



THE CITY OF
CALGARY
LAND USE PLANNING
& POLICY

BEARSPAW EAST

Area Structure Plan

Part 2 of this document contains Supporting Information and does not form part of the bylaw.

For the purposes of electronic publications the supporting information is identified by the footer "Supporting Information".

Bylaw 20P2002
Approved July 21, 2003

BEARSPAW EAST

AREA STRUCTURE PLAN

AND SUPPORTING INFORMATION

NOTE: This office consolidation includes the following amending Bylaws:

Amendment	Bylaw	Date	Description
1	37P2018	2018 June 11	a) Delete and replace Map 2 Land Use Concept. b) Under Section 2.6 Site -Specific Policies - insert a new subsection 4.

Amended portions of the text are indicated with the specific amending Bylaw.

Persons making use of this consolidation are reminded that it has no legislative sanction, and that amendments have been embodied for ease of reference only. The official Bylaw and all amendments thereto are available from the City Clerk and should be consulted when interpreting and applying this Bylaw.

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BEARSPAW EAST AREA STRUCTURE PLAN AND SUPPORTING INFORMATION

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The Area Structure Plan



PART 1

BEARSPAW EAST AREA STRUCTURE PLAN

PREFACE

The **Bearspaw East Area Structure Plan** and Supporting Information is a planning document prepared for adoption by City Council under provisions of the **Municipal Government Act**, R.S.A., 2000, c.M-26, as amended. The document consists of two parts. The first is the ASP, to be adopted by City Council by bylaw. The ASP establishes the conceptual framework for the more detailed planning to follow. The second part is the Supporting Information section, which provides the background to the plan.

It should be noted that there is another planning document with a similar title, the **Bearspaw ASP**, Bylaw 4129-93, of the MD of Rocky View, which deals with a larger area to the west of the city limits. The current Plan, **Bearspaw East ASP**, deals with lands within city limits, which include the Bearspaw Water Treatment Plant and other surrounding sites.

SPECIAL NOTE:

This Plan contains many proposals related to the extension of utility systems, open space provision, roadway interchanges, pathways/bikeways and other municipal services. It is important to note in this regard that the Area Structure Plan does not commit The City to provide these services and facilities at any particular point in time. These decisions will be made through the normal development process and the annual capital budget process.

1.0 INTRODUCTION

1.1 Location

This planning area is located north of the Bow River, opposite the Bowness and Valley Ridge communities. It extends roughly from Bowmont Park to the westerly city limits, and from the Bow River to Nose Hill Drive and its future extension. The northern boundary coincides roughly with the bottom of the Bow River valley escarpment, which extends further east and west beyond the planning area boundaries.

The planning area, as shown on Map 1, includes lands in Sections 4 and 5 in T25-R2-W5M, totalling roughly 624 acres. The City owns approximately 200 acres (apart from Baker Park), the Shriners 101 acres, and the balance is in the ownership of CP Railway and the Province.

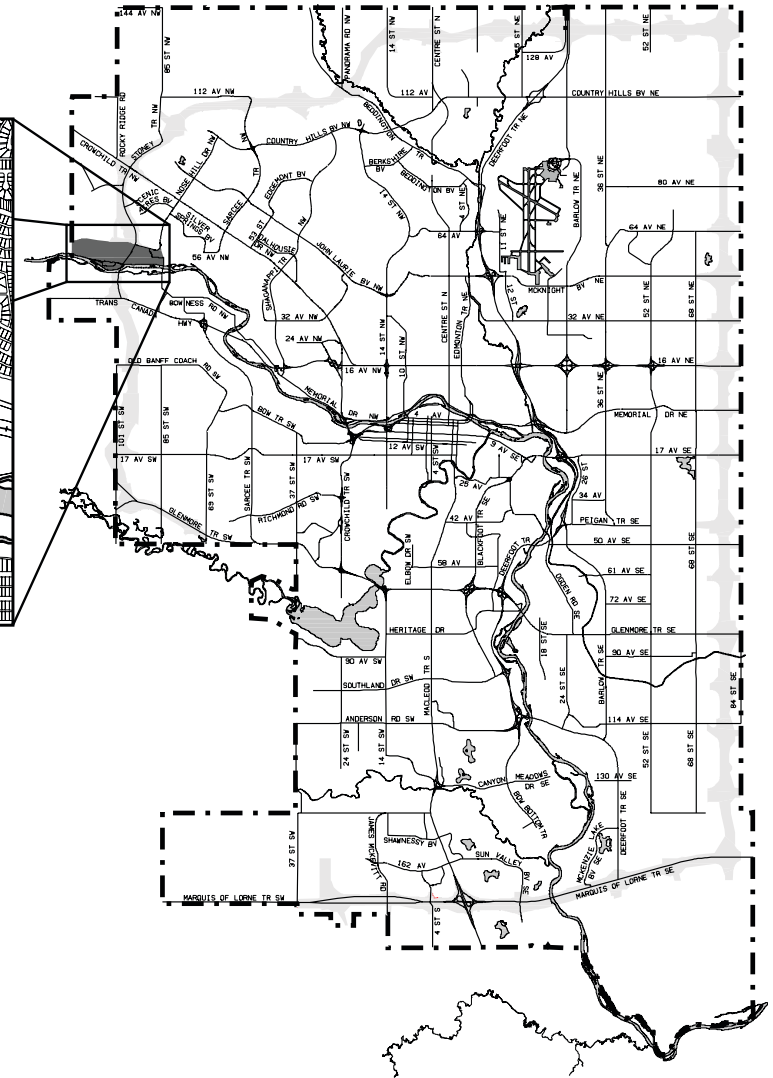
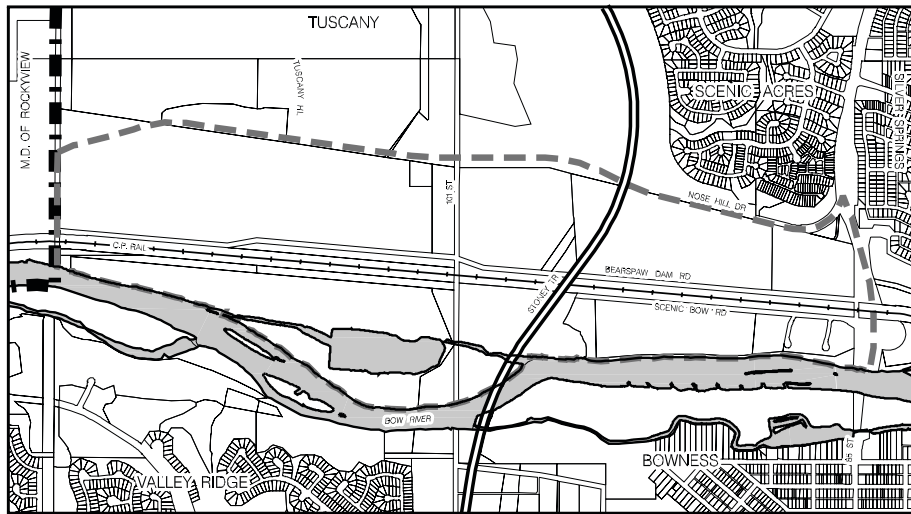
1.2 Planning Context

Bearspaw East is comprised of low-lying lands on the bottom of the Bow River valley, to the north of the river and east of the city limits. Stoney Trail crosses over the planning area at a fairly high elevation, some thirty metres above the grounds of the valley bottom. Geographically, the alignment divides the planning area in two parts, one third to the east and two thirds to the west. The crossing at this location is in itself a rich visual experience on account of the magnificent views of the river valley and its natural surroundings. The steep, heavily-treed, north-facing escarpment of the valley is a spectacular sight, with Bowness Park to the east and Valley Ridge Golf Course to the west. All these natural features and amenities are on sloping terrain, facing the south-bound travellers on Stoney Trail.

These natural features provide the geographic context of Bearspaw East. The riverbank, partly covered by dense vegetation, especially as it meanders in a southerly bend around the water pond on the Shriners' land, stretches along the southern boundaries of the planning area. The south-facing escarpment of the Bow River valley borders on the planning area from the north. This is also a steep escarpment, roughly 45 meters (148 feet) in height, and is dissected by several ravines/coulees. Most prominent among these is the Twelve Mile Coulee, which extends more than two

miles into Tuscany, and its eastern tributary extends into Scenic Acres as well. The Coulee joins the river valley escarpment roughly north of the main building of the Bearspaw Water Treatment Plant, where it reaches 40 meters (130 feet) in height and 290 meters (950 feet) in width. Dense vegetation covers much of the coulee escarpments in Tuscany, but less so near the planning area. Because of its environmental significance, the Coulee has been under study by City staff for a number of years.

As development approaches the planning area on the upland plateau on which Scenic Acres and Tuscany are situated, development pressures can be anticipated within the low-lying lands below. The extension of Nose Hill Drive west of the Stoney Trail, a portion of which is scheduled for construction between 2002 and 2004, will significantly improve accessibility and visibility of large tracts of vacant land in the planning area, and several sites will become "candidates" for development. At the present time, there is no land use policy to guide development on the low-lying lands. The obvious concern here is that a policy vacuum may well set the stage for a future land use conflict.



Map 1 Bears paw East Area Structure Plan

Location



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DATE PLOTTED: 11-JUL-2002

1.3 Planning Constraints

A number of constraints need to be considered in planning for Bearspaw East. These constraints are imposed by existing uses and roads, and location relative to adjacent communities and the riverbanks.

- The Bearspaw Water Treatment Plant (Bearspaw WTP) (Map 2 and Map 4)

The daily operation and annual maintenance required for this plant have significant implications in planning for the surrounding lands. The following are concerns to be addressed:

1. Currently, there is one sedimentation basin and two sludge lagoons in operation at Bearspaw WTP. Pre-treatment of raw water requires water flow through the sedimentation basin prior to filtration to allow suspended matter to settle. The gradual build up of deposits results in a thick layer of sludge at the bottom, which needs to be removed periodically. The sludge, in a liquid state at this stage, is pumped directly to the open sludge lagoons on site. After a freeze/ thaw cycle, the finer suspended matter settles out. This thickening, which takes place over an extended period of time, solidifies the exposed sludge, and it is then transported to The City's gravel mining operation at the end of the Bearspaw Dam Road by truck.

Planning for adjacent lands below the escarpment should take into consideration the nuisance effects of these operations.

2. The negative impacts associated with the plant operation and maintenance will increase in the future. There is currently a need to upgrade our water treatment processes to meet the standards established by the recently enacted legislation. There is also the need to expand the plant capacity to keep up with the demands of Calgary's growing population. It is very likely, if conventional water treatment processes were followed, that more sedimentation basins and sludge lagoons will be required, with the expectation that the level and extent of activities associated with the plant will increase dramatically.
3. Other sources of nuisance at Bearspaw: noise associated with the small power generating plant, bright lights to illuminate important facilities, Public Address system, alarms, high barbed-wire fencing and other aspects of security.

- External Access

Provision of good external access and internal circulation present major challenges to planning for Bearspaw East. Currently, there is no connection from the Stoney Trail to the planning area apart from an indirect route through the T intersection with Nose Hill Drive. Connections to adjacent areas are also limited or substandard; Bearspaw Dam Road connects further west to the Inland Aggregates site in the MD of Rocky View, 85 Street connects to Bowness, and Nose Hill Drive to the northwest sector of the city. Tuscany Hill, a major road, will connect from Nose Hill Drive extension to Tuscany.

- Internal Circulation

The CP mainline and the Keith Yards, which run through the planning area in the east-west direction, divide the area to two sides, with only one cross-connection, namely the 85 Street overpass. Sites east and west of the Stoney Trail are inter-connected under the Stoney Trail bridge crossing by Bearspaw Dam Road and a private road. All these connections, with the exception of Nose Hill Drive, are substandard.

It should be noted that plans for future roads in this area include only the extension of Nose Hill Drive to the west, which will improve access to lands north of the CP mainline. South of the

CP mainline, no major road improvements are planned, and hence the relative isolation of these lands will remain a constraint.

- The Keith Yards (Map 2)

The marshalling yards, apart from being a barrier to road extensions, pose limitation on any consideration for residential uses in the vicinity due to on-site noise and vibrations generated by the day-to-day operations of the railways.



Exhibit 1: The Water Intake Pump Station on the Bow River east of Stoney Trail

- The City Maintenance Depot

On-site activities of the City Maintenance Depot are also a planning constraint. These operations include gravel and salt piling, outside storage, truck maintenance, etc. Calgary Roads, Calgary Transit, Park Development and Operations, and Supply Management Services are among the users of the depot. A moderate physical expansion and some intensification of existing uses should be anticipated.



Exhibit 2: The main building of Bearspaw WTP, with the Tuscany escarpment in the background and the CP mainline in the foreground.

- Floodway and Flood Plain (Map 7)

The pond on the Shriners' land is in the floodway, and is protected from development by the Floodway and Flood Plain regulations of Land Use Bylaw 2P80. Site E-3 on Map 4, the narrow strip of land south of the pond, will be difficult to develop due to its isolation and awkward configuration.

Although the pond poses constraints to development, in itself the pond is a significant visual amenity that fits well in the natural surroundings. (See Exhibit 8).

The planning area is above the flood plain, with the exception of a small strip of land along the riverbanks, and the pond on the Shriners' land, both of which are in the floodway. The pond is roughly 17 acres in size.

