

# Music Center at Indian Hill

in Groton, MA



## Traffic Impact and Access Study

Follow-up Presentation  
Old Ayer Road at Boston Road/Main Street (Route 119)  
Old Ayer Road at Peabody Street  
& Site Parking



Groton Planning Board  
December 1, 2016

Owner - Indian Hill Music

Architect - Epstein Joslin Architects

Acoustician - LKAcoustics Design Studio / Threshold Acoustics

Structural Engineer - Odeh Engineers

Landscape Architect - Stephen Stimson Associates

Theater Consultant - Theater Consultants Collaborative

MEP Engineer - BR+A

Civil Engineer - Beals Associates, Inc.

Lighting - Ripman Lighting Consultants

Food Service Consultant - JGL


# Old Ayer Road at Route 119



### Traffic Problems:

- 1 Peak Hour Congestion on 119 SB AM/NB PM
- 2 Shallow angle of NB left turns onto 119/including difficulty for fire trucks from Old Ayer Road
- 3 No rear end protection for NB left onto Old Ayer Road South & shallow right turn ( $<60^\circ$ )
- 4 No infrastructure for pedestrian movements along 119
- 5 WB traffic on Old Ayer Road South must stop at Old Ayer Road North

### Solution Constraints:

- ❖ Prescott Common parcel 
- ❖ Steep grades next to Route 119 west side
- ❖ Two driveways on the west side of Old Ayer Rd N



## Existing Circulation Problems and Constraints



# Potential options all have important drawbacks

- 0 – Do-Nothing** – problematic/retains existing circulation deficiencies
- 1 - Modify 'T' Intersection Through Prescott Common** - physically highly problematic traffic signalization likely needed - – major Prescott Common impacts
- 2 - Roundabout** - physically highly problematic – major Prescott Common impacts
- 3 – Modifications that generally avoid Prescott Common** – improved safety with minor operations improvements

## Overview of Range of Options







## Single 'T' and Roundabout Options Both Deemed Infeasible for Constructability

Music Center at Indian Hill, Groton, MA



# Old Ayer Road at Route 119

Then what options are  
available?



**Options that minimize  
adverse park impacts**





1-way w/ added park expansion  
– without pedestrian enhancements –



## Option 3A (Town)

BEALS ASSOCIATES INC.

2 PARK PLAZA SUITE 200 BOSTON, MA 02116  
PHONE: 617-242-1120

0 20

Old Ayer Road and  
Main Street

November, 2016





## Option 3B (Town)

Groton, Massachusetts

BEALS ASSOCIATES INC.  
21 Park Plaza South 200 Boston, MA 02116  
Phone: 617 242-1130

