



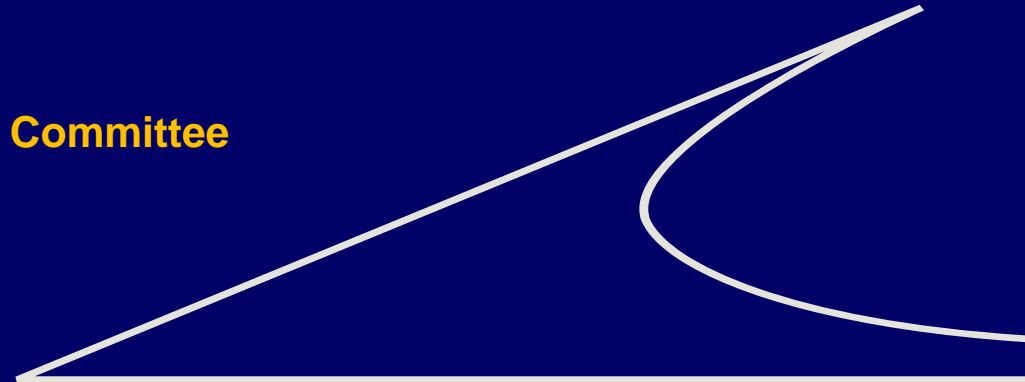
Town of Georgetown

Recreational Fields Master Plan

Board of Selectmen: December 16, 2019
School Committee: January 9, 2020

Gale Associates, Inc.
John M. Perry, P.E.
Brian Biagini, E.I.T.

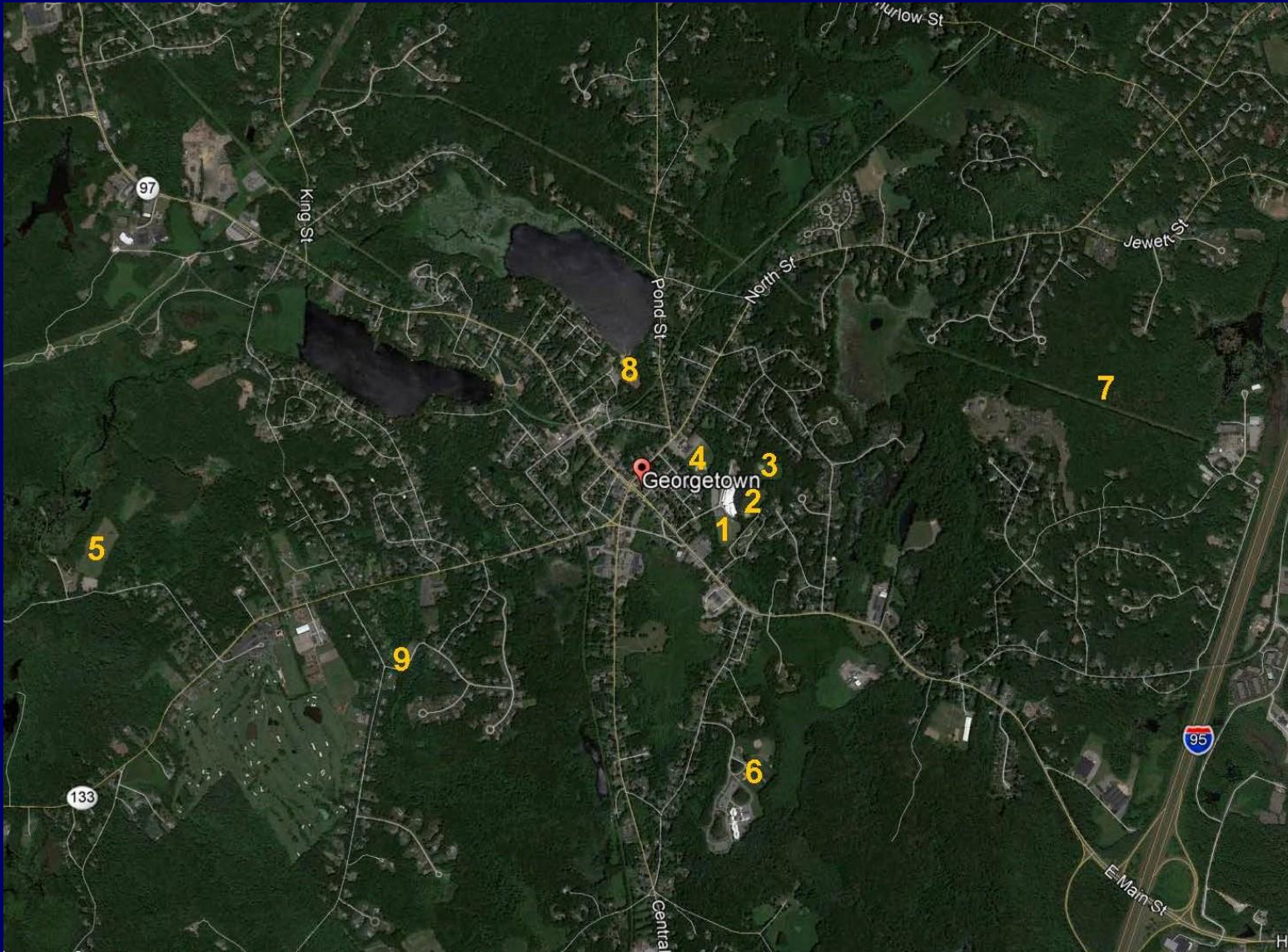
Recreational Fields Study Committee
Jeff Moore, Co-Chair
Scott MacDonald, Co-Chair



Introduction and Purpose

- **Evaluate the physical condition of each athletic field venue at West Street and the Middle/High School Fields**
- **Quantify Demand Use vs Capacity at each athletic field venue**
- **Evaluate and program the Town requirements for upgraded or new facilities**
- **Provide Master Planning Services and Renovation Strategies to meet the needs of the community**
- **Assist Town in the programing and planning of the Operational and Maintenance needs of the existing and proposed facilities**

Existing Town Fields



1. High School Synthetic Turf
2. High School Upper Left
3. High School Upper Right
4. Perley Field
5. West Street Complex
6. Penn Brook Elementary
7. Greenway Parcels
8. American Legion Park
9. Little Hills

Conducted Evaluations at the Middle/High School Fields and West Street.

Compiled Usage and Scheduling data for all existing fields (except Greenway, which is vacant)

Considered future field development opportunities at Greenway Parcel.

