

GPI

Engineering and Construction Services



Greenman-Pedersen, Inc.

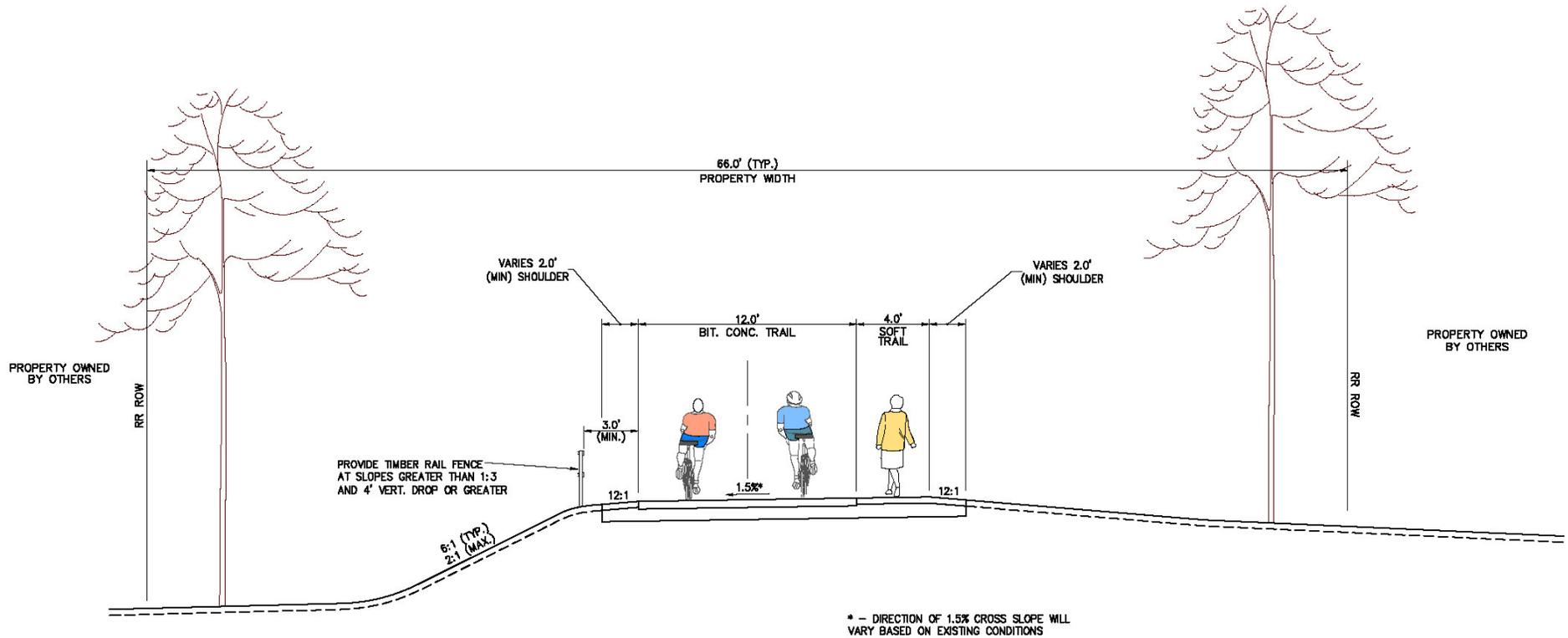
105 Central Street
Stoneham, MA 02180

www.gpinet.com

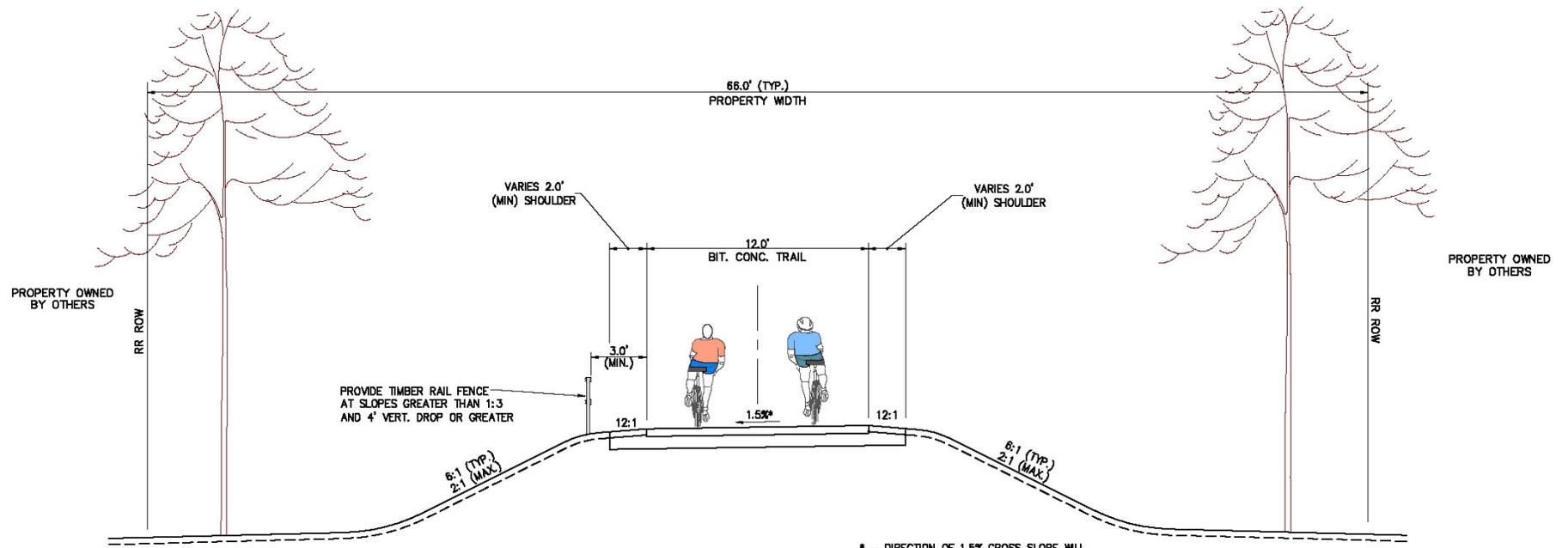


Town of Acton
Board of Selectmen
Bruce Freeman Rail Trail
PRESENTATION

June 4, 2007

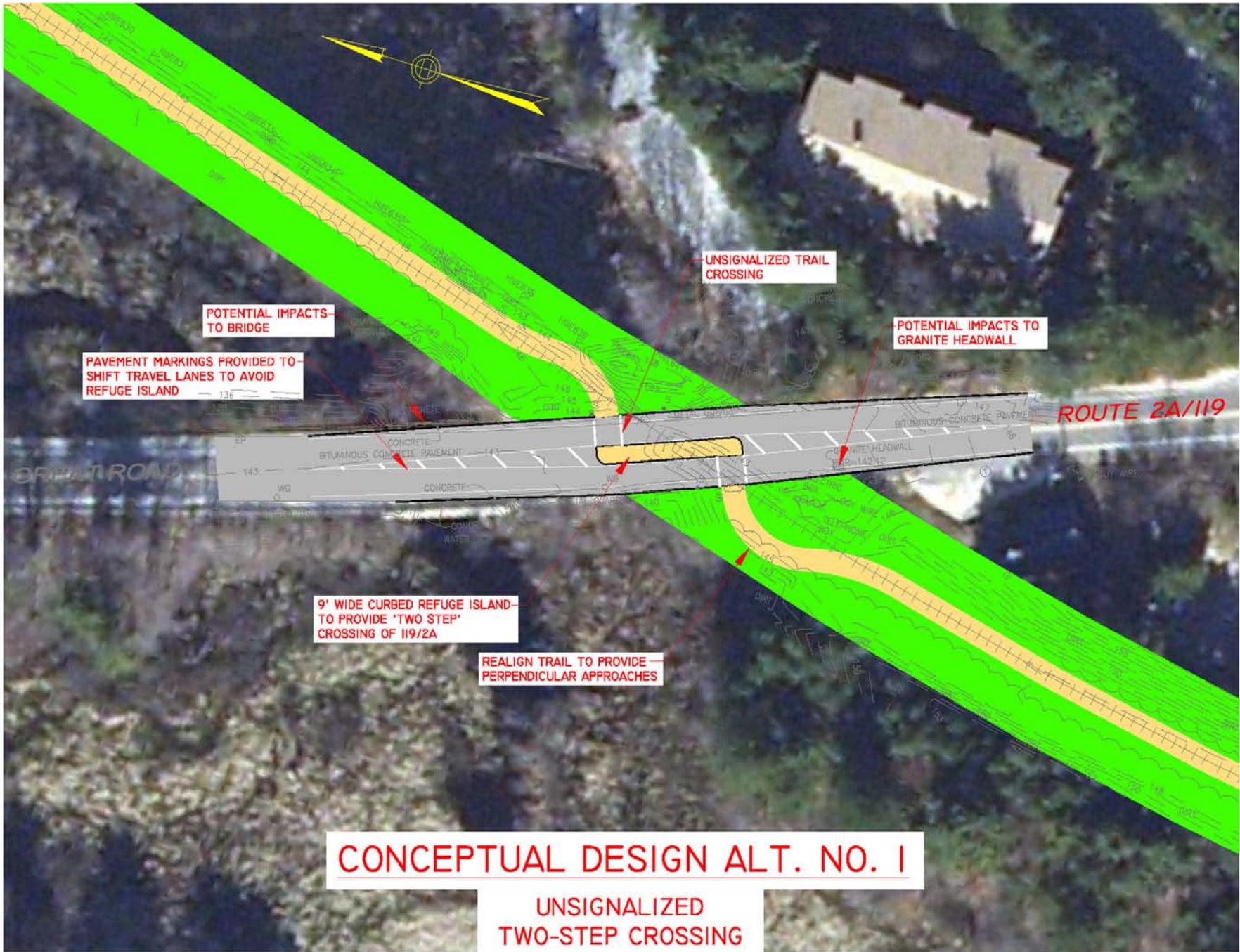


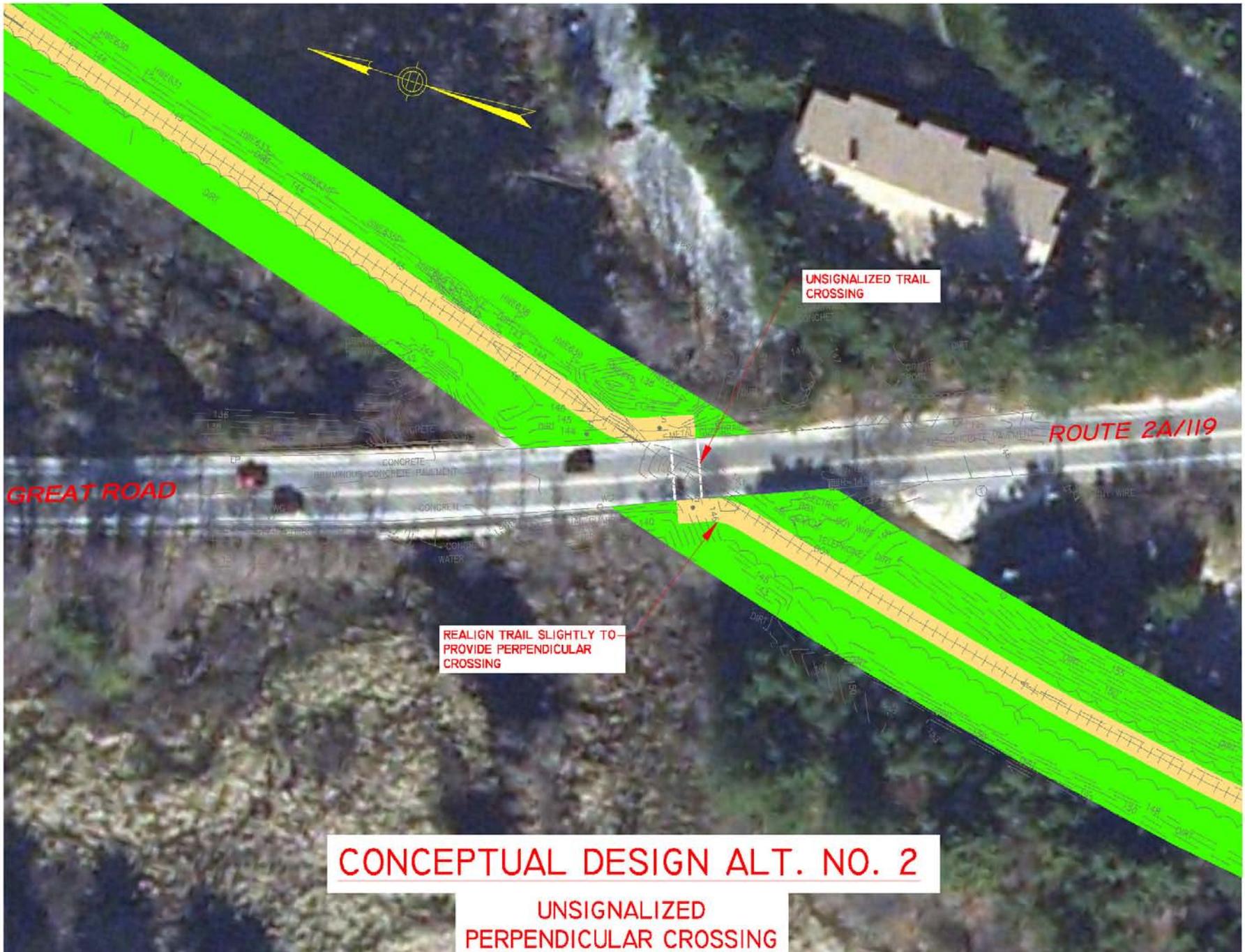
TYPICAL SECTION – PAVED TRAIL WITH ADJACENT SOFT TRAIL

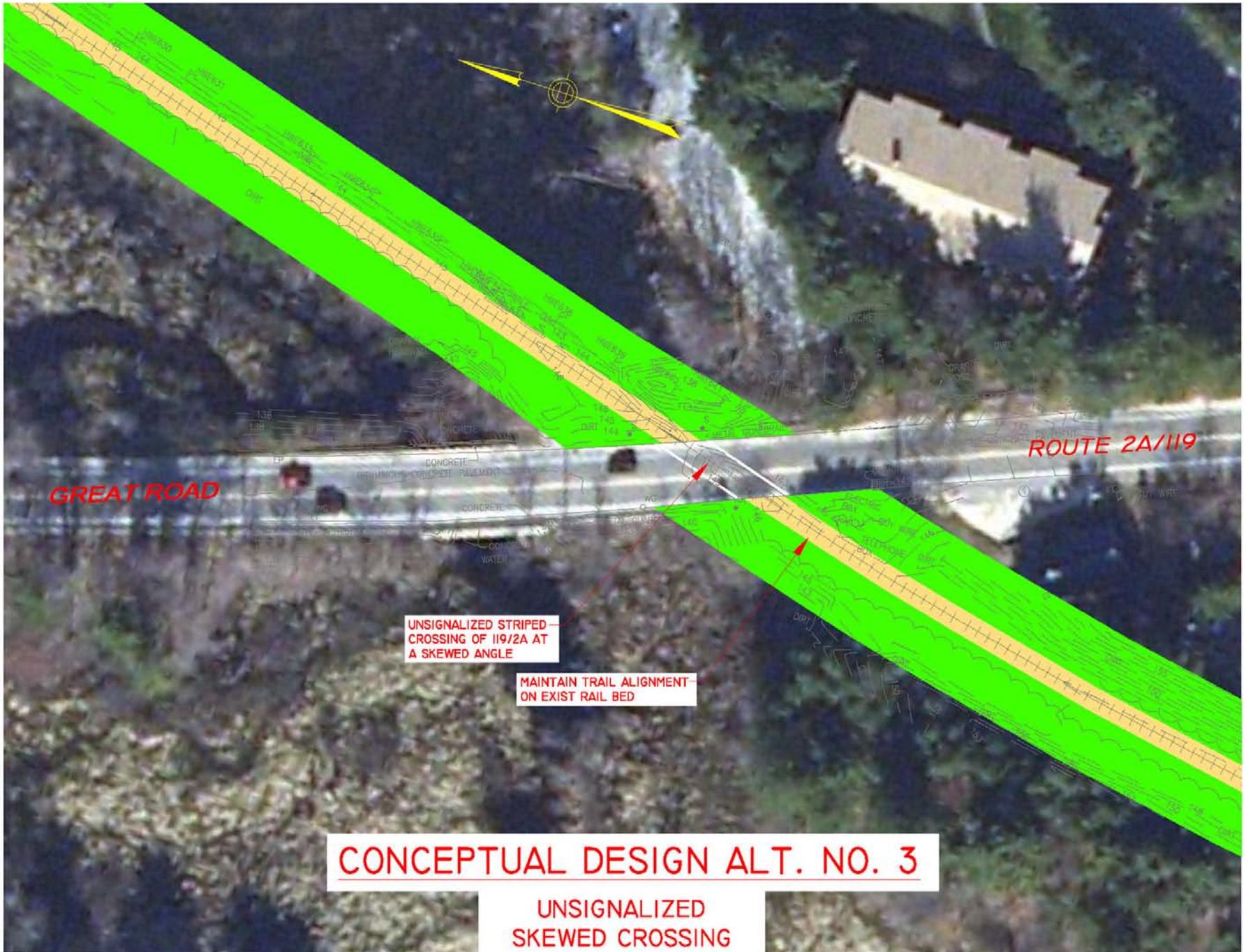


* - DIRECTION OF 1.5% CROSS SLOPE WILL VARY BASED ON EXISTING CONDITIONS

TYPICAL SECTION - PAVED TRAIL







GREAT ROAD

