, mechanical and electrical drawings to demonstrate the feasibility of the design

.2 MODEL

THESIS REPORT

Typewritten document on 8 1/2" x 11" paper including:

- Table of Contents a)
- b) Acknowledgements
- c) Preliminary Proposal
- d) Research documentation
- e) Architectural Programme and explanation as to how the design has satisfied the programme requirements
- f) Reproductions of presentation drawings and photographs of model
- g) An elemental cost analysis
- h) Bibliography

1.6

- PRELIMINARY BIBLIOGRAPHY C. Mumford, THE CITY IN HISTORY, Harmondsworth, Penguin books. 1961.
 - C. Axworthy and J. Gilles (ed.) THE CITY, CANADA'S PROSPECTS. CANADA'S PROBLEMS. Butterworth and Company, 1973

Kevin Lynch, THE IMAGE OF THE CITY, M.I.T. Press, 1960

BUILDING TYPES: PUBLIC ADMINISTRATION BUILDINGS. Articles Architectural record August 1979, and September 1976.

City of Saskatoon, CITY HALL BUILDING PROGRAM TO 1985. Building Department, Architectural Section.

Frederick Gibberd, TOWN DESIGN, The Architectural Press. London, 1970

Deborah Dietsch, THE CHANGING ROLE OF PUBLIC SPACE, and Suzanna Torre AMERICAN SQUARE, Articles, Precis, Volume 3, 1981.

Proshansky, Ittleson, Rivlin (ed.) ENVIRONMENTAL PSHYCHOLOGY: MAN AND HIS PHYSICAL SETTING, Holt, Rinehart and Winston, 1965.

2.1 INTRODUCTION

In the preliminary statement the question put forth was, "What is a City Hall?" and more specifically, what is a City Hall for Saskatoon? The approach intended in answering this question was to analyze the client and its needs, i.e. the City of Saskatoon.

It is always helpful to know the background of a client; where he comes from, why he is where he is, how he got there, why he likes to stay there and what he sees in his future there. As L. Mumford says, "Without a long running start in history, we shall not have the momentum needed, in our own consciousness, to take a sufficiently bold leap into the future; for a large part of our present plans, not least many that pride themselves on being advanced or progressive, are dreary mechanical caricatures of the urban and regional forms that are now potentially within our grasp." 1

Assuming the same holds true here, it is then in order to back up and look briefly at the history of a city and how it came to be, and also the origins of public governments and city halls. After investigating the historical background of a city an analysis will be made of other present day city halls along with some of the current concepts that are being put forth. Finally discussion will centre on Saskatoon itself and its needs as they relate to site, climate, traffic, user data, financial data, etc., and their impact on the final program.

2.2 THE CITY IN HISTORY

What is the city? How did it come into existence? What processes, functions and purposes does it fulfill? No single definition will apply to all cases. The origins of the city are obscure and a large part of its past is buried and effaced beyond recovery.

Human life Mumford says, swings between two poles: movement and settlement. We can observe these traits even in the animal kingdom. Carl O. Sauer has suggested a propensity to store and settle down may itself be an original human trait, and also to go back to a favoured spot that offers shelter or good feed.

Men also began gathering together in respect for its dead. Early man was fascinated with the powerful images of death, and perhaps these played even a greater role than his needs for a fixed meeting place in the evolution of a continuous settlement. Amidst the wanderings of paleolithic man, the dead were the first to have a permanent dwelling. Long ago the Jews claimed as their patrimony the land where the graves of their forefathers were situated. So even before the city was a place of fixed residence, it began as a meeting place to which people periodically returned.

Harman Hr.

In going so far back in history we must not overlook the practical needs that helped establish the city such as year round supply of water, good land for growing crops, a nearby estuary heavily stocked with fish and shellfish, and a solid piece of land, accessible, but protected by swamp or river against enemies. These first villages in the midst of garden plots and fields formed a new kind of settlement and a permanent association with families and neighbours. Within these guarded and sometimes walled enclosures, children could safely play and the cattle could rest at night unmolested by wolf or tiger. So in this setting a new security had entered, a more abundant supply of food was prevalent, and more children were born and more survived than any earlier culture could sustain. All these new habits and functions made their contributions to the evolving city.

It is interesting to note the importance that the domesticated animal played in this evolution. Mumford says that "without the dog and the pig it is doubtful if the close packed community could have survived its sanitary misdemeanours. The pig served as an auxiliary department of sanitation right down to the nineteenth century, in supposedly progressive towns like York and Manchester."²

The actual transition from village to city was a long process that took many centuries, however, this new urban unit became more complex, with other new types entering the city to make their contribution to its existence: the miner, the woodsman, the fisherman, each bringing with him new tools and skills and This new mixture resulted in an enormous expansion of habits. human capabilities in every direction. In this state of dynamic tension and interaction, "the already well-established parts of the city--i.e. shrine, spring, village, market, stronghold--participated in the general enlargement and concentration of numbers. and underwent a structural differentiation that gave them forms recognizable in every subsequent phase of urban culture."3

This whole urban transformation was accompanied by the rise of chieftains into towering kings who likewise became the chief priestly guardian of the shrines. Village neighbors would now be kept at a distance, no longer equals, they were reduced to subjects, whose lives were supervised and directed by military and civil officers, governors, tax-gathers, soldiers, directly accountable to the king. Now the workers would produce not only for their own family but also enough to support the royalty with a large surplus. "From its origins onward, the city may be described as a structure specially equipped to store and transmit the goods of civilization, sufficiently condensed to afford the maximum amount of facilities in a minimum space, but also capable of structural enlargement to enable it to find a place for the changing needs and the more complex forms of a growing society and its cumulative heritage. The invention of such forms as the written record.

the library, the archives, the school and the university is one of the earliest and most characteristic achievements of the city." Beginning as a representation of the cosmos, a means of bringing heaven down to earth, the city became a symbol of the possible and the much longed for utopia. Aristotle said, "men come together in the city to live, they remain there to live the good life". This of course was not true even then as early civilizations also suffered from the vice that threatens to overthrow us--purposeless materialism.

However, this striving towards a utopian city has prevailed down through the ages with Ebeneazer Howards' Garden City, Cabusiers 'Plan Voisin' for Paris and Wright's Broad Acre City. Even Saskatoon, as we shall see later, had its beginnings as a utopian settlement for a Temperance Colony.

Property in the civilized sense of the word, did not exist in primitive communities, if anything, people belonged to the land more than the land belonged to them. Private property began with the idea of all common property as a private possession of the king, whose life and welfare were identified with that community. The separation of property began when the king bestowed gifts upon fellow nobles, servants, etc. for services rendered. Around 1700 B.C. the Code of Hammurabi was written, detailing laws that dealt for the first time with private property, its transfer, its loan and its bequest.

Once this concept of private property was initiated, the need for its control also began to develop. This of course was carried out originally by the kings, priests and nobles and their servants. As more property spread to the private sector so grew the need for local government.

For a long time the city was a place in which all the functions of life took place. It takes little reading of history to see the city of the past as a geographic entity within which the transactions of life were played out. As Norton Long stated in the early 1950's, local government was

an ecology of games. The city's function was to see to it that the various games were negotiated, resources allocated, and decisions made. The world of the city was relatively clear.

2.3 CITY HALLS IN HISTORY

The Greek city was probably one of the first to acquire some of the germs of a civic structure, even though the Greek town was from the beginning the home of a god. In reference to Mumford asks, "What is the assembly of 'germ', Magistrates, in the Prytaneium or Town Hall, but the urban form of the ancient Council of Elders, probably the oldest of political institutions? What is the marketplace (agora) but the same convenient open space where the elders met, big enough for the whole village to gather in. where the neighbors could, incidentally, spread out their surplus products for barter? What is the piped fountain but a more reliable form the sacred spring, whose raised basin was not so likely to be contaminated by pissing dogs or the muddy As for the theatre, that too existed in feet of men? embryonic form in the village fertility rites, for spring and the circular thrashing floor became the stage of the new theatre, and the villagers themselves separated out from the protagonists as chorus, no longer actors, but still too active and loquacious to be called merely spectators." D

Even the most primitive community must handle its affairs and face its common problems. Such a place for gathering must have long existed in the village, an area large enough so that village dances or games might be held there too. All these functions the Greek agora would pass on to the city. Not until the automation and impersonality of the supermarket were introduced in the mid-twentieth century were the functions of the market as a center of personal transaction and social entertainment entirely lost.

The separation of political power from religious power was a turning point in the Hellenic city. However, the Town Hall or prytaneion (Figure 2.1) kept some of the original features of

2.1 THE PRYTANEION

I Porch or Vestibule

II Courtyard

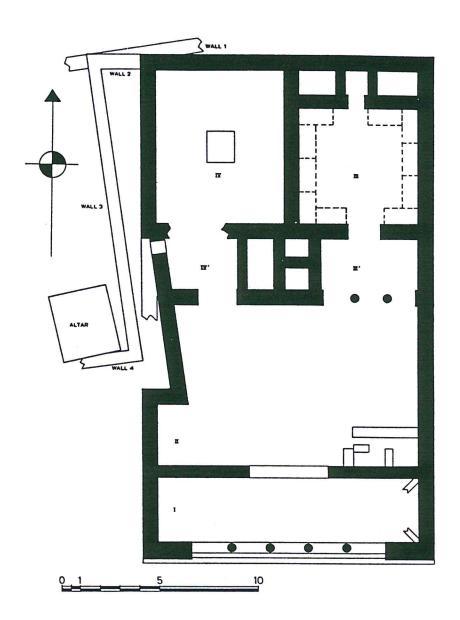
III Archeion

III¹ The Prodomoi of the

and Archeion and

IV¹ Prytancion

IV Prytancion



both palace and temple. It was still treated as home of the king where dignitaries met and state banquets were held. Naturally, the earliest documents on political and civil matters were kept in the prytaneion and often the Council House (bouleuterion), a fairly big place where citizens served in mass, remained near or in the agora.

The Town Hall retained many of these early traits into the Middle Ages. The Town Hall was at the centre of the municipalities' activities. The builders in the Middle Ages were perhaps a bit more practical, "One of the great markets in Bruges, the commercial center of the north before the fifteenth century, was the Wasserhalle, so-called because it spanned a canal and brought the cargoes by barge directly into the market from beneath. The upper room of the Town Hall would be used for the meeting of the mayor and the council. for the administration of justice, for the reception of ambassadors, and for periodic feasts and drinking bouts. The remains of the latter, incidentally, linger on in modern London, along with the ghosts of the old Livery Companies, in the famous feast at the Guildhall that follows the annual election of the new Lord Mayor, and the pageantry of the Lord Mayor's parade." 6 The Town Hall also served the leading families for places to hold their dances and routs. This provision has survived to the present day in the Hilversum Town Hall in Holland where there are both a first and second class marriage chamber. In England at this time it was the "parish" that served as the primary unit of local government. This method served well in the small and stable areas where most people were well known to one another, however it served poorly in the rapidly growing urban centres. Since parish officers were unpaid, the job was left largely to the well-todo and of course leading merchants took an interest. "By the end of the 13th century it was notorious that in large cities. parish offices were usually held by corrupt incompetents who used their position for self-enrichment." The City Hall was however a similar type building to that in other countries at

the time. It also was close to the centre of everyday activity, "Above the arches that formed a covered market place there was generally a room that served as council chamber and courthouse."

The period that followed up to the mid-20th century was generally an era in which the city's image deteriorated especially in North America and some may say that this is still happening. However, there seemed to be at least an awakening to the problems that were associated with the city and a concerted effort was started to try and counteract them. The Boston City Hall was an example of this first The City Hall which it replaced was typical of early effort. North American City Halls. Built in 1912 it was no doubt a symbolic and monumental structure with its standardized bays, modular piers and general austere eclectic image. How it functioned seemed secondary, and perhaps this was true of many buildings of this era in a country that was caught up with a building explosion, not to mention two world wars. With so many immediate needs for space, the time spent on researching these needs more thoroughly was not there. We even see this "make shift" attitude in Saskatoon's first city hall, which was actually a converted school house bought from the School Board in 1912.

2.4 PRESENT DAY CITY HALLS

We have looked briefly at the city and the city hall in history. It is obvious from this that our cities have changed considerably. Cities no longer revolve around the central 'hub' as they used to. Over the last few decades we have seen most urban cores gradually succumb to a sort of decay. Although not as marked as in large cities, even in Saskatoon there is some of this movement from the centre out to the fringes of the city, i.e. the industrial parks, the suburban shopping malls, the arena, etc. This has all taken its toll on the core areas. Much of the culture, folklore and ways of life that once stood for the city are casualties of change, since organizational transformation destroys as it creates.

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Another casualty may also be the concept of local government as a democratic body. The small-scale nature of municipal government we see is quite dependent on the decisions made by the larger organizations. i.e. corporations. unions. provincial government and federal government. The local government in many ways is becoming more irrelevant to the overall position of the citizen. The City Hall today is not the hub that the prytaneion was to the Greek nor is it even close to the City Hall's image in the Middle Ages. However, we see in this century, that many of these past attributes are still sought out and brought into play as recent City Halls are being programmed. There seems to be an underlying desire. partly nostalgic, but nevertheless a desire to rejuvenate the downtown cores, to bring back the hustle and bustle, the night life, the vibrancy that was once the image of a city. Many theories have also been put forward on this topic with as many solutions, but I will not digress into that Suffice it to say, that this basic desire to renew the inner core in any way we can, is obviously much more logical than to say 'let it die'. So I agree that we must take every opportunity we are given to enhance, and improve the downtown I think most cities are expressing this feeling environment. when they direct architects especially in the their construction of new City Halls.

It has been said that "the City Hall today must fulfill three distinct roles: as a civic symbol; as a tool for modern administration and as a focus for community activities". We can observe these underlying intentions in some of the following criteria that was put forth in programs for present day city halls.

2.4.1 BOSTON CITY HALL 1969

Description:

As I indicated earlier, Boston City Hall was probably one of the first city halls that attempted to meet the objectives stated above. It consists of three basic parts:

- a) The Bureaus the areas that deal with the public. These are situated in the massive tapered brick base.
- b) The Bureaucracy the areas that don't relate directly and don't need to be accessible to the public. These spaces are enclosed in the "raised, upside down pyramidal forms".
- c) The Ceremonial arranged in the spaces between.

Analysis:

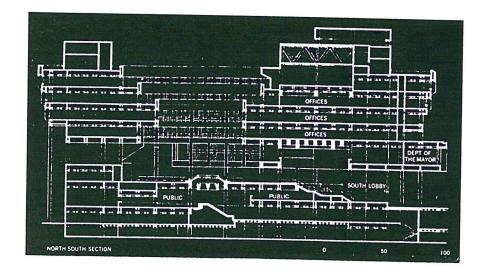
Professor Sibyl Moholy-Nagy points out several pertinent points in her critical analysis: 10

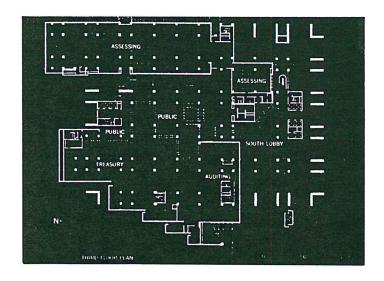
- a) Regarding Symbolism:
 - "...a ceremonial centre part focuses on the Mayor's office and council chamber."
 - "All pre-elevator ages knew the self-expressive importance of monumental stairs without fixed destination. In this case such a staircase leads from the south lobby on the third floor to the fourth floor whose assigned spaces have no particular importance."
- b) Regarding the invitation and involvement of the community:
 - "...ramps lead to the departments used by the largest crowds, and connected with the third floor by escalator and steps. The architects have been emphatic in their hope that these two levels, permitting new perspectives

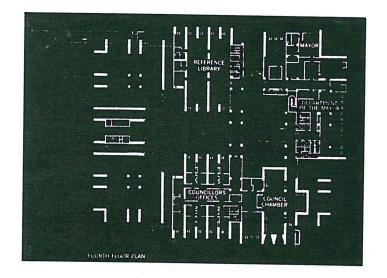
into communicating spaces from every angle, will become a true concourse making the passage through their City Hall a daily experience for citizens on the way to their business."

She also points out the underlying contradiction there seems to be in "involving everybody" and "monumentality".

2.2 BOSTON CITY HALL







2.4.2 TORONTO CITY HALL 1965 Description:

Toronto City Hall was also designed in this same era of reevaluation. It consists of four main elements:

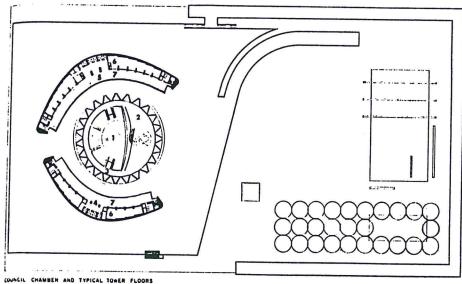
- a) the civic square which was designed in the hopes of attracting people;
- b) a four-level base containing most of the public-related offices and additional facilities such as a library and gallery
- c) the council and executive suite which contain the council chambers and mayor's office; and
- d) two office towers which are not directly public oriented.

