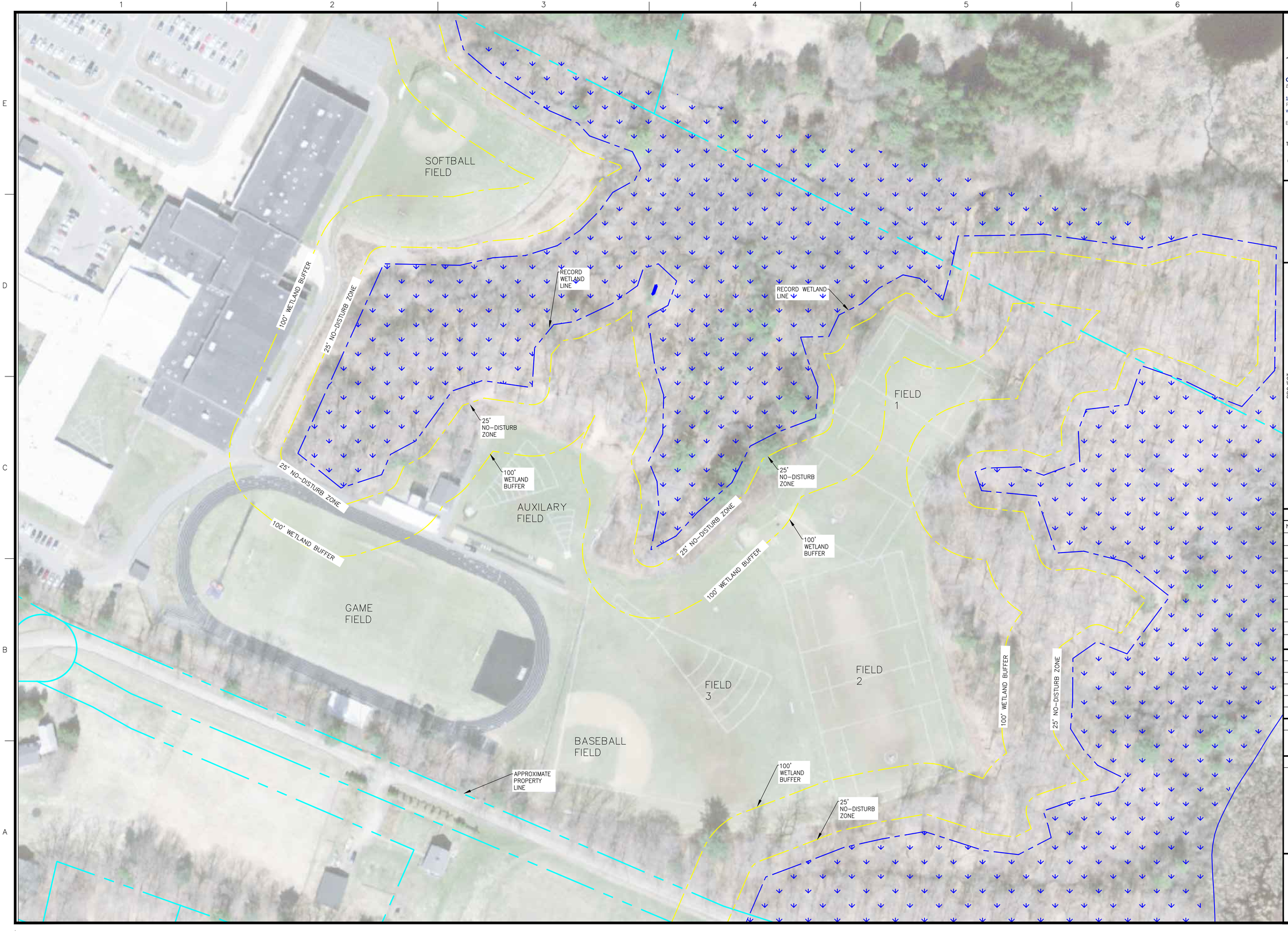
ENCLOSURE 1

ATHLETIC CAMPUS BASE PLAN



Gale Associates, Inc.
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Boston Baltimore Orlando San Francisco

PROJECT
HWRHS MASTER PLAN
HAMILTON-WENHAM REGIONAL HS
775 BAY ROAD
HAMILTON, MA

OWNER
TOWNS OF HAMILTON-WENHAM

REVISIONS

NO.	DATE	DESCRIPTION

CADD FILE	715410-GIS
DESIGNED BY	LAB
DRAWN BY	LAB
CHECKED BY	
DATE	10-15-2014
DRAWING SCALE	1"=60

GRAPHIC SCALE

SHEET TITLE

GIS
BASE PLAN

DRAWING NO.

GIS

PROJECT NO. 716570

ENCLOSURE 2

ATHLETIC CAMPUS EVALUATION FORMS

FIELD EVALUATION
DATA SHEET

Date: 10-6-14

Facility Name: **Track and Game Field**

Field Name: **Game Field**

Type: **Multipurpose** Softball Baseball Other:
Rectangular

Facilities Manager: School/Town

Site Address: **775 Bay Road**

City: **S. Hamilton** **State:** **MA** **Zip:** **01982**

Record Information Available:

	YES	NO
Design Plans and Specifications		
As-Built Drawings		
Site Plan Sketches		
Assessors Maps / Lot plans	x	
Aerial Photography	x	
Flood Maps	x	
Town Maps	x	
Other: GIS	x	

1. Are there any wetlands, surface waters, or other environmentally sensitive areas that impact field redevelopment or maintenance?

Yes – Bordering vegetated wetlands (detention pond) to the North with 100' buffer.

2. Abutter / Adjacencies Description:

North:	Woods/ BVW and School
South:	Direct abutter < 300'. Berm and fence along school property.
East:	School athletic campus
West:	School buildings/parking lots

3. Photo Documents:

4. Geometry Evaluation:

Overall MPR	L: 360’	W: 190’	Runout: 8-10’

Notes:

Field does not meet minimum recommendations for women’s lacrosse or soccer. Track – 6 lanes on oval and straightaway. Minimum recommendations are 6 lanes on oval and 8 lanes on straightaway for improved meet management.

5. Description of Field Subsystems:

Irrigation:	Provided by a well system. Control valves visible in field. Water bans in Town prevent consistent use of irrigation system.
Drainage:	Concrete trench drain at interface between track and field is in poor condition and has visible debris build-out. The drainage outlet appears to surcharge in rain events. Heaves and depressions in track along areas of trench drain. New drainage system should be included in any redevelopment.
Lighting:	No athletic lighting at the field currently.
Fencing:	No fencing along perimeter of track. Rope and stanchions currently

	used. Field complex has a perimeter fence along property lines. Spectator control and security should be provided through track fence.

6. Ancillary Equipment:
   (N/A, Not Present, Poor, Fair, Good, Excellent)

	Condition	Comments
Pitcher's Mound and Rubber	N/A	
Bases and Home Plate	N/A	
Scoreboards	Fair	
Backstop	N/A	
Dugout(s)	N/A	
P.A. System	N/A	
Spectator Seating	Home – good Visitors - Poor	Visitors grandstands do not meet code requirements
Flag Pole	Good	
Player Benches	Fair	
Goals/Goal Posts	Fair	Recommend painting
Field Marking/Striping	Good	Seasonally painted
Parking Facilities	Fair	Provided at adjacent school
Site Accessibility	Fair	Portions of walkways exceed ADA regulations. Home seating is accessible while

		visitors seating is not.
Site Safety	Fair	Perimeter fence not provided, no safety netting, track condition is poor
Site Buildings	Poor	Storage buildings provided are outdated and inadequate for multi-sport use

7. Soil Sample Taken:

YES	NO

Method of Sampling and/or Testing:

Auger – tested for organic content, pH, and recommendations related to maintenance.

