



School Building  
Committee Meeting

# COUNTRYSIDE ELEMENTARY SCHOOL

Newton, MA

# Agenda

- Sustainability update
- Traffic update
- Conservation Commission update
- Preferred approach for PSR submission
- Updated timeline



# Sustainability Considerations

- Design per 10th edition MA state building code
- Building systems
  - All electric
  - Mechanical systems under consideration
    - Air Source Heat Pump (ASHP)
    - Variable Refrigerant Flow (VRF)
    - Ground Source Heat Pump (GSHP)
- Building envelope
  - Insulation
  - Infiltration
  - Windows
- Solar Ready



# Traffic Considerations

- Bus drop off, separated by median vs. non-separated
- Student drop off (blue zone)
- Van drop off/parking
- Pedestrian crossing widths and locations
- On-street parking
- Travel lane widths
- Sidewalk widths
- Bike lanes



# Traffic Conditions | Existing Countryside Elementary School



Above: Traveling east on Dedham St. North

Left: Traveling north on Dedham St. East

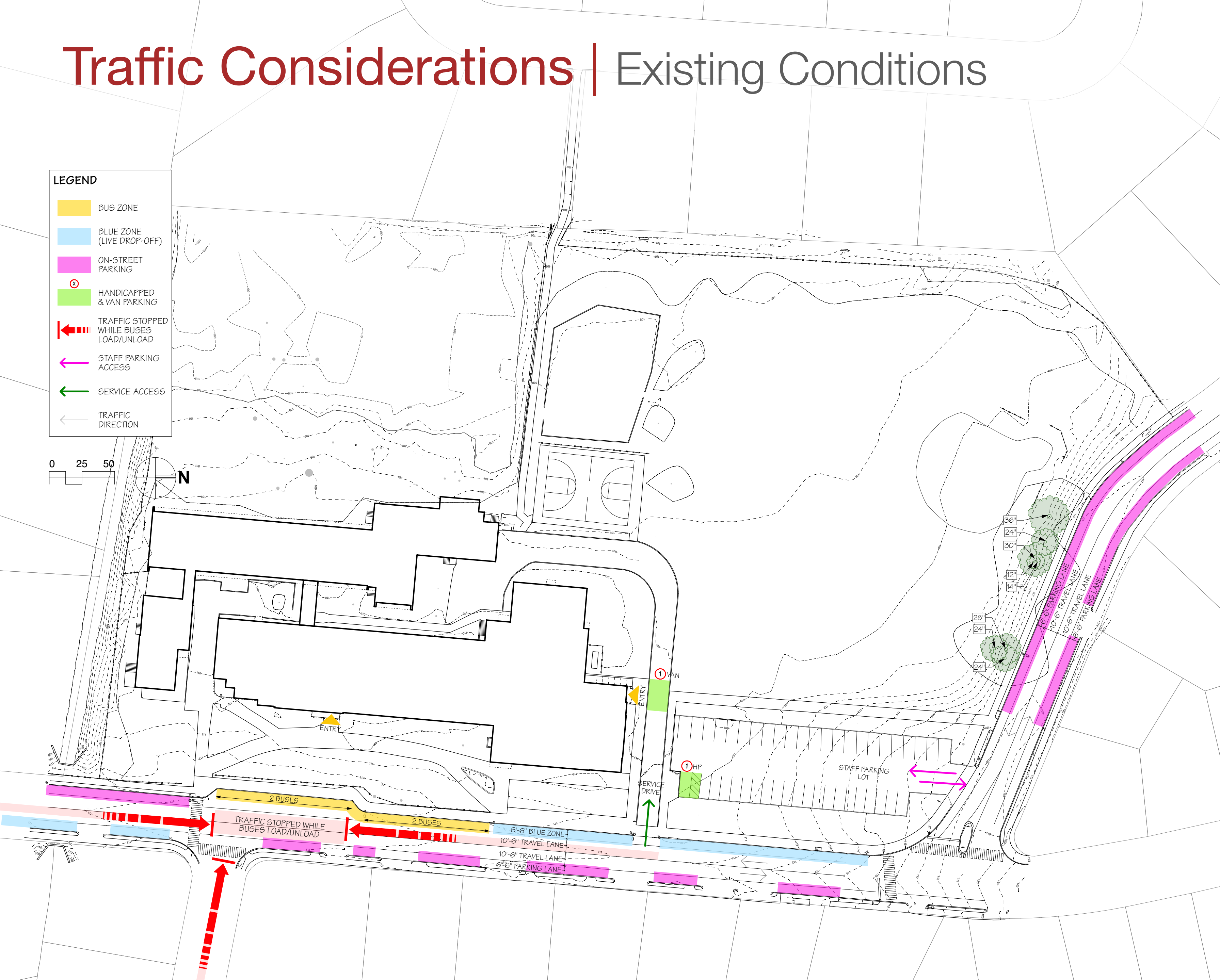
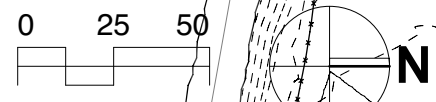


Above and left: Wide pedestrian crossings at the intersection of Dedham St. and Walnut St.

# Traffic Considerations | Existing Conditions

**LEGEND**

- BUS ZONE
- BLUE ZONE (LIVE DROP-OFF)
- ON-STREET PARKING
- HANDICAPPED & VAN PARKING
- TRAFFIC STOPPED WHILE BUSES LOAD/UNLOAD
- STAFF PARKING ACCESS
- SERVICE ACCESS
- TRAFFIC DIRECTION

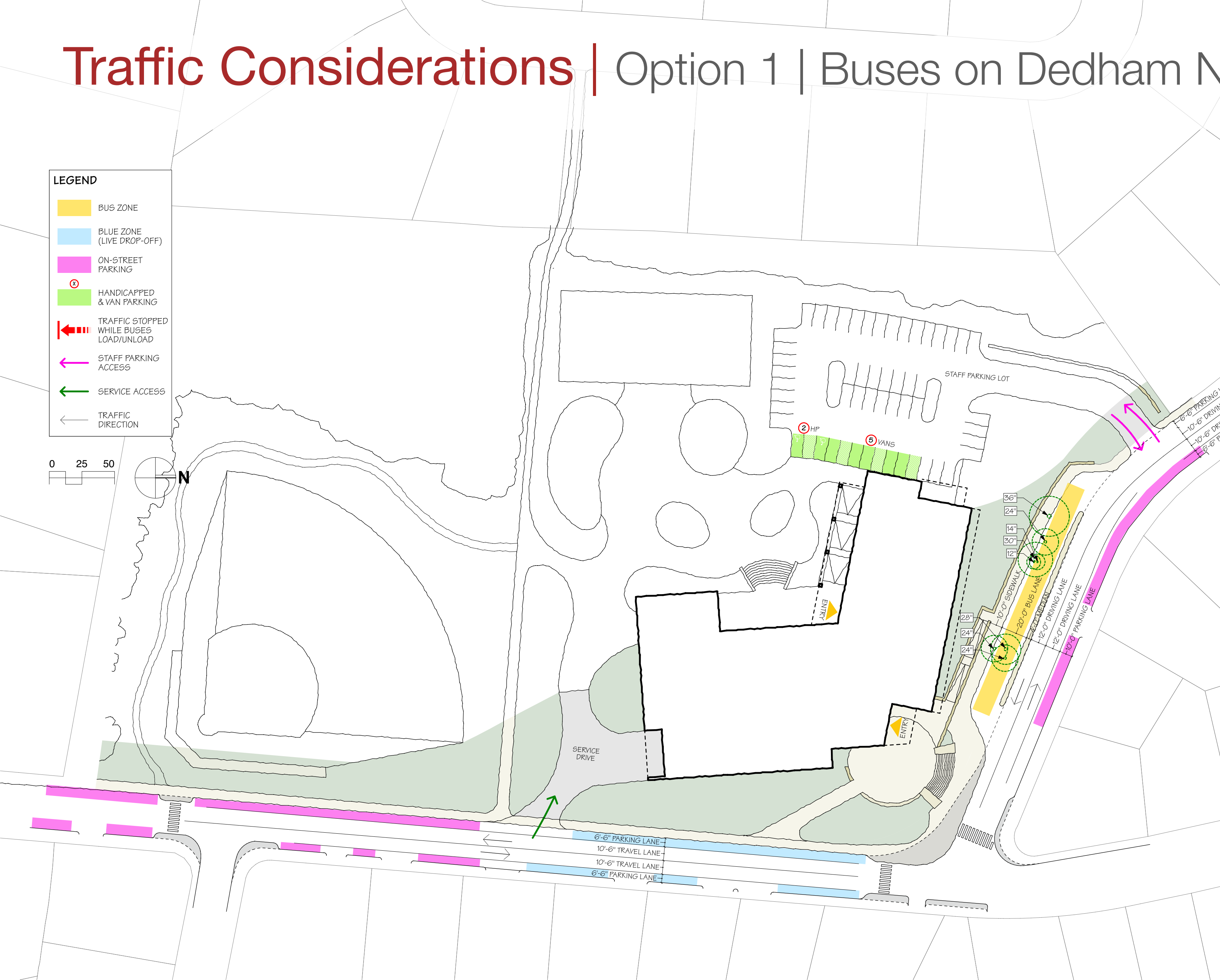
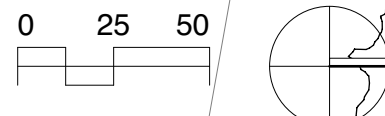


