Final Design Program for Master Plan

Based on prior planning, the public workshops and other public involvement, a final design program was developed, reviewed and approved by the Parks Commission to direct the final master plan for the park. The following approved Design Program was used to create the master plan drawing.

ASHLAND CREEK PARK MASTER PLAN – FINAL DESIGN PROGRAM

The following design program consists of a listing of facilities, project areas, and general guidelines. The program is used to direct the final master plan drawing.

All program elements will be included in the final drawing as directed. The discretionary program items from the previous pre-design program list, which Parks has chosen to include in the master plan, have now been added to the design program.

1. **An entry and orientation area.** A park sign along with entry kiosk should be located near the front of the park at the main entrance.

2. **Restrooms**. Centrally located near the main activity areas accessible to the garden and playground. Adequate storage space should be included along with eco roof. Incorporate storage area for tools also. Try to limit the number of buildings.

3. **Creek & riparian restoration**. Restoration could consist of predominately native tree, shrub and ground cover plantings, an earthen bench of approximately 2-3 feet, log structures in the creek, rip rap removal, improvements to the Hersey Street culvert, and improvements to the existing diversion dam. Provide an average vegetation/earth bench width of 150 feet, which may vary through the park. *The City should realize that creek restoration projects are suggestions which the City may wish to consider for further study and would likely require the services of consultants such as hydrologists and engineers.*

4. **A substantial trail system with loops and a variety of trail types.** ADA access to site. Primary trail type should be a soft permeable surface. Hard surface or ADA would be desirable within inner loops of park including to the front viewing area of the creek. There should be no dead end trails or trails leading directly adjacent to neighboring properties. Ashland Creek Trail, as recommended by City's proposed Trails Plan, may be phased in over time.

5. **The barn.** Retain barn in rustic condition. No improvements to the barn will be made. It will be allowed to remain in tact until it becomes unserviceable. Show what may replace it upon its demise. This does not set a timetable for its removal, but does allow for future planning of the footprint of the barn.

6. **Vehicular access.** Site access should be integrated with the trails system as a shared use pathway. Bollards should be used to control access. Vehicle access is limited to service vehicles on main path system, which maybe a harden surface.

7. **Parking.** Minimal parking is preferred. Limit parking to a couple of ADA parallel spaces located on the east side of the street frontage. A plan utilizing detached sidewalks and landscaping should be given some preference over attached sidewalks.

8. **Streetscape improvements (such as sidewalks, bike lanes, street trees).** Note: full sidewalk improvements are required along the Hersey Street frontage. The City generally looks for a planting strip with street trees, 8'-10' wide to separate the sidewalk from the street (similar to Garfield Park on East Main Street). Preservation of fig tree is desired. Minimize improvements based on city standards.

9. **Use areas.** Three viewpoints of creek area are preferred. This does not imply that direct access to the water is required. The view point to the south should be ADA accessible and probably a little larger to allow for small group viewing of maybe 8 or 9 people. The other 2 viewpoints should

focus on low impact areas that allow for 2 – 3 people. These should be more contemplative in nature with small seating areas. Central use area located north of the barn should have a more developed feel to it. However, other areas should be more casual and natural focusing in on more native grasses, shrubs and trees. Central area should contain playground facilities and footprint for possible single basketball ½ court.

10. **Open areas.** Meadow grasses are preferred outside of the central use areas. Include a native tree savanna.

11. **Community garden.** Area may be reshaped. Community garden can be pushed to the east boundary and north to allow for the entrance of the park. Foot print for the community garden should not exceed a 33% increase from the current garden.

12. **Demonstration and other gardens and/or nurseries areas.** Add compost bins/chip area to gardens, build storage facility for tools, which maybe shared between community gardeners and other programs. Include ADA raised beds.

13. **Shelter and/or outdoor education area.** Include Outdoor classroom space for 30 to 40 people. Structure should be open sided with seating opportunities. Roof should have natural feel to it. Use plant screenings to buffer prevailing winds.

14. **Screening and buffering for parking areas, restrooms, and other park facilities.** Meet City requirements and consider neighbors' preferences.

15. **Corral.** The existing horses may live out their lives on site. Future use of barn and corral will change. Try to use pervious pavers for any hard surface or other "Green" type surface. Include vegetative screens.

16. **Lighting**. Use low light intensity and cut off luminaries to control light on adjacent properties. Lighting should be consistent with Commission lighting policy and limited to areas that require lighting for safety or security, not decorative.

