BASELINE IMPROVEMENTS - (to be undertaken under all scenarios)

		Possible Improvements		
Subject	**Existing Conditions**	**A**	**B**	**C**
Sudbury Common **(Possible Future Condominiums)**	- East driveway one way "in" - West driveway one way "out"	- Reverse driveway circulation - East driveway becomes "out" - West driveway becomes "in"	**Option** - Close west drive - East driveway becomes two way circulation	**Option** - Close east driveway - west driveway becomes two-way (Not a feasible option - driveway is too close to Peakham Road intersection)
Driveway Openings	Wide driveway openings at road	- Redesign driveway entries at Noyes School, Loring Parsonage and First Parish Church to reduce paved width and better direct traffic - Remove small loop drive at Town Hall		
Signage	Limited pedestrian safety signage	- Organize regulatory and directional signs for clarity, scale, and visual character - State law 'reminder' signs at each crosswalk		
Crosswalks	Paint on road pavement	- New thermoplastic marking at all crosswalks - Crosswalks moved to locations protected by stop line - Add crosswalk on Old Sudbury Road at intersection		
Travel Lane Pavement Markings	Paint on road pavement	- New thermoplastic markings - Clear lane and shoulder lines		

NETWORK ALTERNATIVE MATRIX

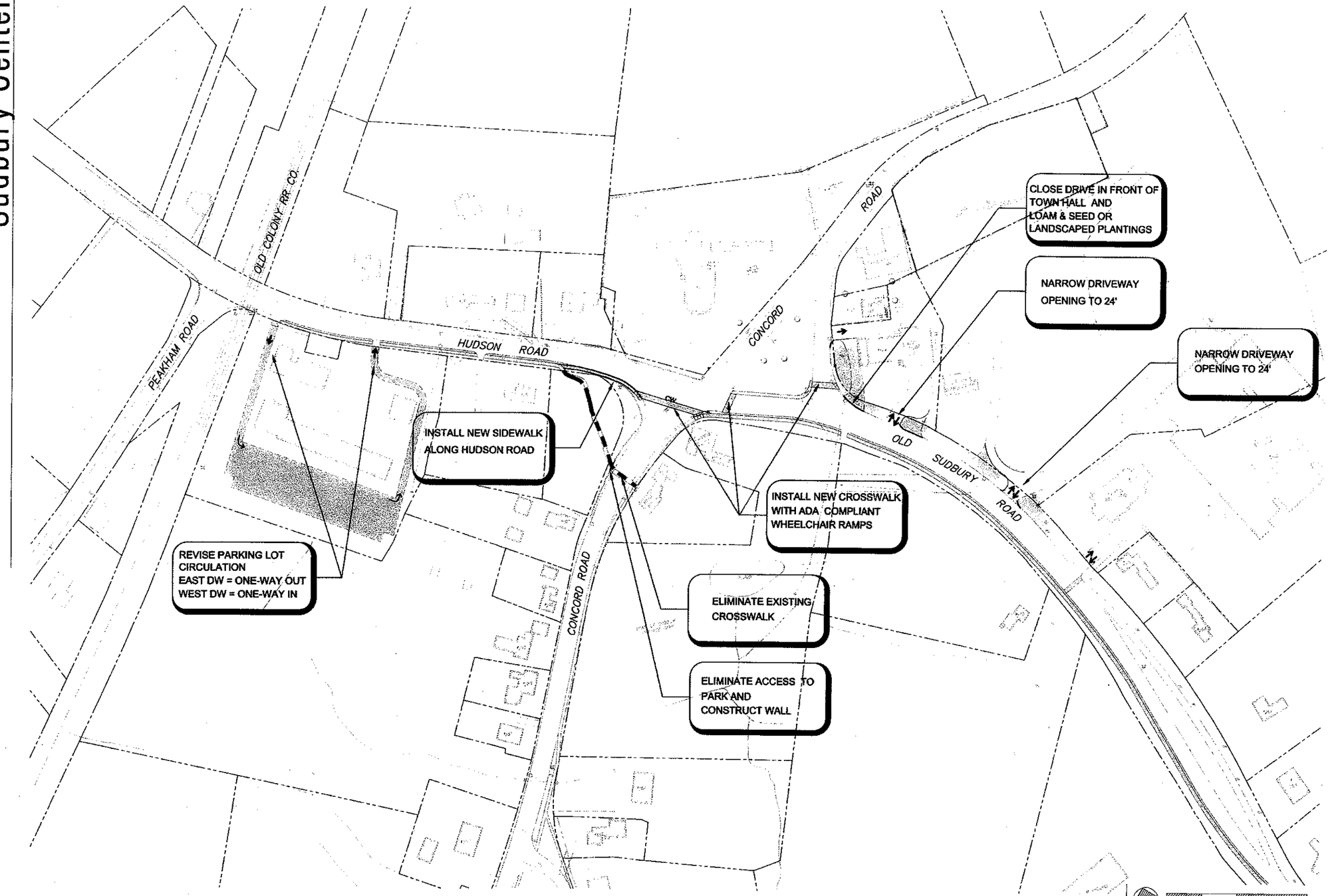
Location	Existing Conditions	Possible Options			
		A	B	C	D
Intersection #1 **Old Sudbury Road /** **Hudson Road at Concord Road**	Four-legged intersection with traffic signal control	- Traffic signal system upgrade - Maintain exisitng geometry	- Signal system upgrade - Minor geometry changes (curbline adjustments)	- Signal system upgrade - Significant geometry changes (curbline relocation) - Remove bypass road in front of Town Hall Addition of SB lane on Concord along the common	- Roundabout (Not feasible - too many impacts on surrounding area)
Intersection #2 **Old Lancaster Road /** **Concord Road / Union Street**	Offset four-legged intersection Stop control on Old Lancaster Road and Union Street	- Geometry improvements to make a more traditional four-legged intersection - maintain stop existing control (Town is working on geometry improvement)	- New traffic signal - Maintain "Town" geometry changes (Option not feasible without geometry change)	- Reconfigure as two unsignalized intersections - Through movement to be Union to Concord - Concord NWB stop control - Remove stop control from Union	- Four way stop control (Not feasible - traffic flow impacts)
Intersection #3 **Peakham Road / Hudson Road**	"T" intersection with stop control on Peakham Road	- Maintain stop control with two turn lanes on Peakham Road	- New traffic signal (Not feasible - will not meet signal warrants)	- Minor widening on Hudson to accommodate left turns from Hudson to Peakham Road	- Three-way stop sign (all road directions) (Not feasible - will constrain Hudson Road traffic)
Intersection #4 **Maynard Road / Hudson Road**	"T" intersection with stop control on Maynard Road	- Maintain stop control with two turn lanes on Maynard Road	- Stop control with channelized right turn lane from Hudson to Maynard	- New signal with two lanes on Maynard Road	- Three-way stop control (Not feasible - traffic flow impacts)
Intersection #5 **Old Lancaster Road /** **Peakham Road**	Four-way intersection with stop control on all four approaches - Minor geometry changes	- New traffic signal - No geometry changes	- New traffic signal - Minor geometry changes (May not satisfy warrants)		- Eliminate two stop controls - No geometry changes (Not feasible - traffic volumes are too high)

