MEADOWLARK PARK
MASTER PLAN

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MEADOWLARK PARK MASTER PLAN
Executive Summary

Introduction
Meadowlark Park is a 14 acre park located south of Lake Elmo in the Heights. The park borders Covert Lane, Cody Drive and Meadowlark Lane and future Sandra Drive. The parkland was acquired through subdivision land dedication process. An additional 4.3 acres of land to the north of the Park are also City owned. This land is not presently considered City Park land. The City acquired this land when the private property owner failed to pay taxes. All lands surrounding the park have been subdivided and platted. To date, only a portion has been developed. The current master plan of record for the park was completed in 1984. This plan recommended fairly intensive development of the park as a traditional community park with passive and active uses including ball fields, playground, and picnic areas. Subsequent to the master plan development, the parcel of land was identified as a wetland. The U.S. Corp of Engineers issued a cease and desist order, prohibiting further filling of the property. Several residents in the neighborhood the Heights Task Force wetlands committee began to explore optional management plans. Their efforts have been assisted by the City and several agencies including DEQ and USFWS.

Background
Realizing that the master plan of record is unachievable, and neighborhood desires for a far less intensely developed park, the City Department of Parks, Recreation and Public Lands began a formal master planning process in spring of 2003. A series of public meetings were held, draft management programs and preliminary design concepts were developed. The City, the Task Force and the consultant team undertook a door-to-door survey to solicit input from the neighborhood. Residents were encouraged to share their views on the management, expansion, improvement and maintenance strategies for this Park.

Management Concepts
To date there is no neighborhood consensus on the amount and configuration of improvements. Attendees at the public meeting appear to be in agreement on approach outlined as follows:

- Amend the long-range master plan for Meadowlark Park to focus on passive recreation and conservation of resources rather than development of active recreation.
- Short-term management strategies should improve maintenance, conserve resources, protect wetlands and protect property values.
- The neighborhood, community, City administration, agencies and property owners should work together on creative funding and implementation strategies.
- The long-term plan for park development should be to develop the park as a passive park that includes increased recreation and educational opportunities but emphasizes conservation of resources, particularly wetlands.
• The master plan implementation processes must inform the neighborhood and community of all planned actions.
• Pursue a hydrologic study to investigate groundwater patterns, water levels and potential impacts to surrounding property owners.

Preliminary Design Concepts
Two plans were developed that illustrated concepts that were initially under discussion. The City and the committee have concluded additional scientific study including groundwater monitoring needs to be undertaken before a final design can be developed. These sketches were included to assist in visualizing opportunities.

Connections:
Pathway connections are proposed along the northern edge of the site and along the perimeter. A connection to Lake Elmo is also recommended. Ideally the connection will occur along the BBWA canal with an open space linkage to Meadowlark Park. The neighborhood suggests most of the secondary pathways in the park should be soft surface. The primary connection will need to be hard surface to comply with ADA accessibility guidelines.

Land Use:
The master plan concept identifies three activity zones. These include recreation, education and habitat enhancement. The more active recreation uses and refined landscaping are proposed along the east edge of the Park. This area has previously been filled, is dryer and will best accommodate play and picnic areas. Some neighborhood residents have suggested the appearance of the park would be improved by landscaping and mowing. The east edge of the park is most visible and the recommended uses suggest a higher level of maintenance. The diversity of habitat types and existing wildlife suggests presents opportunities for outdoor education. The greatest vegetation and habitat diversity occurs along the western edge of the site where woodlands, meadows and open water occur. The focus of this area is recommended to be education.

The park and city owned land is important habitat. Master planning concepts suggest the City owned land become dedicated park land, maintained as open space. The draft master plan suggested the primary focus of this area should be habitat enhancement. Pathways and activities in this are minimal to discourage human activity and enhance wildlife opportunities.

Drainage:
The draft master plan illustrates a range of wetland types including open water, submerged wetlands, emergent wetlands and upland. Discussions to date suggest the amount of open water should perhaps be more limited. If open water in included it must provide multiple benefit of improving drainage, reducing flooding in addition to habitat diversity. Scientific studies are expected to be underway soon to monitor ground water. This information will provide data to refine the master plan.

Expansion:
Expansion of the park to the north to include City owned land has been recommended. Expansion to the west to include private land which encompasses designated wetlands has been suggested. This could be accomplished through outright purchase, or creative
land acquisition strategies such as land exchanges, conservation easements, density bonuses, or transfer of development rights.