The Plan

2



2.0 THE PLAN

2.1 Plan Objectives

Land Use and Development

- Protect the option for phased expansion of the Bearspaw Water Treatment Plant, taking into consideration Calgary's growth needs over the next fifty years and beyond.
- Allow for expansion of City storage facilities and maintenance depot to accommodate current and future operational needs of the northwest sector of the city.
- Provide for recreational opportunities, public and private, on the appropriate sites, in keeping with the river valley natural setting and the predominance of the natural features in this area.
- Protect views across the river from the Bowness and Valley Ridge communities, and from the adjacent communities of Scenic Acres and Tuscany.
- Reduce the potential for future conflicts between uses in close proximity.

Environment

- Protect the floodway lands (Map 7) and as much as possible of the Environmentally Significant Area (Map 5).
- Ensure continuity of the open space system in the Bow River valley, and pathway connections to adjacent communities and natural features.
- Protect and enhance existing natural amenities and the visual surroundings of the river valley.
- Protect the integrity of the Twelve Mile Coulee.

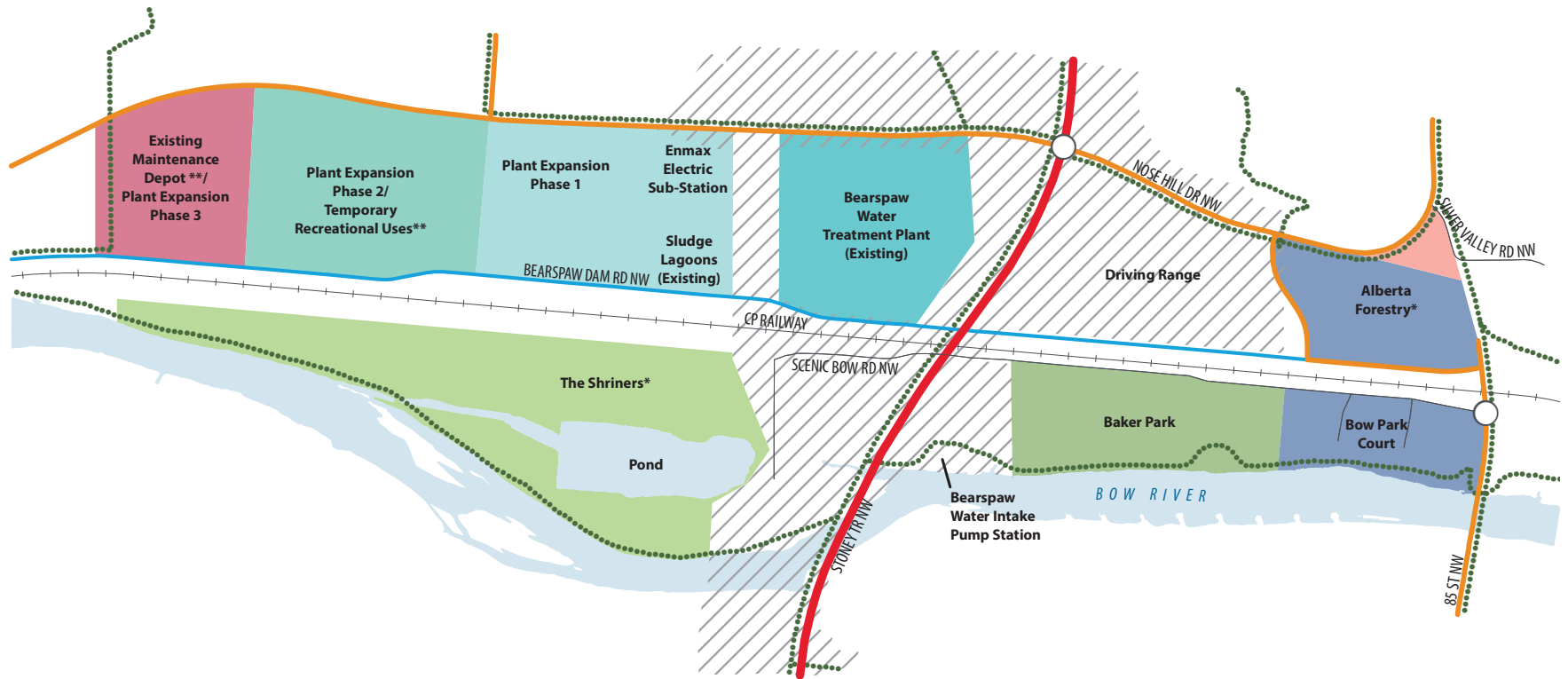
Transportation

- Plan for the extension of the roadway network to service lands below the escarpment, including sites north and south of the railway tracks, and further west possibly to connect with the road network in the MD of Rocky View.
- In planning for the westerly extension of Nose Hill Drive, provide for continuity of the waterstream of the Twelve Mile Coulee, and for a wildlife crossing.

2.2 Plan Formulation

The steps undertaken in arriving at the recommended uses in this Plan are

1. An initial assessment of municipal service availability, specifically stormwater drainage, indicated some limitation on the development potential south of the CP mainline. Costly improvements are also needed to provide good road access to this area.
2. The noise and vibration associated with the CP mainline and the Keith Yards are a limiting factor to any consideration for residential uses on adjacent sites. The sedimentation ponds of the water treatment plant, existing and future, is another, since the maintenance of these facilities could constitute a nuisance to any residential area to be considered below escarpment.
3. In view of the above, open space uses and recreation were considered to be the logical choice for lands south of the tracks. These uses are relatively low traffic generators, and do not require the full range of municipal services. They are also compatible with the natural setting, complementing the range of amenities available to residents of the northwest sector of the city.
4. Open space uses, as defined in this Plan, may include private recreation, such as a golf course, and public recreation, such as a park.
4. Sites north of the tracks and west of Stoney Trail can be made accessible by roads. However, most of these sites, if not all, will eventually be required for the water treatment plant expansion. (These sites were purchased by The City in the seventies specifically for this purpose.) Temporary uses are feasible, provided that the visual impact is minimal, and that termination of use will not be difficult in the future.
5. The plan preparation was accompanied by a series of meetings with the stakeholders to discuss the information available, solicit input, identify concerns, and establish a platform for informed discussions to assist with the orientation of the planning process.

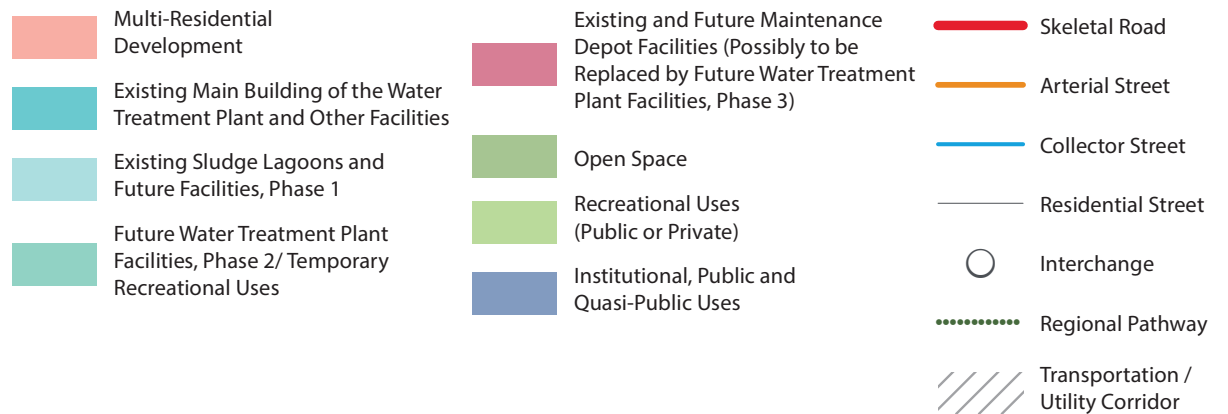


Map 2

Land Use Concept

Approved: 20P2002

Amended: 37P2018



2.3 The Land Use Concept

For purposes of discussing this concept, the Plan area is divided into four large developments cells by the Stoney Trail (north-south) and CP mainline (east-west).

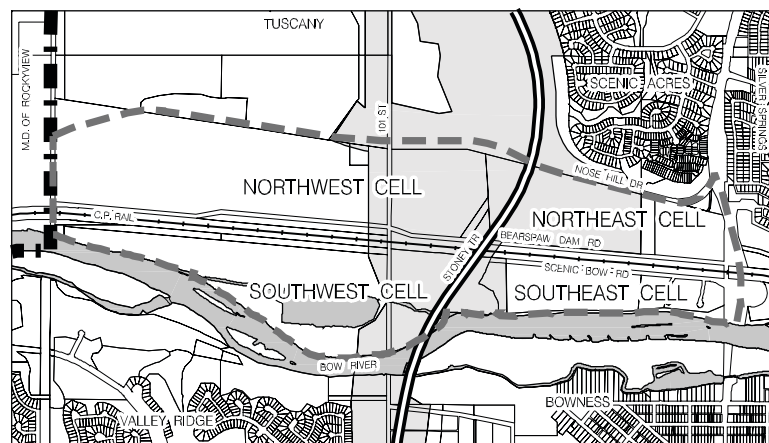
The **southwest cell**, most of which is in the ownership of the Shriners' Temple, is recommended for recreational use - public or private. This would allow for continuation and expansion of the existing facility, and in case of eventual development or redevelopment, may include recreational uses such as an executive golf course or a public park. Much of the existing vegetation, the Environmentally Significant Area, and all of the floodway lands will be protected.

The **southeast cell** is comprised of the Bow Park Court, a group home; Baker Park, which has been developed in recent years as an ornamental park; and TUC lands. The City's water intake pumping station for the Bearspaw Plant is located here. All these uses will continue and no change is proposed.

The **northeast cell** consists of the Forestry site, roughly 20 acres, and TUC lands currently used as a driving range. These uses are likely to be maintained or replaced by other uses of similar nature; that is, temporary recreational use on TUC lands, and institutional, public or quasi-public use on the Forestry site. In the event that the Forestry site is no longer required by The Province, consideration should be

given to protecting the site as open space. This will be subject to a negotiated agreement between The Province and The City, and a future amendment to this Plan to identify the site as open space.

Most of the land in the **northwest cell** is in the ownership of The City. The water treatment plant is located at the eastern end, and the maintenance depot at western end. Large tracts of vacant land, possibly 80 acres, separate these two facilities. The depot expansion will likely use some, but most of the vacant land will eventually be required for plant expansion. The western portion of the vacant lands, as shown on Map 2, may be allocated to temporary recreational uses, as stated in Section 2.6.1. In the very long term, it is possible that all of the City land may be required for plant expansion, in which case relocation of the depot will be considered.



Development Cells

2.4 Transportation

Stoney Trail is a provincial highway, forming part of a ring road system planned to surround most of the city's present built up area. In the northwest sector, Stoney Trail will provide a provincial bypass route from Deerfoot Trail north to Trans Canada Highway west. The TUC regulations protect the right-of-way for the ring road and its interchanges, as well as for utilities and power lines along the ring road.

The ultimate design for Stoney Trail provides for three lanes in each direction, as shown on Map 2, and will include another bridge crossing on the Bow River (west of the existing bridge). A separate TUC alignment for utilities and power lines runs in the north-south direction between the main building of the water treatment plant and the sludge lagoons.

The westerly extension of Nose Hill Drive will connect Stoney Trail to the road grid in M.D. of Rocky View. Construction on a portion of this road, initially four lanes from Stoney Trail to Tuscany Hill, will take place between 2002 and 2004. Ultimately, Nose Hill Drive will be a major road extending all the way to the city limits, and Bearspaw Dam Road will be a collector road standard (west of 87 Street NW).

Depending upon the uses to be developed on the Shriners' land, the access road to the site may need upgrading between 85 Street and 101 Street NW.

1. Planning for the western extension of Nose Hill Drive below Tuscany shall include appropriate provisions to ensure the continuity of the watercourse of the Twelve Mile Coulee, and a wildlife crossing acceptable to Park Development and Operations.

Construction of this road shall include, as appropriate, landscaping, tree-planting and berming so as to create pleasant visual surroundings for its entire length.

2. Alignment of the westerly extension of Nose Hill Drive beyond the city boundaries, and future



Exhibit 3: Stoney Trail, with the north-facing escarpment and Paskapoo Slopes in the background.

access to the road grid of the MD of Rocky View, should be evaluated in a joint study with the MD and The Province to determine alignment and access corridor to the rural and provincial highway system. Long term road network requirements should be identified in the study and road right-of-way protected for future use in both municipalities.

3. Transit service is currently provided from Bowness through the northeast portion of the planning area to Nose Hill Drive, and further north to Crowfoot Village (Route #40).

2.5 General Development Policies

1. The land use, open space, and road concept is illustrated in Map 2. This overall concept plan shall serve as the basis for more detailed land use and subdivision plans. Boundaries of the developable lands and open space shown on this map may be modified at the outline plan stage.
2. Abiophysical impact assessment will be required in conjunction with any servicing schemes to be submitted in support of land use redesignation or outline plan application. Servicing and utility alignments will be selected so as to minimize the impact on environmentally or archeologically significant sites.

