

Merrimack Athletic Fields Plan

Report of the Athletic Fields Needs Committee
October 2010

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Athletic Fields Needs Committee

In March of 2007, the Town Council created the Athletic Fields Needs Committee and asked this Committee *“to find and develop new ball fields in the Town of Merrimack”*.

Over the past three years the membership has included:

Shannon Barnes (Merrimack School Board)

Terry Benhardt (Merrimack Youth Association)

Emily Coburn (Town Resident, formerly with the Merrimack School Board)

Keith Hickey (Merrimack Town Manager)

Sherry Kalish (Director of the Parks and Recreation Department, Town of Merrimack)

Gary Keay (Merrimack Youth Association)

Mike Malzone (Town Resident, formerly with the Merrimack Town Council)

Tom Nutting (Merrimack Village District)

Jim Taylor (Town Resident, formerly with the Merrimack Youth Association)

Tim Tenhave (Town Resident, formerly with the Merrimack Town Council)

Committee information is available on the Town website at:

http://www.merrimacknh.gov/town/boards_and_committees/athletic_fields

Executive Summary

The Committee determined the Town and School District needs 21 new fields to meet the need for today and tomorrow given:

- The number of children in Town (using school district enrollments).
- Current usage by both children and adults.
- Including fields to replace certain corporate fields if they go away.
- Total population of Merrimack given the projected size of the Town at “build-out”.

In determining this need, the Committee sought to find areas where overlap of uses and users could be accommodated. The process followed by the Committee in determining the need is described in Sections 1 and 2 of this plan.

Fortunately, Merrimack does not need to build and locate all 21 fields today. The urgent need for today is for 5 new fields. They include the following:

- 1 Softball field in support of the MYA Softball program.
- 3 Rectangular fields in support of the MYA Football, Soccer, and Lacrosse programs.
- 1 Adult (90') Baseball field to support more than one organization or interest.

In looking at how to meet the immediate need for fields and the long term need, the Committee followed a process to identify potential locations within Merrimack for fields. That process is shown in Sections 3 and 4. The Committee has found there is property available to meet the most immediate needs and likely most of the long term needs as well.

The Committee also looked at how to fund the creation of additional fields. The Committee believes the Town should consider one of the following two approaches but the reader should note other items are discussed in Section 5:

1. Fund the Athletic Field Capital Reserve Fund with a minimum of \$150,000 per year for the next 15 or more years (through the Capital Improvement Process). This would allow a new field to be built approximately every 2 years till the need is met or no other possible field locations can be secured.
2. Take out a 15 year bond for \$2,000,000 which would allow for the creation of 8 new fields in the very near future. The annual funding for this size bond would

vary from approximately \$200,000 down to approximately \$140,000 in its last year. While this bond is being paid, additions to the Athletic Fields Capital Reserve Account could be delayed, reduced, or suspended and could instead be used to cover the expense of the bond. The use of a bond allows for the urgent needs to be immediately met and allows for additional fields to off load the pressure on the current fields in Town.

In order to provide a full picture of field needs, the Committee also looked at the space, parking, and buffer needs for fields in (see Section 6) and the cost of building recent fields within Merrimack in (see Section 7).

In closing, the Committee has done research and spent many hours in gathering the information presented in this plan. The Committee also realizes that significant engineering work and other planning will be needed to bring new fields into reality. It hopes the Town and School District will work closely together to meet this need for the residents of Merrimack.

The Committee wants to see the need for new fields met. We suggest the Town ensures this happens by doing one or a combination of the following:

- Empower a subsequent or updated version of this Committee to bring this Plan into reality, or charge Staff to do that.
- Charge Staff to start and have the necessary conversations with the outside entities mentioned in this plan.
- Include the necessary budget items in the budget and/or Capital Improvement Process to meet the cost of this plan.

The Committee wishes to thank the Staff of the Town, School District, and Merrimack Village District for their support in gathering and providing information to this Committee.

1.0 Initial Needs Evaluation

The Committee looked at field needs from many different perspectives. These included:

- What needs had previously been identified by other people, projects, and efforts in Town.
- What is the projected population of the Town and its inhabitants in the near term and at “build-out” of the Town.
- What is the wish list of fields each sport envisioned for today, in the next few years, and at Town “build-out”.

Note: “Build-out” is described in the “Town of Merrimack Buildout Study” performed by the Nashua Regional Planning Commission, see the footnote below.

1.1 Need identified in the 2002 Master Plan Update

When looking at what needs had been previously identified, the Town of Merrimack Master Plan (revised in 2002) was reviewed. The Master Plan describes the future needs for fields in Chapter VI. An excerpt from pages VI-28 to VI-29 is below:

There are currently 42 public and private playing fields provided throughout Merrimack. Based on playing field provision standards, the Town actually needs 58 fields.

Therefore, the Town needs to develop 16 new fields in order to meet the needs of the 2000 population of 25,119. At buildout, the population is estimated to be 31,895. Applying the playing field provision standards, the Town would need 74 playing fields at buildout.

Therefore, the Town will need to provide 32 additional fields at buildout. Assuming an area of between 3 and 5 acres per field to accommodate parking, ancillary facilities and buffers, a park or parks of between 100 and 150 acres in area would be required to meet future field space demands.

This was based on a build-out population of 31,895¹ and used “Future Needs of Playing Fields”, Preliminary Report, October 13, 1999 by Michael Houseman.

¹ Town of Merrimack Buildout Study, October 2001, Nashua Regional Planning Commission, http://www.nashuarpc.org/publications/local/merrbuildout_oct01.pdf

The Committee reviewed a recent presentation of the Merrimack Youth Association (MYA) to the Town Council provided in March of 2007. This presentation showed a need for MYA related activities of 14 new fields.

1.2 The need spans all age groups and sports

The Committee also did not want to limit the needs analysis to just Town or organized youth needs coordinated by the MYA. It also looked at the needs of the School District, Adult organized sports, and other sports where specialized outdoor areas are needed.

These sports include:

- Baseball (from T-Ball to Men's Leagues), School sponsored, MYA sponsored, and organized adult league.
- Softball (from School and MYA sponsored to adult leagues)
- Soccer (School and MYA related)
- Lacrosse (School and MYA related)
- Football (School and MYA related including Cheerleading)
- Field Hockey (School)
- Tennis (School and recreational)
- Basketball (School and MYA related)

1.3 Population numbers to consider in determining need

In determining need, the Committee looked at current populations of the Town and the students in the School District.

Current population for the Town in 2008 is projected at 28,960¹ as documented by the Nashua Regional Planning Commission (NRPC). The School District shows the student population at 4738 students in January of 2007² and at 4432 in January of 2010³.

The Committee then also looked at population estimates at build-out. The NRPC reports the build-out may occur in 20-30 years (from 2001). Based on average density, the population would be 31,895 with a student population of 6346. Population could be as many as 35,455 including 7049 students using zoning density as the zoning was set in 2001.

The School District currently is showing a slow downward trend in enrollments but the cyclic nature of enrollments and projected number of homes at build-out lead the

¹ <http://www.nashuarpc.org/communities/merrimack.htm>

² p. 26, Merrimack School District Annual Report for year ending June 30, 2006

³ p. 24, Merrimack School District Annual Report for year ending June 30, 2009.

Committee to believe that student population over the long term would increase and approach the average build-out numbers as projected by the NRPC.

1.4 The Wish List of Fields

The Committee realized it had available to it many past examinations of field needs but also wanted to be sure the needs had not changed over time. The Committee then queried the School District administration, MYA Program Directors, Men's Athletic Leagues, and used the knowledge of its members to determine what and how many fields are needed now and at build-out.

Note: The Committee did not look initially at field re-use and overlaps given some sports are only active during one season and not others.

All numbers shown in the following subsections are additional field needs and also incorporate recommendations by Town Staff to allow for field recovery and rest periods.

Note: Appendix A shows the current (2009) fields in the Town and School District as well as the current usage of those fields.

1.4.1 School District Need

Football fields:	1 game, 2 practice
Soccer fields:	2 game
Lacrosse fields:	1 game
Softball fields:	1 game
Baseball fields:	2 game

Totals: 6 rectangular fields, 3 baseball/softball diamonds (1 small, 2 large)

1.4.2 Adult Sports Need

Adult Baseball fields:	1 game
Adult Softball fields:	1 game

Totals: 2 baseball/softball diamonds (1 small, 1 large)

1.4.3 Merrimack Youth Association Need

Football fields:	1 game, 2 practice
Soccer fields:	2 game, 2 replacements for the Kollsman fields
Lacrosse fields:	2 game

Softball fields: 1 game, 2 replacement for the Kollsman fields
Baseball fields: 1 full size (90') game, 2 smaller size (60')

Totals: 9 rectangular, 6 baseball/softball (5 small, 1 large)

1.4.4 Total Need

In total, the Committee noted a need of **26** new fields over the long term. This includes 15 rectangular fields, 4 large diamonds, and 7 small diamonds. This did not include any overlap of fields where one field could satisfy a need for a spring activity and then another need for a fall activity (which is described in Section 2). The total of 26 also takes into account a need to replace fields if certain corporately owned fields become unavailable due to the changing needs of those companies.

1.4.5 Where a need does not exist.

The Committee also considered Basketball courts and Tennis courts. The Committee believed the current facilities will meet the need in the long term given both the Town and School District resources. Hockey and Ice Skating were discussed briefly in the Committee's early meetings and there was no specific need identified for those sports.

1.4.6 A word about Artificial Turf

The Committee discussed the possibility of artificial turf fields. These types of fields were viewed positively due to not being subject to condition problems. Refer to Section 7.3 for more information on these types of fields.

2.0 Final Needs Determination

In determining the final and consolidated field needs, the Committee looked at how the season of each sport and the similar field types (rectangular versus a diamond) can be used to allow for the minimum number of new fields to meet the need for today and out through build-out.

The list went from 26 new fields mentioned in the previous section to 21 fields. The field types, organization need to be met, and when needed is presented in the Table 1 below.

Field Types	“Now “ (= within 2 years)	“Tomorrow” (in addition to the 2 year plan)	“Build Out” (with 20% population growth)
Softball	1 (MYA**)	1 (MSD*)	2***
Rectangular (football, soccer, lacrosse)	3 (MYA**)	4 (3 MSD*/ 1 MYA**)	4 (2 MSD*; 2 MYA**)
90’ baseball	1	2 (MSD*)	
Youth baseball		1	1***
Adult softball			1

* MSD = Merrimack School District

** MYA = Merrimack Youth Association

*** If the current corporate offerings go away, these needs become an immediate need.

Table 1 - Final Field Needs

The Table breaks down to the following including acreage information:

- 11 Rectangular fields (~5.5 acres each)
- 5 Softball fields (~5.5 acres for a large diamond and ~3.5 acres per small diamond)
- 2 Youth baseball fields (~3.5 acres each)
- 3 Baseball fields (~5.5 acres each)

Total of 21 fields (an approximate maximum of 110 acres)

When looking at the 21 needed fields, the following should be noted:

- The number 21 includes the replacement of 7 corporate fields at 3 different locations if they should go away (see Appendix A for field locations and usage).
- The need is as projected through build-out using the population numbers anticipated in the build-out study.
- Acreage information depends on needed buffers, parking spaces, opportunities to co-locate fields, and parking and buffer considerations.

