

# W. EDWARD BALMER SCHOOL

NORTHBRIDGE, MA  
SCHEMATIC DESIGN



## SCHOOL BUILDING COMMITTEE MEETING

JUNE 25, 2018



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

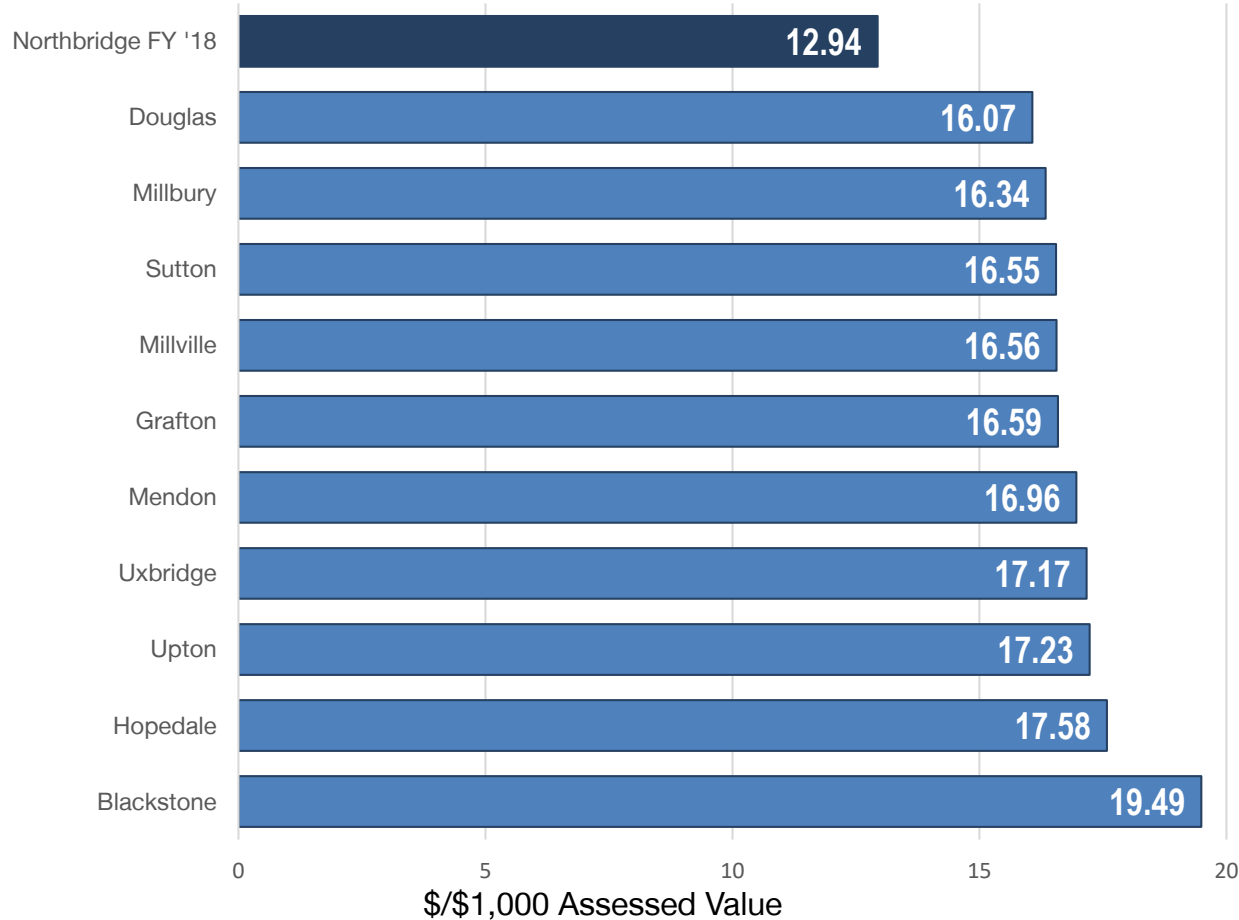


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- **Regional Tax Analysis**
  - **Neighborhood Meetings Recap**
    1. **Vail Field sizes**
    2. **Site Design - Stormwater**
    3. **Site Acoustical Design**
    4. **Selected Backyard Views**
    5. **Selected New Slides from Neighborhood Meetings**
    6. **Questions, Comments, Feedback**