8. General Turf Condition: 4

1	2	3	4	5
- Unusable - Significant loss of turf	- Weak growth density - Large areas void of turf	- Fair growth density - Some areas void of turf	- Decent growth density - Minor repairs needed	- Excellent growth density - Seasonal maintenance

Additional Notes on Turf Condition:

Turf condition appears to be good, likely because of minimal uses. Irrigation system should be used more frequently but is often banned. Minor repair areas recommended. See test results.

9. Appearance: Excellent **Good** Fair Poor

Additional Notes on Field Appearance:

Field is in fair/good condition, while track is in poor condition and requires reconstruction. Outdated drainage system, geometry, and limited safety and security control.

10. Evaluation Summary:

	Failing/ Unacceptable	Marginally meets intended purpose	Good field Minor deficiencies	Excellent Field Meets/exceeds all requirement
Geometry Compliance		X		
Turf Condition			X	
Safety		X		
Support facilities/ equipment	X			
ADA Compliance		X		
Overall:		X		

11. Additional Comments:

Track and field events require reconstruction
Recommend additional fencing and security measures
Visitors grandstands are in failing condition
Pressbox in failing condition
Storage areas do not meet needs of athletics programs
8-lanes on straightaway recommended

FIELD EVALUATION
DATA SHEET

Date: 10-6-14

Facility Name: **Hamilton Wenham Regional High School**

Field Name: **Field 1**

Type: **Multipurpose Rectangular** Softball Baseball Other:

Facilities Manager: School/Town

Site Address: **775 Bay Road**

City: **S. Hamilton** **State:** **MA** **Zip:** **01982**

Record Information Available:

	YES	NO
Design Plans and Specifications		
As-Built Drawings		
Site Plan Sketches		
Assessors Maps / Lot plans	x	
Aerial Photography	x	
Flood Maps	x	
Town Maps	x	
Other: GIS	x	

1. Are there any wetlands, surface waters, or other environmentally sensitive areas that impact field redevelopment or maintenance?

Bordering Vegetated Wetlands (BVW) surround athletic field on 3 sides and limit expansion/redevelopment potential.

2. Abutter / Adjacencies Description:

North:	BVW with 100' buffer
South:	Athletic campus
East:	BVW with 100' buffer
West:	BVW with 100' buffer

3. Photo Documents:

	
	-

4. Geometry Evaluation:

Overall MPR	L: 330’	W: 170’	Runout: 6-8’
<u>Notes:</u> Does not meet minimum widths for mens/womens lacrosse, soccer, or field hockey.			

5. Description of Field Subsystems:

Irrigation:	n/a
Drainage:	No drainage system provided. The field is higher than the remainder of the athletic campus and water runs off over the surface to adjacent wetlands. Infiltration and rate of drainage could be improved with a subsurface drainage system.
Lighting:	None provided.
Fencing:	Partial 4’ fencing is provided along one of the field sidelines at the wooded wetland areas.

6. Ancillary Equipment:
(N/A, Not Present, Poor, Fair, Good, Excellent)

	Condition	Comments
Pitcher's Mound and Rubber	N/A	
Bases and Home Plate	N/A	
Scoreboards	N/A	
Backstop	N/A	
Dugout(s)	N/A	
P.A. System	N/A	
Spectator Seating	N/A	
Flag Pole	N/A	
Player Benches	NP	
Goals/Goal Posts	N/A	
Field Marking/Striping	Good	Seasonal striping
Parking Facilities	N/A	None within close proximity (School parking lots)
Site Accessibility	Poor	No accessible routes provided to field.
Site Safety	Poor	Field depressions/ruts, heaves, no safety netting for lacrosse, no fencing, no lighting

Site Buildings	N/A	

7. Soil Sample Taken:

YES	NO

Method of Sampling and/or Testing:

Auger sampling. Lab testing for organic content, pH, and general maintenance recommendations.

8. General Turf Condition: 3

1	2	3	4	5
- Unusable - Significant loss of turf	- Weak growth density - Large areas void of turf	- Fair growth density - Some areas void of turf	- Decent growth density - Minor repairs needed	- Excellent growth density - Seasonal maintenance

Additional Notes on Turf Condition:

Sinkhole/depression at east edge/center of field
No fence along portions of woods
High pitch and uneven planarity. No formal grading pattern for field use.
Large depression at west/midfield toward wetland

9. Appearance: Excellent Good **Fair** Poor

Additional Notes on Field Appearance:

No supporting amenities. Turf requires maintenance/short-term repairs. Planarity of the field is poor due to pitch of field and heaves and ruts.

10. Evaluation Summary:

	Failing/ Unacceptable	Marginally meets intended purpose	Good field Minor deficiencies	Excellent Field Meets/exceeds all requirement
Geometry Compliance		X		
Turf Condition		X		
Safety		X		
Support facilities/ equipment	X			
ADA Compliance	X			
Overall:		X		

11. Additional Comments:

Undersized with planarity issues and no supporting amenities
Accessible routes not provided
Distance to parking lots makes hosting events difficult
Irrigation not provided.
Good solar orientation (north/south)
Severely constrained by wetlands.

FIELD EVALUATION
DATA SHEET

Date: 10-6-14

Facility Name: **Hamilton Wenham Regional HS**

Field Name: **Field 2**

Type: **Multipurpose** Softball Baseball Other:
Rectangular

Facilities Manager: **School/Town**

Site Address: **775 Bay Road**

City: **S. Hamilton** **State:** **MA** **Zip:** **01982**

Record Information Available:

	YES	NO
Design Plans and Specifications		
As-Built Drawings		
Site Plan Sketches		
Assessors Maps / Lot plans	x	
Aerial Photography	x	
Flood Maps	x	
Town Maps	x	
Other: GIS	x	

1. Are there any wetlands, surface waters, or other environmentally sensitive areas that impact field redevelopment or maintenance?

Bordering Vegetated Wetland (BVW) along its eastern and southern boundaries, each with a 100' buffer, 50- no build zone, and 25' no-disturb zone.

2. Abutter / Adjacencies Description:

North:	Athletic campus and BVW buffers
South:	BVW and buffers, abutter within 300'
East:	Undeveloped wooded area and BVW with buffers
West:	High School campus

3. Photo Documents:

	

4. Geometry Evaluation:

Overall MPR	L: 330’	W: 180’	Runout: 8-10’
Notes: Undersized for soccer or women’s lacrosse. Field is used as a practice football, which is appropriate given its size.			

