

STEWART PARK MASTER PLAN



Roseburg, Oregon

January 2000

WALKER·MACY

City of Roseburg

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History

The Stewart Park is a popular recreation destination for residents of Roseburg and people from throughout Douglas County. The property had once been owned by the City and was transferred to the United States Veterans Administration in the 1930's for development of the Soldiers Home, now known as the V.A. Medical Center, and the Navy and Army Reserve facilities at Fir Grove. The U.S. Government released several parcels back to the City between the 1950's through the 1970's to become what is now Stewart Park, the largest and most significant park in the Roseburg Parks system. Stewart Park, Fir Grove Park, Riverfront Park, and Stewart Park Golf Course in combination make up a 236 acre riverfront facility near the center of downtown Roseburg.

Purpose of the Master Plan

The City adopted the "Ten Year Comprehensive Park Plan" in April of 1997 to develop a strategy for meeting Roseburg's future park and recreation needs. The plan identified Stewart and Fir Grove parks as the most heavily used in the Roseburg park system stating that 95% of park recreation occurs at these two facilities. The plan also states:

"One of the concerns associated with this site is it's carrying capacity and the level of development. While there is land available for additional uses, each new facility takes away from the open space character of the park. The City routinely faces pressure from private groups and organizations who want to use or develop a portion of the park. Unfortunately, the City does not have a master plan to help guide and provide a 'footprint' for the eventual development of the site. As a result, there is no basis for acceptance or denial of development requests."

In the fall of 1998, the citizens of Roseburg approved a bond measure to develop a new Community Park and relieve some of the pressure being placed on Stewart Park. The City began to develop the Stewart Park Master Plan in the spring of 1999 to determine the site's capacity and the appropriate mix and configuration of facilities to remain in Stewart Park.

The master plan process for Stewart Park was facilitated through open and interactive public involvement that incorporated direct input from the City and citizens of Roseburg in the design effort. Following a physical analysis to determine the opportunities and constraints of the park, the design team met with stakeholders, the City, and the public to develop a preliminary program for development. Based on this information, alternative schemes were prepared and presented to the community in a public forum. A preferred plan was derived from elements of the alternative schemes based on public and City comments. The plan was then presented to the community for final comment and input. The Stewart Park Master Plan was developed based upon this input and direction from the residents and the City.

Goals and Objectives

The community developed the following goals for the future development of Stewart Park. These goals include:

- Develop a safe facility
- Relieve the pressure of overuse.
- Preserve and enhance the open space character of the park.
- Accentuate the assets of the park.
- Protect natural resource areas.
- Develop achievable goals that may be accomplished within a 20-year period.



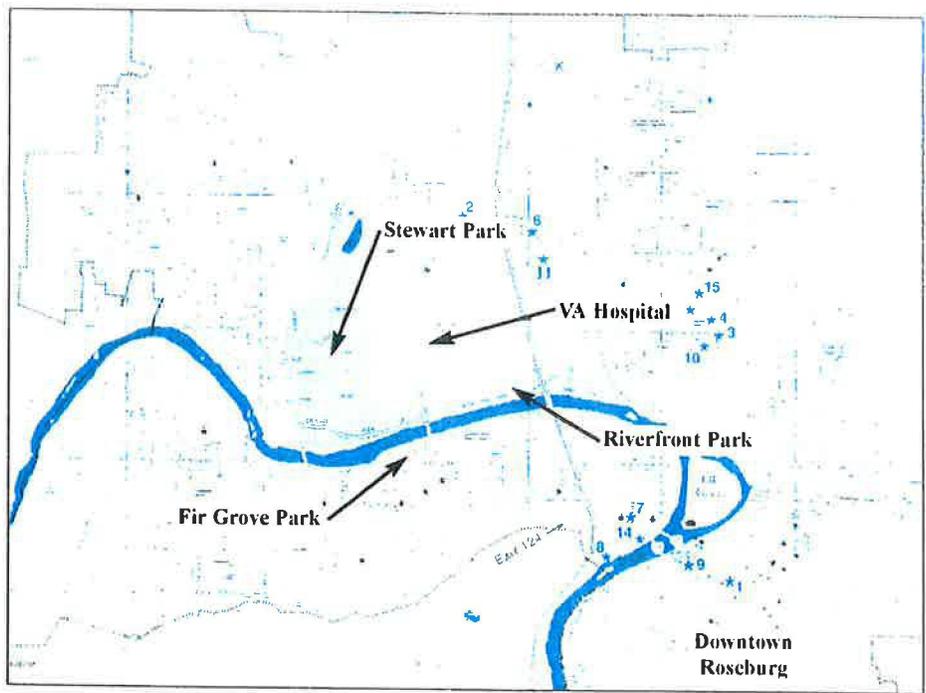
Aerial View of Stewart Park

Introduction

Stewart Park is centrally located in the City of Roseburg on the South Umpqua River. This area receives an average of 32.4 inches of rainfall per year with an average low temperature of 42 degrees and an average high of 65 degrees. The City, located at elevation 475, is the gateway to recreational resources of southern Oregon's Cascade, Klamath and Coast Mountain ranges.

The study area was comprised of three portions: Stewart Park, Stewart Park Golf Course, and Fir Grove Park. Fir Grove is south of the South Umpqua River and is connected to Stewart Park by a bridge. Roseburg Golf Course is part of the park and shares a boundary with the Veterans Administration Facility to the east. The main body of Stewart Park is bounded on the south by the South Umpqua River, by Garden Valley Road to the north, and on the west by Stewart Parkway.

The team analyzed Stewart Park in terms of the physical conditions including circulation, vegetation, soils, slope, land use, and flood hazard. This analysis was valuable because it helped to identify potential opportunities and constraints within the park regarding existing and potential development.



Vicinity Map

Circulation

Vehicular Access to the Park

Access to Stewart Park is via Harvard Avenue from the south and Garden Valley Road from the north. Stewart Parkway provides access along the entire west side of the park. Proximity to Interstate 5 provides easy access to the park for people from the region and beyond. Vehicular access to the park is generally well signed and direct.

Vehicular Circulation and Parking within the Park



Parking within Stewart Park primarily occurs in areas around its perimeter. Significant parking exists at Fir Grove, near the existing picnic facility, along Stewart Parkway, east of the Newton Creek wetlands, and between the YMCA and tennis facilities. Informal parking has developed in small areas along Stewart Park Drive by cars pulling off on its shoulder. Two key areas are used for overflow parking during events. One is just east of Legion Field, the other is just west of the VA facility entry gates. The quality, efficiency, and condition of parking areas varies widely from very good (YMCA) to very poor (gravel area south of the locomotive).

The main internal roadway, Stewart Park Drive, serves as the VA entry road along the eastern border of the Fir Grove Site. Stewart Park Drive through the Fir Grove area is of high visual quality and is of a scale that is fitting for a park road. This route, with its mature trees, gentle curves, and the bridge over the river make this a beautiful and appropriate entry to the park.

Stewart Park Drive through Stewart Park; however, is a very poor quality roadway. The road is very wide which encourages speeding. Also, the informal parking along the shoulder negatively impacts the riverbank. The west end of the roadway curves vertically and horizontally in ways that limit sight distances in areas of high pedestrian use that are frequented by children. It also bisects the western portion of the site, separating active use areas in the park. Finally, the road segregates the bulk of the park from the river and severely impacts the open space quality of the southern portion of the park. City staff has noted speeding and vandalism linked to this portion of road.

