APPENDIX B-5

SITE PLAN REVIEW CHECKLIST FOR TRAFFIC ISSUES

The following checklist is intended to be used to assist communities in reviewing transportation related issues during site plan review. These standards could be added to the zoning ordinance, as appropriate. The standards are from many of the reference materials used in preparing the handbook. The standards may need to be tailored to a particular community or situation.

OFF-SITE CIRCULATION & ACCESS

The distance between the driveway and adjacent intersections or other driveways meets standards (these access standards can be in the road agencies code/rules or the zoning ordinance). Spacing based on posted speed limits is common. (example – 230 feet spacing for 40 mph). _____

Driveway is aligned with driveways across the street or offset at least 150 feet apart for local and collector roads, or 250 feet apart along arterial roads (or other specified access management standards). _____

Driveway design is sufficient for the type of traffic expected and site conditions. This includes reviewing the need for a by-pass lane, center turn lane, deceleration lane, deceleration taper, and width and number of ingress/egress lanes. _____

If site access is available via a side street or service drive, access to an arterial should be limited or discouraged, where appropriate. _____

Is the length of the driveway sufficient to provide storage for vehicles waiting to enter or exit without creating conflicts? _____

Driveway radii for both inbound and outbound are sufficient to accommodate the types of vehicular traffic that is expected to enter the site (typically 25-30 feet). _____

Is the driveway grade too steep? Driveways or circulation roads should not have grades in excess of two percent near the main roadway approach. _____

Ensure that pedestrian crossing is addressed, if appropriate, at all site driveways. _____

If a boulevard design is used, carefully review island design including width, length, and radii. Also driveways likely to be aligned or nearly aligned with an existing or future driveway on the opposite side of the road should typically not include a median/island. _____

Is sight distance at the proposed driveway location sufficient? Will proposed signs and/or landscaping obscure sight distance? _____

Is this a location where a shared driveway, frontage road, rear service drive or _____

connecting parking lots would be appropriate? Are such facilities recommended in a corridor plan, master plan or zoning ordinance?

Setbacks from future rights-of-way should be noted. Is a right-of-way dedication or preservation desired? _____

ON-SITE CIRCULATION (including pedestrians)

Minimize conflicts near entrances, such as cross traffic, through the use of landscaped islands. Islands can also be used judiciously to control and slow traffic maneuvering through a large parking lot. _____

Where public transit, school bus, or semi-truck traffic is expected, insure that the site designer has provided adequate internal radii to accommodate trucks or transit vehicles without conflicting with circulation or parking (check using a turning template – a transparent diagram to scale which illustrates the turning radii for different types of vehicles). Review of emergency vehicle accessibility should also be completed. _____

Ensure that traffic backing out of parking spaces does not conflict with traffic on circulation roads. _____

Where islands are used at the ends of parking rows, the design should discourage vehicles from backing out into major traffic aisles. _____

Parking Island Design – The radii of parking islands should be shown to ensure vehicles can easily move through the parking lot. The depth of parking islands should be about two feet less than the depth of the adjacent parking space. _____

Generally, intersections within the parking lot should be no more than three-way intersections and at most four-way. Avoid intersections with five or more approaches. _____

Pedestrian circulation should generally be down the aisle (parallel to) or provided through separate facilities. _____

Minimize vehicular conflicts for pedestrians near building entrances. Traffic lanes should not abut the building; a protected area for pedestrians should be provided. _____

Ensure that there is sufficient room to maneuver to pick up dumpsters without backing into vehicles parked on the opposite side of an aisle (again, use a turn template). _____

For drive-through facilities, ensure that the drive-through lane does not conflict with maneuvering from parking spaces or traffic circulation. Are the number of stacking spaces <u>on site</u> adequate to accommodate expected queues? _____

Maximum cul-de-sac length should be considered. Community standards range typically from 600 feet to no maximum. ITE recommends a maximum length of _____

1500 feet for low density development (up to 2 dwelling units/acre), 1000 feet for medium density development (2.1-6 units per acre) and 700 feet for higher density developments. Some communities and agencies in Michigan specify a maximum number of units which can be served by a single access point (usually 25-50 units).

PARKING AND LOADING

Parking lots should be shared to reduce parking area where the types of uses and their parking demand patterns make this possible. _____

Are the required number of barrier free and regular parking spaces provided? Do their dimensions meet ordinance requirements? While most ordinances address minimum parking, some communities also consider the maximum parking needed. Often, parking lots are over designed leading to excessive storm water runoff and poor aesthetics. _____

Does sufficient space exist for snow storage? _____

Parking bays or aisles should be aligned perpendicular to the building. This provides better safety for pedestrians rather than walking between parked vehicles. _____

Is barrier free access adequate? _____

Is the loading/unloading area large enough and functionally designed with the proper surfacing materials? Is it separated from through traffic lanes? _____

Loading areas and loading docks should generally be on the rear or side of the building not visible to a residential district or the public street. _____

NON-MOTORIZED FACILITIES

Provision for non-motorized facilities (sidewalks and bike paths) _____

- adequate width (suggest minimum 5 feet along local streets, 6-7 feet along arterial streets)
- acceptable grade
- alignment where sidewalk crosses driveway
- connection between the street sidewalk and building entrances
- barrier free requirements
- consideration of pedestrian connections between residential developments
- convenient pedestrian ways to on-site or nearby bus stops

Provisions for transit facilities (if appropriate) _____

- if there will be on-site transit service, adequate turning radii should be illustrated

- location of bus shelters or drop-off areas
- for larger projects, request written comments from the transit agency

Pedestrian access across sites is typically overlooked along commercial strips. Pathways worn into the turf by pedestrians may demonstrate a need. If sidewalks are not needed at the present time, but may be needed in the future, consider requiring a bond issue for future sidewalk construction. _____

This checklist completed by _____ Date _____