2.1 The Immediate Need

Table 1 (previous page) shows an immediate need for 5 Athletic Fields. These include:

- 1 Softball field in support of the MYA Softball program.
- 3 Rectangular fields in support of the MYA Football, Soccer, and Lacrosse programs.
- 1 Adult (90') Baseball field to support more than one organization or interest.

2.2 If Corporate Fields Go Away...

There is a concern within the Committee and in the Community that property not owned by the Town, School District, or Village District could become unavailable as Athletic Fields for the residents of Merrimack. Recent changes in zoning along with industrial and commercial activities make this even more of a concern.

When reviewing Table 1 on the previous page, it should be noted that if we lose access to some softball or youth baseball fields currently on corporate property, those fields would need to be replaced immediately and this could change the priorities for immediate needs described in Section 2.1.

3.0 Property Assessment Process

To meet the need for fields, it takes property. The Committee looked at parcels within the borders of the Town.

The process involved the following steps:

1. Created a map and list of all properties in Town without a building and greater than 2 acres in size (see Appendix B). The list was created using the Town's GIS information system and includes more than 180 parcels.

Included in the map:

- All vacant Town owned properties greater than 2 acres.
 - All vacant School District properties greater than 2 acres.
 - All Merrimack Village District (MVD) properties greater than 2 acres.
 - Private/Corporate/Commercial properties greater than 2 acres.
2. Using the map and list of properties, the Committee established a course filter rating system for the properties from A (highest) to D (lowest).

The evaluation and analysis was done using GIS information, pictures, topography and personal experiences.

The analysis was intentionally course and did not get into specifics of:

- Who owns the property.
- Cost to actually place a field on that particular property.
- And was based solely on the physical characteristics of each parcel.

The course filter was used to make the list more manageable. Using the filter, the list of potential candidates was dwindled down to 59.

The course filter was defined as:

- A – Good: Topology is close to level, Access is good, and does not appear to be overly wet or have wetlands.
- B – Medium: Generally good but a Topology, Access, or Wetness issue may exist.
- C – Bad: More than one issue related to Topology, Access, or Wetness.

D – Impossible: Issues related to Topology, Access, or Wetness appear to be insurmountable.

3. Grouped the Town, Merrimack Village District, and School District properties to the top of the list for first evaluation.
4. Looked at adjacent properties to see if there were opportunities if two or more parcels were grouped together.
5. Evaluated properties to see if a private/corporate/commercial property was an option. Also, looked at all other parcels greater than 2 acres to see if the building on the parcel did not limit their possibilities for being used as fields.

During the assessment process, the Committee specifically looked at when multiple fields are co-located as in an athletic complex; there are numerous opportunities for reduced costs and a reduced need for land.

The Committee targeted its work for identifying future field locations by looking to co-locate fields and tended to give less emphasis on a property if it did not lend itself to more than one field.

3.1 Rating System used in the Course Filter

The Committee identified 59 properties that ranked either A or B using the course filter.

Those properties are shown in the Table 2 below.

parcel ID	Ratings with some comments	Acreage	#	Address	Owner 1 & 2	Total Value
7C 002	A - was forested. Good if combined with Watkins forest on other side of road. Watkins may be protected..	10.70	20	LAWRENCE RD	WORRAD STANLEY & RUTH LIVING TRUST / WORRAD RUTH TRUSTEE	1,637
6D 391	A/B	2.42	24	BEDFORD RD	WESTON ROAD REALTY LLC	158,800
7C 040	B/C - access issues, with water on 1/3rd, better when combined with adjacent properties.	14.50		WHISPERING PINES LN	VILLENEUVE VICTOR J SR & LEONA A / VILLENEUVE, VICTOR J SR LIVING TRUST	1,044
4C 384	B - Old Corbin's junk yard. Had a field back in the 70's. Wet in back, would need to combine with 4C 383 to have value. Would want to check if an EPA site.	8.26	124	TURKEY HILL RD	TURKEY HILL REALTY I TRUST / SANDERSON J M	193,900
4C 383	B - Would want to combine with 4C 384, part of old Corbin's Junk yard. Maybe an EPA site?, not sure. Had a field once.	3.68	118	TURKEY HILL RD	TURKEY HILL REALTY I TRUST / SANDERSON J M	166,400

4B 009 1	B/C - stream through middle, access from road, slopes down to Souhegan river. Appears to have some small water bodies in middle.	49.16	10	TOMASIAN DR	TOMASIAN, STEPHANIE REV TRUST	8,597
4B 012	A/B - Long parcel, better if combined with 4B-9-1. Water on one side. Across from HHNP.	8.19	1	TOMASIAN DR	TOMASIAN, STEPHANIE REV TRUST	1,440
2D 021	A - access, next to wastewater treatment and railroad.	35.72		MAST RD	TAMPOSI, SAM A NASH, GERALD & / WATSON HAROLD	5,679
7C 028	A - Need to learn more about this. Town owns land across the street as well (7C-19, 2.7 acres). Can use 1/2 of this maybe.	95.85	155	WIRE RD	SWENSON, ALLAN M REAL ESTATE TRUST ALLAN TRUSTEE & / SWENSON, BARBARA J REAL ESTATE TRUST BARBARA TRUSTEE	603,880
6E 002	A/B - small access, gentle slopes, some water, adjacent 7E 018 can be used and opened by this parcel.	20.60	41	BACK RIVER RD	STATE OF NH - DOT / C/O FITSER PATTY	246,700
1E 005	A - awkward shape, good access and gentle slopes. Maybe circumferential HW land	19.15		MERRIMACK DR	STATE OF NH - DOT / C/O FITSER PATTY	1,481,500
1E 004	B/C - slopes up and then down to Merrimack river - circumferential HW land	18.30	17	DW HIGHWAY	STATE OF NH - DOT / C/O FITSER PATTY	2,036,200
2D 003	A - out of the way	11.10	52	THORNTON RD WEST	STATE OF NEW HAMPSHIRE	197,900
6D-1 010	B - next to Shaws north, has detention pond. Very high price tag.	10.13		DW HIGHWAY	ROUTE 3 MERRIMACK LLC / C/O S.R. WEINER ASSOCIATES	1,614,400
2C 066	B	98.59		THORNTON RD WEST	PENNICHUCK CORPORATION /	12,817
2B 324	B	87.11		LORRAINE RD	PENNICHUCK CORPORATION /	16,638
2C 066 1	B - partial water, minor slopes	11.96		CONTINENTAL BV	PENNICHUCK CORPORATION /	526
2B 324 2	B	10.51	21	LORRAINE RD	PENNICHUCK CORPORATION /	2,007
7D 011 1	A/B - maybe water or part of stream on edge. Long skinny parcel	4.75	53	PEARSON RD	MICHAEL WENDY H & / MICHAEL GLENN W	172,800
5D-2 006	B - MVD area, need to check if well	18.75	31	FRONT ST	MERRIMACK VILLAGE DISTRICT	886,300
7C 004	A - good access, but maybe a D since it appears to be Town Forrest and in Trustees Trust - management.	63.10	21	LAWRENCE RD	MERRIMACK TOWN OF / TRUSTEES OF TRUST FUND	1,709,400
3B 164	B - 24 acres for fields	563.00		OLD KINGS RD	MERRIMACK TOWN OF	1,931,700
3B 261 1	B	87.72		NATICOOK RD	MERRIMACK TOWN OF	1,986,600
4D-1 010	B	22.32		GRIFFIN ST	MERRIMACK TOWN OF	769,200
5C 646	A/B - adjacent to DPW garage and Gibson field. Does have stream though it.	16.00	10	ATHERTON RD	MERRIMACK TOWN OF	348,100
6C 300	A/B - looks good with 6C 302	11.56	17	EAGLE DR	MERRIMACK TOWN OF	185,900

4C 255	B - Other side of Martel/Gibson field. Could turn into a complex. Some slopes.	6.67	3	ATHERTON RD	MERRIMACK TOWN OF	173,400
5B 088	A - Northwest Fire station lot.	4.86	172	BABOOSIC LAKE RD	MERRIMACK TOWN OF	145,100
6C 302	A/B looks good with 6C 300	3.81	1	ROBIN LN	MERRIMACK TOWN OF	154,000
7C 019	B - Small, great access, flat - should try to get 7C-028 across the street	2.70		WIRE RD	MERRIMACK TOWN OF	160,500
2C 041 1	B/C - minor slopes but some water in middle	12.57		CONTINENTAL BV	MERRIMACK SCHOOL DISTRICT	274,800
2C 054	B/C - if you combine with 2C 053 and 2C 052-1	5.60	60	TINKER RD	MARTEL JANE M	1,070
2C 053	B/C - if you combine with 2C 054, 2C 052-1	3.70	58	TINKER RD	MARTEL JANE M	707
4D-4 43 1	A	8.21	315	DW HIGHWAY	MANCHESTER Y M C A	796,600
5D-1 10	A - access needs work, probably going to be built up with condo project.	17.10		TWIN BRIDGE RD	LONGA JAMES & SON INC	135,900
4B 014 1	A - farm land	11.84		LESTER RD	LASTOWKA JOHN F JR REV TRUST / LASTOWKA JUDITH A/BANK OF NH	5,031
4B 031	B - near river, good if combined with 4B 014 1	11.60		DAVIDSON AV	LASTOWKA JOHN F JR REV TRUST / LASTOWKA JUDITH A/BANK OF NH	4,930
4B 153	B/C - moist area adjacent to HHNP access road on Amherst Road. Could combine with 24 acres on HHNP.	4.41	8	FULLER MILL RD	KENNEDY GREGG R	156,100
4A 022	B - access, slopes, 1/3 has house and wet stream area.	19.88	136	WILSON HILL RD	JONES, RALPH E. + FERN	132,123
2C 052 1	B/C - if you combine with 2C 053, 2C 054	2.70		TINKER RD	JANAS EDWARD & JACQUELINE C	32,700
1D 001 2	B/C appears to have buildings on it maybe. Some water on edge. Maybe 1 or 2 fields possible.	9.18	36	MANCHESTER ST	HECOP IV LLC /	568,300
7C 040 1	A/B small, but if combined with 7C 040 and 7C 040 -1 can be good.	5.51		WHISPERING PINES LN	HAMPSHIRE VENTURES INC	166,500
7C 030	C/B - no access and power lines but good if combined with 7C-040, but combine 7C 028	13.40		WIRE RD	HAMPSHIRE VENTURE INC / BROOK HOLLOW CORP	203,000
6C 147	A - awkward shape, good access and gentle slopes.	19.59	126	BEAN RD	HADLEY, GEORGE H + THERESA G	3,942
6C 328 1	A - but has a tree farm on it now.	4.23	141	JOPPA RD	GAGNON, ARTHUR L. + NANCY R.	1,798
6A 002	A/B - has slopes	17.10	335	BABOOSIC LAKE RD	FRIENDS OF YOUNG JUDEA / C/O KEN KORNREICH	328,200
6E 003 1	A - Flatley property, has stream through middle.	73.65	645	DW HIGHWAY	FLATLEY JOHN J	2,761,400
6C 140	B/C water in the middle, maybe flood prone but maybe with adjacent property	11.00	136	BEDFORD RD	FISCHER, ALBERT W. JR.	203,500

