



Essex Junction Train Station Access and Scoping Study – Presentation of Transportation Alternatives

Village of Essex Junction
Chittenden County Regional Planning Commission
RSG, Inc.
Scott & Partners Architectural Planning

January 26, 2016

Essex Junction Train Station Access and Circulation Scoping Study

- Introduction –
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 - Scoping Process
 - Purpose & Need Statement
- Presentation of Alternatives
 - Train Station Building
 - Transportation Improvements
- Discussion and Selection of Preferred Alternative



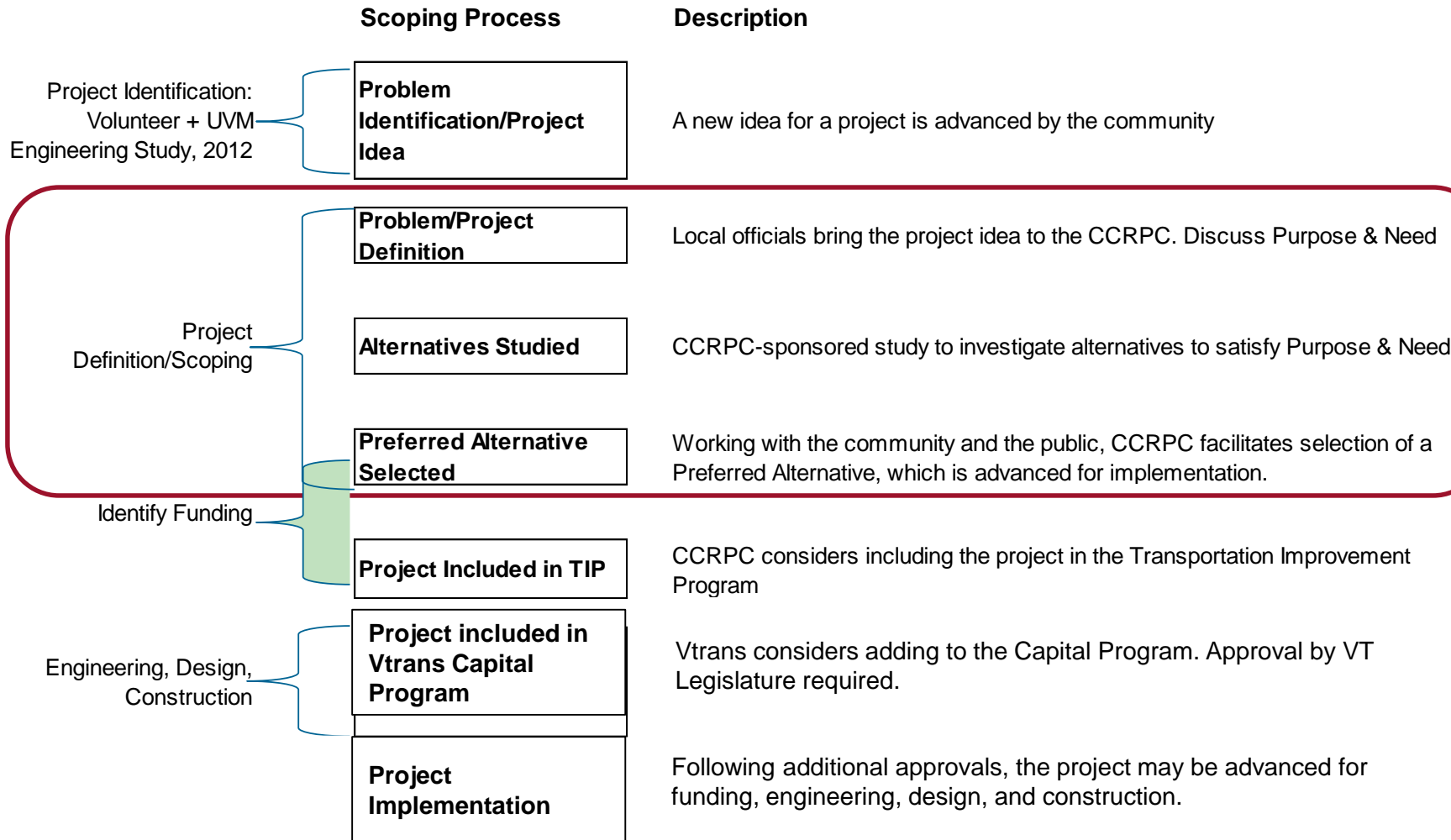
ESSEX TRAIN STATION
EXTERIOR PERSPECTIVE

