

## APPENDIX E

### ENGINEERED TRAFFIC STUDY GUIDELINES

**A. General.** When required by the County Engineer, an engineered traffic study shall be prepared by a professional Civil Engineer licensed in the State of Washington. Traffic studies shall be prepared generally consistent with the Institute of Transportation Engineers guidelines and at a minimum, should incorporate the following elements:

**1. Introduction/Description**

- Project Identification and Overview
- Analysis scope and Purpose
- Project location & Study Area
- Developer/Representative Information
- Development description

**2. Existing Site Conditions/Site Services Inventory**

- Zoning & Land Use
- Transportation network
  - a. Critical intersections and roadway segments
  - b. Traffic signals and controls
  - c. Roadway classifications
  - d. Constraints or problems
  - e. Traffic type, volumes & levels of service
  - f. Area roadway pavement conditions
  - g. Transit service
  - h. Rights-of-way and pavement widths
  - i. Pedestrian, bike, and equestrian facilities
- Safety
  - a. Accident history
  - b. Sight distance (site access and study area)
- Parking (if applicable)

**3. Proposed Improvements**

- Overview
- County six year TIP elements relevant to project
- Study area conceptual plan
- Major & Minor circulation elements

**4. Traffic Projections/Design Year Analysis**

- Level of analysis & Methodology
- Trip Generation (ITE or source acceptable to Traffic Section of Whatcom County)
- Trip Assignment/Distribution
- Total traffic volumes (with & without project)

- a. ADT & AWDT
- b. Peak-hour
- Peak hour considerations (AM/PM)
- Capacity and Design Year LOS Analysis
- Through traffic
- Site access, circulation, and parking

**5. Impacts and Mitigation**

- Frontage improvements and rights-of-way dedication
- Possible improvements to restore system capacity
- Access improvements
- Safety – corrective measures
- Bicycle/pedestrian/equestrian improvements
- Demonstrate compliance with LOS
- Level of Service changes at intersections (signal warrants)
- Capacity restoration on alternative corridors
- Pro-rata share contribution to road improvement projects

**6. Conclusions & Recommendations**

- Need for improvements
- Compliance with applicable local codes
- Site access/circulation plan
- Roadway improvements (preliminary geometric design elements)
  - a. On-site
  - b. Off-site
  - c. Phasing, if appropriate
- Transportation System Management Actions
- Exceptions, if any, from the Whatcom County Development Standards
- Other

- B. Study Area:** Study area shall include access, roadways, and/or critical intersection(s) serving site.
- C. Report Format:** Report should typically be 8 ½” x 11” pages with text, tables, and maps.
- D. Review and Approval by the County Engineer.** The traffic study shall be submitted to the County Engineer for review and approval.
- E. Use of Traffic Study for Other Phases of the Development.** The traffic study submitted during one permit/approval process may be modified as required by the County Engineer and subsequently submitted for use with future permit or project applications.