3. Design for stormwater management facilities for the planning area must satisfy the provincial standards for stormwater quality, introduced in 1998, as well as The City standards.
4. There are several industrial uses and activities in the planning area: Bearspaw WTP, Enmax Substation #36, The City's Maintenance Depot, the Keith Yards and the Forestry facilities. As per the standard approval process, a Potential Site Contamination Acknowledgement and Disclosure Statement will be required as part of the Outline/Land Use Amendment application. An Environmental Site Assessment report(s) may also be required, as determined from a review of the Acknowledgement and Disclosure Statement and civic databases.
5. Since the operation and maintenance of the water treatment plant can produce noise, unsightly views and possibly odour problems, no lands shall be designated for residential uses below the escarpment in the planning area.
6. Bearspaw East is potentially of high archaeological sensitivity due to its location along the riverbanks of the Bow River, and along the bottom of the valley escarpment. (Portions of Twelve Mile Coulee are known to have been buffalo hunting sites). Therefore, a Historical Resource Impact Assessment may be required by Alberta Community Development, and depending on the outcome, mitigation measures may be requested by the Province.

2.6 Site - Specific Policies

1. All of The City's land on Bearspaw Dam Road were originally purchased by Calgary Waterworks in the nineteen seventies to house the Bearspaw Water Treatment Plant. Sufficient land was then acquired to ensure that long term requirements for plant expansion could be met. Currently, there are 80 acres which are vacant. As stated previously, these lands will eventually be required for plant expansion.

Calgary Waterworks plans to carry out engineering studies to deal with the phased expansion of this facility, the only plant in Calgary with spare license capacity. The outcome of these studies and decisions regarding plant expansion will not be known for sometime. However, based upon the information currently available, plant expansion may take place in three phases:

Phase One, which includes facilities required for the foreseeable future. The time frame for beginning and completing this phase is five to twenty years. As shown on Map 2, facilities in Phase One will occupy the vacant lands west of the TUC to the utility easement running in the north-south direction.

Phase Two is the next generation of additional facilities, to be located on lands between the western boundary of Phase One and the existing Maintenance Depot. These facilities will come

under consideration perhaps in twenty years, accommodating up to thirty years of plant expansion.

Phase Three will include facilities likely to be considered for construction in fifty more years. Planning for this phase may possibly require relocation of the Maintenance Depot to another site, to allow for water treatment plant facilities for this phase to proceed.

- (a) To protect the phased out expansion of the water treatment plant, the following policies



Exhibit 4: The Shriners' site on the Bow River.

shall be adhered to in approving any land use redesignations or development permits on the City land in this area.

- i. Currently vacant lands in the Phase One area shall be reserved exclusively for plant expansion. No other uses shall be permitted in this area.
- ii. Since the vacant lands in the Phase Two area will NOT be needed for plant expansion for twenty years or more, portion of these lands may be allocated to temporary uses, subject to conditions stated below.
- iii. Temporary uses shall be for recreational purposes only. Furthermore, development permits for temporary uses shall be for a specified time period, to be circulated to Calgary Waterworks and approved by the Calgary Planning Commission. Normally, this time period will be up to five years, but longer periods may be allowed under special circumstances, such as the need for a long term lease to justify the investment in site improvements and needed buildings or structures. Other factors to be considered:
 - Contribution of the proposed use to the recreational opportunities offered to Calgarians;

- Visual impact of the proposed use on views from Tuscany and Valley Ridge; and
- Any additional information regarding the water treatment plant expansion and construction timing, which may be affected by the proposed use.

- b. Notwithstanding policy 2.6.1 (a) above, no public roads will be built to dissect The City's lands, all of which are reserved for the long-term needs of the water treatment plant. This requirement is mandated by security considerations for the purpose of protecting this facility.
- c. A connection from Bearspaw Dam Road to the Nose Hill Drive extension will be needed. A possible alignment is along the city limits west of The City's land, to be negotiated with MD of Rocky View.

2. The Bearspaw Maintenance Depot provided essential services to a number of City business units since its construction in 1979. Recently, a study has been undertaken to determine, on the basis of an in-depth analysis, the need for various City depots over the short and long term. The study concluded that because of its geographic location and proximity to Stoney Trail, this facility is well-positioned to be the regional depot for the northwest sector. The study's recommendation is for the depot to continue its operation, with

the expectation that demand for its services will increase.

- a. Physical expansion of the Bearspaw depot shall take place with due consideration to the impact on views from the surrounding residential areas, having regard to the appearance of buildings, the need for screening of work yards, landscaping, etc.
- b. Expansion of outside storage facilities will be permitted, as necessary. Use of landscaping, screening and industrial enclosures, as appropriate, is required to mitigate visual impacts.
- c. With the construction of Nose Hill Drive west of Tuscany Hill, a rearrangement of uses and activities on the site may be required at some point in the future. Planning for the physical layout of the site shall locate heavy industrial uses, such as gravel sorting, on the south portion of the site. Administrative offices and staff parking are to be located on the north side. Such a physical layout should reduce potential visual impacts along Nose Hill Drive extension and on the residential area to the north.
- d. As per the existing City policy in dealing with civic projects, facilities expansion shall be subject to review by the Calgary Planning Commission.

3. The Alberta Environment Forestry facility is located in the area referred to on this Plan as "institutional, public and quasi-public uses". This Plan provides for the continuation of this facility, as well as its expansion or redevelopment (within the range of uses specified). Should the Province no longer require the Forestry site at some point in the future, consideration shall be given to its inclusion in the open space system. The site is adjacent to the western boundary of Bowmont Park, and if included, shall be revegetated with plant species compatible with the surrounding native vegetation, thus improving the long-term viability of wildlife habitat in this part of the river valley.*

4. Multi-Residential Development

A Multi-Residential Development site is identified on Map 2: Land Use Concept. This site may develop with multi-residential development and associated ancillary uses. **Bylaw 37P2018**

*This site is serviceable, and can be developed for other purposes as well. Therefore, if it is not possible to acquire the site for open space, other development options would be considered. An appropriate use in this case would be multi-family housing, provided that site accessibility is not a problem, and that traffic to be generated can be accommodated on the roads servicing this area. An amendment to this ASP would be required to allow for housing on this site.

2.7 Natural Areas, Pedestrian/Cyclist Pathways and Archeological Sites

1. Where possible, Park Development & Operations will protect and maintain representative and viable natural habitat types as an integral component of the parks and open space system.
2. Park Development & Operations will encourage and welcome informed public, corporate and community participation, stewardship and partnerships in the acquisition, management, research and protection of appropriate natural environments.
3. Year round enjoyment and use by all Calgarians and city visitors will be encouraged with appropriate sensitivity to environmental impact and safety. Where recreational use and the long-term survival of significant habitats conflict, protection of the resource will take precedence. Recreational facilities will be designed and managed to minimize negative impact on natural areas.
4. The City of Calgary will work with adjacent municipalities to cooperatively protect contiguous natural habitat.

5. Calgary's inventory of natural areas, as defined by the **Natural Area Management Plan, 1994**, include lands in Bearspaw East: the escarpment below Tuscany and a strip of land along the riverbank. During the course of preparing this Plan, these lands have been determined by Park Development and Operation to be Environmentally Significant Area (ESA) in accordance with the established criteria referred to in Sec. 3.3. Map 5 shows the ESA within Bearspaw East.



Exhibit 5: The western end of the Shriners' land against the backdrop of the heavily-treed riverbanks and the bridge crossing of the Stoney Trail.

Generally, natural areas may be protected through:

- dedication as Environmental Reserve;
- dedication as credit or non-credit Municipal Reserve;
- voluntary placement of conservation easement;
- corporate and individual donations; and
- acquisition by The City.

6. The natural areas to be protected as open space will be generally managed as a natural environment park, and in accordance with the **Natural Area Management Plan**.
7. Corporate and individual donations, use of environmental reserve easement and conservation easement shall be encouraged to protect additional lands beyond the open space system to be acquired in accordance with the **Municipal Government Act**, at locations to be determined by Park Development & Operations.
8. To the extent possible, Municipal Reserve shall be used to protect additional environmentally significant lands and regionally significant archeological sites.
9. To maintain the ecological quality of this part of the Bow River valley, any changes to the drainage

pattern or ground-water levels within the planning area should not impact the ESA's shown on Map 5 and other natural areas outside the Plan area: Bowmont Park, The Twelve Coulee, and the ravine north of The City's Maintenance Depot, or other natural areas in the vicinity. Site specific geotechnical and hydrological studies shall consider this requirement and shall be reviewed by the Development Authority when land use and development proposals are considered.

10. The Twelve Mile Coulee extends from Tuscany through the planning area to drain into the Bow River at an outlet east of the water intake of the Bearspaw plant, as shown on Map 7. The coulee, comprised of a ravine and adjacent escarpment, is a significant natural feature, archeological resource and recreational amenity. Every effort shall be made to maintain the continuity of the coulee, preserve the stream that flows through it, and minimize disturbance to its vegetation. This requirement shall be considered in the evaluation of applications for land use re-designation, outline plan, grading permit or development permit, as the case may be, on all adjacent sites.
11. Should the Shriners' land be developed as an executive golf course, site drainage will be subject to approval by Wastewater & Drainage of The City. On-site wet ponds may be required so that City and Provincial standards can be met at the outfall.

12. No re-grading or filling shall be allowed to encroach into the floodway lands. Furthermore, natural vegetation in these areas shall not be disturbed, except where engineering measures are needed to prevent erosion of the riverbanks.
13. Notwithstanding Policy 2.7.11 above, the current use of the pond as an amenity shall be maintained.
14. Any environmental damage which occurs during or prior to development shall be rehabilitated by the developer/builder in all areas to be retained in a natural state. The use of native grass and plant species shall be required, and will be carried out to the satisfaction of Park Development & Operations.

15. Fire truck access shall be maintained to all natural areas for fire fighting purposes.

Regional Pathway System:

16. The pathway and trail system for Bearspaw East is shown conceptually in Map 2. This system will provide access to the natural amenities of the site. The ecological sensitivity of the surrounding lands shall be a major factor in determining the design standard and choice of construction materials and methods, providing access to the appropriate user groups.



17. Pathways on City property or within 500 ft. thereof, shall be evaluated by Calgary Waterworks in the context of security concerns, and the Development Authority shall be advised accordingly.

2.8 The Intermunicipal Development Plan, 1998

Lands west of 101 Street NW right-of-way in Bearspaw East are also subject to the M.D. of Rocky View/City of Calgary **Intermunicipal Development Plan, 1998**. The Plan was adopted by both municipalities, and planning decisions here can have an impact in both jurisdictions.

1. As required by Sec. 3.0 of the **Intermunicipal Development Plan**, any development permit application or land use redesignation application on lands affected by the IDP shall be circulated to the MD of Rocky View for evaluation and comments.
2. Issues of interest to both jurisdictions include biophysical impacts, drainage schemes, inter-connection of roads and pathways, protection of the riverbank, land use compatibility across jurisdictional boundaries, etc.
3. The name **Bearspaw East** refers only to this Plan, and shall not be used in any future subdivision or street name in this area (to avoid confusion with similar names currently in use in the MD).

2.9 Inland Aggregates

Inland Aggregates, City of Calgary, and private farming operations occupy the land further west of the planning area in the M.D. of Rocky View. All these lands, totaling 526 acres, currently have their vehicular access from Bearspaw Dam Road. The City of Calgary and Inland Aggregates utilize their respective lands for gravel mining and sand extraction. However, deposits in the area are nearly depleted, and mining will likely cease in the near future. Inland Aggregates is considering a joint proposal, together with other landowners, for residential development on their respective sites.

- This Plan provides for continued access to these lands from the existing Bearspaw Dam Road and possibly from the westerly extension of Nose Hill Drive. Alignment of the future Nose Hill Drive through the Inland Aggregates site, and further connections to the west, shall be determined as a part of the re-evaluation of the roadway network, referred to in Section 2.4 2.

2.10 Development Phasing

Timing of development depends upon availability of municipal services road access to various portions of the planning area. The area north of the CP mainline is generally serviceable, and municipal utilities can be extended this far. The construction of Nose Hill Drive west of Stoney Trail, to take place between 2002 and 2004, will significantly improve access and generate interest in the potential of the vacant lands below the escarpment.

The introduction of recreational uses south of the tracks and west of Stoney Trail may not require the full range of municipal services or significant improvements to the road access. Timing of any change in use here will depend on the initiative of the landowner (currently the Shriners).

For location and direction of photos in this Plan, see Map 3.