Analysis:

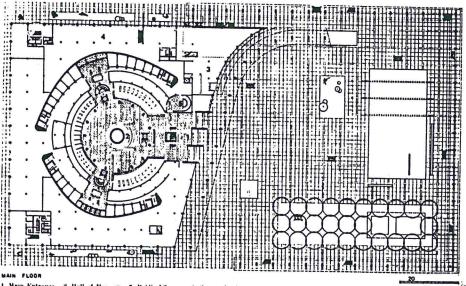
Again this building stands out from its surroundings and acts as a symbolic hub; and there is also an attempt to "involve" the public. I feel, however, that it is not totally successful for the following reasons:

- a) with its blank concrete walls on the east and north sides it shuts out the rest of the city;
- b) the city square which hoped to attract people is somewhat stark;
- c) the internal circulation is somewhat complicated; and
- d) the one-sided communication in the towers is inefficient and expensive.

2.3 TORONTO CITY HALL



1 touncil Chamber 2. Members' Lounge 3. Gallery Walkway 4. West Tower Typical Office Floor 5. East Tower Typical Office Floor 6. Private Offices 7. General Office Area



1. Main Entrance 2. Hall of Memory 3. Public Library 4. County Registry Office 5. Stafrway to Cafeteria

2.4.3 WINNIPEG CITY HALL

Description:

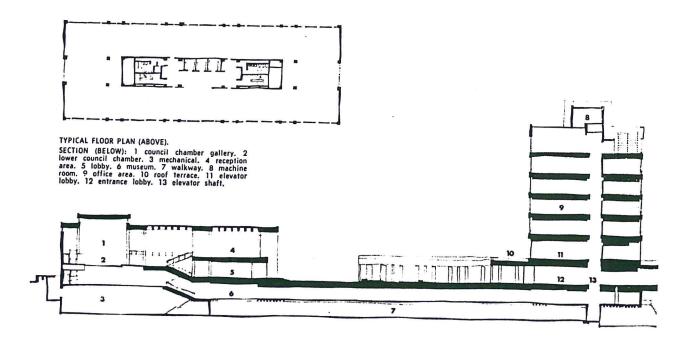
Unlike the previous two examples, Winnipeg City Hall is not a monumental nor symbolic structure. This solution is a group of inward looking buildings which close around a small civic square. It's main functions are separated into two buildings (legislative and administrative) linked only by a podium and below grade by a gallery.

Analysis:

There are however, some of the same underlying concepts.

- a) Symbolism the chamber itself is located at the head of a grand stairway.
- b) Public Involvement the return of this stair leads to the reception area above the main entry and opening off this area are the suites for Mayor and Aldermen.
- c) Ceremony "The architects were particularly concerned to make the citizen's and the ceremonial approach to the chamber one and the same." 11

2.4 WINNIPEG CITY HALL



2.4.4 CALGARY MUNICIPAL BUILDING

Description:

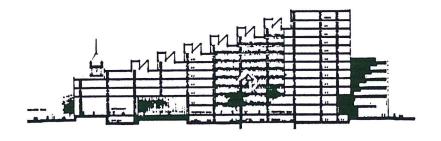
This program differs in that it is really an extension to the existing 1907 City Hall which was to remain as "a strong and positive identity". To this end the addition is a foil or a neutral backdrop for the historic symbol.

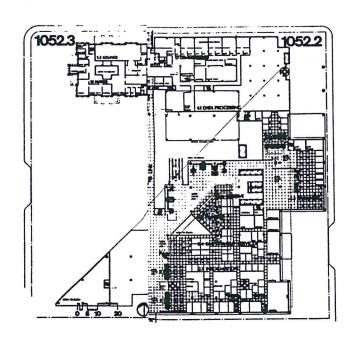
Analysis:

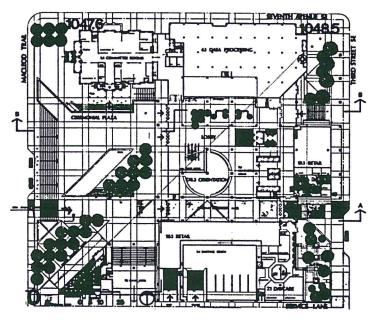
Again we see the separation of public and civic related departments. The Mayor and Aldermen are housed in the symbolic old City Hall, however, council chamber is somewhat removed to the third level of the new addition.

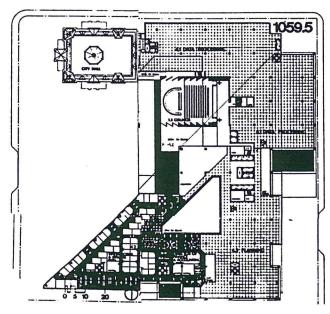
"The main level does attempt to invite the public however with pedestrian penetration in an east-west direction through the building in an enclosed weather-protected retail-banked "Main Street". 12

2.5 CALGARY MUNICIPAL BUILDING









2.4.5 MISSISSAUGA CITY HALL D

Description:

This building was the result of a competition held in 1982. The winning entry by J.M. Kirkland is a building that provides orientation at three scales; the public rooms, civic square and walled garden are all part of an extended pedestrian network. Most public and departmental components are located in the principal south facade building while low public profile departments are in the 12-storey tower.

Analysis:

One perceives this building as a disjointed collection of unrelated forms, however, this was no doubt the intention of the designer in an attempt to facilitate public orientation, i.e. different forms for different functions. This building also adheres closely to some of the current goals and concepts of city halls. The following are excerpts from the program: 13

a) Symbolic Image:

"...the City Hall presents a coherent and identifiable image."

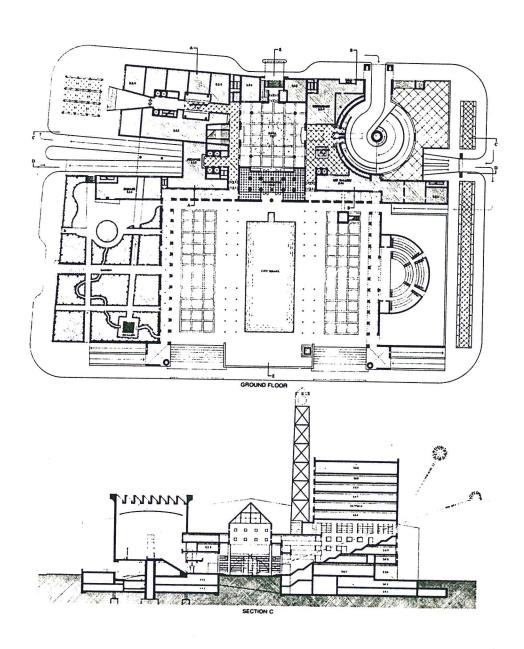
b) Public Interaction:

"The system of public movement in the building encourages the use of the building and penetration into its many areas."

"The Council Chamber and Committee Rooms have a high degree of public accessibility and are located in close proximity to the main lobby..."

In relating his basic symbolic concept of the building Kirkland says he was impressed "...by two related Ontario traditions, one civic and the other agrarian...fine 19th century buildings represent in various forms the idea of large horrific houses. Their peaked and pyramidal copper roofs are recognizably monumental...farm clusters set within the concession grid of rural Ontario--the finite composition of large and small barns, grain silos and water towers enclosed by regular lines of trees also recall a distant memory of classical civic assemblies." 14

2.6 MISSISSAUGA CITY HALL



2.4.6 SUMMARY OF PRESENT THEORIES ON CITY HALLS

In conclusion several concepts regarding present day City Halls which can be summarized as follows:

- a) The building should be a symbolic image.
- b) It should encourage public interaction and involvement.
- c) It should provide a place for ceremonial activity.
- d) It should have a coherent image that is easily identifiable.
- e) The administrative offices and the council chamber should have high public profile.
- f) Consideration should be given to additional public amenities in order to attract people.
- g) Finally it should be an efficient tool for modern administration.

2.5 SASKATOON CITY HALL HISTORICAL BACKGROUND

Unlike many cities that trace their beginnings to a cluster of homesteads or farms; Saskatoon's site was not determined by chance, it was by the deliberate choice of John Lake and his associates in 1882. In that year he was part of a party that headed from Toronto to choose a site for a new Temperance Colony. This was a group of people "...founded by visionaries hoping to create, in the virgin soil and under the purging winds of the Prairies, a new Utopia free from the sins and evils of Europe and the older colonies." The first section of the city was established on the south side of the Saskatchewan River.

Eight years later, something else happened, but on the other side of the river. The railway came, and since the north side was better suited geographically for the site of the water tower, all the other ancillary structures were placed here too. It was obviously convenient to build warehouses and businesses near the station, and as a result a second settlement began to grow. Although the original temperance settlement had adopted the name Saskatoon, it was when the Post Office came and was built in the second settlement, close to the station, and assumed the name Saskatoon that the first official tie was made between the two settlements.

For awhile the original settlement remained the centre of all social activities. The first school and the first church were there. However, by 1900, people on the west bank were tiring of sending their children across the hazardous river crossing to school so a second school opened on the west side. It was followed by new churches, and to the dismay of the Temperance Colonists, an enterprising citizen actually dared to open a bar.

The primary function of Saskatoon, aside from being a Utopia for its first citizens, was that of a market town. In 1890 and 1891, it was the "Buffalo-Bone Capital of the World". Metis would haul the bones by red river cart and stack them along the railroad for shipment to eastern fertilizer plants.

This trade was short lived but it helped establish the settlement and make it a regional centre. Its function as a market town was firmly established when additional roads and rail lines were brought through Saskatoon in the early nineteen hundreds and by its geographical location being in the centre of such activities as farming and ranching.

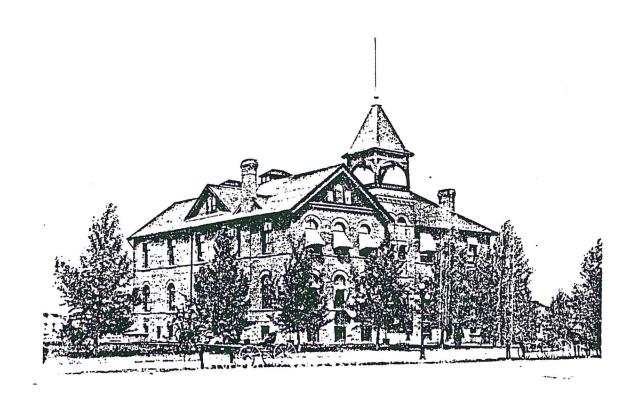
The years from 1906 to 1912 were boom years. The total assessment rose from 2.5 million in 1906 to 38 million in 1912, this in a period when the value of the dollar was pretty steady. "16 An important factor in this growth was the selection in 1909 of a site on the northwest fringes as a campus for the new University of Saskatchewan.

It was also during this boom period that the need for a new city hall became paramount. The first municipal building had been a small one-storey wooden structure located at the corner of 3rd Avenue and 21st Street. By 1912 this facility was bursting at the seams and city council purchased the old King Edward School, on the present grounds of City Hall, for the sum of \$30,000.00 (Figure 2.7). At the time it was said to be "temporary" measure, however, in this instance temporary meant 44 years. This same structure also housed the police department for 18 years in its basement. The forward-looking administration at the time also anticipated the northward growth of the city and also purchased the remaining block, for the price of \$700.00, which it turned into a formal park (Figure 2.8).

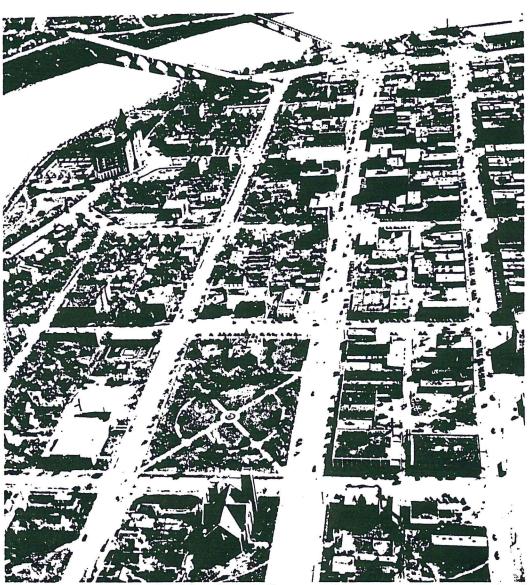
In 1956 a new City Hall was built in a portion of the park and the original building was demolished (Figure 2.9) then in 1982 a final addition was put in place.

This site has historical connotations; this, together with the adjacent governmental buildings I think makes it the logical site for a new City Hall.

2.7 SASKATOON CITY HALL 1912

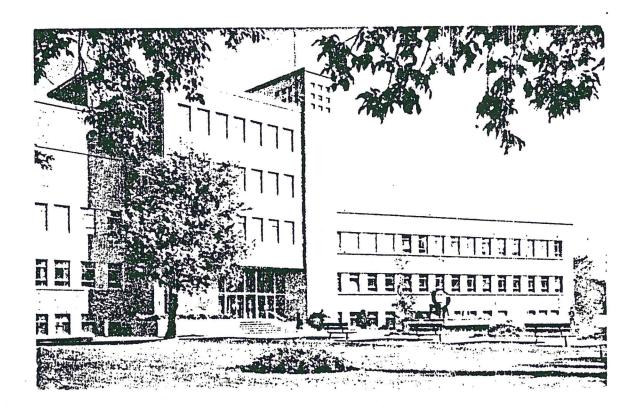


2.8 DOWNTOWN SASKATOON 1948



Downtown Saskatoon in 1948, viewed from the north. The amount of open space is striking. Note the formal park behind City Hall and the number of private homes in the area next to the river.

2.9 SASKATOON CITY HALL 1956



FOOTNOTES SECTION 2.0

- 1 Mumford, Lewis, "The City in History" Harmondsworth, Penquin Books, 1961, p.3.
- 2 IBID p.14
- 3 IBID p.31
- 4 IBID p.31
- 5 IBID p.134
- 6 IBID p.273
- 7 Bellan, R.C., "The Evolving City", Copp Clark, 1971, p.126
- 8 IBID p.33
- 9 <u>Planning City Hall</u>, Management Information Service Report, Volume 7, No. 11, November 1975
- 10 Boston City Hall, Architectural Form, January 1969
- 11 Winnipeg City Hall, Canadian Architect, January 1965
- 12 Calgary Municipal Building, Canadian Architect, January 1982
- 13 Conditions and Program for the National Architectural Design Competition for the New City Hall in Mississauga, Planning Department, City of Mississauga, Ontario
- 14 Mississauga City Hall, Canadian Architect, November 1982
- 15 Delainey, W.P. and Sargeant, W.A.S., <u>Saskatoon</u>. The Growth of a City, (The Saskatoon Environmental Society) p.2
- 16 IBID p.16

3.1 ADMINISTRATIVE USE

As indicated previously the three main roles of City Hall; as a civic symbol, as a tool for administration and as a focus of community activity. The main users of the facility are then obviously separated into two main bodies, firstly the elected officials and public servants and secondly the public.

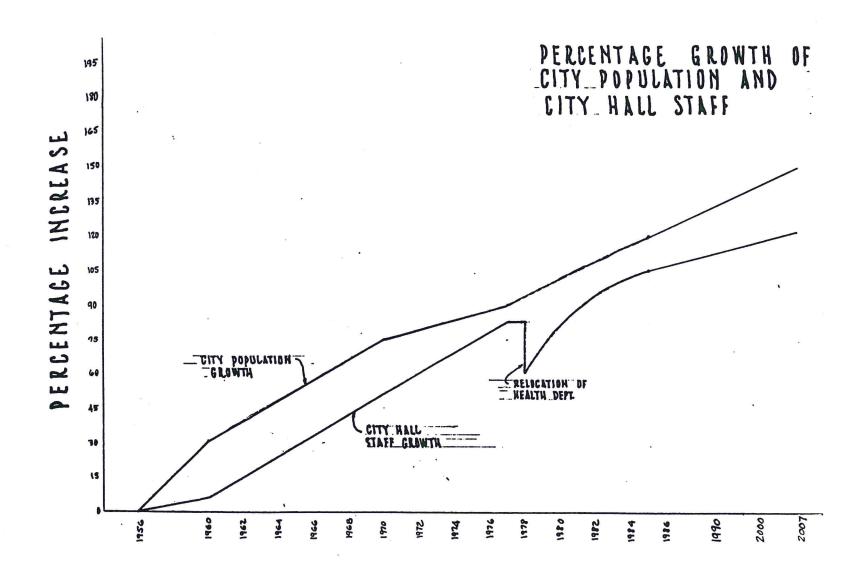
As a tool for modern administration, the City Hall should provide the space and environment necessary for the elected officials and the public servants to achieve high levels of productivity and good community and employee relations.

How does one arrive at a proper size or space requirement for the various departments? A study done by City Hall which basically involved research on other City Halls revealed that approximately 0.75 sq. ft. of City Hall space was being provided per capita of city population. This of course provides us with only an overall 'rule of thumb' and is no help in allocating sizes to various departments. Figure 3.1 shows the positive correlation between population and City Hall staff. The Senior Governments have established policies and guidelines for the provision of office accommodation. These guidelines are used as a control aid and not as an applying code and are intended to assist in the assessment of accommodation.