Pedestrian Access to the Park

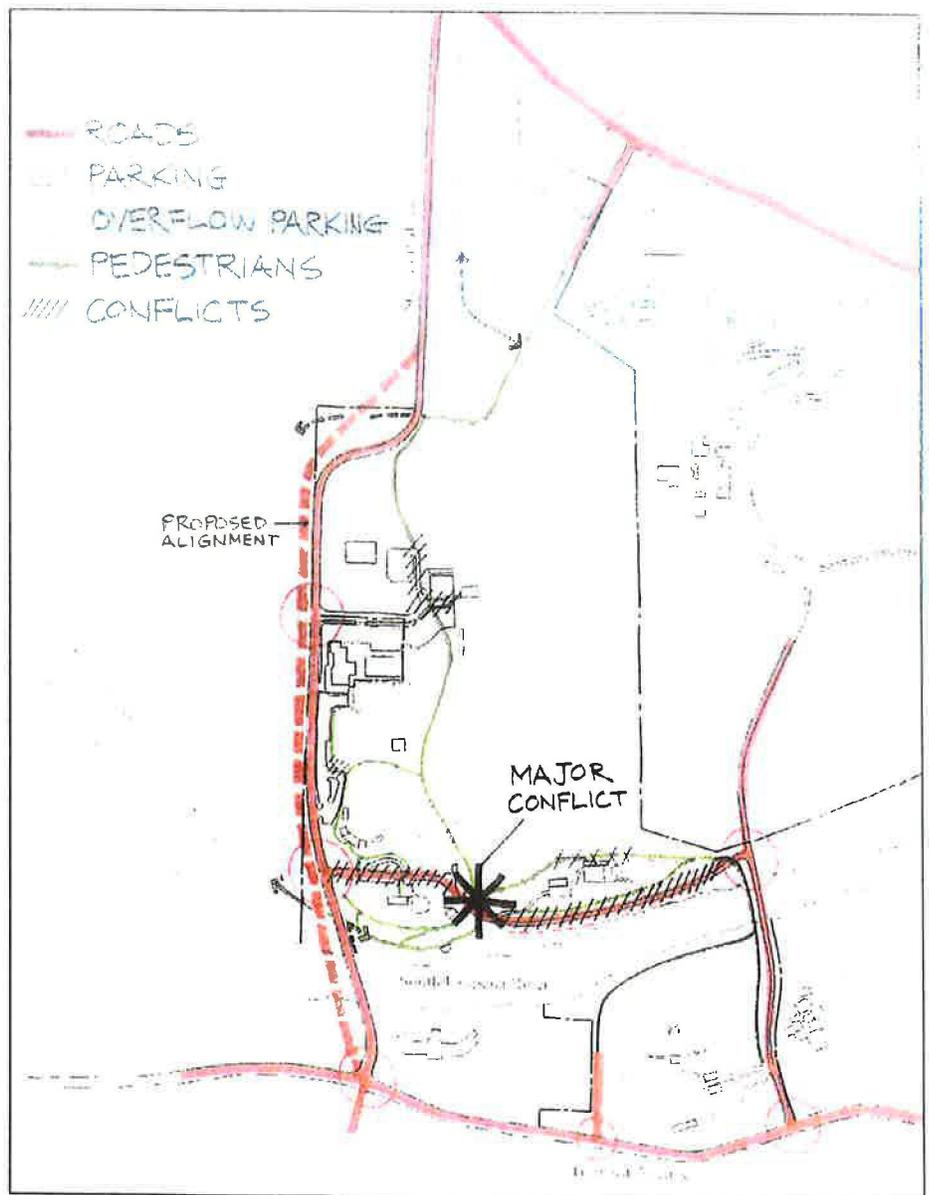


Pedestrians access to the park is via intermittent sidewalks and roadway shoulders along Garden Valley Road, Harvard Avenue, and Stewart Park Drive. Sidewalks and street trees occur only along portions of these roads, making the pedestrian system incomplete and uninviting. Pedestrians accessing three sides of the park from nearby neighborhoods are confronted by high volume arterials with few signalized crossings. These roads act as barriers to pedestrians and bicyclists attempting to access the park. A pedestrian underpass allows access beneath the Stewart Parkway bridge, but the route is very overgrown and not visible. Pedestrian access is provided to the park from downtown via a pedestrian-only route through parkland along the river.

Pedestrian Circulation within the Park



A system of paths connects many of the key facilities within the park. Paths are surfaced with asphalt, wood chips, and gravel. Many "paths of response" are evident where dirt trails have been cut into lawns by repeated foot traffic. Most of the pathways in Stewart Park are well-maintained and properly engineered. There is some hierarchy in the existing path system through the diversity of path widths and surfaces. The paths generally do not contribute to the visual quality of the park or capitalize on opportunities for views. The pedestrian circulation system is inconsistent with several dead end paths, incomplete loops, and, in some cases, redundancies and excessive amounts of paving.



Circulation Diagram

Pedestrian and vehicle conflicts are evident throughout the park primarily at crossing points and along Stewart Drive in the southwest. In addition, a portion of the pedestrian path between the existing maintenance yard and the golf course is potentially dangerous. This path is remote and is hidden from view from other portions of the park.

Vegetation



Native vegetation is concentrated along both banks of the river and in the northern wetlands. These areas consist primarily of a canopy of native Oak, Madrone, Alder, and Fir with native and non-native middle and understory plants. The remainder of the park consists of non-native trees, shrubs, groundcovers and lawn areas. These plants are generally in good condition and are well maintained. The large grove of Fir, Oak, and Madrone adjacent to the theater in the Fir Grove area is a valuable resource that should be preserved. This grove provides a nice passive use space and a buffer between the park and Harvard Drive to the south.



The mature Cedar trees along Stewart Park Drive in Fir Grove, another significant park feature, are known to be in decline due to disease. The current strategy is to replace the trees with a disease resistant species. This should continue on an individual basis as the Cedars decline over time.

Both banks of the Umpqua have significant infestations of invasive plant species. Currently the maintenance staff is attempting to control the spread of these plants through an ongoing process of removal.

Near the picnic shelter, there is a grove of mature fir that appear to be in good condition and add significant character to the area

Slope and Aspect

Slopes in the park are generally moderate to flat, and with the exception of the steep riverbanks, are easily developed. There are several large portions of the park on the north bank of the river that have favorable southern aspect. There are limited opportunities, other than in the golf course, for viewing the park and beyond.

Land Use

A mix of residential, commercial, institutional, and open space land uses surround Stewart Park. Land uses around the park are mixed by type and are of relatively low density. Primarily single family residential exists across Stewart Parkway to the west. A mix of retail types characterizes the northern edge of the park. The eastern edge is bounded by institutions, the VA north of the river and an elementary school to the south. A mix of commercial, multifamily, and single family residential uses south of Harvard Avenue bound the southern edge. The presence of arterial roadways and large parking areas associated with the commercial development on three sides of the park, serve to separate the adjacent neighborhoods from the park.