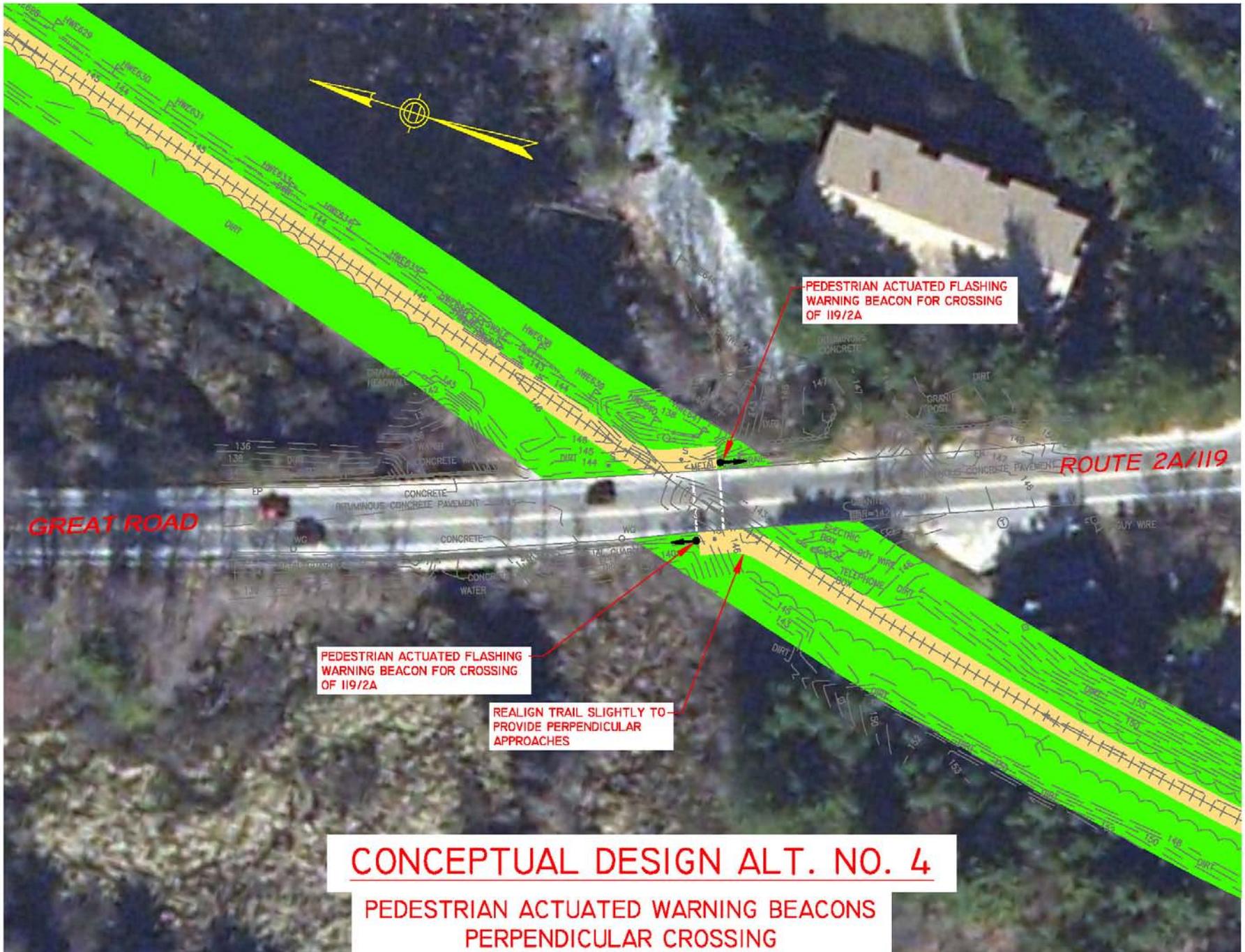
ROUTE 2A/119

UNSIGNALIZED STRIPED
CROSSING OF 119/2A AT
A SKEWED ANGLE

MAINTAIN TRAIL ALIGNMENT
ON EXIST RAIL BED

CONCEPTUAL DESIGN ALT. NO. 3

UNSIGNALIZED
SKEWED CROSSING

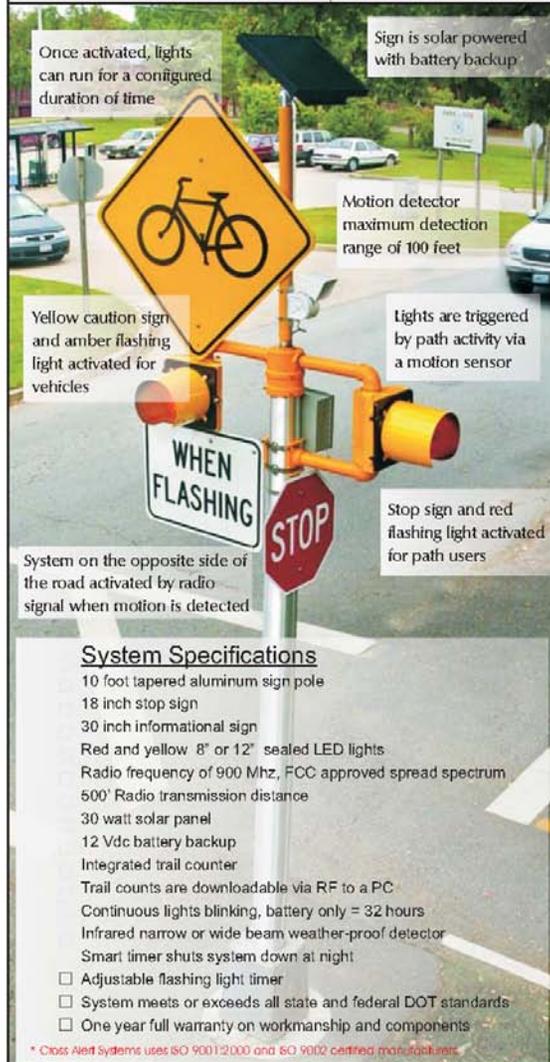


CONCEPTUAL DESIGN ALT. NO. 4

**PEDESTRIAN ACTUATED WARNING BEACONS
PERPENDICULAR CROSSING**



Cross Alert Systems specializes in technological safety solutions. Our patent pending, motion activated early warning system for recreational path/public road intersections provides an active warning to vehicles that a path user is at or near an intersection. This system provides enhanced visibility at mid-block intersections where the line of sight is poor for vehicles to see oncoming path users.



Once activated, lights can run for a configured duration of time

Sign is solar powered with battery backup

Motion detector maximum detection range of 100 feet

Yellow caution sign and amber flashing light activated for vehicles

Lights are triggered by path activity via a motion sensor

Stop sign and red flashing light activated for path users

System on the opposite side of the road activated by radio signal when motion is detected

System Specifications

- 10 foot tapered aluminum sign pole
- 18 inch stop sign
- 30 inch informational sign
- Red and yellow 8" or 12" sealed LED lights
- Radio frequency of 900 Mhz, FCC approved spread spectrum
- 500' Radio transmission distance
- 30 watt solar panel
- 12 Vdc battery backup
- Integrated trail counter
- Trail counts are downloadable via RF to a PC
- Continuous lights blinking, battery only = 32 hours
- Infrared narrow or wide beam weather-proof detector
- Smart timer shuts system down at night
- Adjustable flashing light timer
- System meets or exceeds all state and federal DOT standards
- One year full warranty on workmanship and components

