



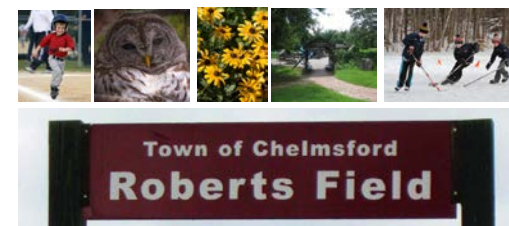
Roberts Field Master Plan

As Recommended by the Roberts Field Improvement Committee

Revision 1: Updated 7/24/17

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Roberts Field Background & History

- Roberts Field is a popular and heavily used neighborhood park in Chelmsford, MA. Located at 260 Old Westford Road, it features a family friendly mix of recreational facilities and managed natural wildlife habitat. A 2017 Chelmsford Open Space and Recreational Facilities Survey identified the Park as one of the top four open spaces and recreational areas used in Town.
- The 20 acre town owned property features a children's playground (Friendship Park), baseball fields (Fitts and Lupien fields) and a multi-use lacrosse field. The natural areas of the park (8.7 acres) include a shallow frog pond(1.5 acres), a certified wildlife habitat (Pollinator Park), and nature walking trails (1mi) around the pond and through its wetland and forested areas. A Habitat and Trail Maintenance Plan was adopted in 2016 to enhance and protect the park's wildlife habitats, while providing safe user access to the natural beauty of the park.
- Originally farmland, in the late 1960's the town purchased the property known as "Robert's Land at Old Westford" to build a school. The school was located elsewhere, and a 1970 Special Town Meeting voted to build the fire station Engine #3 there and designated the remaining area for recreational purposes. The DPW garage was also built in the early 1970s.
- The athletic fields, including baseball backstops and dugouts were built in the early 1970s. The baseball infields have been consistently used and infields maintained by Chelmsford Youth Baseball, and the soccer/football/lacrosse field is currently used and maintained by Chelmsford Youth Lacrosse. The athletic fields are important to both Sports Leagues' under 12 youth programs.
- In the early 1990's, Friendship Park, the parking lot, brick playground pathway and a skate shack near the pond were built. The playground features large wooden, steel and plastic play structures, slides, swings, climbing areas, a sandbox and more. The wooden structures have a 20 year useful life expectancy.
- In 2015, the Town DPW determined that the playground structures at Friendship Park had reached the end of their usable life and needed to be replaced. Because of their condition and wooden build, the DPW determined that no current playground structures could be reused in the new playground. The need to replace the playground and baseball field backstops led to the creation of the Roberts Field Improvement Committee who was charged with creating a Master Plan of Improvements for the Park.

Roberts Field Improvement Committee

Committee Members

- William Arrington – 2017
- Bill Askenburg – 2015-2017, Chair 2017
- Chris Crafts – 2017
- Sherrill Erickson – 2015-16
- Kate Gleisberg – 2017
- Alice Johannan – 2017, Secretary 2017
- Carole Martin – 2015-16
- Margaret Marynowski – 2017
- Charles Micol – 2015-16
- Shayna Micol – 2015-16, Chair 2015-16
- Mark Robillard – 2015-16
- Adelle Stavis – 2017, Vice Chair 2017
- Gregory Whitney -2015-16, Secretary 2015-16

Town Liaisons

- Steve Jahnle – Assistant Director of Public Works
- Evan Belansky – Community Development Director
- Nick Parlee – Town Playground Coordinator
- Katie Messer – Town Conservation Agent
- April Mendez – Conservation Commission
- Laura Merrill – Board of Selectmen

Committee Consultants

- Katie Enright – Howard Stein Hudson
- Kasey Ferreira – Howard Stein Hudson
- Alison LeFlore – Harriman Architects and Engineers
- Jim Connolly – Weston Nurseries
- Terrance Duffy – Weston Nurseries
- James Martin, MS – Consulting Arborist



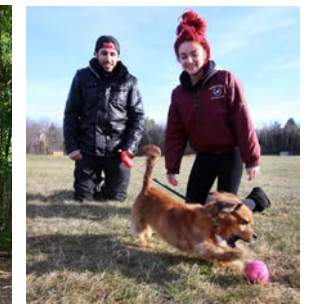
Committee Description & Activity

- The Town of Chelmsford created the Roberts Field Improvement Committee in 2015 charged with the creation of a community-driven Master Plan of improvements for the Park. The mission of the Roberts Field Improvement Committee is to improve, enhance, and beautify Roberts Field and its natural resources, in turn enriching the quality of life for Chelmsford residents and all visitors alike, for present and future generations.
- Roberts Field Improvement Committee Activities
 - (18) Committee Meetings
 - Meeting documents and videos televised and posted at www.RobertsField.org
 - (2) Public Site Walks & (2) Public Input Sessions
 - (1) Park User Survey, (28) Stakeholder Surveys & (2) Public Written Comments
 - (3) Abutter Mailings (2019 mailed pieces, Social Media Postings, Emails, Printed Flyers & CTM)
 - (4) Fundraising Events (\$12,921.01 Raised as of 5/2/17)
 - Presented Recommended Master Plan of Park Improvements and Site Plan



Key Project Goals

- Engage Town residents, Park users and stakeholders through a Community Driven Master Plan Design Process.
- Replace the playground which is at the end of its' usable life and bring it to current safety, ADA compliance, Universal Design, and offering standards.
- Enhance the athletic fields and facilities to make them commensurate with current and anticipated use.
- Deliver new features and improvements that will enhance the Park's usability by everyone irrespective of age or ability, and serve a variety of community groups, while maintaining the Park's "neighborhood family-friendly appeal" and address abutter concerns.
- Leverage and protect the natural beauty of the park to promote users' enjoyment and education regarding nature and wildlife.
- Address the Park's short and long term maintenance needs.
- Improve the overall asset value of Roberts Field Park to the Town of Chelmsford.



Key Survey Results

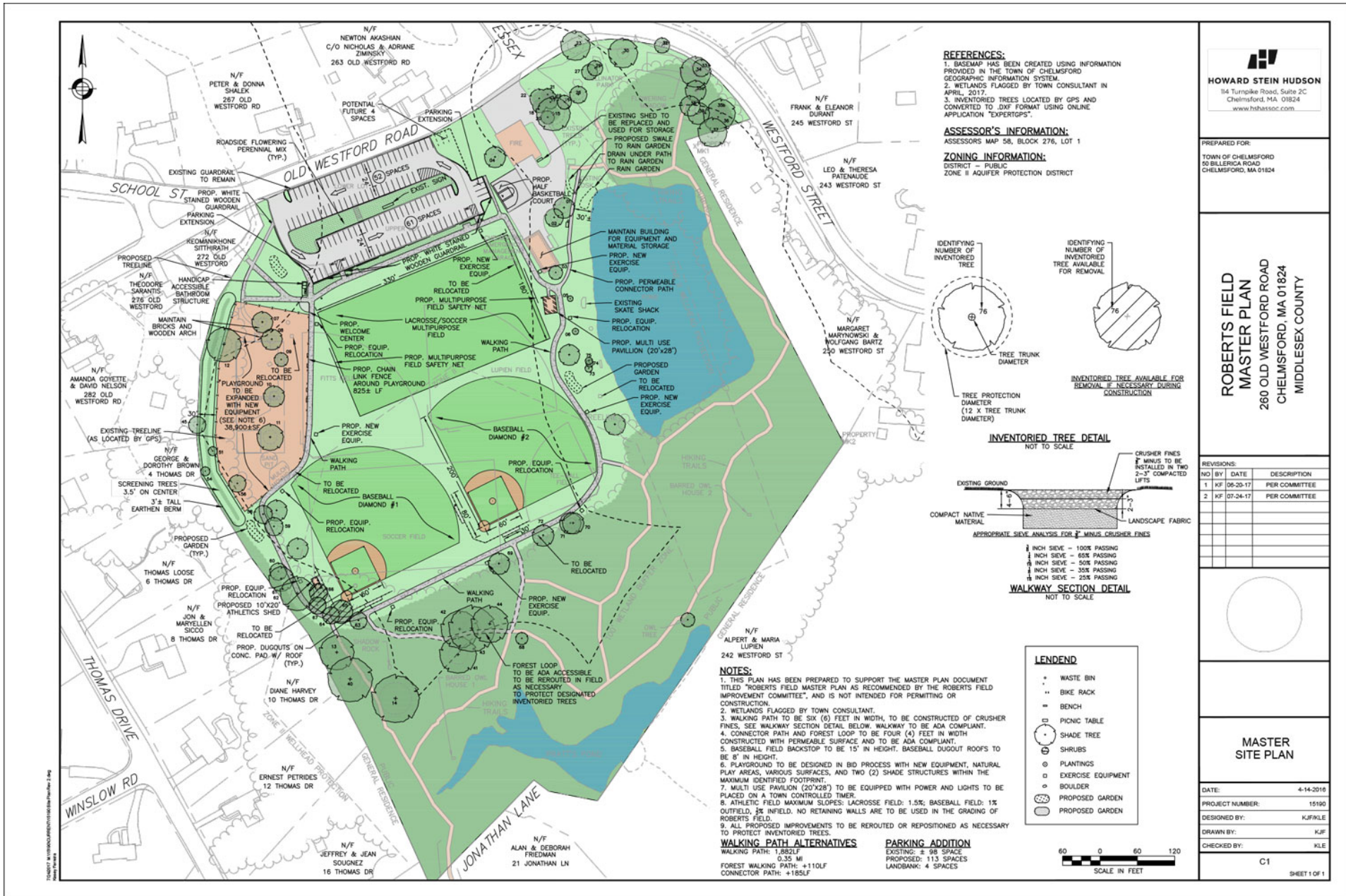
- Park Users and Stakeholders *(see Appendix A)*:
 - Park User Online Survey *(Jan 10 – Feb 1, 2016: 429 responses)*
 - Park Stakeholder Surveys *(28 organizations surveyed)*
 - Public Input Sessions *(Feb 1, 2016, Jun 20, 2017)*
 - Committee Meetings *(Feb 2015 – Jun 2017: 18 meetings)*
- Park User and Stakeholder Surveys identified:
 - Community Planning Concerns and Constraints
 - Preserve open space, trees, wetlands, and other natural Park resources.
 - Maintain Park's dawn to dusk usage hours.
 - Minimize negative impact and security risks to Park users, neighbors and abutters.
 - Develop improved Park Maintenance Plan and utilize long lasting, low maintenance multi-use features.
 - Address Park facility usage and potential facility scheduling conflicts.
 - Minimize playground and athletic field renovation down time.
 - Identify cost sharing opportunities and deliver the most value for the dollars spent.
 - Community Suggestions for Park Improvements
 - New Larger Playground, Bathroom Facilities, More Parking, Improved Athletic Fields, Security Cameras, Lighting, Bandstand, Protected Area for Wildlife, Basketball Court, More Open Space, Interpretative Nature Trails, Picnic Pavilion, Walking Track, Exercise Circuit Machines, Water Splash Pad, Tennis Courts, Bocce Ball Court, Beach Volleyball Court, Pony Size Baseball Field, Sports Field House, Snack Shack, Cricket Field, and Disc Golf Course



