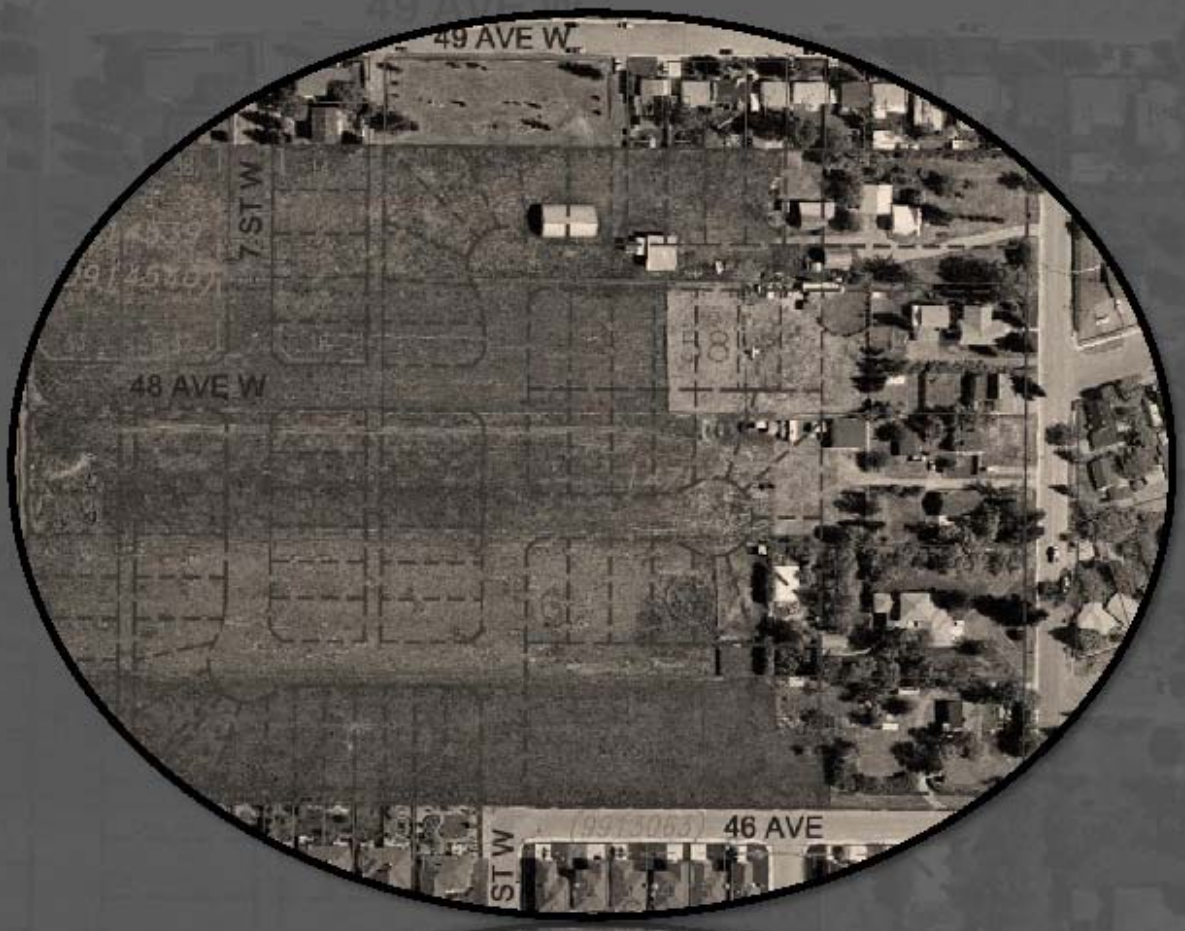
Town of Claresholm



Southwest Residential Area Structure Plan

Bylaw 1552
October 2010

Claresholm

Prepared by Oldman River Regional Services Commission for the Town of Claresholm

OLDMAN RIVER REGIONAL SERVICES COMMISSION

Claresholm

TOWN OF CLARESHOLM
PROVINCE OF ALBERTA
BYLAW #1552

A Bylaw of the Town of Claresholm in the Province of Alberta, to adopt Bylaw# 1552, being the Southwest Residential Area Structure Plan.

WHEREAS the Council of the Town of Claresholm wishes to adopt a comprehensive land use plan for certain land contained within the SW ¼ of 26-12-27 W4M; and

WHEREAS the purpose of an area structure plan is to provide a framework for the subsequent orderly subdivision and development of land within a defined area; and

WHEREAS the Council wishes to regulate and control development of these said land, but also to promote these lands as a residential area.

NOW THEREFORE under the authority and subject to the provisions of the Municipal Government Act, Revised Statutes of Alberta 2000, Chapter M-26, as amended, the Council of the Town of Claresholm in the Province of Alberta duly assembled does hereby enact the following:

1. Council shall adopt an area structure plan in accordance with the provisions of the Act.
2. This plan attached as Schedule 'A', upon adoption, shall be known as the Southwest Residential Area Structure Plan.
3. This bylaw shall come into effect upon third and final reading hereof.

Read a first time in Council this **13th** day of **September** 2010 A.D.

Read a second time in Council this **27th** day of **September** 2010 A.D.

Read a third time in Council and finally passed in Council this **12th** day of **October** 2010 A.D.

Rob Steel, Mayor

Kris Holbeck, CAO

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Maps

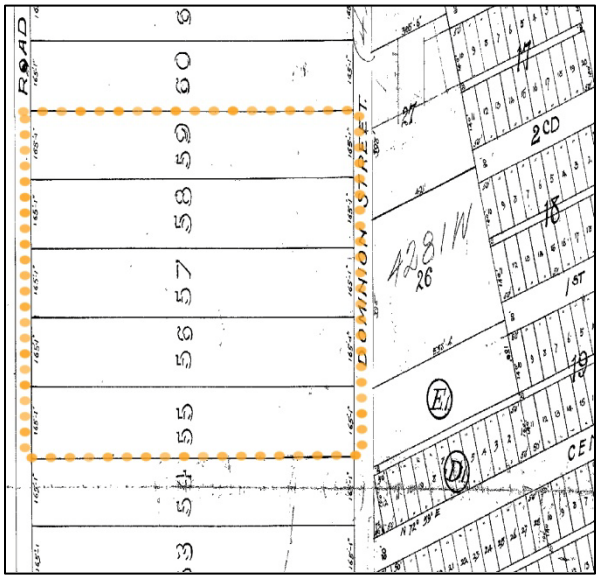
1.0 Introduction

1.1 Background

Claresholm is a growing and thriving community in southern Alberta. The Town's recent increase in population has consumed the majority of land supply for low density residential, creating a need for more residential development within the community. Before considering annexation and the conversion of prime agricultural lands, the Town analyzed the opportunities for infill development within its current municipal boundaries. Infill development has many benefits to the community including:

- cost and time savings compared to the annexation process;
- avoidance of 'leap frog' development;
- use of existing infrastructure;
- preservation of agricultural land;
- more efficient use of land;
- increased tax base;
- possibilities for more vehicle and pedestrian networks; and
- the opportunity for new parks and open spaces.

The Town has identified a twenty-four acre area that has potential for future residential development (see Map 1). The original subdivision plan from 1905 created five-acre estate lots along the west side of Town. The original lot configuration for lots 55-59 is still largely intact and the current landowners have expressed an interest in developing their properties to a more typical urban standard. As a consequence, the Town has undertaken the creation of an area structure plan (ASP) to guide and direct development in this area.



1905 Registered Titles

2010 Registered Titles

1.2 Ownership

There are twenty-four separate legal titles owned by six landowners within the Southwest ASP. Consultation has occurred with these landowners and will continue to occur as the ASP is implemented and developed.

1.3 Purpose and Intent of the Plan

The intent of the Southwest Area Structure Plan is not to compel landowners to develop their properties, but rather to provide landowners, developers and town representatives with a guide for sound neighbourhood planning.

The Southwest ASP will provide certainty to landowners, citizens and interested parties as to the design of future development in the area. Any significant departure from the plan once adopted by bylaw will require a bylaw amendment process, which prompts three readings of the amendment and a public hearing by Town Council.

1.4 Municipal Government Act

Pursuant to Part 17 of the Municipal Government Act, Revised Statutes of Alberta, 2000, Chapter M-26, as amended, a municipality is responsible for the control of land use and development on private land within its boundaries.

Several planning tools are available to the municipality to manage and control development for a particular area, one of which is the area structure plan – a statutory document a municipality can adopt pursuant to section 633 of the Municipal Government Act.