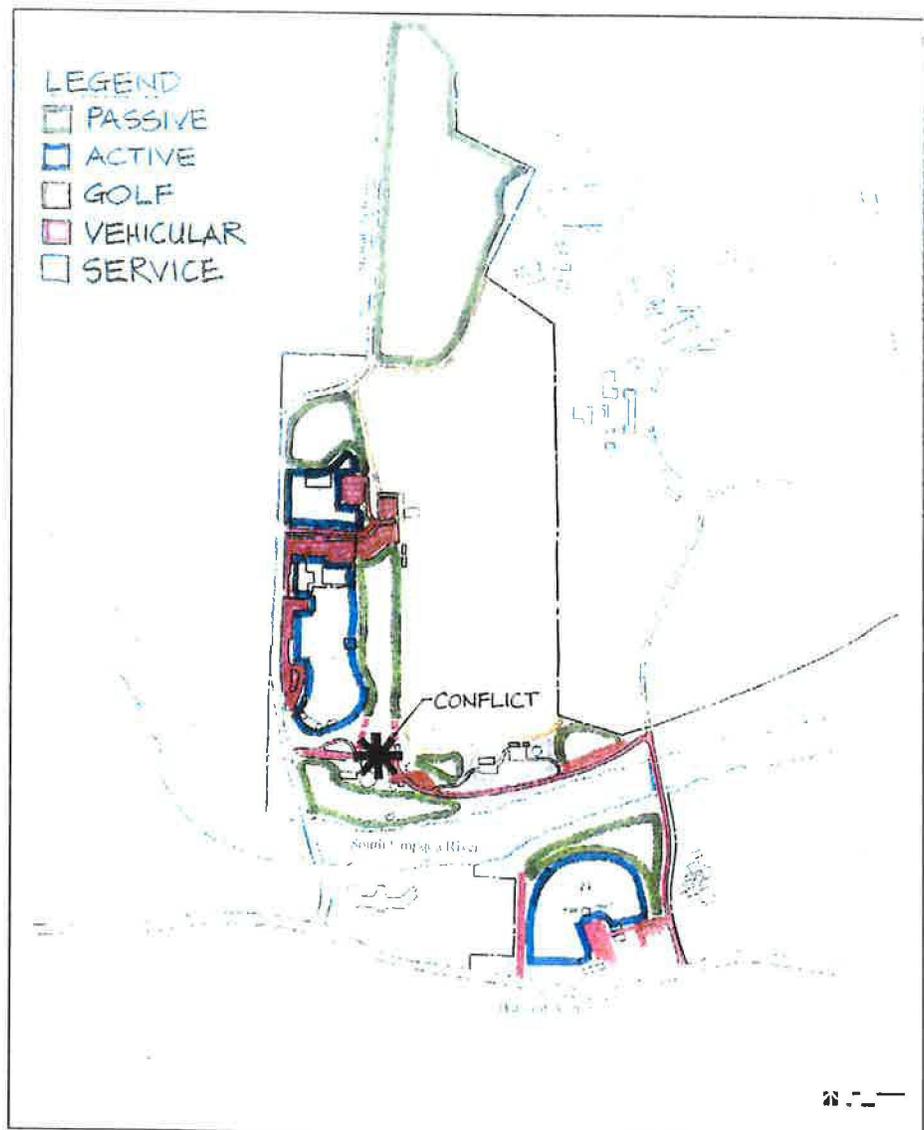
Land uses within the park have been identified in four categories for the purpose of analysis: Naturalistic areas, active use areas, parking and roadways, and maintenance areas.

PHYSICAL ANALYSIS

The naturalistic areas are located in the north comprised of the wetlands and areas along the riverbank. These areas are in moderate condition due to invasive species and human impacts. The active use areas vary from buildings housing arts, YMCA, and tennis, to play areas and open play fields. While generally well served by vehicles, these areas could benefit from better pedestrian connections and revised circulation. The facilities are in good condition given their extensive use, but scheduling conflicts keep many people from using the sports fields.

Parking and circulation, as described previously, dominate much of the lower park and present many conflicts between vehicles and pedestrians.

The maintenance facility occupies a large area in a prime location in the southern portion of the park. Together with the closed treatment plant, the facility is not visually pleasing. While its central location is beneficial in its proximity to maintenance activities, this area has higher potential for public park use than for maintenance.



Land Use Diagram

facilities that are constructed in this area should be designed to be above flood levels as feasible. Flooding from Newton Creek has impacted Stewart Park facilities in the past. Design of facilities in this portion of the park to withstand periodic flooding will be beneficial. In addition, developing a route for flood waters to flow south from Newton Creek to the Umpqua will also minimize damage to the park.

Other Considerations



The South Umpqua River

The areas along the north bank of the river are highly desirable for passive recreation use. Currently, these areas are degraded and are not easily accessed. Developing better connections and views of the river, and restoring the native vegetation will be of great benefit to the river and to park users.

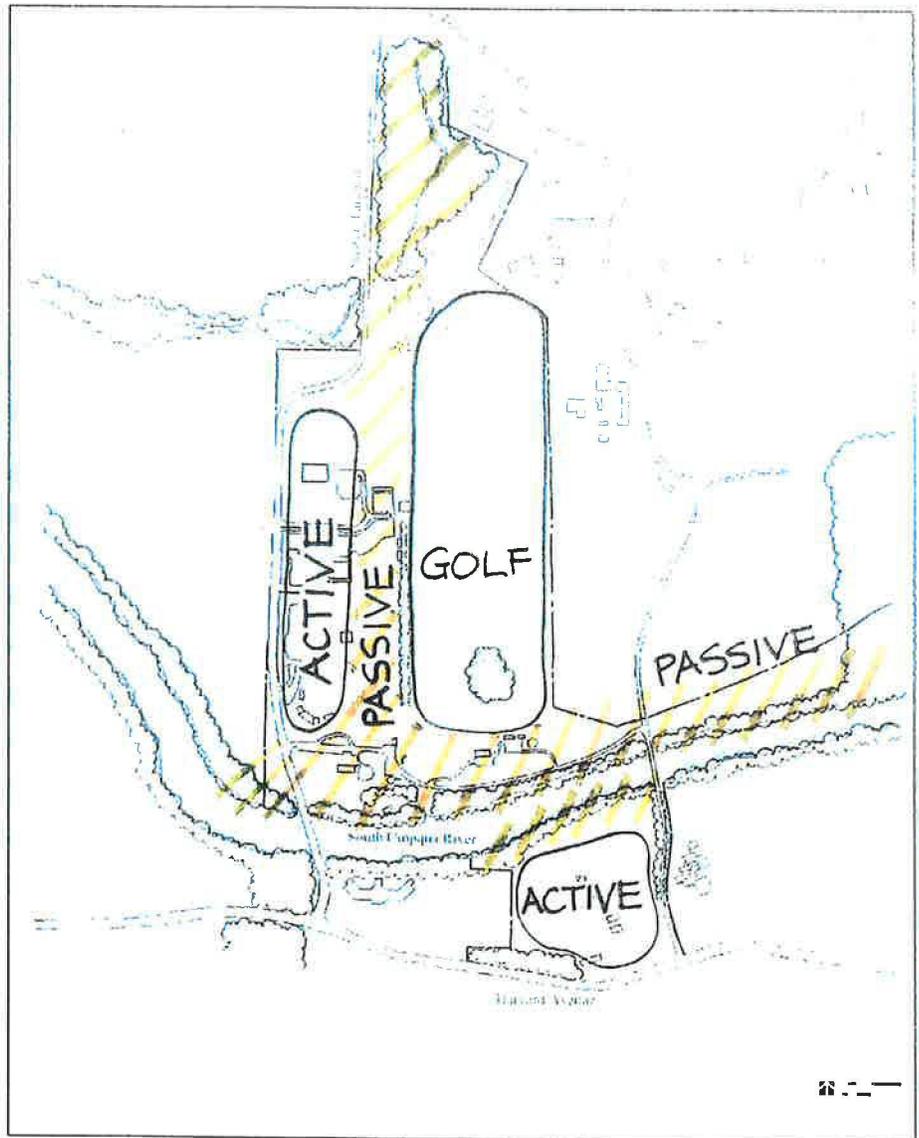
Newton Creek Wetlands



The wetland areas in the northern portion of the site are well used by both wildlife and people. This area provides great potential for both passive recreation and education. Developing better pedestrian connections and continuing to improve the native vegetation, viewing areas, and other amenities, will add to the diversity of recreational opportunities that Stewart Park has to offer.