02/23/15

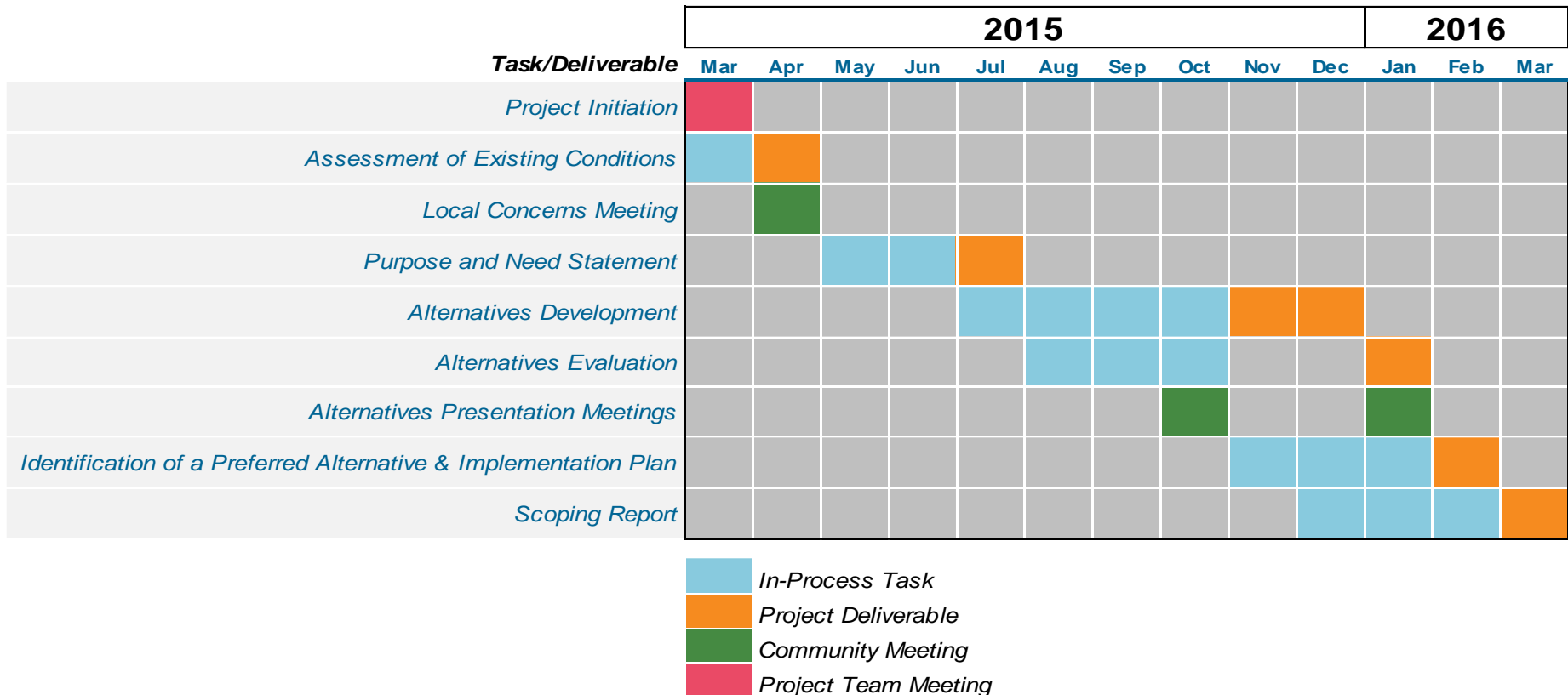


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The Scoping Process



Essex Junction Train Station Access and Circulation Scoping Study



Essex Train Station Access and Scoping Study – Purpose and Need Statement

Purpose:

The purpose of the Essex Junction Train Station project is to upgrade the train station building and the adjacent area to:

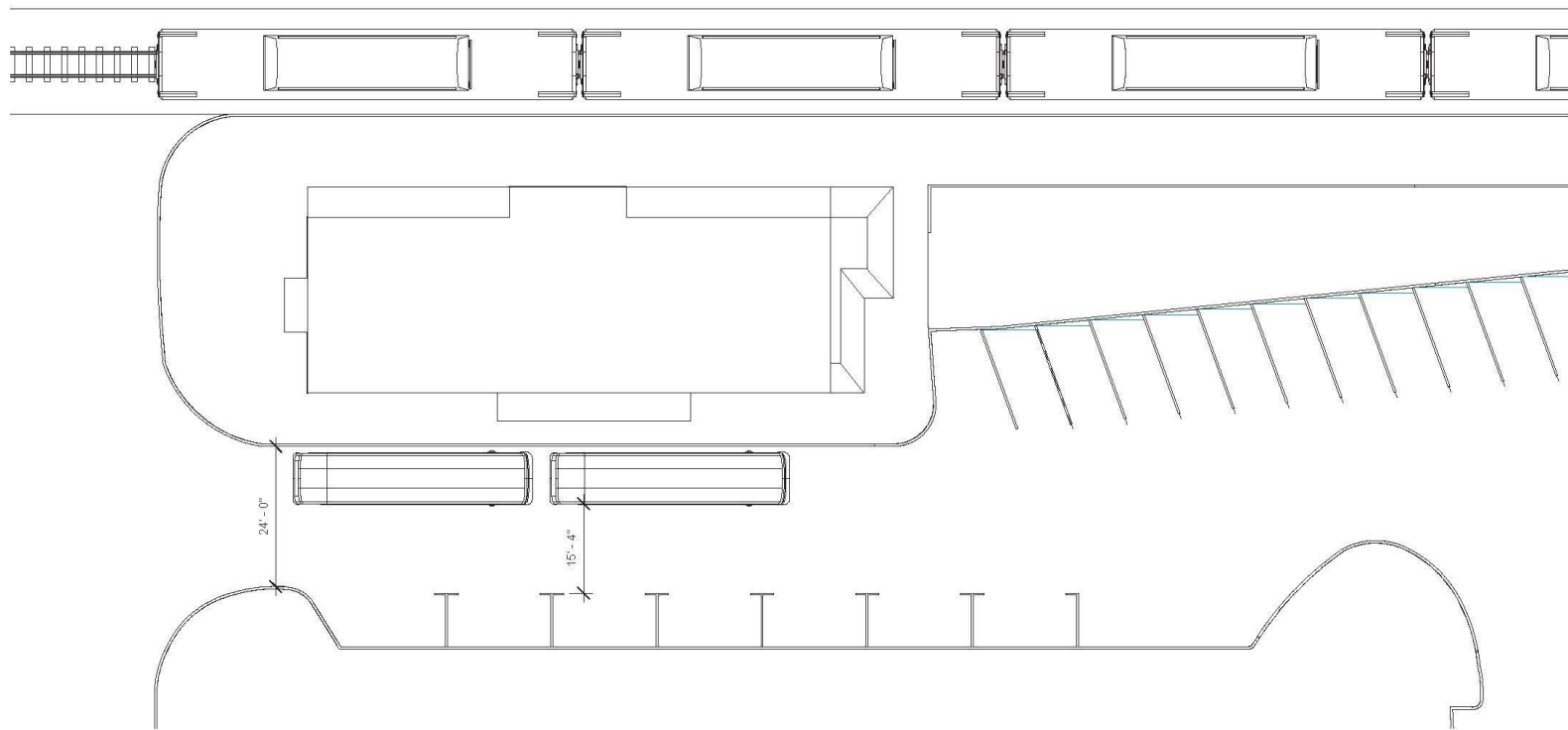
- accommodate the existing station uses;
- provide a safe and functional waiting area for travelers;
- support village economic development;
- improve pedestrian, bus, and vehicular circulation in the surrounding area; and,
- achieve greater architectural harmony with currently designated downtown historic structures.



Essex Train Station Access and Scoping Study – Purpose and Need Statement

- The current station is small and provides minimal shelter for rail and bus patrons.
- Bus stop areas are inadequate to meet current demand for buses. Buses frequently block the travel way.
- Bus stop accommodations for patrons are minimal and lack adequate protection from the weather.
- The existing bathroom within the Amtrak Station is small, cannot accommodate multiple users, and is only available for limited times.
- Public safety in the immediate area of the existing station is a concern for local residents. Safety issues are exacerbated by the poor appearance and condition of the existing station, poor lighting conditions and undefined circulation patterns.
- There is a desire for better pedestrian accommodations in the areas proximate to the train station.
- Public parking, vehicular circulation and taxi waiting areas are poorly defined, lacking adequate signage, consistent geometries, and safe designation/separation of the various uses.

