ELK GROVE

RURAL ROAD POLICY

ADOPTED NOVEMBER 2007

AMENDED DECEMBER 2019

TABLE OF CONTENTS

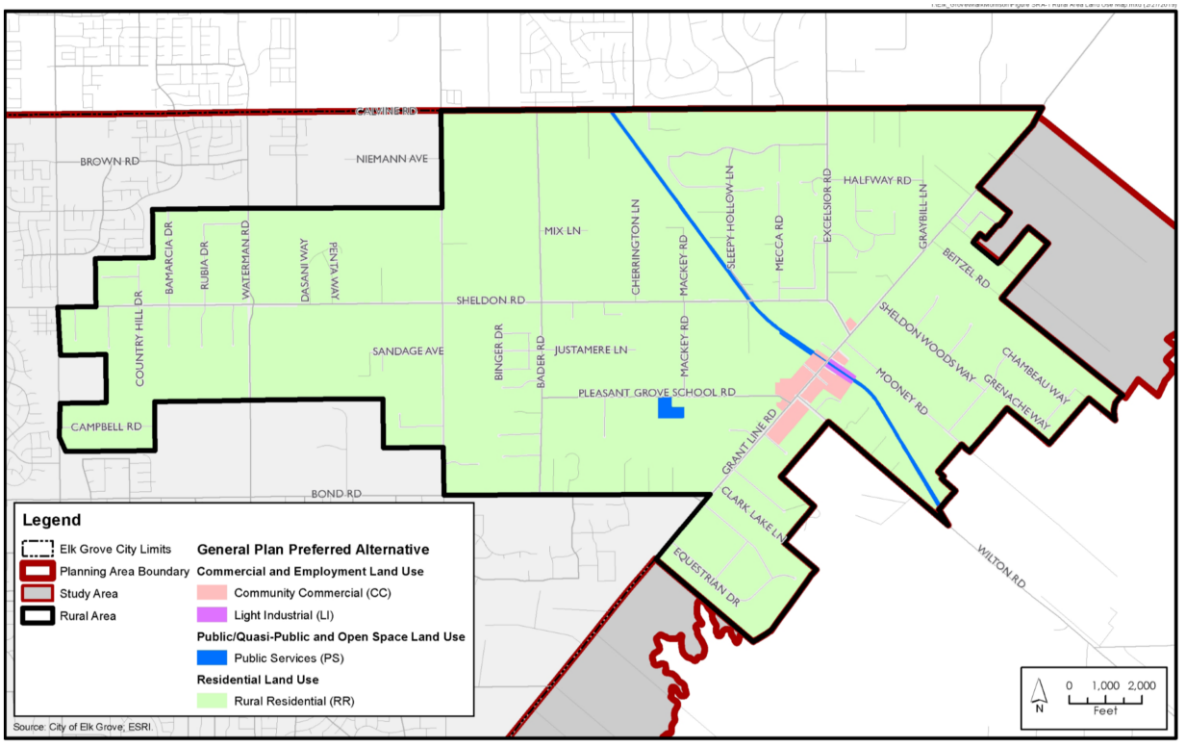
ELK GROVE RURAL ROAD POLICY

I. PURPOSE AND APPLICABILITY

The purpose of the Rural Road Improvement Policy is to preserve and maintain the rural roadways in the City's rural residential area. This policy establishes a value based approach for incremental (rather than ultimate) road improvements that solve specific traffic issues identified through periodic evaluations of traffic conditions. Road improvements within the City's defined rural residential area shall be implemented in response to traffic impacts.

The Rural Road Improvement Policy implements the General Plan goals, policies, and actions. Specifically, this policy implements the provisions of the Land Use and Circulation Elements regarding the preservation and maintenance of features that contribute to the rural residential character, including small local roadways with minimum paving, natural landscape, and preservation of existing mature trees.

The Rural Road Improvement Policy applies to the area defined in the General Plan as the Rural Area Community Plan shown on the map below.



Once adopted by the City Council, the Rural Road Improvement Policy shall apply to all future road improvement planning within the Rural Residential Area. This policy may also apply to previously approved road improvement projects not yet constructed as determined by the City Council on a case-by-case basis.

The Rural Road Improvement Policy works in conjunction with the Rural Road Improvement Standards. The policy identifies when the improvement will take place and the standards determine what the improvements shall look like.

