PROJECT MINUTES

Project:	W. Edward Balmer Elementary School Feasibility Study	Project No.:	17020
Prepared by:	Joel Seeley	Meeting Date:	11/7/2017
Re:	School Building Committee Meeting	Meeting No:	14
Location:	High School Media Center	Time:	6:30pm
Distribution:	School Building Committee Members, Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	Joseph Strazzulla	Chairman, School Building Committee	**Voting Member**
✓	Melissa Walker	School Business Manager	**Voting Member**
	James Marzec	Representative of the Board of Selectmen	**Voting Member**
✓	Michael LeBrasseur	Chairman, School Committee	**Voting Member**
✓	Paul Bedigian	Representative of the Building, Planning, Construction Committee	**Voting Member**
✓	Steven Gogolinski	Representative of the Finance Committee	**Voting Member**
✓	Jeffrey Tubbs	Community Member with building design and/or construction experience	**Voting Member**
✓	Peter L'Hommedieu	Community Member with building design and/or construction experience	**Voting Member**
✓	Jeff Lundquist	Community Member with building design and/or construction experience	**Voting Member**
	Andrew Chagnon	Community Member with building design and/or construction experience	**Voting Member**
	Spencer Pollock	Parent Representative	**Voting Member**
✓	Adam Gaudette	Town Manager	Non-Voting Member
✓	Dr. Catherine Stickney	Superintendent of Schools	Non-Voting Member
✓	Steve Von Bargen	Building Maintenance Local Official	Non-Voting Member
✓	Karlene Ross	Principal, W. Edward Balmer Elementary School	Non-Voting Member
✓	Jill Healy	Principal, Northbridge Elementary School	Non-Voting Member
✓	Kathleen Perry	Director of Pupil Personnel Services	Non-Voting Member
✓	Lee Dore	D & W, Architect	
✓	Thomas Hengelsberg	D & W, Architect	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
14.1	Record	Call to Order, 6:30 PM, meeting opened.
14.2	Record	J. Strazzulla announced the meeting will be video and audio recorded with live broadcast and future re-broadcast.
14.3	Record	A motion was made by M. LeBrasseur and seconded by S. Gogolinski to approve the 10/12/2017 Joint Boards School Building Committee meeting minutes. Motion passed unanimous by those attending, one abstention.
14.4	Record	A motion was made by M. LeBrasseur and seconded by P. Bedigian to approve the 10/17/2017 School Building Committee meeting minutes. Motion passed unanimous by those attending, one abstention.
14.5	Record	J. Seeley distributed and reviewed the updated Meetings and Agendas Schedule for the PSR Phase, attached.
14.6	Record	J. Seeley distributed and reviewed the Project Budget Status, attached.
14.7	Record	J. Seeley distributed and reviewed D&W Amendment No. 6, dated 11/7/2017 and attached, for Hydrant Flow Test Services in the amount of $1,410.00 to be charged against ProPay Code budget 0003-0000, which has a balance of $94,950.00. The Committee discussed in detail. Committee Discussion: 1. M. LeBrasseur asked what is the balance on the $775,000 appropriation? *J. Seeley indicated the balance is $169,095.* 2. J. Tubbs asked if the Fire Department has been coordinated with for the test? *T. Hengelsberg indicated the Water Department oversees the testing and has been coordinated with.* A motion was made by J. Tubbs and seconded by S. Gogolinski to approve D&W Amendment No. 6, dated 11/7/2017 and recommend signature by J. Marzec. No discussion, motion passed unanimous.
14.8	T. Hengelsberg	J. Seeley distributed and reviewed D&W Amendment No. 7, dated 11/7/2017 and attached, for Traffic Consulting Services in the amount of $19,800.00 to be charged against ProPay Code budget 0003-0000, which has a balance of $93,540.00. The Committee discussed in detail. Committee Discussion: 1. J. Tubbs asked what are the three intersections that the traffic consultant will be collecting counts at? *T. Hengelsberg will coordinate with the traffic consultant and provide direction to the Committee.* 2. J. Tubbs asked about the terms and conditions appended to the consultant's proposal, they appear to be at odds with the prime agreement, particularly with respect to limitation of liability. *T. Hengelsberg indicated those will be struck by D&W when executing the consultant's proposal. The terms and conditions of the prime agreement apply for all amendments.*

Item #	Action	Discussion
		A motion was made by P. Bedigian and seconded by M. LeBrasseur to approve D&W Amendment No. 7, dated 11/7/2017 and recommend signature by J. Marzec. No discussion, motion passed unanimous.
14.9	Record	Warrant No. 5 was reviewed. A motion was made by M. LeBrasseur and seconded by P. Bedigian to approve Warrant No. 5. No discussion, motion passed unanimous.
14.10	L. Dore	L. Dore will calculate of the energy cost to operate the new facility as compared to the energy cost to operate the existing Balmer and NES in the Schematic Design Phase.
14.11	T. Hengelsberg	T. Hengelsberg to develop a 5 year total cost of ownership to maintain the Balmer and NES as compared to the cost of a new building estimate, for Committee review, at the completion of the PSR Phase.
14.12	T. Hengelsberg	T. Hengelsberg to develop a cost estimate to maintain both Balmer and NES for the additional period between a new building construction duration and a phased renovation construction duration for Committee review, at the completion of the PSR phase.
14.13	T. Hengelsberg	C. Stickney conducted a parent survey of those parents that drop-off/pick-up at Balmer and NES. T. Hengelsberg forwarded the survey results to the traffic consultant to determine the appropriate parent vehicle queue length for the PreK-5 Options.
14.14	Committee	Committee members to develop a list of possible outcomes for the disposition of NES should a Grade PreK-5 option be the selected option.
14.15	T. Hengelsberg	Middle School Capacity Analysis 1. T. Hengelsberg confirmed that not including the District's 15,366 GSF Maintenance and Storage Space, the Middle School has a 1.56 efficiency factor. 2. Case 1 – Move 5th grade to the elementary school, move Central Office to the Middle School works space capacity-wise. 3. Case 2 - Move 5th grade to the elementary school, move Central Office to the Middle School, take 1905 Wing off-line, does not work space capacity-wise. 4. Case 3 - Move 5th grade to the elementary school, move Central Office to the Middle School, take 1905 Wing off-line, reduce the District's Maintenance and Storage Space area to 9,850 GSF, may work space capacity-wise. D&W to incorporate the key take-aways into the Community No. 5 presentation.
14.16	J. Seeley	J. Seeley to develop a list of acronyms and definitions for PR Subcommittee distribution and posting on the Project Website.
14.17	J. Strazzulla J. Seeley	J. Strazzulla and J. Seeley to review the questions from Community Forum Nos. 1-4 that should be added to the FAQ sheet.
14.18	Record	J. Strazzulla provided a summary overview of Community Forum No. 4.
14.19	Record	T. Hengelsberg reviewed the results of Community-Wide Survey No. 1, attached. Committee Discussion: 1. M. LeBrasseur indicated the results indicate the PR is reaching a certain core interested audience, but future community engagements need to reach a broader section of the community.

Item #	Action	Discussion
14.20	T. Hengelsberg	T. Hengelsberg presented an overview of the proposed structural systems. Committee Discussion: 1. J. Lundquist asked if D&W would consider prefabricated panel systems? *T. Hengelsberg will confirm with the structural engineer and provide direction to the Committee*.
14.21	T. Hengelsberg	T. Hengelsberg presented an overview of the proposed mechanical, electrical and plumbing systems. Committee Discussion: 1. J. Tubbs asked if a displacement ventilation system works in large volume spaces such as the gymnasium and cafetorium? *T. Hengelsberg indicated yes, the exhaust will pull the ventilation supply air up through the space.* 2. J. Tubbs asked if the Fire Alarm Audio message will be through the PA System or the FA speakers? *T. Hengelsberg will verify with the electrical engineers and provide direction to the Committee.*
14.22	T. Hengelsberg	T. Hengelsberg presented and reviewed the updated Design Options and Phasing Plans, attached, as follows: 1. Option B2 – Grade 2-4 New Construction – Back/Side 2. Option C2 – Grade PK-5 Renovation/Addition – Exist CR Wing 3. Option C3.1 – Grade PK-5 New Construction – Back/Side 4. Option C3.2 – Grade PK-5 New Construction – Back/Side 5. Option C3.3 – Grade PK-5 New Construction – Back/Side 6. Option C5 - Grade PK-5 New Construction - Front Committee Discussion: 1. T. Hengelsberg to confirm if building height is exempted by the Dover Amendment. 2. S. Pollock asked (prior meeting) if MA Natural Species has been contacted to confirm there are no impacts? *T. Hengelsberg indicated the environmental permitting consultant reviewed their on-line documents and found no impacts, but he will confirm that they will contact MA natural Species to confirm the findings*. 3. J. Strazzulla asked when will cost estimates for each option be presented? *L. Dore indicated the cost estimates will be presented at the 12/5/2017 Committee meeting*. 4. P. L'Hommedieu indicated the footprint articulation appears to be significant, which will impact costs. *L. Dore indicated D&W is cognizant of the cost impact and will review*. 5. M. LeBrasseur asked if the prior designs for the C3 series are still applicable? *T. Hengelsberg indicated no, the current options supersede them due to the extent of the wetlands*.

Item #	Action	Discussion
		6. P. Bedigian asked if Option C3.1 should be eliminated now, due to its overly complicated and intrusive construction phasing? *L. Dore indicated all the options should be evaluated once the costs and pros/cons have been developed for the 12/5/2017 meeting*. 7. J. Lundquist asked if borings have been performed in the woods at the deep cuts? *T. Hengelsberg indicated no, test pits will be performed during the Schematic Design Phase*. 8. J. Lundquist asked if construction in the wetland buffer zone could improve the site plan layouts? *T. Hengelsberg indicated the request will be brought up at the informational meeting with the Conservation Commission scheduled for 12/6/2017*. D&W to continue to refine the Options for further review.
14.23	J. Seeley	J. Seeley distributed and reviewed a summary from MSBA of the Design-Bid-Build (DBB) and the Construction Manager-at-Risk (CMAR) construction delivery method, attached. J. Seeley indicated the summary is from a MSBA report, which found CMAR construction costs ranging from 7% to 12% above DBB construction costs. MSBA has since eliminated the additional 1% reimbursement for CMAR for projects invited into the Eligibility Period after 1/1/2017, which does not apply to this project. Committee Discussion: 1. P. Bedigian asked what is the process for retaining the CMAR? *J. Seeley provided an overview of the selection process.* 2. L. Dore indicated the cost estimates have been based on the CMAR process. 3. L. Dore recommended that if the Committee is to decide to proceed with the CMAR process, ideally the CM will be retained in the Schematic Design Phase. *J. Seeley will develop a selection timeline for Committee review*.
14.24	Committee	J. Seeley distributed and reviewed the draft Community-Wide Survey No. 2 for Committee review, attached. The survey will be released 12/6/2017 and close 12/15/2017. Committee Discussion: 1. M. Walker asked if Question 2 is required? The Committee to review and provide other questions or edits for the next Committee meeting.
14.25	J. Strazzulla	The PR subcommittee update: 1. J. Strazzulla to review next steps in raising the Seniors Tax Abatement to the maximum level. 2. J. Strazzulla to develop a generic calendar for press release issuances. 3. Census Mailing – T. Hengelsberg provided the Project Information Handout. J. Strazzulla will provide direction on what options and costs to show, since the mailer has to be finalized prior to the PSR costs being developed.

Item #	Action	Discussion
14.26	Record	Public Comments - None
14.27	Record	Old or New Business 1. J. Strazzulla provided the Open Meeting Law documentation to each Committee member, who are to sign and return to Town Hall.
14.28	Record	Next **SBC Meeting: November 21, 2017 at 6:30 pm** at the High School Media Center.
14.29	Record	A Motion was made by S. Gogolinski and seconded by P. Bedigian to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, Updated Meetings and Agendas Schedule, Project Budget Status, Summary from MSBA of the Design-Bid-Build (DBB) and the Construction Manager-at-Risk (CMAR) process, draft Community-Wide Survey No. 2, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

Project Management | SMMA

PROJECT MEETING SIGN-IN SHEET

Project:	W. Edward Balmer Elementary School Feasibility Study	Project No.:	17020
Prepared by:	Joel Seeley	Meeting Date:	11/7/2017
Re:	School Building Committee Meeting	Meeting No:	14
Location:	High School Media Center 427 Linwood Avenue, Whitinsville, MA	Time:	6:30pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	Joseph Strazzulla	jstrazzulla@nps.org	Chairman, School Building Committee
	Melissa Walker	mwalker@nps.org	School Business Manager, MCPPO
	James Marzec	james.r.marzec@gmail.com	Member, Board of Selectmen, CEO
	Michael LeBrasseur	mlebrasseur@nps.org	Chairman, School Committee
	Paul Bedigian	bedigianps@cdmsmith.com	Representative of the Building, Planning, Construction Committee
	Steven Gogolinski	steve@gogolinskicpa.com	Representative of the Finance Committee
	Jeffrey Tubbs	jtubbs@charter.net	Member of community with architecture, engineering and/or construction experience
	Peter L'Hommedieu	PLHommedieu@shawmut.com	Member of community with architecture, engineering and/or construction experience
7:20p	Jeff Lundquist	jlundquist@therichmondgroup.com	Member of community with architecture, engineering and/or construction experience
	Andrew Chagnon	achagnon@vertexeng.com	Member of community with architecture, engineering and/or construction experience
	Spencer Pollock	spencerpollock22@gmail.com	Parent Representative
	Adam Gaudette	agaudette@northbridgemass.org	Town Manager
	Dr. Catherine Stickney	cstickney@nps.org	Superintendent of Schools, NPS
	Steve Von Bargen	svonbargen@nps.org	Building Maintenance Local Official
	Karlene Ross	kross@nps.org	Principal, W. Edward Balmer Elementary School
	Jill Healy	jhealy@nps.org	Principal, Northbridge Elementary School
	Kathleen Perry	kperry@nps.org	Director of Pupil Personnel Services
	Lee P. Dore	lpdore@DoreandWhittier.com	Dore & Whittier Architects
	Donald M Walter	dwalter@DoreandWhittier.com	Dore & Whittier Architects
	Jason Boone	jboone@DoreandWhittier.com	Dore & Whittier Architects
	Thomas Hengelsberg	thengelsberg@DoreandWhittier.com	Dore & Whittier Architects
	Rani Philip	rphilip@DoreandWhittier.com	Dore & Whittier Architects
	Joel Seeley	jseeley@smma.com	SMMA

p:\2017\17020\04-meetings\4.3 mtg_notes\school building committee\14_2017_7november-schoolbuildingcommittee\schoolbuildingcommitteemeetingsign-in sheet_7november2017.docx

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com

Project Management | SMMA

Agenda

Project:	W. Edward Balmer Elementary School Feasibility Study	Project No.:	17020
Re:	School Building Committee Meeting	Meeting Date:	11/7/2017
Meeting Location:	High School Media Center 427 Linwood Avenue, Whitinsville, MA	Meeting Time:	6:30 PM
		Meeting No.	14
Prepared by:	Joel G. Seeley		
Distribution:	Committee Members (MF)		

1. Call to Order
2. Approval of Minutes
    - October 12, 2017
    - October 17, 2017
3. Approval of Invoices and Commitments
4. Review Community Forum No. 4 Comments
5. Update on Design Alternatives
6. Structural Narrative Review
7. MEP Systems Narrative Review
8. Review Construction Delivery Method
9. Community-wide Survey No. 2 Review
10. PR Subcommittee Update
11. New or Old Business
12. Committee Questions
13. Public Comments
14. Next Meeting:
    - November 21, 2017
15. Adjourn

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com

SCHOOL BUILDING COMMITTEE
W. EDWARD BALMER ELEMENTARY SCHOOL
All meetings held at the
High School Media Center at 6:30 PM
unless otherwise noted

MEETINGS SCHEDULE AND AGENDAS
August 29, 2017 Updated October 20, 2017

DATE	AGENDA
Feasibility Study Phase (PSR)	
October 12, 2017	JOINT MEETING OF BOARD OF SELECTMEN, SCHOOL COMMITTEE, FINANCE COMMITTEE AND SCHOOL BUILDING COMMITTEE - 7:00 PM - W. EDWARD BALMER ELEMENTARY SCHOOL MEDIA CENTER
October 17, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Review Preferred Alternative Goals
	Update on Construction Alternatives
	Prepare for Community Forum
October 30, 2017	COMMUNITY FORUM NO. 4 - 6:00 to 8:00 PM - W. EDWARD BALMER ELEMENTARY SCHOOL LIBRARY
November 7, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Review Community Forum Comments
	Update on Construction Alternatives
	Structural Narrative Review
	MEP Systems Narrative Review
	Review MSBA Comments on PDP Submission
	Review Construction Delivery Methods
November 21, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Update on Sustainable Design Goals
	Update on Construction Alternatives
	Preliminary Options Evaluation
	Review Construction Delivery Method
December 5, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Update on Construction Alternatives
	Review Cost Models
	Options Evaluation
	Discuss the One Preferred Option
	Prepare for Community Forum
December 11, 2017	COMMUNITY FORUM NO. 5 - 6:00 to 8:00 PM - NORTHBRIDGE ELEMENTARY SCHOOL CAFETERIA
December 19, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Decide the One Preferred Construction Alternative
	Vote to Submit Preferred Schematic Report to MSBA
January 3, 2018	*SUBMIT PREFERRED SCHEMATIC REPORT PACKAGE TO MSBA*
	ADDITIONAL MEETINGS TO BE SCHEDULED

W. Edward Balmer Elementary School
Northbridge Public Schools
Whitinsville, Massachusetts

PROJECT MANAGEMENT SMMA

SMMA No. 17020
October 31, 2017

Feasibility and Schematic Design Phase	MSBA ProPay Code	FSA Agreement 3/22/2017	Budget Revision 7/31/2017	Current Budget	Vendor	Committed	Balance
OPM	0001-0000	$ 200,000.00	$ (75,000.00)	$ 125,000.00	SMMA	$ 125,000.00	$ -
							$ -
DESIGNER	0002-0000	$ 525,000.00	$ (100,000.00)	$ 425,000.00	D&W	$ 425,000.00	$ -
							$ -
Environmental and Site	0003-0000	$ 40,000.00	$ 110,000.00	$ 150,000.00	D&W	$ 55,050.00	$ 94,950.00
							$ -
Other	0004-0000	$ 10,000.00	$ 65,000.00	$ 75,000.00		$ 855.00	$ 74,145.00
Total Budget		**$ 775,000.00**		**$ 775,000.00**		**$ 605,905.00**	**$ 169,095.00**

** Spent from Other	Date	Amount
GraffitiWorks	8/10/2017	$ 495.00
First Night Uxbridge, Inc.	8/30/2017	$ 360.00
	--/--/----	$ -
	--/--/----	$ -
		$ 855.00

SMMA

Project Management

Memorandum

To:	W. Edward Balmer Elementary School Building Committee	Date:	11/7/2017
From:	Joel G. Seeley	Project No.:	17020
Project:	W. Edward Balmer Elementary School		
Re:	Designer Amendment No. 6: Hydrant Water Pressure/Volume Testing Services		
Distribution:	School Building Committee (MF)		

DESIGNER AMENDMENT NO. 6: HYDRANT WATER PRESSURE/VOLUME TESTING SERVICES

FEE: $1,410.00

REASON: Provide hydrant water pressure/volume testing at Balmer Elementary School.

BUDGET AVAILABILITY: This Amendment would be funded out of the Environmental & Site Budget, ProPay Code 0003-0000, which has the current balance of $94,950.00.

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com

ATTACHMENT F

CONTRACT FOR DESIGNER SERVICES

AMENDMENT NO. 6

WHEREAS, the Town of Northbridge ("Owner") and Dore & Whittier Architects, Inc., (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the W. Edward Balmer Elementary School Project (Project Number 201502140001) at the W. Edward Balmer Elementary School on June 26, 2017 "Contract"; and

WHEREAS, effective as of November 7, 2017, the Parties wish to amend the Contract:

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.

2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services:

	Original Contract	**Prior Amendments**	**This Amendment**	**After this Amendment**
Feasibility Study Phase	$200,000.00	$55,050.00	$1,410.00	$256,460.00
Schematic Design Phase	$225,000.00			$225,000.00
Design Development Phase	$			
Construction Document Phase	$			
Bidding Phase	$			
Construction Phase	$			
Completion Phase	$			
Total Fee	**$425,000.00**	**$55,050.00**	**$1,410.00**	**$481,460.00**

This Amendment is a result of: Provide hydrant water pressure/volume testing at Balmer Elementary School.

ProPay Code: 0003-0000

3. The Construction Budget shall be as follows:

Original Budget:	$ NA
Amended Budget	$ NA

4. The Project Schedule shall be as follows:

Original Schedule:	$ NA
Amended Schedule	$ NA

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER

James R. Marzec
(print name)
Board of Selectmen, Town of Northbridge
(print title)
By _____
(signature)
Date_____

DESIGNER
Lee P. Dore
(print name)
Principal / Vice President, Dore & Whittier Architects
(print title)
By _____
(signature)
Date _____

DORE & WHITTIER
ARCHITECTS, INC.

October 13, 2017

Mr. Joel Seeley, AIA
COO, Executive Vice President
Symmes Maini & McKee Associates Project Management
1000 Massachusetts Avenue
Cambridge, MA 02138

Project: **Balmer Elementary School FS/SD - #17-0759**

Subject: **ASR #6**

Dear Joel,

In accordance with contract Article 8, please accept the following fee proposal for additional consulting services, for the lump sum fee amount as follows:

Hydrant Water Pressure/Volume Test VAV International, Inc. $1,100.00

- Site visit to conduct fire hydrant water pressure/volume test at Balmer Elementary School
- Report and professional interpretation re. sprinkler requirements

Whitinsville Water Company, Pressure Test Fee (reimbursement to VAV, no markup) $200.00

In accordance with contract Article 9, Dore & Whittier Architects hereby submits a fee for coordination of these additional services in the amount of 10%, or: $110.00

TOTAL, ASR #6 **$1,410.00**

Please see the attached consultant's proposal which details scope of services and schedule.
Note that all other provisions of the prime contract remain in force.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC.
Architects • Project Manager

Lee P. Dore, Assoc, AIA, CSI, LEED AP, MCPPO
Principal

cc. DWA Dist.
file.

ARCHITECTS
PROJECT MANAGERS

260 Merrimac Street Bldg 7
Newburyport, MA 01950
978.499.2999 ph
978.499.2944 fax

212 Battery Street
Burlington, VT 05401
802.863.1428 ph
802.863.6955

www.doreandwhittier.com

VAV International, Inc. *Consulting Mechanical Engineers*
400 West Cummings Park Suite-4700 Woburn Massachusetts 01801 (781)935-7228 www.vavint.com

October 10, 2017

Tom Hengelsberg
Dore & Whittier Architects, Inc.
212 Battery Street
Burlington, VT 05401

Re: Balmer ES - Whitinsville, MA - Flow Test

A. Reimbursable Expenses:

1. Water Department Fee - **$200**

B. Flow test Fee - **$1,100**

1. 3 Hours Travel Time
2. 1 Hour for flow test on site.
3. 1 Hour for flow test Data Analysis

Thank you,

Semoon Oh

Semoon Oh*, PE,* Principal

SMMA

Project Management

Memorandum

To:	W. Edward Balmer Elementary School Building Committee	Date:	11/7/2017
From:	Joel G. Seeley	Project No.:	17020
Project:	W. Edward Balmer Elementary School		
Re:	Designer Amendment No. 7: Traffic Study Services		
Distribution:	School Building Committee (MF)		

DESIGNER AMENDMENT NO. 7: TRAFFIC STUDY

FEE: $19,800.00

REASON: Provide traffic data collection, traffic analysis and evaluation of site improvements for the PSR Phase design options.

BUDGET AVAILABILITY: This Amendment would be funded out of the Environmental & Site Budget, ProPay Code 0003-0000, which has the current balance of $93,540.00.

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com

ATTACHMENT F

CONTRACT FOR DESIGNER SERVICES

AMENDMENT NO. 7

WHEREAS, the Town of Northbridge ("Owner") and Dore & Whittier Architects, Inc., (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the W. Edward Balmer Elementary School Project (Project Number 201502140001) at the W. Edward Balmer Elementary School on June 26, 2017 "Contract"; and

WHEREAS, effective as of November 7, 2017, the Parties wish to amend the Contract:

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.

2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services:

	Original Contract	**Prior Amendments**	**This Amendment**	**After this Amendment**
Feasibility Study Phase	$200,000.00	$56,460.00	$19,800.00	$276,260.00
Schematic Design Phase	$225,000.00			$225,000.00
Design Development Phase	$			
Construction Document Phase	$			
Bidding Phase	$			
Construction Phase	$			
Completion Phase	$			
Total Fee	**$425,000.00**	**$56,460.00**	**$19,800.00**	**$501,260.00**

This Amendment is a result of: Provide traffic data collection, traffic analysis and evaluation of site improvements for the PSR Phase design options.

ProPay Code: 0003-0000

3. The Construction Budget shall be as follows:

Original Budget:	$ NA
Amended Budget	$ NA

4. The Project Schedule shall be as follows:

Original Schedule:	$ NA
Amended Schedule	$ NA

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER

James R. Marzec
(print name)
Board of Selectmen, Town of Northbridge
(print title)
By _____
(signature)
Date_____

DESIGNER
Lee P. Dore
(print name)
Principal / Vice President, Dore & Whittier Architects
(print title)
By _____
(signature)
Date _____

DORE & WHITTIER
ARCHITECTS, INC.