17. **Bicycle parking.** Locate 2 racks near the front park entrance. City code may require covering.

18. **Drinking fountain.** One fountain, located near the central restroom area.

19. **Creek viewpoints.** Three viewpoints to expand walking, wildlife viewing, and sitting opportunities. See comments above.

20. **A meditative space.** Provide semi secluded areas away from the central activity area.

21. **Preservation of existing trees to a high extent.** Preserve as many of the current trees as possible.

22. **Minimization of impervious paving.** Utilize porous paving methods as much as possible.

23. E**nvironmental art.** Include where possible as a part of the design of amenities, not as stand alone objects. A decorated cistern may be considered. Express decorative ideas in site facility design, such as the kiosk, play structure and community garden fences, just to name a few of the opportunities.

24. **Introduce "green industry" demonstration projects.** Include "Green" practices that people can use at home. Incorporate garden ideas such as compost mulch and organic methods. Eco-roofs, drip irrigation, rain water catchments cistern, bio-swales, porous paving, and so forth hold a lot of community interest and should be receive further study during design development. Resource conservation through landscaping, water, energy construction are all items that could be incorporated into demonstrative facilities such as eco roofs, water catchments etc.

Master Plan

This Master Plan report and the Final Master Plan drawing incorporate and meet the intent of the above approved Final Design Program and are further described as follows:

Riparian Restoration: A 150 foot average width planted area runs the length of the park. Width and types of plantings vary. An expanded description is provided in the Appendix.

Parking: Two on street accessible parking spaces will be provided and designed to meet code requirements.

Park Entry and Vehicle Access: A central shared use ADA accessible pathway. Vehicular access is controlled by bollards. A double row of trees, reminiscent of local orchards, creates a personal entry area before leading onward to the various use areas of the park. Low level lighting may be included.

Barn: The barn will be retained for the present. Eventually it will be replaced with additional streetscape plantings.

Expanded Community Garden: The existing garden will be moved northeast, enlarged, and include demonstration gardens and/or nursery plots outside of the deer fence. The existing area is approximately 22,000 square feet and the master plan drawing shows an area of approximately 30,000 square feet including the demonstration gardens. The increase shown is 33 percent. The garden area could include other types of gardens, such as a children's/school garden, city nursery, or plantings for educational purposes. ADA accessible rasied beds should be incorporated into the garden. Amenities might include espalier trees, flowering vines and/or roses on the fence, a compost area, tool storage, and art. Decoration may be considered in the fence, gates, benches and paving patterns. A hand pump can be located to supply rainwater from the rainwater catchment cistern.

Kiosk with Covered Bicycle Parking: A kiosk should be included, near the entry, for posting announcements and securing bicycles. Rack space for approximately six bikes should be included under the roof. The structure may have an eco-roof.

Pathways: A wide central shared use pathway leads visitors into the park. a hierarchy of pathways is created for various uses and structured around the central route. Adjacent loop routes are provided for strolling, hiking and play and connect with the central path. The adjacent routes include a nature trail system with 3 creek side viewpoints. In the future, the park can accommodate or be linked with an Ashland Creek Trail corridor as it is developed. Decomposing granite will be considered for trail surfaces, but other surfacing may be approved. All pathway and trail slopes should meet ADA accessibility standards.

Central Open and Grass Areas: The open areas, framed by the path system, consist of a restored native tree savanna/grassland; and an irrigated multi-use play field lawn, which incorporates a play structure for children and a half-court basketball court.

A small informal neighborhood space, with two picnic tables shaded by a pergola, overlooks the children’s play area and lawn. The terrace is formed by a stone sitting wall. Benches and picnic tables offer a place to sit, supervise children, and enjoy the park and views to the surrounding landscape. The terrace will also be advantageous as a meeting area near the gardens.

