

A Master Plan for Improvements to Oakland Heights Playground

Worcester, Massachusetts



January 2007

City of Worcester Department of Public Works and Parks



Acknowledgments

Worcester City Council:

Konstantina B. Lukes, Mayor

Paul P. Clancy, Jr.
Barbara G. Haller
Dennis L. Irish
Philip P. Palmieri
Michael C. Perotto

Joseph M. Petty
Gary Rosen
Frederick C. Rushton
Joffrey A. Smith
Kathleen M. Toomey

Worcester Parks and Recreation Commission:

Michael T. Doherty, Chairman
Vite J. Pigaga, Vice Chairman

Paul A. Belsito
William Daring
Herbert W. Donahue
Gary J. Vecchio
Bruce Wahle

City Administration:

Michael V. O'Brien, City Manager
Robert L. Moylan, Jr., PE, Commissioner of Public Works and Parks
Robert C. Antonelli, Jr., CPRP, Assistant Commissioner of Public Works and Parks

Additional Acknowledgments:

Ingrid Rock, long-time resident of Oakland Heights, for supplying information on the history of Oakland Heights Playground

Table of Contents

Acknowledgments	Page i
Introduction	Page 1
Existing Site Conditions	Page 3
Community Participation	Page 7
Goals and Objectives	Page 8
Proposed Master Plan	Page 9
Estimated Construction Costs	Page 11

Maps and Plans:

Figure 1 – USGS Locus Map	Page 1
Figure 2 – Neighborhood Aerial Photograph	Page 2
Figure 3 – Existing Conditions Map	Page 6
Figure 4 – Master Plan	Page 10

Introduction

Oakland Heights Playground is a 1.5-acre neighborhood park located in southern Worcester. It is situated in the Oakland Heights neighborhood, which is just north of Route 20 and east of Granite Street. The playground is surrounded on three sides (north, south, and west) by residences, and is adjacent to land owned by a church to the east. The Broad Meadow Brook Wildlife Sanctuary is located to the east and north of the church property.

The playground was acquired by the City in 1958 through the tax title process. A small community building was later built, which was used for numerous gatherings organized by the Oakland Heights Neighborhood Association. The building remained in place for many years until the roof caved in from snow and ice, and was then demolished and removed. A multi-use court and swing set were then installed on the property to provide some recreational opportunities for neighborhood children.

Funds were appropriated in 2004 to develop a master plan for renovation of the playground, and EarthDesign Landscape Architecture of Worcester was hired for this task in 2006.

