

Master Plan for Stony Plain, Alberta

Avi Friedman Consultants Inc.



Master Plan for Stony Plain, Alberta

Prepared by

Avi Friedman Consultants Inc.
4606 Wilson Ave.
Montreal, Quebec
H4A 2V4

Design by

Avi Friedman
Juan Mesa
Fa Xivong Wu

January 2007

2.0 Existing Conditions

2.1 Regional Context

Located 17 km west of the City of Edmonton, Stony Plain is spread over 17 sq. km. The town, surrounded by Parkland Country is linked via Highway 16 and 16A, which crosses it to the Edmonton region (Map 01). CN rail line also passes through the town, effectively dividing it into three segments. The first above highway 16A, the second between the highway and the CN rail line, and the last below the rail line, where most of the town's land is concentrated.

Along with Spruce Grove, the Town of Stony Plain is a regional service and commercial hub to a population of 60,000 (Map 02). Yet, its close proximity to Edmonton has made the place a bedroom community with large numbers of daily commuters. The proximity to Edmonton also presents competition to local business from the vast array of services and products offered by the large metropolis. Another notable regional feature is the power centre within the municipal boundary of Spruce Grove on the edge of Stony Plain. Located along Highway 16A, it is a commercial draw to the people of both communities. Stony Plain is also surrounded by farming communities which shape both the physical and the urban make-up of the surrounding area.

2.2 Historical Evolution

The beginning of Stony Plain dates back to 1881 and the establishment of the first homestead in the area. The first name given to the community was Dog Rump Creek, which was changed to Stony Plain when a post office was constructed. The town's name is also attributed to the Cree, who inhabited the region at the time. In the early 1900s, the town was part of the Canadian National Railway network, for which it served as the western terminal. One of the most recognized legacies of Stony Plain is an act by Israel Umbach, the town's first sheriff, who chained a locomotive to the railway tracks for non-payment of taxes and made national headlines. Umbach changed the course of history and Stony Plain was incorporated in 1908. The town's history is well-recorded in its murals, historic sites and multicultural heritage centre.

Study of Stony Plain's urban evolution demonstrates a growth pattern that began in the historic core. The gridiron street layout, typical of early 20th century towns, was common. The street network typically had a main artery along which most services and commerce located and parallel residential streets. This pattern has a railway stop that often was the catalyst to the town's establishment at one end (Map 04).

With successive population growth after World War II, rapid residential developments began, and new neighbourhoods were built off the historic core, south of Highway 16A and later south of the railway. Land purchased by developers often dictated the town's expansion steps, yet it was commonly adjacent to existing neighbourhoods. With the proliferation of cars, new development sites could locate further away from existing ones, and the organic growth pattern somehow diminished.

The development of Meridian Meadows marks a change in Stony Plain's urban evolution, as the first time a neighbourhood was built across Highway 16A.

2.3 Socio-economic Make-up

In general, Stony Plain displays positive and encouraging socioeconomic vital signs as demonstrated by several indicators worth describing (Map 05).

Employment

Some 49 percent of ages 16 to 29 and 65 percent of ages 30 to 54 are employed full-time, as well as 40 percent of ages 55 to 64. This is a sign of a healthy economy and Alberta's prosperity. There is, however, no indication of where these citizens are employed and the type of employment. It is likely that some are commuting to Edmonton and many are employed in town. There is, however, a large segment of retired people, most of which draw their income from former employment or government transfer.

Age

The most notable cohort among Stony Plain's population is the group aged 30 to 54. Similar to other communities, and the country at large, the "baby boom" generation constitutes the majority. More than current demographics, in fact, it is an indication of things to come. In 10 years, when the first of this generation will begin to retire, in the absence of the younger generation, there will be a large population cohort made of seniors. This may put a strain on the town's social services and potential growth.

Status and Type of Dwellings

The majority of Stony Plain's residents (77 percent) own their dwellings, and some 21 percent are renters. This ratio is somewhat above Canada's general average, where 65 percent are owners. It offers several indicators on the economic and social health of the town. Unlike urban areas, Stony Plain's residents are not transient. It is demonstrated by the "sense of ownership" that the author recorded in his visit. It is also an indication of economic health where people hold jobs with income sufficient to carry long-term mortgages.

The majority of the homes in town are single family (79 percent) with multi-family as a balance. This ratio is likely to change as more people retire and choose to trade single family with apartments.

2.4 Growth Management and Urban Form

Current Status

Growth management and urban form are the thrust of this report and the catalyst to its initiation. Stony Plain is considering its future urban direction in the face of possible population growth and increased development activity. Current land use, as displayed by the existing plan, demonstrate a pattern consistent with a town its size (Map 06). In general, there is a clear allocation of land uses and it is rare to find industrial functions of a polluting nature within town in proximity to residential. Industrial development is located in the North-East edge of town with ample land reserve. Commercial, as well as light industrial activities are placed parallel to Highway 16A. Commercial activities are also designated in various zones within the town and are most notable in the historic downtown core.

Residential land use, naturally constitute the majority of Stony Plain's area. Spread around in the South and South East directions, neighbourhoods made of low density housing are typical of these communities. Land reserved for future expansion is located in the South, East, West and North across from Highway 16A.

Another characteristic unique to Stony Plain is its urban make-up (Map 08). The town is divided into three clear sections: the first North of highway 16A where industrial and rural residential land uses are located, the second below Highway 16A that is bordered by the CN line and the third, the largest, below the rail line.

Another feature characteristic of Stony Plain is the trail network in which the town invested monetarily and of which citizens take great pride. Plenty of green spots dot Stony Plain's land use map, including well-maintained municipal parks that reflect a high quality of life citizens enjoy. In addition, the historic downtown is located in the centre of Stony Plain area. It is a liveable area frequented by citizens and visitors who came to shop and be entertained.

Possible Directions

As Stony Plain ponders its future urban evolution and growth, several considerations which derive from current local and global trends need to be regarded. When an attempt is made to diagnose the successful suburban planning practices, recognition of the inner workings of four pivotal issues, environment, economy, society and culture, can arguably be one of the reasons. Mainstream developments are often regarded as a product, rather than a process, where a range of aspects are being systematically explored and manipulated. The process, the key issues and the relations among them can be illustrated with four general principles. When followed, these principles can guide the conception of a sustainable town.

The path of least negative impact principle suggests that a decision-maker of any planning endeavour needs to choose a process that will leave the smallest negative footprints on environmental, societal, cultural or economic aspects affecting or affected by the project. At the

process' outset, impact assessment will be undertaken to ensure that decisions made during the planning stage will have short or no long term disruptive ramifications on those issues.

When a residential development is planned, minimizing the project's initial impact would preferably be a priority. The project's lifecycle can also be viewed as a self-sustaining process of resources and activities. Metaphorically, one can regard the energy that was used in the project's conception and building as a generator of additional sources of power, its existence and even contribute to the creation of additional similar projects. The relevancy of this notion to Stony Plain's future is central and it relates primarily to economic outlook. The town needs to expand its economic base and invest in the creation of future wealth generators.

Another keystone of a sustainable project is the relationship between its pivotal parts. When a supporting relation is established, attributes of one component can propel activity in another. Influence between disciplines and effects of one on the other will in turn create a supporting system. Cultural activities can foster tourism which, in turn, stimulates greater economic activity and expanded prosperity to be invested in building better educational institutions. The mark of a good decision-making for a sustainable urban system is a project's ability to sustain itself throughout its entire lifecycle. Be it through each of its components or their interrelation, the conception and construction needs to ensure that the original attributes of the project will be of value years later. Contributions made in part of the planning process, although appreciated, will have a lesser impact than those made throughout.

A life cycle approach sees the built environment subjected to an ongoing change and evolution. The process' elasticity and ability to adapt to various emerging circumstances is one of its key attributes. When a product has a finite life, it will be of lesser value than one that can be refurbished and reused. When dwellings are designed for adaptability and can easily be modified to the needs of subsequent occupants, obsolescence and demolition are prevented. A similar view needs to prevail when codes and bylaws are enacted. They ought to provide a framework for action, yet not restrict the introduction of amendments and changes when times and circumstances require that they be introduced. Decisions made in Stony Plain need to have a long term perspective and be done in the interest of future generations.

Growth management needs to consider these principles and also bear in mind several ongoing trends. These trends are essentially based on the above principles. Most notable are *Smart Growth* and *New Urbanism*. They suggest a more compact development based on traditional towns and reduced reliance on private cars in favour of pedestrian activities and public transit. Several such communities have been constructed in North America. Unfortunately, most have proven to be unaffordable despite the increased density.

The relevance of these recent ideas and principles to Stony Plain is questionable since citizens' desires are to enjoy suburban attributes that brought them to town in the first place. It is, therefore, necessary to consider an urban model more appropriate to small towns rather than to propose models more relevant to large urban centres that will be rejected.

2.5 Residential Development

Current Status

The evolution of Stony Plain neighbourhoods followed successive population growth since the turn of the century. Whereas the first neighbourhood had a gridiron urban pattern, other developments, primarily those constructed after World War II used more contemporary planning tendencies which included loop and cul-de-sac roads (Map 07). Given the relatively low cost of land, the dominant house types was the single-family detached. The neighbourhoods were connected to each other via arterial roads. Another notable feature that characterized neighbourhoods in Stony Plain is the ample green public spaces and trails that located either next or within the community. One can also find a variety of housing typologies in town, which range from large detached homes to semi-detached, row housing and apartment buildings. At times, these types are mixed in the same neighbourhoods.

Recent Trends

The form of residential developments and the housing types in them are commonly the outcome of several factors. Zoning and bylaw regulation set and required by the town, developers recognition of market needs and buyer's preference are among some of the aspects. Over the past half century, North American developments follow a recognized pattern of wide roads with right of ways exceeding 60 feet with or without sidewalks, lots average 5,000 square feet, front multi-car garages with homes behind. This pattern of development, despite its popularity, has been recognized in recent years as being unsustainable. On-going reliance on private cars as the only mode of local commuting is, for example, questioned as well.

One cannot ignore, however, the attributes that draw people to rural/suburban communities in the first place. Privacy, low crime rate, green space and spacious dwellings are among these features. Therefore, when a town is considering future models of neighbourhood design, these attributes must be regarded along new urban models.

Providing a mix of dwelling types in the same development: As Alberta's population becomes more demographically diverse, building single- and multifamily dwellings within the same community is likely to be not only socially relevant but will make business sense for developers. Often, mixing rental and for-sale properties are also desired as well as integrating seniors and young family housing. These housing types can be clustered in a way that will create coherence and a clear urban form rather than mixed with no structure.

Reduce road right of way and introduce other parking alternatives: Roads built in communities are often excessively wide. In most cases, the low flow of traffic does not justify such width and imposes on the town high construction and maintenance fees. In addition, continuous rows of wide garage doors foster a negative image and create barren streets with no trees. The building of streets that are narrower, when possible, and directing parking to the house rear or side through lanes or side garages are some of the strategies that are advocated in new developments based on sustainable planning principles.

Mix Land Uses: The common tendency in new residential developments is to segregate commercial and residential land uses. In low density housing, this segregation makes sense since there is no clear economic justification for the mixing. Yet, models have been developed that see commerce or other public amenities, such as recreation centres or school buildings on the community's edge within walking distance of each home. In most cases, public transit is introduced, which in small towns can be a small shuttle bus.

Green Spaces: Providing green spaces in close proximity to housing is not only desired by residents but has become necessary for health and fitness reasons. A prevailing notion in urban planning is that the town and its open spaces and infrastructure can be a fitness and recreational instrument. Creating open spaces, play areas for toddlers and adolescents, near clusters of homes need to be a priority in neighbourhood design.

The principles presented above provide a nutshell guide to the creation of sustainable communities that will be considered later in this report.

2.6 Parks and Trail System

Current Status

Over the years, the town of Stony Plain invested in developing an extensive and well-landscaped parks and trail system (Map 10). Further expansion and elaboration is planned in the future. In a report called 2005 Trails Master Plan (Gibbs & Brown Landscape Architects Ltd., in association with Armin A. Preiksaitis, 2005) a detailed elaboration of maintenance operation as well as guidelines for particular trail types were made, among other things.

In assessing the system's current conditions, the author of this report recognized that it can play a pivotal role in the town's future urban expansion. It can be a "joining element" between the different neighbourhoods.

Recent Trends

Open spaces in communities can be regarded as a system where an easily accessible network of green areas that range from the regional to individual unit levels is created. Large scale parks, located outside the development, form the most public of these spaces. Enclosed outdoor areas, on the other end, are the most private. Within these two extremes are neighbourhood parks and communal areas for clusters of homes. Communities need to provide a variety of outdoor spaces for both active and passive recreation.

The spaces themselves, regardless of their place in the hierarchy, can be designed along several key guiding principles: incorporate natural features, design for accessibility from all homes, make the spaces the green lungs of the neighbourhood, let sunlight into the heart of the neighbourhood, integrate storm-water management systems when feasible, ensure that large play areas are well-served by public transit, incorporate noise and privacy protection for homes built near common open spaces, ensure that each open space contributes to the well-being and health of the community it serves, make all play areas for children, fields and courts, paths for jogging and bicycling available for active recreation, provide spaces for passive activities such as sunbathing, reading and simple get-togethers, accommodate the needs of people of all ages and motilities.

Linking the various spaces to form a system while providing varying degrees of privacy in each, is a fundamental principle of planning open spaces in affordable communities. Several patterns for the design of open-space systems have evolved and proven successful as guidelines for the organization of these places. They include separate patch, composite urban, hierarchical and green belt.

The separate patch system is often used in gridiron street patterns, and in recent times was applied in the rehabilitation of older neighbourhoods. Its key attribute is the creation of a street-oriented community life. There is, however, a lack of continuity between the patches, which can be accessed from streets or alleys only. Patches form well-defined gathering places in neighbourhoods. They may include a prominent feature, such as a bandstand or water fountain, and can be landscaped in a variety of ways. The separate patch system constitutes the traditional town square.

The composite urban pattern has a more structured design. It is recognized by its geometric forms and is often associated with New Urbanisms' residential schemes. The main arteries connect housing clusters to communal facilities and public plazas, and the dwellings are oriented according to the geometry of the overall plan. It is a more rigid design pattern and best suited for large, new housing developments rather than the rehabilitation of old districts. The strong, formal geometry dictates the organization and the orientation of the dwellings, which may not correspond with settings that take advantage of passive solar gain, topography, or ecological preservation. This pattern is nonetheless beneficial when it comes to high-density design with potential to contribute to lower cost housing. Another notable advantage rests with accessibility to and from the open spaces. Networks of roads and boulevards form vital parts of these schemes.

Formal in nature, the hierarchical system organizes open spaces based on their order of public, semipublic, and private areas. With its roots in ancient settlements, the system combines public plazas with courts and yards. Its design is visibly more flexible than the systems outlined above. The hierarchy system allows for a variety of different open spaces within a relatively short distance from each other by accommodating diverse needs of community members. Spaces are provided for large gatherings and intimate private encounters. Despite the notion that hierarchies lead to formality, the pattern can also take on a more free-form design in higher-density residential configurations with affordable housing.

The green belt pattern design regards the natural characteristics of the site in planning the open-systems area. The approach resembles the one used by Howard in the Garden City design and later by Henry Wright and Clarence Staine in Radburn, New Jersey. The residential areas are often bordered by amorphous, green spaces. The areas may be never-planted green patches or newly planted. The scheme is highly suitable to developments based on ideas that privilege natural drainage and ecological corridors and living in organic settings. The pattern is not suitable, however, for high-density residential configurations unless multi-family, rather than single-family, dwellings are designed.

In addition to providing recreational facilities to its population, communities are regarding their open spaces, parks and trails as part of their public health systems. Activities in them primarily among the young will contribute to overall fitness. These planning patterns have been considered in our proposal for Stony Plain's master plan.

2.7 Economic Development and Tourism

Current Status

Stony Plain's location and historical evolution is closely tied to the farming communities that surround it. Economically, the town served as the county's service centre. Yet, the town's economic prospects changed in the past decade. Increased economic activity in Alberta in general and in the Edmonton area in particular spilled over to the surrounding area – Stony Plain included.

The town's commercial activity is made primarily of small and medium-size businesses which are located north and south of highway 16A. These businesses are in the retail and the light industrial areas. In addition, tourism is also expanding and the number of visitors to town is growing. Made of people who come to acquire services or simply be entertained in the core, the town's tourism is thriving.

Recent Trends

One of the challenges that towns with narrow economic bases are facing is the need to grow those activities. It is not an easy task as those towns are competing against similar communities who are as aggressive. It requires an "out of the box" approach and the development of appropriate strategies. Some of these strategies are the formation of joint ventures with other towns. Several communities are joining forces to develop infrastructure and to foster a promotional campaign as a cost-sharing measure. Similar alliances can be created with industry or commerce. At times, tax incentives can be offered as a way to attract the private sector to form joint ventures.

2.8 Environmental Management

Current Status

The Town of Stony Plain has demonstrated environmental stewardship in recent years. The town has attempted to conserve the natural heritage within its boundaries and even to expand it. Some of the notable examples of this environmental mindset are manifested in the Town Hall's geothermal heating system and the integration of natural water streams in its parks and trails.

Recent Trends

Current trends in town planning place sustainable approaches to urban development high on the agenda. The environment is, of course, one aspect of such an approach but nonetheless a highly important element. Strategies that have been adopted in recent years have seen the following take place:

- Environmental assessment prior to the start of planning and building: The need to document existing conditions of flora and fauna and plan with or around them rather than alter them has become part of the development process of many communities.
- Integration of LEED guidelines as mandatory part of the planning process: Cities and towns began to adopt environmental guidelines as part of their bylaws and zoning to ensure compliance with environmental objectives. The LEED guidelines act as a good framework to begin such processes, which see encouragement of public transit and urban planning for passive solar gain.
- Public Building as "Environmental Markers": Towns are ensuring that all the public facilities will be constructed to respect the highest energy efficiency standards and will use alternative sources of energy.

These are some of the aspects that need to be considered in future design.

2.9 Historic Downtown Core

Current Status

Stony Plain has an active and fairly vibrant core (Map 13). Downtown was the place from which the town was originally developed and it stretched over several blocks. 50th (Main) street is the core's busy commercial artery, which still attracts local and out-of-town visitors. One of the aspects that distinguished the core is the very attractive murals. They tell the towns' history and celebrate the people that took part in its evolution. Recently, the town considered the building of mixed-use medium-density structure.

Recent Trends

With the introduction of big boxes and power centres, many towns saw the decline of their downtown. Big business left along with the population that resided in the core and patronized these establishments. In recent years, revitalization programs became "buzz words" of many communities.

To foster sustainable existence of the core, several strategies have been developed. The first has to do with repopulation. The building of mix-use structures where residences live about business is one favourable approach. The other avenue is to attract new business to downtown. It is clear that in order to thrive, core areas need to have more than several small friendly stores. Therefore, strengthening the economic viability of the area has become highly important in any revitalization strategy. There must be other draws in the core. In addition to commercial activities they can be public functions like libraries and social service buildings. Some towns also invested in developing the architectural appeal of their cores. Those who lack architectural guidelines are introducing them along with master plans to guide future development.

2.10 Community Services

Current Status

The town of Stony Plain is endowed with a wide range of country services that includes, among others, policing and the fire department. A new Health Services Centre was constructed in the year 2000. In addition, the town also has a museum, a public library and it houses a provincial court building.

Recent Trends

Recent trends in community services development include attention to their location as well as their function. The notion of sustainability prevails in their introduction as they are seen as contributors to the greater good of the community. Good schools, for example, tend to attract good teachers, which in turn attract good citizens. The school building is not only regarded as a place of study during daytime but as a place for after-hours continuing education activities for adults. The school can also serve as a recreational place for the community at large, either after hours or on weekends.

As far as the location of these functions is concerned, in recent years it was recognized that the place of services is adjacent to, or in the heart of, the community. Avoiding travel by car and encouraging walking or biking has become an essential part of setting these functions.

2.11 Transportation

Current Status

The Town of Stony Plain is located in a highly convenient place from a regional transportation point of view. Its proximity to Highway 16 and Highway 16A, as well as Highway 779 and 628 make the town accessible for commuters who arrive from the greater Edmonton area as well as from other Alberta's destinations.

The local road network also satisfies the need of the community (Map 12). The town's small scale does not justify the introduction of regular local bus services. What seems to be missing is a well-established network of sidewalks and bike lanes along local roads.

Recent Trends

With the rise in the cost of fuel, some commuters are considering using public transit. Unfortunately, small towns do not have the means to introduce their own transit system and therefore resort to collaboration with other towns. Having a shuttle bus between towns in the metropolitan area is a strategy that some are adopting. In addition, smart growth strategies also see increase reliance on other means of commuting, such as comfortable networks of pedestrian systems and bike paths connecting various communal destinations.