October 30, 2017

Mr. Joel Seeley, AIA
COO, Executive Vice President
Symmes Maini & McKee Associates Project Management
1000 Massachusetts Avenue
Cambridge, MA 02138

Project: **Balmer Elementary School FS/SD - #17-0759**

Subject: **ASR #7, Revision 1**

Dear Joel,

In accordance with contract Article 8, please accept the following fee proposal for additional consulting services, for the lump sum fee amount as follows:

Phase II Traffic Study Nitsch Engineering, Inc. $18,000.00

- Evaluation of existing conditions and site improvements to support the development of four alternatives with similar traffic patterns, for two enrollment populations (2-4, 510 and PK-5, 1030). Scope includes data collection, traffic analysis and report of findings.

In accordance with contract Article 9, Dore & Whittier Architects hereby submits a fee for coordination of these additional services in the amount of 10%, or: $1,800.00

TOTAL, ASR #7, R1 **$19,800.00**

Please see the attached consultant's proposal which details scope of services and schedule.
Note that all other provisions of the prime contract remain in force.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC.
Architects • Project Manager

Lee P. Dore, Assoc, AIA, CSI, LEED AP, MCPPO
Principal

cc. DWA Dist.
file.

ARCHITECTS
PROJECT MANAGERS

260 Merrimac Street Bldg 7
Newburyport, MA 01950
978.499.2999 ph
978.499.2944 fax

212 Battery Street
Burlington, VT 05401
802.863.1428 ph
802.863.6955

www.doreandwhittier.com

Nitsch Engineering

2 Center Plaza, Suite 430
Boston, MA 02108-1928
T: 617-338-0063
F: 617-338-6472
www.nitscheng.com

October 27, 2017

Mr. Lee P. Dore, Assoc. AIA, LEED AP, MCPPO
Principal
Dore & Whittier
212 Battery Street
Burlington, VT 05401

RE: Nitsch Proposal #12260.1P (Revised)
Balmer Elementary
Traffic Engineering Services
Northbridge, MA

Dear Lee,

Nitsch Engineering is pleased to submit this revised proposal to you (the Client) for professional traffic engineering services associated with the Schematic Design Phase for the Balmer Elementary School in Northbridge, Massachusetts.

Nitsch Engineering understands that the project will be conducted under the control of the Massachusetts School Building Authority (MSBA) Guidelines through the standard "Contract for Designer Services".

The following four (4) potential options are being considered:

1. B2, Grades 2-4, New Construction at the Rear of the Site (510 enrollment)
2. C2, Addition/Renovation of the existing Balmer School, keeping the Academic Wing (1,030 enrollment K-5, plus 80 PK, 1,110 total)
3. C3, Grades PK-5, New Construction at the Rear of the Site (1,030 enrollment K-5, plus 80 PK, 1,110 total)
4. C5, Grades PK-5, New Construction, Front of the Site (1,030 enrollment K-5, plus 80 PK, 1,110 total)

The Schematic Design Phase evaluation will be based on the two (2) enrollment options of 510 and 1,110 students, because all four (4) options have identical access and egress points. The study includes evaluating the existing facilities and the site improvements to support the development alternatives.

This letter summarizes our scope, assumptions, schedule, and fee.

SCOPE OF SERVICES

Nitsch Engineering will provide professional traffic engineering services to accomplish the following tasks under the phases noted.

SCHEMATIC DESIGN

TASK 1: DATA COLLECTION

1. Perform site visits to observe the traffic operations and physical characteristics of the roadway system, and document the existing conditions with notes and photographs;

2. Collect any recent studies and designs associated with the proposed site;

3. Collect studies and designs of other properties, developed or planned to be developed, within one half of a mile (0.5-mile) from the proposed site;

4. Inventory traffic control devices, traffic circulation, access and egress, and adjacent roadways;

SCOPE OF SERVICES – continued

5. Collect Automatic Traffic Recorder (ATR) counts at three (3) locations adjacent to the site. The ATR counts will be for a period of 48 hours continuous during a weekday. The ATR counts will be used to evaluate the site impacts and recommend needed modifications for on-street traffic regulations;

6. Collect turning movement counts (TMC) at four (4) key intersections. The TMCs will be completed for the morning peak (7:00 AM to 9:00 AM) and afternoon peak (2:00 PM to 4:00 PM). The TMCs will be classified for vehicles, trucks, bicycles, and pedestrians;

7. Request accident data for the most recent three (3) years available for each intersection from the Massachusetts Department of Transportation (MassDOT). Nitsch Engineering will complete a crash rate analysis and compare the calculated crash rates with the State's average rates; and

8. Assemble the data in a format suitable for capacity analysis and evaluation.

TASK 2: TRAFFIC ANALYSIS AND REPORT PREPARATION

1. Review the Institute of Transportation Engineers (ITE) Trip Generation Handbook to project trips for the proposed land use;

2. Compute approximate auto trips to and from the proposed site;

3. Review the parking availability and summarize the number of regular and accessible parking spaces available for use by the school;

4. Evaluate the intersections to determine capacity, Level of Service (LOS), and delays based on current traffic volumes and proposed traffic volumes in the year 2024;

5. Complete the evaluation using SYNCHRO, a capacity analysis and simulation software for roadway and intersection capacity studies and coordinated arterials, which is approved by MassDOT. This software will be useful in the evaluation of intersection congestion and for presentations to a non-technically-oriented, public audience. It simulates the traffic flow, shows vehicle queuing, and provides qualitative measures such as capacity, LOS, and delays;

6. Evaluate the above-mentioned intersections to determine if they meet the warrants for signal installation. Warrant analysis will be completed in accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD);

7. Describe and evaluate the proposed site improvements regarding access/egress, site circulation, and impacts to adjacent roadway;

8. Prepare a Traffic Impact Report summarizing the change in traffic impacts between the existing and proposed uses. List applicable mitigation measures; and

9. Attend two (2) coordination and/or review meetings/conference calls with the Project Team and three (3) public meetings (Planning Board, School Committee, Building Committee, etc.). Nitsch Engineering can attend additional meetings, if requested and approved by the Client, as Additional Services.

WORK NOT INCLUDED IN THE SCOPE OF SERVICES

Services not set forth above and not listed in the Scope of Services of this proposal are specifically excluded from the scope of Nitsch Engineering's services. Nitsch Engineering assumes no responsibility to perform any services not specifically listed in the Scope of Services.

1. Performing a property line survey, topographic survey, or other land surveying services.

2. Performing soil testing; available soil information will be acceptable for the existing conditions narrative and Schematic Design.

3. Performing any type of hazardous waste site evaluation.

4. Preparing Massachusetts Environmental Policy Act (MEPA) submittals or other permit applications, except as noted.

5. Preparing quantity/cost estimates, including earthwork cut/fill volume calculations.

6. Performing hydrant flow tests.

7. Performing signal modification and intersection changes.

8. Providing design services for the installation of traffic signal systems or physical improvement outside of the site.

9. Developing traffic design drawings, specifications, and/or estimates.

10. Attending additional public meetings (Planning Board, School Committee, Building Committee, etc.) not included in the Scope of Services. Nitsch Engineering can attend additional meetings, if requested and approved by the Client, as Additional Services.

ASSUMPTIONS

1. Filing fees and other associated costs will be paid by the Client.

2. Any revisions requested by the Client or other approving authorities after submission of final drawings and/or reports will be considered Additional Services.

3. The Client will provide AutoCAD files indicating the proposed building footprint and position, site layout, and grading for the project for Nitsch Engineering to use as our base plan.

4. The Landscape Architect will provide grading and layout of the site (with Nitsch Engineering's review/involvement) for the Conceptual Plans and schematic design.

5. Printing of plans and specifications for presentations to the Owner or to the City will be performed by the Client.

6. The Client will indemnify and hold harmless Nitsch Engineering and its officers, agents, and employees with regard to errors or omissions within documents prepared by others from which information was obtained, in whole or in part, and incorporated into documents prepared by Nitsch Engineering.

ASSUMPTIONS – continued

7. Nitsch Engineering will evaluate traffic conditions for up to one (1) schematic site layout design per two (2) enrollment options of 510 and 1,110 students.

TIME AND MANNER

Nitsch Engineering is prepared to begin work immediately upon receipt of this executed revised proposal and documents to be provided by the Client.

Nitsch Engineering anticipates substantial completion of Task 1 within 30 working, not calendar, days thereafter. Timing of completion of subsequent tasks can be determined once the task commences. The completion of field tasks will be subject to weather conditions affecting the required field work and circumstances beyond Nitsch Engineering's reasonable control.

COMPENSATION

Compensation for the services provided will be in accordance with Nitsch Engineering's Standard Contract Terms, as attached. The lump-sum labor cost for these services is as follows:

Schematic Design	
Task 1: Data Collection	$ 5,000.00*
Task 2: Traffic Analysis and Report Preparation	13,000.00
TOTAL	$18,000.00

* Traffic counts included in this phase will be conducted by a subconsultant.

Labor costs will not be incurred by Nitsch Engineering beyond this lump-sum without verbal approval from the Client. All expenses are included in the lump-sum amount.

ADDITIONAL SERVICES

Nitsch Engineering will be compensated for services requested by the Client that exceed the "SCOPE OF SERVICES" outlined herein. Charges for Additional Services will be billed in accordance with the attached Standard Contract Terms or the Standard Contract Terms in effect at the time the services are provided. Additional Services will not be accomplished unless Nitsch Engineering has verbal approval from the Client.

METHOD OF PAYMENT

Costs incurred on this project will be billed monthly on a percentage complete of lump-sum basis as outlined in the attached Standard Contract Terms. The Client agrees to invoice the Owner within 10 calendar days after receipt of Nitsch Engineering's invoice. Payment will be due within five (5) calendar days after receipt of payment by the Client from the Owner. The Client will make reasonable and diligent efforts to collect prompt payment from the Owner.

A retainer will not be required for this contract.

Should the billing/payment cycle be delayed by the Client or the Owner due to no fault of Nitsch Engineering, Nitsch Engineering expects full payment from the Client within 10 days of the invoice date.

TERMINATION

Nitsch Engineering reserves the right to revise this revised proposal should the signed copy not be received by November 27, 2017. This agreement may be terminated by either party upon seven (7) days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. If this agreement is terminated by the Client, Nitsch Engineering will be paid for services rendered on the basis of services performed.

If Nitsch Engineering is authorized to commence and/or continue providing its services on the project, either verbally or in writing, prior to the full execution of a written contract, such authorization will be deemed an acceptance of this revised proposal, and such services will be provided and compensated for in accordance with the terms and conditions contained herein as though this revised proposal were fully executed by the Client.

Thank you for requesting this revised proposal. We look forward to working with you on this project. Should the conditions in this revised proposal and the enclosed Standard Contract Terms meet with your approval, please sign and return both a copy of this revised proposal and the Standard Contract Terms to us for our files.

If you have any questions, please call.

Very truly yours,

Nitsch Engineering, Inc.

Nick H. Havan, PE, PTOE
Project Manager

Approved by:

Gary F. Pease for

Fayssal J. Husseini, PE, PTOE, LEED Green Associate
Vice President – Transportation Engineering

NHH/mma

Enclosures: Standard Contract Terms

CLIENT AUTHORIZATION

This revised proposal and Standard Contract Terms are hereby accepted by the Client as evidenced by the execution hereof, and such a person so executing the same on behalf of the Client does hereby warrant full authority to act for, in the name of, and on behalf of the Client.

Such acceptance provides full authorization for Nitsch Engineering to proceed with providing the Scope of Services under the terms and conditions stated herein.

_____ _____
Signature Date

_____
Printed Name and Title

STANDARD CONTRACT TERMS
(Version: October 1, 2017)

The following Standard Contract Terms, together with the attached proposal, constitutes the terms of the Agreement between Nitsch Engineering, Inc. ("Nitsch Engineering") and the Client with respect to the performance of the services ("Services") on the project ("Project").

EFFECTIVE DATE

This Agreement will become effective upon Nitsch Engineering's receipt of authorization to proceed. This proposal is subject to renegotiation if acceptance is not received within 30 days or as stated in the proposal.

1. SCOPE OF SERVICES

Nitsch Engineering shall perform the Services described in the attached proposal.

If Nitsch Engineering's services include the performance of any service during the construction phase of the Project, it is understood that the purpose of any such services (including any visits to the site) will be to enable Nitsch Engineering to perform the duties and responsibilities assigned to and undertaken by it as an experienced and qualified design professional, and to provide the Client with confidence that the completed work of the contractor(s) will conform generally to the Contract Documents and that the integrity of the design concept as reflected in the Contract Documents has been implemented and preserved by the contractor(s). Nitsch Engineering shall not, during such visits or as a result of any observations of construction, supervise, direct, or have control over the contractor's(s') work nor shall Nitsch Engineering have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by the contractor(s) or safety precautions and programs incident to the work of the contractor(s) or for any failure of the contractor(s) to comply with laws, rules, regulations, ordinances, codes, or orders applicable to the contractor(s) furnishing and performing their work. Nitsch Engineering does not guarantee the performance of the construction contract by the contractor(s), and does not assume responsibility for the contractor's(s') failure to furnish and perform their work in accordance with the Contract Documents.

Nitsch Engineering shall review and approve (or take other appropriate action with respect to) shop drawings, samples, and other data which the contractor(s) is (are) required to submit, but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such review and approvals or other actions shall not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto, nor to dimensions or quantities. Nitsch Engineering's review or other actions, as described above, shall not constitute approval of an assembly of which an item is a component, nor shall it relieve the contractor(s) of (a) their obligations regarding review and approval of any such submittals; (b) their exclusive responsibility for the means, methods, sequences, techniques, and procedures of construction, including safety of construction, or (c) for compliance with the Contract Documents. Nitsch Engineering shall be entitled to rely upon the accuracy and completeness of surveys, reports, drawings, plans, and other documents prepared by third parties, including consultants and contractors independently retained by the Client.

3. STANDARD OF CARE

The Client and the Owner acknowledge that the Services provided by Nitsch Engineering in this Agreement may require Nitsch Engineering to make decisions based on experience and professional judgment, rather than on precise scientific or empirical criteria. In performing its Services, Nitsch Engineering shall use that degree of care and skill ordinarily exercised by competent members of the engineering profession as of the date of the performance of the Services, in the same locality at the site, and under the same or similar circumstances and conditions. Nitsch Engineering shall perform its Services as expeditiously as is consistent with the orderly progress of the Project. No other representations or warranties, whether express or implied, are applicable with respect to the Services rendered hereunder, the ("Standard of Care").

4. REGULATORY AGENCIES

Nitsch Engineering shall exercise reasonable efforts, to the extent consistent with the Standard of Care, to comply with all applicable zoning and codes for the Project required by those governmental agencies having jurisdiction over the Project. The Client and the Owner acknowledge that some zoning and code requirements are subject to interpretation. Nitsch Engineering will, as necessary, review such interpretations with Regulatory Agencies relating to its Scope of Services. The Regulatory Agencies may require changes to the Documents that may result in additional costs to the Project. Nitsch Engineering may reasonably request Additional Services to make these changes, which will require the Client's and the Owner's approval in advance, which shall not be unreasonably withheld or delayed.

5. CERTIFICATIONS/AFFIDAVITS

The proposed language of certificates, affidavits or certifications requested of Nitsch Engineering or Nitsch Engineering's consultants shall be submitted to Nitsch Engineering for review and approval at least fourteen (14) days prior to execution. The Client shall not request certifications and/or affidavits that would require knowledge or services beyond the scope of this Agreement and/or beyond the professional qualifications and engineering expertise of Nitsch Engineering. Nitsch Engineering shall not be required to sign any document(s), that would result in Nitsch Engineering having to certify, guarantee or warrant the existence of conditions Nitsch Engineering cannot ascertain.

6. INVOICE AND PAYMENT TERMS; SUSPENSION OF SERVICES

Invoices shall be sent to the Client monthly for the prior month, and payment is due within ten (10) calendar days of the invoice date. If payment is not made within thirty (30) calendar days of the invoice date, the amounts due shall include an interest assessment at the rate of 1-1/2% per month commencing on the 30th day after the date of the invoice. If the Client fails to make payment when due for services and reimbursable expenses, Nitsch Engineering may, upon seven (7) days' written notice to the Client, suspend performance of services under this Agreement. Unless payment in full is received by Nitsch

Engineering within seven (7) days of the date of the notice, the suspension shall take effect without further notice. In the event of a suspension of services, Nitsch Engineering shall have no liability to the Client for delay or damage caused to the Client because of such suspension of services for failure of the Client to make payment to Nitsch Engineering. If the Client fails to pay Nitsch Engineering for services rendered, the Client agrees to pay all costs of collection, including, but not limited to, any reasonable attorney fees and costs.

Remit to address:
Check Payments:
Nitsch Engineering, Inc.
Attention: Accounting Department
2 Center Plaza, Suite 430
Boston, MA 02108

Electronic Payments:
ACH and Wire Transfer information will be provided upon request.

7. RESTART

If the Project is stopped for a period greater than sixty (60) days, a restart fee of 10% of the project fee will be required to compensate Nitsch Engineering for the necessary premium time and remobilization of staff and materials. If the duration of the Project stoppage exceeds one hundred and eighty (180) days in the aggregate, an additional adjustment shall be applied to the fee or hourly billings rates, as applicable at the discretion of Nitsch Engineering to cover wage increases and general price escalation.

8. TERMINATION

This Agreement may be terminated by the Client or Nitsch Engineering upon seven (7) days' written notice. In either case, all amounts due for services and reimbursable expenses as of the date of receipt of cancellation notice shall be paid to Nitsch Engineering within 30 days from the date of Nitsch Engineering's final invoice following notice of termination. In the event of termination by the Client for reasons not the fault of Nitsch Engineering, the Client shall pay Nitsch Engineering in addition to payment for services rendered and reimbursable expenses, all expenses reasonably incurred by Nitsch Engineering in connection with the underlying termination of its Services on the Project, including but not limited to demobilization and other costs.

9. WAIVER OF SUBROGATION

The Client and Nitsch Engineering and their insurers waive all rights against each other and against the contractors, consultants, agents, and employees of the other for damages, but only to the extent such damages are covered by the proceeds of any property or other insurance. The Client and Nitsch Engineering shall each require similar waivers from their contractors, consultants, and agents.

10. INSURANCE

Nitsch Engineering is protected by Workers' Compensation Insurance and Professional Liability Insurance, and will furnish information and certificates upon request.

11. TRANSFER, REASSIGNMENT OF AGREEMENT, THIRD PARTIES

Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client, Owner or Nitsch Engineering. Nitsch Engineering's relationship under this Agreement is solely with the Client and the Owner. Privity of contract exists only between the Client and Nitsch Engineering and is not expressed or implied with respect to any other party, including, the contractor, subcontractors, Client's consultants, Owner's consultants, and in regard to a condominium project, the Homeowner Association "HOA", individual unit owners, individual unit owner investors or any other party with whom the Client or Owner now have or may hereafter enter into an agreement with respect to the Project. Neither party, without the prior written consent of the other party, shall transfer, sublet, assign any rights or interest in this Agreement (including, without limitation, monies that are due or monies that may be due). Subcontracting to subconsultants normally contemplated by Nitsch Engineering shall not be considered an assignment for purposes of this Agreement. To the extent the Client or the Owner enters into any contract or undertaking with a third party or makes any promise or representation to a third party that expands, modifies or alters the Services, Agreement, Scope of Services of Nitsch Engineering without Nitsch Engineering's full knowledge, prior to the written consent, then such expansion, modification or alteration shall be void between the parties and of no force and effect, as to Nitsch Engineering, and shall not cause a reduction in Nitsch Engineering's previously agreed compensation, and the Client will pay Nitsch Engineering for all Services performed.

12. BETTERMENT

If a required item or component of the Project is omitted from the Documents, including but not limited to, quantity variances, zoning and code compliance, as defined in the Proposal and in Section 1 herein, and it results in a claim against the Client and Nitsch Engineering or Nitsch Engineering's subconsultants, Nitsch Engineering and its subconsultants shall not be responsible for the original cost to add such required item or component to the Project, to the extent such item or component would have been required and included in the original Documents. In no event, will Nitsch Engineering or its subconsultants be responsible for the cost of an item or component that provides a betterment or upgrade or enhances the value of the Project to the Owner.

13. LIMITATION OF LIABILITY

To the fullest extent permitted by law, the Client agrees to limit Nitsch Engineering's liability to the Client and anyone claiming by, through, or under the Client, for or on account of all claims and/or damages of any nature whatsoever caused by or arising out of Nitsch Engineering's performance of its Services, such that the total aggregate liability of Nitsch Engineering for any and all claims and/or damages of any nature whatsoever, arising out of

the performance of Nitsch Engineering's Services on the Project, whether arising in tort, breach of contract, contractual indemnification, breach of express or implied warrant, or any other theory of liability, shall not exceed $50,000 or Nitsch Engineering's total fee for Services rendered under this Agreement; whichever is greater.

14. HAZARDOUS WASTE/ASBESTOS/CONTAMINANTS

Nitsch Engineering shall not be responsible for the discovery, treatment, disposal, permitting, reporting of any services involving or relating to the presence of or the actual or threatened release, escape, or discharge of hazardous waste, hazardous materials, toxic materials, oil, asbestos, and/or other contaminants which may exist on the site, in any of the existing structures on the site, or due to the proposed development. It is agreed that the Client, to the fullest extent permitted by law, shall release and indemnify and hold harmless Nitsch Engineering and its consultants, agents, and employees, from and against all claims, damages, losses, and expenses, direct and indirect, including but not limited to attorney's fees and defense costs, arising out of or resulting from or in any way connected with detection, presence, handling, removal, abatement or disposal of any hazardous waste, hazardous materials, toxic materials, oil, asbestos and / or other contaminants that exist on, about or adjacent to the Project site, whether liability arises under breach of contract or warranty, tort, including negligence, strict liability, or statutory liability, regulatory or any other cause of action, except for the sole negligence or willful misconduct of Nitsch Engineering. Nitsch Engineering may, at its sole option, and without liability for consequential or other damages, suspend performance of its Services on the Project upon discovery of hazardous waste, hazardous materials, toxic materials, oils, asbestos and / or other contaminants until the Client contains such and warrants that the Project site is in full compliance with applicable laws and regulations.

15. OWNERSHIP AND USE OF DOCUMENTS

All documents including drawings and specifications, design concepts, inventions, propriety information developed for the Project, including electronic documents prepared or furnished by Nitsch Engineering under this Agreement are instruments of service for use solely with respect to the Project ("Documents"). As author, Nitsch Engineering shall retain the ownership and property interest in those instruments of service, including copyright, common law and statutory law interest in the Documents whether or not the Project is completed; however, if the Project is completed, the Client may retain a license to use copies of the Documents solely for information and record reference purposes in connection with the completed Project. These Documents are not intended or represented to be suitable for reuse by Client or any other party in connection with (a) the completion of the Project if Nitsch Engineering's Agreement has been terminated or Nitsch Engineering otherwise is not involved in the Project; (b) extensions of the Project; and / or (c) any other project. Any reuse without written approval, verification or adaptation by Nitsch Engineering for the specific purpose intended will be at the Client's sole risk and without any liability or legal exposure to Nitsch Engineering or its consultants. The Client accordingly waives all claims and shall defend, indemnify and hold harmless Nitsch Engineering, and its consultants, from any and all claims, damages, losses, and expenses including attorney's fees arising out of or resulting from the unauthorized use. At Nitsch Engineering's sole discretion, it may allow the Client to reuse the Documents with written approval, verification or adaptation of the Documents by Nitsch Engineering, which will entitle Nitsch Engineering to additional compensation to be mutually agreed upon by the Client and Nitsch Engineering.

Further, Nitsch Engineering agrees to provide materials to the Client stored electronically. The Client recognizes that data, plans, specifications, reports, documents, or other information recorded on or transmitted as electronic media ("CADD Documents") are subject to undetectable alteration, either intentional or unintentional, due to, among other causes, transmission, conversion, media degradation, software error, or human alteration. Accordingly, the CADD Documents provided to the Client are for informational purposes only and not as an end product. Nitsch Engineering makes no warranties, either express or implied, regarding the accuracy, fitness or suitability for any purpose of the CADD Documents. Accordingly, the Client agrees to waive any and all claims against Nitsch Engineering resulting in any way from the any use, reuse, reliance on, or alteration of the CADD Documents.

16. ESTIMATES AND/OR OPINIONS OF COST

Any estimates or opinions of project or construction costs are provided by Nitsch Engineering on the basis of Nitsch Engineering's experience and qualifications as an engineer and represent its best judgment as an experienced and qualified engineer familiar with the construction industry. Since Nitsch Engineering has no control over the cost of labor, materials, equipment, or services furnished by others or over competitive bidding or market conditions, it cannot guarantee or represent that proposals, bids, or actual project costs or construction costs will not vary from any estimates or opinions of costs prepared by Nitsch Engineering. Similarly, since Nitsch Engineering has no control over building or site operation and/or maintenance costs, Nitsch Engineering cannot and does not guarantee or represent that the actual building or system operating or maintenance costs will not vary from any estimates given by Nitsch Engineering.