# REGIONAL TAX ANALYSIS

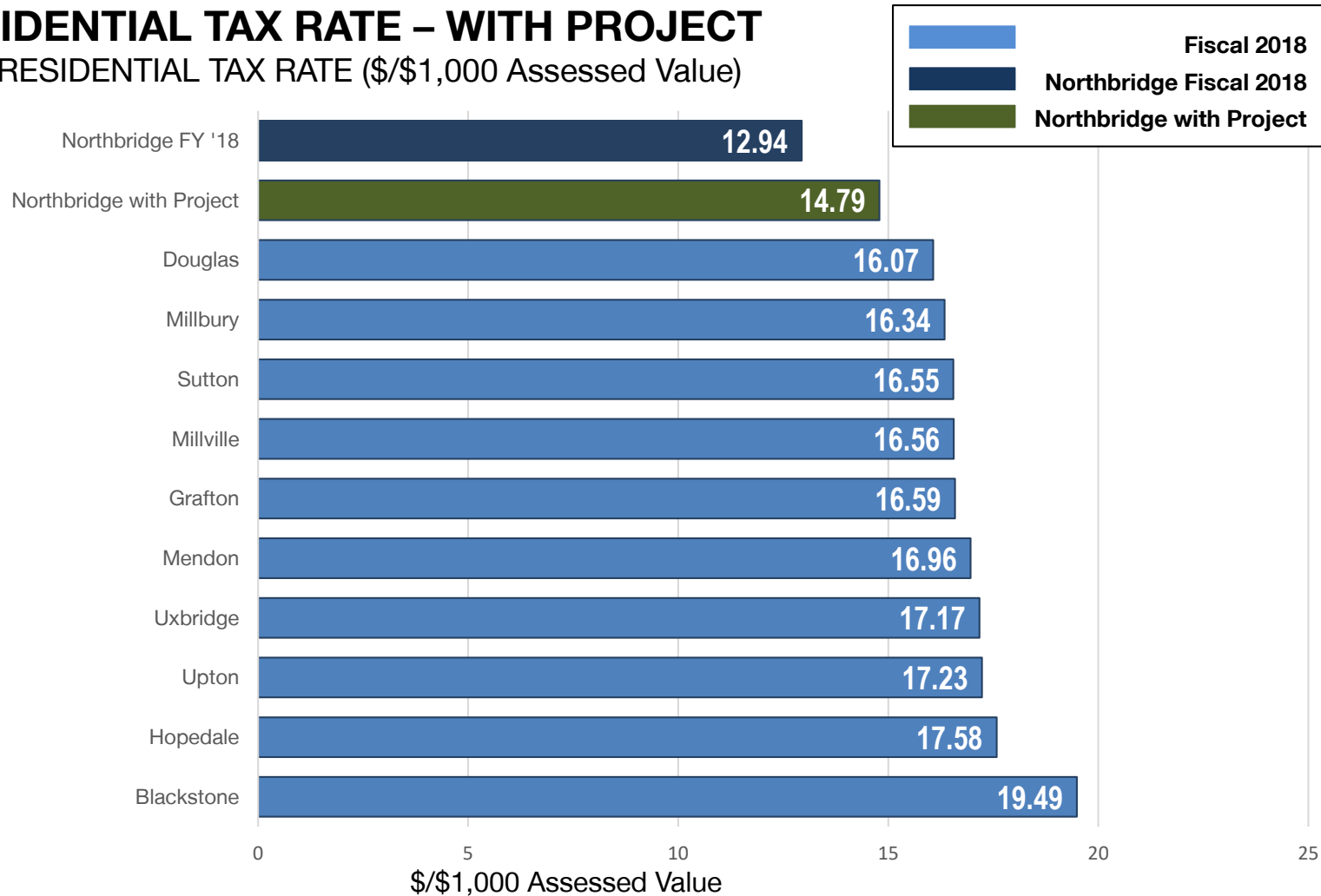
# RESIDENTIAL TAX RATE – CURRENT LEVEL

2018 RESIDENTIAL TAX RATE (\$/\$1,000 Assessed Value)



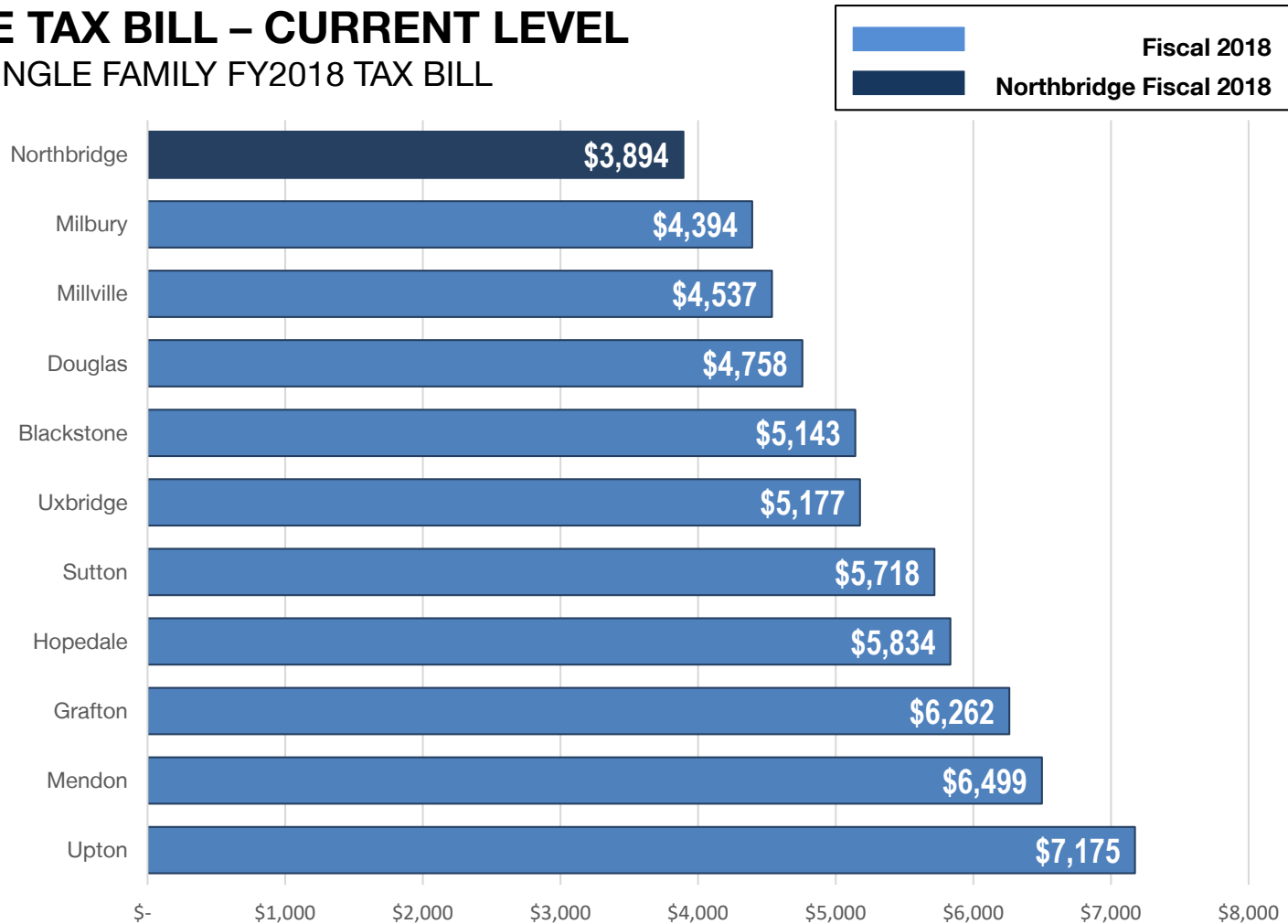
# RESIDENTIAL TAX RATE – WITH PROJECT

2018 