RECREATION OPPORTUNITIES

Following the physical analysis, the design team recognized the potential to unify Stewart Park by capturing and linking the remaining open green space and passive recreation elements. This potential was fundamental in the development of the Stewart Park Master Plan.



Recreation Opportunities Diagram

RECREATIONAL PROGRAM DEVELOPMENT

The program for recreational development for Stewart Park was a result of:

- Review of Roseburg's Comprehensive Parks Master Plan
- Interviews with stakeholder groups that use Stewart Park
- Public comment
- City requirements and goals
- Assessment of opportunities and constraints

The Roseburg Comprehensive Parks Master Plan recommended that no additional facility requests be considered until completion of this Master Plan. *"One of the reasons that Stewart Park receives these requests is that there are no other parks of this type in Roseburg. In the long run, the development of other community and neighborhood parks will distribute recreation uses over more of the parks."*

Representatives from the organized sports groups of Stewart Park were interviewed as stakeholders. The bulk of the stakeholders interviewed represented predominantly active, organized recreation. Each group was encouraged to think in terms of current use and future demand for their various organizations, and where their activity was best accommodated in the Stewart Park Master Plan.

Public input also assisted in formulation of the program through the first open public meeting. The City of Roseburg also played an integral role in the development of the program for Stewart Park. The final program was developed by balancing site capacity with the desired program elements.

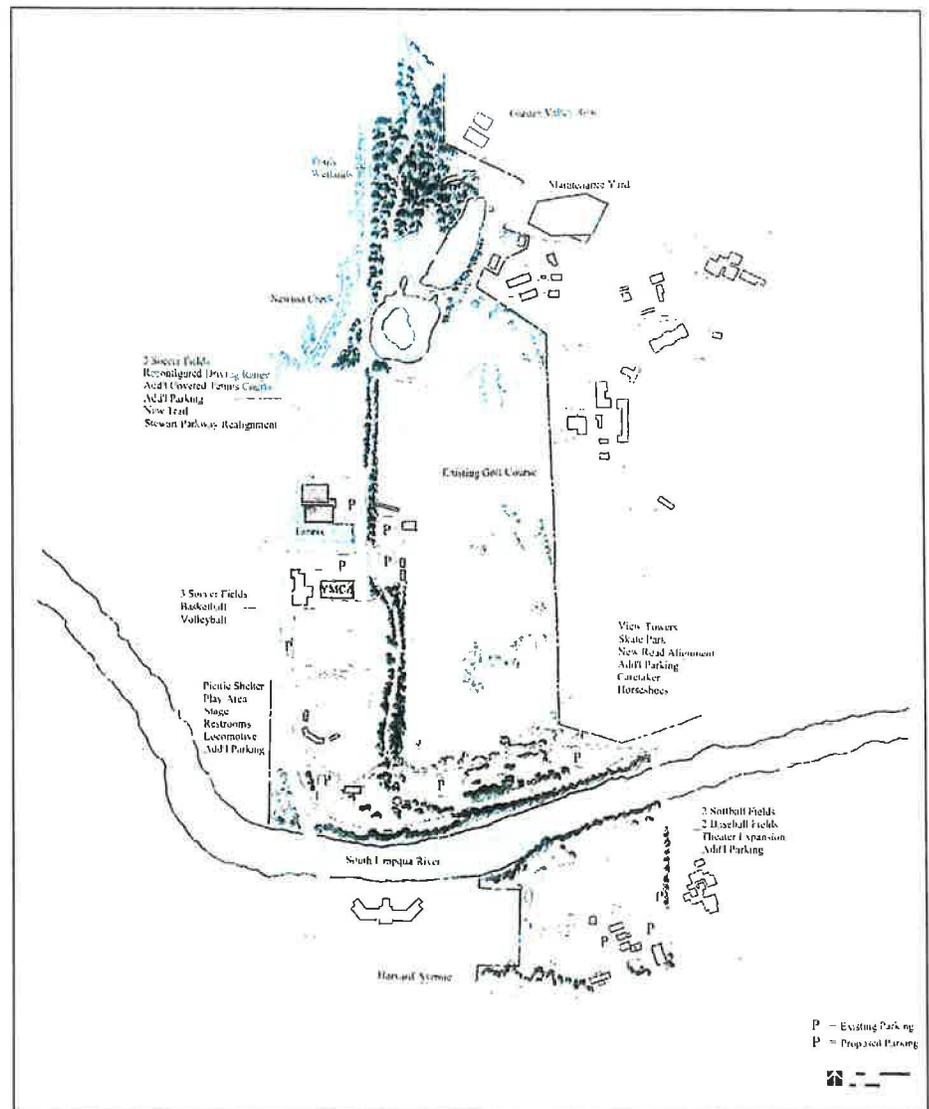
Proposed Program Elements:

Parking	Hiking/Biking
2 Baseball Fields	Wetland
1 Legion Baseball Field	River Access
2 Softball Fields	Locomotive
Horse shoes	Maintenance Facility
Volleyball	Caretakers Quarters
Basketball	Restrooms
Skate Park	Picnicking
Play Area	Parking and Circulation
Golf/Driving Range	Passive Open Space
Concerts	

Preliminary designs were prepared based on the physical analysis and program development. The design team developed two design options that were presented to the City, the Parks Board, and subsequently, to the general public in an open public meeting.