Implementation Strategies:
Advocates for enhancement of the park expect to seek grants and donations to fund the envisioned improvements. An approved master plan that is supported by the neighborhood, community and governing body is a requisite for grant applications.

Maintenance:
Neighborhood residents have suggested a higher level of maintenance is appropriate, even if the park remains undeveloped. Maintenance could include periodic mowing, weed control and litter and trash removal. The City of Billings' policy is to assess surrounding property owners for maintenance. The assessments are collected annually through a property tax assessment. The amount of the assessment varies depending on the costs of maintenance and area assessed.

Neighborhood Survey
The wetland committee of the Heights Task Force felt that the number of people who attended the public meetings was inadequate to represent the needs of the neighborhood. As a result, the consultants, PRPL and the Task Force developed a survey that was distributed to the local neighborhood for their review of the plans and input. The preceding information was given to them as well as the two preliminary plans. Door-to-door surveys were distributed. Eighty-five surveys were returned, representing the immediate neighborhood around the Park.

Support for the Level of Programmatic Elements:

The survey was broken down into four different areas. The first item was to rank the level of support for programmatic elements. The choices for response were “high” “moderate” and “low.” Preservation and enhancement of wildlife and waterfowl habitat as well as preserving and maintaining the native landscape ranked as high priority in this area.

Other items that ranked as “high” within their individual items were pathways and connections to Lake Elmo as well as a desire to see drainage improvements. Items that had a “moderate” preference are open water for drainage, flood control, aesthetics, recreation and habitat. Items that had a “low” preference were connections to the City's bicycle trail system, playground or picnic areas and “manicured” landscaping, such as irrigated lawns, formal tree plantings, etc.

Priorities for Parkland Management:

Respondents were asked to rank their priorities regarding the use, management and development of parkland. The top three items were to:
1. Improve the overall appearance of the Park
2. Improve Management: reduce off-roading, dumping of fill material
3. Improve Maintenance: weed control, mowing, trash control

Those priorities that were ranked in the medium level are:
4. Emphasize resource conservation, preserve wetlands, enhance habitat
5. Develop passive recreation opportunities, pathways
Priorities that were ranked the lowest are:
6. Balance of recreation, education and conservation uses
7. Environmental education, programs and interpretive features along pathways
8. Development of active recreation opportunities, playground

Parkland Expansion:

Respondents were asked to indicate their support of dedicating the City-owned land to the north of the Park as parkland. An overwhelming majority of the respondents indicated that they support dedicating the land to the north as parkland.

Respondents were also asked to indicate their support for expansion of the park to the west. This would include the purchase of the privately-owned land to the west. The most people supported the acquisition to protect the natural area; however, they differed on whether or not to use City funds (i.e. tax dollars or an SID) or to acquire the land through conservation easements, Land Trust or other options.

Maintenance Costs:

Respondents were asked to indicate their willingness to pay an annual assessment for improved maintenance of the park. The majority indicated that they were willing to pay some amount for improved service. The vote was fairly evenly split on exactly what amount between $10-$50 year.

Final Design Concept and Implementation Recommendations

Based upon the feedback at the public meetings, survey and discussion with the Task Force and PRPL staff, it is clear that the intent is to leave this Park as a natural area, as described in the City of Billings' Parks 2020 plan. The feedback was clear on several levels of improvement; each level has different impacts on the PRPL Department's needs for maintenance staff and budget. The current policy of the Park's Department is that due to funding cuts, the Department will not implement improvements or increase maintenance unless the neighborhood agrees to the creation of a Park Maintenance District (PMD). Results of the survey do indicate a willingness to pay for increased maintenance, but were not as willing to pay for land acquisition. As a result, this master plan recommends implementing the following Levels of Development according to the feedback from the neighborhood:

i. Improve the Overall Appearance of the Park & Improve Maintenance

This is the most basic level of improvement to the current park land. Three key items were identified as key elements to the success of this request. They are trash collection, more frequent mowing and noxious weed control.

The current policy for trash services at this park is if trash or debris is noticed or reported, then the Department will send out personnel to clean it up. It is done on an as-needed basis.

The proposed policy is to place two trash containers on site. These containers should collect trash in a way that keeps the wind from blowing them over, water to fill the container and
should be secured to the ground with a concrete pad. The fee for this service is $33.15 per hour which includes staff time, supplies, materials and equipment costs. Because this is a low-usage park, the recommendation is to have the trash collected from the containers every two weeks. Once a month, the park should be walked through and any additional garbage should be picked up. Alternatively, the Department can work with the Community groups such as "Bright 'N Beautiful" to place this park on the list for "Adopt-a-Spot" for litter clean up.