Field Evaluation Form

Athletic Field Evaluation Form



Name of Venue

Field Grade:

####

Date of Evaluation			
Type of Field:	Multi-Purpose Rectangular (MPR)		
Number of Fields:			
Typical age of users:			
MPR Field Dimensions:	Length:	Width	Run-Out

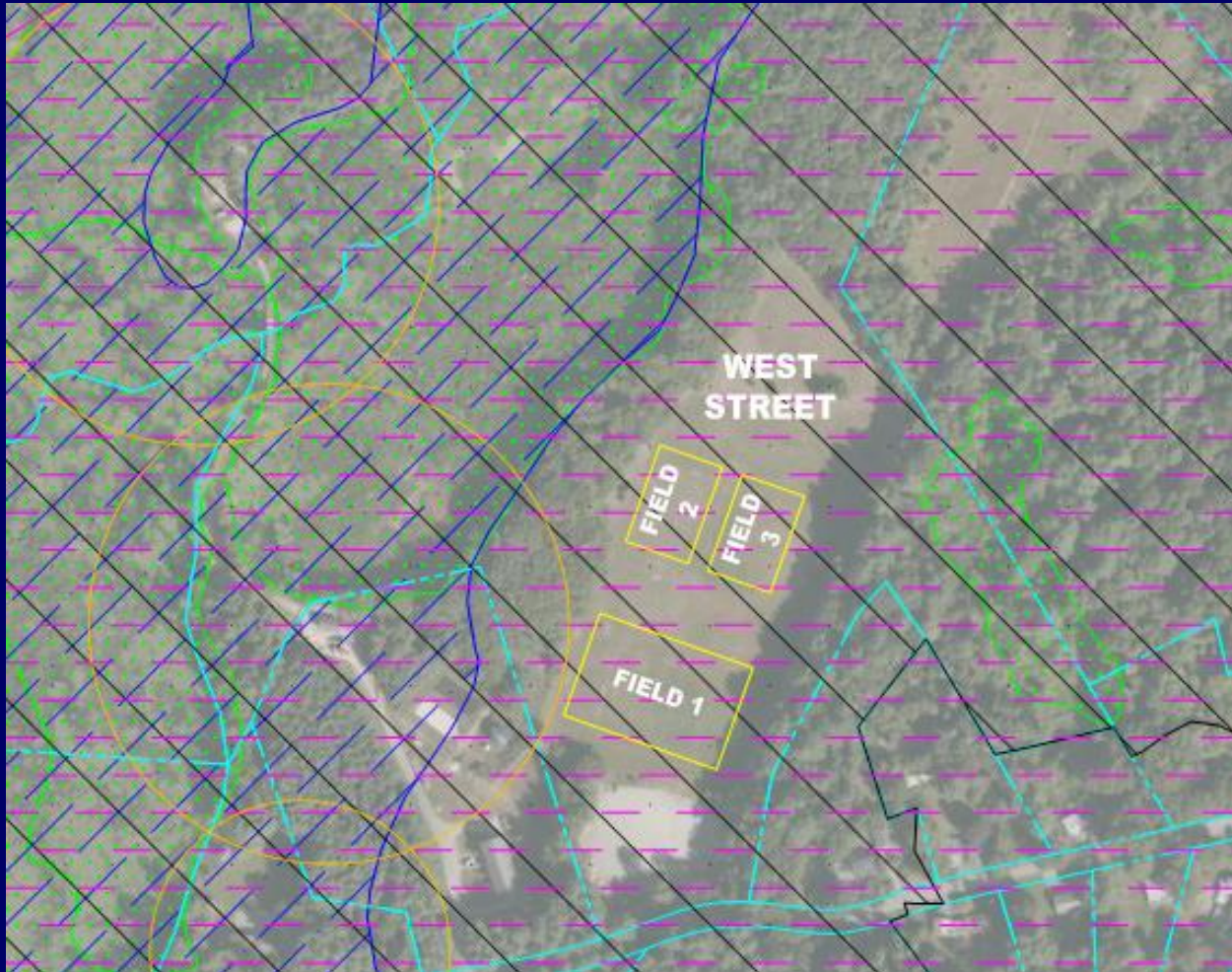
	N/A	Poor (1)	Fair (2)	Good (3)	Excellent (4)
Geometry					
Stand of Turf					
Planarity (playing surface - lack of dips, heaves, holes, etc.)					
Striping (Completeness, visibility, condition)					
Fencing (Perimeter fencing, gates, etc.)					
Irrigation (condition, coverage, reported adequacy)					
Safety (Run-outs, lack of obstructions, etc.).					
Support Equipment (goals, players benches, etc.)					
Athletic Lighting (reported adequacy, lack of spill / glare, general condition, etc.)					
Site Lighting					
Spectator Seating (condition, size, accessibility, etc.)					
Drainage					
Average Score = #DIV/0!					

Comments

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Background Investigation and Facilities Assessment

Town Site – West Street



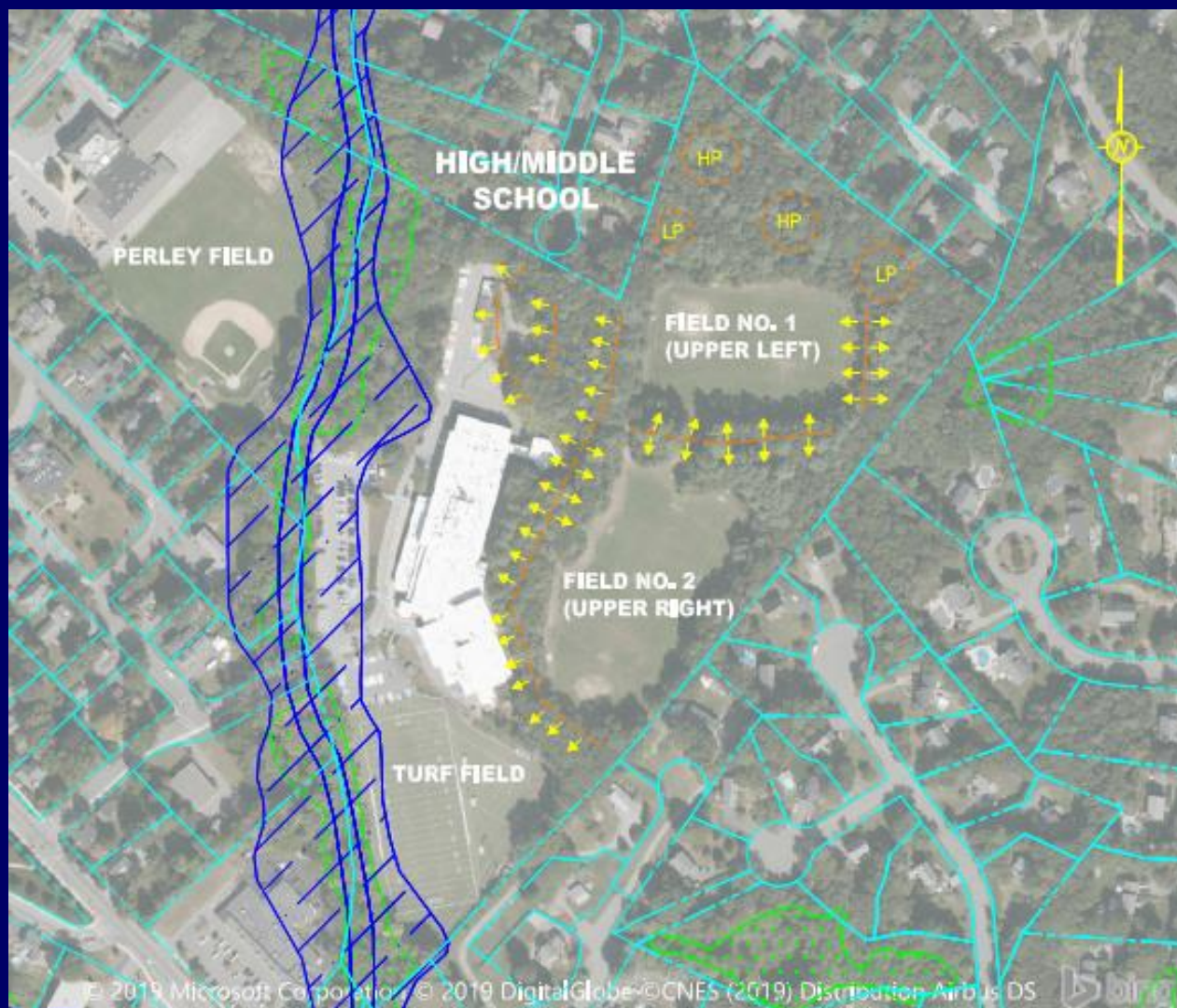
- **Field 1 Score: 1.8**
- **Field 2 Score: 1.7**
- **Field 3 Score: 1.7**
- **General Issues:**
 - ADA Non-Compliant
 - No On-Site Storage
 - Soccer Goals in Poor Condition
 - Field Turf Worn, Needs Repair
 - Located in Zone II Wellhead Protection Area and Borders Zone I Wellhead Protection

