DORE & WHITTIER
ARCHITECTS, INC.

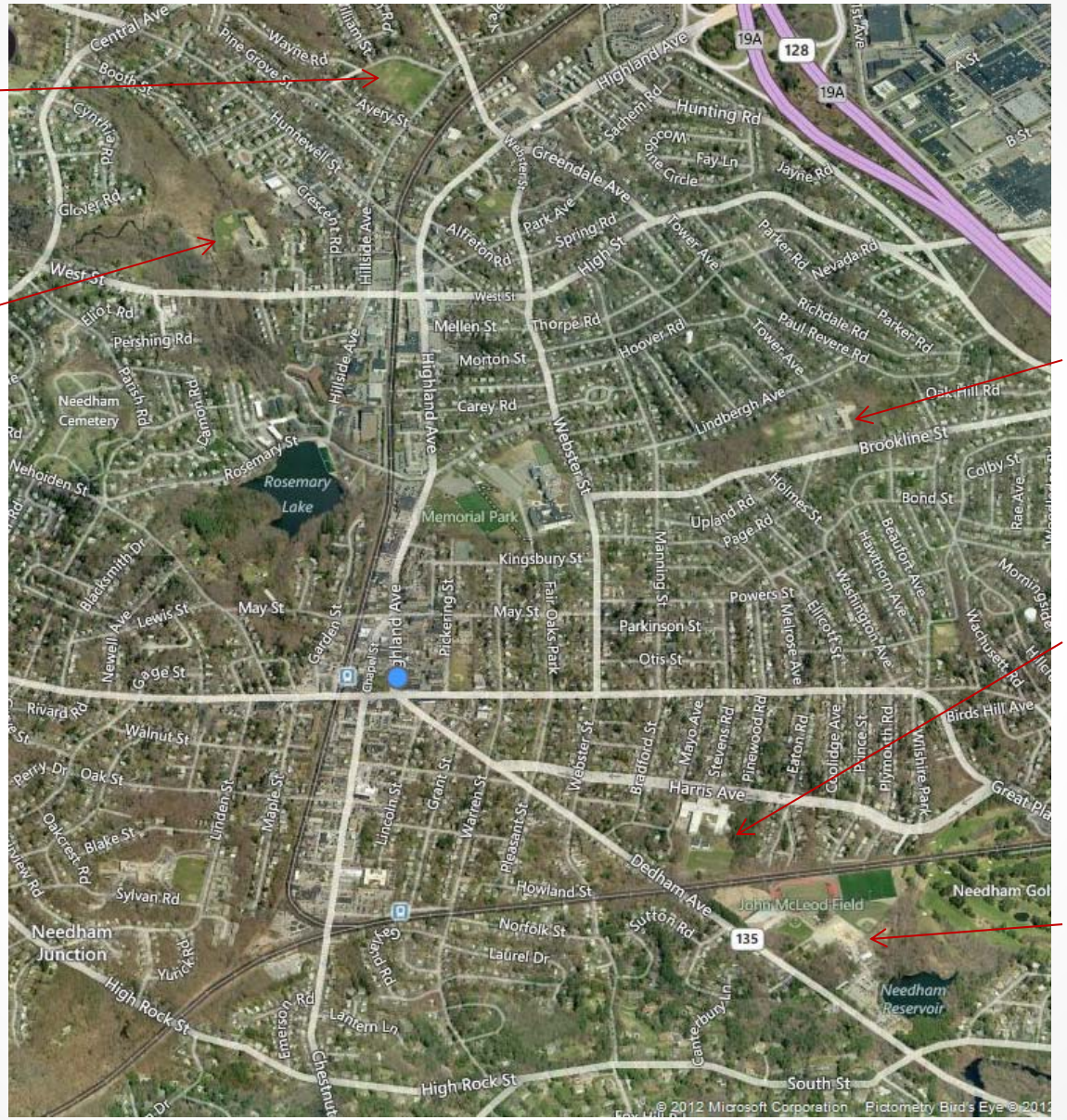
Existing Sites
Under Consideration

Location of Sites under Consideration

DORE & WHITTIER ARCHITECTS, INC.

Cricket Field

Hillside Elementary School



Mitchell Elementary School

Pollard Middle School

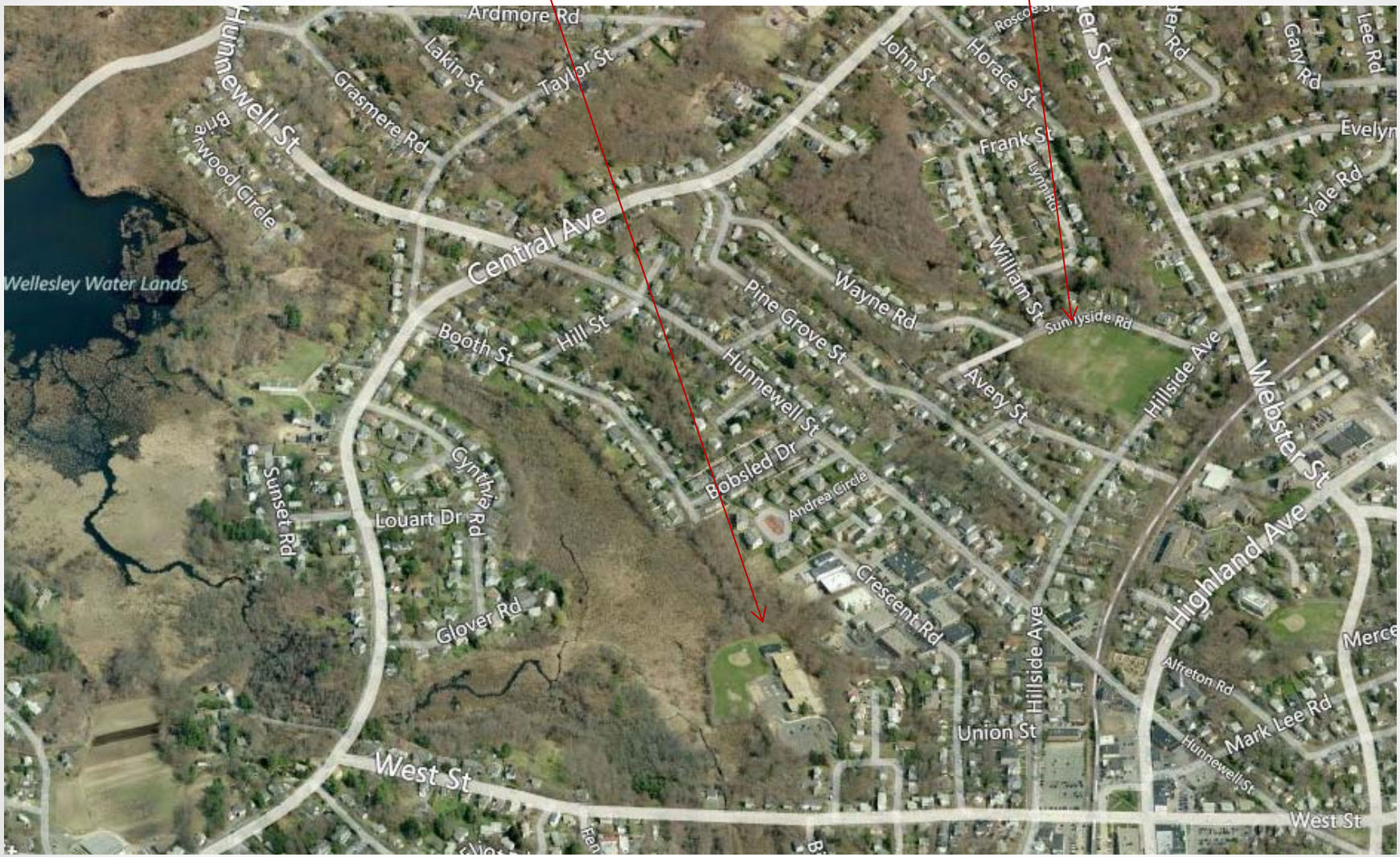
DeFazio Park

Enlarged View of Hillside and Cricket Field Sites

DORE & WHITTIER ARCHITECTS, INC.

Hillside Elementary School

Cricket Field



Existing Mitchell School

DORE & WHITTIER ARCHITECTS, INC.

Existing Hillside School

DORE & WHITTIER ARCHITECTS, INC.

Existing Cricket Field

DORE & WHITTIER ARCHITECTS, INC.

DeFazio Park

DORE & WHITTIER ARCHITECTS, INC.

DORE & WHITTIER ARCHITECTS, INC.

Option 1A.1
Additions and Renovations to Mitchell and Hillside

Option 1A.1

DORE & WHITTIER ARCHITECTS, INC.

Existing Parking Spaces: 78
Proposed Parking Spaces: 90

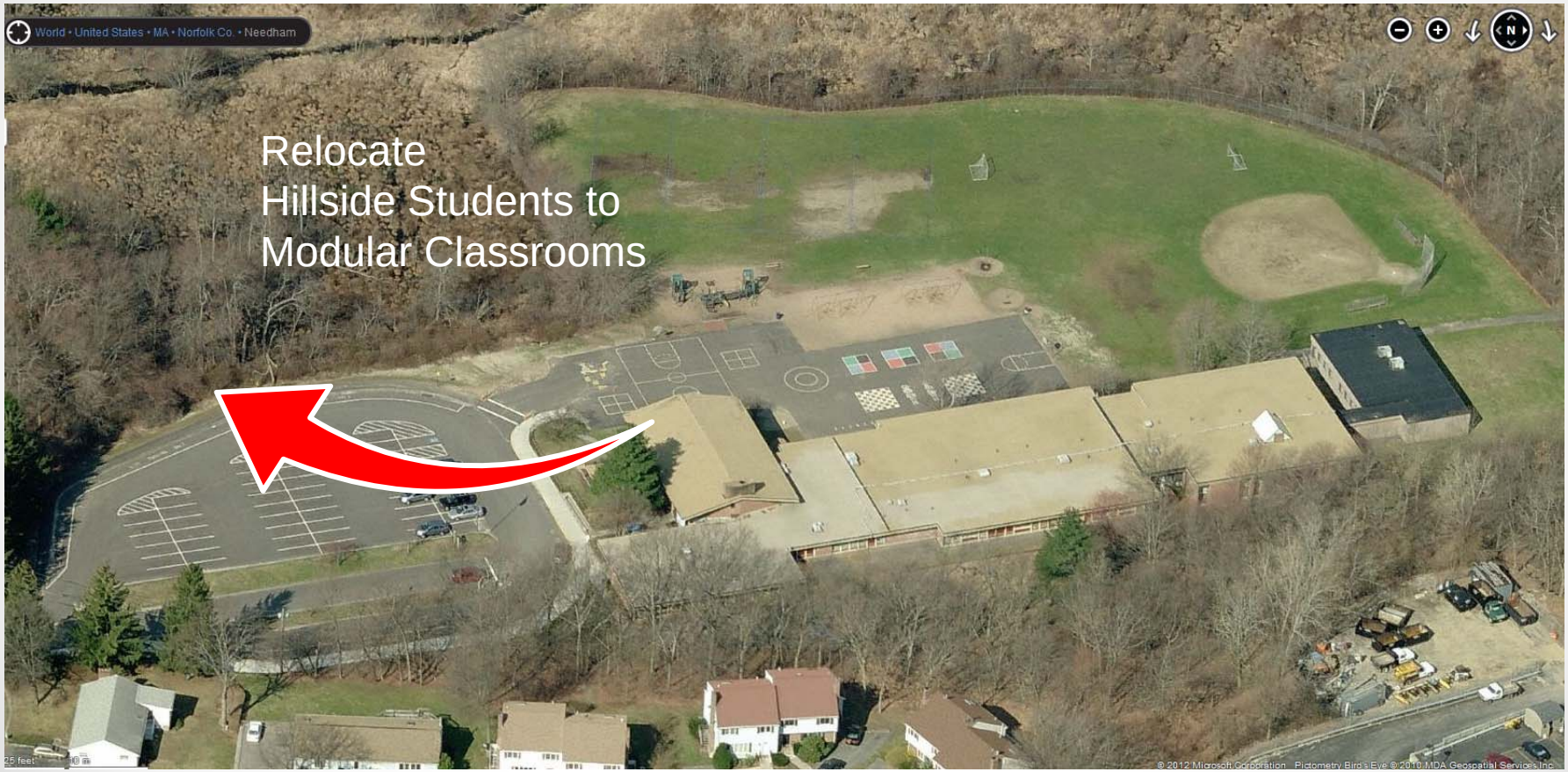
Existing/Renovation

Addition

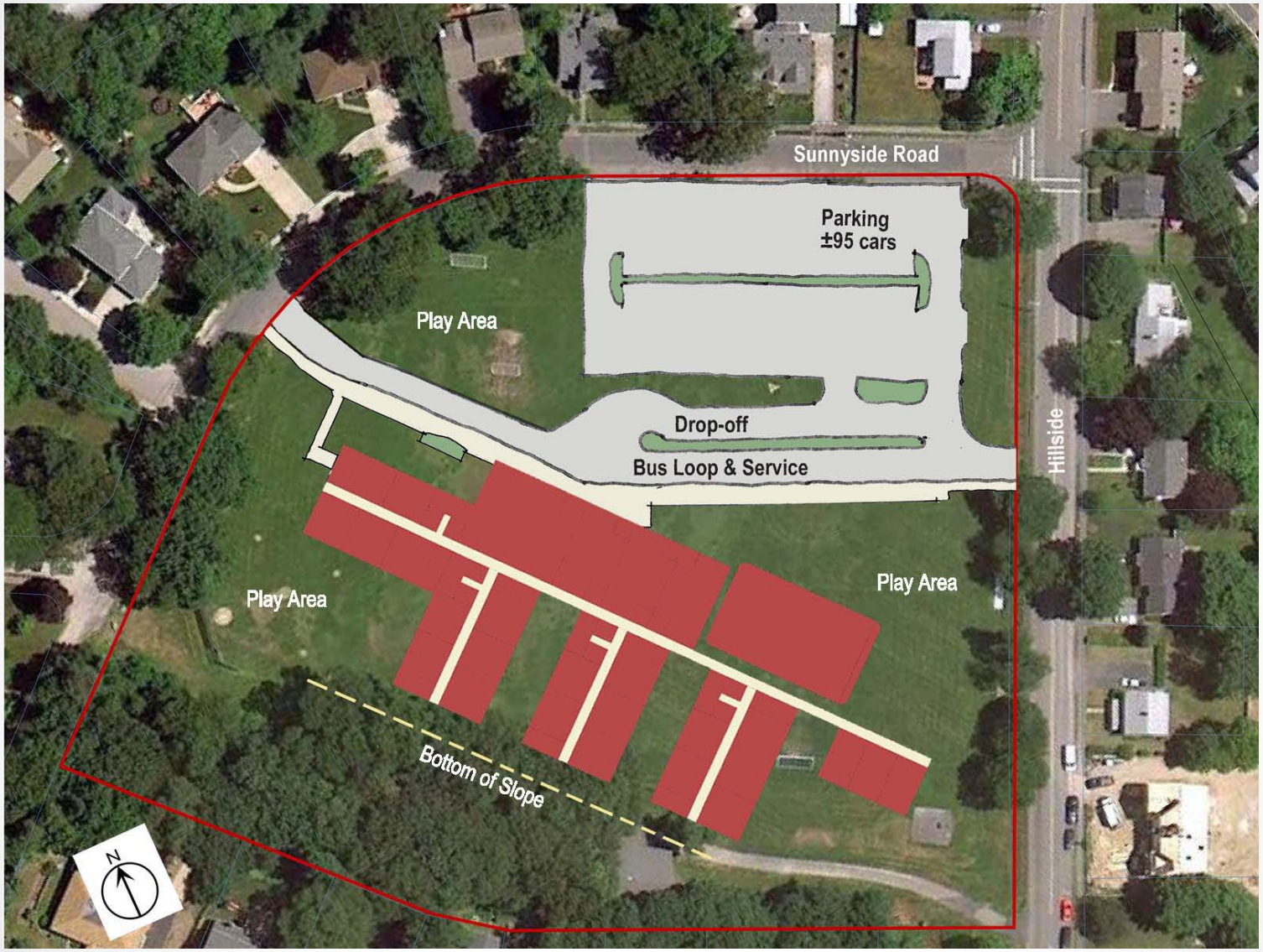
Mitchell Add-Reno for 503 students

Existing Hillside School

DORE & WHITTIER ARCHITECTS, INC.