Saskatchewan Department of Public Works Space Guidelines 1

Minister's Office	33.4	m ²
Deputy Minister's Office	33.4	m ²
Executive's Office	23.2	m ²
Deputy Minister's Secretary's Office	21.8	m ²
Executive Office	18.6	m ²
Double Occupancy Office	13.9	m ²
Assistant's Office	10.7	m^2
Assistant to the Assistant	10.7	m ²
Single Occupancy Office	7.43	m ²
Reception Area	1.48	m ² /person
Conference Room	1.40	m ² /person

3.1 CITY HALL STAFF GROWTH VS. CITY POPULATION²



Sleeper and Wiley Building & Design Recommended Areas 3

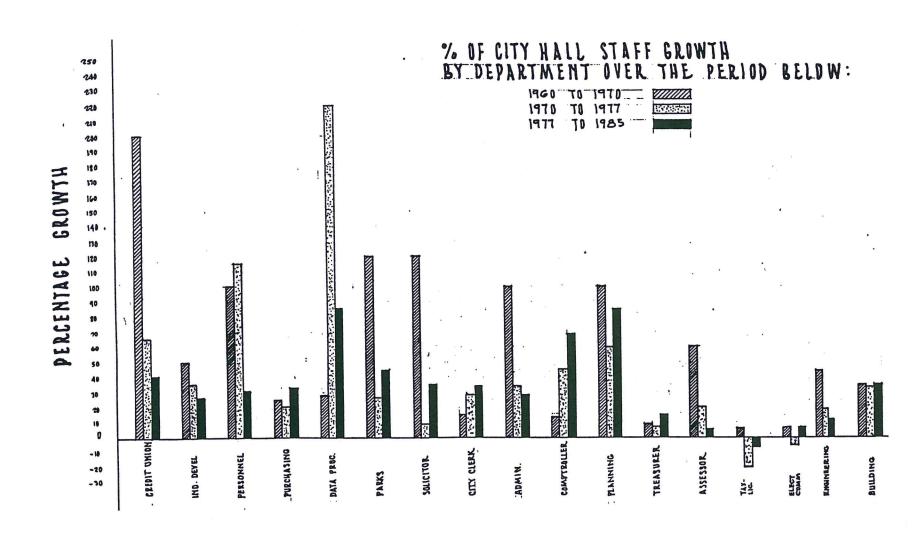
Private Senior Executives, Directors	37.2	m ²
Private Managers, Department Heads	13.0	m ²
Secretaries to Executives	9.29	m ²
Private Secretaries	8.36	m ²
Conference Rooms	2.32	m ² /person
Interview Rooms	6.5	m ²
General Office with cubicles or desks	6.97	$to_8.83 \text{ m}^2$
File Rooms	. 325	m ² /file
Drafting Area	4.18	to 5.57 m^2

More precise figures on which the final program figures are based are arrived at through a combination of additional methods. Some kind of systematic tabulation is useful to make element is omitted. For example, the program sure no developed by the city Chico, California (21,000 residents) listed existing space use and population for each department. according to administrative, operating and broken down clerical personnel (permanent or part-time) and related facilities such as parking spaces. The needs were then projected for probable population increases over the next five, ten and twenty years -- a major factor since Chico's population is expected to double by 1992.

The Planning Department had projected the City of Saskatoon population growth at 2% per year. They also carried out extensive interviews in 1979 with each Department Head in their present and future space and staff requirements. This information is shown in summary on the adjacent chart (Figure 3.2).

Their projections as far as city growth is concerned were somewhat underestimated, i.e. they predicted a population of about 167,000 by 1987, it is in fact closer to 180,000.

3.2 CITY HALL STAFF GROWTH⁴



At this stage the programmer must look at the statistics objectively since it is easy for departments to overstate or understate their requirements, by not being able to distinguish between "wants" and "needs".

Decisions must also be made at this point as to which departments are to be located in the central facility and which can be reasonably located away from City Hall. In this situation it will be assumed that the present condition exists with fire, police and health departments not included in the main facility. It should be noted also that there is also a substantial space for storage of dead files away from City Hall.

3.2 PUBLIC USE

As noted previously it is intended that City Hall will become more of a part of the everyday life of its citizens, that it should accommodate and encourage open accessible government, promote everyday and incidental public use. In order to accomplish this, the public should be provided with access to and activity on several levels of the building to permit familiar and routine use of the entire building.

Firstly, one must consider the various departments that are expected to be more public oriented. The International City Management Association has indicated some of these as follows: ⁵

- a) High volume of visitor traffic:
 - *Treasury
 - *Assessing
 - Elections
 - *Licensing and Registry
 - Police
 - Public Library

Some functions of these departments will also receive high volumes:

- City Manager

- Health

- Traffic

- *Parks & Recreation

- City Clerk

- *Public Works

These areas of high public use should be accessed by sufficiently wide corridors, they should of course be placed for convenience (possibly on lower levels) and for easy identification and orientation. They should also be placed with easy access to parking and public transit. Other considerations in relation to these areas are informal and comfortable waiting and sitting areas, adequate public toilets, drinking fountains and public telephones.

The aforementioned report by the ICMA also suggests that departmental functions that require collection of money (e.g. traffic violations, city clerk, treasurer, etc.) should be grouped together.

This same report also segregates additional departments that have modest public traffic as follows:

- Fire - *Law

- *City Clerk - *Personnel

- Education

- *Public Works

- Sanitation Administration - Traffic

- Housing & Redevelopment

- *Real Property - Civil Defense

- *Building

- *Planning

- Veteran's Services

Obviously some of these departments don't apply to the City of Saskatoon; those which are important of noting are indicated with an asterisk.

Secondly, there are several existing facilities which could be more public oriented, the main one being the cafeteria/restaurant. This facility should be enlarged to accommodate more public usage. In addition it should be located in a high profile area, possibly the main level, adjacent to the outdoor stage for example. This measure would not only potentially increase public usage, but it would create an improved atmosphere for the civic employees as well.

The other facility having public usage is the credit union. If it were open to public use as well as civic employee use, it would be another drawing feature, especially for some senior citizens who come to City Hall to do their business, and wish not to walk to another banking facility further downtown.

Along this same line of thinking, i.e. more facilities to attract the public I would recommend the following:

- a) Day Care Centre.
- b) Art Gallery and Municipal Archive.
- c) Outdoor facilities such as open air theatre, kiosks, furniture, pleasant and protective landscaping.

These last amenities will be dealt with in more depth in the detailed program under public facilities.

3.3 LONG-TERM SPACE NEED

As indicated earlier, the size of a City Hall is somewhat proportional to the size of the city, ie. 0.75 square foot of building area per person of city population on the average. Also over the years, Saskatoon has grown at an average rate of approximately 2%. Using these rules of thumb we can then project additional space requirements.

Making such predictions of course are difficult because of all the unknowns. It is usually acceptable, however, to forecast a building's needs for 20 years. Using these facts we can then arrive at the following:

- a) 2% annual growth to 2007 equals a population increase of 81,835.
- b) At the proportion of .75 sq ft/person = .75 x 81,835 = 61,376 sq ft or 5701 m². This figure accounts for total civic employees, a number of which are not housed at City Hall, i.e. police, parks, fire, health, etc. Using the present proportions of on site to off site, I believe a final figure of approximately 60% would be more in line .6 x 5701 = 3420 m² of space for future expansion.

This subject of symbolism in City Hall has been a recurrent theme through all my investigations into other current City Hall designs. Firstly, the building itself should be perceived of as the hub and focus of the city. It is important that the image of City Hall reflect its status as a landmark and be a coherent and identifiable image. At the same time however, it must be perceived as part of the adjacent grouping of public buildings that surround it.

Internally, we must also consider certain spaces that are symbolic. Foremost among these ceremonial spaces are the Mayor's office and Council chambers. Special consideration should be paid to these areas with regard to: height and floor area, richness of material, textures, lighting, furnishings, sight-lines, acoustics, and audio-visual systems. Additional considerations put forth by ICMA are:

- proper location of public and councilmen's entrances, to reduce disruption during session;
- placement of Mayor's and councilmen's offices and conference/caucus rooms near the chamber;

3.4 SYMBOLIC IMAGE

provision for displays; and

- Investment Services

- Public Health

 adequate seating to accommodate staff and press as well as general public.

3.5 SUMMARY - FLOOR AREA REQUIREMENTS

Public Spaces and Council Facilities	Net Area m ²
 Lobby/Conservatory Council Chambers Mayor's Office Cafeteria/Restaurant Credit Union Related Existing Facilities Daycare Centre Fitness Centre 	600 469 115.35 276.5 120 350 300 344
Administrative Departments	
- City Clerk - Administration - Assessor - Building - Comptroller - Management Information Systems - Electrical - Engineering - Economic Development - Internal Audit - Land - Parks & Recreation - Personnel - Planning	510.75 226.25 469.5 444.25 138.75 561.5 349.75 1125.25 96 115 133.25 392.25 292.00 487.5
- Flaming - Solicitor - Treasurer	363
- Tax & License	270.25 433

44

50

Service Facilities

Purchasing & Inventory ControlShipping & ReceivingMaintenance Custodial	278.25 200 200
TOTAL NET AREA	9,755.35
EFFICIENCY 70%	13,936.21
RESERVED PARKING (GROSS AREA)	10,800,00
TOTAL GROSS AREA	24,736.21 m ²

3.6 BUDGET

The budget is based on the assumption that construction would start in the second quarter of 1988.

An elemental estimate will be provided once the design is complete. At this stage a preliminary budget is based on unit areas. Not included in the cost are furniture and equipment, relocation costs, and consultants' fees.

The following estimate is based on costs derived from "Lansdowne's Construction Cost Handbook".

Underground Parking (\$327.67 x 10,800 m ²)	3,538,836.00
City Hall Building (\$866.25 x 13,936.21 m ²)	12,072,241.00
Site Work	450,000.00
TOTAL	\$16,061,077.00

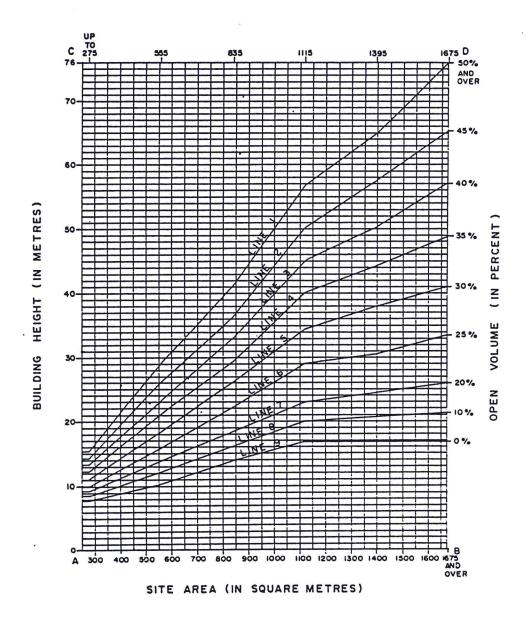
3.7 ZONING AND CODE ANALYSIS

3.7.1 ZONING

- The existing site falls with a B-6 zoning and as such the following conditions apply to the building:
 - Front Yard Not Required
 - Side Yard Not Required
 - Rear Yard Not Required
 - Height
 - (a) In this subsection:
 - "Building site cube" means the volume of the cube established by multiplication of the site area by the building height.
 - (b) The maximum permitted height of a building shall be determined by the site area and by the open volume on the site as shown in Graph No. 1 which is attached hereto and forms part of this bylaw.
 - (c) The following shall apply in the interpretation of the standards established in Graph No. 1, (Figure 3.3)
 - The horizontal base line A-B represents site areas up to one thousand, six hundred and seventy-five square metres (1,675 m²) and over, and has vertical co-ordinates.
 - The vertical base line A-C represents building heights up to seventy-six (76) metres, and has horizontal co-ordinates.
 - The vertical base line B-D represents open volume up to fifty (50) percent and over, and has co-ordinates represented by lines one (1) to nine (9), and by proportinate interpolations.

- (d) The height of a building shall not exceed the figure for building height shown on line A-C, which figure shall be the co-ordinate of the point of intersection of the pertinent line of open volume and the co-ordinate of the pertinent building site area; provided however, that:
 - No building shall exceed the maximum building height established for any site in reference to line one (1), even though there may be more than fifty (50) percent open volume.
 - No building shall exceed the maximum building height established for any site in reference to line nine (9) when no open volume is provided in the building site cube below that height.
- Open Space Not Required, but see open volume under Height.
- Off-Street Parking Not Required
- Off-Street Loading At least 2 off-street loading spaces shall be provided for each building having a building floor area of more than 4,700 m².

3.3 OPEN VOLUME REQUIREMENTS



3.7.2 CODE ANALYSIS

NATIONAL BUILDING CODE 1985

- 1. Major Occupancy (Office)
 Sentence 3.2.2.33(1) Group D, any height, any area.
 - · non combustible construction
 - · sprinklered
 - · assembly ratings:
 - floors 2 hour separation
 - mezzanines 1 hour fire resistance rating
 - roof 1 hour fire resistance rating
 - columns, load bearing walls to have fire resistance equal to that of the supported assembly.
- 2. Minor Occupancy (Assembly)
 - · Restaurant is less than 10% of first floor area.
 - · Council Chamber is less than 10% of second floor area.
 - Therefore according to sentence 3.1.3(6) these are not considered as a major occupancy.
- 3. Minor Occupancy (Parkade Group F2)
 - · Sentence 3.3.7.6 must be separated from main floor by a 1.5 hour fire separation.
- 4. Corridor Ratings are zero. Sentence 3.3.1.3(3)b.
 Corridor Width 1100 minimum. Sentence 3.3.1.7(2)
- 5. Travel Distance. Sentence 3.4.2.4(1).

Group D. Office - 40 m. Group A. Assembly - 30 m.

- 6. Exits Required
 - a) Building Area 4,050 m²

- · Occupant Load 435
- · Capacity for (exterior) exit width is 435 ÷ 90 = 4.8 units
- capacity for (interior) exit width is 435 ÷ 60 = 7.25
 units
- b) Parkade Area 12,496 m²
 - · Occupant Load 271
 - · Capacity for exterior exit width is 271 ÷ 90 = 3 units
- 7. The interconnected space between main and second floor complies with sentence 3.2.8.1(8).
- 8. Washroom Facilities
 - · Total Occupant Load = 1,283
 - · Total Units/Sex = 15

Additional units are located to accommodate each floor level and also future building area.

9. Barrier-free design is in keeping with Section 3.7 for the handicapped.

FOOTNOTES SECTION 3.0

- 1 Report on City Hall Space Requirements, by City of Saskatoon, Building Department, 1978, p. 10.
- 2 IBID Appendix
- 3 IBID p.10
- 4 IBID Appendix
- 5 Planning City Hall, Management Information Service Report, Vol. 7, No. 11, November 1975. p. 12.
- 6 Adapted from City Hall Addition Building Program to 1985, Building Dept., Architectural Section, November 1979.

4.1 THE BUILDING ON THE SITE

4.1.1 BOUNDARIES

The site is a full block located within the City Centre. Together with the library to the south of it, it will form a civic plaza by closing 23rd Street between 3rd Avenue and 4th Avenue.

The site is 13,935.5 m² in area, with dimensions as shown (Figure 4.1).

Part of this program will also include the landscaping of the present 23rd Street to be closed and the integration of the library building into the entire concept.

East of this site are the Post Office and the H.M.C.S. Unicorn Building, and across the southeast corner is the Police Station. To the north and west are primarily commercial buildings with the exception of a church on the northwest corner. The southwest corner of this site has a city transit terminal with the main downtown terminal directly across from it. Most of the present downtown housing is north and east of the site.

Twenty Fourth Street 91 400 THE SITE Fourth Avenue Third Avenue Post Office Bus Mall Twenty Third Street Library

SITE PLAN

4.1

4.1.2 PHYSIOGRAPHY AND GEOLOGY

The site is relatively flat and has a moderate amount of vegetation. The large elm trees that basically ring the site should be given consideration when siting the new facility and as much as possible should be retained.

The site is situated over part of the Sutherland Formation (after E.A. Christiansen) consisting of stiff to hard, clayey till to a depth of at least 11 metres. Above this to about 4.1 metres firm to stiff glacial till deposits are silty, sandy and contain cobblestones and boulders. Extending to a depth of about 1.6 metres is a mantle of sandy gravel and cobblestones, with the uppermost 500 mm basically topsoil.

Foundation design recommendations by P. Machibroda Engineering Ltd. recommend either standard strip footings (at least 2 metres below grade) or cast-in-place piles.

4.1.3 VIEWS AND LANDMARKS

The primary landmark of historic significance on this site is the cenotaph which will remain although it can be moved. I previously discussed the needs for ceremonial space in public spaces, and this landmark should be placed so events such as those on Remembrance Day can be facilitated. The other item that should be retained, although it could also be relocated is the city benchmark.

Views of the site are primarily from the four corners. Probably the most important viewing corridor is from the southwest corner since it is from this corner that the highest pedestrian volume occurs. I think therefore that although all sides of the building will be important, it is probably this direction which should be emphasized since the majority of users will approach from this direction. (See Entrances 4.1.5)

4.1.4 SUN AND SHADE/ WIND AND CALM

Saskatoon lies in the semi-arid region of the Great Plains where the precipitation is less than 380 mm/year. It's marked continental climate has temperature ranges from +30°C to -40°C in winter (November to April) and is characterized by extensive sunshine. Winds are moderate with a marked tendency for brisk, strong winds from the northwest. The air quality is generally good with the occasional dust storm even in winter months.