RESIDENTIAL TAX RATE (\$/\$1,000 Assessed Value)



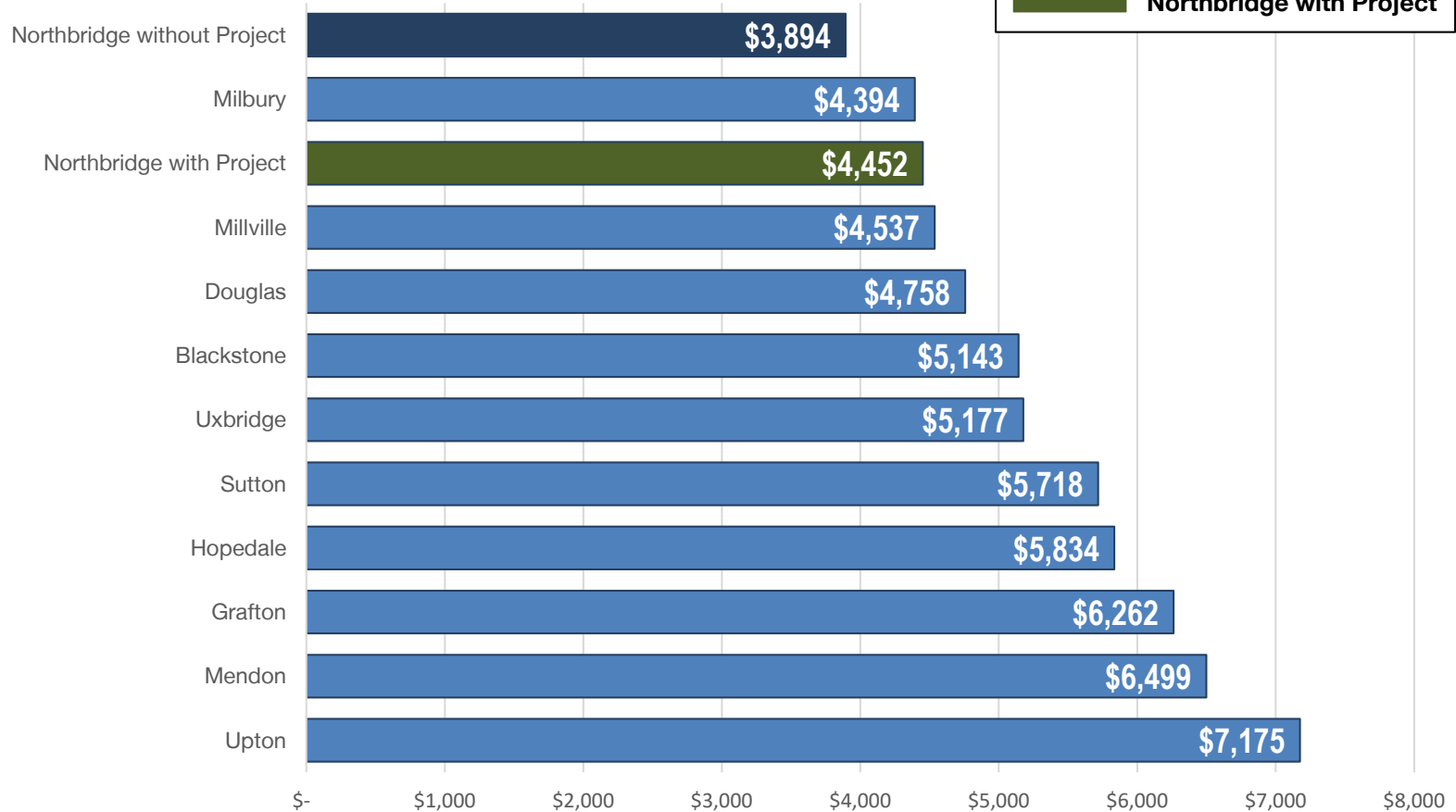
# AVERAGE TAX BILL – CURRENT LEVEL

## AVERAGE SINGLE FAMILY FY2018 TAX BILL



# AVERAGE TAX BILL – WITH PROJECT

## AVERAGE SINGLE FAMILY FY2018 TAX BILL



1.