Presentation of Alternatives –Existing Train Station Site Plan (Alternative 1: No Build)



ESSEX TRAIN STATION

EXISTING SITE PLAN

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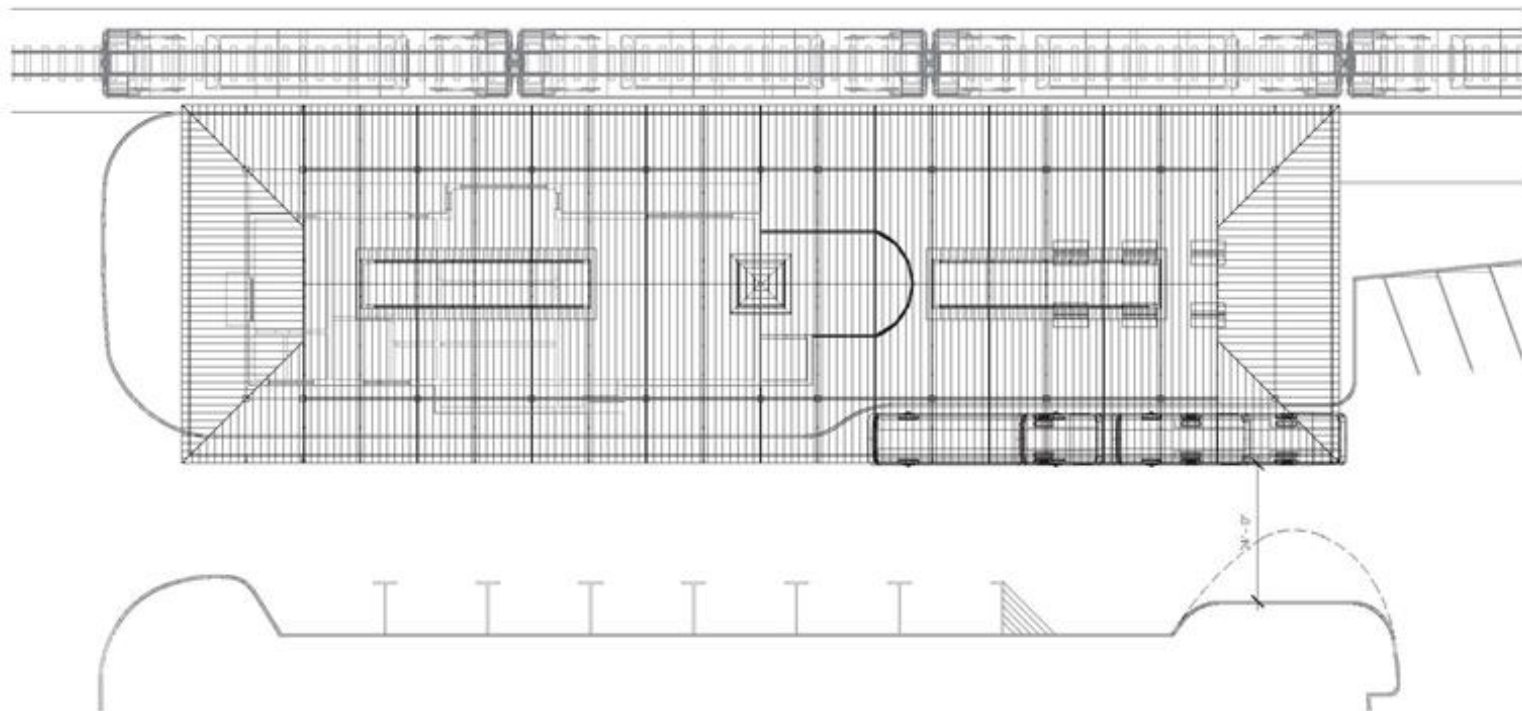


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Presentation of Alternatives – Train Station Building – Existing Conditions (Alternative 1: No Build)



Essex Train Station – Alternative 2: Full Build of New Waiting Area and Roof Canopy



ESSEX TRAIN STATION

PROPOSED SITE PLAN

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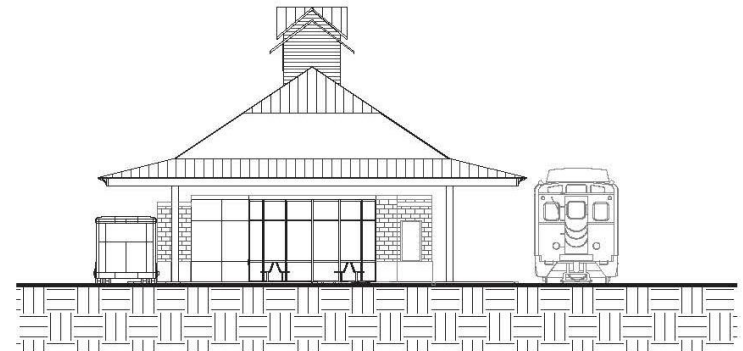


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Essex Train Station Alternative 2 Elevations



① WEST ELEVATION
1/16" = 1'-0"



② SOUTH ELEVATION
1/16" = 1'-0"

ESSEX TRAIN STATION

PROPOSED ELEVATIONS

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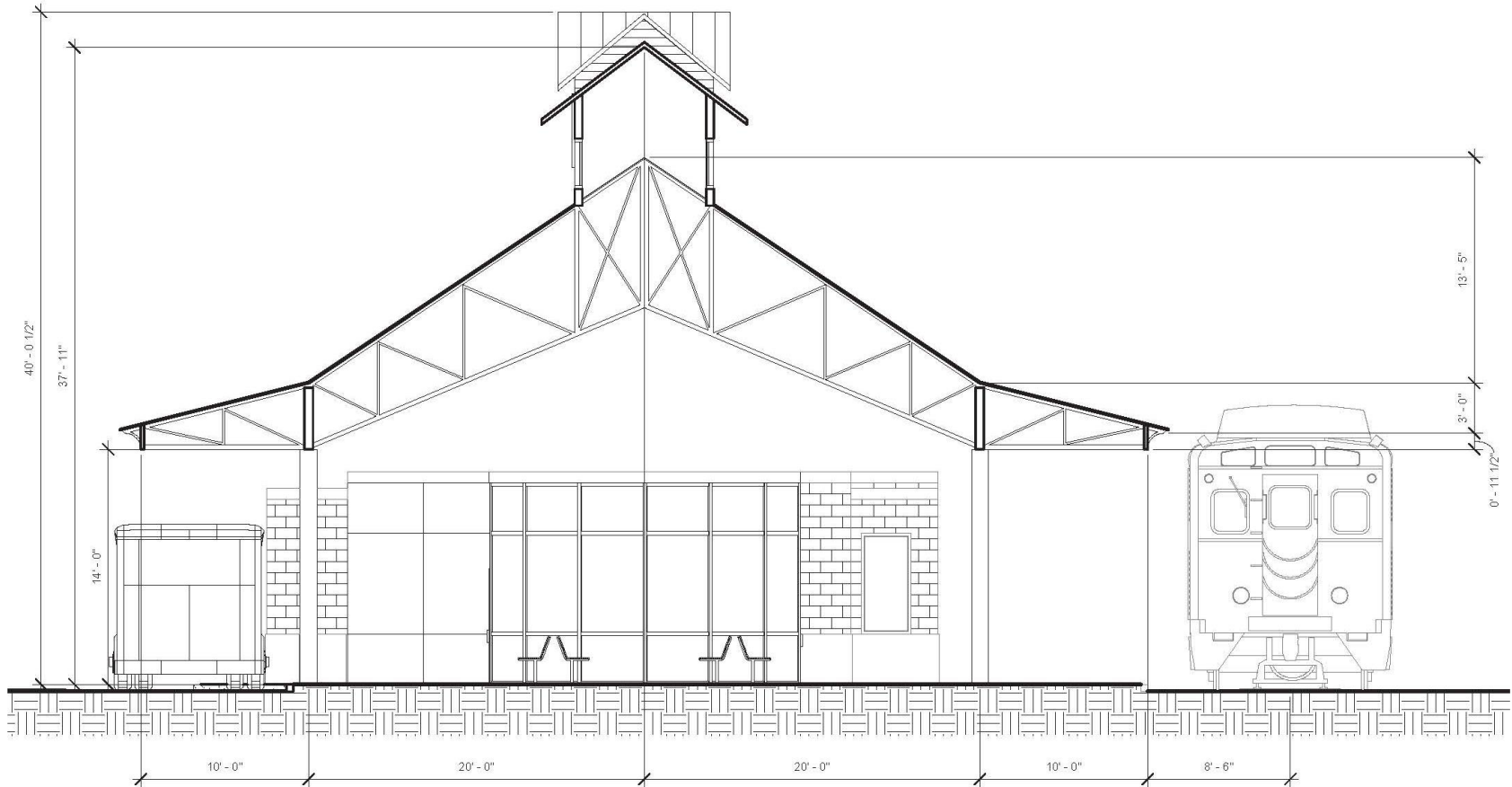