- Bus drop off for 2 buses with waiting zone for 2 buses
- Designated bus drop off with no median separation. Traffic stops during loading and unloading.
- Both bus + parent drop off along Dedham St. East (not separated)
- 370' of parent drop off along Dedham St. East
- Walnut / Dedham St. intersection too large for pedestrian safety
- Parallel parking along Dedham St. is narrow
- Van drop off at service driveway
- Service driveway at Dedham St. East

# Traffic Considerations | Option 1 | Buses on Dedham North, Trees Removed

**LEGEND**

- BUS ZONE
- BLUE ZONE (LIVE DROP-OFF)
- ON-STREET PARKING
- HANDICAPPED & VAN PARKING
- TRAFFIC STOPPED WHILE BUSES LOAD/UNLOAD
- STAFF PARKING ACCESS
- SERVICE ACCESS
- TRAFFIC DIRECTION

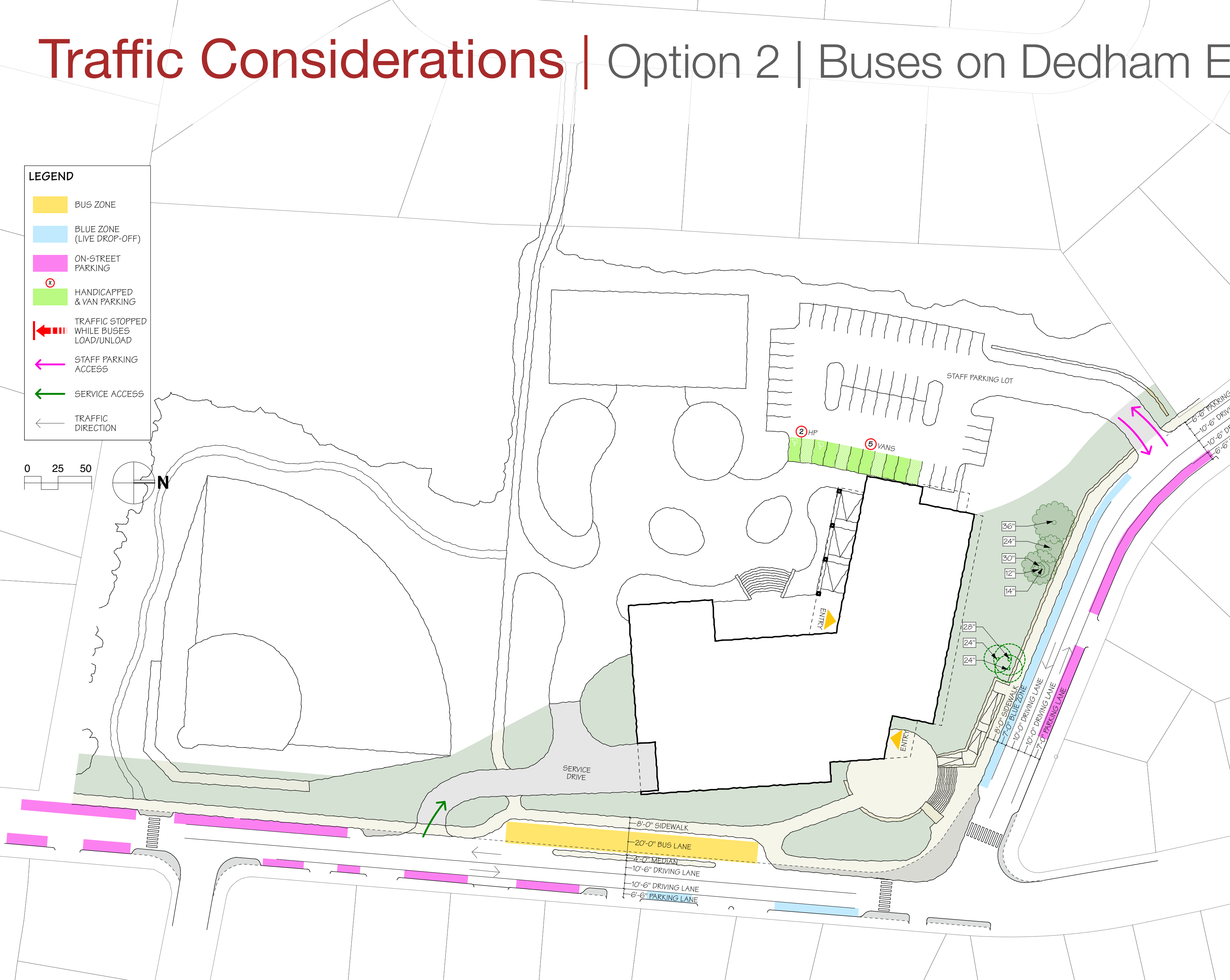
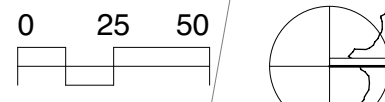


- Bus drop off for 4 buses
- 20' wide designated bus drop off with median separation
- All trees removed along Dedham North
- Utility poles to remain at bus drop off
- Potential guardrail at sidewalk adjacent to bus drop off
- 375' of parent drop off along Dedham St. East
- Walnut / Dedham St. intersection reconfigured for reduced length of crossing
- Parallel parking along Dedham St. East remains narrow
- Van drop off at staff parking lot
- Service driveway at Dedham St. East
- 360° emergency vehicle access

# Traffic Considerations | Option 2 | Buses on Dedham East, Most Trees Remain

**LEGEND**

- BUS ZONE
- BLUE ZONE (LIVE DROP-OFF)
- ON-STREET PARKING
- HANDICAPPED & VAN PARKING
- TRAFFIC STOPPED WHILE BUSES LOAD/UNLOAD
- STAFF PARKING ACCESS
- SERVICE ACCESS
- TRAFFIC DIRECTION