17. SERVICES MADE NECESSARY BY CONTRACTOR PERFORMANCE

It is the Client's responsibility to hire the contractor, and it is the contractor's responsibility to install and complete fully operable systems. The Client agrees to pay Nitsch Engineering at the Hourly Billing Rates listed in Exhibit A for all its troubleshooting work due to contractor's inability to achieve a satisfactory operation.

To the fullest extent permitted by law, the Client shall hold harmless, defend and indemnify Nitsch Engineering, its officers, agents, employees, and consultants, from any and all liabilities, claims, damages, and suits arising out of the negligence of the Client, its agents, or the negligence of any contractor(s) or subcontractor(s) performing any portion of the work and supplying any materials, or any other parties.

18. **HOURLY BILLING RATES** Unless stated otherwise in the proposal, Nitsch Engineering's hourly billing rates are included in Exhibit A.

19. **REIMBURSABLE EXPENSES**
Normal reimbursable expenses are in addition to the fee for services and shall be billed at 1.10 times the amount expended. Reimbursable expenses are those expenses directly related to the Project such as travel including tolls, parking, transportation, meals, and lodging; printing, copying and handling of documents; film and processing; regulations and by-laws/ordinances; telephone calls and other communication charges; postage and delivery; equipment for tests; and permit application fees.

20. **APPLICABLE STATE LAW**
This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Massachusetts.

21. **MUTUAL WAIVER OF CONSEQUENTIAL DAMAGES**
Neither party, nor their parent, affiliated or subsidiary companies, nor the officers, directors, employees or agents of any of the forgoing, shall be liable to the other in any action or claim brought by either party against the other for incidental, indirect, or consequential damages, which include but are not limited to loss of income, profit, revenue, and goodwill, arising out of or related to the Services whether based on contract, tort, statute or otherwise.

22. **PROJECT RISK RELATED TO CONDOMINIUMS OR APARTMENTS (if applicable)**
The Client and Owner acknowledge the risk to Nitsch Engineering inherent in condominium projects and the disparity between Nitsch Engineering's fee and Nitsch Engineer's potential liability for problems or alleged problems with such condominium projects. In consideration of the substantial risks to Nitsch Engineering in rendering professional Services in connection with the Project, the Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless Nitsch Engineering, its officers, directors, employees and subconsultants (collectively, Nitsch Engineering) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising out of or in any way connected with the Services performed on the Project, except for such costs directly caused by Nitsch Engineering's sole negligence or willful misconduct, as found by a court of competent jurisdiction.

23. **MAINTENANCE MANUALS RELATED TO CONDOMINIUMS OR APARTMENTS (if applicable)**
The Client and Owner agree that the Bylaws of the Homeowners' Association established for the Project will require that the Association perform, at a minimum, all maintenance as recommended in the Maintenance Manual, and all routine maintenance, maintenance inspections and any other necessary repairs and maintenance called for as a result of these maintenance inspections. The Bylaws shall also contain an appropriate waiver and indemnity in favor of the Client, Nitsch Engineering and subconsultants, and the contractor if the maintenance recommendations contained in the Maintenance Manual are not performed.

24. **SERVICES INVOLVING UAVs**
In the event of any unmanned aerial system(s) or unmanned aerial vehicle(s) (hereinafter collectively referred to as "UAV") use on the project, Nitsch Engineering's liability for such use shall be limited to damages to the extent caused by its negligence, subject to the further provisions of this article. Nitsch Engineering shall rely on the specific requirements in the Scope of Services to perform any services with the use of any UAV. Nitsch Engineering shall not be responsible for obtaining or examining any images or other information gathered by or resulting from any UAV use (collectively, "Images"), if such Images are not expressly required in the Scope of Services. Nitsch Engineering shall not be responsible for alerting the Client to any Images, for any purpose, regardless of any consequence to the project, if such purpose is not expressly required in the Scope of Services. Any unrequested or unused Images shall be discarded, and the Client agrees to such disposal and agrees that Nitsch Engineering shall not be liable for any such disposal. Nitsch Engineering shall not be liable for any damages, claims, liabilities, or expenses of any kind related to any unauthorized use of any UAV, or any Images.

In the event of any UAV use, the Client and the Owner agree to provide sufficient access to the site and remove any and all potential obstructions, including but not limited to snow and debris, from the site prior to the date on which services involving UAV use are scheduled, or indicated, to be performed. The Client and the Owner agree to restrict access to the site while the UAV is in operation, and to provide advance notice to all individuals, located in the vicinity of the project, of said restriction.

25. **DISPUTE RESOLUTION**
Prior to the initiation of any legal proceedings, the parties agree to submit all claims, disputes, or controversies arising out of, or in relation to the interpretation, application, or enforcement of this Agreement to non-binding mediation. Mediation shall be conducted under the auspices of the Construction Industry Rules of the American Arbitration Association in accordance with its existing terms and procedures, unless the parties mutually agree otherwise. The cost of mediation shall be borne equally by the parties. The party seeking to initiate mediation shall do so by submitting a formal written request to the other party to this Agreement and the American Arbitration Association. This Article shall survive completion or termination of this Agreement, but under no circumstances shall either party call for mediation of any claim or dispute arising out of this Agreement after such period of time as would normally bar the initiation of legal proceedings to litigate such a claim or dispute under the laws of the Commonwealth of Massachusetts. In the event that the dispute is not resolved in mediation, the parties may submit the dispute to litigation in a court of competent jurisdiction, which shall be the method of binding dispute resolution for any claim or dispute under this Agreement.

STANDARD CONTRACT TERMS
(Version: October 1, 2017)

EXHIBIT A

Hourly Billing Rates

The hourly billing rates are subject to change as a result of changes in market conditions. The current hourly billing rates are, as follows:

Department: Civil, Planning, Transportation, Structural	
Principal	$225.00
Senior Project Manager – Structural	$210.00
Senior Project Manager	$200.00
Senior Project Engineer – Structural	$180.00
Project Manager	$175.00
Senior Project Engineer	$155.00
Project Engineer – Structural	$155.00
Project Engineer	$145.00
Senior Project Designer	$130.00
Project Designer	$120.00
Project Technician	$100.00
Senior Planner	$100.00
Planner	$95.00
Planning Analyst	$80.00
Administrative	$70.00

Department: Land Survey	
Senior Project Manager – Survey	$180.00
Project Manager – Survey	$160.00
Project Surveyor	$145.00
Senior Survey Technician	$140.00
Survey Technician 3	$105.00
Survey Technician 2	$90.00
Survey Technician 1	$85.00
Administrative	$70.00
Survey Robotic Services	$130.00

Other Services, include:	
Expert Witness	$300.00
GIS Manager	$130.00

DESIGN BID BUILD V. CONSTRUCTION MANAGEMENT AT RISK
CONTRACTING STRUCTURE

DESIGN BID BUILD

1. DBB is a Single Phase "Fixed Price“ Construction Contracting Method.
2. Under DBB, a Public Owner must procure an Owner’s Project Manager to act as its Representative during the Design and Construction of the Project and a Designer to prepare the Project Design.
3. When the Design is complete, the Owner openly solicits Public Bids from every General Contractor that meets a list of statutorily defined public bidding eligibility requirements.
4. The Bid Solicitation requires a single Lump Sum Bid Price to complete all of the Work included in the Design.
5. The Owner must award the Construction Contract to the Lowest Responsible Eligible Bidder.

CONSTRUCTION MANAGEMENT AT RISK

1. CMR is a Two Phase "Cost Plus" Construction Contracting Method.
2. When using a CMR, a Public Owner must procure an Owner’s Project Manager to act as its Representative during the Design and Construction of the Project and a Designer to prepare the Project Design.
3. Before the Design is prepared, the Owner retains a CMR through a systematic Qualifications Based Procurement Process.
4. The CMR provides advice during the Design Phase regarding constructability and budget and then Constructs the Project, as designed.
5. The CMR Contract Price will be the sum of the CMR’s Cost to Construct the Work plus the General Conditions (CMR’s Costs that are not incorporated into the Project) and a negotiated CMR Fee, as compensation.
6. When the Design is at least 60% complete, the Owner and the CMR will agree upon a Guaranteed Maximum Price ("GMP") as a cap for the Contract Price. Once the GMP is established, the CMR will be paid the lesser of the Contract Price or the GMP.

ADVANTAGES

DESIGN BID BUILD

1) Competitive Bidding is the hallmark of DBB contracting and, assuming the Project Design is clear and complete and all Prequalified Bidders are capable of effectively completing the work, that competition should produce the best available price.

2) A DBB General Contractor is obligated to construct all of the Work that is delineated in the Project Design for a single, Lump Sum Fixed Price. This places the risk for the cost of completing the Work included in the Design entirely on the General Contractor.

3) The Work and the Schedule to complete that Work are narrowly defined in a DBB General Contract and that simplicity should concomitantly simplify management of the Project, provided the Design is clear and straight forward.

CONSTRUCTION MANAGEMENT AT RISK

1) Qualifications Based Procurement is the hallmark of CMR contracting and that ability allows the Owner to identify CMRs that are the most capable of constructing the Owner's Project and to choose a CMR for the Project from that pool.

2) A CMR is available during the Design Phase to work with the Designer to identify Design conflicts and omissions prior to construction. Any significant Design conflicts and/or omissions that are not identified and corrected prior to construction will adversely impact the Project Schedule and/or lead to claims for additional compensation. The CMR's assistance during the Design Phase should drastically reduce that possibility.

3) The CMR contracting process is flexible and provides an Owner with the ability to creatively progress a Project through methods such as having the CMR begin construction before a Design is completed.

DISADVANTAGES

DESIGN BID BUILD

1. A DBB General Contractor is not available to help identify Design conflicts and omissions prior to construction. Any significant conflicts and/or omissions that are not corrected prior to construction will adversely impact the Project Schedule and/or lead to claims for additional compensation.

2. With DBB, an Owner must solicit Public Bids from every General Contractor that meets the statutorily defined public bidding eligibility requirements and award the construction contract to the "Lowest Responsible Eligible Bidder". However, that bidder may not be the best choice to construct the Project. If a Project is complex, an Owner will likely want to identify Contractors that are the most capable of constructing the Project and choose a Contractor to construct the Project from that pool. DBB does not have a legal mechanism to achieve that objective.

3. With DBB, a Designer prepares the Design, General Contractors Bid on that Design, and the "Lowest Responsible Eligible Bidder" constructs the Project. This "linear" process restricts the Owner's ability to creatively progress the Project through methods such as having the Contractor begin construction before the Design is completed.

CONSTRUCTION MANAGEMENT AT RISK

1. Subject to the GMP, a CMR is reimbursed for the Cost of Work and paid a fee as compensation. This places the risk for the cost of completing the work up to the amount of the GMP upon the Owner.

2. Massachusetts Law requires the Owner of a DBB Public Building Construction Project to solicit separate competitive bids from Subcontractors for work that is included in eighteen (18) key sub-trade categories. The Sub-Bid Solicitation is not issued until the Design of the work is completed and each Sub-Bidder is required to submit a single Lump Sum Bid Price to complete all of the Work that is included in a sub-trade category. A list of those Sub-Bids is provided to General Bidders prior to the date of the General Bid Opening and the General Bidders are required to include separate sub-bid fixed prices for the 18 sub-trade categories in their General Bids. With some differences, the law is also applicable to CMR contracting. Given the significant fixed price cost liability for subcontract work, a GMP for a CMR Contract under GL c. 149A will not typically be set until the entire Design is completed. That delay transfers most of the risk for the cost of completing the work to the Owner, obviating the potential for any cost savings that may have been available through competition.

CONCLUSIONS

DESIGN BID BUILD

1) The process is best suited to projects with straight forward Designs.

CONSTRUCTION MANAGEMENT AT RISK

1. The contracting process is best suited to projects with complicated Designs and/or strict schedule limitations.

W. Edward Balmer Elementary School Feasibility Study

School Building Committee Community Survey No. 2

October 17, 2017

As the School Building Committee prepares its recommendation for a Preferred Schematic Design to the Massachusetts School Building Authority, it is important that we hear from you.

Please complete the following short survey; the results will help guide the decision-making process as the School Building Committee continues its important work.

1. **Please select all stakeholder groups that apply to you.**
   - ❑ Student
   - ❑ Parent
   - ❑ Northbridge Resident
   - ❑ Northbridge Registered Voter
   - ❑ Northbridge Homeowner
   - ❑ Northbridge Business Owner
   - ❑ Northbridge Elected Official
   - ❑ Northbridge Public Schools Employee
   - ❑ Other (please specify) _____

2. **Please rank your priority from the choices below with 1 being the most important.**
   - ❑ Cost – Minimal impact on taxpayer
   - ❑ Education – The greatest benefit to all learners

3. **Which of the following design alternatives provides the Northbridge Community the best long term plan for educating its elementary school children? Please rank the following options with 1 being the best long term solution and 4 being the least.**

	Option B2 (Grades 2-4, 510 students) Renovation and addition to the W. Edward Balmer Elementary School at $34.6 M Northbridge Dollars, Northbridge Elementary School to remain as-is.
	Option C2 (Grades PreK-5, 1,030 students) Renovation and addition to the W. Edward Balmer School at $55.6 M Northbridge Dollars, consolidating W. Edward Balmer School and Northbridge Elementary School.
	Option C3 (Grades PreK-5, 1,030 students) New Construction to the rear of the W. Edward Balmer Elementary School campus at $58.9 M Northbridge Dollars, consolidating W. Edward Balmer Elementary School and Northbridge Elementary School.
	Option C5 (Grades PreK-5, 1,030 students) New construction to the front of the W. Edward Balmer Elementary School campus at $58.3 M Northbridge Dollars, consolidating W. Edward Balmer Elementary School and Northbridge Elementary School.

W. Edward Balmer Elementary School Feasibility Study

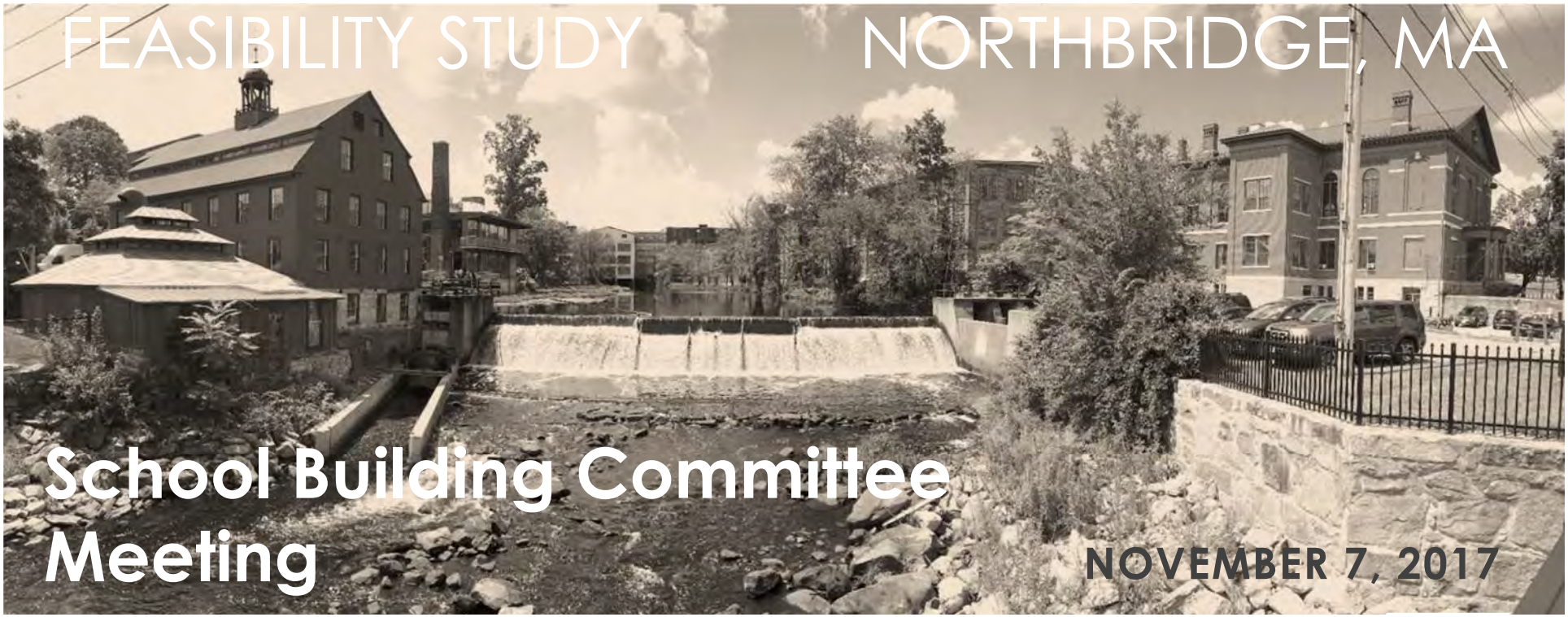
School Building Committee Community Survey No. 2

October 17, 2017

4. What other information will be pertinent to the recommendations of the Northbridge School Building Committee?

W. EDWARD BALMER SCHOOL

FEASIBILITY STUDY NORTHBRIDGE, MA



School Building Committee Meeting

NOVEMBER 7, 2017

SMMA Project Management

NORTHBRIDGE PUBLIC SCHOOLS

Massachusetts School Building Authority
Funding Affordable, Sustainable, and Efficient Schools in Partnership with Local Communities

DORE & WHITTIER ARCHITECTS, INC.

agenda

1. Review of Community-Wide Survey Results presented at Forum #4
2. Selected Design Alternatives Progress Update
3. Engineers' Building System Narratives
4. Middle School Space Analysis Update
5. Review Construction Delivery Method
6. Questions, Comments, Feedback

COMMUNITY-WIDE SURVEY RESULTS PRESENTED AT FORUM #4

COMMUNITY-WIDE SURVEY #1 OVERVIEW

The SBC has conducted a survey designed to gather information on:

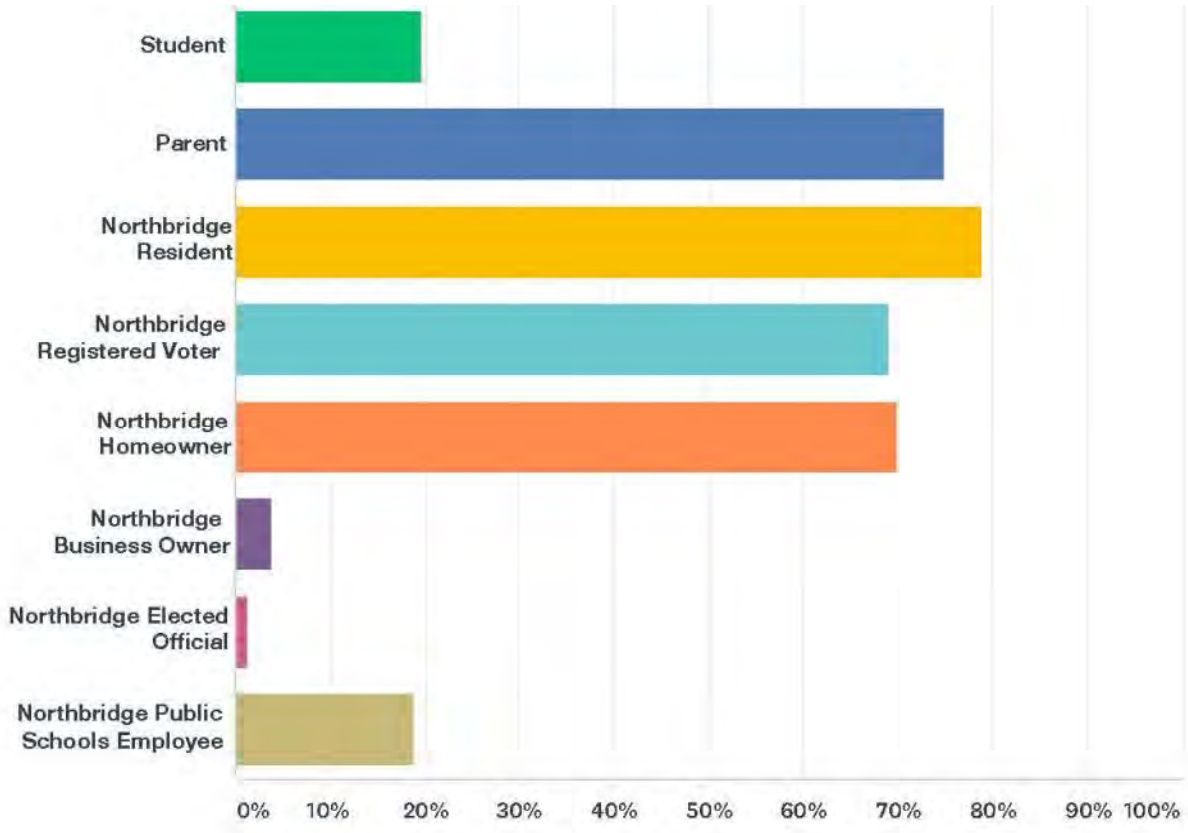
- Stakeholder group membership
- Which option is most beneficial
- Most important project considerations
- How stakeholder gets news
- How can communication with SBC be improved

Hard copy survey forms were distributed at the Library, Community Center, Senior Center and Town Hall and the electronic survey was hosted on the Project Website.

survey

SURVEY QUESTION 1

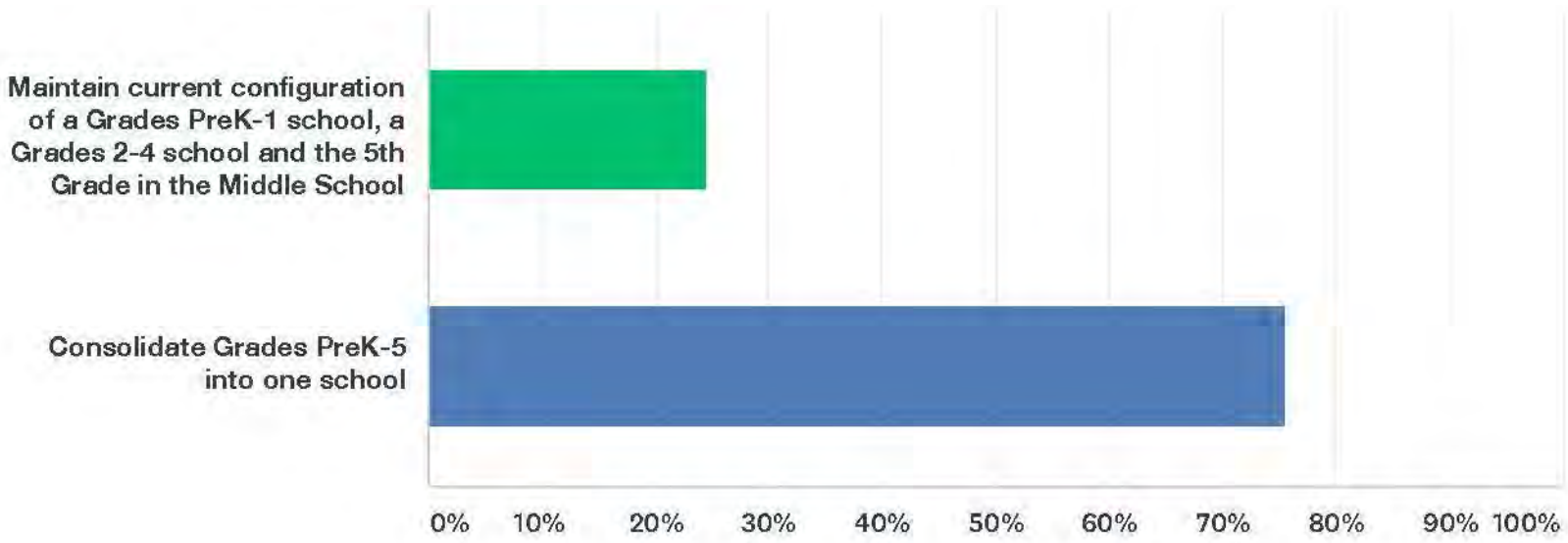
Please select all stakeholder groups that apply to you.



survey

SURVEY QUESTION 2

Which option do you feel is the most appropriate and beneficial for our students and community?