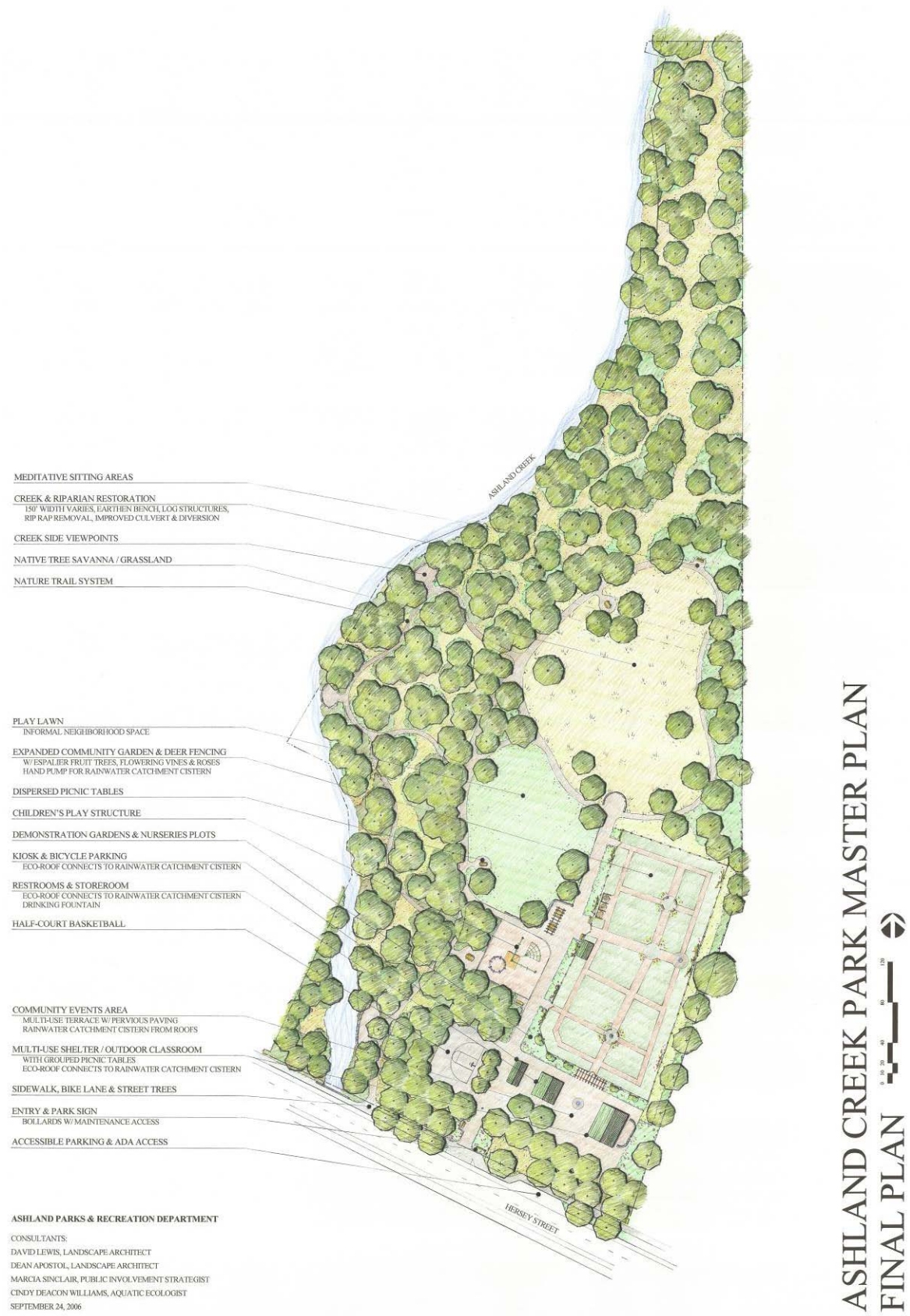
Shelter and Restrooms: A shelter, approximately 26' x 35', and restrooms with storage room will be located within the front terrace. The structures may have eco-roofs and other "green" features. The roofs may connect to a rainwater catchment cistern for use on site. The shelter should be open sided with seating opportunities. A drinking fountain may be attached to the exterior of the restroom building. Utility connections may be included.

Front Terrace: The front terrace is a multi-use community events / outdoor classroom space, which is enhanced with picnic tables, a stone sitting wall and pergola. The outdoor classroom space should accommodate 30-40 people. Utilities may be included. Pervious materials will be considered for paving the terrace. Porous pavers will allow stormwater to infiltrate.

Other facilities: Meditative sitting areas and dispersed picnic tables may be located throughout the park where appropriate. Lighting may be considered for the site and is an option. Any lighting will be low intensity and directed away from adjacent properties. Pathway lighting; lighted bollards near the park entrance, the garden gates, and the restrooms; and other safety lighting may be considered to accommodate people leaving the park in the evening. A licensed electrical engineer may be needed to design the lighting system.