2E 007	A/B - 470K, good access, some slopes, prime commercial Real estate. Good if combined with 2E 008	7.97	39	DW HIGHWAY	EDGEBROOK HEIGHTS LLC	474,200
6B 086	B - good access, 1/2 of property is Baboosic brook.	58.00	41	WOODWARD RD	DUMAS, GERARD J. + PAULINE L.	4,078
2E 006 2	B - Good with adjacent parcels.	3.75	55	DW HIGHWAY	DESANTIS HOME DEVELOPMENT LLC /	569,200
6B 122	A - good for 2 fields at most, triangle shape with water/stream on one edge.	6.40	3	WEST RD	CORCORAN CONSTRUCTION LLC	217,700
3D-1 004	A (D) - if you can cross RR which TC approved, being developed probably	15.40		STAR DR	CMI LEASING CORP.	2,449
3C 044 1	B - awkward shape, some water, some slopes	16.40	60	GREENS POND RD	CLARE, MICHAEL J PROPERTY MANAGEMENT LLC	205,300
7E 023 1	B	2.01	702	DW HIGHWAY	CHURCH FREDERICK A & / JUNE K	213,200
4D-2 002	A	11.00		WRIGHT AV	BRACCI, ALDO + JACK LABORITZ /	14,700
4B 180	B - does it have buildings on it?	2.98	18	FARMER RD	BERNIER, CLAUDE R + RACHEL	568
2C 078	A/B - small with some access concern.	3.59	4	THORNTON RD	BERGERON GLORIA J /	225,800

Table 2 – “A & B” Rated Properties

3.2 Town, School, and Village District Properties

In an effort to first address property that is currently owned by the residents of Merrimack and that could be usable for additional athletic fields, the Committee decided to look at Town, School, and Merrimack Village District (MVD) property that met the “A” or “B” rating.

Those properties are shown in Table 3 below.

parcel ID	Ratings with some comments	Acreage	#	Address	Owner 1 & 2	Total Value
5D-2 006	B - MVD area, need to check if well	18.75	31	FRONT ST	MERRIMACK VILLAGE DISTRICT	886,300
7C 004	A - good access, but maybe a D since it appears to be Town Forrest and in Trustees Trust - management.	63.10	21	LAWRENCE RD	MERRIMACK TOWN OF / TRUSTEES OF TRUST FUND	1,709,400
3B 164	B - 24 acres for fields	563.00		OLD KINGS RD	MERRIMACK TOWN OF	1,931,700
3B 261 1	B	87.72		NATICOOK RD	MERRIMACK TOWN OF	1,986,600

4D-1 010	B	22.32		GRIFFIN ST	MERRIMACK TOWN OF	769,200
5C 646	A/B - adjacent to DPW garage and Gibson field. Does have stream though it.	16.00	10	ATHERTON RD	MERRIMACK TOWN OF	348,100
6C 300	A/B - looks good with 6C 302	11.56	17	EAGLE DR	MERRIMACK TOWN OF	185,900
4C 255	B - Other side of Martel/Gibson field. Could turn into a complex. Some slopes.	6.67	3	ATHERTON RD	MERRIMACK TOWN OF	173,400
5B 088	A - Northwest Fire station lot.	4.86	172	BABOOSIC LAKE RD	MERRIMACK TOWN OF	145,100
6C 302	A/B looks good with 6C 300	3.81	1	ROBIN LN	MERRIMACK TOWN OF	154,000
7C 019	B - Small, great access, flat - should try to get 7C-028 across the street	2.70		WIRE RD	MERRIMACK TOWN OF	160,500
2C 041 1	B/C - minor slopes but some water in middle	12.57		CONTINENTAL BV	MERRIMACK SCHOOL DISTRICT	274,800

Table 3 – Town, School, Village District Properties

The Committee reached the following conclusions on the above list:

- Parcel 5D-2 006: This contains an MVD well and would be difficult to coordinate around the well and have more than 1 or 2 fields if even possible.
- Parcel 7C 004: Deed restricted and unable to put fields on this parcel.
- Parcel 3B 164: Horse Hill Nature Preserve (HHNP). Three athletic fields proposed in HHNP Definitive Plan using 24 acres near western border off of Amherst Road.
- Parcel 3B 261 1: Ireland donated property. Donated for passive recreation only and specifically called for no organized sports.
- Parcel 4D-1 010: Griffin Street boat launch area near Merrimack river. Floods with awkward access and used for other recreational uses at this time.
- Parcel 5C 646: When combined with 4C 255 and the current DPW Garage (parcels 5C 645 and 5C 797) make for a unique area to have an expanded Athletic Complex. See the following sections for more details.
- Parcel 6C 300: When combined with 6C 302 may have a possibility for a couple of fields. Noted that they are deep in a neighborhood and was thought to be wet.
- Parcel 5B 088: Already contains the Bishop Field.
- Parcel 7C 019: Parcel is too small to be a realistic field area.

- Parcel 2C 041 1: School parcel with wet issues and potentially a site for a new fire house but probably not suitable for more than one field.

3.3 Combining Adjacent Properties

In reviewing the 59 properties originally identified as either A or B properties, the following combinations of adjacent properties may lend themselves to being combined to form an Athletic Complex or at least an opportunity for multiple fields:

- 7C 040 & 7C 028 : These private properties have been noted as potential residential development properties with 7C 028 recently (August 2009) being on the agenda of the Planning Board for formal consideration but was then withdrawn in September 2009.
- 6E 002 & 7E 018: Both parcels owned by the State of New Hampshire. Neither has good access but together equal 150+ acres. A review of the elevations, power line designated areas, and water make for a difficult location for placing fields adjacent to each other.

3.4 Commercial/Corporate/Private Properties

Non municipal properties were considered. The cost of purchasing a property weighed heavily on the Committee as those costs could make the possibility out of reach for the Town. Some properties considered were:

- 150+ acre Flatley property (6E 003 1) in northern Merrimack.
- Various Pennichuck properties along Continental Boulevard. Note that none are large enough on their own to have a complex of athletic fields.
- 2D 021, Tamposi/Nash/Watson property off of Mast Road near the Waste Water Treatment Facility. The Committee did debate over this property due to proximity to other Town owned land. Informal and formal queries found the cost to purchase this parcel to be approximately 3 million dollars (\$100,000/acre).

4.0 Plan to meet the Needs

The Committee realizes it will be difficult to meet the full need through “build-out”, but the Committee also believes the need can be mostly if not completely met if the Town focuses on the following items.

- Over time, convert the Turkey Hill Road Department of Public Works facility and its adjacent Town owned properties into an Athletic Complex. This complex has the potential for 4 additional fields (including a rectangular practice field) to augment the 3 current fields.
- Start a conversation with the owners of 3 non-Town owned properties to see if space can be found to either have athletic fields on those tracts while they are not developed or seek to purchase or have the land donated for fields. The three tracts include the following:
 - o Parcel 6E 003 1, part of the Flatley property located on Daniel Webster Highway. The property is flat, located along DW Highway, has a stream in the northern end and is also located in an aquifer protection zone. Room for 1 to 3 fields with parking is available. Recently, interest has been expressed by the owner of this parcel to accommodate athletic fields.
 - o Parcel 2D 021 located off of Mast Road. Acquire and build another complex of Athletic Fields. This parcel has a potential 3 to 5 fields.
 - o Parcels 6E 002 & 7E 018 owned by the State of New Hampshire. They are located in the Northeastern part of Town. The properties have difficulties in access and may have difficulties related to power line easements, elevations, and water.
- Develop 2 rectangular fields on the Wright Avenue NH Plating property under Town option to control and leverage the Manchester YMCA property across the street to develop up to 4 rectangular athletic fields and possibly 1 - 90' baseball field.
- Examine the Merrimack Middle School property for 1 to 2 additional playing fields. During the sighting of the current school, space was left to accommodate an additional school building along with a play area.
- Develop the Horse Hill Nature Preserve 24 acres designated for 3 athletic fields in the Horse Hill Nature Preserve Definitive Plan (August 2006).
- Look closer at Town owned parcels 6C 300 and 6C 302 to see if they may have a possibility for two or three fields.

In Section 2.1, the Committee recognized an immediate need for 5 athletic fields of the following types and quantities:

- 1 Softball field in support of the MYA Softball program.
- 3 Rectangular fields in support of the MYA Football, Soccer, and Lacrosse programs.
- 1 Adult (90') Baseball field to support more than one organization or interest.

The following sections will detail how that need can be met in the short term and how a good portion of the other needs can be met over time. The Committee hesitated in suggesting what order to pursue each opportunity highlighted in the following sections. It is the belief of the Committee that some of these locations may present themselves or become available before others and that the Town should be flexible enough to move on an opportunity when it becomes available.

In general, the Committee believes the Town should utilize Town and School District land first but be flexible enough to consider other properties if they can be secured.

4.1 Turkey Hill Athletic Complex

The Department of Public Works has long had a complex of buildings, sheds, and outdoor storage off of Turkey Hill Road. This infrastructure is anchored by the Highway Garage. The Town knows this garage is in need of significant improvements with costs that will easily exceed several hundred thousand dollars.

Given this current circumstance, the Committee believes now is the time to consider making a more significant change and possibly relocating the Highway garage instead of repairing or rehabilitating the current building. There is space available at the Waste Water Treatment Facility along with other possibilities using current municipal property.

This DPW complex is adjacent to three athletic fields now known as the Martel Softball field and the Tim Gibson Memorial Complex. Combining these 3 fields with the potential for 4 more fields if the Highway Garage was not at that site makes the property an ideal Athletic Complex centrally located in the Town of Merrimack. As plans and activities progress with the pedestrian bridge and trail access from the Town center under Merrill's Marauders Bridge, this facility will have tremendous access to the Schools and the residents of the Town.

The Committee does realize the Town may not want to remove the Highway Garage and instead rehabilitate the building. With that in mind, it still makes good sense to move forward with 3 fields shown in this section given the property's central location in Town.