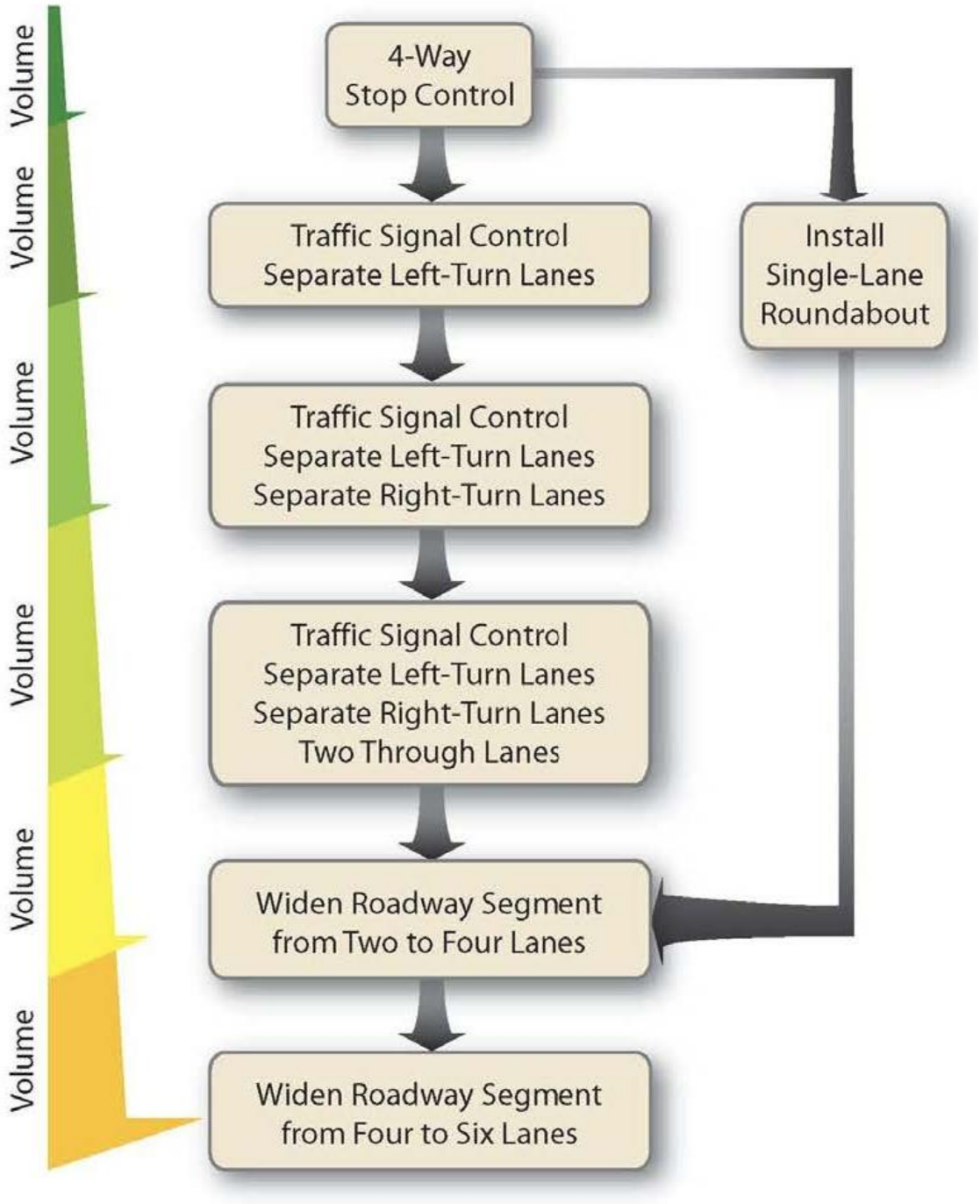
II. ROADWAY PHASING/IMPROVEMENT CONCEPT

Within the City's Rural Residential Area, roadway and intersection improvements shall be implemented in response to traffic impact and not as a result of forecasted travel demand. The phasing of improvements is based on periodic evaluations of traffic conditions through regular traffic counts, safety criteria, and tolerance for delay (level of service). Improvements will only be planned and constructed when the actual need exists. This need will be evaluated by taking traffic counts at regular intervals, when a roadway project of citywide significance is completed, or as needed to address safety (based on accident data). Daily roadway traffic counts will be taken at the following locations with other locations counted as needed:

- Sheldon Road between Waterman Road to Rubia Dirve
- Sheldon Road between Waterman Road and Bradshaw Road
- Sheldon Road between Waterman Road and Bader Road
- Sheldon Road between Bader Road and Mackey Road
- Waterman Road between Sheldon Road and Rubia Dirve
- Waterman Road between Sheldon Road and Bond Road
- Wilton Road east of Grant Line Road
- Excelsior Road between Calvine Road and Sheldon Road
- Grant Line Road between Calvine Road and Sheldon Road
- Grant Line Road between Bond Road and Wilton Road
- Grant Line Road between Bond Road and Elk Grove Florin Road
- Bradshaw Road between Sheldon Road and Norman Lane
- Bradshaw Road between Sheldon Road and Bond Road
- Bradshaw Road between Bond Road and Silvergate Lane
- Bond Road between Bradshaw Road and Salmon Creek Drive
- Bond Road between Bradshaw Road and Bader Road
- Bond Road between Bader Road and Grant Line Road
- Bader Road between Sheldon Road and Pleasant Grove School Road
- Bader Road between Bond Road and Pleasant Grove School Road Bader Road between Sheldon Road and Mix Lane

The City of Elk Grove recognizes that investing in intersection improvements can delay or eliminate the need for widening adjoining roadway segment. Thus, the roadway phasing concept targets incremental improvements to intersections to solve current traffic problems. Roadway and intersection improvements must be implemented as needed to improve demonstrated safety needs regardless of traffic levels. Periodic monitoring of traffic volumes and accidents will be needed to effectively implement this policy.

Volume Thresholds – How it Works



III. ROADWAY PHASING/IMPROVEMENT CRITERIA

To implement the Rural Road Improvement Policy, the City developed phasing/improvement criteria based on traffic volumes thresholds, safety, and tolerance for delay. This policy establishes incremental road segment and intersection improvements that solve specific traffic issues identified through periodic evaluations of traffic conditions. The roadway phasing criteria were developed using the following methodology

STEP 1: Conducted intersection and roadway traffic counts at locations throughout the study area.

STEP 2: Compared the roadway and intersection counts throughout the project area.

STEP 3: Analyzed intersection traffic operations at each intersection using the updated traffic counts.

STEP 4: Identified traffic volumes at each intersection that would result in congested (i.e., stop-and-go) operations based on the current intersection turn lanes and traffic control, which included stop sign control and one lane on each approach.

STEP 5: Converted the intersection volumes from Step 4 to equivalent roadway volumes using the comparison from Step 2. This was done for each leg of each intersection and averaged.

STEP 6: The roadway volume volumes at each intersection from Step 5 were averaged to develop the roadway volume threshold for the improvement step.

STEP 7: Steps 4, 5 and 6 were repeated for each remaining improvement step until widening the adjoining roadway segment was needed.

Improvements will only be planned and constructed when it is determined through the criteria below that an improvement is required.

VOLUME THRESHOLDS/CRITERIA

The City has established daily traffic volume thresholds for intersection operations to identify when an intersection would need to be evaluated for particular improvements. Traffic counts will be done every 3 years to determine if any intersections in the project area meet the volume thresholds. If one or more intersections meet the volume thresholds, the process will commence to identify needed improvements. Improvements will only be planned and constructed when it is determined through the criteria below that the need exists.

Intersection Volume Thresholds Table

Improvement Step	Configuration	Daily Volume Threshold
1	All-way stop control	≤ 8,000
2	Traffic signal control Separate left turn lanes or Single-Lane roundabout	8,000-15,000
3	Traffic signal control Separate left turn lanes Separate right turn lanes or Single-Lane roundabout	15,001-18,000
4	Traffic signal control Separate left turn lanes Separate right turn lanes Two through lanes	18,001-24,000
5	Widen roadway segment from 2 lanes to 4 lanes	>24,001 – 36,000
7	Widen roadway segment from 4 lanes to 6 lanes	>36,001

(1) Center turn lanes may be considered for implementation at any time to improve safety and convenience independent of intersection improvements. The need for center turn lanes will be determined on a case-by-case basis. This improvement does not increase roadway capacity, but does improve the flow.

SAFETY CRITERIA

While volume thresholds are a key indicator or trigger for determining needed improvements, roadway and intersection improvements must be implemented as needed to improve demonstrated safety needs regardless of traffic levels based on Federal and State guidelines specifically for rural areas.

TOLERANCE FOR DELAY

Related to the volume threshold is tolerance for delay. This is a human measure of acceptance for certain traffic conditions.