Committee Considered Park Feature & Improvement List *(See Appendix C)*

Park Feature	Decision	Committee Notes
New, larger playground	Accept	Strong community support; primary objective of the master plan
Bathroom Facilities	Accept	Locate near the playground
More Parking (qualified)	Accept	Maximize parking in existing footprint; ensure adequate ADA parking, Land bank parking for future expansion if needed.
Security Cameras	Accept	Placement and server, monitored at CPD dispatch
Lighting	Accept	For security; no nighttime use of Park
Protected area for wildlife	Accept	Already in plans. Extend current Land Management practices to other areas of Park.
Basketball court	Accept	Half-court hoop combined with 4-Square, hopscotch, and fire fighter graphics. Might be great for older kids.
More open space	Accept	Keep park field area open but avoid removing trees
Interpretative Nature Trails	Accept	"Nature Walk" - ID animal tracks, trees & pollinators. Spring 2017 Eagle Scout project to add 18 birdhouses and 3 informational signs.
Picnic pavilion	Accept	Multi-use; strong community support; need for shade. Pond side and near playground
Walking Track	Accept	Strong community support; retains open space
Exercise Circuit Machines	Accept	Repair existing, add new machines to benefit adults and senior users
Bandstand/performance pavilion	Reject	"Chelmsford Community Band" and multi-use picnic pavilion. Community support but some abutter opposition.. 2-5 Vote Against.
Water Splash Pad	Reject	Duplicative, planned for Varney, limited seasonal use, limited single use, great potential to change character of the Park
Tennis Courts	Reject	Duplicative ; removes green space
Bocce Ball Court	Reject	Duplicative; requires maintenance, limited single use
Beach Volleyball Court	Reject	Not multi-use; removes green space
Pony Size Baseball Field	Reject	CYBL is not looking for this size baseball field, not consistent with age group using Park, CYBL indicated need for two bball fields
Sports Field House	Reject	Removes green space; no interest from athletic groups, long term maintenance needs
Snack Shack	Reject	For events, but may harm business at the adjacent little store, and food trucks would be allowed. Location TBD, near bathrooms?
Cricket Field	Reject	Too large for field area, would exclude baseball and lacrosse field
Disc Golf Course	Reject	Not conducive to park layout, would interfere with other park users and require clearing natural areas

Master Plan Site Plan Drawing



Proposed Project Budget

Master Plan Improvements	Master Plan Budget		Town Budget		Total Budget			Est. Annual Maintenance
	Low	High	Low	High	Low	High		
Athletic Fields	\$ 103,500	\$ 136,000	\$ 1,050	\$ 1,050	\$ 104,550	\$ 137,050	15%	\$ 3,500
Natural Playground	\$ 392,800	\$ 455,350	\$ 700	\$ 700	\$ 393,500	\$ 456,050	50%	\$ 2,800
Pond Side Multi-Use Pavilion	\$ 16,300	\$ 27,970	\$ 350	\$ 350	\$ 16,650	\$ 28,320	3%	
Exercise Circuit/Walking Track	\$ 33,135	\$ 36,969	\$ -	\$ -	\$ 33,135	\$ 36,969	4%	
Portable Bathroom Facility	\$ 4,000	\$ 5,000	\$ 350	\$ 350	\$ 4,350	\$ 5,350	1%	\$ 1,860
Hardscape Play Area	\$ 17,575	\$ 20,175	\$ 350	\$ 350	\$ 17,925	\$ 20,525	2%	
Upper & Lower Parking Lots	\$ 14,754	\$ 15,490	\$ 1,000	\$ 6,500	\$ 15,754	\$ 21,990	2%	
Engine #3 Driveway Area	\$ -	\$ -	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	0%	
DPW Parks Garage	\$ -	\$ -	\$ 14,950	\$ 22,100	\$ 14,950	\$ 22,100	2%	
Park Welcome Area	\$ 11,025	\$ 12,525	\$ -	\$ -	\$ 11,025	\$ 12,525	1%	
Natural Areas of the Park	\$ 108,530	\$ 140,900	\$ 1,200	\$ 1,200	\$ 109,730	\$ 142,100	16%	\$ 1,200
Safety Improvements	\$ -	\$ -	\$ 24,800	\$ 31,200	\$ 24,800	\$ 31,200	3%	
	\$ 701,619	\$ 850,379	\$ 47,250	\$ 66,300	\$ 748,869	\$ 916,679	100%	\$ 9,360

22%

- Master Plan Budget: new expenditure, Town Budget: existing Town budget expenditure
- Consistent with comparable Chelmsford park project costs (*See Appendix H*)
- +22% Low to high budget estimate difference

Proposed Project Timetable

- The total cost for recommended improvements may need to be funded over multiple fiscal years and the Town will identify funding priorities and the implementation schedule.
- The Committee recommends that replacing the Playground is a priority and suggests:
 - Fall 2017: Town to seek playground design and equipment bids, identify ADA compliance needs, and acquire Community feedback on playground proposal and design
 - Late fall/early winter 2017: Remove playground equipment, prep playground footprint, build playground landforms, and other prioritized projects
 - Spring/summer 2018: Install playground and implement other prioritized projects
- Remaining Master Plan Project Schedule to be determined by Town

Park Maintenance Recommendations

- Create and charge Roberts Field Advisory Board to complete detailed Park Maintenance Plan including:
 - Park Maintenance Overview (*Appendix I*)
 - Planting and Maintenance Requirements (*Appendix J*)
 - Park Maintenance Standards and Guidelines
 - Tree Protection Guidelines (*Appendix E*)
 - Oriental Bittersweet Control (*Appendix F*)
 - Fertilization, Herbicide and Pesticide Guidelines
 - Park Rules and Regulations
- Town DPW will enact Stakeholder Maintenance Memorandum of Understandings (MOU) to clearly define Park maintenance responsibilities and schedule expectations with the following Stakeholders:
 - Chelmsford Youth Baseball
 - Chelmsford Youth Lacrosse
 - Friends of Roberts Field
 - New Garden Stakeholders
- Park Stakeholders will have some annual Park maintenance responsibilities outlined in a Memorandum of Understanding.
- Town Facilities' maintenance responsibilities will continue to include mowing, trash removal and structure and playground maintenance and repairs.
- Park facility usage schedule to be maintained by Town Facilities, including athletic fields and pavilion.

Project Implementation Recommendations

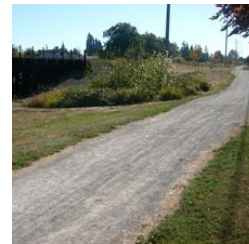
- Town Engineering (DPW) will oversee and implement Park improvements
- Roberts Field Advisory Board would provide Citizen input and oversight, project implementation transparency, seek cost sharing opportunities and help coordinate with other boards and groups involved with project implementation
- Committee Expectations and Standards will be included when developing project Request For Proposals (RFP) and implementing projects.

Project Impact on Abutters

- Park Usage Information *(see Appendix B)*
- Improvements will increase Park usage
 - Improved Playground and internal Walking Trail
- No demand for neighborhood parking
 - More onsite parking spaces (15)
- Effect on Drainage
 - Town DPW Engineering states that there will be no drainage effect to Abutters, with drainage maintained to Park interior.
- Added Landscaping and Plan Design To Minimize Noise
 - Recommended sound/visual mitigation tactics
 - Site Plan feature placement and design
 - Playground design will address with play structure, landform and path locations
 - Playground abutters: added Berms with sound mitigating landscaping (i.e. Thula Green Giant Arborvitae)

Feature & Improvement Recommendation

- Larger Natural Playground
- Athletic Fields
- Pond Side Multi-Use Picnic Pavilion
- Walking Trail & Exercise Circuit
- Portable Bathroom Enclosure
- Hardscape Play Area
- Upper & Lower Parking Lots
- Engine #3 Driveway Area
- DPW Parks Garage
- Park Welcome Area
- Natural Park Area Improvements
- Safety Improvements



Athletic Fields

- One multi-use lacrosse field, two baseball fields, irrigation system and storage sheds. (\$105k-\$137k)
- Expectations
 - Vinyl coated chain link fencing for backstop (15') and dugouts, no outfield fencing, dugout roofs (8') for shade, cement dugout floors
 - Baseball fields located in back of Park and lacrosse field moved forward, to improve Park aesthetics and view
 - Proper drainage for baseball fields
 - No soccer goals for lacrosse field, back goal safety screens (2)
 - CYBL storage shed adjacent to dugout, CYLA adjacent to Engine #3
 - Stakeholder MOU defining maintenance responsibilities
 - Irrigation System and Lawn Service Program
 - Accommodate MedFlight usage and emergency vehicle staging (*Appendix L*)
 - Nearby garbage cans