DORE & WHITTIER ARCHITECTS, INC.



Modular Building at Cricket Field For 445 – 500 Students

DORE & WHITTIER
ARCHITECTS, INC.

Modular Building at DeFazio Field For 445 -500 Students

Option 1A.1

DORE & WHITTIER ARCHITECTS, INC.

Existing Parking Spaces: 50
Proposed Parking Spaces: 75

Existing/Renovation

Addition

Hillside Add-Reno for 487 students

Option 1A.1

GOALS SET BY SCHOOL COMMITTEE

- ✓ Elementary Schools to Provide 3-4 Sections for Grade Grouping
  Designs are for **4** Sections per Grade Grouping

- ✓ School Enrollment Size in the 400-500 Student Range
  Mitchell School = 503 students, Hillside School = 487 students

- ✓ Neighborhood Based
  Schools Remain in their Existing Neighborhood

- ❑ Reduce Transportation Requirements
  Transportation requirements would **increase throughout construction**
  63 Students would be re-districted – may effect transportation

- ❑ Minimize Re-districting
  Re-districting **is** required for **63 students**

- ✓ Ability to offer Full Day Kindergarten to all Families
  Full day Kindergarten at all schools

- ✗ Minimize Cost that will not be Reimbursed or are Considered Temporary Cost (i.e.. Modular Classrooms)
  Modular Classrooms are Required for the Hillside Population

Hillside and Mitchell Existing Schools Addition & Renovations
Option 1A.1

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

✓ Mitchell Site

Project Costs are Estimated to be
5% Less Expensive than New Construction

✓ Mitchell / Hillside

Schools Remain in Existing Neighborhoods

✓ District

Provides Full Day K at All Schools

Provides 4 Sections per Grade Grouping at Each School (400-500 students)

Hillside and Mitchell Existing Schools Addition & Renovations
Option 1A.1

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

Mitchell Site

Construction Phasing Costs - $1m
(3 Student moves + Construction Separation + moving expenses)

Phasing Cost are not Reimbursed by MSBA

Student Disruption During Construction

Reduces outdoor play space for the school, town and neighborhood

Partial loss of athletic fields requires field replacement cost - $400k (unknown location)

Greater Unknown – 20% construction costs vs. 15% for New Construction

Hillside Site

Construction Phasing Costs - $5.4m
must be off site due to existing site constraints

Phasing Costs are not Reimbursed by MSBA

Site Remediation Costs - $750 k (due to TCE Contamination)

Reduces outdoor play space for the school, town and neighborhood due to Parking and improved site circulation

Greater Unknown – 20% construction costs vs. 15% for New Construction

Project Cost are Estimated to be Greater Than New Construction

DORE & WHITTIER ARCHITECTS, INC.

Option 1A.2a and 1A.2b

New Schools at Mitchell and Hillside Sites

(Note: Option 1A.2c is not shown graphically here but is similar to these two options- using temporary modulars instead)

Option 1A.2a &b

DORE & WHITTIER ARCHITECTS, INC.

Mitchell Site -New School for 503 students
Use Existing Building for 487 students in Option 1A.2b

Existing/Renovation
Addition

Option 1A.2a &b

DORE & WHITTIER ARCHITECTS, INC.

Mitchell New School for 503 students

Option 1A.2c

DORE & WHITTIER ARCHITECTS, INC.

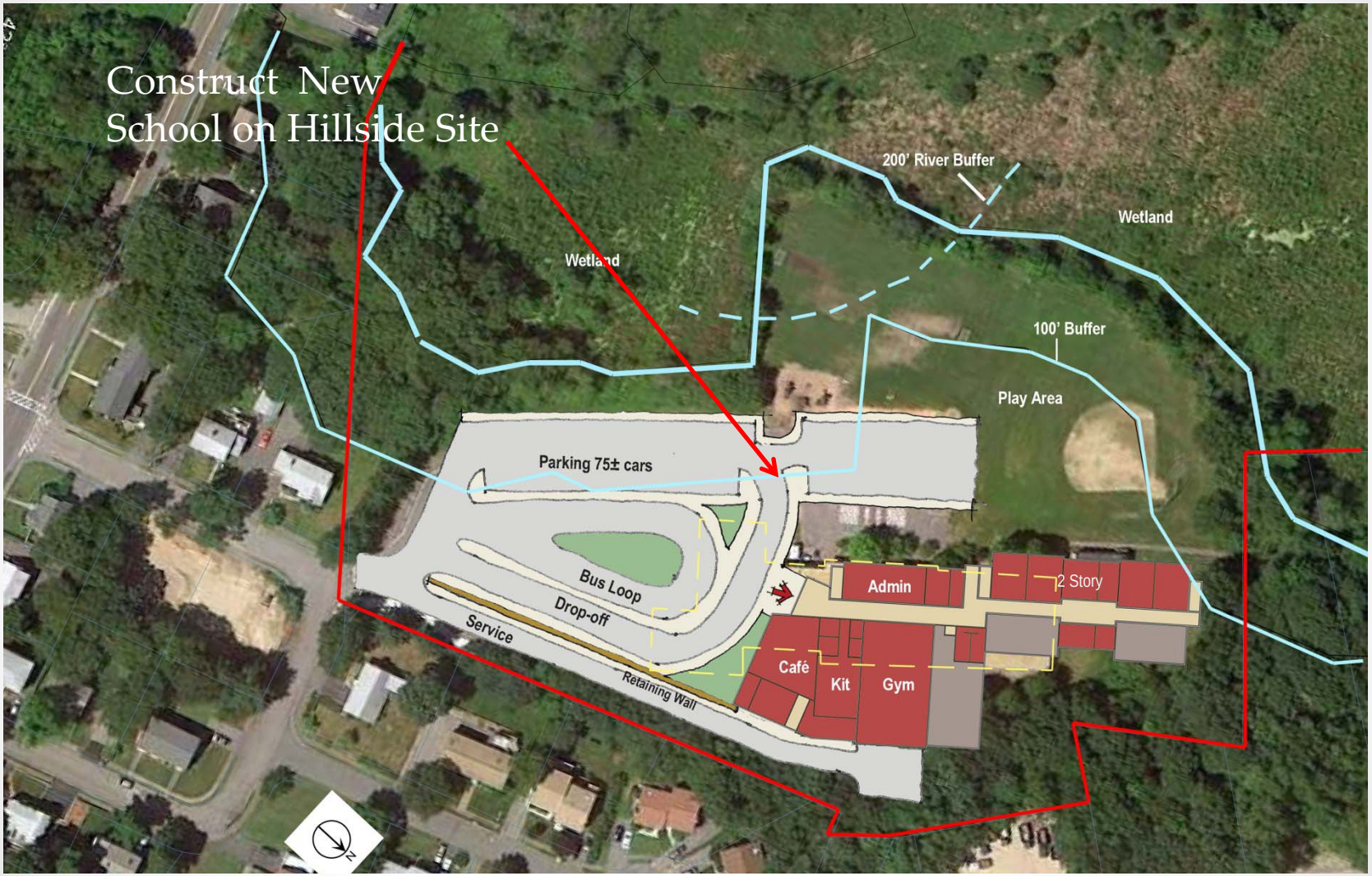
Mitchell New School for 503 students

Existing Hillside School

DORE & WHITTIER ARCHITECTS, INC.

Option 1A.2

DORE & WHITTIER ARCHITECTS, INC.



Hillside Site- New School for 487 students

DORE & WHITTIER ARCHITECTS, INC.

GOALS SET BY SCHOOL COMMITTEE

- ✓ Elementary Schools to Provide 3-4 Sections for Grade Grouping
  Designs are for **4** Sections per Grade Grouping
- ✓ School Enrollment Size in the 400-500 Student Range
  Mitchell School = 503 students, Hillside School = 487 students
- ✓ Neighborhood Based
  Schools Remain in their Existing Neighborhood
- ❑ Reduce Transportation Requirements
  Transportation requirements would **increase throughout construction**
  63 Students would be re-districted – may effect transportation
- ❑ Minimize Re-districting
  Re-districting **is** required for **63 students**
- ✓ Ability to offer Full Day Kindergarten to all Families
  Full day Kindergarten at all schools
- ✓ or ✗ Minimize Cost that will not be Reimbursed or are Considered Temporary Cost (i.e.. Modular Classrooms)
  Modular Classrooms would be Required in option 1A.2.a & c

Hillside and Mitchell New Schools on Existing Sites
Option 1A.2

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

✓ Mitchell Site

Non Reimbursable Phasing Cost are Less Than Additions & Renovation Phasing Cost

Improved Site Circulation When Completed

✓ Hillside Site

Project Cost Estimated to be 1% Less Expensive than Additions / Renovations

✓ Mitchell / Hillside

Schools Remain in Existing Neighborhoods

✓ District

Provides Full Day K at All Schools

Provides 4 Sections per Grade Grouping at Each School (400-500 students)

Modular Classrooms are not required

✓ Athletic Field Parity Maintained

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

Mitchell Site

Construction Phasing Costs - $350k-5.4m
(Construction /Separation + moving expenses)

Student Disruption throughout Construction

Phasing Cost are not Reimbursed by MSBA including non reimbursed temporary parking and driveway

Requires additional off site parking and transportation to site

Active Construction Site with School in Session

Loss of Most Outdoor Play Space and Athletic Fields During Construction

Cost of Demolishing Existing Building

Project Cost Estimated to be Greater Than Additions and Renovations

Hillside Site

Construction Phasing Costs - $500k-5.4m
must be off site due to existing site constraints

Phasing Costs are not Reimbursed by MSBA

Site Remediation Costs - $750 k (due to TCE Contamination)

Reduces outdoor play space for the school, town and neighborhood due to Parking and improved site circulation

DORE & WHITTIER ARCHITECTS, INC.

Option 1A.3

Add/Reno or New School at Mitchell
New School at Cricket Field/Repurpose Hillside

DORE & WHITTIER ARCHITECTS, INC.

Why Cricket Field Was Considered

- Hillside School could remain in the Existing Neighborhood
- A new building would be designed to meet the program needs of the Hillside community
- A new site would resolve some of the Hillside site issues & constraints
  - Remediation
  - Site Access
  - Improved parking, drop off / pick up, & site circulation
- A new building would provide swing space for the Hillside & Mitchell Schools during construction

Option 1A.3

DORE & WHITTIER ARCHITECTS, INC.

Cricket Field Site- New School for 487 students

Option 1A.3

DORE & WHITTIER ARCHITECTS, INC.

New School and Fields

Reno / Add to Mitchell School

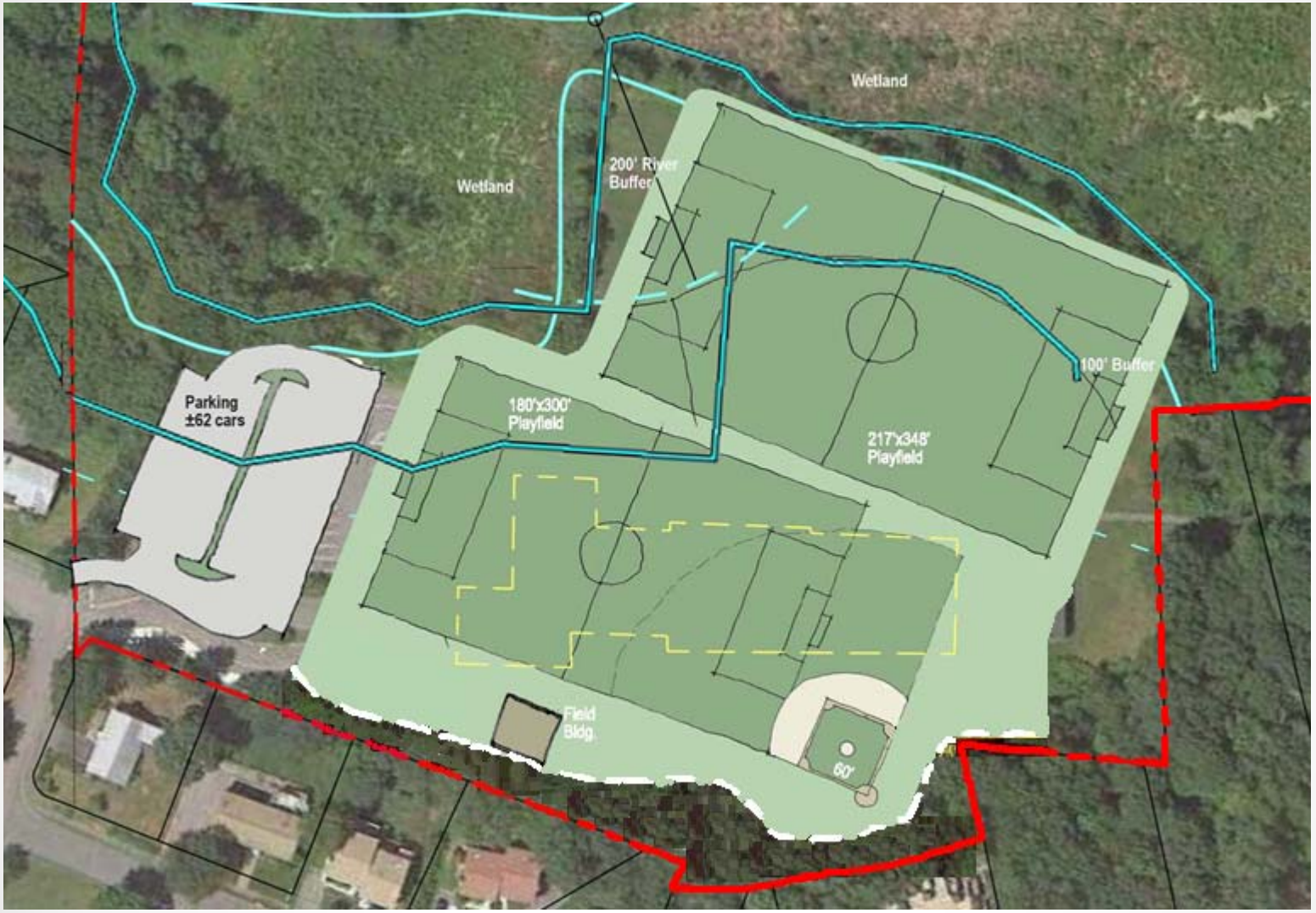
New School and Fields

Existing Hillside School or New Cricket Field School would serve as swing space for Mitchell students

Mitchell School for 503 Students

Option 1A.3

DORE & WHITTIER ARCHITECTS, INC.



New Fields at Hillside School Site

DORE & WHITTIER ARCHITECTS, INC.