STATISTICS:

Annual average temperature - 1.6°C

Annual average precipitation - 348.8 mm

- rain - 245.0 mm

- snow - 1131.0 mm

Average annual wind speed - 17.5 km/h

- direction - winter WNW

- summer SE/W

Average annual sunshine

- hours - 2441.3

- days without - 5%

Sunrise/Sunset

- summer: rise at 3:45 am S130°E

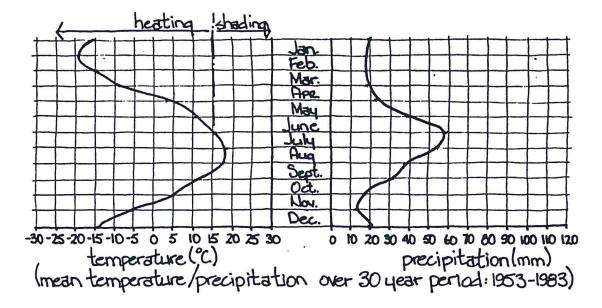
set at 8:15 pm S130°N

- winter: rise at 8:15 am S 50°E

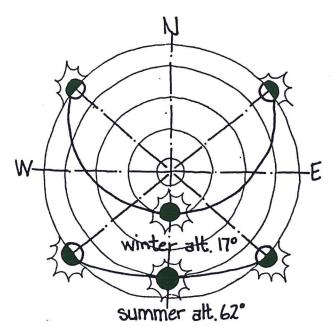
set at 3:30 pm S 50°N

Generally the massing of the City Hall should maximize the desirable year-round conditions of sun and shade, both internally and externally. The design of the building and plaza should minimize the discomfort of winds, especially those of winter, and should provide places of calm in open sunlit areas.

4.2 PRECIPITATION LEVELS



4.3 SUN ANGLES



4.1.5 ENTRANCES: VEHICULAR AND PEDESTRIAN TRAFFIC

In general the number and location of entrances should facilitiate public orientation and access. As indicated previously, the main and symbolic entrance should face the civic plaza and possibly the southwest corner, since this is the corner with highest actual and intended pedestrian traffic flow as can be seen from the downtown plan (Figure 4.4). Minor pedestrian entries would occur at the northeast corner, (linking the major residential mode) and the southeast corner which serves to link the minor downtown business sector. The northwest corner at present is not a major entry and I don't foresee this as becoming a major access.

Vehicular and service entrances should be provided from minor streets. From the Traffic Flow Chart we can see that the most heavily used street is now 4th Avenue; this is primarily because of the Post Office which has an ongoing parking and traffic problem. Perhaps this problem can also be addressed in the final solution.

4.4 DOWNTOWN PLAN¹

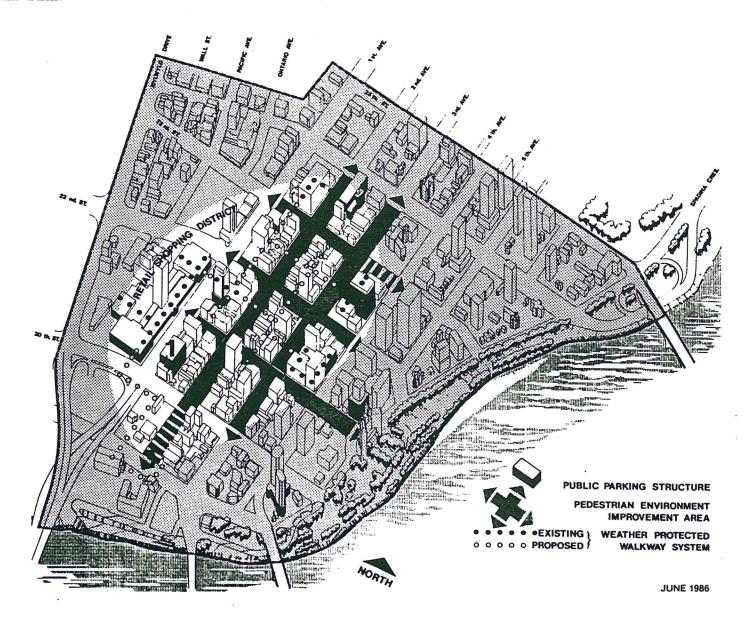
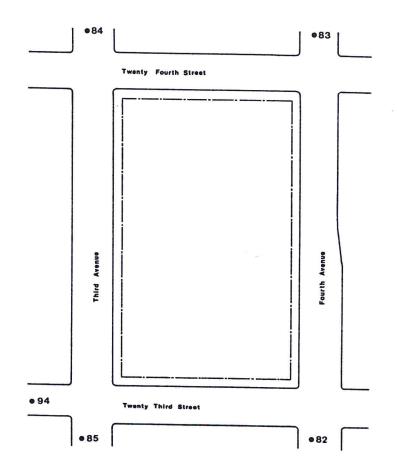


FIGURE 4.5 TRAFFIC FLOW CHART²

STATION		77	80	83	86	
#82	4th Ave	22nd to 23rd	8172	7820	10841	9874
#83	4th Ave	24th to 25th	5638		6340	7301
#84	3rd Ave	24th to 25th	5193	6307	7291	6701
#85	3rd Ave	23rd to 24th	8777	7991	8439	
#94	23rd St	2nd & 3rd Ave	7507	8409	8819	
#87	22nd St	3rd & 4th Ave	8661	10902	11263	



4.1.6 CIVIC PLAZA

"Urban voids are at once the vessel and symbol of human gathering, and represent the tension between the individual and the collective". Over the past years, as previously indicated, the importance of the public square in many cities, not the least Saskatoon, has been diminished, (see picture of Saskatoon City Hall Park 1948, Figure 2.8, and compare it to the present state).

Suzzana Torre says, "The loss of the square parallels the weakening of public institutions and the buildings which symbolized and contained them--churches, town halls, court houses. libraries. Business concerns today present themselves as surrogates for community, a community viewed chiefly as a salaried mass of consumers. People resist this view of themselves and commonly perceive the plazas around or under towers as mere devices to offset their the corporate scalelessness and as functional but meaningless spaces. Thus. the loss of the square cannot be blamed on the loss of Rather, what has been lost is the symbol of the community. community along with the concept of space as a form that can be modeled and shaped to express our perceptions of the public landscape. Lacking a surrogate institution, public life becomes the subject of its own activity in the square. The rebirth of civic space is needed to provide a focus of to the privatization of public life or its resistance replacement by shopping."4*

Saskatoon's City Planners have recognized this fact and have over the past few years initiated studies which have resulted in definite recommendations. One of these which directly affects this site is:

"In conjunction with the Bus Mall it is further recommended that the Section of 23rd St. between 3rd and 4th Avenues be closed to all traffic, except emergency vehicles to provide for a Civic Plaza complex, linking City Hall with the Library and Sturdy Stone Centre. Toward this end it is recommended

that a design competition be intitated to provide a major civic focus for Saskatoon. The design should include passive and active year-round facilities and consider the feasibility for underground public parking premises below the plaza."⁵

From another study done by Dames and Smith Ltd. in 1975, objective 14 stated:

To provide for and maintain urban park and open spaces in the Downtown to accommodate a variety of seasonal activities.

Some of the more specific recommendations supporting this objective were as follows:

- 1. Investigate the possibility for additional urban open spaces in the Downtown.
- 2. Prepare a Downtown park and open space masterplan.
- 3. Develop incentive programs to encourage new development to provide open spaces together with public amenities.
- 4. Urban parks or open spaces should be linked to the river park through streetscape improvements, including street-tree planting.
- 5. Where open spaces adjoin pedestrian routes in the Downtown the site design should be integrated with the design of the route in order to enhance the overall pedestrian quality. This can be accomplished by integrating paving materials, plant material, etc.
- 6. Ease of maintenance and operating costs (such as irrigation systems) should be a factor in open space and park design.

- 7. Open space design should consider pedestrian amenities as idenified in Chapter III, Section B pedestrian environment.
- 8. Bicycle paths should form an integral part of park design.
- 9. Provisions should be made for the inclusion of 'sun traps', 'wind shelters', and 'noise buffers' in public open spaces.
- 10. Urban parks should incorporate substantial elevational changes including earth mounding, to provide for visual relief and screening, wind and noise buffers, etc.
- 11. New buildings should be located and designed to prevent or minimize the shadows they cause on any public or semipublic open space.
- 12. The Civic Plaza should become a major urban focus accommodating a variety of functional and seasonal activities, such as:
 - paved and lanscaped spaces
 - trees, including conifers
 - benches, tables, water features, kiosks, ice rink, shelters gathering spaces, sculpture, decorative lighting, etc.

From this same study a conceptual sketch was included which was also recommending the closure of 23rd Street from 3rd to 4th Avenue (see Figure 4.6). This recommendation was subsequently taken to City Council where it was vetoed. This was done of course before the bus mall on the adjacent street was constructed. This facility has greatly reduced the traffic between the Library and City Hall to the point now

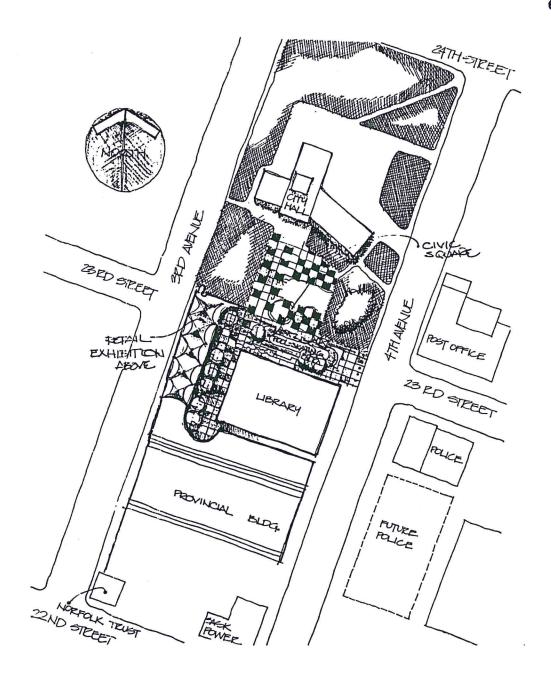
where I believe it only makes sense to extend the overall concept and close this portion of 23rd Street and incorporate it into a City Hall, Civic Plaza, Library complex.

I also see this "23rd Street" park extending through the whole site. Consideration should be given to existing vegetation, in particular the large elm trees.

In general the site will include:

- an open-air stage suitable for symphony concerts;
- seating, (possibly in amphitheatre form) for up to 300 people. This whole area will not be used continuously so it should be designed so as not to appear empty and instead encourage casual unprogrammed use also;
- public washrooms;
- grassed areas, trees, vegetation;
- walkways, benches, lamps, drinking fountains;
- areas for vending, see Section 4.2.8; and
- parking areas, see Section 4.1.7.
- kiosks, temporary space for part-time retail outlets such as the present Farmer's Market type facility.

4.6 CIVIC SQUARE PROPOSAL⁶



4.1.7 PARKING

Ask most of the civic employees at City Hall about parking and they will indicate that they need more. However, perhaps this is true of most people who work in the downtown core. The city has admitted that there is a shortage and has made many recommendations over the years (see Figure 4.7).

In addition to providing parking for some of its own employees, usually department heads, and other employees who require vehicles for their work, the city has a contract with the Police Department which says they must provide parking for all police personnel

Parking at City Hall can probably be broken down into three main categories:

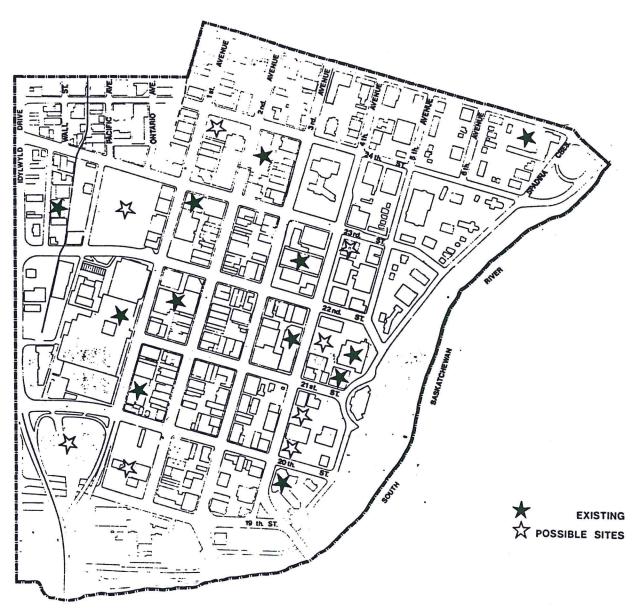
- 1. Privileged, i.e. presently these are department heads, aldermen, mayor, etc.
- 2. Necessity parking, i.e. those employees who require a vehicle for day-to-day tasks.

3. Public Parking

- a) Short term visitor type parking
- b) Long term for people attending meetings, tender openings, etc. from outside City Hall.

Given these facts I will attempt to provide a maximum amount of underground parking, within reason, on one level and also on grade parking for the public.

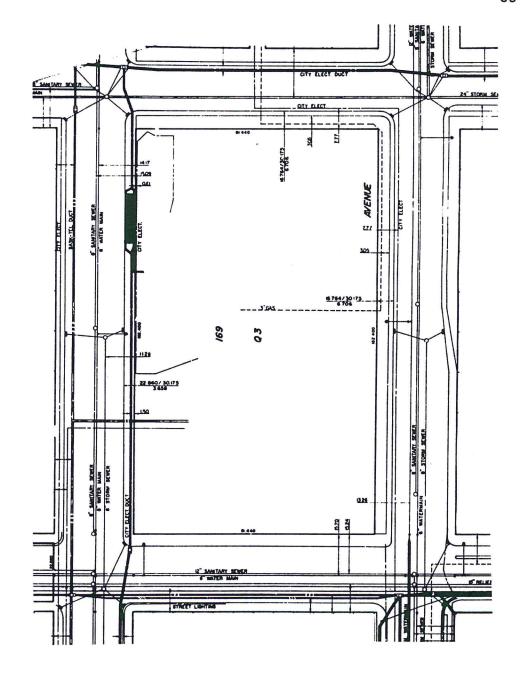
4.7 PROPOSED AND EXISTING PARKING STRUCTURES⁷



4.1.8 SERVICES AND UTILITIES

All services pertaining to this site are shown in Figure 4.8. As can be readily seen, all streets surrounding the site are heavily loaded with underground services. This probably means that it would not be feasible to provide underground links to any of the other existing buildings. We do have the advantage of course in that we have no overhead wires to contend with.

4.8 SITE SERVCES PLAN



4.2 PUBLIC SPACES AND COUNCIL FACILITIES

4.2.1 LOBBY/CONSERVATORY

The lobby should be the principal public interior space of the City Hall. Its design should accommodate casual passing through by the public as well as being the main space of orientation in the building. It will provide public information services and give access to all facilities and departments.

The lobby will also contain a small conservatory. It will be similar to the Mendal Conservatory and will also be a place of quiet and repose for public enjoyment, and a showcase of the Parks and Recreation Department. It will be used for the display of various plants and vegetation and will contain places to sit. It must be separated from other areas to allow for environmental control. A southern exposure is desirable.

Both these areas could be multi-storey spaces, but should be at least 5 m high.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Lobby	400.0	400.0	
1	Conservatory	200.0	200.0	•
	TOTAL NET REQUIREMENT			600.0

4.2.2 COUNCIL CHAMBERS

The Council Chamber is the symbolic and active centre of municipal government. It is the place of formal Council meetings, the setting for public debate and decision-making which involves not only the elected representatives, and civic administration, but members of the public as well.

