

CAC Presentation
March 27, 2014

The Site

Station Improvements

Structural Considerations

Development Options

Implementation

CAC Presentation
March 27, 2014

The Site

Station Improvements

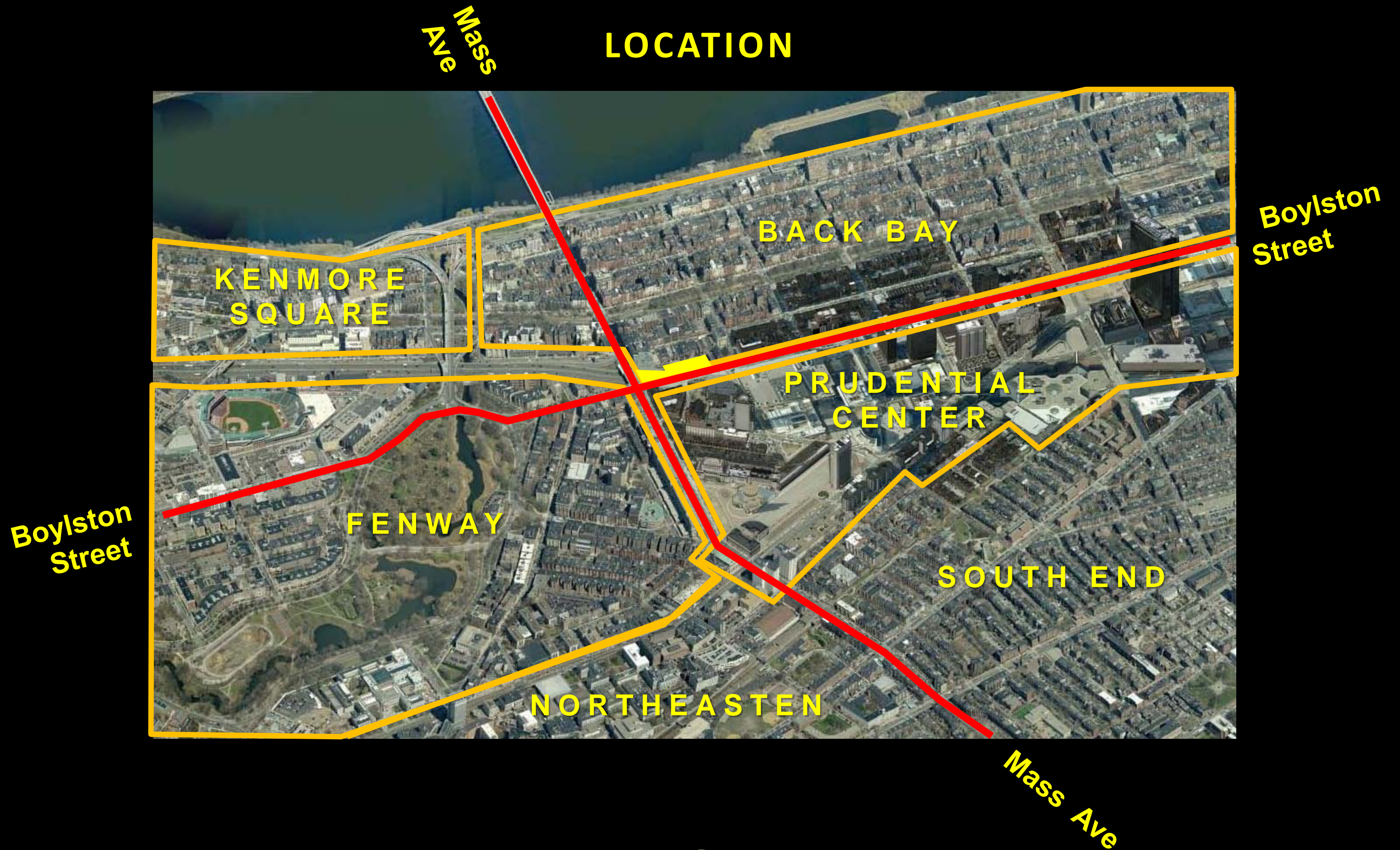
Structural Considerations

Development Options

Implementation

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

LOCATION



OTHER PROJECTS

Parcel 15

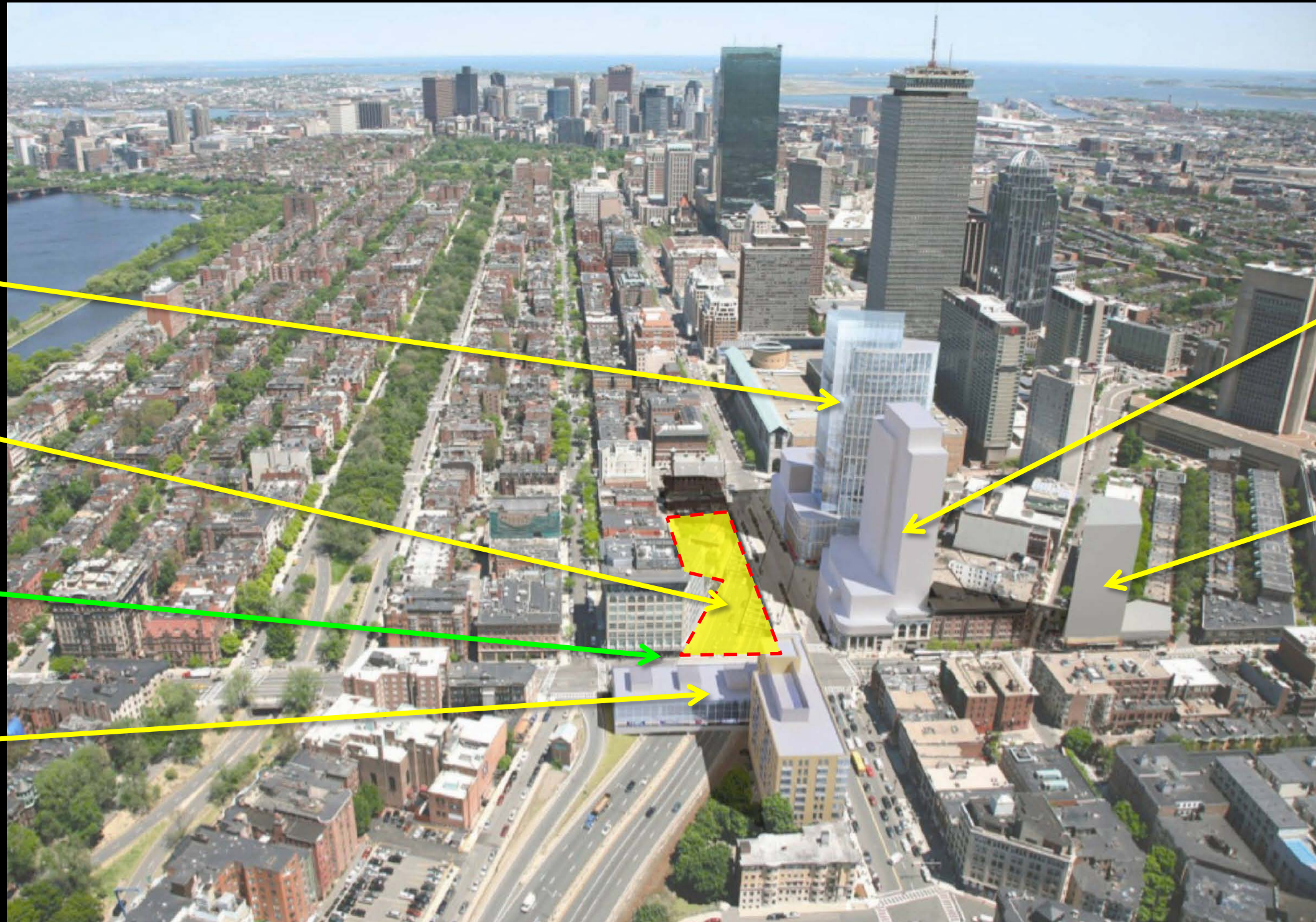
Parcel 13

Hynes Station

Parcel 12

Berklee Crossroads

Berklee 130 Mass Ave (Recently Completed)



From ADG SCOTIA II LLC (an affiliate of Weiner Ventures LLC and Samuels & Associates Development LLC) March 16, 2012

LAND USE BY BUILDING



Interspersed among commercial and residential buildings are clusters of institutional uses

KEY

- Residential
- Residential
- Residential
- Commercial
- Institutional
- Public Facility
- Mixed Use