GOALS SET BY SCHOOL COMMITTEE

- ✓ Elementary Schools to Provide 3-4 Sections for Grade Grouping
  Designed for **4** Sections per Grade Grouping
- ✓ School Enrollment Size in the 400s
  Mitchell School = 503 students, Hillside School = 487 students
- ✓ Neighborhood Based
  School Remain in their Existing Neighborhood
- ❑ Reduce Transportation Requirements
  Transportation requirements would **increase for 63 students**
- ❑ Minimize Re-districting
  Re-districting **is** required for **63** students
- ✓ Ability to offer Full Day Kindergarten to all Families
  Full day Kindergarten at **all** school
- ✓ Minimize Cost that will not be Reimbursed or are Considered Temporary Cost (i.e.. Modular Classrooms)
  Modular Classrooms would not be Required

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

✓ Mitchell Site

Students are not on site through Construction

✓ Hillside Site

No Impact on the Hillside Student Population during Construction

Project Cost Estimated to be Less Expensive than other Hillside Options

✓ Mitchell / Hillside

Schools Remain in Existing Neighborhoods

✓ District

Provides Full Day K at All Schools

Provides 4 Sections per Grade Grouping at Each School (400-500 students)

Modular Classrooms would not be required

✓ Athletic Field Parity Maintained

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

Mitchell Site

Construction Phasing Costs - $250k- (moving expenses)

Phasing Cost are not Reimbursed by MSBA

Loss of Most Outdoor Play Space and Athletic Fields During Construction (reduced Fields under Add / Reno option)

Cost of Existing Building Demolishing (with new building option)

Project Cost Estimated to be More for New building option vs. Additions & Renovations option

Hillside School At Cricket Field

Relocation of Existing Cricket Fields to Hillside Site is not Reimbursable by MSBA

Loss of Cricket Fields for 4-5 years (completion of construction + 2 growing seasons for new fields)

Site Remediation Costs - $500k (due to TCE Contamination)

Cost of Existing Building Demolition

Cricket Field is under the Management of Park & Recreation

Construction Phasing Costs - $250k- (moving expenses)

Neighborhood Considerations

DORE & WHITTIER
ARCHITECTS, INC.

Option 1B

Two Separate Sites, Resize Populations

DORE & WHITTIER ARCHITECTS, INC.

OPTION 1: Hillside & Mitchell Schools on Two Separate Sites

1A: Two Sites - Balanced enrollment

1B: Two Sites **-**Resize Hillside and Mitchell School Populations

Goal to reduce the Hillside Student Population & Reduce Traffic Congestion

Provide 3 Sections per Grade at Hillside = 18 classrooms

18 x 21 = **378** students at Hillside

990 – 378 = **612** students at Mitchell

Provide 5 Sections per Grade at Mitchell = 30 classroom

DORE & WHITTIER
ARCHITECTS, INC.

Option 1B.1

Additions and Renovations to Mitchell (612 students) and Hillside (378 students)

DORE & WHITTIER ARCHITECTS, INC.

OPTION 1: Hillside & Mitchell Schools on Two Separate Sites

1B: Resize Hillside and Mitchell School Populations

1B.1: Mitchell School - **Additions / Renovations**	**612** Students
Hillside School - **Additions / Renovations**	**378** Students
1B.2: Mitchell School - **New School**	**612** Students
Hillside School - **New School**	**378** Students

DORE & WHITTIER ARCHITECTS, INC.

GOALS SET BY SCHOOL COMMITTEE

- ❑ Elementary Schools to Provide 3-4 Sections for Grade Grouping
  Designs would require **5** Sections per Grade Grouping at Mitchell

- ❑ School Enrollment Size in the 400s
  Student Population at Mitchell School **would exceed 600 students**

- ❑ Neighborhood Based
  130 students would not be in their neighborhood school

- ❑ Reduce Transportation Requirements
  Additional student transportation **would be required**

- ❑ Minimize Re-districting
  Re-districting is **would be required**

- ✓ Ability to offer Full Day Kindergarten to all Families
  Full day Kindergarten at **all** school

- ❑ Minimize Cost that will not be Reimbursed or are Considered Temporary Cost (i.e.. Modular Classrooms)
  Modular Classrooms **may be required** based on phasing

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

✓ Mitchell Site

Project Cost are Estimated to be 3% Less Expensive than New Construction

✓ Hillside Site

Project Cost Estimated to be 2% Less Expensive than New Construction

Site Circulation is Improved

✓ Mitchell / Hillside

Schools Remain in Existing Neighborhoods (some of the Hillside population is re-districted)

✓ District

Provides Full Day K at All Schools

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

Mitchell Site

Construction Phasing Costs - $1m
(3 student moves + Construction Separation + moving expenses)

Phasing Cost are not Reimbursed by MSBA

Partial Loss of Athletic Fields Requires Field Replacement Costs - $400 (unknown location)

Greater Unknown Construction Cost – 20% vs. 15% for New Construction

Hillside Site

Construction Phasing Cost – $5 m students must be off site due to existing site constraints

Phasing Cost are not Reimbursable by MSBA

Site Remediation Costs - $750k (due to TCE Contamination)

Partial Loss of Student Play Area Due to Parking Requirements

Greater Unknown Construction Cost – 20% vs. 15% for New Construction

DORE & WHITTIER ARCHITECTS, INC.

Option 1B.2

New Schools at Mitchell (612 students) and Hillside (378 students)

DORE & WHITTIER ARCHITECTS, INC.

GOALS SET BY SCHOOL COMMITTEE

- ❑ Elementary Schools to Provide 3-4 Sections for Grade Grouping
  Designs would require **5** Sections per Grade Grouping at Mitchell
- ❑ School Enrollment Size in the 400s
  Student Population at Mitchell School **would exceed 600 students**
- ❑ Neighborhood Based
  130 students would not be in their neighborhood school
- ❑ Reduce Transportation Requirements
  Additional student transportation **would be required**
- ❑ Minimize Re-districting
  Re-districting is **would be required**
- ✓ Ability to offer Full Day Kindergarten to all Families
  Full day Kindergarten at **all** school
- ❑ Minimize Cost that will not be Reimbursed or are Considered Temporary Cost (i.e.. Modular Classrooms)
  Modular Classrooms **may be required** based on phasing

Hillside and Mitchell New Schools on Existing Sites
Option 1B.2

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

✓ Mitchell Site

Project Cost are Less Expensive than Additions / Renovation

Site Circulation is Improved

✓ Hillside Site

Project Cost Estimated to be 1% Less Expensive than Additions / Renovations

Site Circulation is Improved

✓ Mitchell / Hillside

Schools Remain in Existing Neighborhoods (some of the Hillside population is re-districted)

✓ District

Provides Full Day K at All Schools

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

Mitchell Site

Construction Phasing Costs - $350k (Construction Separation + moving expenses)

Phasing Cost are not Reimbursed by MSBA

Active Construction Site with School in Session

Loss of Most Outdoor Play Area and Athletic Fields During Construction

Partial Loss of Athletic Fields (permanent)

Cost of Demolishing Existing Building

Project Cost are Estimated to be Greater Than Addition / Renovation Cost

Hillside Site

Construction Phasing Cost – $500k-5 m students must be off site due to existing site constraints

Phasing Cost are not Reimbursable by MSBA

Site Remediation Costs - $750k (due to TCE Contamination)

Partial Loss of Student Play Area Due to Parking Requirements

DORE & WHITTIER ARCHITECTS, INC.

Option 3

New 6th Grade School at DeFazio Park
High Rock Becomes Elementary School
New or Renovated Mitchell
Repurpose Hillside

DORE & WHITTIER ARCHITECTS, INC.

OPTION 3: Build New 6th Grade School, Reclaim High Rock for Elementary Use, Build New or Renovate Existing Elementary School at Mitchell Site

3A: New 6th Grade School for **438** Students

3A.1: School at **DeFazio Park**

DORE & WHITTIER ARCHITECTS, INC.

Why DeFazio Park Was Considered

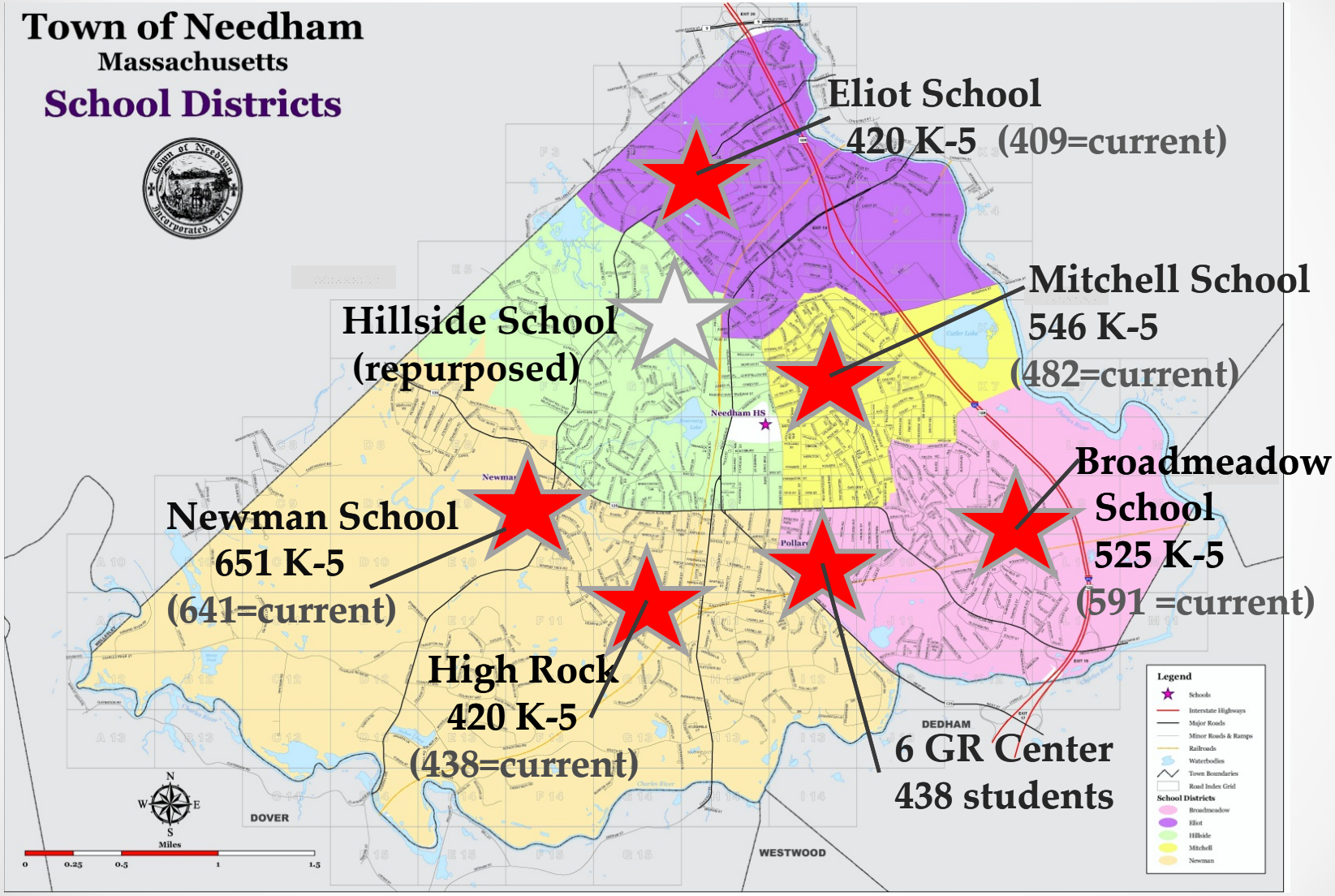
- Managed by School Department, Board of Selectmen and Park & Recreation
- Proximity to the Pollard School – reduce travel time for specialist resources
- A new building would be designed to meet the program needs of a middle school program (High Rock was designed as an elementary school)
- A new building could provide swing space for the Hillside & Mitchell Schools during construction

Option 3A.1

DORE & WHITTIER ARCHITECTS, INC.

New 6th Grade Center for 438 Students @ DeFazio Park

Option 3A.1



Requires re-districting of all schools and eliminates Hillside as an elementary school.

DORE & WHITTIER ARCHITECTS, INC.

GOALS SET BY SCHOOL COMMITTEE

- ❑ Elementary Schools to Provide 3-4 Sections for Grade Grouping
  Requires **5** Sections per Grade Grouping at 3 elementary schools

- ❑ School Enrollment Size in the 400s
  Student Population **would exceed 500 students** at 3 schools

- ❑ Neighborhood Based
  School Remain in their Existing Neighborhood for some students

- ❑ Reduce Transportation Requirements
  Additional student transportation **would be required**

- ❑ Minimize Re-districting
  Re-districting is **would be required & elimination of Hillside School district**

- ✓ Ability to offer Full Day Kindergarten to all Families
  Full day Kindergarten at each school

- ✓ Minimize Cost that will not be Reimbursed or are Considered Temporary Cost (i.e.. Modular Classrooms)
  Modular Classrooms **are not required during**

6th Grade School @ DeFazio Field

Option 3A.1

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

✓ Mitchell Site

No Impact to Students During Construction if new DeFazio school utilized as temp space
School Remains in Existing Neighborhood

✓ DeFazio Park

Project Cost Estimated to be Less Expensive than most Hillside Options

✓ Hillside Site

No Impact to Students during Construction

✓ District

Provides Full Day K at All Schools
Modular Classrooms are not Required

DORE & WHITTIER ARCHITECTS, INC.

CONSIDERATIONS

New 6th Grade School

Construction Phasing Costs - $250k
(moving expenses)

Phasing Cost are not Reimbursed by MSBA

2 Year Impact on DeFazio Field Athletics

Potential Parking Space Reduction

2m +/- Cost Premium for Site Development
due to Narrow Access Point off of
Dedham Avenue and High Groundwater
and Wetland Replication Potential

Transportation Impacts -
High Rock Neighborhood
Bus, Parent, Walkers, Town-wide

Re-Districting

Elimination of the Hillside School district

Re-districting required at every school

Hillside Site

Potential Cost for Existing Building Demolition
Transportation Impacts Hillside Neighborhood

High Rock Site

Transportation Impacts at High Rock
High Rock has 20 Classrooms – Not A 4 Section School
Renovations for Kindergarten Classrooms

Mitchell Site

Construction Phasing Costs – $350k-$1m

Phasing Costs not Reimbursed by MSAB

Partial Loss of Athletic Fields Requires Field Replacement
Cost $400k (unknown location)

Greater Unknown Construction Cost – 20% vs. 15% for
New Construction

Cost Estimates H

COST ESTIMATES

The following pages include the cost estimates for each of the options that are currently under consideration. Cost Estimates have been developed to correspond with each of the conceptual options and take into account the site specific costs of each option, including impact to wetlands/storm water, hazardous materials remediation, demolition of existing buildings or partial building, as well as option-specific costs such as site specific remediation measures (Hillside), phasing and the use of temporary modular classrooms on alternative sites.

These costs are conceptual in nature and are for comparison purposes only; they are not intended for use in construction. Cost was based on current market conditions in May 2012 and must be adjusted for inflation and construction market conditions for each year beyond this date.

Allowances have been provided for hazardous materials abatement and chemical remediation measures. Assumptions have been made for existing site and building conditions based on information known at the time of this study. The actual project cost will vary and will be based on a defined scope of work, specifications, testing, site development, and permitting requirements.