The current policy for mowing unirrigated park land is that it gets mowed on a rotational basis with all other undeveloped areas, which encompasses about 280 total acres. The frequency is dependent upon rainfall. Native grasses typically maintain themselves through fire or grazing activities. However, in an urban area, periodic mowing is a viable substitute for maintenance of native lawns for weed control, growth and fertilization. The proposed policy is to mow the perimeter of the park a minimum of three times per year. The fee for this service is $33.15 per hour.

The Park's Department works with the County Weed program to have the County treat any areas of noxious weed that are reported. The proposed policy is to have a weed survey of the park to proactively identify any weeds that need to be eradicated and develop an initial treatment plan for the upcoming year. The work with the County to develop an on-going evaluation and treatment program for this particular park.

ii. Reduce off-roading and dumping of fill material

Throughout the master planning process, the neighborhood indicated their desire to reduce the amount of unauthorized driving that is occurring on undeveloped lands and through the park. Because most of the area surrounding the west and north of the park are undeveloped, but are platted as streets, people are taking advantage of the unpatrolled areas to practice mud-bogging, and this area has been a popular place for underage drinking parties as well as parking.

The proposed solution is for the Heights Task Force and Park's Department to make an initial contact with the Billing's police department regarding this issue. Similarly, initial contact will need to be made with the dumping of fill material on City-owned land. Filling that is occurring on private land has already been addressed. Unfortunately, the small wetlands on private land are no longer protected by the Clean Water Act. Increased patrols through the area may be necessary; however, a neighborhood watch will be the most effective on this matter. There is no cost associated with this task; however, it will take some initiative among the local residents on control.

Another solution is to place large boulders around the perimeter of the park where access points occur for the vehicles. The cost per boulder usually runs about $250. Strategic locations and "planting" of the boulders diameter into the ground may assist in the deterrent to vehicles in the Park. Additional signage indicating "no motor vehicles" and "City Park" may be warranted until the remaining residential areas are developed. Additionally, adding some gates at street ends may reduce the access to the natural area.
iii. Emphasize resource conservation, preserve wetlands and enhance habitat

Even though this park is designated to be a "natural park," there are still some inherent management needs that should be met. "Just leave the park as-is" is often a common sentiment among the neighborhood. Unfortunately, having no management plan is often as detrimental as disturbing the area completely.

The proposed recommendation is to have the Park's Department collaborate with officials from Lake Elmo and Montana Fish, Wildlife and Parks on a wildlife and resource management plan. The collaboration should identify crucial management issues associated with a natural park located within an urban area.

Items to be evaluated should be the identification of critical nesting periods, where pedestrian and animal use (although already restricted) is identified as a crucial restriction. Identify a woody species replacement plan. Many of the trees that are existing are the invasive Russian Olive and the short-lived Cottonwood trees. Studies have shown that large canopy trees are critical to wildlife habitat. The plan should include the identification of wetland and upland seed mixes in the event that vandalism from off-roading does occur, the repair retains the current grass species diversity. The plan should also identify any further critical elements that are needed to support pheasants, deer, waterfowl and birds in a natural habitat within an urban area.

iv. Develop passive recreation opportunities

The survey indicated a medium-high desire for pathways and connections to Lake Elmo. During the course of the public meetings, people often expressed the desire for soft surfaced trails (i.e. no concrete or asphalt trails). Respondents also expressed the need to have trails that are ADA accessible. According to "A design guide universal access to outdoor recreation," gravel trails or a well maintained compacted crushed stone are considered to be ADA compliant. However, in order to receive for Community Transportation Enhancement Funds (CTEP), the trails must be constructed of a hard surface such as asphalt or concrete. This particular grant source does not make provisions for gravel trails.

Special consideration should be given to minimize conflicts with wildlife during critical season. Signage can become an important role to assist in minimizing the conflicts through education and preventative measures. However, it should be noted that expensive interpretative display signs were not desired according to the public meetings. The signs should be simple in form and give out only the pertinent information.