5. Description of Field Subsystems:

Irrigation:	None provided.
Drainage:	No drainage system. Runoff flows toward southern and eastern wetlands. Field is lowest part of athletic campus and is adjacent to wetlands resulting in wet field conditions after rain events. Ponding is observed at south/east end of field after rain events.
Lighting:	None provided
Fencing:	None provided

6. Ancillary Equipment:
(N/A, Not Present, Poor, Fair, Good, Excellent)

	Condition	Comments
Pitcher's Mound and Rubber	N/A	
Bases and Home Plate	N/A	
Scoreboards	N/A	
Backstop	N/A	
Dugout(s)	N/A	
P.A. System	N/A	
Spectator Seating	N/A	
Flag Pole	N/A	
Player Benches	NP	
Goals/Goal Posts	Fair	Old uprights for practice field. Useable and adequate for practice
Field Marking/Striping	Fair	Seasonally striped – worn from practices
Parking Facilities	Poor	None provided (school parking used)
Site Accessibility	Poor	No accessible routes provided to field
Site Safety	Poor	Field conditions poor, no fencing, no safety netting
Site Buildings	n/a	

7. Soil Sample Taken:

YES	NO

Method of Sampling and/or Testing:

Auger sample, tested for organic content, particle analysis, pH and general maintenance recommendations

8. General Turf Condition: 1

1	2	3	4	5
- Unusable - Significant loss of turf	- Weak growth density - Large areas void of turf	- Fair growth density - Some areas void of turf	- Decent growth density - Minor repairs needed	- Excellent growth density - Seasonal maintenance

Additional Notes on Turf Condition:

Poor condition due to use for football and worn areas (center, midfield, goal areas). No turf growth in majority of overused areas.

9. Appearance: Excellent Good Fair **Poor**

Additional Notes on Field Appearance:

Overused, not irrigated, poor drainage results in poor field appearance. Lack of field amenities, lighting, etc.

10. Evaluation Summary:

	Failing/ Unacceptable	Marginally meets intended purpose	Good field Minor deficiencies	Excellent Field Meets/exceeds all requirement
Geometry Compliance		X		
Turf Condition	X			
Safety	X			
Support facilities/ equipment	X			
ADA Compliance	X			
Overall:	X			

11. Additional Comments:

Field requires reconstruction to repair compacted soils, provide drainage, and provide turf growth. Recommend providing access to field and supporting amenities to increase serviceability.

FIELD EVALUATION
DATA SHEET

Date: 10-6-14

Facility Name: **Hamilton Wenham Regional HS**

Field Name: **Field 3 and Baseball Field**

Type: **Multipurpose Rectangular** Softball **Baseball** Other:

Facilities Manager: **School/Town**

Site Address: **775 Bay Road**

City: **S. Hamilton** **State:** **MA** **Zip:** **01982**

Record Information Available:

	YES	NO
Design Plans and Specifications		
As-Built Drawings		
Site Plan Sketches		
Assessors Maps / Lot plans	x	
Aerial Photography	x	
Flood Maps	x	
Town Maps	x	
Other: GIS	x	

1. Are there any wetlands, surface waters, or other environmentally sensitive areas that impact field redevelopment or maintenance?

Bordering Vegetated Wetland (BVW) along its south/eastern boundary (right field)

2. Abutter / Adjacencies Description:

North:	Athletic campus and BVW buffers
South:	Abutter within 200'
East:	Undeveloped wooded area and BVW with buffers
West:	High School campus

3. Photo Documents:

4. Geometry Evaluation:

Overall: MPR (outfield)	L: 300'	W: 180'	Runout: 8-10'
Baseball	LF:293'	CF:400'+	RF:300'
Notes: Outfield multipurpose field width is adequate for use as a multipurpose field, but does not meet minimum length requirements for soccer or women's lacrosse. Baseball field dimension does not meet MIAA minimum recommended outfield dimensions (300') at left field. Safety dimensions between foul line and seating areas is inadequate.			

5. Description of Field Subsystems:

Irrigation:	None provided.
Drainage:	No drainage system. Field appears to drain generally well based on its elevation higher than surrounding fields. Baseball infield drainage appears to be poor due to maintenance required on clay infield.
Lighting:	None provided
Fencing:	Safety fencing recommended. No sideline fencing. Backstop is in poor condition. 20'+ fence installed along left field line. No outfield fence present.

6. Ancillary Equipment:
(N/A, Not Present, Poor, Fair, Good, Excellent)

	Condition	Comments
Pitcher's Mound and Rubber	NP	
Bases and Home Plate	NP	
Scoreboards	N/A	
Backstop	Poor	Out of plumb/outdated, requires reconstruction
Dugout(s)		

	None provided	
P.A. System	N/A	
Spectator Seating	None provided	
Flag Pole	N/A	
Player Benches	NP	
Goals/Goal Posts	N/A	
Field Marking/Striping	Fair	Seasonally striped – worn from practices
Parking Facilities	Poor	None provided (school parking used)
Site Accessibility	Poor	No accessible routes provided to field
Site Safety	Poor	Field conditions poor, inadequate fencing, no safety netting
Site Buildings	n/a	

7. Soil Sample Taken:

YES	NO

Method of Sampling and/or Testing:

Auger sample, tested for organic content, particle analysis, pH and general maintenance recommendations

8. General Turf Condition: 3

1	2	3	4	5
- Unusable - Significant loss of turf	- Weak growth density - Large areas void of turf	- Fair growth density - Some areas void of turf	- Decent growth density - Minor repairs needed	- Excellent growth density - Seasonal maintenance

Additional Notes on Turf and Infield Condition:

Planarity of outfield / multipurpose field is poor. Ruts and heaves visible. Turn is worn at high-use areas. Field has sparse growth and appears over-compacted.

Infield Condition: Poor condition; requires raking, weeding, lip removal, mound reconstruction, and supplemental infield mix to promote drainage. (Note: field evaluated in off-season)

9. Appearance: Excellent Good Fair **Poor**

Additional Notes on Field Appearance:

Poor backstop condition
Infield requires repair
Maintenance required in outfield / multipurpose field

10. Evaluation Summary:

	Failing/ Unacceptable	Marginally meets intended purpose	Good field Minor deficiencies	Excellent Field Meets/exceeds all requirement
Geometry Compliance		X		
Turf Condition		X		
Safety	X			
Support facilities/ equipment	X			
ADA Compliance	X			
Overall:		X		

11. Additional Comments:

Field requires expansion to meet dimensional requirements for baseball, including safety dimensions at foul lines/seating areas, and between backstop and home plate. Left field dimensions are inadequate. Dugouts and player seating areas not provided.

Field repairs required at outfield/multipurpose field.

FIELD EVALUATION
DATA SHEET

Date: 10-6-14

Facility Name: **Hamilton Wenham Regional High School / Middle School**

Field Name: **Softball Field**

Type: Multipurpose Rectangular **Softball** Baseball Other:

Facilities Manager: **School/Town**

Site Address: **775 Bay Road**

City: **S. Hamilton** **State:** **MA** **Zip:** **01982**

Record Information Available:

	YES	NO
Design Plans and Specifications		
As-Built Drawings		
Site Plan Sketches		
Assessors Maps / Lot plans	x	
Aerial Photography	x	
Flood Maps	x	
Town Maps	x	
Other: GIS	x	

1. Are there any wetlands, surface waters, or other environmentally sensitive areas that impact field redevelopment or maintenance?

Bordering vegetated wetlands along north, south, and eastern boundaries resulting in significant impacts to field redevelopment or maintenance.

2. Abutter / Adjacencies Description:

North:	BVW and abutter within 100’
South:	BVW and associated buffers
East:	BVW and associated buffers
West:	School buildings

3. Photo Documents:

Photo 3 -

Photo 4 -

4. Geometry Evaluation:

Overall: SB	LF: 230’	CF:230’	RF: 230’
Notes: Dimensions meet MIAA recommendations for softball.			

5. Description of Field Subsystems:

Irrigation:	None provided
Drainage:	No formal drainage system provided. Field is generally wet due to surrounding adjacent wetlands and low-lying elevation.
Lighting:	None provided.
Fencing:	Backstop, sideline fencing, and permanent outfield fence in good condition.