The Council Chamber requires a high degree of public accessibility and should be located in close proximity to the main lobby.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
20	Council Chamber Seats	8.0	160.0	
140	Spectator Seats	1.0	140.0	
16	Media Seats	1.5	24.0	
	Public Lobby (140 people)	. 5	70.0	
2	Public Washrooms	12.0	24.0	
	Coat Storage (12 000 x 600mm)	15.0	15.0	
	Alderman's Lounge (12 seats)	3.0	36.0	
	TOTAL NET REQUIREMENT		469.0	469.0

4.2.3 MAYOR'S OFFICE

The Mayor, Councillors and City Commissioner work closely together, are engaged in a great deal of public interaction, and as representatives of the City, have a high public profile. They should be located in close proximity to the Council Chamber, Committee Rooms and Clerk's Department.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Mayor's Office (V.A.P.) (15 000 x 300mm shelves)	31.5	31.5	
1	Executive Assistant (V.A.P.)	13.5	13.5	
1	Secretary	6.75	6.75	
	General Storage	11.0	11.0	
	$(12 500 \times 300 \text{mm shelves})$			
4	Correspondence Files	1.0	4.0	
	Coat Storage (2 000 x 600mm)	3.6	3.6	
9	Reception Seats	2.0	18.0	
1	Aldermanic Library (18 000 x	18.0	18.0	
	300mm shelves, work table, 4 seats)			
1	Aldermanic Meeting Room	9.0	9.0	
	(seats)		-	
	TOTAL NET REQUIREMENT		115.35	115.35

V.A.P. - Visual & Acoustical Privacy V.P. - Visual Privacy

4.2.4. CAFETERIA/RESTAURANT

The Cafeteria will serve both City Hall staff and the public. It should be located at or near ground level with access to a patio or roof terrace that is close to the outdoor stage. It should have the capability of also being closed off from the rest of City Hall for use after hours.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm2
150 1 1	Cafeteria Seats Kitchen Storage	1.4 40.0 26.5	210.0 40.0 26.5	
			-	
	TOTAL NET REQUIREMENT		276.5	276.5

4.2.5 CREDIT UNION

The credit union should be on or near the main level accessible to the public, and in particular the automated teller should be accessible after hours.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Manager (V.A.P.)	18.0	18.0	
1	Supervisor (V.P.)	11.25	11.25	
5	Clerical Workstations	6.75	33.75	
	Reception Counter (6 000 x 600mm)	10.8	10.8	
	Reception Area	28.4	28.4	
4	Correspondence Files	1.0	4.0	
2	Vaults	2.0	2.0	
	Coat Storage (1000 x 600mm)	1.8	1.8	
	General Storage (25000 x 600mm shelves)	10.0	10.0	
			•	
	TOTAL NET REQUIREMENT		120.0	120.0

V.A.P. - Visual & Acoustical Privacy V.P. - Visual Privacy

4.2.6 RELATED EXISTING FACILITIES

The major existing facility is the Library which at present contains a local history archive and a small art gallery. As a means of providing some additional space for the existing library, I propose to relocate these two facilities and provide a physical link with the new City Hall.

a) Art Gallery

It will function much the same as the present Francis Morrison Gallery, with shows of local art and heritage. It should have some area for storage, be able to accommodate large crates and works of art (minimum ceiling height of 4 m). The storage area should have direct access to shipping/receiving. Natural light is not required and if provided must be controllable.

b) Local History Room

This area will make available to the public the collection of documents related to the history of the City and its government. It will include an administrative office, a reading room and controlled access storage areas. It should be located near the main lobby and information area.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Art Gallery	180	180	
1	Storage	20	20	
1	Admin Office	11	11	
1	Reading Room	50	50	
1	Storage	77	77	
1	Work Room	12	_12	
	TOTAL NET REQUIREMENT		350	350

4.2.7 DAYCARE CENTRE

This centre will operate on the same basis as the daycare centre at Cosmo Civic Centre, i.e. a leased space. It will accommodate children of City Hall staff and workers or residents of the city centre. Although the present City Council vetoed a Daycare facility in the present City Hall addition, I feel there is a need for quality Daycare space in the downtown core.

It should be located on ground floor or second level and should be easily accessible from the vehicular drop-off area, and be handicapped accessible.

The Daycare Centre should have natural light and exposure to the outside. The outdoor play area should be separated from other open areas.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
4	Kitchen	0		
1		9	9	
2	Washrooms	5	10	
1	Cloak Room	9	9	
1	Administrative Office	18	18	
	(2 people)			
1	Active Area	197	197	
1	Passive Area	37	37	
1	Storage	19	19	
1	Outdoor Play Area (200 m ²)			
	TOTA NET REQUIREMENT		300	300

4.2.8 FITNESS CENTRE

A fitness centre was proposed at the time the present City Hall addition was built, however, it was vetoed by council on the grounds that there are adequate facilities in the downtown area, i.e. the YMCA and YMCA. I feel, that there is a need for this with the high concentration of sedentary workers in the downtown area.

Access to the facility should allow for convenient use during extended hours by staff and the public while being able to secure the remainder of the building.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Recreation Programmer	14.0	14.0	
2	Instructors (Part time)	8.0	16.0	
1	Exercise Area with Spring			
	Floor (Aerobics)	140.0	140.0	
1	Exercise Area with Carpet			
	Floor (Universal Gym,			
	Weights, etc.)	74.0	74.0	
2	Storage	10.0	20.0	
1	First Aide	10.0	10.0	
1	Men's Change	30.0	30.0	
1	Women's Change	30.0	30.0	
1	Reception Area	10.0	10.0	
	TOTAL NET DEPARTMENT REQUIRE	MENT	344.0	344.0

4.3 ADMINISTRATIVE DEPARTMENT

4.3.1 CITY CLERK'S DEPARTMENT

The Clerk's Department is the Secretariat of the Municipality and City Council. This department receives reports and communications, compiles them into agendas and distributes them to the various committees and City Council. It supplies a recording service to the various municipal meetings and provides ensuing minutes and reports.

NO.	FUNCTION	UNIT AREAm ²	ADEA.2	тотат2
NO.	FUNCTION	UNII AREAM	AREAM	TOTALM-
1	Department Manager (V.A.P.)	20.0	20.0	
1	Assistant Dept. Manager	13.5	13.5	
-	(V.A.P.)	11.25	11.25	
1	Deputy Assistant (V.A.P.)	100 To 10		
2	Supervisor	11.25	22.50	
7	Clerical Workstations	6.75	47.25	
1	Vault (180 000 x 600mm	55.0	55.0	
	shelves & 15 filing cabinets)			
	Dead Storage (55 000 x	20.0	20.0	
	600mm shelves)			
4	Reception Seats	2.0	8.0	
1	Reception Counter	5.0	5.0	
	$(3\ 000\ x\ 600mm)$			
1	Work Room (12,000 x 300mm	9.0	9.0	
	shelves & 6000 x 750mm			
	counter			
11	Correspondence Files	1.0	11.0	
1	Microfilmer	3.0	3.0	
1	Reader/Printer	3.0	3.0	
_	Coat Storage (2 000 x 600mm)		5.0	
4	Committee Rooms (15 seats)	36.0	144.0	
-	(V.A.P.)	30.0	133.0	
	SUBTOTAL		377.50	

CITY CLERK'S DEPT.

Subtotal Forward

377.50

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Divisable Committee Room (75 seats)(V.A.P.)	72.0	72.0	
1	Chair and Table Storage	6.75	6.75	
1	Paper Storage	4.5	4.5	
1	Ballot Box Storage (350 boxes - remote)	50.0	50.0	
	TOTAL NET DEPARTMENT REQUIR	EMENT	510.75	510.75

V.A.P. - Visual and Acoustical Privacy

4.3.2 ADMINISTRATION

The City Commissioner is the chief administrative officer of the City. The position is responsible for planning, directing, supervising, co-ordinating and controlling the budgets as approved by Council. In addition the Commissioner chairs the Board of Administration, is the direct supervisor of all Division Directors and conducts or directs such contacts as necessary with Provincial, Federal, or other governmental officials concerning matters of an administrative nature.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	City Commissioner (V.A.P.)	31.5	31.5	
3	Directors (V.A.P.)	27.0	81.0	
1	Technical Workstation	9.0	9.0	
1	Word Processing Centre	6.75	6.75	
4	Clerical Workstations	6.75	27.0	
1	Conference Room (10 seats)	27.0	27.0	
	(V.A.P.)			
8	Reception Seats	2.0	16.0	
4	Active Files	1.0	4.0	
10	Inactive Files	1.0	10.0	
	Report Storage (25 000 x	4.5	4.5	
	300mm shelves)			
	Supplies Storage (18 000	3.5	3.5	
	x 300mm shelves)			
	Coat Storage (1 500 x 600mm)	3.0	3.0	
1	Microfilm Reader	3.0	3.0	
	TOTAL NET DEPARTMENT REQUIRE	MENT	226.25	226.25

V.A.P. - Visual and Acoustical Privacy

4.3.3 ASSESSOR'S DEPARTMENT

The Assessor's Department is responsible for determining the value of land and buildings to arrive at an annual mill rate for taxation purposes, as such it's primary relationship is with the taxation department. It consists of personnel in accounting, drafting, clerical and assessing.

UNIT AREAm² AREAm² TOTALm²

ADMINISTRATIVE AND BUSINESS ASSESSMENT DIVISION				
1	Department Manager (V.A.P.)	20.0	20.0	
3	Supervisors (1 - V.A.P.)		33.75	
14		6.75	94.5	
1	Meeting Room (4 seats)(V.P.)	9.0	9.0	
4	Reception Seats		32.0	
	Reception Counter (5 000 x 600mm)	9.0	9.0	
	Coat Storage (8 000 x 600mm)	14.0	14.0	
	Forms Storage (20 000 x 600mm shelves)	7.5	7.5	
3	Correspondence Files	1.0	3.0	
4	Accounting Files	1.0	4.0	
10	Reassessment Files	1.0	10.0	
11	Appraisal Files	1.0	11.0	
2	Roll Files	1.0	2.0	
5	Business Files	1.0	5.0	
5	Tub Files	3.0	15.0	
1	Microfilmer	3.0	3.0	
1	Microfilm Reader Printer	3.0	3.0	
4	CRT Units	3.0	12.0	
1	Hard Copy Printer	3.0	3.0	
1	Mini Computer	3.0	<u>3.0</u>	
	DIVISION TOTAL		293.75	
	SUBTOTAL			293.75

V.A.P. - Visual & Acoustical Privacy

V.P. - Visual Privacy

NO. FUNCTION

ASSESSOR'S DEPARTMENT		Subtotal Forward		293.75
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
REAL	PROPERTY AND BUILDING DIVISION	<u>ON</u>		
1	Assistant Dept. Manager (V.A.P.)	13.5	13.5	
2	Supervisors	11.25	22.5	
4	Technicians	9.0	36.0	
13	Clerical Workstations	6.75	87.75	
4	Plan Files	3.0	12.0	
4	Records Files	1.0	4.0	
	DIVISION TOTAL		175.75	175.75
	TOTAL NET DEPARTMENT REQUIRE	MENT		469.5

V.A.P. - Visual and Acoustical Privacy

4.3.4 BUILDING DEPARTMENT

The Building Department is responsible for a diverse range of functions including:

- interpretation and administration of the City Zoning bylaws.
- issuance of building permits after compliance with various federal and provincial codes.
- inspection of buildings under construction.
- enforcement of municipal bylaws.

This department requires a medium degree of public accessibility and has relations with Legal, Planning, Parks and Recreation and Engineering Departments.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
ADMI	NISTRATIVE DIVISION			
1 1 6	Department Manager (V.A.P.) Supervisor Clerical Workstations Reception Counter (2 000 x 600)	20.0 11.25 6.75 3.6	20.0 11.25 40.50 3.6	
4 11 4	Reception Seats Filing Cabinets Plan Cabinets Shelving (5 200 x 300mm) Coat Storage (1.500 x 600mm) Storage Vault (32m ² Shelving)	2.0 1.0 1.0	8.0 11.0 4.0 3.0 2.65 20.0	
	DIVISION TOTAL		124.0	124.0

V.A.P. - Visual & Acoustical Privacy

BUILI	DING DEPARTMENT	Subto	tal For	ward	124.0
NO.	FUNCTION	UNIT	AREAm ²	AREAm ²	TOTALm ²
DESIG	GN/MAINTENANCE DIVISION				
1	Assistant Dept. Manager (V.P		3.5		
3	Supervisors			33.75	
6	Technicians		9.0	54.0	
1	Foreman (Remote)		6.75	6.75	
12	Janitors (See Janitors Closets)				
2	Plan Files		3.0	6.0	
1	Correspondence File		1.0	1.0	
	Library (45 000 x 300mm) Shelving			8.0	
1	Microfilm Reader		3.0	3.0	
1	Meeting Room (4 seats) (V.P.)	9.0	9.0	
	DIVISION TOTAL			135.0	135.0
BUIL	DING DEVELOPMENT DIVISION				*
1	Assistant Dept. Manager		3.5	13.5	
1	Supervisor		. 25	11.25	
5	Technicians		9.0	45.0	
14		€	5.75	94.50	
	Library (22 500 x 300mm shelves)			4.0	
	Forms (22 500 x 450mm shelve	s)		6.0	
	Microfilm Reader	. 3	3.0	3.0	
	Plan Rack			8.0	
	Conference/Meeting (See				
6	Design/Maintenance)			-	
	DIVISION TOTAL			185.25	185.25
	TOTAL NET DEPARTMENT REQUIRE	MENT			444.25
	V.P Visual Privacy				

4.3.5 COMPTROLLER'S DEPARTMENT

The responsibility of the Comptroller's Department is to record, control and report the financial activities of the Corporation through the consistent adherence to civic policies, procedures, and contractual obligations. It's main sections are Accounting, Payroll and Benefits. It should be located close to the Treasurer's Department.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Department Manager (V.A.P.)	20.0	20.0	
1	Assistant Dept Manager	13.5	13.5	
	(V.A.P.)			
1	Supervisor (V.P. from Public)	11.25	11.25	
10	Clerical Workstations	6.75	67.5	
	General Storage (30 000 x 300mm shelves)	6.0	6.0	
	Coat Storage (2 500 x 600mm)	4.5	4.5	
2	Reception Seats	2.0	4.0	
9	Record Files	1.0	9.0	
1	Information Terminal	3.0	3.0	
	TOTAL NET DEPARTMENT REQUIREM	ENT	138.75	138.75

V.A.P. - Visual and Acoustical Privacy V.P. - Visual Privacy

4.3.6 MANAGEMENT INFORMATION SYSTEMS DEPARTMENT

The Management Information Systems Department is responsible for the City's data processing records management, micrographics and word processing functions. The department also monitors and assists in the analysis of microcomputer requirements throughout the corporation.

Organizationally, the Department has a Systems Section which performs the systems analyses. design and programming functions, while the Data Center is responsible for data control. data entry. computer operations, and systems maintenance. The Records Management function includes developing retention schedules, filing and retrieval systems and attending to record center and archival requirements. Micrographics addresses microfilm and microfiche needs, while word processing assists in the area of office productivity There are over 90 terminals located in civic improvements. departments which are used to access various systems.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
ADMI	NISTRATIVE			
1	Department Manager (V.A.P.)	20.0	20.0	
2	Clerical Workstations	6.75	13.5	
	General Storage (4 500 x 600mm shelves)	16.0	16.0	
2	Correspondence Files	1.0	2.0	
	Coat Storage (4 000 x 600mm)			
2	Reception Seats	2.0	4.0	
	DIVISION TOTAL		62.5	62.5

V.A.P. - Visual and Acoustical Privacy

M.I.	S. DEPARTMENT	Subtotal Forward		62.5
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
SYST	TEMS DIVISION			
1	Systems Development Manager (V.A.P.)	13.5	13.5	
1	Supervisor (V.A.P.)	11.25	11.25	
16	Technical Workstations	9.0	144.0	
6	Data File Banks	1.0	6.0	
8	CRT TERMINALS	3.0	24.0	
	Reception (shared)		21.0	
	General Storage (shared)			
	Coat Storage (shared)			
1	Meeting Room (4 seats)	9.0	9.0	
	DIVISION TOTAL		207.75	207.75
DATA	CENTRE			
1	Data Centre Supervisor (V.A.P.)	13.5	13.5	
2	Clerical Workstations* (Data Control)	11.25	22.5	
2	Supervisors	11.25	22.5	
11	Clerical Workstations	6.75	92.25	
	Reception (shared)	00	02.20	
	General Storage (shared)			
	Coat Storage (4 000 x 600mm)	7.0	7.0	
	DIVISION TOTAL		157.75	157.75
	V.I.P Visual and Acoustic	al Privacy		

M.I.S. DEPARTMENT		Subtotal For	Subtotal Forward	
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
MACE	IINE ROOM			
1	Machine Room Parts Storage (1 500 x 600mm shelves)	90.0 6.0	90.0 6.0	
1	Auxillary Room (Bursters, Key Punch, Decolater, 25 000 x 600mm Forms Storage, Sorter)	31.5	31.5	
1	Vault (2 hour rating)	6.0	6.0	
	DIVISION TOTAL		133.5	133.5
	TOTAL NET DEPARTMENT REQUIR	EMENTS		561.5

^{*}Special Requirement for Shelving and Security

4.3.7 ELECTRICAL COMMERCIAL

The City operates an Electric Utility which provides electrical service to the area of Saskatoon which lies within the 1958 City boundaries. The Electrical Department staffing consists of about 105 involved in administration, rates, system planning, construction and operation. Some of these, of course, are employed outside of City Hall.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
ADMI	NISTRATIVE AND COUNTER			
1	Department Manager (V.A.P.)	20.0	20.0	
2	Reception Seats	2.0	4.0	
1	Assistant Dept. Manager(V.A.P	.) 13.5	13.5	
2	Reception Seats	2.0	4.0	
1	Clerical Workstation	6.75	6.75	
1	Meeting Room (4 seats)(V.P.)	9.0	9.0	
13	Clerical Workstations	6.75	87.75	
	(Accounting & Collections)			
1	Supervisor (Counter)	11.25	11.25	
2	Clerical Workstations (V.P. from counter)	6.75	13.5	
2	Clerical Workstations(Counter	6.75	13.5	
	Record Storage (75 000 x 300mm shelves)	13.5	13.5	
6	Tub Files	3.0	18.0	
3	Meter Card Files	1.0	3.0	
1	Information Terminal	3.0	3.0	
1	Microfilm Reader	3.0	3.0	
	Reception Counter (5 000 x 600mm)	9.0	9.0	
	Counter Receiving Space	25.0	25.0	
	DIVISION TOTAL		257.75	257.75