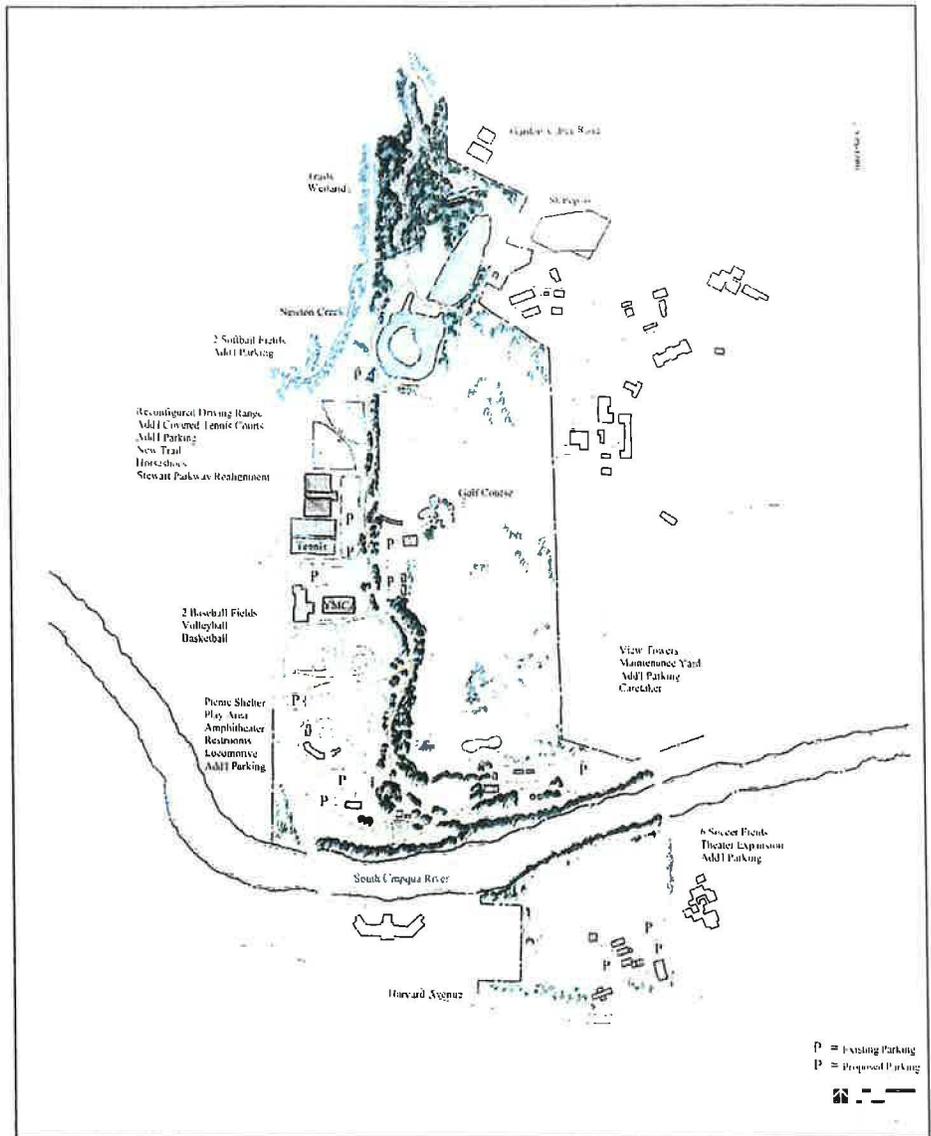
Option A

Option A developed two groups of three soccer fields along Stewart Parkway on the west edge of the Park. Three fields north of the Tennis Center were contingent upon the realignment of Stewart Parkway. Stewart Park Drive was relocated away from the river and narrowed to run adjacent to the golf course. This created several large open spaces near the river with three organized parking lots along the new roadway. The maintenance yard was relocated to the north portion of the park and the treatment plant was converted to a skateboard facility and view towers. Fields for baseball and softball were added to the Fir Grove site with additional parking. A generous open space pedestrian corridor linked the wetlands to the north with the riverfront trail system. The remaining park facilities were to remain intact in the current location.



Option B

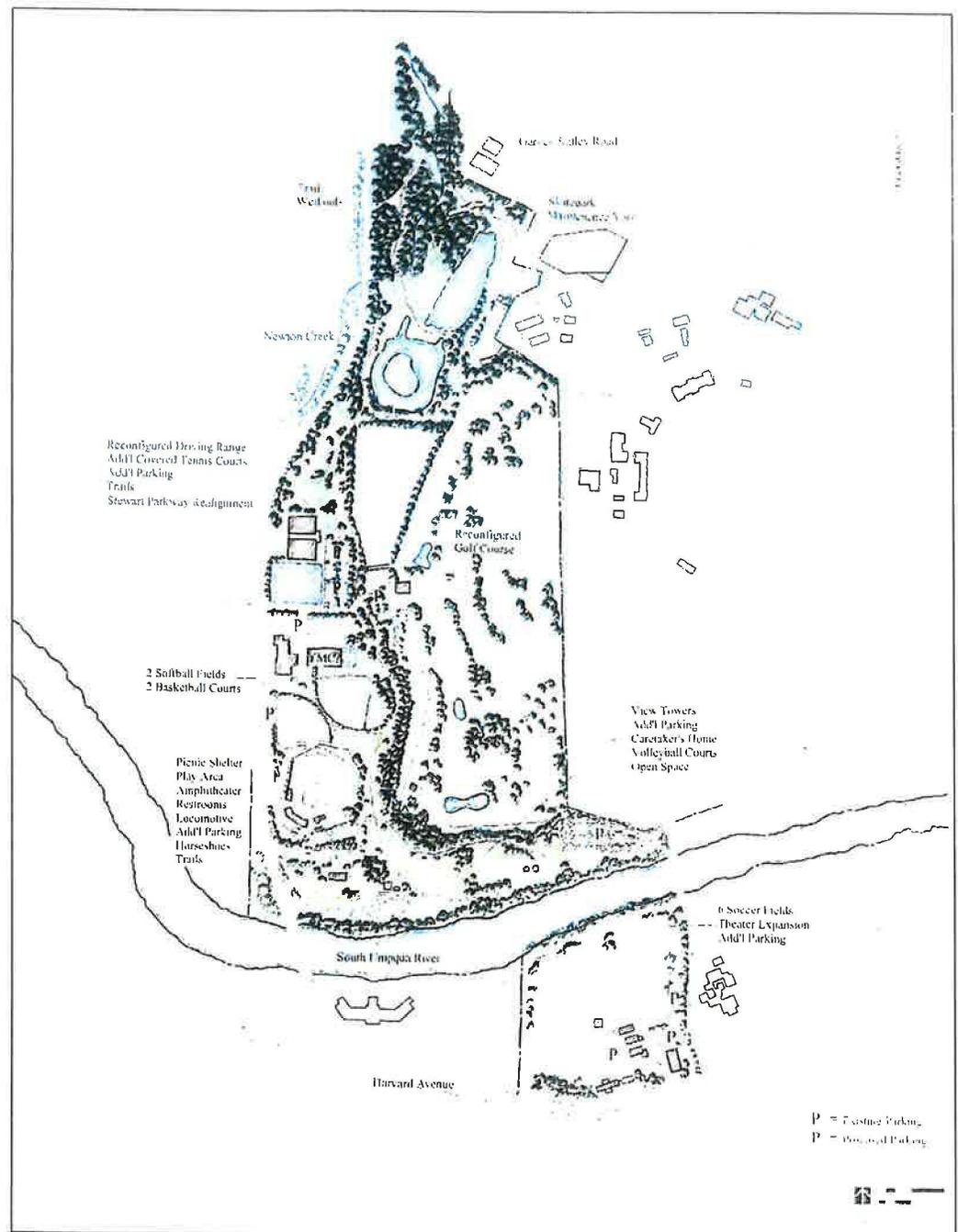
Option B developed a soccer complex at Fir Grove. Stewart Park Drive was removed from the park with parking areas developed on the west and east sides. The removal of Stewart Park drive between the two bridges provided additional open space for park use. The maintenance yard was retained in place and re-organized to allow more area to be incorporated into the park. A formal amphitheater was created at the band shell area while retaining the picnic pavilion and rest rooms. The golf course was reconfigured to allow additional space for passive park uses and to provide room for two additional baseball fields north of Legion Field. Two softball fields with adjacent parking were developed north of the expanded Tennis Center and were contingent upon the realignment of Stewart Parkway.



The City, the public, and the design team felt that option B had the most benefit of the initial options. Relocating the maintenance yard, as illustrated in Option A, was perceived as a viable opportunity as well. The design team then proceeded to refine Option B by testing the addition of some desirable elements from the other option.

THE REFINED PLAN

The refined plan was presented to the City and community. The plan was a hybrid of Options A and B, with other adjustments. The plan showed reconfiguring the golf course to create additional open space. Baseball, other than Legion Field, was removed from the park to be developed at the new Community Park or at another facility. Stewart Park Drive was removed between the bridges and the maintenance facility relocated to the north to provide open space to the riverfront portion of the park. Two adult sized softball fields were developed north of Legion field and a soccer facility was developed at Fir Grove. A passive open space trail system was created to link the wetlands to the north with the riverfront portion of the park and existing trail system to downtown Roseburg.