There may be indirect impacts to residents in the project area that need to be addressed. For example, if a resident is unable to access their driveway for several minutes because of queuing at an intersection, that may be an unacceptable delay. Similarly, if a resident cannot safely turn out of a driveway with a horse trailer for several minutes, that may be an unacceptable delay. Tolerance for delay by residents of the Rural Residential Area will be considered during the process of determining specific improvements and may need to be evaluated separately based on resident input.

IV. IMPLEMENTATION PROCESS

The implementation process for the Rural Road Improvement Policy is as follows:

1) The City shall monitor/measure daily traffic (two-way total) volumes every three years or as needed to measure the effect of a significant roadway project (e.g. interchange upgrade) that may alter travel patterns in the study area. Traffic counts will be done using the same methodology as the baseline counts for this policy (see details in appendix).

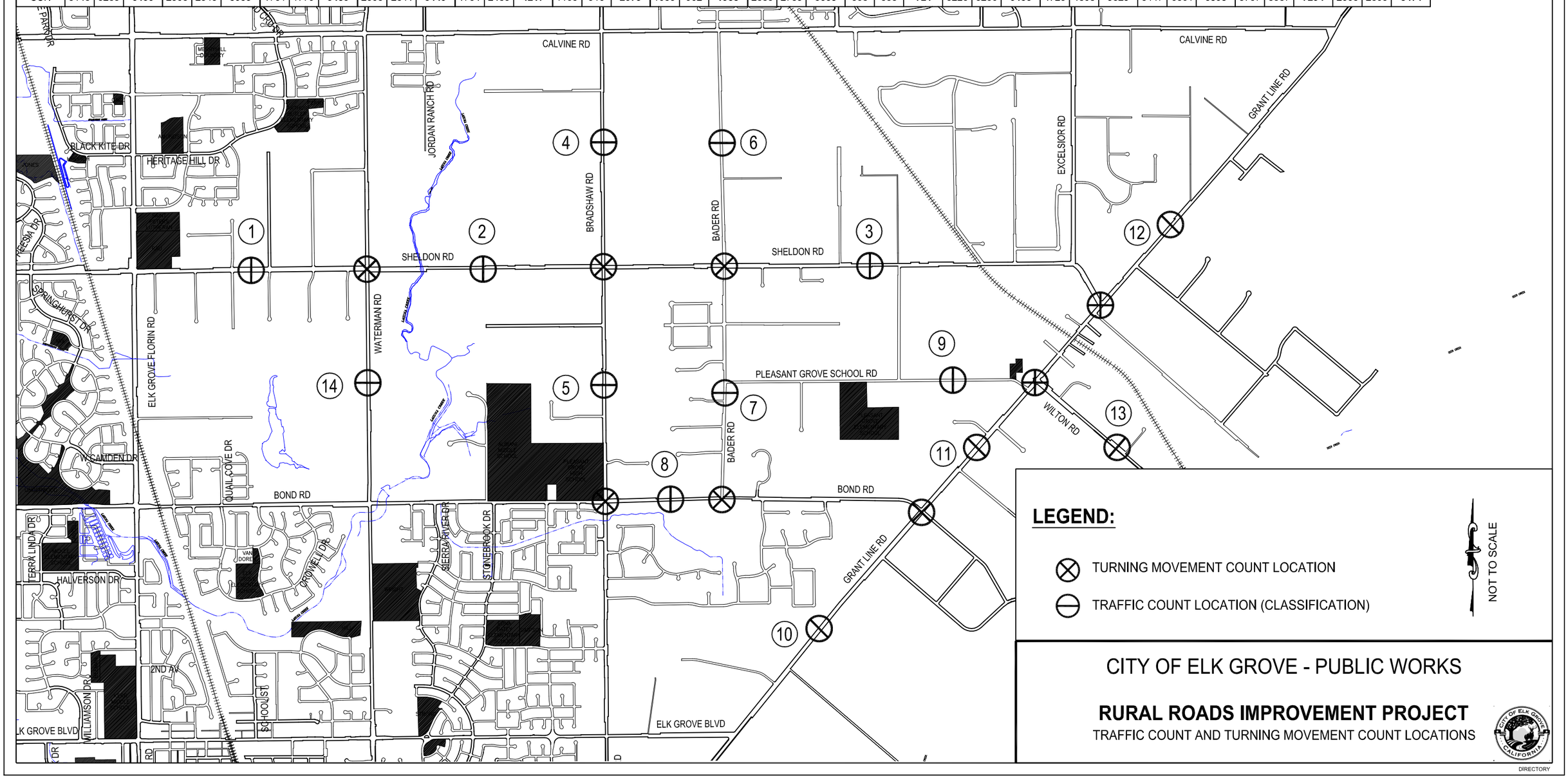
2) The City shall compare measured daily traffic volumes to the improvement thresholds. The threshold is satisfied if the daily traffic (two-way total) volume on any leg of the intersection meets or exceeds the lower volume threshold for identified improvement step.