Streetscape: Utilize an attached sidewalk where needed for ADA parking and accessibility; and a detached sidewalk elsewhere to allow for street trees, shrubs and groundcover in a wide planter strip. Buffer the park from the street with rows of trees reminiscent of an orchard and the agricultural history of Ashland. Tree selection might be fruit or nut trees or something similar in shape. Consider a wildflower mix or grass mix for the under planting.

Materials: During the design development phase, materials, furnishings and products which reflect Ashland's natural surroundings and cultural heritage should be highly considered. Lithia Park should be considered as a source for inspiration. Rounded river stone sitting and retaining walls; decomposing granite trail surfacing; and other indigenous materials should be considered for use in the park. Creating a strong connection between these two parks and accentuating their connection to the creek will help instill the idea of the creek flowing through the city; the importance of Ashland Creek; and enhance the beauty of Ashland.


MEDITATIVE SITTING AREAS
CREEK & RIPARIAN RESTORATION
150' WIDTH VARIES, EARTHEN BENCH, LOG STRUCTURES,
RIP RAP REMOVAL, IMPROVED CULVERT & DIVERSION
CREEK SIDE VIEWPOINTS
NATIVE TREE SAVANNA / GRASSLAND
NATURE TRAIL SYSTEM
PLAY LAWN
INFORMAL NEIGHBORHOOD SPACE
EXPANDED COMMUNITY GARDEN & DEER FENCING
W/ ESPALIER FRUIT TREES, FLOWERING VINES & ROSES
HAND PUMP FOR RAINWATER CATCHMENT CISTERN
DISPERSED PICNIC TABLES
CHILDREN'S PLAY STRUCTURE
DEMONSTRATION GARDENS & NURSERIES PLOTS
KIOSK & BICYCLE PARKING
ECO-ROOF CONNECTS TO RAINWATER CATCHMENT CISTERN
RESTROOMS & STOREROOM
ECO-ROOF CONNECTS TO RAINWATER CATCHMENT CISTERN
DRINKING FOUNTAIN
HALF-COURT BASKETBALL
COMMUNITY EVENTS AREA
MULTI-USE TERRACE W/ PERVIOUS PAVING
RAINWATER CATCHMENT CISTERN FROM ROOFS
MULTI-USE SHELTER / OUTDOOR CLASSROOM
WITH GROUPED PICNIC TABLES
ECO-ROOF CONNECTS TO RAINWATER CATCHMENT CISTERN
SIDEWALK, BIKE LANE & STREET TREES
ENTRY & PARK SIGN
BOLLARDS W/ MAINTENANCE ACCESS
ACCESSIBLE PARKING & ADA ACCESS
ASHLAND CREEK
HERSEY STREET
ASHLAND PARKS & RECREATION DEPARTMENT
CONSULTANTS:
DAVID LEWIS, LANDSCAPE ARCHITECT
DEAN APOSTOL, LANDSCAPE ARCHITECT
MARCIA SINCLAIR, PUBLIC INVOLVEMENT STRATEGIST
CINDY DEACON WILLIAMS, AQUATIC ECOLOGIST
SEPTEMBER 24, 2006
ASHLAND CREEK PARK MASTER PLAN
FINAL PLAN

Appendix

Conference Call

A conference call was held on May 4, 2005 with representatives of Ashland Park's to assist the City in formulating a Public Involvement Strategy and gather background information for the plan.
Taking part in the conference were:

- Jo Ann Eggers, Ashland Parks Commission Chair, JE
- Rick Landt (former commissioner who lives near site), RL
- Carol Wheeldon (former councilor who lives near site), CW
- Linda Chesney, Mt. Park Nature Center and community garden program staff, LC
- Steve Gies, Parks Superintendent, SG
- Don Robertson, Parks Director, DR
- David Lewis, Landscape Architect, Consulting Team Leader, DL
- Dean Apostol, Landscape Architect, DA
- Marcia Sinclair, Public Involvement Consultant, MS

Agenda

- Established the "decision space" - explanation and discussion
- Build a community engagement/public involvement strategy step by step
- Identify next steps