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Essex Train Station – Alternative 2 Cross Section



ESSEX TRAIN STATION

PROPOSED CROSS SECTION

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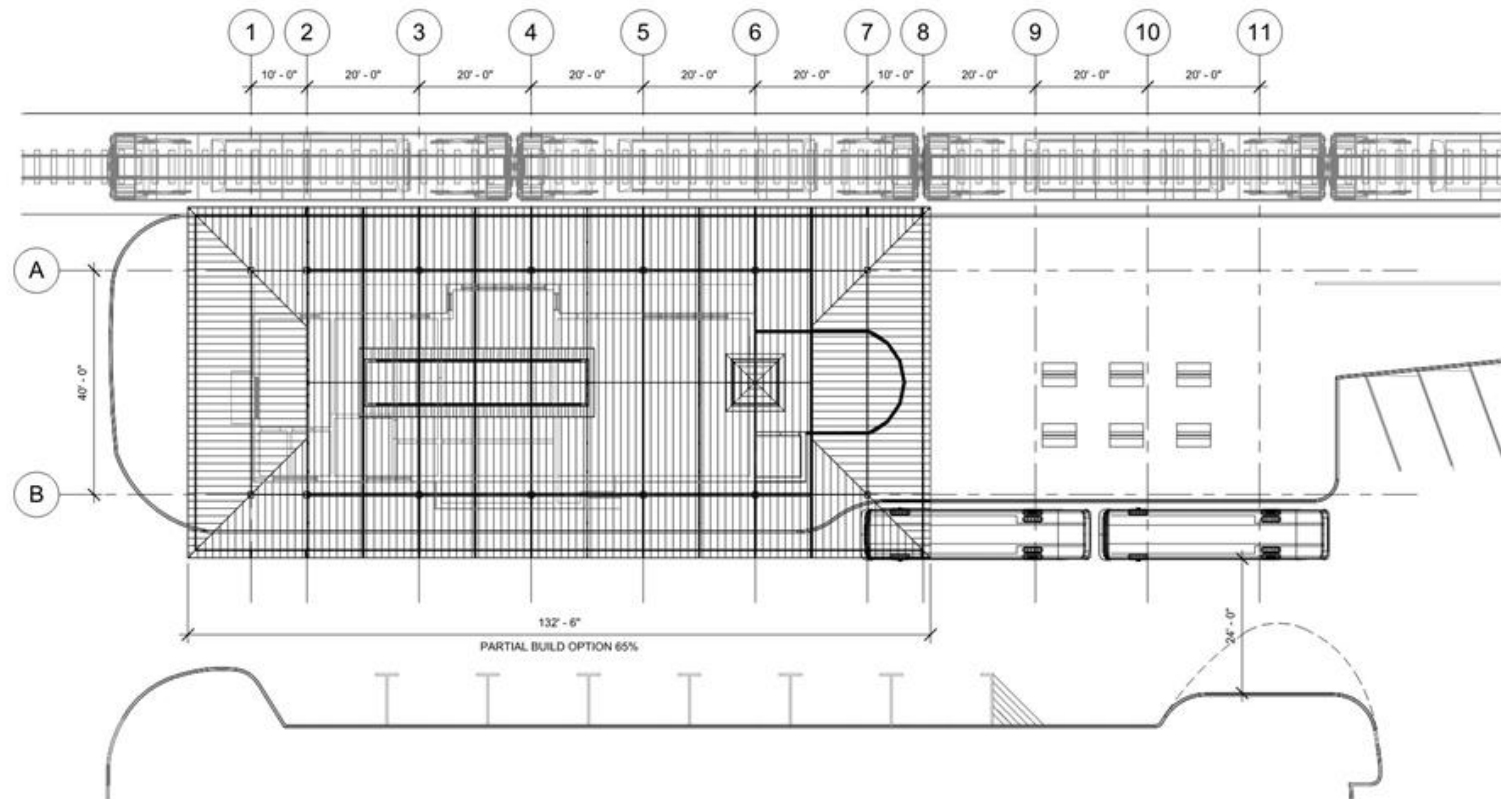


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Essex Train Station – Alternative 3: Partial Build of New Waiting Area and Roof Canopy