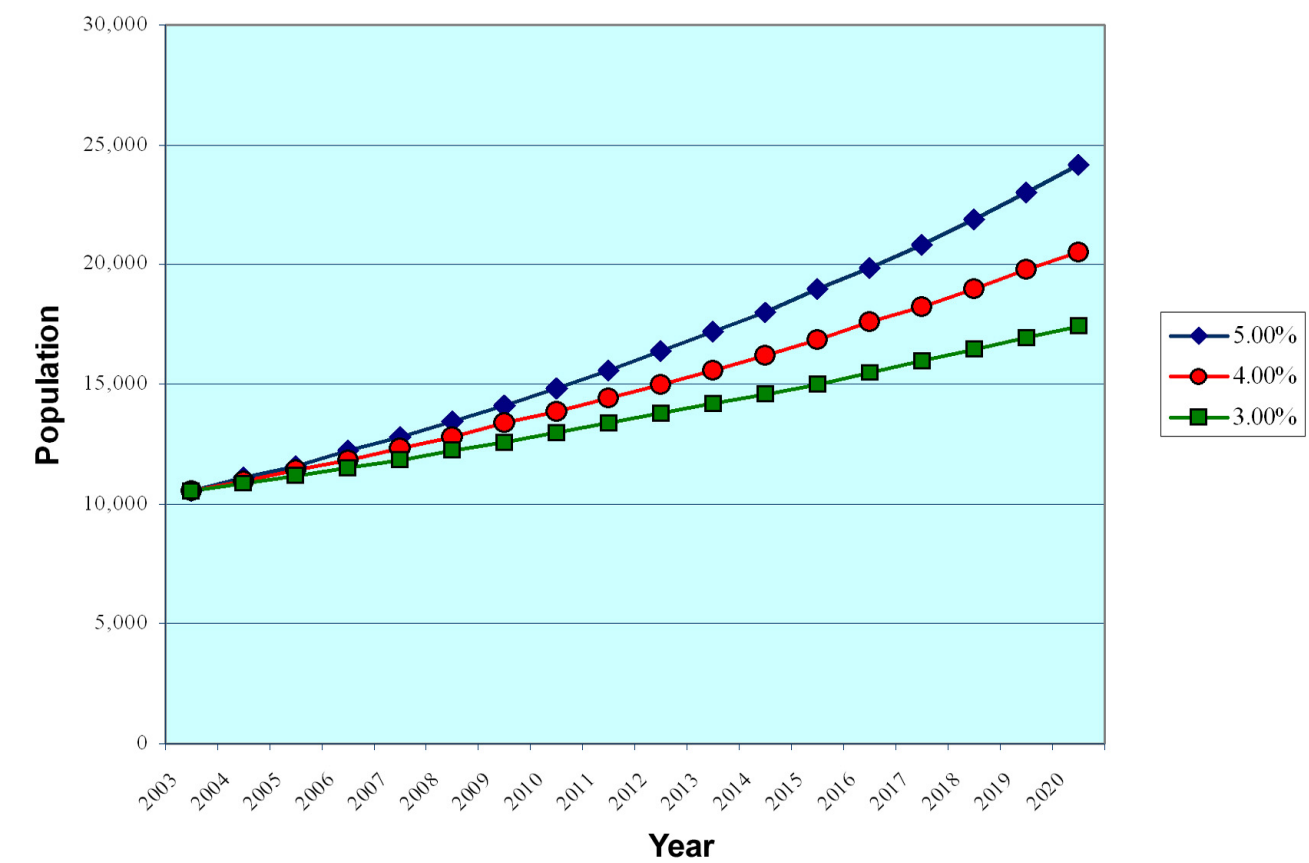
Employment Status by Age and Gender

Emp. Status	% Total Pop. by Emp. Status	0/15 (%)	16/29 (%)	30/54 (%)	55/64 (%)	65 + (%)	M (%)	F (%)
Student	5	5	20	--	--	--	5	5
Post-Secondary Student	2	--	7	--	--	--	2	2
Employed Full Time	37	--	49	65	40	2	45	29
Employed Part Time	7	--	12	11	12	2	3	13
Self-Employed	5	--	2	10	10	2	7	5
Unemployed	5	--	6	9	5	--	2	8
Retired	14	--	--	1	28	92	11	15
Other/ Not Applicable	25	95	4	4	5	--	25	23

Observations:

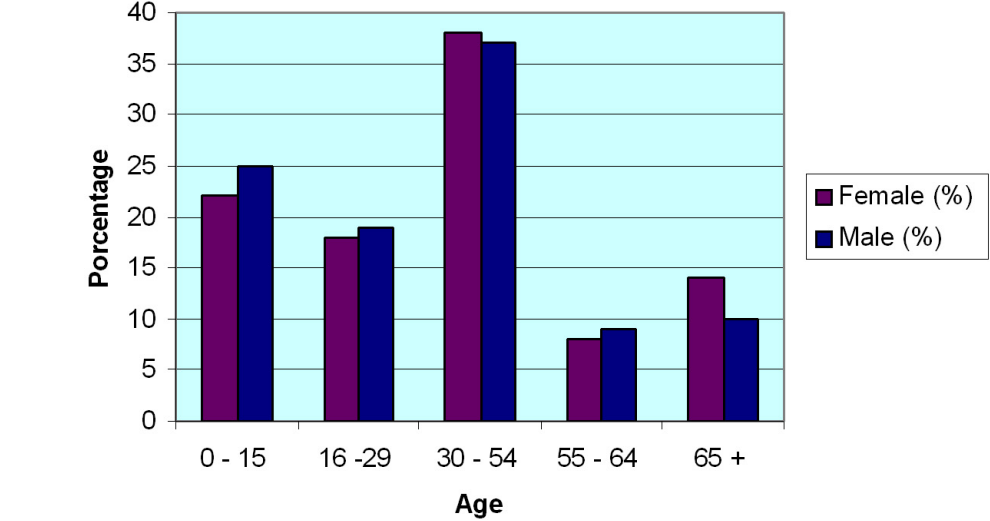
- 14% of all respondents indicted they are retired
- 92% of those aged 65+ and 28% of those aged 55-64 said they were retired
- 37% of respondents indicated they are employed full time, and 65% of those aged 30-54 said they were employed full time
- Of male respondents, 45% indicated that they were employed full time, and only 3% part time
- Of the female respondents, 13% indicated they were employed part time, and 29% full time
- 5% percent of respondents indicated they are self-employed, the majority of which are in the 30-64 age range
- The 2001 federal census indicates that 81.6% of income came from earnings, 10.4% from government transfers, and 7.9 % from other

Projected Population Growth 2003-2020



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
5.00%	10,544	11,071	11,625	12,206	12,816	13,457	14,130	14,836	15,578	16,357	17,175	18,034	18,936	19,882	20,876	21,920	23,016
4.00%	10,544	10,966	11,404	11,861	12,335	12,828	13,342	13,875	14,430	15,007	15,608	16,232	16,881	17,557	18,259	18,989	19,749
3.00%	10,544	10,860	11,186	11,522	11,867	12,223	12,590	12,968	13,357	13,758	14,170	14,595	15,033	15,484	15,949	16,427	16,920

Age by Gender



Observations:

- The 0-15 age cohort makes up 24% of the population
- The 16-54 age group accounts for 56% of the population
- 20% of the 2003 population is in the 55+ cohort
- 51% of the 2003 population is female with the largest number of both males (37%) and females (38%) occurring in the age 30-54 cohort

Type of Dwellings and their Status

Status and Type	# Dwellings	% of Dwellings	% of Residents
Status:			
Own	2,941	77%	80%
Rent	821	21%	20%
Under Construction	18	--	--
Vacant	70	2%	--
Total	3,850	100%	100%
Type:			
Multi-Family	979	26%	20%
Single Family	2,852	74%	79%
Other	19	--	1%
Total	3,850	100%	100%

Observations:

- The number of dwellings increased by 12% over the 2001 federal census, with 26% being multi-family units and 74% single family units
- 77% of the dwellings are owned, and 21% rented

SOCIO-DEMOGRAPHICS

Legend

Town Population in 2003: 10,544

Avi Friedman Consultants Inc.



Title: Socio-Demographics

Scale:

Map No: 05

Drawn by: Juan Mesa

3.0 Setting Objectives

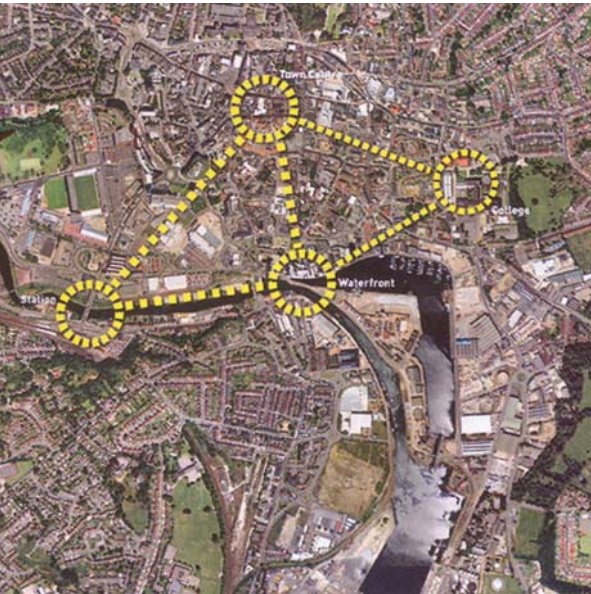
In setting objectives, the author has closely examined Stony Plain’s own goals as well as those that were conveyed through participants’ interests that were expressed in the town hall meeting. Close attention was also paid to transcripts of interviews made with several council members as well as the reports that have been compiled by other consultants. Setting short and long term attainable objectives was a key aspect of the thought process. The author believes that most of the ideas expressed here are within the reach of Stony Plain citizens and leadership, either in the short or long term. Some, however, will require a fresh look and reformulation of current practices.

In each of the categories examined, we have selected key elements that have been divided into 3 components:

- Need – in which we express a desire by the citizens, current leadership or a response to current trends.
- Visions – in which we attempted to draw an image of how the town (or a particular area within it) may look once these strategies are adopted.
- Action – broad action that needs to be taken in order to attain that objective.

Each of the objectives is accompanied by an image or a map that, to the best of our abilities, captures the essence of the idea expressed in that objective.

3.1 Growth Management and Urban Form

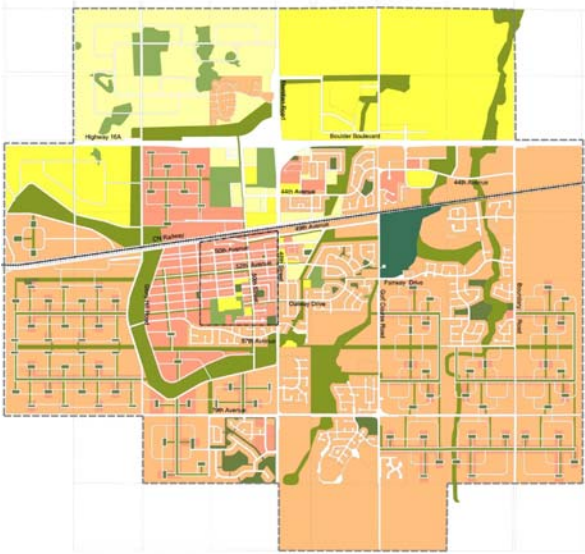


Tax Base Expansion

Need: At present the town draws most of its income from residential taxes. To offer its citizens more amenities and services the town needs to expand its tax base.

Vision: The town will seek collaborative, cost-sharing opportunities with neighbouring towns.

Action: Some possible collaborative cost sharing with Spruce Grove can be in the areas of business park development, public transit, education and water management.



Mix Densities

Need: Despite forecast growth, Stony Plain wishes to retain small town atmosphere where low density residential will be the dominant dwelling form. Yet, at the same time the town wishes to avoid urban sprawl.

Vision: To maintain overall low density the town will have higher density structures (not exceeding 6 stories) along arterial roads and in the periphery of its neighbourhoods.

Action: The town will examine and revise its current density allocations along arterial roads and identify areas where they can be increased.



Maintaining “Small Town” Character

Need: Forecast indicates that Stony Plain will reach a population of, 16,000 to 23,000, by the year 2019. Yet, there is a strong desire to keep the current “small town” character.

Vision: More land (than the traditional 10%) will be allocated to green public spaces in future neighbourhoods. The additional area can be gained by increasing the density of some parts of the community. In addition, the town will explore development of linear park on lands it owns.

Action: In the coming years Stony Plain will develop in collaborating with a private developer a model demonstrating community base on green open space ideas.



Centrality of the Core

Need: Stony Plain wishes to maintain the centrality of its core area as it expands.

Vision: The town will have an urban model that grows organically from the centre.

Action: The town will direct further expansion into an area that keeps the historic central core. In general, the town will guide its evolution to areas it wishes to develop rather than respond to emerging opportunities.

3.2 Residential Development



Locating Amenities

Need: To support sustainable planning practices the town wishes to reduce reliance on private car as the only mode of local transportation.

Vision: Future services and amenities will be located at the intersection of arterial roads that boarder several communities for the purpose of making these elements economically viable.

Action:

1. The town will locate further school sites and commercial amenities on the edges of new communities.
2. The town will explore offering permit to home owners who wish to operate non-noise generators business from home.



Streetscape

Need: To maintain its sense of friendliness and improve its curb appeal, the town wish to integrate in its residential areas streetscape features that promote interaction between residents.

Vision: Future streets design will include mandatory requirements for benches, light poles, building boards, etc.

Action: The town will implement guidelines for streetscape in neighbourhoods that will include: tree planting, etc. to which developers will adhere.



Affordable Homes

Need: To maintain a proper demographic continuum the town recognize that it is necessary to keep its young population in the community. Housing is recognized as essential part of this strategy.

Vision: As part of its residential offering the town will have affordable housing stock. Criteria for cost of dwelling will be based on 30% of one’s income devoted to shelter.

Action:

1. The town will designate areas for affordable housing as part of its neighbourhood planning.
2. The town will develop incentive mechanisms aimed at developers for construction of affordable housing.



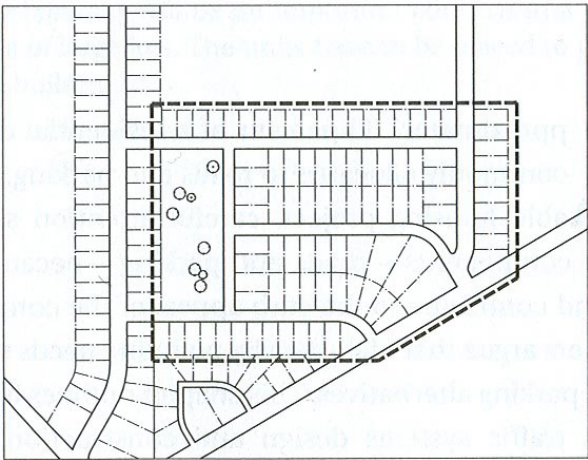
Mix Housing Types and Options

Need: As Stony Plain’s population grows a need to house people of different age groups and backgrounds will also be expanded.

Vision: To foster better integration among residents of different ages and demographic backgrounds, the town will have neighbourhoods with mix housing types and densities.

Action:

1. The town will permit the sensible integration of mix housing types in its neighbourhoods
2. The town will explore bi-generational homes to house extended families.



Connected Neighbourhoods

Need: At present, some of Stony Plain’s new neighbourhoods seem to be disconnected from each other.

Vision: To foster better integration of future communities the town will seek to connect its neighbourhoods by linking them through arterial roads.

Action: The town will explore its roads system and will propose routes and arterial roads that will foster more connection among communities. The process will discourage passage of cars through local streets, but permit them in arterial roads.

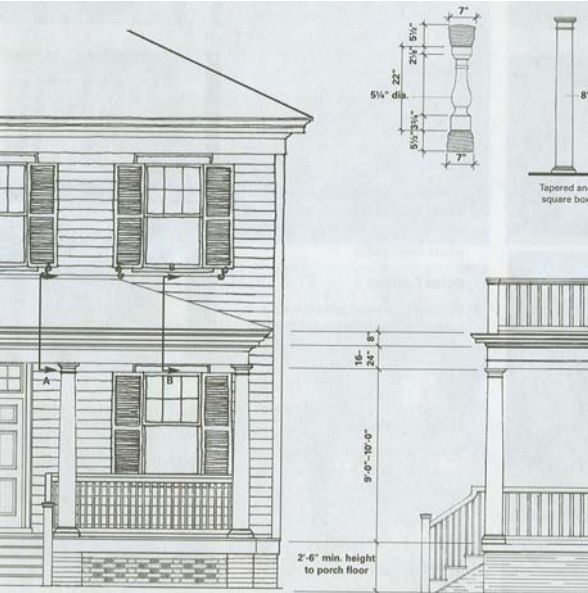


Tall Edges Buildings

Need: The town wish to maintain low density, yet accommodate its non-traditional households within its neighbourhoods.

Vision: Neighbourhoods will be made of mix housing types which will locate on the edges of new communities.

Action: The town will look into developing a model demonstration community.



Residential Architectural Guidelines

Need: The town wishes to foster a greater coherence of its residential image. At the present there are few guidelines that convey overall architectural character of the community and the appearance of its homes.

Vision: Future homes in Stony Plain will conform to overriding new guidelines that will foster greater consistency of appearance.

Action: The town will adopt as part of its by-laws a new set of architectural guidelines to be submitted along with a design of new developments.



Senior Housing

Need: Growth of the senior population is expected to rise in Stony Plain as the baby boom generation retires and more housing for senior will be required.

Vision: The town will have greater range of housing alternatives for seniors who will include independent as well as assisted living and bi-generational housing.

Action: 1. The town will undertake to study the implications of future ageing on its residential offering.
2. The town will invite developers of assisted and non-assisted senior housing to invest in Stony Plain.

3.3 Economic Development and Tourism



Business Park

Need: To offer a greater number of amenities and services, as well as generating more employment for young people the town needs to expand its residential tax base to include other sources of income through wealth generators.

Vision: The town will become more proactive in its entrepreneurial approach and seek collaboration with the private sector in the development of a new business park. New jobs for young professionals will be created as a result.

Action: The town will identify an area for a business park development and will seek collaborating with the private sector and/or other municipalities for its establishment.



Small Stores

Need: The town wishes to support the economic vitality of its small business sector.

Vision: The town will prohibit the building of big box stores south of Highway 16A to support local business activities whenever possible. The town will permit the building of apartments above business in commercial buildings.

Action: the town will introduce a by-law prohibiting building big box stores in some areas.



Downtown: a Tourist Destination

Need: The town wishes to increase the activity and the vitality of its downtown core through attraction of tourists.

Vision: Future development plans will see the core becoming a major tourist attraction drawing people from regional destinations.

Action: The town will pursue plan of action to promote its downtown image regionally. Signs guiding visitors to the core will be placed throughout the town.



First Impression

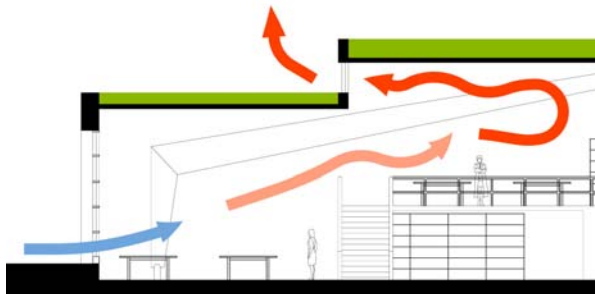
Need: Passing motorists on Highway 16A get a poor first impression of the town as a result of non-attractive business establishment. In addition 48th Street, with the exception of the area adjacent to the rotary park, lacks character and needs improvement.

Vision: Beautification of the existing entrance way as well as new direction signage for local streets will be introduced in the coming years.

Action: The town will approach business owners near the town and 48th Street about fencing their lots. It can also introduce an “adopt a wall strategy” and expand the mural program to that area.

3.4 Environmental Management

A LEED Town



Need: The need to address global and local environmental concerns requires examination of steps that will ensure adoption of proper environmental practices.

Vision: Stony Plain will become an environmental leader by adopting LEED guidelines for residences and neighbourhoods as an official municipal policy.

Action: The town will explore requiring all future developments of residential or commercial buildings to provide LEED assessment tables.

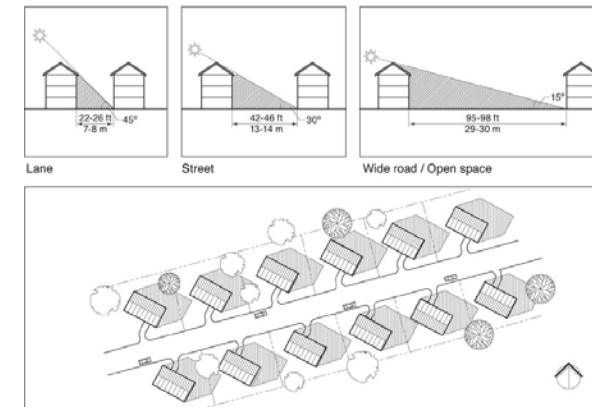


Green Public Buildings

Need: The town wishes to lead by example on matters related to the environment.

Vision: The town will demonstrate leadership by having all its building design for energy efficiency and use of alternative cost-saving /low emission energy sources.

Action: The town will develop a green architectural guidelines for all its present a future public buildings.



Energy Saving Urban Practice

Need: The need of lower rising energy cost requires new approach to the design and construction of new communities and homes.

Vision: The town wishes to foster environmental sensitivity in planning of new neighbourhoods and design of new homes.

- Action:**
1. Guidelines will be established for the orientation of streets in east west direction to increase passive solar gains.
 2. Homes will be built according to LEED guidelines.
 3. The town will establish guidelines for sustainable neighbourhood design.



Flora and Fauna

Need: To foster a “green” image, conserve water and adopt better environmental practices the town need to protect its flora and fauna heritage.

Vision: The town will pay special attention to existing patches of green areas and encourage xeriscaping.

- Action:**
1. The town will require environmental assessment prior to the start of new development.
 2. The town will create guidelines for the use of alternatives to sod planting methods.
 3. The town will limit the use of sod in its parks and encourage citizens to do the same.

3.5 Historic Downtown Core

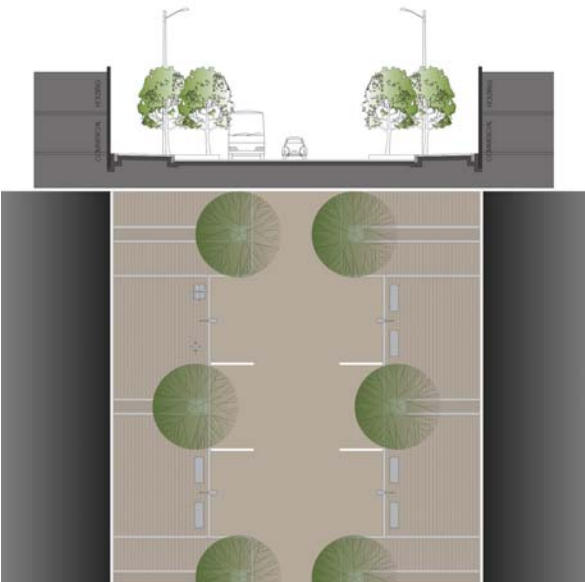


Increase Population

Need: To maintain the economic vitality of downtown business, there need to be greater economy of scale though the increase of downtown's population.

Vision: The number of residents living in the core will increase in years to come as part of the overall growth.

Action: The town will gradually increase the height and the density permitted in the core. New projects built in designated areas will be taller and have apartment above stores.



Parking

Need: To foster pedestrian friendly environment the on-lot front parking need to be avoided.

Vision: The Downtown will have front on street angled parking but not on-lot front business parking. Places for employees parking and overflow costumers will be at the rear or on special lots located on the core's edge.

Action: The town will undertake to study and proposed alternative parking locations and strategies.



Architectural Guidelines

Need: As the core may become a draw and a regional tourist attraction more effort need to be invested in its aesthetic/architectural appearance.

Vision: Downtown will have designated specific architectural design guidelines to ensure harmony of forms, materials, colours, and proportions.

Action: The town will enact a set of guidelines to which further new buildings and renovated ones will adhere.



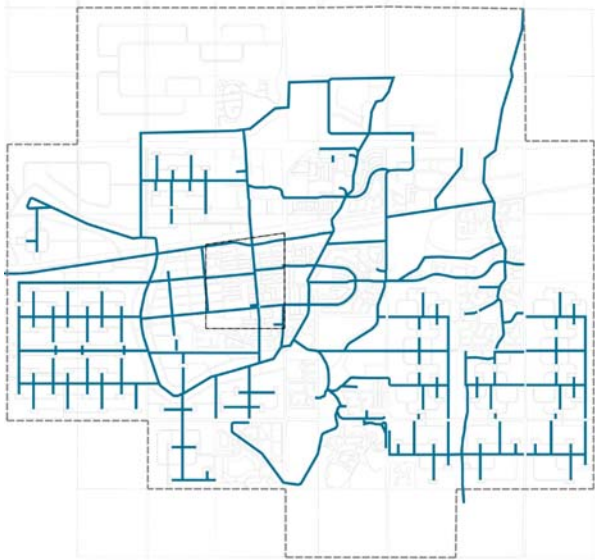
Additional Anchors

Need: At present there are enough businesses to support downtown activities. Yet, in the future as the population grows more business will be required to compete with the existing power centres.