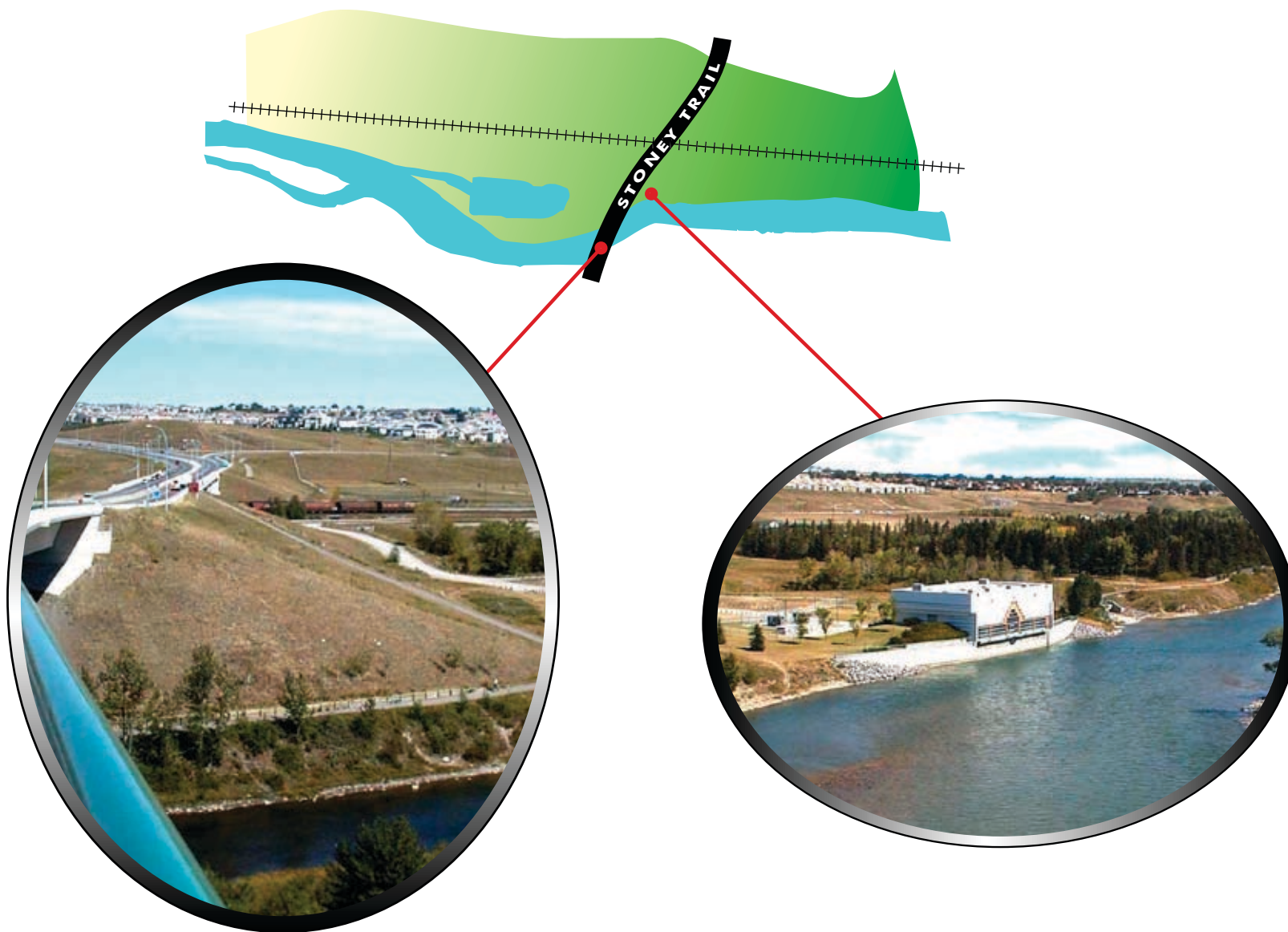


Exhibit 6

Stoney Trail Crossing of the Bow River, with a view of the Scenic Acres Community.

Exhibit 7

Bears paw Water Intake Pump Station on the Bow River, viewed from the east side of Stoney Trail at the river crossing.

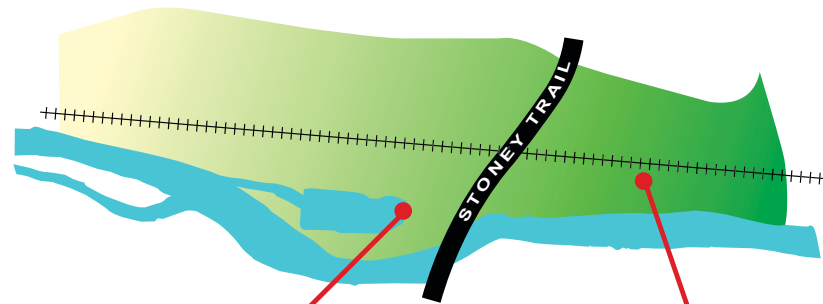


Exhibit 8

The pond on the Shriners' land against the backdrop of the north-facing escarpment of the Bow River valley.



Exhibit 9

The tree-lined, Scenic Bow Road provides access to Baker Park to the left.

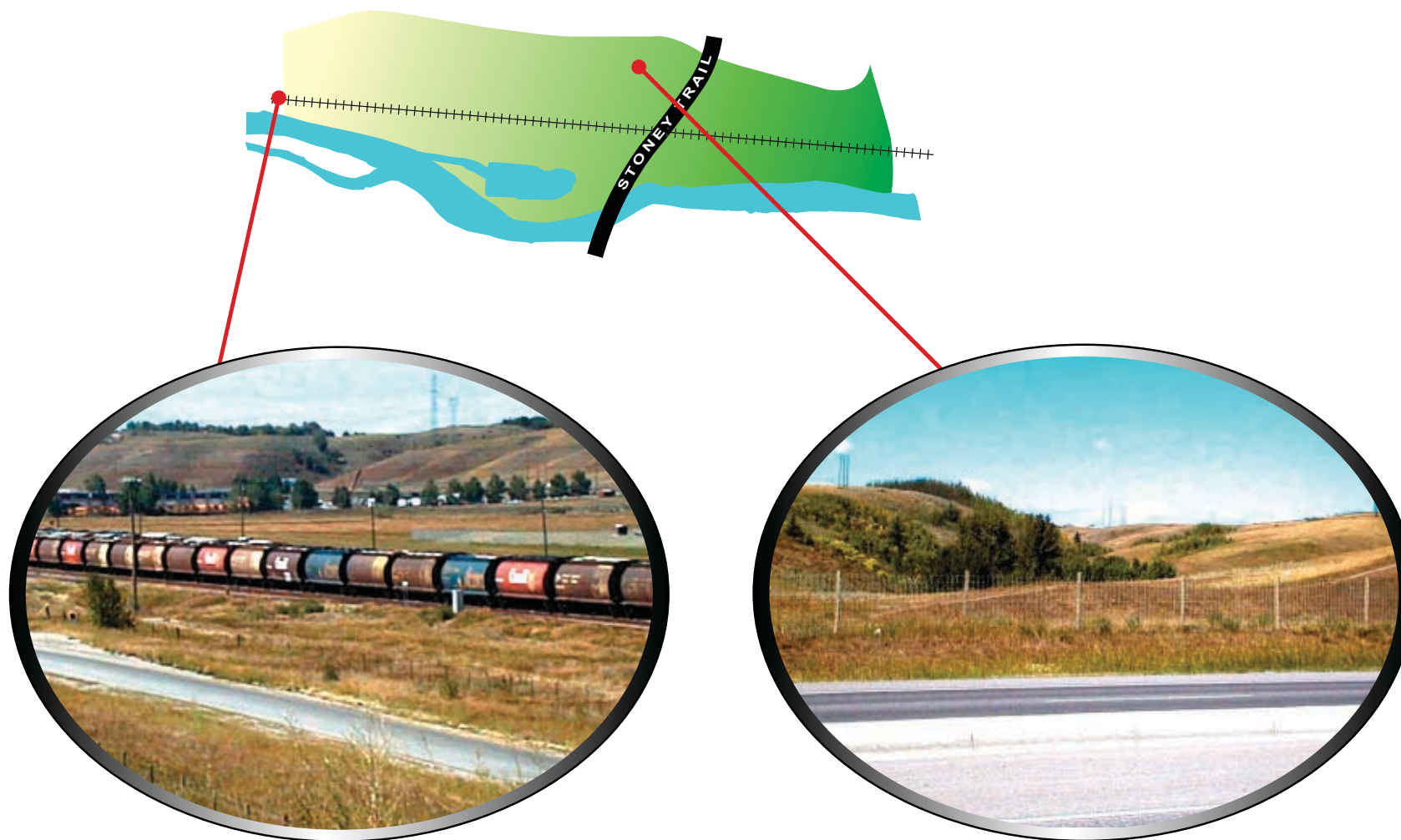
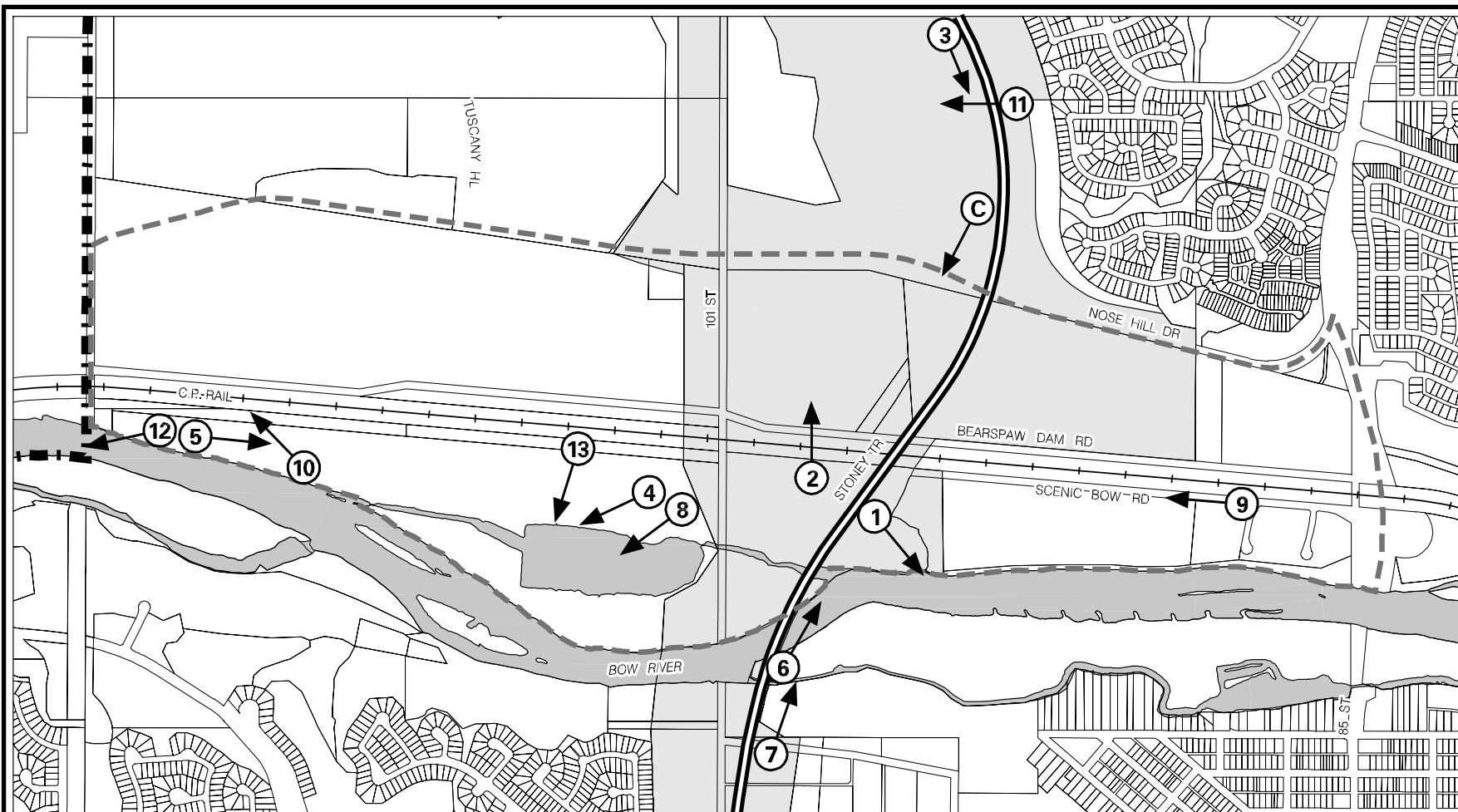


Exhibit 10

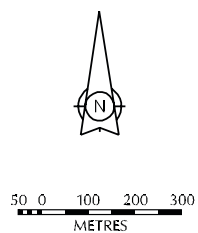
CP mainline and the Keith Yards divide the planning area into two parts, with only one cross-connection at the 85 Street overpass. Another substandard, at grade crossing is located in the MD of Rocky View on a private road.

Exhibit 11

The Twelve Mile Coulee, viewed from Stoney Trail.



Map 3
Bears paw East
Area Structure Plan
Location And Direction
Of Photographs



- ← (#) Photographs Shown
In Exhibits 1 To 13
- ← (C) Photograph Shown
On Cover Page



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SUPPORTING INFORMATION

Planning Area



3.0 PLANNING AREA

(MAP 4)

The planning area is on the lower bench below the escarpments of Scenic Acres and Tuscany, extending from the western boundaries of Bowmont Park to the city limits, and from the Bow River to Nose Hill Drive and its future westerly extension. Located in this area:

- Bow Park Court (A)
- Baker Park (B)
- Alberta Environment Forestry facility (C)
- TUC lands (D-1, D2, and D3)
- Shriners Al Alzhar Temple (E-1 and E-2),
- Shriners and Calgary Police Horse Stables (E-3)
- Bearspaw Water Treatment Plant (F-1 and F-2)
- City Maintenance Depot (G)
- Electric Sub-station #36 (H)

This area, as described above, is roughly 624 acres.

Site I is roughly 12 acres and is situated on the lower bench, but outside the planning area. The site elevation is somewhat higher, some 15 meters above the grounds to the south. The site is in Carma's ownership.

3.1 Existing Uses and Conditions

Bearspaw Water Treatment Plant, shown as Site F-1 and F-2 on Map 4 consists of a range of facilities which include two large buildings housing water filtration, pumping, chlorination, fluoridation facilities and other processes required to treat the city's water supply. There is also a separate diesel power plant, a storage building, an underground sedimentation basin, an uncovered sedimentation basin, and two sludge lagoons located on Site F-2. Lands north and west of the sludge lagoons are currently vacant. Large feeder mains link the site to the raw water pump stations, one at the Bearspaw Dam and the other on the riverbank across from the western end of Bowness Park (in D-2).