ESSEX TRAIN STATION

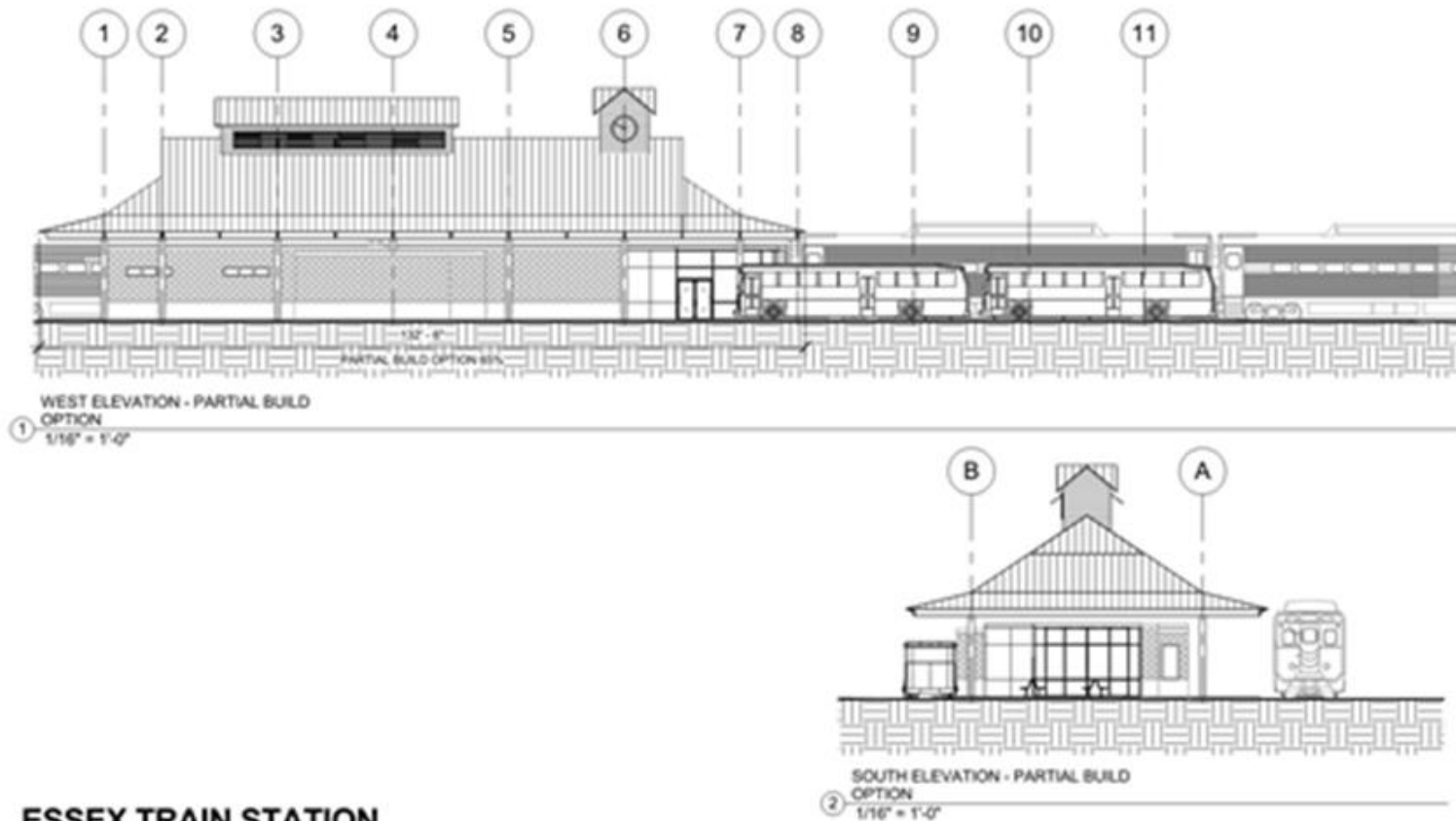
PROPOSED SITE PLAN - PARTIAL BUILD OPTION

09/22/15



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Essex Train Station Alternative 3 Partial Build Elevations



ESSEX TRAIN STATION

PROPOSED ELEVATIONS - PARTIAL BUILD OPTION

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Essex Train Station – Alternative 3 Partial Build Perspective



ESSEX TRAIN STATION

EXTERIOR PERSPECTIVE - PARTIAL BUILD OPTION

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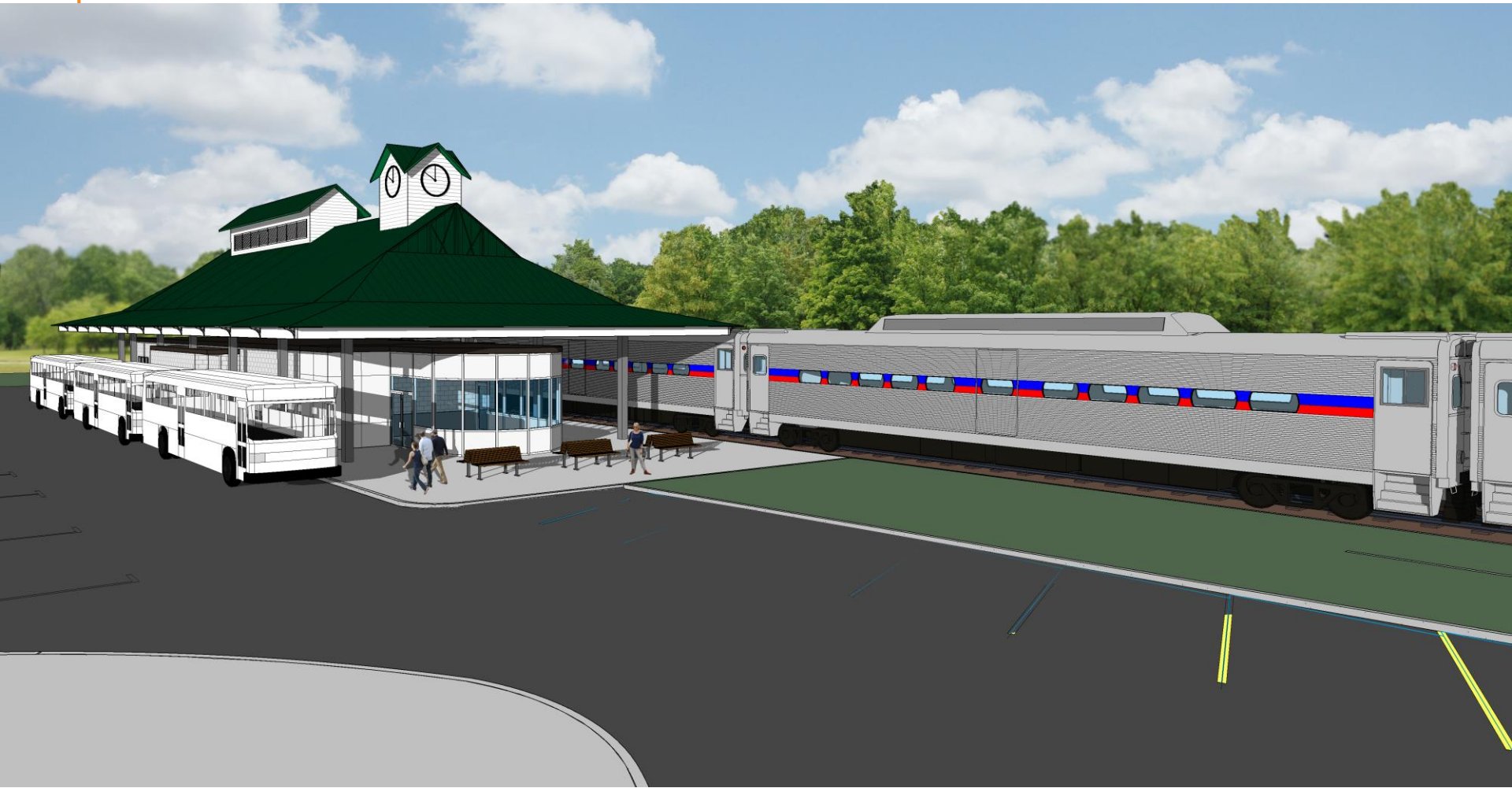


