

THE MEADOWS

TOWN OF BRUDERHEIM, AB



AREA STRUCTURE PLAN

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1.0 Introduction

1.1 PURPOSE

The purpose of The Meadows Area Structure Plan (MASP) is to describe the proposed infill development for a portion of land located in South Central Bruderheim. The Plan Area is bounded by existing residential development to the east and west, MR and existing residential development to the north, and undeveloped lands and a railway to the south.

The intent of the MASP is to develop these lands as a logical addition to the Town and provide additional residential opportunities for the area. These new lots are intended provide an affordable but attractive alternative for potential residents of the Town.

This ASP implements the land use frame work and development objectives by identifying the following:

- The size and location of the lots;
- The alignment of the new roadway and its tie-in to the existing roadways;
- Servicing concepts for deep utility servicing;
- Open Space Plan;
- Proposed Development Density.

1.2 PLAN AREA

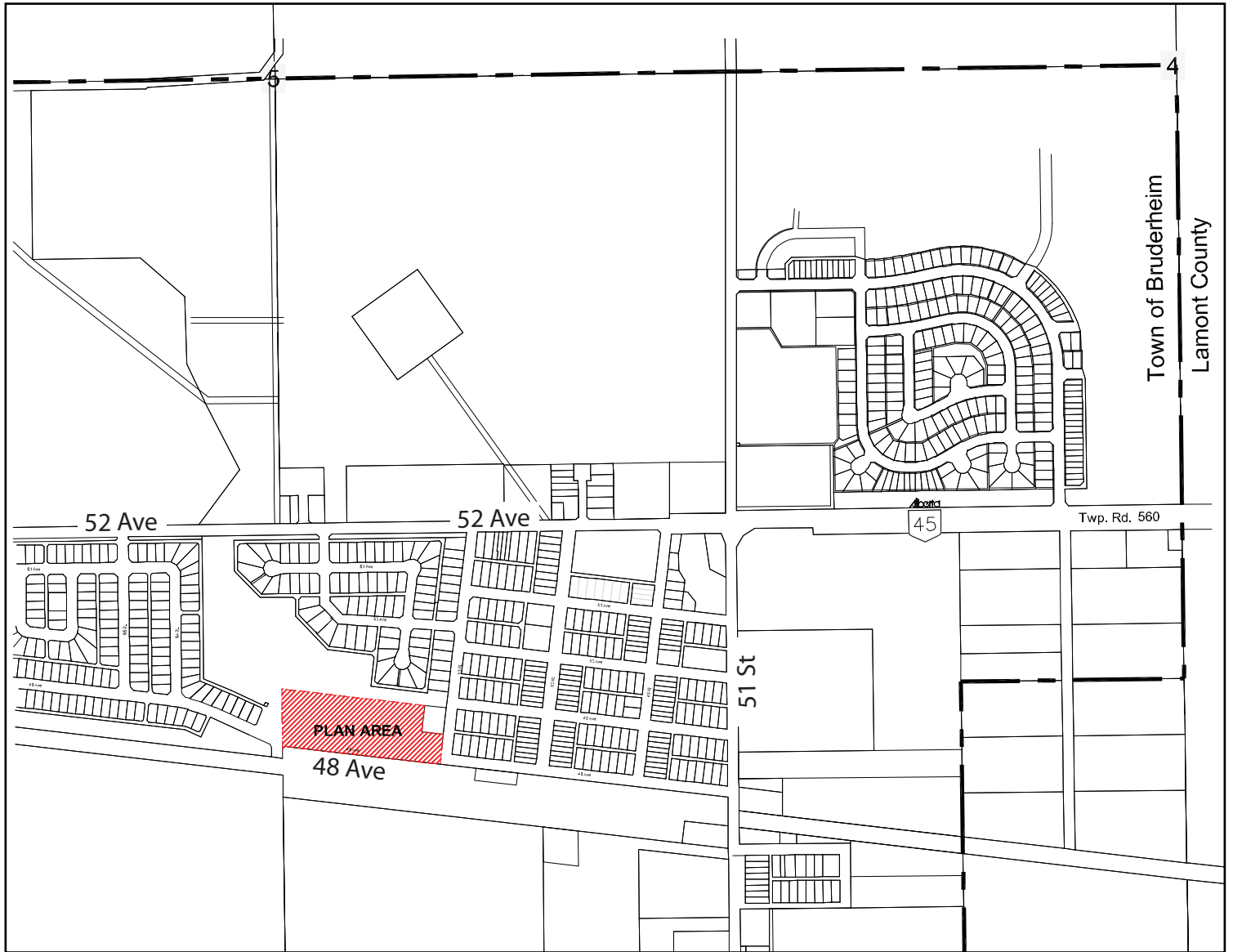
The MASP consist of land located within the Town of Bruderheim and includes approximately 3.09 hectares (7.44 ac) as shown in Figure 1.0 – Location Plan. The Plan Area is legally described as Plan 1710E0. This parcel of land is currently designated as UR – Urban Reserve District and proposed to be rezoned to R1 - Residential designation and R2 – General Residential.