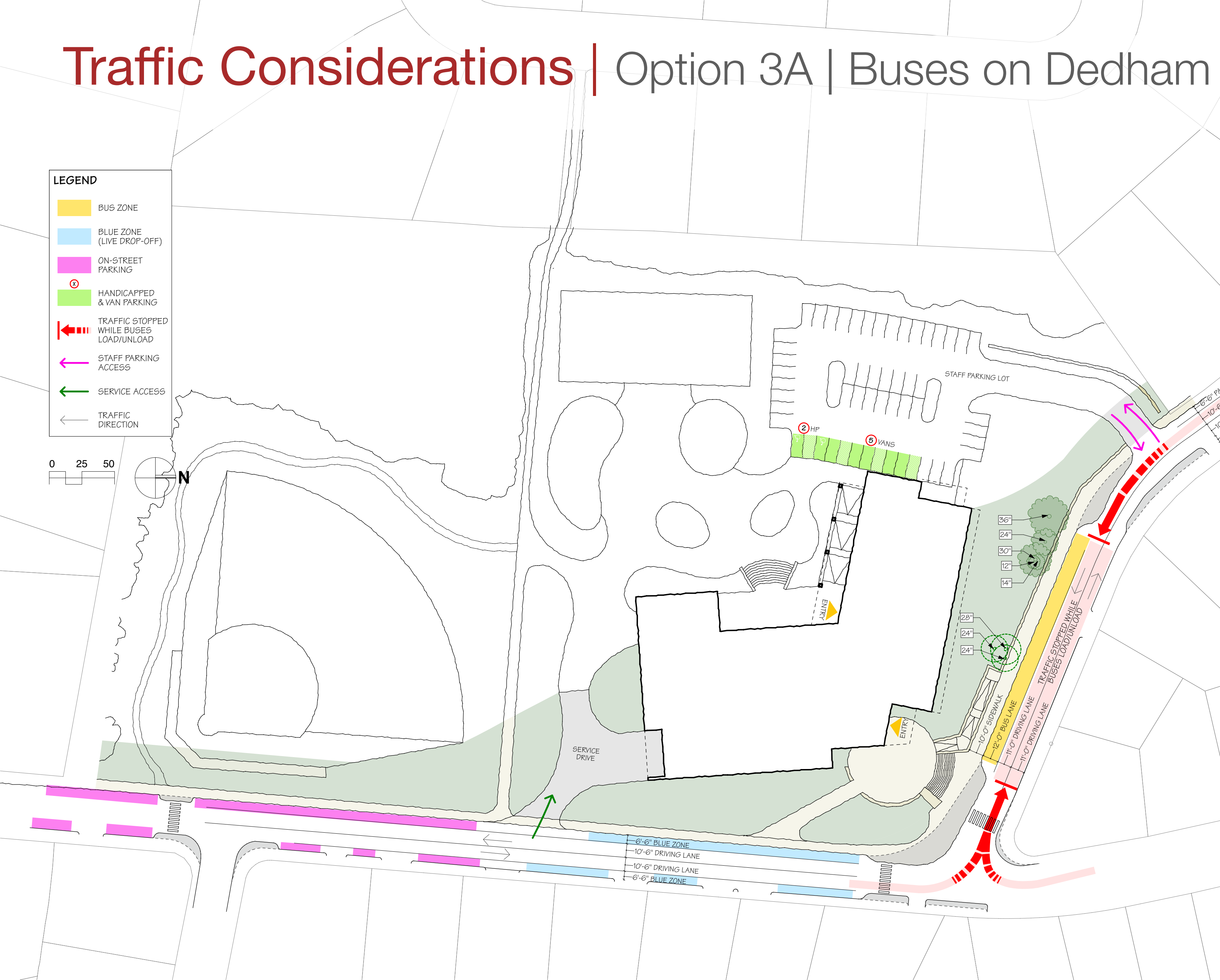
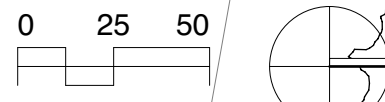
- Bus drop off for 4 buses
- 20' wide designated bus drop off with median separation
- Most trees remain along Dedham North
- Utility poles to be relocated at bus drop off
- Primary parent drop off along Dedham St. North, 350' of parent drop off overall
- Walnut / Dedham St. intersection reconfigured for reduced length of crossing
- Parallel parking remains narrow
- Van drop off at staff parking lot
- Service driveway at Dedham St. East
- 360° emergency vehicle access



# Traffic Considerations | Option 3A | Buses on Dedham North, Most Trees Remain

**LEGEND**

- BUS ZONE
- BLUE ZONE (LIVE DROP-OFF)
- ON-STREET PARKING
- HANDICAPPED & VAN PARKING
- ⊗ HANDICAPPED & VAN PARKING
- TRAFFIC STOPPED WHILE BUSES LOAD/UNLOAD
- STAFF PARKING ACCESS
- SERVICE ACCESS
- TRAFFIC DIRECTION

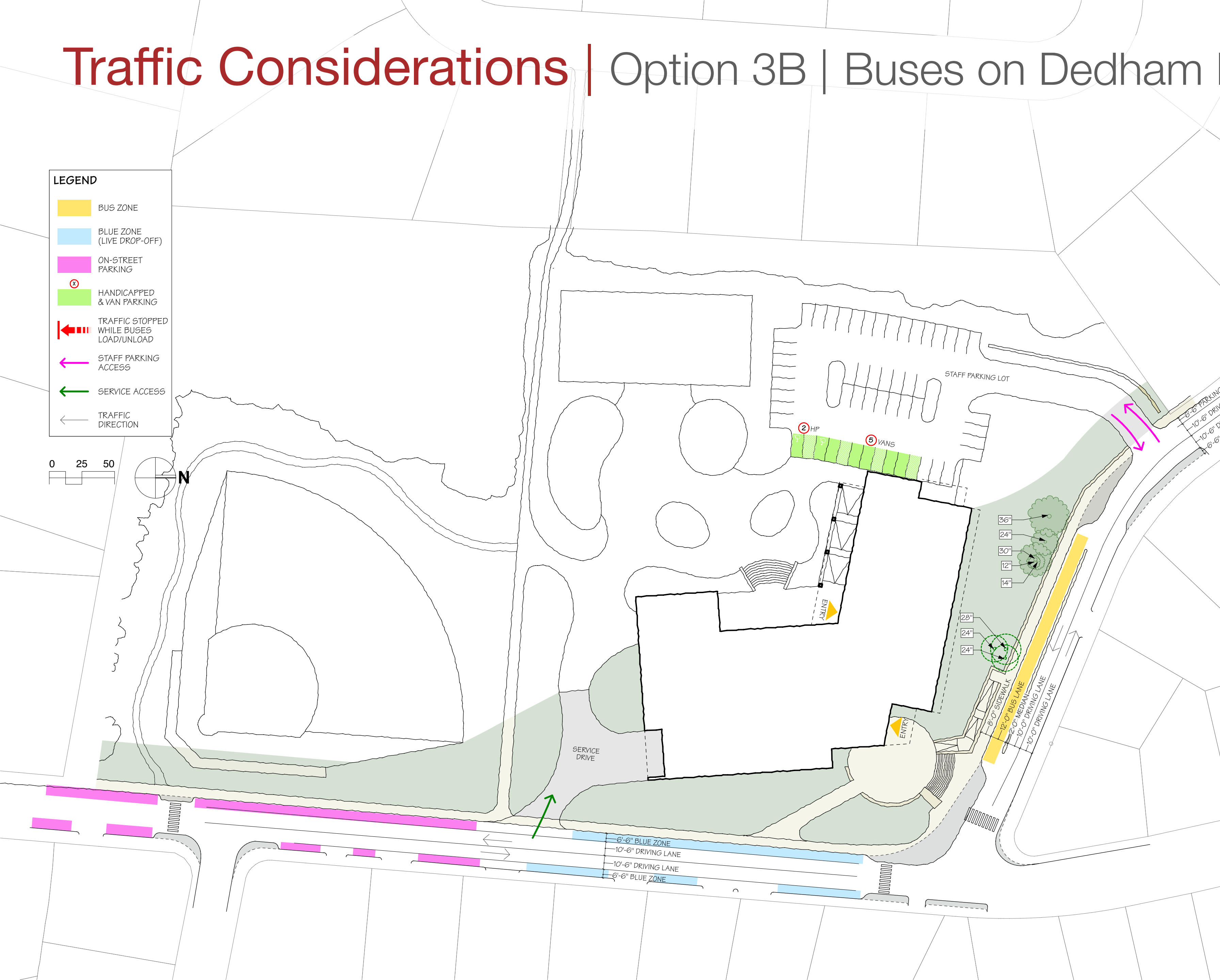
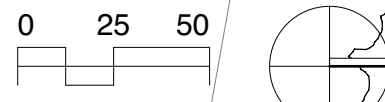


