



Epping Road (NH 27) Corridor Study

Exeter, New Hampshire

Presented by
Greg Bakos, PE

March 1, 2021

Contributions from:

Jason Plourde, PE, PTP

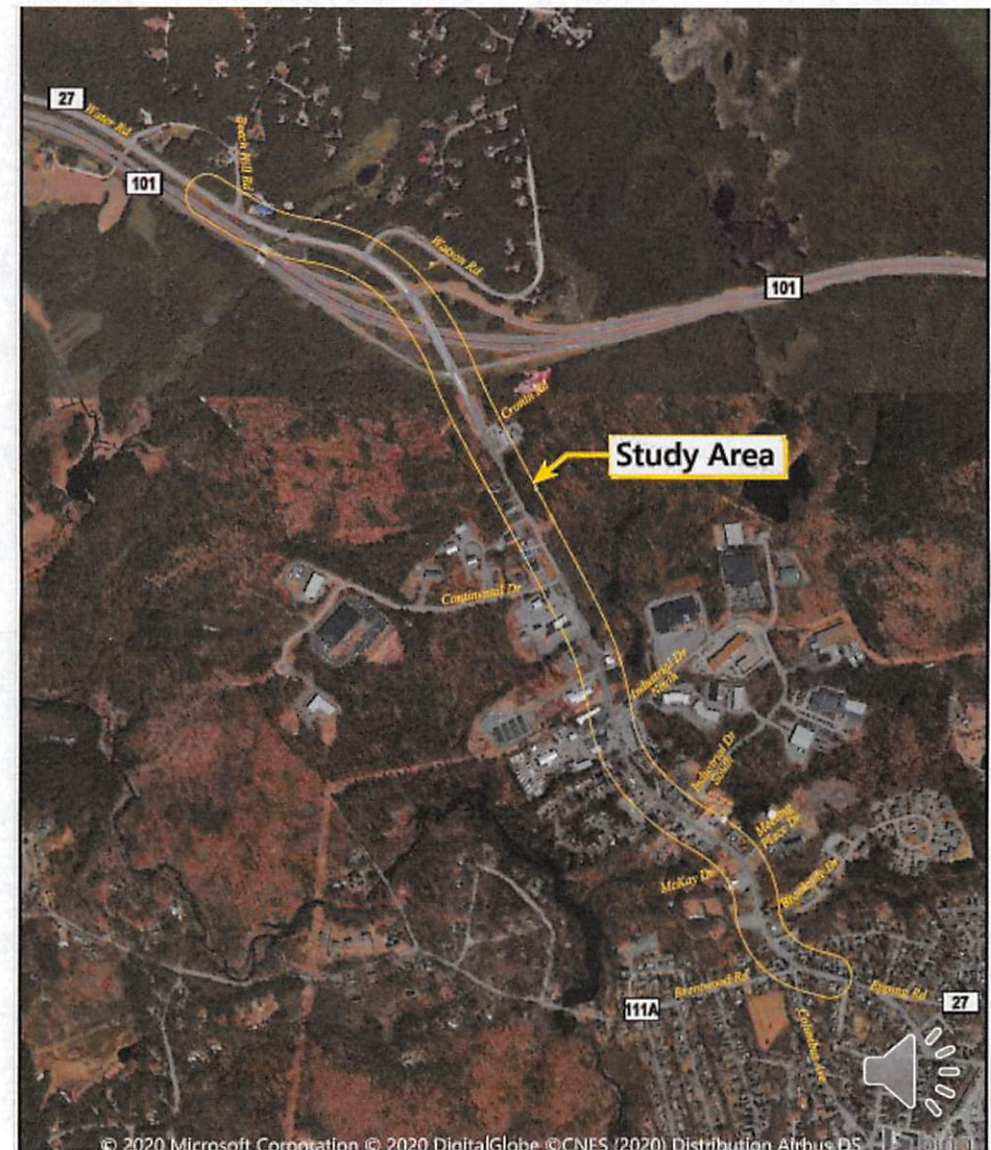
Frank Koczalka, PE



Why Study the Epping Road Corridor?

Tax Increment Financing (TIF) District Established

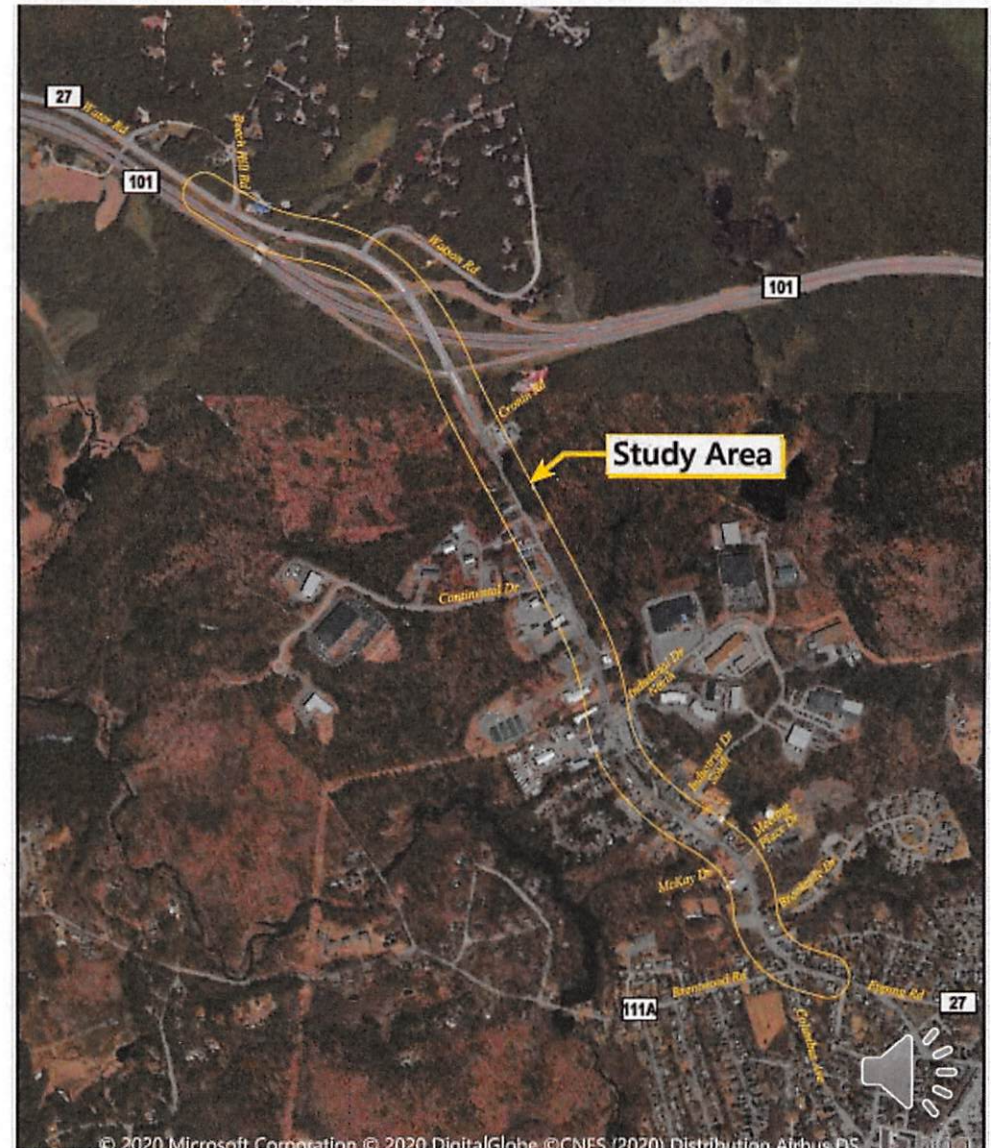
- March 2015 Town Meeting
- Between Beech Hill Rd and Brookside Dr.
 - 1.6 miles of underdeveloped/undeveloped areas
 - Formed to stimulate economic development
 - Provides funding for infrastructure improvements
 - Additional development will generate tax dollars



Why Study the Epping Road Corridor?

Corridor Study:

- Also includes Brentwood Rd/Columbus Ave Intersection
- Identified multimodal operational and safety deficiencies
- Developed conceptual engineering and design recommendations



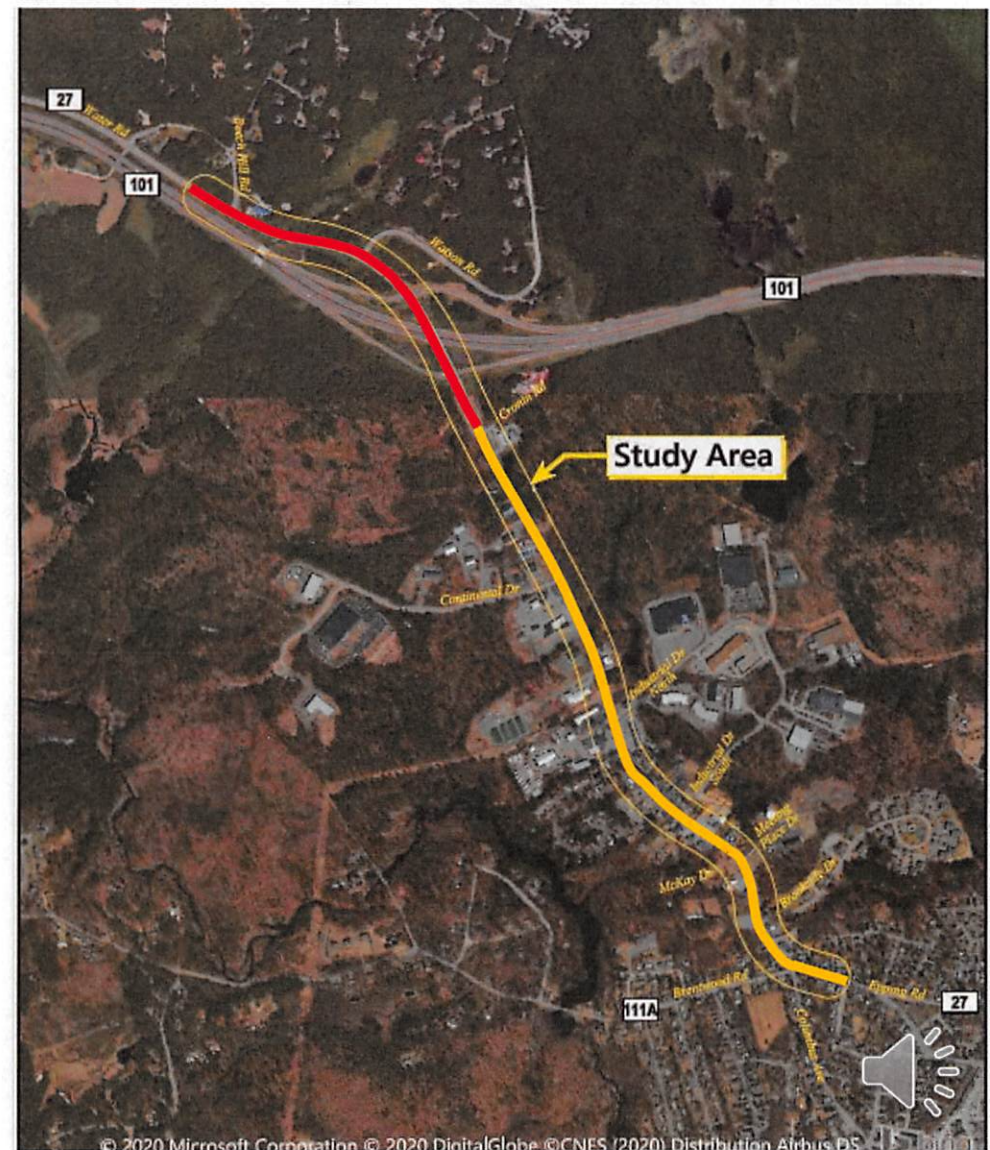
Jurisdictions:

Epping Rd between Beech Hill Rd and Cronin Rd

- NHDOT jurisdiction
- Class II: Secondary Highway
- Improvements would require NHDOT approval