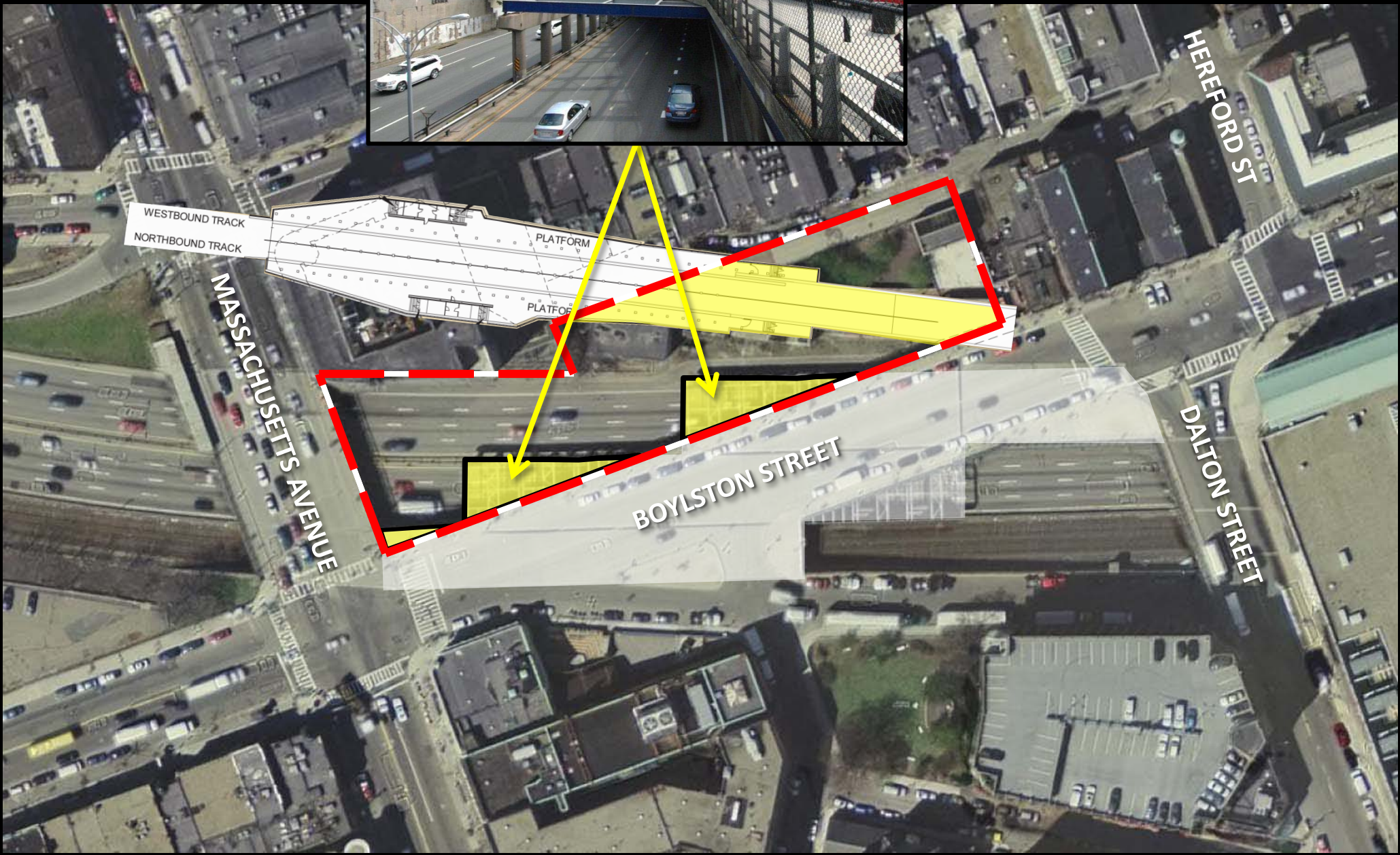
PARCEL CONSTRAINTS



PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY



Boylston Street Bridge Structure

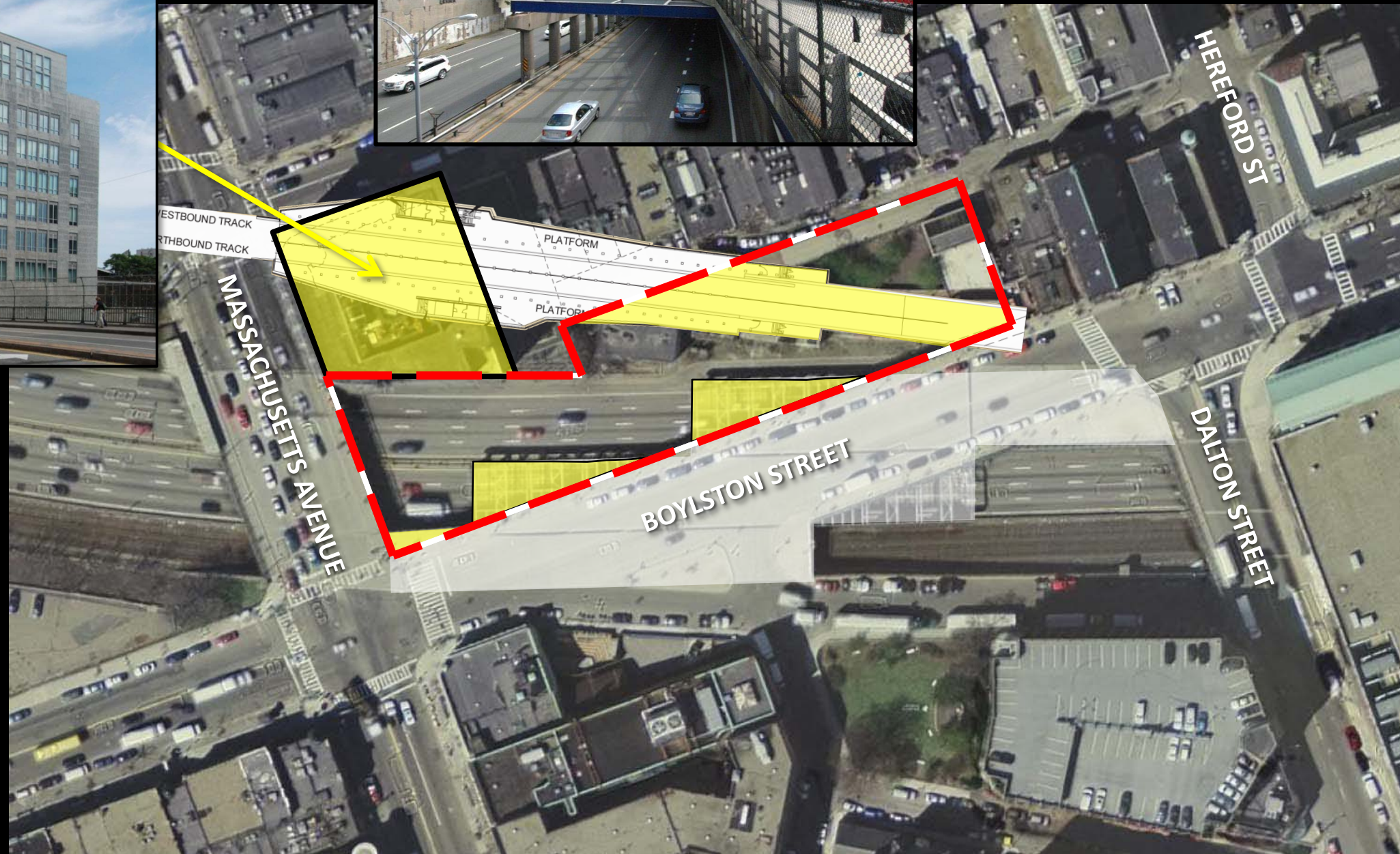


PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

360 Newbury Street



Boylston Street Bridge Structure



PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

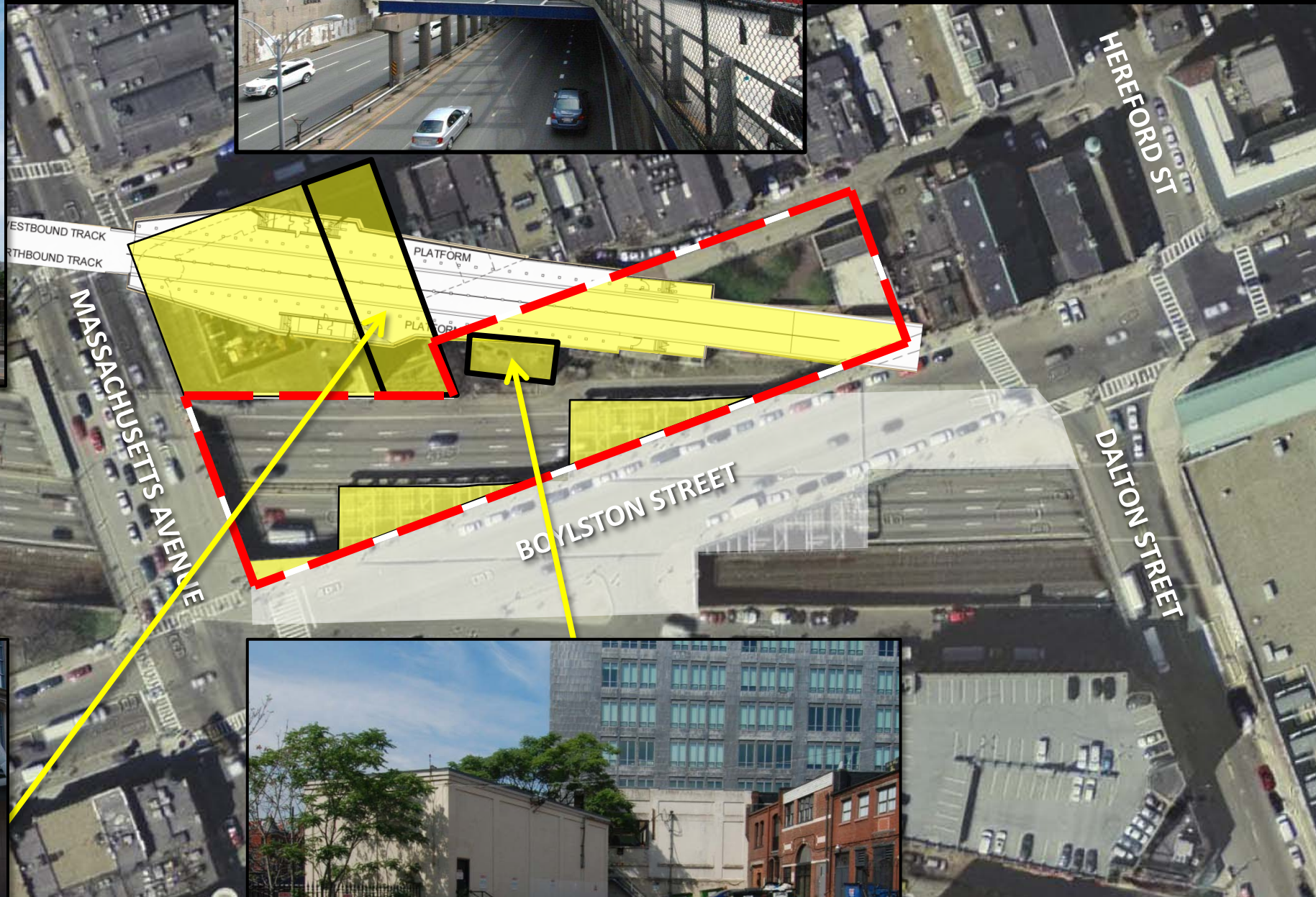
360 Newbury Street



Boylston Street Bridge Structure



Traction Power Substation



Unit Substation



PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

360 Newbury Street



Boylston Street Bridge Structure



Traction Power Substation



Boylston Street Headhouse



Unit Substation



PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

360 Newbury Street



Traction Power Substation



Boylston Street Bridge Structure

MBTA Ventilation Building



Boylston Street Headhouse



Unit Substation



PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

360 Newbury Street

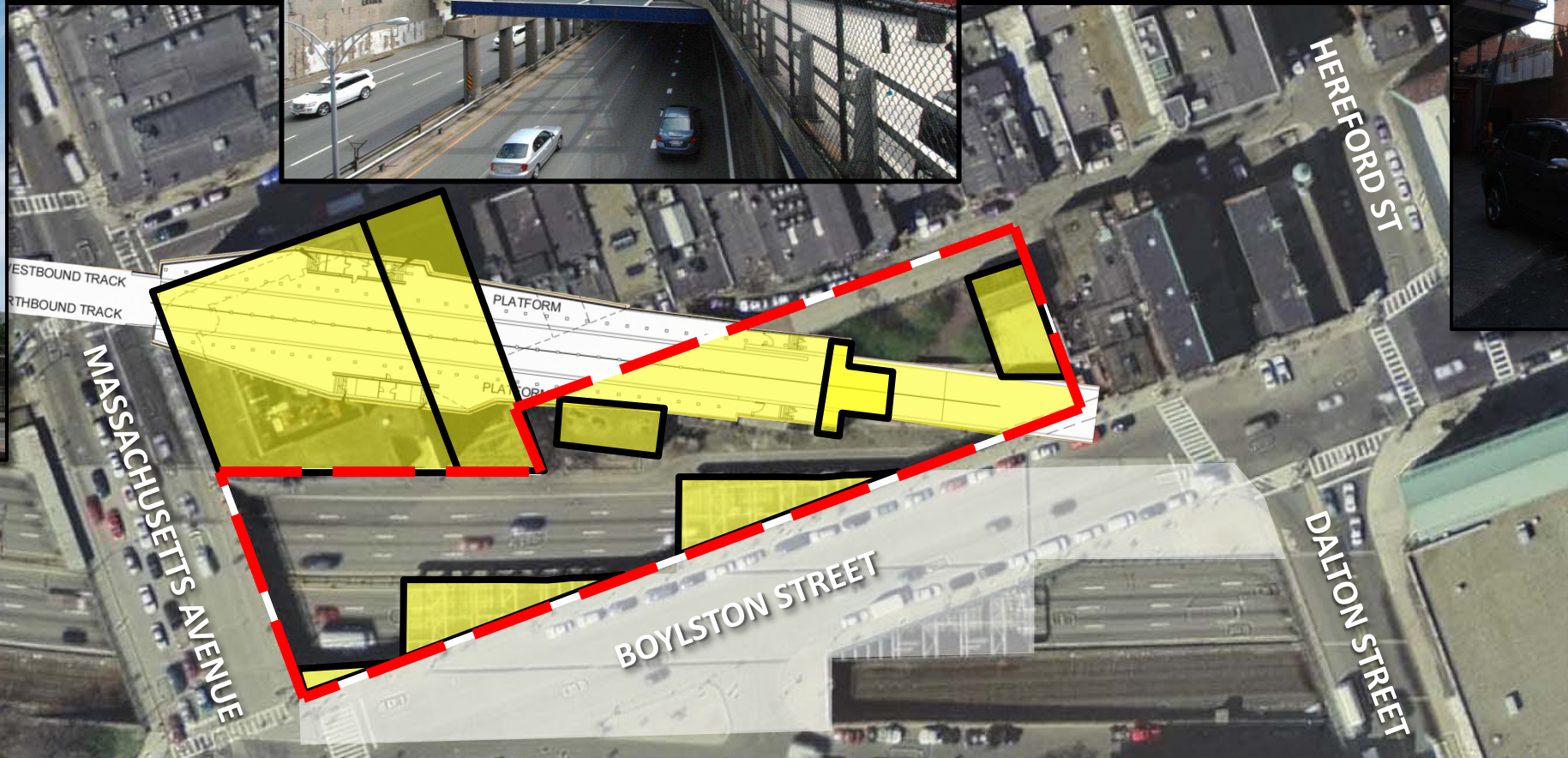


Traction Power Substation



Boylston Street Bridge Structure

MBTA Ventilation Building



Boylston Street Headhouse



Unit Substation



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March 27, 2014

The Site

Station Improvements

Structural Considerations

Development Options

Implementation

STATION IMPROVEMENTS



STATION IMPROVEMENTS

Replace existing entrance at Mass Ave to allow:

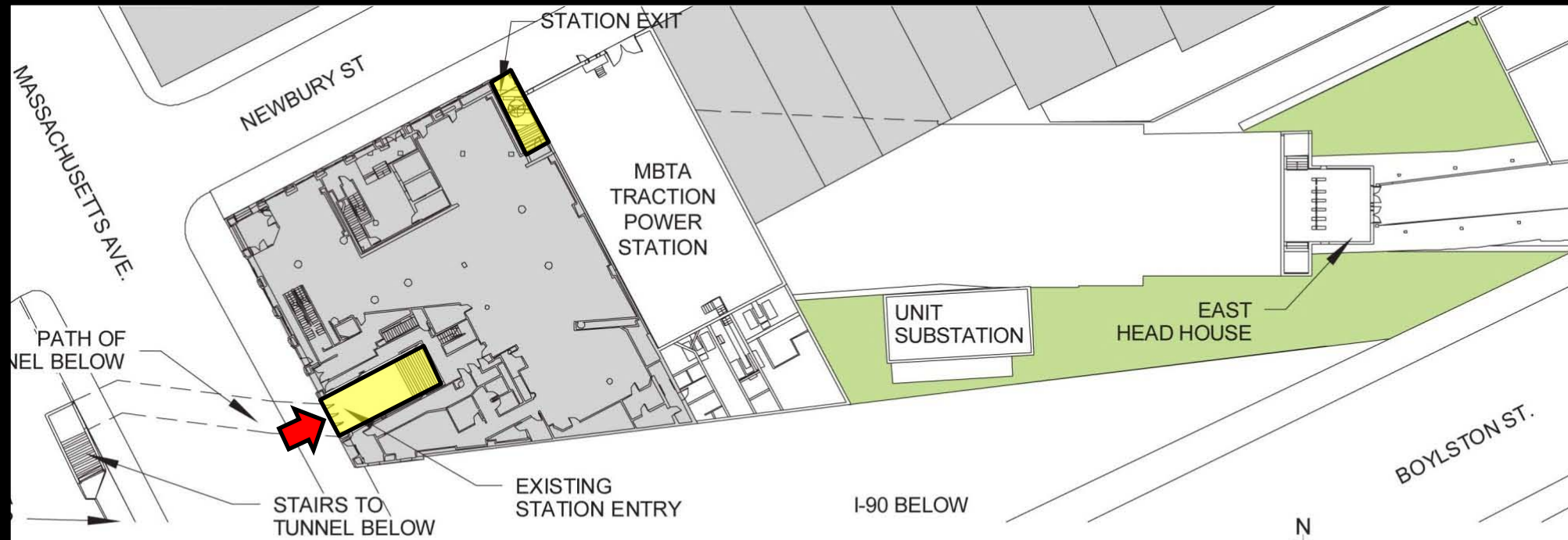
- Fare collection at street level and
- Direct elevator service to platform level



New entrance at Boylston Street

- Direct elevator service to platform level
- Optional full-service entrance

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY



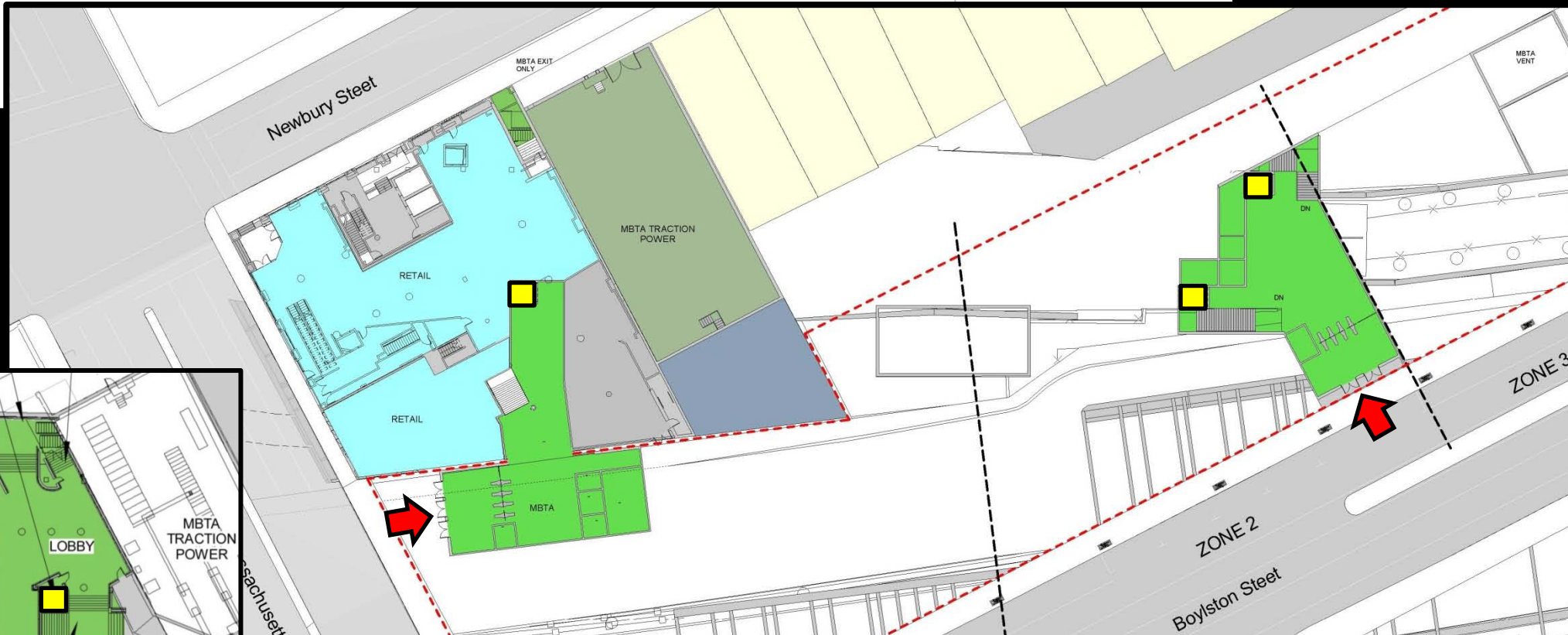
➔ New Mass Ave and Boylston entrances and fare collection using air-rights over Turnpike