- Bus drop off for 4 buses
- 12' wide designated bus drop off with no median separation. Traffic stops during loading and unloading.
- Most trees remain along Dedham North
- Utility poles to remain at bus drop off
- Potential guardrail at sidewalk adjacent to bus drop off
- 375' of parent drop off along Dedham St. East
- Walnut / Dedham St. intersection reconfigured for reduced length of crossing
- No parallel parking at Dedham St. North across from school
- Parallel parking at Dedham St. East remains narrow
- Van drop off at staff parking lot
- Service driveway at Dedham St. East
- 360° emergency vehicle access

# Traffic Considerations | Option 3B | Buses on Dedham North, Most Trees Remain

**LEGEND**

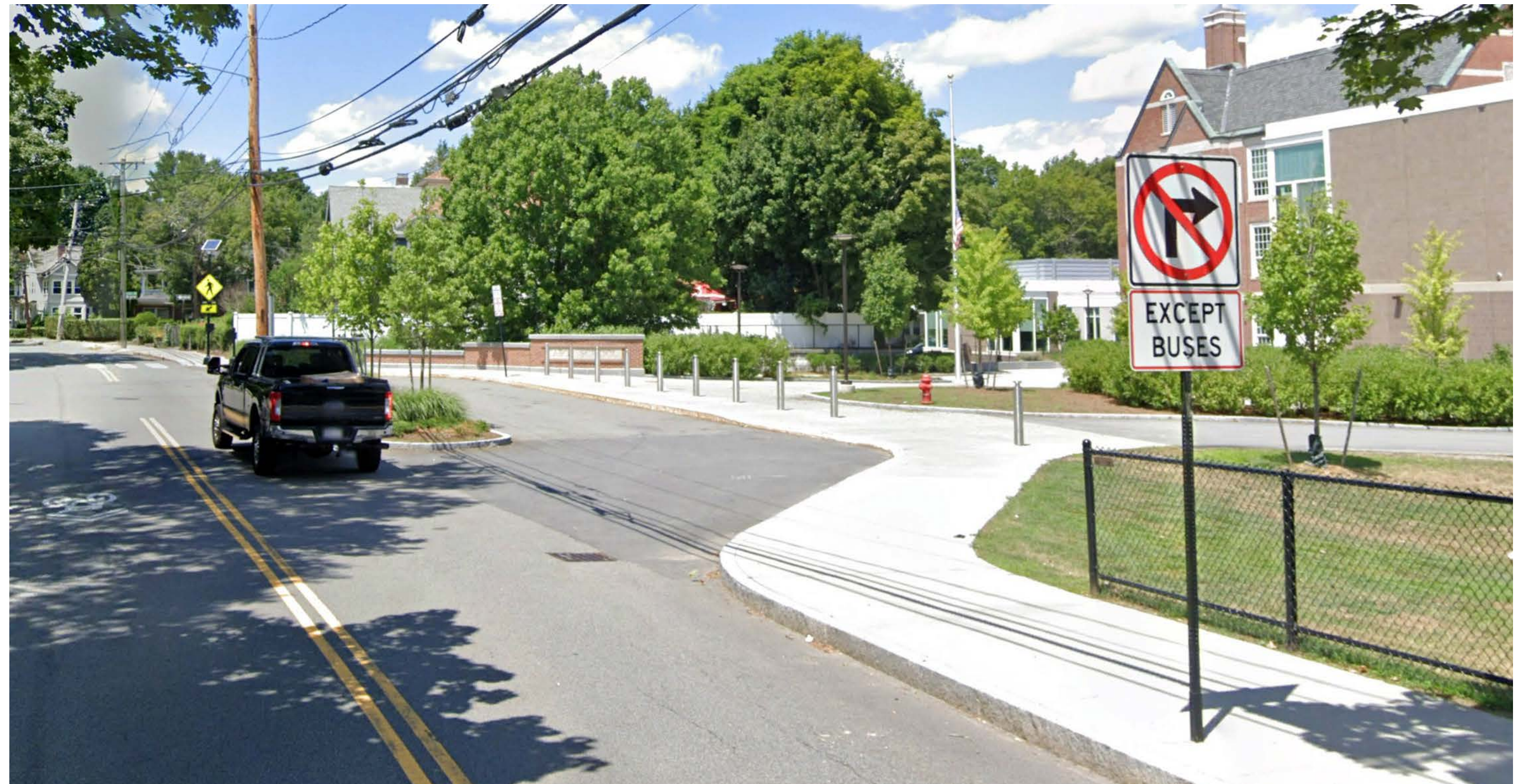
- BUS ZONE
- BLUE ZONE (LIVE DROP-OFF)
- ON-STREET PARKING
- HANDICAPPED & VAN PARKING
- TRAFFIC STOPPED WHILE BUSES LOAD/UNLOAD
- STAFF PARKING ACCESS
- SERVICE ACCESS
- TRAFFIC DIRECTION



- Bus drop off for 4 buses
- 12' wide designated bus drop off with narrow median separation
- Most trees remain along Dedham North
- Utility poles to remain at bus drop off
- Potential guardrail at sidewalk adjacent to bus drop off
- 375' of parent drop off along Dedham St. East
- Walnut / Dedham St. intersection reconfigured for reduced length of crossing
- No parallel parking at Dedham St. North across from school
- Parallel parking along Dedham St. East remains narrow
- Van drop off at staff parking lot
- Service driveway at Dedham St. East
- 360° emergency vehicle access