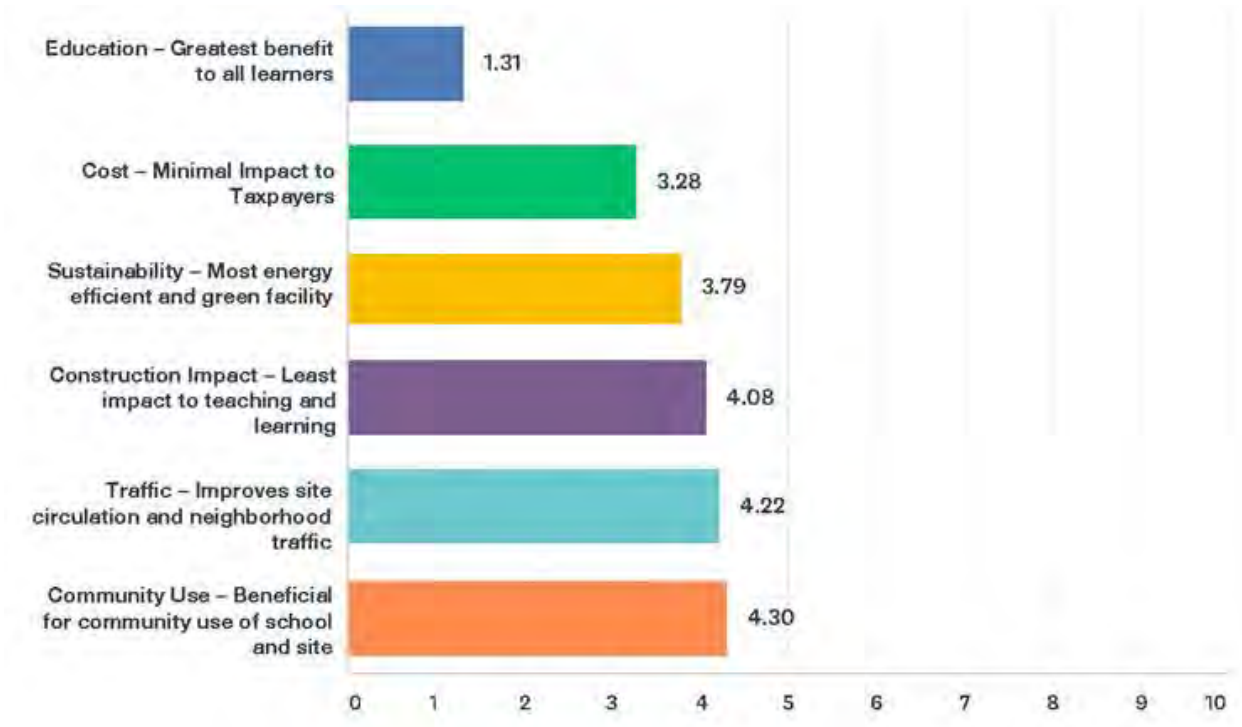


survey

SURVEY QUESTION 3

What is the most important consideration in the decision-making process for recommending a capital school building project to the Northbridge Community for approval?

Please rank the following priorities with 1 being the most important and 6 being the least important.



survey

SURVEY QUESTION 3

What is the most important consideration in the decision-making process for recommending a capital school building project to the Northbridge Community for approval?

Please rank the following priorities with 1 being the most important and 6 being the least important.

	1 (Most Important)		2		3		4		5		6 (Least Important)		Rank
Cost – Minimal impact to taxpayers	16.47%	57	26.01%	90	17.05%	59	11.56%	40	10.98%	38	17.92%	62	3.28
Education – Greatest benefit to all learners	78.90%	273	15.90%	55	2.89%	10	1.16%	4	0.29%	1	0.87%	3	1.31
Sustainability – Most energy efficient and green facility	0.87%	3	19.94%	69	25.72%	89	21.10%	73	17.63%	61	14.74%	51	3.79
Traffic – Improves site circulation and neighborhood traffic	1.73%	6	8.09%	28	18.79%	65	28.32%	98	23.70%	82	19.36%	67	4.22
Community Use – Beneficial for community use of school and site	1.73%	6	12.43%	43	16.47%	57	18.79%	65	24.57%	85	26.01%	90	4.30
Construction Impact – Least impact to teaching and learning	0.58%	2	17.63%	61	19.08%	66	19.08%	66	22.83%	79	20.81%	72	4.08

survey

SURVEY QUESTION 4

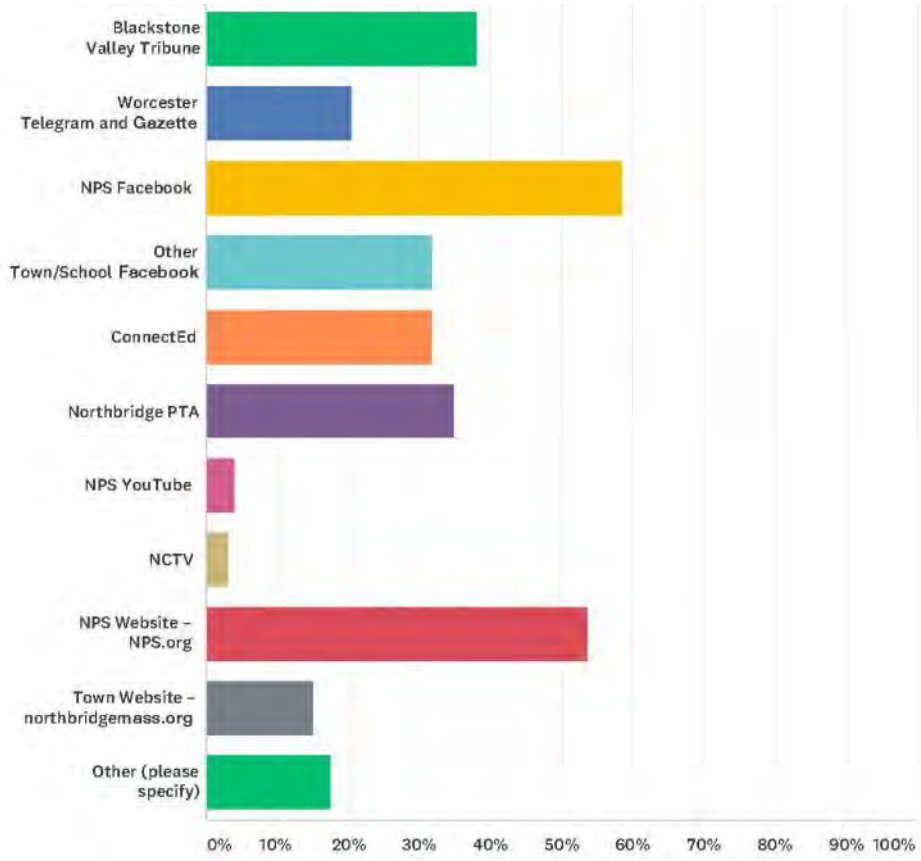
Is there another important consideration that is not listed above? If so, please explain.

- Educational Technology (4 responses)
- Student Health and Safety (12 responses)
- Benefits to All Residents (6 responses)
- Traffic and Bussing (3 responses)
- Accommodating Future Growth (5 responses)
- Impact on Other Town Projects (5 responses)

survey

SURVEY QUESTION 5

How do you receive your information on Town and School News?



survey

SURVEY QUESTION 6

How can the School Building Committee improve communication with the public regarding this project and state grant?

- ❑ Mail (25 responses)
- ❑ ConnectEd (6 responses)
- ❑ Community Meetings at Different Locations (13 responses)
- ❑ Email (32 responses)
- ❑ Backpack Flyers (11 responses)
- ❑ Social Media (20 responses)
- ❑ Newspaper (6 responses)

survey


QUESTIONS?
D&W
DORE & WHITTIER
ARCHITECTS, INC.

SELECTED DESIGN ALTERNATIVES
PROGRESS UPDATE

options evaluation

B1 $29.0M

B2 $34.6M

C1 $61.3M

C3 $58.9M

GROUP A
Balmer + NES
CODE/ DM
ONLY
$53.0M
total

B3 $33.8M

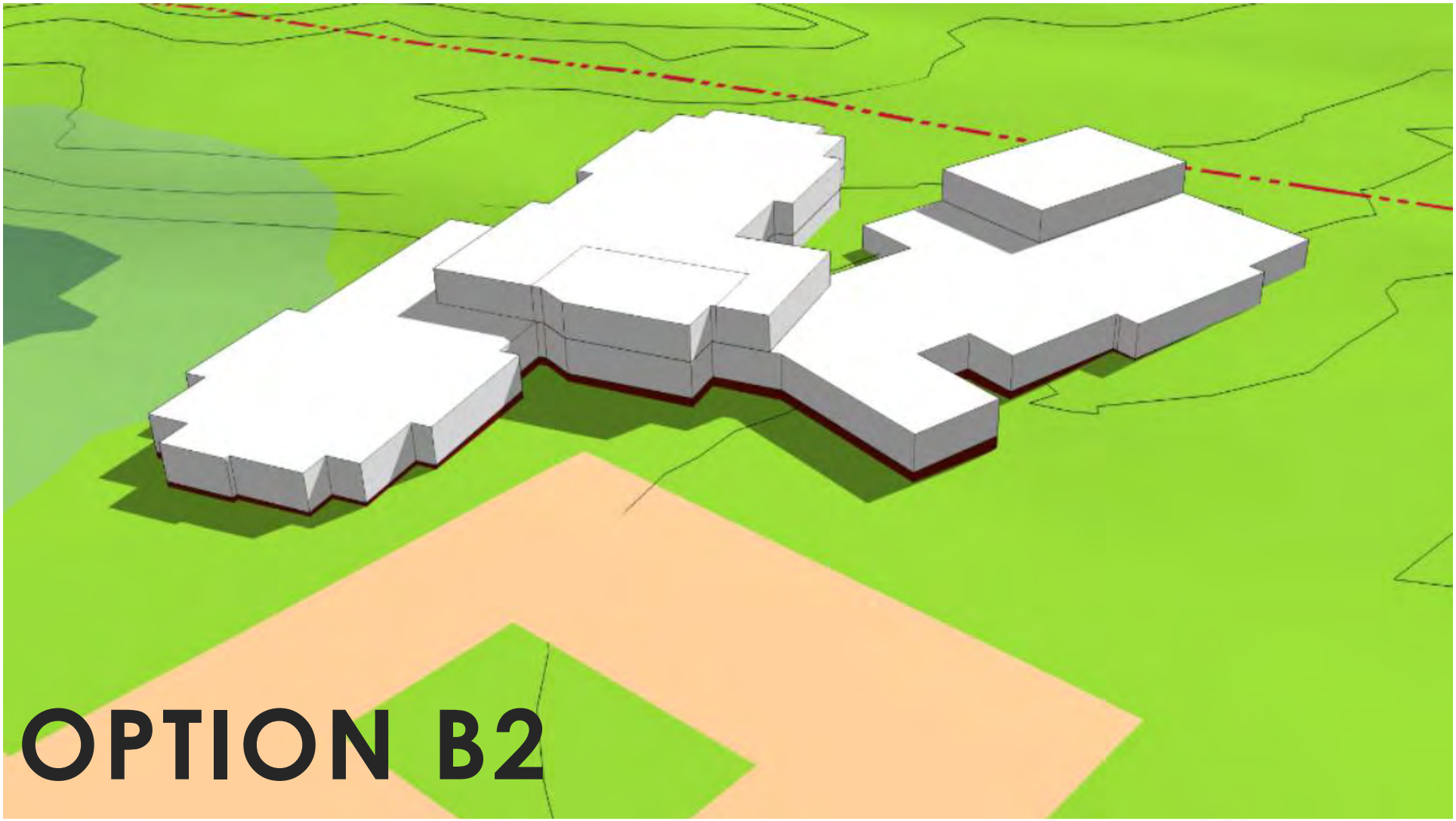
C2 $55.6M

C4 $66.6M

OPTIONS OVERVIEW WITH COST TO TOWN

Estimated costs are preliminary and subject to change as the project is refined.

C5 $58.3M



OPTION B2

OPTION B2

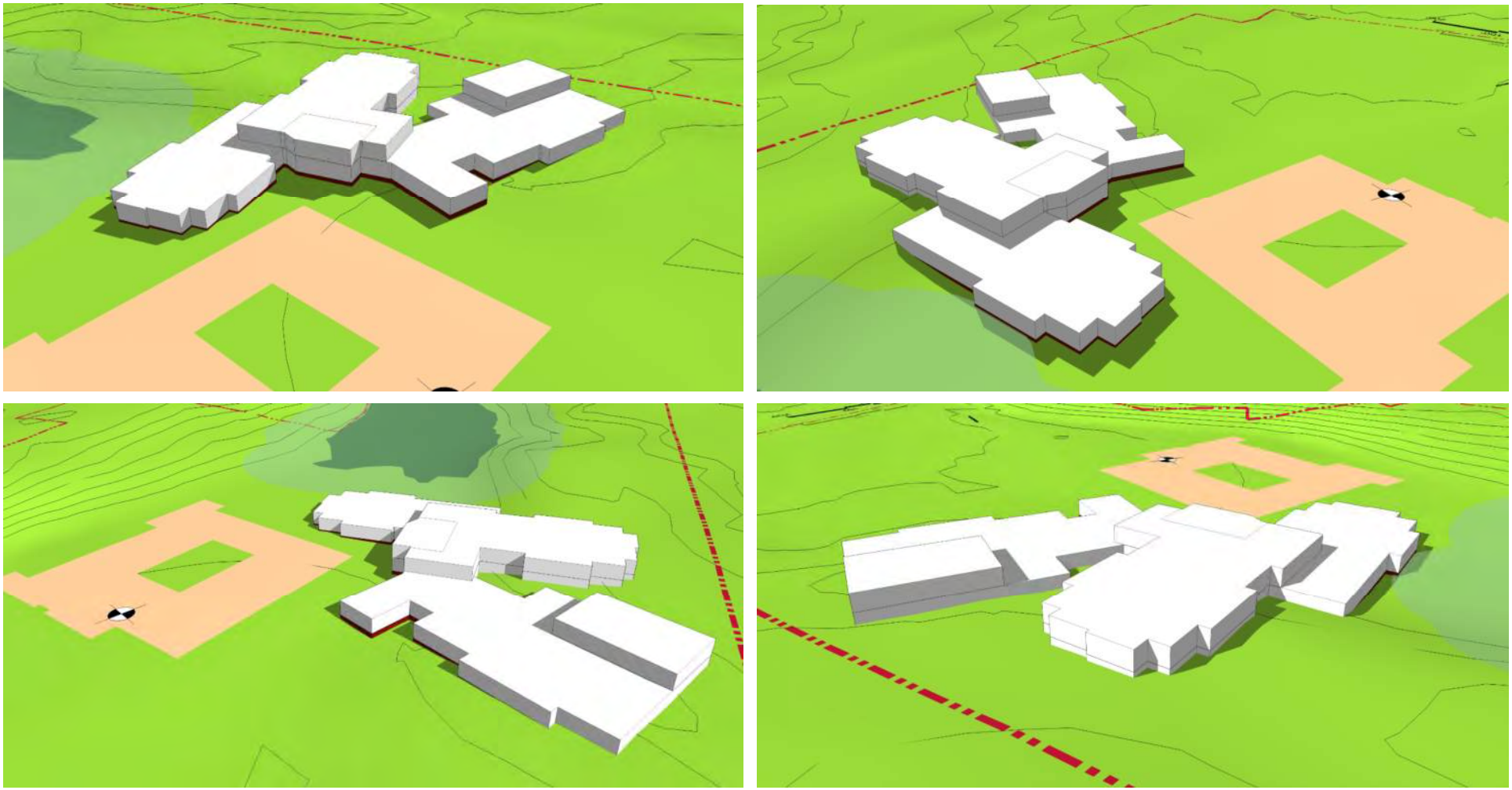
- GRADES 2-4 (510)
- NEW BUILD
- 2 STORIES
- REAR/EAST EDGE OF SITE
- 2 YEAR DURATION

SITE PROGRAM

	PROGRAM	DESIGN
PARKING	100	116
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	0	0
CAR QUEUE	40	36
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	5
U-6 SOCCER	1	2
PK- 2 PLAYGROUND	0	0
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	1
OUTDOOR LEARNING	2	3

3,000 SF – 100' WETLAND SETBACK ZONE IMPACT – FIELDS ONLY

preliminary design



OPTION B2 – MASSING MODEL ON SITE TOPOGRAPHY

2

1

OPTION B2

- 2-4 (510)

preliminary design

OPTION B2

PROS

- Clean replacement project allows Balmer to function
- Good drop-off design for busses and cars
- Extra play fields
- Admin has commanding view of site
- Good public/private separation
- Shared spaces and Media central

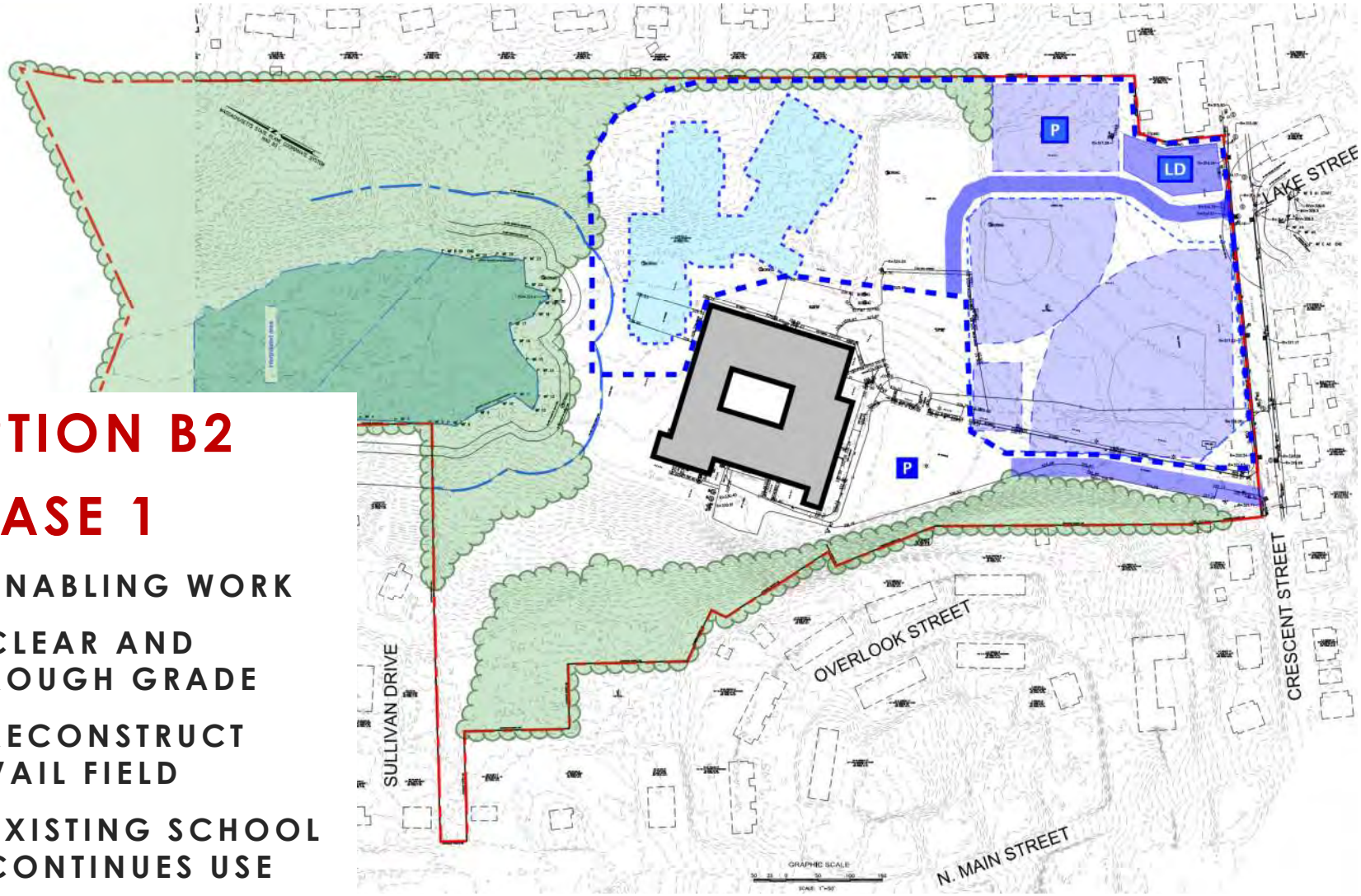
CONS

- Circulation only around ¾ of building
- Grades 2-3 paired but 4 on its own

OPTION B2

PHASE 1

- ENABLING WORK
- CLEAR AND ROUGH GRADE
- RECONSTRUCT VAIL FIELD
- EXISTING SCHOOL CONTINUES USE



preliminary design

OPTION B2

PHASE 2

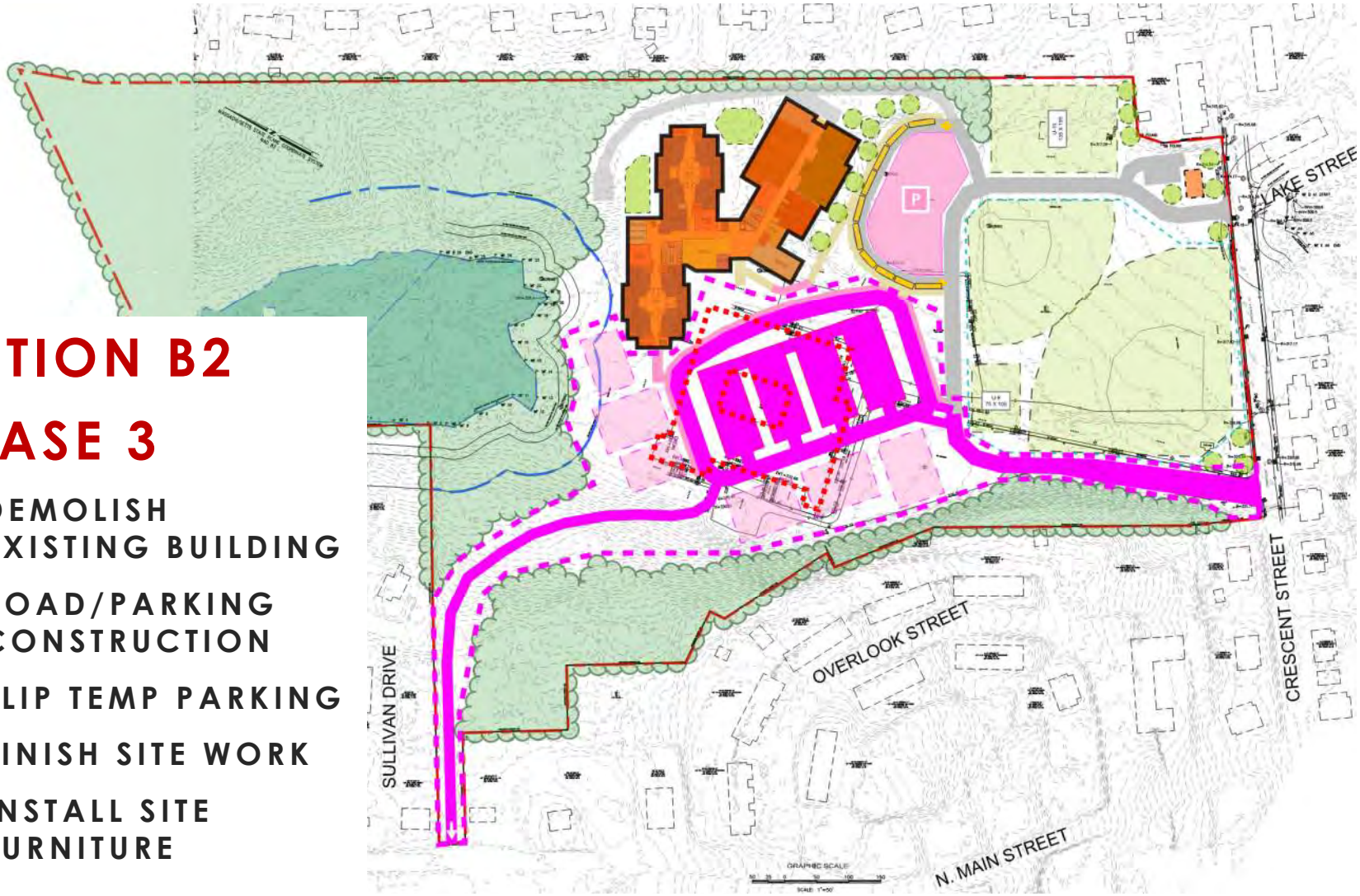
- BUILDING CONSTRUCTION
- ROAD CONSTRUCTION
- SITE WORK AROUND BUILDING

preliminary design

OPTION B2

PHASE 3

- DEMOLISH EXISTING BUILDING
- ROAD/PARKING CONSTRUCTION
- FLIP TEMP PARKING
- FINISH SITE WORK
- INSTALL SITE FURNITURE



preliminary design

ALL C-SERIES OPTIONS HAVE…

- Required site elements replaced/reconstituted
- Separate bus and car loops
- PK-K park and drop lot
- Public/private separation: core versus academic wings
- Grade pairings aligned by floor level: PK-K; 1-2; 3-4-5
- Grade pairings not separated by core
- All space summary program elements present
- Extended learning areas
- Outdoor learning areas
- Shared program centrally located
- Special education integrated