Bus stops relocated to new station entrances on Mass Ave and Boylston Street

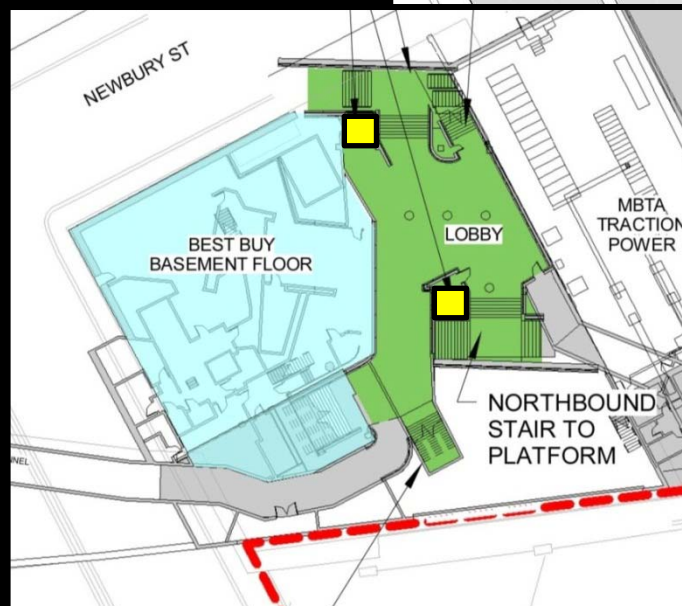
level plan

Existing street level

Proposed mezzanine

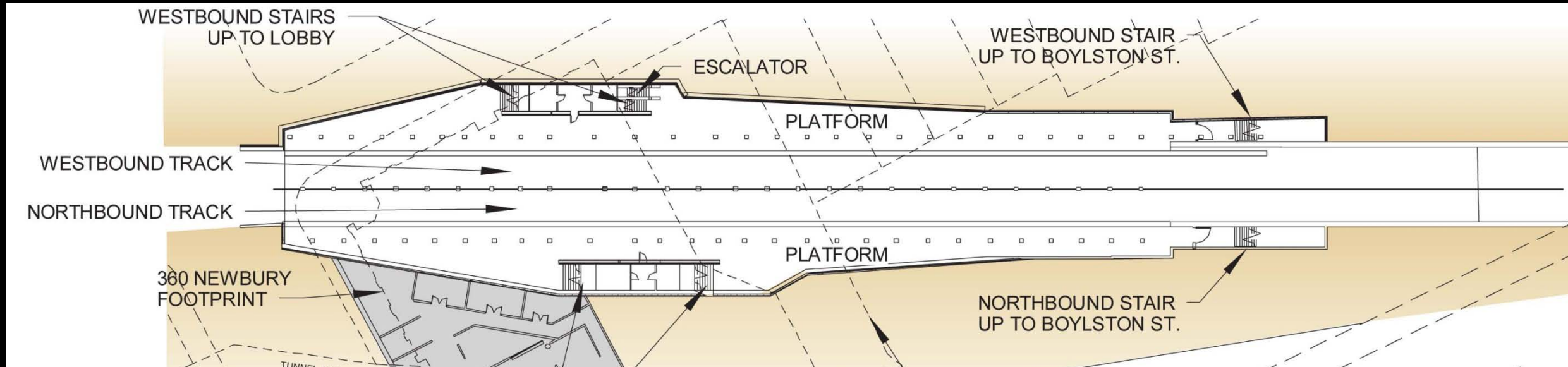


Proposed street level

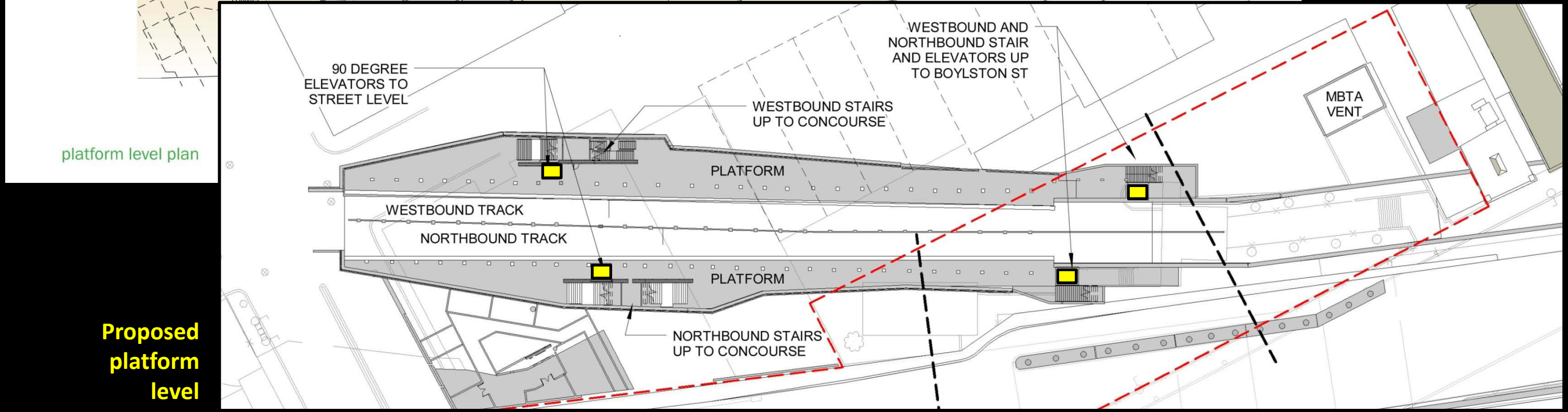


■ New elevators from street level entrances to mezzanine and platforms

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY



Existing platform level



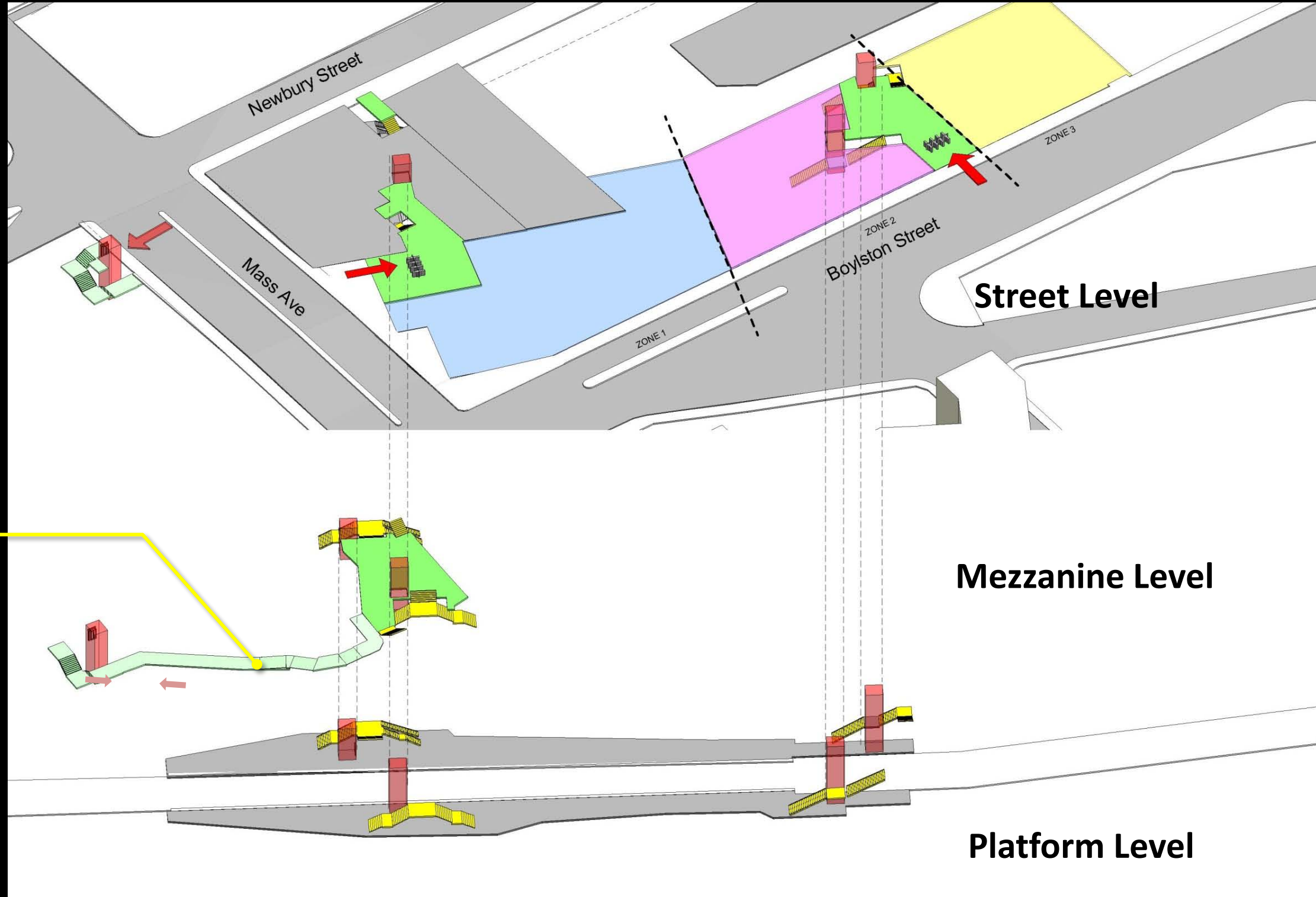
Proposed platform level

■ New elevators from street level entrances to mezzanine and platforms

STATION ACCESSIBILITY

Optional headhouse and elevator at Mass Ave Bus Stop

Existing tunnel below Mass Ave



PROJECT UPDATE
March 3, 2014

The Site

Station Improvements

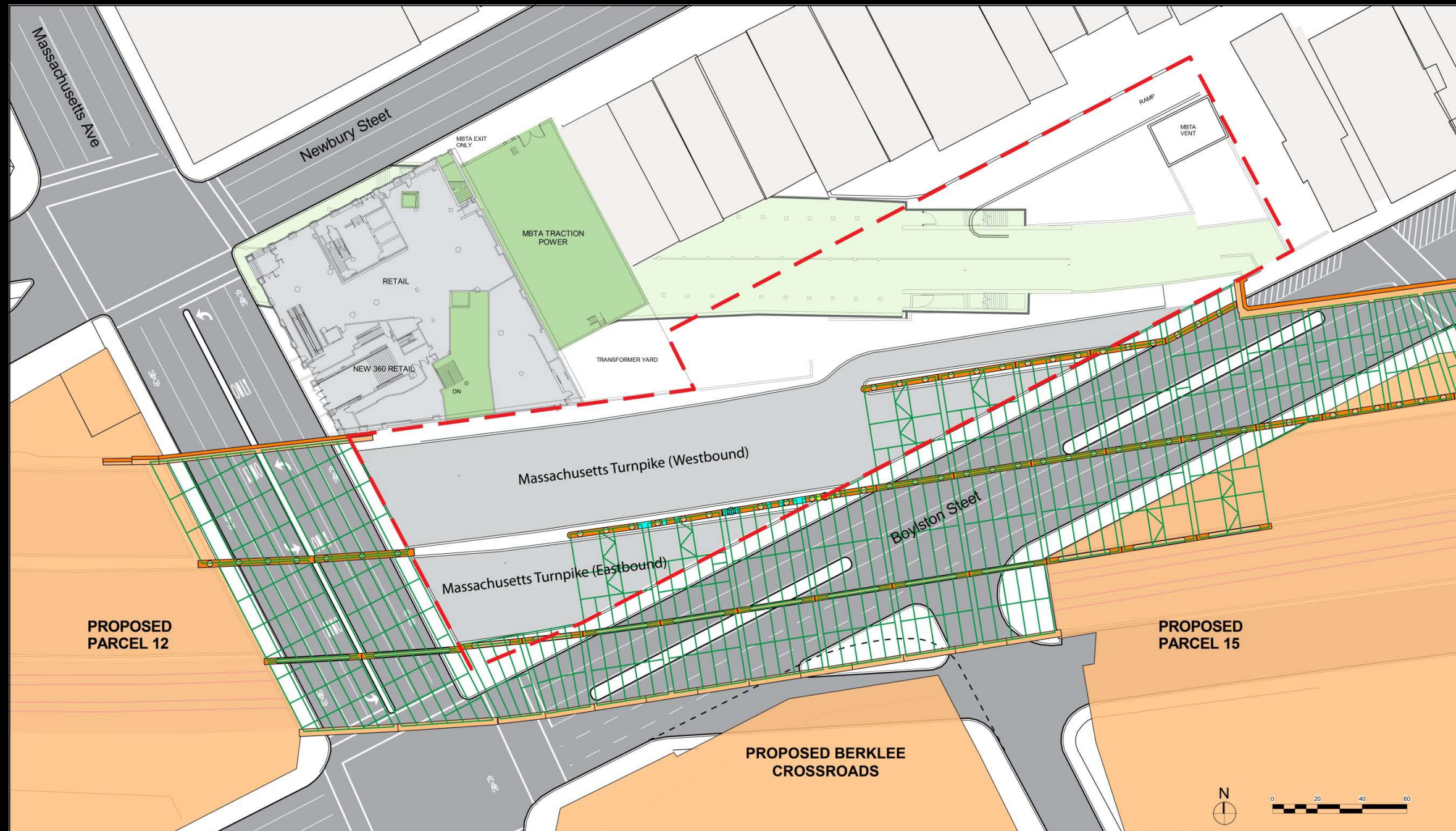
Structural Considerations

Development Options

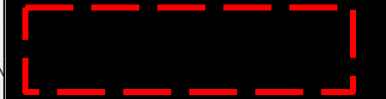
Implementation

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

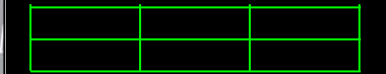
Parcel covers Turnpike and Green Line tunnel



Parcel Boundary



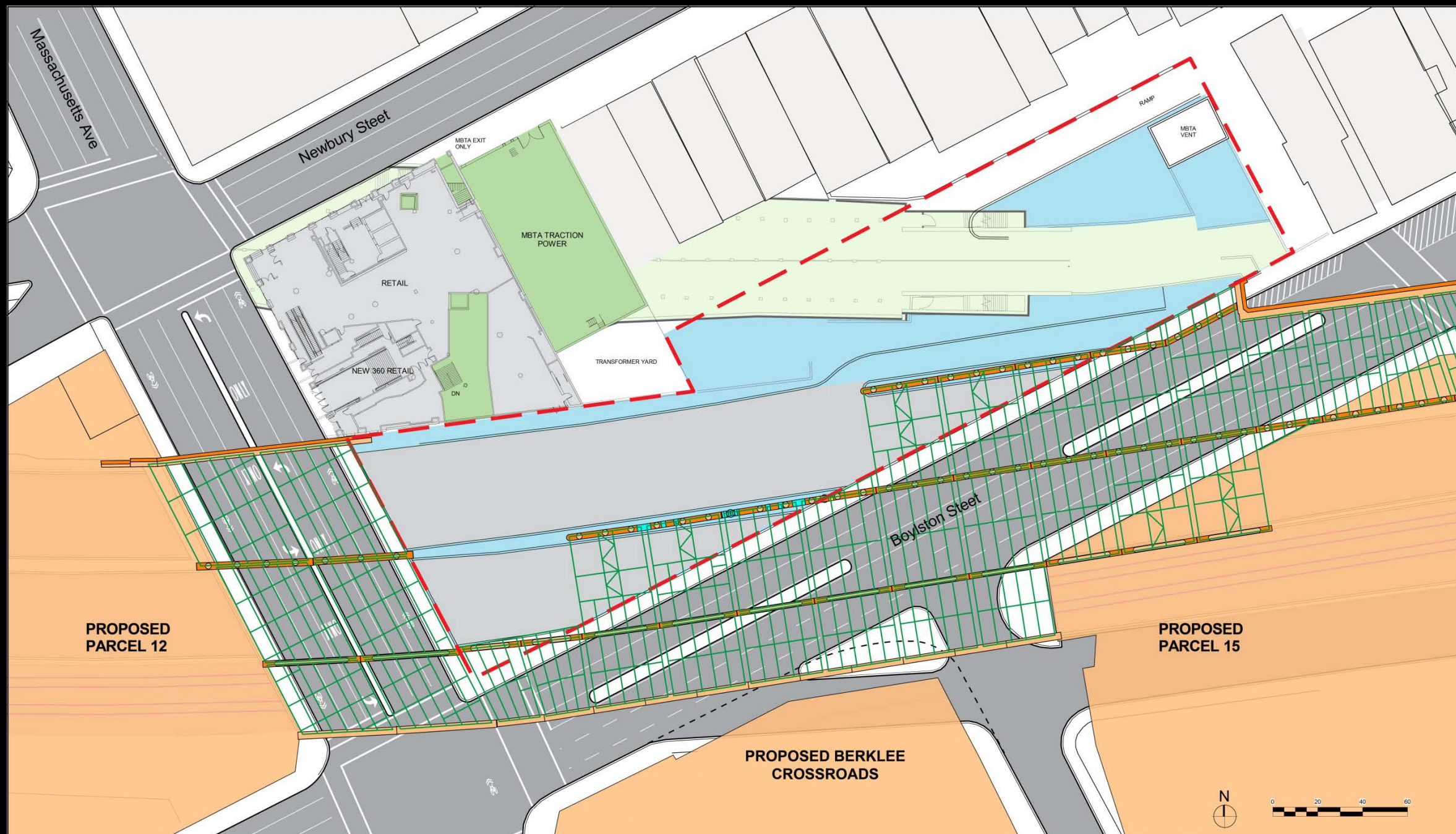
Existing Bridge Framing



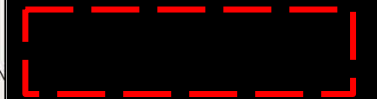
Existing bridge structure covers portion of Turnpike

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

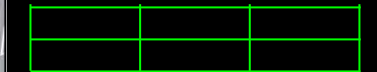
Limited areas for foundations



Parcel Boundary



Existing Bridge Framing

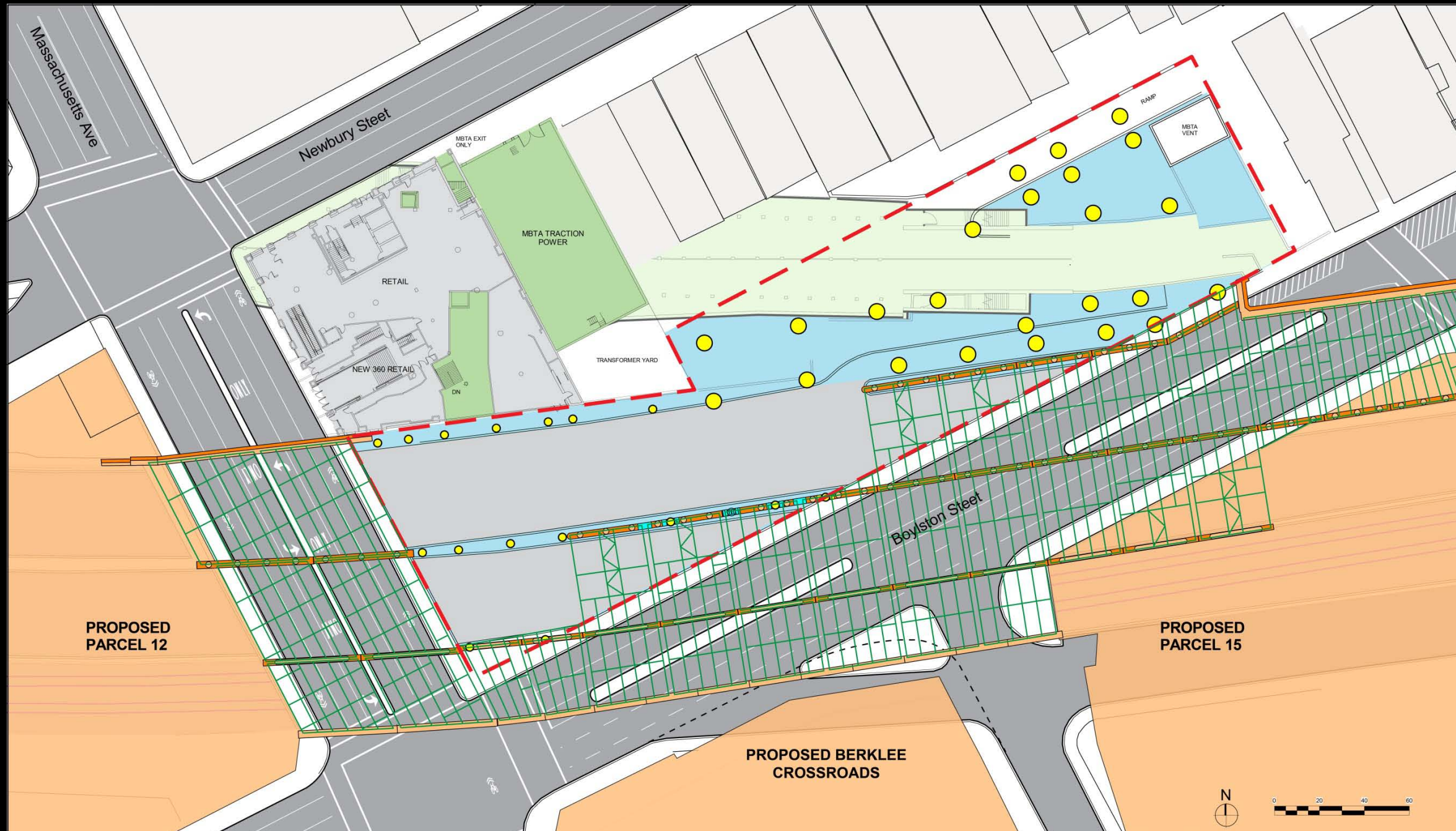


Terra Firma



PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Drilled caissons provide support