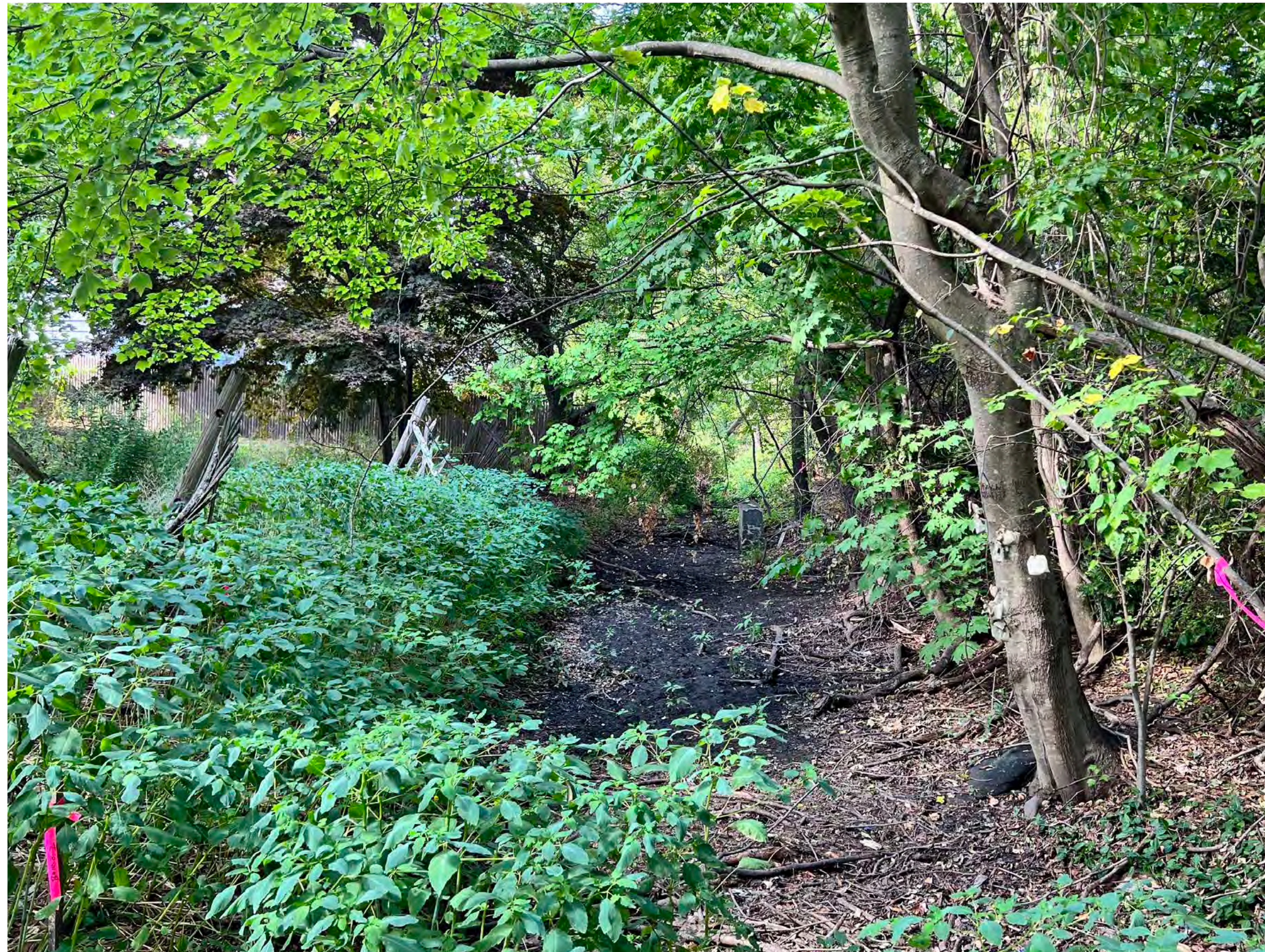
# Traffic Discussion Summary

- Bus drop off lane separated by median
- Bus drop off lane width 12'-14'
- Van drop off/parking to be studied further
- Reconvene in April for further discussion

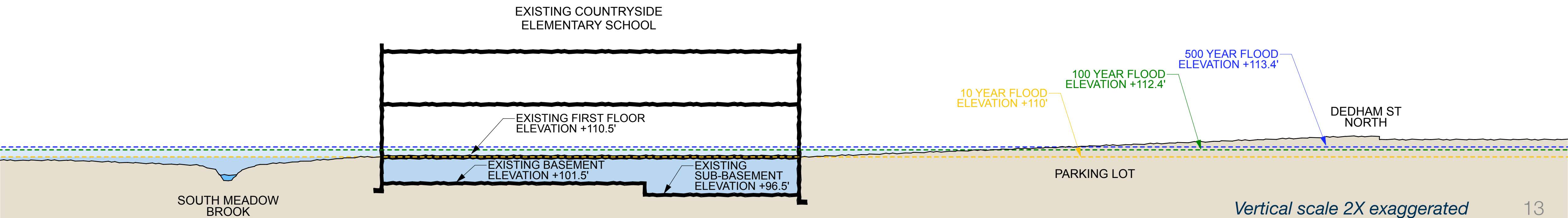
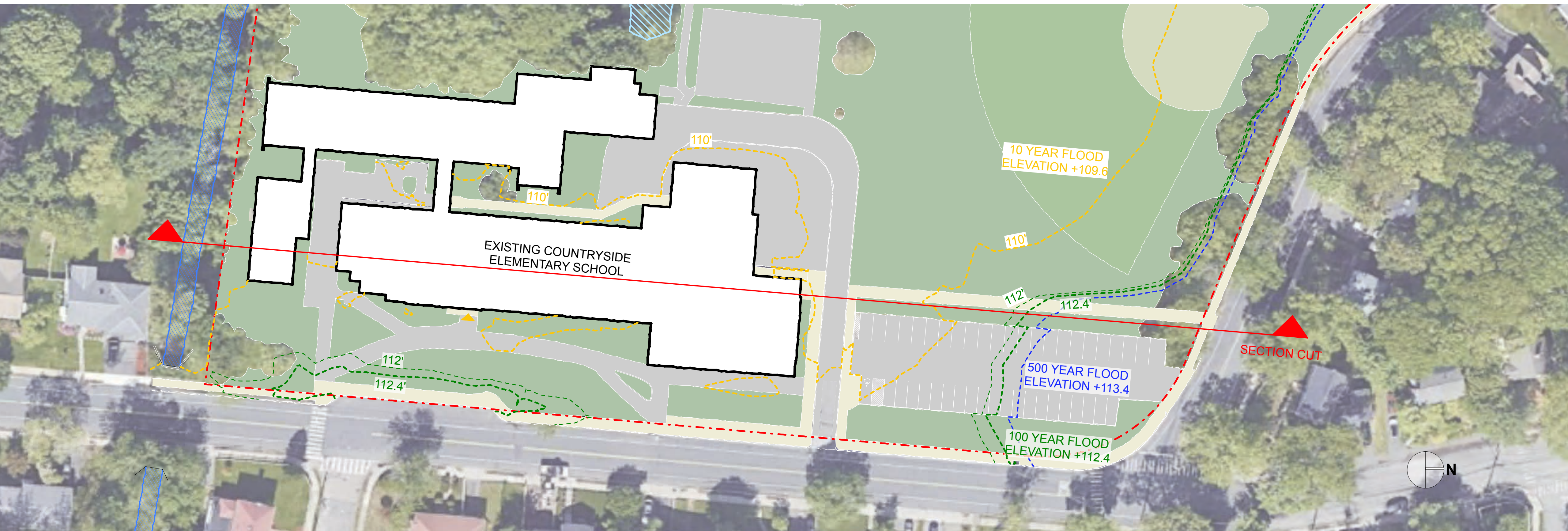


# Conservation Commission Update

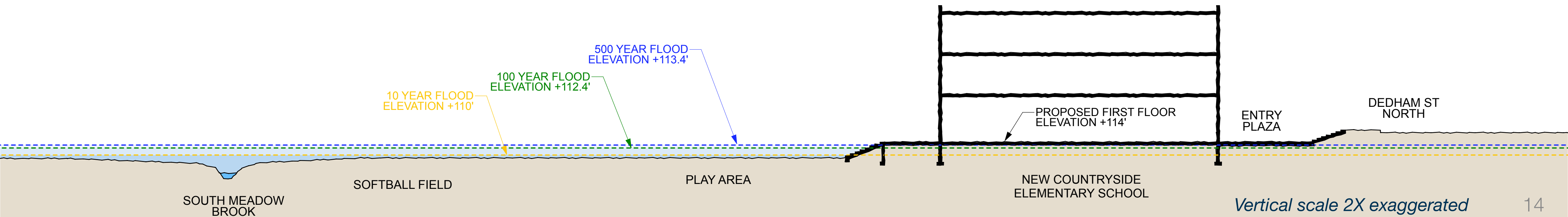
- ANRAD hearing held March 23, 2023
- Order of Resource Delineation received March 24, 2023