Epping Rd between Cronin Rd and Brentwood Rd

- Urban Compact Area
- Town jurisdiction
- Class IV: Town Road



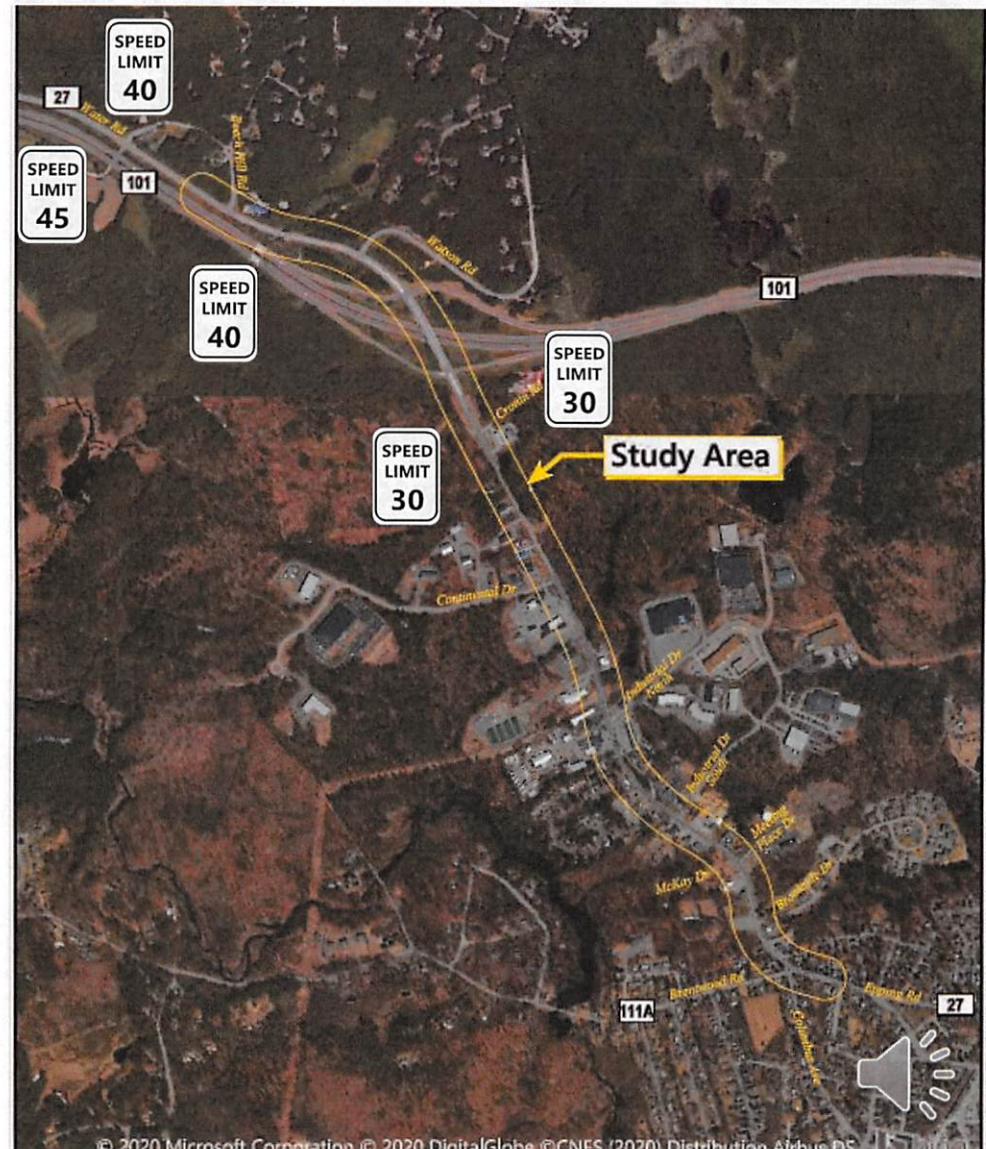
Epping Road Corridor Characteristics

Vehicular Corridor:

- Generally, a 2-lane roadway (1 lane/direction)
- Turn lanes at Interchange and at Continental Dr
 - Continental Dr = the only signalized intersection
- Two-way left-turn lane (center turn lane) between 93 and 78 Epping Rd
- Posted speed limits vary between 30 and 45 mph

Non-motorized Facilities:

- No defined bike lanes; variable width shoulders
- Sidewalks sporadically provided



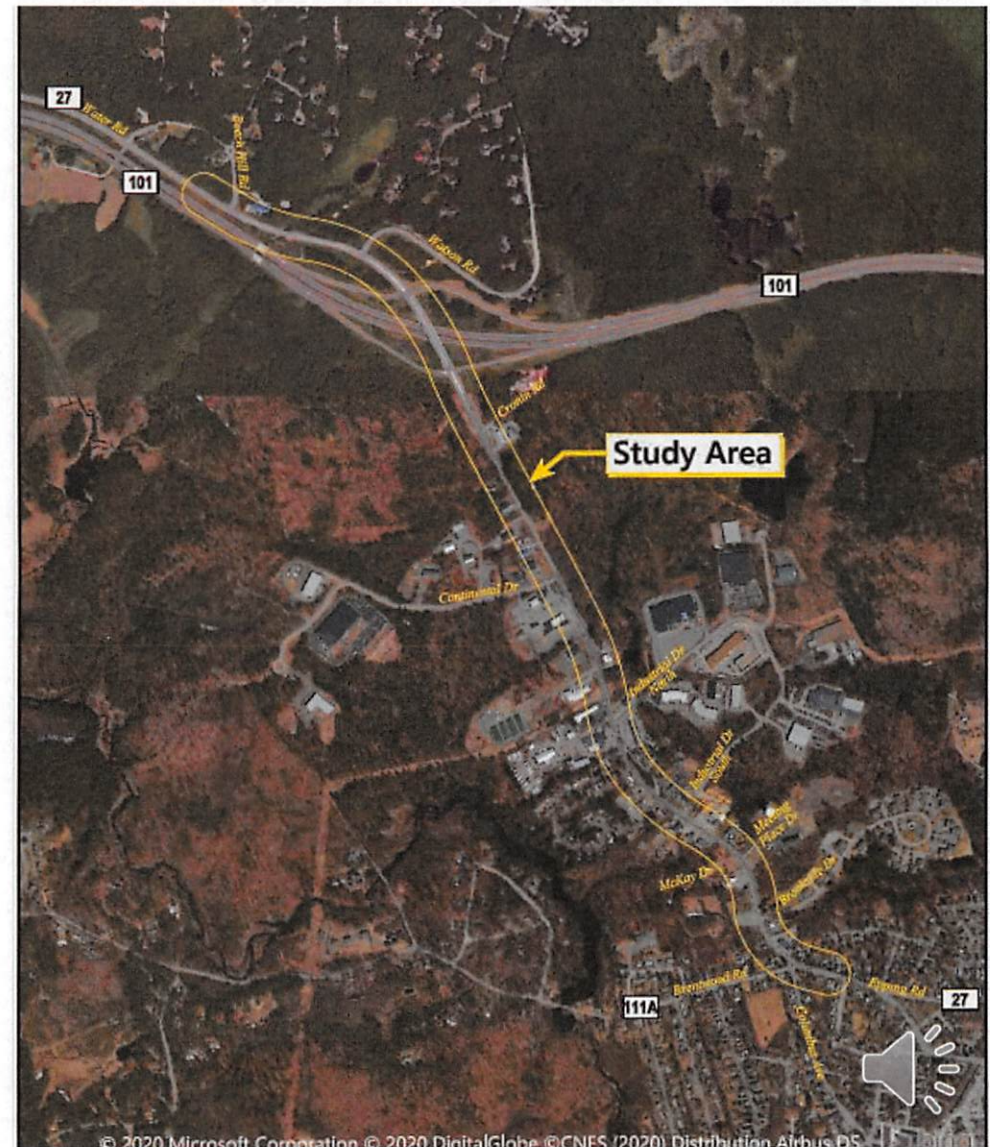
Epping Road Corridor Data

Traffic Volumes

- Base traffic volumes
 - Traffic counts in March 2020
 - COVID-19 adjustments from pre-pandemic counts
- Future traffic volumes (10-year horizon)
 - Annual growth rate (Rockingham Planning Commission)
 - Known developments planned within study area
 - Development of vacant parcels along corridor (zoning requirements, preliminary GIS wetland data, served by sewer and water) – *estimates could vary when parcels are developed and with more detailed wetland data*

Crash Data

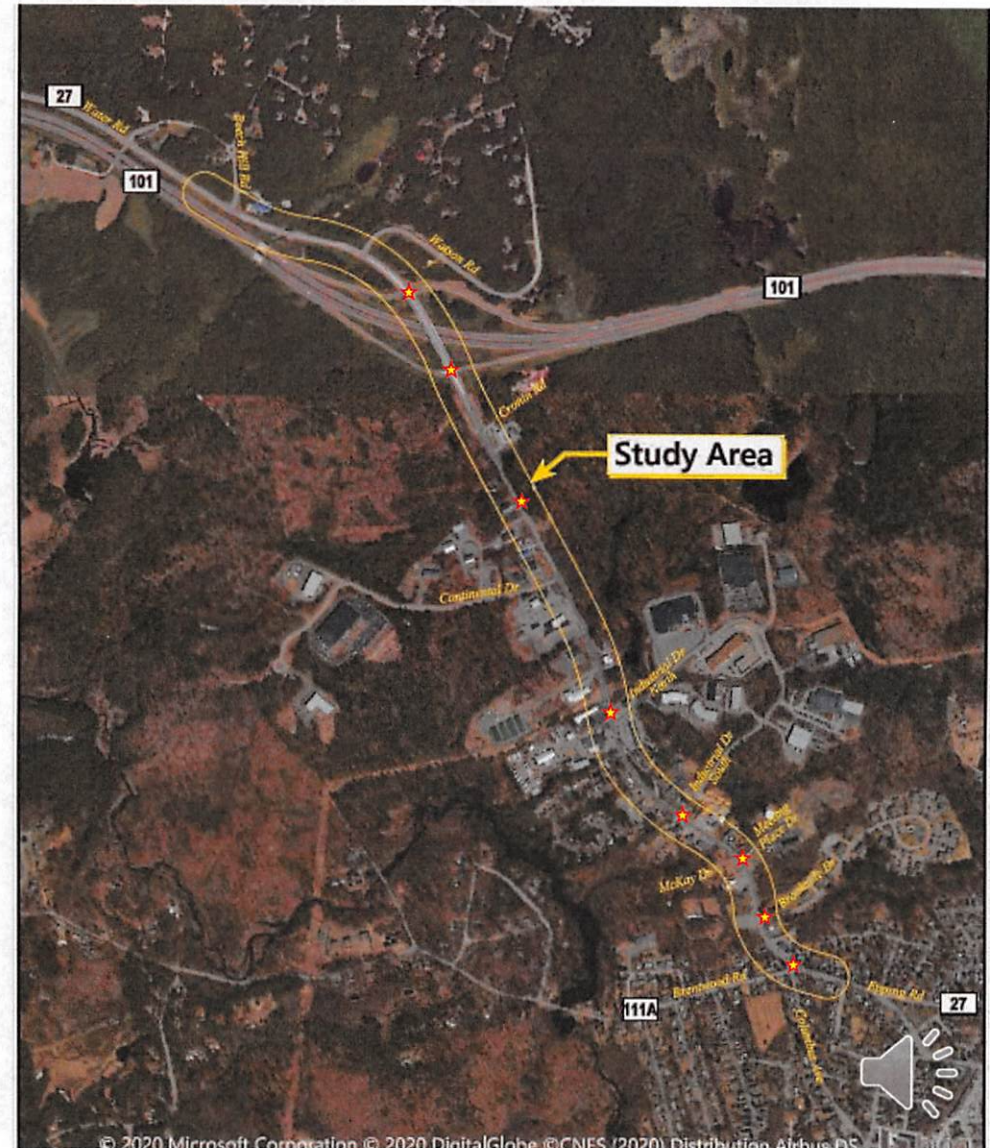
- Exeter Police Department (2014-2019)
 - To understand reported crash frequency and patterns