The current facility and adjacent Town owned parcels are shown in Figure 1 below:



Figure 1 - Turkey Hill Property

In looking at what can be done at the Turkey Hill properties, the following potential fields could be added:

1. A 90 foot Baseball field (Field “A” in Figure 6) adjacent to the Gibson Memorial Complex. This area is near the PSNH power line easement and is relatively level with very sandy soils except for the more recent stockpiling of gravel and hard fill near what would be the outfield. The need for a 90’ baseball field was deemed urgent by the Committee. This allows that need to be met.
2. A Softball Field (Field “B” in Figure 6) off of Atherton Road. This area is heavily wooded with mostly mature White Pines. The soils are sandy and the current area is used as a BMX style play area for the neighborhood. Parking maybe limited depending on the field needs but ample parking areas exist along Atherton Road. The need for a Girls Softball field was deemed urgent by the Committee. This allows that need to be met.
3. A rectangular practice area (“Practice Area” in Figure 6) that can be used for Cheerleading practice and as a Soccer/Lacrosse practice area or potentially a playing field for MYA participants in the 5 -10 year old range. The practice area shown in Figure 6 is very preliminary. In that area there is some parking as well as an elevated flat area. Either the elevated area could contain the practice location or the current parking area could be used for the practice location.

4. A potential Softball Field (Field “C” in Figure 6) where the current Highway Garage building exists. This field would be near Turkey Hill Road and could be situated so that it does not impact the current re-fueling facility on the site now.

This Town owned property allows two urgent needs to be met including the 90’ Baseball field and one Girls Softball Field. It also creates a rectangular practice area that can off load some of the demand on our current rectangular fields. Lastly, it allows for a second Girls Softball Field to be created at a later time if the DPW Highway garage is relocated.

This plan will have an impact on the Salt shed area and some areas of the DPW yard where material is stock piled. Parking is always a concern when adding fields. There is room for parking near the proposed fields along with a large parking area presently located near the Martel Softball field. Parking for the “B” Softball field could also be added along the west side of Atherton Road.

Figure 2 below shows the potential fields overlaid on the same picture as was used for Figure 1. There is a large wooded area not being proposed for any additional fields. That area is mostly wet and contains a stream and some slopes. Additional parking could be located along Atherton Road and should be investigated if the current parking areas are not considered adequate.

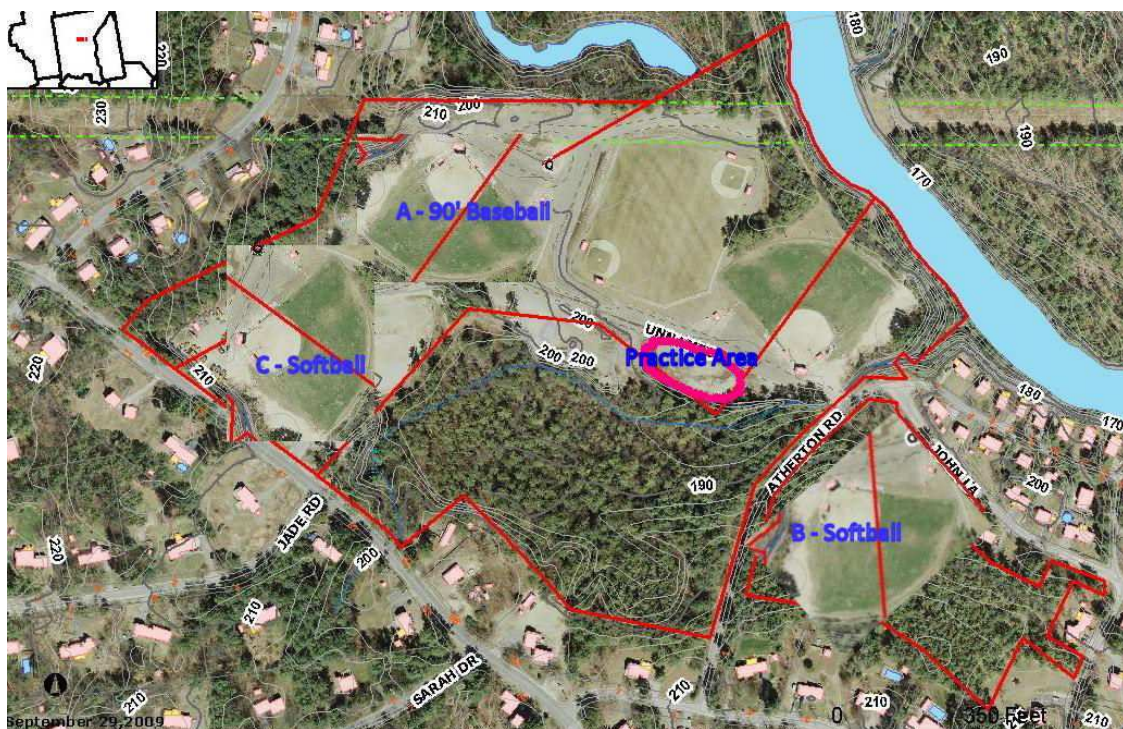


Figure 2 - Turkey Hill Road Athletic Complex

Note: The figure above used a cutout of the Martel Softball Field as a basis for showing locations of the baseball and softball fields. The depiction is the approximate sighting for those fields with exact locations determined once the plan is moved forward and proper engineering work can be completed.

4.2 Non-Town Sites to be investigated

During the property assessment phase of the Committee's work, three properties not owned by the Town, School District, or Merrimack Village District were identified as possible athletic field locations. Each has its unique issues but since they have a potential for athletic fields, the Committee believes it is important to open a conversation with their owners to learn if a possibility exists for the Town to have fields located at those sites. This section will detail each of the three properties.

4.2.1 Mast Road Property

Figure 3 below shows the Mast Road property known to the Town as 2D 021. It is the middle parcel highlighted in the Figure. The parcels to its east and west are both currently owned by the Town of Merrimack. The parcel to the west is a parcel given to the Town based on it is being mostly a wetland and the parcel to the east is the Waste Water Treatment Facility.

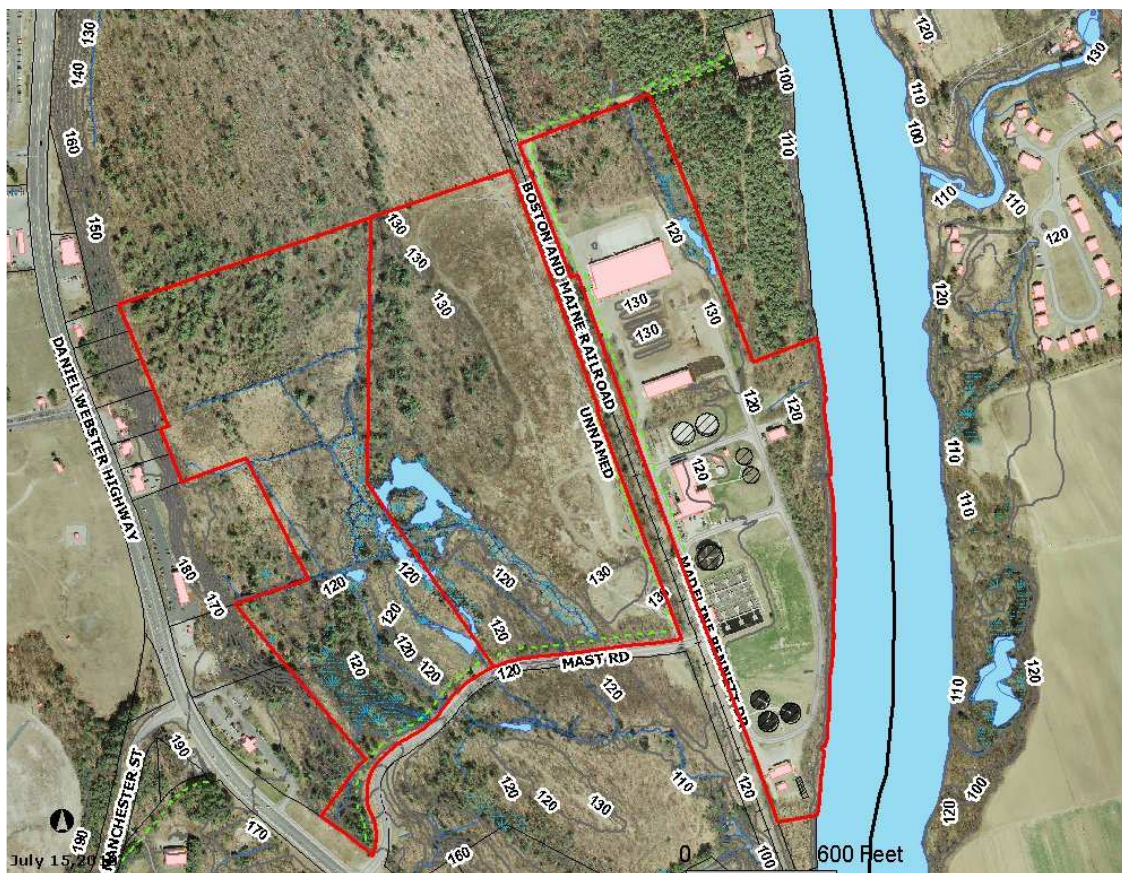


Figure 3 - Mast Road Property

The Committee made inquiries to the owners of this parcel to see if a sale price could be arranged for the Town and those inquiries returned an asking price of approximately 3 million dollars.

The property is relatively flat, away from residences and has good access. That parcel along with a few acres from the Town property to west could yield up to 5 playing fields and parking. Its continuous flat area would allow for a large green space that could be managed as one large potential field. Athletic fields (mostly rectangular) could be located on the parcel one year and the shifted on this large open area to allow certain areas to recoup/regenerate and give needed time off to a section of the overall large area. Time to regenerate is a significant concern with the current athletic fields in Town. This parcel has the potential to have this capability on site while also providing the advantages of having many fields co-located on one site.

4.2.2 State of NH Properties

The State of New Hampshire owns a number of parcels in Merrimack along the F. E. Everett Turnpike. Two of those parcels are adjacent to each other and can be considered very large when viewed as one “property”. The only access within Merrimack is along Back River Road. These parcels are shown in Figure 4 below with 7E 018 being the larger northern parcel and 6E 002 being the smaller southern parcel that has frontage on Back River Road.



Figure 4 - State of NH Properties

In closely looking at the properties using the topographical tools available with the Town GIS system it is clear the properties have gentle slopes but numerous water bodies, streams, and power line areas. It is not clear how you could co-locate many fields on these large parcels but since the State may no longer have a good use for those parcels it would be good to better understand the State's intentions for those parcels.

At this time it is difficult to estimate the number of potential fields on those parcels.