Vision: More business will be attracted to downtown as its population increases. Also, some existing blocks will be redeveloped as part of a renewal process.

Action:

1. New activities and amenities will be offered to attract more costumers. Some of these amenities will be: an art gallery, cinemas, and a performing arts centre.
2. An effort will be made to promote and advertise the core in the region.



Connections

Need: Residents of Stony Plain are tempted by the convenience offered by big box stores (inexpensive products, ample parking, etc.) in Spruce Grove. Also, there is not an easy pedestrian and cyclists access to the core.

Vision: The town will have a network of bicycle paths and sidewalks connecting neighbourhoods with the core.

- Action:
1. The town will undertake to explore and build sidewalks and bicycle paths to downtown.
 2. Future urban design will conceive the area as a winter town.



Mural Program and Art

Need: One of the most successful undertakings in Stony Plain is its mural Program. In addition to celebrating local history it beautifies the core.

Vision: The mural program will continue and possibly be expanded to other parts of the core or the town in general.

Action: A program and topics for new murals will be proposed. Also, other artistic endeavours, such as sculptures, should be explored.



Public Square

Need: A mark of a town where citizens meet each other is a public square. It acts as the town's living room. At present, Stony Plain does not have one.

Vision: Stony Plain will have a vibrant town square.

Action: The town will explore locations and constructs a gathering place. Preferably, the square will be framed by tall buildings and have business on ground floor and dwellings above.

3.6 Parks, Recreation, Open Space, Trail and School



Linear Park

Need: The success of the parks and trail system in Stony Plain makes it highly relevant to expand it. The system can become one instrument of linking neighbourhoods and provide the “green” that gives the town its uniqueness.

Vision: Stony Plain will expands its trails and park system.

Action: The town will explore location for a new linear park as a means of connecting future neighbourhoods.



Expanded Use of Schools

Need: With a greater investment in schools, a better use of these facilities becomes a reality.

Vision: Schools will have their libraries and sport facilities open to the public after hours.

Action: The town will explore collaborating with local schools boards to ensure expanded after hours use of the facilities.



Fitness and Recreation

Need: The lack of fitness among people and particularly among children is a leading cause of illnesses, such as diabetes and cardiovascular diseases. Encouraging an active life style should be a priority in Stony Plain.

Vision: The town will incorporate public sport amenities in its parks and neighbourhoods to improve fitness among its citizens.

Action: The town will make the building of play areas, jogging tracks and skateboard park as a mandatory part of every future residential planning initiative.



A Walkable Town

Need: To encourage fitness activities and to foster relations among citizens walking paths can be made part of the town’s planning.

Vision: The town will adopt a “pedestrian charter” and see that every new street will have sidewalks on one side of the road at the very least.

Action: The town will introduce sidewalks in new neighbourhoods and will explore their addition to existing communities.

3.7 Community Services / Cultural Issues



Winter Festival

Need: In addition to the existing festivals (Blueberry Bluegrass & Country Music Festival and Cowboy Poetry and Country Music Gathering) the town wishes to have a winter festival to stimulate the cultural life of the town during this season.

Vision: Future and existing festivals will take place in the Public Square which will be located in downtown. This new location of the festivals will bring people to the core, thereby consolidating it as a tourist destination.

Action: The office for Economic Development & Tourism of Stony Plain will engage the creation of a winter festival that will be related to the town’s cultural life.



Performing Arts Centre

Need: Currently, Stony Plain lacks a facility dedicated to the training, promotion, and presentations of performing arts such as: theatre, dance, music, etc. These activities are relevant in order to maintain the cultural values of its society.

Vision: The town will undertake to develop a Performing Arts centre, which can be a complex containing: library, auditorium and gallery.

Action: Located in the core, the town will allocated a lot to build a Performing Arts Centre which will be a landmark in the area and will attract people to downtown.



New Schools

Need: In some of the new housing developments in Stony Plain there are not schools for children residing in those areas.

Vision: Stony Plain will address the construction of new schools in those areas which are isolated from the urban core. As well, their sport facilities will be accessible to all the residents after school hours.

Action: State of the art new schools will be constructed and existing ones upgraded for use by the community.

3.8 Transportation & Infrastructure



Public Transit

Need: As cost of gas rises and the town increases its size the implementation of a public transportation system is necessary, to reduce reliance on private cars and to provide public transportation to people who are unable to drive (seniors, children, students, etc).

Vision: The town will adopt a new public transportation system to connect residential neighbourhoods to commercial, educational, cultural and health facilities.

Action: Inquire about the introduction of local public shuttle bus.



Intercity Public Transit

Need: Currently, Stony Plain does not have a regional bus service to other neighbouring towns or Edmonton. The town wants to be part of regional public transit services.

Vision: A shuttle bus will provide connection to Spruce Grove and Edmonton.

Action: In collaboration with other towns and cities, Stony Plain will explore engaging an intercity bus company and will become a destination.



Bicycle paths

Need: The town wants to encourage alternative means of transportation. In addition to existing trail system, new trails are required in the new areas of the town to enable all the residents to bike or walk from their residences to any part of the town.

Vision: Continuation of the existing trail system will be assured and incorporation of bicycle lanes in existing and new roads will be study to extend the coverage of bicycle paths in all of the town areas.

Action: In accordance to 2005 Trail Master Plan, the town will guarantee the undertaking to complete this plan and to ad additional trails recommended in this Master Plan.



Walkable Community

Need: There is lack of sidewalks in Stony Plain. The town wishes to increase pedestrian activity by constructing new sidewalks.

Vision: A network of sidewalks will be put in place to enable Stony' Plain's residents to walk from their homes to downtown.

Action: According to a proposed plan, the town will build sidewalks in designated areas.

4.0 Proposed Master Plan

4.1 Macro Scale

Land Uses (Map 14)

Based on the existing land uses which were included in the Municipal Development Plan (MDP) a reformulation of the town's land uses was proposed. The new plan preserved most of the uses proposed in the existing plan but made adjustments to some residential, commercial and industrial lands and integrated the new acquired areas.

In the existing land uses plan, the residential areas are distinguished as urban and rural. In that plan, the rural residential area was located in the south-east part of town. This area is closer to downtown than other urban residential areas located north of the Highway 16A. Therefore, the new plan proposes to have the rural residential area on the town's north-west and urban residential areas south of the highway 16A.

Another change made to the residential land use was to propose mix-use high density in the areas east of downtown, and those adjacent to the Exhibition Pavilion and the Pioneer Museum to the east. Expanding downtown and increasing its population is one of the proposed strategies to revitalize this area and its commercial activities.

In order to provide services to residential areas, some small commercial and institutional activities were located in the intersection of main roads. Also, a proposed Business Park is located on the north-west corner of the intersection of Highway 16A and Meridian Road. This location was chosen for being adjacent to the entrance to town from Highway 16A. The reason for this location is that the construction of the new business park will attract more investors for being in a privileged position.

Future Evolution Pattern (Map 15)

In the last years, Stony Plain has increased its urban area by building neighbourhoods in scattered locations disconnected from its urban centre. This expansion does not seem to follow a planned growth pattern. Also, each neighbourhood is designed as a separated entity that does not make part of a major master plan. Therefore, a plan of future urban evolution is proposed, illustrating how the town can grow in three phases. The plan contemplates the evolution of both urban and the green areas.

Building Density (Map 16)

The "small town" atmosphere is one of the main reasons why people chose to live in Stony Plain which characterized low density. Also, the town wishes to maintain that atmosphere while having urban growth. Therefore, the new density of the town is proposed in several areas according to the land use distribution.

The new residential areas are proposed as mix density places where low is combined with high density buildings which are located near major road intersections. In downtown and its expansion boundary, area of mix uses where population increase is required, high density is proposed. Also, low density residential areas are located in the north-west part of town. Industrial districts are proposed as low density areas.

Area of Economic Development (Map 17)

The town wishes to increase its tax base and diversify its economy. In order to achieve this objective the master plan includes a new area of economic development located along side Highway 16A. In this area a new business park is proposed. The main objective of the business park is to attract companies seeking to locate their headquarters which can provide employment to skilled workers and professionals. In addition to the mentioned area, the master plan proposes that neighbourhood commerce will be located along main roads. These commercial areas are meant to provide neighbourhoods with local services.

Parks and Trail System (Map 18)

According to the MDP the town plans to extend the existing trail and park system to other residential parts of town. Also, new developments shall be connected to that system. Therefore, the proposed park and trail system took the existing plan and proposes a network of parks and trails that should accomplish one main objective: all residential areas will be connected to downtown and other points of interest by green corridors. This idea is achieved by implementing the following projects into the master plan: a main linear park, secondary linear parks, and a network of neighbourhood parks. A main linear park (green belt) surrounds downtown and connects all different areas of the town. This main park was located on patches of land own by the town and on existing forested areas. Some other lands were necessary to create a continuing green area.

Secondary level linear parks are proposed to connect neighbourhood parks to the main lineal park. These green spaces are located along arterial roads that articulate main access way to neighbourhoods. These spaces may be located along wide sidewalks or on green medians.

At a smaller scale, neighbourhood parks are designed to provide each neighbourhood with children play spaces, sitting areas, fountains, and vegetation. Each neighbourhood shall have its own park. These spaces are also meant to enable communities to create their own identity by designing each park differently.

Public Buildings (Map 19)

In sustainable communities services are located within walking or short driving distances. Therefore, the proposed master plan includes construction of local services such daycares, schools, and community centres within the boundaries of new neighbourhoods. Also, in the revitalization of downtown, new services are proposed to create more activity in downtown and draw people to that area. These new services are: a civic square and a centre for performing arts.

Transportation Network (Map 20)

As the town will continue to expand its urban tissue and new developments will be built in the periphery, a new road network needs to be implemented. This network follows a hierarchical system that goes from main (highways and collectors) to local roads.

In the neighbourhood design, Stony Plain has followed different street patterns that go from the Gridiron pattern to Loops, Lollipops and Warped Parallel. The last patterns have created non connected neighbourhoods. Therefore, the new proposed patterns ensure connectivity among neighbourhoods. Also, these local roads are connecting a system of neighbourhood parks.

Shuttle Bus Service (Map 21)

As the town's urban area is expected to grow along its population (especially seniors), need for public transit is expected to appear. In the master plan this issue has been addressed by implementing three bus routes that are distributed in different areas of the town.

The Routes 1 and 2 are to be implemented in a first phase and are covering the eastern part of town where the existing residential developments are. The Route 3 is to be implemented in a second phase covering the western part of town. Additional routes will be included in the transit system as the town expand its urban area.

Bike Path System (Map 22)

Another aspect to be considered in the creation of a sustainable community is to implement alternative, non-polluting transportation systems. In the master plan the implementation of a bike path system provides the town's inhabitants the opportunity to ride their bikes from any part of town to downtown or other town neighbourhoods.

This system is located along the parks and trail systems and in existing sidewalks. Also, three different sections have been proposed to be included in the Bike Path System: Mix Use, Single Use-Bicycle, and Multi Tread-single use/pedestrian.

Micro Projects (Map 23)

This plan shows the location of three projects to be developed in a smaller scale. Those projects are: guidelines for downtown, the conceptual design of a civic square, and guidelines for a typical neighbourhood. The selection of these projects was made by considering the town's most immediate plans and needs.

EXISTING LAND USES

Legend	Area (Ha)	%
--------	-----------	---

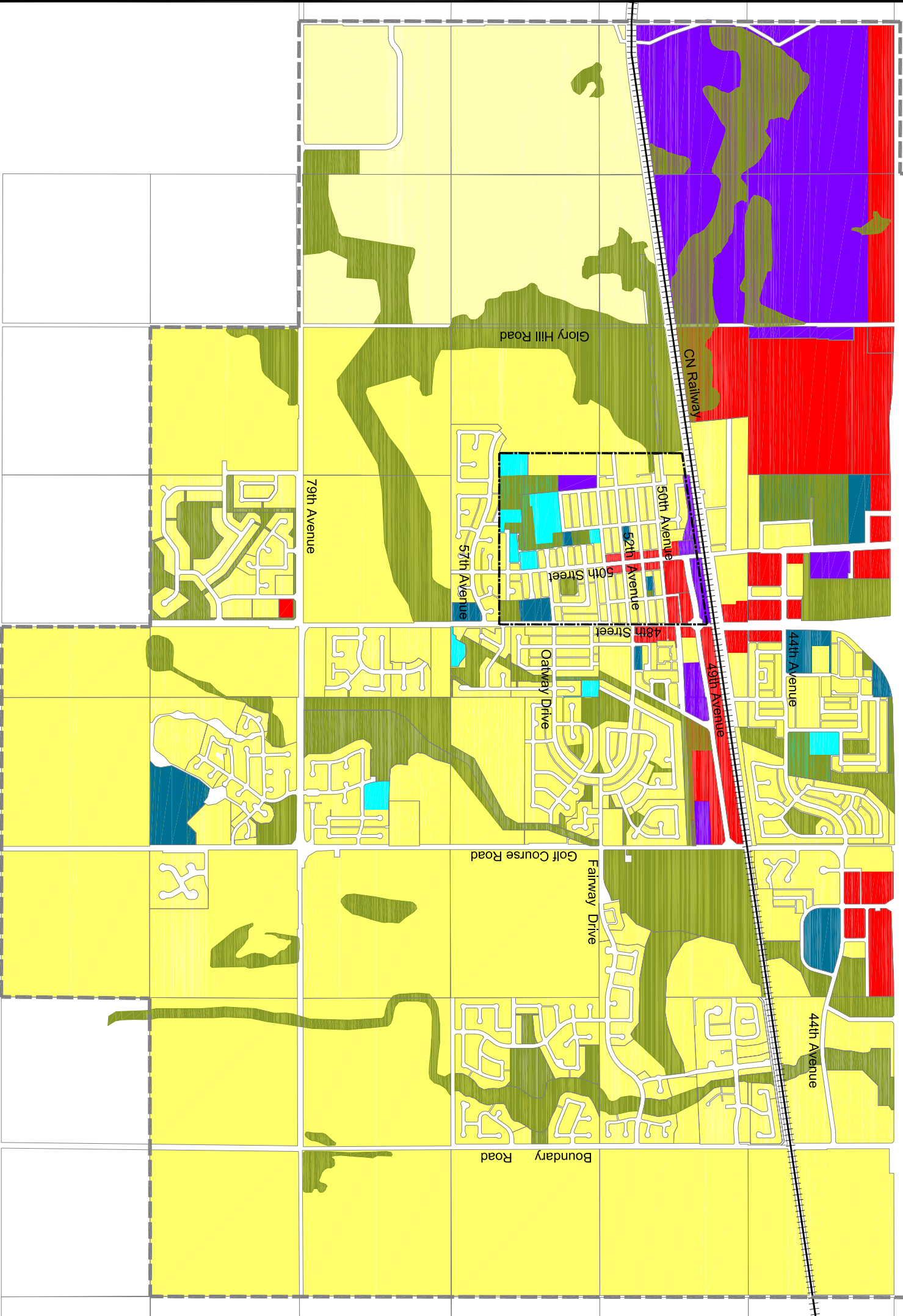
<div></div>	Urban Residential	1,738.73	53.00
<div></div>	Rural Residential	249.96	7.62
<div></div>	Commercial	180.88	5.51
<div></div>	Industrial	534.07	16.28
<div></div>	Institutional	42.14	1.28
<div></div>	Educational	10.14	0.31
<div></div>	Public Utility	15.01	0.46
<div></div>	Green Spaces	510.00	15.54

TOTAL 3,280.96 100.00

Town Limit

Historic Downtown Core

Note: the above figures do not include the road area.



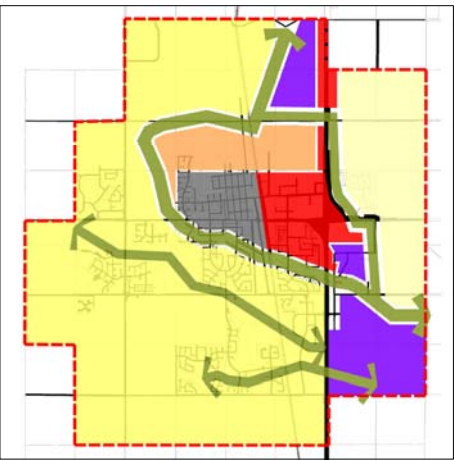
Avi Friedman Consultants Inc.

Title: Existing Land Uses

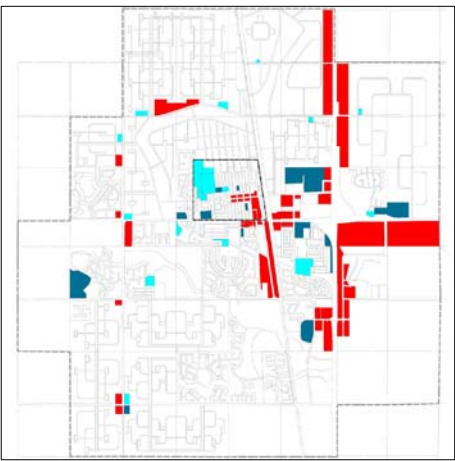
Scale: 1:25,000

Map No: 06

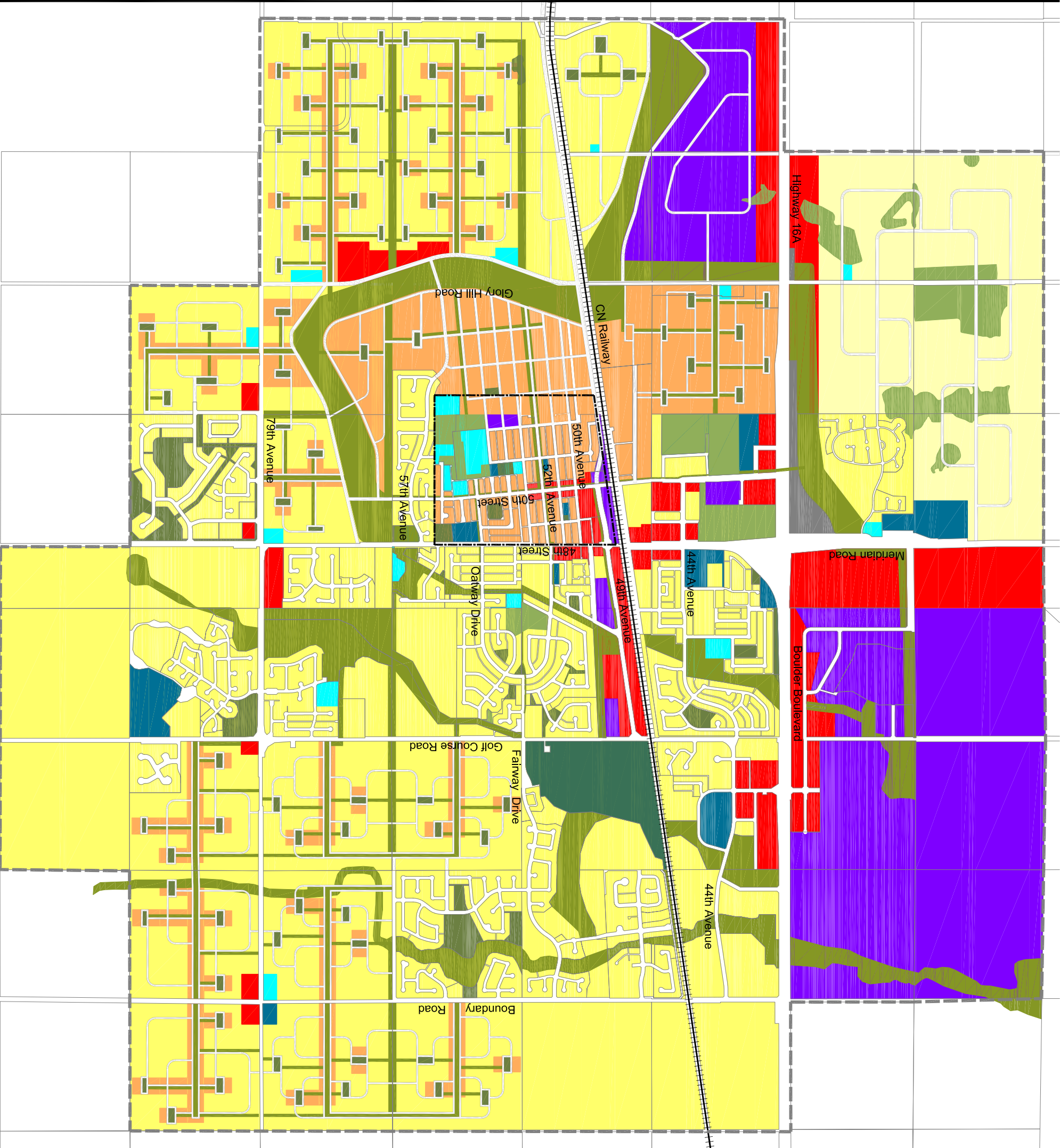
Drawn by: Juan Mesa















Conceptual Land Use Map



Location of Existing and New Services and Commerces

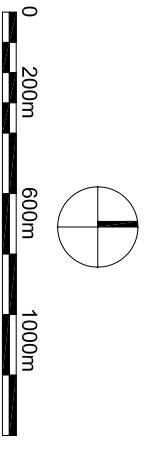


PROPOSED LAND USES

	Urban Residential	1,482.19	45.18
	Rural Residential	252.90	7.71
	Mixed Use-High Density	371.52	11.32
	Commercial	174.98	5.33
	Industrial	446.77	13.62
	Institutional	56.61	1.73
	Educational	41.26	1.26
	Public Utility	10.14	0.31
	Linear Park	296.30	9.03
	Town Parks	81.95	2.50
	Neighbourhood Parks	30.06	0.92
	Golf Course	36.23	1.10
TOTAL		3,280.96	100.00

Town Limit

Historic Downtown Core



Title: Proposed Land Uses

Scale: 1:25,000

Map No: 14

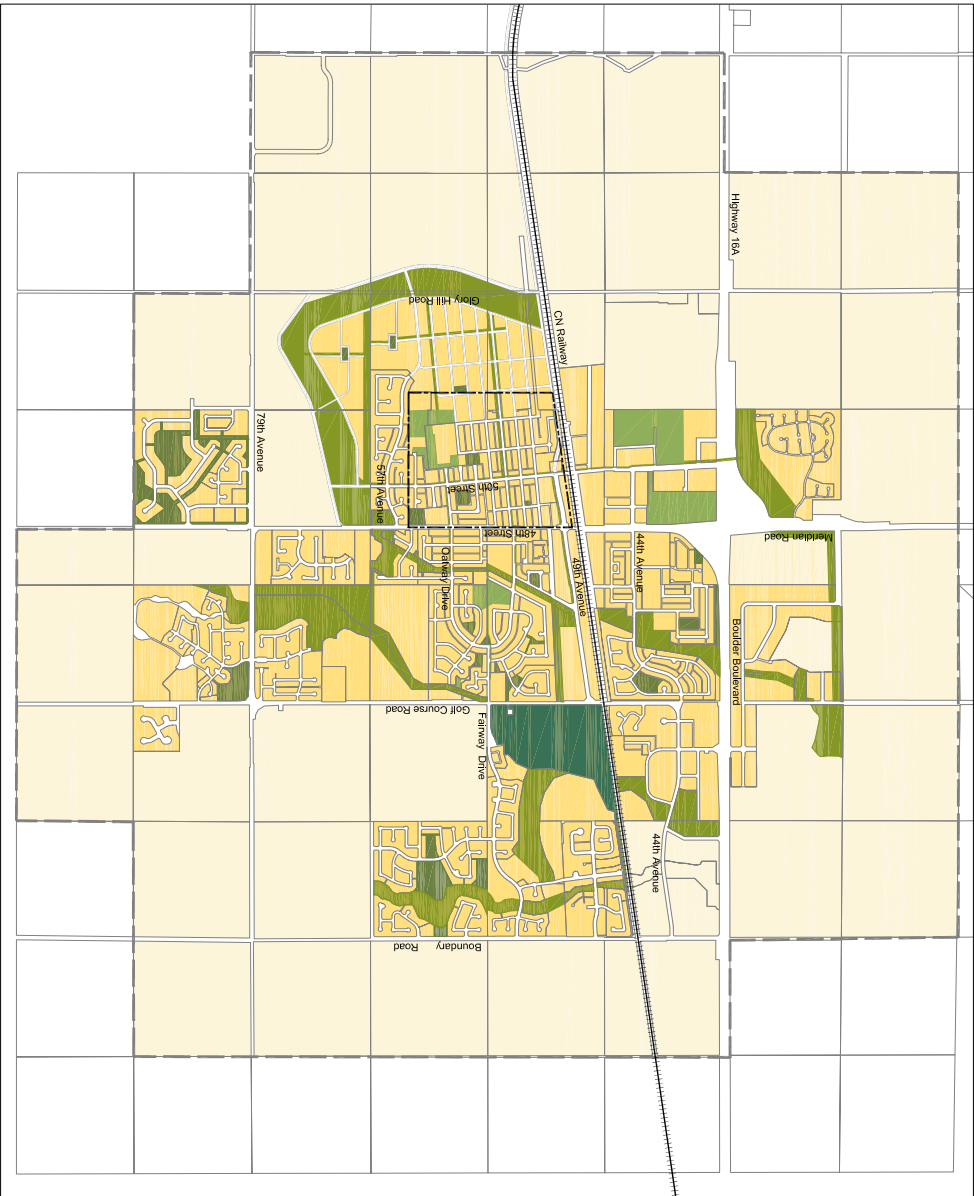
Drawn by: Juan Mesa

Avi Friedman Consultants Inc.