* Cross Alert Systems uses ISO 9001:2000 and ISO 9002 certified manufacturers

BENEFITS

VEHICLES ARE FOREWARNED THAT PATH USERS ARE AT OR NEAR THE INTERSECTION

SIGN ONLY FLASHES WHEN PATH USERS APPROACH THE INTERSECTION (ACTIVE WARNING)

REINFORCES EXISTING RIGHT OF WAY RULES

SYSTEM DOES NOT NEED TO BE TIED INTO THE ELECTRIC GRID

PATH USERS DO NOT HAVE TO LEAVE PATH TO TRIGGER SYSTEM (PASSIVE DETECTION)

SYSTEM EMPHASIZES NEED FOR PATH USER TO STOP

INTEGRATED TRAIL COUNTER

System Cost

2-pole intersection, delivered, \$16000*
* price as of 7/1/2005, subject to change

Installation notes

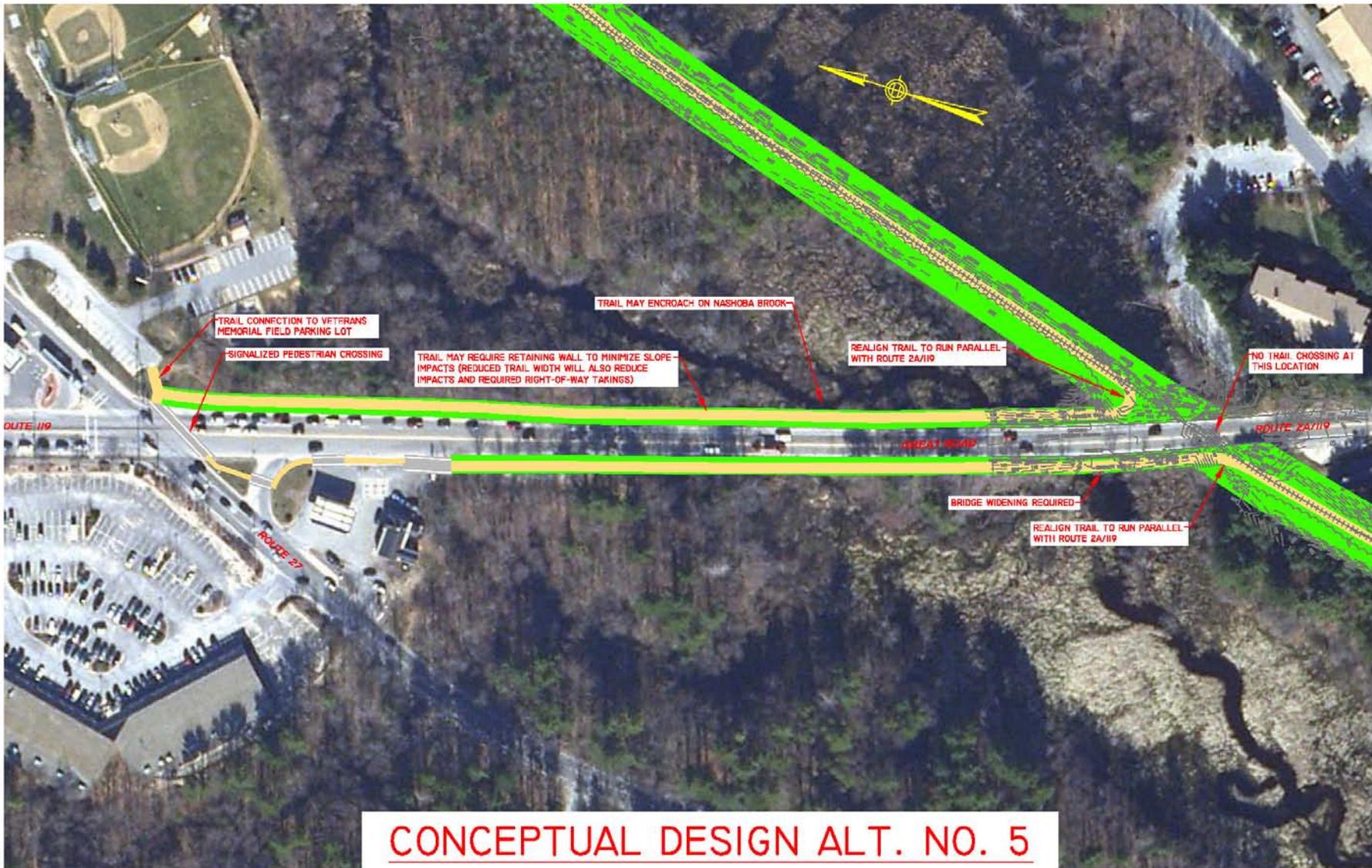
Typical installation cost of approximately \$1200/pole, for labor and material for foundation