Cost Summary

PRELIMINARY Estimated Project Costs Summary 6.26.12

Hillside & Mitchell Elementary Schools - Prefeasibility Study

Needham Massachusetts

The following is a summary of Estimated Project Costs developed for the Hillside and Mitchell Elementary Schools. The options developed are conceptual in nature and therefore the estimated project costs are intended to provide a preliminary order of magnitude view at the potential project costs. Project costs consist of estimated site and building construction costs, design and construction contingencies, phasing, soft costs to cover the values of the design team, owner's project manager, investigative services, etc and fixtures, furniture and technology costs. The project costs **presented are in current 2012 dollars and may need to be adjusted for inflation depending on future construction timeframes.**

Options:	# Sections Per Grade	Pop	Estimated Costs	Subtotals
Option 1A: Two Separate Sites with Balanced Enrollments				
Option 1A.1: Mitchel ES - Additions / Renovations	4	503	$ 37,892,000	
Hillside ES - Additions / Renovations	4	487	$ 46,539,000	*$ 84,431,000*
Option 1A.2a: Mitchell ES - New School	4	503	$ 39,543,000	
Hillside ES - New School (*w/ temp modulars*)	4	487	$ 46,046,000	*$ 85,589,000*
Option 1A.2b: Mitchell ES - New School	4	503	$ 39,543,000	
Hillside ES - New School (*w/ Mitchell as temp c*	4	487	$ 38,416,000	*$ 77,959,000*
Option 1A.2c: Mitchell ES - New School (*w/ temp modula*	4	503	$ 46,123,000	
Hillside ES - New School (*w/ temp modulars*)	4	487	$ 42,406,000	*$ 88,529,000*
Option 1A.3: Mitchell ES - Additions / Renovations	4	503	$ 35,282,000	
Cricket Field - New School (replace Hillside)	4	487	$ 39,746,000	*$ 75,028,000*
Or Mitchell ES - New School	4	503	$ 38,143,000	
Cricket Field - New School (replace Hillside)	4	487	$ 39,746,000	*$ 77,889,000*
Option 2: Hillside and Mitchell Schools located on One Site				
990 students located on one site				
Option eliminated from consideration				
Option 1B: Two Separate Sites, Resize Populations				
Option 1B.1: Mitchell ES - Additions / Renovations	5	612	$ 43,907,000	
Hillside ES - Additions / Renovations	3	378	$ 41,094,000	*$ 85,001,000*
Option 1B.2a: Mitchell ES - New School	5	612	$ 43,982,000	
Hillside ES - New School (*w/ temp modulars*)	3	378	$ 41,551,000	*$ 85,533,000*
Option 1B.2b: Mitchell ES - New School	5	612	$ 43,982,000	
Hillside ES - New School (*w/ Mitchell as temp c*	3	378	$ 34,201,000	*$ 78,183,000*
Option 3: New 6th Grade School, High Rock becomes Elementary School, New or Renovated Mitchell				
Option 3A: New 6th Grade School at DeFazio Field	20	438	$ 45,099,000	
Option 3A.1: Mitchell ES - Additions / Renovations	5	546	$ 44,111,000	*$ 89,210,000*
Or New 6th Grade School at DeFazio Field	20	438	$ 45,099,000	
Option 3A.1: Mitchell ES - New School	5	546	$ 45,136,000	*$ 90,235,000*
Option 4: Create K-4 Schools District-wide/Add Full Day Kindergarten				
Grade reconfiguration (K-4, 5/6 school, 7/8 school)				
Option eliminated from consideration				

Mitchell **1A.1** Add / Renovations

Estimated Project Costs							6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study							
Needham Massachusetts							
Mitchell Elementary School							
Option 1A.1: Additions and Renovations -							
		503 students					
			Sq Footage:	**Estmated Cost:**	**Comments:**		
Construction Costs:							
	Construction Phasing Costs:			$ 2,300,000	3 moves, Separation, Park, Fields		
	Site Development			$ 2,100,000	Allowance		
		Special Site Considerations		$ 400,000	Field Replacement (Site Unknown)		
	Existing Building Demolition			$ -			
	Building Construction:						
		Medium Renovation	0	$ -	$200/sf		
		Heavy Renovation	54000	$ 12,690,000	$235/sf		
		New Construction	28400	$ 7,810,000	$275/sf		
		Total Square Footage	82400				
Construction Subtotal:				**$ 25,300,000**	$ 307	per sf	
Project Contingency (Design + Construction)				**$ 5,060,000**	20% of construction		
	Estimated Construction Cost + Contingency			$ 30,360,000			
Soft Costs:							
	Owner's Project Manager,						
	Arch/engineering, Owner direct,						
	Survey, Geotechnical, Hazardous						
	Materials, Printing, Legal, etc.						
		Subtotal		**$ 6,325,000**	25% of construction		
Fixtures Furnishings and Equipment (FF&E):							
		Subtotal		**$ 1,207,200**	Student population x $2400		
Project Cost Summary:							
	Construction Costs			**$ 25,300,000**			
	Project Contingency			**$ 5,060,000**			
	Soft Costs			**$ 6,325,000**			
	FF&E Costs			**$ 1,207,200**			
	Estimated Total Project Costs			**$ 37,892,000**	$ 460	per sf	

Hillside **1A.1** Add / Renovations

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Hillside Elementary School						
Option 1A.1: Additions and Renovations -						
		487 students				
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 6,200,000	Temp Crs, Utilit, Park, Fields, Move	
	Site Development			$ 2,400,000	Allowance	
		Special Site Considerations		$ 750,000	Site Remediation Allowance	
	Existing Building Demolition			$ -		
	Building Construction:					
		Medium Renovation	0	$ -	$200/sf	
		Heavy Renovation	45300	$ 11,325,000	$250/sf	
		New Construction	38600	$ 10,615,000	$275/sf	
		Total Square Footage	83900			
Construction Subtotal:				**$ 31,290,000**	$ 373	per sf
Project Contingency (Design + Construction)				**$ 6,258,000**	20% of construction	
	Estimated Construction Cost + Contingency			$ 37,548,000		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 7,822,500**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 1,168,800**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 31,290,000**		
	Project Contingency			**$ 6,258,000**		
	Soft Costs			**$ 7,822,500**		
	FF&E Costs			**$ 1,168,800**		
	Estimated Total Project Costs			**$ 46,539,000**	$ 555	per sf

Mitchell **1A.2a** New Construction

Estimated Project Costs							6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study							
Needham Massachusetts							
Mitchell Elementary School							
Option 1A.2a: New Construction -							
		503 students					
				Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:							
	Construction Phasing Costs:				$ 1,500,000	Separation, Temp parking, Move	
	Site Development				$ 3,000,000	Allowance	
		Special Site Considerations			$ -		
	Existing Building Demolition			54000	$ 270,000		
	Building Construction:						
		Medium Renovation			$ -	$200/sf	
		Heavy Renovation			$ -	$235/sf	
		New Construction		82227	$ 22,612,425	$275/sf	
		Total Square Footage		82227			
Construction Subtotal:					**$ 27,382,425**	$ 333	per sf
Project Contingency (Design + Construction)					**$ 4,107,364**	15% of construction	
	Estimated Construction Cost + Contingency				$ 31,489,789		
Soft Costs:							
	Owner's Project Manager,						
	Arch/engineering, Owner direct,						
	Survey, Geotechnical, Hazardous						
	Materials, Printing, Legal, etc.						
			Subtotal		**$ 6,845,606**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):							
			Subtotal		**$ 1,207,200**	Student population x $2400	
Project Cost Summary:							
	Construction Costs				**$ 27,382,425**		
	Project Contingency				**$ 4,107,364**		
	Soft Costs				**$ 6,845,606**		
	FF&E Costs				**$ 1,207,200**		
	Estimated Total Project Costs				**$ 39,543,000**	$ 481	per sf

Hillside **1A.2a** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Hillside Elementary School						
Option 1A.2a: New Construcion -						
		487 students				
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 6,200,000	Temp Crs, Utilit, Park, Fields, Move	
	Site Development			$ 2,700,000	Allowance	
		Special Site Considerations		$ 750,000	Site Remediation Allowance	
	Existing Building Demolition		45300	$ 226,500		
	Building Construction:					
		Medium Renovation		$ -	$200/sf	
		Heavy Renovation		$ -	$250/sf	
		New Construction	80650	$ 22,178,750	$275/sf	
		Total Square Footage	80650			
Construction Subtotal:				**$ 32,055,250**	$ 397	per sf
Project Contingency	(Design + Construction)			**$ 4,808,288**	15% of construction	
	Estimated Construction Cost + Contingency			$ 36,863,538		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 8,013,813**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 1,168,800**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 32,055,250**		
	Project Contingency			**$ 4,808,288**		
	Soft Costs			**$ 8,013,813**		
	FF&E Costs			**$ 1,168,800**		
	Estimated Total Project Costs			**$ 46,046,000**	$ 571	per sf

Mitchell **1A.2b** New Construction

Estimated Project Costs							6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study							
Needham Massachusetts							
Mitchell Elementary School							
Option 1A.2b: New Construction -							
		503 students					
				Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:							
	Construction Phasing Costs:				$ 1,500,000	Separation, Temp parking, Move	
	Site Development				$ 3,000,000	Allowance	
		Special Site Considerations			$ -		
	Existing Building Demolition			54000	$ 270,000		
	Building Construction:						
		Medium Renovation			$ -	$200/sf	
		Heavy Renovation			$ -	$235/sf	
		New Construction		82227	$ 22,612,425	$275/sf	
		Total Square Footage		82227			
Construction Subtotal:					**$ 27,382,425**	$ 333	per sf
Project Contingency (Design + Construction)					**$ 4,107,364**	15% of construction	
	Estimated Construction Cost + Contingency				$ 31,489,789		
Soft Costs:							
	Owner's Project Manager,						
	Arch/engineering, Owner direct,						
	Survey, Geotechnical, Hazardous						
	Materials, Printing, Legal, etc.						
			Subtotal		**$ 6,845,606**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):							
			Subtotal		**$ 1,207,200**	Student population x $2400	
Project Cost Summary:							
	Construction Costs				**$ 27,382,425**		
	Project Contingency				**$ 4,107,364**		
	Soft Costs				**$ 6,845,606**		
	FF&E Costs				**$ 1,207,200**		
	Estimated Total Project Costs				**$ 39,543,000**	$ 481	per sf

Hillside **1A.2b** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Hillside Elementary School						
Option 1A.2b: New Construcion -						
		487 students				
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 500,000	Temp relocate to exist Mitchell	
	Site Development			$ 2,700,000	Allowance	
		Special Site Considerations		$ 750,000	Site Remediation Allowance	
		Temp Additional Parking		$ 250,000		
	Existing Building Demolition		45300	$ 226,500		
	Building Construction:					
		Medium Renovation		$ -	$200/sf	
		Heavy Renovation		$ -	$250/sf	
		New Construction	80650	$ 22,178,750	$275/sf	
		Total Square Footage	80650			
Construction Subtotal:				**$ 26,605,250**	$ 330	per sf
Project Contingency (Design + Construction)				**$ 3,990,788**	15% of construction	
	Estimated Construction Cost + Contingency			$ 30,596,038		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 6,651,313**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 1,168,800**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 26,605,250**		
	Project Contingency			**$ 3,990,788**		
	Soft Costs			**$ 6,651,313**		
	FF&E Costs			**$ 1,168,800**		
	Estimated Total Project Costs			**$ 38,416,000**	$ 476	per sf

Mitchell **1A.2c** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Mitchell Elementary School						
Option 1A.2c: New Construction -						
		503 students				
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 6,200,000	Temp Crs, Utilit, Park, Fields, Move	
	Site Development			$ 3,000,000	Allowance	
		Special Site Considerations		$ -		
	Existing Building Demolition		54000	$ 270,000		
	Building Construction:					
		Medium Renovation		$ -	$200/sf	
		Heavy Renovation		$ -	$235/sf	
		New Construction	82227	$ 22,612,425	$275/sf	
		Total Square Footage	82227			
Construction Subtotal:				**$ 32,082,425**	$ 390	per sf
Project Contingency (Design + Construction)				**$ 4,812,364**	15% of construction	
	Estimated Construction Cost + Contingency			$ 36,894,789		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 8,020,606**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 1,207,200**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 32,082,425**		
	Project Contingency			**$ 4,812,364**		
	Soft Costs			**$ 8,020,606**		
	FF&E Costs			**$ 1,207,200**		
	Estimated Total Project Costs			**$ 46,123,000**	$ 561	per sf

Hillside **1A.2c** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Hillside Elementary School						
Option 1A.2c: New Construcion -						
		487 students				
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 3,600,000	2 yr temp crs lease only	
	Site Development			$ 2,700,000	Allowance	
		Special Site Considerations		$ 750,000	Site Remediation Allowance	
	Existing Building Demolition		45300	$ 226,500		
	Building Construction:					
		Medium Renovation		$ -	$200/sf	
		Heavy Renovation		$ -	$250/sf	
		New Construction	80650	$ 22,178,750	$275/sf	
		Total Square Footage	80650			
Construction Subtotal:				**$ 29,455,250**	$ 365	per sf
Project Contingency	(Design + Construction)			**$ 4,418,288**	15% of construction	
	Estimated Construction Cost + Contingency			$ 33,873,538		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 7,363,813**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 1,168,800**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 29,455,250**		
	Project Contingency			**$ 4,418,288**		
	Soft Costs			**$ 7,363,813**		
	FF&E Costs			**$ 1,168,800**		
	Estimated Total Project Costs			**$ 42,406,000**	$ 526	per sf

Mitchell **1A.3** Additions / Renovations

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Mitchell Elementary School						
Option 1A.3: Additions and Renovations -						
		503 students				
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 500,000	Temp new Hillside, back to Mitchell	
	Site Development			$ 2,100,000	Allowance	
		Special Site Considerations		$ 400,000	Field Replacement (Site Unknown)	
	Existing Building Demolition			$ -		
	Building Construction:					
		Medium Renovation	0	$ -	$200/sf	
		Heavy Renovation	54000	$ 12,690,000	$235/sf	
		New Construction	28400	$ 7,810,000	$275/sf	
		Total Square Footage	82400			
Construction Subtotal:				**$ 23,500,000**	$ 285	per sf
Project Contingency	(Design + Construction)			**$ 4,700,000**	20% of construction	
	Estimated Construction Cost + Contingency			$ 28,200,000		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 5,875,000**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 1,207,200**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 23,500,000**		
	Project Contingency			**$ 4,700,000**		
	Soft Costs			**$ 5,875,000**		
	FF&E Costs			**$ 1,207,200**		
	Estimated Total Project Costs			**$ 35,282,000**	$ 428	per sf

Mitchell **1A.3** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Mitchell Elementary School						
Option 1A.3: New Construction -						
		503 students				
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 500,000	Temp new Hillside, back to Mitchell	
	Site Development			$ 3,000,000	Allowance	
		Special Site Considerations		$ -		
	Existing Building Demolition		54000	$ 270,000		
	Building Construction:					
		Medium Renovation		$ -	$200/sf	
		Heavy Renovation		$ -	$235/sf	
		New Construction	82227	$ 22,612,425	$275/sf	
		Total Square Footage	82227			
Construction Subtotal:				**$ 26,382,425**	$ 321	per sf
Project Contingency	(Design + Construction)			**$ 3,957,364**	15% of construction	
	Estimated Construction Cost + Contingency			$ 30,339,789		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 6,595,606**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 1,207,200**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 26,382,425**		
	Project Contingency			**$ 3,957,364**		
	Soft Costs			**$ 6,595,606**		
	FF&E Costs			**$ 1,207,200**		
	Estimated Total Project Costs			**$ 38,143,000**	$ 464	per sf

Hillside @ Cricket Field **1A.3** New Construction

Estimated Project Costs							6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study							
Needham Massachusetts							
Hillside Elementary School @ Cricket Field							
Option 1A.3: New Construcion -							
		487 students					
				Sq Footage	**Estmated Cost:**	**Comments:**	
Construction Costs:							
	Construction Phasing Costs:				$ 250,000	Move into new school	
	Site Development				$ 3,000,000	Allowance	
		Special Site Considerations			$ 500,000	Hillside Site Remediation Allowance	
		Hillside Field Development			$ 1,400,000	2+ fields, Support Bldg and Parking	
	Existing Building Demolition			45300	$ 226,500		
	Building Construction:						
		Medium Renovation			$ -	$200/sf	
		Heavy Renovation			$ -	$250/sf	
		New Construction		80650	$ 22,178,750	$275/sf	
		Total Square Footage		80650			
Construction Subtotal:					**$ 27,555,250**	$ 342	per sf
Project Contingency	(Design + Construction)				**$ 4,133,288**	15% of construction	
	Estimated Construction Cost + Contingency				$ 31,688,538		
Soft Costs:							
	Owner's Project Manager,						
	Arch/engineering, Owner direct,						
	Survey, Geotechnical, Hazardous						
	Materials, Printing, Legal, etc.						
			Subtotal		**$ 6,888,813**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):							
			Subtotal		**$ 1,168,800**	Student population x $2400	
Project Cost Summary:							
	Construction Costs				**$ 27,555,250**		
	Project Contingency				**$ 4,133,288**		
	Soft Costs				**$ 6,888,813**		
	FF&E Costs				**$ 1,168,800**		
	Estimated Total Project Costs				**$ 39,746,000**	$ 493	per sf