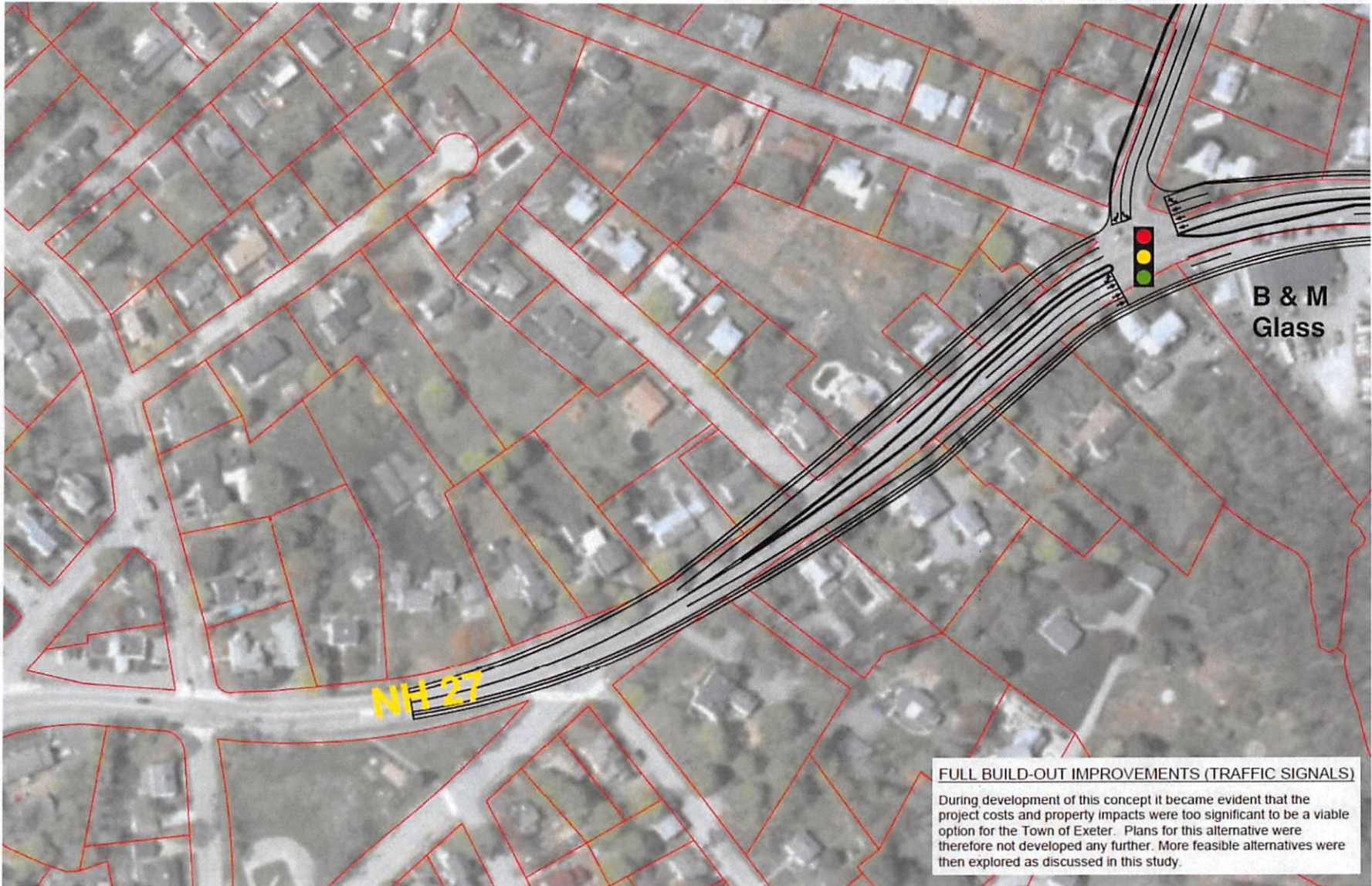


What: Epping Road Corridor Full Build Out of Parcels

Traffic Signals Alternative

- Potentially 8 signalized Intersections:
 - NH 101 westbound ramps
 - NH 101 eastbound ramps
 - Ray Farmstead Rd
 - Industrial Dr (north) and Dearborn Rd
 - Industrial Dr (south) and 104 Epping Rd
 - Meeting Place Dr and McKay Dr
 - Brookside Dr and Great Bay Kids' Co. driveway
 - Brentwood Rd
- The amount of land and business acquisition required would be considerable and was determined by Town to be undesirable / infeasible





FULL BUILD-OUT IMPROVEMENTS (TRAFFIC SIGNALS)

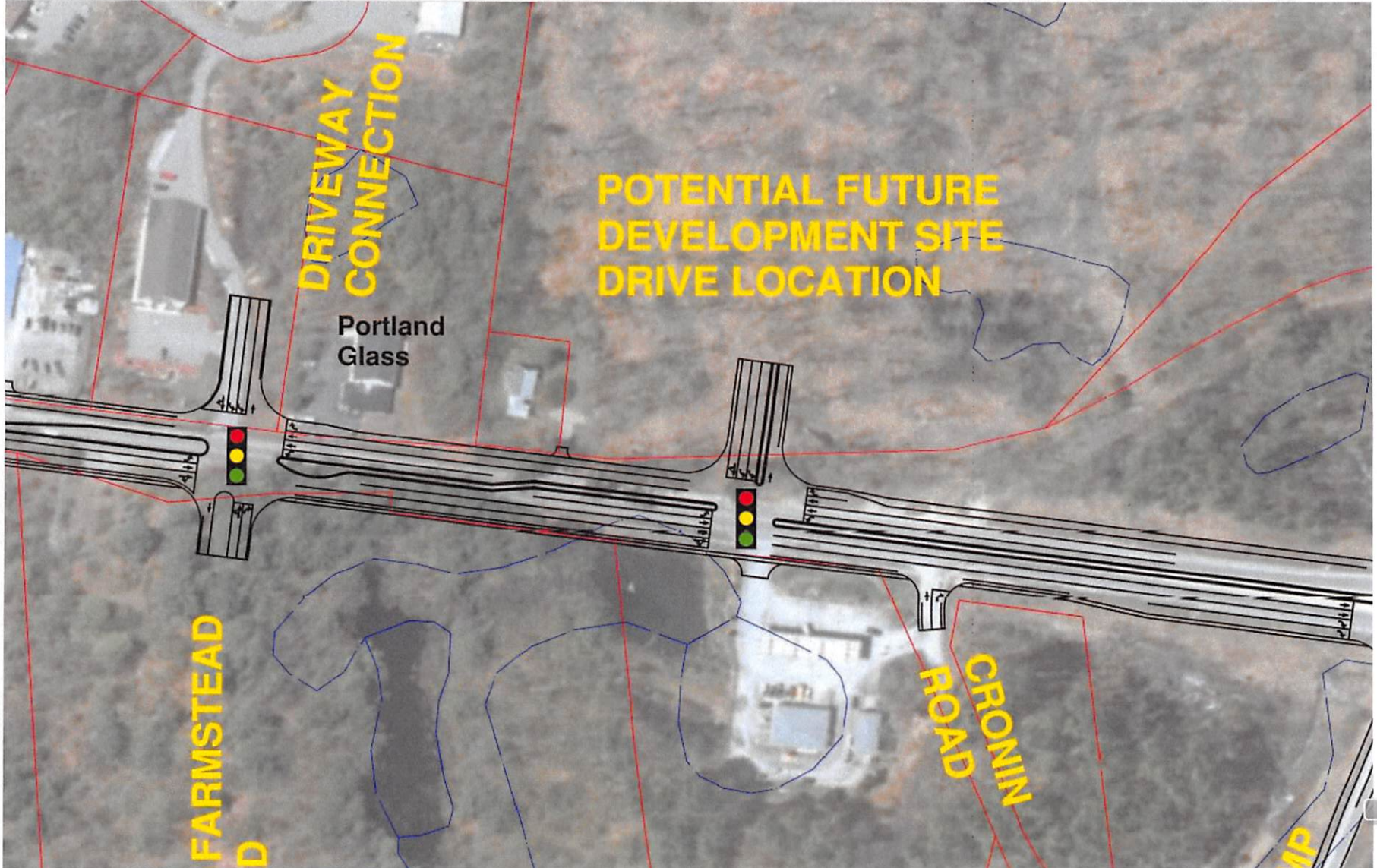
During development of this concept it became evident that the project costs and property impacts were too significant to be a viable option for the Town of Exeter. Plans for this alternative were therefore not developed any further. More feasible alternatives were then explored as discussed in this study.











**DRIVEWAY
CONNECTION**

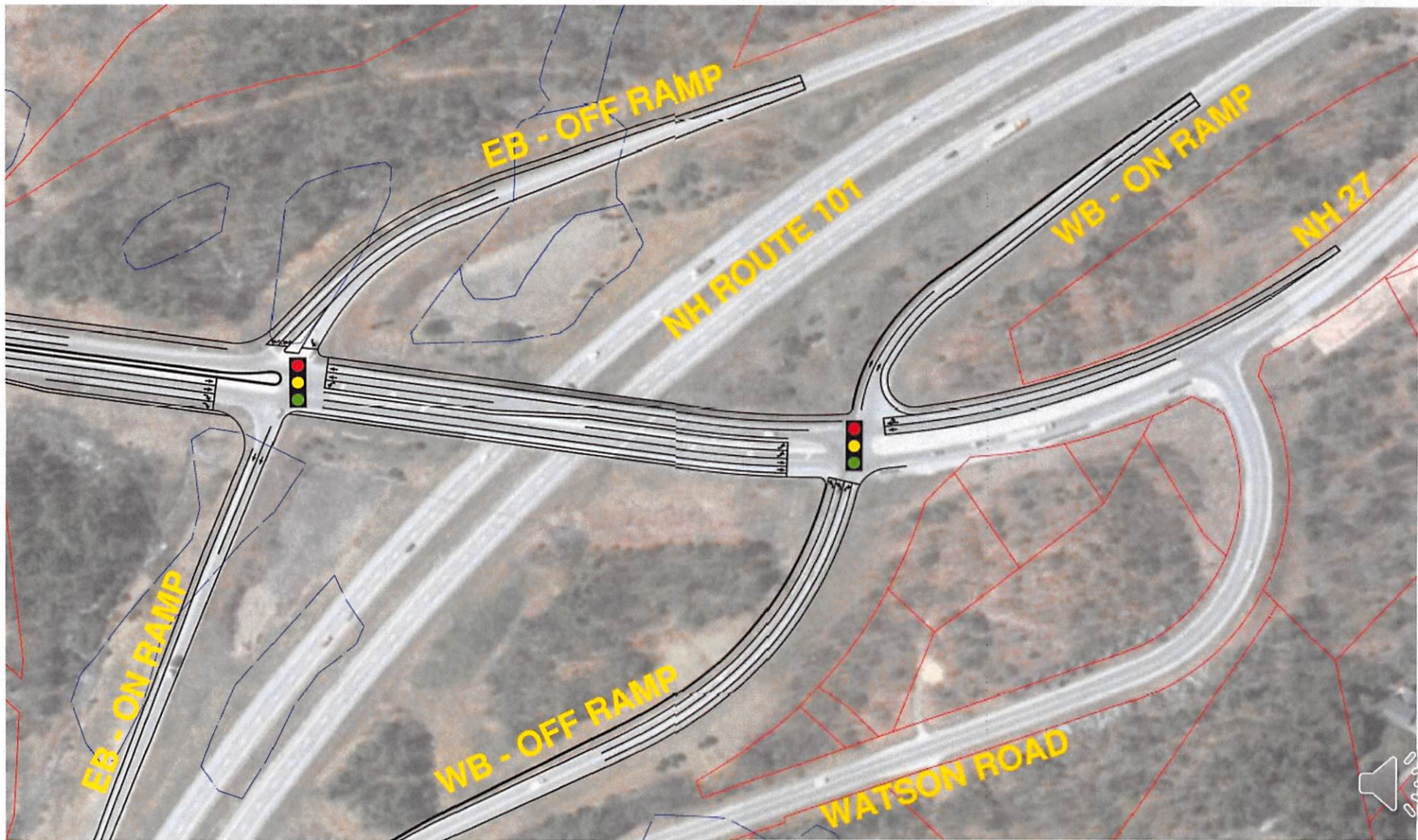
**POTENTIAL FUTURE
DEVELOPMENT SITE
DRIVE LOCATION**