4.2.3 Flatley Property

This parcel known as 6E 003 1 is located along Daniel Webster Highway adjacent to and just behind the Reeds Ferry Fire Station. It has been recently used to grow and harvest hay. The property is well known and easily accessed. The owner of the parcel has held this property for quite some time and recently indicated an interest in allowing Town fields to be built on that property.

The Town should consider continuing the conversation with the owner to suggest the possibility of donating or developing athletic fields as part of any future proposed development of that parcel. Given the proximity to the F.E. Everett Turnpike and the

new airport access road it is highly likely that the parcel will be developed in the next few years. Figure 5 below shows the parcel along with its small water bodies and stream.



Figure 5 - Flatley Property

4.3 Other Field Sites

There are four other potential field sites already controlled by the Town of Merrimack and the School District. Two are well known and have preliminary field plans. The third is located on School District Property and the fourth in a neighborhood in the north part of Town.

The four sites include:

- Wright Avenue former NH Plating property along with the adjacent Manchester YMCA property.
- Horse Hill Nature Preserve.
- Merrimack Middle School Property.
- Town owned property off of Eagle Drive and Robin Lane.

4.3.1 Wright Avenue Property(s)

This property really encompasses two distinct properties across the street from one another. They are located just north of Horseshoe Pond off of Daniel Webster Highway. The first property is able to be put under Town control and the other is the property of the Manchester YMCA. These properties are centrally located in Town with reasonable access to and from Daniel Webster Highway except during the morning and evening workday rush hours.

The first property on the north side of Wright Avenue is known as the New Hampshire Plating property which has undergone significant rehabilitation as part of being a NHDES site and an EPA Superfund site:

http://yosemite.epa.gov/R1/npl_pad.nsf/31c4fec03a0762d285256bb80076489c/53cb30fefc3d3478525691f0063f6de?OpenDocument

<http://des.nh.gov/organization/divisions/waste/hwrb/fss/superfund/summaries/nhplating.htm>

The second property on the south side of Wright Avenue is owned by the Manchester YMCA. This property has gone through the Planning Board process and encompasses 5 athletic fields. These include 3 soccer/rectangular fields, 1 practice field, and 1 90' baseball field.

This property is owned by the Manchester YMCA which would require the Town to enter into a formal agreement with the Manchester YMCA to have Town fields at that site.

Figure 6 below shows both properties with the NH Plating property being actually two distinct parcels on the north side of Wright Avenue.



Figure 6 - Wright Avenue Properties

As part of the EPA planning process for the NH Plating property, a conceptual plan was developed for 2 rectangular fields. They are shown in the Figure 7 below. Using these fields would come with a restriction on how they could be developed.

The athletic field area is capped with 2 feet of clean material forming a barrier to the material below it. This cap includes 6" of gravel and 18" of topsoil/loam along with a warning fabric layer under these 2 feet. Improvements to the field area could not extend below this 2' barrier.

- Penetrations of the 2' barrier would have to be done by a qualified contractor and would include hazardous material handling.
- Light posts, goal posts, fencing could not be done if they involved penetration of the barrier. If they could be designed to not penetrate the barrier, they would probably be allowed.
- Irrigation could be done as that does not usually involve going very deep.

The Town is not yet the actual owner of record for the properties but does have the ability to take control of the property.

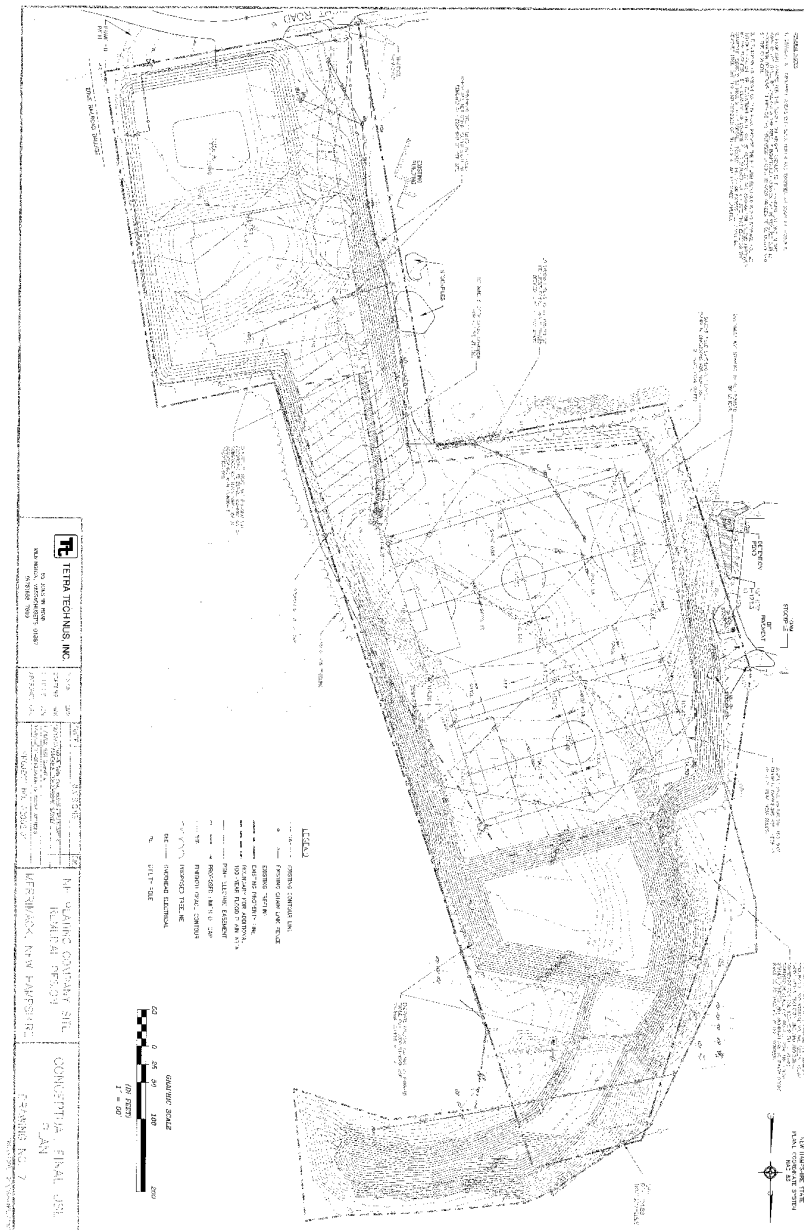


Figure 7 - NH Plating Fields

During the Planning Board process for the YMCA property, the YMCA expressed an interest in having an arrangement with Town to create and have athletic fields.

The YMCA wanted to have and would build 2 soccer/rectangular fields for its use during the day when it had activities going on. Those fields would be made available to the Town in the evenings and on weekends when that did not conflict with YMCA activities. The remaining 3 fields could be built by the Town for its use assuming an acceptable

agreement could be reached. The accepted site plans in the Community Development office show the exact locations of the YMCA fields. Figure 8 below shows the 5 fields on the YMCA property.

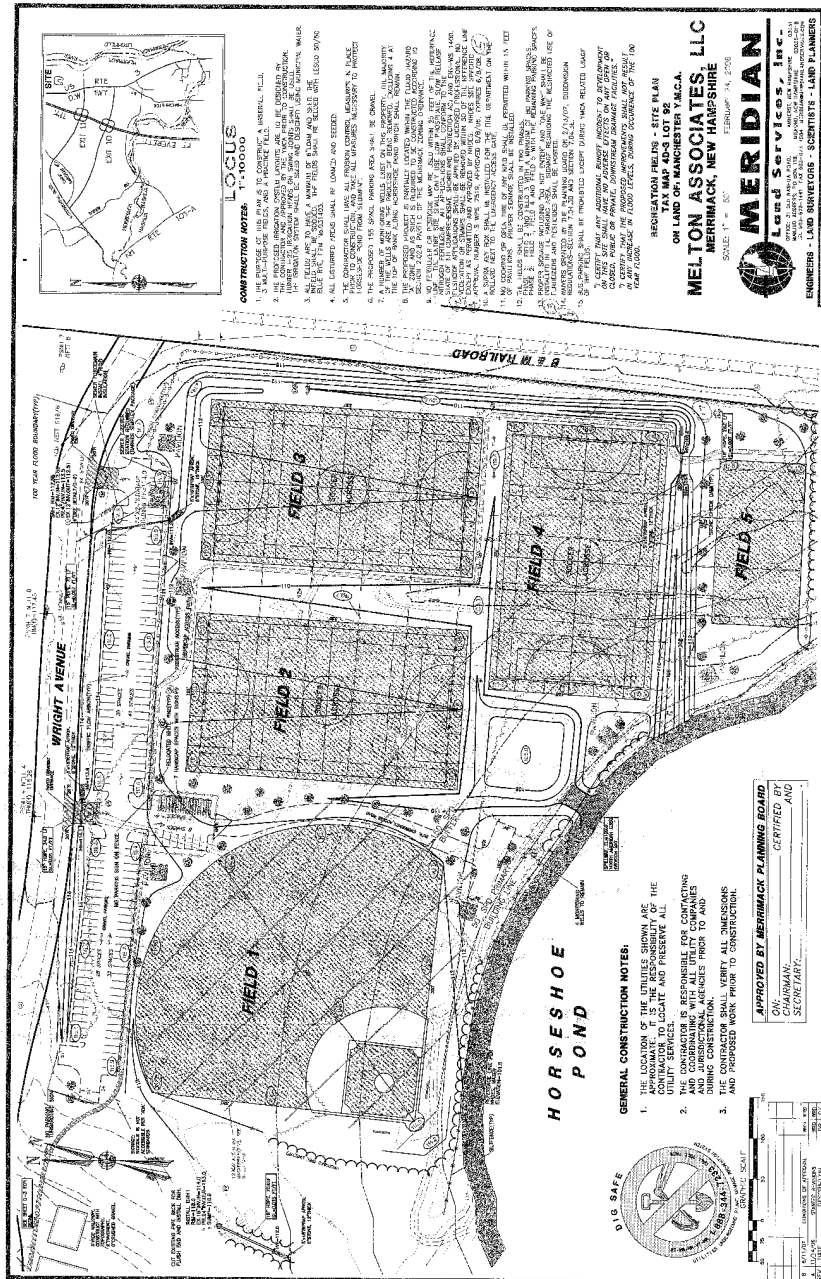


Figure 8 - YMCA Field Layout

It should be noted that the creation of the Wright Avenue fields should include a discussion of improvements to the Wright Avenue and Columbia Circle intersections.

This improvement is not covered in the recent traffic study known as “Roadway Infrastructure Master Planning Study.” The study was presented to the Town in April of 2010. This intersection improvement is included in the 2009 - 2016 Capital Improvement Program as a major project for Columbia Circle only.