I. Athletic Fields Feature Information	Master Plan Budget		Town Budget		Total Budget			Est Yearly Maint Cost
	Low	High	Low	High	Low	High		
	\$ 103,500	\$ 136,000	\$ 1,050	\$ 1,050	\$104,550	\$ 137,050	15%	\$ 3,500
Lacrosse Field - grading, loaming and seeding (lower cost if Town supplies materials)	\$ 15,000	\$ 18,000						
(2) Back Goal Screen between field and walking track: 15'-20' tall poly mesh screen on pulleys	\$ 3,000	\$ 4,000						
(2) Baseball Fields with backstops and dugouts (dugout roof, fencing, clay infield, grading and seeding)	\$ 48,000	\$ 51,500						
(2) Storage Shed for athletic fields (low - 8'x12' \$5k, high - 16'x24' \$15k) basic options	\$ 10,000	\$ 30,000						
Irrigation system and well (Deep well, irrigation on all fields and grass areas, Pollinator Park)	\$ 27,500	\$ 32,500						
(3) garbage bin and footers			\$ 1,050	\$ 1,050				
Maintenance: Cost = Fertilization lawn service program; Trash pickup, mowing, bathrooms - Town; BB clay infields - CYBL, LAX striping - CYLA								\$ 3,500

Pond Side Multi-Use Picnic Pavilion & Benches

- 20' x 28' Multi-use Pavilion with three removable picnic table picnic/seating area, winter skate seating, and performance area for small bands or theatre performances. Replace three pond side benches. (\$17k-\$29k)
- Expectations:
 - Includes electricity and interior lighting (timer/switch in garage)
 - (3) movable thermoplastic picnic tables
 - No walls
 - Consistent Park wooden structure style
 - Minimal visual obstruction
 - 3 Thermoplastic pond side benches
 - Nearby garbage can
 - ADA compliant connecting path to Walking Trail



Pavilion design TBD



III. Pond Side Multi-Use Pavilion Feature Information	Master Plan Budget		Town Budget		Total Budget			Est Yearly Maint Cost
	Low	High	Low	High	Low	High		
	\$ 16,300	\$ 27,970	\$ 350	\$ 350	\$ 16,650	\$ 28,320	3%	\$ -
20'x28' Pavilion (low - wood \$12.7k, high - metal \$22.6k) with power and interior lights	12700	\$ 22,600						
(3) Picnic Tables (6' or 8' metal - \$1000-\$1040)	3000	\$ 3,120						
(1) garbage bin and footer			\$ 350	\$ 350				
(3) Pond side benches (metal \$200-\$750 each)	600	\$ 2,250						
Maintenance: Garden - TBD, All Other - Town								

Walking Trail & Exercise Circuit

- Interior 6' wide .35 mile long permeable walking track, ringed with permanent exercise circuit stations, with two shorter 4' wide permeable pathways in forest and pond side. (\$33k - \$37k)
- Expectations:
 - Permeable pathways = "Crusher Fines" pathways
 - ADA Compliant walking track and pathways
 - Relocate six existing exercise stations
 - Repair barbell and leg press machines
 - Add four new stations beneficial for seniors
 - Parallel Bars, Mobility Balance Station, Stretch Station and Elliptical Machine
 - Add rubber mats for each station
 - Add 4' wide permeable Pond Shore Connector and Forest Loop paths
 - Path locations will be adjusted to protect designated inventoried trees



IV. Exercise Circuit/Walking Track (.35 mi)	Master Plan Budget		Town Budget		Total Budget		Est Yearly Maint Cost
	Low	High	Low	High	Low	High	
Feature Information	\$ 33,135	\$ 36,969	\$ -	\$ -	\$ 33,135	\$ 36,969	4%
Interior Walking Track (6' wide/1882' long, \$10 LF)	\$ 18,850	\$ 22,584					
Pond Shore Connector & Forrest Loop: Crusher Fines Path (4' wide/295' long, \$8 LF,)	\$ 2,360	\$ 2,360					
Exercise Equip (repairs- \$600, new -stretching \$2.3k, parallel bars \$1.15k, mobility \$.8k, air walk \$2.9k)	\$ 7,850	\$ 7,850					
Informational Signage (\$75 - \$175)	\$ 75	\$ 175					
Rubber matting for exercise stations (6'x6' mats \$200 each, 10 stations, Est 2x per station)	\$ 4,000	\$ 4,000					
Maintenance: Garden - TBD, All Other - Town							

Portable Bathroom Enclosure

- Shade structure to house two portable bathrooms with bench for seating or diaper changing. (\$4k - \$5k)
- Expectations
 - Parking lot access
 - Consistent Park structure style
 - Walls with some visibility
 - Nearby garbage can and bike rack
 - Located in front of Park, near parking lot, playground and Welcome Area
 - ADA handicap portable bathroom units



Pavilion design TBD



V. Portable Bathroom Facility Feature Information	Master Plan Budget		Town Budget		Total Budget			Est Yearly Maint Cost
	Low	High	Low	High	Low	High		
	\$ 4,000	\$ 5,000	\$ 350	\$ 350	\$ 4,350	\$ 5,350	1%	\$ 1,860
Portable bathroom enclosure (large enough for 2 handicap units, bench seating, screened walls)	\$ 4,000	\$ 5,000						
(1) garbage bin and footer - reuse			\$ 350	\$ 350				
(2) handicapped portable bathroom rental (cost noted in maintenance)								
Bike rack - reuse from playground								
Maintenance: Cost = Bathroom Rental (Handicap \$105/month, reg \$50; clean and stock once a week), Garden - TBD, All Other - Town								\$ 1,860

Hardscape Play Area

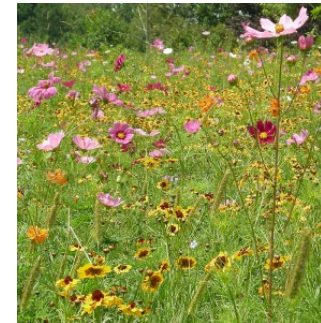
- Half court basketball court and hardscape play area adjacent to Engine #3 and the DPW garage. (\$18k - \$21k)
- Expectations
 - Painted games like four square & snakes and ladders
 - Fire Station or Nature themed CHS Art class paint project
 - Single basketball goal on gooseneck pole
 - Nearby bike racks and garbage can
 - Park Rules sign (hours, vehicle access, parking, dogs)



VI. Hardscape Play Area Feature Information	Master Plan Budget		Town Budget		Total Budget		Est Yearly Maint Cost
	Low	High	Low	High	Low	High	
Next to Engine #3 (grade, gravel, 3.5 inches mix, lines, hoop, half basketball court, four square)	\$ 17,575	\$ 20,175	\$ 350	\$ 350	\$ 17,925	\$ 20,525	2%
Bike rack - reuse from Town inventory							
Park Rules sign (\$75 - \$175 hours, vehicle access, parking, dogs)	\$ 75	\$ 175					
(1) garbage bin and footer			\$ 350	\$ 350			
Maintenance: Garden - TBD, All Other - Town							

Upper and Lower Parking Deck

- Add additional parking spaces, restripe upper and lower parking deck and replace upper parking lot metal guardrails with wooden guardrails. (\$16k-\$22k)
- Expectations
 - Existing parking spaces: 93
 - Proposed parking spaces: 113
 - Handicap parking spaces: 3
 - Land Bank parking spaces: 4
 - New painted lines (vertical orientation)
 - New upper parking lot wooden guardrails (stained white wood)
 - Maintain field access points from parking lot (stretcher width)
 - Hydroseeded plantings under guardrails and between upper and lower parking lot (flowering meadow roadside mix)
 - (2) property signs (certified pollinator habitat)
 - Replace existing damaged Parking Lot Sign “Roberts Field”
 - Blocked vehicle field access from new parking lot side wooden guardrails



VII. Upper & Lower Parking Lots	Master Plan Budget		Town Budget		Total Budget		Est Yearly Maint Cost
	Low	High	Low	High	Low	High	
Feature Information	\$ 14,754	\$ 15,490	\$ 1,000	\$ 6,500	\$ 15,754	\$ 21,990	2%
White wooden parking lot guardrails (requires staining)	\$ 13,500	\$ 13,500					
Restripe upper and lower parking lots (low - paint, high - thermo)			\$ 500	\$ 6,000			
Replace sign (\$500 "Roberts Field") and add (2) property signs (\$75 each "Certified Pollinator Habitat")	\$ 150	\$ 150	\$ 500	\$ 500			
Landscaping (guardrails & upper/lower parking lots - Flowering roadside seed mix 9200 sqft x \$.12-\$.20)	\$ 1,104	\$ 1,840					
Maintenance: All Other - Town							

Engine #3 Driveway Area

- Regrade and repave sections of Engine #3's driveway. Rebuild drainage headwall and build rain garden. (\$2k - \$3k)
- Expectations
 - Maintain emergency vehicle access to fields
 - Neighborhood walking entryway to Park
 - Connects to Westford St/Old Westford Road sidewalks
 - Work with drivers to prevent plow damage to lawn
 - Regrade to correct water pooling
 - Redirect drainage to new rain garden (budget item in Natural Area Improvements)



VIII. Engine #3 Driveway Area	Master Plan Budget		Town Budget		Total Budget		Est Yearly Maint Cost
	Low	High	Low	High	Low	High	
Feature Information	\$ -	\$ -	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	0%
Repair swale, regrade and patch driveway along side and back of Engine #3, drain into rain garden			\$ 2,500	\$ 2,500			
<i>Maintenance: Garden - TBD, All Other - Town</i>							