Portland
Glass

**FARMSTEAD
D**

**CRONIN
ROAD**



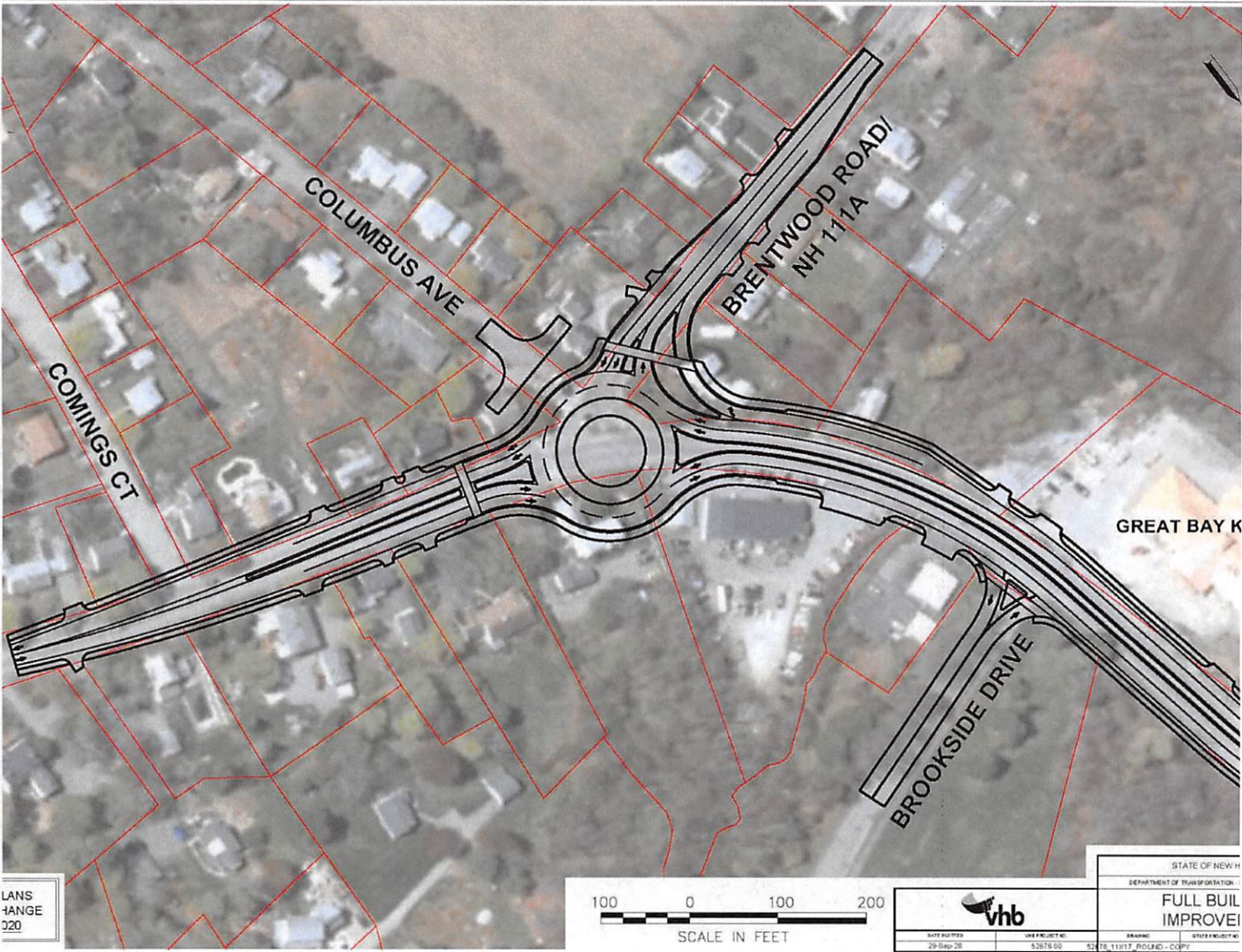


What: Epping Road Corridor Full Build Out of Parcels

Roundabouts Alternative

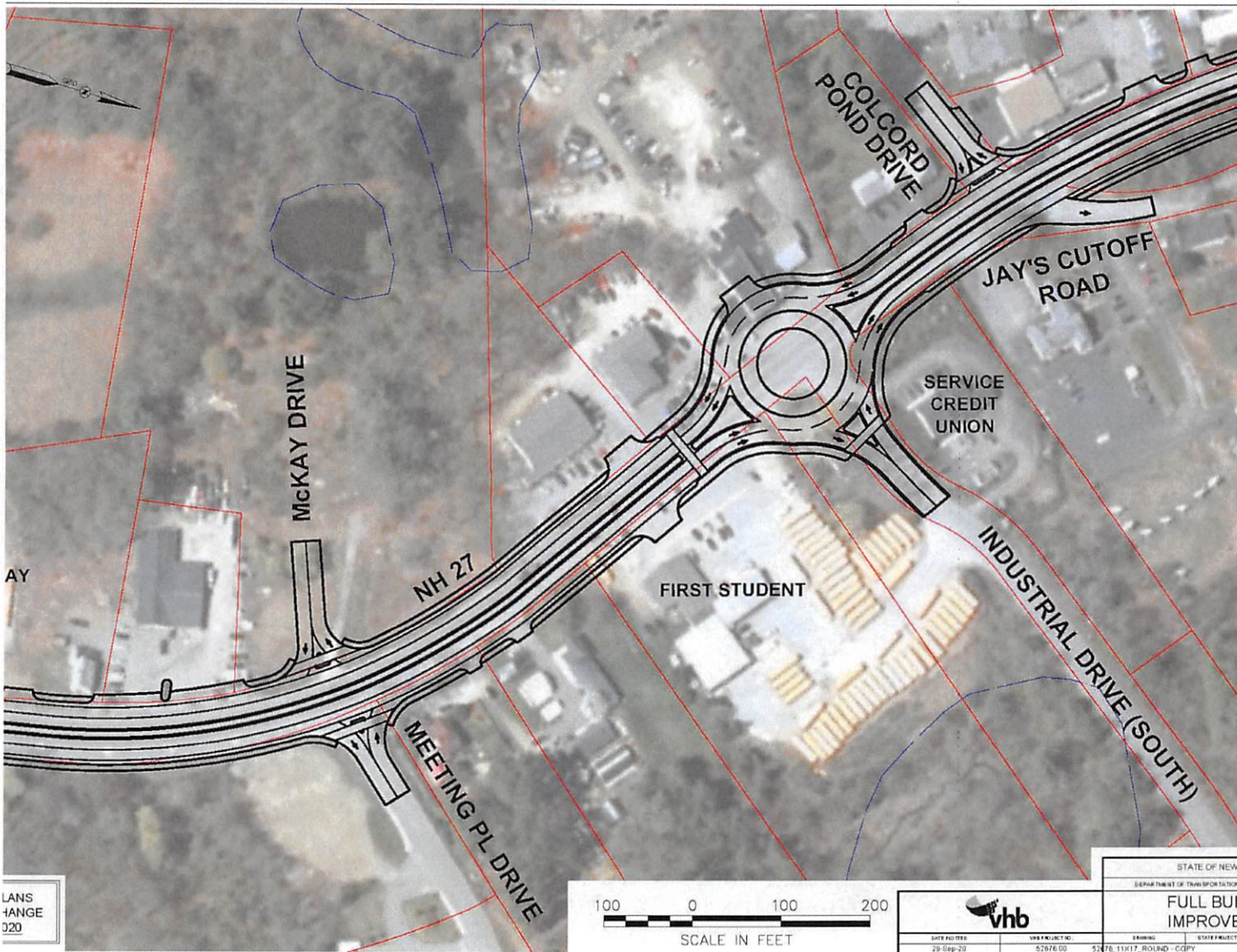
- Potential signalization
 - NH 101 westbound ramps
 - NH 101 eastbound ramps
- Potential roundabouts
 - Industrial Dr (north)
 - Industrial Dr (south)
 - Brentwood Rd
- Potential medians for access control
 - Between NH 101 and Gateway at Exeter
 - Between Gateway at Exeter and Continental Dr (break at Ray Farmstead Rd)
 - Between Continental Dr and Industrial Dr (south)
 - Between Industrial Dr (south) and Brentwood Rd



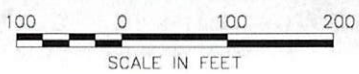


PLANS
 CHANGE
 020



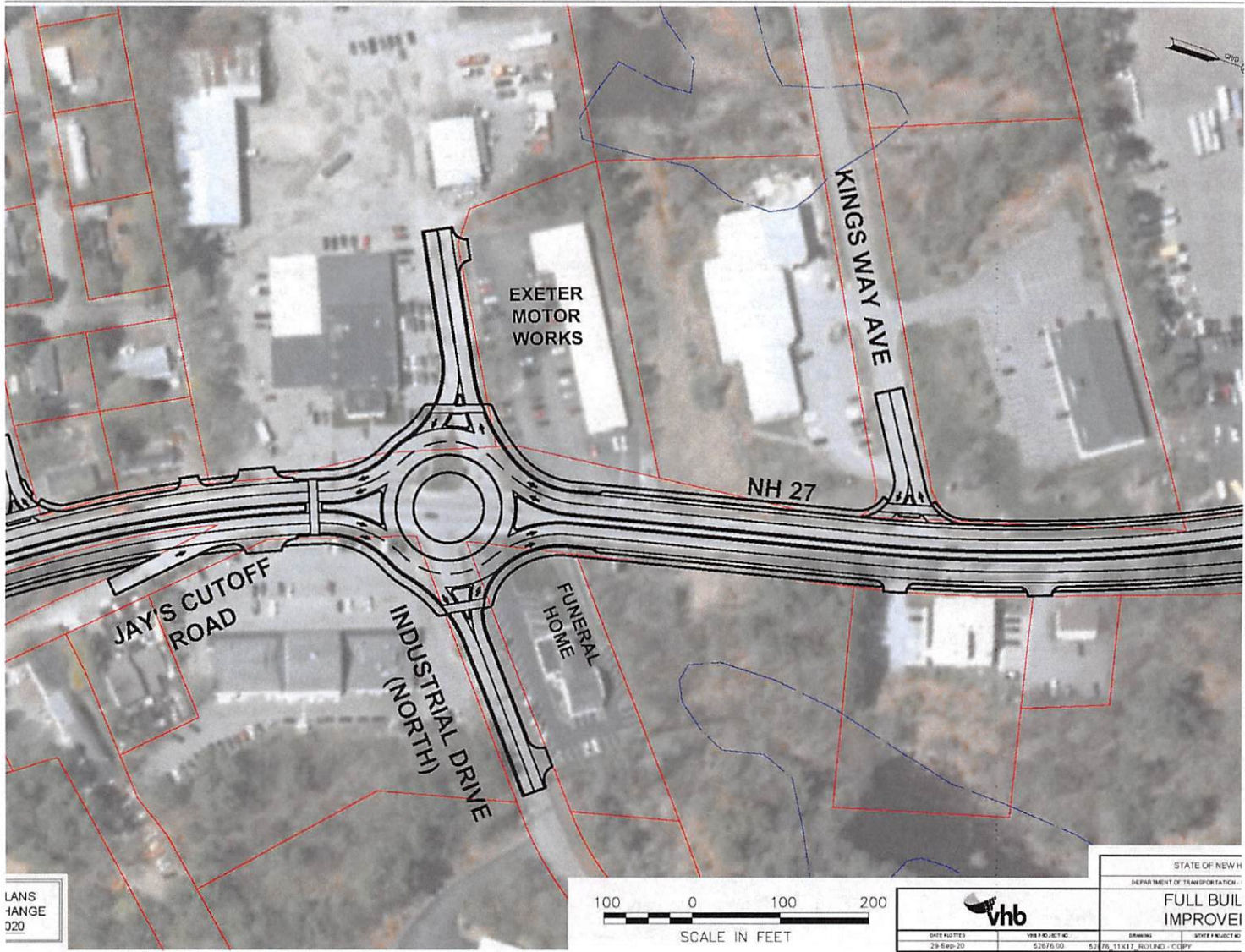


PLANS
CHANGE
020



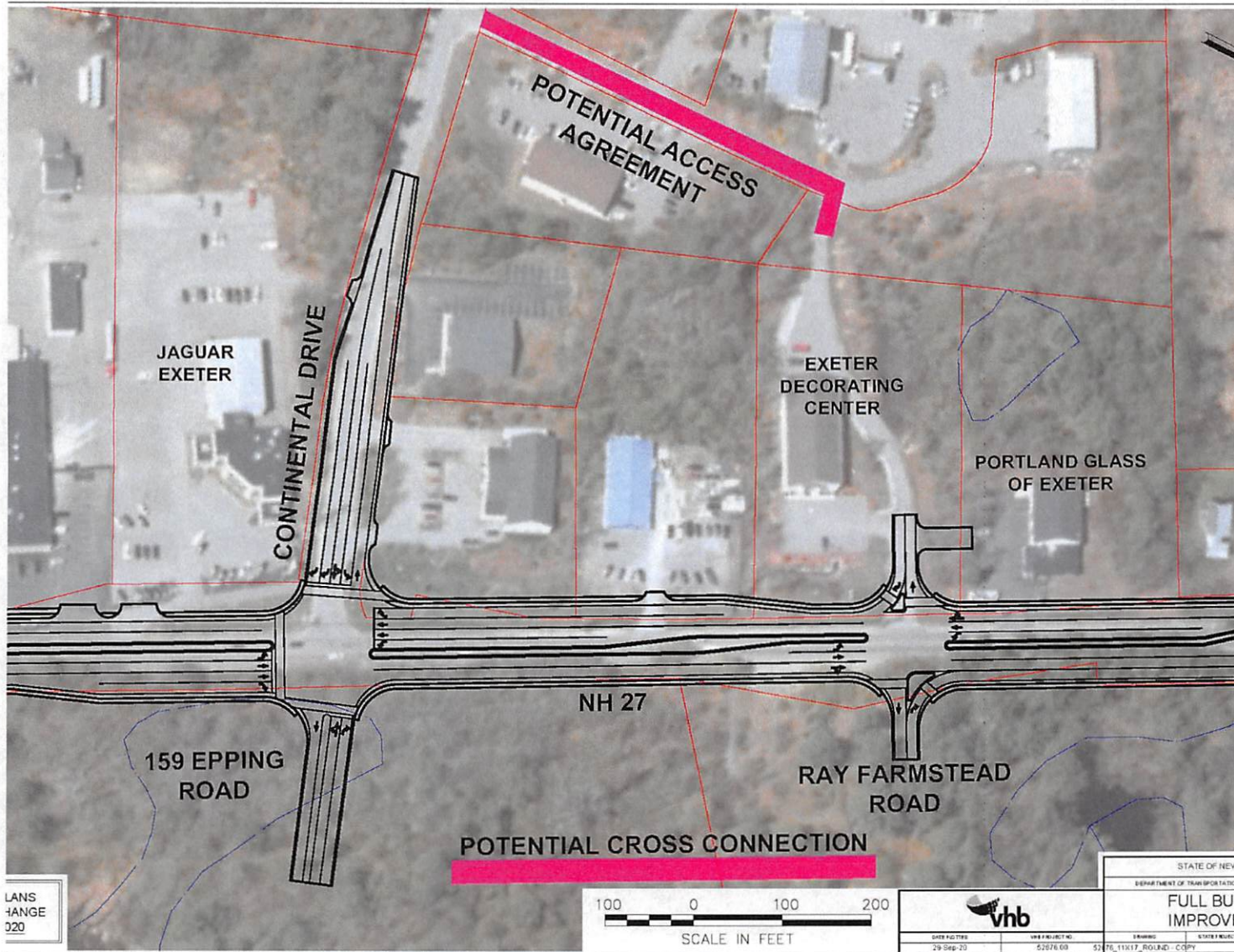
STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION			
FULL BUILD IMPROVEMENT			
vhb			
DATE PLOTTED	USER PROJECT NO.	DRAWING	STORE NUMBER
29-Sep-20	52976.00	52976.11X17 ROUND - COPY	