Mitchell **1B.1** Additions / Renovations

Estimated Project Costs							6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study							
Needham Massachusetts							
Mitchell Elementary School							
Option 1B.1: Additions and Renovations -							
		612 students					
				Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:							
	Construction Phasing Costs:				$ 2,300,000	3 moves, Separation, Park, Fields	
	Site Development				$ 2,300,000	Allowance	
		Special Site Considerations			$ 400,000	Field Replacement (Site Unknown)	
	Existing Building Demolition				$ -		
	Building Construction:						
		Medium Renovation		0	$ -	$200/sf	
		Heavy Renovation		54000	$ 12,690,000	$235/sf	
		New Construction		42100	$ 11,577,500	$275/sf	
		Total Square Footage		96100			
Construction Subtotal:					**$ 29,267,500**	$ 305	per sf
Project Contingency (Design + Construction)					**$ 5,853,500**	20% of construction	
	Estimated Construction Cost + Contingency				$ 35,121,000		
Soft Costs:							
	Owner's Project Manager,						
	Arch/engineering, Owner direct,						
	Survey, Geotechnical, Hazardous						
	Materials, Printing, Legal, etc.						
			Subtotal		**$ 7,316,875**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):							
			Subtotal		**$ 1,468,800**	Student population x $2400	
Project Cost Summary:							
	Construction Costs				**$ 29,267,500**		
	Project Contingency				**$ 5,853,500**		
	Soft Costs				**$ 7,316,875**		
	FF&E Costs				**$ 1,468,800**		
	Estimated Total Project Costs				**$ 43,907,000**	$ 457	per sf

Hillside **1B.1** Additions / Renovations

Estimated Project Costs							6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study							
Needham Massachusetts							
Hillside Elementary School							
Option 1B.1: Additions and Renovations -							
		378 students					
				Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:							
	Construction Phasing Costs:				$ 6,200,000	Temp Crs, Utilit, Park, Fields, Move	
	Site Development				$ 2,400,000	Allowance	
		Special Site Considerations			$ 750,000	Site Remediation Allowance	
	Existing Building Demolition				$ -		
	Building Construction:						
		Medium Renovation		0	$ -	$200/sf	
		Heavy Renovation		45300	$ 11,325,000	$250/sf	
		New Construction		25600	$ 7,040,000	$275/sf	
		Total Square Footage		70900			
Construction Subtotal:					**$ 27,715,000**	$ 391	per sf
Project Contingency (Design + Construction)					**$ 5,543,000**	20% of construction	
	Estimated Construction Cost + Contingency				$ 33,258,000		
Soft Costs:							
	Owner's Project Manager,						
	Arch/engineering, Owner direct,						
	Survey, Geotechnical, Hazardous						
	Materials, Printing, Legal, etc.						
			Subtotal		**$ 6,928,750**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):							
			Subtotal		**$ 907,200**	Student population x $2400	
Project Cost Summary:							
	Construction Costs				**$ 27,715,000**		
	Project Contingency				**$ 5,543,000**		
	Soft Costs				**$ 6,928,750**		
	FF&E Costs				**$ 907,200**		
	Estimated Total Project Costs				**$ 41,094,000**	$ 580	per sf

Mitchell **1B.2a** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Mitchell Elementary School						
Option 1B.2a: New Construction -						
612 students						
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 1,500,000	Separation, Temp parking, Move	
	Site Development			$ 3,200,000	Allowance	
		Special Site Considerations		$ -		
	Existing Building Demolition		54000	$ 270,000		
	Building Construction:					
		Medium Renovation		$ -	$200/sf	
		Heavy Renovation		$ -	$235/sf	
		New Construction	92350	$ 25,396,250	$275/sf	
		Total Square Footage	92350			
Construction Subtotal:				**$ 30,366,250**	$ 329	per sf
Project Contingency (Design + Construction)				**$ 4,554,938**	15% of construction	
	Estimated Construction Cost + Contingency			$ 34,921,188		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 7,591,563**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 1,468,800**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 30,366,250**		
	Project Contingency			**$ 4,554,938**		
	Soft Costs			**$ 7,591,563**		
	FF&E Costs			**$ 1,468,800**		
	Estimated Total Project Costs			**$ 43,982,000**	$ 476	per sf

Hillside **1B.2a** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Hillside Elementary School						
Option 1B.2a: New Construcion -						
378 students						
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 6,000,000	Temp Crs, Utilit, Park, Fields, Move	
	Site Development			$ 3,300,000	Allowance	
		Special Site Considerations		$ 750,000	Site Remediation Allowance	
	Existing Building Demolition		45300	$ 226,500		
	Building Construction:					
		Medium Renovation		$ -	$200/sf	
		Heavy Renovation		$ -	$250/sf	
		New Construction	68200	$ 18,755,000	$275/sf	
		Total Square Footage	68200			
Construction Subtotal:				**$ 29,031,500**	$ 426	per sf
Project Contingency (Design + Construction)				**$ 4,354,725**	15% of construction	
	Estimated Construction Cost + Contingency			$ 33,386,225		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 7,257,875**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 907,200**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 29,031,500**		
	Project Contingency			**$ 4,354,725**		
	Soft Costs			**$ 7,257,875**		
	FF&E Costs			**$ 907,200**		
	Estimated Total Project Costs			**$ 41,551,000**	$ 609	per sf

Mitchell **1B.2b** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Mitchell Elementary School						
Option 1B.2b: New Construction -						
612 students						
		Sq Footage:		**Estmated Cost:**	**Comments:**	
Construction Costs:						
Construction Phasing Costs:				$ 1,500,000	Separation, Temp parking, Move	
Site Development				$ 3,200,000	Allowance	
Special Site Considerations				$ -		
Existing Building Demolition		54000		$ 270,000		
Building Construction:						
Medium Renovation				$ -	$200/sf	
Heavy Renovation				$ -	$235/sf	
New Construction		92350		$ 25,396,250	$275/sf	
Total Square Footage		92350				
Construction Subtotal:				**$ 30,366,250**	$ 329	per sf
Project Contingency (Design + Construction)				**$ 4,554,938**	15% of construction	
Estimated Construction Cost + Contingency				$ 34,921,188		
Soft Costs:						
Owner's Project Manager,						
Arch/engineering, Owner direct,						
Survey, Geotechnical, Hazardous						
Materials, Printing, Legal, etc.						
Subtotal				**$ 7,591,563**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
Subtotal				**$ 1,468,800**	Student population x $2400	
Project Cost Summary:						
Construction Costs				**$ 30,366,250**		
Project Contingency				**$ 4,554,938**		
Soft Costs				**$ 7,591,563**		
FF&E Costs				**$ 1,468,800**		
Estimated Total Project Costs				**$ 43,982,000**	$ 476	per sf

Hillside **1B.2b** New Construction

Estimated Project Costs							6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study							
Needham Massachusetts							
Hillside Elementary School							
Option 1B.2b: New Construcion -							
		378 students					
				Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:							
	Construction Phasing Costs:				$ 500,000	Temp relocate to exist Mitchell	
	Site Development				$ 3,300,000	Allowance	
		Special Site Considerations			$ 750,000	Site Remediation Allowance	
		Temp Additional Parking			$ 250,000		
	Existing Building Demolition			45300	$ 226,500		
	Building Construction:						
		Medium Renovation			$ -	$200/sf	
		Heavy Renovation			$ -	$250/sf	
		New Construction		68200	$ 18,755,000	$275/sf	
		Total Square Footage		68200			
Construction Subtotal:					**$ 23,781,500**	$ 349	per sf
Project Contingency (Design + Construction)					**$ 3,567,225**	15% of construction	
	Estimated Construction Cost + Contingency				$ 27,348,725		
Soft Costs:							
	Owner's Project Manager,						
	Arch/engineering, Owner direct,						
	Survey, Geotechnical, Hazardous						
	Materials, Printing, Legal, etc.						
			Subtotal		**$ 5,945,375**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):							
			Subtotal		**$ 907,200**	Student population x $2400	
Project Cost Summary:							
	Construction Costs				**$ 23,781,500**		
	Project Contingency				**$ 3,567,225**		
	Soft Costs				**$ 5,945,375**		
	FF&E Costs				**$ 907,200**		
	Estimated Total Project Costs				**$ 34,201,000**	$ 501	per sf

6th Grade School **3A** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
New 6th Grade Center School						
Option 3A: New Construcion - DeFazio Field						
		438 students				
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
	Construction Phasing Costs:			$ 250,000	Move to new school	
	Site Development			$ 3,000,000	Allowance	
		Special Site Considerations		$ 3,000,000	High groundwater and wetlands	
		Hillside Field Development				
	Existing Building Demolition			$ -		
	Building Construction:					
		Medium Renovation		$ -	$200/sf	
		Heavy Renovation		$ -	$235/sf	
		New Construction	83200	$ 24,128,000	$290/sf	
		Total Square Footage	83200			
Construction Subtotal:				**$ 30,378,000**	$ 365	per sf
Project Contingency (Design + Construction)				**$ 6,075,600**	20% of constr/more site unknowns	
	Estimated Construction Cost + Contingency			$ 36,453,600		
Soft Costs:						
	Owner's Project Manager,					
	Arch/engineering, Owner direct,					
	Survey, Geotechnical, Hazardous					
	Materials, Printing, Legal, etc.					
		Subtotal		**$ 7,594,500**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
		Subtotal		**$ 1,051,200**	Student population x $2400	
Project Cost Summary:						
	Construction Costs			**$ 30,378,000**		
	Project Contingency			**$ 6,075,600**		
	Soft Costs			**$ 7,594,500**		
	FF&E Costs			**$ 1,051,200**		
	Estimated Total Project Costs			**$ 45,099,000**	$ 542	per sf

Mitchell **3A.1** Additions / Renovations

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Mitchell Elementary School						
Option 3A.1: Additions and Renovations -						
546 students						
			Sq Footage:	**Estmated Cost:**	**Comments:**	
Construction Costs:						
Construction Phasing Costs:				$ 2,300,000	3 moves, Separation, Park, Fields	
Site Development				$ 2,300,000	Allowance	
Special Site Considerations				$ 400,000	Field Replacement (Site Unknown)	
Existing Building Demolition				$ -		
Building Construction:						
High Rock Upgrades				$ 250,000	Accommodate K population	
Medium Renovation			0	$ -	$200/sf	
Heavy Renovation			54000	$ 12,690,000	$235/sf	
New Construction			42100	$ 11,577,500	$275/sf	
Total Square Footage			96100			
Construction Subtotal:				**$ 29,517,500**	$ 307	per sf
Project Contingency (Design + Construction)				**$ 5,903,500**	20% of construction	
Estimated Construction Cost + Contingency				$ 35,421,000		
Soft Costs:						
Owner's Project Manager,						
Arch/engineering, Owner direct,						
Survey, Geotechnical, Hazardous						
Materials, Printing, Legal, etc.						
Subtotal				**$ 7,379,375**	25% of construction	
Fixtures Furnishings and Equipment (FF&E):						
Subtotal				**$ 1,310,400**	Student population x $2400	
Project Cost Summary:						
Construction Costs				**$ 29,517,500**		
Project Contingency				**$ 5,903,500**		
Soft Costs				**$ 7,379,375**		
FF&E Costs				**$ 1,310,400**		
Estimated Total Project Costs				**$ 44,111,000**	$ 459	per sf

Mitchell **3A.1** New Construction

Estimated Project Costs						6.26.12
Hillside & Mitchell Elementary Schools - Prefeasibility Study						
Needham Massachusetts						
Mitchell Elementary School						
Option 3A.1: New Construction -						
546 students						
		Sq Footage:	**Estmated Cost:**	**Comments:**		
Construction Costs:						
Construction Phasing Costs:			$ 1,500,000	Separation, Temp parking, Move		
Site Development			$ 3,200,000	Allowance		
Special Site Considerations			$ -			
Existing Building Demolition		54000	$ 270,000			
Building Construction:						
High Rock Upgrades			$ 250,000	Accommodate K population		
Medium Renovation			$ -	$200/sf		
Heavy Renovation			$ -	$235/sf		
New Construction		94850	$ 26,083,750	$275/sf		
Total Square Footage		94850				
Construction Subtotal:			**$ 31,303,750**	$ 330	per sf	
Project Contingency (Design + Construction)			**$ 4,695,563**	15% of construction		
Estimated Construction Cost + Contingency			$ 35,999,313			
Soft Costs:						
Owner's Project Manager,						
Arch/engineering, Owner direct,						
Survey, Geotechnical, Hazardous						
Materials, Printing, Legal, etc.						
Subtotal			**$ 7,825,938**	25% of construction		
Fixtures Furnishings and Equipment (FF&E):						
Subtotal			**$ 1,310,400**	Student population x $2400		
Project Cost Summary:						
Construction Costs			**$ 31,303,750**			
Project Contingency			**$ 4,695,563**			
Soft Costs			**$ 7,825,938**			
FF&E Costs			**$ 1,310,400**			
Estimated Total Project Costs			**$ 45,136,000**	$ 476	per sf	

Construction Phasing Costs Summary

Construction Phasing Costs Summary

Hillside & Mitchell Elementary Schools - Prefeasibility Study

Needham Massachusetts

The following Phasing Costs Summary highlights the cost components included in the Construction Phasing Costs line item found in each of the Estimated Project Costs detail.

Options:	Phasing Costs	Phasing Cost Components
Option 1A: Two Separate Sites with Balanced Enrollments		
Option 1A.1: Mitchel ES - Additions / Renovations	$ 2,300,000	3 moves ($750k), Constr sep ($250k), 2 fields ($800k), Temp park ($500
Hillside ES - Additions / Renovations	$ 6,200,000	36 mod crs ($4.4m), Util ($250k), 2 fields ($800k), Temp park ($500k), M
Option 1A.2a: Mitchell ES - New School	$ 1,500,000	Constr sep ($750k), Temp park ($500k), Move ($250k)
Hillside ES - New School (*w/ temp modulars*)	$ 6,200,000	Same as Hillside 1A.1
Option 1A.2b: Mitchell ES - New School	$ 1,500,000	Same as Mitchell 1A.2a
Hillside ES - New School (*w/ Mitchell as temp crs*)	$ 500,000	2 moves ($500k)
Option 1A.2c: Mitchell ES - New School (*w/ temp modulars*)	$ 6,200,000	Same as Hillside 1A.1
Hillside ES - New School (*w/ temp modulars*)	$ 3,600,000	Mod crs lease only ($50k/yr/cr x 36 crs = $1.8m x 2 yrs = $3.6m
Option 1A.3: Mitchell ES - Additions / Renovations	$ 500,000	2 moves ($500k)
Cricket Field - New School (replace Hillside)	$ 250,000	1 move into new school ($250k)
Or Mitchell ES - New School	$ 500,000	2 moves ($500k)
Cricket Field - New School (replace Hillside)	$ 250,000	1 move into new school ($250k)
Option 2: Hillside and Mitchell Schools located on One Site		
990 students located on one site		
Option eliminated from consideration		
Option 1B: Two Separate Sites, Resize Populations		
Option 1B.1: Mitchell ES - Additions / Renovations	$ 2,300,000	Same as Mitchell 1A.1
Hillside ES - Additions / Renovations	$ 6,200,000	Same as Hillside 1A.1
Option 1B.2a: Mitchell ES - New School	$ 1,500,000	Same as Mitchell 1A.2a
Hillside ES - New School (*w/ temp modulars*)	$ 6,000,000	Same as Hillside 1A.1 except fewer mod crs needed
Option 1B.2b: Mitchell ES - New School	$ 1,500,000	Same as Mitchell 1A.2a
Hillside ES - New School (*w/ Mitchell as temp crs*)	$ 500,000	Same as Hillside 1A.2a
Option 3: New 6th Grade School, High Rock becomes Elementary School, New or Renovated Mitchell		
Option 3A: New 6th Grade School at DeFazio Field	$ 250,000	1 move High Rock to DeFazio
Option 3A.1: Mitchell ES - Additions / Renovations	$ 2,300,000	Same as Mitchell 1A.1
Or New 6th Grade School at DeFazio Field	$ 250,000	1 move High Rock to DeFazio
Option 3A.1: Mitchell ES - New School	$ 1,500,000	Same as Mitchell 1A.2a
Option 4: Create K-4 Schools District-wide/Add Full Day Kindergarten		
Grade reconfiguration (K-4, 5/6 school, 7/8 school)		
Option eliminated from consideration		

Appendix I

MEETING NOTES

DORE & WHITTIER
ARCHITECTS, INC.