Funding for the implementation of the trails and signage should be sought from grant sources. Many people indicated that they were not willing to pay for improvements, but were willing to pay for long-term maintenance. The estimated costs for a gravel trail with a clay binder can run anywhere from $2.50 to $4.50 per linear foot. A minimum width of five feet is desirable. Signage, as described above, cost approximately $76.25 each.
v. Evaluate Drainage Issues and Associated Improvements

The preliminary master plans indicated areas of open water, which is a crucial element for waterfowl habitat. However, during the public meetings, many people were very concerned with the depth of the existing water table and cited issues with water in their basements and foundations. These concerns were so intense, that the desire to add open water closer to their homes was not an option. However, people at the meeting felt that if a hydrologic study was performed, and the results clearly indicated the flow of underground water systems, they would be open to reconsidering enhancement of the existing wetlands with open water. The source of funding for these studies can be from grant sources or through the City’s Capital Improvement Program.

There appears to be much confusion around the current condition and location of the Holling Drain. People mentioned that they have man holes in their back yard and can hear the flow of water during certain times of the year. There is no doubt that the BBWA canal, which is located to the west of the Park contributes to underground flow through the park.

The wetlands that are within the park are considered jurisdictional and any filling or movement of earth would require an Army Corps of Engineers permit. People also indicated in their survey comments their concerns regarding the mosquito-born West Nile Virus. Currently, no spraying is done to control mosquitoes in the City. According to Lynda Saul of the Montana Department of Environmental Quality, the type of mosquito that carries the virus typically reproduces in small water areas such as old tires, bird baths, pet dishes, etc. However, any introduction of open water should evaluate this issue. Any drainage issues should be coordinated with public works on stormwater management for the neighborhood and any corresponding utility improvements.

Many people cited concerns about vegetative restoration due to the alkalinity of the soils. Alkali soils are a good indication of wetland boundaries, where the soil is constantly saturated. The white powdery substances are the minerals that are left behind when the water evaporates from the soils. Unfortunately, there is not much that can be done to change the alkalinity of the soil, unless the water table changes. There are several plants, mainly wetland plants that have adapted and thrive in these conditions. These plants should be identified and reintroduced into these areas to provide cover for wildlife habitat.

Jon Reiten of the Montana Bureau of Mines and Geology has offered to monitor the hydrogeology of the area within and around Meadowlark Park. This study, slated to begin in 2004 will have a duration of a minimum of one year and will give the City and surrounding property owners a better idea of the hydrogeologic conditions, including the ground and surface water connections. This study will provide the information needed to plan for open water and other wetland enhancements.
vi. Land Acquisition

The respondents to the survey overwhelmingly approved of dedicating the City-owned land to the north of the existing park boundaries as park land. The land is undesirable for building due to the high water table and delineated wetlands within the property boundary. However, it is the current policy of the Park Department not to acquire additional park property without the creation of the PMD.

Likewise, people were generally in favor of “protecting” or designating the wetlands to the west of the park as parkland. However, they fell short of wanting to create a Parks Special Improvement District or other property tax money to acquire this property. Other creative means of protecting the wetlands to the west may be through a dedicated conservation easement, land trust purchase or other ways should be considered to minimize assessments on the surrounding property owners. The public should note; however, if additional land is acquired as dedicated park land, there may be an increase in the assessment of the park maintenance district.

The Final Master Plan
The final graphic master plan is attached to this report and serves as a graphic representation of the proposed improvements described above. The plan shows a gravel trail that surrounds the perimeter of the existing park and through the proposed new park area to the North. The gravel trail should be constructed to meet ADA accessibility. Approximately 3330 linear feet (LF) of gravel trails are shown on the plan. The estimated cost to place all gravel trails is $8325-$14,985. Additionally, approximately 960 LF of boardwalk is shown in areas where the soils may be consistently saturated. This boardwalk, constructed of recycled plastic lumber, would be similar to that used in Yellowstone National Park near Old Faithful. It should be placed low to the ground to minimize impacts to the environment. The estimated cost of a 5’ wide walk is about $9.25-$12.00/LF.

The plan also shows four entry points into the park. At these points should be information about the purpose, hours, pet ordinance and sensitive habitat information identified from the previously listed implementation plans. A few deciduous trees as identified as necessary for the habitat enhancement should be placed near the entrances. The large tree areas indicate existing vegetation as currently on site. These areas should be maintained and replaced as per the habitat enhancements.

The areas marked “proposed enhanced wetland” are those areas in which the potential exists for an open water wetland. The location is schematic and the open water should only occur if the hydrologic study determines that any open water or other enhancements will not negatively affect the surrounding home owners.

Nonetheless, any improvements to Meadowlark Park should be expedited with wildlife and waterfowl conservation and habitat needs a number one priority. The neighborhood has been consistent with the desire to have a minimally developed natural area for this park. Cost considerations not only for improvements but long-term maintenance should be considered carefully with the implementation of any portion of this plan.