ELECTRICA	L COMMERCIAL DEPARTMENT	Subtotal For	ward	257.75
No.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
METER REA	DERS			
Coat	cical Workstations Storage (4 000 x 600mm) Stal Storage (12 000 x 0mm shelves)	6.75 7.0 4.0	81.0 7.0 <u>4.0</u>	
DIVI	SION TOTAL		92.0	92.0
TOTA	L NET DEPARTMENT REQUIRE	MENT		349.75

4.3.8 ENGINEERING DEPARTMENT

The Planning and Design Branch provides engineering services in the field of transportation, radio communications, water and sewer design and construction and project management. Under the direction of the Assistant City Engineer (P & D) the Branch is organized into three sections:

- 1. Transportation Section
- 2. Water and Sewer Section
- 3. Roadway System Section

The Works Branch provides services in the fields of construction, maintenance and solid waste management.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
GENE	RAL OFFICE DIVISION			
1	Department Manager (V.A.P.)	20.0	20.0	
1	Assistant Dept. Manager	13.5	13.5	
	(V.A.P.)(Development)			
1	Supervisor (V.A.P.)	11.25	11.25	
1	Conference (10 seats)(V.A.P.)	27.0	27.0	
1	Technician (V.P.)	9.0	9.0	
11	Clerical Workstation	6.75	74.25	
1	Library (120 000 x 300mm shelves)	27.0	27.0	
1	Supplies (50 000 x 300mm shelves)	9.0	9.0	
1	Records (30 000 x 300mm shelves)	5.4	5.4	
1	Coats (3 000 x 600mm)	5.4	5.4	
4	Reception Seats	2.0	8.0	

GENE	RAL OFFICE DIVISION Continued			
1	Reception Counter (3 000 x 600mm)	5.4	5.4	
11	Correspondence Files	1.0	11.0	
1	Microfilm Reader	3.0	3.0	
1	Printing Room	11.0	11.0	
	_			
	DIVISION TOTAL		240.2	
	SUBTOTAL			240.2
WATE	R & SEWER DIVISION			
1	Assistant Dept. Manager (V.A.P.)	13.5	13.5	
2	Supervisors (V.P.)	11.25	22.5	
8	Technicians	9.0	72.0	
15	Clerical Workstations	6.75	101.25	
	Library (14 000 x 300mm)	2.5	2.5	
	Supplies (50 000 x 600mm)	18.0	18.0	
	Coats (3 000 x 600)	5.4	5.4	
	Reception (shared)			
5	Card Files	1.0	5.0	
9	Drawing File	3.0	27.0	
1	Record File	9.0	9.0	
2	Plan Racks	4.5	9.0	
7	Correspondence Files	1.0	7.0	
1	Microfilm Reader	3.0	3.0	
1	Display Maps (5 000 x	15.0	15.0	
	1 000mm)			
	DIVISION TOTAL		310.15	310.15
	SUBTOTAL			550.35
	V.A.P Visual and Acoustical	Privacy		

V.P. - Visual Privacy

ENGINEERING DEPARTMENT Subtotal Forward		550.35		
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
TRAN	SPORTATION			
1	Assistant Dept. Manager (V.A.P.)	13.5	13.5	
3	Supervisor (1-V.A.P., 2-V.P.) 11.25	33.75	
22	Technicians (1-V.P.)	9.0	198.00	
5	Clerical Workstations	6.75	33.75	
1	Meeting Room (4 seats)	9.0	9.0	
	Drawing Storage 12m3	12.0	12.0	
	General Storage (9000 x 600mm	n 11.0	11.0	
	& 9000 x 900mm shelves)			
	Record Storage (45 000 x	8.0	8.0	
	300mm shelves)			
	Supplies Storage (18 000 x 300mm)	3.0	3.0	
	Library (73 000 x 300mm shelves)	13.0	13.0	
	Coat Storage (3 000 x 600mm) Reception (shared)	5.4	5.4	
9	Drawing Files	3.0	27.0	
5	Correspondence Files	1.0	5.0	
1	Computer Room	6.75	6.75	
1	Print Room (17 000 x 900mm shelves	18.0	18.0	
1	Microfilm Reader	3.0	3.0	
	DIVISION TOTAL		400.15	400.15
	SUBTOTAL			950.5

V.A.P. - Visual and Acoustical Privacy V.P. - Visual Privacy

ENGINEERING DEPARTMENT		Subtotal Forward		950.5
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
FIEL	D STAFF			
4	Clerical Workstations (General Office)	6.75	27.0	
8	Clerical Workstations (Water & Sewer)	6.75	54.0	
5	Clerical Workstations (Transportation)	6.75	33.75	
1	Storage (32 000 x 600mm shelves)	18.0	18.0	
	DIVISION TOTAL		132.75	132.75
TRAF	FIC CONTROL CENTRE			
1 1	Display Room Machine Room	28.0 14.0	28.0 14.0	
	DIVISION TOTAL		42.0	42.0
	TOTAL NET DEPARTMENT REQUIRE	MENT		1125.25

4.3.9 ECONOMIC DEVELOPMENT DEVELOPMENT

The Economic Development Department encourages the continued growth of industry in the City. It co-ordinates with all City Departments and other agencies to expedite procedures pertaining to economic development.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Department Manager (V.A.P.)	20.0	20.0	
2	Supervisors (V.A.P.)	11.25	22.5	
1	Technician (V.P.)	9.0	9.0	
2	Clerical Workstations	6.75	13.5	
	Storage (33 000 x 30mm	6.0	6.0	
	shelves)			
5	Reception Seats	2.0	10.0	
	Library (33 000 x 300mm	6.0	6.0	
	shelves)			
6	Correspondence Files	1.0	6.0	
1	Microfilm Reader	3.0	3.0	
	TOTAL NET DEPARTMENT REQUIRE	MENT	96.0	96.0

V.A.P. - Visual and Acoustical Privacy V.P. - Visual Privacy

4.3.10 INTERNAL AUDIT DEPARTMENT The Internal Audit Department's function is to assist management in ensuring the orderly and efficient conduct of business, including the safeguarding of assets, the reliability of accounting records, and the preparation of reliable management information.

Audit and policy reviews are prompted from management requests, general and specific observations by audit personnel, and by employee and taxpayer enquiries.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1 2 1 1 3 2	Department Manager (V.A.P.) Technicians Clerical Worktable Filing Cabinets Reception Seats	20.0 9.0 6.75 6.75 1.0 2.0	20.0 18.0 6.75 6.75 3.0 4.0	
	TOTAL NET DEPARTMENT REQUIRE	MENT	58.5	58.5
FINA	NCE & BUDGET SECTION			
1 2 1	Section Manager (V.A.P.) Technical Workstations Clerical Workstation Storage (shared) Reception (shared) Filing (shared)	13.5 9.0 6.75	13.5 18.0 6.75	
	SECTION TOTAL		28.25	28.25
	SUBTOTAL			86.75

INTE	RNAL AUDIT DEPT.	Subtotal Forward		86.75
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
METE	ODS AND PROCEDURES SECTION			
1 2 1	Section Manager (V.A.P.) Technical Workstations Clerical Workstation Storage (shared) Reception (shared) Filing (shared)	13.5 9.0 6.75	13.5 18.0 6.75	
	SECTION TOTAL		28.25	28.25
	TOTAL NET DEPARTMENT REQUIREM	ENT		115.0

V.A.P. - Visual and Acoustical Privacy

4.4.11 LAND DEPARTMENT

Saskatoon is one of the few cities that is an active land banker and land developer. The lands purchased are planned, engineered and serviced in a logical and orderly sequence, and then sold to either contractors, developers or to private individuals.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Department Manager (V.A.P.)	20.0	20.0	
1	Assistant Dept. Manager (V.A.P.)	13.5	13.5	
1	Supervisor (V.A.P.)	11.25	11.25	
2	Technicians (V.P.)	9.0	18.0	
1	Clerical Workstation	6.75	6.75	
4	Clerical Workstations	6.75	27.0	
1	Workroom/Storage (10 000 x	11.25	11.25	
	300mm shelves)			
	Reception Counter	4.5	4.5	
	Reception (6 seats)	2.0	12.0	
6	Correspondence Files	1.0	6.0	
1	Reader	3.0	3.0	
	Tack Surface (10m ²)	Wall Mounted		
	TOTAL NET DEPARTMENT REQUIRE	MENT	133.25	133.25

V.A.P. - Visual and Acoustical Privacy

V.P. - Visual Privacy

4.4.12 PARKS AND RECREATION DEPARTMENT

The Parks and Recreation Department provides leisure services and facilities. The Parks Department operates mainly off-site with the exception of a small administrative section. It is responsible for parks, cementaries, sports facilities, etc. The Recreation Section is responsible for rinks, community centres, pools, etc.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
ADMI	NISTRATIVE DIVISION			
1	Department Manager (V.A.P.)	20.0	20.0	
1	Assistant Dept. Manager (V.P.) (Administration)	13.5	13.5	
2	Supervisors	11.25	22.5	
5	Clerical Workstations	6.75	33.75	
3	Part-time Technical	9.0	27.0	
6	Reception Seats	2.0	12.0	
	Coat Storage (3 000 x 600mm)	2.5	2.5	
1	Reception Counter (3 000 x 600mm)	3.0	3.0	
1	Work Room	18.0	18.0	
	Library/Conference (68 000 x 300mm shelves)(6 seats)(V.P		27.0	
	General Storage (60 000 x 300mm plus 60 000 x 600mm shelves)(Active)	30.0	30.0	
	General Storage (20 000 x 600) (Dead)	m) 7.0	7.0	
1	Plan File	3.0	3.0	
	DIVISION TOTAL		197.5	
	SUBTOTAL			197.5

PARK	S AND RECREATION	Subtotal Forward		197.5
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
RECR	EATION DIVISION			
1	Assistant Dept. Manager (V.A.P.)(Recreation)	13.5	13.5	
3	Supervisors (V.A.P.)	11.25	33.75	
9	Technicians	9.0	81.0	
	General Storage (54 000 x 300mm shelves)	10.0	10.0	
	DIVISION TOTAL		138.25	138.25
	SUBTOTAL			335.75
FACI	LITIES DIVISION			
1	Assistant Dept. Manager (V.A.P.)	13.5	13.5	
1	Supervisor	11.25	11.25	
	Reception (Shared)			
	Storage (16 000 x 300mm shelves)	3.0	3.0	
	DIVISION TOTAL		27.75	27.75

PARKS	S AND RECREATION	Subtotal Forward		363.50
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
PARKS	DIVISION			
1	Supervisor (Landscape Architect)	11.25	11.25	
1	Technician	9.0	9.0	
1	Drawing File	3.0	3.0	
1	Correspondence File	1.0	1.0	
	Library (25 000 x 300mm shelves)	4.5	4.5	
	Reception (Shared)		-	
	DIVISION TOTAL		28.75	28.75
	TOTAL NET DEPARTMENT REQUIRE	MENT		392.25

V.A.P. - Visual and Acoustical Privacy

4.3.13 PERSONNEL SERVICES DEPARTMENT

The Personnel Department is responsible for the effective conduct of employee relations, employment and recruitment policies, pension and benefit administration, union negotiations, labour relations, compensation, training and development, relations with other levels of government on labour matters, occupational safety and health, and organization planning and development. Assistance is provided to all departments in matters related to human resources.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Department Manager (V.A.P.)	20.0	20.0	
3	Assistant Dept. Managers (V.A.P.)	13.5	40.5	
1	Supervisor (V.P.)	11.25	11.25	
4	Clerical Workstations	6.75	27.0	
2	Clerical Workstations (V.P.) (Data Entry)	6.75	13.5	
2	Technicians (V.A.P.)	11.25	22.5	
2	Technicians (V.A.P.)	9.0	18.0	
2	Technicians (V.P.)	9.0	18.0	
1	Technician (V.P.)(Safety Officer)	9.0	9.0	
	Supplies Storage (30 000 x 300mm shelves)	5.5	5.5	
	Library (30 000 x 300mm shelves)	5.5	5.5	
10	Employee Files	1.0	10.0	
10	Office Files	1.0	10.0	
1	Microfilm Reader (V.P.)	3.0	3.0	
1	Coffee Counter (1500 x 600mm)	3.0	3.0	
1	Work Table (3000 x 600mm)	6.75	6.75	
6	Reception Seats	2.0	12.0	
	SUBTOTAL		225.5	225.5

V.A.P. - Visual and Acoustical Privacy V.P. - Visual Privacy

PERSONNEL SERVICES DEPT.		Subtotal Forward		225.5
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm
1	Reception Counter (4500 x 600mm)	8.0	8.0	
6	Application Cubicles	2.0	12.0	
2	Testing Cubicles (V.P.)	3.0	6.0	
1	<pre>Interview Room (4 seats) (V.A.P.)</pre>	9.0	9.0	
1	Conference Room (10 seats) (V.A.P.)	27.0	27.0	
	Information Boards (5 000 x 1200mm high)	4.5	4.5	
	SUBTOTAL		66.5	66.5
	TOTAL NET DEPARTMENT REQUIRE	MENT		292.0

V.A.P. - Visual and Acoustical Privacy

4.3.14 PLANNING DEPARTMENT

The Planning Department advises and assists City Council in preparing and implementing planning policies for physical development, growth and change, transportation networks urban design and environmental protection within the City.

It is composed of four branches which offer collective or independent planning advice and technical support:

- 1. Research
- 2. Design
- 3. Development
- 4. Residential Rehabilitation

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
ADMI	NISTRATIVE BRANCH			
1	Department Manager (V.A.P.)	20.0	20.0	
1	Conference Room (10 seats)	27.0	27.0	
1	Supervisor	11.25	11.25	
4	Clerical Workstations	6.75	27.0	
3	Interview Cubicles (2 seats)	5.0	15.0	
2	Reception Seats	2.0	4.0	
	Display (25 000 x 1 200mm tackboard)	17.0	17.0	
	Reception Counter (1200 x 600)	2.0	2.0	
8	Correspondence Files	1.0	8.0	
	General Storage (32 000 x 300mm shelves)	6.0	6.0	
	Records Storage (16 000 x 300mm shelves)	3.0	3.0	
	SUBTOTAL		140.25	

V.A.P. - Visual and Acoustical Privacy

PLAN	NING DEPT ADMIN. BRANCH	Subtotal	140.25	
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
	Clothes Closet (2000 x 600mm) Library (32 000 x 300mm shelves)	4.0 6.0	4.0 6.0	
1	Microfilm Reader	3.0	3.0	
	BRANCH TOTAL		153.25	
	SUBTOTAL			153.25
RESE	ARCH BRANCH			
1	Assistant Department Manager (V.A.P.)	13.5	13.5	
1	Supervisor	11.25	11.25	
5	Technicians	9.0	45.0	
6	Plan Cabinets Reception (shared) Files (shared) Storage (shared) Library (shared)	1.0	6.0	
	BRANCH TOTAL		75.75	75.75
	SUBTOTAL			229.0

V.A.P. - Visual and Acoustical Privacy

PLANNING DEPARTMENT		Subtotal For	Subtotal Forward		
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²	
DESI	GN BRANCH				
1	Assistant Dept. Manager (V.A.P.)	13.5	13.5		
1	Supervisor	11.25	11.25		
8	Technicians	9.0	72.0		
8	Plan Cabinets	1.0	8.0		
3	Plan Files	3.0	9.0		
	Light Table	3.0	3.0		
1	Microfilm Reader	3.0	3.0		
	General Storage (55 000 x 300mm shelves) Reception (shared) Correspondence Files (shared)	10.0	10.0		
	Library (shared)				
	BRANCH TOTAL		129.75	129.75	
	SUBTOTAL			358.75	

V.A.P. - Visual and Acoustical Privacy

PLANNING DEPARTMENT		Subtotal Forward		358.75
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
DEVE	ELOPMENT CONTROL			
1	Assistant Dept. Manager (V.A.P.)	13.5	13.5	
1	Supervisor	11.25	11.25	
4	Technicians	9.0	36.0	
3	Clerical Workstations	6.75	20.25	
3	Correspondence Files	1.0	3.0	
4	Plan Cabinets	1.0	4.0	
	Reception (shared)			
	Library (shared)			
	Storage (shared)			
	BRANCH TOTAL		88.0	88.0
RESI	DENTIAL REHABILITATION ASSIST	ANCE PROGRAM		
3	Technicians	9.0	27.0	
1	Clerical	6.75	6.75	
2	Reception Seats	2.0	4.0	
3	Correspondence Files	1.0	3.0	
	BRANCH TOTAL		40.75	40.75
	TOTAL NET DEPARTMENT REQUIRE	CMENT		487.5