This plant was constructed on the Bow River in the seventies, and is the larger and more recent of the two water treatment plants in Calgary (the Glenmore Reservoir and Water Treatment Plant were built in the thirties). Both plants have been modernized over the years, and both use conventional processes. The Elbow River, however, is approaching its total allowable diversion, which limits the Glenmore Plant capacity. This is not the case with Bearspaw WTP, now the only plant with expansion capability.

The daily operation and annual maintenance required for this plant have significant implications in planning for the surrounding lands, which are referred to in Section 1.3 of this Plan. It should be further noted that there are no sludge lagoons in the Glenmore WTP. Sludge from the Glenmore plant is presently treated with chemicals (to subdue odor), then transported to the Sheppard lagoons. The sludge from the Bearspaw Plant is transported to The City's gravel pit at the end of Bearspaw Dam Road as a part of the annual maintenance program.

Waterworks intends to expand plant capacity at the Bearspaw site to meet the demands created by urban growth and higher treatment standards required by recently enacted legislation. This expansion is anticipated on Site F-2, and in the very long term, Site G as well.

Two additional stages of plant expansion are currently planned and each will require additions to existing water filtration buildings, more sedimentation basins and sludge lagoons. It is also possible other facilities will be required for ozone treatment or Granulated Active Carbon (GAC) filtration.

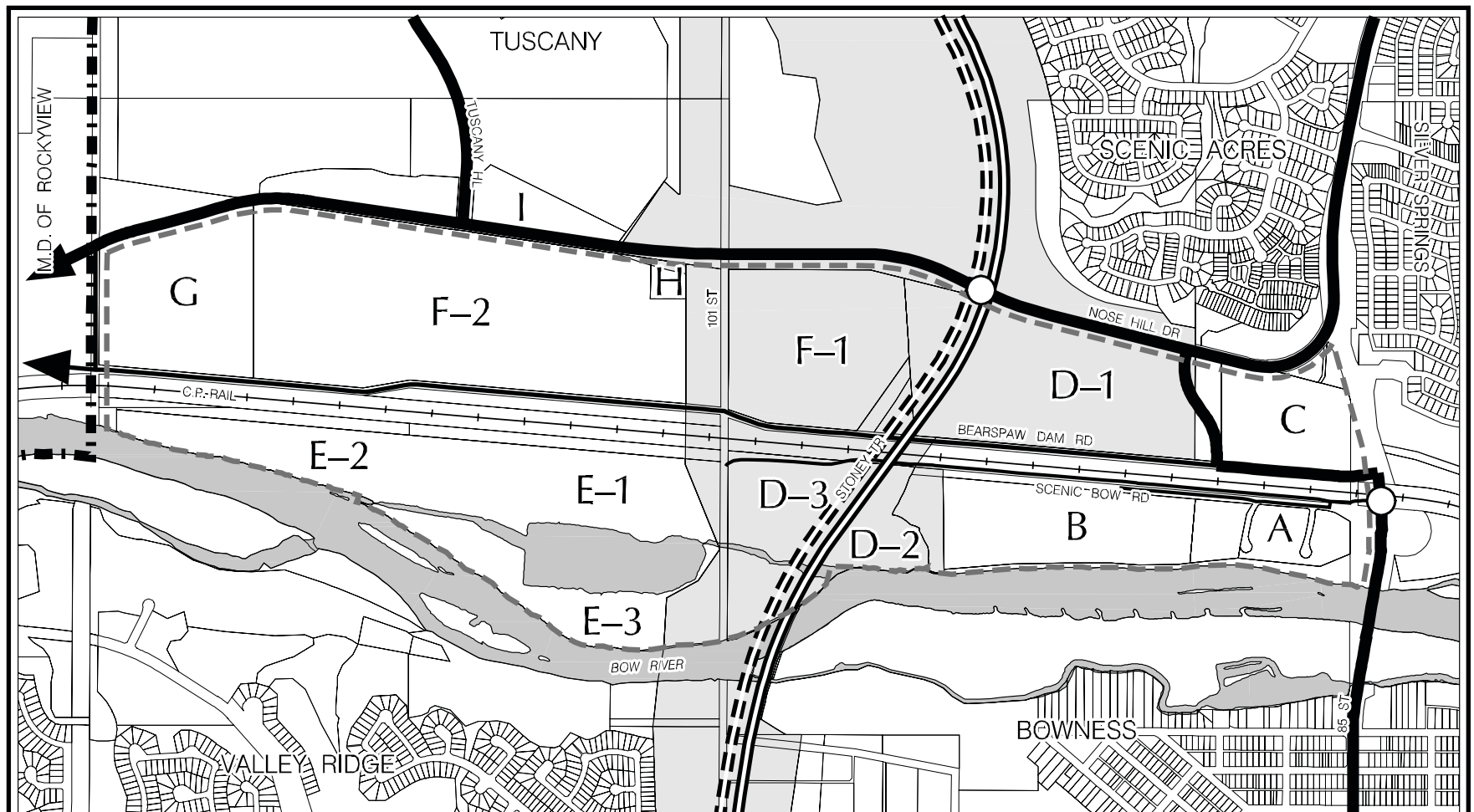
City Maintenance Depot, Site G, is a large maintenance operation for Calgary Roads trucks, and gravel sorting site for the northwest sector of the city. The site is serviced by a spur track that branches off the CP mainline, and is useful to The City in that rail shipments initially arrive to this site.

Parks Development & Operation and Supply Management Services are currently among the users of the Depot facilities.

Electric Substation #36, Site H, is in the ownership of Enmax, and is a long term facility.

The Shriners site is an elongated parcel, shown as Sites E-1, E-2 and E-3, with the clubhouse being located at the eastern end. Access is provided from a private road. Although not a recent construction, the building is in good condition and is likely to be maintained for sometime. The water pond and the horse stables used by the Shriners and the Calgary Police Service are closer to the river (Site E-3).

The clubhouse and the vacant lands to the west, Sites E-1 and E-2, are above the flood plain, and if serviceable, can be considered developable.

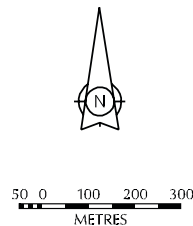


Map 4
Bearspaw East
Area Structure Plan

Existing Uses



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- A. Bow Park Court
- B. Baker park
- C. Alberta Environment Forestry Facility
- D. TUC Lands (D-1, D-2, and D-3)
- E. Shriners' Al Alzhar Temple, Calgary Police Horse Stables (E-1, E-2 AND E-3)
- F-1 Bearspaw Water Treatment plant
- F-2 Sedimentation Ponds and Vacant Land
- G. City Maintenance Depot
- H. Electric Station No. 36
- I. Carma's proposed multi-family site

Acreage (Approximate)

A.	13.3 ac
B.	31.3 ac
C.	20 ac
D.	D-1 = 67 ac, D-2 + D-3 = 42.2 ac
E.	E-1 + E-2 + E-3 = 101 ac
F-1	42.8 ac
F-2	109.6 ac
G.	39.4 ac
H.	2.2 ac
I.	12 ac

Bow Park Court, Site A, is a group home for the handicapped, operated by Alberta Family and Social Services. The site was selected on the basis of its relative isolation and its natural surroundings. Physical layout of this facility is similar to a residential subdivision with two cul-de-sacs. Accommodations are relatively modern and are likely to be maintained over the long term.

Baker Park, Site B, the previous sanatorium site, has been landscaped in recent years as a decorative park.

The Transportation/Utility Corridor includes the existing Stoney Trail (three lanes), the right of way for its future expansion (another three lanes), as well as TUC associated uses, power lines, gas pipelines, stormwater ponds, etc. A portion of the surplus lands, Site D-1, has been leased for a driving range. Most of site D-3 is vacant.

The **Alberta Environment Forestry Facility**, on Site C, houses some of the regional administrative and technical functions of the Alberta Forestry.

3.2 Topography

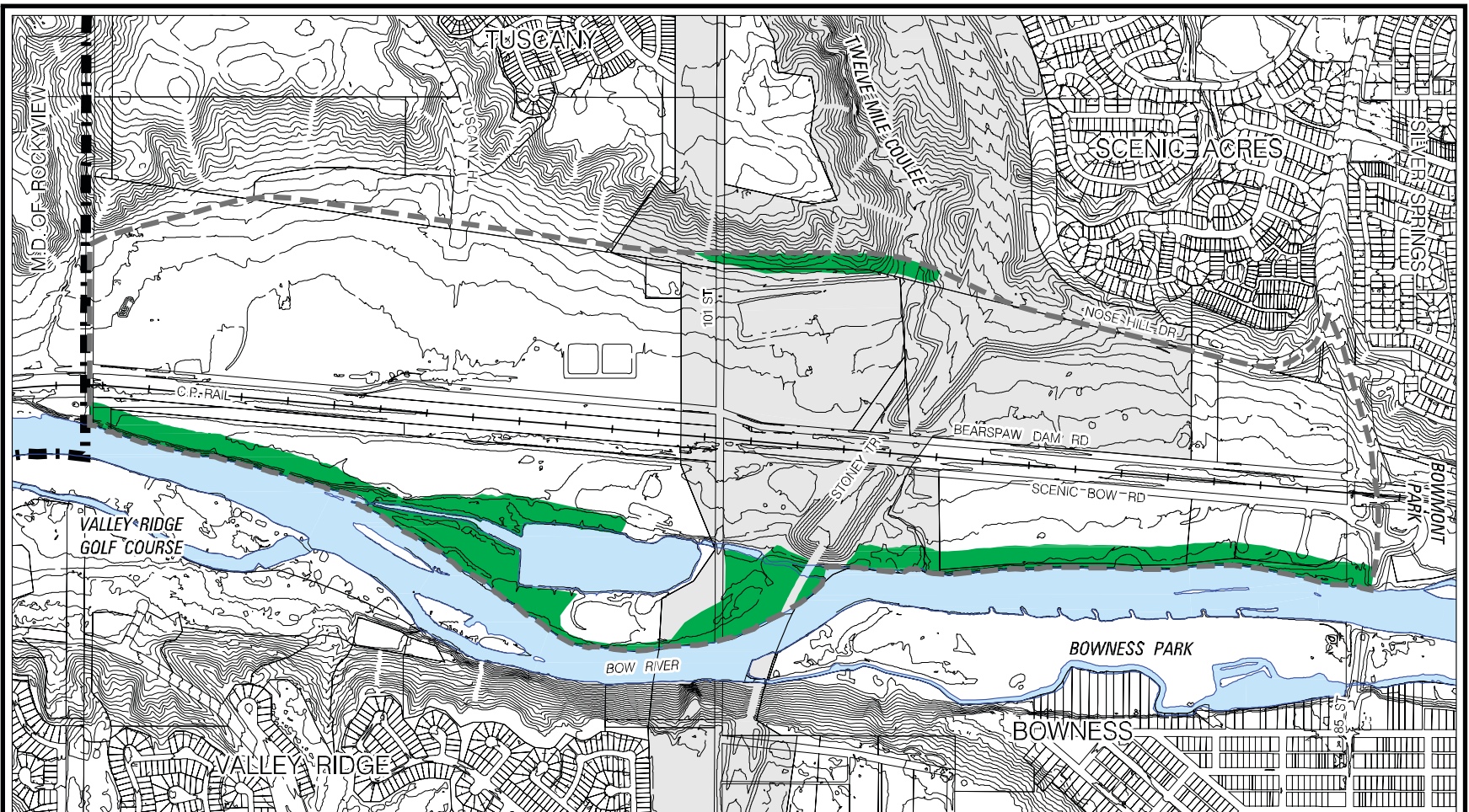
All of the planning area is comprised of benchlands along the north side of the Bow River. The topography in this area, and of its immediate surroundings, is marked by a series of terraces descending toward the riverbanks. Carma's land, Site I, and the stormwater pond to the west are on the higher terrace, with

ground natural contours between 1,105 metres and 1,097 metres. The lands south of Nose Hill Drive (and its future extension) and the CP mainline is on the intermediate terrace, elevation 1,092 metres to 1,087 metres. The lower terrace is the area south of the railway tracks, elevation 1,085 metres to 1,075 metres.

3.3 The Environmentally Significant Area (ESA) (Map 5)

Park Development & Operations considers the portion of the planning area shown on Map 5 to be environmentally significant for the following reasons:

- Importance of the riverbanks at this location, given abundance of the natural features in the immediate surroundings.
- Uniqueness of the physical form of the meandering river surrounded on both sides by steep escarpments.
- Ecological association with the point bars in the gravelly water stream, the valley escarpments, the Twelve Mile Coulee, Bowness Park and Bowmont Park.
- Predominance of mature Balsam Poplar within the area.



Map 5
 Bears paw East
 Area Structure Plan
 Environmentally
 Significant Areas



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 METRES

-  Plan Boundary
-  Transportation Utility Corridor
-  Environmentally Significant Areas

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This map is conceptual only.
 No measurements of distances
 or areas should be taken
 off this map.

Habitat Types

Habitat Type		Associated Vegetation Community
1.	Balsam Poplar	Water Birch/Dogwood
2.	Riverine Tall Shrub	Willow Saskatoon Water Birch Dogwood Balsam P.
3.	Native Grassland	Rough Fescue Needle Grass (dominant) Mixed Native Grass (others)
4.	Non-Native Grassland	Brome-Thistle Other
5.	Disturbed	Balsam P./Manicured grass Manicured grass Antropogenic
6.	Artificial Pond	Non-native

Balsam Poplar

The riverbend in Bearspaw East is densely covered by mature stands of Balsam Poplar. This situation is common in Calgary along the riverbanks, on prominent point bars, the gravelly floodplain and terraces in well-drained areas. Balsam Poplar stands are vital to wildlife, especially migratory birds.