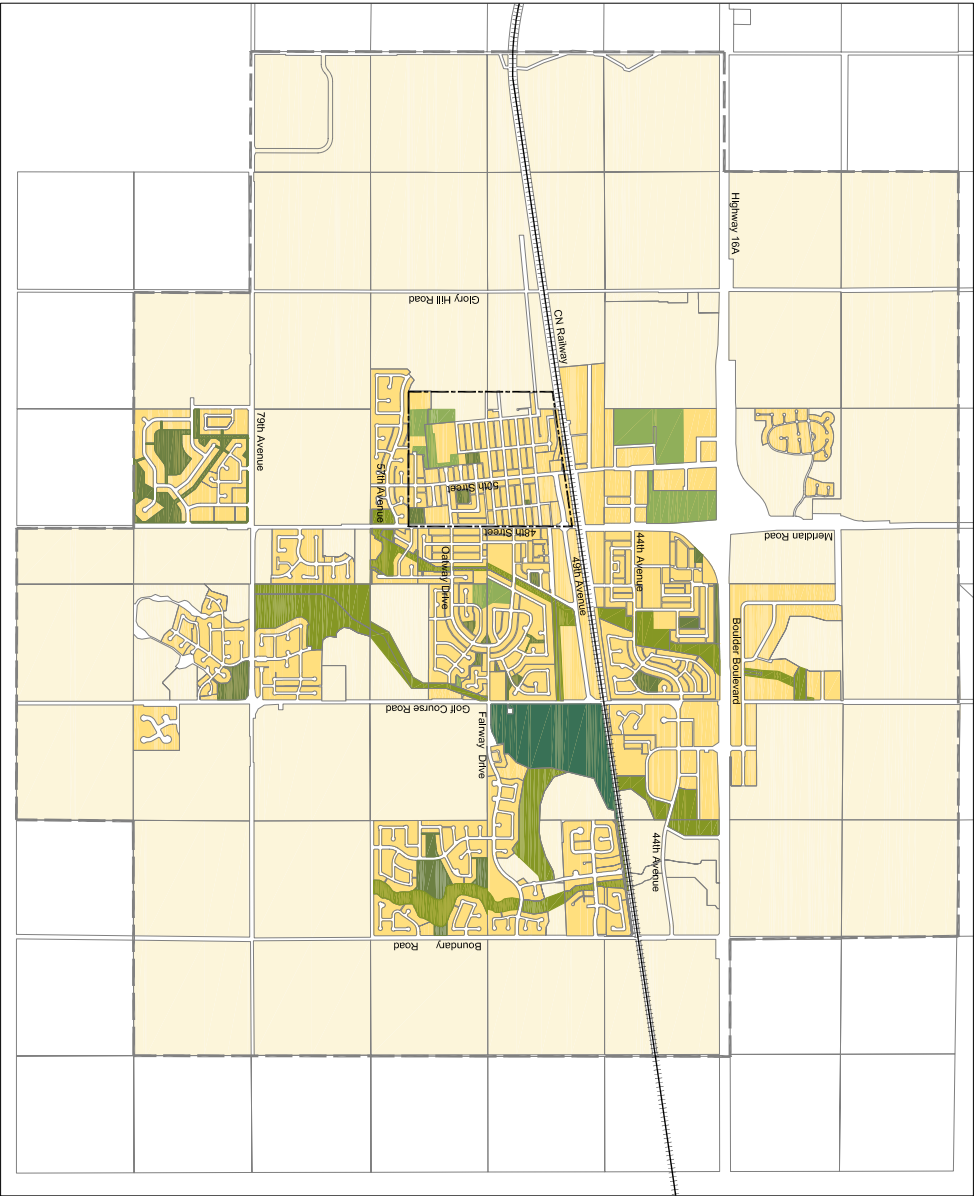
FUTURE EVOLUTION PATTERN

Legend

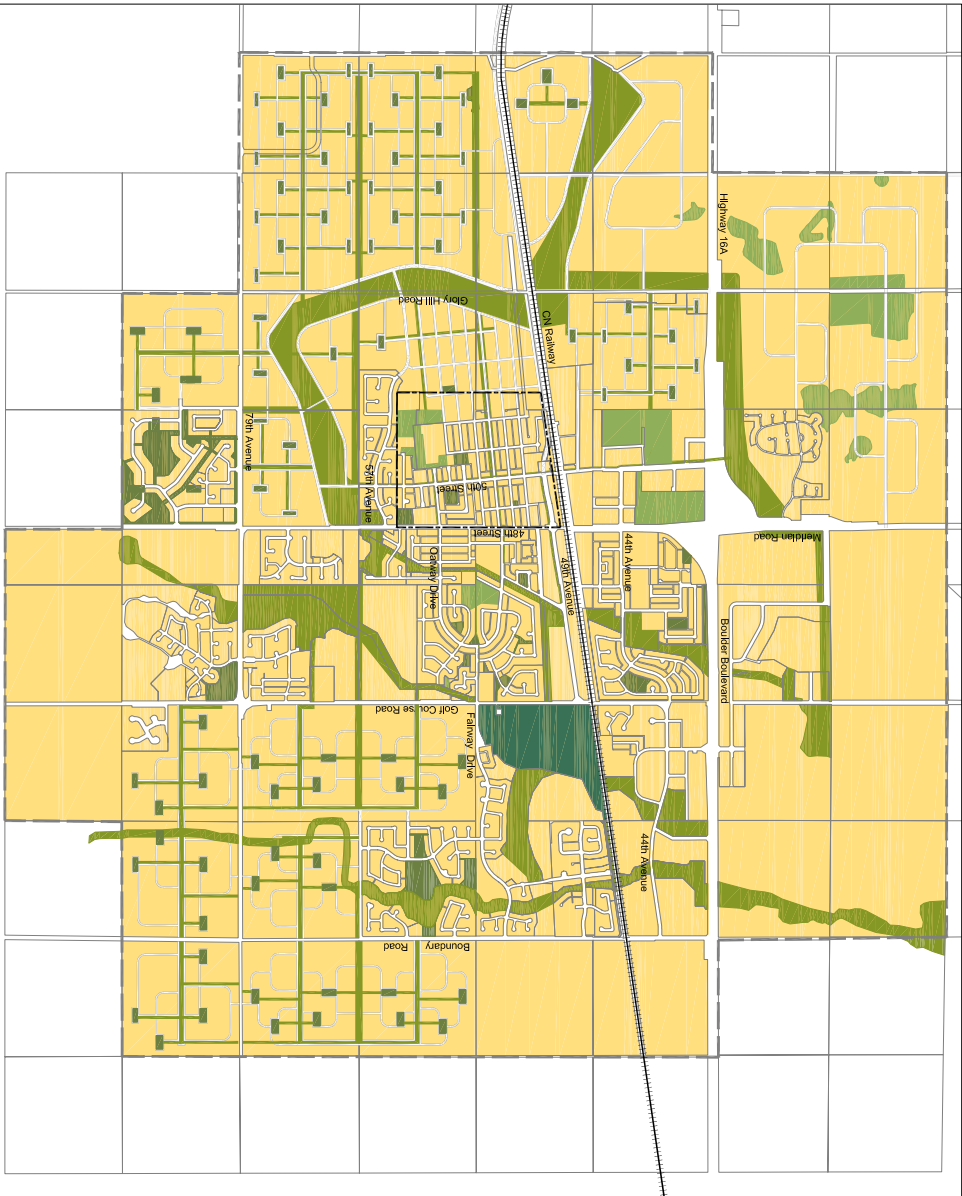
- Proposed Growth
- Non Developed Area
- Town Limit
- Historic Downtown Core



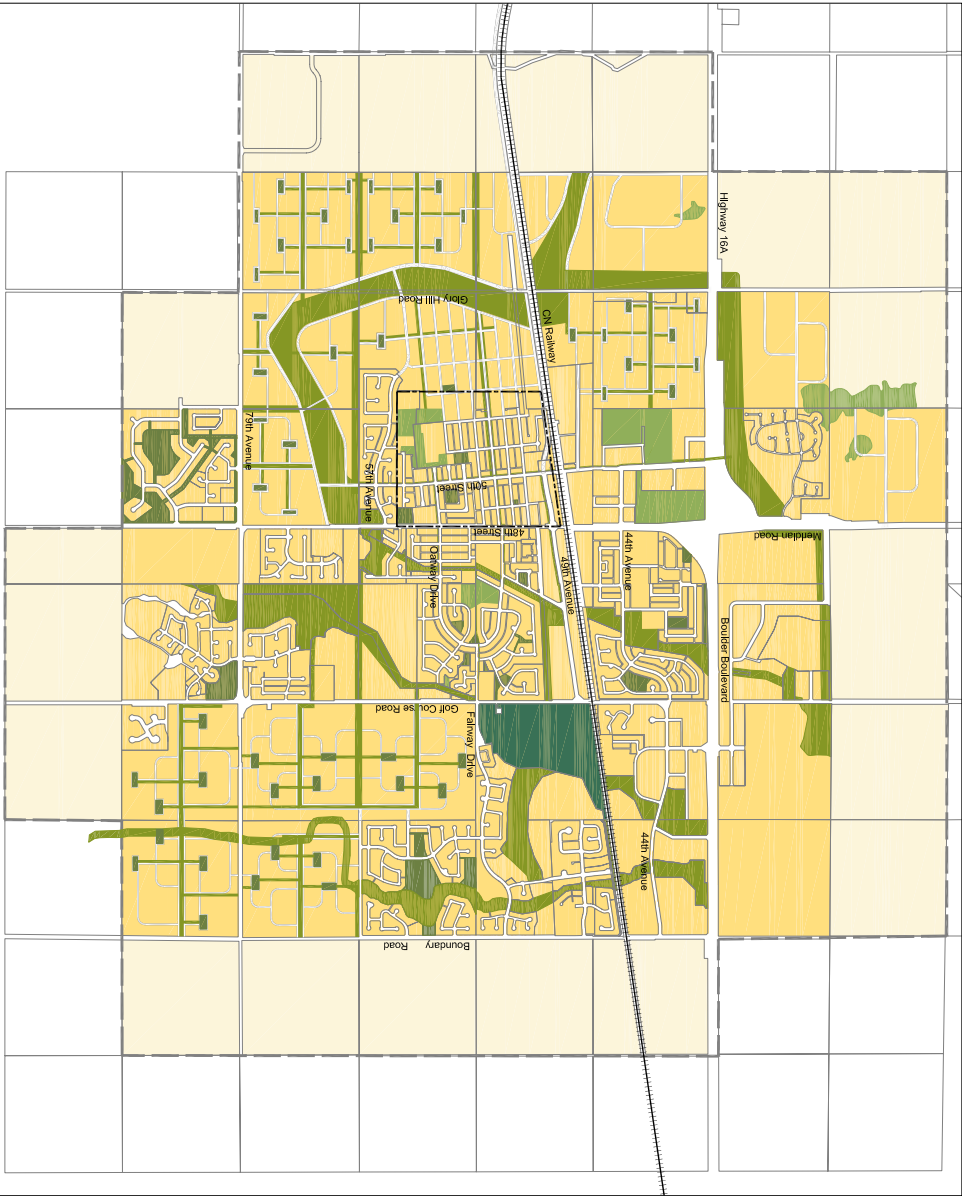
Phase 1



Existing Situation



Phase 3



Phase 2

Avi Friedman Consultants Inc.



0 400m 1000m 2000m

Title: Future Evolution Pattern

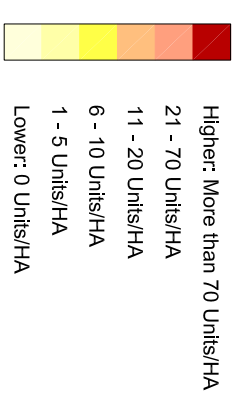
Scale: 1:52,000

Map No: 15

Drawn by: Juan Mesa

EXISTING BUILDING DENSITY

Legend

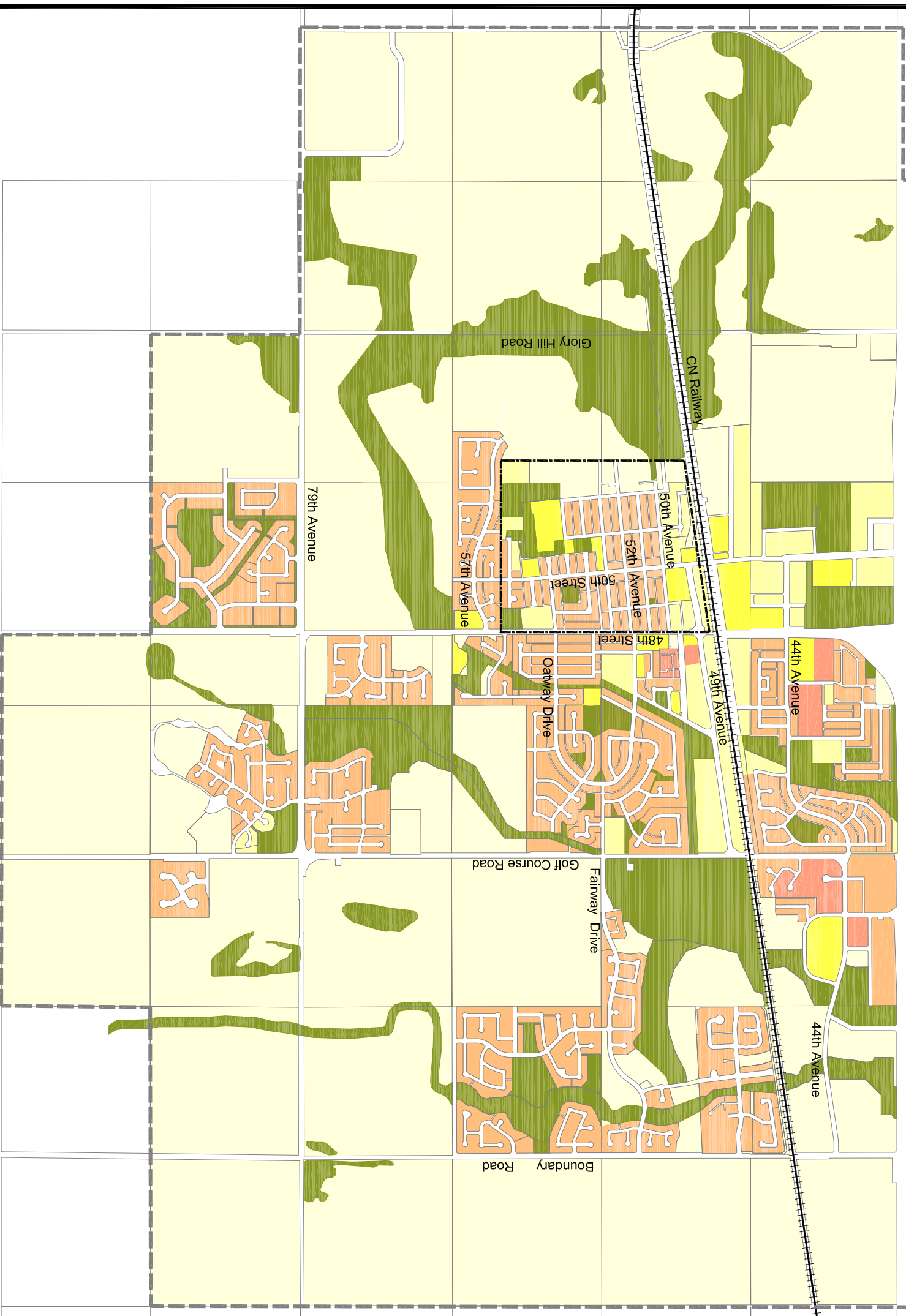


Not applicable (Park, Open Space)

--- Town Limit

Historic Downtown Core

Note: the density figures refer to buildings per hectare.



Avi Friedman Consultants Inc.

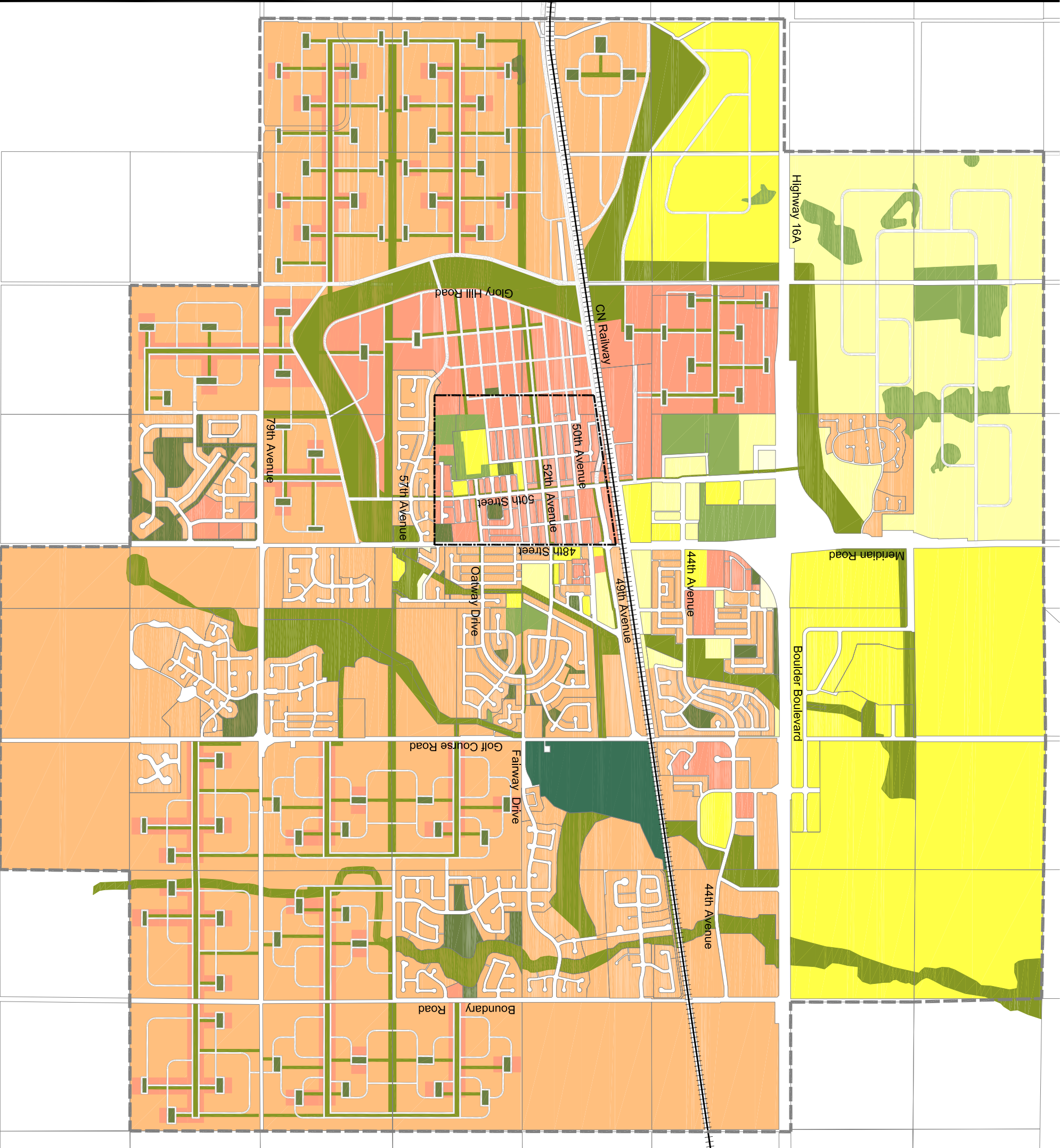
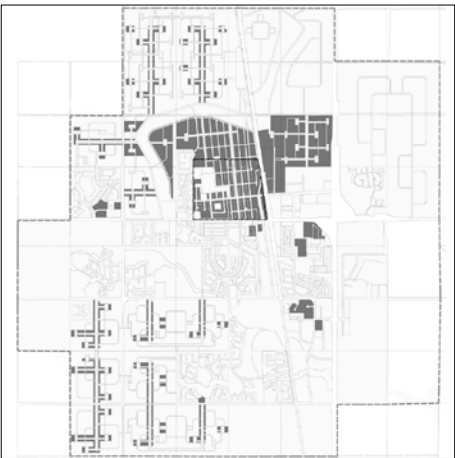
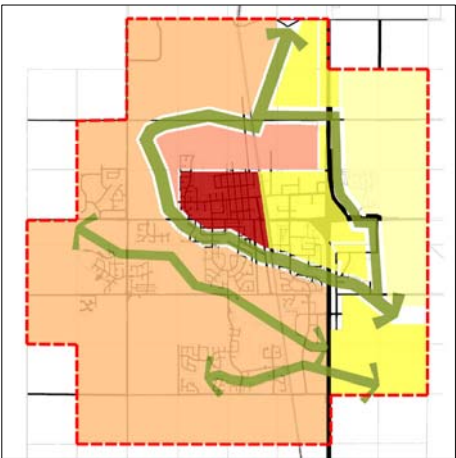


Title: Existing Building Density

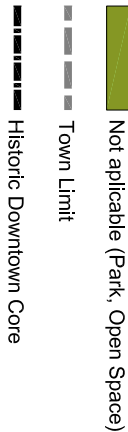
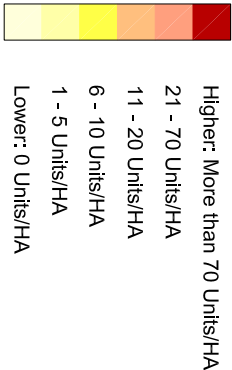
Scale: 1:25,000

Map No: 09

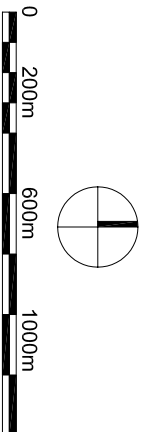
Drawn by: Juan Mesa



PROPOSED DENSITY
Legend



Avi Friedman Consultants Inc.