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Essex Train Station Alternative 4 Partial Build Perspective



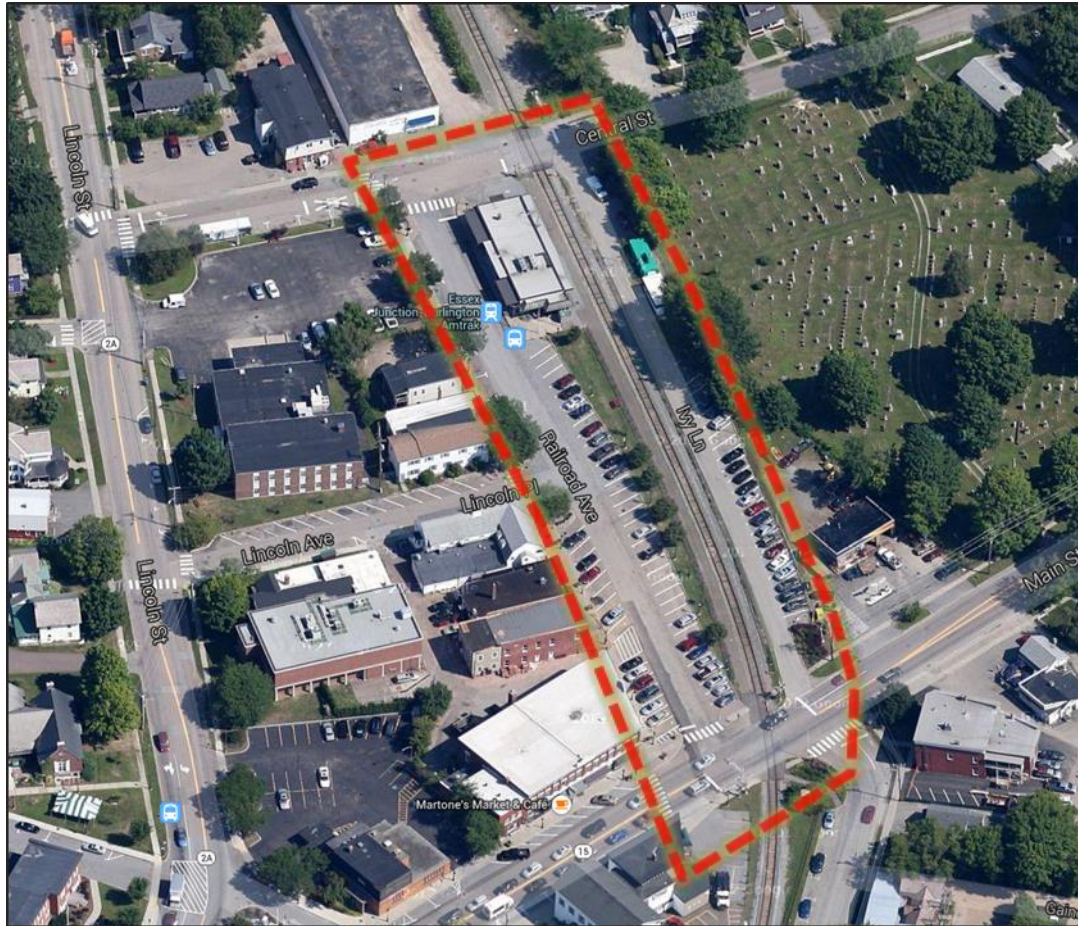
Essex Train Station Alternative 4 Partial Build Perspective



Summary of Train Station Alternatives

	Train Station Improvement Alternative:	No Build	Alternative 2 - New Waiting Area and Roof Canopy (Two-Way Traffic)		Alternative 3 - New Waiting Area and Roof Canopy (One Way Traffic)		Alternative 4 - Partial Build, New Waiting Area and Roof Canopy (One-Way Traffic)
			Full Build w/Plaza	Partial Build w/Plaza	Full Build w/Plaza	Partial Build w/Plaza	Partial Build, no Plaza
COST	Cost Estimate	\$0	\$1.35 million	\$1.15 million	\$1.35 million	\$1.15 million	\$1.10 million
Purpose and Need	Current Station is Small, Minimal Shelter	0	++	++	++	++	++
	Existing bathroom is small, available limited times.	0	++	++	++	++	++
	Bus stop areas inadequate	0	++	++	++	++	++
	Desire for better pedestrian accommodations	0	++	+	++	+	+