Area Structure Plans

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

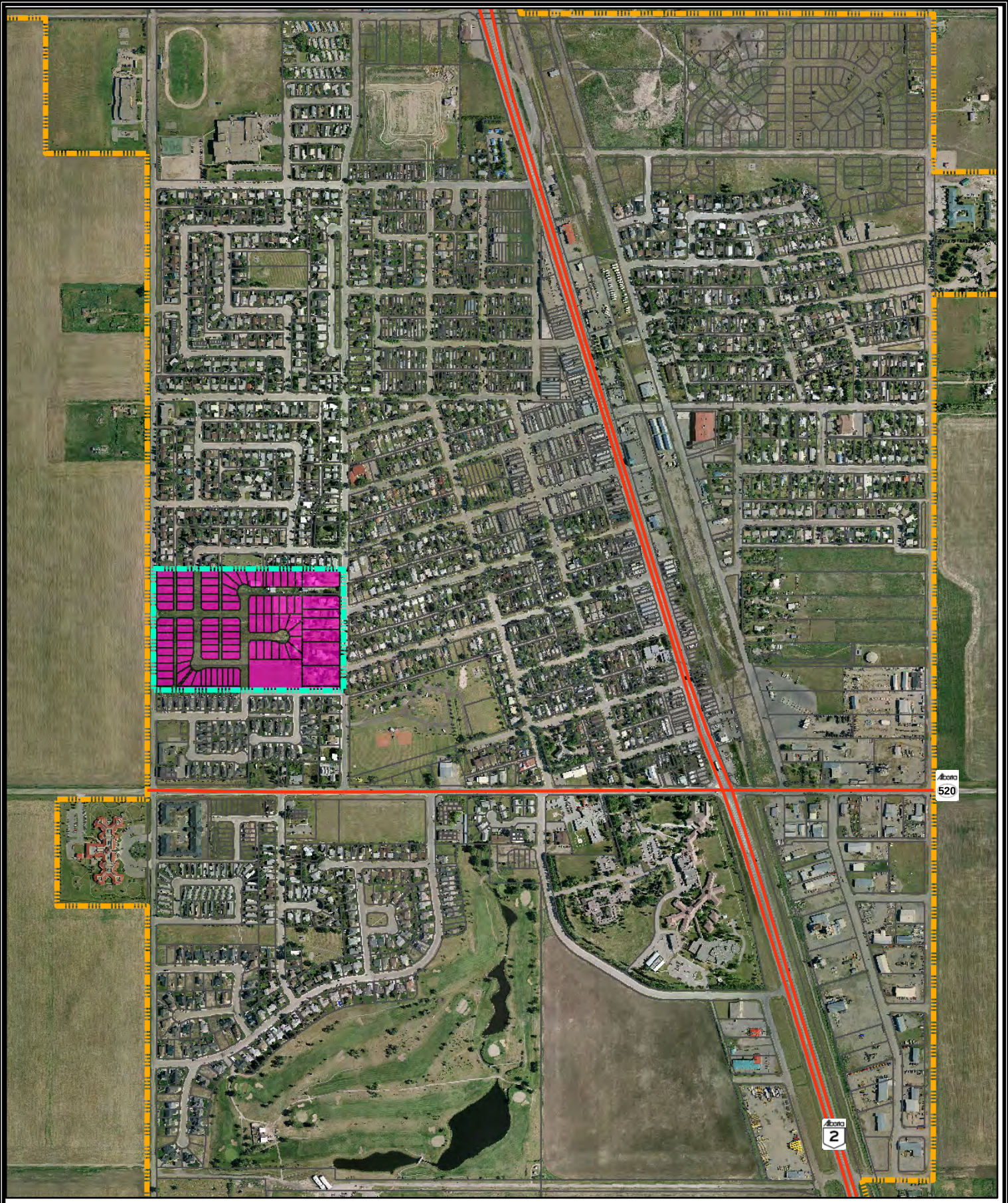
(i) the sequence of development proposed for the area,

(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.*



TOWN OF CLARESHOLM
SOUTHWEST AREA STRUCTURE PLAN

ASP LOCATION
MARCH 16, 2010

MAP 1

ASP Boundary
Claresholm Boundary
Highways
ASP Location

Claresholm

0 125 250
Meters

N

1.5 Municipal Development Plan

The Town's Municipal Development Plan (MDP) Bylaw generally discusses the issues of land use, transportation corridors, community identity and future growth. The MDP requires the creation of an area structure plan for the Southwest ASP area and identifies this location for future residential use. Thus, the Southwest ASP fulfills the vision of the MDP for this area.

1.5.1 MDP Polices for Residential Development

The MDP states that the goal of residential development in the Town is:

> *To encourage and support the development of safe, attractive and functional residential neighbourhoods that will provide the residents of the Town with a variety of housing options.*

The Southwest ASP has been created to fulfill the vision of the MDP and provide for the development of a safe, attractive and functional residential neighbourhood with a variety of housing options in the southwest of Claresholm.

Further, the Southwest ASP must meet the following policies for residential development found within the Town's MDP.

3.4 Policies

- *Encourage residential neighbourhoods in areas in close proximity to schools and community facilities.*
- *New residential development will be planned such that existing municipal infrastructure is utilized to the most sustainable extent possible.*
- *New residential subdivisions […] should include paved streets, curbs, gutters and sidewalks, and provide underground services that allow for future growth and are easily accessible.*
- *Residential areas will be planned to accommodate a wide variety of housing types to enhance the appearance of the Town. By ensuring that residential areas are connected to the community via pedestrian walkways.*
- *The Town supports the infilling of vacant lots and the rehabilitation of existing homes as an alternative to the development of new residential areas.*
- *All new infill development shall be of a form that is compatible with the surrounding area in terms of height, scale and density.*

1.5.2 MDP Policies for Recreation, Parks and Open Space

The MDP states that the goal of recreation, parks and open space in the Town is:

> *To preserve and enhance the quality of life for the residents of Claresholm through the maintenance of existing park facilities and the acquisition and improvement of new parks, recreational facilities, trails, bikeways, and open spaces.*

The following MDP policies for recreation, parks and open space must be considered in the development of the Southwest Area Structure Plan:

6.4 Policies

- *Council will compel developers to provide lands for neighbourhood parks as a part of residential neighbourhoods.*
- *Develop a network of recreational trails and bikeways throughout the community that will be accessible to all residents.*
- *Cooperate with developers to provide parks and recreational facilities, including trails, at the time that development occurs in low and high-density residential areas.*
- *Consider operation and maintenance costs in the design of all park improvements and recreation facilities. These costs should be considered prior to acquiring new facilities.*
- *Whenever possible, establish greenways to link open space areas located in close proximity to one another.*

1.5.3 MDP Policies for Transportation

The Southwest ASP should consider the following MDP policies for transportation:

7.4 Policies

- *The Municipality should enter into a development agreement with potential developers to provide for construction or upgrading of such amenities as roads, light standards, sidewalks, and curb and gutter systems.*
- *Ensure that building frontages encourage pedestrian usage of streets contributing to vitality.*

1.6 Level of Planning Detail and Flexibility

This area structure plan meets the requirements of higher planning documents. The level of planning detail provided in the plan reflects the appropriate balance between vision and flexibility. Provincial legislation foresees the possibility that a statutory plan, such as an area structure plan, may not accommodate all circumstances. Thus, municipal authorities, if situations warrant, are given the power to allow waivers to certain requirements of the plan. If waivers to the plan are being regularly given, this may indicate that the plan requires review and amendment.

1.7 Process

Following some initial consultation with landowners, the Oldman River Regional Services Commission and Town of Claresholm administration drafted a proposed design scheme for the plan area. The proposed design scheme guided the creation of the Southwest Area Structure Plan.

The following process is required for the adoption of an area structure plan:

i. The ASP is reviewed by Council.
ii. The ASP receives first reading.
iii. A mandatory public hearing is held pursuant to Municipal Government Act requirements.
iv. The ASP receives second reading.
v. The ASP receives third and final reading. The ASP is now adopted by bylaw.

Once adopted, the Town of Claresholm administration will use the area structure plan in-concert with other local plans to guide decision-making concerning future subdivision and development.

1.8 Objectives

The Southwest Area Structure Plan will seek to accomplish the following objectives:

- Maintain and enhance the existing quality of life by continuing the low density residential land use pattern shown in the surrounding neighbourhoods.
- Provide a framework and guidance for the orderly subdivision and development of vacant parcels of land, so as to eliminate 'leap frog' development scenarios.
- Maintain and enhance the quality of life of existing and future residents by ensuring that the proposed transportation pattern provides easy access to major transportation routes, while limiting the temptation for non-residents to cut-through the local neighbourhood.
- Provide direct and safe pedestrian linkages to the community nodes (such as parks and open spaces).
- Ensure that the type and distribution of land uses comply with the policies and objectives of the Town's policy documents, where possible, considering the constraints and opportunities associated with the plan area.

1.9 Definitions & Acronyms

1.9.1 Definitions

Public Open Space means land which is not in private ownership and is open to use by the public.

Public park or recreation means a public park, playground, recreation area, indoor or outdoor rink, gymnasium, sports field, campground, agriplex, historic or archaeological site.

Linear Park means a park area that is longer than it is wide and developed to accommodate one or more modes of recreational travel such as walking, running, rollerblading or cycling.

1.9.2 Acronyms

MDP: Municipal Development Plan

LUB: Land Use Bylaw

ASP: Area Structure Plan

PUL: Public Utility Lot

MGA: Municipal Government Act, Revised Statutes of Alberta, 2000, Chapter M-26

2.0 Design Considerations

2.1 Existing Land Use

All parcels of land inside the ASP boundary are within the *Single Detached Residential – R1* land use district (see Map 2). There are currently twenty-four parcels within the area, ranging in size from 0.14 acres to 4.76 acres (see Table 1). There are a total of six parcels greater than 2.0 acres, with all other parcels being less than 0.5 acres. The total acreage from residential parcels equals 22.66 acres. The remaining area of approximately 1.75 acres is dedicated to roads.

Table 1: Existing Legal Parcels in ASP area

Short Legal	Size (acres)	Short Legal	Size (acres)
Block 55 Plan 147N	4.3	Lot 17 Block 5 Plan 0914539	0.15
Block 55 Plan 147N	0.47	Lot 18 Block 5 Plan 0914539	0.15
Block 56 Plan 147N	4.76	Lot 38 Block 4 Plan 0914539	0.14
Block 57 Plan 147N	2.38	Lot 39 Block 4 Plan 0914539	0.15
Block 57 Plan 147N	2.38	Lot 40 Block 4 Plan 0914539	0.15
Block 58 Plan 147N	0.28	Lot 41 Block 4 Plan 0914539	0.15
Block 58 Plan 147N	0.49	Lot 42 Block 4 Plan 0914539	0.14
Block 58 Plan 147N	2.31	Lot 43 Block 4 Plan 0914539	0.14
Block 59 Plan 147N	3.07	Lot 44 Block 4 Plan 0914539	0.15
Lot 14 Block 5 Plan 0914539	0.15	Lot 45 Block 4 Plan 0914539	0.15
Lot 15 Block 5 Plan 0914539	0.15	Lot 46 Block 4 Plan 0914539	0.15
Lot 16 Block 5 Plan 0914539	0.15	Lot 47 Block 4 Plan 0914539	0.15
		Total	**22.66**

Source: ORRSC

2.2 Topography and Existing Site Conditions

The topography of the plan area slopes from the northwest to southeast, with a difference of approximately 2.5 metres (see Map 3). At the present time, the majority of primary dwellings and secondary buildings are located on the eastern third of the plan area. There are only two buildings located outside of this eastern third of the ASP area, leaving the remaining land essentially vacant for future development. Subdivision has occurred in the northwest corner of the plan area, as of the beginning of 2010 single family dwelling construction has begun.