Parcel Boundary



Existing Bridge Framing



Terra Firma



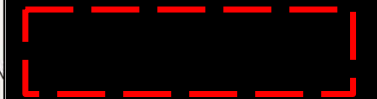
Drilled Caissons



Tying caissons together provides lateral support



Parcel Boundary



Existing Bridge Framing



Terra Firma



Drilled Caissons



Pile Caps

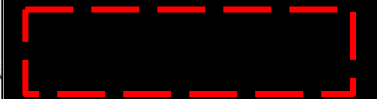


PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

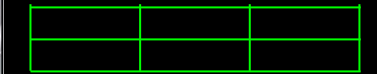
Trusses span areas with limited space for foundations



Parcel Boundary



Existing Bridge Framing



Terra Firma



Drilled Caissons



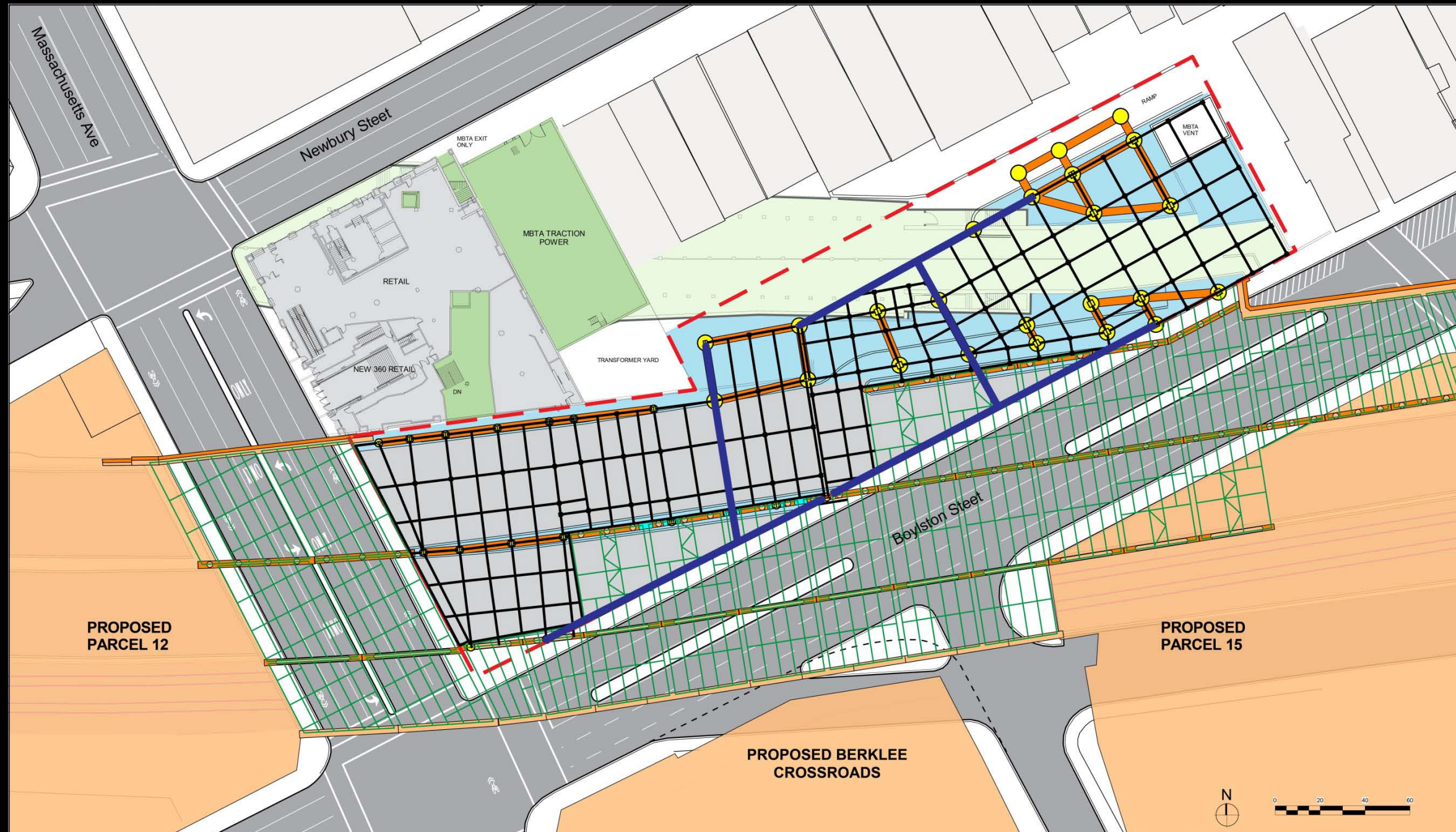
Pile Caps



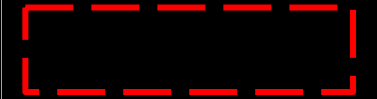
Trusses



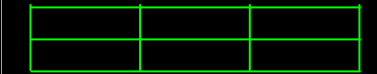
Additional framing maximizes building coverage



Parcel Boundary



Existing Bridge Framing



Terra Firma



Drilled Caissons



Pile Caps



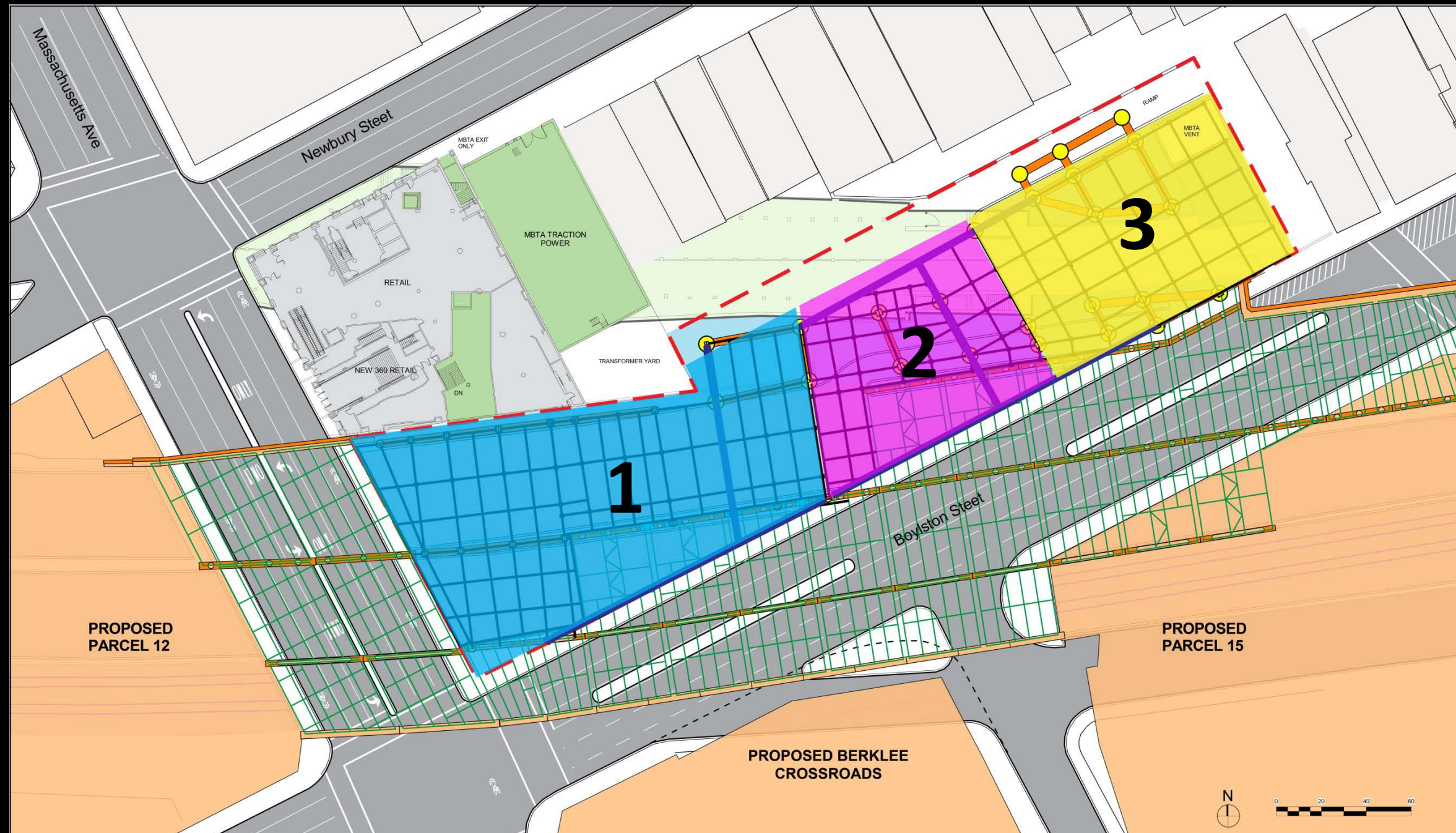
Trusses



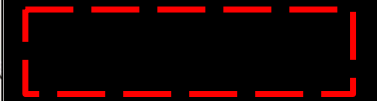
Building Framing



Structural analysis recommends three zones



Parcel Boundary



Existing Bridge Framing



Terra Firma



Drilled Caissons



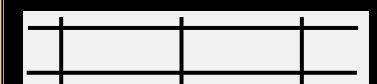
Pile Caps



Trusses



Building Framing



ZONE 1
Most
Challenging

ZONE 2
Moderate Capacity

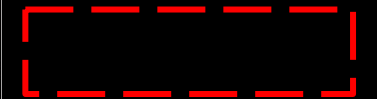
ZONE 3
Highest
Capacity

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

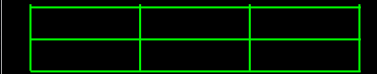
Reduced building footprint can eliminate trusses



Parcel Boundary



Existing Bridge Framing



Terra Firma



Drilled Caissons



Pile Caps



Trusses



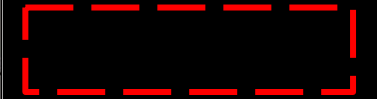
Building Framing



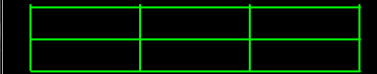
Not building over bridge supports simplifies structure



Parcel Boundary



Existing Bridge Framing



Terra Firma



Drilled Caissons



Pile Caps

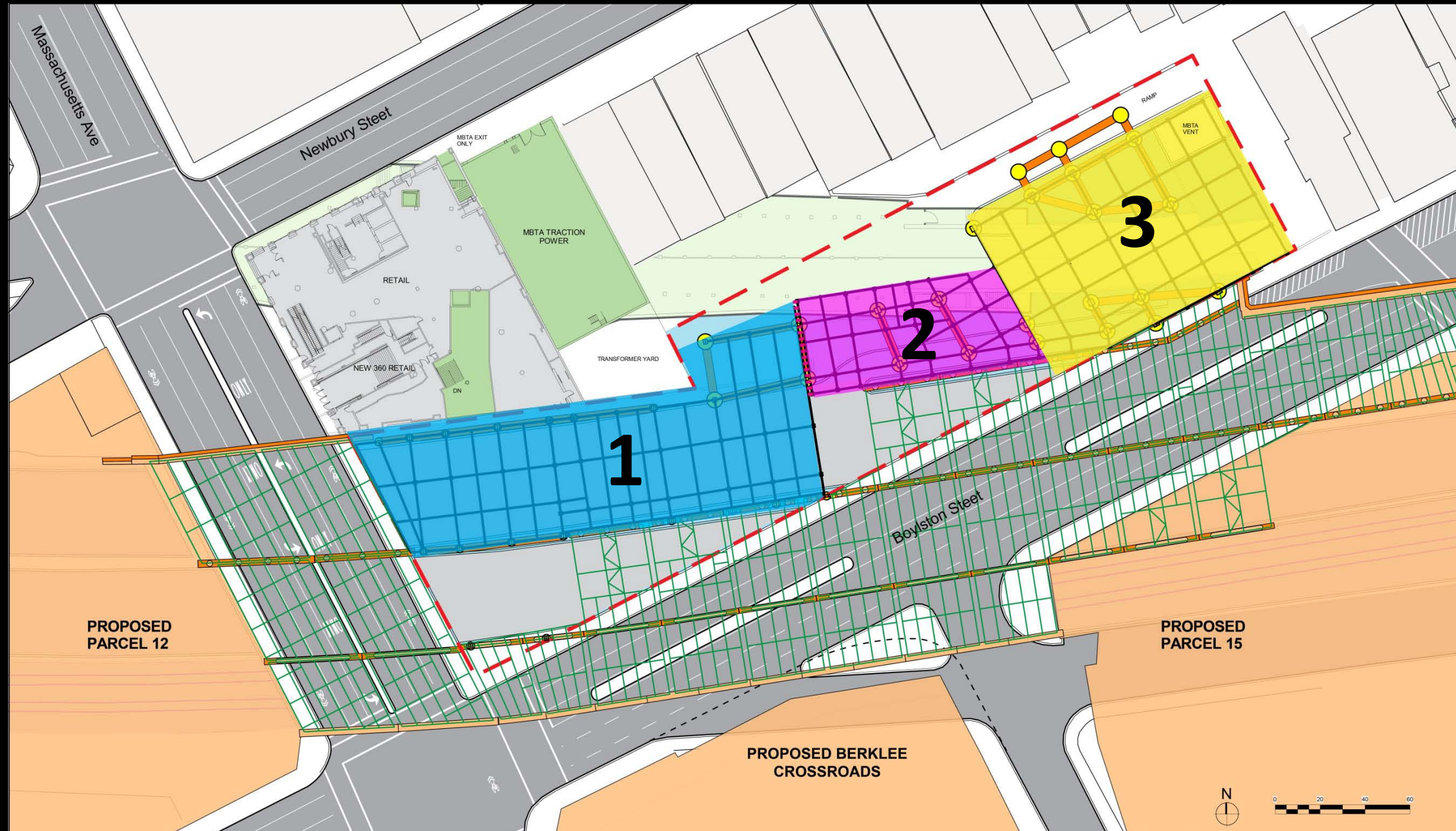


Building Framing



PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Modified building footprint reduces complexity