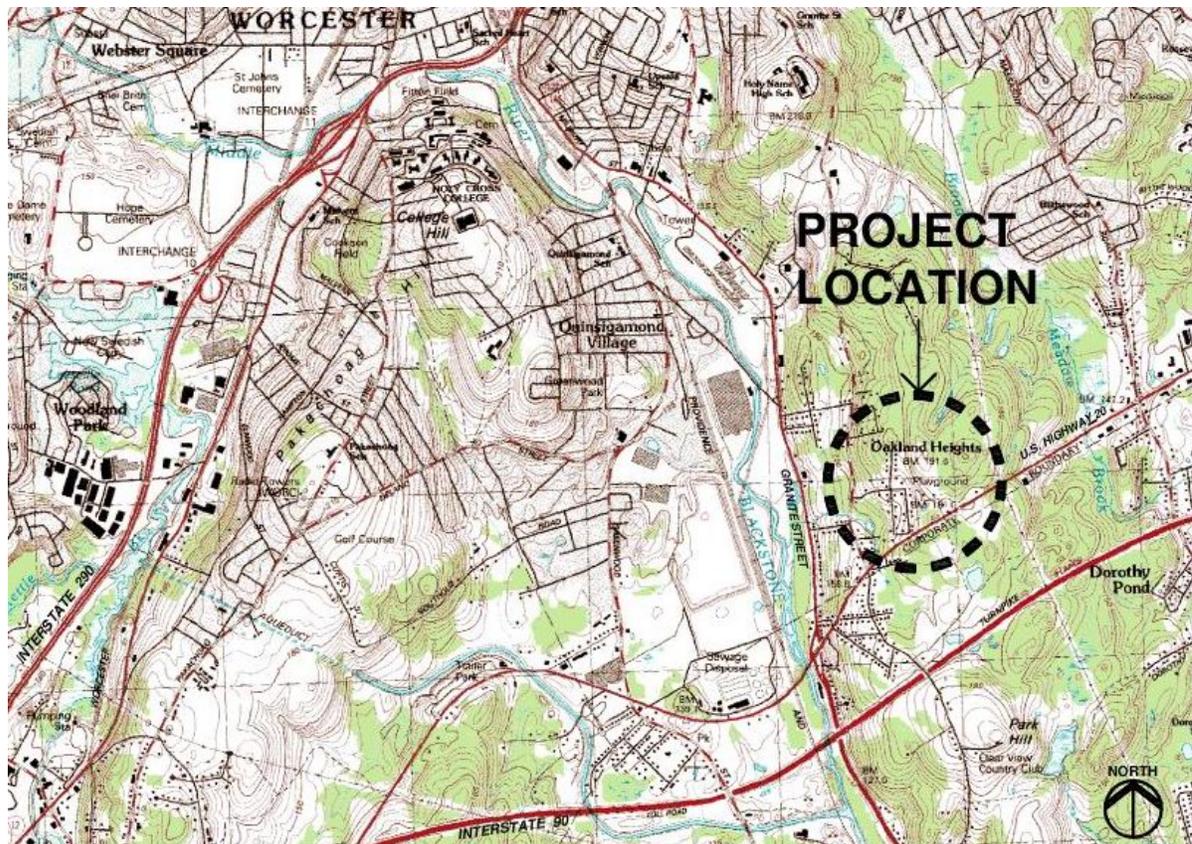


Figure 1: Locus Map



Figure 2: Neighborhood Aerial Photograph

Existing Site Conditions

Constructed Features:

The playground currently includes an asphalt game court measuring approximately 75 feet by 90 feet, a swing set, and an open lawn area, all situated on the western half of the property. The court surface is in good condition, but the swing set is outdated and in poor shape. Basketball goal posts (without hoops and backboards) are still in place on the east and west ends of the court. Wooden posts with non-functioning light fixtures are located near the court, connected by an overhead wire crossing the court. In addition, a post-and-chain barrier runs along the east boundary at Parkhill Road, and there is a paved maintenance access off of Garnet Street, with posts and chain to prevent unauthorized vehicular access.

Several low stone walls are present on the property, running along most of the northern and eastern property boundaries. There are also the remnants of a stone wall within the woodland area in the eastern portion of the site.



Portion of existing court



Existing swing set near court



View from lawn area toward court



Maintenance entrance from Garnet Street

Vegetation:

The eastern half of the property and the northern edge of the western half are forested with upland hardwoods including Maple, Oak, and Hickory species. Most of this woodland contains trees with trunk diameters of less than 18 inches. However, there are a few large Sugar Maple, Northern Red Oak and White Oak trees in this area that measure between 30 and 40 inches in trunk width. In addition, invasive exotic species including Ailanthus and Japanese Knotweed are growing along the edge and somewhat into the woodlands near the open lawn area of the property.

The open, western portion of the site includes several Red Maple trees in good condition, ranging in size from 18 to 24 inches in trunk diameter. The most attractive group of Maples is located in the southwest corner of the property, near the corner of Garnet Street and Parkhill Road. One Ash tree on the south side of the court is in poor condition.



View of Maple grove from Parkhill Road



Edge of woodland at lawn area (facing west)

Topography:

Most of the western half of the property, where the playground facilities are located, is gently-sloped with grades ranging from 3 to 10 percent. Topography is steeper near and within the right-of-way of Garnet Street, where the property slopes down to the street.

The wooded half of the site quickly slopes up toward the eastern property line, with an elevation change of 40 feet from the woodland edge next to the lawn area up to the northeast property corner. Gradients in this area range from 3:1 to 1:1 horizontal-to-vertical ratios.