STEWART PARK MASTER PLAN

Key Components of the Master Plan

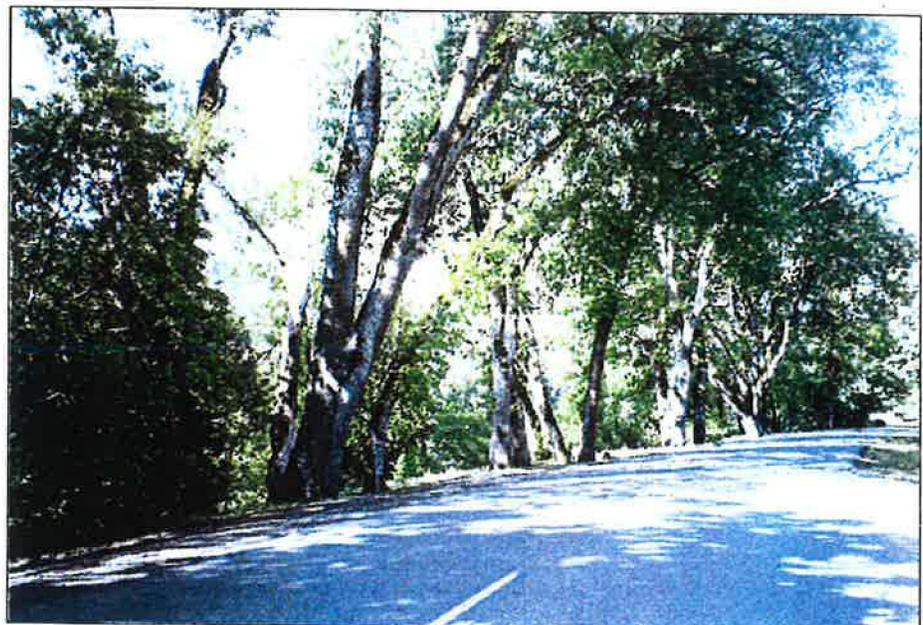
- Relocate maintenance yard
- Remove Stewart Park Drive
- Improve the north/south passive pedestrian corridor
- Retrofit some sewage treatment structures
- Reorganize and add parking at perimeter locations
- Improve amphitheater
- Improve/ reorganize ball fields and play areas
- Create Soccer complex at Fir Grove

Regaining Usable Park Space

The Master Plan for Stewart Park establishes a new approach by converting roadway and other vehicular uses into prime riverfront usable space. By removing vehicles from the heart of the park, a gain of at least 3 ½ acres of space for pedestrian and recreational use will be realized. This action will also engage other unused areas into the waterfront and open them to public use.



The plan calls for the removal of Stewart Park Drive between the entrance to the Veterans Administration Facility and Stewart Parkway. The former roadway is developed into passive park space adjacent to the river for a variety of program elements. The maintenance yard is relocated to the north, away from the high use areas. The new location will continue to allow easy access to City streets, the Golf Course and Stewart Park. Additional park space has been realized by reconfiguring portions of the golf course and driving range. The 8th hole has been modified to improve play and provide additional land for park development. The driving range is reoriented to the east by realigning the tee boxes. This allows the landing area to be narrowed, thereby adding park space to the west. This acquired space is developed into a variety of open lawn areas for passive and active uses with sufficient area to accommodate a large number of visitors and events.



The Open Space Corridor



The concept of developing an identifiable open space corridor which links the entire park from the northern wetlands to the river emerged early in the design process. This corridor acts as an organizing element which interfaces the active uses in the park. It facilitates unimpeded pedestrian access within the park through a pleasant and inviting trail system. The path system links the facilities within Stewart Park, connects to the adjacent communities including the pedestrian underpass below Garden Valley Road, and joins with the Riverfront Park trail system that continues east into downtown Roseburg. The character is predominantly naturalistic, particularly along the river and near the wetlands in the north. The pedestrian corridor is widened where it passes between the golf course and YMCA parking lots to improve safety and enhance the park experience.



The main trail is envisioned as a multi-use asphalt path, with directional information at key intersections. The path is to be at least 12 feet wide and capable of supporting a variety of vehicles for emergency, security, maintenance, and for public vehicle access and egress during special events. The path also accesses the caretaker's residence that has been relocated to a central but less prominent location. The caretaker's residence is intended to be an informal park headquarters where visitors can go to seek help if needed. Traffic control devices will be required on the path to prohibit unauthorized vehicular access. The plan also improves and enhances the nature trails in the north portion of the site by completing the loop around the wetland and connecting to the main pedestrian system. Paths in the natural areas should be constructed of a soft surface such as wood chips or bark.

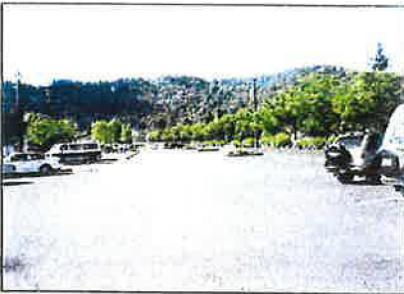


Overlooks



Another key element of the Master Plan is to integrate some of the structures associated with the old sewage treatment plant. The development of a pair of view towers from the existing clarifier tanks will take advantage of an existing resource located in a prominent position in the park. The tanks and associated structures are good examples of public works architecture of their period and will provide reference to the history of the site. These structures are sculptural in form, well constructed of high quality materials, and in scale with their use. From atop the cylindrical red brick tanks, views of Stewart Park, the river, the golf course, and the surrounding hills are available. These tanks are to be retrofitted with a stair that would coil externally to the top of the tank. The surrounding landscape is modified to open up views to and from the towers. The view towers are the only structures of the treatment plant specifically identified for preservation by the Master Plan; however, reuse of other structures may be appropriate in the further detailed design of the site.

Parking



Parking is located at the perimeter of the waterfront area, allowing direct access to popular park facilities. By placing parking at the edges of the park, conflicts between vehicles and pedestrians are minimized. These parking lots are screened with planting and earthwork that enhance the perception of a naturalistic space in the park interior. Parking is added to the Fir Grove site by expanding the existing system and by adding parking west of the trees lining Stewart Park Drive. Care should be taken during construction to preserve the existing trees and maintain the boulevard character along the entrance to the park. Parking has also been added to the lot east of the tennis facilities by taking advantage of existing paved areas and by construction of additional parking areas. The plan provides an additional 260 designated parking spaces bringing the total to 788 for Stewart and Fir Grove Parks. These parking lots are developed with a priority on pedestrian safety. The plan removes a large amount of overflow and informal parking that currently takes place along Stewart Park Drive and in the open lawn areas in the park. Overflow parking for large events is relocated to the golf driving range. The range is linked to the City streets through the new multi-use trail and parking lot near the wetlands leading north to Garden Valley Road, and west to Stewart Parkway. The intent is to implement parking fees for events to offset the lost revenue from temporarily closing the range to golfers.

Sports Fields



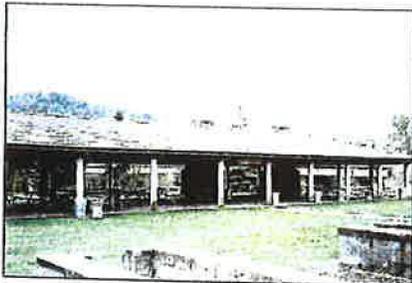
Legion Field is preserved in its current use and configuration. The sense of entry is improved with a stronger focus on the entrance. A significant pool of parking is developed immediately adjacent to the entrance. Pedestrian links to other park facilities are strengthened through connections to the trail system. The two softball fields north of Legion Field are improved to accommodate adult play. Provision of concession facilities, relocation of the play area away from the parking lot, and an improved pathway system improves how the fields integrate with the park. The two baseball fields at Fir Grove are relocated to the new Community Park or another facility. The fields at Fir Grove are converted to a soccer facility with six large fields and options for additional smaller fields. The concession and rest room building remains central to the complex. Other field areas for practice, warm-up, and other use have been provided throughout the park. The largest area available is located north of the Tennis Center and is contingent upon the future realignment of Stewart Parkway.