West Street Photos



Background Investigation and Facilities Assessment

Town Site – High School



- Upper Left Average Score: **1.9**
- Upper Right Average Score: **2.0**
- General Issues:
 - ADA Non-Compliant
 - Minimal On-Site Storage
 - Damaged and Rusty Backstop Fencing
 - Poor Drainage at Upper Left
 - Infields Overgrown
 - Chain Link Batting Cage Significantly Deformed
- Synthetic Turf Score: **3.4**
 - Generally in Good Condition

Middle/High School Photos



Use Questionnaire

Name of using agency/sport: _____

Agency point of contact information:

Name: _____

Phone: _____

Email: _____

Date: _____

What sport is played: _____

What age group(s): _____

What is the sex of the participants (m/ f/mixed): _____

What is the total number of program participants: _____

What has been the growth trend in the past 5 years? _____

What do you expect for growth in the next 5 years? _____

For each season, what are the number of teams fielded?

Season 1: No. Teams _____ Ave. Players per team: _____

Season 2: No. Teams _____ Ave. Players per team: _____

Are your number of teams currently restricted by field space? _____

If so, how many more teams would you fill given unlimited space? _____

Are there out-of-season workshops or clinics that require field space?: Explain type, number and dates, what venue is used and time used per day: _____

To the best of your ability please complete the below schedule for your agency/sport. The Field Venue refers to the field site (e.g., High School) and the Field No./Name refers to the specific field at the venue.

Season 1: Start Date: _____ End Date: _____

Field Venue	Field No./Name	Timeframe for games/practices (e.g., Mon 5pm-9pm, Wed 3pm-7pm)						
		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.

Season 2: Start Date: _____

End Date: _____

Field Venue	Field No./Name	Timeframe for games/practices (e.g., Mon 5pm-9pm, Wed 3pm-7pm)						
		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.

Describe the general condition of each of the fields your program uses in terms of maintenance, serviceability, drainage, amenities, safety, geometry, etc.: _____

Would additional lighted fields in your community enhance field availability? Do you feel additional lighted fields are justified? If so, which fields in particular do you recommend be lighted? _____

Would synthetic turf fields in your community enhance field availability? Do you feel synthetic turf fields are justified? If so, which fields in particular do you recommend become synthetic turf? _____

As the town prepares a master plan for its athletic fields, what are your program's top priority needs that should be addressed?

1) _____

2) _____

3) _____

Please provide any further comments or information that may be pertinent to the athletic/recreation planning process: _____

Thank you for your cooperation in completing this questionnaire.

Current Use Demand (Raw Data)

Georgetown User Demand Statistics

MATRIX LEGEND:

Natural Grass

Field Uses Under 250/Year

Field Uses Between 250-350/Year

Field Uses Over 350/Year

Synthetic Turf

Field Uses Under 750/Year

Field Uses Between 750-850/Year

Field Uses Over 850/Year

Overburden Fields

- Penn Brook Field 2 (343)
- West Street Field 3 (308)
- Perley Field (266)
- Penn Brook Field 1 (485)
- Penn Brook Field 4 (803)
- High School Synthetic Turf Field (951)
- American Legion Park (645)

Town of Georgetown Athletic Fields		CURRENT USE DATA (SCHEDULED TEAM USES)												
Georgetown User Demand Statistics														
		1				2			3			4	5	6
User Organization	User Totals	Pean Brook Elementary				High School			West Street			Portley	Littles Hill	American Legion Park
		Field 1 60' Diamond	Field 2 60' Diamond	Field 3 Soccer G2	Field 4 Soccer G6 60' Diamond	Turf Field 60' Softball 90' Baseball MFR	Upper Right MFR 60' Softball	Upper Left MFR 60' Softball	Field 1 G4x	Field 2 G4B	Field 3 G6	Baseball Field 90' Diamond	G2 MFR-Y	American Legion Park 72' Diamond
SPRING/FALL														
OWHS - BASEBALL	193					66.7	21					105		
OWHS - SOCCER	126					86.3		22.3				16.3		
OWHS - FIELD HOCKEY	119					39.7						79.3		
OWHS - LACROSSE	135					105	30							
OWHS - FOOTBALL	93					40.8	52.5							
OWHS - SOFTBALL	75							75.0						
YOUTH BASEBALL	1801	485	268.7		511.3	32.0						18.7		485.3
GAA SOCCER (OVS)	825			84	204	138	36	36	63	48	117		99	
YOUTH FIELD HOCKEY	16					16								
YOUTH LACROSSE	217				52	164.7								
YOUTH FLAG FOOTBALL	182					147.3								34.7
YOUTH SOFTBALL	107		74.7			32								
WENT'S OVER 40 SOCCER	31					6.7					24			
ATLANTIC GOALIE KEEPERS	240								80	80	80			
ANTONELLI BASEBALL CLINIC	33													33.3
LADIES KICKBALL	9													9
FALL BASEBALL LEAGUE	11											10.7		
SUMMER														
CHALLENGER SOCCER	75								25	25	25			
ATLANTIC GOALIE KEEPERS	80								26.7	26.7	26.7			
OPS SOCCER	75								25	25	25			
WASH BALL	69													69.3
BOY SCOUTS	43								10	10	10			13.3
OWHS GIRLS SOCCER	9					9.3								
BASEBALL	35					3.3						32		
WEBB/ACK VALLEY MENS LACROSSE	5					5.3								
BROWDSK SOCCER/FIELD HOCKEY	19					18.7								
PORT CITY PAPPS LACROSSE	4					4								
FIELD HOCKEY CLINIC	14					14								
GAA SOCCER (OVS)	41				35.3	6								
SEACOAST SOCCER CLINIC (YOUTH)	11			10.7										
ANTONELLI BASEBALL	3					2.7								
GAA SOFTBALL	9					9								
ADULT BASEBALL	4											4		
GIRLS SUMMER SOCCER	3					3.3								

Equivalent Use Demand

Georgetown User Demand Statistics

MATRIX LEGEND:

Natural Grass

Field Uses Under 250/Year

Field Uses Between 250-350/Year

Field Uses Over 350/Year

Synthetic Turf

Field Uses Under 750/Year

Field Uses Between 750-850/Year

Field Uses Over 850/Year

Overburden Field Results

- Penn Brook 2 (306)
- West Street Field 3 (271)
- Penn Brook 1 (391)
- Penn Brook 4 (657)
- High School Synthetic Turf Field (1008)
- American Legion Park (450)

[illegible]

Field Deficit Data

Field Deficit Data - Based on Equivalent Use (Existing Fields)						
Town of Georgetown Athletic Fields Study						
Use Type	Total Uses	Avg use per Field	Total Fields Needed	Total Fields Needed Rounded	Current No. of Fields	Field Deficit
Natural Grass Fields						
60' Baseball	1020	510	4.1	5	2	3
70' Baseball	416	416	1.7	2	1	1
60' Softball	146	49	0.6	1	3	-2
90' Baseball	130	130	0.5	1	1	0
MPR-F	360	360	1.4	2	1	1
MRP-Y	1059	212	4.2	5	5	0
Total	3131					
Turf Field						
Softball/Baseball	130	130	0.5	1	1	0
MPR-F	879	879	1.2	1	1	0
Total	1008					

F=Full Size

Y=Youth Size

Note: Fields needed and field deficit data is based on natural grass. Synthetic turf with lights can count for three (3) natural fields.

Field Deficit Data

Field Deficit Data - Based on Equivalent Use (West Street Decommissioned)						
Town of Georgetown Athletic Fields Study						
Use Type	Total Uses	Avg use per Field	Total Fields Needed	Total Fields Needed Rounded	Current No. of Fields	Field Deficit
Natural Grass Fields						
60' Baseball	1020	510	4.1	5	2	3
70' Baseball	416	416	1.7	2	1	1
60' Softball	146	49	0.6	1	3	-2
90' Baseball	130	130	0.5	1	1	0
MPR-F	360	360	1.4	2	1	1
MRP-Y	1059	530	4.2	5	2	3
Total	3131					
Turf Field						
Softball/Baseball	130	130	0.5	1	1	0
MPR-F	879	879	1.2	1	1	0
Total	1008					

F=Full Size

Y=Youth Size

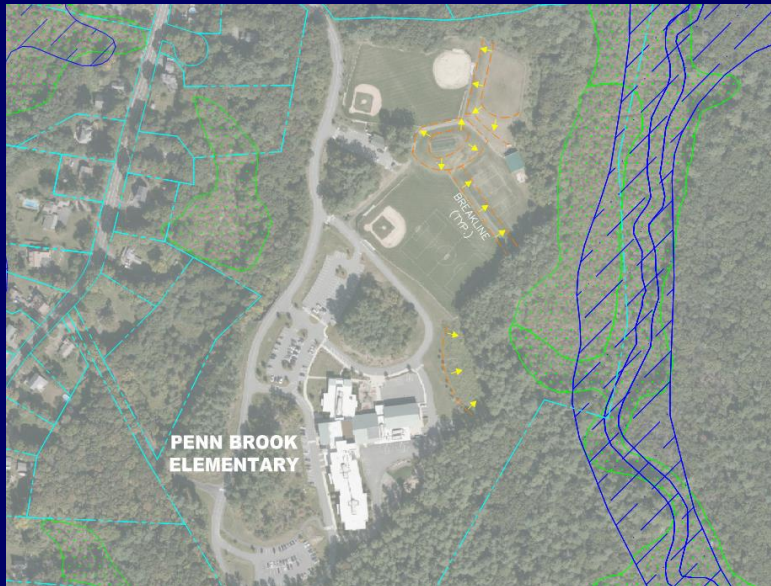
Note: Fields needed and field deficit data is based on natural grass. Synthetic turf with lights can count for three (3) natural fields.

Field Demand Conclusions

- A well maintained natural turf field can support approximately 250 Equivalent Uses Per Year, if properly rested and not used when wet.
- 5 natural grass fields over 250 Uses (overburdened).
- Synthetic turf capable of 750+ events depending on schedule, currently the Middle/High School turf field is scheduled for 1,000+ uses per year.
- Upper Left and Upper Right fields at High School could accommodate more uses if renovated and appropriately maintained.
- The current actual uses only reflect what is currently occurring. Additional field uses would be scheduled if space and schedule allowed, especially baseball and soccer.
- The athletic fields are not afforded the consistent and appropriate rest period needed due to their full use schedule during the year.
- Need to plan for the possibility of decommissioning West Street complex.

Additional Town Fields

- Gale considered development and expansion options at the following fields:
- Penn Brook – additional field expansion does not appear likely due to topography constraints and an existing leaching field.
- Littles Hill – Property lines do not allow for expansion
- American Legion Park – Field is located close to an open water source and does not appear suitable for expansion.