Background questions during conference call

1. What do existing policies recommend or determine for this park or park type?

- Purchased park to meet Comp Plan goals. RL
- Kids play area implied by neighborhood park need within ¼ mile.
- Conservation/restoration of Ashland Creek (level not determined). DR, JE, RL
- Possible trail connection. RL
- City has no defined specifications on what new community or neighborhood parks will contain (in master plan) DR
- Park features and style of development flexible. DR
- This site chosen to provide park within ¼ mile of neighbors, but has larger role in community RL
- City should provide walking connection to park from neighborhood. JE
- Hersey St is busy so look beyond site for connections. DR
- Other policies: floodplain ordinance, riparian (under revision), Night lighting, no light shinning off property. RL
- Important to serve neighborhood, but also larger community (creek, park size) JE
- South border of park (Hersey St) important. Highly visible & accessible. DR
- This park only 3 blocks north of town center at main plaza area and end of Lythia Park. Can be viewed as extension of Lythia. Draw people to the site. RL

2. Are there certain functions this park is already expected to serve (i.e. play space for kids,) and others that it is not expected to serve? (i.e. organized sports).

- It has a water feature already CW
- Large enough for sports field, but probably not appropriate use RL
- How much floodplain to reclaim as natural? How much will we allow the creek to meander? RL
- Can have field or informal play area in floodplain. Probably smaller scale. DR
- Community garden use under temporary agreement only. Must keep our minds open to what is best overall. JE, RL
- Very popular garden site, keep options open. May be touchy issue JE
- Garden use here has been very successful LC (Also see Linda's email notes later in this document).
- Garden users may be vocal and disproportionate voice RL
- Informal sports DR

3. Are there unmet city recreation needs that should be or might be met at this park?

- All needs represented DR

- A recent new park has organized sports. We should be looking toward additional types of services here (informal sports, bocce ball and bowling green). CW
- Programs at Mt Park very popular (almost too popular) and could spill over to this site to regulate impacts JE, LC (Environmental education, Stream restoration, bird watching, native plant gardening, invasive plant info, - these are popular programs)
- Composting classes, alternatives to pesticides, xeriscaping, organic gardening CW
- Consider demonstration gardens and educational gardens DR
- Extent of floodplain may preclude building rec center. Consider outdoor "class rooms" DR
- 3 buildable lots in park SG
- Portions of park flood frequently, including the barn RL, SG
- Save the barn. It has been there a long time. CW
- Restrooms may or may not be OK on this site. DR
- We are getting too insulted away from nature. JE

4. What decisions have already been made regarding park facilities and services?
- Nothing hard and fast yet. We have some goals. DR
- Certain things to accomplish, no decisions on how or where DR
- No fixed decisions have been made by parks commission. RL

5. Could this park be designed along the lines of a specific theme, such as a "children's park or urban farm park" for example?
- Much humor over this one
- Base it on community needs, natural setting, floodplain, restoration theme, a natural theme. RL
- Creek and views are important. All ages, events, parties, informal lawn games, creek access points JE

6. Are there any existing facilities or uses in the park that must remain?
- Sewer line crosses park west to east

7. What is the city policy with regard to management and restoration of Ashland Creek?
- Opportunity to "walk the talk," provide good model, demonstrate concern for creek, which hasn't been shown by some recent development JE
- Floodplain and riparian ordinances being updated. Need to track. DL

8. Are there specific requirements, like off-street parking, that must be met?
- On-street could be sufficient, depends on what is chosen for the site program. SG
- Retain old fig tree RL
- Best to keep most trees. Trees over 2" DBH sacred in Ashland DR
- Restrooms optional here, available across street DR, RL
- We will need to meet ADA regs for parking, etc at the site. DR
- Existing parking is only on south side of Hersey. May want to explore widening a portion of Hersey. RL

9. What are the known or suspected issues surrounding this park and the immediate neighborhood that could influence this plan or planning process?
- City budget may limit options JE
- No fixed CIP budget for this park. Don't let budget limit too much, but be reasonable. Could be phased over long period. DR
- Encourage walking & cycling part of larger city efforts. Provide bike parking. CW
- Immediate neighbors may oppose active park uses. Homeless and fire concerns may be used as problems to limit park development. RL
- Water right and diversion in creek must remain JE, RL
- Recent crime issues in Bear Cr greenway will probably still be on people's minds. CW

Linda Chesney had to leave the conference call early and provided the following by email:

> I hope that a community garden will be considered as an appropriate use for the space. We've received a lot of positive feed-back about it as a resource for citizens striving for sustainable lifestyles since it makes locally grown, organic produce more accessible. And the garden has

become a valuable educational resource, providing a central location for teaching school children and for community education classes. The barn would be very useful as an educational facility and is of historic value as well. In keeping with the historic agricultural use of the property, it would be wonderful to see a small area be made available for park staff to work with volunteers propagating native plants for projects on public lands within the city.