OPTION C2

OPTION C2

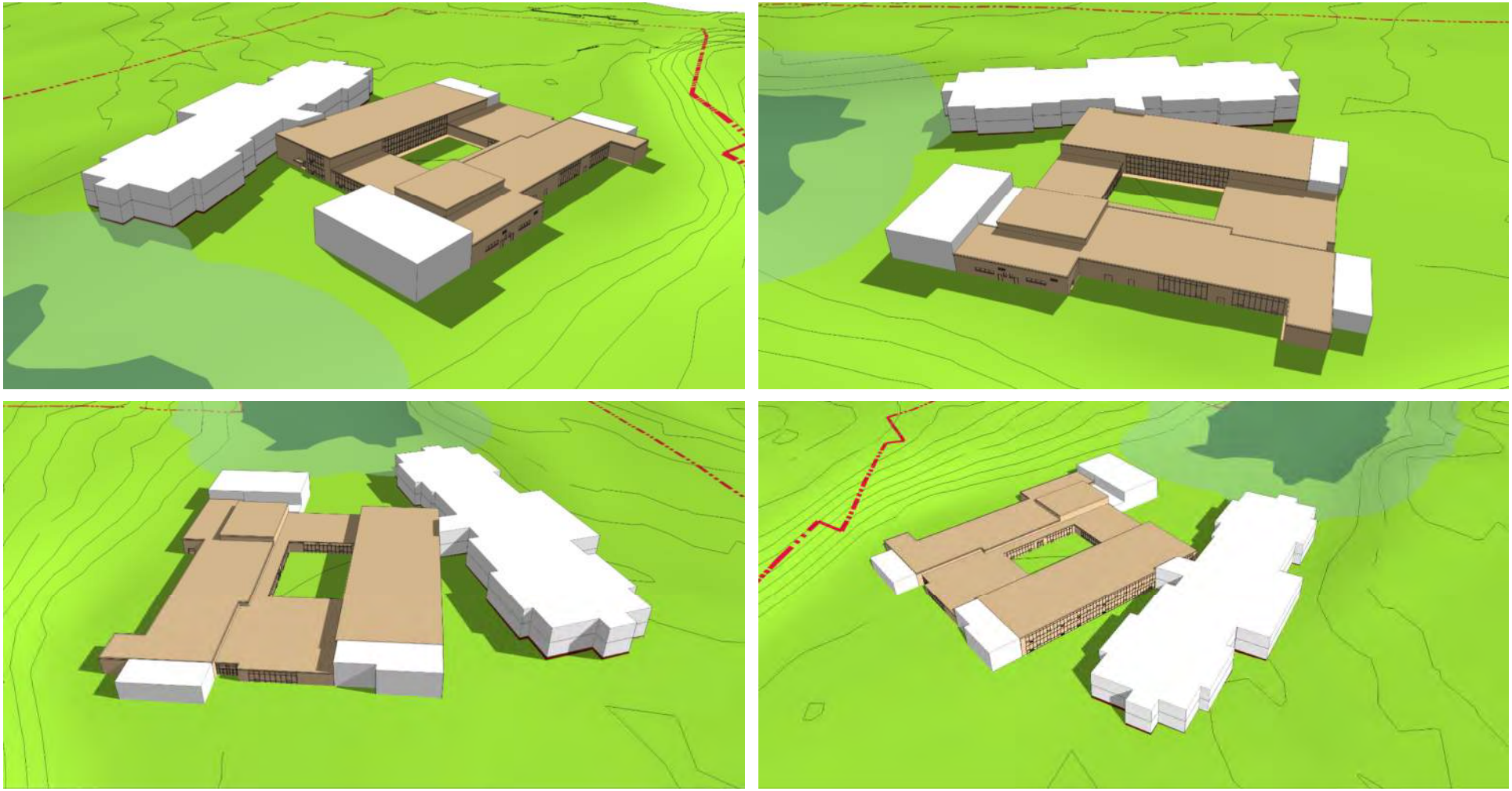
- GRADES PK-5 (1,030)
- ADD/RENO
- 2 STORY ADDITIONS
- EXISTING SITE
- 4 YEAR DURATION

SITE PROGRAM

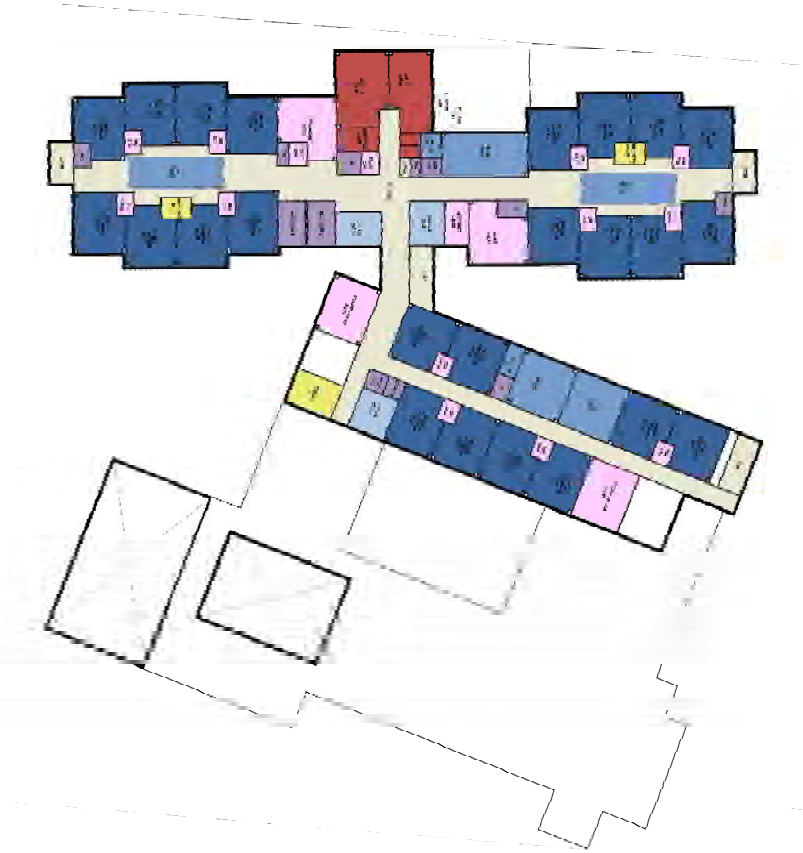
	PROGRAM	DESIGN
PARKING	205	248
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	12
CAR QUEUE	50	26
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	4
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	USE PK-K DROP
OUTDOOR LEARNING	2	4

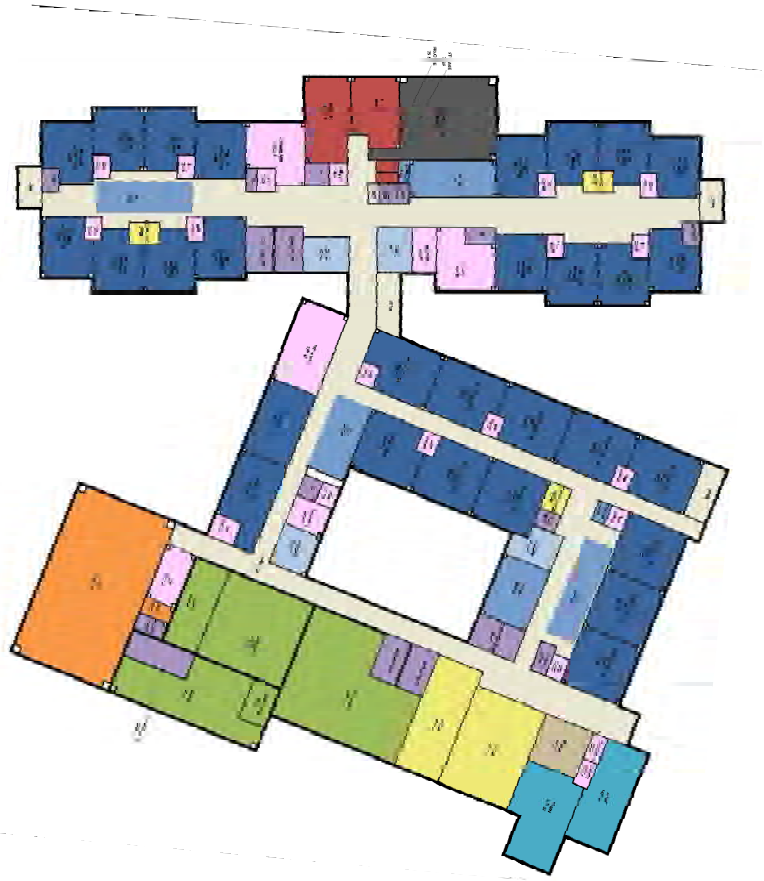
14,000 SF – 100' WETLAND SETBACK ZONE IMPACT – FIELDS/ DRIVE

preliminary design



OPTION C2 – MASSING MODEL ON SITE TOPOGRAPHY





preliminary design

OPTION C2

2

1

- PK-5 (1,030)

OPTION C2

PROS

- Reused existing building
- Additions define interesting exterior landscape spaces
- Additions avoid wetlands and topography

CONS

- Phased add/reno will disrupt education
- 4 year duration
- Circulation only around 2/3 of building
- Compromises in plan layout and adjacencies in reno portion
- Many site plan compromises: circulation, distance to entry, car & bus drop offs tight, parking distant & fragmented, small play-grounds
- Poor solar orientation
- Admin has no view of parking

GREENFIELD HIGH SCHOOL

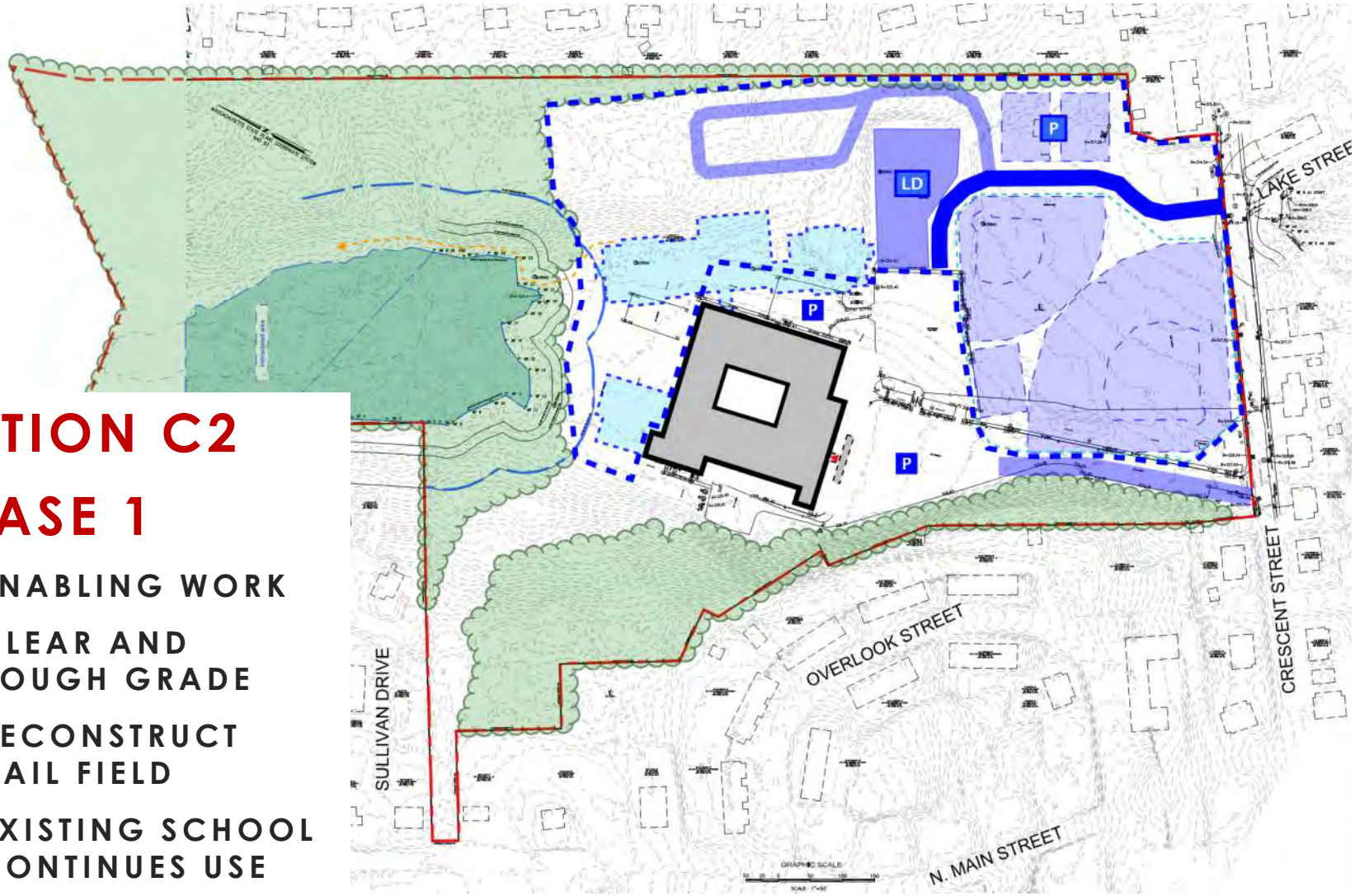
- EXAMPLE OF CLOSE, PHASED CONSTRUCTION

construction phasing

OPTION C2

PHASE 1

- ENABLING WORK
- CLEAR AND ROUGH GRADE
- RECONSTRUCT VAIL FIELD
- EXISTING SCHOOL CONTINUES USE

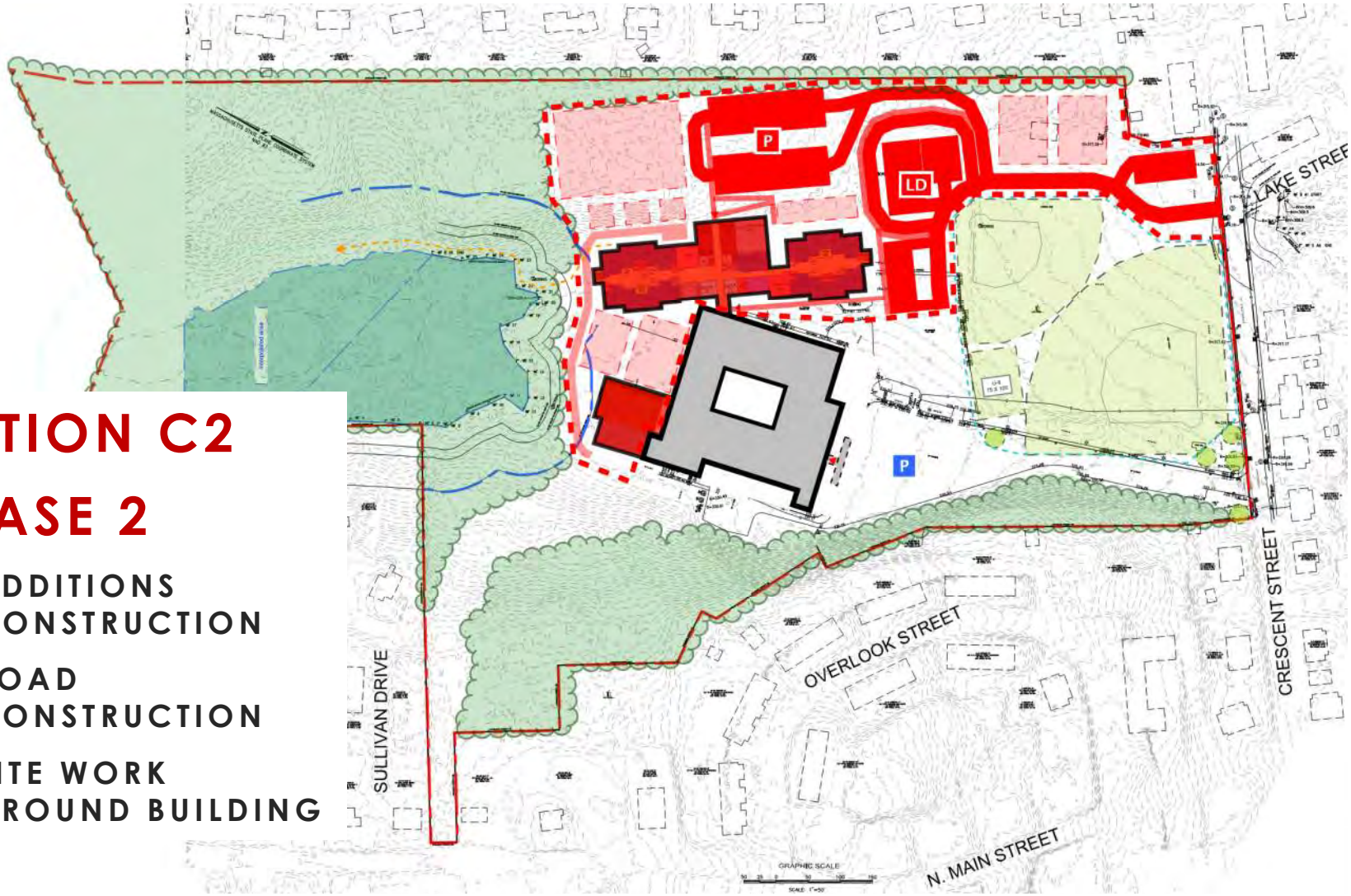


preliminary design

OPTION C2

PHASE 2

- ADDITIONS CONSTRUCTION
- ROAD CONSTRUCTION
- SITE WORK AROUND BUILDING

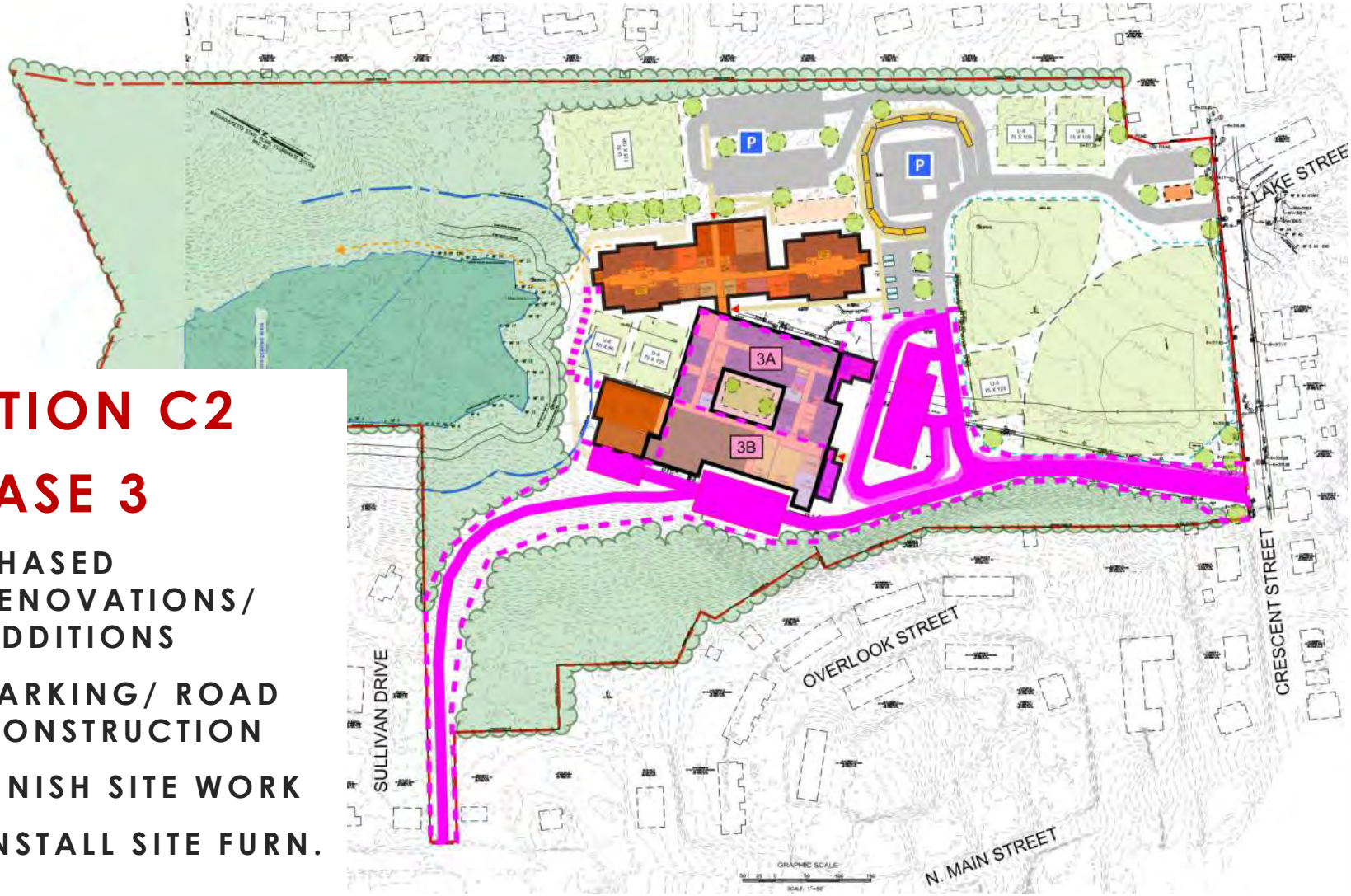


preliminary design

OPTION C2

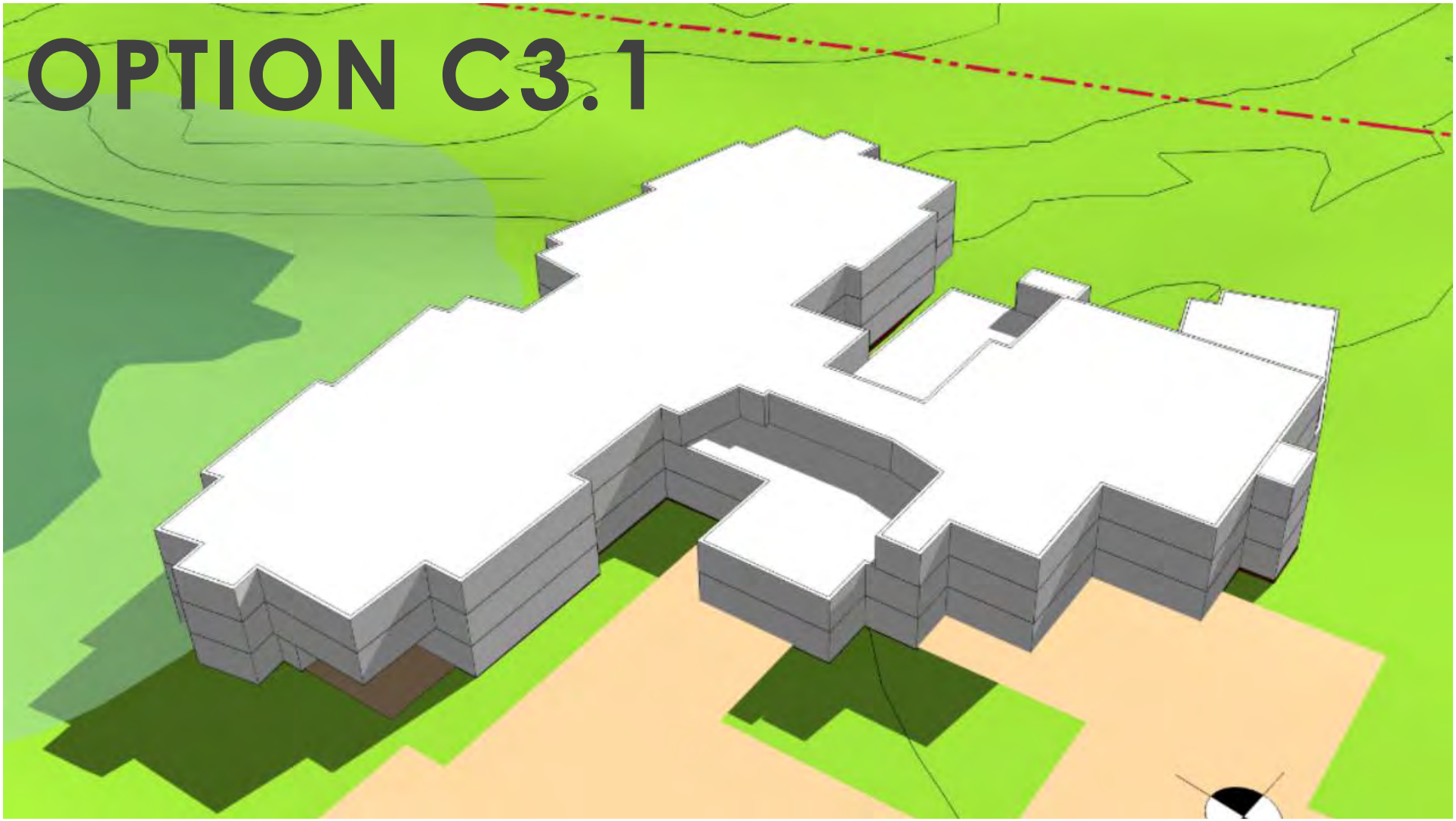
PHASE 3

- PHASED RENOVATIONS/ ADDITIONS
- PARKING/ ROAD CONSTRUCTION
- FINISH SITE WORK
- INSTALL SITE FURN.



preliminary design

OPTION C3.1



OPTION C3.1

- GRADES PK-5 (1,030)
- PHASED NEW BUILD
- 3 STORIES
- REAR OF SITE
- 3.5 YEAR DURATION

SITE PROGRAM

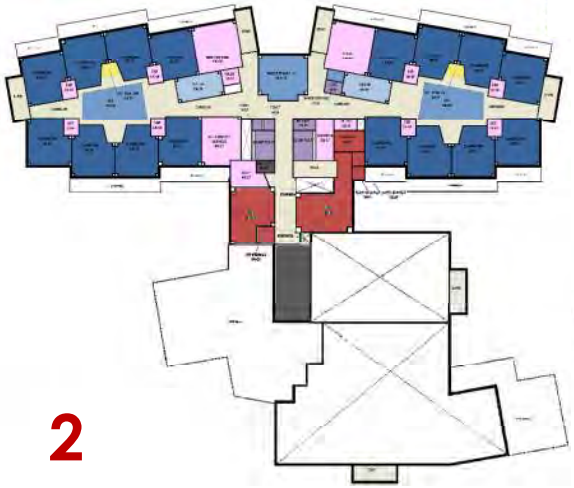
	PROGRAM	DESIGN
PARKING	205	221
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	15
CAR QUEUE	50	40
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	3
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	1 + PK-K DROP
OUTDOOR LEARNING	2	3