2.3 Adjacent Land Use

The Southwest ASP is located in the southwest part of Claresholm adjacent to the Town's western boundary (see Map 4). Agricultural land within the M.D. of Willow Creek sits to the west of the Southwest ASP plan area, directly across from 8th Street West. The majority of land to the north of the ASP area is designated within the *Single Detached Residential – R1* land use district. There is also a small park that functions as a children's playground adjacent to the ASP's north border. Directly east of the ASP area the land is all designated within the *Single Detached Residential – R1* district. Centennial Park, a

large community park and campground sits to the southeast of the ASP boundary. The land adjacent to the ASP's southern border is divided between three districts: *Single Detached Residential* – R1 district, *Duplex Residential* – R2 district, and the *Multiple Residential –R4* district.

2.4 Existing Road Network

The ASP area is bounded on the west by 8th Street West and on the east by 4th Street West. Both of these north-south streets have significant traffic flows. Only two internal roads currently exist within the plan area: 48th Avenue West and 7th Street West. One of the objectives of the Southwest ASP is to discourage traffic from cutting through the development in order to access 4th Street West or 8th Street West. For residents of the neighbourhood, access to Highway 520 can be achieved from 4th Street West or 8th Street West. The most direct connections from the area to downtown Claresholm are 48th and 49th Avenues West.

Air photo of existing site conditions and road network

TOWN OF CLARESHOLM
SOUTHWEST RESIDENTIAL ASP

EXISTING LOT CONFIGURATION AND ACTUAL LAND USE
MARCH 16, 2010

MAP 2

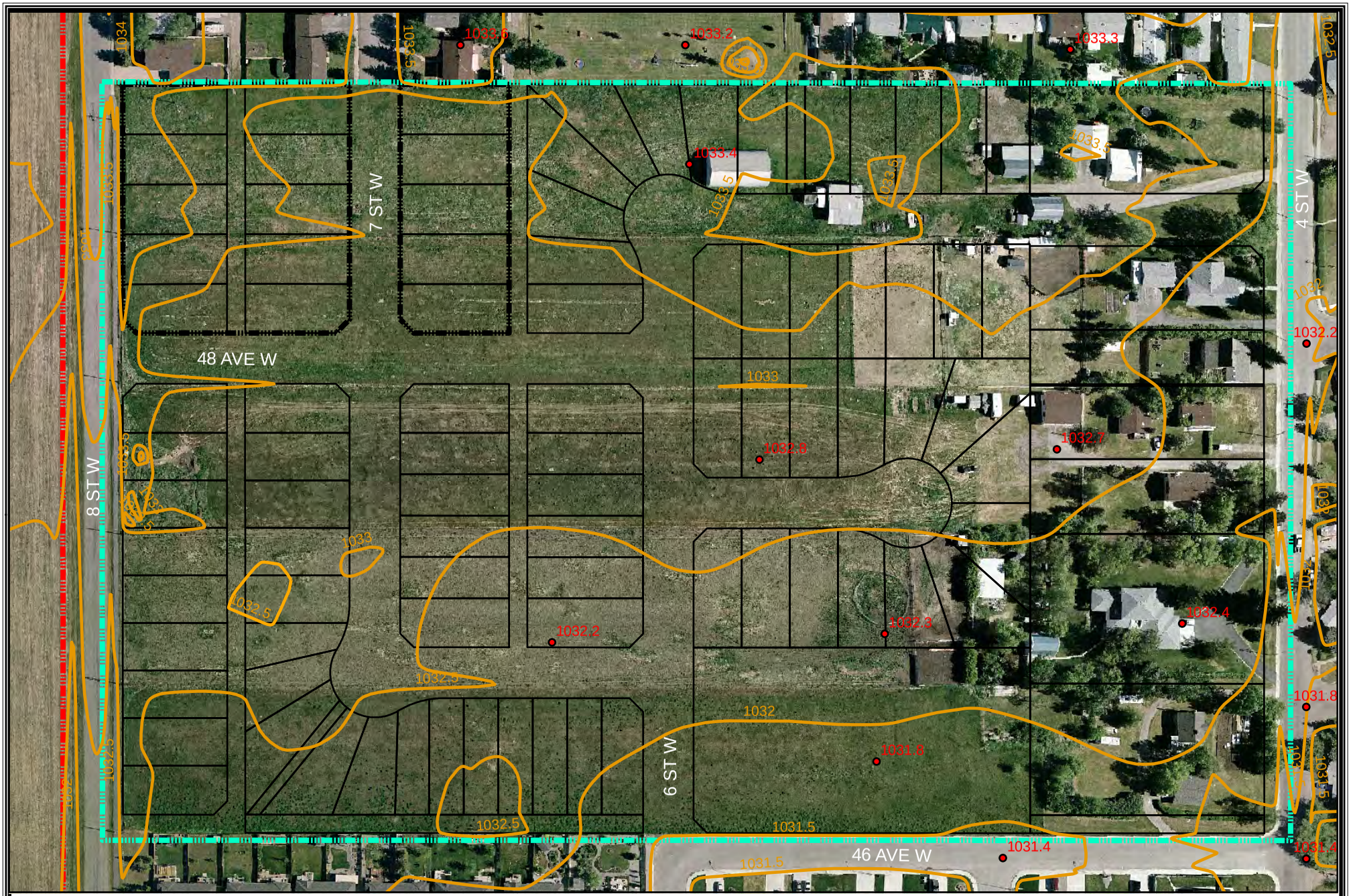
Existing Lot Configuration and Land Use

- ASP Boundary
- Claresholm Boundary
- Single Detached Residential - R1
- Duplex Residential - R2
- Multiple Residential - R4
- Retail Commercial - C1
- Public - P

Claresholm
Oldman River Regional Services Commission

0 50 100
Meters

N



TOWN OF CLARESHOLM
SOUTHWEST RESIDENTIAL ASP

CONTOUR MAP
MARCH 16, 2010

MAP 3

- ASP Boundary
- Claresholm Boundary
- Existing Lots Within ASP
- Contours (metres)
- Spot Heights (metres)

Claresholm

Oldman River Regional Services Commission

0 25 50

Meters

N

3.0 Land Use Concept

3.1 Overview of Design

The Southwest ASP design is focused on continuing the low density residential land use pattern present in the adjacent neighbourhoods (see Map 5). The majority of proposed lots are for single detached residential use with a small number of lots designated for duplex residential use. The existing dwellings along the eastern portion of the area will be subdivided into seven large properties, ranging in size from 0.71 acres to 0.98 acres. A large public utility lot is proposed in the southeastern corner of the plan area and will be used primarily for storm water management and secondarily as a passive park. Four linear parks have been planned in the design concept, with the intention of being pedestrian linkages to the Town's existing parks and trail network. Overall, the ASP design will provide the Town with new residential and open space opportunities, while at the same time integrating smoothly into the Town's current development pattern and respecting the historic development in the area.

Table 2: Land Use Distribution

LAND USE	NUMBER OF LOTS	NUMBER OF DWELLING UNITS	ACRES	PERCENTAGE OF TOTAL AREA
Single detached residential	85	85	15.76	65%
Duplex residential	9	18	1.06	4%
Public Open Space & Utility Lot	5	n/a	2.15	9%
Roads and Lanes	n/a	n/a	5.44	22%
TOTAL	97	101	24.41	100%

Source: *ORRSC*

3.2 Residential Development

The majority of residential lots in the proposed design are to be designated in the *Single Detached Residential – R1* district. A small number of lots in the *Duplex Residential – R2* district have been planned in the south of the plan area to provide a density gradient between the adjacent *Multiple Residential – R4* district and the proposed *Single Detached Residential – R1* district. Along the eastern portion of the plan area seven large lots will be positioned to accommodate some existing buildings and development. These large lots will allow the current land owners to maintain the function of their properties, while still allowing for new development to take place in the remainder of the plan area.

3.2.1 Lot Types

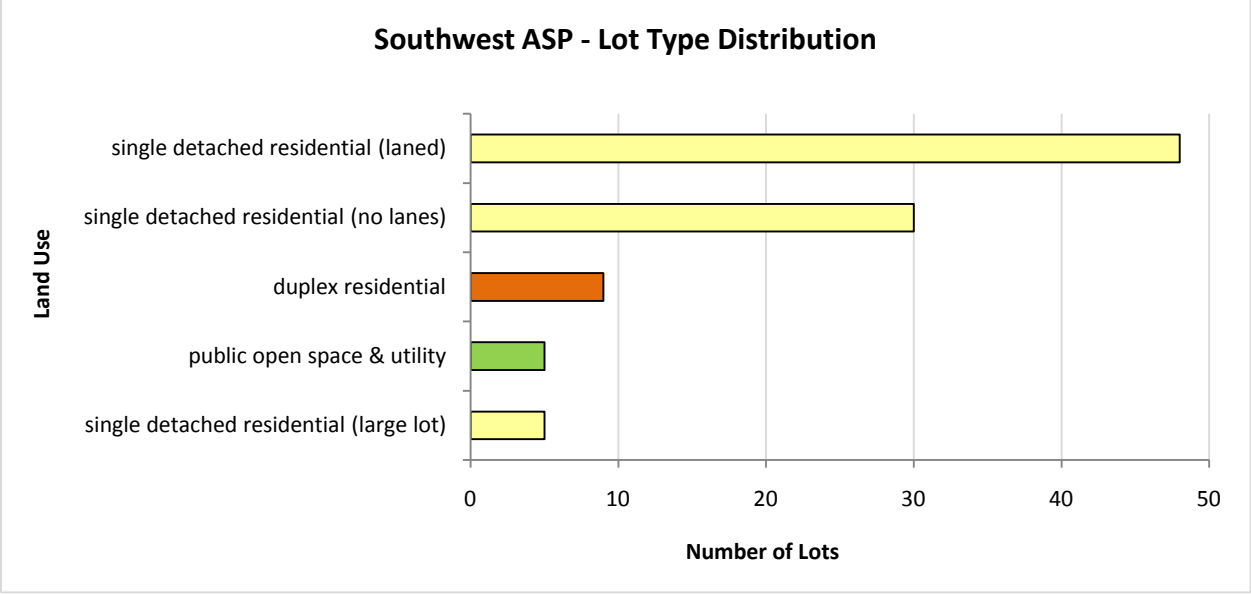
Single detached residential (large lot): The proposed design creates seven large single detached residential lots from the existing estate lots in the plan area. Although the lot sizes do not conform to

those of adjacent neighbourhoods, they are necessary to accommodate the existing dwellings and buildings within the plan area. The lot depth for the seven large lot properties was determined by the need to accommodate an existing accessory structure on Block 57 Plan 147N. Thus all seven large lots will have a depth of approximately 258 feet (78.5 m) and lot widths from 60 feet (18.3 m) to 165 feet (50.3 m). These lots will be designated within the *Single Detached Residential – R1 district* in the Town of Claresholm Land Use Bylaw.