Balsam stands are normally accompanied by an understorey of red-osier dogwood, willow, water birch, saskatoon, silverberry, or Canada buffaloberry. Occasionally, white spruce may establish in shady, moist areas but rarely reach maturity. Disturbed riparian

forests, which is the case here, have a rudimentary smooth brome-thistle understorey. The disturbance is the result of current uses (the horse stables and grazing activities).

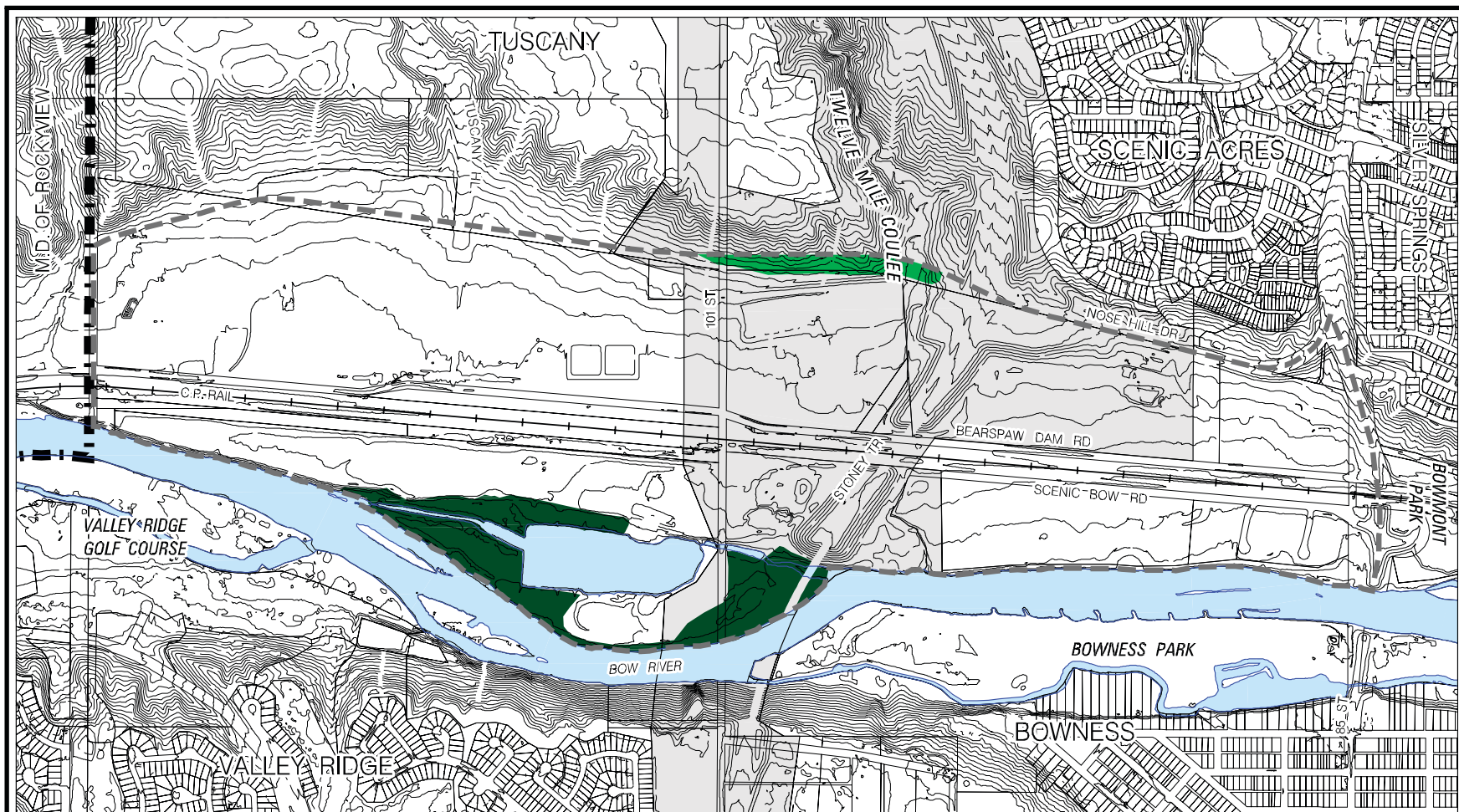
Riverine Shrubs

Riverine shrubs, commonly found along the floodplain and lower slopes of the major river valleys in association with Balsam Poplar stands, include species such as red-osier dogwood, water birch, and a variety of willows. These shrubs can withstand periodic flooding and are adapted to grow in coarse, unstable soil. Often, these shrubs mark the transition from flood plain dense vegetation and tree stands to grassland or wetland. This habitat type is also vital to wildlife, and is sensitive to disturbance.

Riverine Tall Shrubs are present in association with the Balsam Poplar.

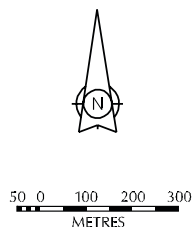
Native Grasslands

Most native grasses grow in exposed areas where wind and sun prevail, more so than other vegetation species can usually tolerate. Moisture tends to be a limiting factor, especially in steeper hillside situations. In Bearspaw East and its immediate surroundings, grasslands are found on the benchlands above floodplain, and on the escarpments, ravines and gullies. June grass, wheat grasses, and needle grasses grow in mixed communities on the drier terrain. Large patches of fescue grasslands, while rare in Calgary,



Map 6 Bears paw East Area Structure Plan

Habitat Type



- Plan Boundary
- Transportation Utility Corridor
- Balsam Poplar Woodland
- Native Grassland

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No measurements of distances
or areas should be taken
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still exist on Nose Hill, Paskapoo Slopes and in a few other locations, including Bearspaw East. Rough fescue grass communities are often tall and tussocky (hill like) and tend to be found on rough terrain that was unsuitable for the plough. The tufted thick base protects the grass from fire and winter grazing. Native grasslands also support an abundance of wildflowers. Prairie crocus is a common spring flower, while golden bean, hedsarum, lupine, geranium, fleabane, bedstraw, sage, goldenrod, and aster will follow into fall.

Most of the native grasses are to be found north of the planning area. Furthermore, in the immediate surroundings of the planning area, fescue grass can also be found on the south-facing escarpment of the river valley and in the Twelve Mile Coulee. The association with other plant species increases the diversity and abundance of available food for animal species within this portion of the river valley. On the benchlands, however, the significance of native grasses might have been reduced as a result of grazing and encroachment by non-native grasses and weeds.

Disturbed and Non-Native Grasslands

Disturbance simply refers to areas where the majority of native species have been removed leaving either bare ground or introduced grass. Non-native grassland refers to introduced grasses or weeds that have been

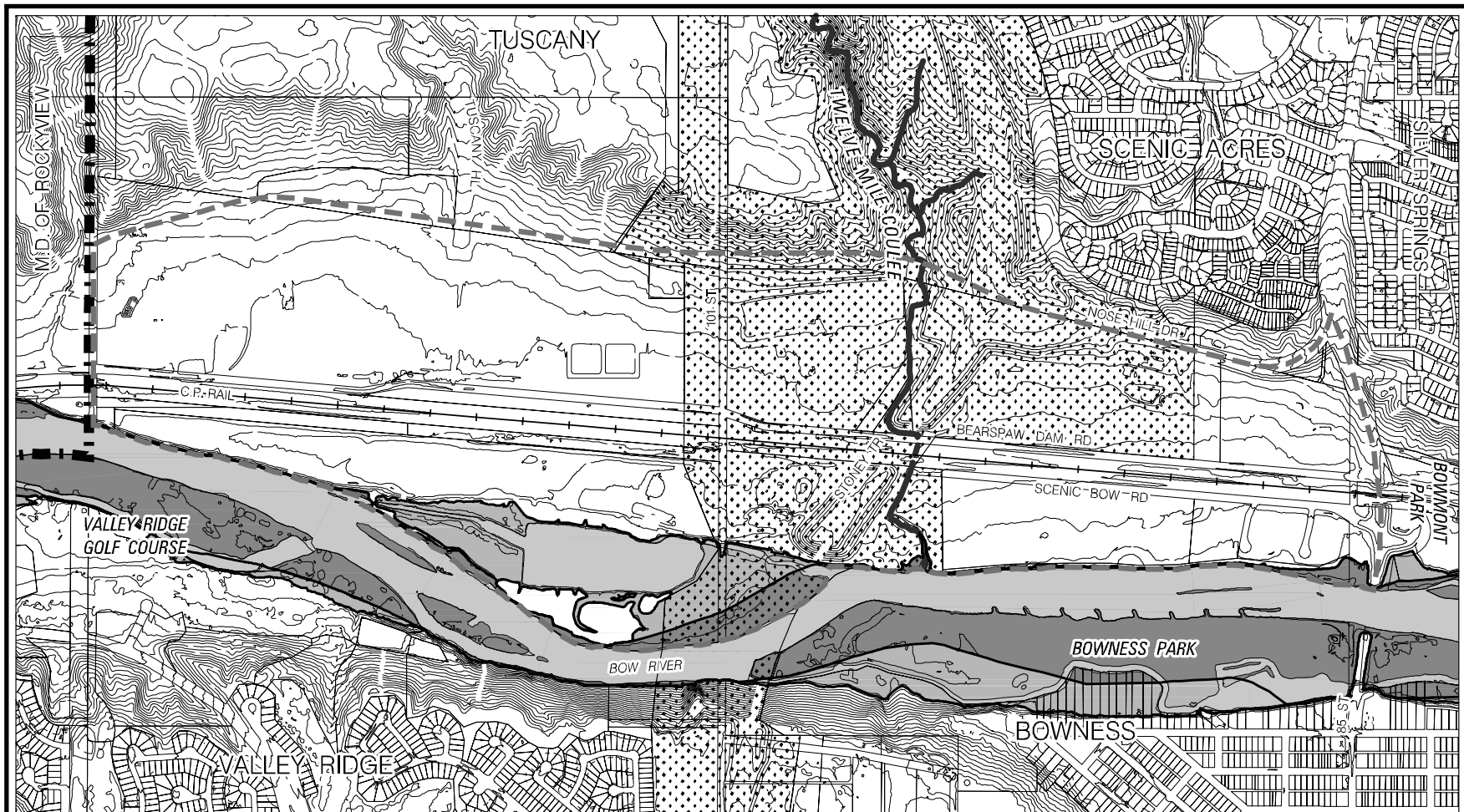
left to grow naturally. Disturbed sites are less likely to be frequented by wildlife. Species common to non-native grassland that are highly invasive and difficult to control are Smooth Brome and Thistle.

Because of grazing over an extended period of time, native grasses on a large portion of the Shriners' land are now mixed with invasive grasses and weeds. Native grasses outside the planning area (on the Tuscany escarpment and the Twelve Mile Coulee) are in a natural condition.

Planning Implications

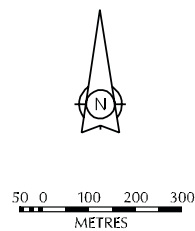
Open space and environmental policies should take into account a number of inter-related issues: the ecological and geographical association of vegetation communities, age pattern within each community, and their role as wildlife habitat. Wildlife is defined here not as just deer or other large mammals, but is broader in scale, ranging from birds to plants. Maintaining healthy links between reproduction, seasonal and daily migration and food supply are essential to natural habitat.

Wildlife movement is often limited by availability of dense cover. The presence of dense Balsam Poplar stands along the southerly bend of the river provides this cover for wildlife movements and connects to the Bowmont Park's natural area. This connection, however, is not a continuous cover.



Map 7 Bears paw East Area Structure Plan

Floodway/Floodplain



- Plan Boundary
- Transportation Utility Corridor
- Floodway
- Floodplain



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This map is conceptual only.
No measurements of distances
or areas should be taken
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Species that have been observed include mule deer, white-tailed deer, moose, red fox, coyote, American badger and porcupine. Many species of birds are also likely to use the movement corridor.

For land use planning purposes, viability of the various habitats, vegetation communities and the associated wildlife use in Bearspaw East depends upon the following:

- Maintenance of large blocks (unfragmented) of habitat types, especially along the riverbanks and the surrounding escarpments (outside the planning area).
- Protection of the Balsam Poplar stands in the planning area and its surroundings, their association with native grasslands on the benchlands and nearby escarpments, ravines and coulees.
- Recognition of the role of the Bow River corridor role as an ecological unit, including significant natural features in the immediate vicinity, e.g., the point bars in the Bow River, the south-facing and the heavily-treed north-facing escarpments of the river valley, the Twelve Mile Coulee and Bowmont Park natural area.

- Protection of the rare Riverine Tall Shrub community.
- The avoidance of increased fragmentation in significant habitats.
- Effective use of Natural Area Management techniques.



Exhibit 12: The riverbank surroundings at the western city limits. In the foreground is the western end of the Shriners' site.

Policies and Studies Affecting the Plan



4.0 POLICIES AND STUDIES AFFECTING THE PLAN

4.1 The M.D. of Rocky View, City of Calgary Intermunicipal Development Plan, 1998.

This plan deals with the area of mutual concern to The City of Calgary and the M.D. of Rocky View. Boundaries of the plan overlaps both jurisdictions, extending one mile inside the city limits (except in the northwest, north of 112 Avenue NW, where the overlap is two miles inside city limits), and several miles outward into the M.D. of Rocky View. Policies of the plan apply to the lands near the city limits, Area A, where there is a need for joint planning and coordinated development decisions. Area B is a Notification Zone where circulation to The City of Calgary is required for information purposes.