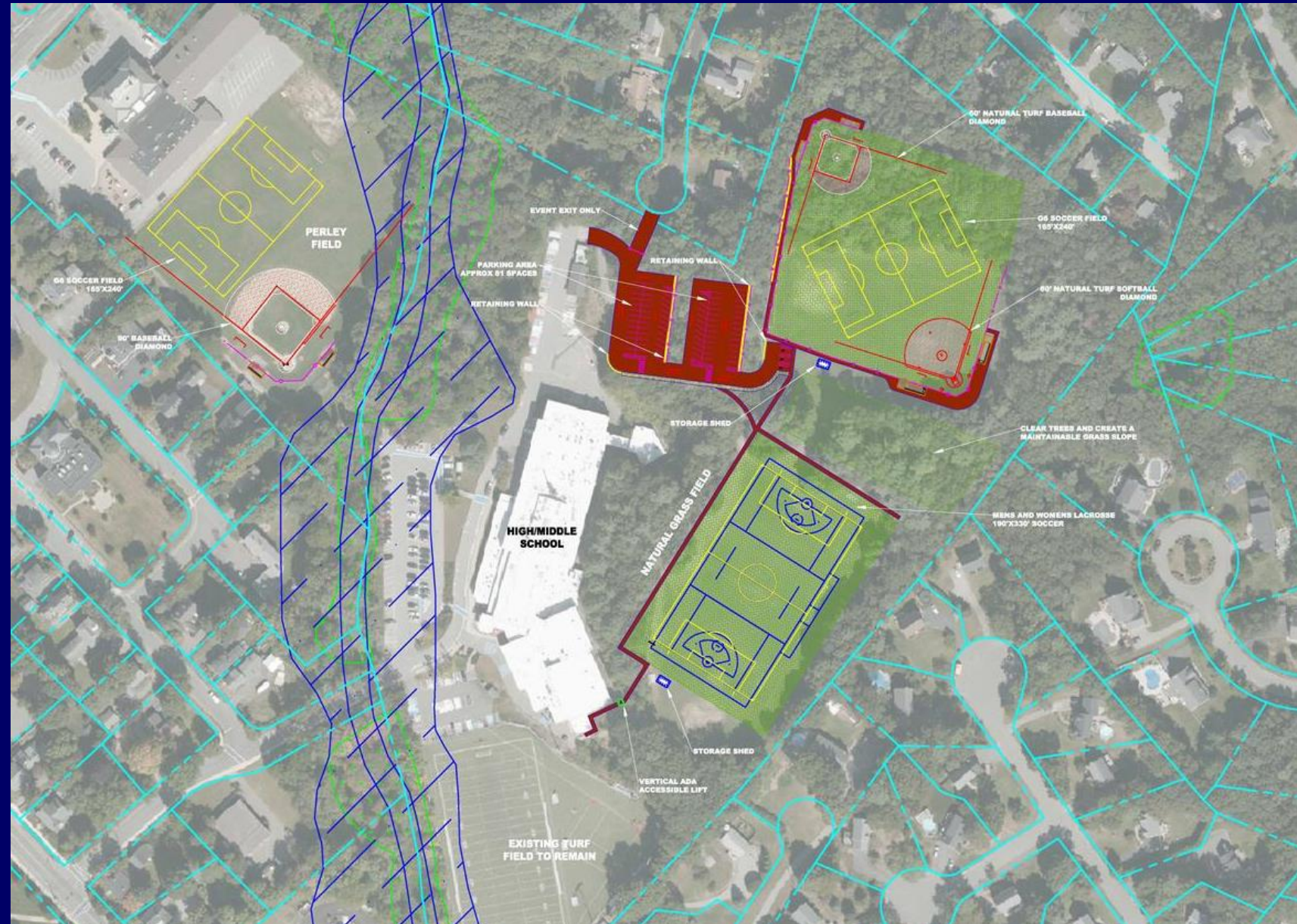


Conceptual Option 1

Assumes Town can continue use of the West Street Complex

Cost Estimate

- Upper Left Field: \$2,130,938
- Upper Right Field: \$692,794
- East Main Street: \$120,512
 - 60'/70' Baseball Diamond



Assumes Town can continue use of the West Street Complex

Assumes Town can continue use of the West Street Complex

Overburden Field Results		
	Existing	Redistributed
Penn Brook 1	391	291
Penn Brook 2	306	306
Penn Brook 4	657	277
High School Upper Left	107	285
High School Upper Right	193	254
West Street Field 3	271	271
High School Synthetic Turf Field	1008	1008
American Legion Park	450	450

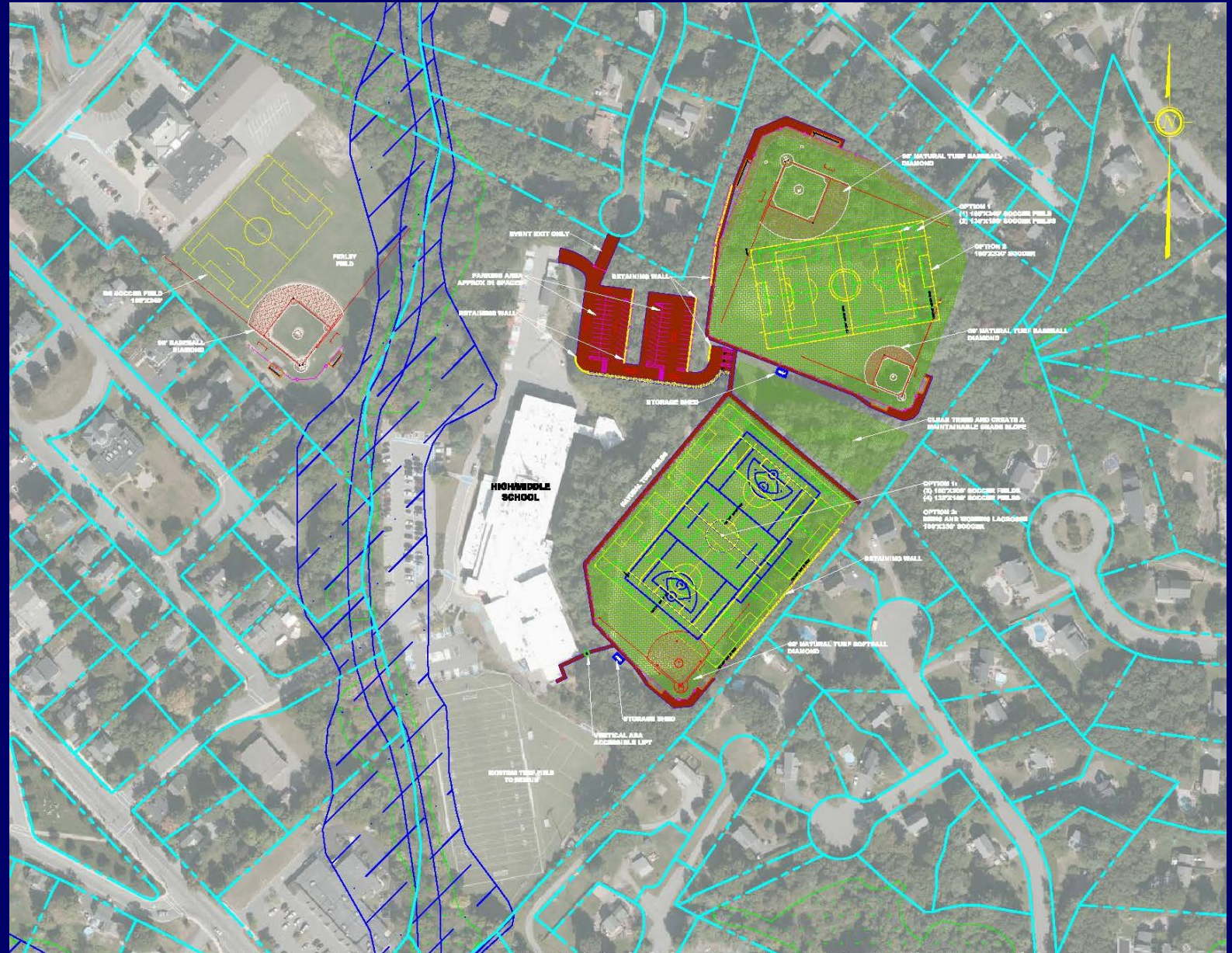
Town of Georgetown Athletic Fields				REDISTRIBUTED USE DATA (Scheduled Team Uses)														
Georgetown User Demand Statistics				Schematic Design Option 1														
				1				2			3			4		5	6	7
User Organization	Total Equivalent Use	Equivalent Use Factor	Anticipated 5 Year Growth Factor	Pain Brook Elementary				High School			West Street			Parkway	Littles Hill	American Legion Park	East Main Street	
				Field 1 60' Diamond Baseball	Field 2 60' Diamond Softball	Field 3 Soccer G2	Field 4 Soccer B6 60' Diamond Baseball	Turf Field 60' Softball 90' Baseball MPR	Upper Right MPR	Upper Left 60' Baseball 60' Softball MPR	Field 1 G4a	Field 2 G4b	Field 3 G6	Baseball Field 90' Diamond	MPR-Y	American Legion Park 70' Diamond Baseball	Recreation Park 60'/70' Diamond Baseball	
SPRING/FALL																		
GMHS - BASEBALL	144.5	0.75	1					50	15.8						78.8			
GMHS - SOCCER	126	1	1					86.3	23.3						16.3			
GMHS - FIELD HOCKEY	119	1	1					39.7							79.3			
GMHS - LACROSSE	202.5	1.5	1					157.5	45									
GMHS - FOOTBALL	186.7	2	1					81.7	105.0									
GMHS - SOFTBALL	56.3	0.75	1							56.3								
YOUTH BASEBALL	1451.5	0.75	1.075	291	217		97	26		175				15		391	240	
GAA SOCCER (BYSA)	618.8	0.75	1			63	153	103.5		54	47.25	36	87.75		74.25			
YOUTH FIELD HOCKEY	24	0.75	2					24										
YOUTH LACROSSE	273.8	1.25	1					205.83	65									
YOUTH FLAG FOOTBALL	136.5	0.75						110.5								26		
YOUTH SOFTBALL	128	0.75	1.6		89.6			38.4										
MEN'S OVER 40 SOCCER	30.7	1						6.7					24					
ATLANTIC GOALIE KEEPERS	240	1									80	80	80					
ANTONELLI BASEBALL CLINIC	25	0.75														25		
LADIES KICKBALL	4.5	0.5														4.5		
FALL BASEBALL LEAGUE	8	0.75												8				
SUMMER																		
CHALLENGER SOCCER	75	1									25	25	25					
ATLANTIC GOALIE KEEPERS	80	1									26.7	26.7	26.7					
EPS SOCCER	75	1									25	25	25					
BOY SCOUTS	10.8	0.25									2.5	2.5	2.5			3.3		
GMHS GIRLS SOCCER	9.3	1						9.3										
BASEBALL	26.5	0.75						2.5						24				
MERRIMACK VALLEY MEN'S LACROSSE	8.0	1.5						8.0										
RIDGEMOUNT SOCCER/FIELD HOCKEY	18.7	1						18.7										
PORT CITY PAPPI'S LACROSSE	6	1.5						6										
FIELD HOCKEY CLINIC	14	1						14										
GAA SOCCER (BYSA)	31	0.75	1				26.5	4.5										
SEACOAST SOCCER CLINIC (YOUTH)	8	0.75			8													
ANTONELLI BASEBALL	2	0.75						2										
GAA SOFTBALL	10.8	0.75	1.60					10.8										
ADULT BASEBALL	3	0.75											3					
GIRLS SUMMER SOCCER	2.5	0.75						2.5										