Public Involvement Strategy Questions

1. What are the primary goals of the public involvement process?

- Notify community of planning process and provide way to stay informed. CW
- Publicize opportunities for interested citizens to participate in the process
- Draw information and community desires for new recreation facility to enhance plan and meet community needs.
- Model inclusive, interactive planning JE
- Method of keeping everyone informed CW
- Increase community trust and support of Parks staff and commission. Provide open process and sense that individuals were heard. RL
- Build constituency for development phases RL
- Encourage bigger view of this site (not just local park), long term needs. JE
- Identify opportunities for facilities that may fit better elsewhere JE

2. Who will be interested in this park? Who are our "publics?"

A contact list of interested neighbors, organizations, commissions and individuals was created. The city contacted and/or met with many groups and individuals over the following months; and informed them of the park master planning effort and upcoming workshops.

- Multiple city commissions, (Bicycle and Pedestrian, Conservation, Neighborhood, Transportation, Planning, etc.)
- Parks Commission: Mike Gardiner, Diane Amarotico, Rich Rosenthal, JoAnne Eggers, and Jim Lewis.
- Environmental & conservation groups (Audubon, Watershed, Headwaters, etc…)
- Pete Vogel and family (former property owner)
- Folks who keep horses in park
- Community garden interests
- Residents within ¼ mile. Observe notice area as defined by City. CW
- Adjacent landowners
- Civic, service clubs and business community
- Skateboarders
- Lawn bowlers
- Organized sports groups
- Senior Citizens
- Agencies (DEQ, ODFW, Corps of Engineers, DSL)
- School aged kids
- Trails groups (Scott Kurtz, Chair of the Trail Committee, AWTA, etc.)

JoAnne Eggers provided the following: Here are the names of some people to contact regarding the master planning process. I think the others will appear in the city council, city committees and commissions, and community and civic groups.

Linda Chesney (or Kari Gies) will have names of those on the Parks Environmental Stewardship Program Advisory Committee. They include teachers, resource experts (some agency people), volunteers, and others - one of the most playful and intelligent/knowledgeable selection of folks I have ever brainstormed with.

Mike Uhtoff and family, NW Nature Shop, 154 Oak St.

Bill Meyers, DEQ water quality, early member of Ashland Watershed Partnership, and Ashland resident.

Karen Bolda, Bear Creek Greenway

Karen Smith, Bear Creek Greenway coordinator and neighbor of the new park.

Neighbors, upstream and down:

Barry Peckham, Parks Commissioner from another era.

Selene Aitken

Bob Quaccia, downstream neighbor with bird habitat and xeriscaping.
Jeff Golden, host of local public radio talk show, downstream neighbor.

School District: Wilderness Charter School (high school program), Willow Wind Learning Center (for students who are home schooled), general student population.

Groups: Klamath Siskiyou Wildlands Center, 84 4th St.
Headwaters, Ashland, Cindy Deacon-Williams.
Audubon, Barbara Massey and Pepper Trail.
Ashland Watershed Partnership, Cyndi Dion.
Community Garden, Carol Kale and Patrick Marcus
The Stream Team, Donna Rhee and Jacquie Milikien.

Creek and Riparian Restoration

The City should realize that creek restoration projects are suggestions which the City may wish to consider for further study and would likely require the services of consultants such as hydrologists and engineers. We recommend further study of all aspects of the concepts which involve altering the existing stream and riparian areas. A hydraulic engineer should examine existing stream flows and help develop the grading plan and study the existing conditions. Altering the existing grading, drainage and vegetation may have off-site effects including pooling and problematic down stream flows.

The main riparian design concept is that the riparian area could trace the creek approximately 150 feet from the stream edge. The width may vary across the park as needed.

Bench: Site grading could create an earthen "bank full" bench which would be roughly 2 to 3 feet higher in elevation than the riparian zone; and run roughly parallel to the edge of the stream, approximately 150' to the east.