ZONE 1
Most
Challenging

ZONE 2
Moderate Capacity

ZONE 3
Highest
Capacity

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The Site

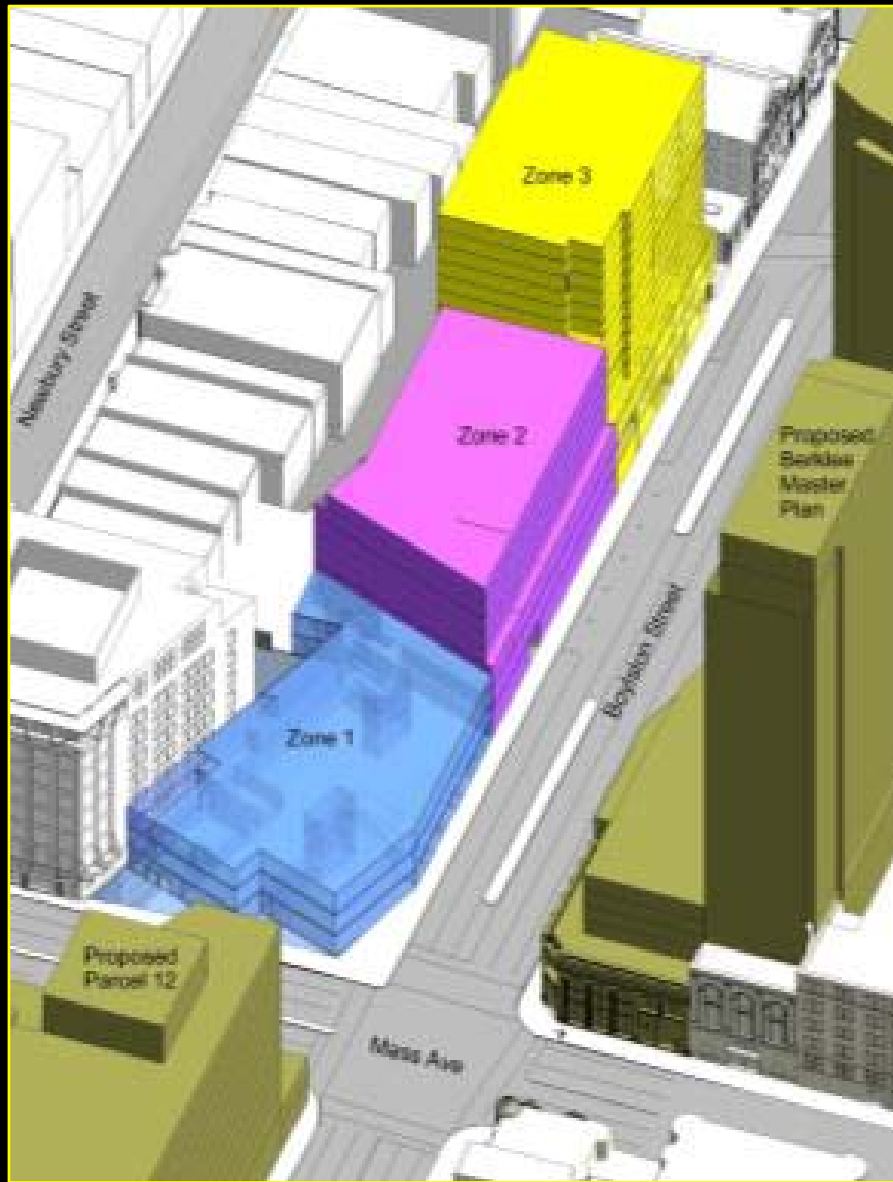
Station Improvements

Structural Considerations

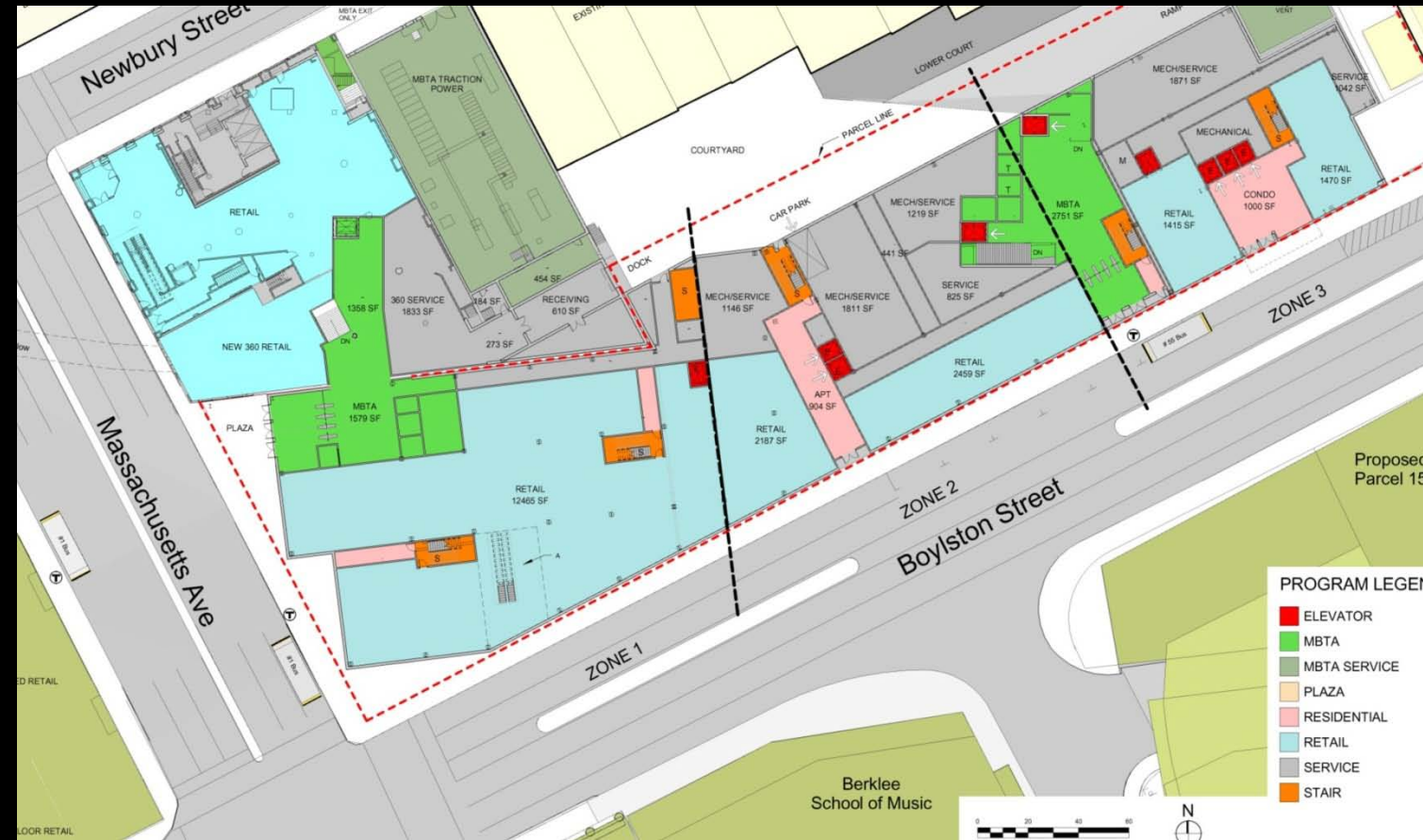
Development Options

Implementation

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY



Option A: Maximum Floor Plate, Full Development to Boylston Street (retail, residential)



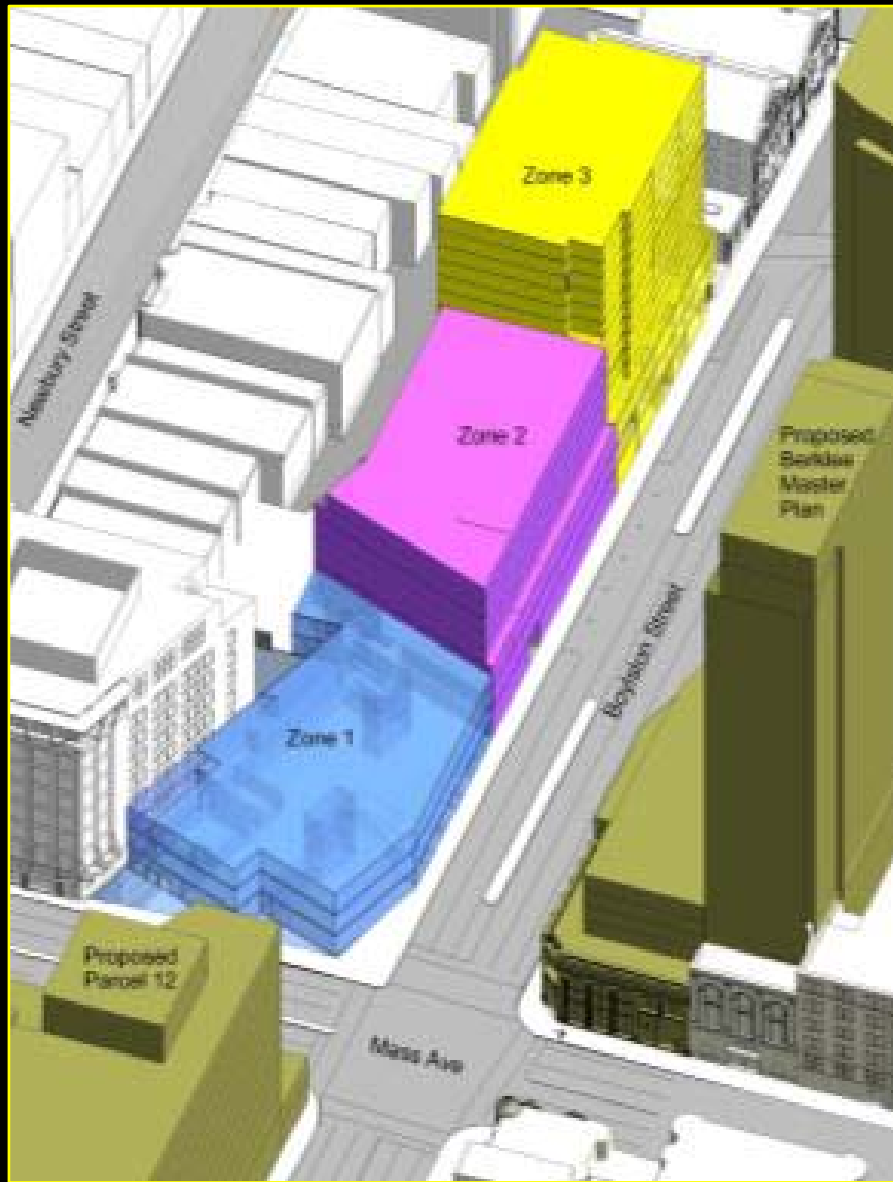
Street Level

Zone 1 – 3 floors
 Zone 2 – 8 floors
 Zone 3 – 15 floors

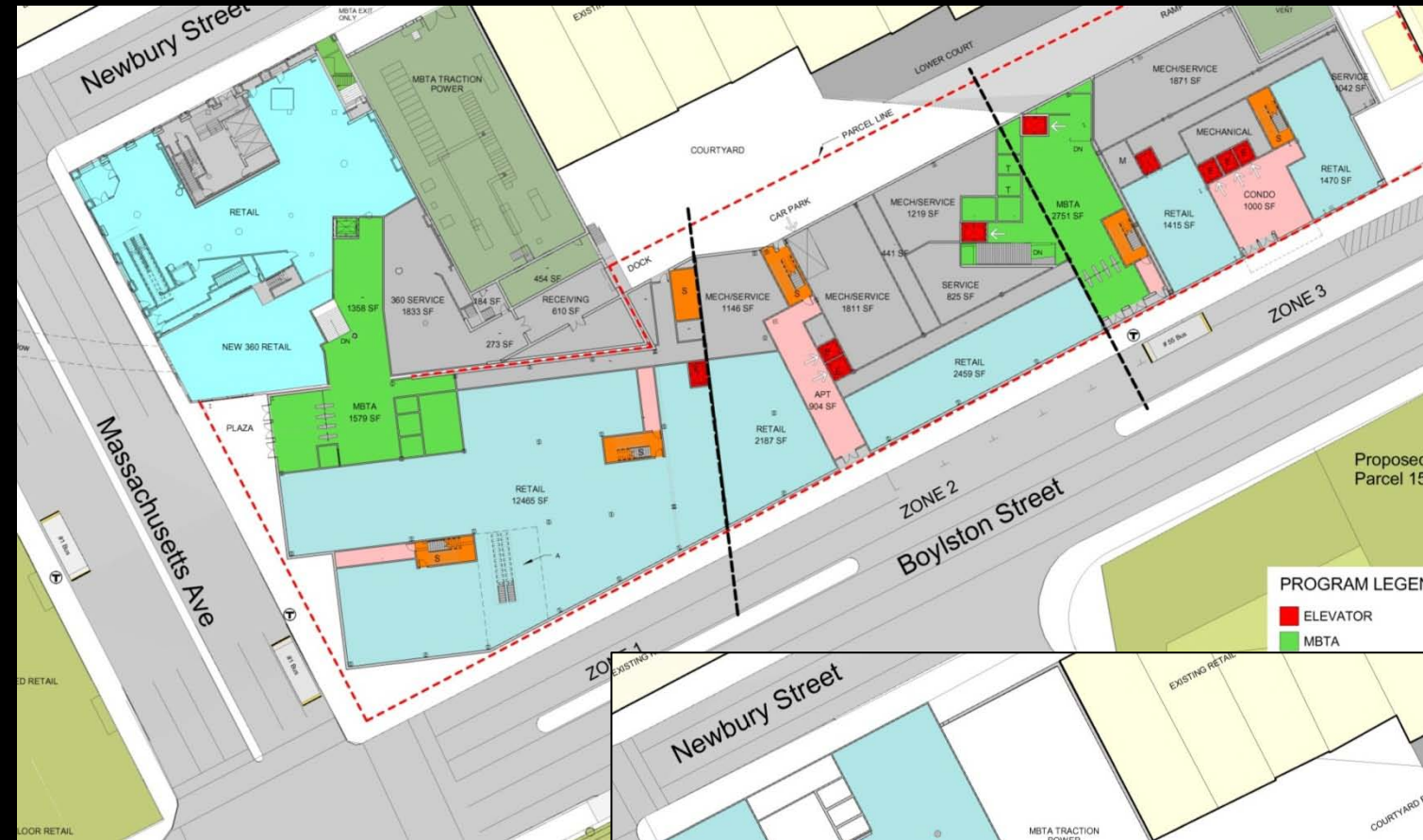
MBTA	7,588 SF
Retail	53,092 SF
Residential	174,273 SF
Parking	28,910 SF
<u>Common</u>	<u>56,406 SF</u>

Total Floor Area 320,269 SF
FAR 6.0
 (75% of allowable FAR)

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY



Option A: Maximum Floor Plate, Full Development to Boylston Street (retail, residential)



Street Level



Typical Upper Level Retail Space

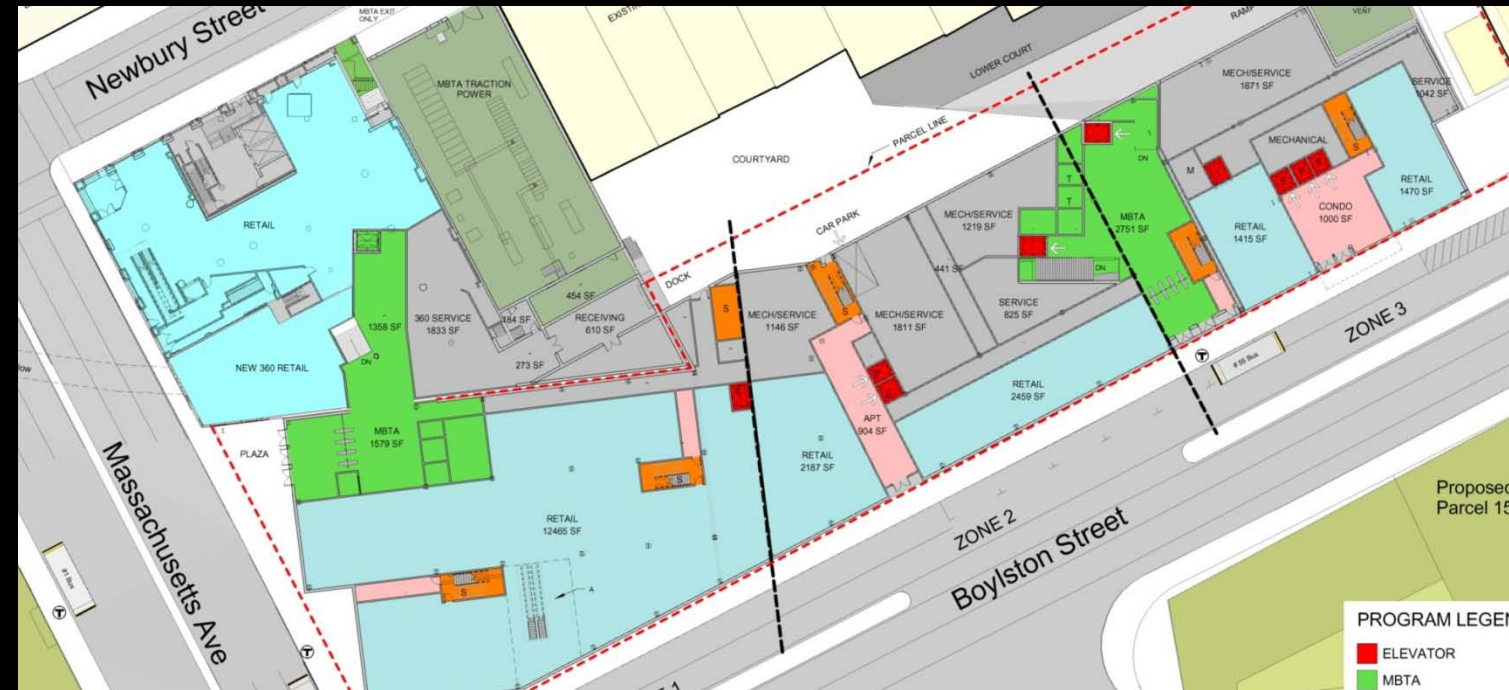
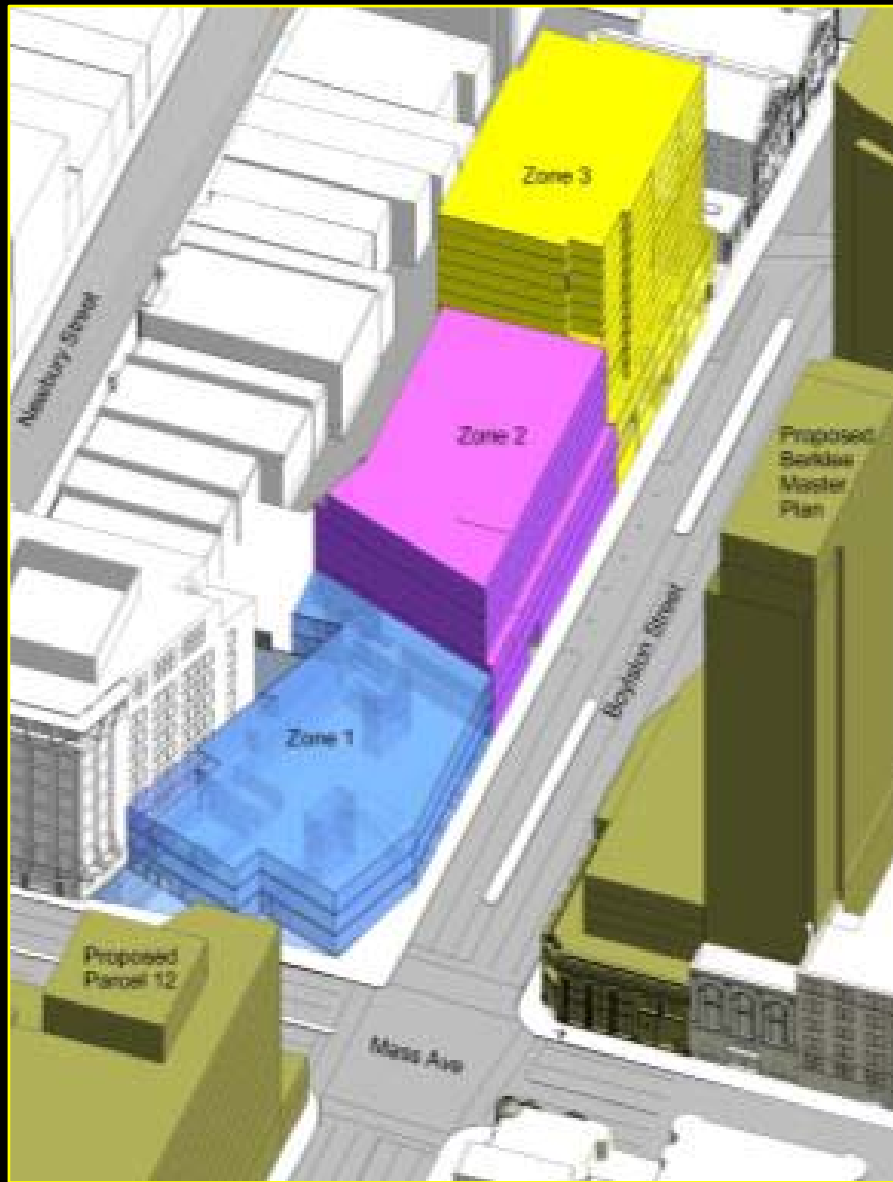
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Total Floor Area 320,269 SF
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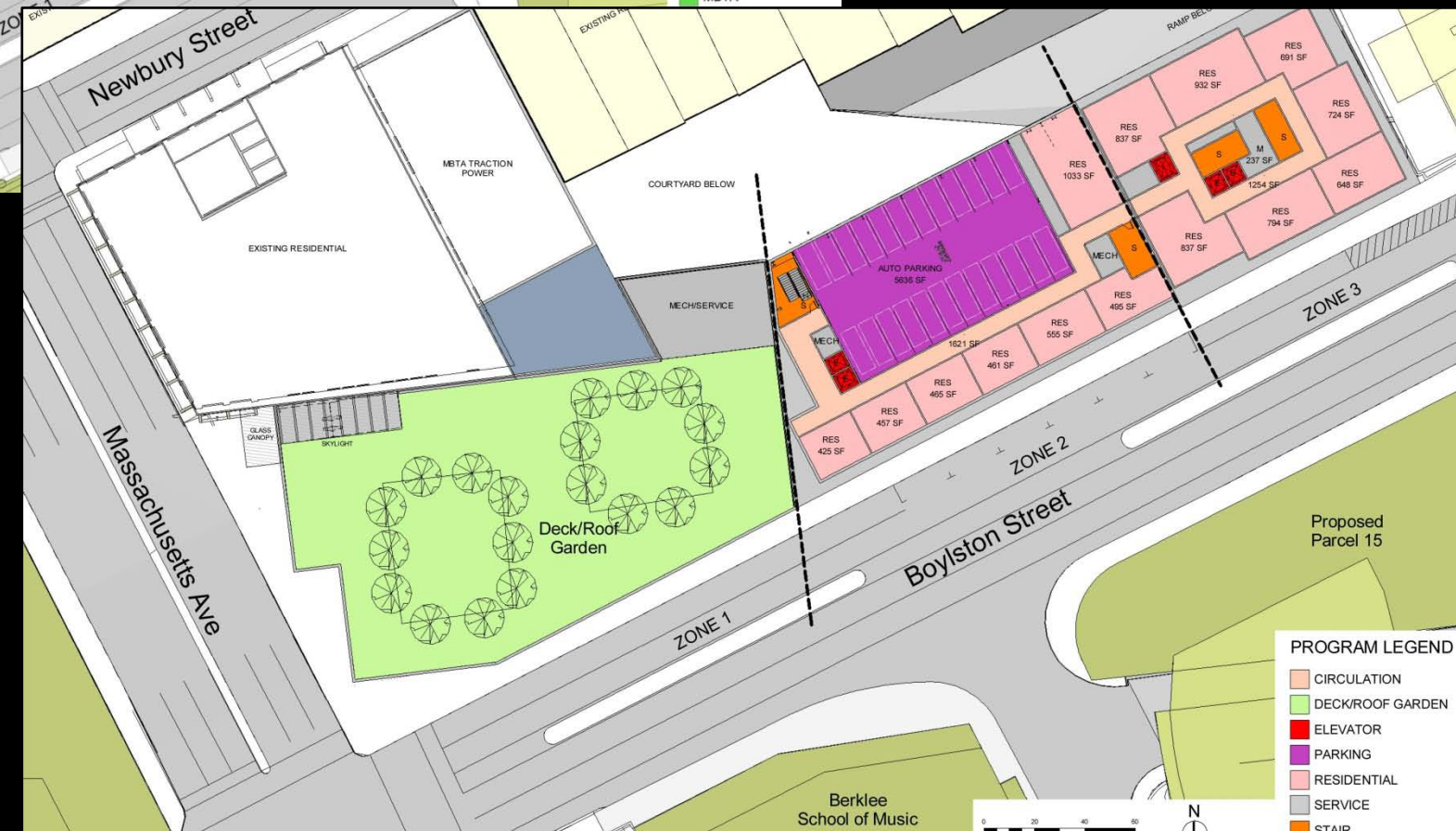
PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Option A: Maximum Floor Plate, Full Development to Boylston Street (retail, residential)