**VAIL FIELD SIZES**





# SITE PLAN

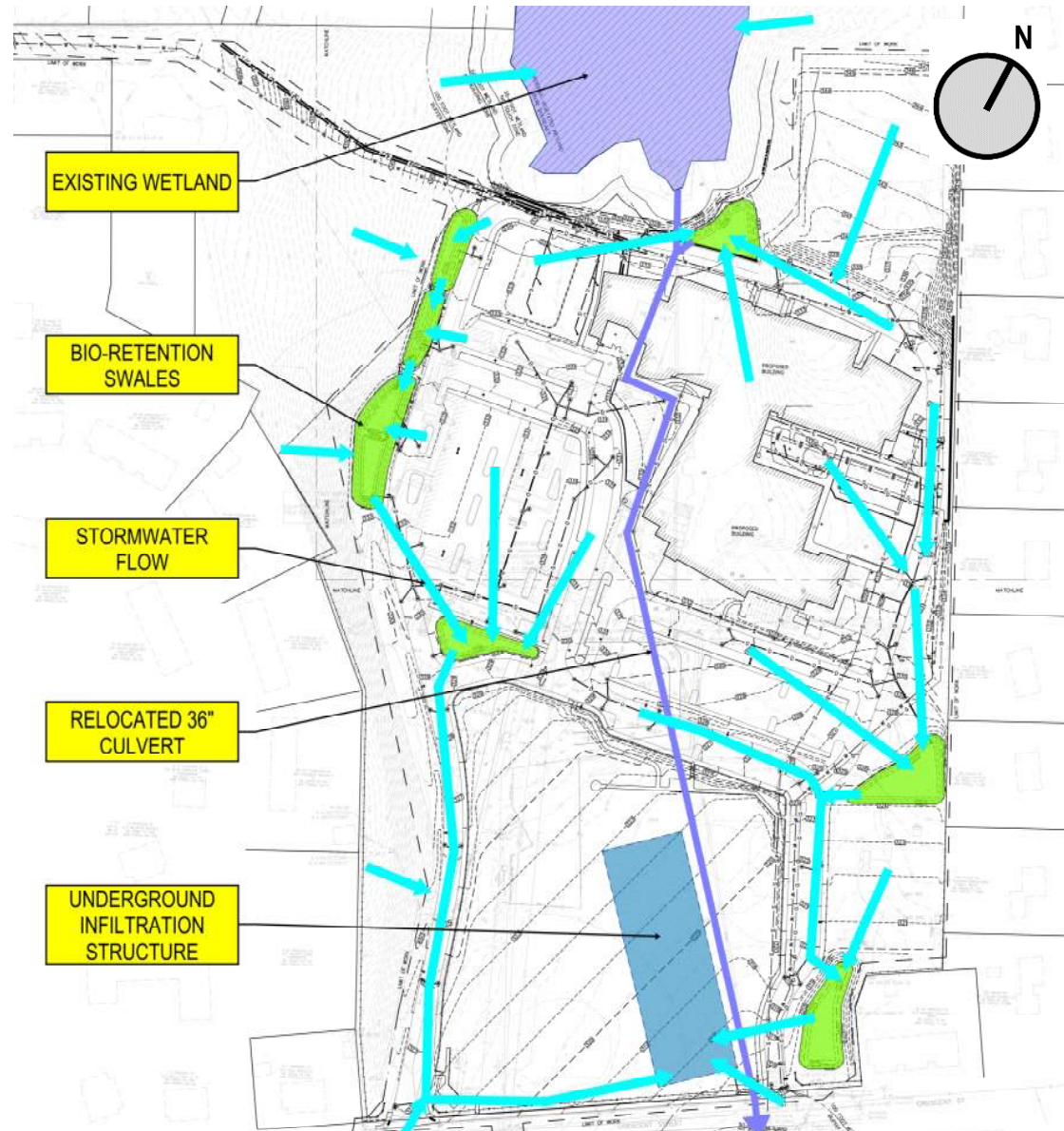


**2.**

**SITE DESIGN-  
STORMWATER**

# STORMWATER DRAINAGE

- Present site does not comply with MA stormwater regs.
- New site is a system of bio-retention swales that drain into underground infiltration
- New site meets MA regs, no increase in peak flows

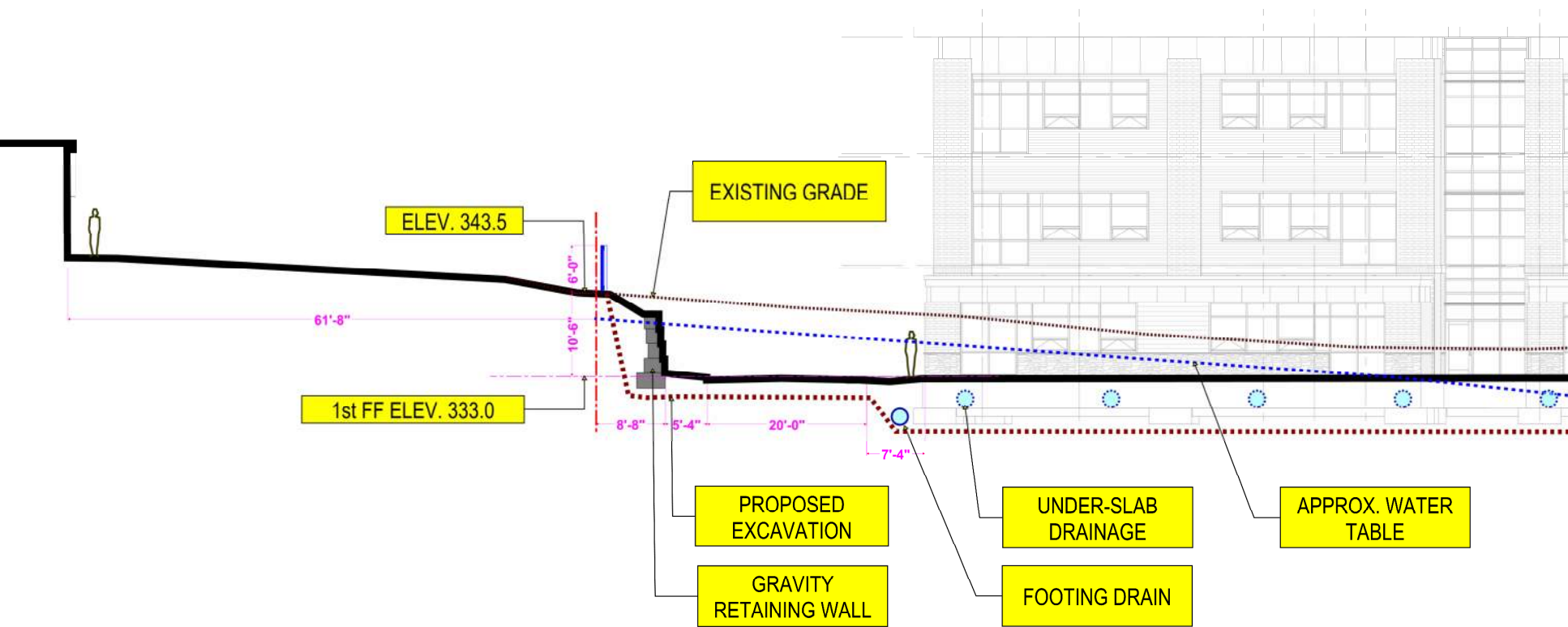


**SITE DRAINAGE PLAN**





# SITE SECTION SHOWING PROPOSED DRAINAGE



3.

SITE ACOUSTICAL  
DESIGN



# SITE PLAN





## PROPOSED SOUND CONTROL MEASURES

- 6' wood stockade fence at property line
- Dense planting buffers
- Road bermed and down-slope from houses
- Distance
- Trucks: No idling policy  
(conforms with LEED)