Issues dealt with in the plan include:

- Land use compatibility across jurisdictional boundaries.
- Protection of the right-of-way for transportation, servicing alignments, and drainage catchment areas impacting lands in both jurisdictions.
- Ensuring orderly development along the major entranceways to the city.

- Protection of all sources of drinking water, specially the Bow River and Elbow River.
- Protection and rehabilitation of key natural features and habitat areas.

Bearspaw East falls within the boundaries of Intermunicipal Development Plan, Area A, and several of its key policies have been incorporated into this ASP (See Sections 2.4.2, 2.6.4, 2.7.9, 2.8, and 2.9).

4.2 Municipal Development Plan, 1998

The **Calgary Municipal Development Plan** was adopted by City Council in July, 1998. The document is the municipal development plan for The City of Calgary, as required by the **Municipal Government Act, 2000**, and as such, replaces the General Municipal Plan. The plan addresses future land use, development and transportation, relationships with municipal neighbours, provision of municipal services and facilities.

It also includes policies regarding the dedication of reserve land, and provides the basis for actions and decisions regarding the environmental, social and economic health of the city.

The **Calgary Municipal Development Plan** provides the strategic, city-wide framework for more detailed plans and policies.

4.3 Provincial Land Use Policy, 1996

Pursuant to Section 622 of the **Municipal Government Act**, The Province of Alberta has established **Land Use Policies** (Order in Council 522/96), November 6, 1996). These policies require that municipal and provincial planning efforts be consistent and that a high level of cooperation and coordination is fostered with respect to the areas of mutual concern. All municipal statutory plans must be consistent with the Land Use Policies. Key mutual policy areas that this Plan encourages are: land use patterns that foster sustainable development; protection of the natural environment and minimizing the loss of valued habitat; negative impacts to water quality, hydrology and soil erosion are minimized; and preservation and enhancement of significant historical resources for the enjoyment of present and future generations.

4.4 Calgary Transportation Plan, 1995 (Map 8)

The **Calgary Transportation Plan** was adopted by City Council. The plan portrays a vision of Calgary in the year 2024 when the city's population is expected to reach 1.25 million. It sets out a strategy for avoiding expensive and contentious river crossings and road improvements, the problems of air pollution, downstream traffic impacts, and the loss of natural areas experienced by other cities undergoing substantial growth.

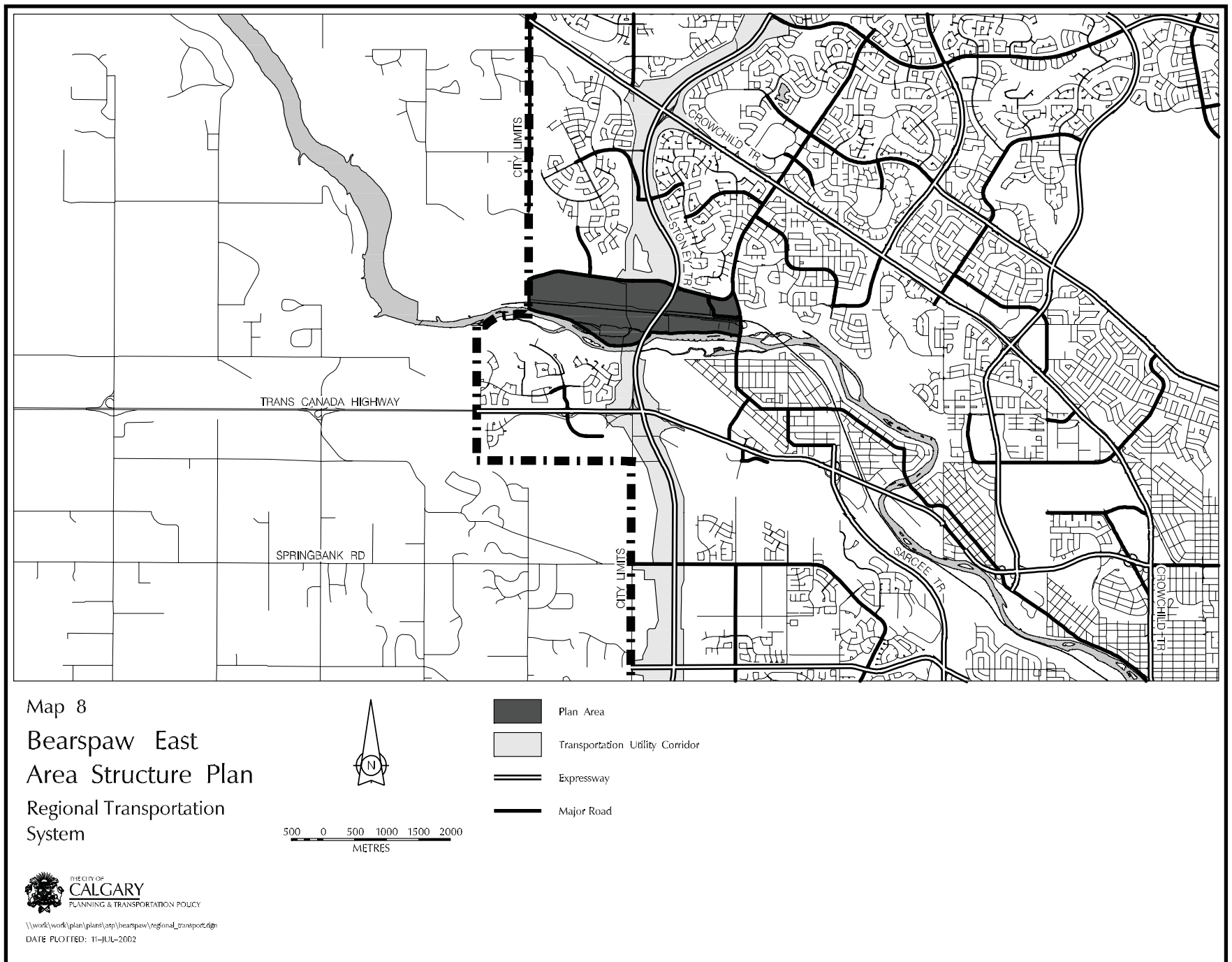
The plan emphasizes the link between transportation and land use planning, establishes policies to be used in the planning of new residential communities so as to reduce the need for vehicle trips, and encourages transit and other modes of transportation. The study also supports the preservation of environmentally significant areas, historical and archeological sites through effective land use planning.

The westerly extension of Nose Hill Drive is identified in the Calgary Transportation Plan as a major street (Fig. 5).

4.5 Sustainable Suburbs Study, 1995

The purpose of this study is to promote more fiscally, socially and environmentally sustainable communities. The study is aimed, not only at implementing the objectives of the **Calgary Transportation Plan** as they relate to the development of new communities, but seeks to encourage developers, City departments and others to find new ways of designing more sustainable communities. It describes many of the long term fiscal, social and environmental problems facing the city, and sets out a comprehensive package of planning policies, requirements and guidelines that respond to these issues.

Protecting the natural areas, and incorporating important natural features into the urban fabric is encouraged.



4.6 Transit Friendly Design Guide, 1995

The **Transit Friendly Design Guide** describes techniques for improved integration of transit into residential and non-residential areas, to achieve the vision described in the **Calgary Transportation Plan**. It explains, and gives examples of, the physical requirements necessary to encourage transit use.

4.7 The City of Calgary Environmental Policy, Principles and Goals, 1994

The **City of Calgary Environmental Policy, Principles & Goals** acts as a guide for City of Calgary Employees to ensure that the environmental stewardship and performance standard adopted by the City of Calgary is implemented and maintained by staff.

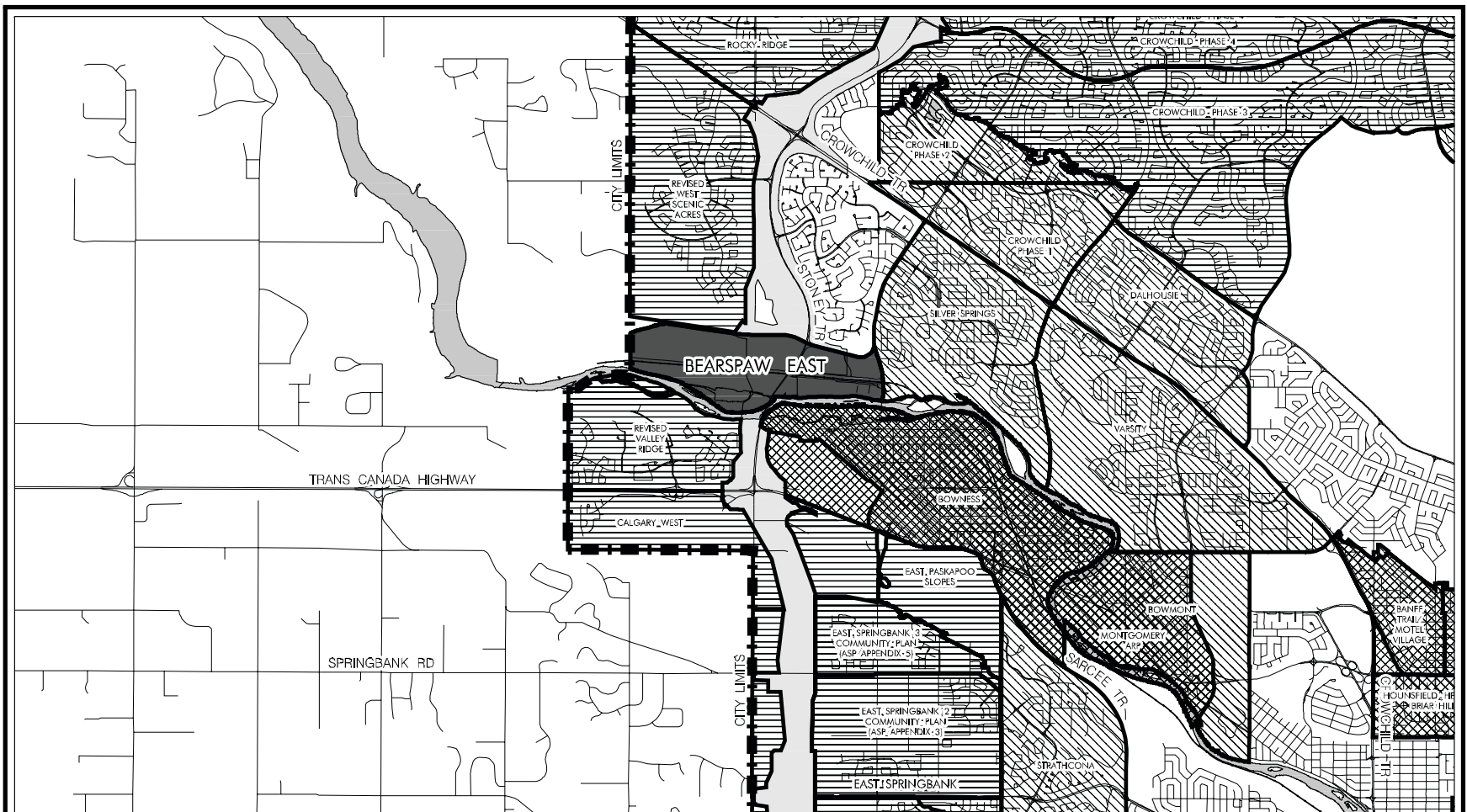
4.8 The Urban Parks Master Plan, 1994

The focus of the **Urban Parks Master Plan**, as expressed in the vision statement, is to provide for “an integrated River Valley Park System,” and strengthen the commitment to its “preservation, use and enjoyment” by all Calgarians. Bearspaw East, being in the Bow River valley, is therefore affected to a considerable extent by the plan policies, and specifically by these principles:

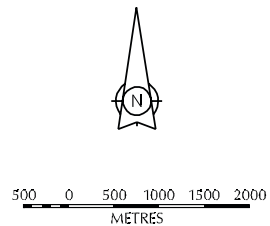
- Passive, low-intensity, informal, and unstructured activities are the primary use in the river valleys.
- Continuous pathways will inter-connect uses in the river valleys and provide linkages to adjacent communities, open spaces, and development areas.
- Adjacent development will reflect and protect the character of the river valleys.

With the river valleys being the focus of the **Urban Parks Master Plan**, numerous recreational opportunities were identified in this general area:

- Bearspaw Park (in the MD of Rocky View)
- The Douglas Fir Ravine and Valley Ridge Golf Course on the opposite side of the river
- The escarpments below Tuscany and Scenic Acres, and the Twelve Mile Coulee, along the northern boundaries (of Bearspaw East), and the north facing escarpment
- Baker Park
- The Shriners Al-Azhar facility
- Bowmont Park
- Bowness Park
- Athletic Park (on the vacant lands west of the existing Water Treatment Plant, Site F-2 on Map 4).



Map 9
Bears paw East
Area Structure Plan
Planning Policy Context



- Plan Area
- Transportation Utility Corridor
- Area Structure Plans
- Area Redevelopment Plans
- Design Briefs



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The Park's Plan has been developed after an extensive citizen participation process, aided by surveys of 40,000 respondents. The outcome was a vision for the future of the river valleys, and a direction for consideration of large number of recreational facilities and opportunities. A priority rating was assigned to the list of projects for implementation purposes. In the evaluation process, the Athletic Park referred to above was assigned a low priority.