Follow State DOT guidelines for installation requirements

Cross Alert offers an optional maintenance program

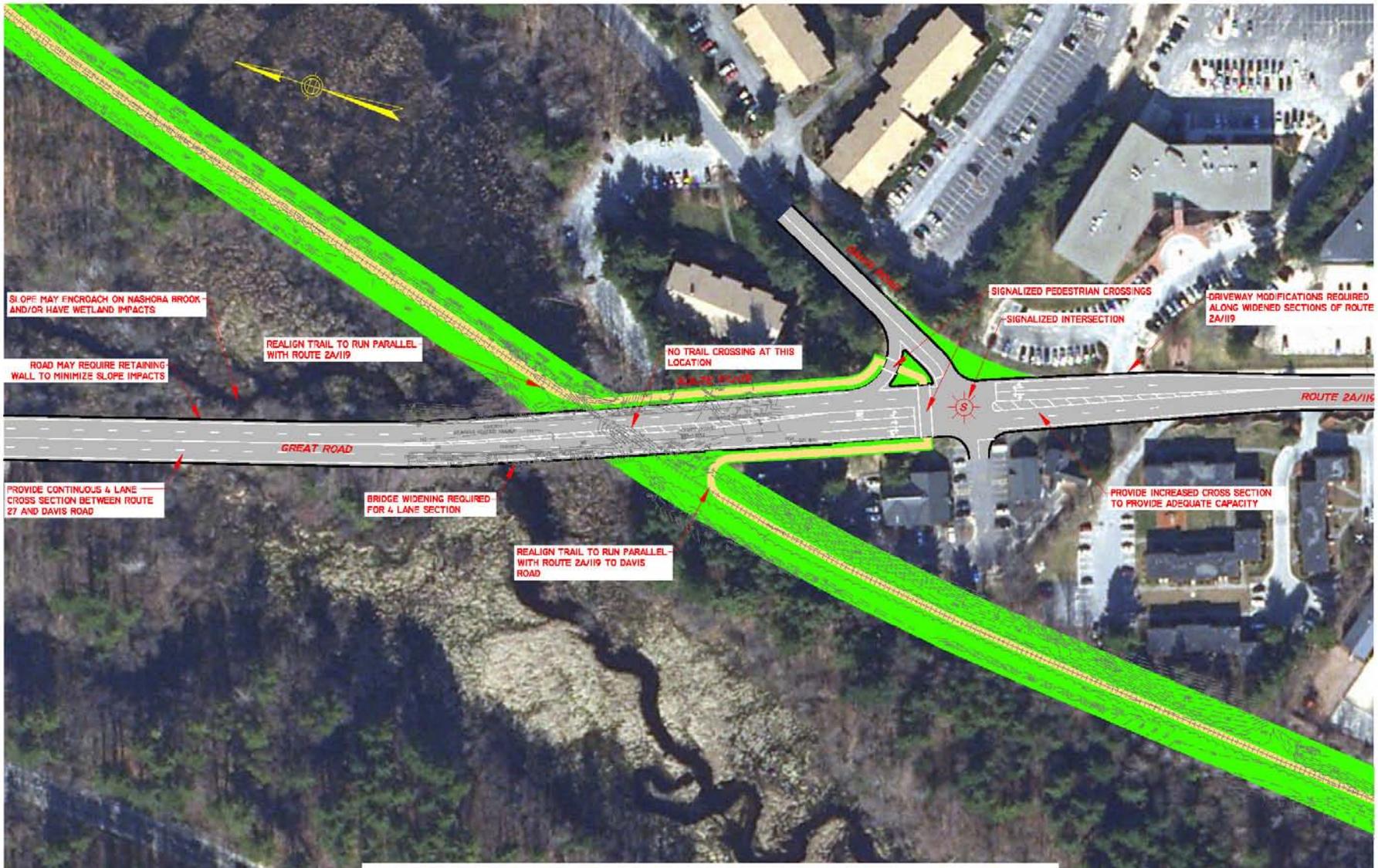
Cross Alert Systems, Inc.
3970 Post Road Second Floor
Warwick, RI 02886
1.866.CROSSALERT
(1.866.276-7725)
info@crossalert.com