4.3.2 Horse Hill Nature Preserve

The Town purchased the Horse Hill Nature Preserve (HHNP) in 2002. The property consists of 563 acres of which 24 acres have been reserved for athletic fields and the support of those fields. These 24 acres are shown and designated in the Horse Hill Nature Preserve Definitive Plan. This plan was accepted by the Town Council in 2006. More information on the Plan can be found here:
<http://www.hhnp.org/DefinitivePlan.htm>.

Figure 9 shows a map of HHNP with the proposed athletic fields superimposed on the property. The proposed fields would be accessed from Amherst Road just west of Pollard Road and east of Fuller Mill Road. There is currently a parking lot found just adjacent to where an access road would need to be built to access and service the fields.



Figure 9 - Athletic Fields at HHNP

The proposed fields for HHNP include:

- 1 – 90 foot Baseball Diamond.
- 2 – Rectangular Fields to support Soccer, Lacrosse, or Football.

In making the recommendation for fields at HHNP, the Consensus Building Group that created the Definitive plan recommended that a wildlife impact study be performed

examine all properties that contained a structure and had significant undeveloped land associated with them.

The Merrimack Middle School (MMS) is a property that has available land that could be used for fields. The property when it was approved by the New Hampshire Department of Environmental Security (NHDES), allowed for an additional school building with an associated playing field to be added to the site. The area where that building could be constructed was just behind the current playing fields of MMS. This area is shown in Figure 11 below:



Figure 11 - Merrimack Middle School Field Area

The area of interest is relatively flat, has good soils, and has access to electricity, water, and parking. The types of fields to be placed on this property have not been discussed but would likely include an overlap of the Town and School District's needs.

When MMS was constructed, an 8" water line was put in and run out to the current playing fields shown in the figure. Site work and planning is still needed before going forward with this idea. It should be noted that the area being proposed does not fall under the conservation easement placed on a portion of the MMS property.

To better clarify where additional fields could be located, Figure 12 below shows the same area shown in Figure 11 above but with the original potential sighting of an additional school building.

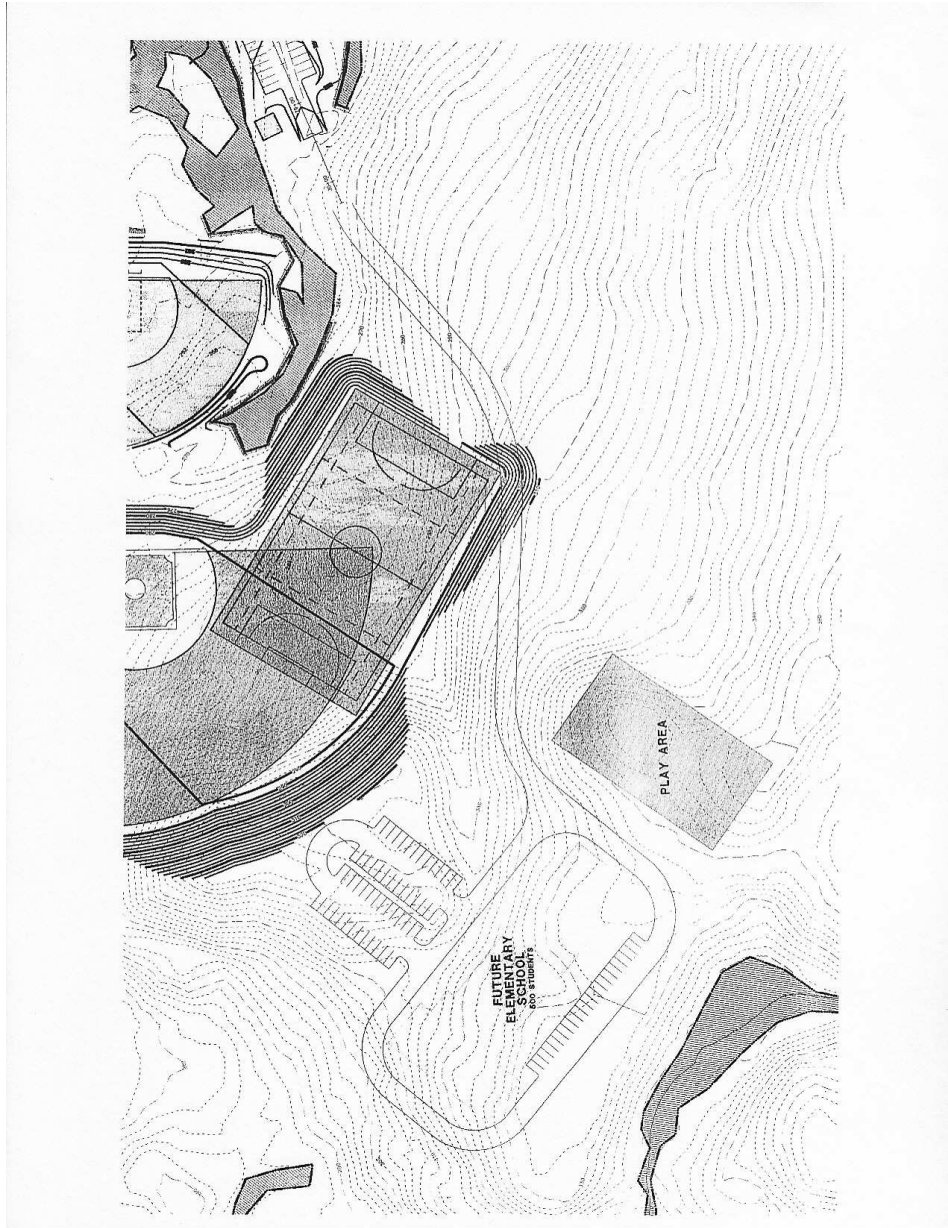


Figure 12 - MMS School Area

4.3.4 Eagle Drive / Robin Lane property

The Town owns two parcels of land known as 6C 300 and 6C 302. They are located off of Eagle Drive and Robin Lane which are off of Wire Road in the north central part of Town.

Figure 13 shows the two parcels as they relate to Eagle Drive, Robin Lane, and Falcon Drive with Wire Road and Bedford Road over on the right of the Figure.



Figure 13 - Eagle Drive - Robin Lane Properties

These parcels are currently considered to be managed by the Conservation Commission. They are both deep into a neighborhood. The terrain is generally flat with mostly small vegetation and white pine trees. It offers nearly 15 contiguous acres and is not covered by any deeded conservation easements or building restrictions. If the parcel was ideal, this could allow 1 - 3 fields with associated parking. More sight investigation and considerations made for access need to be taken into account before moving forward with these properties.

5.0 Funding the Need

When it comes to funding new fields and determining the cost of those new fields, Merrimack has only a few recent examples to draw from (see Section 7). This combined with the unique characteristics of any given site make the funding question difficult to answer.

Traditionally Merrimack has drawn from donations (money, in-kind services, and corporate fields), bonding (indirectly as part of a school project), and the Capital Reserve / Capital Improvement process to build fields. The proposal below continues in that same manner.

In order to meet the needs of Merrimack both today and tomorrow, the Committee suggests the Town do one or a combination of the following:

1. Support the development of new athletic fields in the Capital Improvement Program by contributing \$150,000 annually to Athletic Fields Capital Reserve Fund. This plan should provide the necessary background for these annual requests.

This amount will not provide for a new field each year but will allow for approximately 1 new field to be created every 2 years.

2. Consider not using the Athletic Fields Capital Reserve Account for current Merrimack field maintenance or upgrades unless they are included in this plan.
3. Consider locating and applying for Athletic Field related grants from the State, Federal Government and the private sector. Using money saved in the Athletic Fields Capital Reserve Account can be used to “match” the granted money if a match is required.
4. Consider bonding an approximate \$2 million bond for the purpose of creating new Athletic fields. A bond of this size can be realized with an approximate \$140,000 - \$200,000 annual principal and interest payment in today’s market. If this was done, the annual installments to the Athletic Fields Capital Reserve Account could be suspended with those dollars used to annually pay down this bond. The advantages of this approach includes:
 - Immediate needs can be met alleviating the scheduling concerns of the current Town and School programs.
 - Will create approximately 8 new fields depending on location, site concerns, and field type.

- Those paying for the bond will be those who will see an immediate benefit of the bond.
 - Building multiple co-located fields at the same time allows for savings that cannot be realized if you build just one field at a time.
 - Bonded money could also be used in conjunction with a grant to further leverage the bond/grant.
 - Include private sector and private party donations while also including municipal employees when building these new fields to further stretch these bond dollars. The current fund drive for Kids Kove is a good example of this along with the improvements recently done at Veterans Park.
5. Consider having the School District include (if not done already) money in its Capital Improvement Program to include the creation of 2 new fields at a current School District property.

5.1 How Funding through the CIP would look...

Providing annual \$150,000 installments to the Athletic Fields Capital Reserve Fund (CRF) following the Town's Capital Improvement Program (CIP) would provide on average one new athletic field every two years with the potential for a new field in back to back years. In total, 9 new athletic fields would be built over 15 years. This is based on the five following assumptions:

- A new Athletic Field costs \$250,000 to complete including all site related items (See section 7 for more details on field costs).
- The cost of new fields remains constant over the 15 year period.
- Cost of related site items including access, parking, and site work average to be the same for all field locations chosen.
- The current Athletic Field CRF balance would be used for field maintenance, upgrades, or other already identified purposes.
- The use of grants, in-kind services, or other donations is not included.

Table 4 below shows funding the CIP continuously for \$150,000 over the next 15 fiscal years. The total expenditure would be \$2,250,000. It shows the Town's immediate need

for 5 new fields would be met in 2020 along with 9 fields being built over the 15 year period.

Fiscal Year	Amount	Balance	Field Built	Total New Fields
2011/12	150,000			
2012/13	150,000			
		50,000	2013	1
2013/14	150,000			
2014/15	150,000			
		100,000	2015	2
2015/16	150,000			
		0	2016	3
2016/17	150,000			
2017/18	150,000			
		50,000	2018	4
2018/19	150,000			
2019/20	150,000			
		100,000	2020	5
2020/21	150,000			
		0	2021	6
2021/22	150,000			
2022/23	150,000			
		50,000	2023	7
2023/24	150,000			
2024/25	150,000			
		100,000	2025	8
2025/26	150,000			
		0	2026	9
Total Funding				\$2,250,000
Total Fields Built				9

Table 4 - Annual CIP Installments

5.2 How Funding through a Bond would look...

Using a 15 year bond for \$2,000,000 dollars would have a total expenditure after 15 years of \$2,560,232. Its annual cost would vary over the period and range from \$203,000 in its most expensive year to \$141,830 in its least expensive year. This option would allow for 8 new fields to be built immediately given the following five assumptions:

- A new Athletic Field costs \$250,000 to complete including all site related items (See section 7 for more details on field costs).
- An interest rate on the bond of 3.5%.