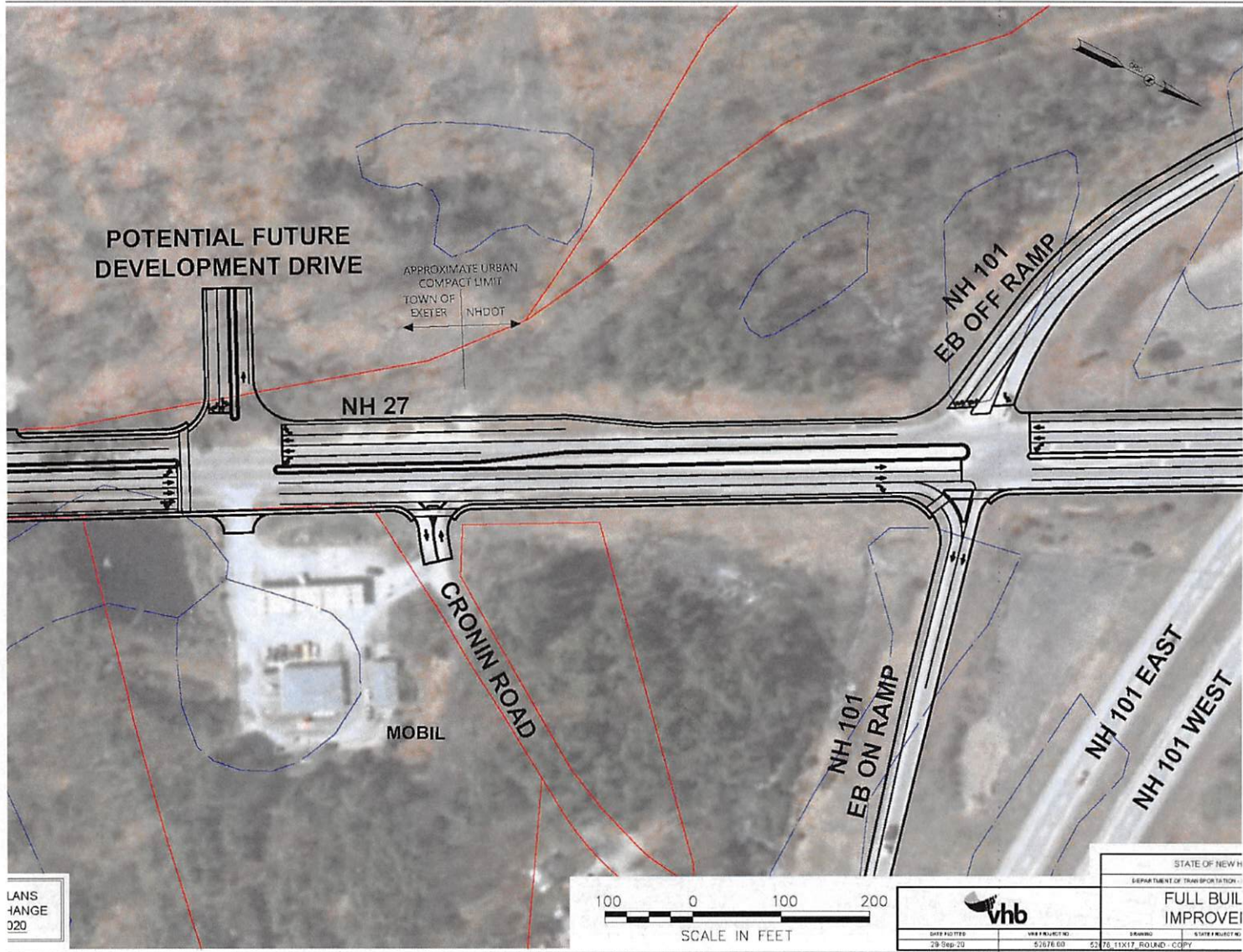
PLANS CHANGE 020



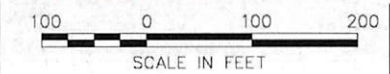


PLANS
CHANGE
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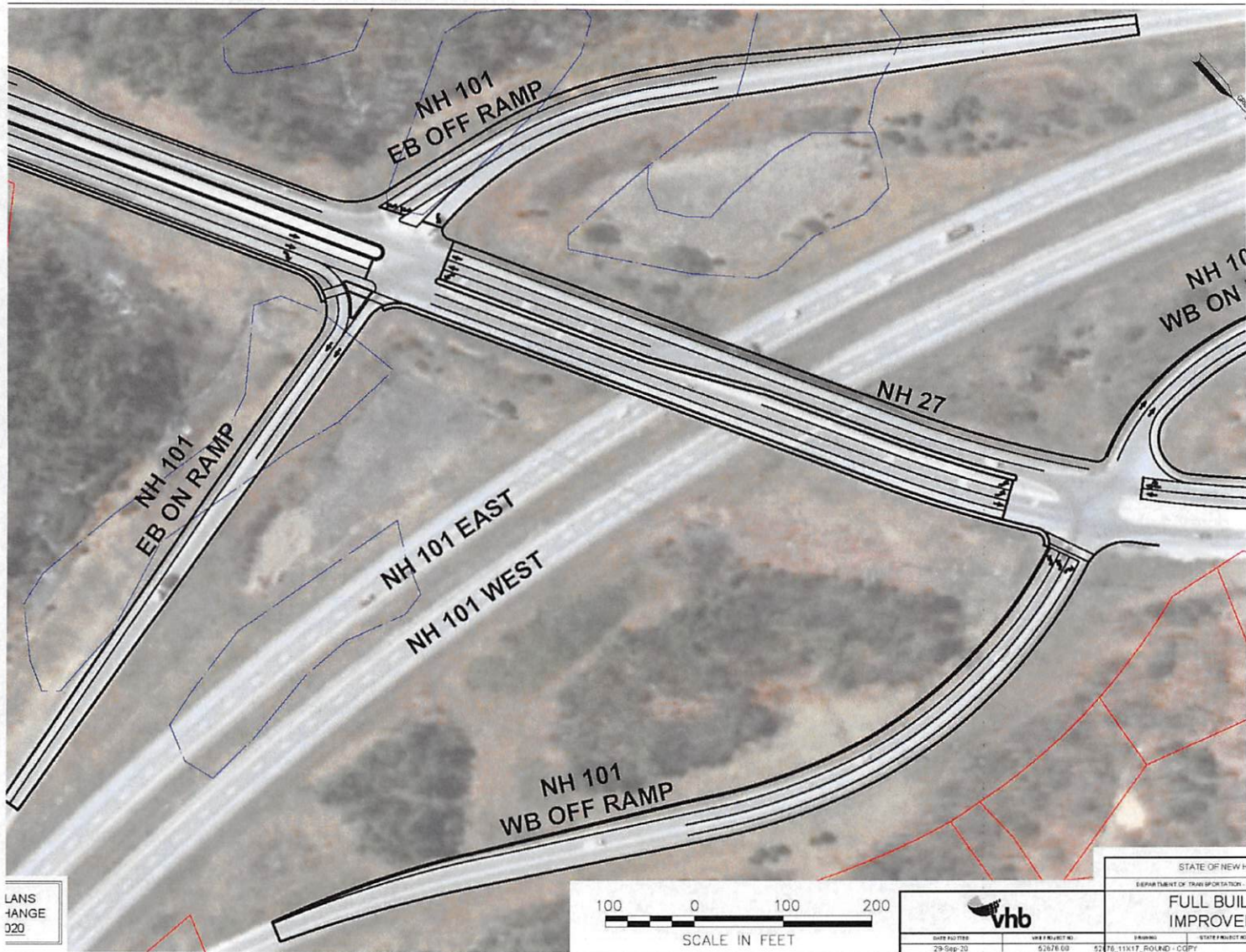


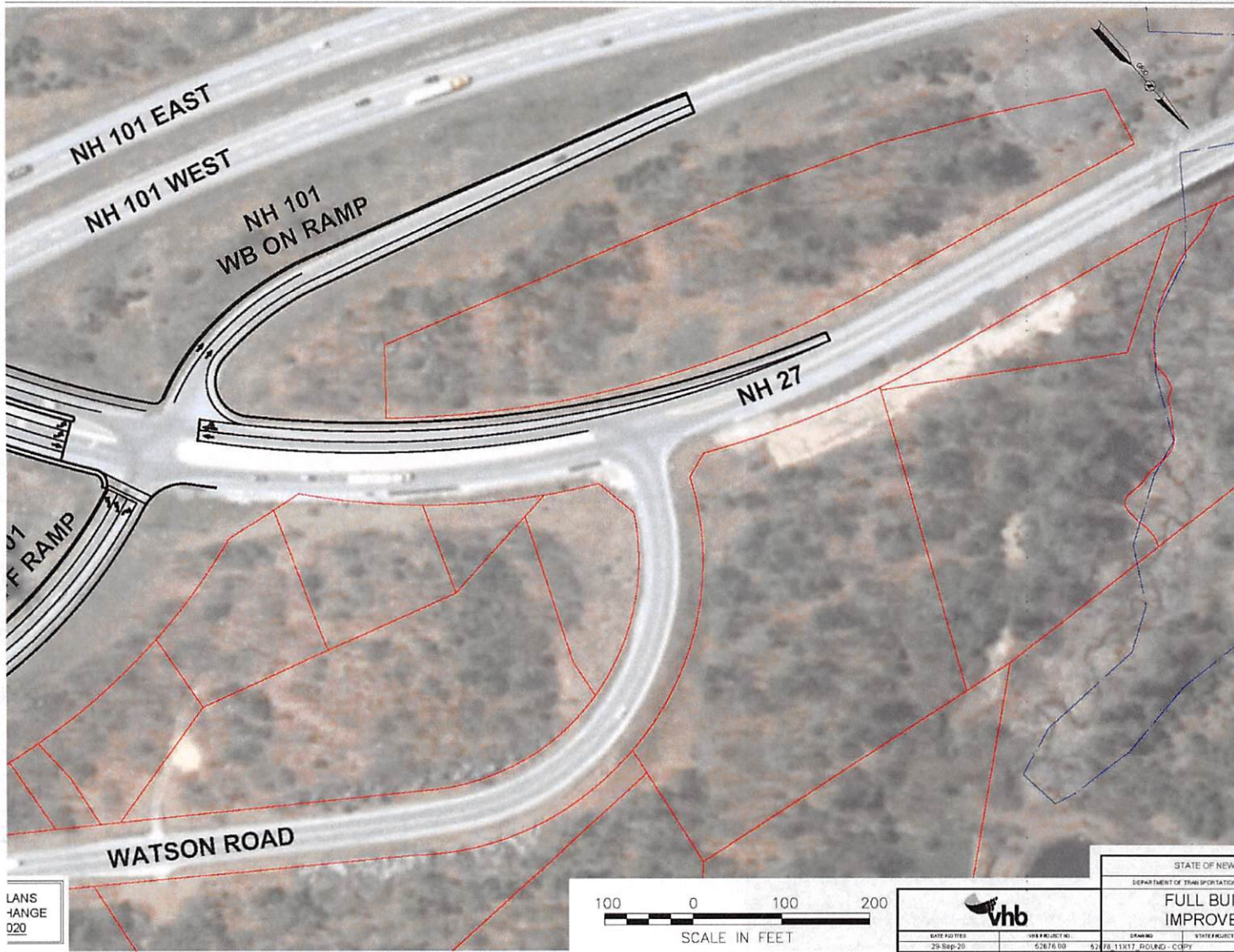
PLANS CHANGE 020



		STATE OF NEW HAMPSHIRE	
		DEPARTMENT OF TRANSPORTATION	
DATE PLOTTED 29-Sep-20		DRAWING 6/18/17 ROUNDCOPY	
VHA PROJECT NO. 52076-00		SHEET PROJECT NO. 52 70.11X17 ROUNDCOPY	
<p>FULL BUILD IMPROVE</p>			