Single detached residential (with lanes): A total of 48 single detached residential lots in the plan area will contain rear lanes. Rear lanes lessen street parking issues, allow for easier storage of recreation vehicles, increase pedestrian safety along the street and create a more aesthetically pleasing streetscape. These lots will be designed to the specifications outlined in the Town of Claresholm Land Use Bylaw *Single Detached Residential – R1 district.*

Single detached residential (without lanes): While a street with lanes may be preferable, physical constraints may not allow for the provision of lanes on every lot. In addition, some homeowners may prefer the convenience and benefits of a front driveway design. The proposed plan contains a total of 30 single detached residential lots without lanes. These lots will be designated within the *Single Detached Residential – R1 district*.

Duplex residential: There are nine duplex residential lots proposed in the Southwest ASP. The duplex lots have been placed adjacent to existing lots that are within the *Multiple Residential –R4* district. This placement, as well as the placement of a linear park between the two areas, creates a nice transition to the single detached residential district. These lots will be designated within the *Duplex Residential – R2* district of the Town of Claresholm Land Use Bylaw.



TOWN OF CLARESHOLM
SOUTHWEST RESIDENTIAL ASP

PROPOSED LOT CONFIGURATION AND SURROUNDING LAND USE
MARCH 16, 2010

MAP 4

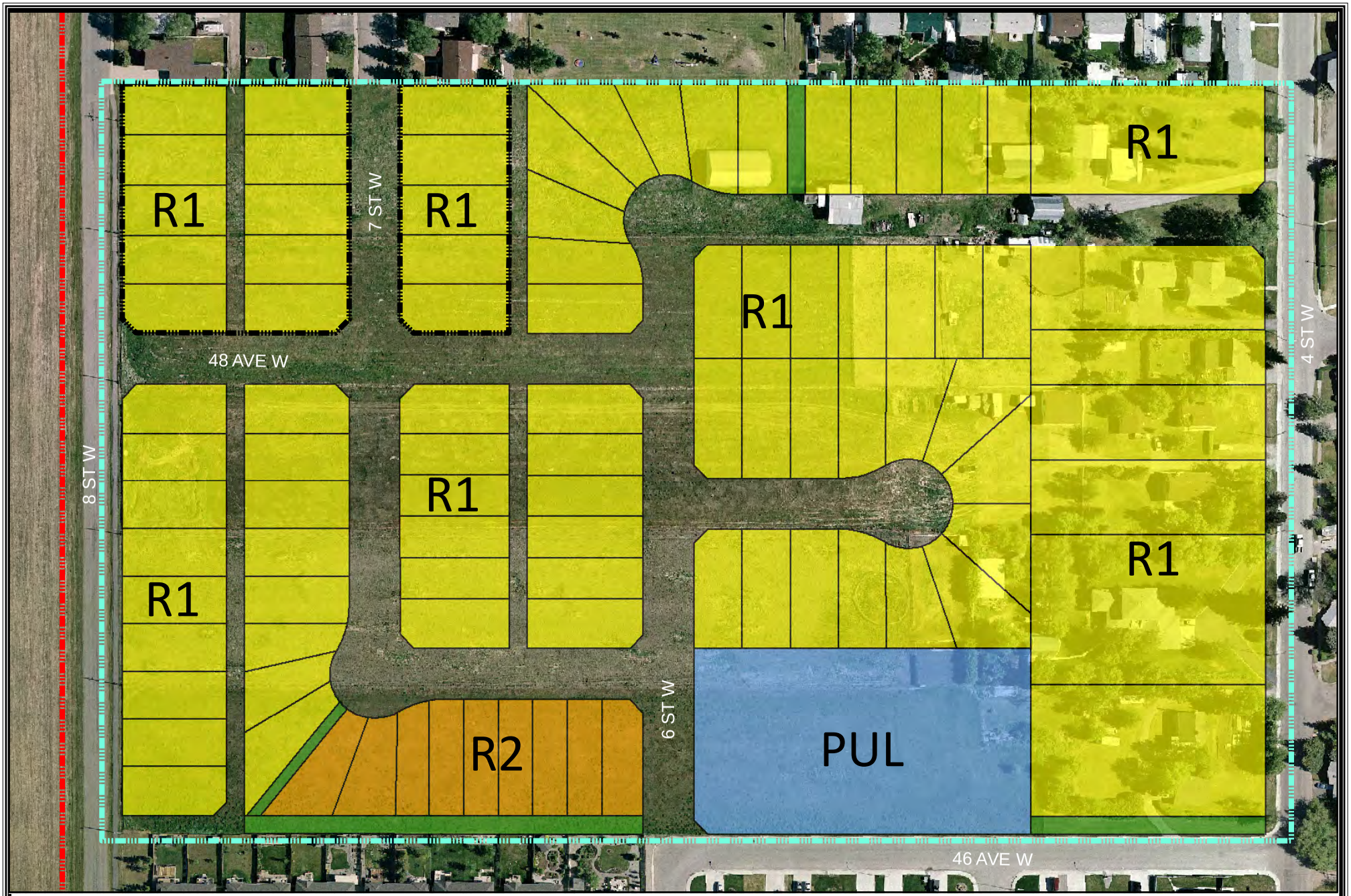
PROPOSED LOT CONFIGURATION AND SURROUNDING LAND USE

- ASP Boundary
- Claresholm Boundary
- Existing Lots Within ASP
- Single Detached Residential - R1
- Duplex Residential - R2
- Multiple Residential - R4
- Retail Commercial - C1
- Public - P

Claresholm
Oldman River Regional Services Commission

0 50 100
Meters

N



TOWN OF CLARESHOLM
SOUTHWEST RESIDENTIAL ASP

PROPOSED LOT CONFIGURATION AND LAND USE
MARCH 16, 2010

MAP 5

ASP Boundary
Claresholm Boundary
Existing Lots Within ASP

ProposedLot Configuration & Land Use

Single Detached Residential - R1
Duplex Residential - R2
Public Open Space
Public Utility Lot

Claresholm
Oldman River Regional Services Commission

0 25 50
Meters

N

3.3 Parks, Open Space and Pedestrian Linkages

Parks and open spaces are integral features of an attractive and enjoyable neighbourhood. They provide not only beauty, but also functionality, due to their ability to act as pedestrian corridors, storm water management facilities and outdoor recreation amenities.

Centennial Park, Claresholm

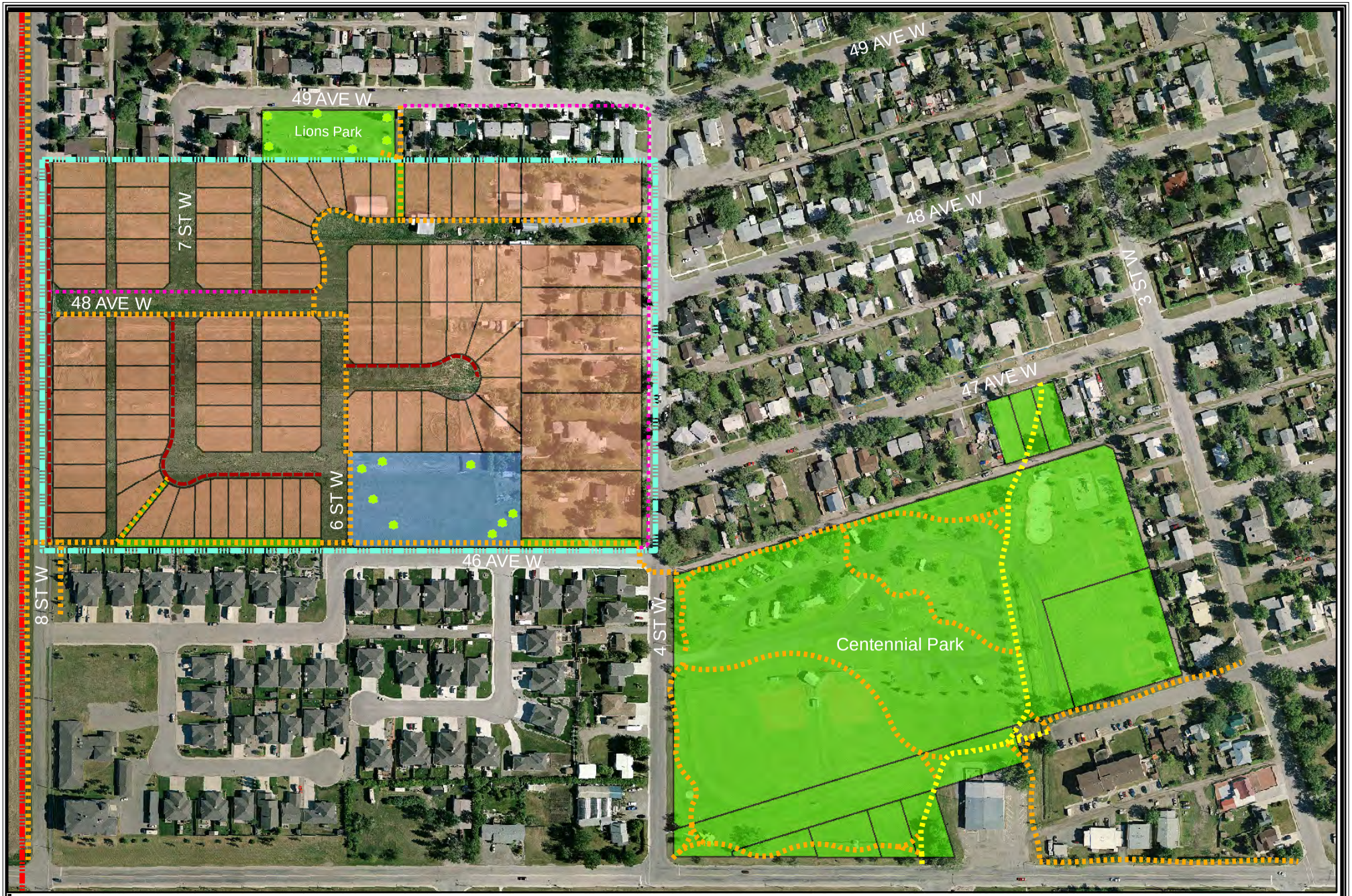
The Southwest ASP contains one large open space and four linear parks (see Map 6). The large open space is located in the southeast portion of the plan area and will be used primarily for storm water management. There may be an opportunity for a pedestrian trail and passive activity around the storm water facility. The location of the storm water facility in the southeast of the plan area has the added benefit of providing a good pedestrian connection to Centennial Park. The linear park in the north portion of the plan area provides a good linkage to Lion's Park, which is a ¾ acre neighbourhood park that includes picnic tables and a variety of playground equipment. The three linear parks in the south of the plan area create opportunities for pedestrian connections to the large open space in the ASP's southeast, Willow Park a few blocks south, and a potential future pathway along 8th Street West.