The MASP constitutes a logical planning unit with respect to identifiable plan boundary and servicing considerations.

1.3 THE APPROVAL PROCESS



In conformance with the Town of Bruderheim application, review and approval process, the MASP was submitted to the Town of Bruderheim administration for review, circulation and comments. Upon receipt of the Town of Bruderheim comments, revisions to the document was

FIGURE 1.0



Town of Bruderheim
Lamont County

LEGEND

-  ASP Boundary
-  Town Boundary



made and resubmitted to the Town allowing this Plan to be forwarded to the staff and council for their review and recommendations for approval.

A Public Open House was facilitated by the developer on February 10, 2008 at the Bruderheim Memorial Community Center to inform the public of the project and to gather public comments and opinions at a time and place as agreed upon with Town Administration. A separate summary of the Open House will be provided to Council at the time of Public Hearing.

The MASP then went to Council for 1st reading. Upon following the required advertisement schedules, the MASP was presented by the Town of Bruderheim staff at a Public Hearing with the expectation of 2nd and 3rd readings to following. The MASP was then adopted via bylaw by the Town of Bruderheim.

1.4 AUTHORITY

This Plan is prepared pursuant to provincial legislation outlined in s.633 of the *Municipal Government Act* (MGA) (*Revised Statutes of Alberta, 2000, Chapter M-26*) which authorizes a council to adopt an area structure plan as follows:

633(1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may, by bylaw, adopt an area structure plan.

- (2) An area structure plan
 - (a) must describe
 - (i) the sequence of development proposed for the area,
 - (ii) the land uses proposed for the area, either generally or with respect to specific parts of the area,
 - (iii) the density of population proposed for the area either generally or with respect to specific parts of the area, and
 - (iv) the general location of major transportation routes and public utilities, and
 - (b) may contain any other matters the council considers necessary.

The Meadows Area Structure Plan has been prepared as a Statutory Plan. It adheres to Section 633 of the Municipal Government Act of Alberta and follows the guidelines and policies set forth by the Town of Bruderheim for the development of new areas.

1.5 INTERPRETATIONS

Maps, Plan and Figures: Unless specifically identified within this Plan, all boundaries and location of any land use district boundaries and/or symbols shown are approximate and shall be interpreted as such. Unless identified as absolute locations, the enclosed maps and figures are not intended to define exact locations.

Development Application: Any request by a landowner/developer for approval of site specific changes shall be considered as a Development Application. A development application may include town specific ASP's or Outline Plan, subdivision, and land use redesignation applications.

2.0 Site Context & Development Considerations

2.1 TOPOGRAPHY, SOILS & VEGETATION

As shown on Figure 2.0 – Existing Conditions, the site topography gently slopes from the southeast to the northwest. There is an existing storm drainage system in the MR immediately north of the proposed development area. An existing channel carries overland drainage from an area southeast of the proposed development to a twin culvert in the north end of the MR. Part of the drainage channel will have to be rerouted around the proposed development in the southeast corner.