- Cost of related site items including access, parking, and site work average to be the same for all field locations chosen.
- The current Athletic Field CRF balance would be used for field maintenance, upgrades, or other already identified purposes.
- The use of grants, in-kind services, or other donations is not included.

Table 5 shows funding the bond over the next 15 fiscal years and how the Town's immediate need for 5 new fields would be met immediately (in 2012). It also means 3 additional fields would be build immediately to allow for field rotation, reconditioning, and an overall spread of the activities over the 15 year period.

BOND PAYMENT SCHEDULE					
Principal - \$2,000,000					
Term - 15 Years					
Interest Rate - 3.50%					
Year Ending	Principal	Interest	Interest		
June 30	July	July	January	Total	Balance
2011	-	-	-	-	2,000,000
2012	133,000	35,000	35,000	203,000	1,867,000
2013	133,000	32,673	32,673	198,346	1,734,000
2014	133,000	30,345	30,345	193,690	1,601,000
2015	133,000	28,018	28,018	189,036	1,468,000
2016	133,000	25,690	25,690	184,380	1,335,000
2017	133,000	23,363	23,363	179,726	1,202,000
2018	133,000	21,035	21,035	175,070	1,069,000
2019	133,000	18,708	18,708	170,416	936,000
2020	133,000	16,380	16,380	165,760	803,000
2021	133,000	14,053	14,053	161,106	670,000
2022	133,000	11,725	11,725	156,450	537,000
2023	133,000	9,398	9,398	151,796	404,000
2024	133,000	7,070	7,070	147,140	271,000
2025	133,000	4,743	4,743	142,486	138,000
2026	137,000	2,415	2,415	141,830	1,000
	1,999,000	280,616	280,616	2,560,232	

Table 5 - Funding by Bond

6.0 Field Types and Associated Requirements

Early in the process the Committee realized it would be important to have information on the actual field space, buffer, and parking needs each athletic use requires. The Committee noted when fields are co-located some of the parking and buffer needs can be reduced and when placing fields outside of residential areas some of the buffer needs can also be reduced.

Table 6 shows the field type, sport/use, dimensions, buffer area, and parking spaces.

Field Type	Sport	FULL FIELD				NO 50' BUFFER				Parking Places
		Length	Width	Sq Ft	Acres	Length	Width	Sq Ft	Acres	
Baseball	Baseball (large field)	500	500	250,000	5.74	400	400	160,000	3.67	40
Baseball	Baseball (small field)	393	393	154,449	3.55	293	293	85,849	1.97	40
Baseball	Softball (fast pitch or girls)	395	395	156,025	3.58	295	295	87,025	2.00	40
Baseball	Softball (slow pitch or men)	445	445	198,025	4.55	345	345	119,025	2.73	40
Rectangular	Soccer	540	415	224,100	5.14	440	315	138,600	3.18	48
Rectangular	Lacrosse (boys)	500	378	189,000	4.34	400	278	111,200	2.55	48
Rectangular	Lacrosse (girls)	560	408	228,480	5.25	460	308	141,680	3.25	48
Rectangular	Football	540	340	183,600	4.21	440	240	105,600	2.42	96
Rectangular	Field Hockey	470	365	171,550	3.94	370	265	98,050	2.25	48
paved court	Basketball					144	110	15,840	0.36	14

Max baseball		500	500	250,000	5.74	400	400	160,000	3.67	40
Max rectangular		560	415	232,400	5.34	460	315	144,900	3.33	96

Table 6 – Field Type Areas

To understand the area requirements of parking spaces, Table 7 was developed.

	Length	Width	Sq Ft	Acres
10 parking places	45	60	2,700	0.06
14 parking places	63	60	3,780	0.09
20 parking places	90	60	5,400	0.12
30 parking places	145	60	8,700	0.20
40 parking places	90	120	10,800	0.25
48 parking places	108	120	12,960	0.30
96 parking places	216	120	25,920	0.60

(9' x 18' per car, 24' access)

Table 7 – Parking Space Areas

The following notes are related to the above Tables:

1. Actual playing field sizes are as described in official publications related to the sport (e.g., Cal Ripkin / Babe Ruth Baseball, National Federation of State).
2. There is a 20' allowance around all sides of the fields for user and maintenance access, concessions, etc.
3. Parking is not included in the required square footage/acreage, but must be considered in locating a field.
4. The Full Field figures include an additional 50' of buffer space around all sides of the field. This is to protect the neighbors, and to help isolate the field. These buffers can be reduced if fields are not located in residential areas.
 - Note that contiguous fields do not necessarily need the 50' buffer space between them. For example, two Soccer fields located side by side could fit on a rectangle 540' x 730' = 9.05 acres; a savings of 1.24 acres compared to two separate fields.
 - 50' buffers may not be needed in some locations, such as next to parks, school playgrounds, conservation or open space properties, commercial or industrial areas, etc.

7.0 Typical Costs for Field Improvements

Note: Costs for fields differ greatly when you also factor in the costs of roadways, parking areas, buffers, tree work, fences, and any other access upgrades.

In gathering information on field costs, the Committee drew on three recent projects that occurred within Merrimack. Those projects included:

- The Gibson Memorial Complex at Turkey Hill Road.
- The irrigation project done at Bishop Field on Baboosic Lake Road.
- The Merrimack Middle School Athletic Fields on Madeline Bennett Lane.

7.1 *Gibson Memorial Complex*

This project is located off of Turkey Hill Road and Atherton Road near the DPW Highway Garage. It was built during 2003 and 2004 and includes the following:

- Irrigation
- Loam, sod, infield mix, etc.
- Fencing
- Dugouts
- Guardrails
- Site work
 - Clearing and grubbing
 - Earthwork
 - Rock and Ledge Excavation (and blasting)
 - Erosion and sedimentation control
- Relocating a Hydrant

The project involved relocating 2 little league baseball fields and developing a common rectangular field.

A plan for the project is shown below in Figure 14 and the as-built improvement is shown in the GIS picture with aerial photo from 2005 in Figure 15.

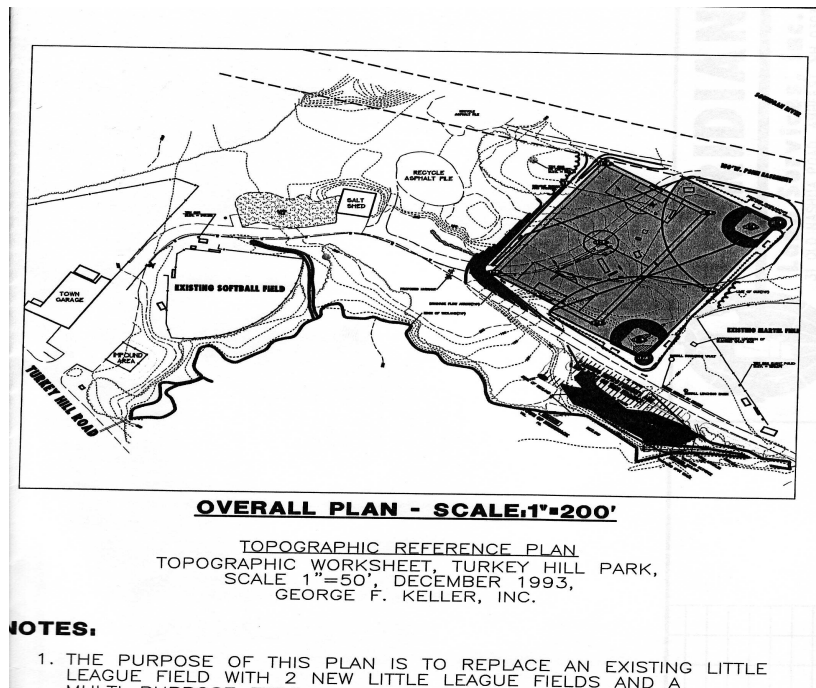


Figure 14 – Gibson Field Improvement

The as-built improvement can be seen in the GIS-aerial shown below in Figure 15 with the outfields of both baseball diamonds serving as a rectangular field when baseball is not in session.

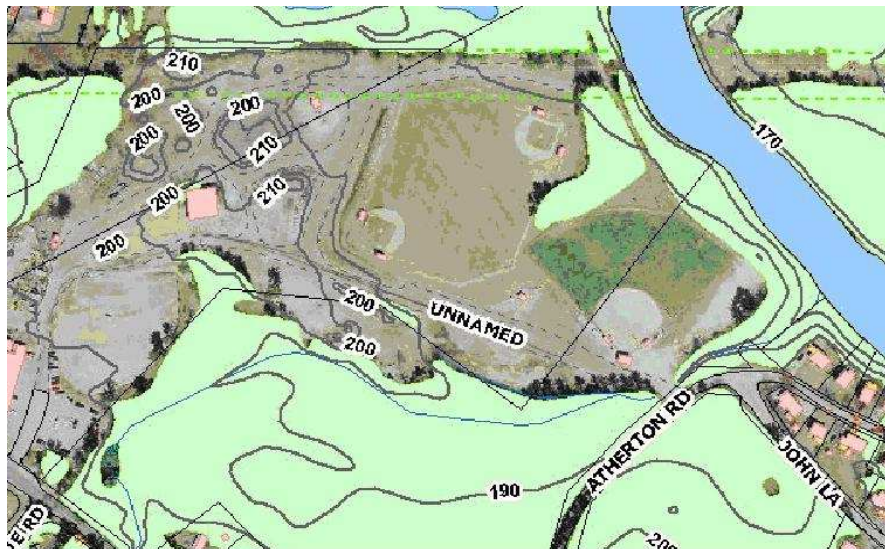


Figure 15 – As-Built Gibson Improvement

7.1.1 Costs as Bid for the Gibson Memorial Complex

The cost breakdown for this improvement is shown below in Table 8:

Description	Units	Unit Price	Amount
Mobilization and Bond	1	26,000	26,000
Clear and grub	1	12,000	12,000
Erosion Control	1	5,000	5,000
Site Cuts and fills	1	54,000	54,000
Irrigation System	1	20,000	20,000
Screened loam	1	20,000	20,000
Sod	1	30,000	30,000
Infield mix	1	5,000	5,000
Remove and relocate hydrant	1	5,000	5,000
Fence, gates, 7 posts	1	18,000	18,000
Pump House	1	10,000	10,000
Dug outs	4	7,500	30,000
Guardrails	1	5,000	5,000
Dug outs @ Twardowsky fields	2	7,500	15,000
Dug outs @ Martel Field	2	8,000	16,000
		Total	\$271,000

Table 8 - Costs for Gibson Complex

Note: The above chart also shows an improvement to the Twardowsky Softball field on Amherst Road and the Martel Softball field adjacent to the Gibson Memorial Complex.