Soils:

The soils throughout most of the site, with the exception of the steep northeast corner, are classified as Chatfield-Hollis-Rock Outcrop complex, with a fine sandy loam topsoil and subsoil. The bedrock layer is relatively shallow – only 10 to 40 inches below grade. This general class of soils also includes rock outcrops, and some scattered small areas of exposed rock can be seen in the turf areas of the property. In addition, there are many boulders and outcrops in the lower portion of the woodland. This soil type is generally suitable for the

growth of vegetation, but outcrops and shallow bedrock can present some challenges for site development.

The soils in the northeast corner of the property, located in the woodland, are classified as Canton Fine Sandy Loam with steep slopes and an extremely stony composition. The slopes of this soil type are the principal limitation to development of this portion of the site.



Rock outcrops and surface boulders are prevalent in the lower portion of the woodland.

Hydrology:

The primary hydrologic feature on this site is a continuous wetland area, along portions of the north and east sides of the property, within the woodlands. This wetland is approximately one quarter acre in size. Within this area there are a couple of short, dry swales, and the lower one appears to have been created when soil and rocks were filled between the wooded hillside and the lawn area. There is also a small wetland area at the southern edge of the property, adjacent to a drain inlet near Garnet Street.

Utilities:

As noted previously, within the playground site there are some old light poles with overhead electrical lines, and the lights are no longer functioning. Along both streets that are adjacent to the property, there are public utility poles and overhead electrical lines. A guy line from one of the Garnet Street poles extends into the wooded area of the property. Some street lights are also located along the portion of Garnet Street that borders the site. In addition, there is evidence of a water main in the right-of-way of Garnet Street.

Neighborhood and Off-Site Considerations:

The Oakland Heights neighborhood consists of single-family homes. Streets within the neighborhood are private, including those that are adjacent to the playground. These streets are paved but are in very poor condition, with numerous potholes.



Figure 3: Existing Conditions

Community Participation

Three public meetings were held with neighborhood residents. They are summarized below.

Public Meeting #1: August 1, 2006

Location: Senior Center, Providence Road

The existing conditions map for the playground was presented, and residents were asked to express their desires, questions, and concerns regarding the playground. The attendees generally agreed on the following requests:

- Remove basketball goal posts at the court and convert court to a multi-use facility.
- Construct parking for handicap-accessible usage only.
- Provide fencing or other barriers at property lines to prevent ATVs and other unauthorized vehicles from accessing the site.
- Construct a larger, improved play equipment area for children.
- Provide picnic tables.
- Provide benches and trash receptacles.
- Provide a walking path.
- Install structures close to and/or within view of streets to deter vandalism.
- Provide activities for children, ages 2 to 12.
- Design the playground to function as a day-use facility, and to primarily serve neighborhood residents.

The residents also stated their desire for the streets in the neighborhood to be improved. City staff referred them to information on the City's website (www.ci.worcester.ma.us). The "Private Street Information" page (accessed from a link on the Department of Public Works and Parks page) explains options for improvement of these streets. This information can also be obtained by contacting the City at 508-929-1300.

Public Meeting #2: September 20, 2006

Location: Senior Center, Providence Road

The preliminary master plan was presented at this meeting. The attendees indicated that they were pleased with the proposed plan.

Public Meeting #3: October 23, 2006

Location: Senior Center, Providence Road

Another meeting was held to present the preliminary master plan to residents who were unable to attend the previous meeting. Attendees expressed no objections to the plan.

Goals and Objectives

Based upon input received from neighborhood residents and the City of Worcester's park development and maintenance standards, the following goals and objectives have been established for Oakland Heights Playground:

1. **Maintain usage as a neighborhood playground**

- Provide facilities that are typical of a neighborhood playground (such as play equipment and picnic tables).
- Limit parking to the provision of handicap-accessible space(s).

2. **Upgrade existing facilities**

- Install a new children's play area with a variety of equipment and sufficient safety surfacing.
- Retain existing court as a multiple-use facility, and re-paint as needed.

3. **Increase the number and type of leisure opportunities**

- Add facilities for adults and families including a walking path and picnic area.