PROPOSED ALTERNATIVES

	Simplified Intersection					Significant Intersection Changes					
Subject	**A**	**B**	**C**	**D**	**E**	**A**	**B**	**C**	**D**	**E**	**F**
Alignment / Circulation	- Improved Concord Road axis alignment - Reconfigure / Remove pedestrian island - Maintain existing number of lanes	- Curb line adjustment at Town Green to better guide southbound Concord Road traffic onto Old Sudbury Road eastbound and Old Sudbury Road westbound traffic onto Concord Road northbound	- Remove small loop drive at Town Hall	- Design for minimum lane width and Single Unit (SU) (30ft long truck)		- Addition of three turn lanes on Old Sudbury Road / Hudson Road axis only	- Addition of turn lanes at intersection (three lanes at all road quadrants instead of two lanes)	- Closure of "Town Hall bypass road" - Modify existing Town Green to allow left turn from Concord Road southbound to Old Sudbury Road eastbound - Retain access for emergency vehicles	- Old Sudbury Road westbound to Concord Road northbound bypass through Noyes School lot to location north of Revolutionary War Cemetery (minor traffic improvements - too many safety/visual impacts)	- Maintain Town Hall bypass road - Modify southern nose at bypass to be left turn only onto Old Sudbury Road (right turns prohibited) - Modify northern tip to discourage right turns from Concord Road to bypass road	- Design for standard lane width and WB-50 (tractor-trailer combination truck)
Traffic Signal	- Maintain existing signal - Adjust timing and phasing	- Upgrade to modern system with loop detectors	- Add exclusive pedestrian phase to traffic signal cycle	- Add pedestrian demand (push-button) phase to traffic signal cycle		- Upgrade to modern system with loop detectors	- Add exclusive pedestrian phase to traffic signal cycle	- Add pedestrian demand (push-button) phase to traffic signal cycle			
Signage		Install directional signs on Town Common to control turns at road in front of Town Hall (prevent northbound Concord Road vehicles from turning right to loop west on Old Sudbury Road)									
Green Space	- Minor layout line adjustment at Grinnell Park	- Green space impact at Town Common - Reinforce new curb line alignment at Town Green with landscaping	- Minor increase of green space at Town Hall		- Potential for increased green space impact		- Traffic channelization islands provide planting opportunity	- Increase in green space at Town Green	- Loss of useable open space and recreation facilities		- Potential for increased green space impact
Land Impacts	- Layout line alterations to allow curb line adjustment and construction of retaining wall at First Parish Church - Layout line adjustment at Hosmer House (impact on very limited front lot)				- May require land takings	- Minor impact at Town Green - Layout line alterations to allow curb line adjustment and construction of retaining wall at First Parish Church	- Significant layout line adjustment and land taking - Retaining wall at First Parish Church - Relocated rubble wall at Grinnell Park - Possible widening of Concord Road (south) layout lines to accommodate two lanes	- No impact	- No significant land taking - Loss of parking for Town - Significant impact on school operations		- May require land takings