V.A.P. - Visual and Acoustical Privacy

4.3.15 SOLICITOR'S DEPARTMENT

The City Solicitor defends claims and actions by and against the City including prosecution of Bylaws. It reports to Council, provides advice and legal opinions and prepares agreements, contracts and claims.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Department Manager (V.A.P.) (30 000 x 300mm shelves)	20.0	20.0	
1	Assistant Department Manager (30 000 x 300mm shelves) (V.A.P.)	17.0	17.0	
6	Solicitors (Supervisors) (V.A.P.)(30 000 x 300mm shelves)	13.5	81.0	
2	Technician (V.P.) (15,000 x 300mm shelves)	11.25	22.5	
8	Clerical Workstations	6.75	54.0	
2	Wordprocessing Centres (A.P.)	8.5	17.0	
	General Storage	20.0	20.0	
	$(55\ 000\ x\ 600mm\ shelves)$			
	Coat Storage	8.5	8.5	
	$(3\ 000\ x\ 600mm\ shelves)$			
5	Reception Seats	2.0	10.0	
35	Correspondence Files	1.0	35.0	
1	Microfilm Reader	3.0	3.0	
1	Library (345 000 x 300 shelves) & 750 x 2 250	75.0	75.0	
	work table		-	
	TOTAL		363.0	363.0

V.A.P. - Visual and Acoustical Privacy

V.P. - Visual Privacy

A.P. - Acoustical Panels

4.3.16 TREASURER

The City Treasurer Department is responsible for the collection, control and disbursement of all corporate funds, i.e., property taxes, business taxes, consumption and usage of City electrical, water and sewer services and matters related to municipal licensing.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
GENE	RAL OFFICE			
1	Department Manager (V.A.P.)	20.0	20.0	
1	Assistant Dept. Manager (V.P.) 13.5	13.5	
1	Supervisor	11.25	11.25	
5	Clerical Workstations (1-V.P. from Public)	6.75	33.75	
1	Meeting Room (4 seats)(V.P.)	9.0	9.0	
2	Counter Workstations (Cashiers)	6.75	13.0	
	General Storage (20 000 x 600mm shelves)(Active)	7.0	7.0	
	General Storage (45 000 x 600mm shelves)(Dead)	16.0	16.0	
1	Safe	4.0	4.0	
	Coat Storage (4 000 x 600mm)	7.0	7.0	
	Reception Counter (5 000 x 600mm)(5 workstations)	9.0	9.0	
	Counter Receiving Space	25.0	25.0	
12	Records Files	1.0	12.0	
1	Microfilm Reader	3.0	3.0	
1	Mail Room (2 clerical work			
	stations)	37.0	37.0	
1	Photo Copy Room	22.0	22.0	
	DIVISION TOTAL		242.5	
	SUBTOTAL			242.5

V.A.P. - Visual and Acoustical Privacy V.P. - Visual Privacy

TREASURER		Subtotal Forward		242.5
NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
PAYE	ROLL AND BENEFITS			
1 3 4	Assistant Dept. Manager (V.P. Supervisors (V.P.) Clerical Workstations Records Storage (45 000 x	13.5 11.25 6.75 16.0	13.5 33.75 27.0 16.0	
4	600mm shelves) Printout Files (x3 high) Reception Counter (2000 x 600mm)	1.0 4.0	4.0 _4.0	
	DIVISION TOTAL		98.25	98.25
INVE	STMENTS			
1	Supervisor (V.P.) Clerical Workstation	11.25 6.75	11.25 <u>6.75</u>	
	DIVISION TOTAL		18.0	18.0
	SUBTOTAL			358.75

V.P. - Visual Privacy

Am ² AREAm ² TOTALm ²
9.0 33.75 3.5 10.0 8.0 8.0
74.25 <u>74.25</u> 433.0

4.3.17	TAX	AND	LICENSE		
DEPARTMENT					

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
ADMINISTRATIVE				
1 1 3 1 3 6 27 1	Department Manager (V.A.P.) Supervisor Clerical Workstations General Storage (50 000 x 300mm shelves) Coat Storage (3500 x 600mm) Safe Reception Seats Tub Files Cabinet Files Reader Printer	20.0 9.0 6.75 10.0 6.0 4.0 2.0 3.0 1.0 3.0	20.0 9.0 20.25 10.0 6.0 4.0 6.0 18.0 27.0 3.0	
1	Microfilmer Counter (5000 x 600mm) DIVISION TOTAL	3.0 9.0	3.0 9.0 135.25	135.25
PROP	ERTY TAX		155.25	135.25
1 1 1 9	Assistant Dept. Manager (V.P. Technical Workstation Supervisor Clerical Workstations DIVISION TOTAL	9.0 11.25 6.75	13.5 9.0 11.25 60.75	94.5
LICE	NSE		01.0	04.0
1 4	Assistant Dept. Manager (V.P. Clerical Workstations	13.5 6.75	13.5 27.0	
	DIVISION TOTAL		40.5	40.5
	TOTAL NET DEPARTMENT REQUIREM	ŒNT		270.25
	V.A.P Visual and Acoustics V.P Visual Privacy	al Privacy		

4.3.18 INVESTMENT SERVICES DEPARTMENT

This Department was recently developed in order to manage the investing of monies that are collected by the City. It basically operates on its own with no direct relationship to other departments.

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	Department Manager	20	20	
1	Assistant	9	9	
1	Secretary	7	7	
1	Reception (4 seats)	2	_8	
	TOTAL NET DEPARTMENT REQU	JIREMENT		44

4.3.19 PUBLIC HEALTH

This office was also recently developed with its basic purpose being that of an educational nature, i.e., prevention of accidents, occupational therapy, etc.

NO.	FUNCTION	UNIT AREAm ²	AREA ^{m2}	TOTALm ²
1	Nurse	15	15	
1	Exam	20	20	
1	Reception - 4 seats	2	8	
1	Storage	7	_7	
	TOTAL NET DEPARTMENT REG	QUIREMENT		50

4.4 SERVICE FACILITIES

The primary responsibility of Central Purchasing and Stores Department generally falls into two categories:

- 1. The purchase of material, equipment, and services for all departments of the City.
- 2. The management of major materials, stores and disposal of surplus material and equipment.

An additional off-site facility would also be required to handle items not directly used at City Hall, e.g. Works & Utilities Division.

4.4.1 PURCHASING AND INVENTORY CONTROL

NO.	FUNCTION	UNIT AREAm ²	AREAm ²	TOTALm ²
1	General Office Area		84	
1	Public Reception		37	
	Administrative			
	1 Purchasing Coordinator	13.5	13.5	
	1 Inventory Coordinator	13.5	13.5	
	1 Inventory Control	11.25	11.25	
	4 Buyer's Office	11.25	45	
	Conference (for tender			
	openings, etc.)	55	55	
	Storage	19	_19	
	TOTAL NET DEPARTMENT		278.25	278.25

4.4.2 SHIPPING AND RECEIVING

This area shall provide for the shipping and receiving of materials and storage on a short-term basis. Materials moved will include: furniture and equipment, office and printing supplies, mail, food service supplies, and waste materials.

This area may be located on levels below grade but must have direct access to service circulation and elevators.

The loading area should permit vehicular loading and unloading without conflicting with other traffic or pedestrian movement.

TOTAL NET REQUIREMENT

200 m²

4.4.3 MAINTENANCE/CUSTODIAL

Maintenance operations includes repairs to furniture and equipment, building finishes, the fabrication of small installations in the building and maintenance of interior and exterior landscaping. Therefore it should include a workshop and storage area. These areas should be in proximity to shipping and receiving.

Note custodial areas (12 Janitor's Closets throughout building) in Section 4.3.5 Design Maintenance.

TOTAL NET DEPARTMENT

 $200 m^{2}$

NOTE: Other areas such as Central Storage, Lost and Found, Micrographics Lab, and additional Warehouse Storage are located off-site. This is by choice of City Hall Administration.

4.4.4 RESERVED PARKING

Reserved parking will serve the Mayor, Aldermen, senior staff, the handicapped, media and short-term field staff. A definite shortage of parking exists in the downtown area and it is probably logical when undertaking a project of this size to then provide adequate parking plus instead of creating an additional burden on existing facilities. Therefore, I am taking the approach of providing maximum parking on one level over most of the site up to an assumed 300 parking stalls.

This parking should be located below grade and should be controlled. Additional on-grade parking (not reserved) should also be available. See Section 4.1.7.

TOTAL AREA REQUIRED GROSS

10,800 m²

4.5 PROGRAM SUMMARY

The total gross building area equals the total net building areas plus an allowance for superstructure, mechanical ductwork, service spaces and public circulation.

The ratio between the net and gross area is the efficiency of a building and in this type of structure I am assuming an efficiency of 70%.

FOOTNOTES SECTION 4.0

- 1 A Plan for the Downtown, City of Saskatoon Planning Dept., June, 1986
- 2 Annual Traffic Volume Report, City of Saskatoon, 1986.
- 3 Torre, Susana, <u>The American Square</u>, Precis. Volume 3, Columbia University, 1981 p.30
- 4 IBID p.30
- Downtown Design Study, City of Saskatoon, Planning Department, October 1980, December 2980, February 1981
- 6 Damas & Smith Ltd., Core Area Study of Saskatoon, 1975
- 7 Downtown Design Study, City of Saskatoon, Planning Dept., Oct. 1980, Dec. 1980, Feb. 1981

5.0 INTERDEPARTMENTAL RELATIONSHIPS

The circulation system includes all spaces associated with horizontal and vertical movement of the public and staff within the building.

As previously mentioned the circulation system should emphasize ease of orientation. It should also be handicapped accessible and provide control of areas as required.

We have discussed areas and departments that receive high public usage, however, I have not indicated interrelationships between various departments and facilities in all cases. Some of these occur logically because of the nature of their work. A chart that was produced when Boston City Hall was planned can be seen in Figure 4.9. This together with the chart showing the Present Organizational Structure, (City Of Saskatoon), Figure 4.10, will be of some help in determining departmental adjacencies.

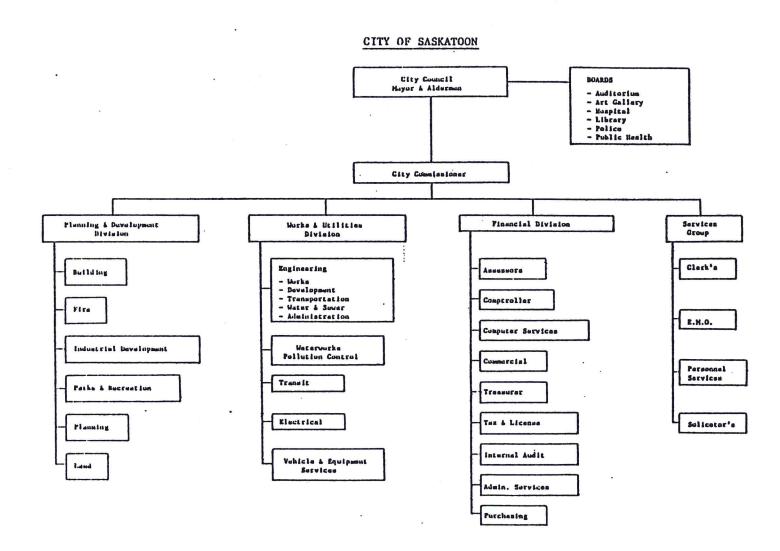
Of the main divisions at City Hall, those in the Finance Division are probably the most interrelated. In addition, many of these also serve the public and should therefore be accessible, possibly on a main floor location. Included in these are:

- Assessor
- Treasurer
- Tax & License
- Comptroller
- Central Purchasing and Stores

4.9 DESIRED DEPARTMENTAL ADJACENCIES

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4.10 ORGANIZATION CHART - CITY OF SASKATOON



6.0 DESIGN SOLUTION ANALYSIS

The research report and Architectural Program previously submitted contained the basis for functional and spatial requirements. In this report a number of theories, concepts and objectives were itemized and stressed. Following is a list of these items and how they have been satisfied in the final scheme.

SYMBOLIC IMAGE

The entire building and site radiates from the Council Chamber which itself is high profile because of its location and form.

PUBLIC INTERACTION

The site is laid out with pedestrian patterns encouraging a normal flow toward the building from the park and also from the other streets.

Drawing features such as the Restaurant and Conservatory are located directly off the main lobby; the Gallery and Council Chamber are also within this space on the second level.

IDENTIFIABLE IMAGE

In addition to its central, high profile location, the form of the building is quite unlike the basic form of the adjacent buildings, even though it borrows forms from them. In addition to this its placement at the end of the civic square sets it on a pedestal.

PUBLIC PROFILE FOR SENIOR ADMINISTRTION

Both the Council Chamber and Mayor's office are directly at the top of the grand stairway opening onto the Public Gallery.

USER FRIENDLY

The high public usage areas are located on the main and second level directly off the lobby. Upper areas open off a central rotunda that overlooks the civic park, which serves to orient the user.

EFFICIENCY

The building orients toward the south with its major areas of glazing facing this direction.

Departments are located in proximity to each other based on their amount of interaction.

The building shape in plan is square and compact rather than linear, which makes travel distances shorter, makes most efficient use of the site, and decreases amounts of material.

NET TO GROSS RATIO

The efficiency of a building is also measured by the net to gross ratio. The original program estimated an efficiency of 70%. This has been improved as follows:

TOTAL NET AREA
TOTAL GROSS AREA

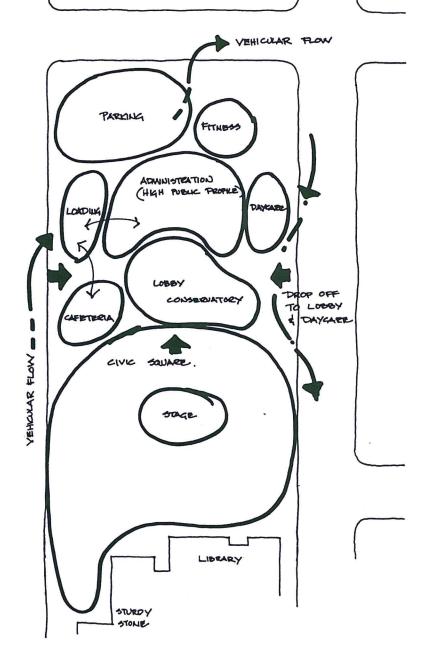
 $9,755.35 \text{ m}^2$ 13,582.00 m²

EFFICIENCY = 72%

CONCEPTUAL DETERMINANTS:

- · COUNCIL CHAMBER TO BE SYMBOLIC · FOCAL POINT.
- . BUILDING INTEGRATED WITH CIVIC SQUARE
- · RESTAURANT IN SHELTERED ZONE & DIRECTLY RELATED TO OUTDOOR STAGE.
- VEHICULAR TRAFFIC

 PROPESTRIAN TRAFFIC TO BE
 SEGREGATED AS MUCH AS TOSSIBLE.
- · DAYCARE TO BE IN SHELTERED ZONE (PROM BOTH HATURAL & MAN. MADE FLEMENTS)
- . BUILDING SHOULD ORIENT TOWARD CITY CENTRE,
 CIVIC SQUARE & THEREFORE MAIN REDESTRIAN APPROACH.
- . MINOR PARKING ON GRAPE.
- · BUILDING TO BE ZONED ACCORDINGLY TO PUBLIC ACCESSIBILTY REQUIREMENTS.
- · CITY HALL SHOULD BE INVITING TO PUBLIC. SOME ELEMENTS THAT STRIVE TO DO THIS ARE:
 - · GALLERY & HISTORY ROOM
 - . RESTAURANT & OUTDOOR STAGE.
 - · CONSERVATORY
 - . FITHE SS CENTRE
 - · DAYCARE
 - · FINAL FORMS, ORIENTATION AREAS, ETC. OF THE BUILDING ITSELF.
- . BUILDING MUST RESPOND TO CHMATE.

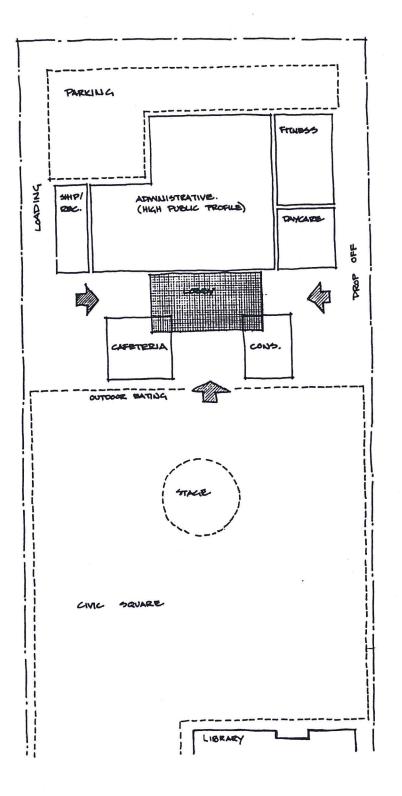


SCHEME D

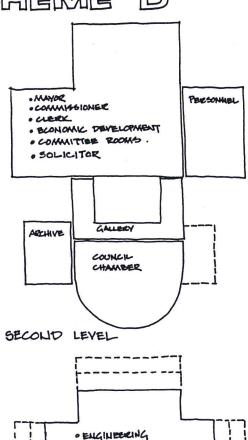
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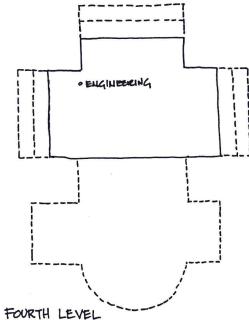
- · COUNCIL CHAMBER IS FOCAL POINT
- . GOOD ACCESS FROM ALL SIDES
- · ENTRIES ARE VISIBLE
- . MAKES EFFICIENT USE OF SITE
- . ENTRY 15 PROTECTED FROM ELEMENTS
- · DAYCARE & FITHESS ARE MORE SEGREGATED
- . LOADING IS ALSO CLOSE TO CAFETERIA
- · BUILDING ORIENTS TOWARD FORMAL CITY SQUARE.
- . DAY CARE & RESTAURANT IN SHELLERED ZONE
- . VEHICULAR & PEDESTRIAN TRAFFIC IS SEGREGATED.
- . GOOD RESPONSE TO CLIMATE.