Title: Proposed Density

Scale: 1:25,000

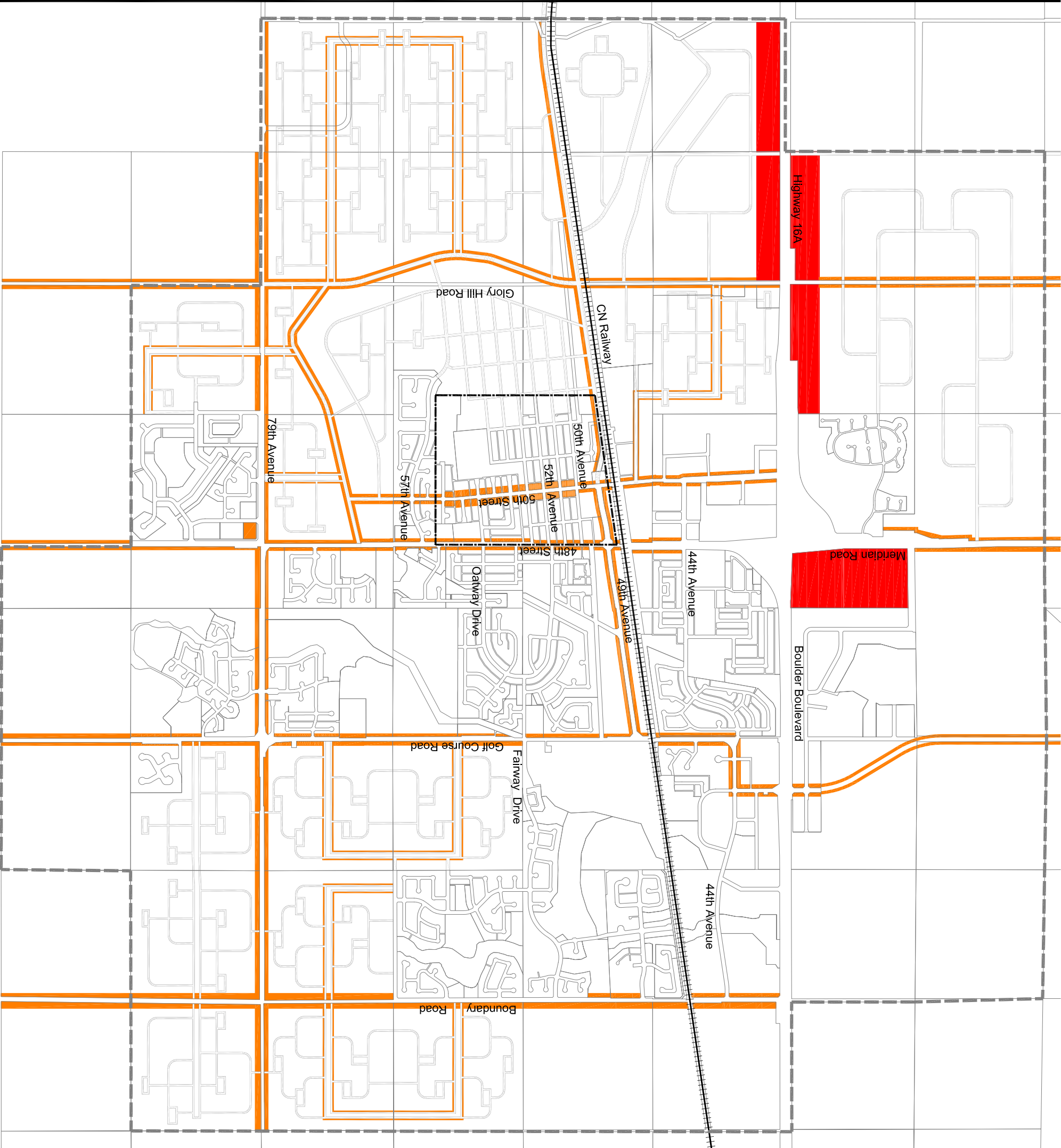
Map No: 16

Drawn by: Juan Mesa

PROPOSED AREA OF ECONOMIC
DEVELOPMENT

Legend

- Area of Economic Development
- Neighbourhood Commerce
- Town Limit
- Historic Downtown Core



0 200m 600m 1000m

Title: Proposed Area of Economic Development

Scale: 1:25,000

Map No: 17

Drawn by: Juan Mesa

Avi Friedman Consultants Inc.

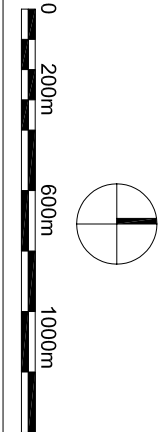
EXISTING PARKS & TRAIL SYSTEM

Legend

- Open Spaces
- Neighbourhood Parks
- Woods and Bushes
- Stony Plain Golf Course
- Bodies of Water
- Trail System
- Town Limit
- Historic Downtown Core

PARK NAMES	Area (H)	%
1. High Park	25.6	9.8
2. Exhibition Park	14.3	5.4
3. Shikaol Park	0.8	0.3
4. Rotary Park	10.8	4.1
5. Skate Park	1.0	0.3
TOTAL AREA PARKS AND OPEN SPACES	260.2	100

Avi Friedman Consultants Inc.

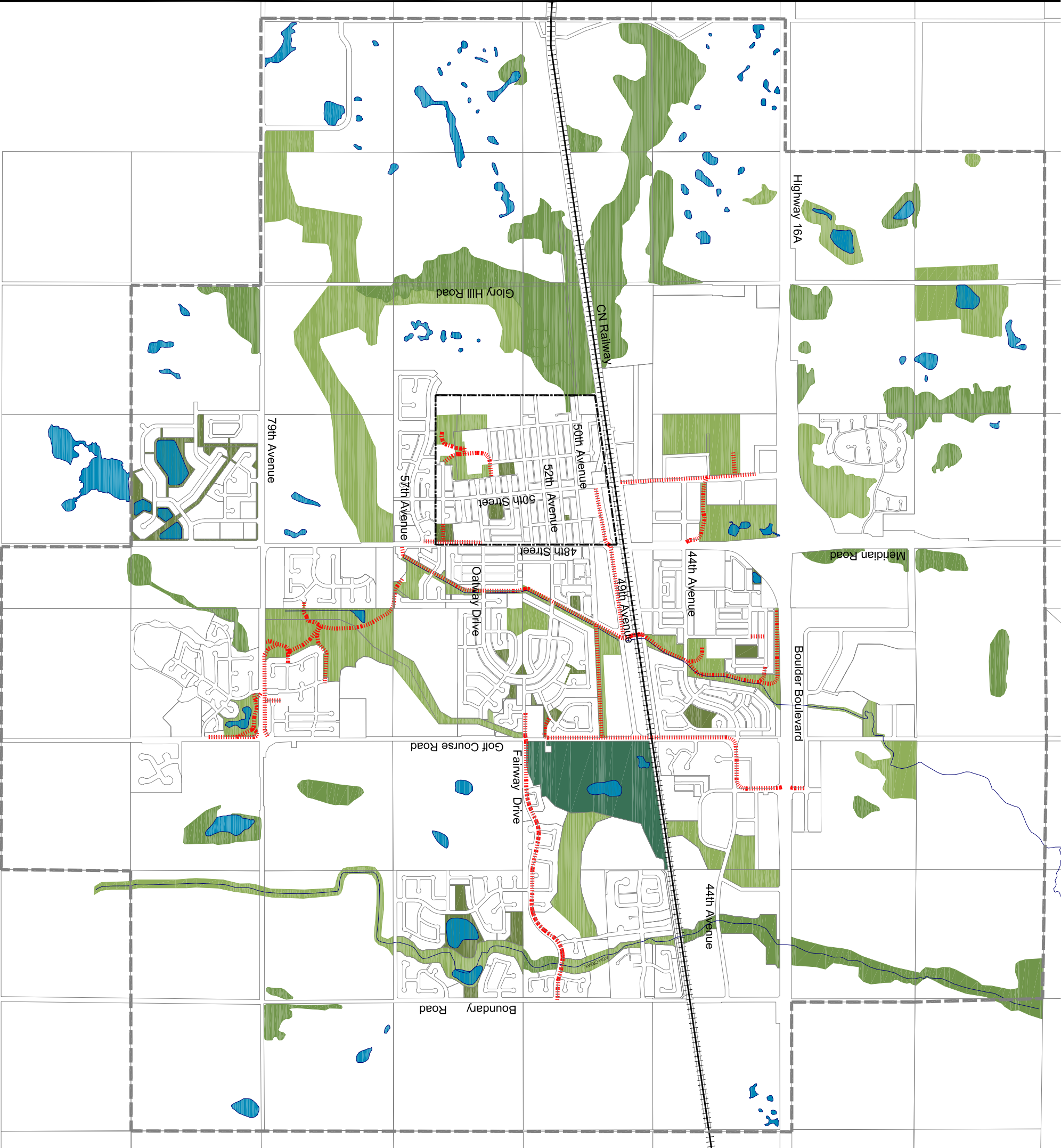


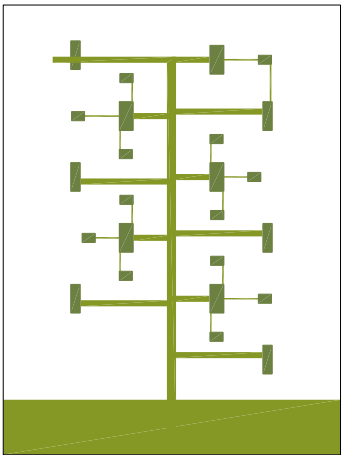
Title: Existing Parks & Trail System

Scale: 1:25,000

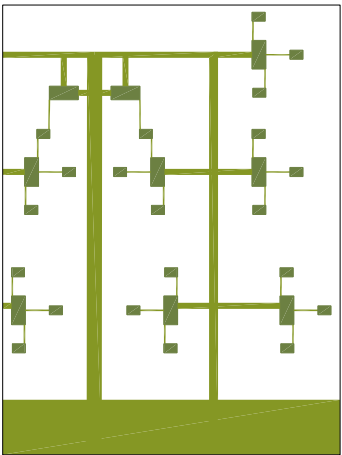
Map No: 10

Drawn by: Juan Mesa

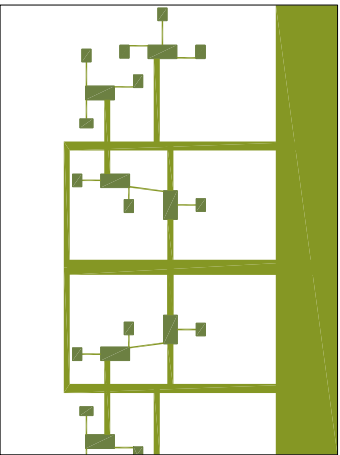




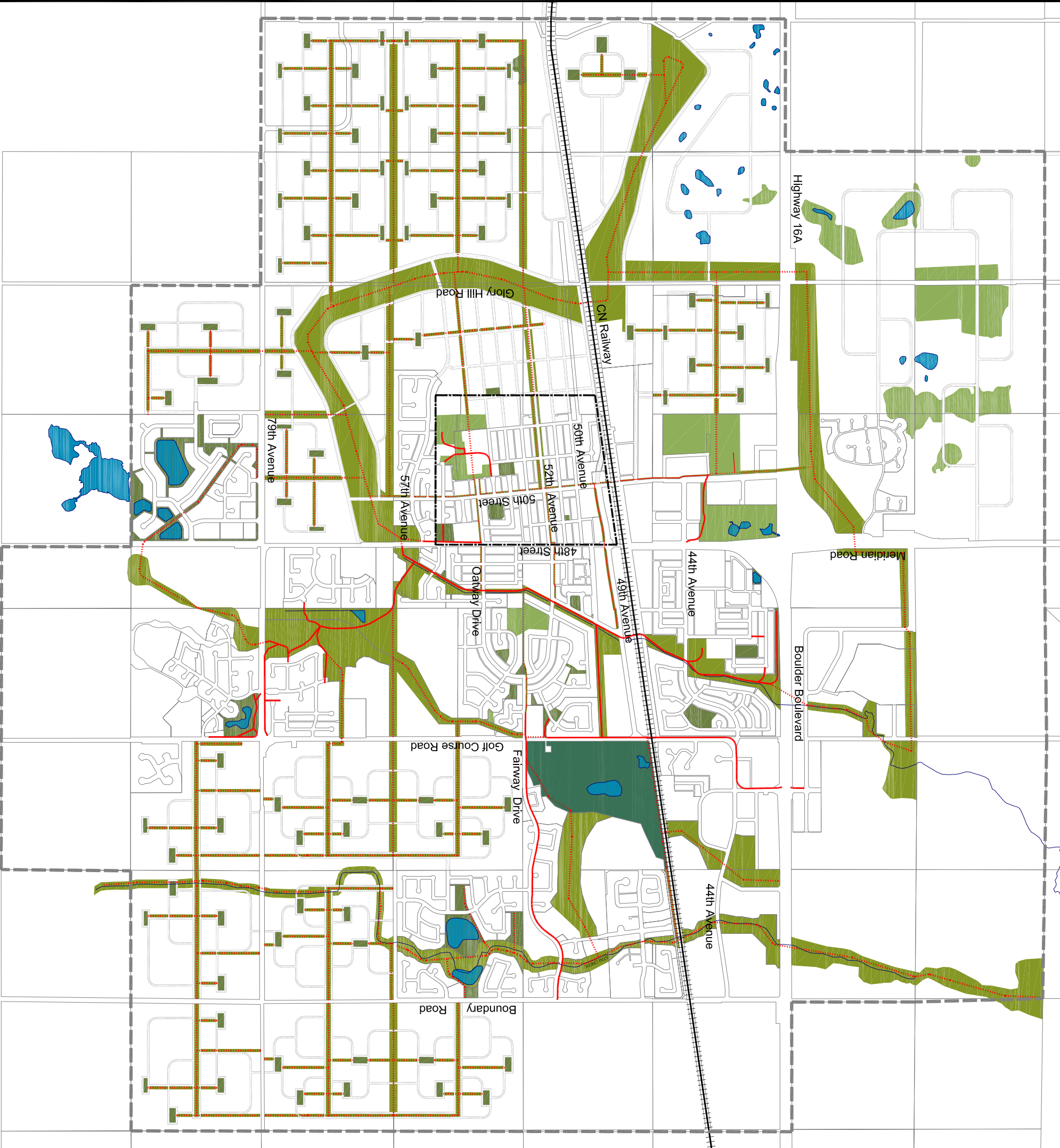
Neighbourhood Park Model 1



Neighbourhood Park Model 2



Neighbourhood Park Model 3



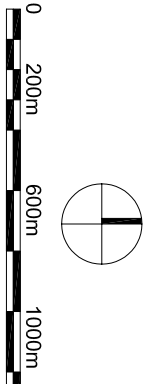
PROPOSED PARKS & TRAIL SYSTEM

Legend

- Proposed Linear Parks
- Town Parks
- Neighbourhood Parks
- Stony Plain Golf Course
- River
- Existing Trail System
- Proposed Trail System
- Town Limit
- Historic Downtown Core

PARK NAMES	Area (H)	%
Existing Parks		
1. High Park	25.6	7.18
2. Exhibition Park	14.3	4.01
3. Shikaoi Park	0.8	0.22
4. Rotary Park	10.8	3.03
5. Skate Park	1.0	0.28
Proposed Linear Park	260.58	73.07
TOTAL AREA PARKS AND OPEN SPACES	356.59	100.00

Avi Friedman Consultants Inc.



Title: Proposed Parks & Trail System

Scale: 1:25,000

Map No: 18

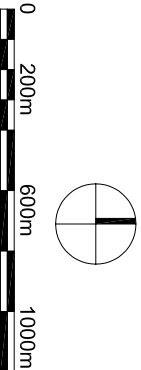
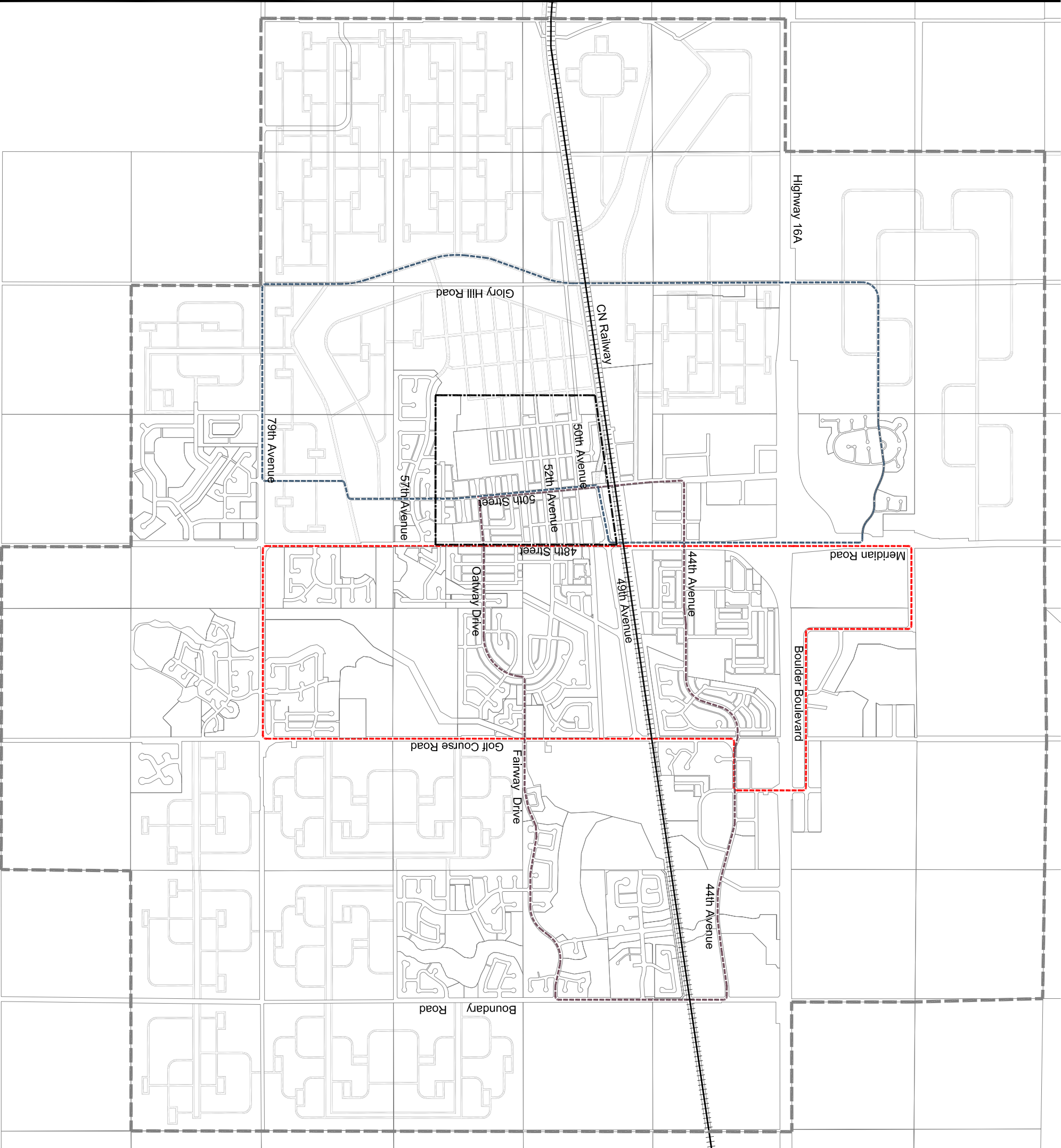
Drawn by: Juan Mesa

PROPOSED SHUTTLE BUS SERVICE

Legend

- Route 1
- Route 2
- Route 3

- Town Limit
- Historic Downtown Core



Avi Friedman Consultants Inc.