6. Ancillary Equipment:
(N/A, Not Present, Poor, Fair, Good, Excellent)

	Condition	Comments
Pitcher's Mound and Rubber	NP	
Bases and Home Plate	NP	
Scoreboards	N/A	
Backstop	Good	Appears to be like new.
Dugout(s)	Fair	Player benches on pad with fencing. No enclosed dugouts provided.
P.A. System	N/A	
Spectator Seating	N/A	
Flag Pole	N/A	
Player Benches	Fair	
Goals/Goal Posts	N/A	
Field Marking/Striping	N/A	
Parking Facilities	Fair	Adjacent middle school parking
Site Accessibility	Fair	Accessible slopes not confirmed, but appear to generally accessible from the adjacent parking lot
Site Safety	Fair	Dimensions between foul lines and player seating areas does not meet recommended

		distances. No sideline fence.
Site Buildings	N/A	

7. Soil Sample Taken:

YES	NO

Method of Sampling and/or Testing:

Auger sample tested for organic content, particle analysis, and pH for general maintenance recommendations. See test results.

8. General Turf Condition: 4

1	2	3	4	5
- Unusable - Significant loss of turf	- Weak growth density - Large areas void of turf	- Fair growth density - Some areas void of turf	- Decent growth density - Minor repairs needed	- Excellent growth density - Seasonal maintenance

Additional Notes on Turf Condition:

Recommend aeration to improve drainage and reduce field compaction. Outfield in generally good condition with minor repairs needed. Infield requires seasonal maintenance and infield mix test/supplementation to improve drainage.

9. Appearance: Excellent **Good** Fair Poor

Additional Notes on Field Appearance:

10. Evaluation Summary:

	Failing/ Unacceptable	Marginally meets intended purpose	Good field Minor deficiencies	Excellent Field Meets/exceeds all requirement
Geometry Compliance			X	
Turf Condition			X	
Safety		X		
Support facilities/ equipment		X		
ADA Compliance		X		
Overall:		X		

11. Additional Comments:

Recommend aeration and general maintenance
Recommend sideline fence extension
Dimension between backstop and home plate does not meet recommendations
Severely constrained due to wetlands

ENCLOSURE 3

SOIL TEST RESULTS

UMass Extension

CENTER FOR AGRICULTURE

Soil and Plant Tissue Testing Laboratory
203 Paige Laboratory
161 Holdsworth Way
University of Massachusetts
Amherst, MA 01003
Phone: (413) 545-2311
e-mail: soiltest@umass.edu
website: soiltest.umass.edu

West Experiment Station

Soil Test Report

Prepared For:

Lindsey Barbee
Gale Associates, Inc
163 Libbey Pkwy
Weymouth, MA 02189

lab@gainc.com
781-335-6465

Sample Information:

Sample ID: S1

GAME FIELD

Lab Number: S141114-102
Area Sampled: 60000 sq ft
Received: 11/14/2014
Reported: 11/20/2014

Results

Analysis	*Value Found*	*Optimum Range*
Soil pH (1:1, H2O)	6.7	
Modified Morgan extractable, ppm		
Macronutrients		
Phosphorus (P)	2.3	4-14
Potassium (K)	36	100-160
Calcium (Ca)	1372	1000-1500
Magnesium (Mg)	115	50-120
Sulfur (S)	24.1	>10
Micronutrients *		
Boron (B)	0.3	0.1-0.5
Manganese (Mn)	5.4	1.1-6.3
Zinc (Zn)	1.5	1.0-7.6
Copper (Cu)	0.4	0.3-0.6
Iron (Fe)	12.1	2.7-9.4
Aluminum (Al)	128	<75
Lead (Pb)	2.0	<22

Analysis	*Value Found*	*Optimum Range*
Cation Exch. Capacity, meq/100g	9.2	
Exch. Acidity, meq/100g	1.3	
Base Saturation, %		
Calcium Base Saturation	74	50-80
Magnesium Base Saturation	10	10-30
Potassium Base Saturation	1	2.0-7.0
Scoop Density, g/cc	0.97	
Optional tests		
Soil Organic Matter (LOI), %	4.6	

* *Micronutrient deficiencies rarely occur in New England soils; therefore, an Optimum Range has never been defined. Values provided represent the normal range found in soils and are for reference only.*

Soil Test Interpretation

Nutrient	Very Low	Low	Optimum	Above Optimum
Phosphorus (P):				
Potassium (K):				
Calcium (Ca):				
Magnesium (Mg):				

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website: soiltest.umass.edu

West Experiment Station

Recommendations for Sports Turf/Golf Fairway-Maintenance

Limestone (Target pH of 6.5)	Nitrogen, N	Phosphorus, P2O5	Potassium, K2O
lbs / 1000 sq ft			
0	3 - 5	1.5	5

Comments:

Many fertilizer sources and rates may be combined to provide acceptable turfgrass fertilty.
For best results, split the N, P2O5, and K2O recommendations above into three to four applications over the course of the growing season at six to eight week intervals, beginning in mid- to late-April.

References:

UMass Lawn and Landscape Turf Best Management Practices	http://extension.umass.edu/turf/publications-resources/best-management-practices

General References:

Interpreting Your Soil Test Results	http://soiltest.umass.edu/fact-sheets/interpreting-your-soil-test-results
For current information and order forms, please visit	http://soiltest.umass.edu/

UMass Extension

CENTER FOR AGRICULTURE

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Phone: (413) 545-2311
e-mail: soiltest@umass.edu
website: soiltest.umass.edu

Particle Size Analysis - Basic

Prepared For:

Lindsey Barbee
Gale Associates, Inc
163 Libbey Pkwy
Weymouth, MA 02189

lab@gainc.com
781-335-6465

Sample Information:

Sample ID: S1
GAME FIELD
Order Number: 11154
Lab Number: X141114-102
Received: 11/14/2014
Reported: 11/19/2014

USDA Size Fraction

Main Fractions	Size (mm)	Percent
Sand	0.05-2.0	57.0
Silt	0.002-0.05	33.1
Clay	<0.002	9.9

USDA Textural Class: sandy loam

MA Title V Textural Class II

UMass Extension
CENTER FOR AGRICULTURE

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161 Holdsworth Way
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Amherst, MA 01003
Phone: (413) 545-2311
e-mail: soiltest@umass.edu
website: soiltest.umass.edu

Soil Test Report

Prepared For:

Lindsey Barbee
Gale Associates, Inc
163 Libbey Pkwy
Weymouth, MA 02189

lab@gainc.com
781-335-6465

Sample Information:

Sample ID: S2
FIELD #1
Order Number: 11152
Lab Number: S141114-103
Area Sampled: 60000 sq ft
Received: 11/14/2014
Reported: 11/20/2014

Results

Analysis	*Value Found*	*Optimum Range*
Soil pH (1:1, H2O)	6.0	
Modified Morgan extractable, ppm		
Macronutrients		
Phosphorus (P)	1.8	4-14
Potassium (K)	89	100-160
Calcium (Ca)	557	1000-1500
Magnesium (Mg)	72	50-120
Sulfur (S)	18.3	>10
Micronutrients *		
Boron (B)	0.2	0.1-0.5
Manganese (Mn)	5.8	1.1-6.3
Zinc (Zn)	2.1	1.0-7.6
Copper (Cu)	0.4	0.3-0.6
Iron (Fe)	22.0	2.7-9.4
Aluminum (Al)	213	<75
Lead (Pb)	7.2	<22