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MEETING DATE: April 9, 2012

PROJECT: Needham Pre-feasibility Study / Hillside & Mitchell Schools
Dore and Whittier Architects, Inc. Project #12-633

SUBJECT: PPBC-School Committee Presentation

ATTENDING: PPBC and School Committee Members, Town of Needham Officials, School Administration and School District Administration officials, Dore & Whittier Architects, members of the public

NOTES

The following outline is a summary of notes taken by Dore & Whittier outlining the questions and discussion points following the PPBC-School Committee powerpoint presentation, given by Dore & Whittier Architects at the PPBC meeting held on April 9th, 2012.

Questions and Discussion:

1. Adding to Newman: How does this affect current MSBA project at Newman? The future work is not anticipated to have any impact on MSBA reimbursement for the current improvement project.
2. How does the cost of renovations at Hillside compare with new construction? It is expected that the renovation costs at Hillside may approach or exceed the cost of new construction.
3. Hillside: Venting of chemicals will need to continue in any reno/add or new construction because the plume is coming down from the hill and is below the ground surface. In an MSBA feasibility study, an environmental consultant will need to evaluate the condition in more detail, to determine the full extent of remediation and mitigation efforts.
4. How much "buildable" area is on the Cricket site, Hillside site and Mitchell sites? They each approximate 6 to 7 acres, with slightly more acreage on the Mitchell site. D&W will review and confirm.
5. What are advantages/disadvantages of building at Cricket vs. Hillside?
   An important point to consider is that the Cricket site allows for good use of taxpayer dollars for swing space. It can be used for both Mitchell and Hillside projects. Traffic and neighbor considerations will be important. More potential for students to walk to school at the Cricket site. Hillside would have larger fields and parking area than currently at Cricket site.
6. Which options allow for the most future expansion possibilities? Each building will be designed to allow for a small future addition should it be necessary due to increased enrollment. The Mitchell site and the DeFazio site may offer more potential for larger future additions, however each of the sites will have limitations on the number of students due to limitations on parking, play fields and traffic impact.

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7. School sizes that are in the 400 student range is an important aspect to consider in each of these options. This was discussed as an important point during the Educational Framework workshop.
8. An important consideration for Hillside parents is to keep the community intact, whether it is reno/add, a new school on existing site, or a new school on another site.
9. Articulated values by the School Committee are:
    a. Prefer 3-4 sections for grade groupings
    b. Neighborhood based
    c. Reduced transportion costs
    d. Ability to offer Full-Day K to all families
    e. Minimize redistricting
    f. Minimum cost or expenses that will not be reimbursed or are considered temporary cost (ie modular classrooms)

10. One of the results of this Pre-Feasibility Study is a better informed conversation with MSBA.
11. Options that are not desired, as articulated unanimously by both the PPBC and the School Committee:
    a. Opt 2; 900 student school does not work for many reasons.
    b. Opt 3 A.2, Grade 6 school at Pollard site. Putting two schools on this small site does not work well, including the parking issues it presents and the proximity to wetlands.
    c. Opt 4; not interested in 5-6, 7-8 school-: Grade 6 Center has been working very well for them and redistricting students is not desirable
12. Take another look at Full-Day K numbers for K-5 and confirm number of classrooms needed at each school.
13. Review cost of Hillside renovations for a 50 yr life cycle under option 1A.1
14. Review the Special Permitting requirements that would be triggered with a school on the DeFazio site.
15. When considering the cost of the new school at Cricket field, and comparing it to other options, need to include the cost of the demo of the existing building and constructing the new fields at Hillside.

16. The fields at Hillside are difficult to use because they are wet; near the wetlands. Need to carry adequate funds for adequate drainage and soils.
17. Evaluate annual operating costs when you review options. (This may fall under MSBA feasibility study).
18. This pre-feasibility study work is designed to look at all the options, in preparation for an SOI submission to the MSBA. It will be important to express why certain options were set aside.
19. Consider using the Hillside school as an alternative location for the School District offices. Response: That is a separate study that will be coming shortly; that should not influence decisions on these options.
20. Where do we program Cricket Fields during construction of Cricket field option? Response: Possibly Nike field

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Next Steps:
Outlined below are proposed next steps to be taken in completing this study:

1. Prepare Cost Estimates for each of the Options that are still on the table.
2. Present Study to the Community and Select Groups for feedback
3. Prepare Report summarizing the process, the options, the decisions and the reasoning for those decisions. Outline a proposed list of options recommended for further study and inclusion in an SOI submission to MSBA.

The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes. After 5 days, we will accept these minutes as an accurate summary of our discussion and enter them into the permanent record of the project

DORE & WHITTIER ARCHITECTS, INC.
Architects • Project Managers

Roberto Fitzgerald, Assoc. AIA, LEED A.P.
Project Manager

Cc: Hank Haff for distribution
Steve Popper
Dan Gutekanst
MR/DMW/File

Future School Needs Committee

Enrollment Projections for School Years Beginning in 2011
Discussion and Analysis
November 5, 2011

Each year the Future School Needs (FSN) Committee projects school enrollment for the next ten years. The goal of the projections is to both reflect an accurate picture of the next year's enrollment and determine general trends over the longer term. Historically, accurately projecting the number of students who will enter kindergarten has been the most difficult part of the projection.

We have limited data to analyze the impact of Section 40B. The school system's transportation data shows that 16 students (3 at the high school, 5 at Pollard, 8 at elementary schools) live in the largest 40B project at Charles River Landing. There were 16 students last year as well. Our projections reflect these students but we do not know if any of these students are new to Needham since January 1, 2011. Our understanding is that the building is currently approximately 85% occupied. The number of students from this building is consistent with the original planning guidelines for the facility.

Birth Trends

The births reflect reported births from July 1 to June 30 of each year. The reported births in the 2010/2011 year were 261. This is the lowest figure in well over 10 years and 42 lower than the average of the prior 5 years. We used a six year average from 2006-2011 to estimate future assumed births (296 per year). Last year's figure was 305, the figure two years ago was 318, and the figure three years ago was 325. Declining births affect our projections and we monitor this each year.

Accuracy of Prior Year Projections

Last year we projected total enrollment of 5,402 for the 2011/2012 school year. Actual enrollment is 5,360 -- a difference of 42 students. This represents a 0.8% overstatement. We have shown our projection results for the last 15 years on the next page.

Year	Projected	Actual	% Understated (overstated)
2011	5,402	5,360	(0.8%)
2010	5,258	5,301	0.8%
2009	5,143	5,238	1.8%
2008	5.034	5,059	0.5%
2007	5,060	5,003	(1.1%)
2006	5,013	4,979	(0.7%)
2005	4,915	4,879	(0.7%)
2004	4,780	4,838	1.2%
2003	4,611	4,667	1.2%
2002	4,513	4,565	1.2%
2001	4,417	4,439	0.5%
2000	4,411	4,374	(0.8%)
1999	4,378	4,334	(1.0%)
1998	4,393	4,303	(2.1%)
1997	4,209	4,281	1.7%

Percent understated reflects Actual/Projected in percentage terms.

The past projections show that FSN usually projects annual enrollment for the next year within 2.0% (14 of the last 15 years). In 8 of the last 15 years the projections were within 1.0%. Since the revised kindergarten methodology was adopted 14 years ago (see below), only once (in 1998, the first year of the census method) was the projection off by more than 2.0%. We always need to keep in mind that these projections are **estimates** and in any given year there could be as much as a 3.0% (or greater) variance.

Public kindergarten attendance has increased slightly from 89% to approximately 91% of all kindergartners. This percentage has been fairly consistent around 90% for the past 3 years (and 6 of the last 8 years). Therefore, we again used a factor of 90% for public kindergarten this year.

The actual figure for 7th grade is significantly lower than projected. This difference represents a number of students moving to private school or out of the district. We also found significant variability in our results in grades 9, 11, and 12. In 9th grade there were 17 less students than projected. In last year's projections, 9th grade was the reverse- there were 18 more students than projected. In11th and 12th grade there are more students than expected. The variability in 11th and 12th grades is unusual.

Since the actual figures are less than projected for this year, the projected enrollment in every year over the next 10 years is slightly lower than last year.

General Methodology

Projections for grades 1-12 are determined based on the average of retention factors for each grade for the past five years. A retention factor is the enrollment in a given grade this year divided by the enrollment for the preceding grade last year. A retention factor greater than one indicates there are more children in a grade this year than were in the preceding grade last year. For example, the current retention factor for third grade is .9882 which equals 417 (third grade enrollment for 11/12 school year) divided by 422 (second grade enrollment for 10/11 school year). This factor is averaged with the factors from the prior four years to produce the average retention factor this year for third grade of 1.0075.

Census Data and Kindergarten Methodology

The methodology uses the annual census to track pre-school age children in town to help estimate the number who will be kindergarten eligible each year. We then estimate the percentage that will attend public school upon entering kindergarten. Until 2005, there was a clear increasing trend of public kindergarten attendance (91% in 2004, 89% in 2003, 85% in 2002, 80% in 2001 and 77% in 2000). We indicated three years ago that this trend may be topping out. The figures were 89% for 2005, 90% in 2006 and 85% in both 2007 and 2008. The figure for 2009 jumped to 92% and the figure for 2010 was 89%. The estimated figure this year is 91%. We again used a figure of 90% in our projections this year.

The accuracy of the overall projections is based largely on the accuracy of kindergarten. The following table demonstrates our kindergarten results over the past 14 years.

Year	Projected	Actual	Proj. – Actual
2011	408	398	10
2010	386	363	23
2009	404	423	(19)
2008	385	399	(14)
2007	410	380	30

2006	447	456	(9)
2005	405	414	(9)
2004	422	433	(11)
2003	366	394	(28)
2002	347	383	(36)
2001	337	339	(2)
2000	346	346	0
1999	338	323	15
1998	365	315	50

There are several items that should be pointed out from the above chart. First, kindergarten is extremely difficult to estimate and the results can vary significantly from year to year. It is unreasonable to expect to be consistently within 10 students. Second, although the first year of the revised methodology (1998) produced a difference of 50 students, it was a better estimate than the prior methodology would have produced. Third, when a trend begins or changes our figures will tend to lag for several years before catching up.

We analyze census data each year in determining our projections. We continue to track the census until January 1 of the year following the entrance of kindergarten (we assume for this purpose that the number of children in a grade will be the same on a given September 1 and the following January 1).

Our methodology reflects our best estimate for the projected number of children eligible for kindergarten in September 2012. To do this we used our estimate of 90% for public kindergarten enrollment and a METCO kindergarten enrollment of 12 students. We assumed that the children eligible for kindergarten in September 2012 would increase to 413 (an increase from the current level of 386 as of 1/1/11). This estimate is based on our analysis of town census data (net in-migration) over the past five years at the pre-school ages. Assuming 90% of the 413 attend public school and there are 12 METCO kindergartners, there would be 384 kindergartners in 2012 (413 x .90 +12=384).

For years beyond 2014, we used a factor of 1.30 times the number of births to estimate the number of kindergarten students. This factor is based on an approximation using the actual and estimated ratios from 2008 through 2014 and is somewhat higher than last year's figure of 1.24.

Effect of Alternative Kindergarten and Future Birth Assumptions

The assumed values for kindergarten enrollment each year have a significant impact on the long-term projections. We become less confident of our

kindergarten estimates (and correspondingly our total estimates) as we move further away from the January 1, 2011 data. By the time we reach the kindergarten estimate for the school year 2017/2018 and beyond, the children have not yet been born and our calculation is based entirely on estimates of future births. In addition to our best estimate projection, we are providing low end and high end projections based on alternative assumptions. These projections are intended to show a reasonable range in future years (both above and below our estimate), but there is no guarantee that the actual enrollments in any year will be within the low and high estimates.

For alternative kindergarten assumptions, we assumed low-end enrollment would be 15 students less than the figures on our spreadsheet for school years beginning in 2012, 2013, and 2014. We assumed it would be 20 students lower than expected in 2015 and beyond. For the high-end assumption, we assumed enrollment would be 15 students greater than the figures on our spreadsheet for the school years beginning in 2012, 2013, and 2014 and 20 students greater than expected in 2015 and beyond.

The range for kindergarten was coupled with birth assumptions after fiscal year 2011 of 276 children each year (low-end) and 316 children each year (high-end). This was determined as a difference of 20 (plus or minus) from the estimated births beyond fiscal year 2012 of 296.

The Committee welcomes any comments regarding these projections.

Respectfully submitted,

David Coelho, Chairman appointed by Selectmen

Heidi Black	appointed by Parent-Teachers' Council
Marianne Cooley	appointed by School Committee
Ann DerMarderosian	appointed by Finance Committee
James Lamenzo	appointed by Moderator
Marjorie Margolis	appointed by Moderator
Mary Riddell	appointed by League of Women Voters
Roger Toran	appointed by Planning Board

CURRENT PROJECTION				FUTURE SCHOOL NEEDS COMMITTEE										
				ENROLLMENT PROJECTIONS										
YEAR		2005/2006			06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
BIRTHS*		306			288	334	295	290	261	296	296	296	296	296
SCHOOL YEAR		2011/2012		PROJ -	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
	GRADE	PROJECTED	ACTUAL	ACTUAL										
	K	408	398	10	384	390	353	377	339	385	385	385	385	385
	1	379	384	(5)	418	404	410	371	396	356	405	405	405	405
	2	442	447	(5)	388	422	408	414	375	400	360	409	409	409
	3	428	417	11	450	391	425	411	417	378	403	363	412	412
	4	439	431	8	420	453	394	428	414	420	381	406	365	415
	5	487	491	(4)	436	425	458	399	433	419	425	385	411	369
	6	430	438	(8)	494	439	427	461	401	435	421	427	387	413
	7	442	413	29	426	481	427	416	449	390	423	410	416	377
	8	423	419	4	413	426	481	427	416	449	390	423	410	416
	9	417	400	17	428	421	435	491	436	424	458	398	432	418
	10	377	371	6	398	425	418	432	488	433	421	455	396	429
	11	367	378	(11)	368	394	421	414	428	483	429	417	451	392
	12	363	373	(10)	376	366	392	418	411	425	480	426	414	448
	TOTAL	5,402	5,360	42	5,399	5,437	5,449	5,459	5,403	5,397	5,381	5,309	5,293	5,288
	K-5	2,583	2,568	15	2,496	2,485	2,448	2,400	2,374	2,358	2,359	2,353	2,387	2,395
	6-8	1,295	1,270	25	1,333	1,346	1,335	1,304	1,266	1,274	1,234	1,260	1,213	1,206
	9-12	1,524	1,522	2	1,570	1,606	1,666	1,755	1,763	1,765	1,788	1,696	1,693	1,687
		5,402	5,360	42	5,399	5,437	5,449	5,459	5,403	5,397	5,381	5,309	5,293	5,288
* REFLECTS JULY 1 TO JUNE 30 BIRTHS														

Actual figures shaded
K adjusted for METCO
Constant births after FY11 based on 6 year average FY 06-11

November 2011

SCHOOL COMMITTEE POLICY NEEDHAM PUBLIC SCHOOLS	FILE	IHB
Policy for: CLASS SIZE	Revision 3	
Date Approved by School Committee: October 6, 2009	Signature of Chair: Joseph P. Barnes	Page 1 of 1

The Needham School Committee is committed to favorable class sizes at all grade levels as an important element of the learning experience for students. Thus, the school committee will maintain reasonable class sizes, to the extent possible, in all classrooms throughout the school system.

The principal will assign students according to their individual needs and this could impact overall class size within a school.