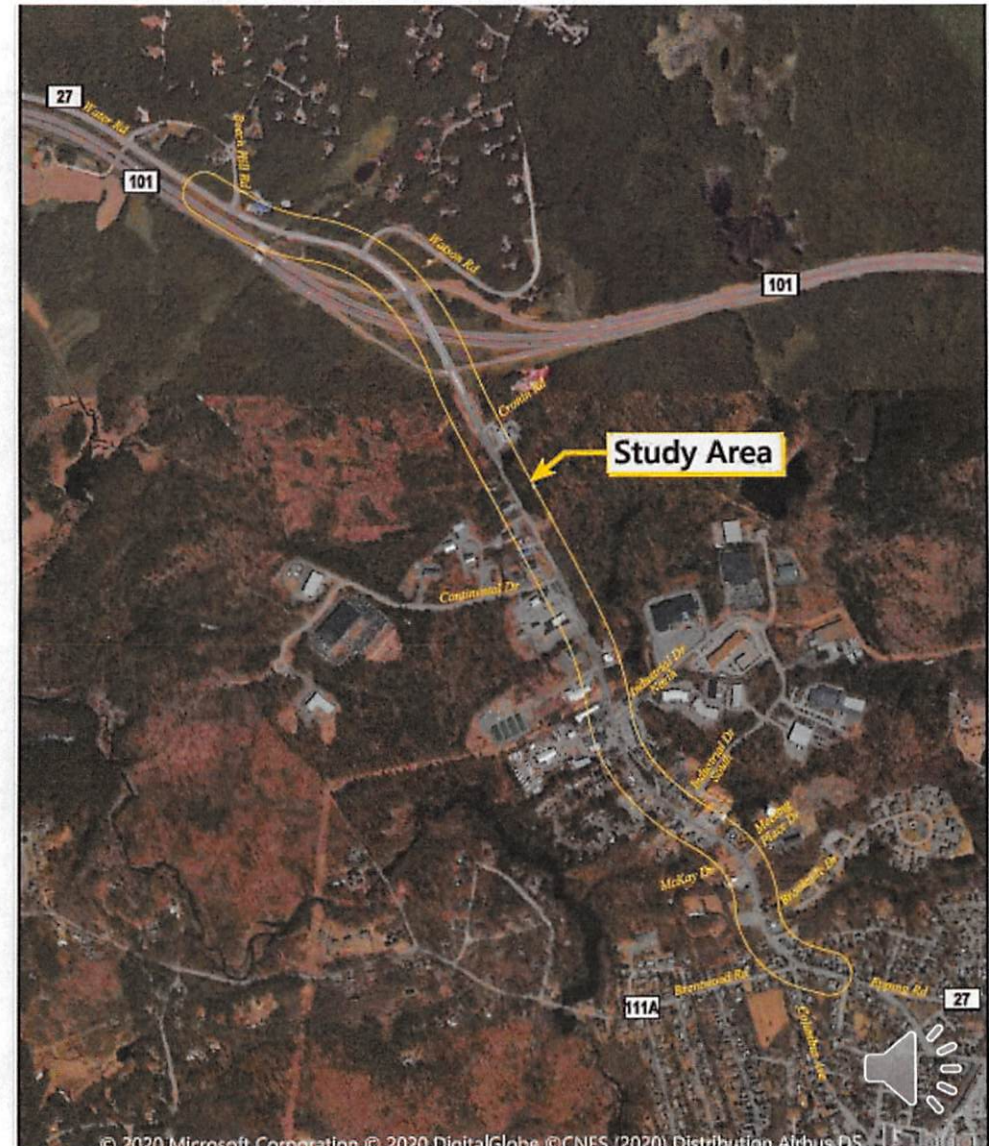


PLANS
CHANGE
020

What: Epping Road Corridor

Multimodal Improvements (Bike/Ped)

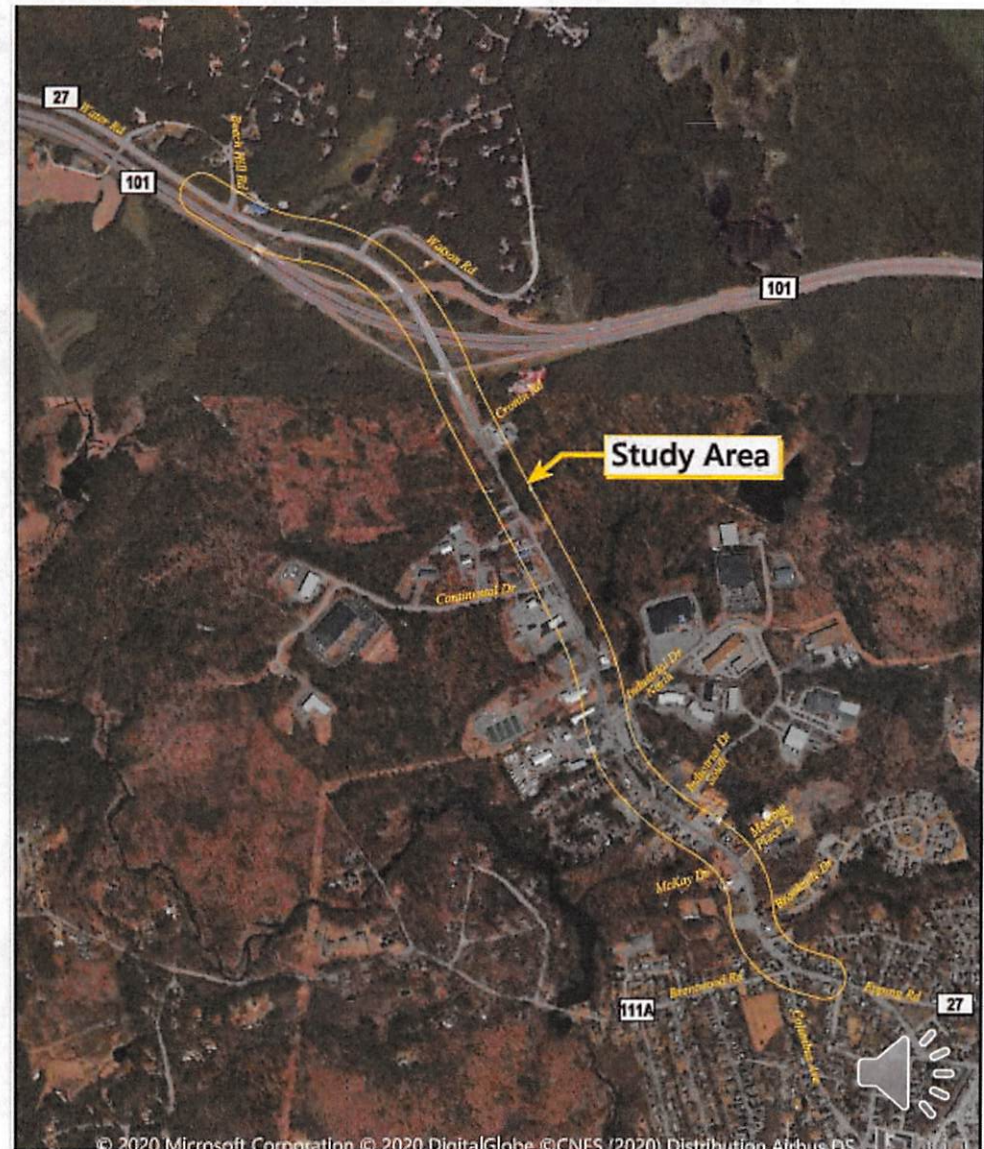
- Along east side of corridor:
 - Extend sidewalk from NH 101 interchange to Ray Farmstead Rd
 - Maintain sidewalk between Meeting Place Dr and Brentwood Rd
- Along west side of corridor:
 - Construct sidewalk from Gateway at Exeter to Brentwood Rd
- Provide consistent wider shoulders for bike usage



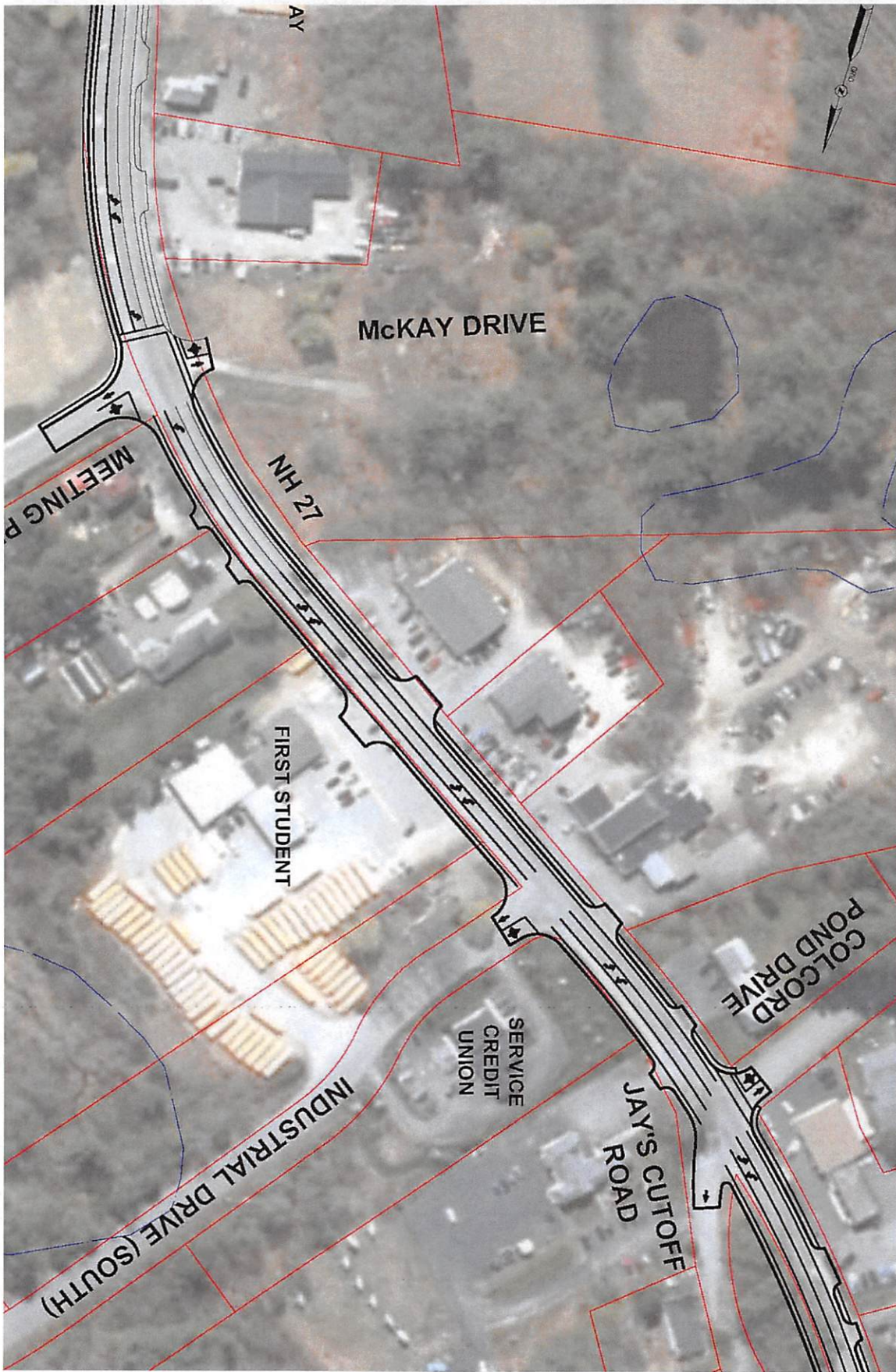
What: Epping Road Corridor Mid-Term Conditions