Analysis	*Value Found*	*Optimum Range*
Cation Exch. Capacity, meq/100g	8.0	
Exch. Acidity, meq/100g	4.4	
Base Saturation, %		
Calcium Base Saturation	35	50-80
Magnesium Base Saturation	7	10-30
Potassium Base Saturation	3	2.0-7.0
Scoop Density, g/cc	0.92	
Optional tests		
Soil Organic Matter (LOI), %	5.0	

* *Micronutrient deficiencies rarely occur in New England soils; therefore, an Optimum Range has never been defined. Values provided represent the normal range found in soils and are for reference only.*

Soil Test Interpretation

Nutrient	Very Low	Low	Optimum	Above Optimum
Phosphorus (P):				
Potassium (K):				
Calcium (Ca):				
Magnesium (Mg):				

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website: soiltest.umass.edu

Recommendations for Sports Turf/Golf Fairway-Maintenance

Limestone (Target pH of 6.5)	Nitrogen, N	Phosphorus, P2O5	Potassium, K2O
	lbs / 1000 sq ft		
75	3 - 5	2	2

Comments:

Do not topdress turf with more than 50 lb limestone per 1000 sq ft at one time. Split the above application between early spring and mid-autumn.
Many fertilizer sources and rates may be combined to provide acceptable turfgrass fertilty.
For best results, split the N, P2O5, and K2O recommendations above into three to four applications over the course of the growing season at six to eight week intervals, beginning in mid- to late-April.

References:

UMass Lawn and Landscape Turf Best Management Practices	http://extension.umass.edu/turf/publications-resources/best-management-practices

General References:

Interpreting Your Soil Test Results	http://soiltest.umass.edu/fact-sheets/interpreting-your-soil-test-results
For current information and order forms, please visit	http://soiltest.umass.edu/

UMass Extension
CENTER FOR AGRICULTURE

Soil and Plant Tissue Testing Laboratory
203 Paige Laboratory
161 Holdsworth Way
University of Massachusetts
Amherst, MA 01003
Phone: (413) 545-2311
e-mail: soiltest@umass.edu
website: soiltest.umass.edu

Particle Size Analysis - Basic

Prepared For:

Lindsey Barbee
Gale Associates, Inc
163 Libbey Pkwy
Weymouth, MA 02189

lab@gainc.com
781-335-6465

Sample Information:

Sample ID: S2
FIELD #1
Order Number: 11154
Lab Number: X141114-103
Received: 11/14/2014
Reported: 11/19/2014

USDA Size Fraction

Main Fractions	Size (mm)	Percent
Sand	0.05-2.0	68.5
Silt	0.002-0.05	22.2
Clay	<0.002	9.3

USDA Textural Class: sandy loam

MA Title V Textural Class II

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University of Massachusetts
Amherst, MA 01003
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e-mail: soiltest@umass.edu
website: soiltest.umass.edu

Soil Test Report

Prepared For:

Lindsey Barbee
Gale Associates, Inc
163 Libbey Pkwy
Weymouth, MA 02189

lab@gainc.com
781-335-6465

Sample Information:

Sample ID: S3
FIELD #2/3
Order Number: 11152
Lab Number: S141114-104
Area Sampled: 60000 sq ft
Received: 11/14/2014
Reported: 11/20/2014

Results

Analysis	*Value Found*	*Optimum Range*
Soil pH (1:1, H2O)	5.5	
Modified Morgan extractable, ppm		
Macronutrients		
Phosphorus (P)	1.7	4-14
Potassium (K)	70	100-160
Calcium (Ca)	274	1000-1500
Magnesium (Mg)	51	50-120
Sulfur (S)	16.6	>10
Micronutrients *		
Boron (B)	0.1	0.1-0.5
Manganese (Mn)	6.0	1.1-6.3
Zinc (Zn)	1.7	1.0-7.6
Copper (Cu)	0.4	0.3-0.6
Iron (Fe)	20.4	2.7-9.4
Aluminum (Al)	287	<75
Lead (Pb)	7.1	<22

Analysis	*Value Found*	*Optimum Range*
Cation Exch. Capacity, meq/100g	8.1	
Exch. Acidity, meq/100g	6.1	
Base Saturation, %		
Calcium Base Saturation	17	50-80
Magnesium Base Saturation	5	10-30
Potassium Base Saturation	2	2.0-7.0
Scoop Density, g/cc	1.01	
Optional tests		
Soil Organic Matter (LOI), %	5.1	

* *Micronutrient deficiencies rarely occur in New England soils; therefore, an Optimum Range has never been defined. Values provided represent the normal range found in soils and are for reference only.*

Soil Test Interpretation

Nutrient	Very Low	Low	Optimum	Above Optimum
Phosphorus (P):				
Potassium (K):				
Calcium (Ca):				
Magnesium (Mg):				

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website: soiltest.umass.edu

Recommendations for Sports Turf/Golf Fairway-Maintenance

Limestone (Target pH of 6.5)	Nitrogen, N	Phosphorus, P2O5	Potassium, K2O
	lbs / 1000 sq ft		
100	3 - 5	2	4

Comments:

Do not topdress turf with more than 50 lb limestone per 1000 sq ft at one time. Split the above application between early spring and mid-autumn.
Many fertilizer sources and rates may be combined to provide acceptable turfgrass fertilty.
For best results, split the N, P2O5, and K2O recommendations above into three to four applications over the course of the growing season at six to eight week intervals, beginning in mid- to late-April.

References:

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General References:

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Amherst, MA 01003
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e-mail: soiltest@umass.edu
website: soiltest.umass.edu

West Experiment Station

Soil Test Report

Prepared For:

Lindsey Barbee
Gale Associates, Inc
163 Libbey Pkwy
Weymouth, MA 02189

lab@gainc.com
781-335-6465

Sample Information:

Sample ID: S4
SOFTBALL FIELD
Order Number: 11152
Lab Number: S141114-105
Area Sampled: 60000 sq ft
Received: 11/14/2014
Reported: 11/20/2014

Results

Analysis	*Value Found*	*Optimum Range*
Soil pH (1:1, H2O)	6.5	
Modified Morgan extractable, ppm		
Macronutrients		
Phosphorus (P)	1.9	4-14
Potassium (K)	44	100-160
Calcium (Ca)	1193	1000-1500
Magnesium (Mg)	110	50-120
Sulfur (S)	21.1	>10
Micronutrients *		
Boron (B)	0.2	0.1-0.5
Manganese (Mn)	8.6	1.1-6.3
Zinc (Zn)	1.8	1.0-7.6
Copper (Cu)	0.4	0.3-0.6
Iron (Fe)	14.8	2.7-9.4
Aluminum (Al)	141	<75
Lead (Pb)	2.2	<22

Analysis	*Value Found*	*Optimum Range*
Cation Exch. Capacity, meq/100g	9.5	
Exch. Acidity, meq/100g	2.5	
Base Saturation, %		
Calcium Base Saturation	63	50-80
Magnesium Base Saturation	10	10-30
Potassium Base Saturation	1	2.0-7.0
Scoop Density, g/cc	1.01	
Optional tests		
Soil Organic Matter (LOI), %	4.8	

* *Micronutrient deficiencies rarely occur in New England soils; therefore, an Optimum Range has never been defined. Values provided represent the normal range found in soils and are for reference only.*

Soil Test Interpretation

Nutrient	Very Low	Low	Optimum	Above Optimum
Phosphorus (P):				
Potassium (K):				
Calcium (Ca):				
Magnesium (Mg):				

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CENTER FOR AGRICULTURE

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161 Holdsworth Way
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Amherst, MA 01003
Phone: (413) 545-2311
e-mail: soiltest@umass.edu
website: soiltest.umass.edu

Recommendations for Sports Turf/Golf Fairway-Maintenance

Limestone (Target pH of 6.5)	Nitrogen, N	Phosphorus, P2O5	Potassium, K2O
lbs / 1000 sq ft			
0	3 - 5	2	5

Comments:

Many fertilizer sources and rates may be combined to provide acceptable turfgrass fertilty.
For best results, split the N, P2O5, and K2O recommendations above into three to four applications over the course of the growing season at six to eight week intervals, beginning in mid- to late-April.