DPW Parks Garage

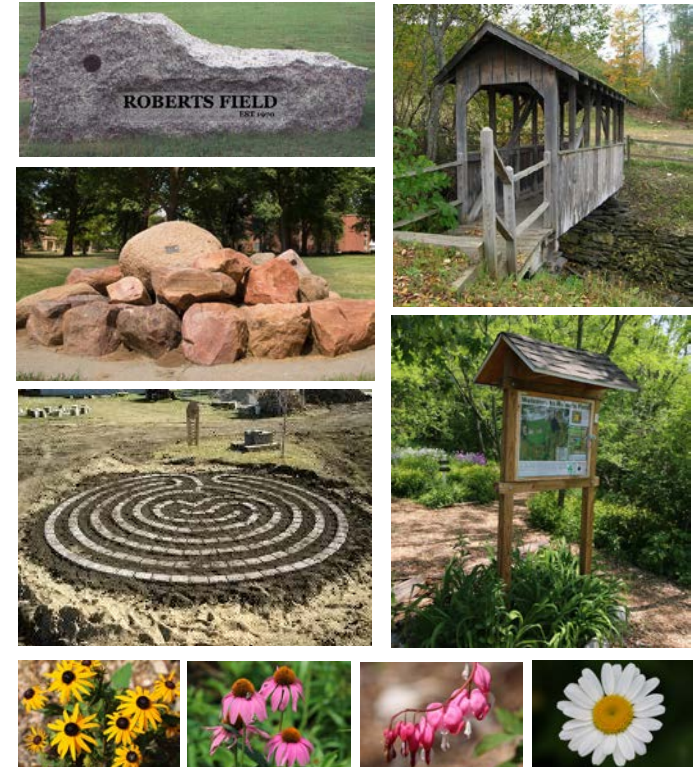
- Repair garage roof, replace windows and doors, grade and seed perimeter, add gutters. (\$15k - \$22k)
- Expectations
 - Garage to be used for storage by Chelmsford Emergency Management
 - Emergency Management plans to use the entire garage for storage
 - No hazardous materials stored inside garage
 - No temporary storage adjacent to garage (no trailers or buildings)
 - No material stored or separated outside of garage
 - Gutter drainage to new garden in rear of garage (budget item in Natural Area Improvements)
 - Surrounding area to be graded and seeded with grass



IX. DPW Parks Garage Feature Information	Master Plan Budget		Town Budget		Total Budget		Est Yearly Maint Cost
	Low	High	Low	High	Low	High	
	\$ -	\$ -	\$ 14,950	\$ 22,100	\$ 14,950	\$ 22,100	2%
Repair Parks garage (\$20,000 includes new door and windows.)			\$ 13,000	\$ 20,000			
Add Gutters that drain into garden			\$ 1,500	\$ 1,500			
Grade and seed area around garage (\$200), add new garden to rear of building (\$250-\$400)			\$ 450	\$ 600			
Maintenance: Garden - TBD, All Other - Town							

Park Welcome/Community Area

- Create Park Welcome/Community Area (\$11k-\$13k)
- Expectations
 - Add Information Kiosk
 - Add “Roberts Field” stone marker and rock seating
 - Add driveway garden
 - Locate bathrooms
 - Add “New England Covered Bridge” to pedestrian bridge that connects to store
 - Joint project approval with abutter and Town
 - Bridge and roof should be ADA compliant
 - Add spiral meditation labyrinth
 - Budgeted placeholder location – Playground location preferred



X. Park Community/Welcome Area	Master Plan Budget		Town Budget		Total Budget		Est Yearly Maint Cost
	Low	High	Low	High	Low	High	
Feature Information	\$ 11,025	\$ 12,525	\$ -	\$ -	\$ 11,025	\$ 12,525	1%
"New England Covered Bridge" addition for store bridge	\$ 6,000	\$ 7,000					
Drive way garden	\$ 3,000	\$ 3,000					
"Roberts Field" stone marker (Etched Stone = \$1200) and Sitting Stones	\$ 1,200	\$ 1,200					
Meditation labrynth (stones from DPW)	\$ 500	\$ 1,000					
(1) garbage bin and footer - reuse	\$ -	\$ -					
Information Kiosk (Kiosk (\$250) Park Map, Park Events; Sign (\$75) rules)	\$ 325	\$ 325					
Maintenance: Garden - TBD, All Other - Town							25

Safety Improvements

- Install security cameras and underground utilities (\$25k - \$31k)
- Expectations
 - 3 security cameras and upgraded server, with video feed to CPD dispatch
 - Move Park utility wires underground, per CPD safety recommendation
 - Implementation to be scheduled with other similar Town projects



XII. Safety Improvements	Master Plan Budget		Town Budget		Total Budget			Est Yearly Maint Cost
	Low	High	Low	High	Low	High		
Feature Information	\$ -	\$ -	\$ 24,800	\$ 31,200	\$ 24,800	\$ 31,200	3%	\$ -
Security Cameras (3 cameras, upgraded server, approx 300yds fiber, does not include burying fiber)			\$ 20,000	\$ 24,000				
Underground utilities (street to back playground - 450', garage to pavilion 150')			\$ 4,800	\$ 7,200				
Maintenance: All - Town								

Recommended Next Steps

- Roberts Field Improvement Committee Voted to approve Final Master Plan at July 18th Committee meeting
- Secure Park Master Plan approval from Board of Selectmen at July 31st BOS meeting
- Dissolve Roberts Field Improvement Committee
- Recommend forming Roberts Field Advisory Board
 - Citizen Input and Oversight of Master Plan implementation and bid process
 - 3-5 Members reporting to the Town Manager
 - Continuity with Roberts Field Improvement Committee
 - Gather public input for Playground RFP and Design
 - Finalize Park Maintenance Plan
 - Explore and develop cost sharing opportunities
 - Seek corporate/organizational sponsorships, grants and donations
 - Assist with Volunteer project coordination
 - Assist with Playground Community Build structure installation
 - Meet as needed
 - Continue BOS and Con Com liaison assignments
- Recommend playground project start Fall 2017
 - Prep Playground site area late Fall/early Winter 2017
 - Begin construction Spring 2018
- Town to determine funding and implementation schedule for Master Plan



Appendices

- Appendix A: Park Surveys
 - Park User: What do you do at Roberts Field? – page 30
 - Park User: What Features would improve the Park? – page 31
 - Park User: Survey Questions, Comments and Concerns – page 32
 - First Public Input Session: Questions Asked and Comments Provided –page 33
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- Appendix B: Park Usage Information
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- Appendix C: Committee Park Feature Selection Criteria – page 39
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- Appendix G: Universal Design and Natural Playground Theme – page 43
- Appendix H: Supporting Cost Data
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- Appendix I: Park Maintenance Overview – page 46
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- Appendix L: Why Dredge The Pond – page 49
- Appendix M: Nature Scavenger Hunt Detail Images & Ideas – page 50
- Appendix N: Friendship Park Playground Structures – page 51 & 52

Park User Survey: What Do People Do at Roberts Field?

Q2 What types of activities do you participate in at Roberts Field? (Select all that apply)	
Answer Choices	Responses
Bring children to Friendship Park playground	75.18%
Enjoy the natural open spaces	44.15%
Walk on the trails	35.32%
Play lacrosse, baseball or soccer	31.50%
Ice skate	20.29%
Walk dogs	18.85%
Sit pond side	16.71%
Exercise on circuit machines	9.79%
Run/Jog	8.35%
Birdwatching	7.40%
Other (please specify)	10.02%
Total Respondents: 419	

Other Activities at the Park

- Practice golf with plastic air-filled balls
- Watch baseball games
- Stargazing
- Run around with the kids/ fly kites
- Picnic, fly kite, play frisbee, sit and read
- Hang out with friends
- Snowshoe in winter
- Picnic
- Catching frogs
- Sand area and mulch mound

Park User Survey: What Features Would Improve the Park?

Answer Choices	Responses
Bathroom Facilities	71%
New larger, updated, age-appropriate playground	60%
Water Splash pad for children	43%
Walking track	41%
Picnic Pavilion	36%
Interpretative nature trails	28%
More natural beauty and open spaces	26%
Basketball court	25%
Protected areas for wildlife and native plants	25%
Small outdoor ampitheatre or bandstand	21%
Surveillance video cameras	18%
Sports field house and snack-shack	18%
More parking	15%
Larger pony sized baseball field	11%
Other (please specify)	10%
Beach volleyball court	9%
Bocce ball court	9%
Tennis court	6%

Total Respondents :421

Other Features that would improve the Park

- Wi-Fi, electric car charging stations
- Horseshoes
- Control the bitter sweet aggressive vine along the woods
- A playground that also includes space/equipment so handicapped children can participate with their peers.
- Soccer field
- Better ice skating facilities
- New Location for planned Bandstand, instead of on the Town Common
- Shaded seating near the playground.
- Consistent mowing & grounds keeping
- Maintain and fix up the baseball fields properly
- If large enough a disc golf course
- More security lights, if more economical than cameras

Park User Survey: Questions, Comments or Concerns

Park User survey comments were varied and sometimes contradictory, but there were comments and concerns that were mentioned repeatedly by many Park Users (**underlined and bolded below**)

- **Thank you for all of your efforts to improve Roberts Field!**
- I would like to see these improvements while still being able to **maintain the neighborhood/community feel.**
- Need to continue to **support the corner store** business.
- **Make Roberts unique and not duplicative** would be nice i.e. focus on older adults and younger children's need for recreation.
- **Playground could use updating**, though, and needs removal of growth and poison ivy.
- All equipment needs to be durable, rust-proof.
- I would **not like to see bathroom facilities** added, as I would be concerned about **cleaning and maintenance and misuse** issues.
- **Bathrooms are a must.** Splash pad would be fantastic. Updating main structure is much needed!
- Features like a water splash pad **could be a draw, as will other features, to non residents**
- Plant more trees in park for **shade**
- Choose natural options that are either **self-sustaining and require minimal maintenance.**
- **Lights** for late afternoon early evening walks/ play/ sports
- Definitely need **more parking**
- There is **too much parking**
- Ball fields and soccer fields are **poorly maintained**
- I like Roberts Field as a **wide open park/green space.**
- Whose care and control and wallet is this run by?
- Fix up one baseball field, make a 50/70 field with fences...make two basketball courts for summer ball and just rec ball...fix up playground
- Keep it natural, peaceful. Don't turn it into another sports field

First Public Input Session: Questions Asked & Comments Provided

The Committee attempted to investigate and answer all of the questions and comments provided by the Community about the Park and Master Plan, including those asked and offered at the Public Input Sessions.