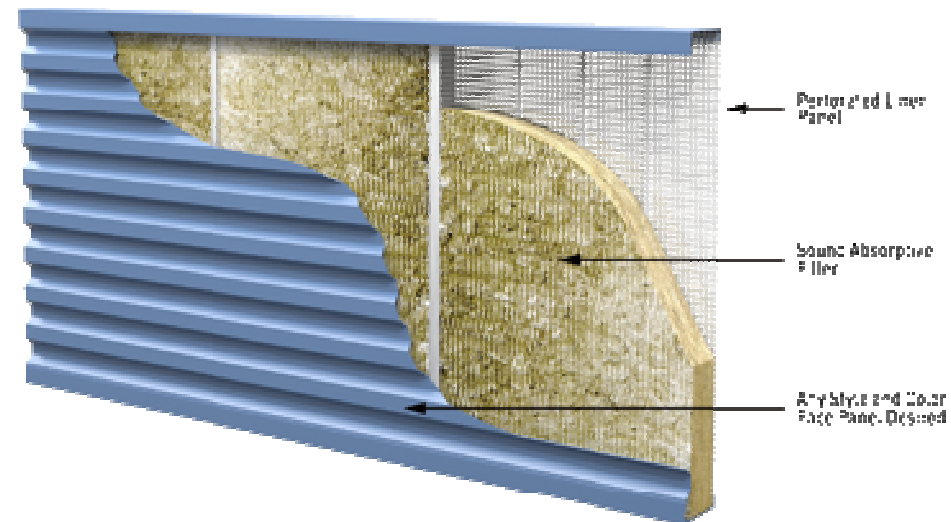
### Mechanical Equipment:

- Select quieter equipment
- Specify sound attenuators and wraps
- Use sound-absorptive rooftop equipment screens that direct sound upward





## SOUND-ABSORPTIVE ROOFTOP EQUIPMENT SCREENS





# ACOUSTICAL CONSULTANT APPROACH

- Measure background noise levels at key points on site:
  - Neighbors' back yards/ houses
  - Property line at each residence
- **MA DEP policy– no more than +10dB louder than existing background noise**
- <10 dB becomes design goal
- Employ design strategies as listed

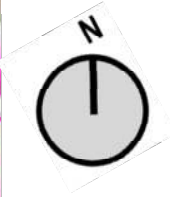


**4.**

**SELECTED BACKYARD  
VIEWS**

# BACKYARD VIEWS

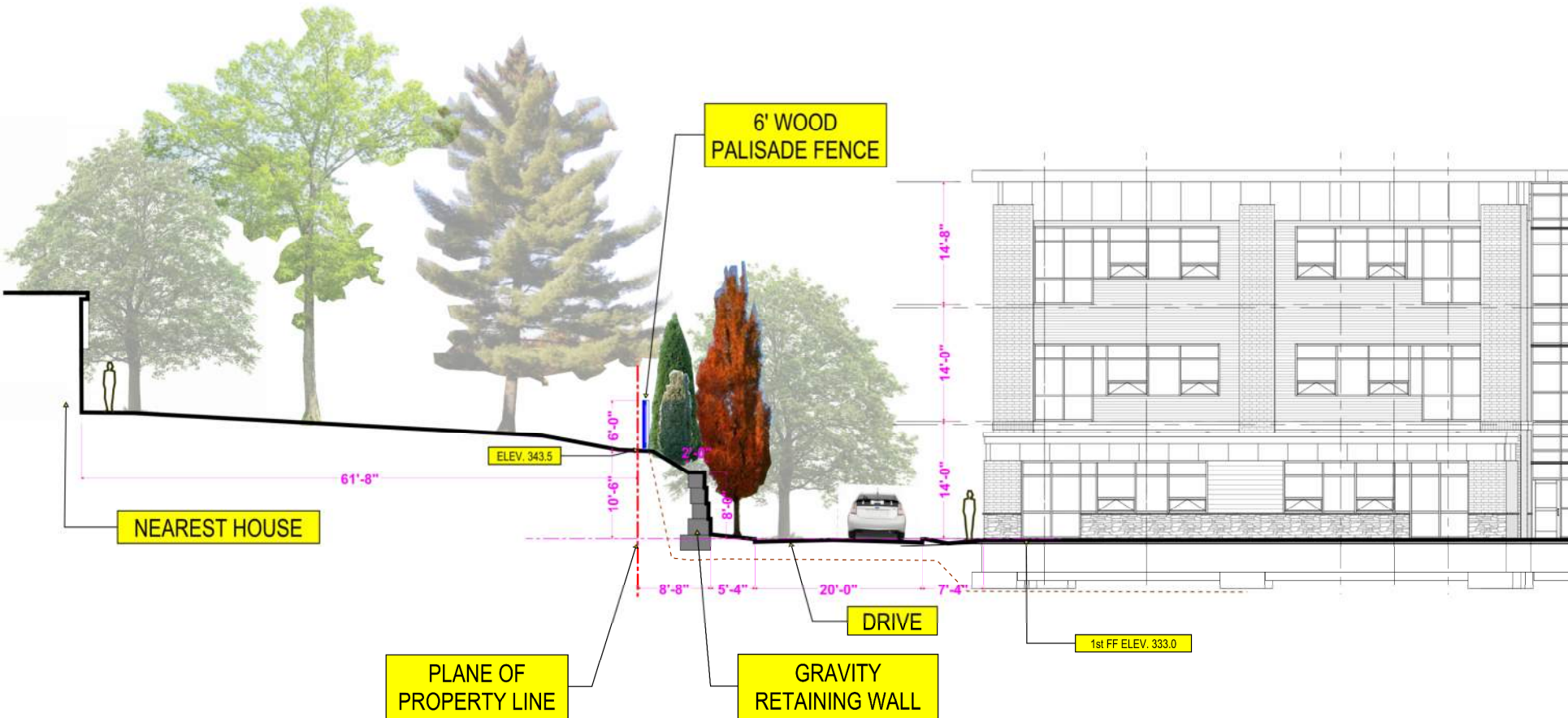
- Respected privacy of neighbors
- Computer model of building and site elements
- Trees and shrubs approximate – mature growth shown
- Houses and sheds approximate
- No swimming pools or patios shown
- Private fences and landscaping approximate