Conceptual Option 2

Includes decommissioning of West Street Complex

Cost Estimate

- Upper Left Field: \$2,293,999
- Upper Right Field: \$1,188,289



Conceptual Option 2

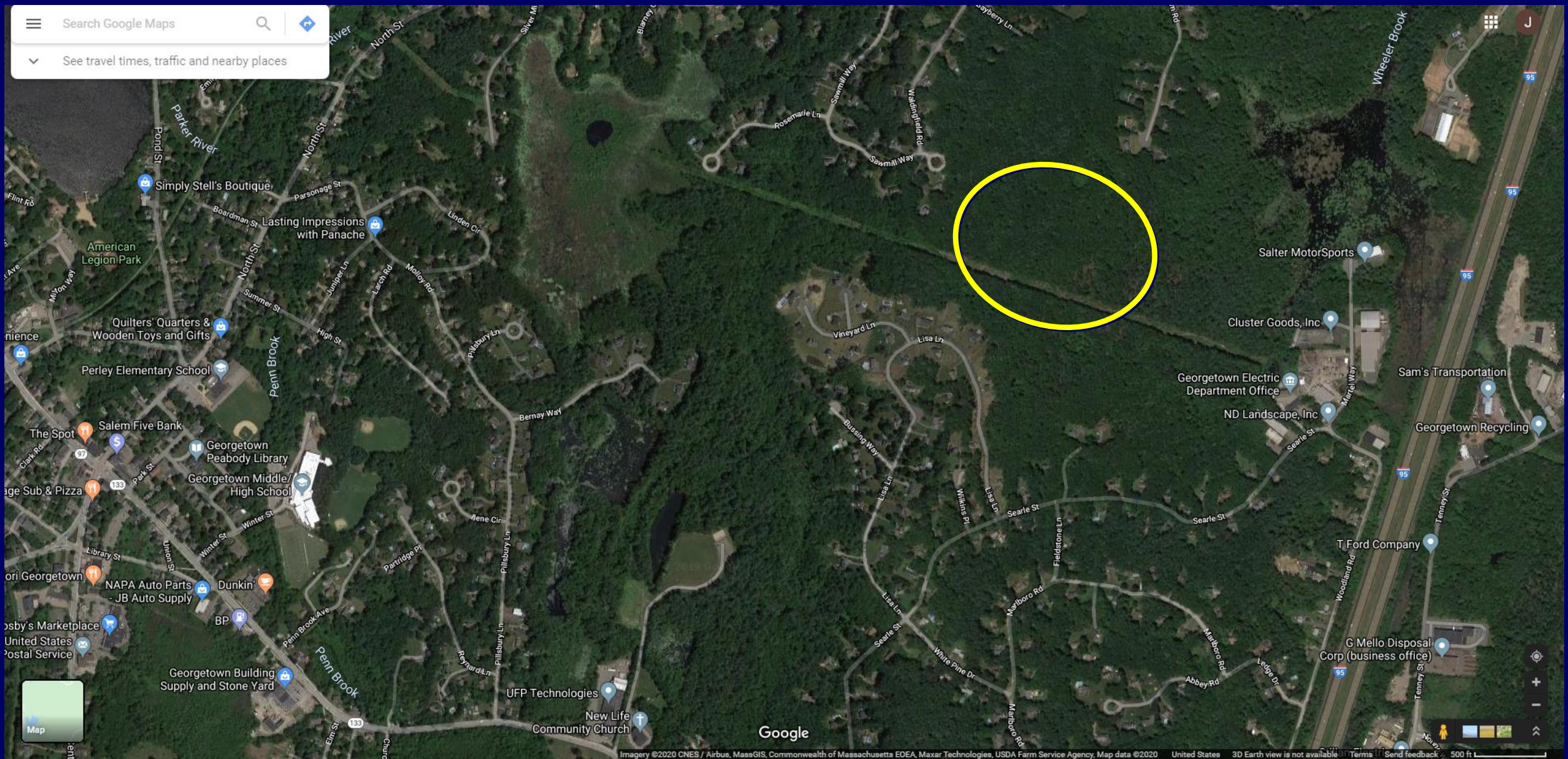
Redistributed Use

Includes decommissioning of West Street Complex

Overburden Field Results		
	Existing	Redistributed
Penn Brook 1	391	299
Penn Brook 2	306	306
High School Upper Left	107	344
High School Upper Right	193	331
Perley Field	224	308
East Main Street	0	316
Penn Brook 4	657	657
High School Synthetic Turf Field	1008	947
American Legion Park	450	450

[illegible]