3) When the next improvement threshold is satisfied, the City will commence a more detailed traffic analysis to identify specific (i.e., minimum) improvements required to accommodate actual traffic impacts. Exceptions include an improvement that is needed to improve demonstrated safety impacts of a roadway or intersection.

4) The City shall host at least one public workshop with the residents in the Rural Residential Area to present the traffic data, threshold analysis, and range of alternative improvements to address the traffic impact. Notices for the workshop(s) will be mailed to all property owners of record within the Rural Residential project area as defined herein. Input from that workshop will be presented to the City Council for direction to proceed with the Capital Improvement process.

APPENDIX

	SHELDON RD									BRADSHAW RD						BADER RD						BOND RD			PLEASANT GROVE SCHOOL RD			GRANT LINE RD									WILTON RD			WATERMAN RD		
	①			②			③			④			⑤			⑥			⑦			⑧			⑨			⑩			⑪			⑫			⑬			⑭		
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	TOTAL	EB	WB	TOTAL	NB	SB	TOTAL
MON	4246	4472	**8718**	3230	3495	**6725**	2287	2539	**4826**	4321	4315	**8636**	3502	4037	**7539**	1519	1352	**2871**	1668	1525	**3193**	4315	4297	**8612**	614	503	**1117**	4525	4393	**8918**	7157	6893	14050	5481	5628	**11109**	5249	5152	**10401**	4041	4149	**8190**
TUE	4469	4587	**9056**	3283	3656	**6939**	2260	2674	**4934**	4622	4661	**9283**	3843	4430	**8273**	1636	1440	**3076**	1713	1636	**3349**	4426	4568	**8994**	685	583	**1268**	4627	4487	**9114**	7505	7015	**14520**	5634	5898	**11532**	5351	5237	**10588**	4149	4250	**8399**
WED	4265	4748	**9013**	3367	3722	**7089**	2317	2702	**5019**	4527	4747	**9274**	3484	4556	**8040**	1702	1508	**3210**	1788	1626	**3414**	4423	4468	**8891**	653	531	**1184**	4852	4673	**9525**	7322	7305	**14627**	5865	6018	**11883**	5456	5507	**10963**	3982	4002	**7984**
THU	4444	4718	**9162**	3406	3647	**7053**	2420	2688	**5108**	4590	4667	**9257**	3574	4535	**8109**	1879	1317	**3196**	1858	1626	**3484**	4849	4600	**9449**	666	589	**1255**	4820	4715	**9535**	7515	7355	**14870**	6156	6155	**12311**	5598	5510	**11108**	4137	4324	**8461**
FRI	4645	4759	**9404**	3487	3683	**7170**	2396	2720	**5116**	4881	4991	**9872**	3389	4764	**8153**	1718	1441	**3159**	1847	1681	**3528**	4831	4709	**9540**	664	538	**1202**	5173	5039	**10212**	8130	7724	**15854**	6254	6303	**12557**	5723	5707	**11430**	4306	4456	**8762**
SAT	3220	3760	**6980**	2770	2851	**5621**	1898	2086	**3984**	2798	3060	**5858**	2180	2952	**5132**	1435	1103	**2538**	1436	1182	**2618**	3688	3499	**7187**	453	430	**883**	3854	3782	**7636**	5494	5807	11301	4166	3984	**8150**	4613	4520	**9133**	2803	2922	**5725**
SUN	3145	3285	**6430**	2508	2545	**5053**	1701	1779	**3480**	2608	2841	**5449**	1734	2483	**4217**	1163	916	**2079**	1086	902	**1988**	2883	2785	**5668**	368	353	**721**	3226	3230	**6456**	4725	4808	**9529**	3447	3361	**6808**	3707	3587	**7294**	2668	2803	**5471**



LEGEND:

- ⊗ TURNING MOVEMENT COUNT LOCATION
- ⊖ TRAFFIC COUNT LOCATION (CLASSIFICATION)

NOT TO SCALE

CITY OF ELK GROVE - PUBLIC WORKS

RURAL ROADS IMPROVEMENT PROJECT

TRAFFIC COUNT AND TURNING MOVEMENT COUNT LOCATIONS

DIRECTORY