A few test holes were dug on the proposed site to determine average topsoil depths. Based on this information our estimation of the depth of topsoil on the site is between 0.25 – 0.30m. The site is currently vacant with minimal vegetation cover.

There is an existing storm water drainage system located on the Municipal Reserve site that will be enhanced to provide storm water drainage for the new development.

2.2 HISTORICAL LAND USE

The subject area is undeveloped agricultural land and is currently not being used.

There are no historical resources for this land identified in the current March 2011 publication of “A Listing of Significant Historical Sites and Areas” from the Alberta Historical Resources Foundation. The quarter section has been in use as agricultural land for several decades.

2.3 EXISTING UTILITIES

There are no existing utilities on the property; however, existing sanitary sewers, storm sewers and water mains near the boundary will be extended into to service the Plan Area.

2.4 EXISTING INFRASTRUCTURE

The existing utilities and roadway will be extended from both the east and the west of the development to easily service this site.

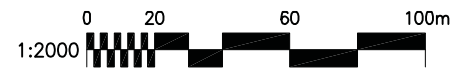
FIGURE 2.0



LEGEND

----- ASP Boundary

~ Contour Lines



EXISTING CONDITIONS
BRUDERHEIM ASP



3.0 Development Strategy

3.1 PURPOSE

This Plan has been prepared as an efficient use of the infill land within the Town of Bruderheim and to provide new housing opportunities. The development of this property and the subsequent connection of 48th Avenue to the West Woodlands Subdivision will improve access to and from the existing subdivisions.

The main objectives of the Plan are:

- Develop a plan consistent with the general intent and purpose of the Town of Bruderheim Municipal Development Plan (MDP);
- Provision of a framework to deliver high quality, comprehensively planned residential areas by defining the general pattern and composition of land uses, linkages, servicing designs and development staging.

The existing boundaries create a logical planning unit and the basis for the design as shown on Figure 3.0 – Concept Plan. The land use statistics and densities are represented in Table 1.0 and Table 2.0.

Table 1.0 - Land Use Statistics

Land Use	Area (ac)	% of GDA
Gross Area	7.44	
Out parcel (Plan 0623287)	0.46	
Net Developable Area	6.98	100%
Residential Single Family (R-1)	0.63	9%
General Residential (R-2)	2.48	36%
Open Space - Municipal Reserve (MR)	0.69	10%
Public Utility Lot (PUL)	0.62	9%
Roads and Lanes	2.52	36%

Table 2.0 - Residential Units and Population

Land Use	Net Area	Total	Density	Population
	(ac)	Units	persons/unit	
Residential Single Family (R-1)	0.63	5	2.5	12
General Residential (R-2)	2.48	32	2.5	80
Total	3.11	35		92

3.2 ECOLOGICAL STEWARDSHIP

- Develop land in an efficient manner and encourage development of these lands to a municipal standard.
- Encourage sustainable growth through development of infill lands with appropriate densities.
- Promote the development of open spaces and walkway linkages for pedestrian, bicycle and other multi-use travel, and connect them to the surrounding areas.
- Support directives to mandate energy efficient construction and other innovative building and infrastructure techniques.

3.3 RESIDENTIAL



It is anticipated that the residential portion of the project will:

- Encourage a variety of housing types appropriate for the context of the Plan Area; including single detached housing and duplexes. All housing forms and options will recognize consumer preferences and be in conformance with municipal standards and policies set forth by the Town of Bruderheim.
- Emphasize pedestrian friendly streetscapes and building siting.
- Provide direct and safe pedestrian linkages to community nodes such as the open space areas.
- Locate residential development to integrate with and take advantage of features such as greenways, storm water management facilities, parks and open spaces.

FIGURE 3.0



LEGEND

-  Single Detached Residential (R1)
-  General Residential (R2)
-  Municipal Reserve (MR)
-  Storm Water Management Facility (PUL)
-  Roads/Lanes
-  ASP Boundary



3.3.1 Residential Single Family (R-1)

A total of five single family lots will be developed on the subject lands as shown on Figure 3.0 – Concept Plan. Residential Single Family lots will be developed with a minimum width of 12.0m for interior lots and 13.5m for corner lots with minimum parcel size of 360m².