Title: Proposed Shuttle Bus Service

Scale: 1:25,000

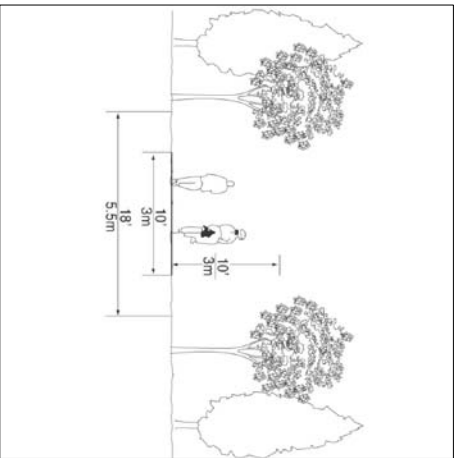
Map No: 21

Drawn by: Juan Mesa

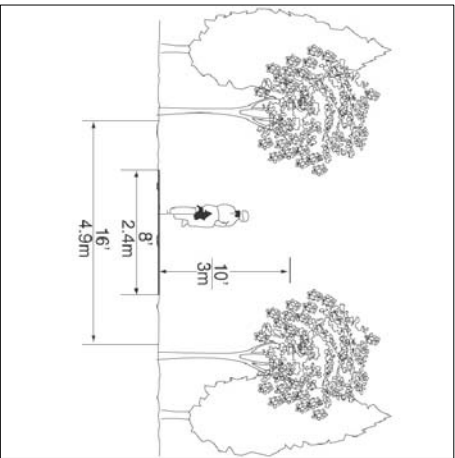
PROPOSED BIKE PATH SYSTEM

Legend

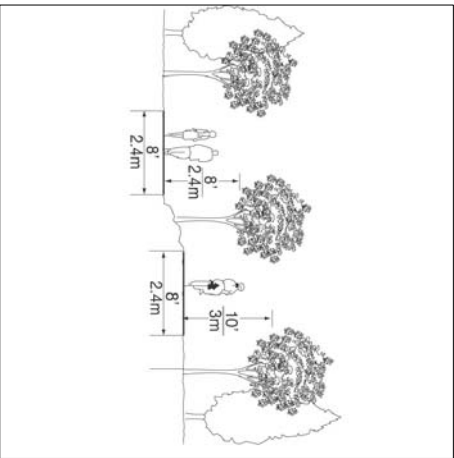
- Proposed Bikepath
- Town Limit
- Historic Downtown Core



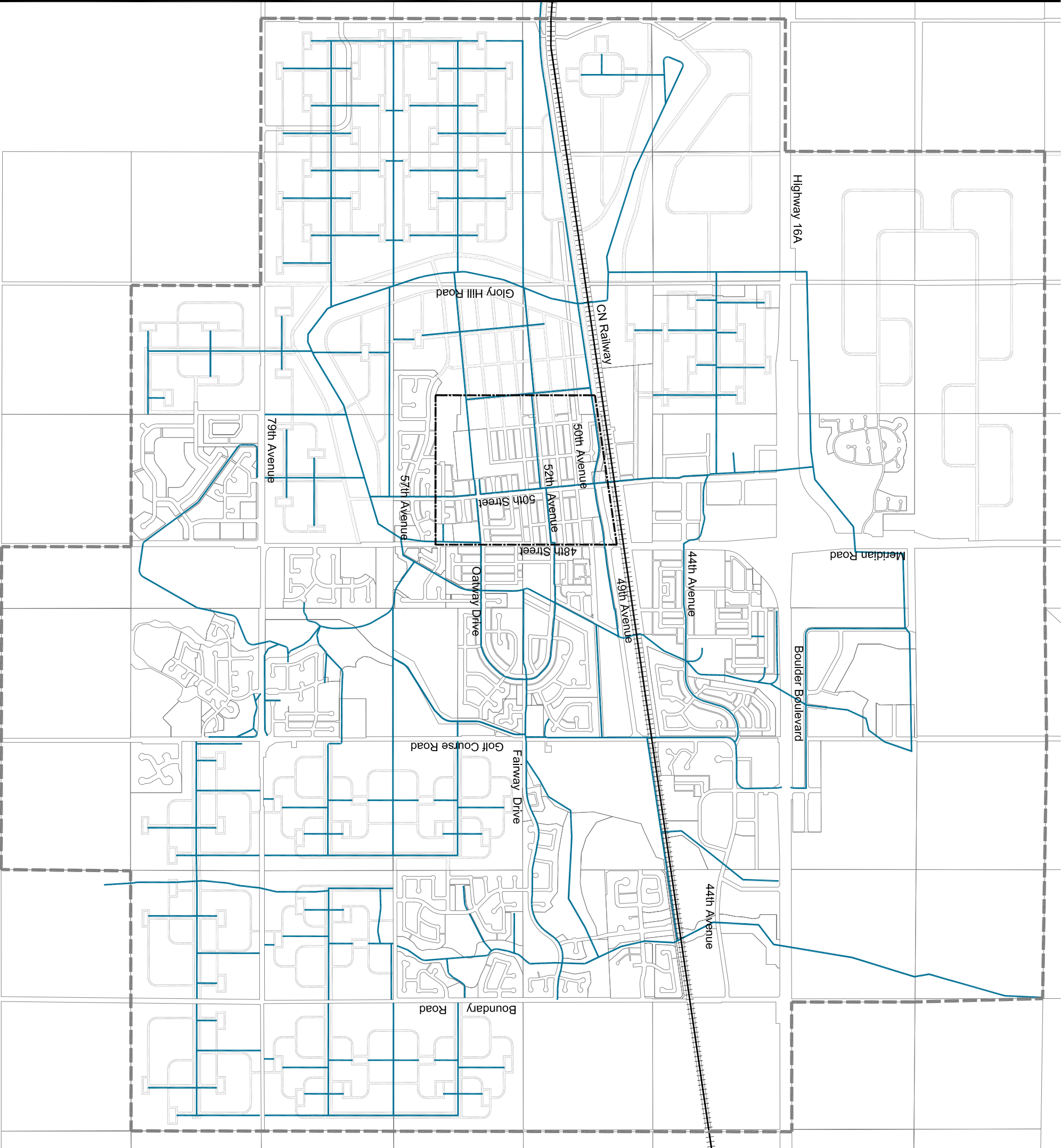
Type 1 Bike Path Section: Mix Use



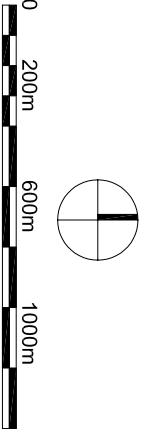
Type 2 Bike Path Section: Single Use - Bicycle



Type 3 Bike Path Section: Multi Tread - Single Use Pedestrian / Bicycle



Avi Friedman Consultants Inc.



Title: Proposed Bike Path System

Scale: 1:25,000

Map No: 22

Drawn by: Juan Mesa

5.0 Selected Sites

Downtown Expansion (Map 24)

In order to increase downtown's population it is required to extend its limits over adjacent areas where possible. Currently downtown is located in the eastern periphery of Stony Plain's urban area. Therefore, it is possible to extend its limits towards the east up to the proposed linear park. The design of this expansion has been proposed by continuing the existing orthogonal street pattern and creating a homogeneous urban form. Additionally, small squares are included in some street intersection in order to improve the area's streetscape.

Downtown (Map 25-28)

In order to achieve a coherent urban appearance in downtown a set of guidelines is proposed. These guidelines contemplate several aspects of downtown's urban design. In the first page called Downtown Design Guidelines, considerations about micro-climate design, housing typologies, parking patterns, and street furniture are addressed. This page also shows an example of an existing situation and its location per each category, then two alternatives or strategies are suggested. In the second page, proposed street sections are introduced as a model to be applied in order to improve downtown's streetscape. Each of the four categories includes its location, existing condition image, proposed section, and proposed image. Finally in the third page, a set of façade guidelines for Main Street seek to create a model to be used in the design of future buildings and new or renovated façades. For this page four categories were studied: windows and doors, building heights, colours and materials, and signage and awnings. In each case two example images were used as the model to follow in future constructions.

Civic Square (Map 29-32)

Stony Plain expressed a need to create a gathering open space where a variety of public events can take place. These events include: concerts, markets, festivals, and civic celebrations. Usually, civic squares are located in central parts of town surrounded by public buildings. Therefore, the town has chosen to locate a new civic square on lots own by the municipality in front of town hall. The design of the civic square took in consideration several determinants such as: use of the space and its surrounding buildings, landscape, and spatial characteristics of the space itself. First, in order to create an urban feel in the square, cultural and commercial/residential buildings were proposed. A centre for performing arts will face town hall. This building is one of the new cultural buildings to be built in downtown to attract more visitors. Also, a commercial/residential building was proposed in the eastern side of the square. In the ground floor of that building a coffee shop, a restaurant, and other retail space were included. The upper floors will have professional offices and apartments. Second, the space is made up of several features namely: water, trees, hard surfaces, benches and street lights. In the winter the water surface can be turned into a skating area. Two lines of trees are enclosing the space while a curve line of a different specie of trees is crossing the square and connecting town hall with the two new buildings (centre for performing arts and commercial/residential building). Third, the square was designed as an enclosed space that is surrounded by existing and new buildings in three of its four sides. The remaining side was enclosed by a line of trees. The square is extended across the street.

A Model Neighbourhood (Map 33-34)

In order to develop parameters for new residential developments, a model neighbourhood was illustrated. The design of this neighbourhood contains a more detailed scale than the one presented in the general town plans. Also, this neighbourhood follows sustainable design concepts which were presented in the general master plan. These concepts include: mixing housing typologies, pedestrian friendly spaces, and higher densities. The first concept is carried out by mixing two or three housing typologies in the same neighbourhood. These typologies are: single/semidetached homes, row houses, and apartment buildings. Each neighbourhood is designed to have an open common central park with children games, gathering spaces and gardens. Row houses and apartment buildings are likely to be located facing this parks. On the other hand, single homes are located facing local or arterial roads. Also, in major road intersections local services and apartment buildings can be located. The second concept has to do with the parks and trail system plan. A network of parks of different scales is connected by bike paths, trails, and linear parks. The neighbourhood's central park is connected with a linear park by a mix-use sidewalk, trail and bike path. Another design consideration regarding pedestrian friendly spaces is that each multi-family home has a direct view of a park and a green backyard. Also, each block is provided with sidewalks ensuring access from each home to its local park. Finally, in order to achieve higher density small lots for single homes and more multi-family housing are proposed.

Design Guidelines for Housing (Map 35-41)

Based on the proposed model neighbourhood, a set of guidelines was formulated in order to outline design principles for future communities. Six design aspects were addressed: massing, exterior façade, windows, doors, streetscape and parking. Each aspect is developed for each dwelling typology studied. The first aspect, massing, was divided into four categories: setbacks, building height, size of home and size of lot. The second aspect, exterior façade, studied the cladding types, decorative work, and porch/balcony types. For cladding three main types are found: masonry, vinyl siding, and brick. Regarding decorative work three architectural elements were included: corbels for roofs, corbel and beams for porches, and turned bars for porch guards. The third aspect was window types in which three main groups are distinguished: double hang with shutters, double hang, and sliding. The four aspect analyzed in housing guidelines are the types of doors. Doors for single homes and row houses can use any of the two shown types. For buildings apartments, a glazed door is proposed. The fifth studied aspect is streetscape. In this aspect street furniture, playgrounds, and gathering structures are included. Finally, in the last aspect, parking patterns for each housing typology are presented.

Town Entrance (Map 42-44)

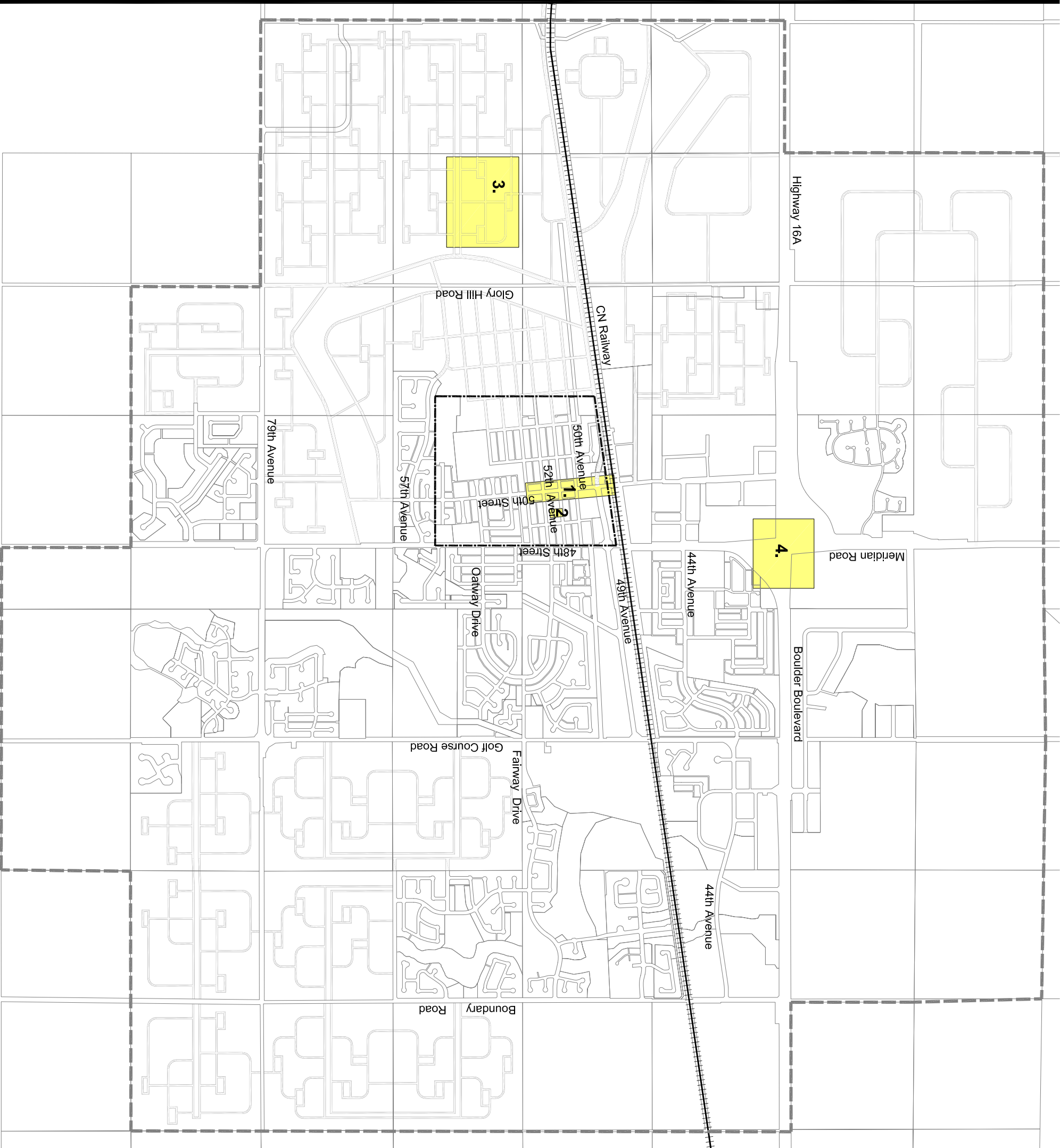
The existing entrance to Stony Plain from Highway 16A is characterized by the presence of industrial lots that produce an unappealing image. In order to improve the image of the town's entrance, a combination of landscaping elements and billboards are proposed. These elements will create a screen that will prevent view of the industrial area. The billboards will have copies of the town's murals. Also, the proposed lighting elements will have flags announcing upcoming events in town, and in the adjacent areas to the overpass, plant elements will be implemented.

SELECTED DESIGN SITES

Legend

- 1. Downtown
- 2. Civic Square
- 3. Typical Neighbourhood
- 4. Town Entrance

- Town Limit
- Historic Downtown Core



Avi Friedman Consultants Inc.



Title: Selected Design Sites

Scale: 1:25,000

Map No: 23

Drawn by: Juan Mesa

PROPOSED DOWNTOWN EXPANSION

Legend

- Existing Historic Downtown Core
- Proposed Downtown Expansion
- Area of Future Development
- Neighbourhood Parks
- Linear Parks
- Open Space for School
- Location of Civic Square
- Corner Squares




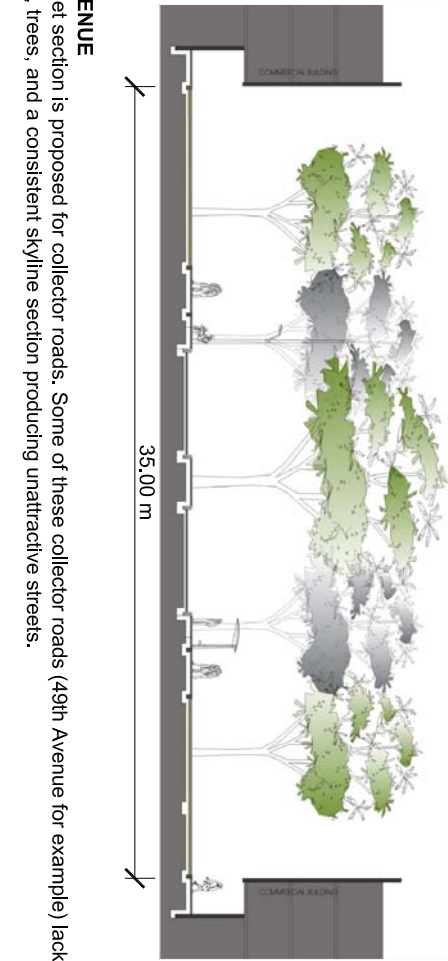
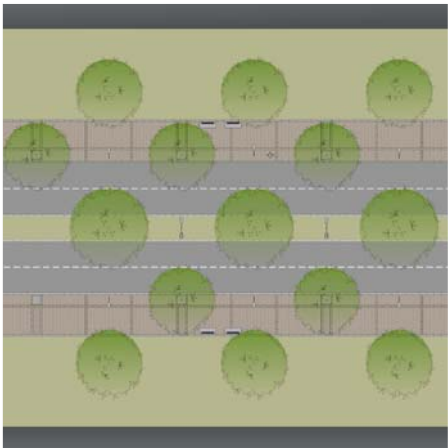
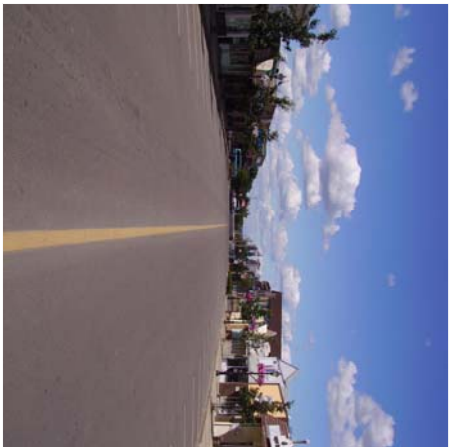
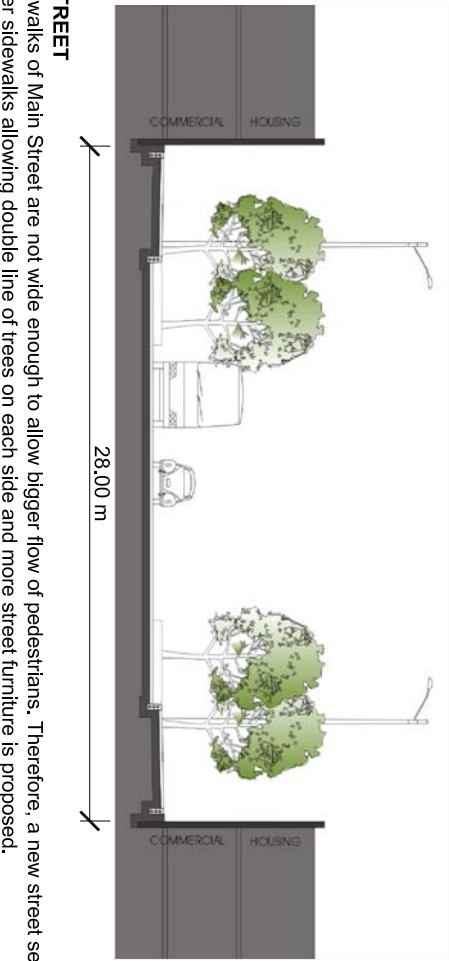

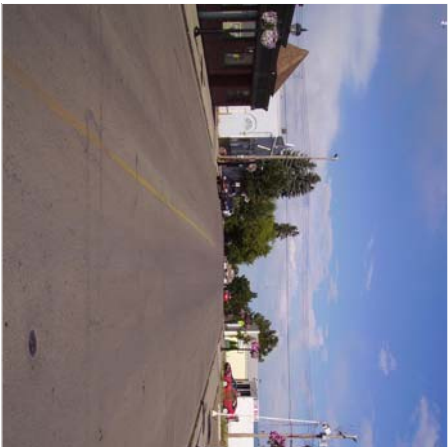
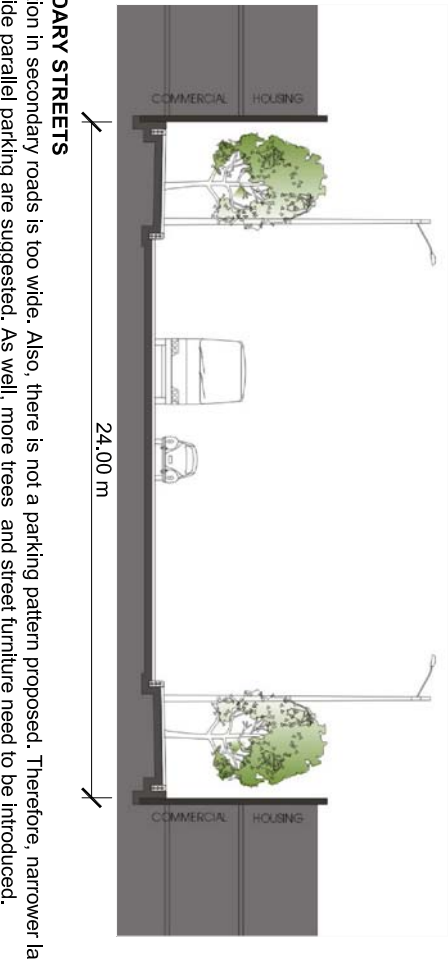
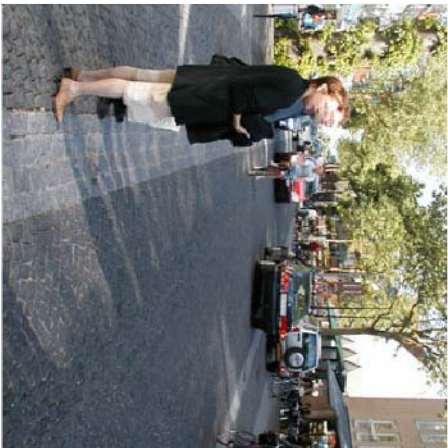



Avi Friedman Consultants Inc.

Title: Proposed Downtown Expansion

Scale: 1:5000

Sheet No: 24

Drawn by: Juan Mesa

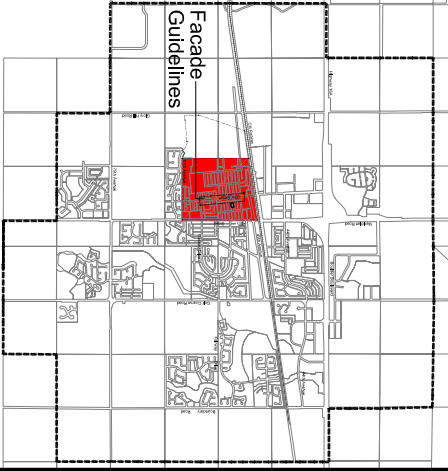
LOCATION	EXISTING SITUATION	PROPOSED STREET SECTIONS	ILLUSTRATION
49th AVENUE		<p>49th AVENUE</p> <p>This street section is proposed for collector roads. Some of these collector roads (49th Avenue for example) lack street furniture, trees, and a consistent skyline section producing unattractive streets.</p> 	
MAIN STREET		<p>MAIN STREET</p> <p>The sidewalks of Main Street are not wide enough to allow bigger flow of pedestrians. Therefore, a new street section with wider sidewalks allowing double line of trees on each side and more street furniture is proposed.</p> 	
SECONDARY STREETS		<p>SECONDARY STREETS</p> <p>The section in secondary roads is too wide. Also, there is not a parking pattern proposed. Therefore, narrower lanes with double side parallel parking are suggested. As well, more trees and street furniture need to be introduced.</p> 	
ALLEYS		<p>ALLEYS</p> <p>Today's alleys are not designed. A more attractive section is proposed with consistent heights and trees.</p> 	

PROPOSED STREET SECTIONS

Legend

- Existing Historic Downtown Core
- Proposed Downtown Expansion
- Selected Area


Downtown Location



Facade Guidelines

Avi Friedman Consultants Inc.