SITE PLANNING



# EAST PROPERTY LINE – SITE SECTION

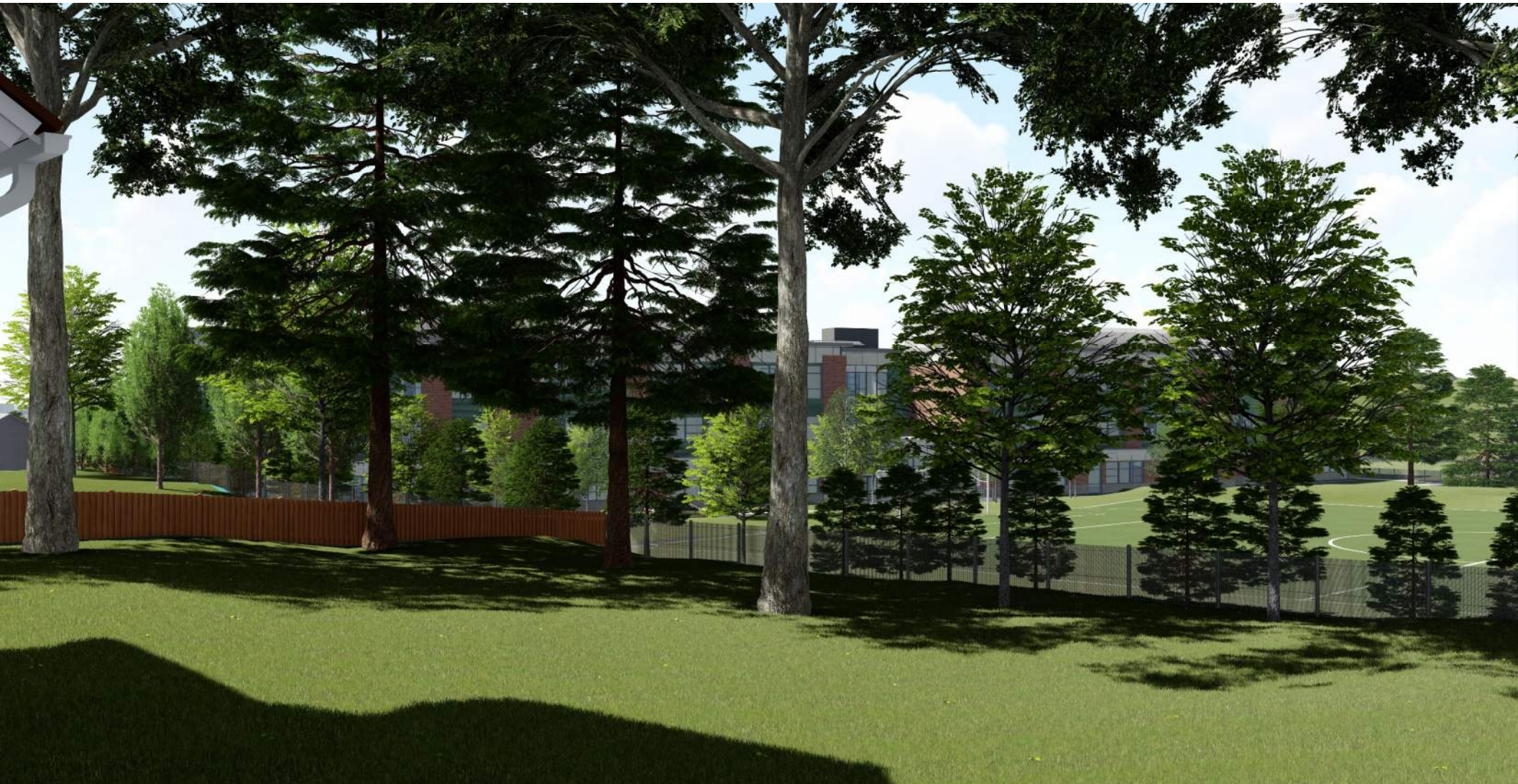






Backyard view north of soccer field, looking southwest





Backyard view near soccer field, looking southwest





Backyard view near classroom wing, looking west





Backyard view near playground, looking west





Backyard view near stormwater basin, looking northwest





VIEW OF EAST DRIVE AND RETAINING WALL



# PLANTING MATERIALS



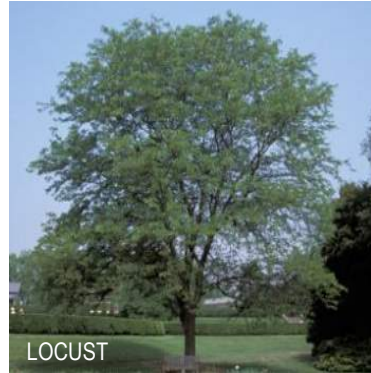
SUGAR MAPLE



COLUMNAR RED MAPLE



GINKGO



LOCUST



WHITE PINE



CEDAR



SERVICEBERRY



COTONEASTER



SWEET FERN



WINTERBERRY



JUNIPER



SPREADING YEW



VIBURNUM



FRAGRANT SUMAC



FEATHER REED GRASS



FOUNTAIN GRASS

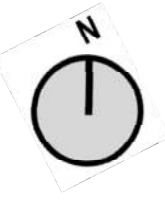
**5.**

**SELECTED NEW  
SLIDES**



# NEIGHBORHOOD TRAFFIC STUDY

- Existing roads can handle increased traffic
- Level of Service of intersections to remain much the same
  - Most are grade A, a few B, one C, one E → D
- No added signals warranted