3.3.2 General Residential (R-2)

Sixteen R-2 General Residential lots will be developed as duplex lots to provide for thirty two dwelling units. Each R-2 lot will be a minimum of 230m² with minimum lots widths of 7.5m for interiors and 9.0m for corner lots.

Depending on the additional storm water storage required as a result of this development and the resulting excavation near the existing storm water pond, the excess material generated will be used to balance the earthworks on the site and possibly create walkout lots along the north side of the some lots. This will be finalized during the detailed design of the project.

3.4 PARKS AND OPEN SPACE

The objectives of the parks and open space are:

- Provide integrated linkages and greenways between various community amenities.
- Allow for the provision of consolidated park space within the neighborhood to provide open space and opportunities for recreation for residents through the dedication of Municipal Reserves.

3.4.1 Municipal Reserve

A 0.69 acre Municipal Reserve has been intergraded into the existing open space. A portion of this open space area will also function as a stormwater management facility as seen on Figure 4.0 – Open Space and Trials Plan.

FIGURE 4.0



LEGEND

-  Municipal Reserve (MR)
-  Storm Water Management Facility (PUL)
-  ASP Boundary
-  Pedestrian Linkage



4.0 Transportation Concept

4.1 TRANSPORTATION

The system of roads proposed for the MASP neighborhood provides its residents and the surrounding, traveling public with safe and efficient access from this area. The objectives of the system of roads are to:

- Provide a logical, safe and efficient transportation system within the Plan Area to address pedestrian, bicycle and other multi-use modes of transportation.
- Provide non-vehicular circulation options throughout the Bruderheim area with special attention to linkages to the recreational parks sites.
- Minimize walking distances by creating an interconnected street network and providing walkways where roadway connections are not feasible.

4.2 COLLECTOR ROADWAY

Currently, 48th Avenue is not continuous along the south side of Town with dead ends at both the east and west ends of the proposed site. The only roadway connection from the West Woodlands subdivision to the rest of the Town is along 52nd Avenue. When this site is fully developed, 48th Avenue would be extended to connect the existing portions of the road which will improve vehicle mobility in this area of town.

Field surveys of both the east and west ends of existing 48th Avenue have shown an inconsistent roadway width which will have to be reviewed and designed as part of the new portion of road. Their width's are not equal and the proposed roadway connecting them will have to be tapered to provide a smooth transition between the two sections of road.

4.3 LANEWAYS

The MASP has been designed with some lots backing on to laneways. All lanes will be constructed to the standards set forth by the Town of Bruderheim.

4.4 TRAFFIC CALMING MEASURE

As shown on Figure 5.0 – Traffic Calming Measures, a traffic calming measure has been identified along the collector to improve safety through reducing speeds and increasing awareness to the area. This traffic calming measure is conceptual in nature and will be reviewed during detail design.

FIGURE 5.0



LEGEND

- ASP Boundary
- ▭ Roads



5.0 MUNICIPAL SERVICING

5.1 SITE SERVICING

The preliminary servicing review is based on information obtained from the Town of Bruderheim Infrastructure Plan prepared by Tritex Engineering Consultants Ltd. in 1988.

The proposed development will be serviced with municipal water, sanitary sewer, and storm sewer services. The development will be serviced with underground gas, cable T.V., phone, and power servicing which will be extended from the existing Town of Bruderheim system.

5.2 STORMWATER SYSTEM

Currently there is an existing storm drainage system in the green space northwest of the Plan Area and it is proposed that the storm runoff generated from the new development will outlet into this existing system. The storage volume required to accommodate the 1:100 year storm event for the site has been reviewed and it is proposed that additional storage be added to existing storm detention pond within the new MR area to achieve the required volume. If extra material is required to grade the site and it proves to be beneficial to the Town, additional storage could be added to the existing detention area with enhancements to outlet system.