The bench height and location will require hydrologic engineering to exactly determine the needed design. Purely as a conceptual idea, 2-3 feet is likely adequate for most spring run-off events. The idea is to create a "designated" inner flood plain that is less than the entire width of the park so that in most flood events the creek would overflow the main channel and spread out to the bench, but would not spread out across the entire draw. In major events the flood waters are likely to encompass most of the park regardless. The likelihood of flood must be acknowledged in the park design to the extent possible.

The park could possibly be contoured so there are a series of 3 parallel benches that always drain through downstream. Basically we want to have a three tier cross section, with the lowest tier the creek itself, the second tier the inner floodplain/replanted riparian area, and the upper tier the rest of the park. We can anticipate that occasional big floods will inundate the land and park amenities.

The bench could be created through a cut and fill operation by lowering the second tier inner floodplain and then grading and contouring the upper meadow. The ideal would be to taper the third tier out to the east park boundary rather than to simply put a "bump" in the middle of the park. Remember, in really high flood events, most of the park will be under water and any backwater areas will trap the flow as the flood recedes. The intent of the concept is to allow the creek to determine its own path between the existing west side "bluff" and the constructed "bank full" bench. Over the long-term, the creek will likely develop a bit of a meander on its own.

Topsoil: Given that most of the park land currently is fill, there may not be much concern regarding the design having much of an effect on topsoil within the inner floodplain. There may already be a concern with soil productivity because of past management on the land. The riparian area might be lowered by perhaps 12" without removing all the topsoil. Any useable top soil should be stock piling for use within the park. The usual methods of skimming off the top soil, stock piling and replacing after grading; and/or pocket planting the new vegetation in pockets of top soil can be considered. After stock piling and composting, the top soil would be redistributed through out or used for pocket planting.

To the extent the sod in the lower floodplain is scraped, stock piled, composted and reused, weedy plant species can be removed. If the entire meadow area is graded, unwanted plant species can be largely removed.

Planting: Riparian vegetation could be planted between the creek and the bank full bench. Much of this area could have an open sun lit character through clustering trees and shrubs, such as alders, ash, willows and cottonwoods. An open pattern to the planting will allow views through the area and decrease vandalism and camping. Planting may extend past the bench to push the tree or shrub edge past the bench and into areas of the park.

Next Steps: Design development engineers and landscape architects should also study the following:
1. Removal of creek side rock rip rap in those areas that are not intermingled with the roots of existing large trees; and the eventual removal of the rest of the rip rap after the replanted riparian vegetation is established, including that around existing large trees. In some cases, it is anticipated that there will be a need to reshape the stream bank a bit and do some willow planting.

2. At the existing Hersey Street culvert, study constructing a bottom baffle system to concentrate stream flow during low flow to enhance fish passage.

3. At the existing irrigation diversion, study either rebuilding the diversion to allow for fish passage or removing the diversion and installing a pump/chamber to eliminate the fish barrier while allowing for continued use of the water right.

4. Study creek access at three points: just downstream from road, near the bend in the river and lower down possibly near the existing diversion, but also could be below that point if that fits better with park trail design).

5. Add large wood/root wads and log structures, in Ashland Creek at several points to encourage pool development.

Cost Estimate

Items	Quantity	Unit	Cost	Totals	Subtotal	Notes
Creek, riparian & native tree savanna / grassland restoration						184900 SF Total
Demolition	1	Allow	5000	5,000		
Excavation grading/compaction	3,426	CY	15.00	51,390		conserve topsoil
Fine grading	100,000	SF	0.25	25,000		
Log structures	1	Allow	25000	25,000		
Rip rap removal	1	Allow	25000	25,000		
Improved culvert	1	Allow	30000	40,000		
Improved diversion dam	1	Allow	30000	35,000		
Trees	370	Ea	125.00	46,250		20 per 10,000 SF
Shrubs & ground cover	184,900	SF	0.50	92,450		
Mulch & Soil amendments	60,000	SF	0.25	15,000		
Irrigation (temporary)	184,900	SF	0.40	73,960		
Subtotal					**434,050**	
Other park earthwork						
Demolition	1	Allow	2000	2,000		
Excavation grading/compaction	2,900	CY	15.00	43,500		conserve topsoil
Fine grading	60,000	SF	0.25	15,000		
Saw cutting asphalt& concrete	1	Allow	500	500		
Subtotal					**61,000**	