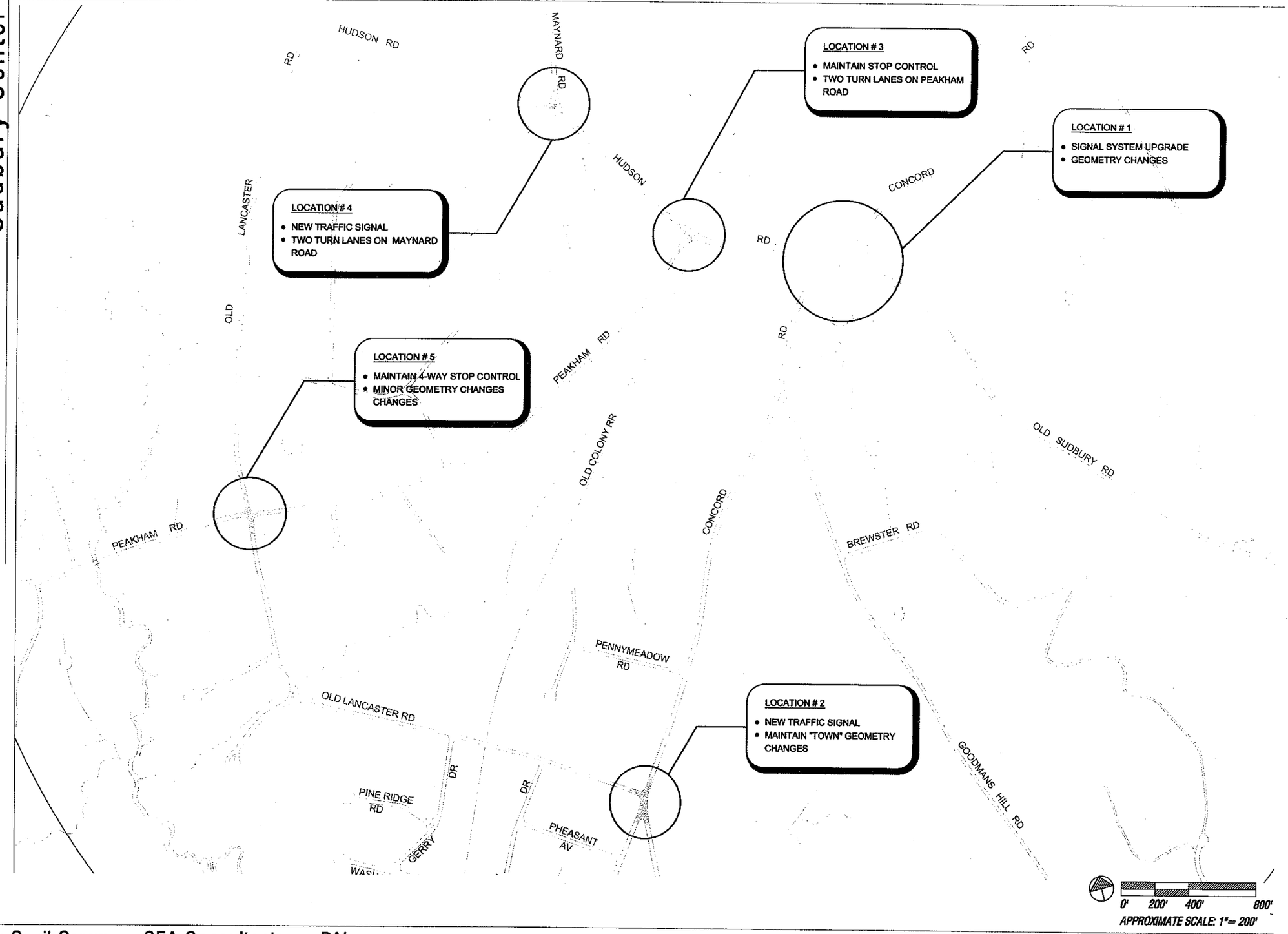
Baseline Improvements

Sudbury Center