13,330 SF – 100' WETLAND SETBACK ZONE IMPACT – BUILDING/ DRIVE

preliminary design

OPTION C3.1 – MASSING MODEL ON SITE TOPOGRAPHY

3



2

1

OPTION C3.1

- PK-5 (1030)

preliminary design

OPTION C3.1

PROS

- Good drop-off design for busses and cars
- Good solar orientation
- Admin has commanding view of site
- Compact, logical plan
- Shared spaces and Maker central
- Dynamic extended learning spaces touch nearly all classrooms

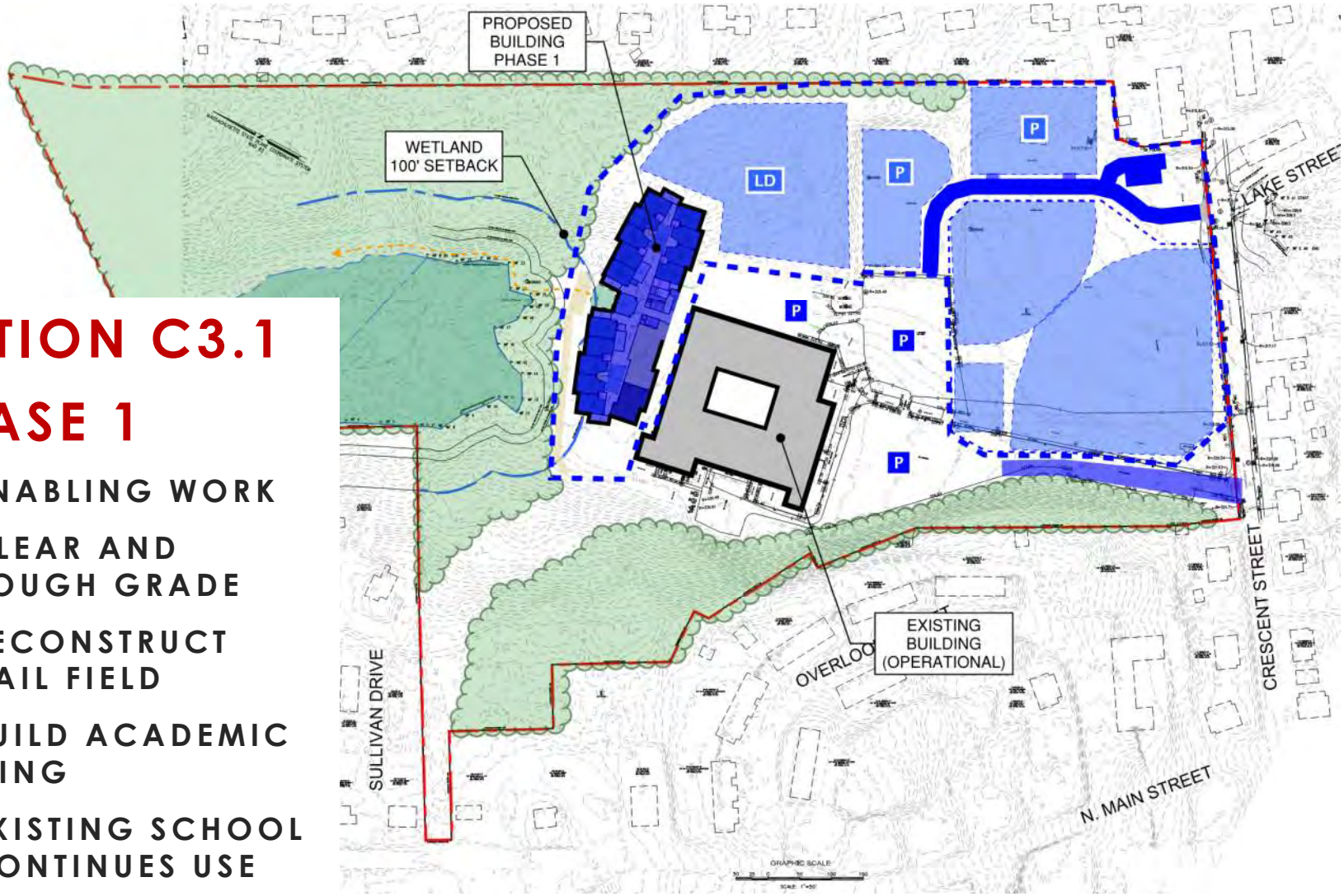
CONS

- Phased takedown project increases duration
- New construction close to existing building
- Circulation only around 4/5 of building
- Upper playground distant from building

OPTION C3.1

PHASE 1

- ENABLING WORK
- CLEAR AND ROUGH GRADE
- RECONSTRUCT VAIL FIELD
- BUILD ACADEMIC WING
- EXISTING SCHOOL CONTINUES USE

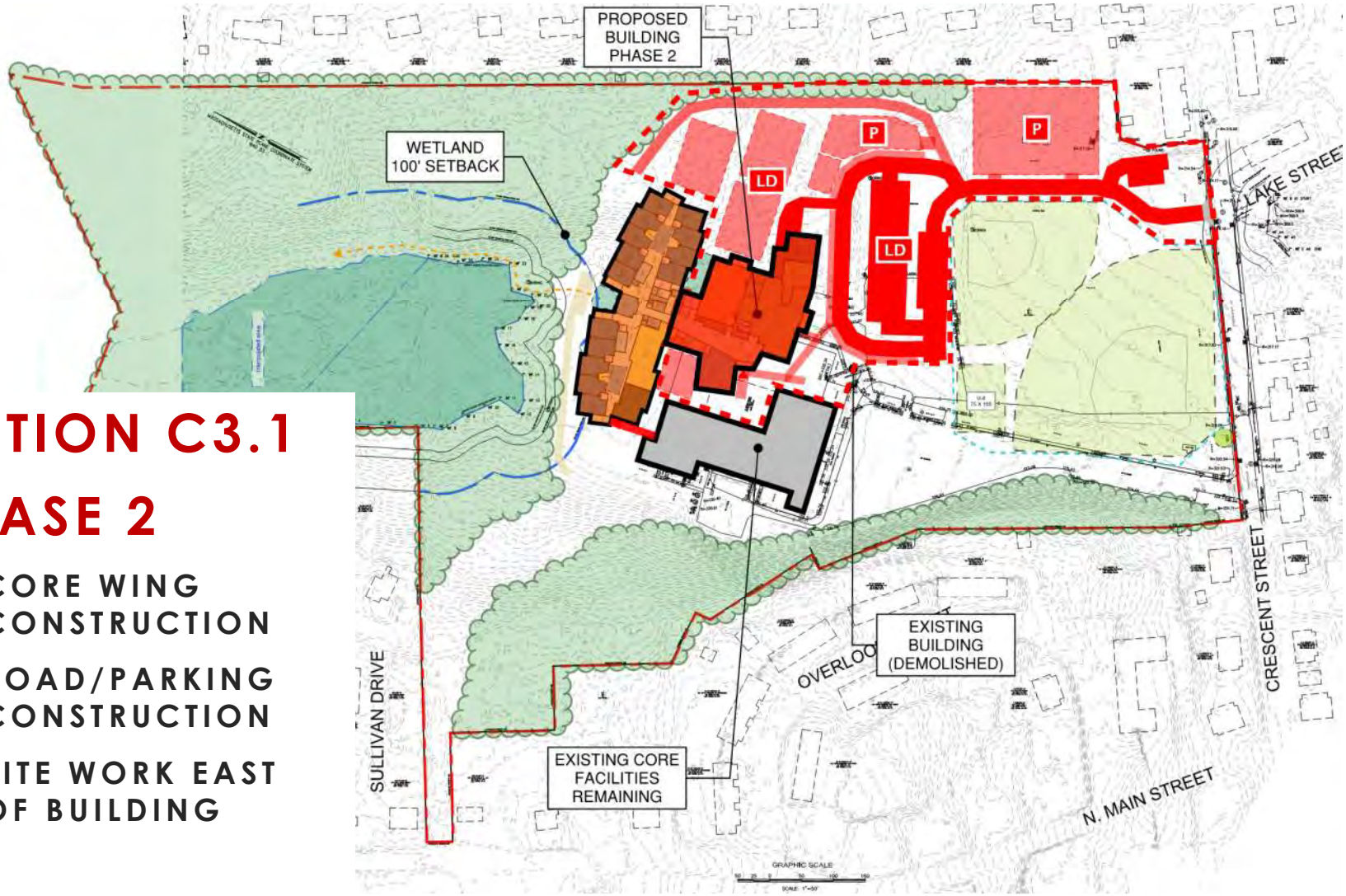


preliminary design

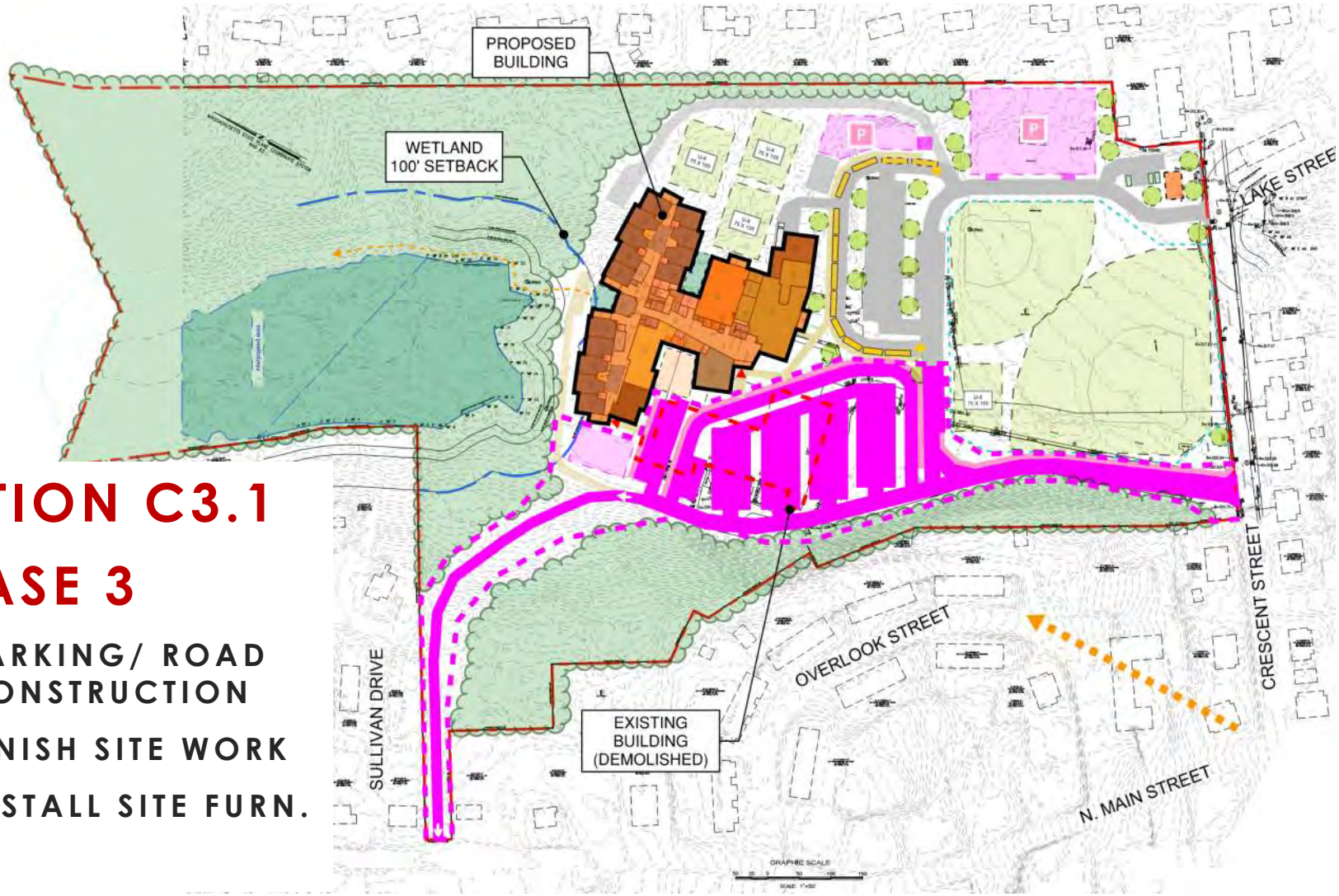
OPTION C3.1

PHASE 2

- CORE WING CONSTRUCTION
- ROAD/PARKING CONSTRUCTION
- SITE WORK EAST OF BUILDING



preliminary design

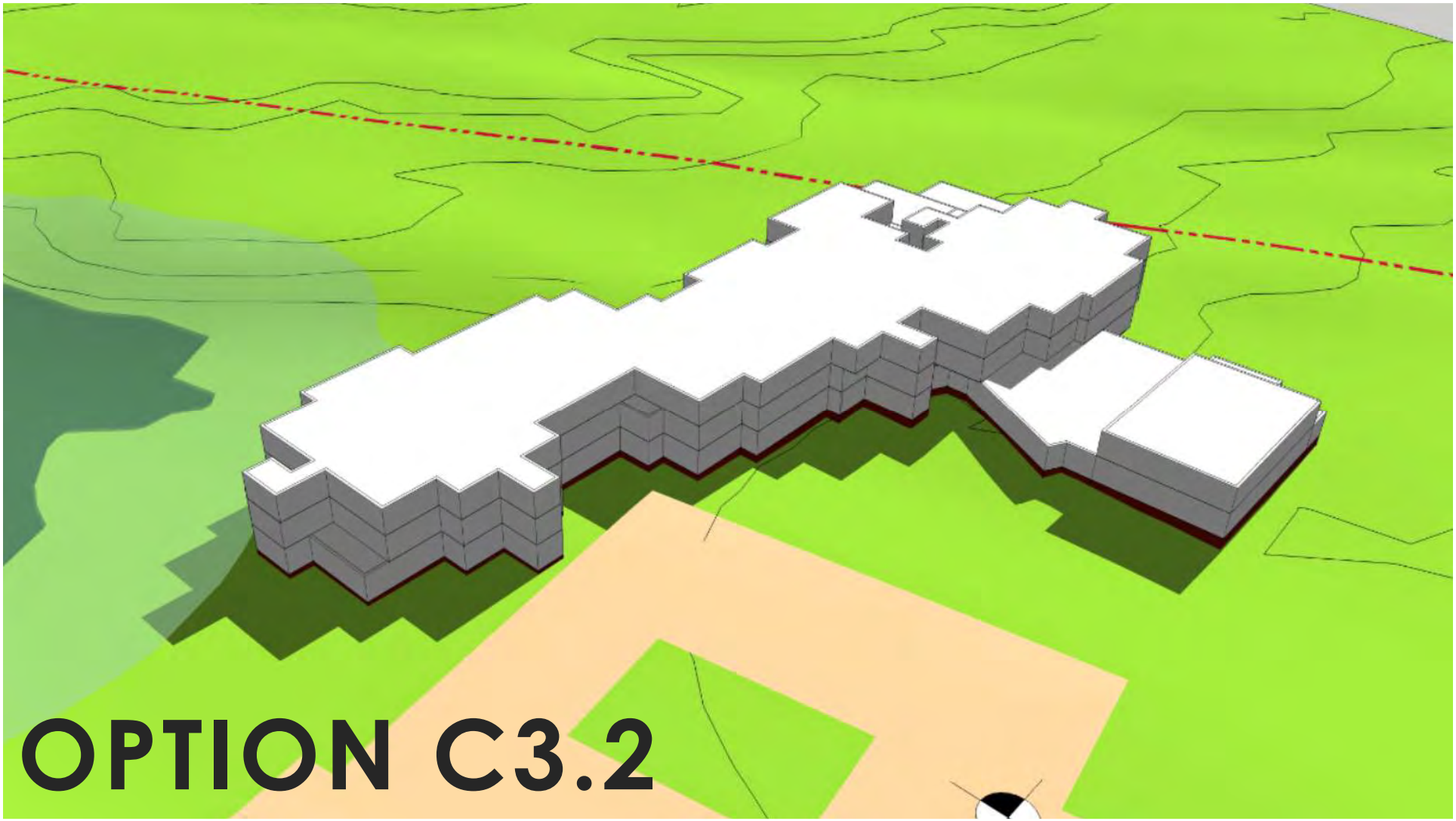


OPTION C3.1

PHASE 3

- PARKING/ ROAD CONSTRUCTION
- FINISH SITE WORK
- INSTALL SITE FURN.

preliminary design

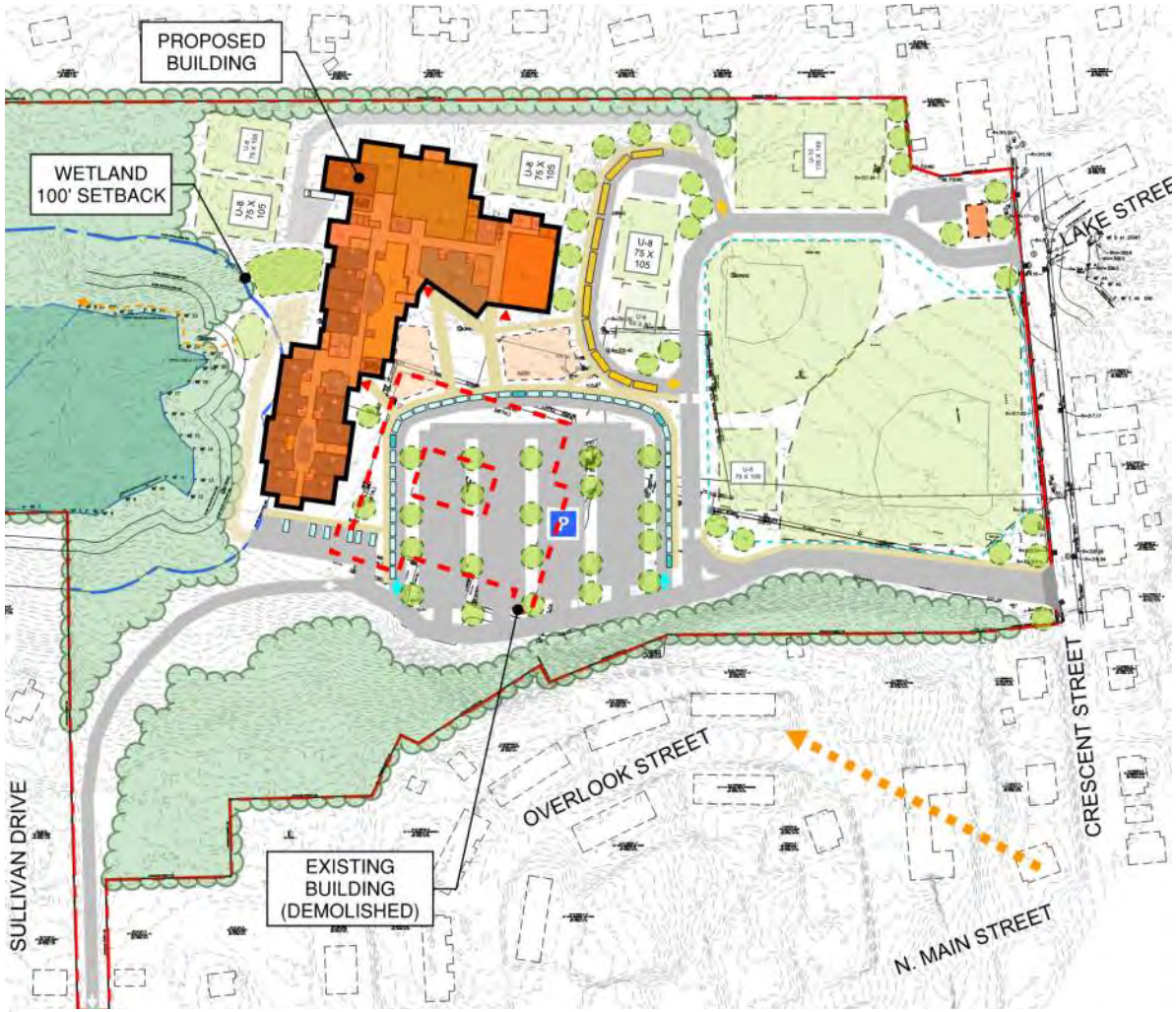

OPTION C3.2

OPTION C3.2

- GRADES PK-5 (1,030)
- NEW BUILD
- 3 STORIES
- REAR OF SITE
- 3 YEAR DURATION

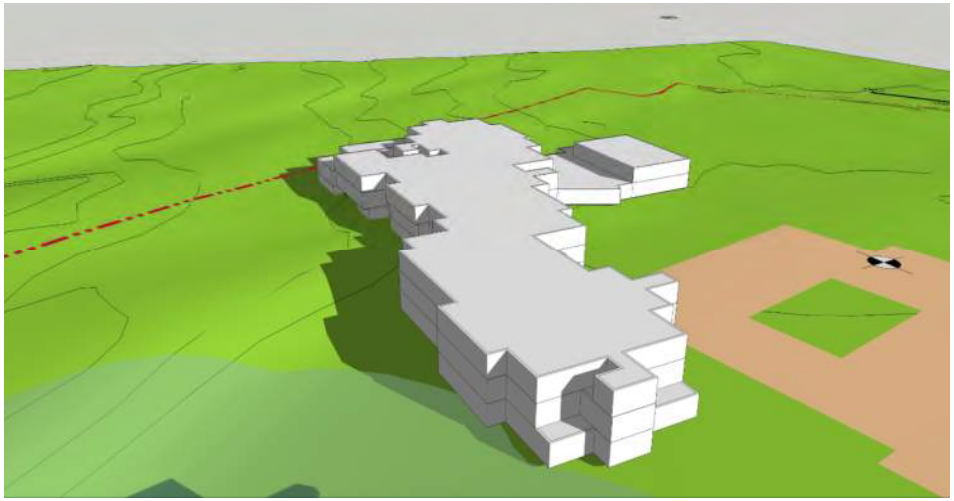
SITE PROGRAM

	PROGRAM	DESIGN
PARKING	205	211
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	18
CAR QUEUE	50	40
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	5
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	1 + PK-K DROP
OUTDOOR LEARNING	2	3

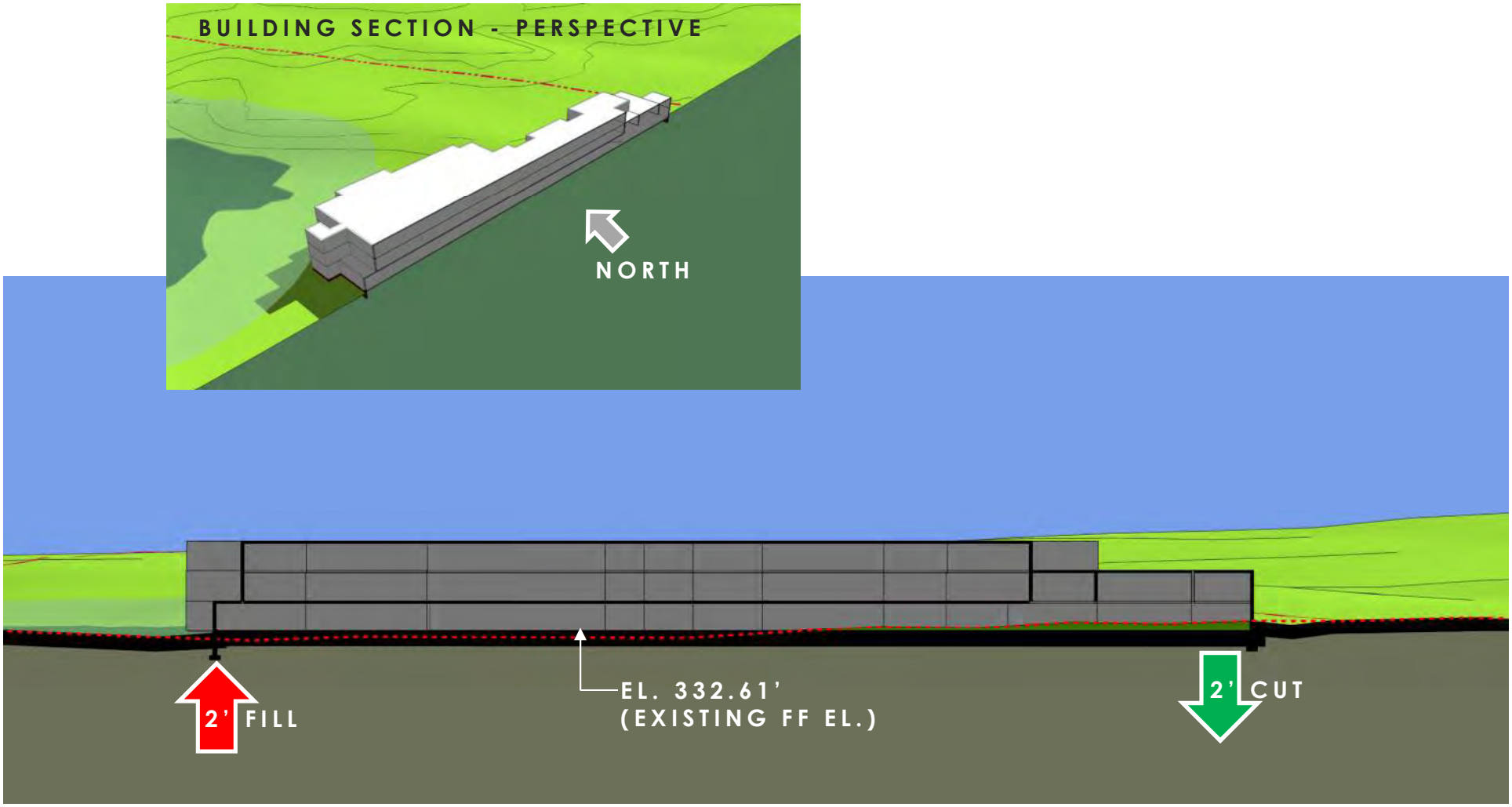


14,200 SF – 100' WETLAND SETBACK ZONE IMPACT – BUILDING/ DRIVE

preliminary design



OPTION C3.2 – MASSING MODEL ON SITE TOPOGRAPHY



OPTION C3.2 – EAST-WEST BUILDING SECTION ON SITE TOPOGRAPHY

3

2

1

preliminary design

OPTION C3.2

- PK-5 (1030)