There is an existing drainage course that originates south of the existing development, crosses 48th Avenue and continues north through the proposed development area as shown on Figure 6.0 – Stormwater System. With the development of the Plan Area, the affected portion of the drainage course will be diverted around the new lots and then continue northwest in the existing swale as before. As noted above, storm water in excess of a 1:5 year event will be directed into the proposed storage site and released at a controlled rate.

5.3 SANITARY SEWER SYSTEM

The Tritex Engineering Report states that the existing sanitary sewer system is more than adequate in all areas of Town. Due to the growth in the population since the utilities capacities were reviewed in 1988, it can be assumed that the existing sanitary sewer system is still more than adequate to accept flows from the new development. The proposed development would tie into the existing sanitary sewer system at the east end of 48th Avenue in the West Woodlands Subdivision at manhole 414 as shown on Figure 7.0 – Sanitary Sewer System.

A preliminary review of the existing ground elevations versus the proposed sanitary sewer inverts, indicates that there shouldn't be any difficulty using a gravity sewer main with adequate ground cover for servicing this area.

The Tritex Engineering study of 1988 also reviewed the Sewage Lagoons capacity and indicates that the existing lagoons can serve approximately 3800 people.

FIGURE 6.0



LEGEND












-  Storm Pipe
-  Storm Manhole
-  Existing Storm Pipe
-  Existing Storm Manhole
-  Existing Pond Outlet
-  ASP Boundary



FIGURE 7.0



LEGEND

-  Sanitary Pipe
-  Sanitary Manhole
-  Existing Sanitary Pipe
-  Existing Sanitary Manhole
-  ASP Boundary



5.4 WATER

As noted in the Tritex Engineering report, the existing water system is more than adequate for the current population. With the development of the new property, two existing dead-ended water mains would be connected along 48th Avenue, further improving the existing water main network in the Town as shown on Figure 8.0 – Water System. Smaller diameter water mains would be extended into the proposed cul-de-sacs for lot servicing.

5.5 SHALLOW UTILITIES

The applicable shallow utility franchises will be contacted regarding this ASP, including natural gas, power distribution, telephone communication and cable television. It is anticipated that the site is serviceable for all utilities through extensions of their existing facilities located adjacent to or near the Plan area.

5.6 LOT GRADING

Individual lots within the development will be graded to provide positive drainage away from the house foundation. House grades will be set a minimum of 0.3 meters above any surface water ponding elevations.

FIGURE 8.0



LEGEND

- - - Water Pipe
- ⋈ Water Valve
- Existing Water Pipe
- ⋈ Existing Water Valve
- ASP Boundary