Concerts and the Arts



The events sponsored by "Music on the Half Shell" have become increasingly popular. The use of this area for 4th of July fireworks speaks for the importance of this place to the community. The amphitheater, and the events that occur here, are a major asset to the park. The plan calls for improvement of the venue through the construction of a formal amphitheater. The amphitheater is designed to fit within the existing landforms and trees, allowing large crowds to simply spill over onto adjacent informal spaces. Connection of the amphitheater to the pedestrian circulation system will allow easy access from other points in the park and to event parking areas. The arts continue to be encouraged as a program element within Stewart Park, especially at Fir Grove. The plan retains the uses associated with the Umpqua Valley Arts Center, pottery studio, and allows for future expansion to the Betty Long Unruh Theater. The adjacent soccer fields can be used for major cultural events without the interference of baseball structures such as backstops, dugouts, and bleachers.

Other Facilities



Opportunities for informal, small group activities like picnics and Frisbee tossing abound throughout the park. The picnic shelter, rest rooms, and large play area will remain and be enhanced by improvements to the park around it. The amount of horseshoe pits in Stewart Park is reduced and relocated. Horseshoe tournaments, while a legitimate park use, are an infrequent occurrence. The limited use does not justify the current location and space devoted to the activity. The horseshoe pits have been reduced in number and relocated near the existing picnic shelter where they will be more readily available for use by groups and individuals using the picnic shelter and other facilities. Tournaments could still be accommodated, albeit at a reduced level.



Skateboarding has become a popular and legitimate form of active recreation. The plan calls for construction of a permanent skateboard facility at the north end of the park next to the new maintenance facility.

The volleyball courts are relocated to the east end of the park adjacent to parking and the riverfront. The location by the water and the adjacent sloping lawn areas for spectators provide a beach volleyball venue for use in tournaments and informal games

The plan allows for the expansion of the indoor tennis courts to the north. In doing so, the existing pro shop is removed and replaced with a new facility as part of the expansion. As part of the expansion, the existing basketball courts and shelter adjacent to the Tennis Center are removed and replaced with additional parking. The existing half basketball courts on the east side of the YMCA building are retained and expanded to full courts. This area continues to serve multiple purposes for court sports and as an emergency access route.

The historic steam locomotive deserves special comment. Many people born and raised in the Roseburg area fondly recall playing on the old locomotive in Stewart Park as a child. The old engine holds strong community sentiment and is a cherished artifact of Roseburg's past. The plan recommends relocation and preservation of the locomotive at the "hub" of the park near its present location by the existing rest rooms. Ideally, it would be restored to working condition sometime in the future. In the meantime, prominent placement that would be aligned on the entrance to the main parking lot is recommended. This location marks a gateway to the interior of the park. It provides a visual terminus to the north/south pedestrian corridor and presents an opportunity for interpretive signs relevant to the history of Roseburg in a location easily accessed by visitors. Providing safe access to and on the locomotive is important for public safety.

Phase One

Phase One concentrates on improvements at Fir Grove. Baseball is removed to a new location and the soccer facility is established with improvements to parking.

Phase Two

Phase Two focuses on regaining the open space along the riverfront between the Fir Grove bridge and Stewart Parkway as well as all improvements south of the golf course and Legion Field. This also includes development of the new maintenance facility to the north.

Phase Three

Phase Three includes all remaining improvements to Stewart Park.

COST ESTIMATE

07/09/1999

PHASE ONE

Item	Unit	Unit Cost	Quantity	Subtotal	Totals
Demolition and Site Preparation					
Mobilize	ls	\$10,000.00	NA	\$10,000	
Erosion Control Allowance	ls	\$5,000.00	NA	\$5,000	
Remove and Dispose Concrete Paving	sf	\$2.25	1,000	\$2,250	
Remove and Re-use Gravel Paving	sf	\$0.75	6,900	\$5,175	
Curb Demolition and Disposal	lf	\$2.50	250	\$625	
Shed Removal and Disposal	sf	\$2.00	2,000	\$4,000	
Backstop Removal and Disposal	lf	\$5.00	400	\$2,000	
Salvage Bleachers	sf	\$0.50	6,500	\$3,250	
Tree Removal	ea	\$250.00	18	\$4,500	
Strip Turf	sf	\$0.10	40,000	\$4,000	\$40,800
Earthwork					
Site Grading (assume 6" area wide)	cy	\$4.00	4800	\$19,200	
Curb and Wall Excavation	lf	\$5.00	1,000	\$5,000	
Road and Path Prep.	sf	\$0.25	16800	\$4,200	\$28,400
Site Improvements					
Roads/Parking (asphalt)	sf	\$3.50	35,000	\$122,500	
Concrete Curb	lf	\$12.00	1,500	\$18,000	
Concrete Paving	sf	\$4.00	5,000	\$20,000	
Storm Drainage (allowance)	ls	\$25,000.00	NA	\$25,000	
Site Furnishings	ls	\$10,000.00	NA	\$10,000	
Soccer Goals	pair	\$2,500.00	6	\$15,000	\$210,500
Landscape					
Finish Grading	sf	\$0.25	40,000	\$10,000	
Soil Preparation	sf	\$0.25	40,000	\$10,000	
Irrigation (new, all fields)	sf	\$0.50	385,000	\$192,500	
Trees	ea	\$150.00	150	\$22,500	
Shrub Beds	sf	\$3.00	1800	\$5,400	
Seed Turf	sf	\$0.07	40000	\$2,800	
Seed Rough Grass	sf	\$0.10	32000	\$3,200	\$246,400
Subtotal					\$526,100
Contractor Overhead & Profit @ 15%					\$78,915
Subtotal					\$605,015
Contingency @ 20%					\$121,003
Total					\$726,018