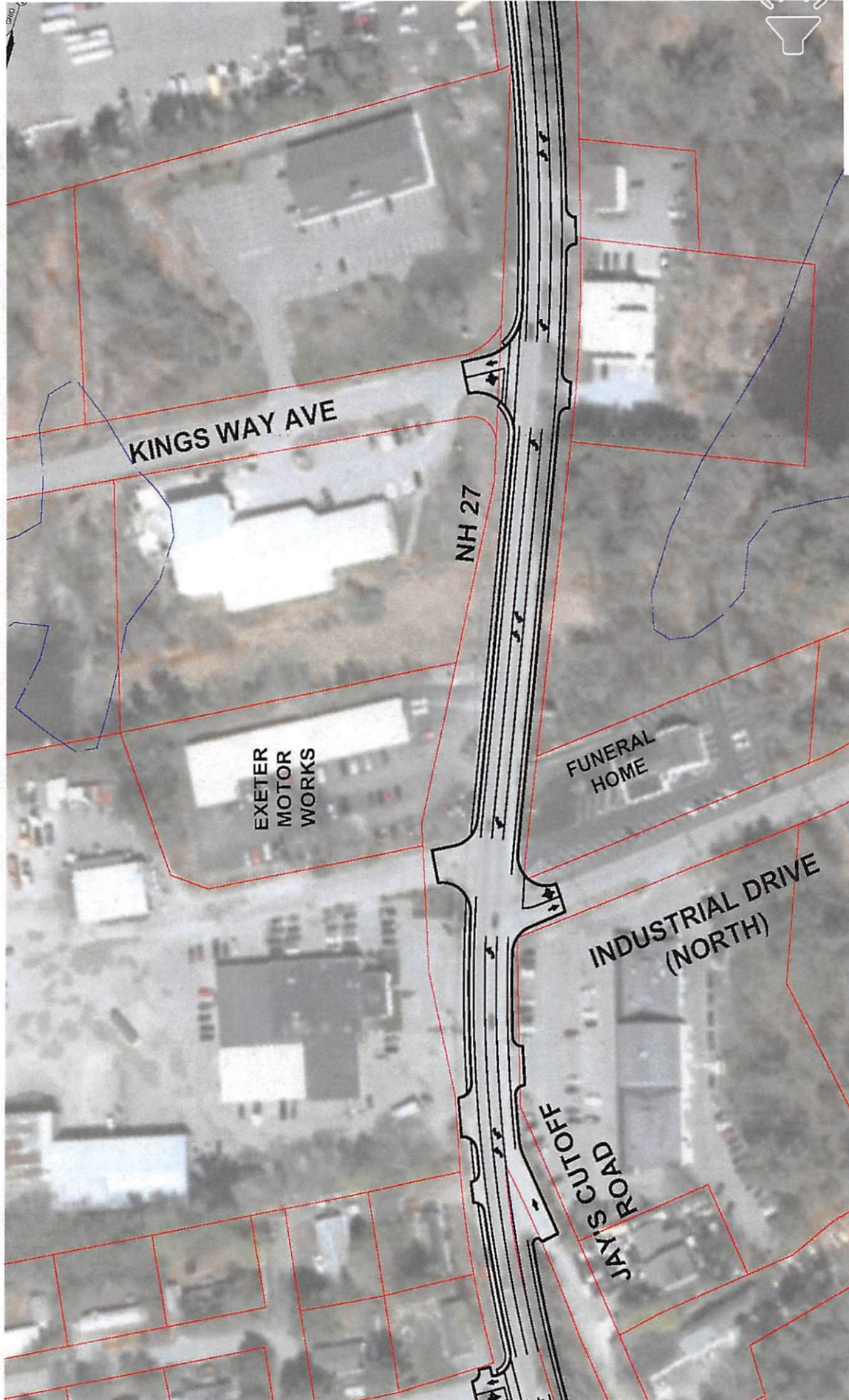
Interim Improvements

- This alternative omits development of vacant parcels in traffic projections
 - Includes Ray Farm Exeter full build out, Gateway at Exeter, Unitol Corporation, and Primrose Daycare School
- Construct two-way left-turn lane (center turn lane)
 - Between Cronin Rd and Continental Dr
 - Between Continental Dr and Brookside Dr
 - Provide wide shoulders for bike usage, and sidewalks
- Implement Access Management Strategies
 - “lessen congestion upon arterial streets and provide for the safe and orderly flow of traffic within a developing commercial area” (Zoning Ordinance Article 6.8).
 - Limited access points for properties less than 1,200 feet (Town’s Site and Subdivision Regulations Section 10.3).









JAGUAR
EXETER

CONTINENTAL DRIVE

ACCESS
EMENT

EXETER
DECORATING
CENTER

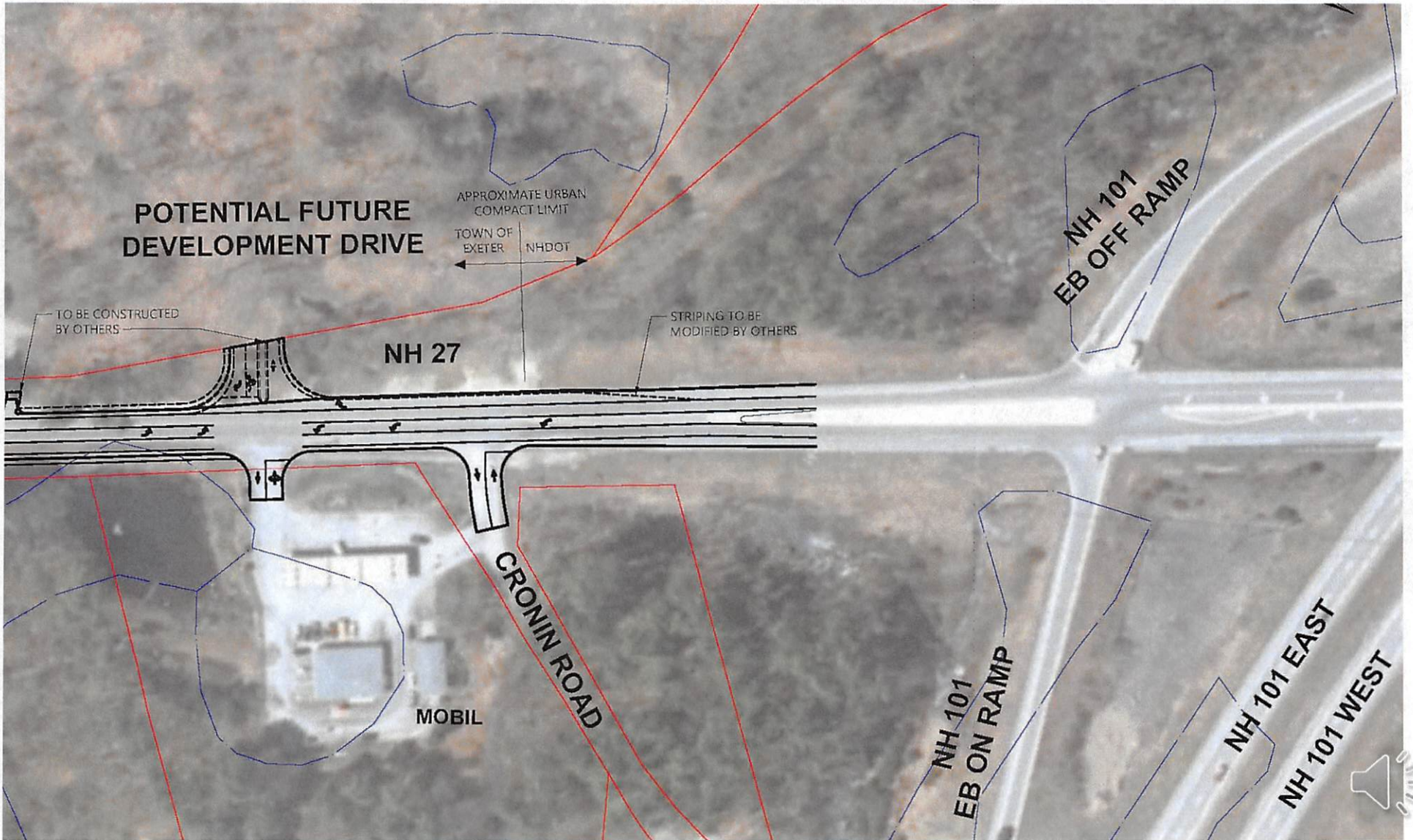
PORTLAND GLASS
OF EXETER

TO BE CONSTRUCTED
BY OTHERS

NH 27

RAY FARMSTEAD
ROAD





POTENTIAL FUTURE DEVELOPMENT DRIVE

APPROXIMATE URBAN COMPACT LIMIT

TOWN OF EXETER NHDOT

TO BE CONSTRUCTED BY OTHERS

NH 27

STRIPING TO BE MODIFIED BY OTHERS

CRONIN ROAD

MOBIL

NH 101 EB ON RAMP

NH 101 EB OFF RAMP

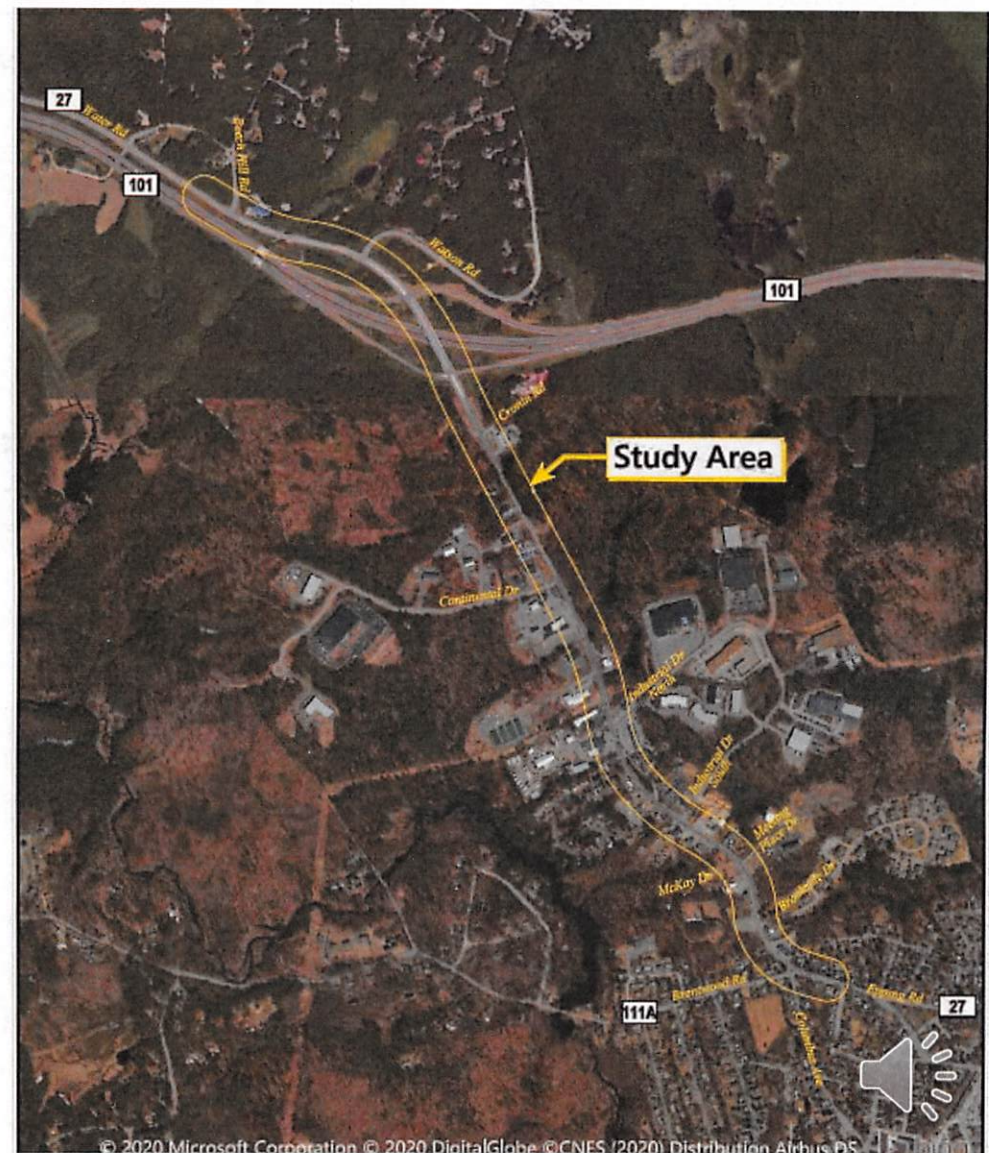
NH 101 EAST

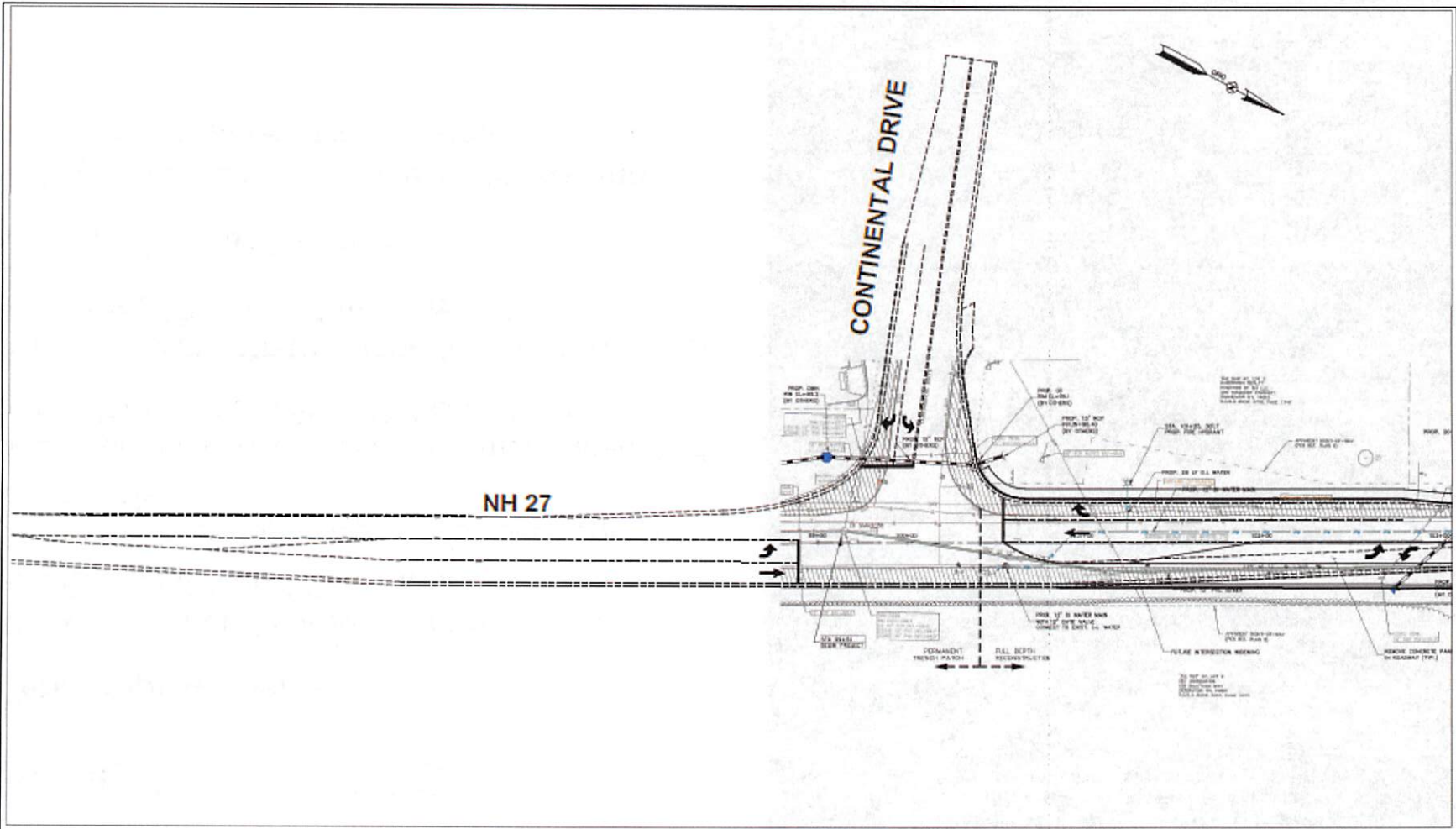
NH 101 WEST

What: Epping Road Corridor Near-Term Conditions

Near Term Improvements

- To improve safety and some operational concerns between Cronin Rd. and Continental Dr.
 - Omits planned developments and full development of vacant parcels
 - Measures do not negate the improvements identified in the Near-Term and Full Build Out conditions
- Construct two-way left-turn lane (center turn lane) between Cronin Rd. and Continental Dr.
- Improve sight lines at Beech Hill Rd.
- Conduct speed studies near Beech Hill Rd. and Watson Rd. and evaluate traffic calming measures