Street Level

Zone 1
Roof Plan



Zone 1 – 3 floors
Zone 2 – 8 floors
Zone 3 – 15 floors

MBTA	7,588 SF
Retail	53,092 SF
Residential	174,273 SF
Parking	28,910 SF
Common	56,406 SF

Total Floor Area 320,269 SF
FAR 6.0
(75% of allowable FAR)

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Option B: Zone 1 Full Floor Plate (retail, hotel/dorm)



Street Level

Zone 1 – 5 floors
Zone 2 – 8 floors &
plaza
Zone 3 – 15 floors

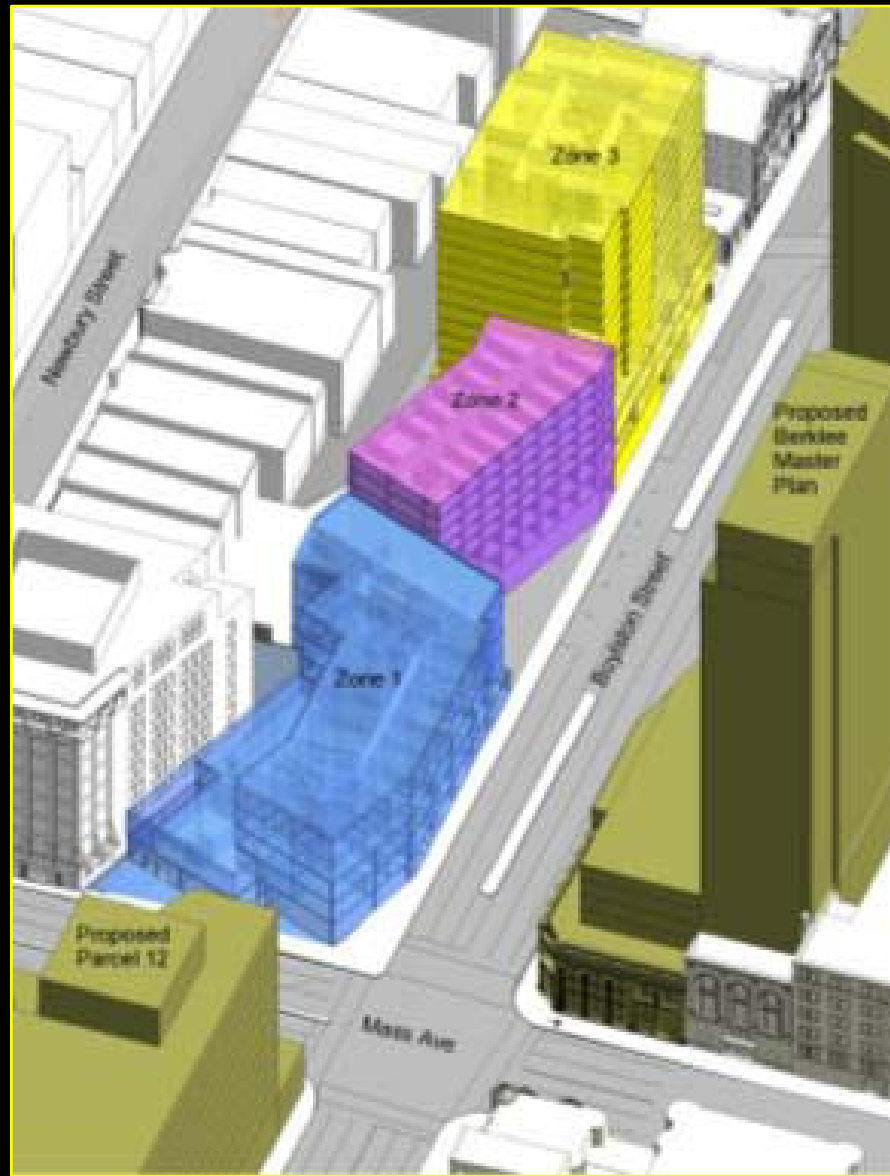
MBTA	7,623 SF
Retail	36,059 SF
Residential	200,321 SF
<u>Common</u>	<u>52,940 SF</u>

Total Floor Area 296,943 SF
FAR 5.6
(70% of allowable FAR)

PROGRAM LEGEND

■	ELEVATOR
■	HOTEL/DORM
■	MBTA
■	MBTA SERVICE
■	PLAZA
■	RETAIL
■	SERVICE
■	STAIR

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY



Option B: Zone 1 Full Floor Plate (retail, hotel/dorm)



Street Level



Typical Upper Level

Zone 1 – 5 floors
 Zone 2 – 8 floors & plaza
 Zone 3 – 15 floors

MBTA	7,623 SF
Retail	36,059 SF
Residential	200,321 SF
Common	52,940 SF

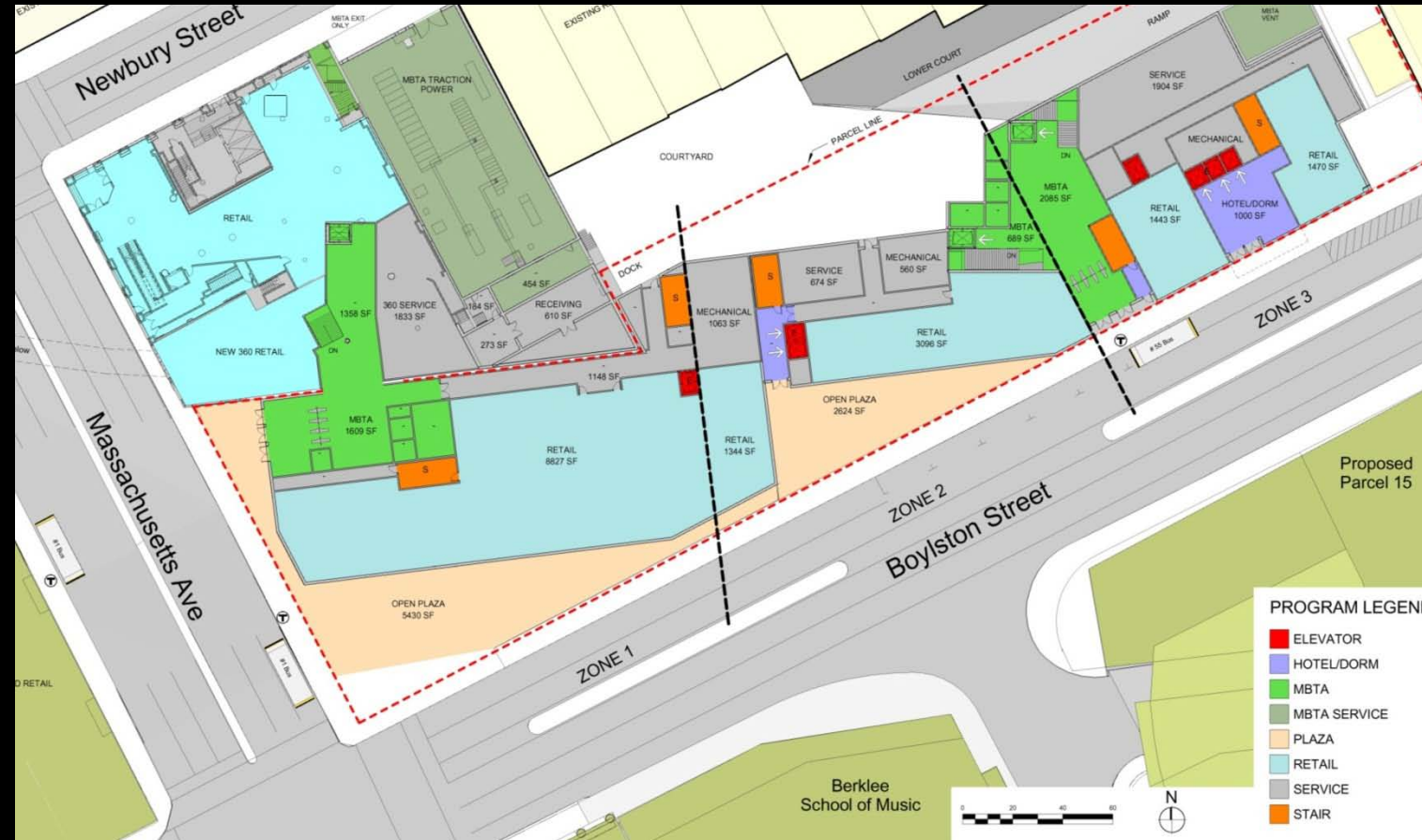
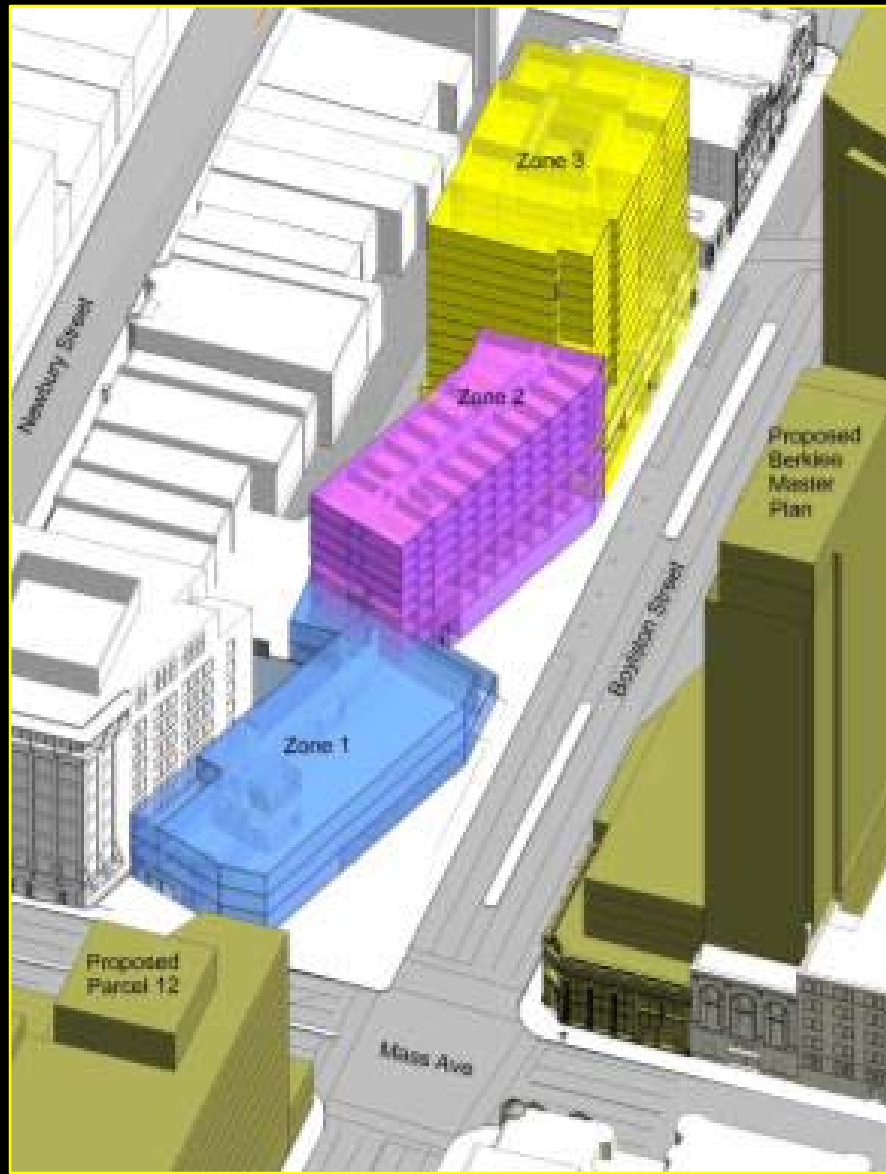
Total Floor Area	296,943 SF
FAR	5.6
	(70% of allowable FAR)

PROGRAM LEGEND

- CIRCULATION
- DECK/ROOF GARDEN
- ELEVATOR
- HOTEL/DORM
- MBTA SERVICE
- RETAIL
- SERVICE
- STAIR

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Option C: Massing Follows Turnpike, with Plazas (retail, hotel/dorm)