020060010001200m



Title: Proposed Street Sections

Scale: 1:26,500

Map No: 26

Drawn by: Juan Mesa

DOWNTOWN FACADE GUIDELINES			Legend		
Existing Historic Downtown Core			Legend		
SAMPLE ELEMENTS			OBSERVATION		
WINDOWS & DOORS			GUIDELINES		
BUILDING HEIGHTS			ILLUSTRATION		
COLORS & MATERIALS			SIGNAGE AND AWNINGS		
			<p>Among some of the two story tall buildings on Main Street, these two examples illustrate the proportion of windows to be used in new buildings and transformations of existing ones. The proportions of the windows on the second floor in the first building is 1:1.5. On ground level large expanses of doors and windows glassing are used.</p>		
			<p>All new buildings on Main Street should follow the proportions for windows and doors shown in the example. Two main types of window proportions are proposed: 1:1.5 and 1:2. For doors, it is recommended to have a central door per building. In some stores large windows will be allowed to display their products.</p>		
			<p>In order to consolidate an even height on Main Street, it recommended that each block will be two storey tall. All new construction replacing a one storey building should be two storey tall. In the corners an increment of half storey is recommended in order to emphasis the corner.</p>		
			<p>Two storey tall buildings on Main Street</p>		
					
					
			<p>Even though Main Street does not have a consistent use of colors or materials, beige brick and beige and yellow stucco are commonly seen. Also, yellow stone, shown in the the second example, is an isolated example but it is more homogeneous to yellow stucco than other materials.</p>		
			<p>Due to the high design quality and permanent character, the brick building shown is the most outstanding building in the use of the material. Therefore brick is that material to be used in all new construction on Main Street. If it is not possible to use brick, stucco will be acceptable using colors similar to the beige or red brick.</p>		
			<p>Different types of signage are used on Main Street. However some of these sings are less aggressive and do not affect the façade perception than others. These two examples show how by placing the letters directly on the façade, the façade maintain its integrity. Also, the use of this type of signage creates greater homogeneity.</p>		
			<p>The metal signs shown in the samples pictures are good signage models in downtown. Therefore, it is recommended that new stores will adopt this type of signage. In order to make them more equal, a pre established size, font and color should be set. New awnings should use a similar patter of color and design. The shown example could be used as a model for the future implementation of new awnings.</p>		
					
			<p>Avi Friedman Consultants Inc.</p>		
<p>Downtown Location</p>					
<p>Title: Downtown Facade Guidelines</p>			<p>Scale:</p>		
<p>Map No: 27</p>			<p>Drawn by: Juan Mesa</p>		

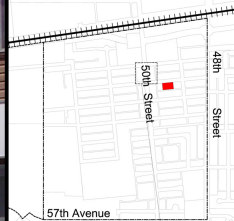


RENDER OF PROPOSED MAIN STREET

Legend



Before Intervention



Render Location of Main Street



Downtown Location

Avi Friedman Consultants Inc.



Title: Render of Proposed Main Street

Scale:

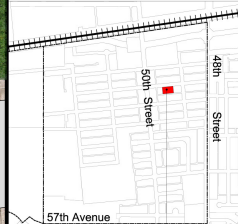
Map No: 28

Drawn by: Juan Mesa



PROPOSED CIVIC SQUARE - SITE PLAN Legend

- Existing Historic Downtown Core
- Proposed Downtown Expansion



Square Location in Downtown



Downtown Location

Avi Friedman Consultants Inc.



Title: Proposed Civic Square - Site Plan

Scale: 1:500

Map No: 30

Drawn by: Juan Mesa

PROPOSED CIVIC SQUARE SITE ANALYSIS

Legend

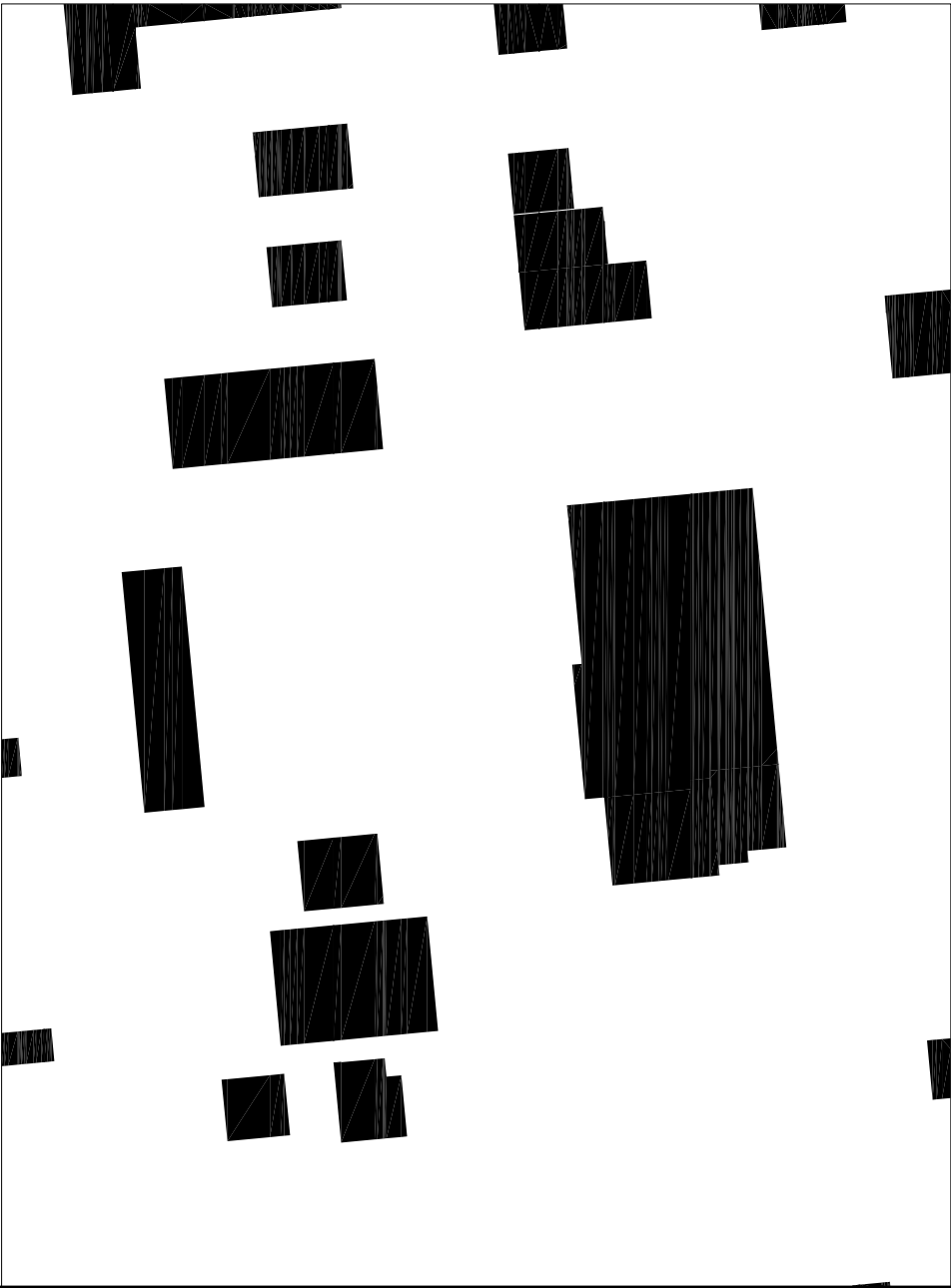
- USES
- Mixed Uses
 - Institutional
- HEIGHTS
- One Floor
 - Three or More Floor
- PARKING/OPENSACES
- Green
 - Public Parking



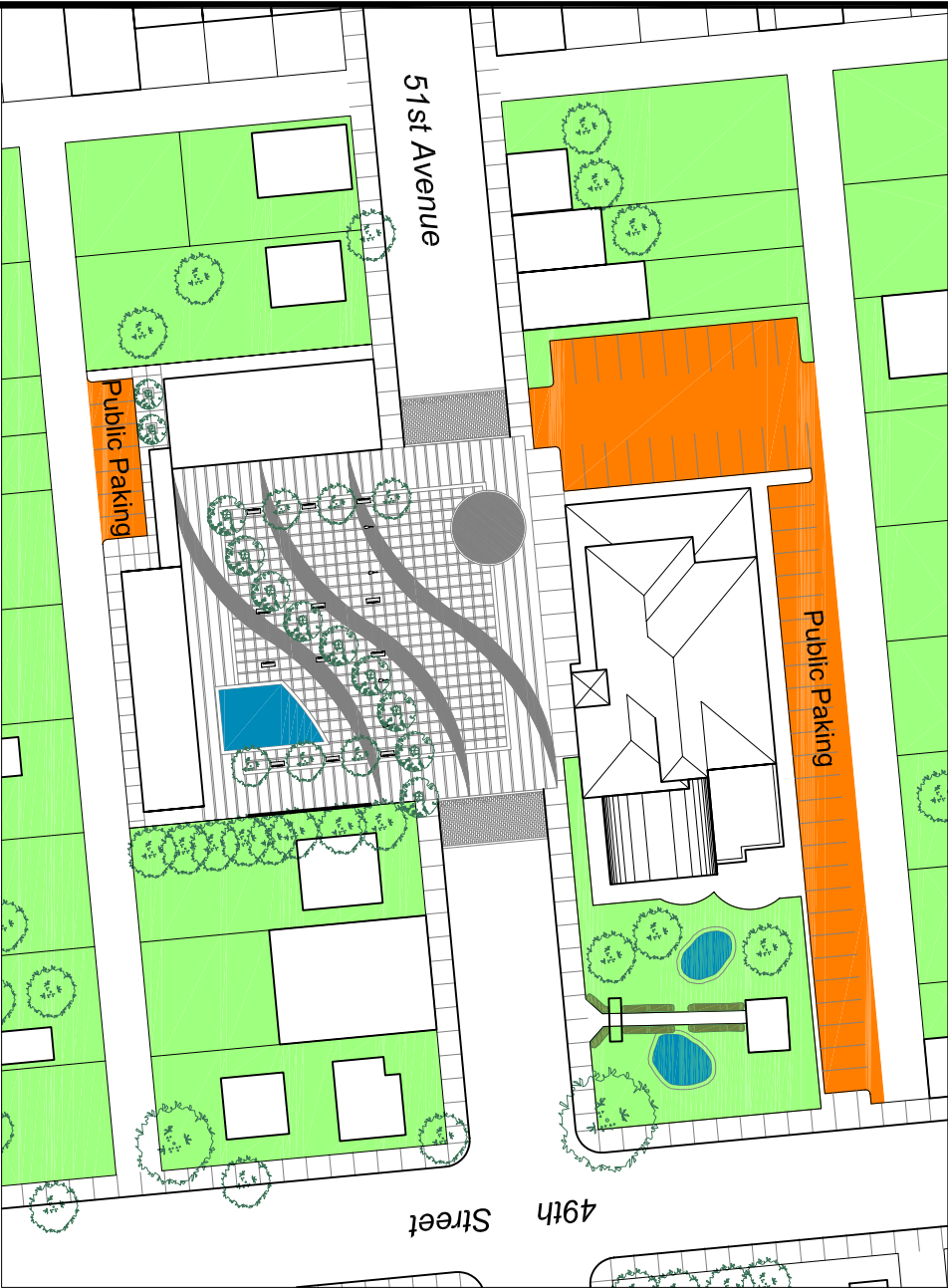
Uses



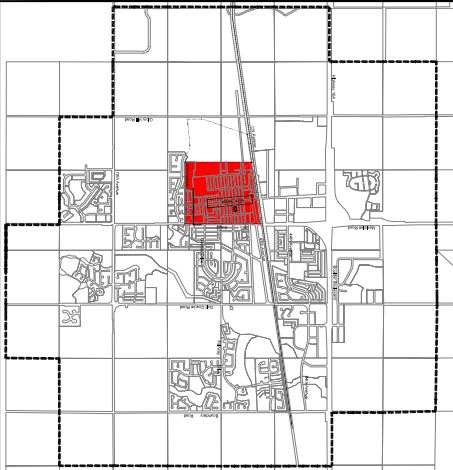
Heights



Morphology



Parking/Open Spaces



Square Location in Downtown

Downtown Location

Avi Friedman Consultants Inc.



Title: Proposed Civic Square Analysis

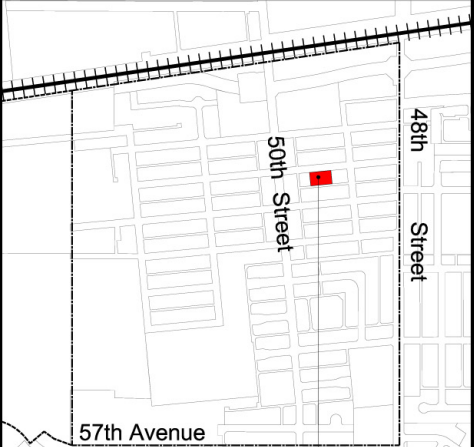
Scale: 1:1000

Map No: 31

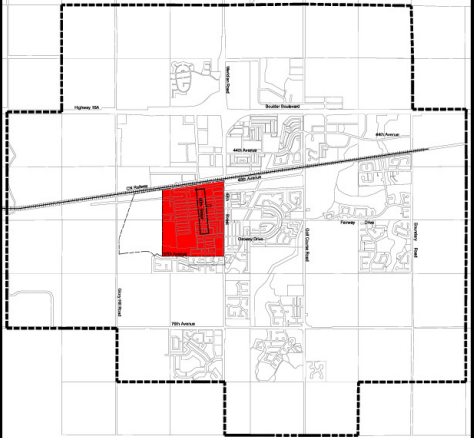
Drawn by: Juan Mesa



RENDER OF PROPOSED CIVIC SQUARE
Legend



Square Location in Downtown



Downtown Location

Avi Friedman Consultants Inc.



Title: Render of Proposed Civic Square

Scale:

Map No: 32

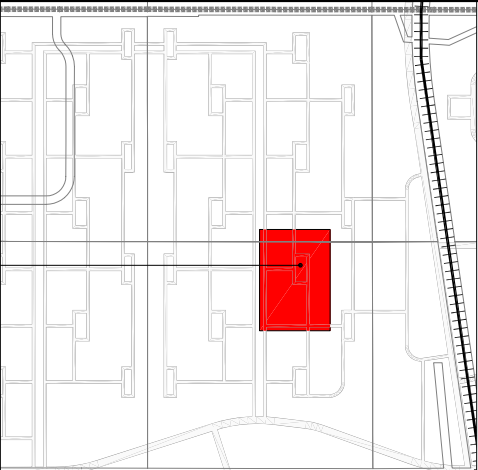
Drawn by: Juan Mesa

LAND USE TYPES FOR A NEW NEIGHBOURHOOD

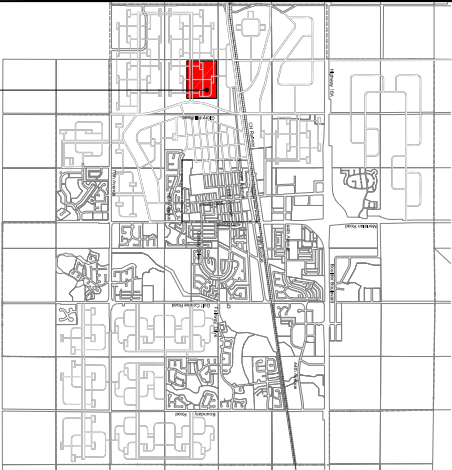
Legend

- Detached Houses
- Row Houses
- Neighbourhood Park
- Trail System

The shown measurement units are in meters



Neighbourhood Location



Neighbourhood Location

Avi Friedman Consultants Inc.

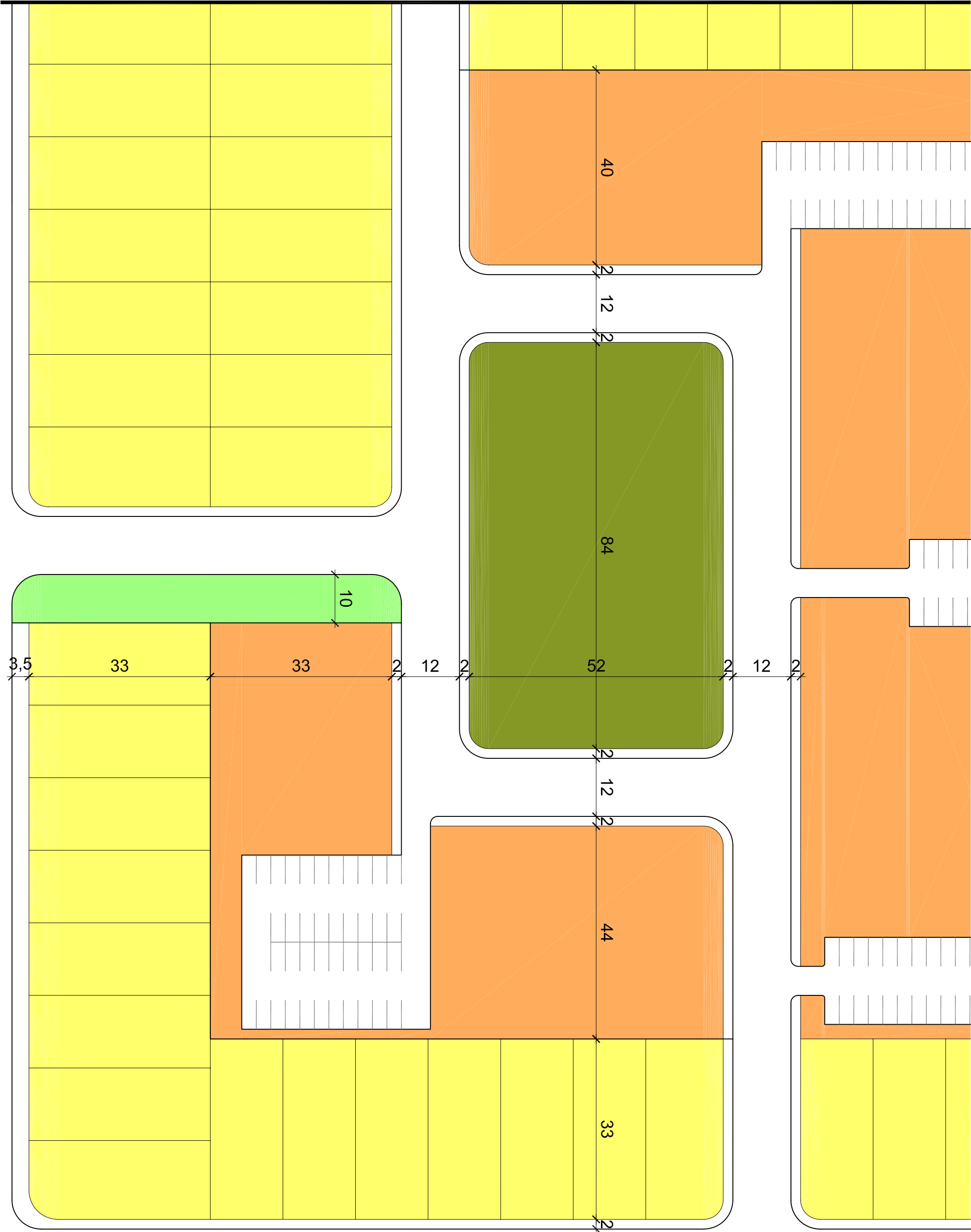


Title: Land Use Types for a New Neighbourhood

Scale: 1:750

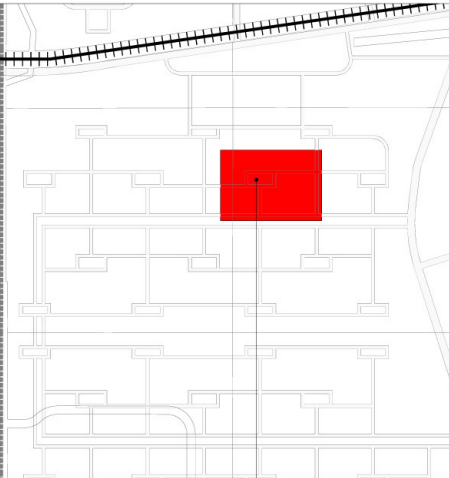
Map No: 33

Drawn by: Juan Mesa

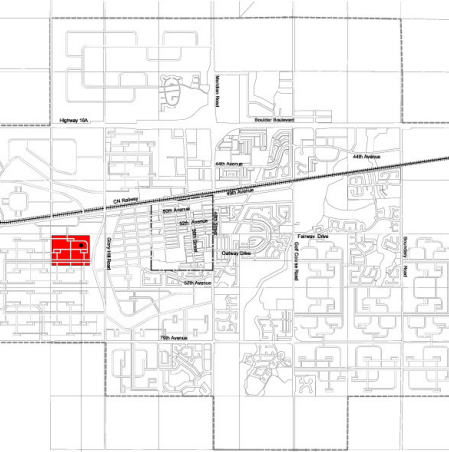




PROPOSED NEIGHBOURHOOD - SITE PLAN
Legend

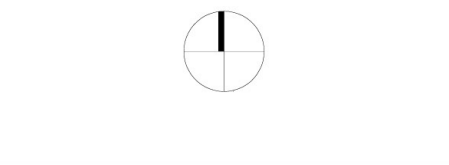


Neighbourhood Location



Neighbourhood Location

Avi Friedman Consultants Inc.