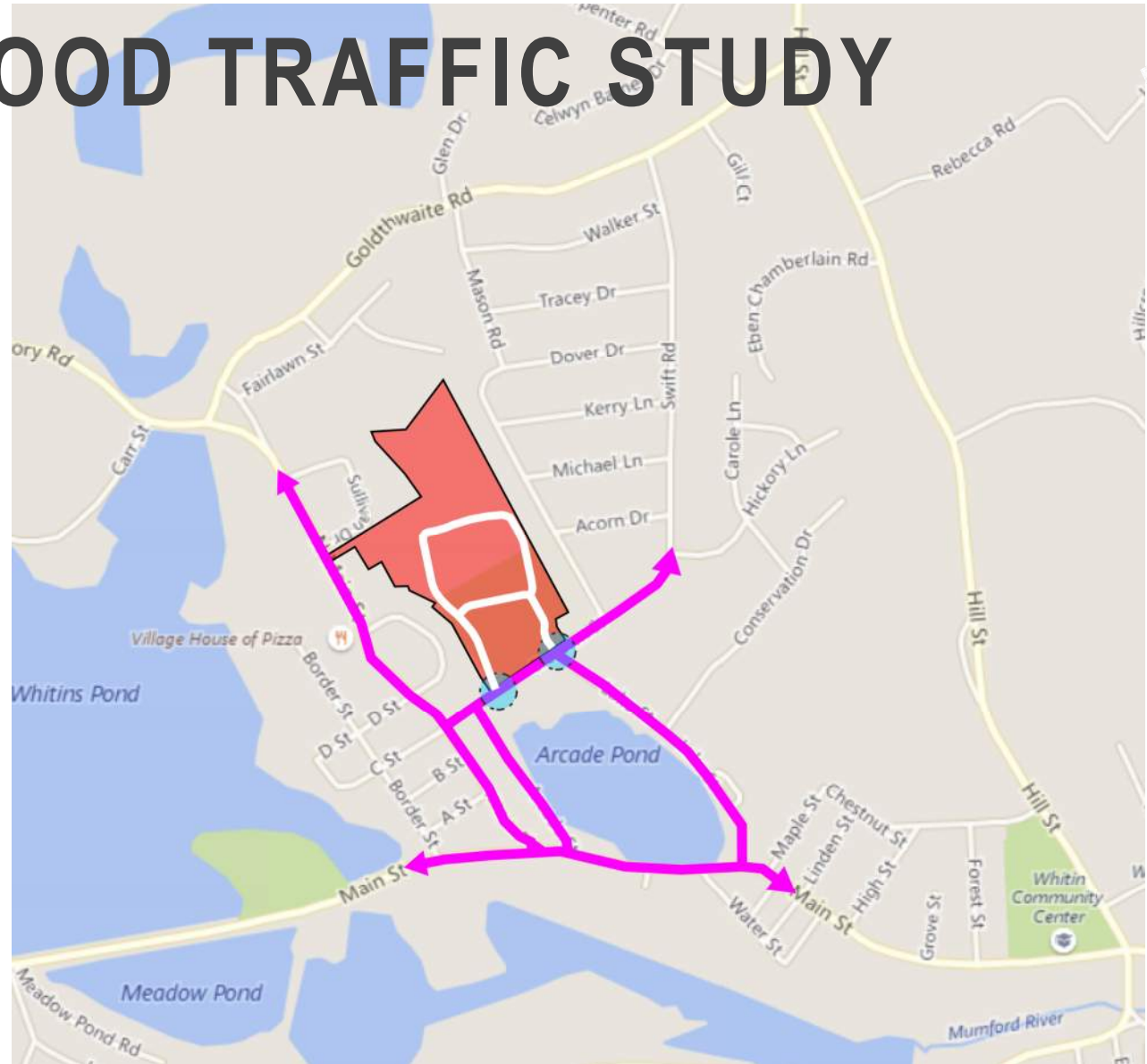


AREA MAP



# NEIGHBORHOOD TRAFFIC STUDY

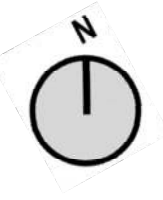
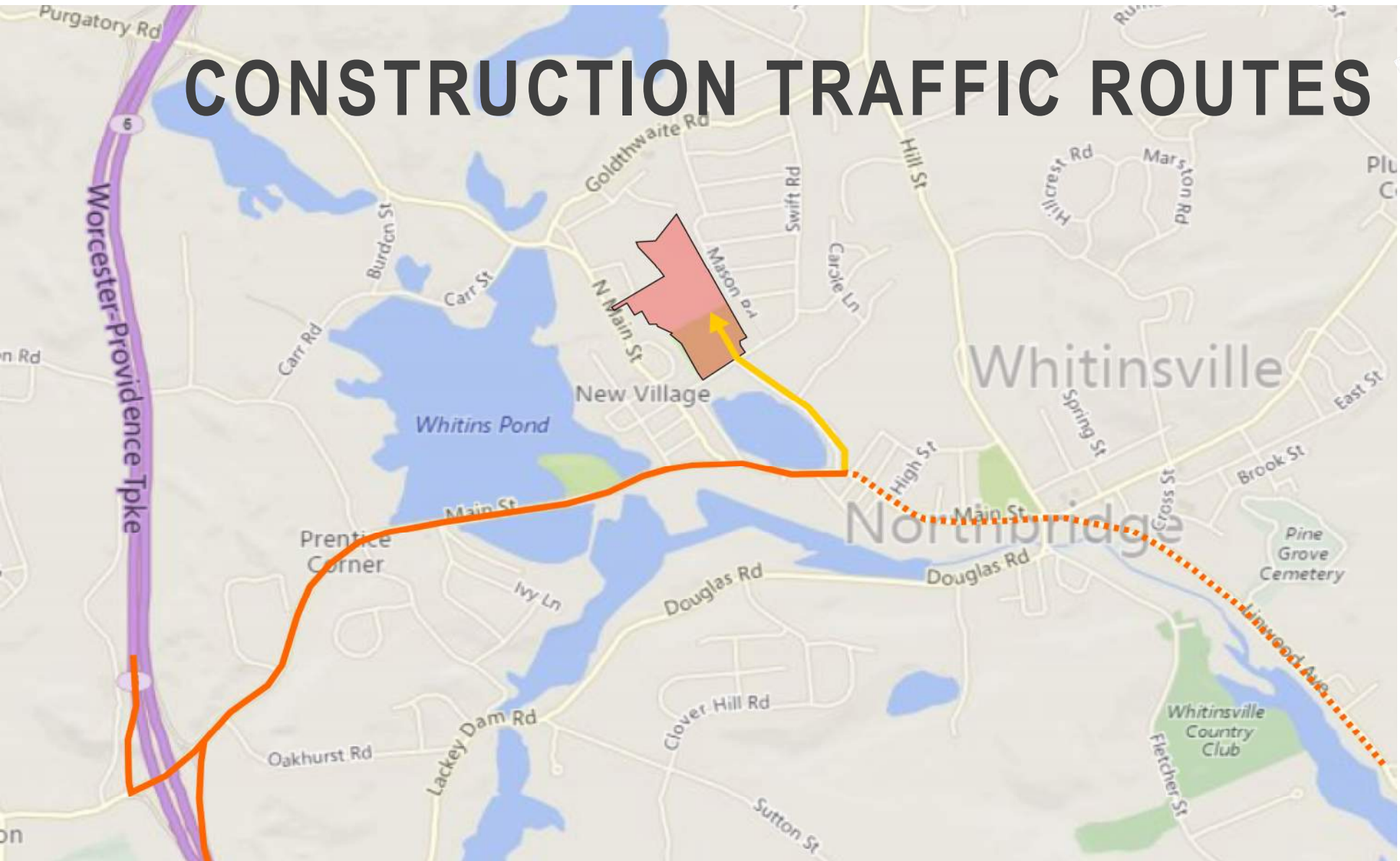
- 77 car queue should not interfere with traffic
- Intersection improvements (H/C ramps & crosswalks) recommended
- Acceptable sight distances at school intersections