Recommended class sizes are listed below, with the understanding that these are guidelines rather than absolute limits requiring strict, literal adherence:

GRADE LEVEL	CLASS SIZE
K - 3	18 - 22
4 - 5	20 - 24
6 -12	Reasonable Class Size

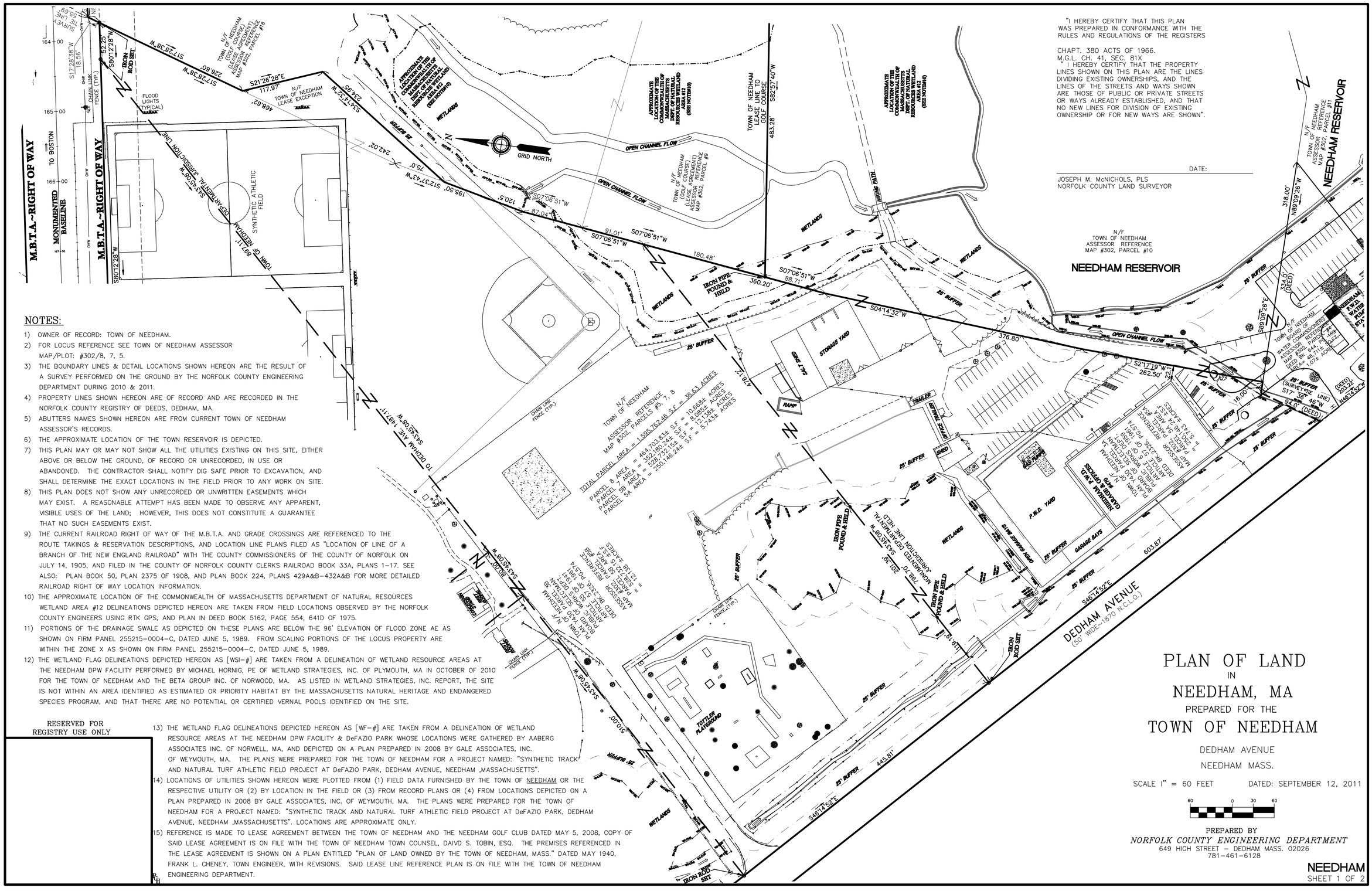
In the event a class size exceeds the guidelines, it will be the prerogative of the superintendent of schools in consultation with the building principal to discuss changes that they may deem appropriate. If, in the judgment of the superintendent, it is necessary to take action that would affect the budget, such as increasing professional staffing, a recommendation will be brought to the school committee for formal approval.


ASSESSORS PLAN
NO. 94
SCALE: 1 IN.=40 FT.
TOWN ENGINEER
SEE PLAN 93
SEE PLAN 78
SEE PLAN 77
SEE PLAN 95
SEE PLAN 70
CRICKET FIELD
TOWN of NEEDHAM
6.76 ACRES
SUNNYSIDE
ROAD
WILLIAM ST.
WAYNE RD.
PRIVATE
AVERY ST.
HILLSIDE AVENUE
WEBSTER ST.
M.B.T.A.

Park and Recreation Motion
Excerpt from Meeting Minutes
6/11/2012

The following motion regarding Cricket Field referenced in the Hillside / Mitchell (Pre) Feasibility Study was approved unanimously by the Town of Needham, Park and Recreation Commission at their meeting on June 11, 2012:

Whereas, the Park & Recreation Commission has full and sole jurisdiction of Cricket Field, and
Whereas, Cricket is a vital asset of the Park and Recreation Commission and the Town of Needham and is heavily utilized by school and youth athletes and the Park and Recreation Department, and
Whereas, the field is located in a neighborhood that is short on green space and has historic significance to the neighborhood and town, and
Whereas, the current Hillside School site has not been thoroughly reviewed as to whether it can or cannot continue as a school site, and
Whereas, the building of a school at Cricket would result in substantial redistricting; would incur significant costs that would not be reimbursed by the State for the construction of replacement fields and field house and would result in the loss of two heavily utilized multipurpose fields, playground and field house during the 4 years of construction, and
Whereas, three options have already been withdrawn by the School Committee,
I move that we request the School Committee (and PPBC) withdraw Cricket Field as an option for any school building development.



"I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS

CHAPT. 380 ACTS OF 1966.
M.G.L. CH. 41, SEC. 81X
" I HEREBY CERTIFY THAT THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIPS, AND THE LINES OF THE STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN".

DATE:

JOSEPH M. McNICHOLS, PLS
NORFOLK COUNTY LAND SURVEYOR

NOTES:

1) OWNER OF RECORD: TOWN OF NEEDHAM.
2) FOR LOCUS REFERENCE SEE TOWN OF NEEDHAM ASSESSOR MAP/PLOT: #302/8, 7, 5.
3) THE BOUNDARY LINES & DETAIL LOCATIONS SHOWN HEREON ARE THE RESULT OF A SURVEY PERFORMED ON THE GROUND BY THE NORFOLK COUNTY ENGINEERING DEPARTMENT DURING 2010 & 2011.
4) PROPERTY LINES SHOWN HEREON ARE OF RECORD AND ARE RECORDED IN THE NORFOLK COUNTY REGISTRY OF DEEDS, DEDHAM, MA.
5) ABUTTERS NAMES SHOWN HEREON ARE FROM CURRENT TOWN OF NEEDHAM ASSESSOR'S RECORDS.
6) THE APPROXIMATE LOCATION OF THE TOWN RESERVOIR IS DEPICTED.
7) THIS PLAN MAY OR MAY NOT SHOW ALL THE UTILITIES EXISTING ON THIS SITE, EITHER ABOVE OR BELOW THE GROUND, OF RECORD OR UNRECORDED, IN USE OR ABANDONED. THE CONTRACTOR SHALL NOTIFY DIG SAFE PRIOR TO EXCAVATION, AND SHALL DETERMINE THE EXACT LOCATIONS IN THE FIELD PRIOR TO ANY WORK ON SITE.
8) THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
9) THE CURRENT RAILROAD RIGHT OF WAY OF THE M.B.T.A. AND GRADE CROSSINGS ARE REFERENCED TO THE ROUTE TAKINGS & RESERVATION DESCRIPTIONS, AND LOCATION LINE PLANS FILED AS "LOCATION OF LINE OF A BRANCH OF THE NEW ENGLAND RAILROAD" WITH THE COUNTY COMMISSIONERS OF THE COUNTY OF NORFOLK ON JULY 14, 1905, AND FILED IN THE COUNTY OF NORFOLK COUNTY CLERKS RAILROAD BOOK 33A, PLANS 1–17. SEE ALSO: PLAN BOOK 50, PLAN 2375 OF 1908, AND PLAN BOOK 224, PLANS 429A&B–432A&B FOR MORE DETAILED RAILROAD RIGHT OF WAY LOCATION INFORMATION.
10) THE APPROXIMATE LOCATION OF THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF NATURAL RESOURCES WETLAND AREA #12 DELINEATIONS DEPICTED HEREON ARE TAKEN FROM FIELD LOCATIONS OBSERVED BY THE NORFOLK COUNTY ENGINEERS USING RTK GPS, AND PLAN IN DEED BOOK 5162, PAGE 554, 641D OF 1975.
11) PORTIONS OF THE DRAINAGE SWALE AS DEPICTED ON THESE PLANS ARE BELOW THE 96' ELEVATION OF FLOOD ZONE AE AS SHOWN ON FIRM PANEL 255215–0004–C, DATED JUNE 5, 1989. FROM SCALING PORTIONS OF THE LOCUS PROPERTY ARE WITHIN THE ZONE X AS SHOWN ON FIRM PANEL 255215–0004–C, DATED JUNE 5, 1989.
12) THE WETLAND FLAG DELINEATIONS DEPICTED HEREON AS [WSI–#] ARE TAKEN FROM A DELINEATION OF WETLAND RESOURCE AREAS AT THE NEEDHAM DPW FACILITY PERFORMED BY MICHAEL HORNIG, PE OF WETLAND STRATEGIES, INC. OF PLYMOUTH, MA IN OCTOBER OF 2010 FOR THE TOWN OF NEEDHAM AND THE BETA GROUP INC. OF NORWOOD, MA. AS LISTED IN WETLAND STRATEGIES, INC. REPORT, THE SITE IS NOT WITHIN AN AREA IDENTIFIED AS ESTIMATED OR PRIORITY HABITAT BY THE MASSACHUSETTS NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM, AND THAT THERE ARE NO POTENTIAL OR CERTIFIED VERNAL POOLS IDENTIFIED ON THE SITE.

RESERVED FOR REGISTRY USE ONLY

13) THE WETLAND FLAG DELINEATIONS DEPICTED HEREON AS [WF–#] ARE TAKEN FROM A DELINEATION OF WETLAND RESOURCE AREAS AT THE NEEDHAM DPW FACILITY & DeFAZIO PARK WHOSE LOCATIONS WERE GATHERED BY AABERG ASSOCIATES INC. OF NORWELL, MA, AND DEPICTED ON A PLAN PREPARED IN 2008 BY GALE ASSOCIATES, INC. OF WEYMOUTH, MA. THE PLANS WERE PREPARED FOR THE TOWN OF NEEDHAM FOR A PROJECT NAMED: "SYNTHETIC TRACK AND NATURAL TURF ATHLETIC FIELD PROJECT AT DeFAZIO PARK, DEDHAM AVENUE, NEEDHAM ,MASSACHUSETTS".
14) LOCATIONS OF UTILITIES SHOWN HEREON WERE PLOTTED FROM (1) FIELD DATA FURNISHED BY THE TOWN OF NEEDHAM OR THE RESPECTIVE UTILITY OR (2) BY LOCATION IN THE FIELD OR (3) FROM RECORD PLANS OR (4) FROM LOCATIONS DEPICTED ON A PLAN PREPARED IN 2008 BY GALE ASSOCIATES, INC. OF WEYMOUTH, MA. THE PLANS WERE PREPARED FOR THE TOWN OF NEEDHAM FOR A PROJECT NAMED: "SYNTHETIC TRACK AND NATURAL TURF ATHLETIC FIELD PROJECT AT DeFAZIO PARK, DEDHAM AVENUE, NEEDHAM ,MASSACHUSETTS". LOCATIONS ARE APPROXIMATE ONLY.
15) REFERENCE IS MADE TO LEASE AGREEMENT BETWEEN THE TOWN OF NEEDHAM AND THE NEEDHAM GOLF CLUB DATED MAY 5, 2008, COPY OF SAID LEASE AGREEMENT IS ON FILE WITH THE TOWN OF NEEDHAM TOWN COUNSEL, DAIVD S. TOBIN, ESQ. THE PREMISES REFERENCED IN THE LEASE AGREEMENT IS SHOWN ON A PLAN ENTITLED "PLAN OF LAND OWNED BY THE TOWN OF NEEDHAM, MASS." DATED MAY 1940, FRANK L. CHENEY, TOWN ENGINEER, WITH REVISIONS. SAID LEASE LINE REFERENCE PLAN IS ON FILE WITH THE TOWN OF NEEDHAM ENGINEERING DEPARTMENT.

PLAN OF LAND
IN
NEEDHAM, MA
PREPARED FOR THE
TOWN OF NEEDHAM

DEDHAM AVENUE
NEEDHAM MASS.

SCALE 1" = 60 FEET DATED: SEPTEMBER 12, 2011

60 0 30 60

PREPARED BY
NORFOLK COUNTY ENGINEERING DEPARTMENT
649 HIGH STREET – DEDHAM MASS. 02026
781–461–6128

NEEDHAM
SHEET 1 OF 2

MICROWAVE SITE COALITION FACT SHEET – NEEDHAM, MA

CLEARING THE AIR ON HILLSIDE ELEMENTARY SCHOOL AIR QUALITY ISSUES

In the mid-1980's, the Massachusetts Department of Environmental Protection (DEP) discovered that groundwater beneath the Hillside Elementary School contained chemicals that had seeped into the ground at the Microwave Development Laboratories (MDL) property on Crescent Road, east and uphill of the school. The DEP was concerned that vapors from the chemicals could migrate through the soil and enter the school building. In 1988 and 1989, because of concern that students and teachers could be exposed to these chemicals, tests for the chemicals were conducted of the air inside the school.

The tests showed that trichloroethylene (TCE) was present at very low levels in the air inside the school, but not in the air above the playground. TCE levels were recorded in the Library/Media center, the utilities crawl space beneath the floor of the school, and in a storm drain outside the school. Although tests showed that the levels of TCE were very low, school administrators and town health officials decided to act in ways that would restore the community's confidence in the safety of children and school staff. The school was closed in January 1990 and students and staff were relocated to other schools in Needham for the remainder of the school year.

During the time that the school was closed, two ventilation/treatment systems were installed to remove TCE vapors from air beneath the school and to stop vapors from entering the school building. The school re-opened in September 1990 and has been in continuous use since that time because potential risks to students and teachers have been eliminated by the air treatment systems. During the school closure, a Hillside Advisory Committee (HAC), now referred to as the Hillside Health and Safety Advisory Committee (HSAC), was formed to determine criteria for re-opening the school and to oversee and monitor continued testing of air inside the school. Also during this time, the Microwave Site Coalition (MSC) was formed by the Needham Board of Health. This town-wide coalition was charged with reviewing all materials related to the Hillside/MDL site, confirming the determination that the school was indeed safe to re-open, and producing the original version of this fact sheet for public distribution which was January 2000.

How Did the Chemicals Get into the Groundwater and into the Air inside the School?