Old Ayer Road and  
Main Street

November, 2016

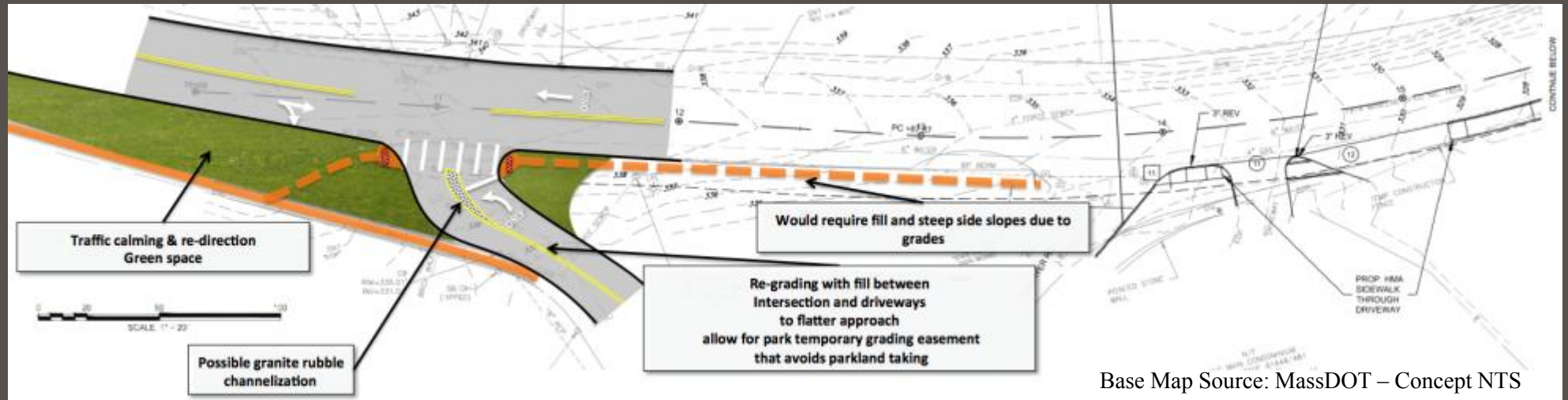




**Option 3C (Robertson)**

No Scale





# OLD AYER ROAD AT MAIN STREET (ROUTE 119)





# Option 3C Before/After Looking North on Old Ayer Road (North)





# Option 3C Before/After Looking North on Old Ayer Road (North)

**Too steep  
for design  
standards**

**Optional crosswalk and street sidewalk**





# Option 3C Before/After Looking South on Old Ayer Road (North)





# Option 3C Before/After Looking South on Old Ayer Road (North)

Optional crosswalk and street sidewalk


Too steep  
for design  
standards





Retain 2-way flows  
Allow for pedestrian  
amenities;  
address NB left turn demands  
And grading issues



 Possible new  
green space

1

\*  
Remove as much of the nose  
as feasible  
within grading constraints  
to improve approach angle

2

3

T with Old Ayer Road South

Consider either 1) (shown) 2-3 vehicle  
right bypass to retain MassDOT  
sidewalk plan, or 2) (not shown), a  
short left lane within paved area  
requiring an alteration of MassDOT's  
sidewalk plan *but not widening*

Not to Scale

10 m  
50 ft

Scale = 1:1,128

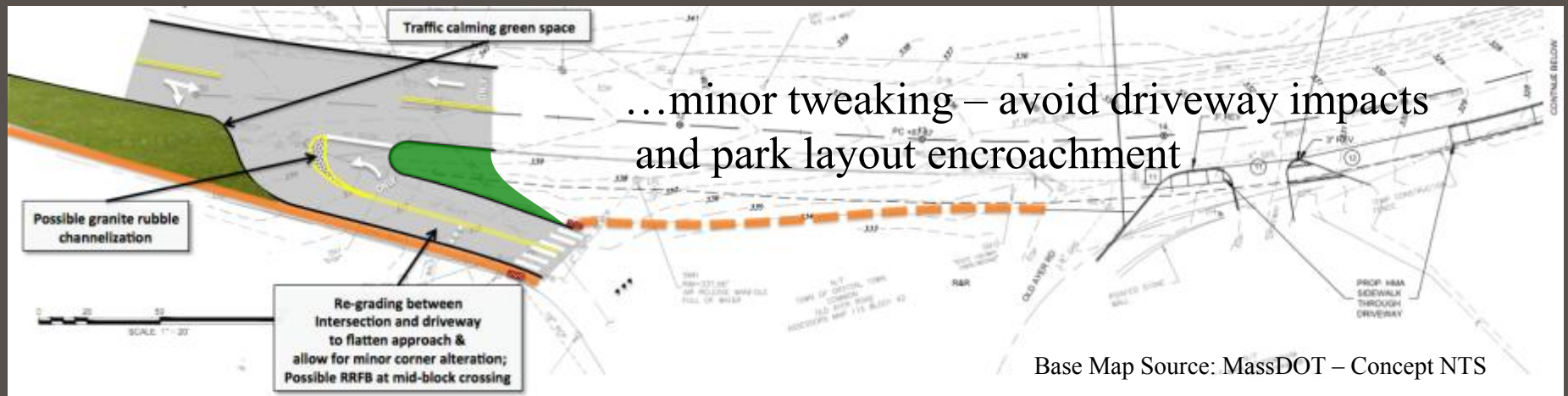
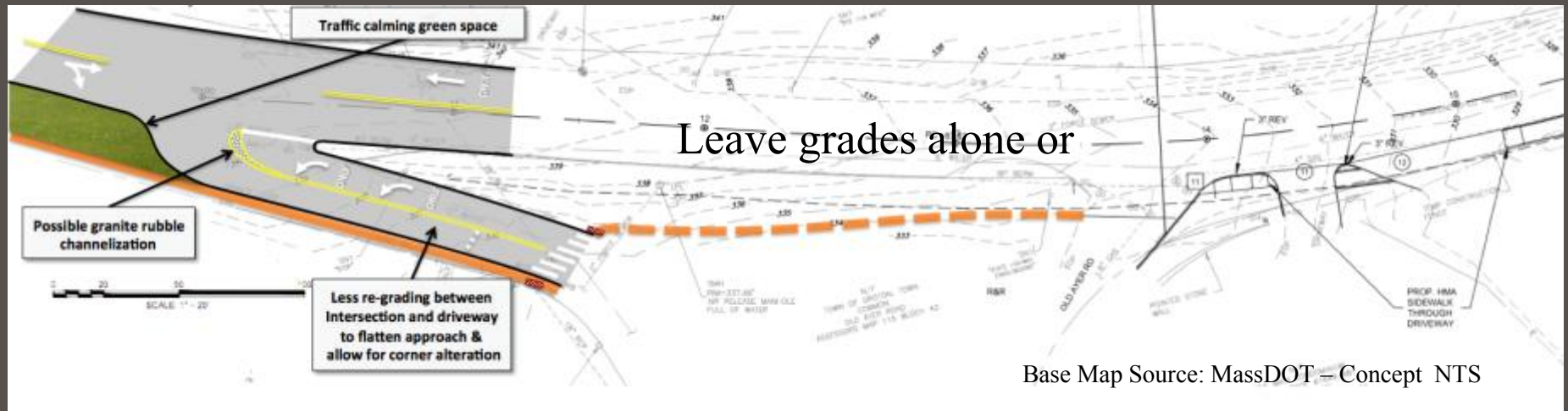
194,365.55m 927,855.47m