The Southwest ASP design creates an opportunity to add a numerous pedestrian connections and pathways for the Town of Claresholm. The Southwest ASP design proposes an east-west pathway along the entire southern boundary of the plan area connecting 8th Street West to 4th Street West. This east-west pathway is connected to a series of north-south pedestrian connections that include: a proposed trail along 8th Street West, pathway and sidewalks along 7th Street West, sidewalks along 6th Street West and existing sidewalk along 4th Street West. 48th Avenue West provides an east-west pedestrian connection along the northern portion of the plan area. Together the pathways, sidewalks and linear parks will create a comprehensive pedestrian network for the plan area. In addition, the pedestrian system for the Southwest ASP adds new and improved connections for Claresholm's existing southwest residential areas.

3.4 Proposed Road Network

The proposed road network for the Southwest ASP has been designed to promote internal neighbourhood traffic only. 48th Avenue West has been intentionally off-set to make it more difficult for traffic to use this neighbourhood as a thoroughfare between 4th St. W and 8th St. W. In addition, the presence of a cul-de-sac on 47th Avenue West and the lack of a direct connection from 7th St. W onto 46th Avenue West both discourage non-local traffic in the plan area. Where possible the residential areas have been designed with rear lanes to match many of the existing neighbourhoods within Claresholm. Rear lanes allow for greater pedestrian safety and a more attractive streetscape. In general, the proposed road network is similar to Claresholm's existing road network and should integrate well with the Town's present traffic patterns and flow.

An inviting street in Claresholm with rear lanes.



TOWN OF CLARESHOLM
SOUTHWEST RESIDENTIAL ASP

PARKS, TRAILS AND TRANSPORTATION
MARCH 16, 2010

MAP 6

ASP Boundary
Claresholm Boundary
Trees
Existing Trails
Proposed Trails
Existing Sidewalk
Proposed Sidewalk
Proposed ASP Lot Configuration
Parks
Public Utility Lot

Claresholm
Oldman River Regional Services Commission

0 50 100
Meters

N

3.5 Servicing & Utilities

The engineering assessment for the Southwest Area Structure Plan was conducted by Cicon Engineering based on an estimated build out population of 207 new residents (see Appendix A). Where information in the plan and Appendix A are in conflict the plan shall prevail.

3.5.1 Sanitary Sewer

All sanitary sewer gradients will be at or above Alberta Environment's and the Town's minimum gradients. All manhole spacing will be within Alberta Environment's guidelines and the Town's standards. All sanitary sewer from the ASP area will be directed into the existing 300 mm diameter sanitary sewer on 8 Street W. All proposed sanitary sewer will be gravity mains with no lift stations. Connection of weeping tile to sanitary sewer service should not be permitted unless extraordinary circumstances prevail. The sanitary sewer system is not specifically designed to handle these flows.

- Phase 1: All flow will be into the existing 200 mm diameter sanitary sewer on 48 Avenue W, which is connected to the 300 m diameter trunk main on 8 Street W.
- Phase 2: Flow will be into 8 Street W trunk main, with services of lots facing 8 Street W connected directly to trunk main on 8 Street W.
- Phase 3: Flow will be into Phase 2 sanitary sewer.
- The existing large lot residential on the east side of the ASP area will continue to be serviced by the sanitary sewer main on 4 Street W.

3.5.2 Water Supply and Distribution System

The proposed water system will be required to supply peak hour flows for the total projected population. Based on an average water consumption of 450 L/person/day and a peak hour factor of 4.5, the supply system should be capable of delivering 4.9 L/sec. The proposed water distribution system with 200 mm diameter main will have no problem in delivering peak hour flows.

The projected fire flows are as per fire underwriters requirements. The proposed water distribution system will be capable of accommodating the 4500L/min fire flow without experiencing more than a 100kPa pressure drop. Proposed loop connections at 4 Street W, 6 Street W and 48 Avenue W will vastly improve the surrounding areas capability of delivering fire and peak hour flows.

3.5.3 Storm Water Management System

Figure 5 (see Appendix A) outlines the surface drainage and the area into the proposed dry storm pond. The large residential lots on the east side of the ASP area as well as 40% of Phase 1 will drain into 4 Street W. The front portion of lots facing 8 Street West will drain into 8 Street W and the rear of 4 lots will drain into 49 Avenue. The remainder of the development will drain into the proposed storm pond by surface drainage. The 3 lots from the existing subdivided lots along 7 Street West will drain into the storm pond. The shallow dry storm pond will have a water depth of 0.5 m to 0.8 m during a 1:100 year storm event.

The storm pond will drain via a 200 mm diameter pipe into the existing 375 mm diameter storm sewer on 46 Ave W. The outflow of the storm pond is attenuated down to a 1:2 year storm 2 hours into the storm, which is a very high attenuation. This will minimize the impact to the existing storm sewers downstream of the proposed connection for this development. It is suggested that homeowners utilize underground 'rain barrels' to collect weeping tile and roof drain gutter water and utilize the water for lawn and garden irrigation. This harvesting of about 20% of rainfall runoff would lessen demand on the water distribution system as well as lowering the total storm water runoff from the development.

3.5.4 Shallow Utilities

Utilities (electricity, natural gas, water, telephone, cable) will be extended from the existing adjacent residential areas to the Southwest ASP area. All utility lines shall be constructed underground and all above ground utility equipment shall be located out of roadway site triangles per the Standards of Development of the Land Use Bylaw. Where possible above ground utility equipment shall be located on property lines so as to not impede residential development. Details will be determined at the subdivision stage of development.

3.5.5 Road and Sidewalk Standards

All road rights-of-way will be 16 m in width, except for a short section of 48 Avenue W, which will be 17.07 m to match the existing road right-of-way. All roads will be 9.5 m wide from lip of gutter to lip of gutter as per the Town standard for local residential streets. All roads will have low profile rolled curb and gutter on one side and low profile monolithic sidewalk curb and gutter on the other side except the cul-de-sac, which will only have rolled curb and gutter on both sides.

Road structures will meet the Town's specifications. Wheelchair ramps will be installed at intersections. 8 Street West, which is a collector road, will have a paved width of 12 m when fully constructed. The proposed lots fronting 8 Street W should not be allowed vehicular access off 8 Street. This would prevent vehicles from backing out into the traffic of 8 Street West. This restriction may be accomplished via caveat on the lots facing 8 Street W. All lanes will have a minimum gradient of 0.50% and all streets will have a minimum gradient of 0.60%. The proposed lane rights of way will be 6.1 m wide, with all lanes having a travel surface 5 m wide.

3.6 Consultation Process

3.6.1 Public Open House

Public participation in the planning process is intended to give citizens input into the land use planning process. The information gathered through public participation is used to establish goals and policy decisions for land uses within the area structure plan boundary.

After first reading was given, a mandatory public hearing was held pursuant to Municipal Government Act requirements. Following adoption, the appropriate administrative bodies will be using this plan in concert with other local plans to guide decisions concerning future subdivision and development.

3.6.2 Town Administration and Planning Advisors

A steering committee consisting of Town administrators and planners from the Oldman River Regional Services Commission was created to provide a framework for the process. Meetings focused on issues and objectives for the area structure plan. Discussion focused on issues related to appropriate land use, roads and traffic flow, parks and open space and subdivision design.

3.6.3 Referral Agencies

Alberta Environment and all area utilities will be notified after 1st reading for comment on the Southwest Area Structure Plan. Their general comments will be incorporated into this section as an amendment after second reading and the plan will be adjusted where required. All agencies will receive further referrals through the subdivision process.

4.0 Sequence of Development

Once an area structure plan is in place detailing the density and types of development allowed, there is a three-stage process to begin developing a parcel of land.

4.1 Reclassification of land

4.1.1 Purpose

The process for reclassification as outlined in the Municipal Government Act Revised Statutes of Alberta 2000 (MGA) provides for advertising of the proposal and holding a public hearing where affected landowners may comment on the proposal. Council will make the final decision to redesignate a parcel and there is no appeal of this decision.

All land eligible to be subdivided within the plan area is currently designated as *Single Detached Residential – R1* within the Land Use Bylaw. The proposed design concept contains two other land use districts: *Duplex Residential – R2* and *Public – P*. Where necessary, land will need to be reclassified from *Single Detached Residential – R1* to *Duplex Residential – R2* or to *Public – P*.