Questions:

- What are the ideas for fundraising? First Steps?
- Will Master Plan (MP) include long-term maintenance needs?
- Will MP include budget and staffing?
- Who meets with Howard Stein Hudson (HSH)? Who gives them input? What is the timeline? When can the public meet with HSH?
- What are the boundaries of the project? Is there a plot plan?
- Have you gotten Town feedback about traffic and maintenance? Trash pick-up and mowing? Police reports?
- How will new features affect abutters? Drainage? Parking? Noise?
- Will building a wildlife friendly habitat continue?
- Will there be a discussion of expected usage increases for features?
- How are decisions going to be made about types of playground and equipment?
- Has there been any input from Town sports who use Roberts Field?

Comments:

- Maintenance is an issue now at Roberts Field
- Drawing people in with too many features is a concern
- Keep the neighborhood feel of the park
- The pond needs to be deeper to keep it from drying out
- People are concerned with the water splash pad and bathroom facilities and the effect on the neighborhood
- Cameras will deter crime
- Nervous about effect of drainage and grading on flooding basement
- Problem with standalone bathroom at the park
- Commuters use the porta potty now, bathroom will get lots of use
- Abutter concerned that larger playground will create more noise



Roberts Field Stakeholder Surveys: Information Collected

- Surveys were sent to and information was gathered from over 28 Chelmsford groups and organizations including:

Chelmsford Youth Baseball
Chelmsford Youth Basketball League
Chelmsford Youth Lacrosse
Chelmsford Youth Soccer Association
Chelmsford Girls Softball League
Chelmsford Police Athletic League
Chelmsford Pop Warner
Merrimack Valley Cricket Club
Chelmsford Police
Chelmsford Fire
Chelmsford DPW - Engineering
Chelmsford DPW - Public Facilities
Chelmsford Public Schools - Athletic Department

Chelmsford Community Development
Chelmsford Community Band
Chelmsford Parade Committee
Chelmsford Tree Committee
Chelmsford Animal Control Officer
Chelmsford Boy Scouts
Rosie's Town Store/Laer Realty
KDK Foundation
Chelmsford Agway
Open Gate Garden Club
Country Lane Garden Club
Chelmsford Garden Club
Golden Chain Garden Club

- Information gathered included Park usage interest & intent, maintenance, cost sharing opportunities, scheduling, safety considerations, design input, and more.
- This information helped the Committee to shape the Park Feature List and Master Plan of Improvements.

Expected Park Usage: Athletic Fields

- Chelmsford Youth Baseball and Chelmsford Youth Lacrosse reported their expected daily Park usage throughout the year, including the estimated number of parked cars for games and practices.
- The heaviest field usage is in April – June, mainly on the weekends.
 - CYBL Saturday and Sunday reported “# of cars” represents multiple daily games.

Roberts Field Improvement Committee																	
2017 Estimated Athletic Field Usage																	
Athletic Organization: Baseball										Athletic Organization: Chelmsford Youth Lacrosse							
		Weekday Use					Weekend Use		Weekday Use					Weekend Use			
		Mon	Tue	Wed	Thur	Fri	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Sun		
JAN	Time																
	# Players																
	# Cars																
FEB	Time																
	# Players																
	# Cars																
MAR	Time								5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm	League games played time vary			
	# Players								25 -45	25 -45	25 -45	25 -45	25 -45		40		
	# Cars								30	30	30	30	30		40		
APR	Time	5:30 - 7:30 PM	5:30 - 7:30 PM	5:30 - 7:30 PM	5:30 - 7:30 PM	5:30 - 7:30 PM	9:00 AM - 7:00 PM	9:00 AM - 7:00 PM	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm		League games		
	# Players	40-50	40-50	40-50	40-50	40-50	180-200	40-50	25 -45	25 -45	25 -45	25 -45	25 -45		40		
	# Cars	50-60	50-60	50-60	50-60	50-60	240-250	40-50	30	30	30	30	30		40		
MAY	Time	6:00 - 8:00 PM	6:00 - 8:00 PM	6:00 - 8:00 PM	6:00 - 8:00 PM	6:00 - 8:00 PM	9:00 AM - 7:00 PM	9:00 AM - 7:00 PM	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm		league games		
	# Players	40-50	40-50	40-50	40-50	40-50	180-200	40-50	25 -45	25 -45	25 -45	25 -45	25 -45		40		
	# Cars	50-60	50-60	50-60	50-60	50-60	240-250	40-50	30	30	30	30	30		40		
JUN	Time	6:00 - 8:00 PM	6:00 - 8:00 PM	6:00 - 8:00 PM	6:00 - 8:00 PM	6:00 - 8:00 PM	9:00 AM - 7:00 PM	9:00 AM - 7:00 PM	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm	5:30 - 8:30pm		league games		
	# Players	40-50	40-50	40-50	40-50	40-50	180-200	40-50	25 -45	25 -45	25 -45	25 -45	25 -45		40		
	# Cars	50-60	50-60	50-60	50-60	50-60	240-250	40-50	30	30	30	30	30		40		
JUL	Time	6:00 - 8:00 PM	6:00 - 8:00 PM	6:00 - 8:00 PM	6:00 - 8:00 PM	6:00 - 8:00 PM			5pm - 8pm		5pm - 8pm		5pm - 8pm				
	# Players	20-30	20-30	20-30	20-30	20-30			60-90		60-90		60-90				
	# Cars	30-40	30-40	30-40	30-40	30-40			20		20		20				
AUG	Time								5pm - 8pm		5pm - 8pm		5pm - 8pm				
	# Players								60-90		60-90		60-90				
	# Cars								20		20		20				
SEP	Time					6:00 - 8:00 PM	10:00 AM - 2:00 PM										
	# Players					40-50	80-90										
	# Cars					50-60	80-90										
OCT	Time					6:00 - 8:00 PM	10:00 AM - 2:00 PM										
	# Players					40-50	80-90										
	# Cars					50-60	80-90										
NOV	Time																
	# Players																
	# Cars																
DEC	Time																
	# Players																
	# Cars																

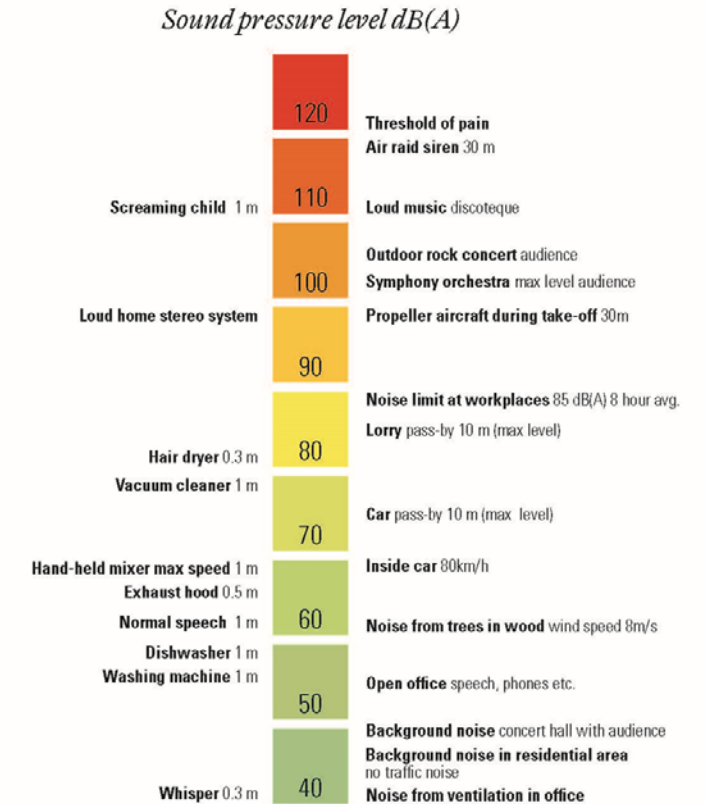
Park Parking Lot Usage

- CPD Parking Lot Traffic Study planned for July 2017
 - New data will be added as it becomes available
 - Expectation that quarterly traffic data will be added

Park Sound Level (db) Measurements

- Sound Level Measurements
 - Sound Levels (db) measured with Chelmsford Board Of Health equipment
 - Roberts Field - Upper Parking Lot
 - Saturday 6/13/17, 10:30am-10:45am (2 baseball games)
 - 62db-64db
 - Saturday 6/13/17, 11:45am-12:00pm (2 baseball games)
 - 64db-71db
 - Saturday 6/13/17, 3:30pm-4:00pm (2 baseball games)
 - 70db-72db
 - Sunday 6/14/17 , 8:30pm-9:45pm (CHS Stargazing event)
 - 56db-64db
 - Roberts Field - Pondsides
 - Saturday 6/13/17, 4:00pm-4:15pm (1 baseball game) 56db-60db

Typical noise levels



Expected Park Usage: Safety Responses

- Chelmsford Police Department (Chief James Spinney)
 - The Park is well monitored by police. Roberts Field had 168 recorded property checks in 2016, meaning CPD officers proactively visited the property (not initiated by a call).
 - Roberts Field had a “handful of reports involving suspicious vehicles and people”. No vandalism or other serious violations were reported in 2016.
- Chelmsford Fire Department (Chief Gary Ryan)
 - Very few emergency calls at the Roberts Field. Since January 2015 there have been only 6-7 vehicle lockouts or medical calls at the three Chelmsford Parks including Roberts Field, Varney Park and Harmony Park (mostly lockouts).