www.crossalert.com



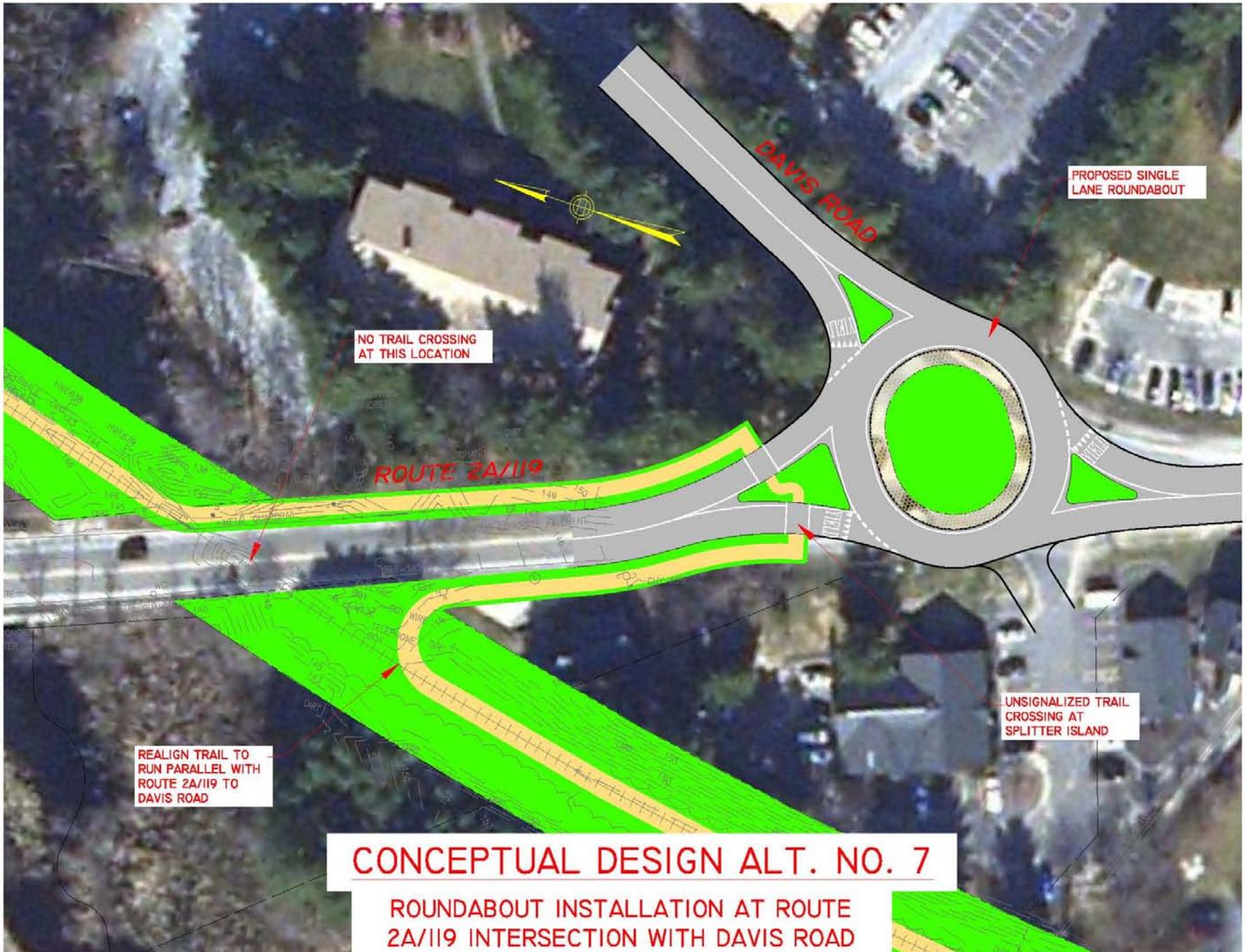
CONCEPTUAL DESIGN ALT. NO. 5

SIGNALIZED CROSSING AT ROUTE 2A/27
INTERSECTION



CONCEPTUAL DESIGN ALT. NO. 6

SIGNALIZED CROSSING AT
DAVIS ROAD INTERSECTION



CONCEPTUAL DESIGN ALT. NO. 7

ROUNDABOUT INSTALLATION AT ROUTE 2A/119 INTERSECTION WITH DAVIS ROAD



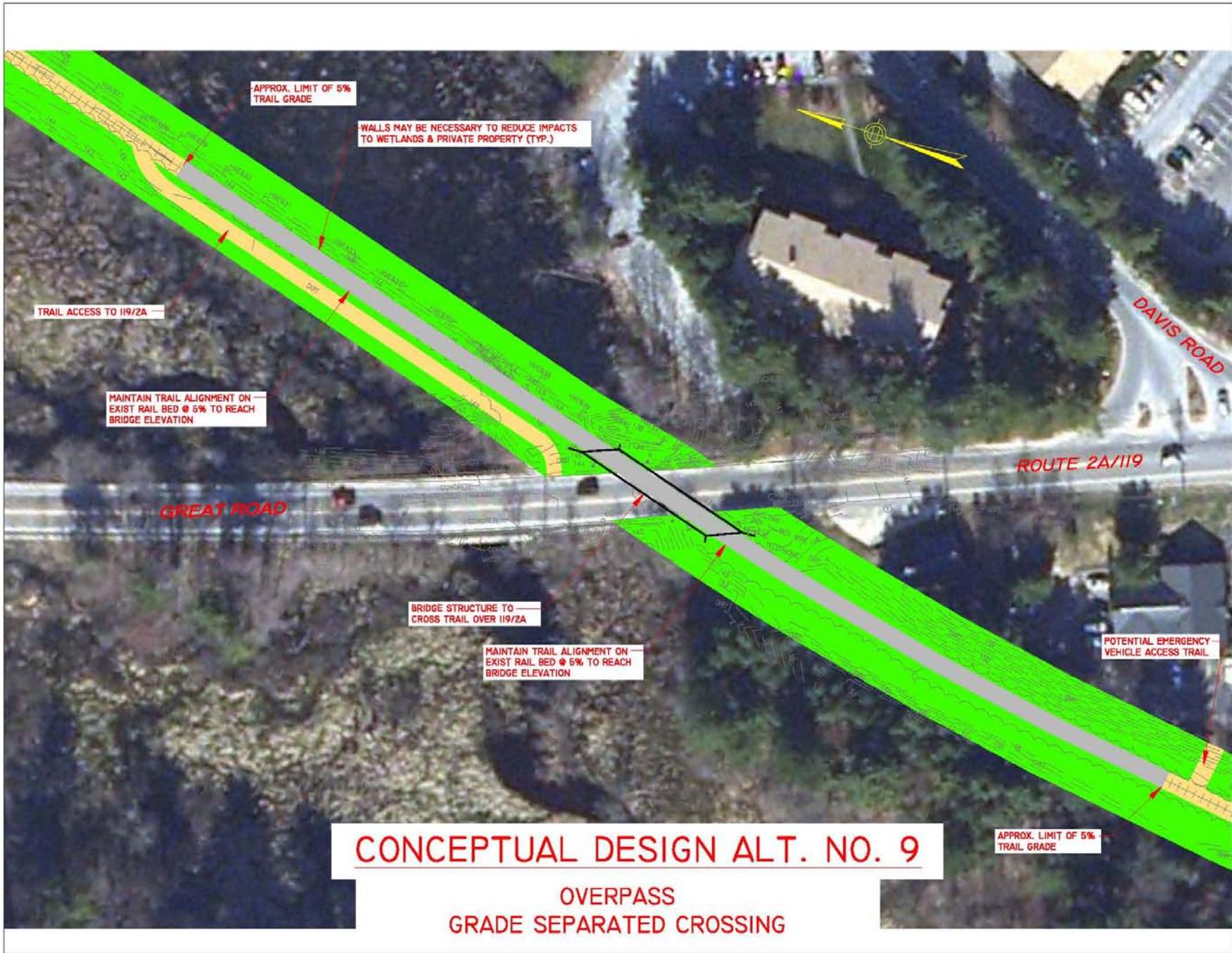
SIGNALIZED/GATED
TRAIL CROSSING

ROUTE 2A/119

REALIGN TRAIL SLIGHTLY TO
PROVIDE PERPENDICULAR
CROSSING

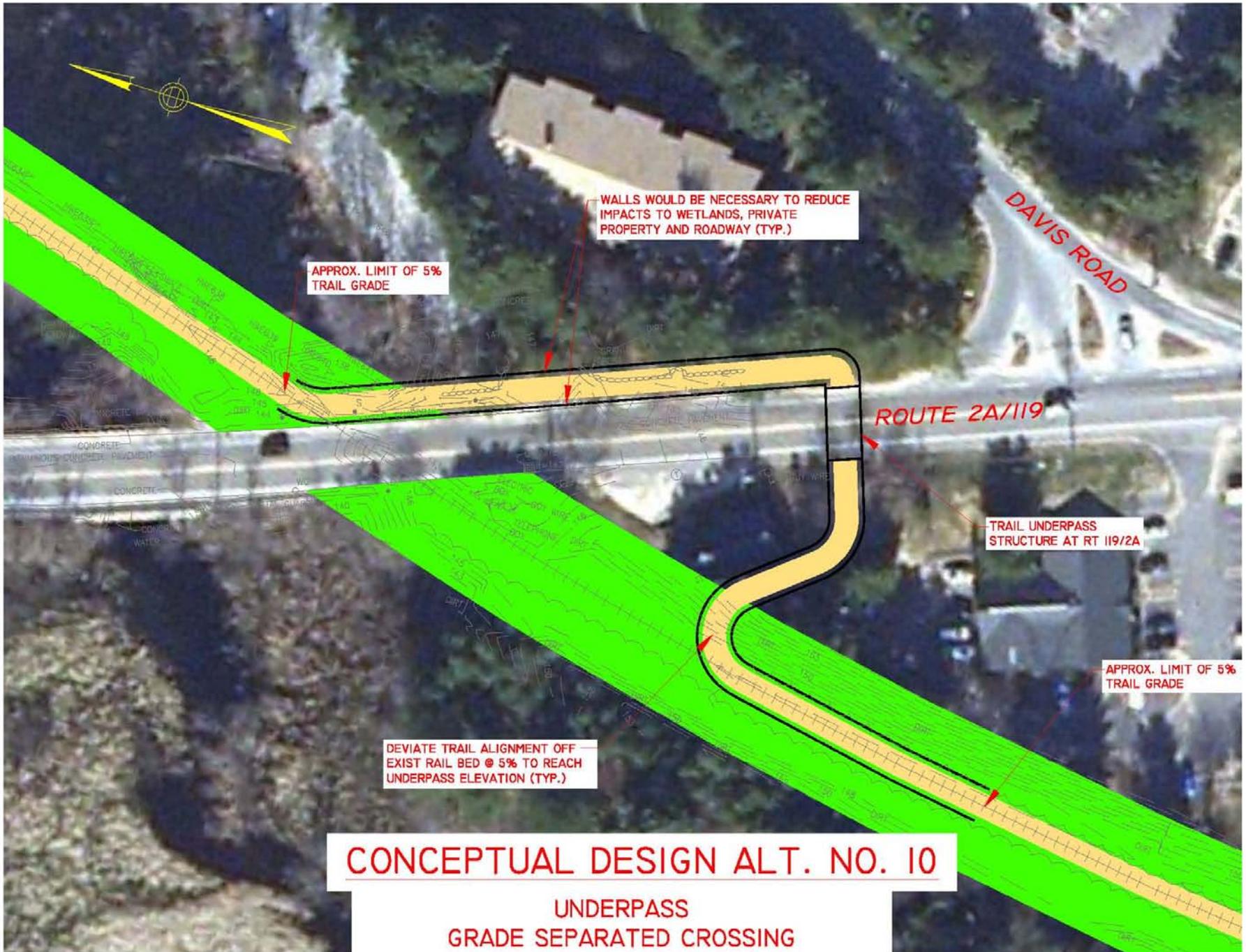
CONCEPTUAL DESIGN ALT. NO. 8

SIGNALIZED/GATED
PERPENDICULAR CROSSING



CONCEPTUAL DESIGN ALT. NO. 9