MassGIS Topographic Features Basemap

 **Option 3D**

Music Center at Indian Hill, Groton, MA





# Option 3D Design Options

## Old Ayer Road North at Main Street (Route 119)

Music Center at Indian Hill, Groton, MA





1

# Before/After Looking South on Main Street to Relocated Old Ayer Road (North)





1

# Before/After

## Looking South on Main Street to Relocated Old Ayer Road (North)





2

# **Before/After** **Looking Southwest on Old Ayer Road (North)** **To Old Ayer Road (South)**





2

# Before/After Looking Southwest on Old Ayer Road (North) To Old Ayer Road (South)

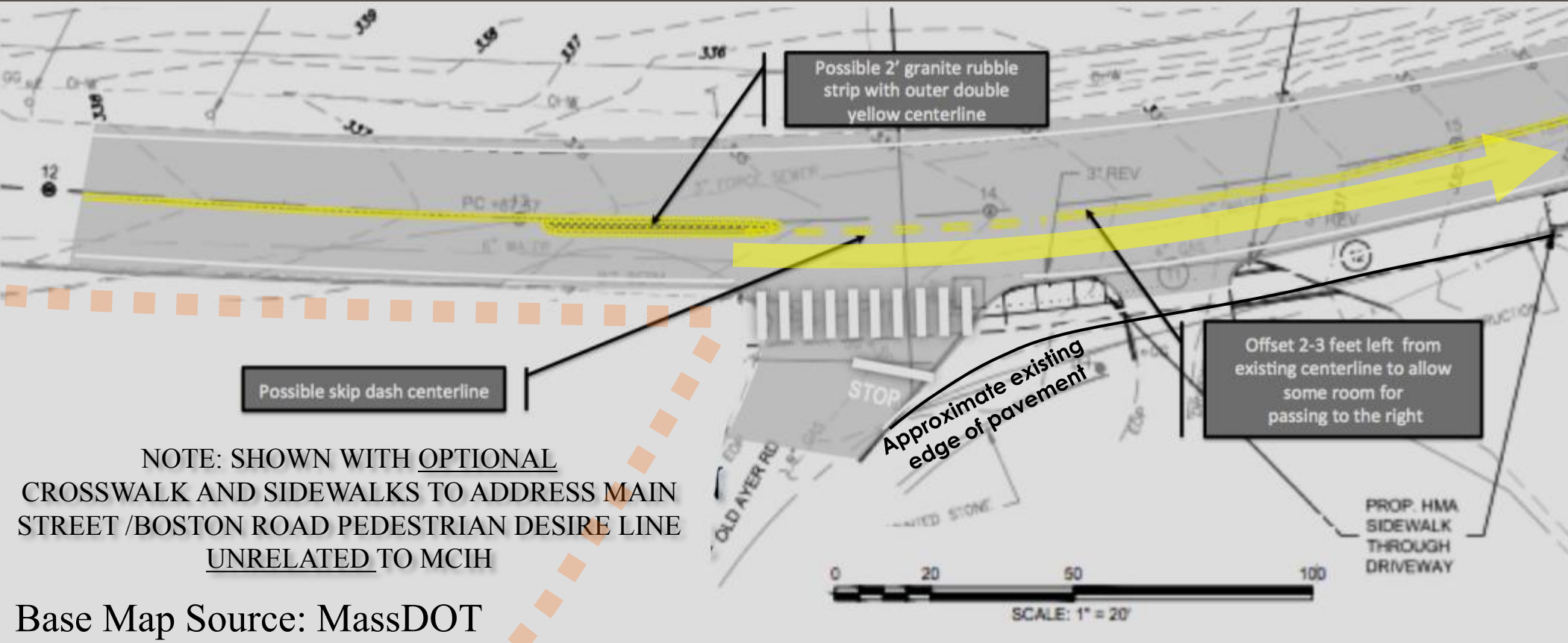


NOTE: SHOWN WITH OPTIONAL  
CROSSWALK AND SIDEWALKS TO  
ADDRESS MAIN STREET /BOSTON  
ROAD

PEDESTRIAN DESIRE LINES  