7.2 Bishop Field Irrigation Project

Bishop Field is located on Baboosic Lake Road next to Madeleine Bennett Road (which leads into the Merrimack Middle School). In 2007-2008, this field was reconstructed to make it a full rectangular pitch for lacrosse and soccer. It also had irrigation added including the building of a pump house. This project was done by a local contractor at the cost of \$80,500.

The cost breakdown was as follows:

- \$40,600 – Supply, deliver, and install new irrigation system including irrigation shed (pump) shed.
- \$39,900 – Field improvements including loam, limestone, fertilizer, seed, and establish turf.

The field improvement area is show below in Figure 16 as it appeared in 2005 before the actual upgrade was completed.



Figure 16 – Bishop Field¹

7.3 Athletic Fields at the Merrimack Middle School

In 2004, the Merrimack School District completed the new Merrimack Middle School. As part of that construction, a Softball field and a Baseball/Soccer (rectangular) field combination was built.

The costs for constructing those fields were as follows:

- Softball: \$221,815
- Soccer/Baseball: \$207,378
- Well: \$27,500

A picture of those fields is show below in Figure 17:

¹ GIS maps or portions thereof in this entire document come from using the Town of Merrimack GIS online system at <http://www.merrimackgis.org>



Figure 17 - Merrimack Middle School Fields¹

7.4 Costs and other considerations for Artificial Turf fields

Whenever there are field discussions, the use of artificial turf is often discussed. It offers many advantages over traditional grass/sod surfaces. These advantages include:

- Durability
- No irrigation required
- Lines can be permanent
- No fertilizers
- Yearly maintenance is ~10% of natural grass/sod

An artificial field program should include costs for:

- Disinfectants
- Detergents
- Equipment to apply and remove these cleaners as they do not absorb them.

One other item to consider beyond the cost of installation is the cost of the maintenance equipment for the turf. The equipment (sweeper, sprayer, field magnet, etc) used is not the same as that for a regular grass field.²

¹ Figure was taken from a view using <http://maps.live.com> – Copyright Microsoft Corp 2009 and Pictometry International Corp 2009.

² Maintenance and associated costs more specifically described at <http://www.superbowl sod.com/pdfs/real3.pdf>

Further information on the safety of artificial turf fields can be found at:

<http://www.syntheticurfCouncil.org/>

The New Hampshire Department of Education has a more information on artificial turf at its website regarding the application for building aid for artificial fields. This webpage provides further details on the points made above and can be found at:

http://www.education.nh.gov/program/school_approval/at_letter.html

Examples of local high schools in the area that have artificial turf fields include:

- Bedford High School
- Nashua High Schools – Stellos Stadium
- Manchester West and Memorial High Schools
- Exeter High School
- Portsmouth High School:
<http://www.cityofportsmouth.com/newmiddleschool/files/AstroTurfUnderConstruction.pdf> (**Note:** This document is full of good information.)

Stellos Stadium in Nashua is the oldest of the local artificial fields in this area. Nashua is currently contemplating a bond of \$1,000,000 to replace the turf at Stellos Stadium.

Appendix A - Current (2007/8/9) Fields and Usage

SITE	DESCRIPTION	LOCATION	OPERATOR	CURRENT USERS	COMMENTS
Merrimack Middle School Soccer Field	Full size soccer field	Behind Mastricola Middle School	Merrimack School District	School Soccer / MYA Soccer	
Merrimack Middle School Baseball Field	90 foot baseball diamond	Behind Mastricola Middle School	Merrimack School District	School Baseball / MYA BR Baseball	
Merrimack Middle School Softball Field	Full size softball field	Behind Mastricola Middle School	Merrimack School District	School Softball / MYA Softball	
Merrimack High School Memorial Field	Full size football/soccer/lax field with track, lights	Behind High School	Merrimack School District	School Football, Soccer, Lacrosse, Track, X-Country, Band; limited MYA Lacrosse	
Merrimack High School Softball Field	Full size fast pitch softball field	Below Memorial field, close to river	Merrimack School District	School Softball, Football practice / MYA Softball	
Mastricola Elem. Field (O'Neil)	90 foot baseball diamond, rectangular field in the fall	O'Gara drive, south of Mast. Elem School	Merrimack School District	School Field Hockey, Baseball / MYA BR Baseball	"JV" baseball field
Mastricola Upper Elem. School Baseball Field	90 foot baseball diamond, rectangular field in the fall	O'Gara drive, across from skateboard park	Merrimack School District	School Soccer, Baseball / MYA BR Baseball / Adult Baseball / Legion Baseball	"Varsity" baseball field
Mastricola Upper Elem. School Softball Field	Full size softball field	Next to Upper Elem School, across from police	Merrimack School District	School Softball / MYA Softball	
Thorntons Ferry #1	Partial rectangular field	Upper field to left of school	Merrimack School District	MYA Soccer	Rough surface
Thorntons Ferry #2	Small grassy play area	Lower playground to right of school	Merrimack School District	MYA Soccer	small
Reeds Ferry #1	Softball field in spring, soccer field in fall	First field on left on Lyons Rd, headed to school	Merrimack School District / Town agreement	School Soccer, Lacrosse / MYA Softball, Soccer	
Reeds Ferry #2	Softball field in spring, soccer field in fall	Second field on left on Lyons Rd.	Merrimack School District / Town agreement	School Soccer, Lacrosse / MYA Softball, Soccer	

Reeds Ferry #3	Rectangular field, some lights	Third field on left on Lyons Rd, lights	Merrimack School District / Town agreement	School Soccer, Lacrosse / MYA Lacrosse, Soccer	
Reeds Ferry #4	School playground, partial rectangular field	To the left of Reeds Ferry school, behind swings	Merrimack School District / Town agreement	MYA Soccer	
Reeds Ferry #5	Small softball field	To the left of Reeds Ferry school, up from playground	Merrimack School District / Town agreement	MYA Softball, Soccer	Sheldon Lane Field
Reeds Ferry #6	Rectangular field	Second field on right on Lyons Rd	Merrimack School District / Town agreement	School Soccer, Lacrosse / MYA Soccer, Lacrosse	
Reeds Ferry #7	Rectangular field	First field on right on Lyons Rd	Merrimack School District / Town agreement	School Soccer, Lacrosse / MYA Soccer, Lacrosse	sometimes referred to as #7A, B, C
Wasserman Park #1	Small rectangular field, baseball backstop	Below P&R HQ, next to tennis courts	Town	Summer Camp / MYA Cardinals, Youth Baseball	
Wasserman Park #2	60 foot baseball diamond, large outfield	Next to Norma French playground,	Town	Summer Camp / MYA Cardinals, Youth Baseball	
Wasserman Park #3	Large grassy area	South of and slightly above #2	Town	Summer Camp / MYA Cardinals, Youth Baseball	sometimes referred to as #3 and #4
Veterans' Park #1 (Rivard)	90 foot baseball diamond, large outfield	On the left as you enter Vets Park	Town	MYA Youth Baseball, Soccer, Cardinals	SP4 Richard N. Rivard Memorial Field; short backstop
Veterans' Park #2 (Heath)	60 foot baseball diamond.	On the right as you enter Vets Park	Town	MYA Youth Baseball, Soccer, Cardinals	Merchant Marine Officer Phillip A. Heath Memorial Field
Veterans' Park #3 (Parker)	60 foot baseball diamond.	On the right as you enter Vets Park	Town	MYA Youth Baseball, Soccer, Cardinals	Captain Harry A. Parker Memorial Field; Pvt. Roger R. Gerard Memorial Field = #2 & #3 combined to make one large field

Bise Field	60 foot baseball diamond, lights	Next to MYA Building	Town	MYA Youth Baseball, Cardinals	
Twardosky Field #1	Full size softball field	Amherst Road, 1 mile west of Turnpike	Town	Adult Softball	
Twardosky Field #2	Partial rectangular field	Amherst Road, 1 mile west of Turnpike	Town	MYA Soccer	
Bishop Field	Full size rectangular field	Baboosic Lake Rd, in front of Mid Sch, by lights	Town	MYA Soccer, Lacrosse	
Martel Field	Full size softball field, lights	Off of Atherton Rd, behind DPW	Town	Adult Softball	rarely used by MYA Softball
Gibson Field #1	60 foot baseball diamond	Off of Atherton Rd, behind DPW	Town	MYA Youth Baseball, Soccer.	Tim Gibson Memorial Athletic Complex
Gibson Field #2	60 foot baseball diamond	Off of Atherton Rd, behind DPW	Town	MYA Youth Baseball, Soccer.	Gibson #1 & #2 outfields combine to make rectangular field
Kollsman Field #1	Full size soccer field	DW Highway, across from A-B.	Private - Kollsman.	MYA Soccer	
Kollsman Field #2	Full size soccer field	DW Highway, across from A-B.	Private - Kollsman.	MYA Soccer	Kollsman #2 usually split into two small fields for young teams
Kollsman Field #3	Softball field	DW Highway, across from A-B.	Private - Kollsman.	MYA Softball	
Kollsman Field #4	Softball field	DW Highway, across from A-B.	Private - Kollsman.	MYA Softball	
Anheuser-Busch Long Field	Full size soccer field	DW Highway, south of main plant	Private - Anheuser-Busch	MYA Soccer	games only, some restrictions
Anheuser-Busch Thornton Field	Full size soccer field	DW Highway, south of main plant	Private - Anheuser-Busch	MYA Soccer	games only, some restrictions
Anheuser-Busch Softball Field	Full size softball field	DW Highway, south of main plant	Private - Anheuser-Busch		rarely used by Town / School / MYA
Amtech Field	60 foot baseball diamond	Continental Blvd, near MVD warehouse	Private - Amtech	MYA Youth Baseball	

Camp Sargent	Small softball diamond	Camp Sargent Rd, just east of Vets Park	Private - YMCA Camp Sargent	(no School / Town / MYA use at current time)	Camp parking lot used for football overflow
Nashua Corp. Soccer Field	Full size soccer field	DW Highway, behind and left of plant	Private - Nashua Corporation	(no School / Town / MYA use at current time)	Private clubs use the soccer field
Nashua Corp. Softball Field	Small softball diamond	DW Highway, to right of plant	Private - Nashua Corporation	(no School / Town / MYA use at current time)	MYA has used this field in distant past
American Legion Softball Field	Full size softball field	Baboosic Lake Rd, behind Legion bldg	Private - American Legion	(no School / Town / MYA use at current time)	
<u>Approximate 2007 Usage, School / MYA / Town</u>					
Spring:	Rectangular Fields	9			
	Ball Fields	22	(4 90' fields, 8 60' fields, 10 Softball fields)		
	General Grass Fields, irregular	5			
Fall:	Rectangular Fields	15			
	Ball Fields	6	(2 60' fields, 4 Softball fields)		
	General Grass Fields, irregular	11			

Appendix B – Properties Evaluated