OPTION C3.2

PROS

- Clean replacement project allows Balmer to function
- Good drop-off design for busses and cars
- Optional extra play fields
- Admin has commanding view of site
- Good solar orientation

CONS

- Circulation only around 4/5 of building
- Upper playground distant from building
- Length of building might be imposing

OPTION C3.3

OPTION C3.3

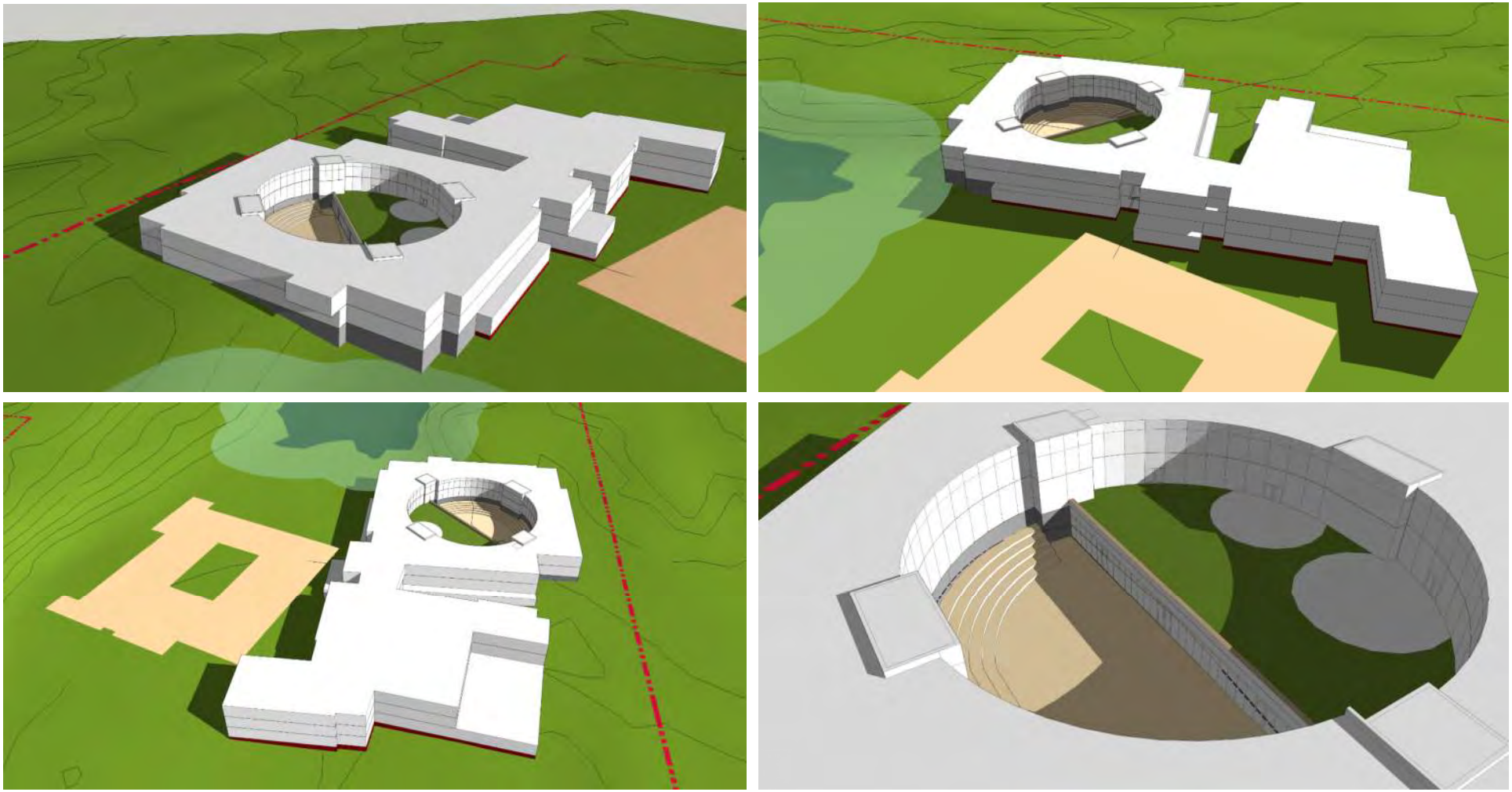
- GRADES PK-5 (1,030)
- NEW BUILD
- 3 STORIES, STEPPED
- REAR/EAST EDGE OF SITE
- 3 YEAR DURATION

SITE PROGRAM

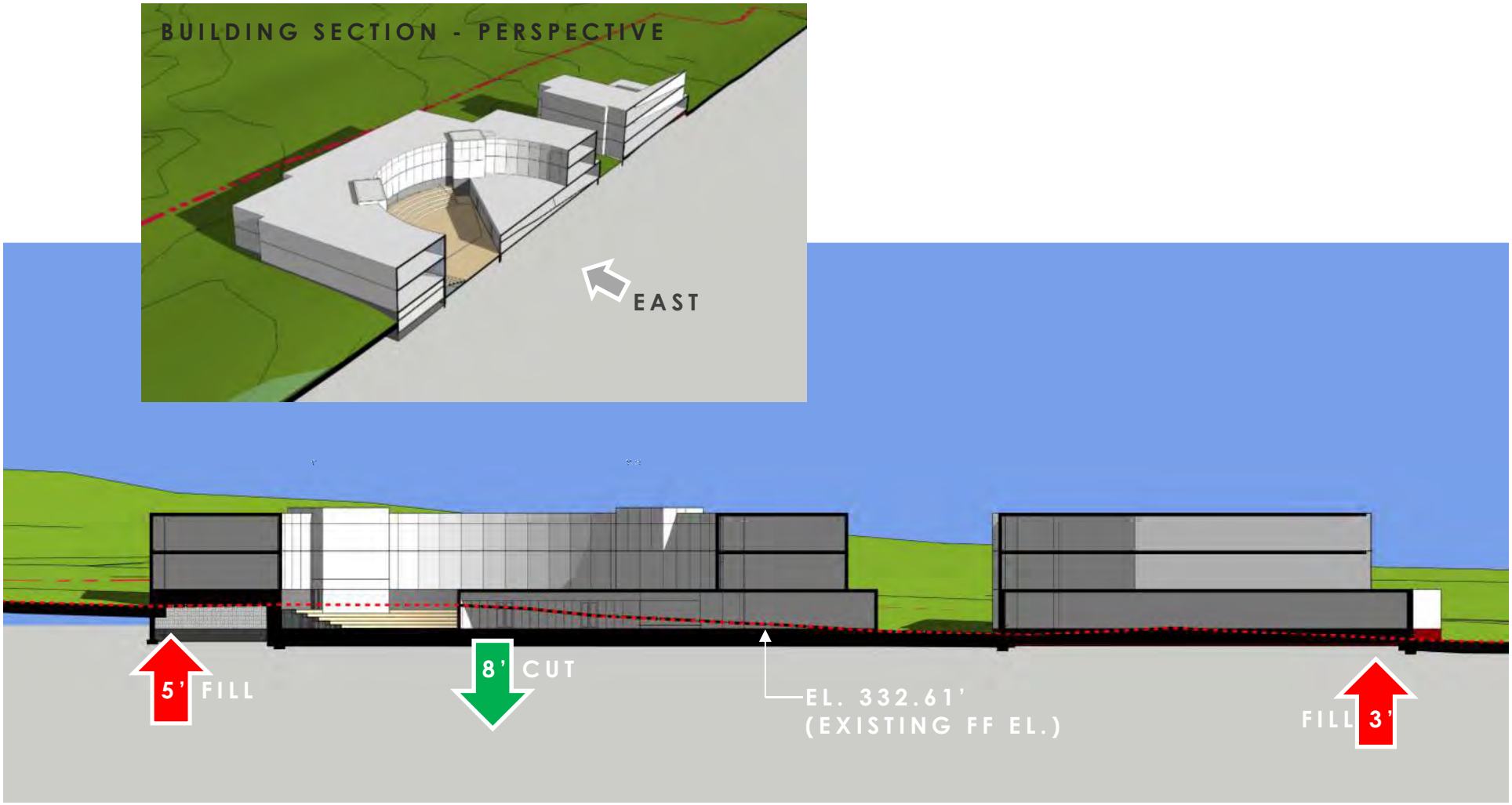
	PROGRAM	DESIGN
PARKING	205	212
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	20
CAR QUEUE	50	38
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	3
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	USE PK-K DROP
OUTDOOR LEARNING	2	3

12,500 SF – 100' WETLAND SETBACK ZONE IMPACT – FIELDS ONLY

preliminary design



OPTION C3.3 – MASSING MODEL ON SITE TOPOGRAPHY



OPTION C3.3 – NORTH-SOUTH BUILDING SECTION ON SITE TOPOGRAPHY

3

2

1

preliminary design

OPTION C3.3

- PK-5 (1,030)

OPTION C3.3

PROS

- Clean replacement project allows Balmer to function
- Built into hillside to save earthwork
- Good drop-off design for busses and cars
- Media center central, 2nd floor
- Dynamic, central outdoor learning space
- Arts plaza
- Extended learning spaces touch nearly all classrooms

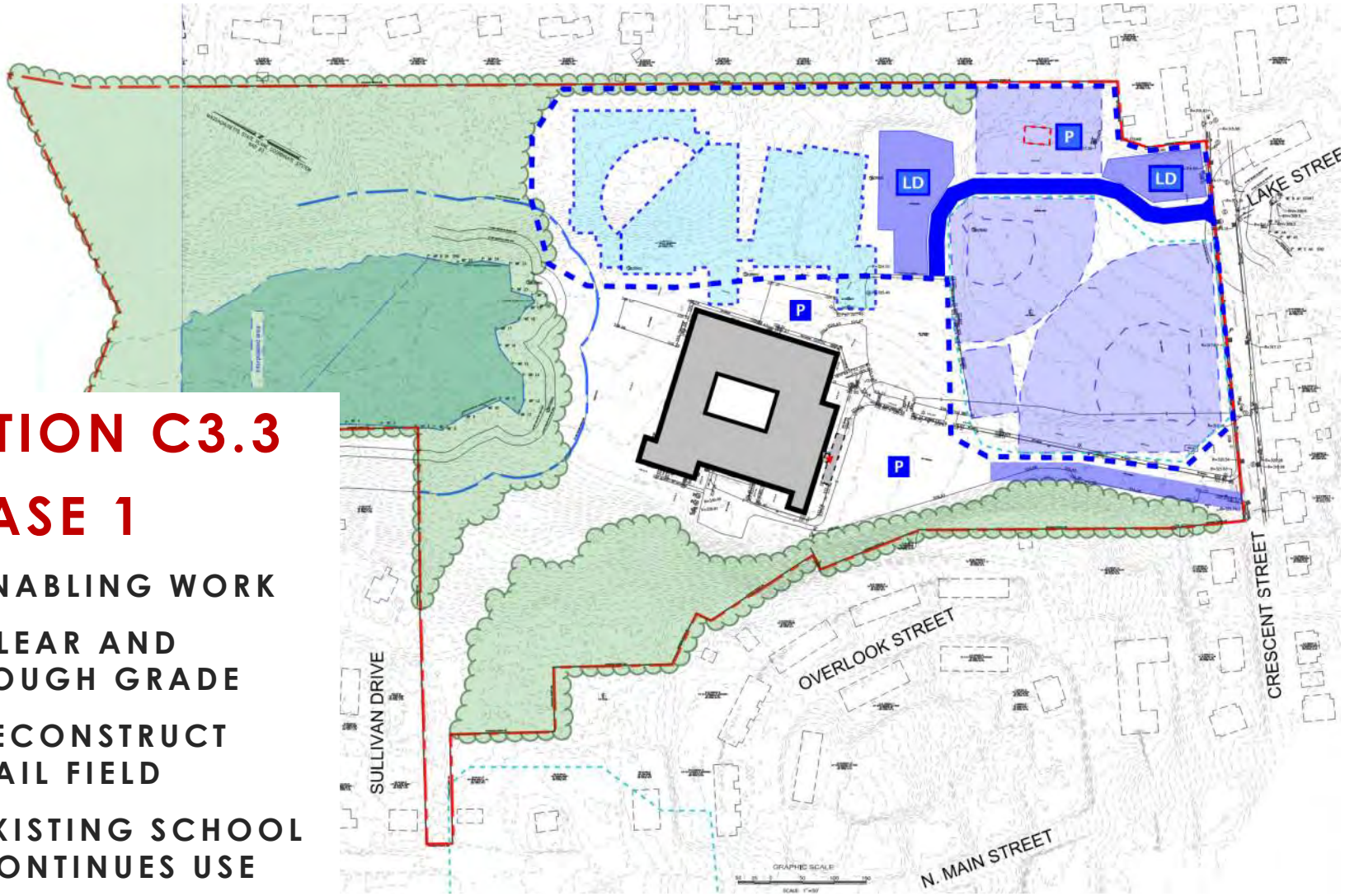
CONS

- Circulation only around 4/5 of building
- Admin has view of parking and car drop, but not rest of site

OPTION C3.3

PHASE 1

- ENABLING WORK
- CLEAR AND ROUGH GRADE
- RECONSTRUCT VAIL FIELD
- EXISTING SCHOOL CONTINUES USE



preliminary design

OPTION C3.3

PHASE 2

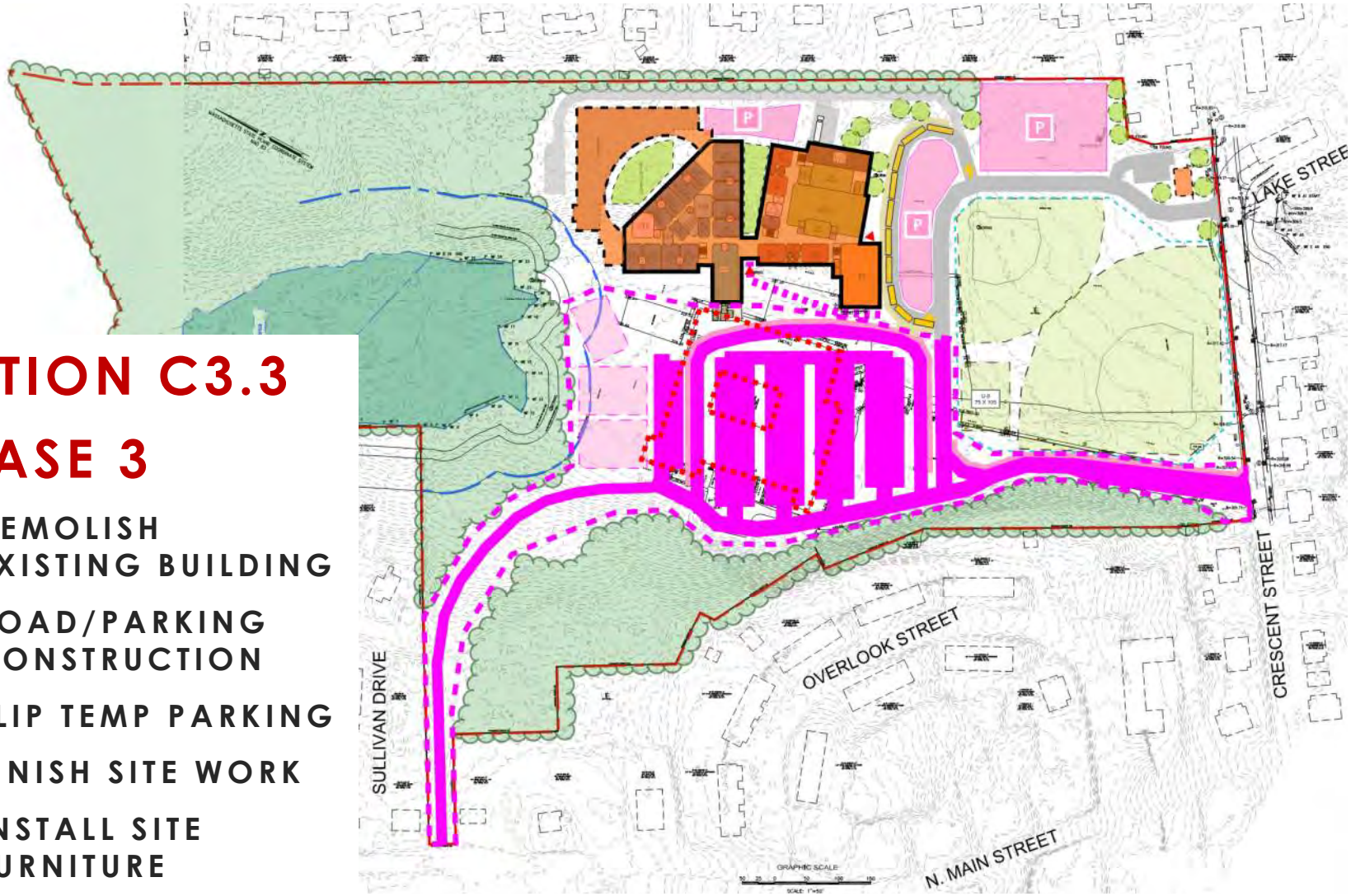
- BUILDING CONSTRUCTION
- ROAD/PARKING CONSTRUCTION
- SITE WORK AROUND BUILDING

preliminary design

OPTION C3.3

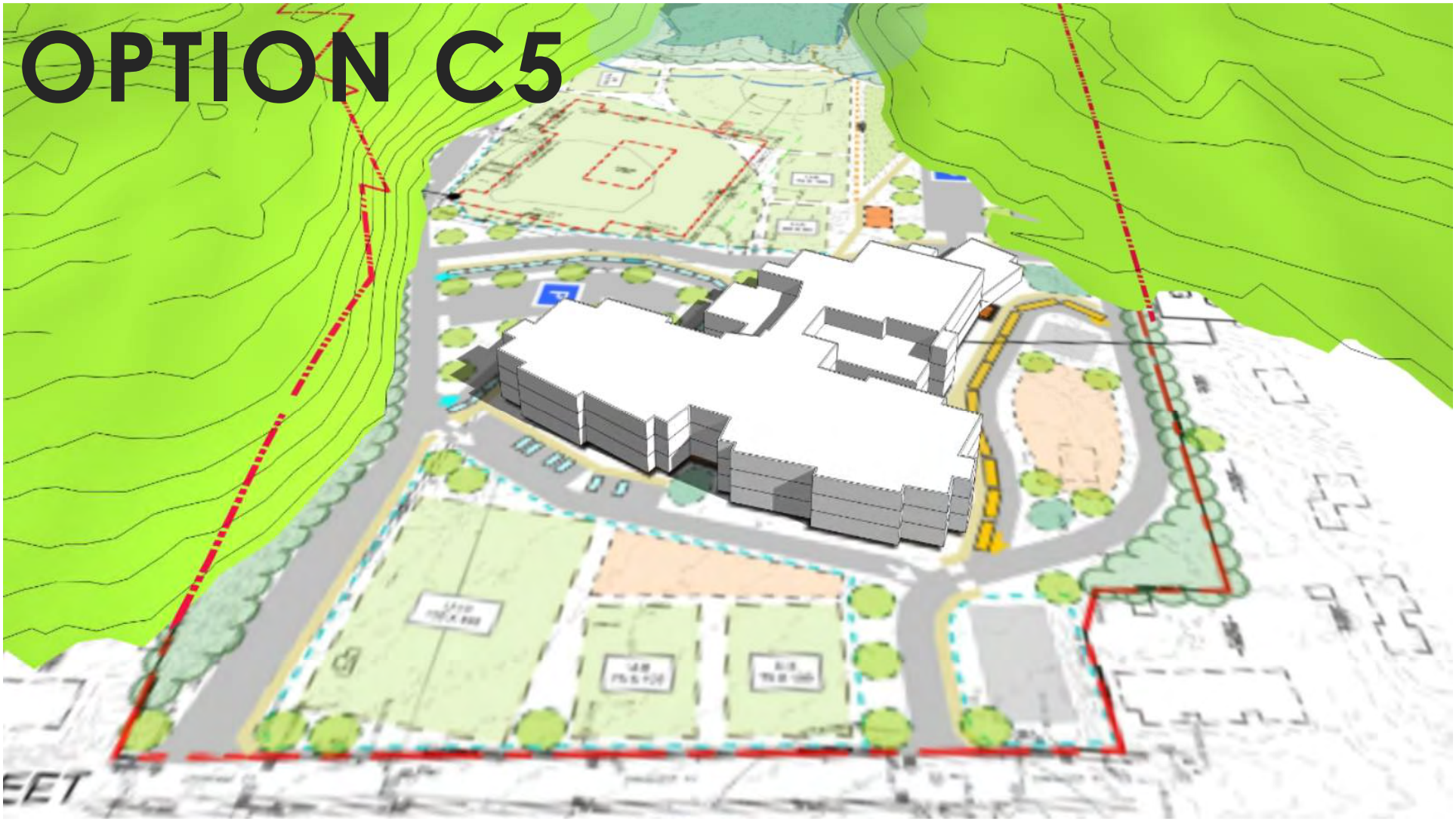
PHASE 3

- DEMOLISH EXISTING BUILDING
- ROAD/PARKING CONSTRUCTION
- FLIP TEMP PARKING
- FINISH SITE WORK
- INSTALL SITE FURNITURE



preliminary design

OPTION C5



OPTION C5

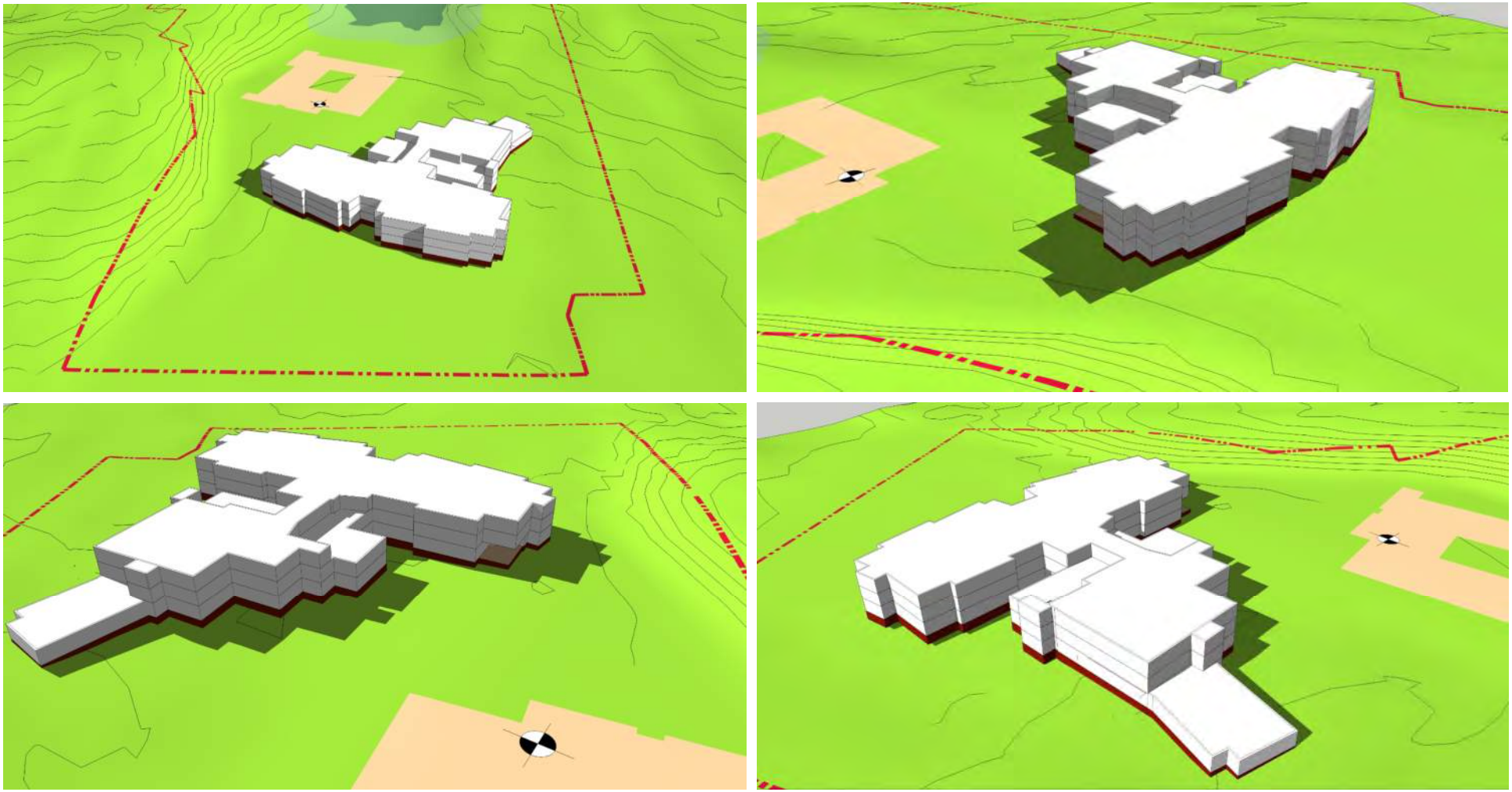
- GRADES PK-5 (1,030)
- NEW BUILD
- 3 STORIES
- FRONT OF SITE
- 3 YEAR DURATION