4.1.2 Process and Policies

4.1.2.1 Proposals for reclassification of lands from *Single Detached Residential – R1* to *Duplex Residential – R2*, or *Public – P*, shall follow the process outlined in the Municipal Government Act, Revised Statutes of Alberta 2000.

4.1.2.2 The desires of one land owner to subdivide and develop their property shall not force an adjacent land owner to do the same, if the adjacent land owner is not prepared to develop.

4.2 Subdivision of Land

4.2.1 Sequence and Requirements

After a parcel of land is redesignated to the appropriate district as outlined in the plan, the land owner may apply for subdivision of the parcel into separate titles. The land owner or developer will have certain costs to consider associated with the subdivision process. These include:

i. Subdivision application fees, survey costs and registration costs.
ii. Provision of municipal reserve by way of land or cash in lieu of land in an amount not exceeding 10 percent of the acreage of the parcel being subdivided or 10 percent of the per acre value of the parcel being subdivided. It is assumed that municipal reserve will be provided as either land, where it is warranted, or as cash in lieu of land where no municipal space is to occur.
iii. Developers will be required to enter into a development agreement with the Town of Claresholm in regards to providing infrastructure to service the plan area.

iv. Developers will be required to provide the following infrastructure to the Town's specifications to adequately service the area:

- water mains and service connections,
- sanitary sewer mains and service connections,
- storm sewer mains and service connections,
- overland drainage system,
- paved roadways complete with curb and gutter,
- sidewalks and lanes where required,
- natural gas,
- electrical and street lighting,
- telephone,
- cable television.

v. Town off-site levies and development fees (that also help cover costs for Town engineering and planning costs associated with the preparation of this area structure plan) may be applied to developers of the area at the time of development.

4.2.2 Policies

4.2.2.1 The Southwest ASP is to be used as a guideline for subdivision when the landowners decide that they want to subdivide their existing titles.

4.2.2.2 As a condition of subdivision approval, the developer must provide a plan of survey from a certified Alberta Land Surveyor that certifies the location and dimensions of any existing buildings and the exact dimensions of the lot(s) to be subdivided.

4.2.2.3 Subdivision proposals will be reviewed in terms of conformity to the ASP design scheme. Prior to the application or survey of the subdivision proposal, developers are encouraged to consult with the Town and their planning advisor to determine if the proposal is in compliance with the plan.

4.2.2.4 As a condition of subdivision approval, the land owner or developer shall enter into a development agreement with the Town of Claresholm.

4.2.2.5 At the time of subdivision, the subdivision authority shall require a land owner to provide the 10 percent reserve requirement by providing land, paying money in lieu of land, or a combination of both.

4.2.2.6 Costs of infrastructure construction shall be borne by the persons owning and developing land in the plan area.

4.2.2.7 The design of utility infrastructure shall be to the Town of Claresholm and utility company standards and the Town will provide detailed engineering standards for the roadways and servicing to the developer at the time of development.

4.2.2.8 Any costs associated with topographic survey or engineering work that may be required for the subdivision shall be at the expense of the developer.

4.2.2.9 Any utility easement(s) as required by utility companies or the Town of Claresholm shall be established prior to finalization of the subdivision application.

4.2.2.10 Lot sizes and layouts shall conform to the standards as described in this plan, however, in all instances the minimum lot size of the corresponding land use district in the Town's Land Use Bylaw shall be adhered to when subdividing a lot.

4.2.2.11 Any proposed deviations in the lot layout or designated land uses will require an amendment to this Area Structure Plan by Council, if acceptable. However, the overall road layout, design pattern and maximum density shall be strictly adhered to.

4.2.2.12 In respect of market demands and future growth, subdivision may occur in phases, having regard to the overall design and road layout and servicing requirements. Any phasing of development shall be reflected by a proposal or plan that must be approved by the Town of Claresholm.

4.2.2.13 The Town of Claresholm will agree to a formula for the distribution of the costs associated with the development of the storm water management system for the area. A land owner, whose parcel of land is not specifically designated to accommodate the storm water detention as per the design of this plan, will likely be required to provide money in lieu based on the formula, to pay for their land parcel share.

4.3 Development of Individual Lots

4.3.1 Development Permit Approval Process

Once the plan area has been subdivided, the necessary infrastructure in place, conditions met and separate titles issued, the land owner can apply to the Town of Claresholm for a development permit to develop a permitted or discretionary use as listed in the appropriate district (Single Detached Residential – R1, Duplex Residential – R2, or Public – P) allowed for in this plan area and contained in the Land Use Bylaw.

The development approval process will include the following:

i. The land owner will be required to submit an application form, a fee, a site plan showing the location of the building on the lot, building plans and a grading plan in keeping with the overall conceptual grading plan for the plan area.

ii. Once the application, applicable fee and any required information have been submitted, the designated officer or the development authority will review and make a decision on the application. If a proposed development conforms to this plan and the Land Use Bylaw, the designated officer shall issue a development permit with or without conditions. If the application is for a development permit for a discretionary use the designated officer shall send the application to the development authority for a decision. In this instance, the development authority shall notify persons likely to be affected by the issuing of the development permit.

iii. The development authority may require that as a condition of issuing a development permit, the applicant enter into a development agreement with the Town of Claresholm in regards to the provision of infrastructure services or pay for an off-site levy.

iv. The landowner should be aware of the location of any underground services present before any excavation work is commenced. In addition, the person to whom a development permit has been issued shall notify the designated officer following the stake-out of the site, but prior to the commencement of construction.

v. The applicant must commence the development within 12 months from the date of issuance of the permit, unless the development permit is suspended or cancelled; otherwise the permit is no longer valid.

4.3.2 Policies

4.3.2.1 This Area Structure Plan is to be used as a guideline for development in conjunction with the Land Use Bylaw when considering a development permit application.

4.3.2.2 All residential buildings shall be required to connect to both the municipal water supply and sewage systems.

4.3.2.3 The land owner/developer will be required to submit an application form, a fee, a site plan showing the location of the building on the lot, building plans and a grading plan.

4.3.2.4 Any costs associated with topographic survey or engineering work that may be required shall be at the expense of the developer.

4.3.2.5 Land owners will be required to provide for adequate storm water drainage management as created by their land parcel and proposed development.

4.3.2.6 Legal access and egress from a lot shall be indicated on a site plan and shall be at a location to the satisfaction of the designated officer or the development authority.

4.3.2.7 Landscaping shall be provided on all street frontage and shall be to the satisfaction of the designated officer or the development authority.

4.3.2.8 The development authority may require the developer to provide additional standards of development (parking, landscaping, screening of storage/goods, etc.) in conjunction with the Land Use Bylaw.

5.0 Summary

The Southwest Area Structure Plan has been prepared to provide a framework for subdivision and development within the plan boundaries for the Town of Claresholm. The Southwest ASP puts forward a vision for a residential neighbourhood that maintains the Town's high-quality of life and integrates well into the Town's existing development. The proposed neighbourhood offers a large number of residential lots, complimented with the provision of five open spaces and an extensive pedestrian network. The road network has been designed to give safety to the area's residents by promoting local traffic only, while still offering easy connections to the Town's major thoroughfares. The development of the Southwest Area Structure will benefit the Town through the provision of a new residential neighbourhood within the Town's existing boundaries.

Appendix A

Cicon Engineering Design Brief

CICON ENGINEERING

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File #506121

Date: May, 2010

DESIGN BRIEF
SOUTHWEST RESIDENTIAL AREA STRUCTURE PLAN
CLARESHOLM, AB

POPULATION – See Figure 1

Figure 1 shows the proposed R-1 (single family residential) and R-2 (duplex residential) lots. Although all lots conform to the Town of Claresholm Land Use Bylaw No. 1525 with regards to minimum lot sizes, due to marketability it is expected that the final subdivision will have less single family lots that will be larger in area. Population projections are based on Figure 1 densities and 2.8 people per dwelling unit. The 5 country residential lots were not included in population projections as their population already exists. **Therefore the maximum population at full build out of the SouthWest Residential area is projected to be 207 people.**

WATER SYSTEM – See Figure 2

TOTAL POPULATION SERVED - 207

The proposed water system (see Figure 2) will be required to supply peak hour flows for the total projected population. Based on an average water consumption of 450 L/person/day and a peak hour factor of 4.5, the supply system should be capable of delivering;

(450 x 207 x 4.5) / (1440 x 60) = 4.9 L/sec (64 igpm)

The proposed water distribution system with 200mm diameter main will have no problem in delivering peak hour flows.

For ultimate fire flow of 4500 L/min (1000 igpm), pressure drop is less than 100kPa (15psi) for the proposed water system. With static line pressure of 430kPa (62psi), a residual pressure of 325kPa (47psi) exceeds fire fighting requirements. The projected fire flows are as per FIRE UNDERWRITERS. The proposed water distribution system will be capable of accommodating the 4500L/min fire flow without experiencing more than a 100kPa (15psi) pressure drop.

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The water distribution mains will be PVC C900 with a minimum cover of 2.6 meters. Hydrant spacing is a maximum of 160m. All water mains are 200mm diameter.

Proposed loop connections at 4 Street W, 6 Street W and 48 Avenue W, (which connects to existing 250mm diameter trunk main on 8 Street W.), will vastly improve the surrounding areas capability of delivering fire and peak hour flows.

ROADS – See Figure 3

All road right-of-ways will be 16m in width, except a short section of 48 Avenue W which will be 17.07m to match the existing road right of way. All roads would be 9.5m wide from lip of gutter to lip of gutter, the Town of Claresholm standard for local residential streets. All roads have low profile rolled curb and gutter on one side and low profile monolithic sidewalk curb and gutter on the other side except the cul-de-sac, which will have only curb and gutter on both sides. Road structures will be as per Town of Claresholm's specification. Wheelchair ramps will be installed at intersections. Existing 8 Street West, being a collector, will have a paved width of 12 meters when fully constructed in the future. The proposed lots fronting 8 Street West should not be allowed vehicular access off 8 Street. This would prevent vehicles from backing out into the traffic of 8 Street West. This restriction may be accomplished via caveat on the lots facing 8 Street West.