THROUGH PARK  
UNRELATED TO MCIH

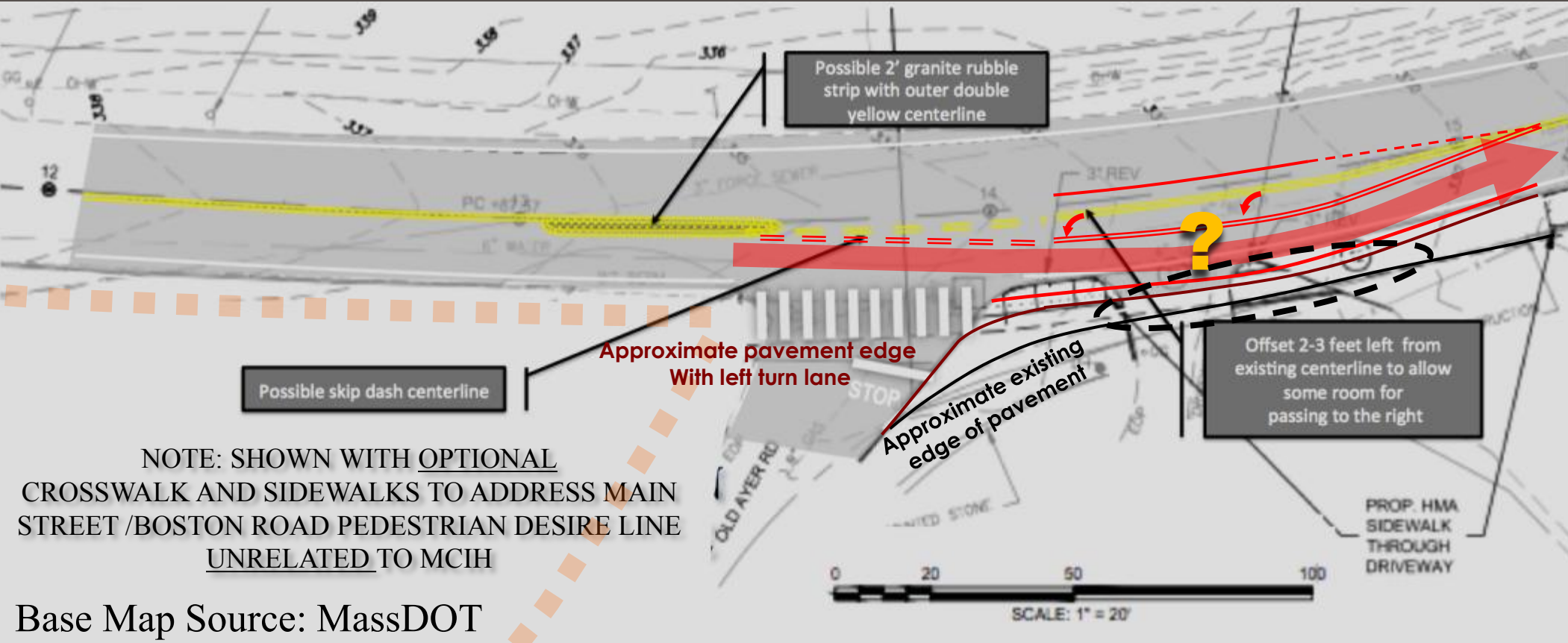






## OLD AYER ROAD SOUTH AT BOSTON ROAD (ROUTE 119)





## OLD AYER ROAD SOUTH AT BOSTON ROAD (ROUTE 119)





3

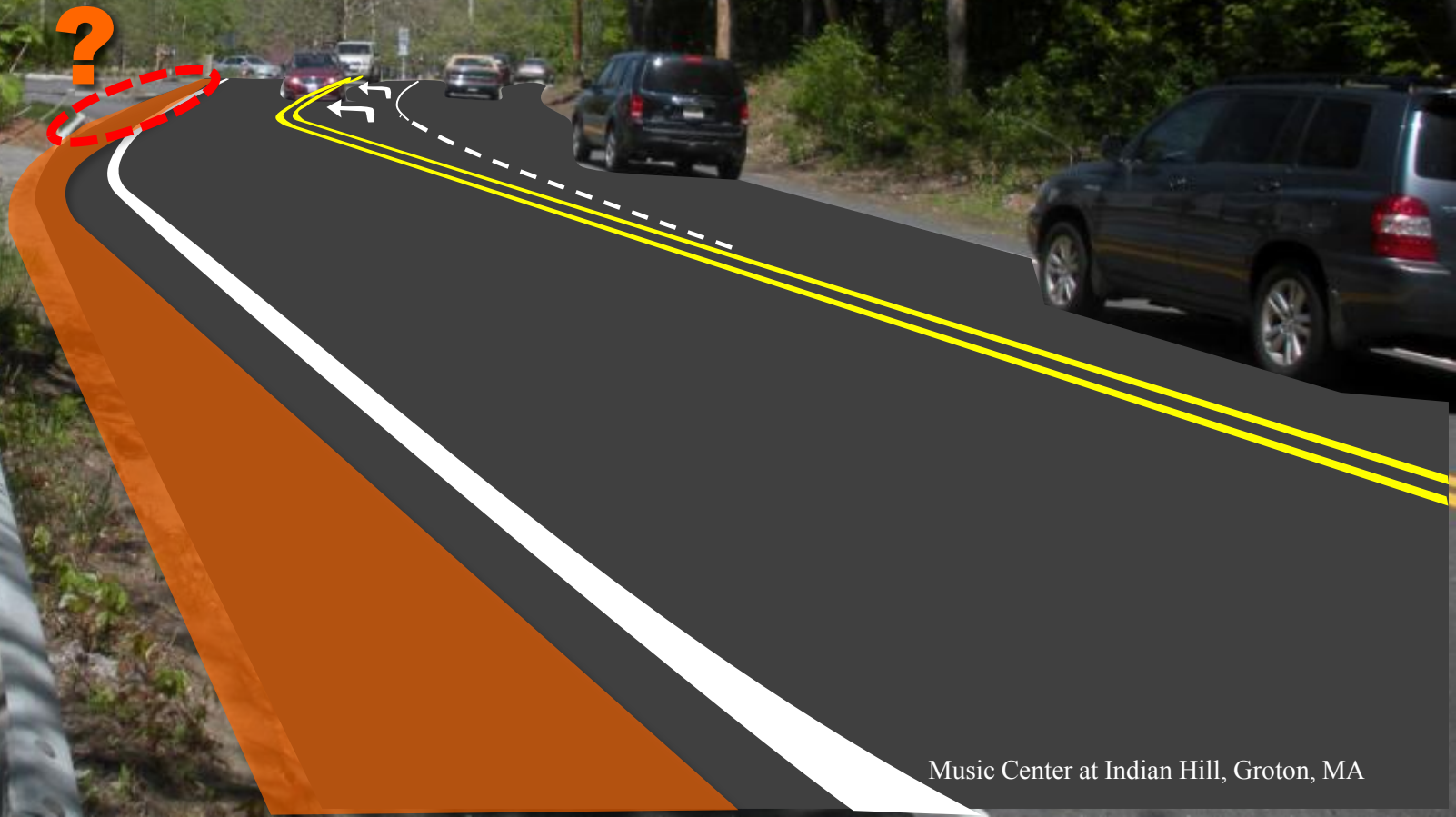
**Before/After**  
**Looking North on Boston Road (North)**  
**to Old Ayer Road South**  
**where left lane or right bypass may be possible**





3

**Before/After**  
**Looking North on Boston Road (North)**  
**to Old Ayer Road South**  
**where left lane or right bypass may be possible**





3

# Revised Before/After Looking North on Old Ayer Road (South)





# Revised Before/After Looking North on Old Ayer Road (South)

NOTE: CONCEPT SHOWN WITH OPTIONAL  
CROSSWALK AND SIDEWALKS  
TO ADDRESS MAIN STREET /BOSTON ROAD  
PEDESTRIAN DESIRE LINE  
UNRELATED TO MCIH

or



## Findings

Options 3A-3C all have good features.

Option 3D combines some of the best features of options available.

## Findings about Range of Options



## General Recommendation:

The Town should carefully review pros and cons of available options and *select features most in line with consensus discussions between Town officials, the Planning Board, Board of Selectmen, and MassDOT, which controls a significant portion of the Boston Road (Route 119) at Old Ayer Road South intersection.*

The Applicant has agreed to provide the Town with financial assistance to implement its preferred option.

## Old Ayer Road at Route 119 Recommendation







# Thanks Questions??