4. **Upgrade security and deter vandalism**

- Provide adequate visibility from the adjacent streets to facilities within the site.
- Install fencing, guardrail, and/or bollards along the open areas of the property boundaries along the streets to prevent access by unauthorized vehicles.
- Provide facilities that are day-use only, without on-site lighting.
- Primarily provide facilities that attract adults and children (age 12 and younger).

5. **Design for low maintenance**

- Minimize plant beds to reduce need for weeding.
- Specify durable materials, furnishings, and equipment.
- Site new trees and built features to facilitate lawn mowing.

6. **Provide barrier-free access for all users.**

- Provide accessible parking. This is especially crucial because the streets in this neighborhood are unsafe for wheelchairs due to the prevalence of potholes.
- Design and build the facilities in this playground to comply with the Americans with Disabilities Act.

Proposed Master Plan

The proposed plan for Oakland Heights Playground includes retaining the existing asphalt court, building a new children's play equipment area, and adding a loop walking trail, picnic area, and play lawn. The plan also includes one handicap-accessible parking space, off of Parkhill Road. This area is best-suited for the parking space since its grades are similar to the existing and proposed use areas, facilitating wheelchair access to those sites.

The existing basketball posts will be removed from the ends of the court, and the four-square and hopscotch games will be re-painted along the south portion of the asphalt. The existing light posts, overhead lines, and swing set will also be removed from the site. A four-foot high fence will be installed between the court and adjacent new play equipment area.

The play equipment area will consist of a section for school-age children and another for preschool-age children, divided by a raised planter that will also function as a seat wall. The school-age section will include a belt swing set and a composite play structure with two slides and several decks and climbers; and the preschool-age section will consist of a smaller and lower composite play structure, a bucket (toddler) swing set, and a spring see-saw. Adjacent to the preschool-age section will be a small play lawn.

Pedestrian access to the site from Parkhill Road will be through the parking area, and access from Garnet Street will be adjacent to the maintenance drive. A loop walkway, about 580 feet in length, will connect the site access areas to the court, play equipment area, play lawn, and picnic area. Three picnic tables will be sited among the grove of mature Maple trees in the southwest portion of the property. One of these tables will be wheelchair-accessible.

The maintenance entrance will be retained in its current location, and a metal gate will be installed. Also, a wooden guardrail will be installed along the street frontages of the site's open areas. Bollards will be installed between the parking area and walkway.

A variety of site amenities will be added, including benches on the north and south sides of the play equipment area, a bench on the south side of the court, trash receptacles at the site entrances and picnic area, a bike rack and information sign near each site entrance, and an identity sign for the playground near the corner of Garnet Street and Parkhill Road.

About one-tenth acre of the woodland will be cleared, and this will occur east and south of the existing lawn area. This clearing is needed to the east to provide sufficient space for the play lawn and walkway, and the removal of low vegetation between the play equipment area and Garnet Street is necessary for visibility into this part of the site. The extent of clearing and specific walkway location and materials in the play lawn area will be subject to Conservation Commission review, since these alterations are proposed near wetlands.

Several new trees are proposed to be planted on the property. Deciduous shade trees will be installed near the street perimeters of the site, to supplement the existing Maple trees. Groups of small flowering trees are proposed near the Parkhill Road site entrance, south of the game court, and in the planter in the play equipment area. Evergreen trees are proposed along portions of the northern side of the site to provide screening for the adjacent residents.



Figure 4: Master Plan

Estimated Construction Costs

The following costs have been estimated for the construction of Oakland Heights Playground. Each of the first three categories includes clearing (where applicable), grading, and lawn seeding associated with that particular facility or area.

Facility:	Cost Estimate:
Children's Play Equipment Area and Play Lawn	\$136,600
Loop Walkway and Picnic Area	\$46,600
One Handicap-Accessible Parking Space	\$23,400
All Other Improvements (including benches, bike racks, trash receptacles, signage, gate, guardrails, fencing, trees, erosion control measures, removal of various existing items from the site, and re-painting the multi-use court)	\$58,000
Total Estimated Cost:	\$264,600.00

Master Plan Approved by
**Worcester Parks and
Recreation Commission**

January 25, 2007

Master Plan Approved by
Worcester City Council

July 17, 2007