# Site Section and Flood Elevations | Existing Conditions



# Site Section and Flood Elevations | Approach 6A



Vertical scale 2X exaggerated

# Stormwater Management | Approach 6A

## LEGEND

- RAIN GARDEN/  
BIORETENTION BASIN
- UNDERDRAIN SYSTEM
- POROUS PAVEMENT
- VEGETATED AREA
- WETLAND
- RIVER

0 25 50

N



- Design to fully comply with the requirements of the Massachusetts Stormwater Regulations
- Stormwater management components
  - Bioretention basins
  - Surface detention basin
  - Porous asphalt parking lot
  - Permeable rubber play surfaces
- No increase in peak rates of stormwater discharge off site

# Building Location Criteria Matrix

COUNTRYSIDE ELEMENTARY SCHOOL — 191 Dedham Street, Newton, MA Criteria Matrix

● Favorable      ⊙ Neutral      ○ Unfavorable

BUILDING LOCATION EVALUATION CRITERIA MATRIX	465 STUDENT ENROLLMENT				
	EX	6A	6B	6C	6D
	Existing School at Existing Location <i>For Reference Only</i>	L-SHAPE Northeast Corner	BAR SHAPE North Perimeter	L-SHAPE Northwest Corner	BAR SHAPE Western Perimeter

**Building and Site Facts**

1	Student enrollment population	372	465	465	465	465
2	Size of site (acres)	7.39	7.39	7.39	7.39	7.39
3	Site Environmental (wetlands, etc.)	2.02	2.02	2.02	2.02	2.02
4	Meets MA Flood Regulations (prereq.)	NO	YES	YES	YES	YES
5	Site usable (acres)	5.37	5.37	5.37	5.37	5.37
6	Building gross square feet (GSF)	56,150	75,500	75,500	75,500	75,500
7	Building Footprint gross square feet (GSF)	39,940 (including modulars)	33,000	33,650	32,000	32,700
8	Building volume within 100-year Flood Elevation (cubic feet) (Assumes standard foundation w/ slab on grade - for comparison purposes, no construction on piers)	84,097	73,600±	78,750±	99,100±	117,300±
9	Site improvements/developed area (SF)	193,060	200,000	199,350	201,000	200,300
10	Distance from wetland - 25 ft "No Disturb" zone (closest part of bldg in feet)	0	175	15	25	20
11	Building inside 100' wetland buffer	YES	NO	YES	YES	YES
12	Staff Parking Spaces	43	46	43	43	44
13	HP Parking Spaces	1	2	2	2	2
14	Van Parking Spaces	3	5	5	5	5
15	Bus Drop-off/Pick-up zone number of buses accommodated	2 + 2 onstreet	4	4	4	4

**Cost and Schedule**

1	Project Cost, \$million		⊙	⊙	⊙	⊙
2	Allows students to move in to new school Fall 2027		●	●	●	●
3	Requires swing space		●	●	●	●
4	Maintains standard site plan approval schedule		●	⊙	●	●



# Building Location Criteria Matrix

BUILDING LOCATION EVALUATION CRITERIA MATRIX	465 STUDENT ENROLLMENT				
	EX	6A	6B	6C	6D
	Existing School at Existing Location <i>For Reference Only</i>	L-SHAPE Northeast Corner	BAR SHAPE North Perimeter	L-SHAPE Northwest Corner	BAR SHAPE Western Perimeter

Educational						
1	Provides flexibility for future growth (construction on piers)		●	●	●	⊙
2	Provides flexibility for educational innovations / pedagogy		●	●	●	●
3	Optimizes configuration and adjacency of teaching spaces		●	●	●	●
4	Provides outdoor learning opportunities		●	●	●	●
5	Allows for efficient program design layout		●	●	●	●
6	Minimizes existing school disruption		⊙	●	●	●
Safety and Security						
1	Optimizes safety and efficiency of on-site bus and van drop off		●	●	●	●
2	Separates safe circulation of bus, vehicle, pedestrian and bike access		●	●	●	●
3	Improves off site traffic impact		●	●	●	●
4	Optimizes site for safe pedestrian and bike access		●	●	⊙	⊙
5	Optimizes safe building access		●	●	○	○
Community						
1	Provides accessibility to community used spaces (interior)		●	⊙	○	●
2	Accommodates community program needs / extended day program		●	●	●	●
3	Enhances community connections		●	●	●	●
4	Enhances community green/open space and playground		●	●	●	●
5	Construction Impact on abutters		●	⊙	⊙	○
Building						
1	Meets current building codes (prereq.)		●	●	●	●
2	Meets MAAB/ADA requirements (prereq.)		●	●	●	●
3	Meets healthy building environment (prereq.)		●	●	●	●
4	Requires less building construction on piers		●	●	○	○
5	Meets hazardous material remedial requirements (prereq.)		●	●	●	●
6	Allows for a contextually sensitive design		●	●	●	●
7	Optimizes use of natural light and daylighting		●	●	●	⊙
8	Optimizes connection of outdoor/indoor space, integration with site		●	●	○	○
9	Allows efficient attainment of Green School/Stretch Code requirements		●	●	●	●

# Building Location Criteria Matrix

BUILDING LOCATION EVALUATION CRITERIA MATRIX	465 STUDENT ENROLLMENT				
	EX	6A	6B	6C	6D
	Existing School at Existing Location <i>For Reference Only</i>	L-SHAPE Northeast Corner	BAR SHAPE North Perimeter	L-SHAPE Northwest Corner	BAR SHAPE Western Perimeter

Site					
1	Meets MAAB/ADA requirements (prereq.)		●	●	●
2	Meets environmental remedial requirements (prereq.)		●	●	●
3	Building located outside of the wetlands buffer and riverfront setback		●	○	○
4	Maximizes efficient utilization of site		●	●	○
5	Optimizes outdoor program space and green space		●	○	○
6	Optimizes safety and efficiency of on-site bus and van drop off		●	●	○
7	Separates safe circulation of bus, vehicle, pedestrian and bike access		●	●	●
8	Provides sufficient parking for teachers, staff + visitors		○	○	○
9	Improves off site traffic impact		●	●	●
10	Optimizes site for safe pedestrian and bike access		●	●	○
11	Allows for future expansion		●	●	○
Sustainability					
1	Achieves City goal for fossil free building HVAC systems		●	●	●
2	Optimizes building orientation		●	●	○
3	Optimizes solar (PV) opportunities		●	●	●
4	Allows efficient attainment of Green School/Stretch Code requirements		●	●	●
5	Optimizes building envelope thermal performance		●	●	●
Gross Scoring			42	37	27

42

37

27

23

# Approach 6A | 465 Students | New Construction | 75,500 SF

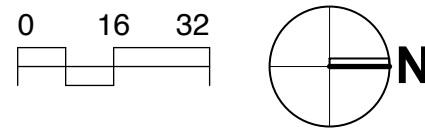


- Entrance to main lobby centrally located between Dedham Street north & south
- First floor same level as main entrance (two entryways)
- Takes advantage of higher ground above 100-yr flood elevation for entry plaza
- Service and loading area access from Dedham Street east - does not require additional fill and retaining walls
- Gym location - direct access to fields and playground
- Construction of new building is approximately 10 feet away from existing building
- Classroom wing has north-south orientation

# Approach 6A | 465 Students | New Construction | 75,500 SF

**LEGEND**

Blue	CORE ACADEMIC SPACES
Purple	SPECIAL EDUCATION
Green	ART & MUSIC
Light Green	HEALTH & PHYS ED
Dark Green	MEDIA CENTER
Orange	DINING & FOOD SERVICE
Light Orange	PLATFORM
Red	MEDICAL
Light Red	ADMIN & GUIDANCE
Pink	OTHER / EXTENDED DAY
Grey	CUST, MAINT, & TOILETS
Yellow	CIRCULATION