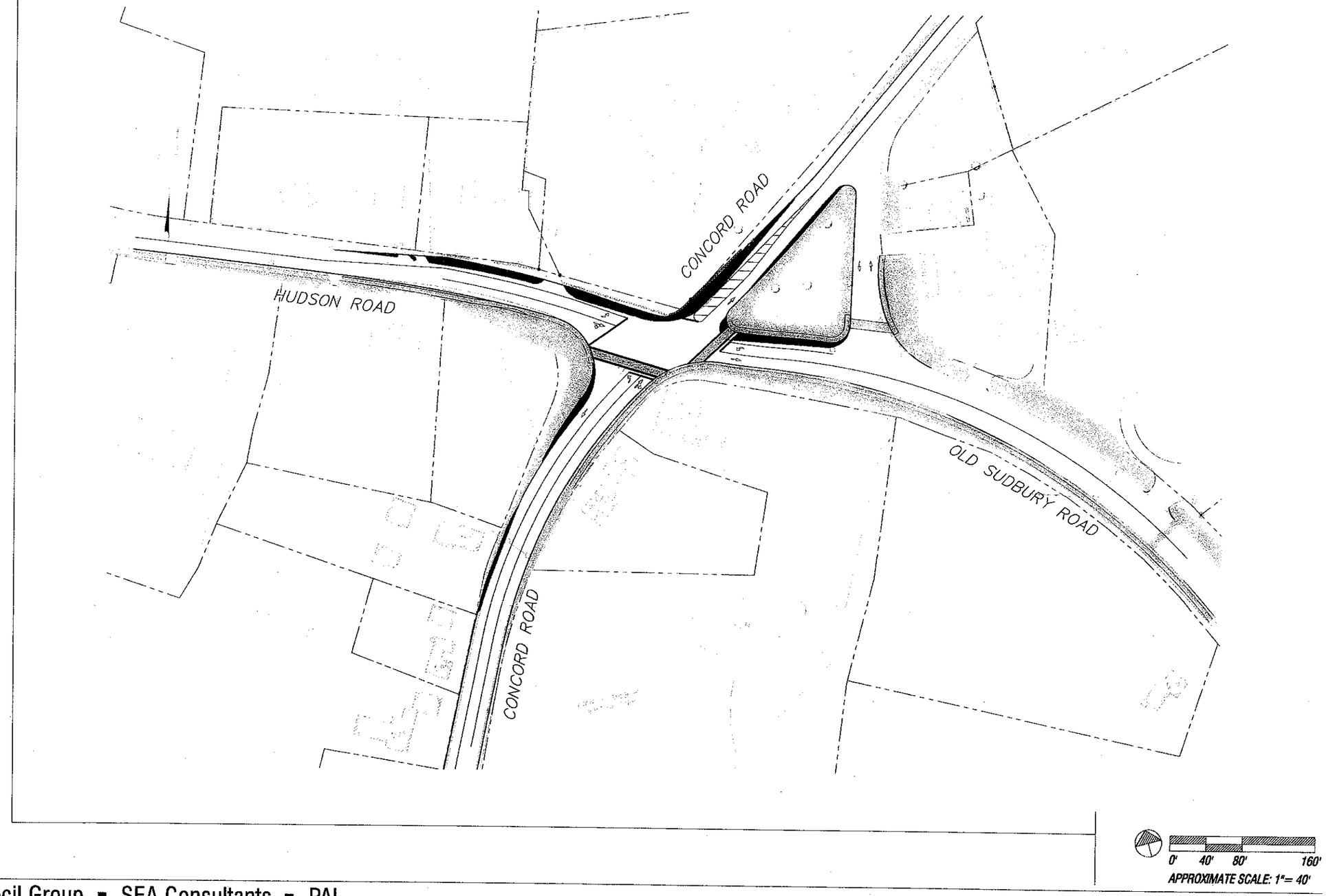
Network Improvements

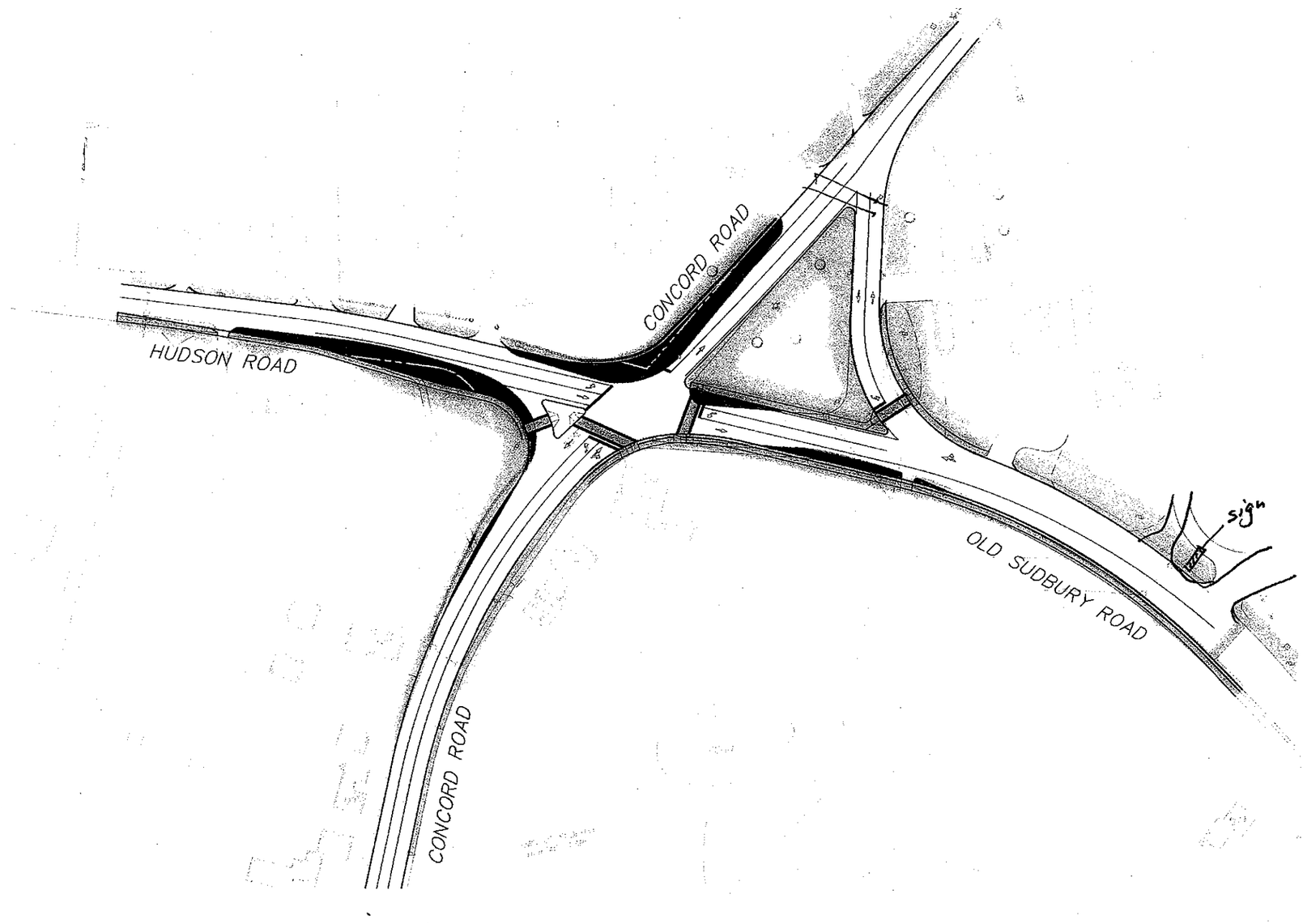
Sudbury Center



Simplified Geometry Changes

Sudbury Center



Significant Geometry Changes

Sudbury Center