Presentation of Transportation Alternatives



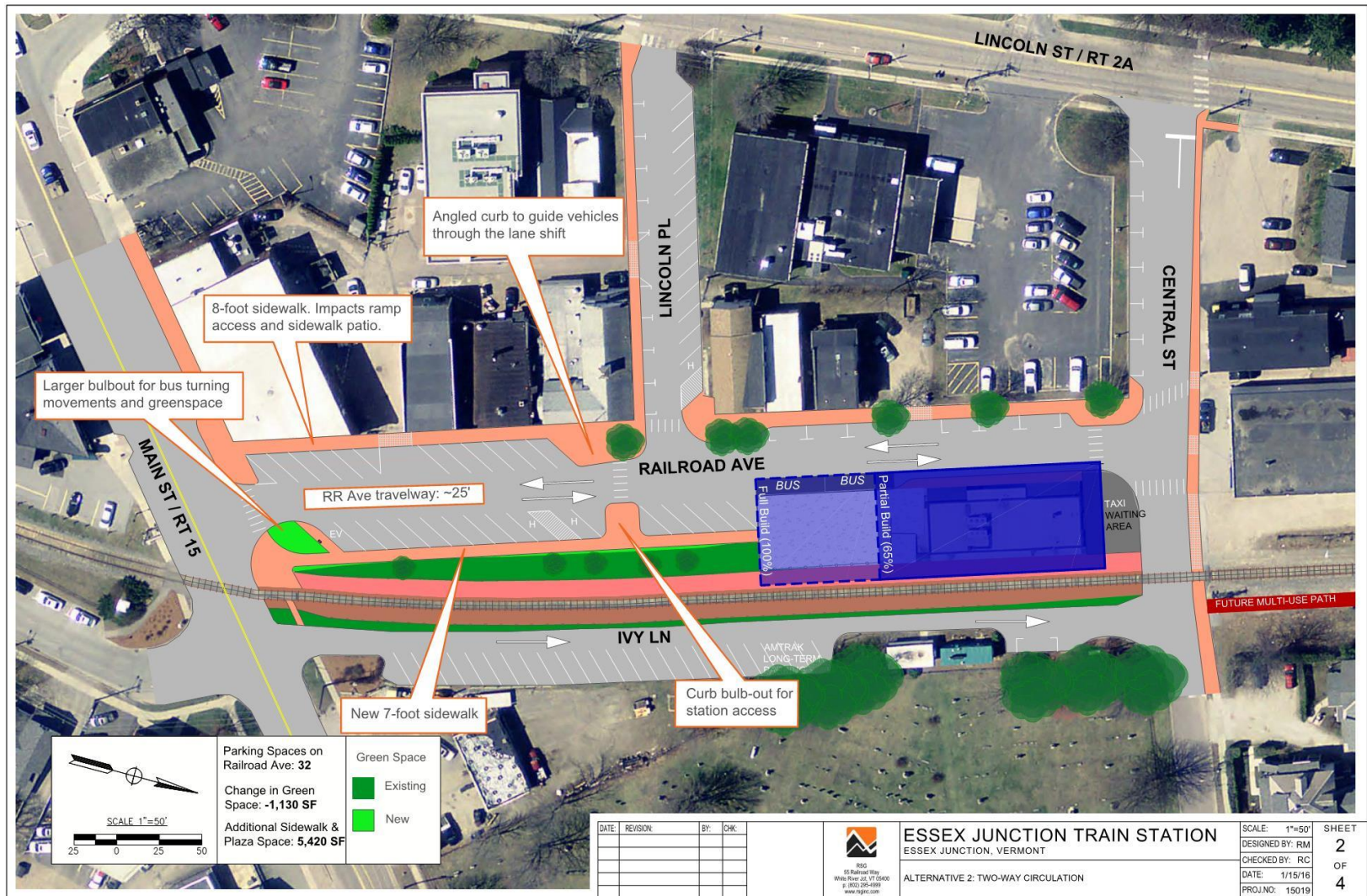
Transportation/Access/Circulation Issues

- Provide a pedestrian crosswalk across Railroad Avenue to the Amtrak Station.
- Provide pedestrian accommodations to serve the angled parking spaces along the east side of Railroad Avenue to access the Amtrak Station.
- Incorporate CCTA bus dwelling and access needs.
- Maintain the parking spaces serving existing commercial uses, and consider potential changes to accommodate a taxi stand and long-term (i.e. all day and/or multi-day) parking.
- Consider the addition of an electric vehicle charging station.
- Consider alternative uses for Ivy Lane for multimodal travel, long-term parking.
- Consider continuation of the multimodal path that terminates at Central Street immediately east of the railroad right-of-way.
- Evaluate the inconsistent width of Railroad Avenue north and south of Lincoln Place, and consider appropriate lane widths for the multimodal use of Railroad Avenue.
- Consider the potential addition of greenspace for stormwater management and aesthetics.

Alternatives Considered

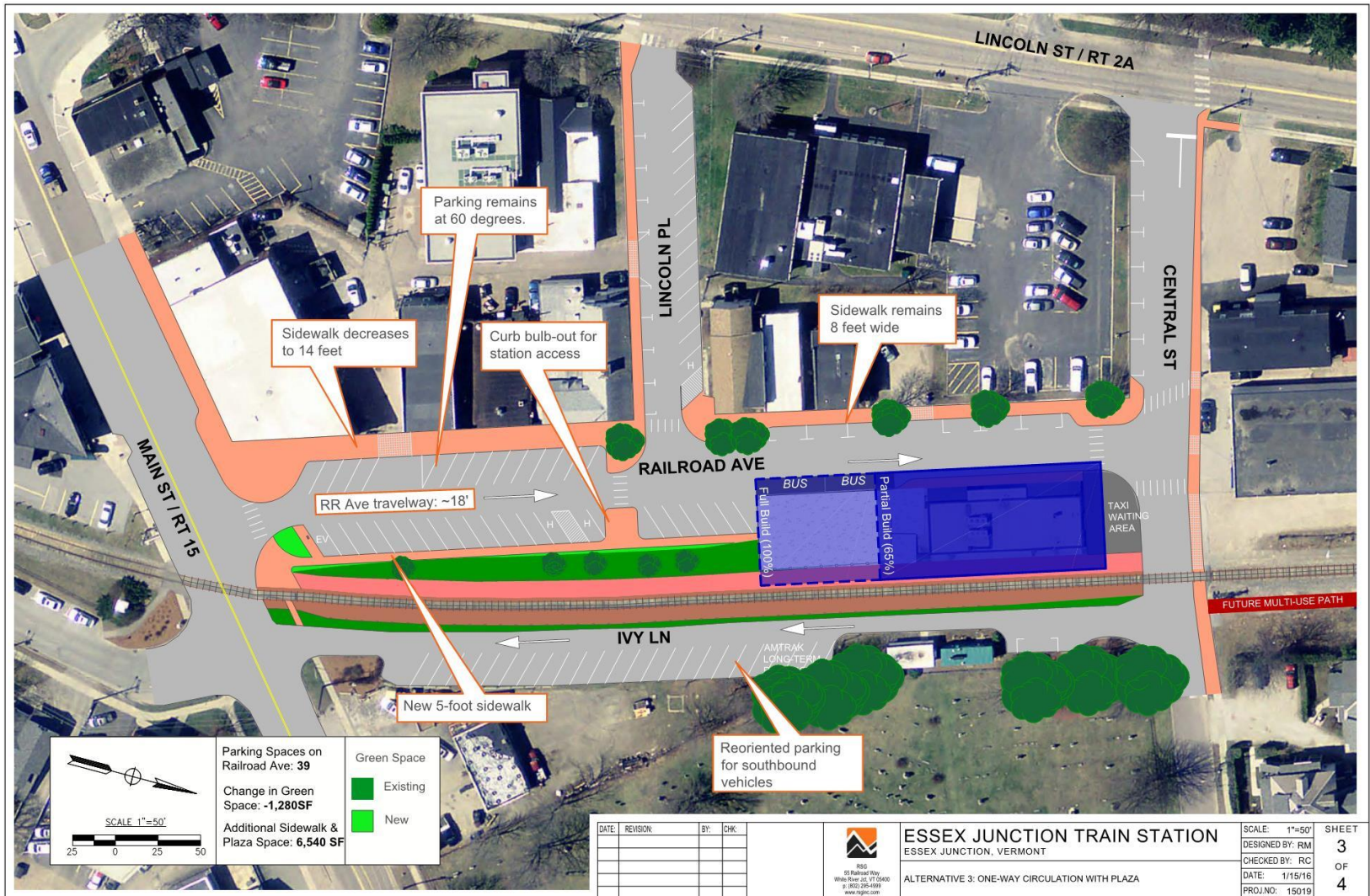
- Alternative 1: No Build
- Alternative 2: Access Improvements, Two-Way Circulation on Railroad Avenue
- Alternative 3: Access Improvements, One-Way Circulation on Railroad Avenue and Ivy Lane
- Alternative 4: Access Improvements, One-Way Circulation, No Plaza Area
 - On-Street Parking Alternatives Were Considered for Both Alts 2 & 3
 - Core Improvements included in Alternatives 2 - 4:
 - Accommodation of two CCTA buses adjacent to train station;
 - Construct a new six-foot-wide sidewalk and increase green space along the easterly sideline of Railroad Avenue;
 - Construct a new crosswalk and curb extensions on Railroad Avenue south of Lincoln Place;
 - Increase in plaza space adjacent to train station;
 - Modify curb radius at the northeast corner of the Main Street/Railroad Avenue intersection to facilitate CCTA bus right turns from Main Street;
 - Accommodate future electric vehicle (EV) charging station;
 - Designate a taxi waiting area.