- Meets MSBA Space Guidelines
- Ideal spatial relationships and adjacencies
- Gymnasium on first floor
- Kindergarten on first floor
- North / South solar orientation classrooms



# Approach 6B | 465 Students | New Construction | 75,500 SF



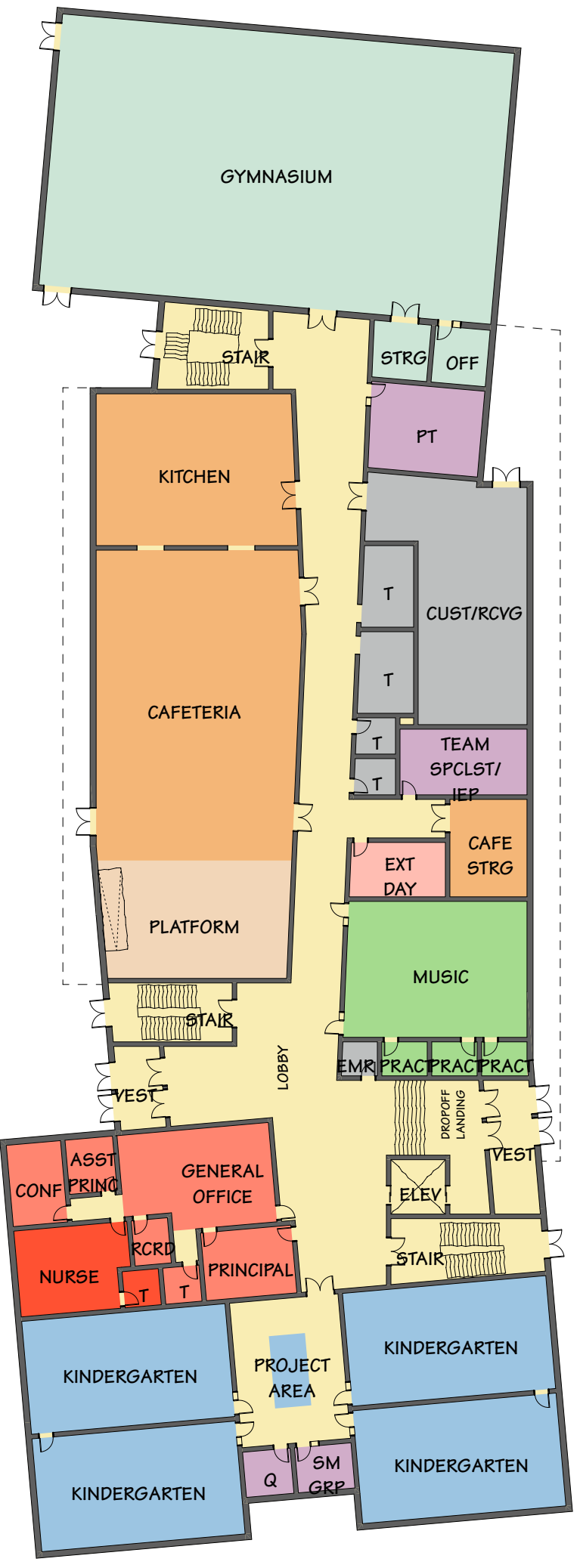
- Entry to main lobby at Dedham Street north and at playground
- First floor split level from main entrance at Dedham Street north (two entryways)
- Entry plaza will require fill within 100-yr flood elevation
- Service and loading area access from Dedham Street north - will require fill and retaining walls
- Gym location - direct access to fields and playground
- Construction of new building is approximately 100 feet away from existing building
- Classroom wing has north-south orientation

# Approach 6B | 465 Students | New Construction | 75,500 SF

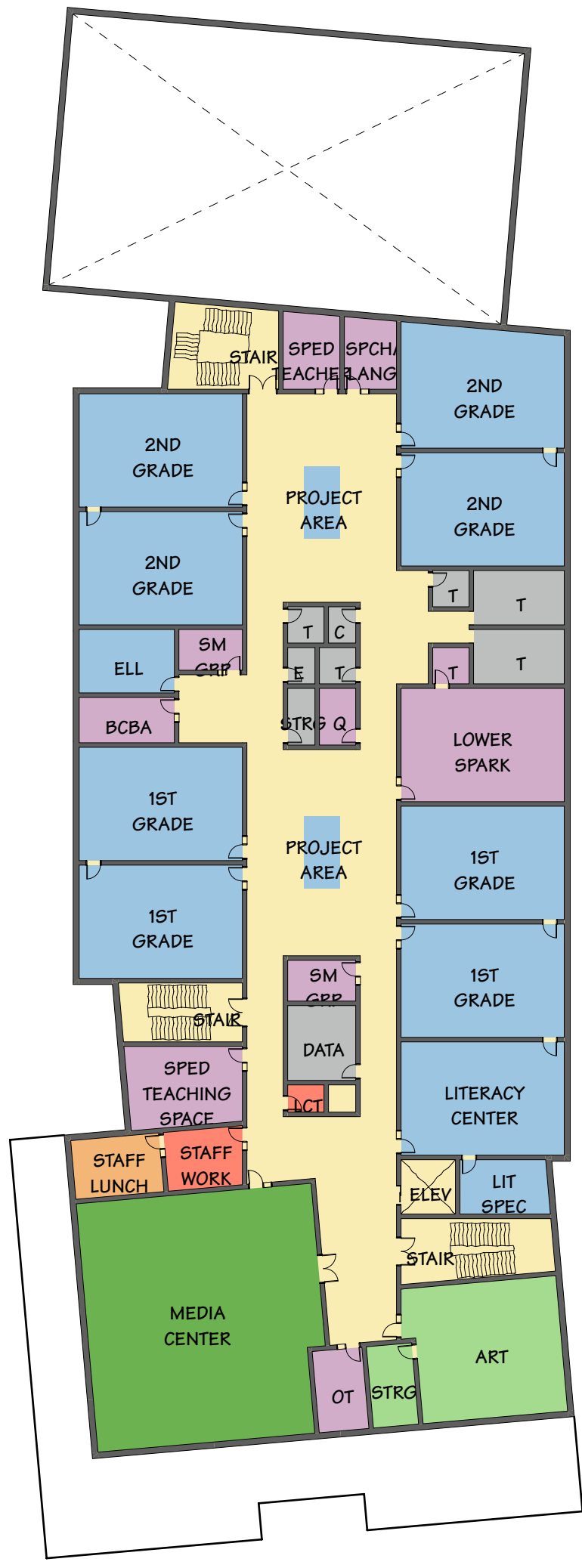
**LEGEND**

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYS ED
- MEDIA CENTER
- DINING & FOOD SERVICE
- PLATFORM
- MEDICAL
- ADMIN & GUIDANCE
- OTHER / EXTENDED DAY
- CUST, MAINT, & TOILETS
- CIRCULATION