Greenway Parcel Location Overview

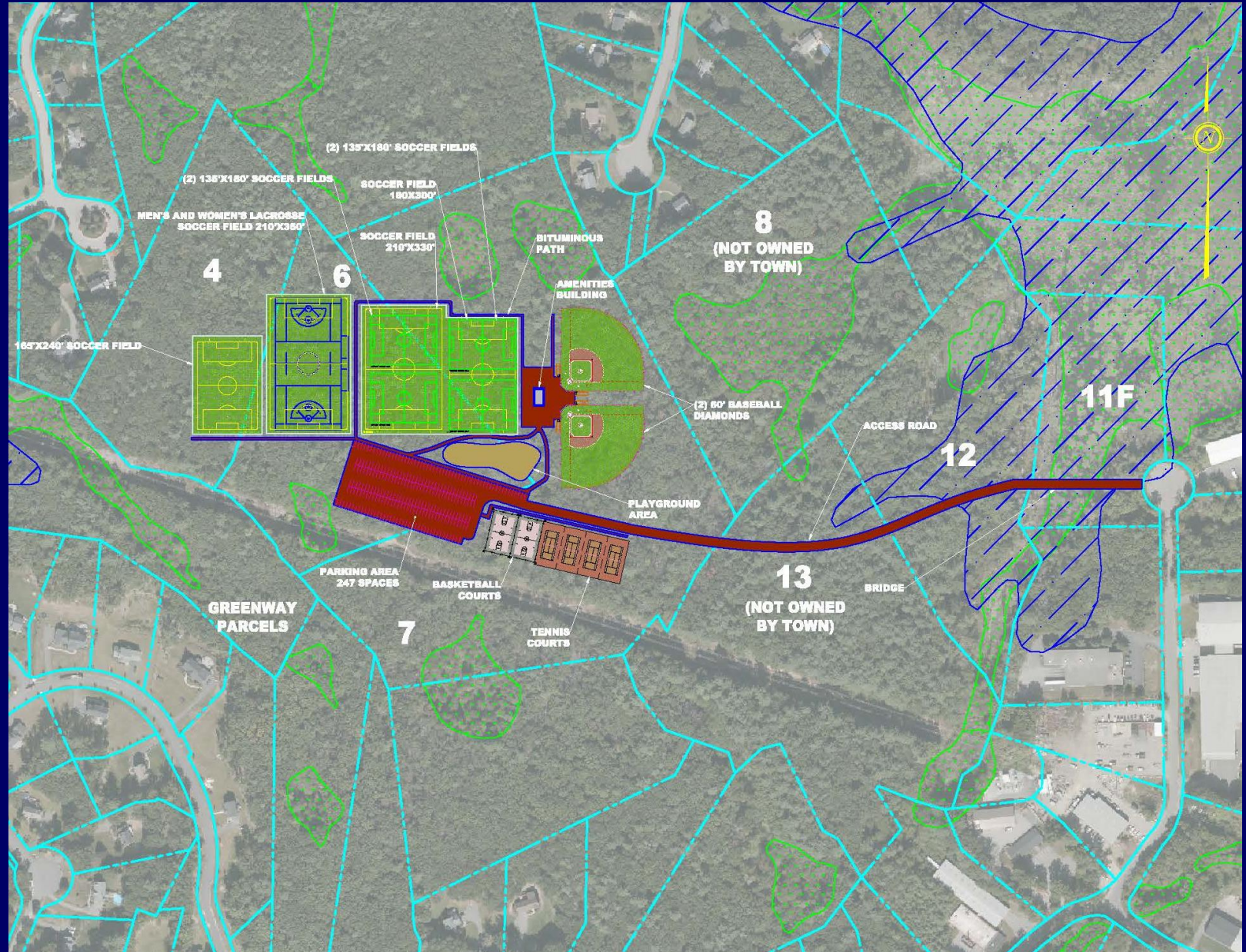


Conceptual Option 3

- Assumes West Street Complex is decommissioned and Greenway Parcels can be developed

Cost Estimate

- Greenway Parcels:
\$9,284,594 (Does not include cost for a bridge or purchase of parcel no. 13)
- Upper Left Field: \$546,131
- Upper Right Field: \$688,376
- East Main Street: \$120,512



Conceptual Option 3 Redistributed Use

Overburden Field Results		
	Existing	Redistributed
High School Synthetic Turf Field	1008	811
Greenway Field 4	0	257