Committee Park Feature Selection Criteria

Using the data collected, the Committee created a list of criteria to help guide which Park features and improvements to include in the Master Plan.

Where possible, select Park Features and make Park Improvements that:

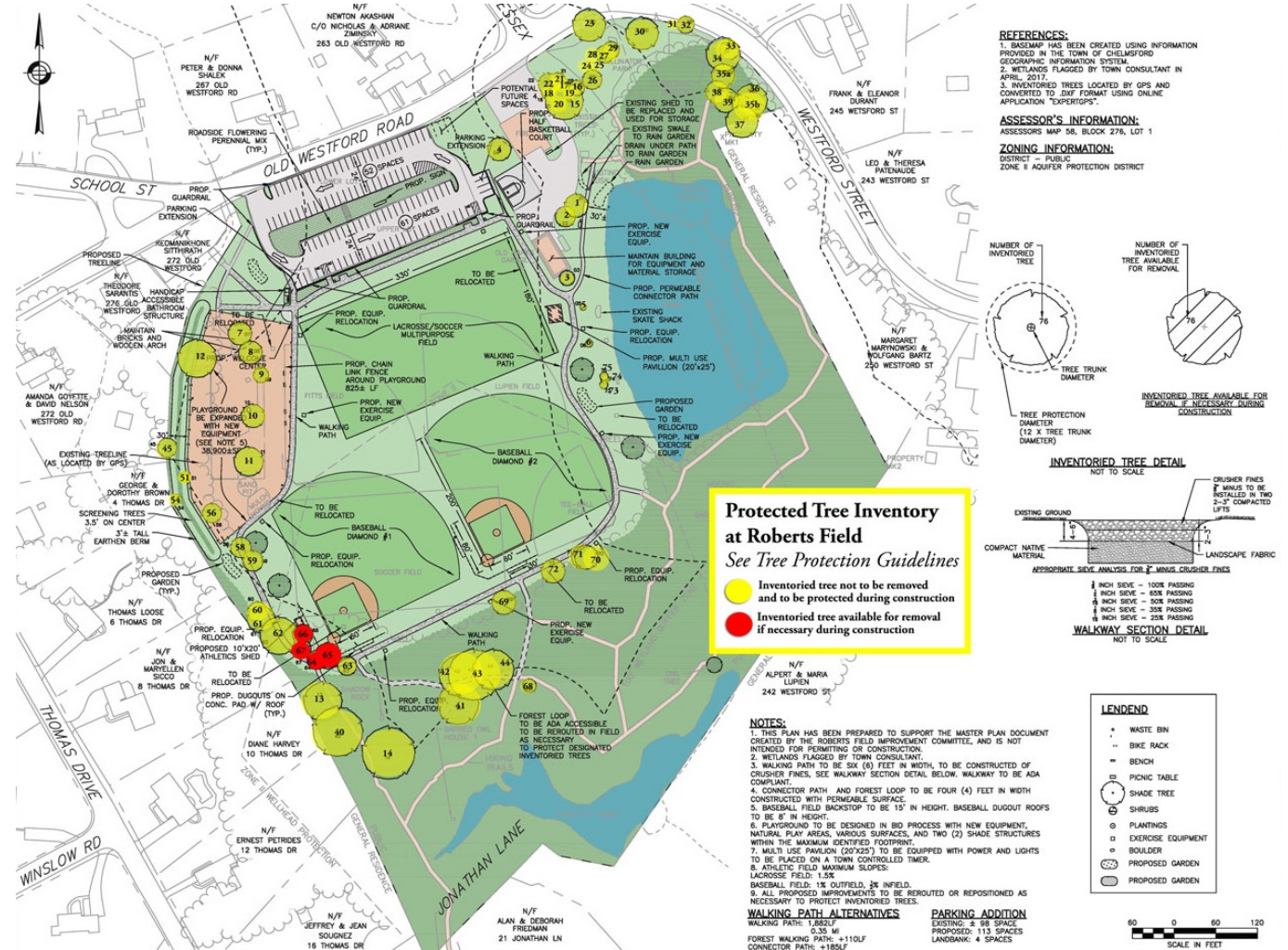
- Maintain neighborhood family-friendly park theme
- Accommodate a variety of Community groups and Park users
- Have cost effective and low long-term maintenance needs
- Maintain Park's open space
- Mitigate impact to abutters
- Employ multi-use facilities and features
- Use ADA compliant features
- Utilize wildlife-friendly, native, non-invasive plantings
- Properly protect inventoried trees during Park improvements
- Create athletic facilities designed for younger players
- Incorporate existing features where possible (bricks, playground entry, etc.)
- Work within a phased plan with potential for long shelf life
- Minimize duplicative recreational features with other nearby Chelmsford recreational facilities
- Maximize safety and security of Park and Park features
- Maximize traffic safety of parking lot and Park roads
- Develop playground with Universal Design

Park Tree Inventory

Park Tree inventory created by James Martin, MS, Consulting Arborist for the Chelmsford Tree Committee

- Recommend changes to Park Tree Inventory to be approved by Park Advisory Board or Chelmsford Board of Selectmen