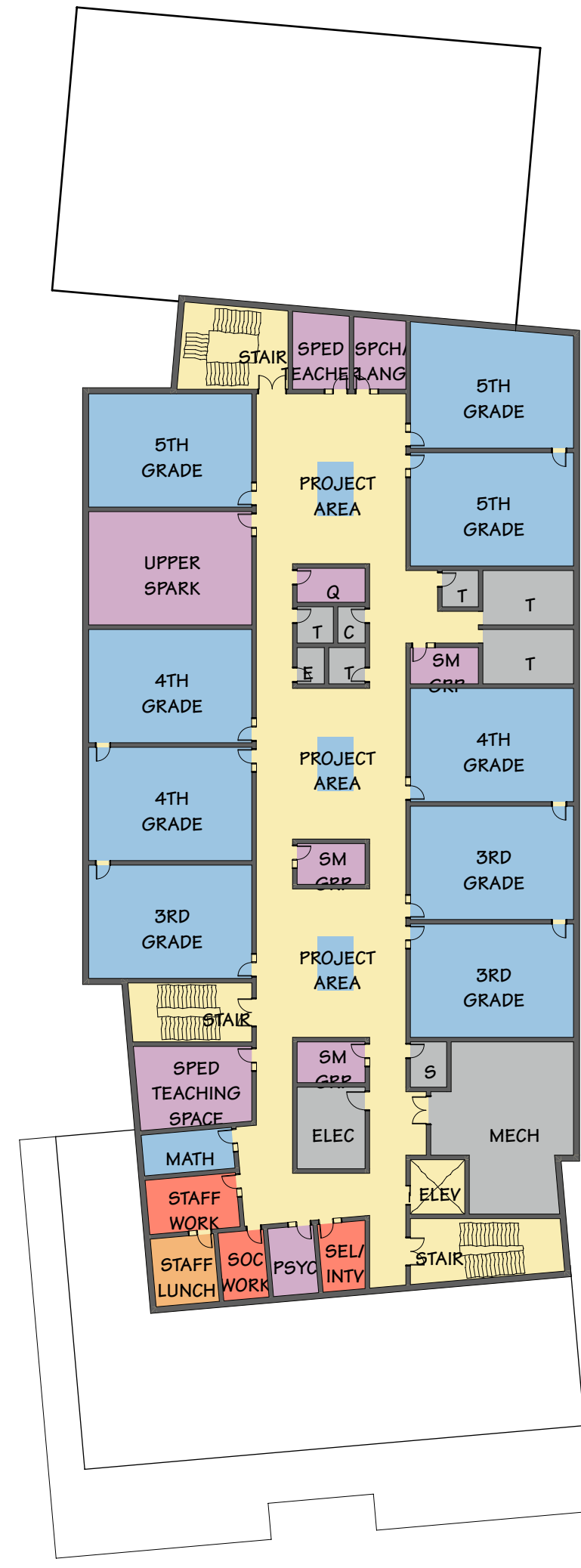
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First Floor



Second Floor



Third Floor

- Meets MSBA Space Guidelines
- Ideal spatial relationships and adjacencies
- Gymnasium on first floor
- Kindergarten on first floor
- North / South solar orientation classrooms

# Approach 6A | Recommended Approach



# Approach 6A | Preferred Schematic





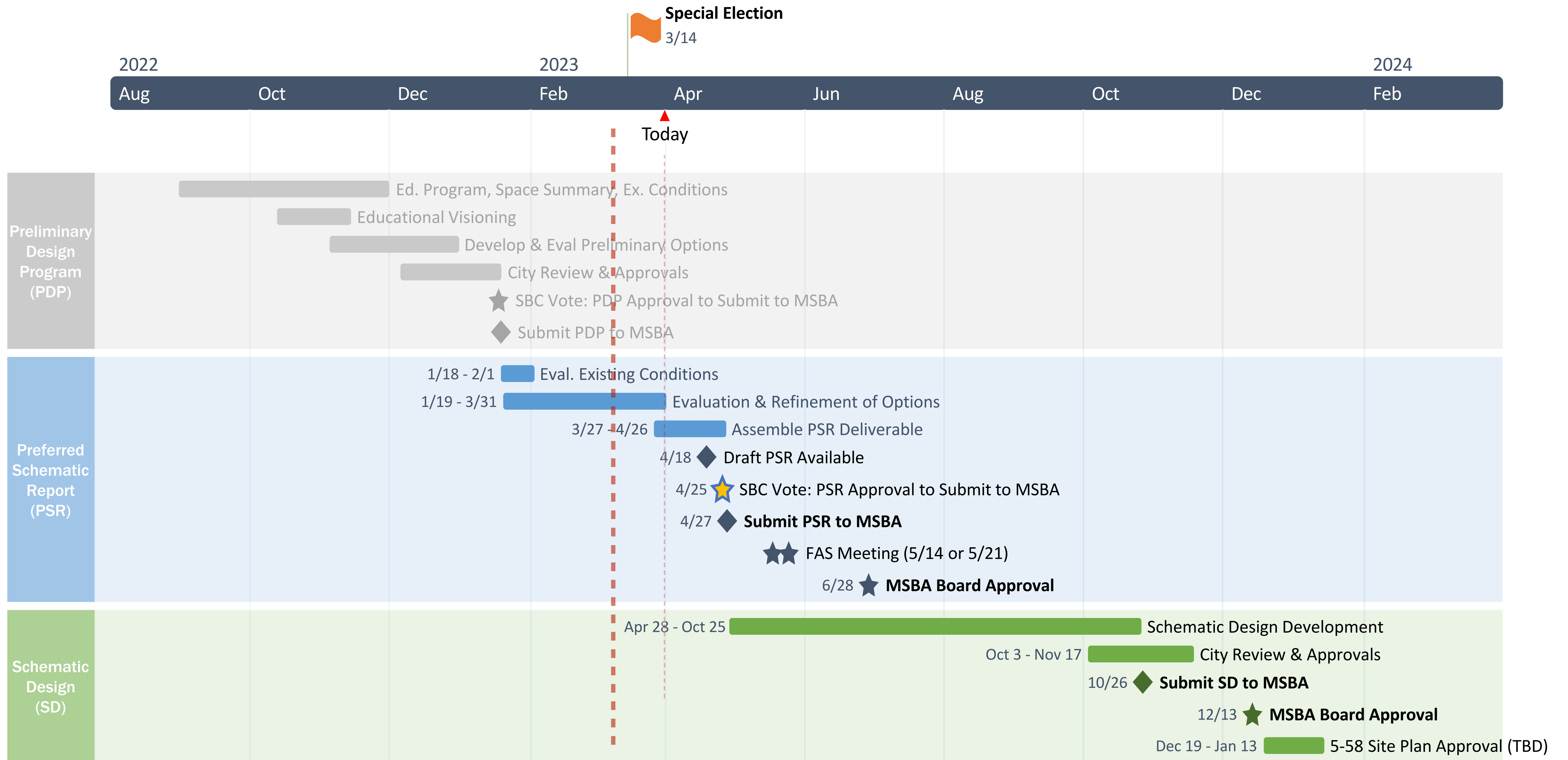
# Approach 6A | 465 Students | New Construction | 75,500 SF



# Approach 6A | 465 Students | New Construction | 75,500 SF



# Project Schedule | Milestones



\* Anticipated estimated construction Summer 2025 - Summer 2027

# Upcoming meetings / activities

- Public Facilities Committee Meeting April 12, 2023
- SBC Meeting: April 25, 2023  
Vote to submit PSR to MSBA
- Submit Preferred Schematic Report (PSR) April 27, 2023
- MSBA Board of Directors approval to begin Schematic Design June 21, 2023



School Building  
Committee Meeting

# COUNTRYSIDE ELEMENTARY SCHOOL

Newton, MA

# Approach 6C | Preliminary Location Options



- Entry to main lobby accessed from interior of site - bus and parent drop-off/pick up is not directly adjacent to the school entrance
- First floor same level as main entrance (one entry way)
- Entire building and entry plaza within 100-yr flood elevation
- Service and loading area access from Dedham Street north - will require fill and retaining walls
- Gym location - direct access to fields and playground
- Construction of new building is over 100 feet away from existing building
- Classroom wing has north-south orientation

# Approach 6D | Preliminary Location Options



- Entry to main lobby accessed from interior of site - bus and parent drop-off/pick up is not directly adjacent to the school entrance
- First floor same level as main entrance (one entry way)
- Entire building and entry plaza within 100-yr flood elevation
- Service and loading area access from Dedham Street north - will require fill and retaining walls
- Gym location - not adjacent to playground and field, but building can be mirrored for gym adjacent to playground
- Construction of new building is over 100 feet away from existing building
- Classroom wing has east-west orientation