Street Level

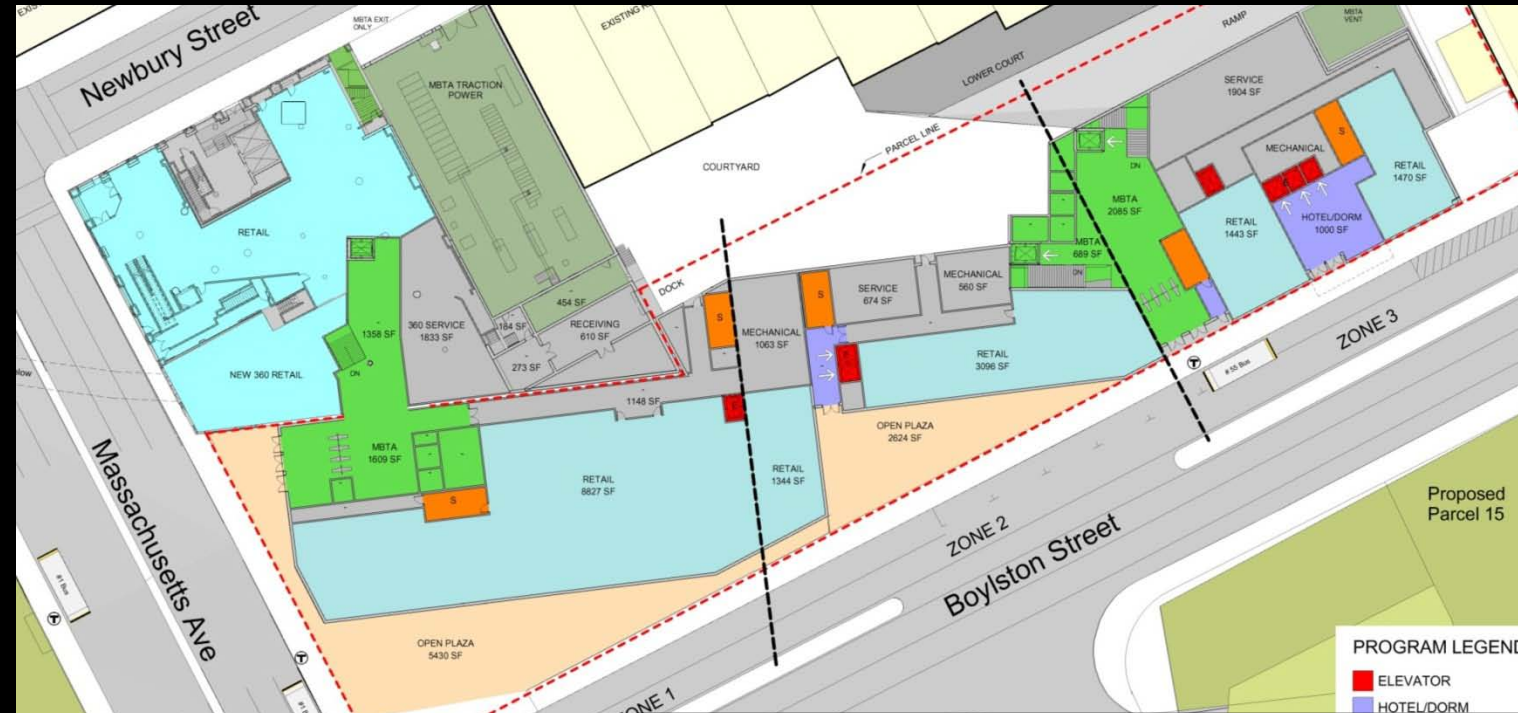
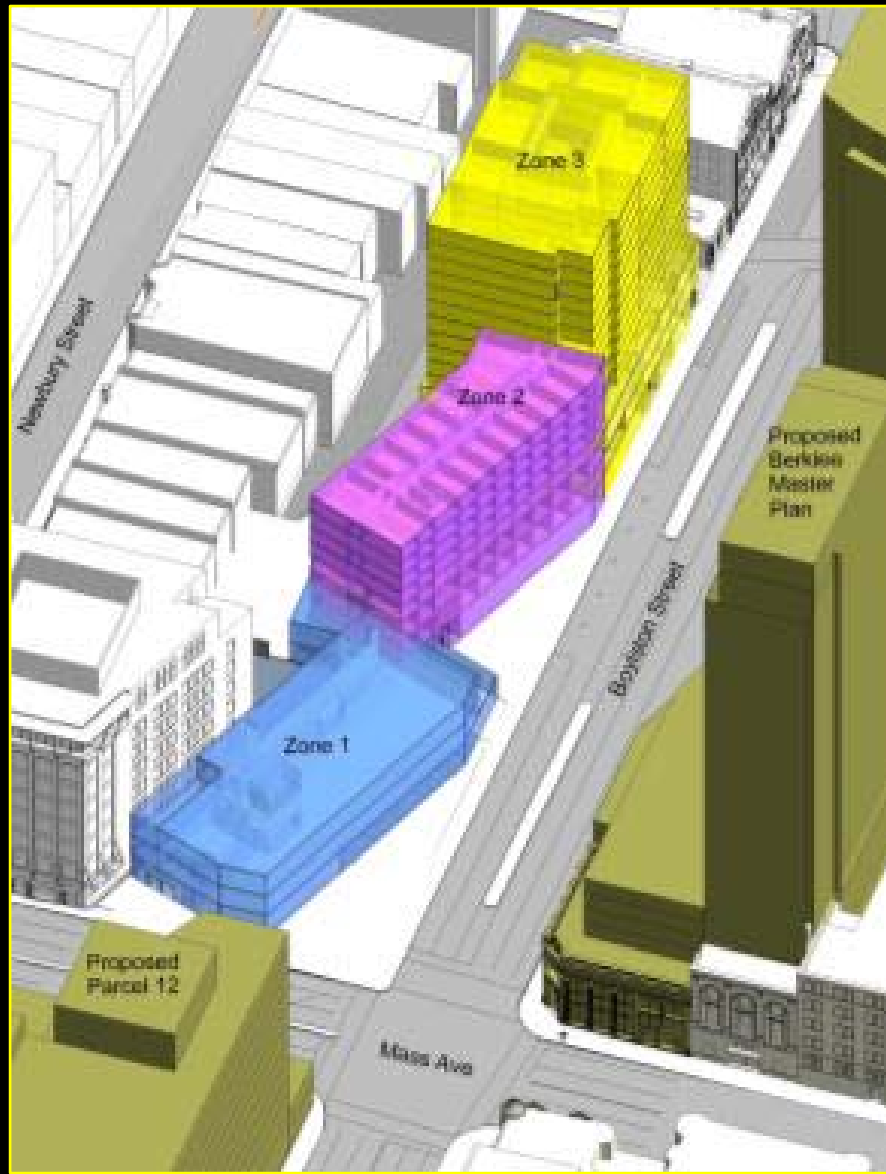
Zone 1 – 3 floors & plaza
 Zone 2 – 8 floors & plaza
 Zone 3 – 15 floors

MBTA	7,623 SF
Retail	39,813 SF
Residential	173,765 SF
Common	50,475 SF

Total Floor Area 271,676 SF
FAR 5.1
 (64% of allowable FAR)

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Option C: Massing Follows Turnpike, with Plazas (retail, hotel/dorm)



Street Level



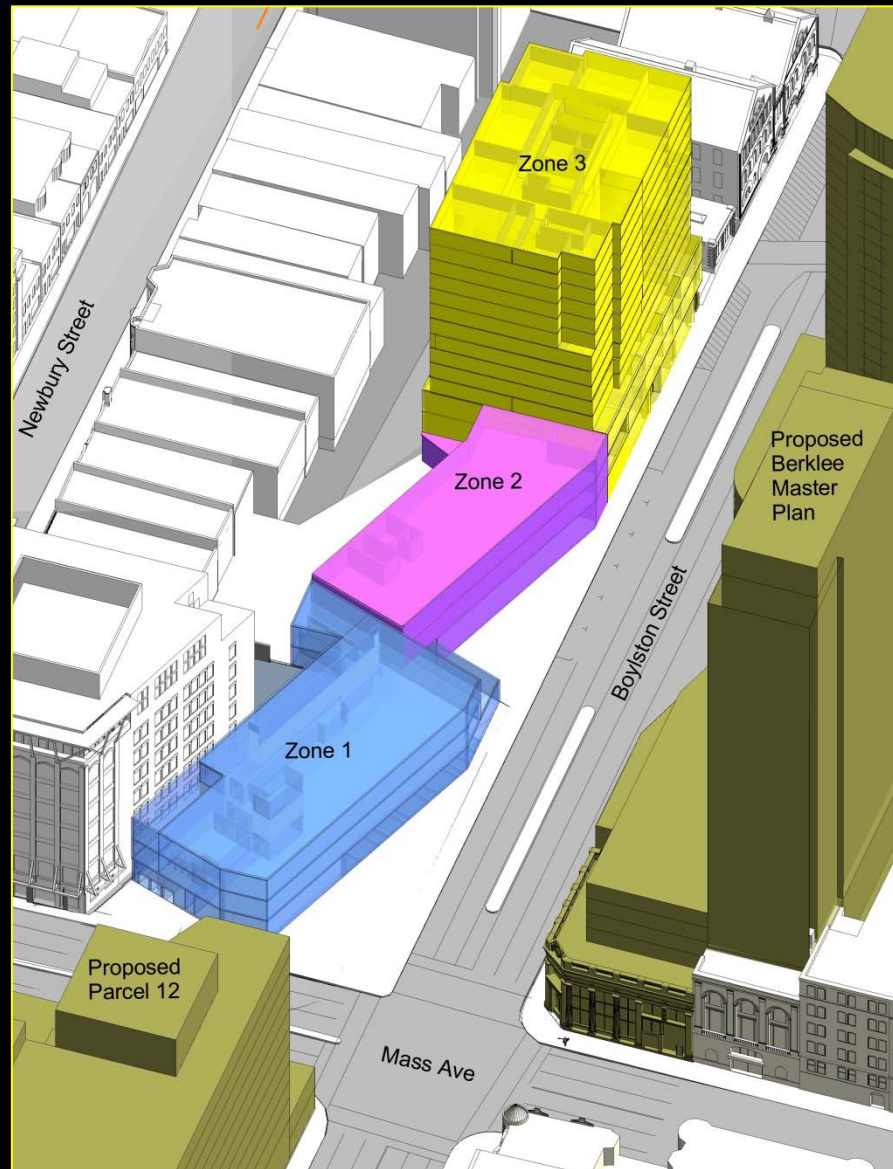
Typical Upper Level

Zone 1 – 3 floors & plaza
 Zone 2 – 8 floors & plaza
 Zone 3 – 15 floors

MBTA	7,623 SF
Retail	39,813 SF
Residential	173,765 SF
Common	50,475 SF
Total Floor Area	271,676 SF
FAR	5.1
	(64% of allowable FAR)

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Option D: Massing Follows Turnpike, with Plazas (retail, hotel/dorm)



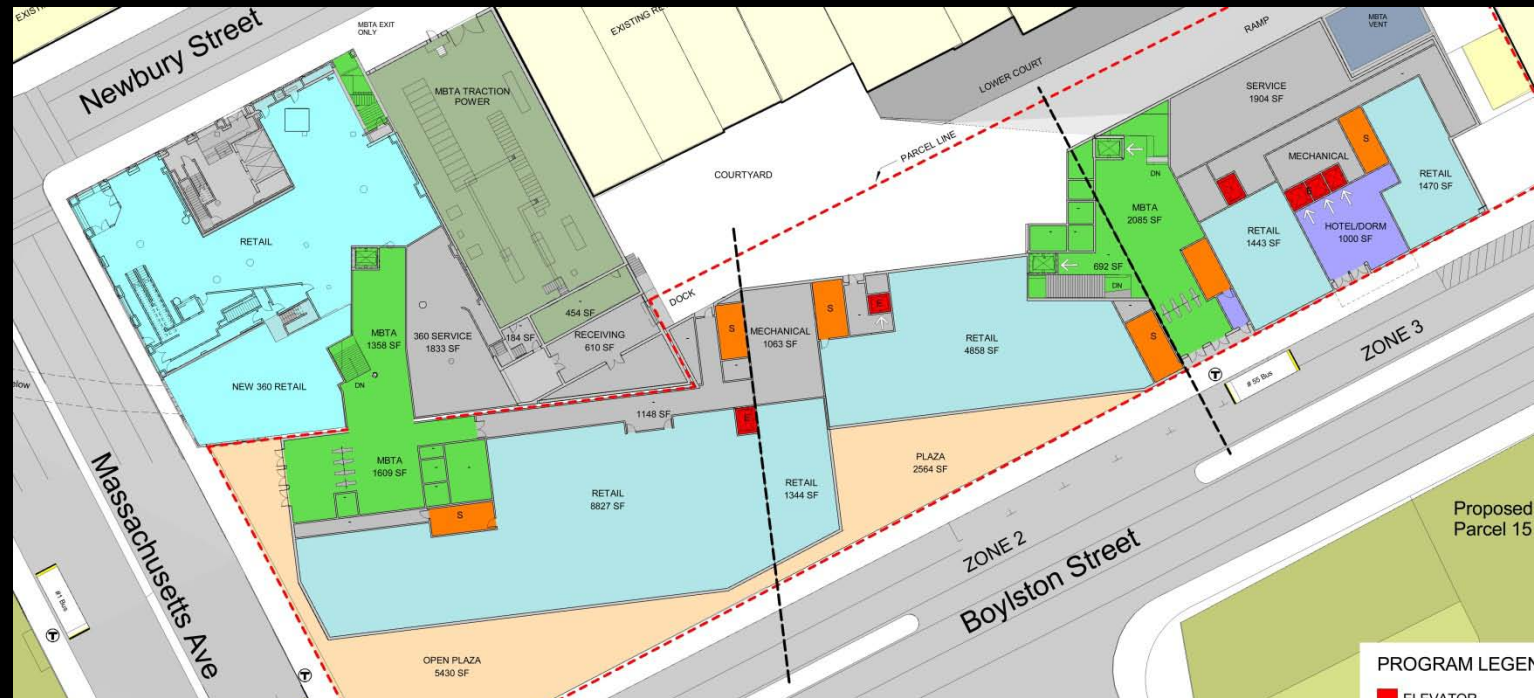
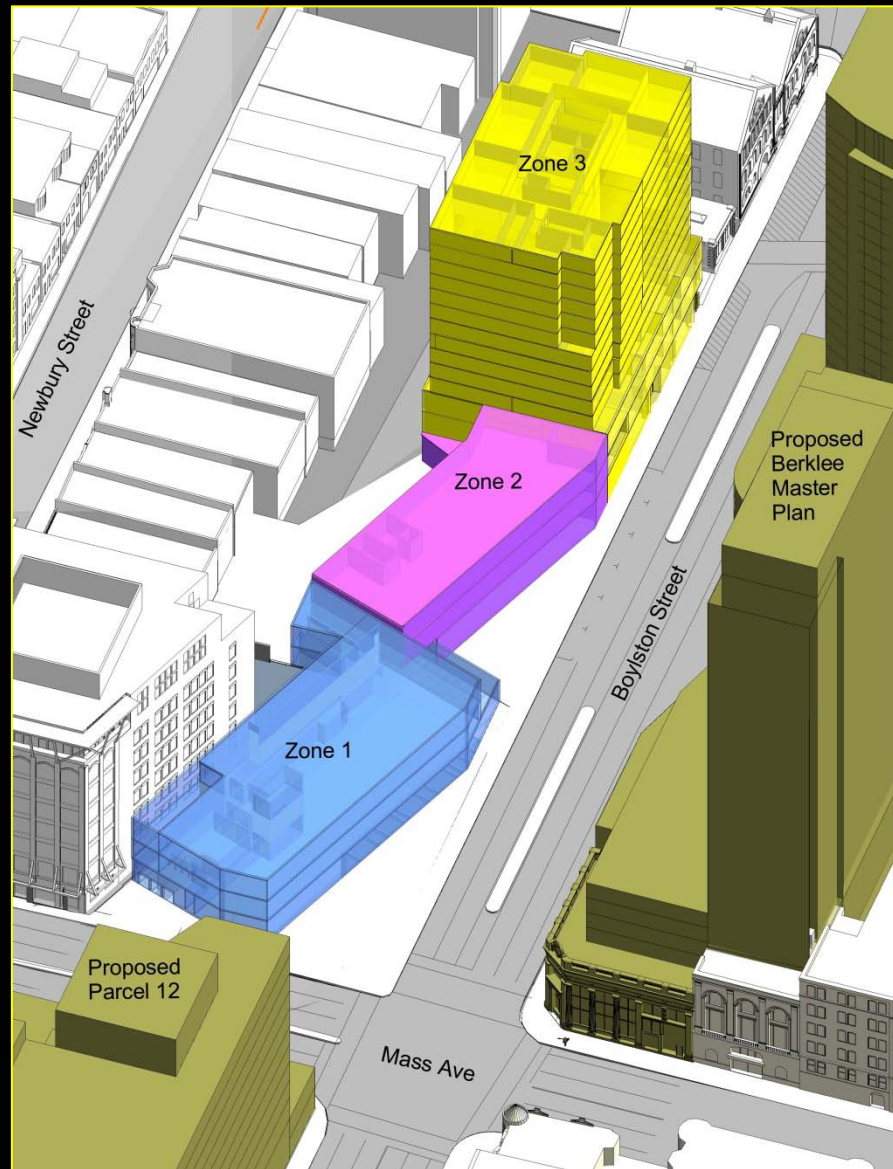
Street Level

Zone 1 – 3 floors & plaza
 Zone 2 – 3 floors & plaza
 Zone 3 – 15 floors

MBTA	7,623 SF
Retail	56,383 SF
Residential	143,058 SF
<u>Common</u>	<u>44,989 SF</u>
Total Floor Area	262,477 SF
FAR	4.7
	(59% of allowable FAR)

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Option D: Massing Follows Turnpike, with Plazas (retail, hotel/dorm)