Alternative 2: Two Way Traffic on Railroad Ave.



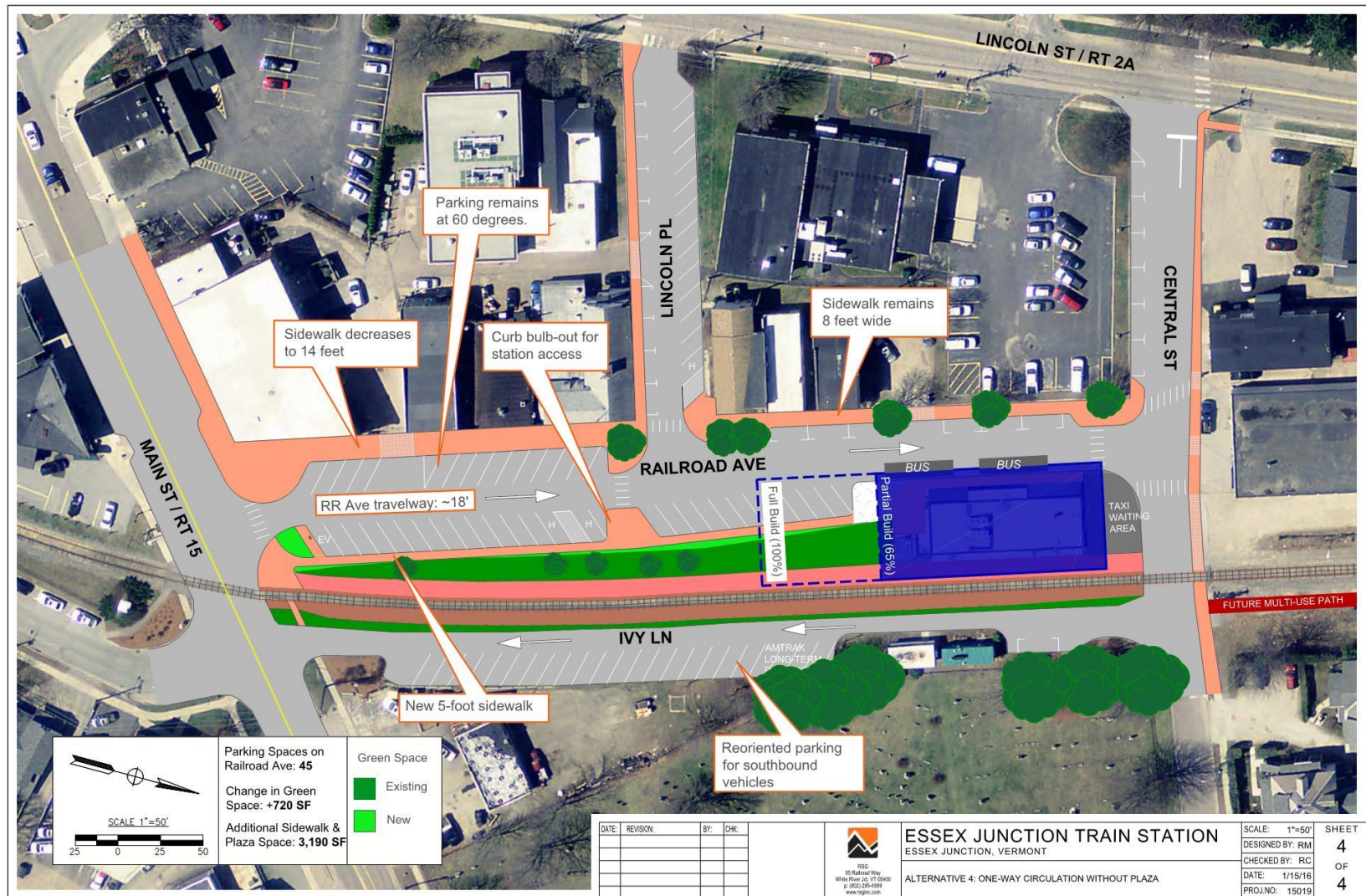
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Alternative 3: One Way Traffic on Railroad Ave., with Plaza



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Alternative 4: Minimalist, One Way Traffic on Railroad Ave., without Plaza



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Evaluation of Alternatives

	Improvement:	No Build	Alternative 2 - Two-Way Circulation	Alternative 3 - One Way Circulation	Alternative 4 - One Way Circulation
COST	Conceptual Cost Estimate	-	\$214000 - 271000	\$226000 - 287000	\$182000 - 231000
	Properties Affected	-	NECR Rail Station Property	NECR Rail Station Property and Ivy Lane	
ENGINEERING	Typical Section (total road width)	22' -28' + parking	25' + parking	17.5' + parking	17.5' + parking
	Alignment/Geometric Changes	addition of curb bulbouts by pedestrian cross-walk			
		-	+5420 SF in additional pedestrian areas	+6540 SF in additional pedestrian areas	+3190 SF in additional pedestrian areas
	Bike/Ped Impacts	-	+	++	++
	Greenspace	-	- 1130 square feet	- 1280 square feet	+ 720 square feet
	Right of Way Impacts	-	necessitates agreements with NECR for station re-design and Ivy Lane usage.		
	Traffic Impacts	-	negligible	introduction of one way circulation	introduction of one way circulation
	CCTA Impacts	-	++	++	+
	Parking Impacts on Railroad Avenue	-	-29 spaces	-30 spaces	-15 spaces

Discussion and Recommendation of Preferred Alternative

- Consultant Team Recommends Alternative 4 as Preferred Alternative
 - Lowest Cost
 - Addresses all key access and circulation deficiencies
 - Results in least loss of on street parking
 - Maximizes green space

Project Team

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