Items not included: lighting, signage, emergency telephones, traffic control

COST ESTIMATE

07/09/1999

PHASE TWO

Item	Unit	Unit Cost	Quantity	Subtotal	Totals
Demolition and Site Preparation					
Mobilize	ls	\$20,000.00	NA	\$20,000	
Erosion Control Allowance	ls	\$10,000.00	NA	\$10,000	
Asphalt Removal and Disposal	sf	\$0.20	145,000	\$29,000	
Remove Gravel Paving and Re-use	sf	\$0.75	20,000	\$15,000	
Fencing Removal and Disposal	lf	\$2.50	1,000	\$2,500	
Curb Removal and Disposal	lf	\$2.50	2,000	\$5,000	
Building Removal and Disposal	ea	\$7,000.00	1	\$7,000	
Building Relocation	ea	\$5,000.00	1	\$5,000	
Tree Removal and Disposal	ea	\$250.00	100	\$25,000	
Strip Turf	sf	\$0.10	332,000	\$33,200	\$151,700
Treatment Plant/ Maintenance Yard Demolition- assume no hazardous materials					
Asphalt Removal and Disposal	sf	\$0.20	4,750	\$950	
Remove Gravel Paving and Re-use	sf	\$0.75	4,200	\$3,150	
Remove Fencing	lf	\$2.50	1,600	\$4,000	
Curb Demolition and Disposal	lf	\$2.50	450	\$1,125	
Wall Demolition and Disposal **	cy	\$220.00	240	\$52,800	
Building Removal and Disposal	ea	\$7,000.00	5	\$35,000	
Equipment Removal and Disposal ***	ls	\$35,000.00	NA	\$35,000	
Excavation and fill	cy	\$4.00	4500	\$18,000	\$150,025
Earthwork					
Strip and Stockpile Topsoil (6" depth)	cy	\$3.00	12,800	\$38,400	
Site Grading (assume 1')	cy	\$4.00	25000	\$100,000	
Curb and Wall Excavation	lf	\$5.00	6,000	\$30,000	
Road and Path Prep.	sf	\$0.25	120000	\$30,000	\$198,400
Site Improvements					
Heavy Duty Asphalt	sf	\$3.50	50,000	\$175,000	
Light Duty Asphalt	sf	\$2.50	70,000	\$175,000	
Concrete Curb	lf	\$12.00	5,500	\$66,000	
Concrete Paving	sf	\$4.00	3,000	\$12,000	
Site Furnishings Allowance	ls	\$50,000.00	na	\$50,000	
Raised Pedestrian Crossings	ea	\$5,000.00	10	\$50,000	
Train Relocate	ls	\$5,000.00	1	\$5,000	
Volleyball Pits	ea	\$8,000.00	2	\$16,000	
Horseshoe Pits	ea	\$800.00	6	\$4,800	
Viewtower Retrofit	ls	\$175,000.00	1	\$175,000	
Utilities Allowance	ls	\$100,000.00	1	\$100,000	\$828,800

COST ESTIMATE

Item	Unit	Unit Cost	Quantity	Subtotal	Totals
Amphitheater					
Grading	cy	\$4.00	5000	\$20,000	
Seatwalls	lf	\$60.00	3000	\$180,000	
Mowband	lf	\$8.00	2600	\$20,800	
Concrete Paving	sf	\$3.50	8500	\$29,750	
Railings	lf	\$70.00	850	\$59,500	
Concrete Stairs	lf nose	\$35.00	600	\$21,000	
Irrigation	sf	\$0.60	12000	\$7,200	
Soil Preparation	sf	\$0.25	12000	\$3,000	
Seed	sf	\$0.07	12000	\$840	\$342,090
Landscape					
Finish Grading	sf	\$0.25	332000	\$83,000	
Soil Preparation	sf	\$0.25	332,000	\$83,000	
Irrigation (all new system, no salvage)	sf	\$0.50	332,000	\$166,000	
Irrigation pump	ls	\$15,000.00	1	\$15,000	
Trees	ea	\$150.00	750	\$112,500	
Shrub Beds	sf	\$3.00	4250	\$12,750	
Seed Lawn	sf	\$0.07	200000	\$14,000	
Seed meadow	sf	\$0.10	132000	\$13,200	\$499,450
Maintenance Yard					
Utility Allowance	ls	\$10,000.00	NA	\$10,000	
Tree Removal	ea	\$250.00	8	\$2,000	
Fencing Removal and Disposal	lf	\$2.50	200	\$500	
Grading	cy	\$4.00	6500	\$26,000	
Heavy Duty Asphalt	sf	\$3.50	45000	\$157,500	
Pre-Engineered Buildings	sf	\$12.00	11000	\$132,000	
Office and Support Buildings	sf	\$80.00	1000	\$80,000	
Bulk Storage Bays	lf	\$50.00	100	\$5,000	
Retaining Walls	lf	\$50.00	500	\$25,000	
Gates	ea	\$1,500.00	2	\$3,000	
Fencing	lf	\$18.00	1100	\$19,800	
Irrigation	sf	\$0.50	11000	\$5,500	
Landscape Screening	sf	\$3.50	11000	\$38,500	\$504,800
				Subtotal	\$2,675,265
				Contractor Overhead & Profit @ 15%	\$401,290
				Subtotal	\$3,076,555
				Contingency @ 20%	\$615,311
				Total	\$3,691,866

Items not included: lighting, signage, emergency telephones, traffic control assume treatment plant tank walls removed to 2' below existing grade, walls below grade remain in place, and removed material is disposed off site

*** assume some equipment selectively salvaged

COST ESTIMATE

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PHASE THREE

<u>Item</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Quantity</u>	<u>Subtotal</u>	<u>Totals</u>
Demolition and Site Preparation					
Mobilize	ls	\$5,000.00	NA	\$5,000	
Erosion Control Allowance	ls	\$3,000.00	NA	\$3,000	
Remove Asphalt and Dispose	sf	\$0.20	44,800	\$8,960	
Remove Concrete Paving and Dispose	sf	\$2.50	3,700	\$9,250	
Remove Fencing and Dispose	lf	\$2.50	2,900	\$7,250	
Backstop Removal and Disposal	lf	\$5.00	180	\$900	
Curb Demolition and Disposal	lf	\$2.50	200	\$500	
Building Removal and Disposal	ea	\$7,000.00	1	\$7,000	
Tree Removal and Disposal	ea	\$250.00	20	\$5,000	
Strip Turf	sf	\$0.10	85,000	\$8,500	\$55,360
Earthwork					
Strip/Stockpile Topsoil (assume 6" depth)	cy	\$3.00	1,500	\$4,500	
Site Grading (assume 4" over 100000 sf)	cy	\$4.00	925	\$3,700	
Curb and Wall Excavation	lf	\$5.00	3,000	\$15,000	
Road and Path Prep.	sf	\$0.25	160000	\$40,000	\$63,200
Site Improvements					
Heavy Duty Asphalt	sf	\$3.50	15,000	\$52,500	
Light Duty Asphalt	sf	\$2.50	78,000	\$195,000	
Concrete Curb	lf	\$12.00	3,000	\$36,000	
Concrete Paving	sf	\$4.00	9,000	\$36,000	
Storm Drainage (allowance)	ls	\$30,000.00	na	\$30,000	
Infields (backstop, fence, dugout, etc.)	ea	\$20,000.00	1	\$20,000	
Relocate Ballfield Lights	ls	\$50,000.00	1	\$50,000	
Site Furnishings (allowance)	ls	\$15,000.00	na	\$15,000	
Raised Pedestrian Crossings	ea	\$5,000.00	10	\$50,000	
Play Area	ls	\$25,000.00	1	\$25,000	
Fencing	lf	\$18.00	2500	\$45,000	
Basketball Goals	ea	\$2,500.00	2	\$5,000	
Driving Range Building Modification	ls	\$5,000.00	1	\$5,000	\$564,500
Landscape					
Finish Grading	sf	\$0.25	70,000	\$17,500	
Soil Preparation	sf	\$0.25	70,000	\$17,500	
Irrigation (assume all new, no salvage)	sf	\$0.50	150,000	\$75,000	
Trees	ea	\$150.00	500	\$75,000	
Shrub Beds	sf	\$3.50	3500	\$12,250	
Seed turf	sf	\$0.07	70000	\$4,900	
Over seed meadow	sf	\$0.10	20000	\$2,000	
Wetland Vegetation	sf	\$1.75	3500	\$6,125	\$210,275
				Subtotal	\$893,335
				Contractor Overhead & Profit @ 15%	\$134,000
				Subtotal	\$1,027,335
				Contingency @ 20%	\$205,467
				Total	\$1,232,802

Items not included: lighting, signage, emergency telephones, traffic control

07/09/1999

COST SUMMARY BY PHASE

<u>Phase</u>	<u>Total</u>
Phase 1	\$726,018.00
Phase 2	\$3,691,866.00
Phase 3	\$1,232,802.00
Grand Total	\$5,650,686.00