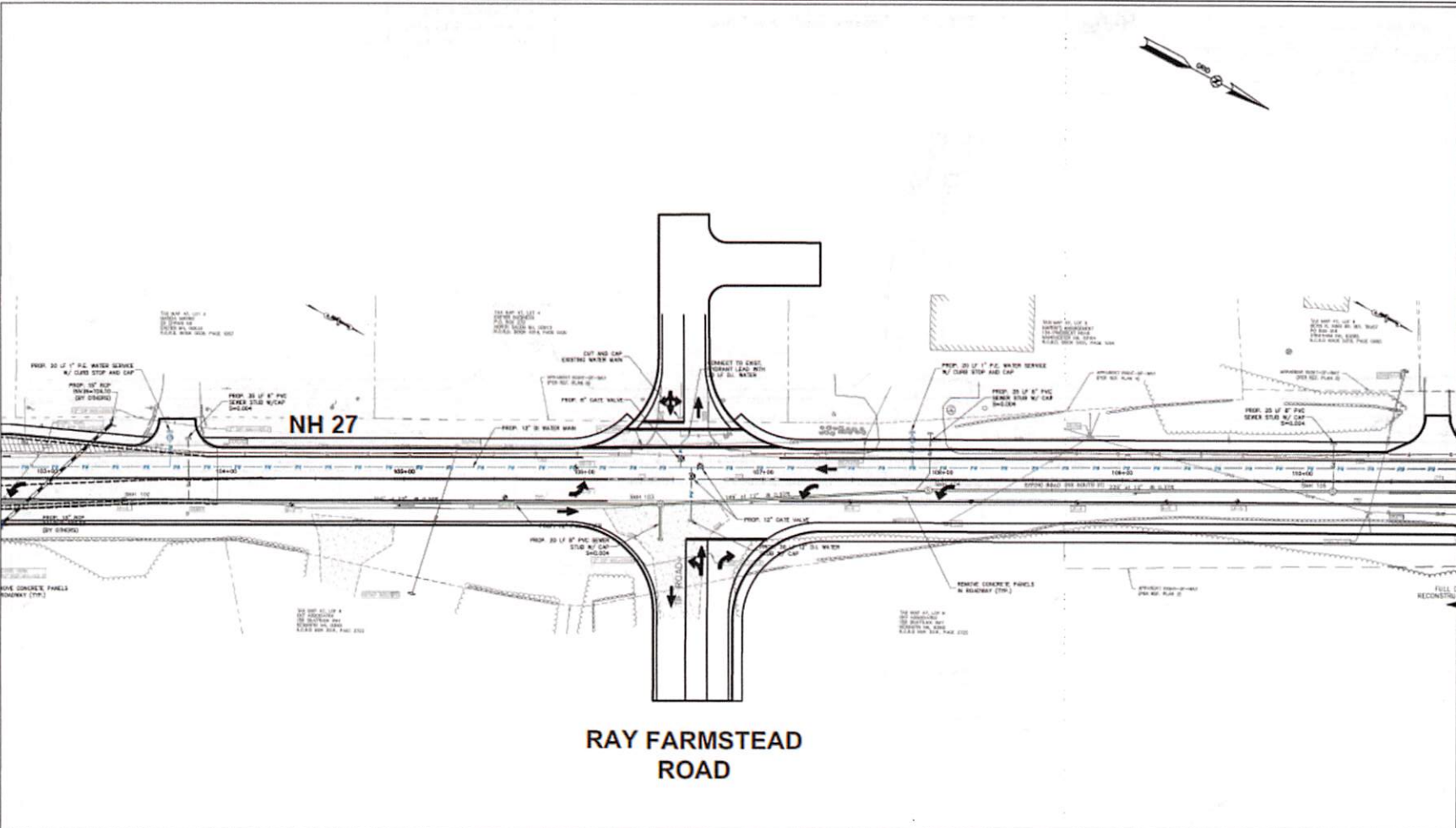


PROGRESS PLANS
 SUBJECT TO CHANGE
 DATE 9/28/2020



STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN			
NEAR-TERM IMPROVEMENTS			
DATE PLOTTED: 09/28/20	DATE PRINTED: 09/28/20	SHEET NO. 1	TOTAL SHEETS 3





NH 27

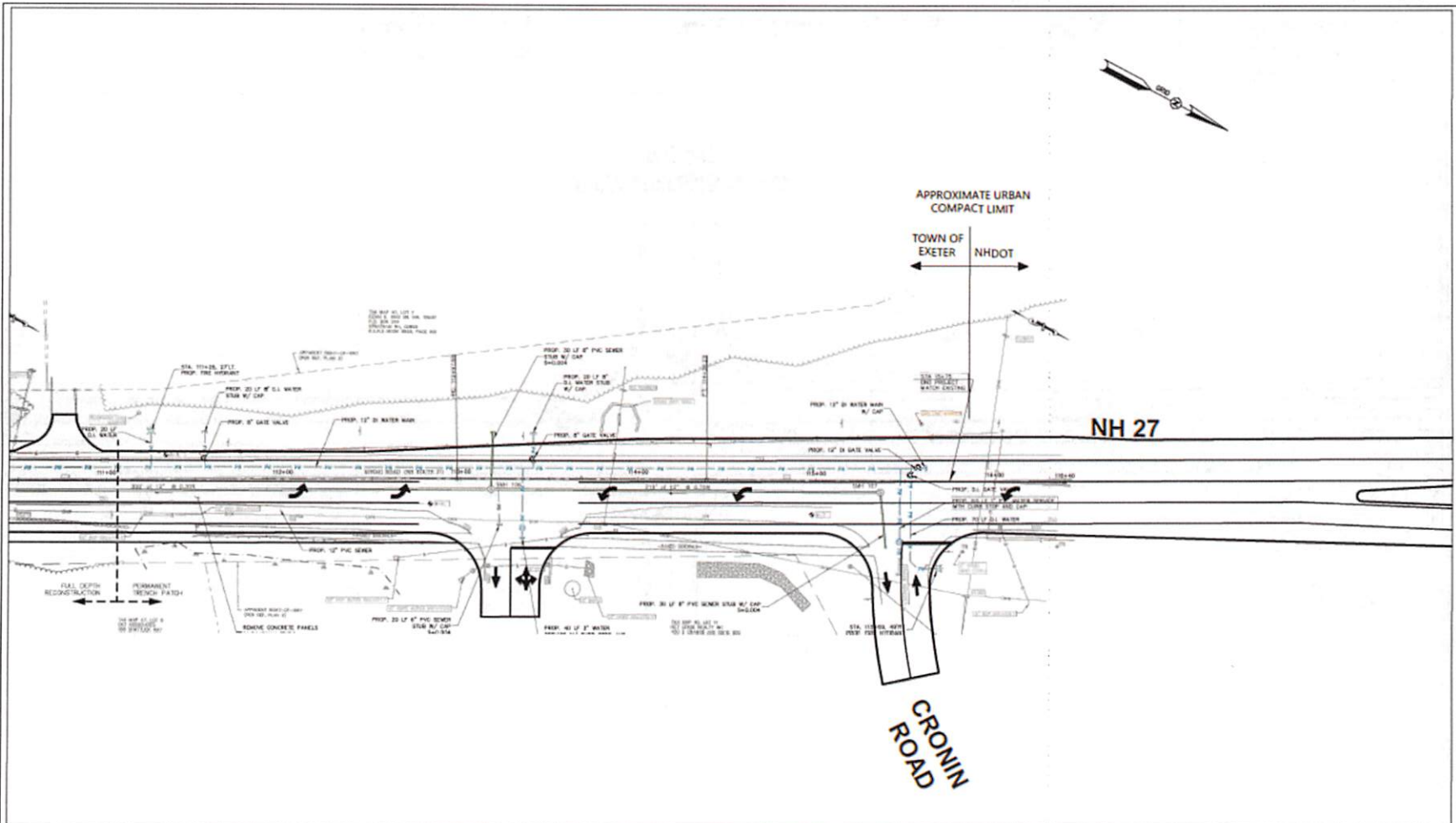
RAY FARMSTEAD ROAD

PROGRESS PLANS
SUBJECT TO CHANGE
DATE 9/28/2020



STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION - BUREAU OF HIGHWAY DESIGN			
NEAR-TERM IMPROVEMENTS			
DATE PLOTTED:	DATE PROJECTING:	DRAWN:	TOTAL SHEETS:
08-26-2020	9/20/20		3





APPROXIMATE URBAN
COMPACT LIMIT

TOWN OF
EXETER NHDOT

NH 27

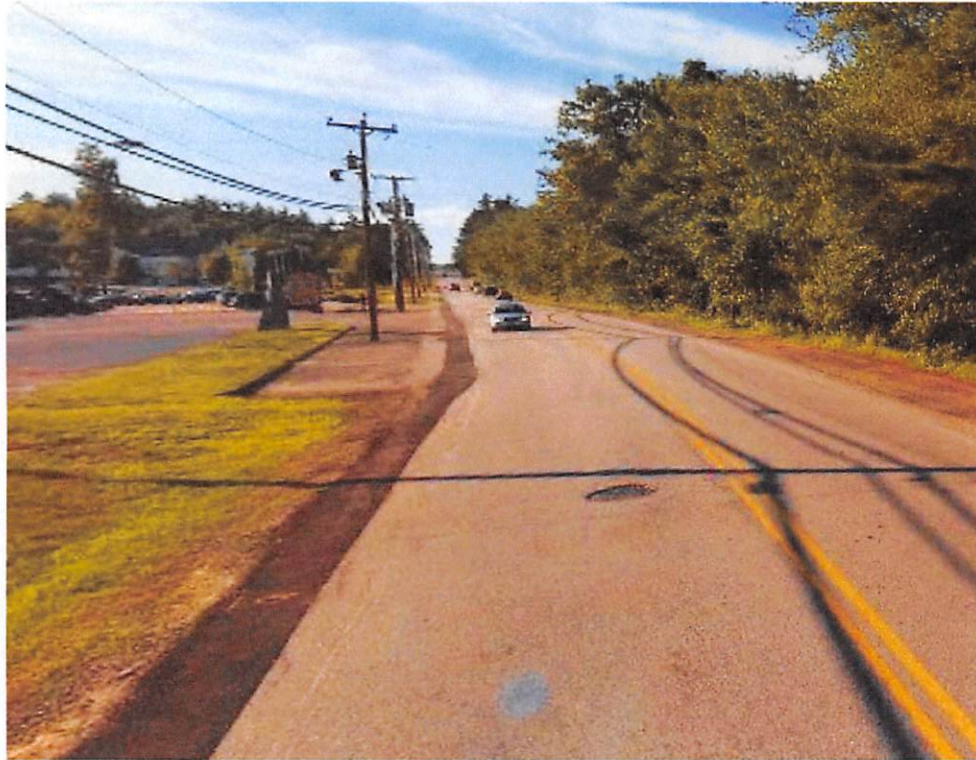
CRONIN
ROAD

PROGRESS PLANS
SUBJECT TO CHANGE
DATE 9/28/2020



STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN			
NEAR-TERM IMPROVEMENTS			
DATE PLOTTED	DATE PROJECT NO.	DRAWING	TOTAL SHEETS
08-28-20	82078.00	3	3





Offices located throughout the east coast