Inv #	GPX #	Street / Property	Tree Species	DBH	Cond.	Notes	Map	Spread	Height	Lat.	Long.	Date	By
RF001	01	Roberts Field	Linden Littleleaf	16	Good	Split Trunk Chain Imbedded	43	36	25	42°36'356	71°23'343	1/31/2017	BA/JM
RF002	02	Roberts Field	Linden Littleleaf	13	Fair		43	31	27	42°36'354	71°23'346	1/31/2017	BA/JM
RF003	03	Roberts Field	Maple Red	0.4	Poor	Constat Damage to roots trunk	43	34	33	42°36'343	71°23'345	1/31/2017	BA/JM
RF004	04	Roberts Field	Crabapple	12	Good	Suckers mower	43	30	31	42°36'369	71°23'367	1/31/2017	BA/JM
RF005	05	Roberts Field	Maple Red	1.5	Poor	Roots & trunk construction damage	43	5	15	42°36'333	71°23'338	1/31/2017	BA/JM
RF006	06	Roberts Field	Elm American	4.5	Good		43	9	28	42°36'324	71°23'336	1/31/2017	BA/JM
RF007	07	Roberts Field	Crabapple	14	Good		43	30	35	42°36'326	71°23'447	1/31/2017	BA/JM
RF008	08	Roberts Field	Maple Sugar	14.4	Good	Sap Sucker	43	38	45	42°36'322	71°23'444	1/31/2017	BA/JM
RF009	09	Roberts Field	Pear Bradford	13.6	Fair	trunk vandalized	43	24	32	42°36'317	71°23'442	1/31/2017	BA/JM
RF010	10	Roberts Field	Linden Littleleaf	14	Good		43	33	40	42°36'309	71°23'444	1/31/2017	BA/JM
RF011	11	Roberts Field	Maple Sugar	22.1	Good		43	43	53	42°36'297	71°23'443	1/31/2017	BA/JM
RF012	12	Roberts Field	Oak Red	26	Good	Boundary Line Tree	43	56	60	42°36'321	71°23'462	1/31/2017	BA/JM
RF013	13	Roberts Field	Oak Red	35.3	Fair	Boundary Line Tree old wire	44	60	68	42°36'238	71°23'422	1/31/2017	BA/JM
RF014	14	Roberts Field	Oak Red	51.3	Good	Pruning 37.5/32.5/12.5	44	77	70	42°36'226	71°23'404	1/31/2017	BA/JM
RF015	15	Roberts Field	Maple Red	3.6	Fair		43	56	38	42°36'382	71°23'344	2/27/2017	BA/JM
RF016	16	Roberts Field	Oak Black	3	Good		43	12	20	42°36'385	71°23'340	2/27/2017	BA/JM
RF017	17	Roberts Field	Maple Red	10	Good		43	22	40	42°36'385	71°23'345	2/27/2017	BA/JM
RF018	18	Roberts Field	Maple Red	11.3	Good		43	22	40	42°36'384	71°23'349	2/27/2017	BA/JM
RF019	19	Roberts Field	Maple Red	13	Good		43	21	40	42°36'386	71°23'345	2/27/2017	BA/JM
RF020	20	Roberts Field	Maple Red	15	Fair		43	22	30	42°36'381	71°23'346	2/27/2017	BA/JM
RF021	21	Roberts Field	Maple Red	8.9	Fair		43	20	40	42°36'387	71°23'346	2/27/2017	BA/JM
RF022	22	Roberts Field	Maple Red	15	Fair	Construction damage	43	31	35	42°36'386	71°23'349	2/27/2017	BA/JM
RF023	23	Roberts Field	Oak Red	25.4	Good		43	48	48	42°36'400	71°23'336	2/27/2017	BA/JM
RF024	24	Roberts Field	Maple Red	9.9	Good		43	31	42	42°36'387	71°23'335	2/27/2017	BA/JM
RF025	25	Roberts Field	Maple Red	8.6	Good		43	23	42	42°36'387	71°23'335	2/27/2017	BA/JM
RF026	26	Roberts Field	Maple Red	15.9	Good		43	24	42	42°36'387	71°23'335	2/27/2017	BA/JM
RF027	27	Roberts Field	Cherry Black	8	Fair	Weed Barrier	43	26	30	42°36'393	71°23'331	2/27/2017	BA/JM
RF028	28	Roberts Field	Maple Red	11.7	Good	Weed Barrier	43	21	30	42°36'393	71°23'331	2/27/2017	BA/JM
RF029	29	Roberts Field	Maple Red	15.4	Fair	Weed Barrier	43	33	30	42°36'394	71°23'329	2/27/2017	BA/JM
RF030	30	Roberts Field	Maple Red	18.6	Good	7.4,8.6,8.5,7.5,8	43	48	51	42°36'398	71°23'319	2/27/2017	BA/JM
RF031	31	Roberts Field	Cherry Black	8.5	Poor		43	25	35	42°36'400	71°23'305	2/27/2017	BA/JM
RF032	32	Roberts Field	Maple Sugar	7.7	Good		43	24	35	42°36'400	71°23'305	2/27/2017	BA/JM
RF033	33	Roberts Field	Maple Red	7.8	Good	5.6	43	29	36	42°36'394	71°23'291	2/27/2017	BA/JM
RF034	34	Roberts Field	Maple Red	23.5	Good	11.8,15.3,8.7,10.1	43	51	54	42°36'393	71°23'291	2/27/2017	BA/JM
RF035	35A	Roberts Field	Maple Red	9.7	Fair	9.7	43	34	45	42°36'388	71°23'291	2/27/2017	BA/JM
RF035	35B	Roberts Field	Maple Red	20	Good	18.8,8	43	44	56	42°36'382	71°23'284	2/27/2017	BA/JM
RF036	36	Roberts Field	Maple Red	23.7	Fair	21.7,9.5	43	56	45	42°36'381	71°23'285	2/27/2017	BA/JM
RF037	37	Roberts Field	Maple Red	19.9	Fair	Boundary Line Tree 13,15	43	48	45	42°36'377	71°23'287	2/27/2017	BA/JM
RF038	38	Roberts Field	Maple Red	16.8	Fair	7.15	43	33	40	42°36'384	71°23'291	2/27/2017	BA/JM
RF039	39	Roberts Field	Maple Red	19.3	Fair	5.7,5.2,5.8,6.2,14.2	43	36	40	42°36'382	71°23'292	2/27/2017	BA/JM
RF040	40	Roberts Field	Oak Red	33.1	Good	Boundary Tree?	44	73	75	42°36'232	71°23'417	3/30/2017	JM
RF041	41	Roberts Field	Oak Red	31.1	Good	12.1,18.9,17.3,12.8	44	60	65	42°36'239	71°23'382	3/30/2017	JM
RF042	42	Roberts Field	Oak Red	22.1	Good	17.3/4/13.2	44	61	45	42°36'244	71°23'379	3/30/2017	JM
RF043	43	Roberts Field	Oak Red	29.3	Good		44	75	74	42°36'245	71°23'375	3/30/2017	JM
RF044	44	Roberts Field	Oak Red	39	Good	22.4/28.9/13.6	44	60	73	42°36'246	71°23'373	3/30/2017	JM
RF045	45	Roberts Field	Cherry Black	12	Fair	PL	43	25	37	42°36'296	71°23'471	4/30/2017	BA/JM
RF051	51	Roberts Field	Red Oak	7	Good		43	15	20	42°36'289	71°23'462	4/30/2017	BA/JM
RF054	54	Roberts Field	Crabapple	7.5	Poor	Historic? Boundary wire in trunk	44	15	20	42°36'284	71°23'464	4/30/2017	BA/JM
RF056	56	Roberts Field	Oak Red	9	Fair		44	27	24	42°36'281	71°23'453	4/30/2017	BA/JM
RF058	58	Roberts Field	Catalpa Northern	12	Fair		44	30	28	42°36'273	71°23'443	4/30/2017	BA/JM
RF059	59	Roberts Field	Catalpa Northern	11	Fair		44	30	27	42°36'270	71°23'443	4/30/2017	BA/JM
RF060	60	Roberts Field	Oak Red	11.1	Good		44	35	45	42°36'258	71°23'437	4/30/2017	BA/JM
RF061	61	Roberts Field	Oak Red	20.1	Good	8x10.3x11.7x12	44	40	58	42°36'256	71°23'436	4/30/2017	BA/JM
RF062	62	Roberts Field	Oak Red	18.7	Good		44	55	79	42°36'252	71°23'430	4/30/2017	BA/JM
RF063	63	Roberts Field	Larch European	9.7	Good		44	25	52	42°36'246	71°23'408	4/30/2017	BA/JM
RF064	64	Roberts Field	Pine White Easter	9.3	Fair		44	25	30	42°36'247	71°23'418	4/30/2017	BA/JM
RF065	65	Roberts Field	Oak Red	12.1	Good		44	38	53	42°36'248	71°23'414	4/30/2017	BA/JM
RF066	66	Roberts Field	Oak Red	11	Good		44	30	52	42°36'253	71°23'422	4/30/2017	BA/JM
RF067	67	Roberts Field	Maple Red	8.1	Fair		44	25	50	42°36'249	71°23'423	4/30/2017	BA/JM
RF068	68	Roberts Field	Hickory Shagbark	3.7	Good		44	20	20	42°36'244	71°23'354	4/30/2017	BA/JM
RF069	69	Roberts Field	Cherry Black	11.5	Good		44	35	47	42°36'262	71°23'358	4/30/2017	BA/JM
RF070	70	Roberts Field	Pine White Easter	19.4	Good		44	35	45	42°36'273	71°23'332	4/30/2017	BA/JM
RF071	71	Roberts Field	Pine White Easter	16.1	Good		44	35	45	42°36'273	71°23'332	4/30/2017	BA/JM
RF072	72	Roberts Field	Pine White Easter	14.2	Good		44	35	45	42°36'270	71°23'343	4/30/2017	BA/JM
RF073	73	Roberts Field	Alder	3	Good		43	12	12	42°36'314	71°23'328	4/30/2017	BA/JM
RF074	74	Roberts Field	Alder	3.3	Good	1.5x3	43	12	12	42°36'315	71°23'328	4/30/2017	BA/JM
RF075	75	Roberts Field	Alder	4.7	Good	4x12x1	43	12	12	42°36'316	71°23'328	4/30/2017	BA/JM



Inventoried Tree Protection Guidelines

Protect the inventoried trees' **Critical Root Zone** (area around the tree trunk that extends outward from the trunk with a diameter of **12 times the diameter of the tree trunk**). The tree trunk is measured at a point 4 ½ feet above ground level. It shall be the responsibility of the Towns Site Supervisor to enforce all of these Guidelines during Park Construction.

Construction Standards

- Trees designated for protection will be clearly marked inside construction zones by Consulting Arborist Jim Martin.
- A protective 5' snow fence on 5' metal posts will be installed before any construction work begins. The fence is to remain in place in good condition and not be removed, even temporarily, until after all construction work is completed and equipment removed from the work site.
- The fence is to be located completely surrounding the outer margin of the Critical Root Zone.
- Nothing is to be stored, even temporarily, inside the Root Zone including surplus soil, plant material, supplies, equipment, machinery, tools, vehicles, fuel, or anything else that could potentially harm the tree.
- There will be no fires within 100 feet of the Protection Zone.
- Protection Zone signage is to be weather proof and installed to the fence every 8 feet with a minimum of 2 signs.
- When there is to be a grade change adjacent to the Critical Root Zone, a trench, located 1 foot outside the protective fence, will be dug by hand to a depth of 24 inches. The exposed root ends are to be cleanly cut on the side toward the tree with sharp pruning tools. Do not make slanting cuts. The roots are not to be chopped, crushed, ripped, or torn. The roots are not to be allowed to dry out. Cover with moist soil as soon as they are properly cut.
- If necessary for safety reasons, dead branches over 3 inches in diameter should be removed from the tree before work commences by properly trained and qualified tree workers in accordance with the Z-133 & A-300 Standards, under the direct supervision of a Massachusetts Certified Arborist.
- Trees are not to be topped or to have the canopy thinned or reduced.
- The tree should NOT be fertilized before or during construction but one year or more later if necessary by soil & tissue test.
- ***Underground utilities such as water or electrical lines or irrigation pipes are not to be installed by trenching through the Critical Root Zone.*** If necessary, by boring at a depth of 35 inches or greater under the tree from one side or the other.

Oriental Bittersweet Control

- Oriental bittersweet is a vigorously growing vine that climbs over and smothers vegetation, killing it from excessive shading or breakage. Bittersweet climbs high into tree canopies, choking out new tree growth, and eventually uprooting and toppling trees during high winds and heavy snowfalls.
- Roberts Field has several large areas severely affected by Oriental bittersweet.
- The Committee recommends 3-5 year plan including mechanical removal and herbicidal treatments with Conservation Commission supervision in wetland areas.



Universal Design and Natural Playground Theme

- Universal Design (UD): Also called human-centered design in public play spaces. Rather than using separate, specialized equipment for individuals with disabilities, UD principles envision thoughtfully-designed playgrounds with features that can be used by everyone in multiple, creative ways
- A **natural playground** is a recreational space with a decentralized mix of manufactured play structures and natural landforms of open green lawns, rolling hills, berms and landscaping designed with the intent of bringing children and people closer to nature, and encouraging fun activities like digging in the sand, rolling down hills, or playing chase or hide and seek.
- Benefits of Natural Playground Theme and Features:
 - Lower investment vs a traditional playground
 - Significantly higher play value
 - Reduces playground structure injuries
 - Longer lasting
 - Lower maintenance costs



Comparable Chelmsford Park Project Costs

Playground/Parks Projects - Chelmsford

(Totals do not represent Town DPW time for building or maintenance costs)

Project Expenditures To Date	Softball Field &				
	Varney Park*	Harmony Park**	Town Hall Parking***	New Harrington Playground****	Southrow Playground*****
Donation Rev	\$ 248,352	\$ 55,000	\$ -	\$ -	\$ 52,801
CPC Funds	\$ -	\$ 5,000	\$ -	\$ -	\$ 10,000
Bond Issue	\$ 248,352	\$ -	\$ -	\$ -	\$ -
Gen Fund Budget - Hwy	\$ 100,000	\$ -	\$ 26,266	\$ 160,000	\$ -
Expenditures	\$ (596,704)	\$ (60,000)	\$ (26,266)	\$ (160,000)	\$ (62,801)
Total Estimated Project Budget	\$ 1,931,194	\$ 120,000	\$ 282,266	\$ 160,000	\$ 100,000

*Varney Park expenditures are Phase 1, and received a PARC grant for \$248,352. The Town advised that it does not believe the Roberts Field project would qualify for a PARC grant because it is not of regional significance, includes smaller improvements that are not transformational, and recent Varney grant award is duplicative geographically for the state.