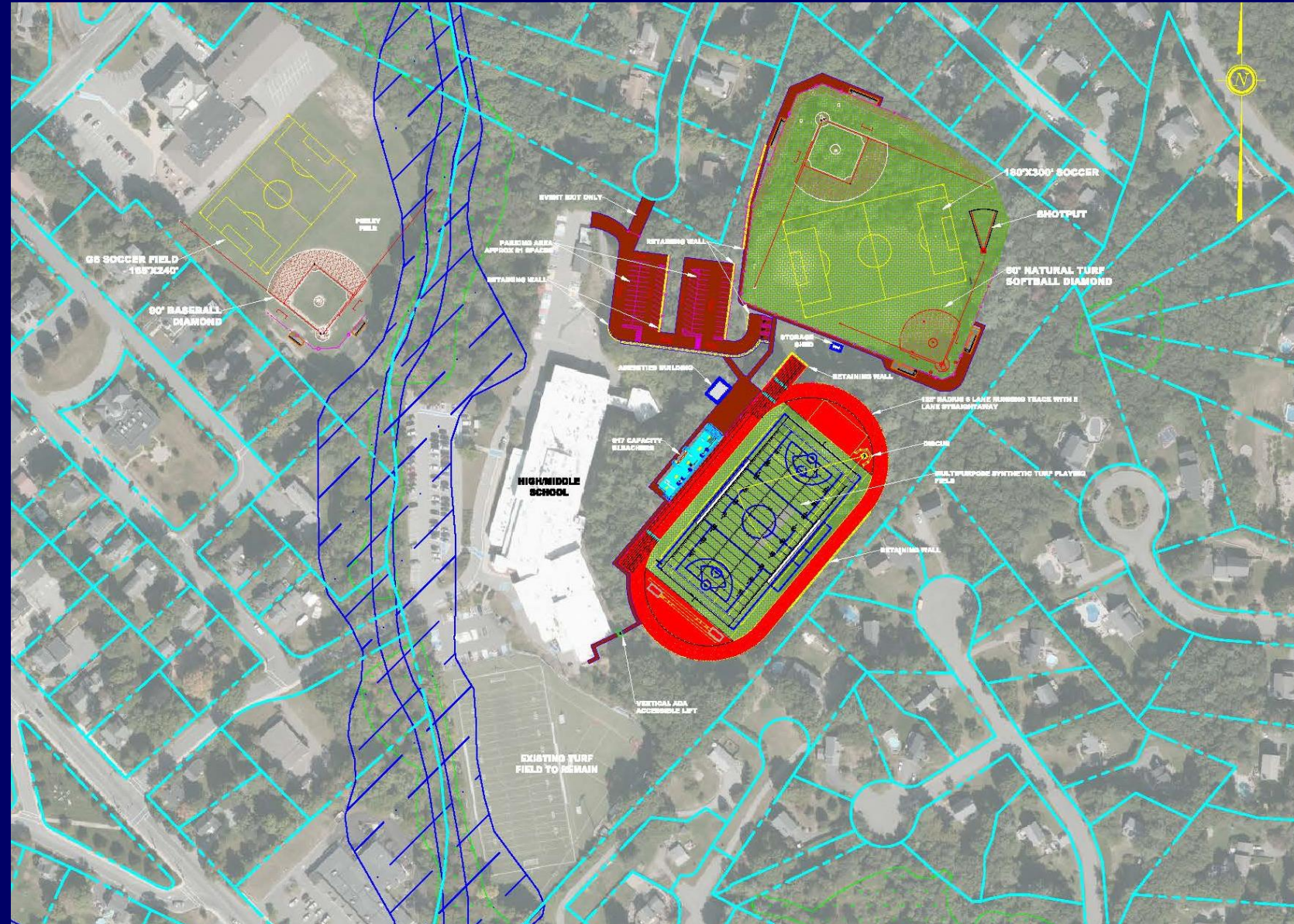
Town of Georgetown Athletic Fields				REDISTRIBUTED USE DATA (Scheduled Team Uses)																				
Georgetown User Demand Statistics				Schematic Design Option 3																				
				1				2				3				4		5	6	7	8			
User Organization	Total Equivalent Use	Equivalent Use Factor	Anticipated 5 Year Growth Factor	Pines Brook Elementary				High School				West Street			Parley	Littles Hill	American Legion Park	East Main Street	Greenway Fields					
				Field 1	Field 2	Field 3	Field 4	Field 5	Upper Right	Upper Left	Field 1	Field 2	Field 3	Southfield G3	MPPE G2	American Legion Field	Recreation Park	Field 1	Field 2	Field 3	Field 4	Field 5	Field 6	
				60' Diamond Baseball	90' Diamond Softball	Soccer G2	Soccer G3	60' Softball	90' Softball	MPPE	MPPE 90' Softball	G4a	G4b	G5	90' Diamond G3	G2	70' Diamond Baseball	60' x 70' Baseball	G5	MPPE F	MPPE G4a/G4b	MPPE G4a/G4b	60' Baseball	90' Baseball
SPRING/FALL																								
SAHMS - BASEBALL	144.5	0.75	1						50	15.8						78.8								
SAHMS - SOCCER	126	1	1						85.3			23.3				16.3								
SAHMS - FIELD HOCKEY	119	1	1						39.7							79.3								
SAHMS - LACROSSE	202.5	1.5	1						157.5	45														
SAHMS - FOOTBALL	186.7	2	1						81.7	105.0														
SAHMS - SOFTBALL	55.3	0.75	1								56.3													
YOUTH BASEBALL	1451.4625	0.75	1.075	241	217		163	26							15		150	241					200	199
SAH SOCCER (TOTAL)	618.8	0.75	1			63	75	103.5	27	27						74.25			87.75		90	71.25		
YOUTH FIELD HOCKEY	24	0.75	2					24												145				
YOUTH LACROSSE	270.8	1.25	1					125.83													145			
YOUTH FEM FOOTBALL	136.5	0.75						110.5									26.0							
YOUTH SOFTBALL	128	0.75	1.6					0		128														
MEN'S OVER 40 SOCCER	30.7	1						6.7													24			
AT LAMARIC GOLFAL KEEPERS	240	1																	80		80	80		
ANTONELLI BASEBALL CLINIC	25	0.75															25							
LAMARIC KICKBALL	4.5	0.5															4.5							
FALL BASEBALL LEAGUE	8	0.75													8									
SUMMER																								
CHALLENGER SOCCER	75	1																		25	25	25		
AT LAMARIC GOLFAL KEEPERS	80.1	1																		26.7	26.7	26.7		
GPS SOCCER	75	1																		25	25	25		
BOY SCOUTS	10.8	0.25															3.3			2.5	2.5	2.5		
SAHMS GIRLS SOCCER	9.3	1							9.3															
BASEBALL	26.5	0.75													26.5									
DEERBROOK VALLEY MEN'S LACROSSE	8.0	1.5																			8			
PIONEER SOCCER/FIELD HOCKEY	18.7	1							18.7															
POPE CITY PAPING LACROSSE	6	1.5							6															
FIELD HOCKEY CLINIC	14	1							14															
SAH SOCCER (TOTAL)	31	0.75	1						4.5													26.5		
DIACAST SOCCER CLINIC (HOURS)	8	0.75				8																		
ANTONELLI BASEBALL	2	0.75													2									
SAH SOFTBALL	10.8	0.75	1.60							10.8														
ADULT BASEBALL	3	0.75													3									
BIRLS SUMMER P. SOCCER	2.5	0.75							2.5															

Conceptual Option 4

Option for Track & Field at the High School Upper Right Field

Cost Estimate

- Upper Left Field: \$2,293,999
- Track & Field: \$4,394,186
- East Main Street: \$120,512



Cost Estimate Summary

Conceptual Option 1

- Upper Left Field: \$2,130,938
- Upper Right Field: \$692,794
- East Main Street: \$120,512

Conceptual Option 2

- Upper Left Field: \$2,293,999
- Upper Right Field: \$1,188,289

Conceptual Option 3

- Greenway Parcels: \$9,284,594
- Upper Left Field: \$546,131
- Upper Right Field: \$688,376
- East Main Street: \$120,512

Conceptual Option 4

- Upper Left Field: \$2,293,999
- Track & Field: \$4,394,186
- East Main Street: \$120,512

Inclement Weather Policy

It only takes playing once on a very wet field to destroy the turf root zone for that season. An effort must

be made not to play games or even practice on fields that are excessively wet. Because of the Towns sustained heavy use of the fields, an Inclement Weather Policy (IWP) is strongly recommended as a management tool for preventing damage to the fields. The enforcement of a restrictive IWP by field managers is the single best management practice available. It protects the safety of the players, the condition of the fields and serviceability of the facilities. An effective procedure in policing the use of the fields might be the implementation of a yearly field deposit collected from every group intending to use the fields. If a group is found using closed fields, the permit holder may be charged for the cost to repair the field against that field security deposit paid by the group at the beginning of the year...

Maintenance

Tasks Included:

- **Soil sampling, spring inspection**
- **Spring clean-up**
- **Weed and pest control**
- **Fertilizer spreading**
- **Cutting grass / rake out infield**
- **Maintenance of synthetic turf fields**
- **Aeration**
- **Top dressing**
- **Overseeding**
- **Irrigation**
- **Fall clean-up**
- **Lime application**
- **Off-season maintenance**



Overall Conclusions

- The Master Plan identifies inventory constraints, community needs and planning programs to meet the recreational needs of the community.
- Five (5) natural grass fields are currently overused (greater than 250 uses per year).
- Many of the existing athletic fields have deficiencies in similar areas, i.e., too little rest periods essential to turf growth and establishment, field areas devoid of turf, drainage issues, a lack of site amenities, and a lack of ADA accessibilities.
- The decommissioning of West Street would result in the need for additional youth soccer fields.
- Greenway Parcels appear to be the only developable parcels in Town, but there are many unknowns associated with the Greenway Parcels.
- Renovating the Middle/High School Fields and expanding the Upper Left fields appears to be the most feasible option.

Attachment #1:

Proposed Wastewater Treatment Plant & Disposal Areas (i.e., combined sewer system leaching and recreation fields).



Figure 6-4

Questions and Comments