All lanes will have a minimum gradient of 0.50%, all streets will have a minimum gradient of 0.60%.

The proposed lane rights of way would be 6.1m wide with the lanes having a travel surface of 5m wide.

SANITARY SEWER – See Figure 4

- All mains are PVC DR 35, 200mm dia. (See figure 4).
- All sanitary sewer gradients will be at or above Alberta Environment's and the Town of Claresholm's minimum gradients. All manhole spacing will be within Alberta Environment's guidelines and the Town of Claresholm Standards.
- All separation of water main and sewer main will be 3.0m.

DESIGN POPULATION & FLOWS

Potential number of dwelling units for SouthWest Residential is 74. This would generate a population of 207.

Utilizing Harmon's Peaking Factor Formula and a design average flow of 400 L/person/day, the following peak flow is generated for the ultimate population of 207.

$P_F = 1 + 14/ [4 + (\sqrt{0.207})] = 4.14$
Q_{peak} = 400 L/person/day x 207 people x 4.14 = 342,800 L/day
= 4.0 L/second (52.4 igpm)
Add 10% infiltration = 4.4 L/second (57.6 igpm)

200mm dia. pipe @ 0.40% (minimum gradient) with a n value of 0.013 is capable of 0.77 ft^3/sec or 21.8 L/sec. Therefore, no capacity problems with proposed or existing 200mm dia. sanitary sewer pipe will be experienced.

All sanitary sewer from SouthWest Residential will be directed into the existing 300mm diameter sanitary sewer on 8 Street W.

Phase 1 will all flow into the existing 200mm diameter sanitary sewer on 48 Avenue W which is connected to the 300mm diameter trunk main on 8 Street West. Phase 2 flow will be into 8 Street West trunk main with services of lots facing 8 Street West connected directly to trunk main on 8 Street W. Phase 3 sanitary sewer will flow into Phase 2 sanitary sewer. It is noted that the five Country Residential lots are and will continue to be serviced by the sanitary sewer main on 4 Street West. **All proposed sanitary sewer will be gravity mains with no lift stations.**

Connection of weeping tile to sanitary sewer service must not be allowed.

STORM SEWER - See Figure 5

Storm sewer design parameters utilized are outlined below.

- ☐ City of Calgary Rainfall Intensity Curves adopted
- ☐ 1:5 year storm with 20 minute initial time of concentration
- ☐ Rational Method, which is conservative, for flow calculations
- ☐ Runoff coefficient of 0.6 was applied for post development
- ☐ Maximum distance of surface drainage on roads/lanes prior to storm sewer intercept 300 meters
- ☐ Roughness coefficient for pipe of n = 0.013 was adopted
- ☐ 1:100 year post development storm will be attenuated to 1:2 year pre development storm at 2 hours into the storm by using a dry storm detention pond located in the proposed park area in the south east corner of the proposed development.

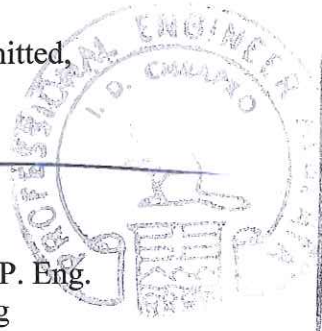
Figure 5 outlines the surface drainage and the area that will drain into the proposed dry storm pond. The country residential lots as well as 40% of Phase 1 will drain into 4 Street W. The front portion of lots facing 8 Street West will drain into 8 Street and the rear of 4 lots will drain into 49 Avenue. The remainder of the development will drain into the proposed storm pond by surface drainage. As well 3 lots from newly developed subdivision along 7 Street West will drain into the storm pond. The shallow dry storm pond will have a water depth of 0.5m to 0.8m during a 1:100 year storm.

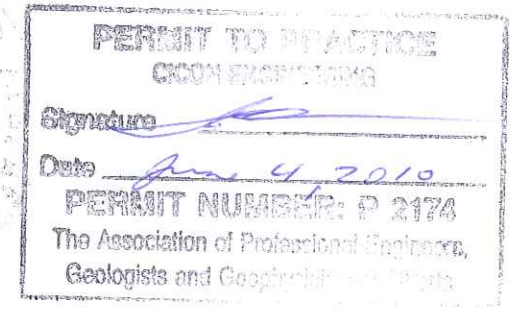
The storm pond will drain via 200mm diameter pipe into the existing 375mm diameter storm sewer on 46 Ave W. The outflow of the storm pond is attenuated down to a 1:2 year storm 2 hours into the storm, which is a very high attenuation. This will minimize the impact to the existing storm sewers downstream of proposed connection for this development

It should be noted that a soccer pitch could be fitted into the dry storm pond area.

It is suggested that lots utilize underground "rain barrels" to collect weeping tile and roof drain gutter water and utilize the water for lawn and garden irrigation. This harvesting of about 20% of rainfall runoff would lessen demand on the water distribution system as well as lowering the total storm water runoff from the development.

Respectfully submitted,





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0 50 100 150 200

SCALE 1:1500 (IN METERS)

49 AVENUE W

48 AVENUE W

46 AVENUE W

8 STREET W

7 STREET W

6 STREET W

4 STREET W

UTILITY R/W

R1

R2 DUPLEX

P

RESIDENTIAL

P H A S E 1

P H A S E 2

P H A S E 3

	ZONE	DESCRIPTION	No. DWELLING UNITS	AREA (Ha.)	%
	R1	SINGLE FAMILY (MIN 464.5m²)	62	3.81	46.1
	R1	COUNTRY RESIDENTIAL	5	1.72	20.8
	R2	MULTI-FAMILY – DUPLEX	12	0.42	5.1
	P	PARK		0.98	11.8
		ROADS		1.34	16.2
	TOTALS		79	8.27	100.0

1032.0 ORIGINAL GROUND CONTOURS (0.30m INTERVAL)

EXISTING BUILDINGS

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TOWN OF CLARESHOLM

SOUTHWEST RESIDENTIAL AREA STRUCTURE PLAN

FIGURE 1
OVERALL CONCEPT PLAN

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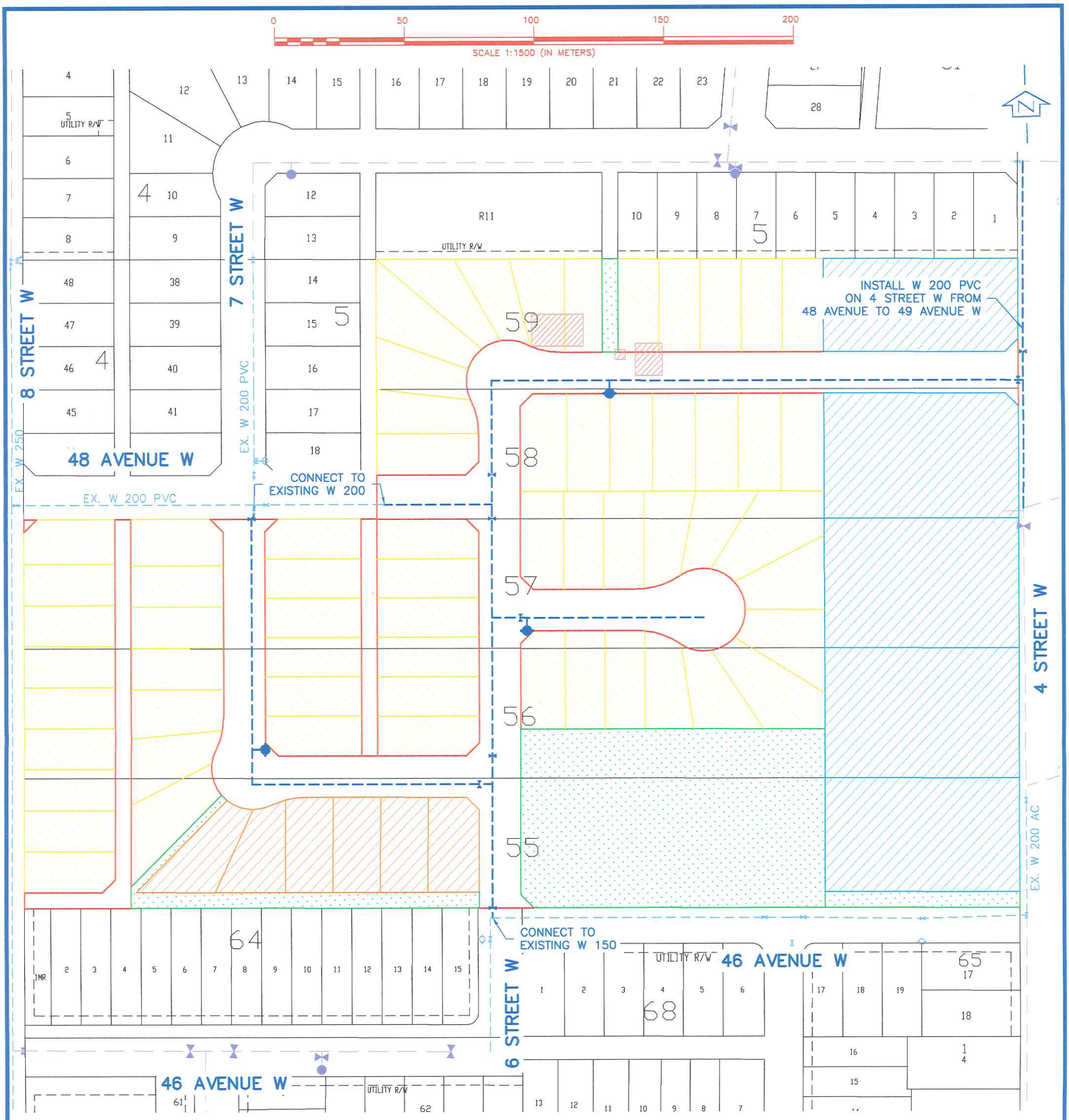