References:

UMass Lawn and Landscape Turf Best Management Practices	http://extension.umass.edu/turf/publications-resources/best-management-practices

General References:

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For current information and order forms, please visit	http://soiltest.umass.edu/

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Particle Size Analysis - Basic

Prepared For:

Lindsey Barbee
Gale Associates, Inc
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Sample Information:

Sample ID: S4
SOFTBALL FIELD
Order Number: 11154
Lab Number: X141114-105
Received: 11/14/2014
Reported: 11/19/2014

USDA Size Fraction

Main Fractions	Size (mm)	Percent
Sand	0.05-2.0	60.5
Silt	0.002-0.05	31.0
Clay	<0.002	8.5

USDA Textural Class: sandy loam

MA Title V Textural Class II

ENCLOSURE 4

SCHEDULED FIELD USES (DEMAND)

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - SCHEDULED TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
H-W Little League Spring	32	435	April	June						56	
H-W Lttle League Summer	10	140	July	August						30	
H-W Youth Football	5	115	Aug.	Nov.	20						
H-W Youth Soccer Spring	47	535	April	Nov.							
H-W Youth Soccer Fall	67	655	Sept	Nov							
H-W Youth Boys Lacrosse	15	200	April	June			24				
H-W Youth Girls Lacrosse	10	161	April	June							
H-W Babe Ruth	5	75	April	June		24					
HWRHS JV Football					Numbers	Built	into	Vars	FB		
HWRHS Football	1	50	Aug	Nov	10			84			30
HWRHS JV Girls Lacrosse	1	20	March	May			18		60		
HWRHS Varsity Girls Lacrosse	1	30	March	June	10			10	10		
HWRHS JV Boys Lacrosse	1	20	March	May			45	10			
HWRHS Varsity Boys Lacrosse	1	20	March	June	10		65	5			
HWRHS Freshman Boys Soccer	1	20	Aug.	Oct	Off-Site						

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - SCHEDULED TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
HWRHS JV Boys Soccer	1	20	Aug	Oct					60		
HWRHS Varsity Boys Soccer	1	20	Aug	Nov	10				65		
HWRHS Freshman Girls Soccer	1	20	Aug.	Oct	Off-Site						
HWRHS JV Girls Soccer	1	20	Aug	Oct			60		10		
HWRHS Varsity Girls Soccer	1	20	Aug	Nov	10		65				
HWRHS Varsity Field Hockey	1	20	Aug.	Nov	Off-Site						
HWRHS Cross Country	1	60	Aug.	Nov	Off-Site						
HWRHS JV Baseball	1	20	March	May		70					
HWRHS Varsity Baseball	1	25	March	June	Off-Site						
HWRHS Girls Softball	1	20	March	May						60	
HWRHS Track and Field	1	90	March	June	60 (Track)			35 Javelin			35
H-W Freshman Basketball	1	20	Nov	Feb	Off-Site						
HWRHS Tennis	2	20			Off-Site						
Recreation Patton Park Program	1	150	June	August							

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - SCHEDULED TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
Adult Boot Camp Fall	1	20	Sep	Nov							
Adult Boot Camp Spring	1	20	Mar	May							
Adult Boot Camp Summer	1	20	June	August							
H-W intertown Baseball	1	20	Sep	Nov							
H-W Sr. Babe Ruth Summer	1	20	July	August		30					
Eagles Soccer	1	30	Sep.	Nov.							
Sunforce Soccer	2	35									
Wiffleball	20	80	July	July							
Flag Football - Adult			Sep	Sep							
Phy Ed - HWRHS			Sep	Jun				180			
Phys Ed M.S			Sep	June						180	
Phys Ed Cutler			Sep	June							
Phys. Ed Buker			Sep	June							
Phys Ed Winthrop			Sep	June							
Recreation Multi Sport	1	20	Aug.	Aug.							

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - SCHEDULED TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
Middle School Intramurals Field Hockey Fall	1	20	Sep	Nov						30	
Middle School intramurals	1	50	Sep	Nov							
X-Country Fall											
Middle School Intramurals Ultimate Frisbee	1	10	Sep	Nov							
Mens Adult Basketball League	12	120	Jan	Dec							
Sunday Basketball League	1	25	Jan	Dec							
Fitness Classes	6	120	Jan	Dec							
Young Adult Basketball League			Jul	Aug							
Pingree School basketball	1	20	Dec	Feb							
H-W Thundercats	2	20	Nov	April							
H-W Youth Basketball			Nov	Mar							
Floor Hockey - Fall	1	10	Feb	April							
Special Events	10	200	Jan	Dec							
Imagination Station	1	50	Jan	Dec							
Adult Soccer Fall	5	80									

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - SCHEDULED TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
Adult Soccer Spring	5	80									

	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
TOTALS	130	124	277	324	205	356	65

NOTES

USE CALCULATION:

ONE (1) 2-HOUR EVENT OF 20-30 PLAYERS ON THE FIELD IS CONSIDERED ONE (1) USE.

ENCLOSURE 5

SUMMARY OF SCHEDULED DEMAND

HAMIILTON-WENHAM MASTER PLAN ACTUAL SCHEDULED USES (DEMAND)

FIELD USE ANNUAL SUMMARY - ACTUAL TEAM USES			
Field Location	**Field Type**	**Total Annual Uses**	**Comments**
Game Field Inside Track	MPR	**130**	Varsity games (football,soccer,lax)
Field 1 (Upper Field)	MPR	**277**	Soccer and Lax
Field 2 (Lower Field)	MPR	**324**	Football practice/lax/PE
Field 3 (Baseball Outfield)	MPR	**205**	Soccer/Lax
Project Adventure Field	MP	**65**	Football/track and field
Baseball Field	90'D	**124**	JV and Babe Ruth
Softball Field	60'D	**356**	MS PE, Little League, new softball team
	Total	1481	

ENCLOSURE 6

EQUIVALENT DEMAND MATERIX

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - EQUIVALENT TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
H-W Little League Spring	32	435	April	June						42	
H-W Lttle League Summer	10	140	July	August						22.5	
H-W Youth Football	5	115	Aug.	Nov.	20						
H-W Youth Soccer Spring	47	535	April	Nov.							
H-W Youth Soccer Fall	67	655	Sept	Nov							
H-W Youth Boys Lacrosse	15	200	April	June			36				
H-W Youth Girls Lacrosse	10	161	April	June							
H-W Babe Ruth	5	75	April	June		24					
HWRHS JV Football					Numbers	Built	into	Vars	FB		
HWRHS Football	1	50	Aug	Nov	20			84			60
HWRHS JV Girls Lacrosse	1	20	March	May			18		60		
HWRHS Varsity Girls Lacrosse	1	30	March	June	10			10	10		
HWRHS JV Boys Lacrosse	1	20	March	May			67.5	15			
HWRHS Varsity Boys Lacrosse	1	20	March	June	15		97.5	7.5			
HWRHS Freshman Boys Soccer	1	20	Aug.	Oct	Off-Site						