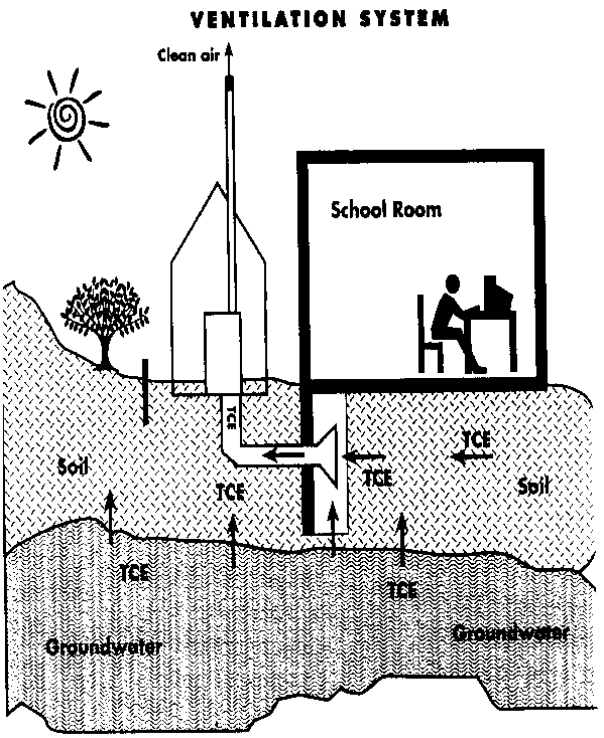
According to the DEP, the contaminants flowing with groundwater beneath the school came from improper disposal of chemicals that seeped into the ground at the MDL site on Crescent Road. The figure on the last page shows the location of the school in relation to MDL. The groundwater flows down the hill from this site, beneath the school, and towards Rosemary Meadow and the Town of Wellesley. The path of the chemicals moving with the natural flow of groundwater is known as a plume. The figure also shows the approximate outline of the plume where groundwater monitoring tests detected elevated levels of TCE. Highest levels of TCE are concentrated under the MDL site. Lowest levels of TCE, and "non-detect" levels, are found along the edges of the plume and at the western end of the plume, toward the Wellesley town line.

Testing showed that the primary chemical found in the groundwater plume was trichloroethylene, or TCE. Other chemicals found at lower levels were vinyl chloride, tetrachloroethylene (PCE), freon, and the breakdown products of these chemicals. The chemicals are part of a class of chemicals known as volatile organic compounds (VOCs) because they "volatilize" or evaporate when they come into contact with air. As they flow with groundwater and pass through soil, they are released from the soil into the air. Concentrations are quickly diluted when TCE is exposed to outside air.

When TCE volatilized from groundwater beneath the Hillside school, it traveled through the cracks and joints in the concrete slab under the school, entered closed areas such as crawl spaces beneath the school, and was released into classrooms at low levels. The TCE vapors entered the school similar to the way that radon gas can enter into a building. (The schematic on page 2 depicts how the ventilation/treatment systems operate and protect the school.)

How Is Air inside Hillside School Being Treated to Eliminate Exposure for Students and Teachers?

Two ventilation/treatment systems have been installed at Hillside School to prevent TCE vapors in the soil from entering the school. In April 1990, the first system -- a ventilation/control system in the crawl space -- was installed as a short-term system. This system consists of two vacuum fans that draw the air out of the crawl space and introduce fresh air. This prevents a buildup of TCE in the crawl space and prevents it from entering the school building. This system still operates as a back-up system for a second treatment system, the Sub-Slab Depressurization System (SSDS).



The SSDS, which operates the same way a radon removal system operates, was installed throughout the school in Spring 1990. It is the primary treatment system, and it removes TCE vapors directly from the soil beneath the concrete slab and foundation of the school. As TCE is released from the soil it is captured and routed through pipes into 55-gallon drums containing activated carbon located in a shed outside of the school.

How Is the Sub-slab Depressurization System Monitored and Inspected?

To ensure that the treatment system is operating properly, automatic monitoring systems have been installed by the DEP and inspection and oversight systems have been developed by the HAC. The ventilation/ treatment systems are monitored every school day. Trained staff check and record pressure gauge readings to make sure the system maintains the correct vacuum pressure. A monthly check of the treatment system is performed by a contractor overseen by DEP. Air samples are collected from the tunnels and after flowing through the carbon drums in the treatment shed. When the activated carbon drums are used up, they are collected for proper disposal and replaced with new carbon. Semi-annually, in February and August, samples of the air within the school are collected and tested to confirm that levels of TCE remain below the protective limits set by the Hillside Advisory Committee and adopted by the Needham School Committee.

TCE STANDARDS AND MEASUREMENTS *parts per billion (ppbv)*	
Commonly occurring levels of TCE in outdoor air – DEP:	1 ppbv
Commonly occurring levels of TCE in indoor air – DEP:	.92 ppbv*
Acceptable level of TCE inside Hillside School -- set by HAC:	.92 ppbv*
Highest level of TCE recorded in playground in 1989:	1 ppbv
Occupational Safety and Health Administration standard for 8-hour adult exposure:	50,000 – 100,000 ppbv

* .92 ppbv replaced 2 ppbv

What Is the Hillside Advisory Committee? (Now known as the Hillside Health and Safety Advisory Committee (HSAC))

The HAC was formed in 1990 by the Needham School Committee. The HAC was comprised of parents, Hillside teachers and administrators, School Committee members, and officials from the Needham Board of Health. The committee was initially created to provide school community oversight of the installation of the ventilation and treatment systems, to set criteria for the control systems, to establish acceptable levels for TCE in air inside the school (at levels much lower than all existing standards), and to oversee the re-opening of the school. The committee met with many experts to review the issues and complete its work. The HAC continues to meet regularly to review air quality data and to assure continued safe operation of the air treatment systems; through the Town of Needham, the Health Department and the DEP, the committee continues to have access to professional advice. In 2007, HAC formally changed its name to the Hillside Health and Safety Advisory Committee (HSAC) in recognition of its current mission, which involves not only oversight of Hillside's air quality, but also of any other health and safety issues that arise within the school environment.

What Guidelines Did the HAC Set for Acceptable Levels of TCE in Air inside the School?

Although the Hillside School was determined by DEP to be safe in 1990, it was closed for half a year during installation of the SSDS to improve air quality inside the school. This conservative protective measure was taken to restore the confidence of children, parents, teachers, and the Needham community that the school was operating in a safe environment. The HAC recognized that guidelines and scientific studies used to determine levels of exposure to TCE did not sufficiently address safe levels for children or the effects of TCE exposure on children. They recognized that available studies were limited to TCE exposure for adults and animals. The HAC set its own strict guidelines and established control measures for ongoing monitoring of the system. Initially, the action level was set at 5 ppbv and shortly thereafter lowered to 2 ppbv, which remained in effect until 2003 when the HAC requested lowering the acceptable level to be consistent with the published DEP typical indoor air background value of .92 ppbv. These guidelines were formally accepted by the School Committee (see initial version of this handout for a complete set of HAC Guidelines).

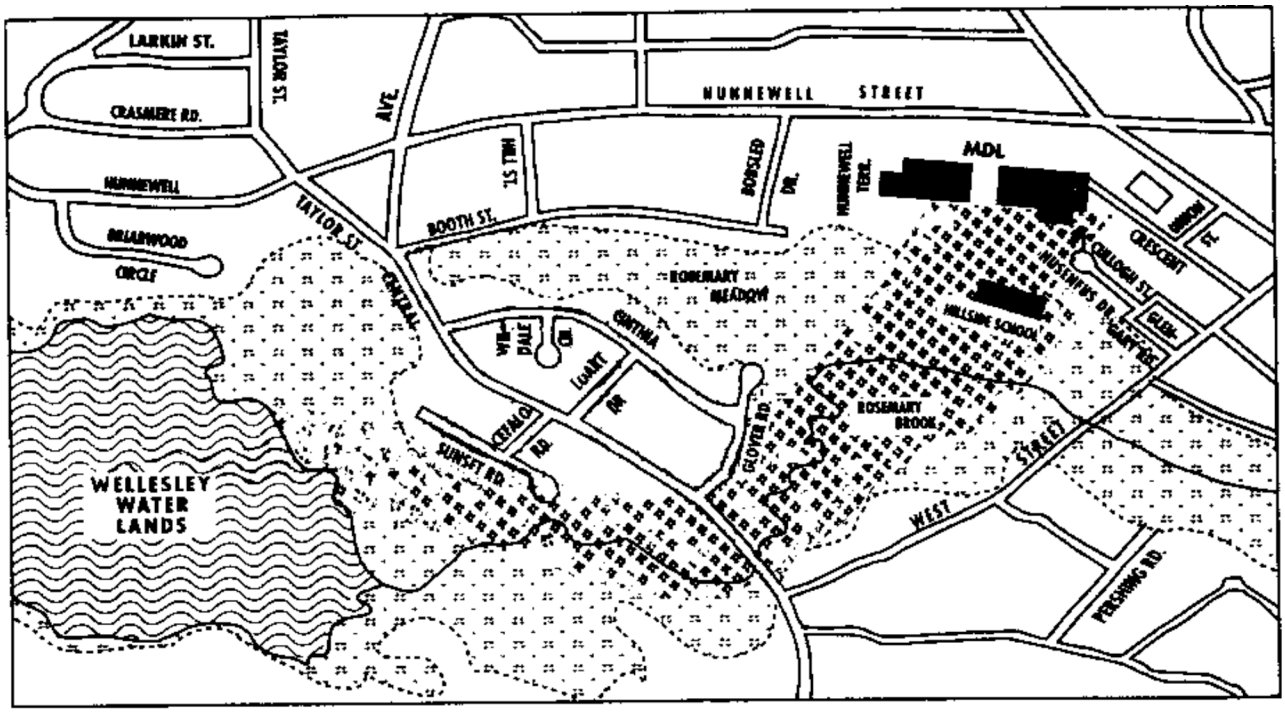
Average levels of TCE in the School have remained under the HAC approved guidelines of TCE in air since control measures were initiated in 1990.

The 1997 Revised Operation & Maintenance Plan for the Sub-slab Depressurization and Crawlspace Ventilation System includes the following:

Action Level in ppbv of TCE and Freon 113	Action(s) To Be Taken
.92 *	1) Re-test room on a monthly basis until level is below .92. 2) Re-evaluate SSD system and make any appropriate adjustments or repairs.
40 **	1) Re-sample immediately. After two rounds of exceedances, close room. 2) Re-evaluate SSD system and make any appropriate adjustments or repairs.

* .92 ppbv replaced 2 ppbv

** TCE only



This figure depicts the location of the MDL site, Hillside School and Rosemary Meadow. ***The outline of the plume in bold is approximate and not to scale****. Maps showing actual TCE concentrations and the true limits of the plume along with updated reports are available at the Needham Public Library or directly through the MA DEP.*

This schematic map shows the approximate limits of the plume of contamination in the groundwater. The groundwater flows downhill from the Microwave Development Laboratories (MDL) site on Crescent Road, through Rosemary Meadow, and toward the Needham/Wellesley Town Line. MDL is in the upper right corner of the map. Highest levels of contamination are near the MDL Site. Lowest levels are along the edges of the plume and towards the Wellesley Water Lands.

For Further Information

- To receive further information about the MDL site, write to Rodene Lamkin, the MDL Site Manager, MA DEP Northeast Regional Office, Bureau of Waste Site Cleanup (BWSC), 205B Lowell St., Wilmington, MA 01887, or call (978) 694-3354.
- Needham Public Library, 1339 Highland Avenue, Needham, MA 02492, is a local repository for MDL site documents. Contact the Reference section of the library at (781) 455-7559, for help in locating these materials.
- The HAC, now the Hillside Health and Safety Advisory Committee (HSAC), meets regularly at the Hillside Elementary School. Parents are encouraged to participate in meetings. Contact the School Administration Office at (781) 455-0461, for meeting schedules and a list of current committee members.
- For information about the Microwave Site Coalition, or to request additional handouts on this topic, contact the Needham Health Department, 1471 Highland Avenue, Needham, MA 02492, or call (781) 455-7523.

This original fact sheet was made possible through a grant from the DEP, and developed in January 2000 by JSI Center for Environmental Health Studies, Boston, MA, in cooperation with the Needham Board of Health and the Microwave

Athletic Fields and Recreation Facilities		*Prefeasibility Study for Mitchell and Hillside Schools*			
	Facility	Current uses	Construction Interruption	Long Term Issues	Notes
Hillside School		*School uses all facilities during the school day*			
1-	60' Diamond	School; youth baseball	2-3 yrs	reconstructed	possible other site
1-	Multi-purpose (120'x240' +/-)	School; youth soccer	2-3 yrs	reconstructed	possible other site
1-	Hard Surface play area	School; community; summer prgm	2-3 yrs	reconstructed	possible other site
3-	Basketball hoops	School; community	2-3 years	reconstructed	possible other site
1-	Memorial garden	memorial to 9/11			
2-	Playgrounds (K, 1-5)	School; community; summer prgm	2-3 yrs	reconstructed	possible other site
Mitchell School		*School/NEDP uses all facilities during the school day*			
2-	60' Diamond	School;youth softball/baseball	2 or 5 years	reconstructed	
1-	Multi-purpose (unofficial)	School; youth soccer	2 or 5 years	reconstructed	
1-	Hard Surface play area	School; community; summer prgm		reconstructed	MAAB improvements required
1-	Playground (K-5)	School; community; summer prgm		reconstructed	MAAB improvements required
1-	Outdoor Education Center	School	2 or 5 years	reconstructed	
1-	Basketball court	School; community	2 or 5 years	reconstructed	
Cricket Field					
1-	Multi-purpose (217'x300' +/-)	Girls High School Varsity Soccer & Lacrosse; Youth soccer & lacrosse	2-3 yrs	reconstructed	possible other site
1-	Multi-purpose (180'x248' +/-)	Girls High School JV Soccer & Lacrosse; Youth soccer & lacrosse	2-3 yrs	reconstructed	possible other site
1-	Sand Lot Diamond	community	2-3 yrs	reconstructed	possible other site
1-	Tot Lot	community	2-3 yrs	reconstructed	possible other site
1-	Park Building	P&R Summer Program; Storage; High School teams	2-3 yrs	reconstructed	possible other site
1-	Memorial garden	Memorial to Needham girls	none	retained	
1-	1/2 basketball court	community	2-3 yrs	reconstructed	possible other site
DeFazio Park		*Pollard Middle School uses some of the facilities during school day*			
1 -	90' Baseball Diamond-west	High School baseball; youth baseball	None	None	
1-	90' Baseball Diamond-east	High School baseball; youth baseball	Potential use for parking and laydown space in Option 1A.2 for temporary modular classrooms or Option 3 and restored at the end of the project		
2-	Turf Fields (210' x 320')	High School soccer, lacrosse, field hockey; youth soccer, lacrosse	None	None	
1-	60' Baseball Diamond	youth baseball	None	None	
1-	8 Lane Track with Multi-purpose Field	High School track & field; youth track; youth soccer; community	None	None	
1-	Multi-purpose Field	High School field hockey, soccer; youth soccer	None	None	
1-	Memorial Pavilion: restrooms & concession	community	None	None	
1-	Tot Lot	community	During parking lot construction	Relocated per master plan concept	
	Parking	Gravel parking area would be replaced by paved parking with shared use	restricted parking areas during construction	Paved shared parking	parking concerns in afternoon when shared by School and High School Athletics

TOWN OF NEEDHAM ATHLETIC FIELD INVENTORY

* used by Needham High School athletics and Needham High School clubs
X = natural grass S = synthetic turf

Multi-Purpose Fields
Football, Soccer, Lacrosse, Field Hockey, Ultimate Frisbee, Rugby

	Full Size	Medium Size	Small Size	Notes
Cricket *	**X**	**X**		
DeFazio *	**SSX**	**X**		
Greene's		**X**		
High Rock *	**X**			
High School *		**X**		
Hillside			**X**	
Memorial *	**S**			
Newman	**X**			Too wet for regular use
Pollard *		**X**		
Riverside			**X**	

Diamonds
Baseball, Softball

	90' baseball	60' baseball	60' softball	Notes
Avery *			**X**	
Broadmeadow		**XX**		
Claxton *			**XX**	
DeFazio *	**XX**	**X**		
Dwight		**X**		
Eliot		**X**		
Greene's		**X**		
High Rock		**X**		
Hillside		**X**		
Memorial *	**X**		**S**	
Mills		**X**		
Mitchell			**XX**	
Newman		**XXX**		2 too wet for regular use
Perry			**X**	
Pollard *		**X**		
Walker-Gordon	**X**			Short outfield