SITE PROGRAM

	PROGRAM	DESIGN
PARKING	205	209
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	18
CAR QUEUE	50	33
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	4
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	2 + PK-K DROP
OUTDOOR LEARNING	2	4

11,100 SF – 100' WETLAND SETBACK ZONE IMPACT – FIELDS ONLY

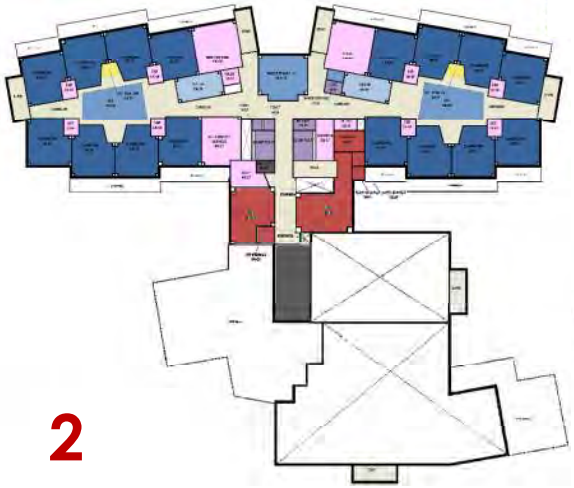
preliminary design



OPTION C3.3 – MASSING MODEL ON SITE TOPOGRAPHY

PLANS MIRRORED

3



2

1

OPTION C5

- PK-5 (1030)

preliminary design

OPTION C5

PROS

- Clean replacement project allows Balmer to function
- Least amount of earthwork
- Best solar orientation

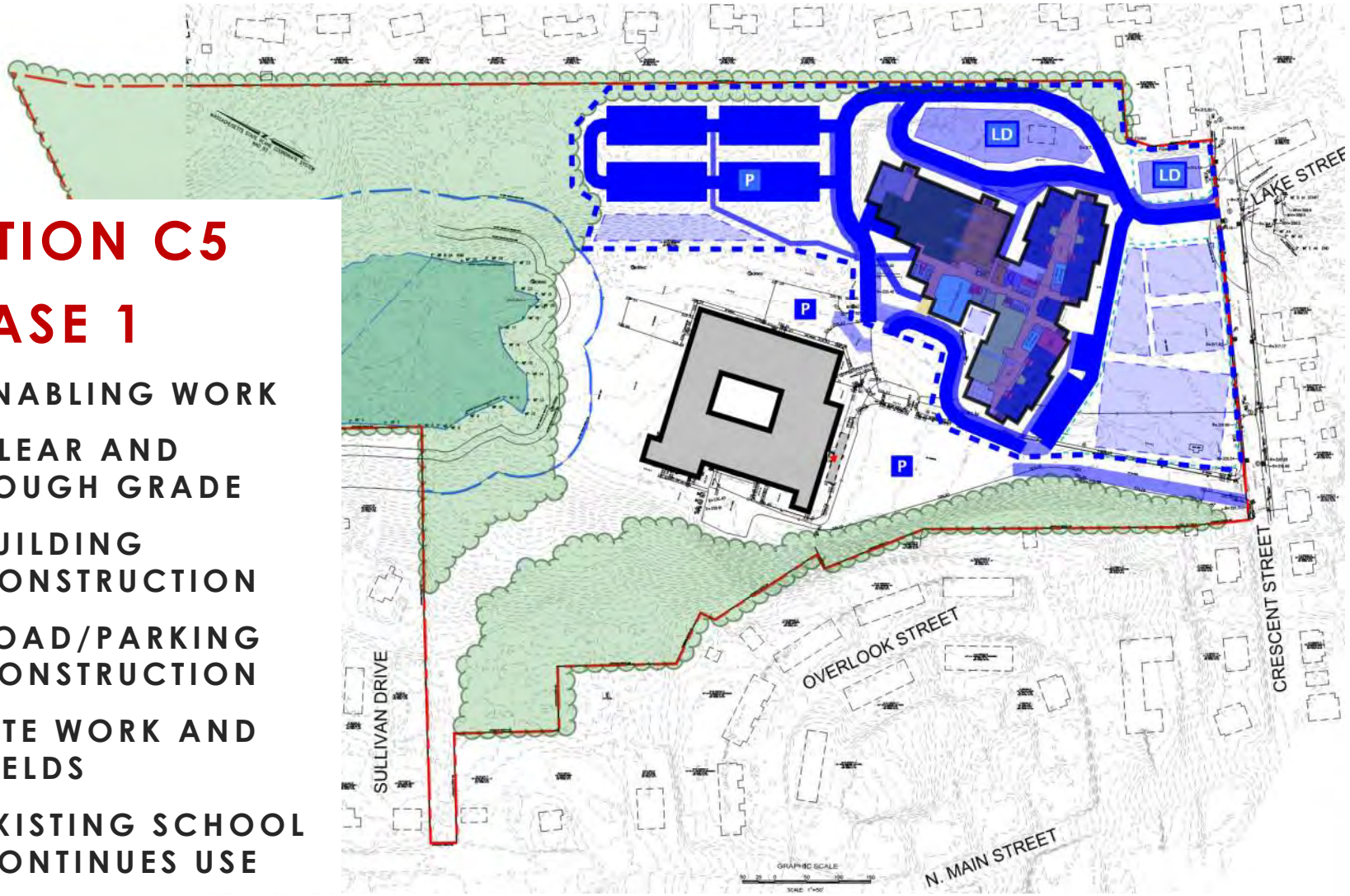
CONS

- Circulation only around 4/5 of building
- Drop-offs tight for busses and cars
- Building entrance "around back"
- Scale of building on Crescent Street

OPTION C5

PHASE 1

- ENABLING WORK
- CLEAR AND ROUGH GRADE
- BUILDING CONSTRUCTION
- ROAD/PARKING CONSTRUCTION
- SITE WORK AND FIELDS
- EXISTING SCHOOL CONTINUES USE



preliminary design

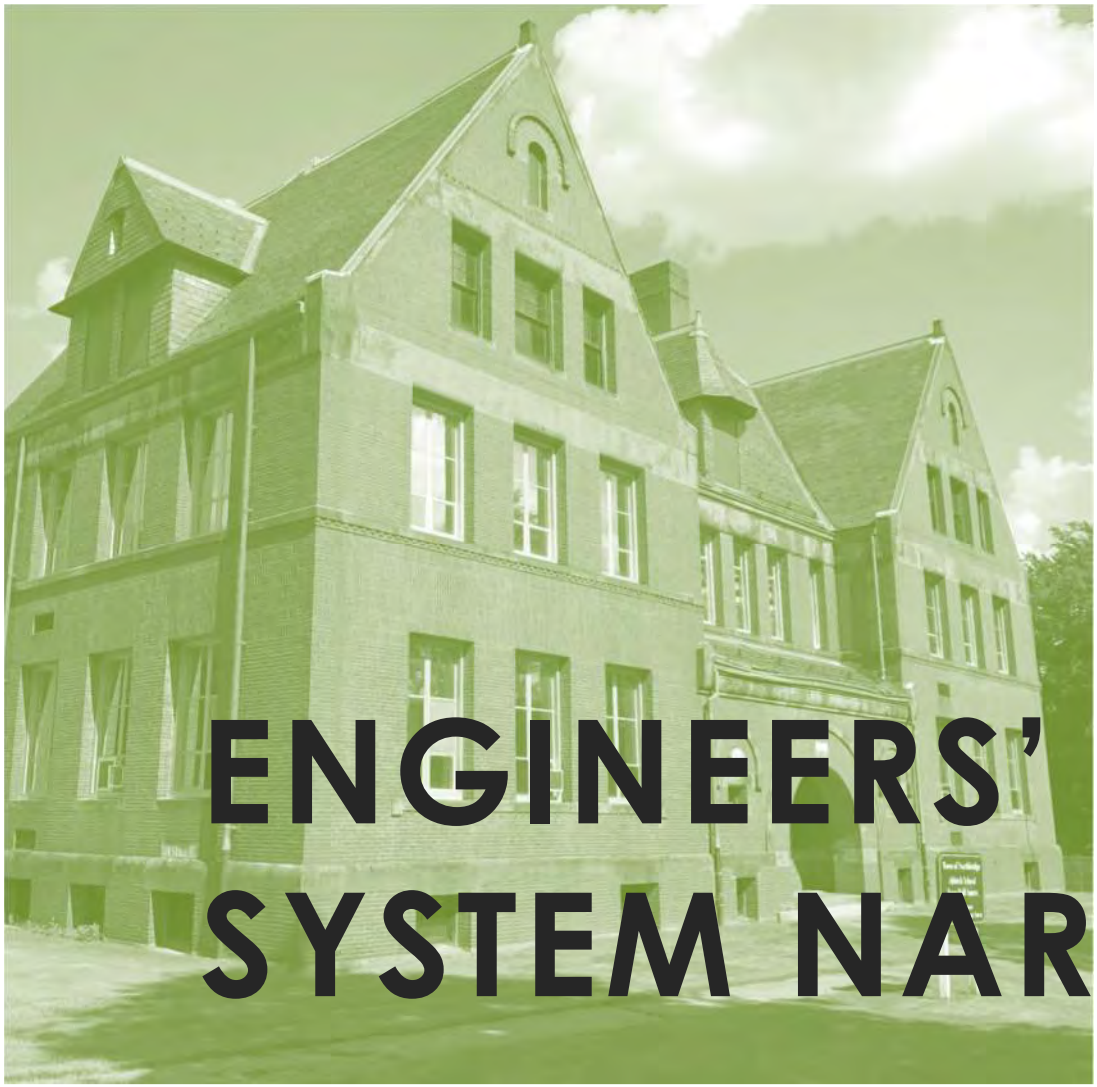
OPTION C5

PHASE 2

- ROAD/PARKING CONSTRUCTION
- NEW VAIL FIELD CONSTRUCTION
- SITE WORK
- INSTALL SITE FURNITURE

preliminary design


QUESTIONS?
D&W
DORE & WHITTIER
ARCHITECTS, INC.



ENGINEERS' BUILDING SYSTEM NARRATIVES

PROPOSED STRUCTURAL SYSTEMS - NEW

- Substructure
  - Reinforced cast-in-place concrete foundation walls and concrete slab-on-grade
- Superstructure
  - Light-weight concrete composite metal deck slab spanning between steel girders and columns
  - Galvanized, corrugated metal deck roof; acoustic deck at Gym, Media Center and Cafeteria
- Vertical Framing
  - Lateral load resisting system - concentric braced frames of structural steel members or reinforced masonry sheer walls (Gym)

PROPOSED STRUCTURAL SYSTEMS –RENO

- Phased gut renovation
  - Additional reinforced masonry shear walls
  - Reinforcement of existing roof framing to support new mechanical systems
  - Existing masonry walls – clipped to existing structure

PROPOSED MECHANICAL SYSTEMS

- Code- and LEED for Schools v4- Compliant
- High-efficiency dual-fuel oil/natural gas fired boiler plant
- Dehumidification Displacement Ventilation in Classrooms, Gym, Lobby, Cafetorium, Corridors
- VAV terminal boxes per each zone
- Hydronic supplemental space heating via ceiling radiant panels
- Full A/C in Admin, Nurse, Media Center, Electric and IT rooms
- Optional A/C in cafetorium?
- Kitchen and Custodial areas served by H&V units

PROPOSED ELECTRICAL SYSTEMS

- National Grid will supply power to transformer
- Typical lighting fixtures – pendant mounted LED indirect luminaries with dimmable or dual-level switching
- Occupancy and daylight dimming sensors
- Gymnasium – direct fixtures
- Cafeteria/Media Center – combo of pendant direct/indirect fixtures and linear recessed fixtures
- Direct Digital Control (DDC) System
- "Solar-Ready" Roof – planned and equipped for PV system

PROPOSED ELECTRICAL SYSTEMS

- Emergency Power System - Generator
- Fire Alarm system – smoke detectors, sprinkler system
- Lightning protection system
- Uninterruptable Power System (UPS)
- Distributed antenna system (DAS)
- In-building 2-way radio system communication

PROPOSED PLUMBING SYSTEMS

- New gas service
- New sanitary and storm system service
- New 4” domestic water service
- New high-efficiency gas-fired domestic hot water plant with recirculation system
- New water closets, lavatories, urinals, water coolers, floor sinks and drains; handicap accessible fixtures
- New roof drains and overflow drains

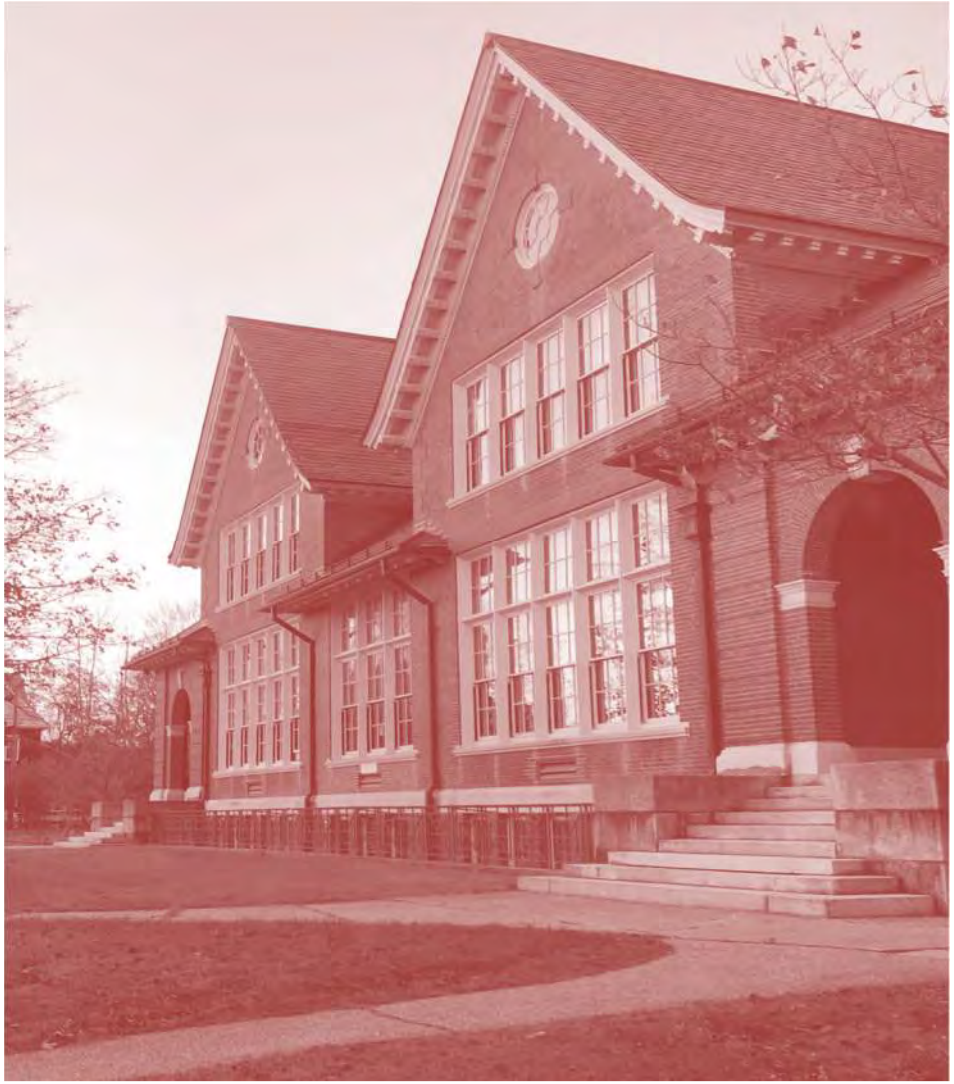
PROPOSED FIRE PROTECTION SYSTEM

- New 6” sprinkler service
- Wet sprinkler system to serve entire building-zoned by floor
- Standpipes with FD valves at each floor stairwell
- Ansul system at kitchen hoods

PROPOSED COMMUNICATIONS AND SECURITY SYSTEMS

- Voice and data - 100% wireless coverage
- LCD flat panel display or short-throw interactive projector in classrooms, media center, and conference rooms
- Telephone system with Voice over IP (VOIP)
- Public address and clock system
- Video/audio door intercom at main entry doors
- Integrated security system- intrusion detection, video surveillance, access control
- Digital Signage
- Sound system and projector in Gym and Cafeteria
- Speech reinforcement system at instructional spaces


QUESTIONS?
D&W
DORE & WHITTIER
ARCHITECTS, INC.

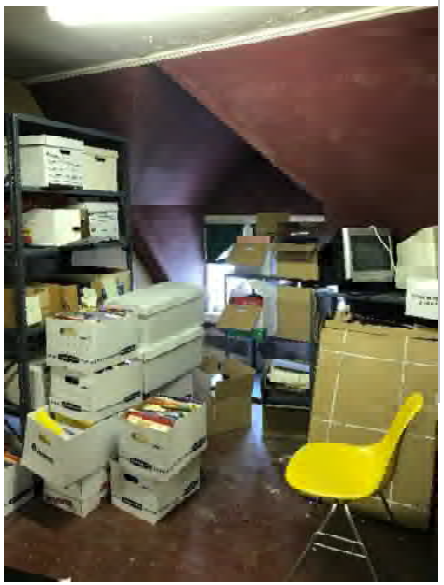


NORTHBRIDGE MIDDLE SCHOOL SPACE ANALYSIS UPDATE

DISTRICT ADMINISTRATION SPACE ANALYSIS

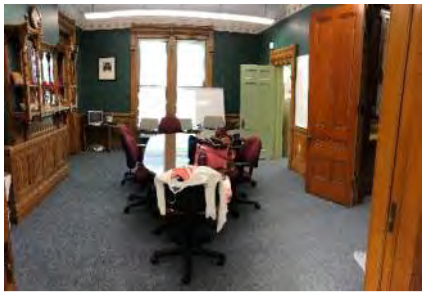
ASSESSMENT AND PROGRAM HIGHLIGHTS

- Stately Residential Building, but ill-equipped for office use
- Serious Issues: Client Privacy, Handicapped Accessibility, meeting space, file space, safe storage space for vital records, indoor environment (hot/cold), no sprinkler, possible structural concerns…



RESULTS:

Existing space, totals	4,718 Net SF
Recommended proposed space, totals	5,485 Net SF
Proposed total required space	8,228 Gross SF



space planning

MIDDLE SCHOOL CAPACITY ANALYSIS

EXISTING SPACE UTILIZATION:

Existing Overall Building area:	176,340 GSF
District Maintenance/Storage @1.56 GF	- 15,366 GSF
Effective Middle School use:	160,974 GSF
Existing MS Educational Program area:	103,427 NSF

1.56 Grossing Factor (ratio of gross to net SF) – indicates an older, less-space-efficient building.

MSBA benchmark is (1.5) .

MIDDLE SCHOOL CAPACITY ANALYSIS

RECONFIGURATION - CASE 1:

Keep existing District Maintenance/Storage

Existing Effective MS Area:	103,427 NSF
← 5th Grade moves to Balmer	- 10,368 NSF
→ District Admin Offices move to MS	+ 5,485 NSF
Delta (Additional Capacity)	*4,883 NSF*

CONCLUSION: THIS SCENARIO WOULD WORK

MIDDLE SCHOOL CAPACITY ANALYSIS

RECONFIGURATION - CASE 2:

Keep existing District Maintenance/Storage

Existing Effective MS Area:	103,427 NSF
Move classes out of 1905 Wing, take out of service	- 15,926 NSF
Existing MS Area without 1905 wing:	87,501 NSF
← 5th Grade moves to Balmer	- 10,368 NSF
→ District Admin Offices move to MS	+ 5,485 NSF
Remaining Middle School Area	82,618 NSF
Grade 6-8 Program Area	***93,059 NSF***

CONCLUSION: THIS SCENARIO WOULD NOT WORK

MIDDLE SCHOOL CAPACITY ANALYSIS

RECONFIGURATION - CASE 3:

Remove existing District Maintenance/Storage	+ 9,850 NSF
Existing Effective MS Area including reclaimed Maint. areas:	113,277 NSF
Move classes out of 1905 Wing, take out of service	- 15,926 NSF
Existing MS Area without 1905 wing:	97,351 NSF
← 5th Grade moves to Balmer	- 10,368 NSF
→ District Admin Offices move to MS	+ 5,485 NSF
Remaining Middle School Area	92,468 NSF
Grade 6-8 Program Area	*93,059 NSF*

CONCLUSION: THIS SCENARIO *COULD* WORK

space planning

MIDDLE SCHOOL CAPACITY ANALYSIS

CONCLUSIONS:

- Moving 5th grade to Balmer will better align this age group with their peers educationally.
- Moving 5th grade out of the MS will create other realigning opportunities to right-size and match classes and spaces.
- This space analysis is high-level, based on gross and net area (SF) and does not address detail-level program and space realities in the building.
- The District should evaluate the pros and cons of Case 3 if closing the 1905 wing is a high priority.

REVIEW OF CONSTRUCTION DELIVERY METHOD

CONTRACTING STRUCTURE

CHAPTER 149 - GENERAL CONTRACTOR, DESIGN-BID-BUILD	CHAPTER 149A - CONSTRUCTION MANAGER AT RISK (CMR)
Single-phase fixed price contract	Two-phase "cost plus" contracting method
Owner procures OPM, Designer	Owner procures OPM, Designer
After design completed, Bids solicited from qualified GCs	Before design prepared, Owner retains CMR through qualifications-based selection process
Bid solicitation requires single Lump Sum Bid Price to complete all the work	CMR provides constructability/budget review during design, then constructs the project
Owner must award contract to the Lowest Responsible Eligible Bidder	CMR contract price = Cost of the Work + General Conditions + Negotiated CM Fee
	CMR and Owner agree on Guaranteed Maximum Price (GMP) when design is at least 60% complete. CMR paid the lesser of the Contract Price or the GMP (i.e. Savings returned to Owner)

ADVANTAGES

CHAPTER 149 - GENERAL CONTRACTOR, DESIGN-BID-BUILD	CHAPTER 149A - CONSTRUCTION MANAGER AT RISK (CMR)
Competitive Bidding should produce the best available price	Qualifications-based procurement allows Owner to select CMR most capable of constructing the project
Risk for constructing the project delineated in the documents is entirely on the GC	CMR works with designer to identify design conflicts and omissions prior to construction. Design conflicts/omissions may lead to schedule and cost increases; CMR's involvement reduces this likelihood. CMR helps design project phasing approach.
The Work and schedule to complete it are narrowly defined; simplified project should yield simplified management	CMR process is flexible and provides Owner the ability to pursue alternate methods such as fast track/ early design packages, before design entirely completed
	+2% MSBA reimbursement incentive available

DISADVANTAGES

CHAPTER 149 - GENERAL CONTRACTOR, DESIGN-BID-BUILD	CHAPTER 149A - CONSTRUCTION MANAGER (CM)-AT-RISK
GC not available to help identify design conflicts and omissions prior to construction. Design conflicts/omissions may lead to schedule and cost increases.	CMR is reimbursed for cost of the work and paid a fee as compensation, placing risk for the cost of completing the work up to the GMP on the Owner
Designer must develop project phasing approach in isolation.	Filed Sub Bid process delay transfers most of the risk for the cost of completing the work to the Owner, and may reduce cost savings available through competition
"Lowest Responsible Eligible Bidder" may not be the best, most qualified choice to construct the project	Before design prepared, Owner retains CMR through qualifications-based selection process
Linear D-B-B process restricts Owner's ability to pursue alternate methods such as fast track/ early design packages	
No MSBA reimbursement incentive available	

CONCLUSIONS

CHAPTER 149 - GENERAL CONTRACTOR, DESIGN-BID-BUILD	CHAPTER 149A - CONSTRUCTION MANAGER (CM)-AT-RISK
Best suited for less complicated or less complex projects with straightforward designs	Best suited for more complicated/ complex projects designs, with factors such as phased construction, complex schedule or management challenges, or strict schedule limitations.


QUESTIONS?
D&W
DORE & WHITTIER
ARCHITECTS, INC.

NEXT STEPS

- Continue to refine building plan diagrams with Working Group, using the Education Plan and Space Summary Program.
- November , 2017 – Survey #2 issued
- December 6, 2017 – Community Forum #5 at NES Cafeteria
- December 19, 2017 – SBC to vote on Preferred Option
- January 3, 2018 – Submit Preferred Schematic Report (PSR) to MSBA
- May 9, 2018 – Submit Schematic Design (SD) documents to MSBA
- June 27, 2018 – MSBA board meeting to approve project to bring to voters
- Fall 2018 – Town Vote

process


THANK YOU
D&W
DORE & WHITTIER
ARCHITECTS, INC.