4.9 The Natural Area Management Plan, 1994

The primary role of this plan is to ensure the long term viability of Calgary's natural environment, and to support its appropriate use by the public. A new classification is introduced, Natural Environment Park, to facilitate the task of planning and managing these areas.

The plan highlights the need for continuous processes of public input, education and interpretation of ecological data, and staff training to provide expert management of natural areas.

East Bearspaw is shown to contain two types of habitat, Balsam Poplar and Native Grassland. The Twelve Mile Coulee and the south-facing slopes below Tuscany are also shown to contain significant habitat.

Much of this information is presented again in the recent draft of the **Calgary Open Space Plan, February 2001**.

4.10 The Revised West Scenic Acres ASP, 1993

This planning document covers an area 620 hectares/ 1,530 acres on the upland plateau to the west of Stoney Trail, now known as Tuscany. The Plan establishes development policies from Crowchild Trail to the ridge of the escarpment (minus the setback from the break of slope line, and any additional open space to be required). Carma, the major landowner in Tuscany, also owns some land below the escarpment, which was made subject to a Special Study. This requirement was established in the plan in view of the apparent need for land use planning for any lands below the escarpment to take place in the larger context of the benchlands.

A stormwater pond was approved in 2000 on the western half of the Special Study area. For the balance the area, roughly 12 acres, Carma is proposing a multiple family housing development.

4.11 The East Scenic Acres ASP, 1990

This plan dealt with the area north of the existing Nose Hill Drive. The Scenic Acres community is now fully developed, and the built up area extends to the escarpment ridge. The row of houses along the ridge overlooks the eastern portion of the planning area.

4.12 Planning Documents in Preparation

At the time of drafting this Plan, several related planning tasks were in progress:

- The **Twelve Mile Coulee Management Plan** has been undertaken by Park Development and Operations to provide "the overall direction for the development, maintenance and protection of the Twelve Mile Coulee to perpetuate the natural character of the landscape while providing compatible, quality recreational opportunities." Plan preparation involved a telephone survey, user survey, community consultation, and open house(s). Upon completion, the plan will formalize the trail system of the coulee, its connections to the regional pathway system, and establish a management strategy consistent with the **Natural Area Management Plan**. This study is close to its finalization.

Planning for the Nose Hill Drive westerly extension has prompted two studies, the first is **Biological Assessment for the Proposed Extension of Nose Hill Dr NW, January 2002**, and the second is **Biophysical Impact Assessment for Nose Hill Drive NW Extension, February 2002**. These reports are currently being reviewed.



Exhibit 13: Amenities associated with Calgary's river valley system are the focus of the Urban Parks Master Plan

Servicing and Utilities

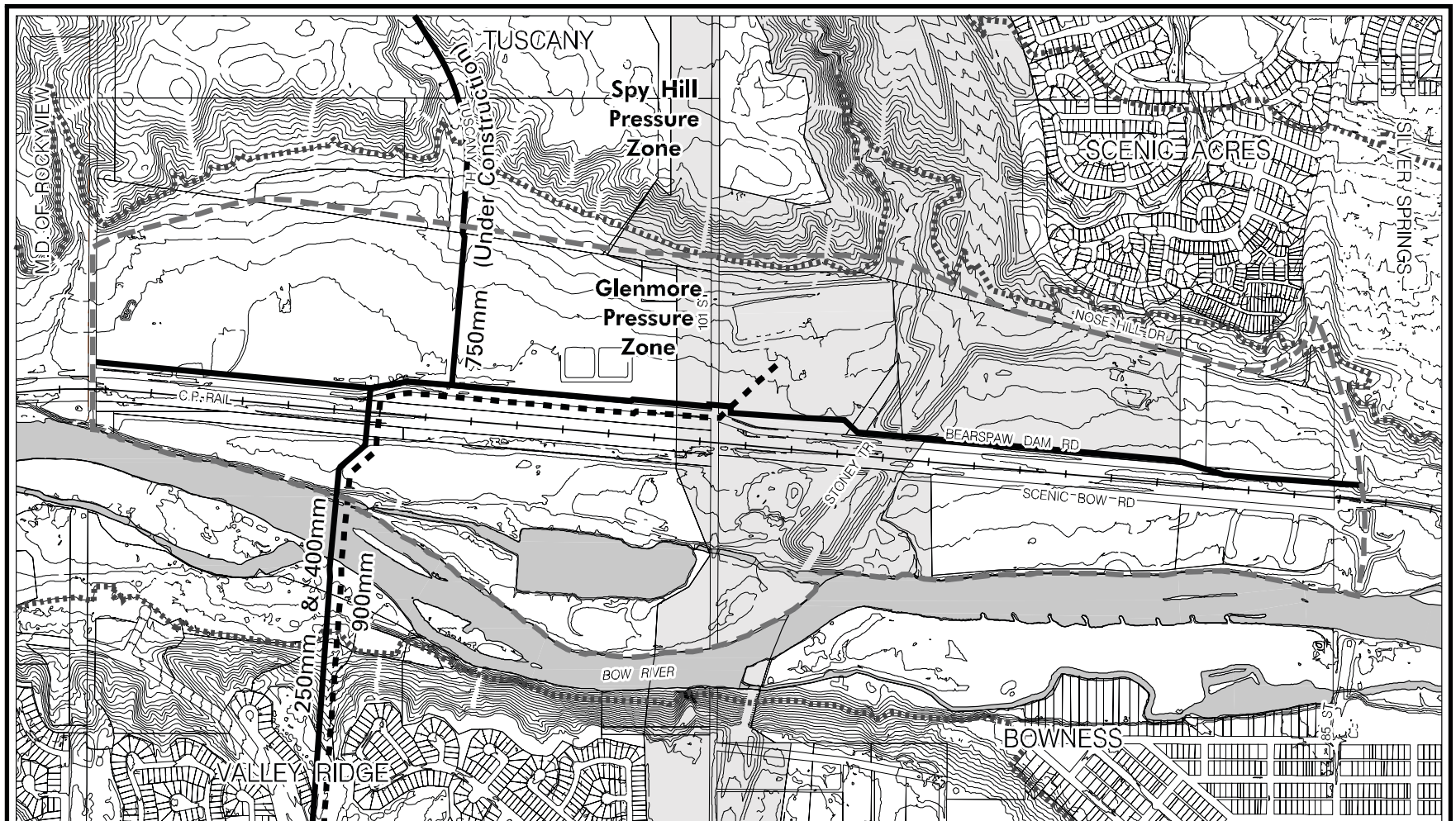
5

5.0 SERVICING AND UTILITIES

5.1 Water Supply

All of Bearspaw East is located in the Glenmore Pressure Zone, which covers the benchlands below the 1085 meter elevation along the bottom of the escarpment. Service is provided here by pressure reduction from the Spy Hill West Zone, the next pressure zone (1107 to 1148 meters).

A 750 mm feedermain is currently being constructed down the escarpment. It is planned that this feedermain be extended across The City's land to Bearspaw Dam Road, to connect to another main, 900 mm, which will cross under the Bow River to supply the growth areas in the west and northwest sectors of the city.



Map 10 Bears paw East Area Structure Plan

Water Supply



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DATE PLOTTED: 11-JUL-2002

This map is conceptual only.
No measurements of distances
or areas should be taken
off this map.

5.2 Sanitary and Storm Sewers

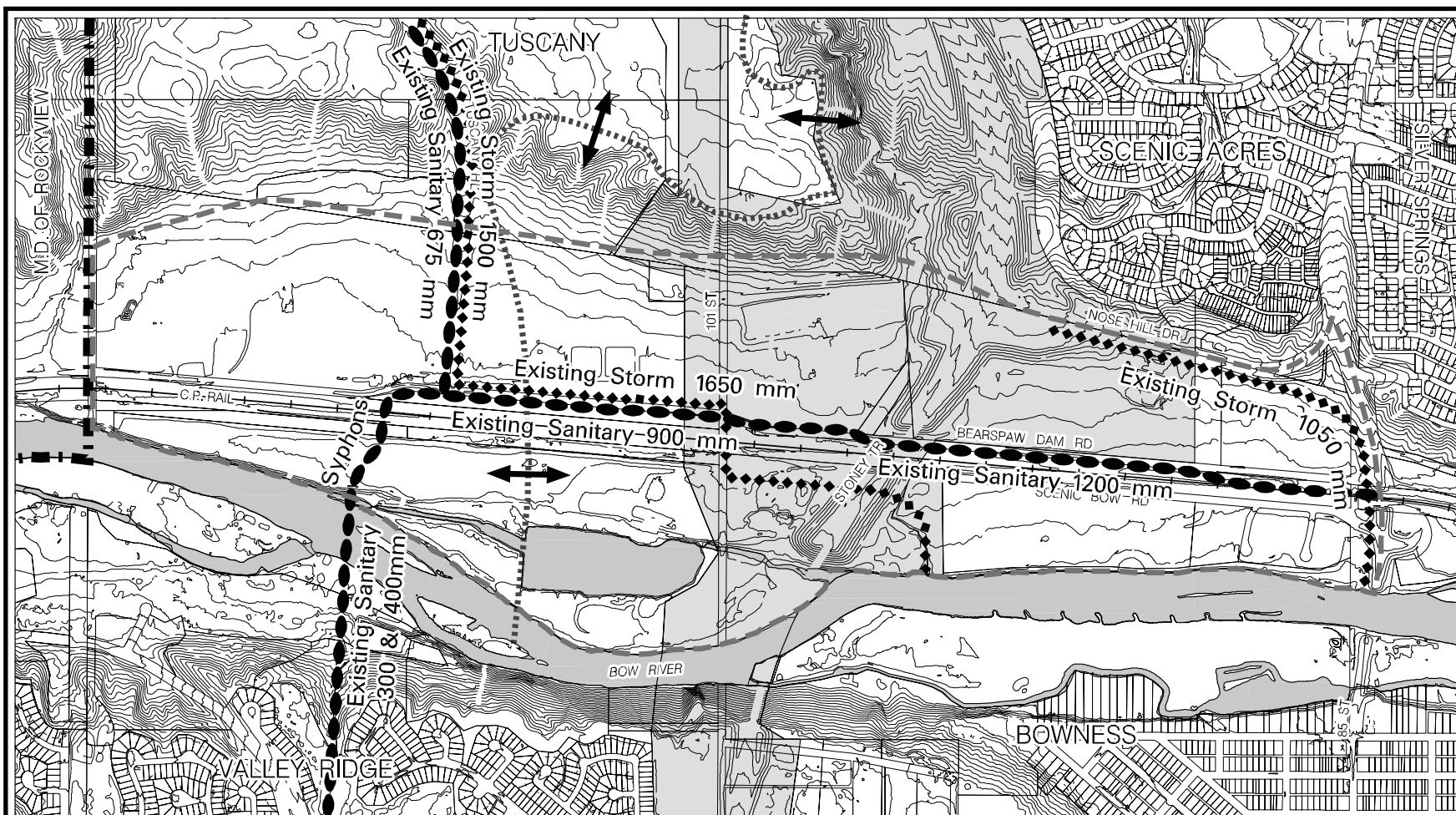
Sanitary and storm sewer mains are also being constructed down the slope to the planning area. The 675 mm concrete sewer main will connect across The City's property to the 900 mm main on Bearspaw Dam Road. There is some capacity still available, but full development of the planning area may require its upgrading.

The storm 1500 mm sewer main under construction down the escarpment will also connect to the 1650 mm main along Bearspaw Dam Road.

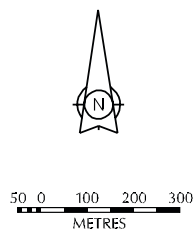
These mains will service any development north of the CP mainline. South of the tracks sanitary trunks are also available, while stormwater drainage is yet to be designed.

5.3 Shallow Utilities

Natural gas, electricity, and telephone lines are currently located within or at the periphery of the planning area, and can be extended to service future development as required.



Map 11
 Bearspaw East
 Area Structure Plan
 Sanitary And Storm
 Sewer Servicing



- — — Plan Boundary
- ▭ Transportation Utility Corridor
- ◆◆◆ Existing Storm Sewer Main
- Existing Sanitary Sewer Main
- Catchment Area Boundary

THE CITY OF
CALGARY
 PLANNING & TRANSPORTATION POLICY
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 DATE PLOTTED: 11-JUL-2002

This map is conceptual only.
 No measurements of distances
 or areas should be taken
 off this map.

Community Services

6

6.0 COMMUNITY SERVICES

Apart from the Bow Park Court group homes, no residential population is anticipated within the planning area. The community services provided for this area are:

6.1 Police Services

District 7 Office, located at #2, 5720 Silversprings Blvd. N.W. provides police protection to Bearspaw East.

6.2 Fire Protection and Emergency Medical Services

Fire protection will be provided from Station No. 21, 209 Silvergrove Dr. NW and Station No. 15, located in Bowness at 6328 - 35 Avenue NW. Emergency Medical Services will be provided from Bowmont Station, 5010 Bowness Road N.W.

6.3 Social Services

Alberta Family and Social Services operates the Bow Park Court group homes for the handicapped, located at #220, 200 Scenic Bow Place NW.

6.4 Community Health Services

The Ranchlands Community Health Center at #109, 1829 Ranchland Drive N.W will provide community health services to this area. Another community health center is located in Bowness, 6328 – 35th Avenue N.W.