AREA MAP



# CONSTRUCTION TRAFFIC ROUTES

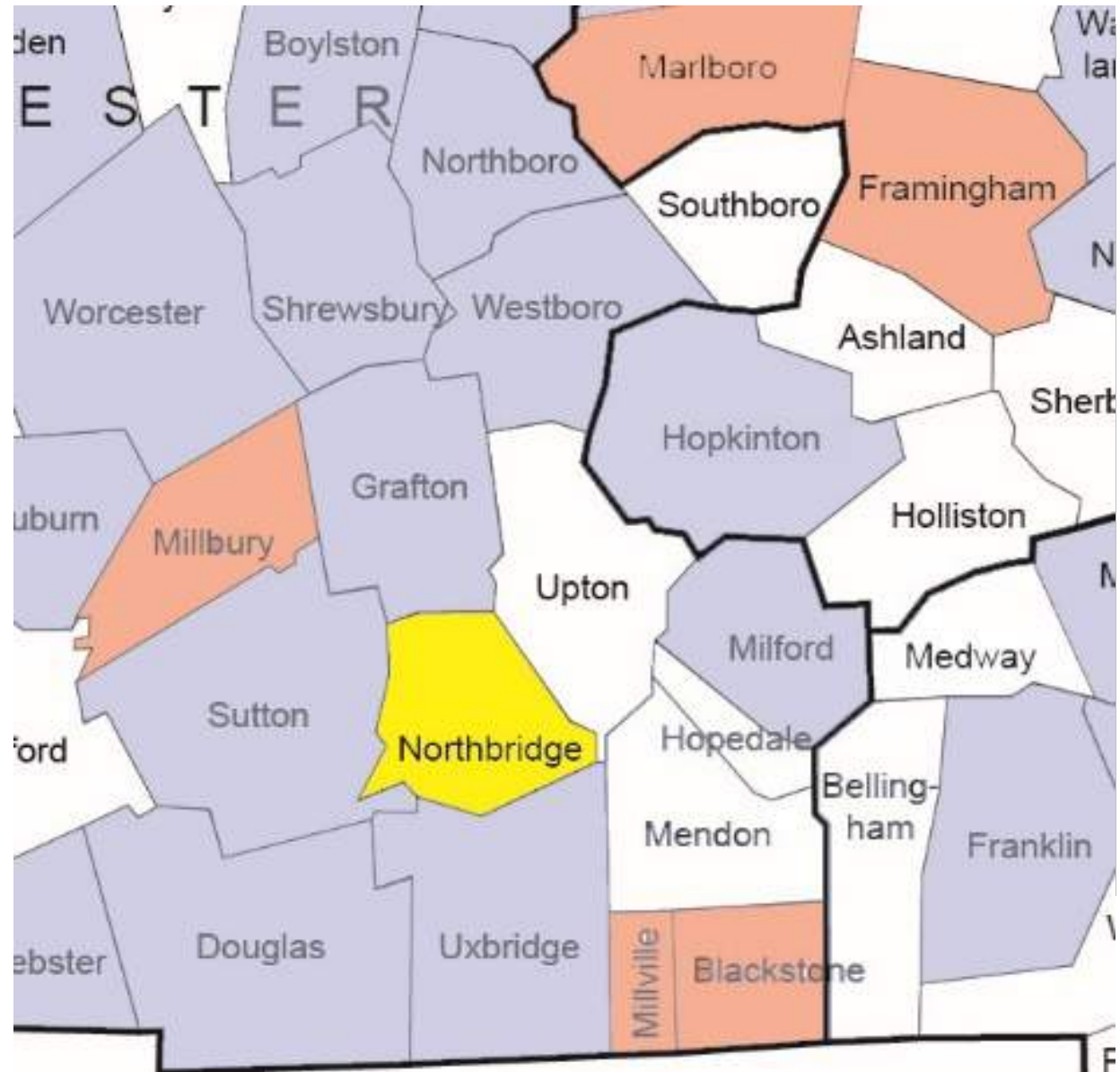
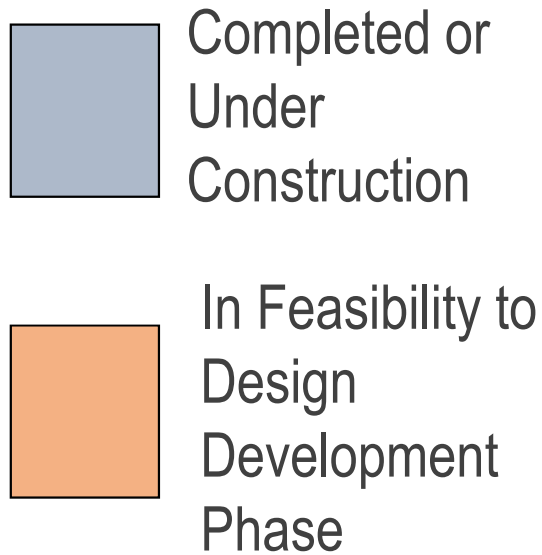


AREA MAP





MAP SHOWING  
MSBA CORE PROGRAM  
PROJECTS IN  
NEIGHBORING TOWNS  
(within past ten years):



construction projects







INTERIOR VIEW OF EXTENDED LEARNING AREA





INTERIOR VIEW OF EXTENDED LEARNING AREA





INTERIOR VIEW OF  
MEDIA CENTER





INTERIOR VIEW OF MEDIA CENTER

## **NEXT STEPS**

- **June 27, 2018 – MSBA Board Meeting to approve project to bring to voters**
- **August 20, 2018 – Community Forum #8**
- **September 19, 2018 – Community Forum #9**
- **October 10, 2018 – Community Forum #10**
- **October 23, 2018 – Town Meeting Vote**
- **November 6, 2018 – Anticipated Debt Exclusion Vote**







***Thank you for your attention!***  
***Questions? Comments?***



DR. DANIEL W. WILSON  
ARCHITECTS