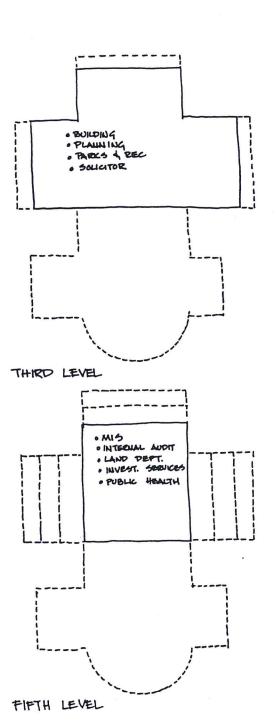
II . CAFETERIA 15 TOO PROMINENT (?)



SCHEME D







7.0 ELEMENTAL COST ANALYSIS

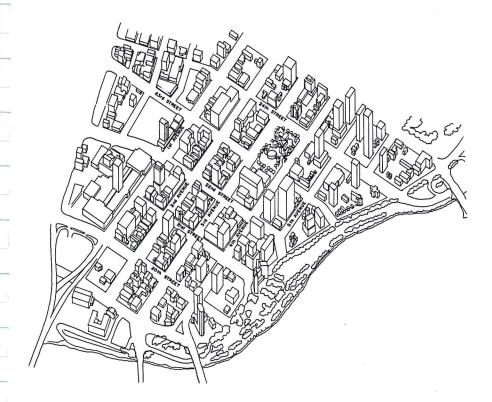
	SPEC. DIV.	ITEM TOTAL	DIVISION TOTAL
01	GENERAL CONDITIONS		\$ 164,620.00
02	SITE WORK		57,624.00
	Excavation	\$ 110,043.00	
	Sub Base Parking	37,563.00	
	Roadway Base	7,134.00	
	Piles	60,000.00	
	Weeping Tile	2,616.00	
	Catch Basin	2,838.00	
	C.B. Cover	2,787.00	
	Sign	10,000.00	
	Outdoor Stage	176,000.00	
	Turf	1,650.00	
	Trees	4,400.00	
	Paving - Asphalt	26,015.00	
	- Stone	95,000.00	
	- Sidewalk	16,278.00	
	Pavement Marking	2,000.00	
	Irrigation	3,300.00	
03	CONCRETE - Floors - Walls - Elevator & S	2,648,540.00 tairs	2,648,540.00
04	MASONRY - Brick	334,560.00	
	- Stone	382,120.00	716,680.00
05	METAL		125,995.00
	Stairs	48,360.00	
	Rail	27,635.00	
	Miscellaneous	50,000.00	
06	WOOD - Millwork	342,000.00	447,000.00
	- Panelling	105,000.00	

	SPEC. DIV.	ITEM TOTAL	DIVISION TOTAL
07	THERMAL & WATER Damproofing Silicone Wall Insulation Roof	\$ 65,088.00 4,809.00 159,159.00	\$ 653,403.00
	Copper Sloped Roof B.U. Roofing Flashing Cant Roof Hatch	129,470.00 130,891.00 114,424.00 43,970.00 3,192.00 2,400.00	
08	DOORS & WINDOWS Storefront Doors - Metal - Wood - Vault - O.H. Windows Curtain Wall	34,020.00 19,080.00 32,437.00 5,324.00 9,000.00 228,804.00 234,786.00	563,451.00
09	FINISHES Framing Gyprock C. Tile Q. Tile Marble Marble Agglomerate Carpet Vinyl Gyprock	36,768.00 146,126.00 105,503.00 71,470.00 675,136.00 299,552.00 552,959.00 283,055.00	2,170,569.00

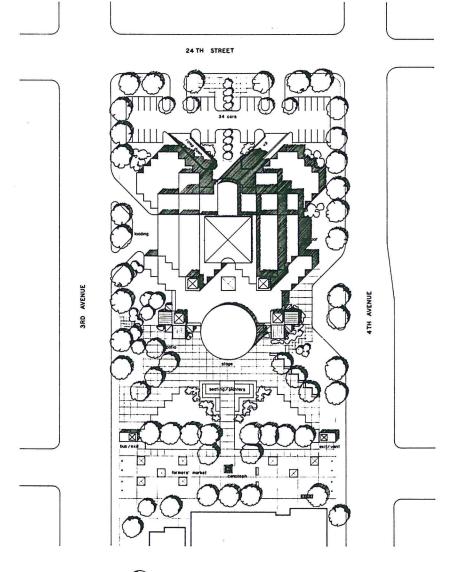
	SPEC. DIV.	ITEM TOTAL	DIVISION TOTAL
10	SPECIALTIES Chalkboards & Tackboards T. Partitions Access Floor Flag Poles Directores Signs Movable Partition Washroom Accessories	\$ 10,000.00 41,220.00 1,489,287.00 2,857.00 10,640.00 25,000.00 16,150.00 9,547.00	\$ 1,604,695.00
11	EQUIPMENT Parking Gate Dock Levelers Bumpers Incinerator	3,471.00 3,822.00 468.00 65,000.00	72,761.00
12	FURNISHINGS Restaurant Equipment Drapery Seating	115,000.00 227,688.00 30,150.00	372,838.00
13	ELEVATOR		161,700.00
14	MECHANICAL		2,655,000.00
15	ELECTRICAL		1,816,600.00
	TOTAL		\$14,073,852.00
	OVERHEAD - 10%	\$1,407,385.00	\$15,481,237.00
	PROFIT - 5%	\$ 774,061.00	\$16,255,298.00
	CONTINGENCY	\$ 322,800.00	\$16,578,098.00
	TOTAL		\$16,578,098.00

SASKATOON CITY HALL

RAIC SYLLABUS
DESIGN THESIS
APRIL , 1988
G. AGREY



LOCALE - CITY CENTRE

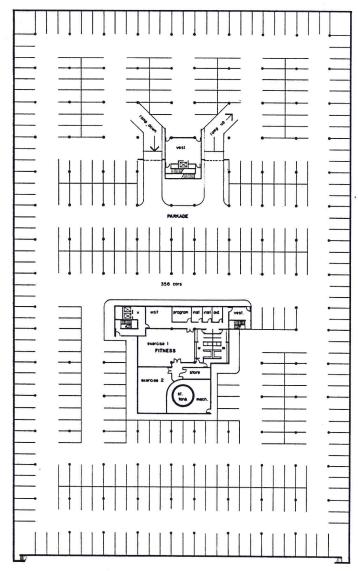


SITE PLAN 1500

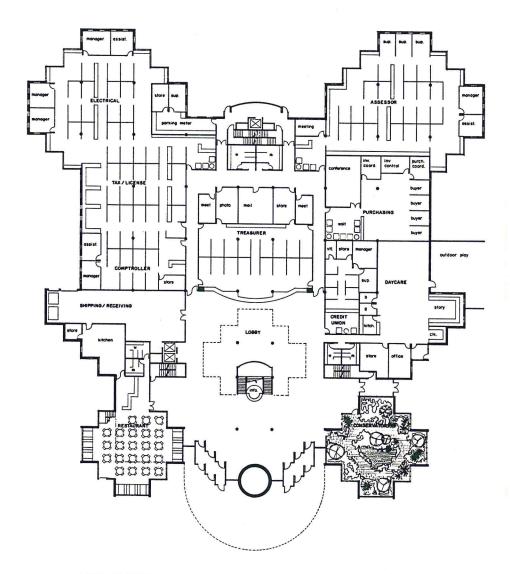




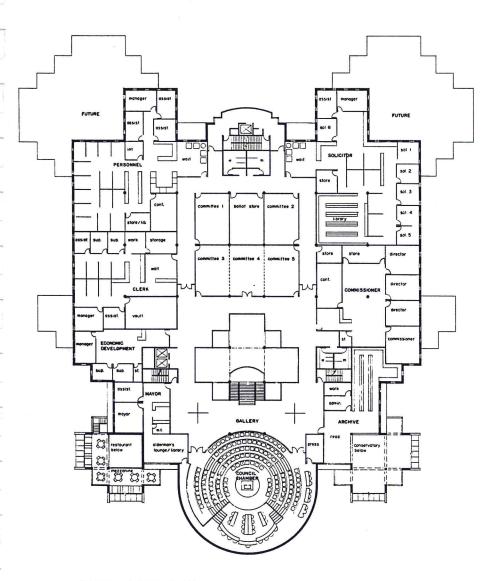
VIEW FROM THIRD AVENUE



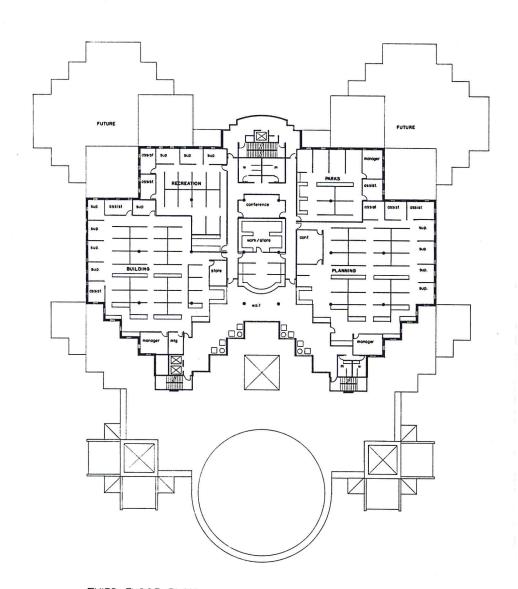
PARKADE LEVEL PLAN 1.400



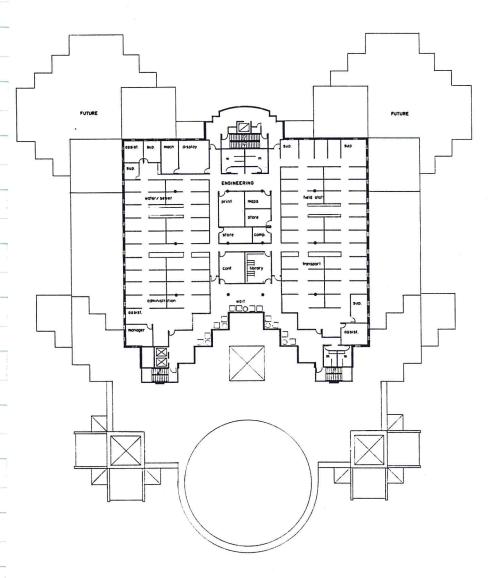
MAIN FLOOR PLAN 11 200



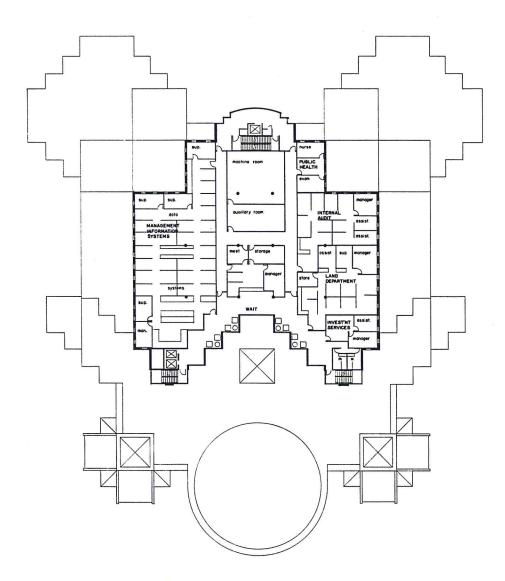
SECOND FLOOR PLAN 1: 200



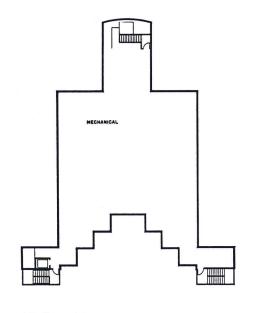
THIRD FLOOR PLAN 1, 200

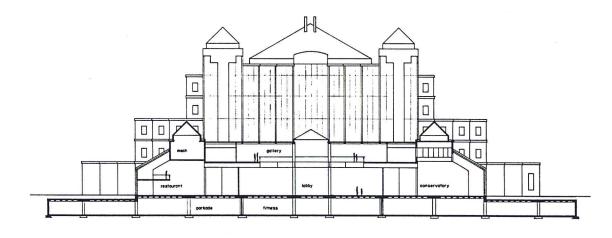


FOURTH FLOOR PLAN 1: 200



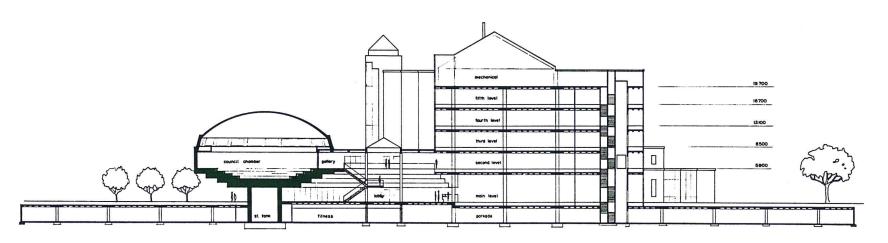
FIFTH FLOOR PLAN 11 200



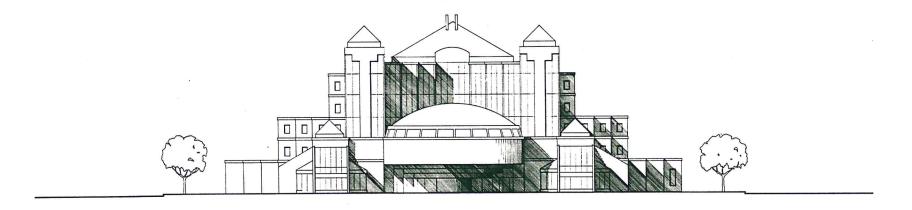


PENTHOUSE 1: 200

CROSS SECTION 11 200



LONGITUDINAL SECTION 11 200



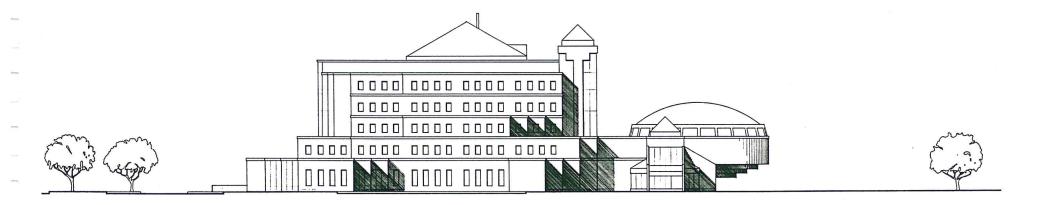
SOUTH ELEVATION 1. 200



NORTH ELEVATION 1: 200



EAST ELEVATION 11200



WEST ELEVATION 11 200

9.0 BIBLIOGRAPHY

- Axworthy, L. and Gilles, J. (ed.), The City, Canada's Prospects, Canada's Problems, Buttersworth and Company, 1973.
- Bellan, R.C., The Evolving City, Copp-Clark, 1971.
- Boston City Hall, Article in Architectural Form, January, 1969.
- Building Types: Public Administration Building: Articles in Architectural Record, August 1979 and September 1976.
- Calgary Municipal Building, Article in the Canadian Architect, January, 1982.
- Conditions and Program for the National Architectural Design Competition for the New City Hall in Mississauga, Planning Department, City of Mississauga, Ontario.
- City of Saskatoon, City Hall Building Program to 1985, Building Department, Architectural Section.
- Dietsch, Deborah, The Changing Role of Public Space, and Torre, Suzanna, American Square, Articles in Precis, Volume 3, 1981.
- Delainey, W.P. and Sergeant, W.A.S., Saskatoon, The Growth of A City (The Saskatoon Environmental Society).
- Gibberd, Frederick, Town Design, The Architectural Press, London, 1970.
- Lynch, Kevin, The Image of the City, M.I.T. Press, 1960.
- Mississauga City Hall, Article in the Canadian Architect, November, 1982.
- Mumford, Lewis, The City in History, Harmondsworth, Penquin Books, 1961.

- Proshansky, Ittleson, Rivlin (ed.), Environmental Psychology: Man and His Physical Setting, Holt, Rinehart and Winston, 1965.
- Planning City Hall, Management Information Service Report, Volume 7, No. 11, November 1975.
- Raic Syllabus, Design Thesis Problem 9 Study Guide, September 1981.
- Report on City Hall Space Requirements, by City of Saskatoon, Building Department, 1978.
- Winnipeg City Hall, Article in the Canadian Architect, January, 1965.