OVERPASS
GRADE SEPARATED CROSSING





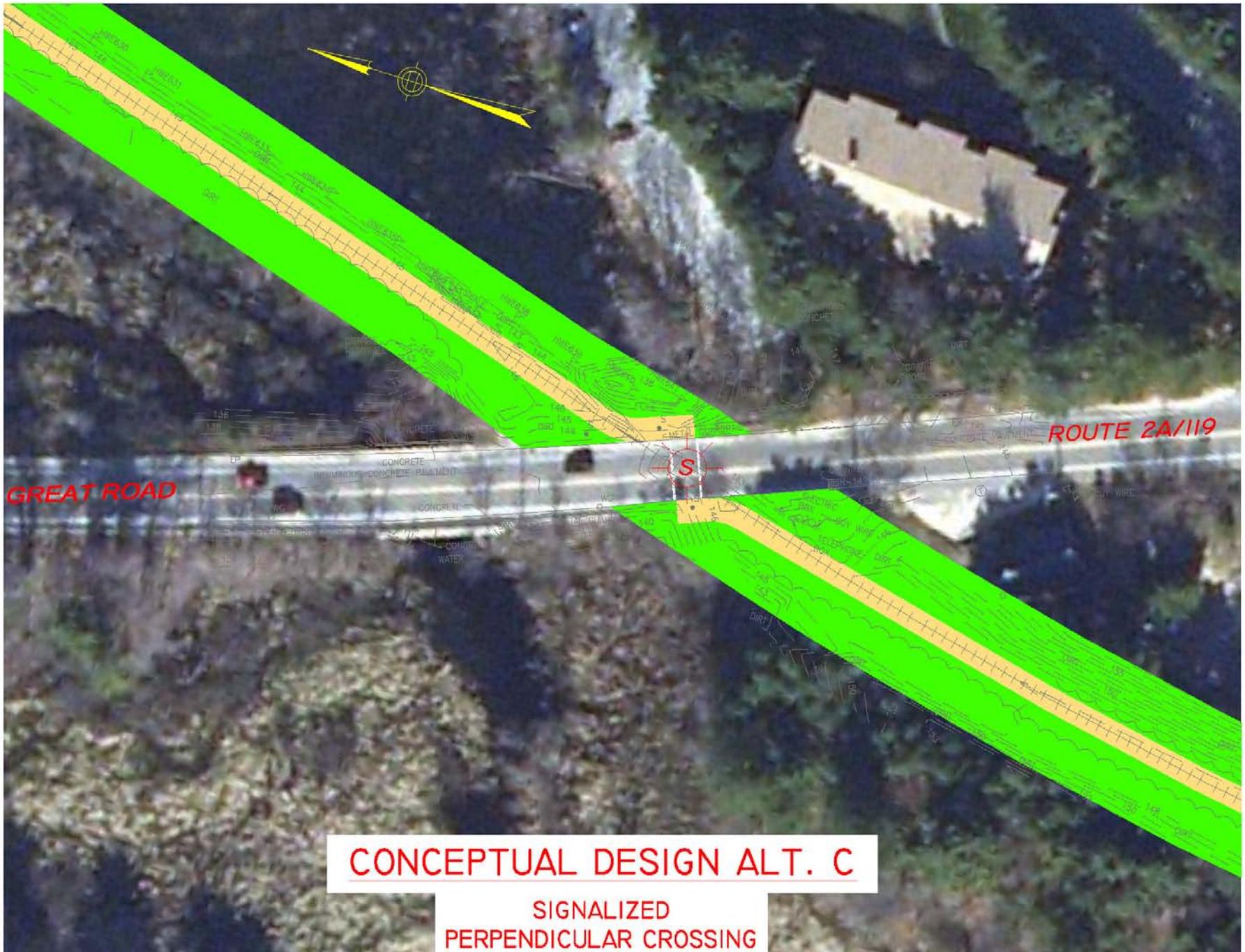
CONCEPTUAL DESIGN ALT. A

**OVERPASS
GRADE SEPARATED CROSSING**





CONCEPTUAL DESIGN ALT. B
ROUNABOUT INSTALLATION AT ROUTE 2A/119 INTERSECTION WITH DAVIS ROAD



CONCEPTUAL DESIGN ALT. C

**SIGNALIZED
PERPENDICULAR CROSSING**

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A photograph of a forest path with the word "QUESTIONS?" overlaid in large white letters. The path is covered in fallen leaves and leads through a dense forest of tall trees. The lighting is soft, suggesting a misty or overcast day.

QUESTIONS?