**Harmony Park Playground equipment from Koman, Inc is \$100,000, and received \$25,000 from the East Chelmsford Improvement fund, \$3,500 from Community Action fund

*** Softball/Town Hall Parking includes athletic field and parking lot/drainage project costs (approximately \$250,000)

****New Harrington Playground replaced with addition of school building modular classrooms

*****Southrow Playground replaced old equipment destroyed by fire in FY12. It received an insurance reimbursement of \$52,801 and PTO fundraising proceeds of \$10,000.

Cost Sharing & Fundraising Opportunities

- Fundraising was not part of the Committee’s charter, although the Committee did raise over \$12k.
- The Committee recommends that the Town should seek opportunities to reduce Town expenditures through cost sharing, volunteer project adoption or fundraising.

- Park Stakeholders

Estimated Budget		Est Annual						
Low	High	Maintenanc	Park Improvements	Direct Benefit to:				
\$ 67,275	\$ 83,275	\$ 2,310	Chelmsford Youth Baseball (fields, storage, irrigation system, lawn service program)					
\$ 37,275	\$ 53,775	\$ 1,155	Chelmsford Lacrosse (field, storage, irrigation system, lawn service program)					

- Park Supporters

- Garden Clubs
- Eagle Scouts
- Mothers’ Clubs
- Community Organizations (KDK Foundation, CPAL, Firefighter/Police/Teacher Unions)
- Landscapers
- Schools
- Corporate Sponsors
- Individual Sponsors & Volunteers

- Park and Playground Grants

- Town provided opinion that project would not qualify for State PARC grants
- Many corporate and private charitable foundation grants are available for ADA compliant and Universal Design playgrounds

Estimated Park Maintenance Overview

Recommend that Park Advisory Board create detailed Maintenance Plan, including:

Park Feature	Maintained By	Estimated Life	Maintenance Required
Playground			
- Play Structures	DPW	20-35 years	To be identified by playground equipment manufacturer
- Surfaces	DPW	Varies	Wood chips 1-3 years, rubber PIP surface 7-15 years and biannual maintenance, abutter landscape mowing
- Chain Link Fencing	DPW	30+ years	Repairs as needed, vinyl coating extends useful life and durability
Baseball Fields			
- Infield	CYBL		Annual clay refurbishment
- Outfield	DPW		Mowing, fertilization, leveling fill, reseeding
- Dugouts/Backstops	DPW, CYBL	30+ years	Repairs as needed, after use cleaning
- Storage Shed	DPW, CYBL, CYLA	30+ years	Paint, repairs as needed
Lacrosse Field	DPW, CYLA		Mowing, fertilization, leveling fill, reseeding, striping
Irrigation System	DPW	15-25 years	Winter cleanout, sprinkler head replacement
Walking Track	DPW	10-15 years	Repairs as needed
DPW Garage	DPW, CFD	25-30 years	Roof shingles 25-30 year useful life, gutters 15-25 useful life, driveway snow removal
Hardscape Play Area	DPW, CFD	10-15 years	Asphalt repairs as needed
- Half Basketball Court	DPW	10-15 years	Asphalt repairs as needed, basketball goal 10-20 years useful life
Exercise Circuit	DPW	15-25 years	Repairs as needed
Pond Side Pavilion	DPW	25+ years	Repairs as needed, Roof 25-30 year useful life, power washed 1-3 years, refinished 7-10 years
Security Cameras	DPW	7-10 years	Repairs as needed
Gardens/Natural Areas	Garden Stakeholders		Weeding, mulch replacement, additional plantings, pond fountains 5-10 years useful life and debris removal
Parking Lot	DPW	10-15 years	Snow removal, crack patching, annual mowing and line trimming of planted areas
Park Trash	DPW		Trash pick up, trash barrel maintenance
Nature Trails	Friends of Roberts Field		Wood chips as needed, dead tree removal, invasive plant removal, bridge maintenance

Planting & Maintenance Requirements

- Continue Park Land Management Program to protect and enhance wildlife habitat in natural areas of the park.
 - Remove invasive plants and encourage planting native, flowering & fruiting plants (*Appendix F*)
 - Increase and protect wildlife habitat and nesting opportunities
 - Provide Park users safe access and interaction
- Develop complimentary Park landscape and field maintenance plan
 - Minimal pesticide, fertilization and weed control (herbicide)
- Protect trees, habitat and gardens during Park construction and beyond
 - Adopt Tree Protection guidelines (*Appendix D & E*)
 - Identify garden and landscape maintenance Stakeholders and assign responsibilities
 - Protect and improve Pond for habitat and recreational use (*Appendix K*)



Park MedFlight Requirements

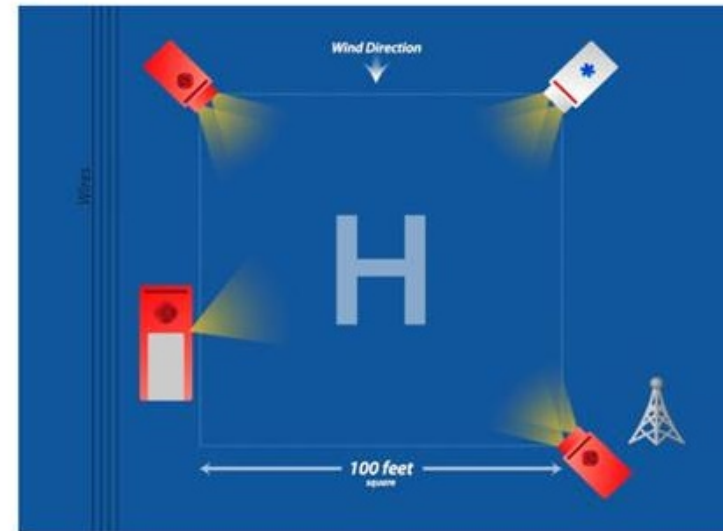
Our Landing Zones have to receive approval from Boston Medflight to ensure they comply with their regulations. A typical Landing Zones is 100 Feet X 100 Feet (see diagram below) and an 18 foot access drive is needed for emergency vehicles.

Chief Gary Ryan
Chelmsford Fire Department

Field access will be routed around the back of Engine #3 for field access, emergency vehicles will stage both on the field and on the top parking lot and the guardrail openings will be maintained and wide enough to accommodate stretchers.

When securing the landing zone, ground personnel shall ensure:

- Area is clear of debris (trash cans, barriers, cones, etc.)
- Obstructions are noted and relayed to the pilot (wires, tall trees, light poles, antennas, etc.)
- Crowd control prior to aircraft arrival
- During a night landing:
 - No lights should be pointed toward the sky.
 - Emergency lights should be on to help locate the Landing Zone.
 - Two vehicles should be stationed at the corners to make an "x" with their low beam lights.
 - Any obstructions should be illuminated.
 - Crews routinely use night vision goggles. Emergency vehicles may be asked to shut off emergency lights.



Why Dredge The Pond?

- If the pond is not dredged and deepened, what is the likely outcome?
- Cori Rose, Wetlands Scientist – “In 15-25 years it will fill in, become covered in algae and eventually be taken over by Phragmites that is present on the north shore or by the loosestrife. The water quality is already suffering significantly and probably can’t hold fish anymore due to the lack of oxygen.”



Pond at Roberts Field 7/18/17

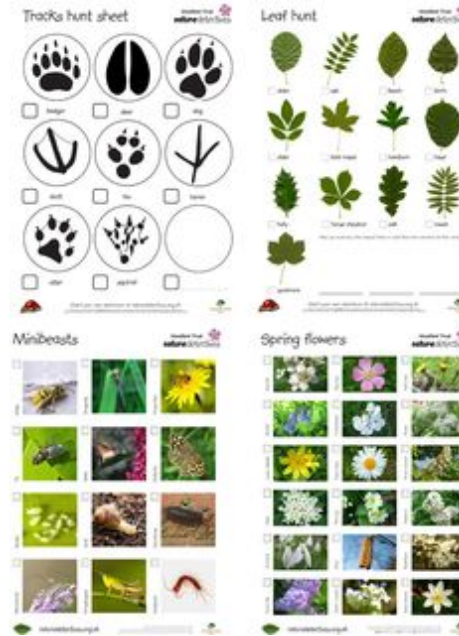


Pond at Roberts Field 7/18/17



Phragmites at other location

Nature Scavenger Hunt Detail Images & Ideas



Friendship Park Play Structure Inventory

Duplicate existing playground features in new playground (provide list for playground bid process).

Existing Playground Features	Location
4 Baby Swings	Front
4 Regular Swings	Back
1 Small Sandbox	Front
1 Sand Playtable	Front
1 Sand Play Room	Front
1 Big sandpile	Back
1 Play car	Front
2 chin up bars	Main Structure
1 Tire climb	Main Structure
1 Covered walkway ramp	Main Structure
1 Covered shaky bridge	Main Structure
1 Uncovered shaky bridge	Main Structure
2 small slides	Main Structure
1 Big slide	Main Structure
1 Big swirly slide	Main Structure
1 rolling log	Back
1 uneven bars	Back

Existing Playground Features	Location
1 Crawl through tube	Main Structure
1 Tic Tac Toe game	Main Structure
1 Rope ladder climb	Main Structure
1 chain ladder climb	Main Structure
1 higher level play area	Main Structure
1 stationary monkey bars	Back
1 ring monkey bars	Main Structure
1 ring climb/swing	Back
2 sliding zip lines	Main Structure
1 fireman's pole	Main Structure
1 bike racks	Front
2 trash cans	Interior
4 benches	Interior
4 picnic tables	Interior
1 pvc xylophone	Front
1 tree stump	Front