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - EQUIVALENT TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
HWRHS JV Boys Soccer	1	20	Aug	Oct					90		
HWRHS Varsity Boys Soccer	1	20	Aug	Nov	15				97.5		
HWRHS Freshman Girls Soccer	1	20	Aug.	Oct	Off-Site						
HWRHS JV Girls Soccer	1	20	Aug	Oct			60		10		
HWRHS Varsity Girls Soccer	1	20	Aug	Nov	10		65				
HWRHS Varsity Field Hockey	1	20	Aug.	Nov	Off-Site						
HWRHS Cross Country	1	60	Aug.	Nov	Off-Site						
HWRHS JV Baseball	1	20	March	May		70					
HWRHS Varsity Baseball	1	25	March	June	Off-Site						
HWRHS Girls Softball	1	20	March	May						45	
HWRHS Track and Field	1	90	March	June	60 (Track)			35 Javelin			35
H-W Freshman Basketball	1	20	Nov	Feb	Off-Site						
HWRHS Tennis	2	20			Off-Site						
Recreation Patton Park Program	1	150	June	August							

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - EQUIVALENT TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
Adult Boot Camp Fall	1	20	Sep	Nov							
Adult Boot Camp Spring	1	20	Mar	May							
Adult Boot Camp Summer	1	20	June	August							
H-W intertown Baseball	1	20	Sep	Nov							
H-W Sr. Babe Ruth Summer	1	20	July	August		30					
Eagles Soccer	1	30	Sep.	Nov.							
Sunforce Soccer	2	35									
Wiffleball	20	80	July	July							
Flag Football - Adult			Sep	Sep							
Phy Ed - HWRHS			Sep	Jun				180			
Phys Ed M.S			Sep	June						135	
Phys Ed Cutler			Sep	June							
Phys. Ed Buker			Sep	June							
Phys Ed Winthrop			Sep	June							
Recreation Multi Sport	1	20	Aug.	Aug.							

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - EQUIVALENT TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
Middle School Intramurals Field Hockey Fall	1	20	Sep	Nov						30	
Middle School intramurals	1	50	Sep	Nov							
X-Country Fall											
Middle School Intramurals Ultimate Frisbee	1	10	Sep	Nov							
Mens Adult Basketball League	12	120	Jan	Dec							
Sunday Basketball League	1	25	Jan	Dec							
Fitness Classes	6	120	Jan	Dec							
Young Adult Basketball League			Jul	Aug							
Pingree School basketball	1	20	Dec	Feb							
H-W Thundercats	2	20	Nov	April							
H-W Youth Basketball			Nov	Mar							
Floor Hockey - Fall	1	10	Feb	April							
Special Events	10	200	Jan	Dec							
Imagination Station	1	50	Jan	Dec							
Adult Soccer Fall	5	80									

HAMILTON/WENHAM REGIONAL HIGH SCHOOL ATHLETIC FIELD DEMAND DATA - EQUIVALENT TEAM USES

User Organization	Number Teams	Number Participants	Season Start	Season End	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
Adult Soccer Spring	5	80									

	HS Game	HS Baseball	HS Field 1	HS Field 2	HS Field 3	MS Softball	Aux. Grass
TOTALS	150	124	344	331.5	267.5	274.5	95

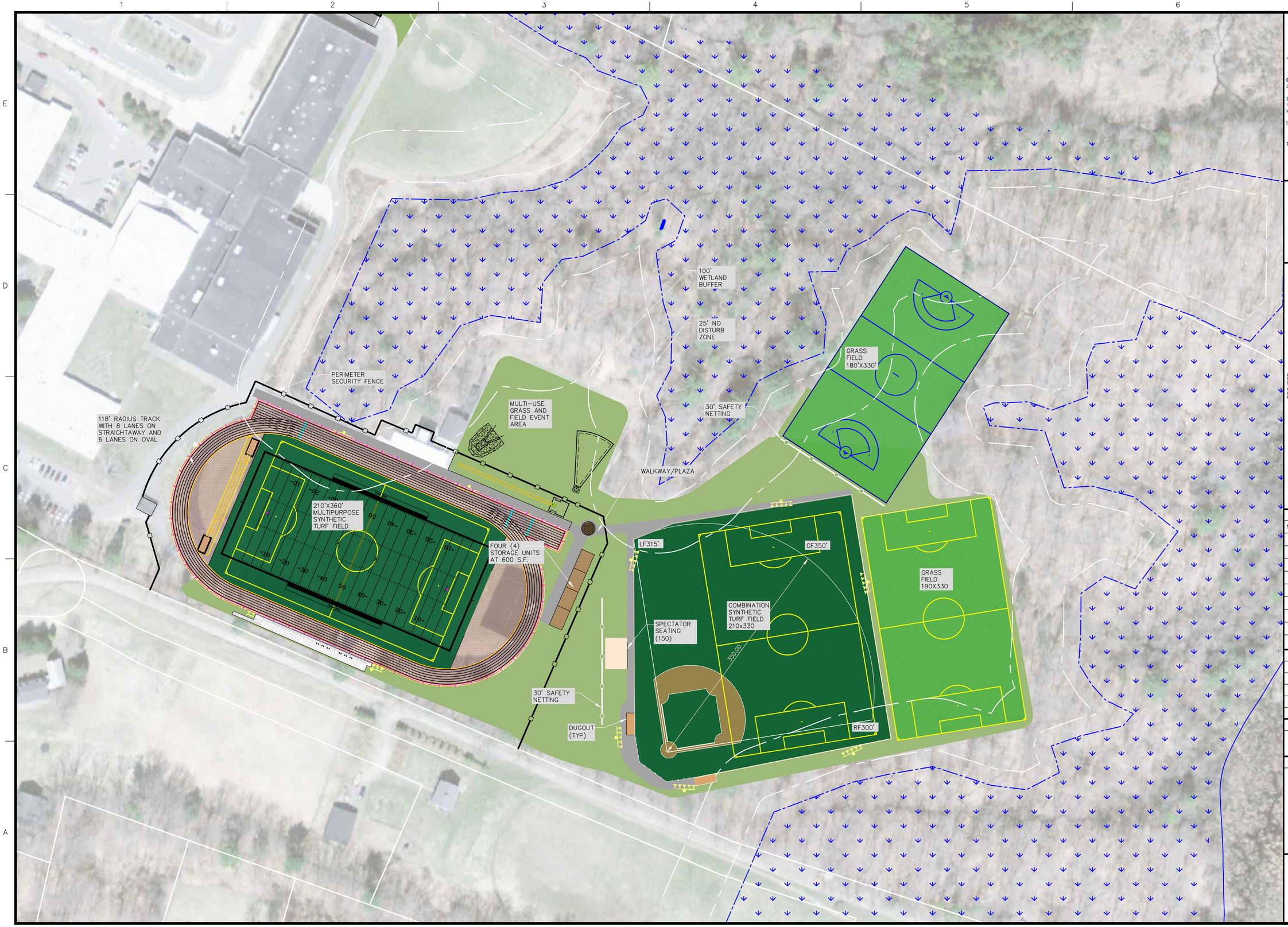
NOTES

USE CALCULATION:

ONE (1) 2-HOUR EVENT OF 20-30 PLAYERS ON THE FIELD IS CONSIDERED ONE (1) USE.