Streetscape					
Concrete Curb	75	LF	25.00	1,875	includes base
Porous pavers	2,240	SF	11.00	24,640	
Paver items included above:					
Excavation, grading & compaction	0	CY	15.00	0	
Crushed rock - placement	0	SF	0.65	0	
Geotech fabric	0	SF	0.12	0	
Crushed rock - material	0	CY	20.00	0	
Walk - edging	0	LF	1.25	0	
Pavers	0	SF	7.50	0	
Asphalt	600	SF	3.00	1,800	
Paint striping	1	Allow	400	400	
ADA regulation signs	2	Allow	300.00	600	
Subtotal				**29,315**	
Nature trails, viewpoints, & pathways					
Trail & viewpoints (2)	4,065	SF	2.50	10,163	5' width, decomposing granite
Trail, viewpoints (1), picnic & bench pads	12,470	SF	2.50	31,175	8' width, decomposing granite
Trail, garden entries, picnic terrace	4,450	SF	2.50	11,125	12' width, decomposing granite
Stone retaining/sitting walls	205	LF	200.00	41,000	
Subtotal				**52,125**	
Entry & front terrace					
Porous pavers @ entry & terrace	9,760	SF	11.00	107,360	
Paver items included above:					
Excavation, grading & compaction	0	CY	15.00	0	
Crushed rock - placement	0	SF	0.65	0	
Geotech fabric	0	SF	0.12	0	
Crushed rock - material	0	CY	20.00	0	
Walk - edging	0	LF	1.25	0	
Pavers	0	SF	7.50	0	
Stone sitting walls	140	LF	175.00	24,500	
Subtotal				**131,860**	
Community & demonstration garden					30,000 SF Total
Deer fencing & gates	705	LF	20.00	14,100	
Hose bibs	20	Allow	200.00	4,000	
Hand pump	1	Allow	5000	5,000	
Cistern	1	Allow	7000	7,000	
Pipe & trench	600	LF	10	6,000	
Soil amendments	30,000	SF	0.16	4,800	
Irrigation @ demonstration beds	2,980	SF	1.00	2,980	
Compost structure	1	Allow	2000.00	2,000	
Move existing structures	1	Allow	5000.00	5,000	
Subtotal				**50,880**	
Play Areas					
Play structure	1	Allow	25,000	25,000	
Concrete Curb	240	LF	25.00	6,000	
Wood chips	1	Allow	5000	5,000	engineered wood, 3600 SF
Half court basketball equipment	1	Allow	1450	1,450	including striping
Court paving	3,315	SF	4.25	14,089	porous asphalt
Subtotal				**51,539**	
Planting & Irrigation (includes streetscape)					
Play lawn, seeded	16,500	SF	0.25	4,125	

Irrigation @ play lawn	16,500	SF	0.75	12,375		
Soil amendments	16,500	SF	0.16	2,640		
Subtotal					**19,140**	
Wildflower mix	14,068	SF	0.20	2,814		
Shrubs & groundcover	18,450	SF	1.00	18,450		
Trees	52	Ea	250	13,000		installed w/ mulch
Irrigation @ plant beds	18,450	SF	0.75	13,838		
Mulch & soil amendments	18,450	SF	0.25	4,613		
Subtotal					**52,714**	
Site structures						
Kiosk w/ covered bike parking	1	Ea	15,000	15,000		installed
Restroom w/ storage	1	Ea	130,000	130,000		installed
Multi-use shelter	1	Ea	34,000	34,000		26' x 36', installed
Stone sitting walls @ shelter	40	LF	175.00	7,000		
Pergola	2	Ea	6,500	13,000		installed
Subtotal					**199,000**	
Site furnishings						
Benches	7	Ea	1,200	8,400		installed
Picnic tables	5	Ea	1,600	8,000		installed
Picnic tables @ shelter	6	Ea	1,600	9,600		installed
Bike racks	2	Ea	350	700		installed
Drinking fountain	1	Ea	3,000	3,000		installed
Trash receptacle	1	Ea	1,500	1,500		installed
Bollards	4	Ea	300	1,200		installed
Bollards Removable	1	Ea	500	500		installed
Lighting	1	Allow	20,000	20,000		installed
Park entry sign	1	Allow	3000	3,000		
Park regulation sign	1	Allow	600	600		
Subtotal					**56,500**	
Subtotal				**1,179,460**		
Mobilization, Bonding, Insurance	1	LS	117,946	117,946		10%
Contingency				117,946		10%
A&E Design				117,946		10%
Construction Cost Estimate				**1,533,298**		

Notes

1. Earthwork approximate.