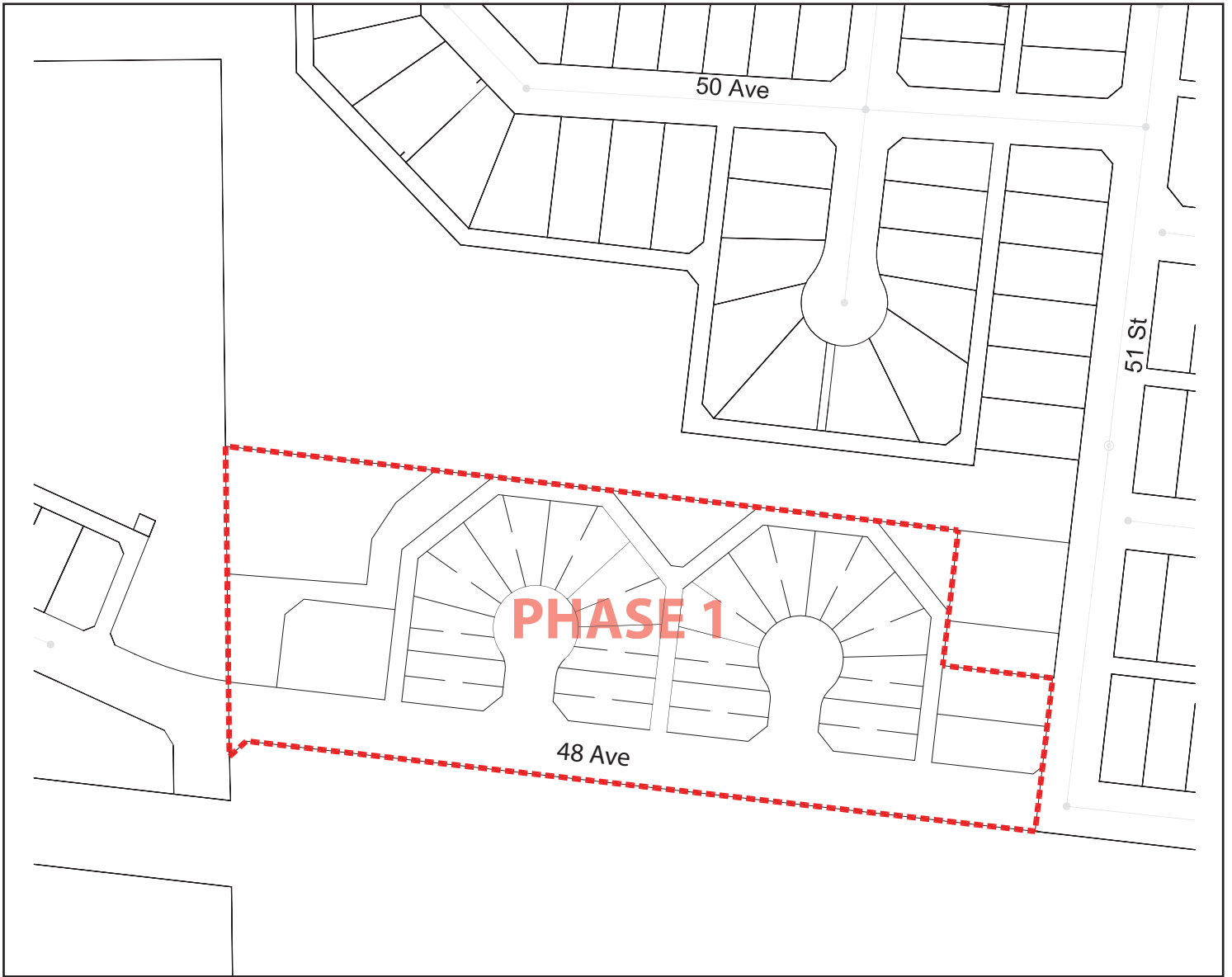
6.0 IMPLEMENTATION

This Area Structure Plan for the Bruderheim development area will be implemented in accordance with the Town of Bruderheim redistricting and subdivision approval processes.

6.1 DEVELOPMENT STAGING

The current plan is to develop the MASP in one stage due to the size of the Plan Area. The basis for this implementation strategy comes from the initial market demand and need for housing options as shown on Figure 9.0 - Staging.

FIGURE 9.0



LEGEND

----- ASP Boundary



APPENDIX: OPEN HOUSE

On February 10th, 2009 at 5pm, a public open house was held at the Bruderheim Memorial Community Center. A newspaper advertisement was sent out beforehand to encourage residents to come out and participate in the discussion. During the meeting, the proposed Concept Plan and details were presented. Topics of discussion included the overall development plan, traffic calming methods to be used, and housing types to be implemented. There were four (4) attendees to this open house.

After the meeting was complete, attendees were asked to fill out a feedback form and return it to Stantec Consulting either that evening or via e-mail/mail/fax within two weeks. Several questions were asked on the feedback forms including the relationship of the person to the site, how well the proposed development tied into the surrounding community and if he/she was in support of the proposed development. There was then space for additional questions or comments. Stantec received one (1) feedback form following the open house.

Based on the feedback form received, this person, an interested member of the general public, was in favor of the proposed development and felt it tied in well to the surrounding community. Several concerns were brought up on this form:

- The linkages into the town's walkways
- How drainage would be affected by this development
- More screening may be needed due to the industrial lands to the south of the Plan Area
- Would the developer be willing to supply investment of time/advice/money to improve the park land to the north of the Plan Area

These concerns were taken into consideration as planning of The Meadows continued forward.