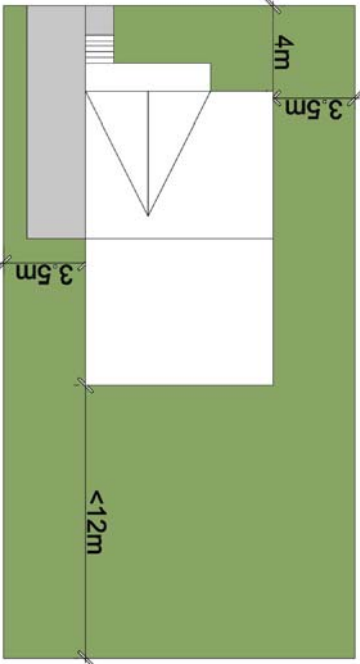
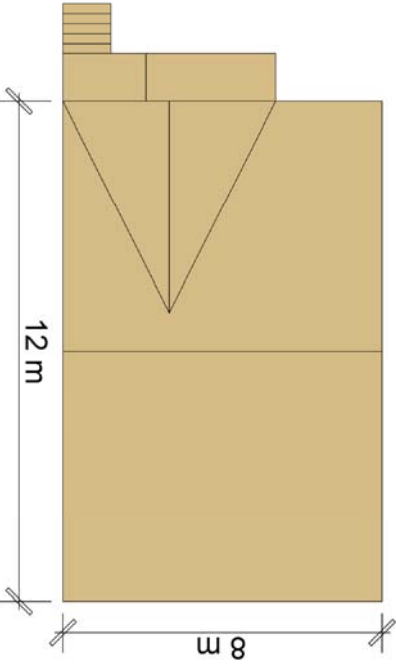
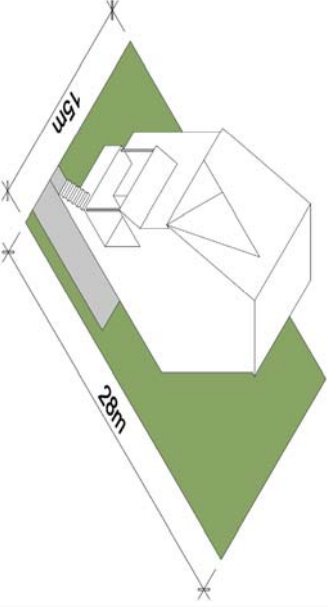
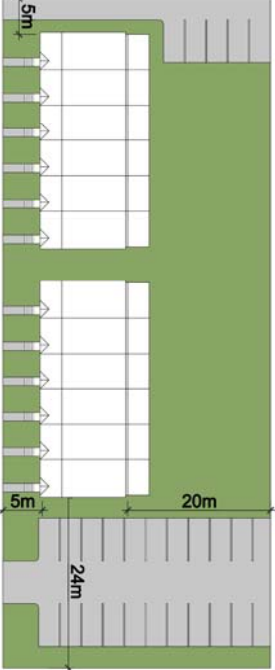
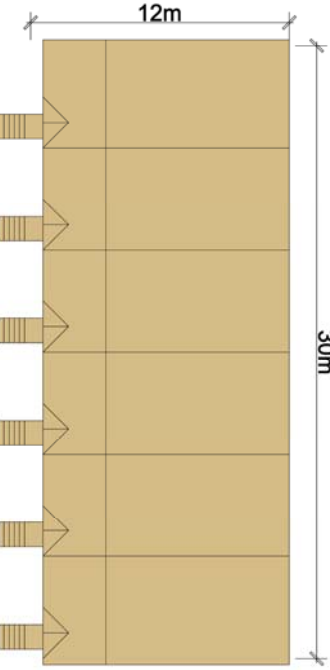
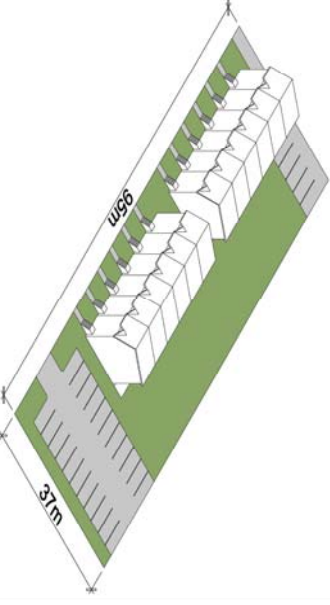
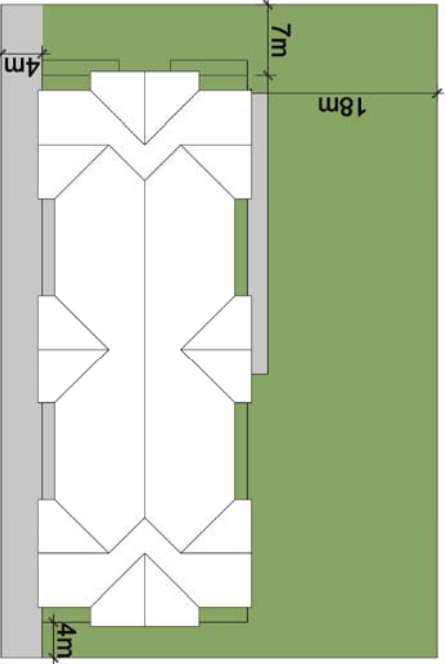
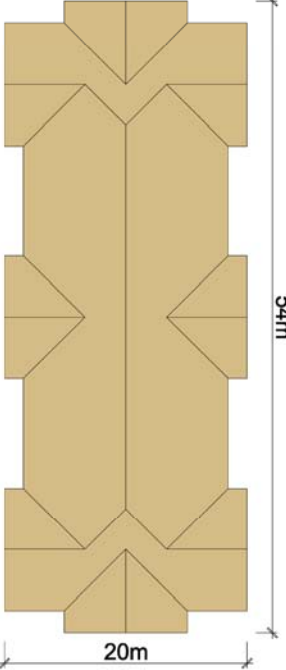
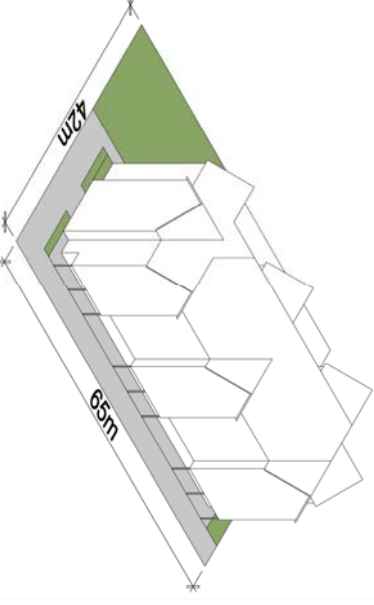


Title: Proposed Neighbourhood - Site Plan


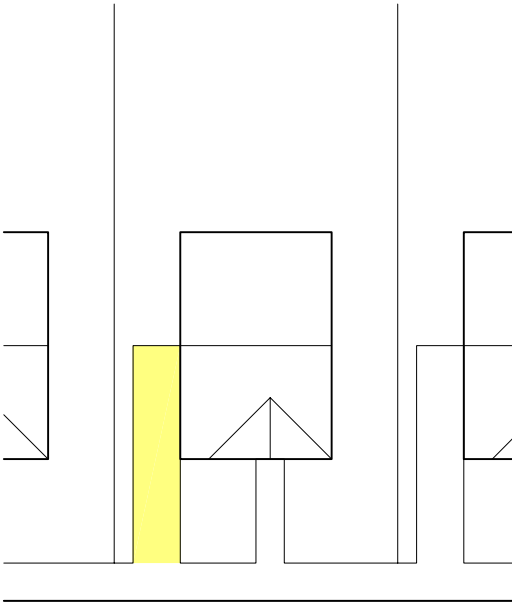
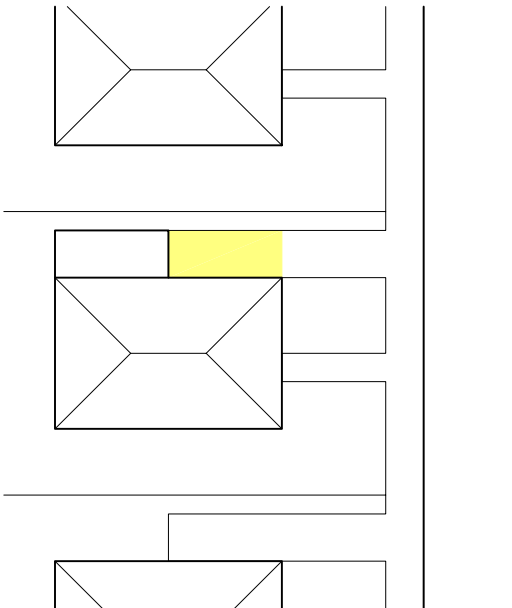

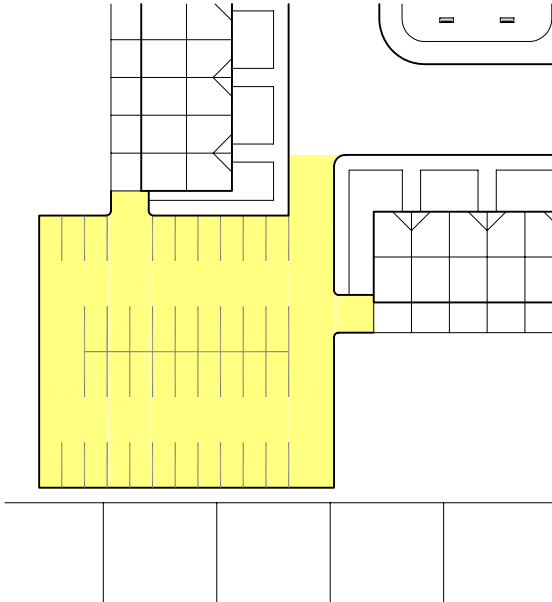
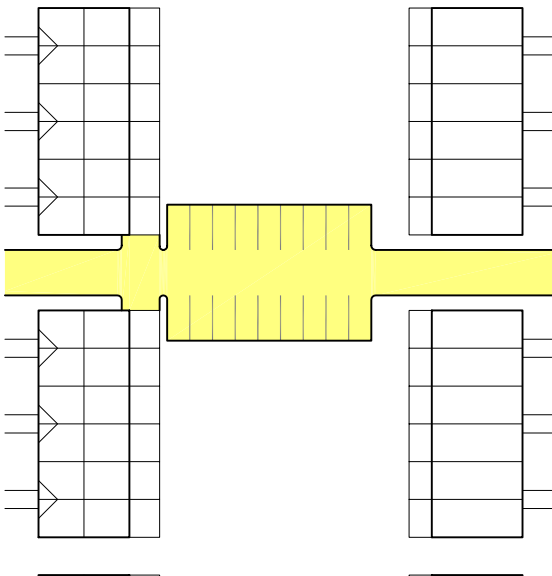
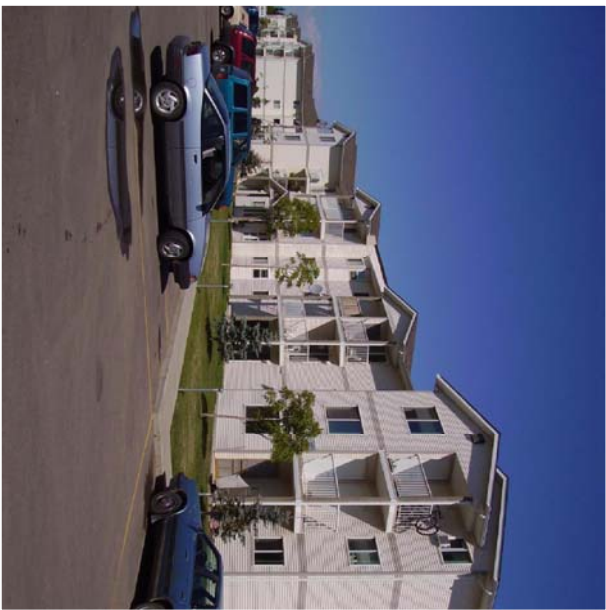
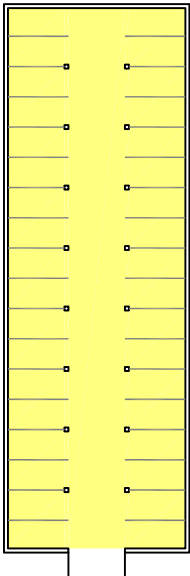
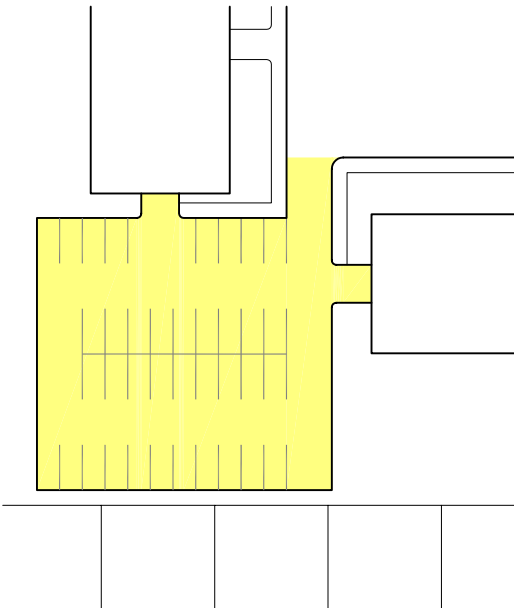
Scale:

Map No: 34

Drawn by: Juan Mesa

SETBACK		HEIGHT	SIZE OF HOME	SIZE OF LOT
SINGLE / SEMI DETACHED				
Setback suggested for single or semi detached home lots are: Side setback: 3.5 m Front setback: 4 m Rear setback: 10 m		Units shall have a maximum of four floors. Unit height shall not exceed 13.5 m or be less than 9 m as measure from street level to highest point of the building.	Suggested single home footprints are between 80 to 100 sq. m. Long rectangular footprint shapes facing its narrower side to the street is more recommended.	Suggested single home lots are 15 m wide and 28 m long. Private parking for each unit shall be located in an adjacent area Garages may be built at the back of the house.
ROW HOUSE / PLEX				
Setback suggested for a townhouse lot is: Side setback: 4 m (Parking area shall no be located within the setbacks) Front setback: 4 m Rear setback: 18 m (Within the rear setback a public green areas shall be provided)		Units shall have a maximum of three floors, including a basement. Unit height shall not exceed 12.5 m or be less than 8 m as measure from street level to highest point of the building.	Suggested row house unit footprints are between 60 to 70 sq. m. Clusters of 4 to 6 units is suggested. Each unit shall be provided with an independent entrance.	This townhouse project provides 12 units in a lot area of 3,515 sq m. A town house condominium project shall provide unit with view over the backyard, outside or inside private parking and visitor parking.
APARTMENT BUILDINGS				
Setback suggested for apartment building lots are: Side setback: 4 m (facing a street) and 7 m (facing other lot) Front setback: 4 m Rear setback: 18 m		The building shall have a maximum of six floors, including a basement. The building height shall not exceed 18.9 m or be less than 16.5 m as measure from street level to highest point of the building.	Suggested apartment building footprints are between 500 to 1,000 sq. m. Long rectangular footprint shapes facing its wider side to the street is more recommended.	Each apartment building shall have a large landscaped backyard to provide view for rear located apartments. Private parking for each apartment unit shall be located in the basement and visitor parking in an exterior adjacent area.

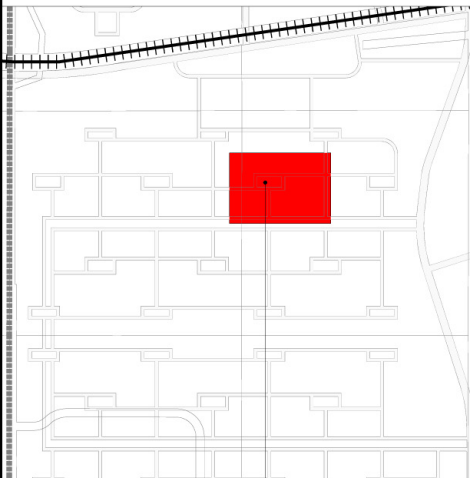
OBSERVATION		TYPE		MATERIAL AND COLOUR		ELEMENT	
SINGLE / SEMI DETACHED		  Double Hang with Shutters		<p>Shutters on windows are used in some of the most traditional homes in town. These elements are made of wood and painted in colours that match the façade. This example shows a decorated shutter window painted in three colours. A simpler design can be used in new homes.</p> <p>In terms of materials a combination of two types can be used. For the frame, vinyl or metal are to be used in energy-efficiency windows. For the shutters wood or vinyl can be utilized, however wood ones can provide a better appearance.</p> <p>In terms of colours white is preferred. In fact, most homes use white windows. However, in some instances, shutters can be painted in other colours in addition to white.</p>		<p>Mullions usually divide each mobile pane into four parts of square shape. The thickness of these mullions is half of that of the frame and shutters.</p> <p>The width of the shutters has to be half of the window so that they appear as though they can cover the windows.</p>	
ROW HOUSE / PLEX		  Double Hang		<p>Double hang windows are commonly used in both new and old residential buildings. The window proportion is 1 wide to 2 tall. Some of these windows used mullions to divide the glass. This window provides deeper light penetration due to its taller proportion.</p> <p>The materials to be used in these windows are PVC, vinyl, or aluminum. The colours to be used are white and very light pastel tones. In this window type it is recommended to include window sills</p>		<p>Mullions in this window sample divide the mobile panel into six parts. Each part follows a rectangular shape vertically oriented. The thickness of these elements is third part of that of the frame.</p>	
APARTMENT BUILDINGS		  Sliding		<p>Sliding windows is a type that is highly used in apartment buildings. Also, semi square and rectangle shapes are used in smaller quantity.</p> <p>This type of windows is used in most contemporary projects so the materials used are more likely to be PVC and vinyl.</p> <p>For the colours, white is the more appropriated since it creates more contrasts with brick which is also a recommended material for the facades of apartments.</p>		<p>The frame of this window is imbibed in the wall while on the exterior a wooden panel is simulating a thicker frame. The relation between both the frame's thickness and the mullion's thickness is 3 to 1.</p> <p>This window has a double face of sliding panels. The sliding panels have a proportion of 1 to 2 vertically oriented.</p>	

EXISTING SITUATION	PARKING LOCATION 1	PARKING LOCATION 2	PARKING GUIDELINES
			<p><u>Exterior Side Location:</u> In single home lots exterior parking for cars can be placed adjacent to the house. This location avoids having cars parked in front of the homes and big garage entrances as front facades. Visitor parking is located off street.</p> <p><u>Interior Parking with Lateral Access:</u> When provided, houses can have their own garage which will be accessed from an adjacent lane. This garage should be recessed 5m from the front façade. As well as exterior side location parking, visitor parking is located off street.</p>
			<p><u>Corner Location:</u> In row housing developments parking lots should not be facing front or back facades. When two rows of houses form an L, corner location allows residents to have their exterior parking in an adjacent area with no visual relation from their homes.</p> <p><u>Rear Yard Location:</u> When two rows of homes are aligned in the same street rear parking location is more appropriated to avoid direct view from homes. Also, underground parking below the home decks provides private parking to residents.</p>
			<p><u>Underground Parking:</u> In apartment buildings underground parking is an efficient solution that does not requires additional outdoor space. Also, this type of parking gives comfort to the residents of all ages during winter.</p> <p><u>Corner Location:</u> Similar to row housing, corner location for parking lots allows residents to have private parking in adjacent areas while avoiding direct view from their apartments. This parking solution can be combined with underground parking.</p>

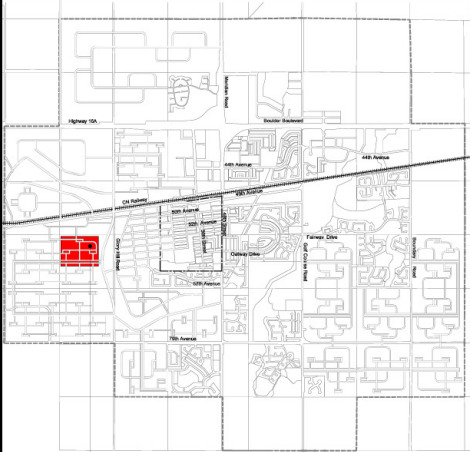
LANDSCAPE		PLANT MATERIAL	SITE ELEMENTS
<div><div>SINGLE / SEMI DETACHED</div><p>The location of trees in single home lots combines the use of small, medium and big size trees. At the front yard small and medium trees are suggested. In addition, small a garden may contribute to the appearance of the front yard. At the back, big/small trees and bushes can form a back fence, block the view from other homes and provide shadow during summer.</p></div>		<div><p>This existing example of plant material used at the front yard combines flowers with small trees. Other elements like flowerpots can add to the yard's appearance.</p></div>	<div><p>Benches along pedestrian pathways in residential developments allow inhabitants to actively use exterior spaces while improving the neighbourhood appearance.</p></div>
<div><div>ROW HOUSE / PLEX</div><p>In row houses the common back yard is framed by the presence of a row of big/small trees. At the front yard each home may have a garden. Also on the sidewalk a line of medium trees creates a shadow over the homes.</p></div>		<div><p>Another example of front yard plant material creates a small garden by using flowers, flowerpots and trees. However, garage entrance diminishes the effect of this plant material.</p></div>	<div><p>Children games in neighbourhood parks ensure the use of the space while providing the residents with play area for their children. Each park may have its own design creating identity in each neighbourhood.</p></div>
<div><div>APARTMENT BUILDINGS</div><p>Similar to the size of trees suggested in row houses the back yard is framed by a medium/big line of trees. Also, a line of medium/big trees is suggested on the sidewalk.</p></div>		<div><p>This example of plant material for apartment buildings shows how the view over a parking lot from the street can be screened by using trees. However, it is not recommended to have parking lots in front of the apartments.</p></div>	<div><p>Structures that provide shadow in parks allow residents to gather and meet. These elements may include benches for people to sit.</p></div>



RENDER OF A TYPICAL NEIGHBOURHOOD
Legend



Neighbourhood Location



Neighbourhood Location

Avi Friedman Consultants Inc.



Title: Render of a Typical Neighbourhood

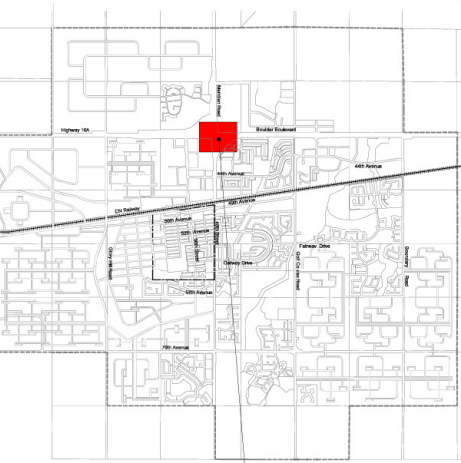
Scale:

Map No: 41

Drawn by: Fa Xivong Wu

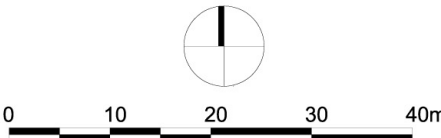


PROPOSED TOWN ENTRANCE - SITE PLAN
Legend



Town Entrance Location

Avi Friedman Consultants Inc.



Title: Proposed Town Entrance - Site Plan

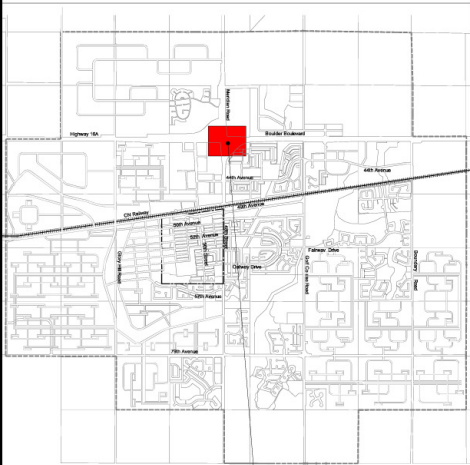
Scale: 1:500

Map No: 42

Drawn by: Fa Xivong Wu



RENDER OF PROPOSED TOWN ENTRANCE - NIGHT
Legend



Town Entrance Location

Avi Friedman Consultants Inc.



Title: Render of Proposed Town Entrance - Night

Scale:

Map No: 44

Drawn by: Fa Xivong Wu