ENCLOSURE 7

MASTER PLAN REDEVELOPMENT SCHEMATIC



GALE

Gale Associates, Inc.
Engineers and Planners

163 LIBBEY PARKWAY | WEYMOUTH, MA 02189
P 781.335.6465 F 781.335.6467
www.gainc.com

Boston Baltimore Orlando San Francisco

PROJECT
HWRHS MASTER PLAN
775 BAY ROAD
HAMILTON MA

OWNER
TOWNS OF HAMILTON/WENHAM
HAMILTON, MA

REVISIONS

NO.	DATE	DESCRIPTION

CADD FILE	HWRS-DES-FINAL
DESIGNED BY	LAB
DRAWN BY	LAB
CHECKED BY	
DATE	10-28-14
DRAWING SCALE	1"=60'

GRAPHIC SCALE

SHEET TITLE

SCHEMATIC LAYOUT 1

DRAWING NO.
SK-1

PROJECT NO. 716570

Gale Associates, Inc.
Engineers and Planners

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HAMILTON MA

OWNER
TOWN OF HAMILTON/WENHAM
HAMILTON, MA

REVISIONS		
NO.	DATE	DESCRIPTION

CADD FILE	HWRS-DES-FINAL
DESIGNED BY	LAB
DRAWN BY	LAB
CHECKED BY	
DATE	10-28-14
DRAWING SCALE	1"=60'

GRAPHIC SCALE

SHEET TITLE

SCHEMATIC
LAYOUT
1

DRAWING NO.
SK-1

PROJECT NO. 716570

ENCLOSURE 8

SCHEMATIC COST ESTIMATES

HAMILTON-WENHAM REGIONAL HIGH SCHOOL MASTER PLAN

Schematic Pre-Design Estimate

TRACK AND FIELD REDEVELOPMENT PROJECT

ITEM	DESCRIPTION	TOTAL COST
1	General Conditions	$ 79,972.62
2	Erosion Control	$ 3,150.00
3	Site Preparation / Demolition	$ 15,000.00
4	Track Reconstruction	$ 409,380.00
5	Track D-Area Construction	$ 170,840.00
6	Discus / Hammer and Shot Put Venues	$ 35,600.00
7	Pole Vault and Long Jump	$ 52,000.00
8	Synthetic Turf Game Field Construction (inside track)	$ 1,166,466.00
9	Athletic Lighting	$ 310,000.00
10	Spectator Seating	$ 205,000.00
11	Walkways / Access Drives	$ 31,195.00
12	Utilities	$ 100,000.00
	Subtotal	$ 2,578,603.62
	Soft Costs (7%)	$ 180,502.25
	TOTAL	$ 2,759,105.87

HAMILTON-WENHAM REGIONAL HIGH SCHOOL MASTER PLAN

Schematic Pre-Design Estimate

TENNIS COURT DEVELOPMENT

ITEM	DESCRIPTION	TOTAL COST
1	General Conditions	$ 61,122.45
2	Erosion Control	$ 2,900.00
3	Site Preparation / Demolition	$ 12,500.00
4	Tennis Construction	$ 288,070.00
5	Athletic Lighting	$ 216,800.00
6	Site Walkways / Parking Improvements	$ 18,810.00
7	Landscaping / Site Elements	$ 16,650.00
		$ 616,852.45
		$ 43,179.67
		$ 660,032.12

HAMILTON-WENHAM REGIONAL HIGH SCHOOL MASTER PLAN

Schematic Pre-Design Estimate

BASEBALL/MULTIPURPOSE FIELD REDEVELOPMENT

1	General Conditions	$	171,407.89
2	Erosion Control	$	4,950.00
3	Site Preparation / Demolition	$	13,000.00
4	Synthetic Turf Combination Field (Baseball & Multipurpose)	$	1,492,996.00
5	Athletic Lighting	$	460,000.00
6	Spectator Seating	$	28,000.00
7	Walkways / Access Drives	$	26,560.00
8	Utilities	$	70,000.00
9	Landscaping	$	80,000.00
		$	2,346,913.89
		$	164,283.97
		$	2,511,197.86

HAMILTON-WENHAM REGIONAL HIGH SCHOOL MASTER PLAN

Schematic Pre-Design Estimate

Modular Storage Buildings

ITEM	DESCRIPTION	TOTAL COST
1	Modular Storage Buildings and Foundations	$ 395,874.00
2	Walkways / Access Drives	$ 7,640.00
3	Utilities	$ 26,000.00
	Subtotal	$ 429,514.00
	Soft Costs - 7%	$ 30,065.98
	Total	$ 459,579.98

HAMILTON-WENHAM REGIONAL HIGH SCHOOL MASTER PLAN

Schematic Pre-Design Estimate

FIELD #2 EXPANSION AND Field #1 SAFETY NETTING

ITEM	DESCRIPTION	TOTAL COST
1	General Conditions	$ 38,969.28
2	Erosion Control	$ 4,500.00
3	Site Preparation / Demolition	$ 10,000.00
4	Field 2 Expansion	$ 254,835.00
	Subtotal	$ 308,304.28
	Soft Costs - 7%	$ 21,581.30
	Total	$ 329,885.57

ENCLOSURE 9

PROPOSED REDISTRIBUTION OF DEMAND

HAMILTON-WENHAM MASTER PLAN PROPOSED REDISTRUBION OF DEMAND

FIELD USE ANNUAL SUMMARY - ACTUAL & PROPOSED TEAM USES

Field Location	Field Type	Total Annual Uses	Total Annual Uses	Comments
Game Field Inside Track	MPR	**130**	**--**	
NEW GAME FIELD	SYN	**--**	**425**	
Field 1 (Upper Field)	MPR	**277**	**162**	
Field 2 (Lower Field)	MPR	**324**	**150**	
Field 3 (Baseball Outfield)	MPR	**205**	**--**	
NEW COMBO SYNTURF	BB/MPR	**--**	**479**	
Project Adventure Field	MP	**65**	**65**	
Baseball Field	90'D	**124**	**--**	On Combo Field
Softball Field	60'D	**356**	**200**	Move MS P.E. to turf
	Total	1481	1481	

ENCLOSURE 10

ATHLETIC CAMPUS REDEVELOPMENT PHASING PLAN

HAMILTON-WENHAM MASTER PLAN PHASING PLAN (10-YEAR)					
PROJECT ELEMENTS	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
TRACK AND FIELD COMPLEX					
Track and Field Redevelopment	2,694,000				
BASEBALL/MP COMBO FIELD					
Baseball/MP Combination Field		2,511,198			
TENNIS COMPLEX					
Six (6) Tennis Courts and Lights			660,032		
STORAGE COMPLEX					
Foundation and 4 precast storage units			460,000		
FIELD #2 EXPANSION					
Field #2 Expansion				330,000	
SOFTBALL FIELD RECONSTRUCTION					
Reconstruct softball field					300,000
TURF CARPET REPLACEMENT					
Turf replacement at track and field					425,000
SUBTOTALS	**2,694,000**	**2,511,198**	**1,120,032**	**330,000**	**725,000**
MASTER PLAN REDEVELOPMENT TOTAL	**7,380,230**				

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