PROPOSED WATERMAIN (200mm UNLESS OTHERWISE NOTED), HYDRANT, VALVE

EXISTING WATERMAIN, HYDRANT, VALVE

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SOUTHWEST RESIDENTIAL AREA STRUCTURE PLAN

FIGURE 2
OVERALL WATER DISTRIBUTION

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0 50 100 150 200

SCALE 1:1500 (IN METERS)

8 STREET W

7 STREET W

4 STREET W

48 AVENUE W

46 AVENUE W

UTILITY R/W

R11

59

58

57

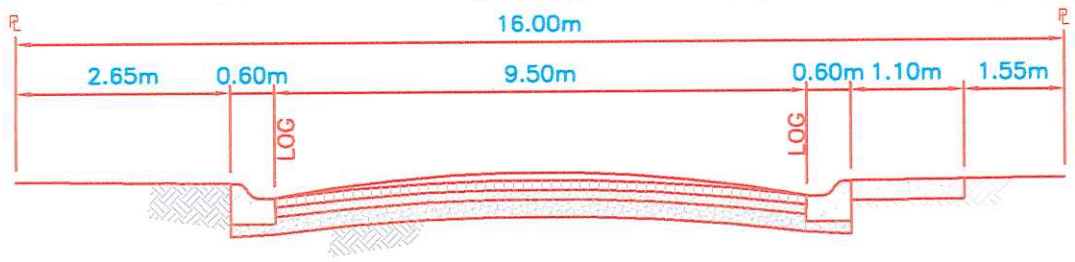
56

55

64

65

68



TYPICAL LOCAL RESIDENTIAL ROAD X-SECTION

PROPOSED SIDEWALK, CURB & GUTTER

EXISTING SIDEWALK, CURB & GUTTER

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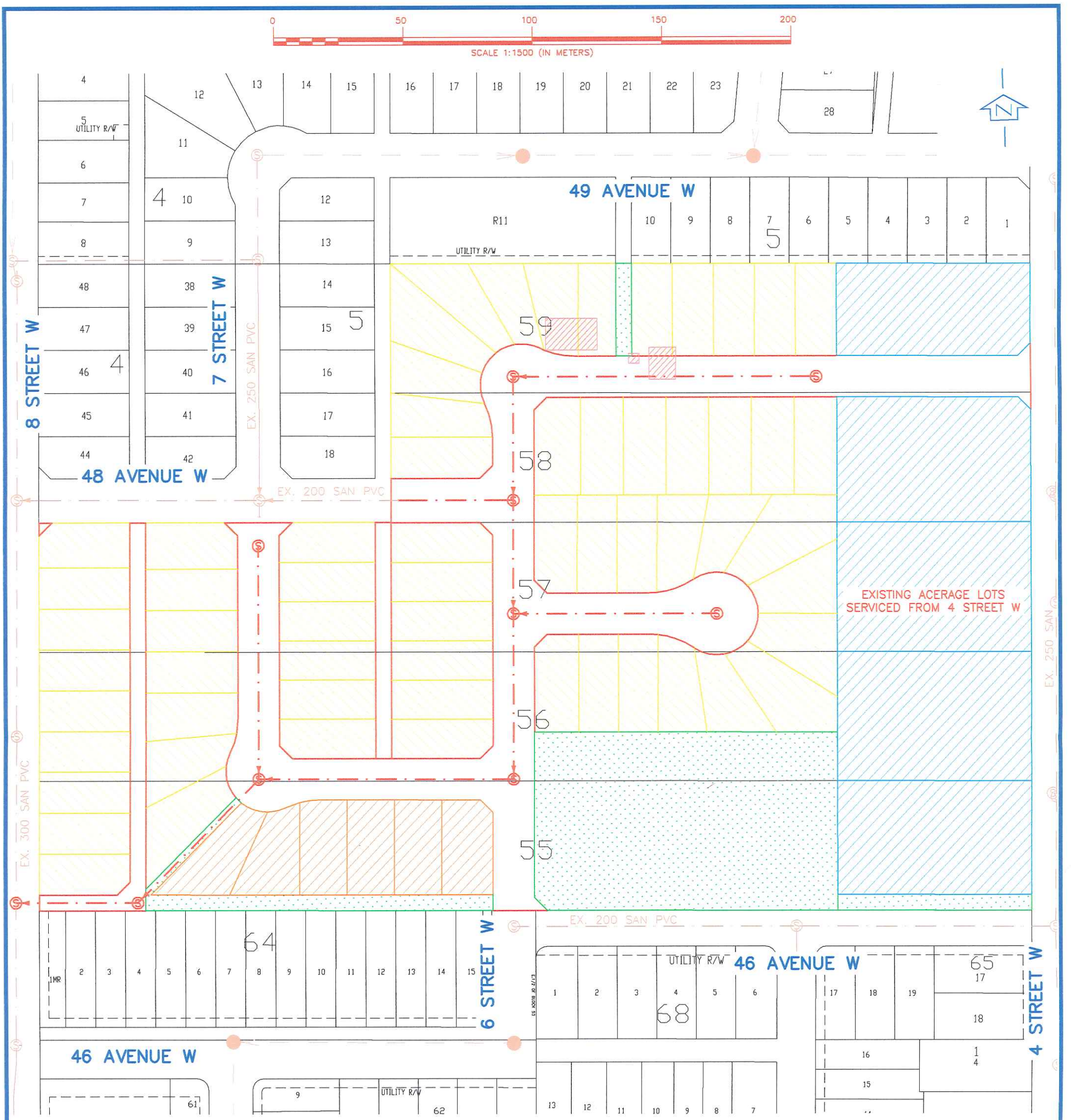
SOUTHWEST RESIDENTIAL AREA STRUCTURE PLAN

FIGURE 3
OVERALL STREET PLAN



PROPOSED SANITARY SEWER MAIN @ 0.40% GRADIENT (200mm UNLESS OTHERWISE NOTED) & MANHOLE

EXISTING SANITARY SEWER MAIN & MANHOLE

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SOUTHWEST RESIDENTIAL AREA STRUCTURE PLAN

FIGURE 4
OVERALL SANITARY SEWER PLAN

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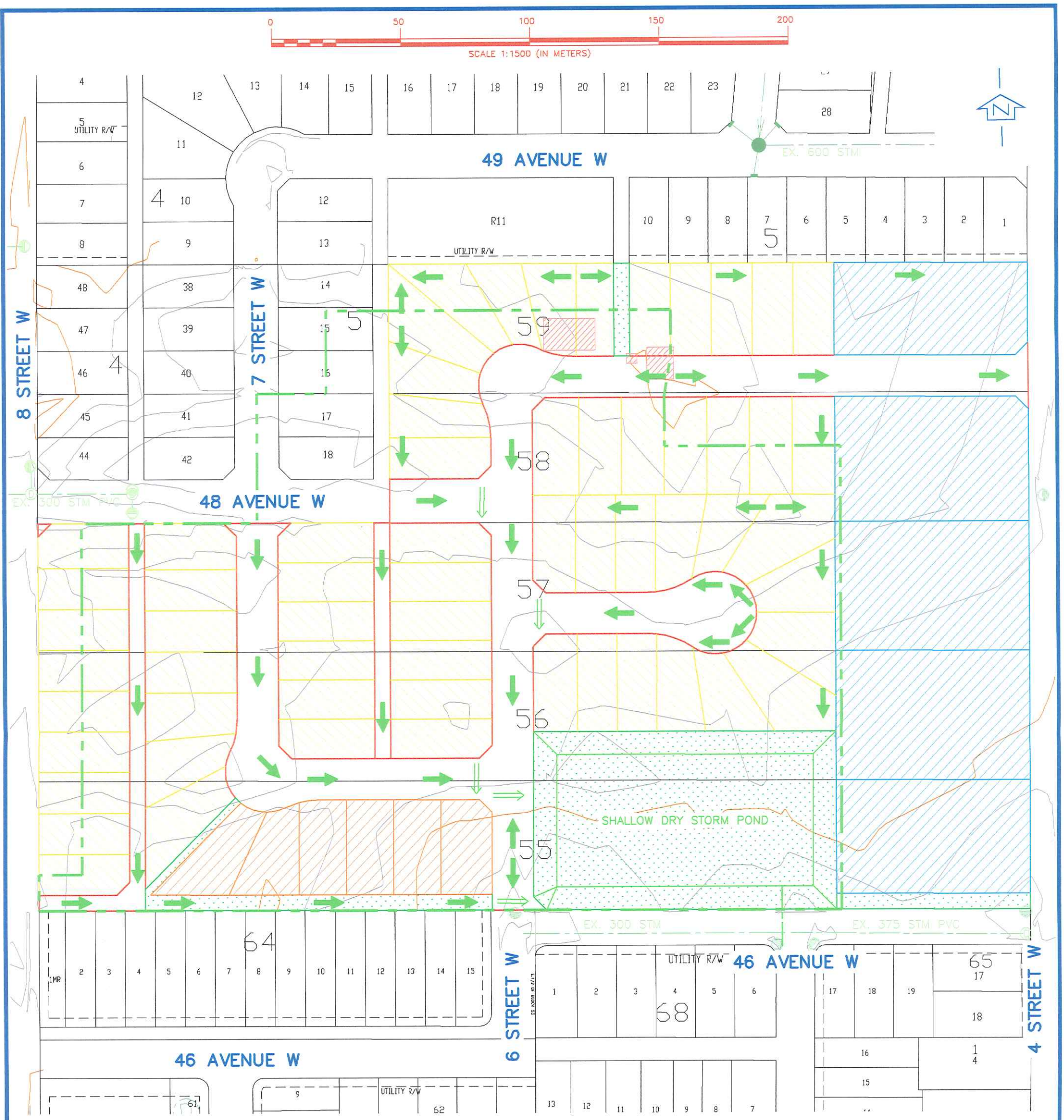

NOTE:
1. 5 SURFACE SWALES
2. BOTTOM OF DRY STORM POND 9m FROM ℄
3. STORM OUTLET 200mm DIA.

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SOUTHWEST RESIDENTIAL AREA STRUCTURE PLAN

FIGURE 5
STORM WATER MANAGEMENT

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