Street Level



Typical Upper Level

Zone 1 – 3 floors & plaza
 Zone 2 – 3 floors & plaza
 Zone 3 – 15 floors

MBTA	7,623 SF
Retail	56,383 SF
Residential	143,058 SF
Common	44,989 SF
Total Floor Area	262,477 SF
FAR	4.7
	(59% of allowable FAR)

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY



Option E: MBTA components plus Zone 3 (residential)



Street Level

Zone 1 – MBTA only
 Zone 2 – MBTA only
 Zone 3 – 15 floors

MBTA	7,174 SF
Retail	3,003 SF
Residential	117,290 SF
<u>Common</u>	<u>32,249 SF</u>

Total Floor Area 159,716 SF
FAR 3.0
 (38% of allowable FAR)

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Option E: MBTA components plus Zone 3 (residential)



Street Level

Typical Upper Level



Zone 1 – MBTA only
 Zone 2 – MBTA only
 Zone 3 – 15 floors

MBTA	7,174 SF
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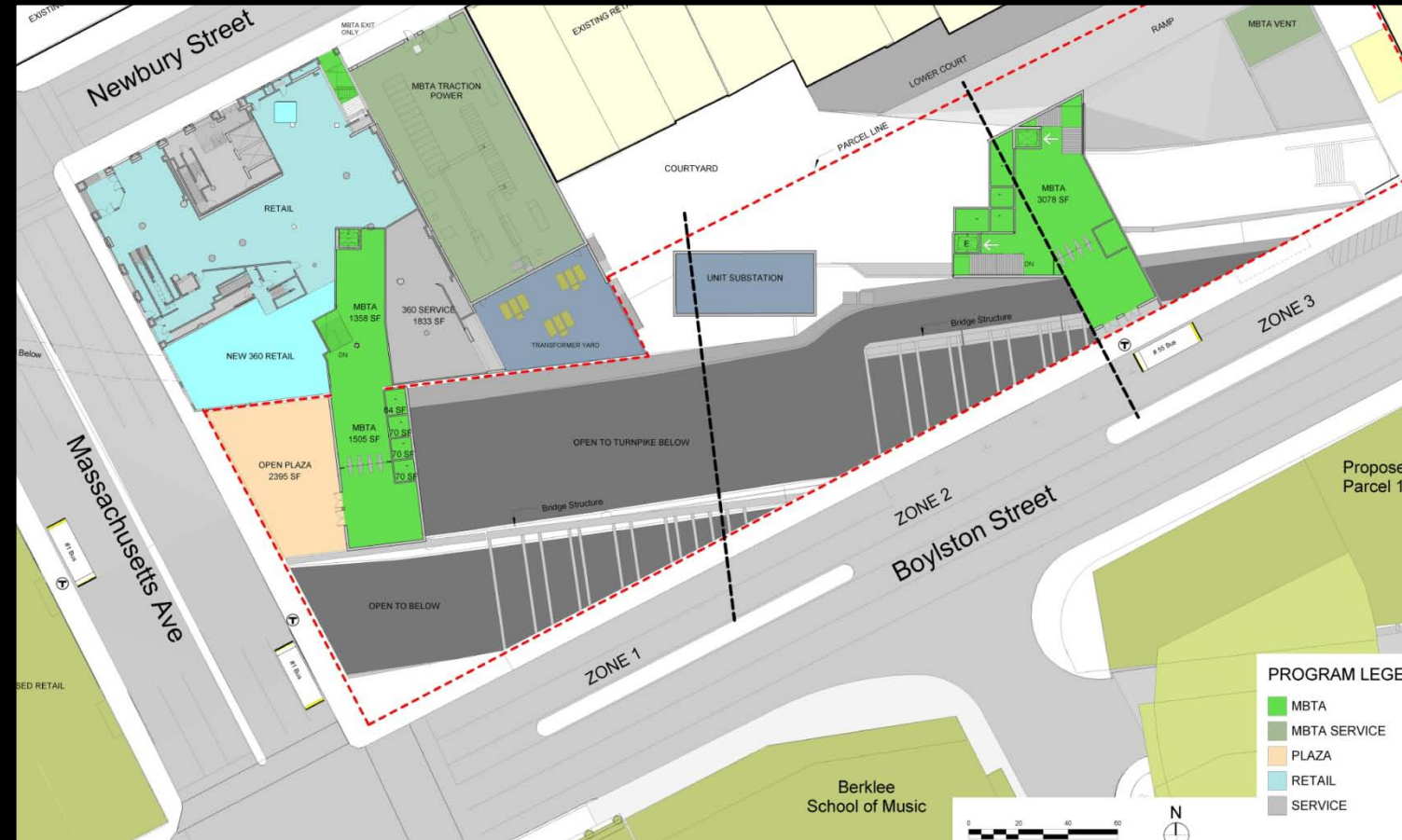
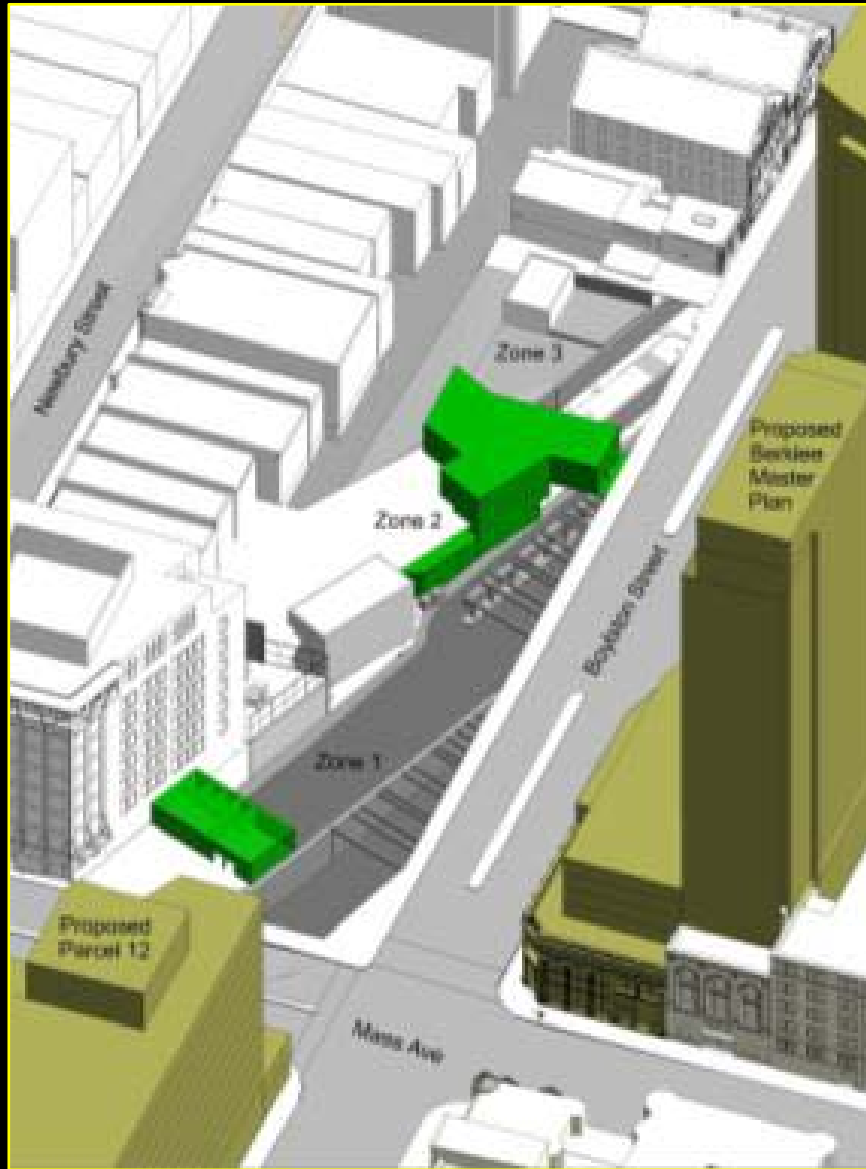
Total Floor Area 159,716 SF
FAR 3.0
 (38% of allowable FAR)

PROGRAM LEGEND

- ELEVATOR
- HOTEL/DORM
- MBTA
- MBTA SERVICE
- PLAZA
- RETAIL
- SERVICE
- STAIR

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Option F: MBTA components only



Street Level

Zone 1 – MBTA only
 Zone 2 – MBTA only
 Zone 3 – none

<u>MBTA</u>	<u>7,588 SF</u>
Total Floor Area	7,588 SF
FAR	0.1
(2% of allowable FAR)	

PROGRAM LEGEND

- MBTA
- MBTA SERVICE
- PLAZA
- RETAIL
- SERVICE

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

Option A



Maximize available floor plate by utilizing areas over Boylston Street bridge structure

Zone 1 – 3 floors
Zone 2 – 8 floors
Zone 3 – 15 floors

MBTA	7,588 SF
Retail	53,092 SF
Residential	174,273 SF
Parking	28,910 SF
Common	56,406 SF
TOTAL AREA	320,269 SF
FAR	6.0
(75% of allowable FAR)	

Option B



Upper floor uses and massing in Zone 2 extends through Zone 1

Zone 1 – 5 floors
Zone 2 – 8 floors (w/ plaza)
Zone 3 – 15 floors

MBTA	7,623 SF
Retail	36,059 SF
Residential	200,321 SF
Common	52,940 SF
TOTAL AREA	296,943 SF
FAR	5.6
(70% of allowable FAR)	

Option C

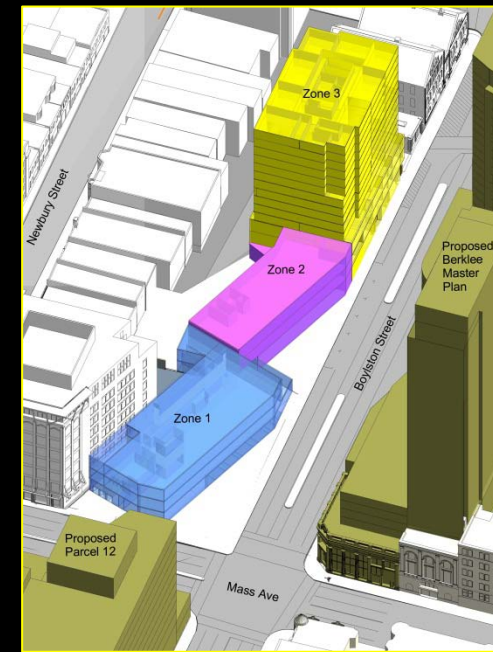


Massing follows Turnpike alignment in Zones 1 and 2
- plazas cover Boylston Street bridge structure

Zone 1 – 3 floors (w/ plaza)
Zone 2 – 8 floors (w/ plaza)
Zone 3 – 15 floors

MBTA	7,623 SF
Retail	39,813 SF
Residential	173,765 SF
Common	50,475 SF
TOTAL AREA	271,676 SF
FAR	5.1
(64% of allowable FAR)	

Option D



Massing follows Turnpike alignment in Zones 1 and 2
- plazas cover Boylston Street bridge structure

Zone 1 – 3 floors (w/ plaza)
Zone 2 – 3 floors (w/ plaza)
Zone 3 – 15 floors

MBTA	7,623 SF
Retail	56,383 SF
Residential	143,058 SF
Common	44,989 SF
TOTAL AREA	262,477 SF
FAR	4.7
(59% of allowable FAR)	

Option E



MBTA components + Zone 3

Zone 1 – MBTA only
Zone 2 – MBTA only
Zone 3 – 15 floors

MBTA	7,174 SF
Retail	3,003 SF
Residential	117,290 SF
Common	32,249 SF
TOTAL AREA	159,716 SF
FAR	3.0
(38% of allowable FAR)	

Option F



MBTA components only

Zone 1 – MBTA only
Zone 2 – MBTA only
Zone 3 – None

MBTA	7,588 SF
Retail	3,003 SF
Residential	117,290 SF
Common	32,249 SF
TOTAL AREA	159,716 SF
FAR	0.1
(2% of allowable FAR)	

Parcel Area **53,130 SF**
Allowable FAR **8.0**
Total Allowable FAR Area **425,040 SF**

KEY

■ Zone 1 ■ Zone 2 ■ Zone 3 ■ MBTA Components

COST ANALYSIS

Costs:

- For Options A through E.
- All hard costs range from \$85 M to \$161 M total.
- Total Development costs range from \$106 M to \$190 M total.
- MBTA Station costs c. \$25 M, plus \$3 M in electrical costs.

Revenues:

- Based on uses and areas from market analysis under current conditions.

Returns:

- Ranges for each option.
- Not definitive, only to test plausibility.
- Feasible at most optimistic assumptions.
- Probably infeasible at most conservative assumptions.
- Worth further study for average assumptions.

CAC Presentation
March 27, 2014

The Site

Station Improvements

Structural Considerations

Development Options

Implementation

DISPOSITION, PROCUREMENT, AND CONTRACTING

Disposition and Procurement:

- Single MassDOT air rights / MBTA station procurement RFP process.
- Integrated project team: air rights developer, station CM and designers.
- Developer team completes station design and procures station contractor under state bid laws.

Contracting:

- MassDOT long-term air rights lease.
- MBTA development agreement for CM and design.
- Development team contract for station construction.

FINANCING APPROACH

Air Rights:

- Air rights revenue to be applied to station costs.
- Air rights development must be self-supporting, and must produce meaningful rent revenue to help pay for the MBTA station improvements.
- MassDOT and MBTA will not subsidize air rights development.

MBTA Station :

- To the extent that development revenues do not cover all station costs, MassDOT and MBTA will fund remaining station costs.

REQUEST FOR PROPOSALS

Structure:

- Currently pursuing single RFP for the integrated development team.
- Selection process will consider station designer qualifications, developer qualifications, proposal quality, and air rights rent offer.
- Complete information available to qualified bidders, including feasibility study.

Timing and review:

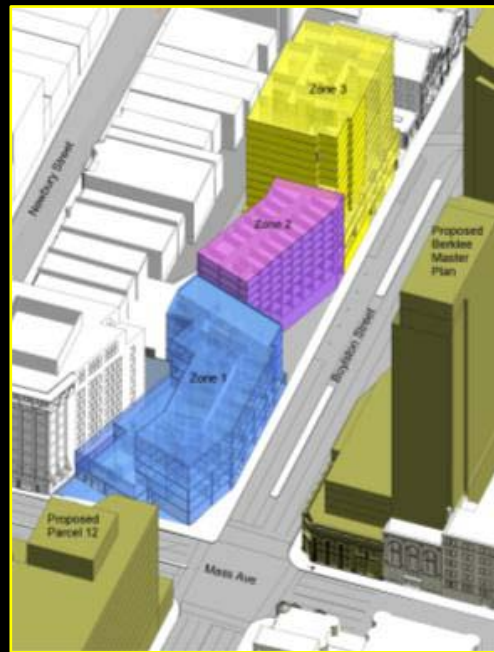
- Plan to issue in April.
- Four-month response period to ensure wide marketing, allow for team formation, address design complexity, and field developer questions.
- Proposals due in August.
- Review and further rounds August to September.
- As in the past, proposers to present to the CAC. MassDOT and MBTA to seek input from the CAC and BRA.

PARCEL 13 – HYNES STATION AIR RIGHTS FEASIBILITY STUDY

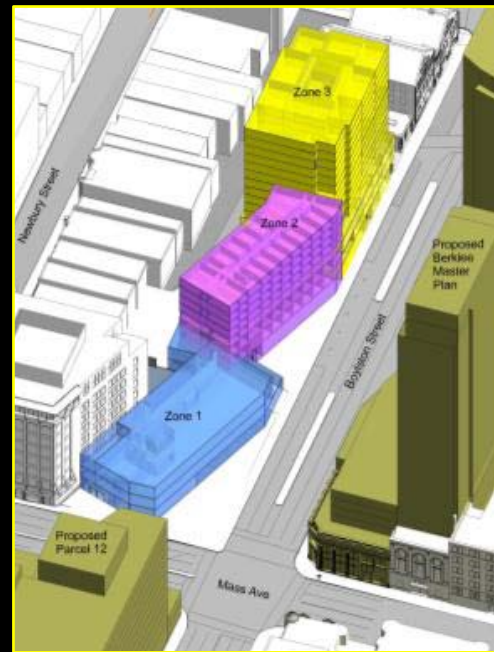
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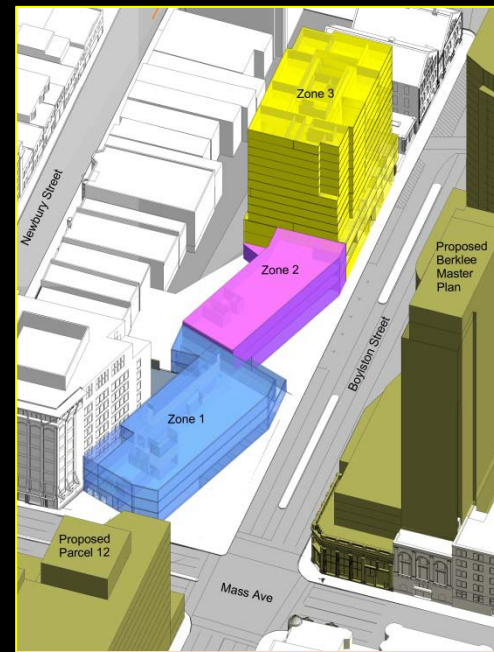
Option A



Option B



Option C



Option D



Option E



Option F