<u>APPENDIX C – ACCESS MANAGEMENT</u> <u>STANDARDS AND MAINEDOT PERMITS</u>

C.1 Access Management

Highways are principal transportation routes that accommodate many different types of trips, among them longer distance trips between towns and other distant destinations. Because they are the primary corridors for longer distance automobile and truck travel, highways are often designed to move traffic quickly. Nonetheless, many highways (with the exception of Interstate Highways, the Maine Turnpike, and other fully access-controlled routes) also provide access to abutting parcels to various degrees. Therefore, maintaining the efficiency and safety of highways is in part related to existing and proposed land use activity along those highways and how access to such activity is managed.

The frequency, location and configuration of access points (i.e., driveways or entrance roads) influence many aspects of a highway's performance and character. Access points, particularly those requiring left turns, can disrupt traffic flow and increase the potential for crashes. In densely developed areas with frequent access points, trips entering or exiting the highway can worsen congestion and increase crashes. In less developed areas where posted speeds are high (like Bath Road), occasional turning vehicles can be unexpected and crashes can be more severe. Management of how access is provided can address these safety and congestion issues, and also help communities preserve rural or historic character where appropriate to do so.

While the MaineDOT administers an access management program outside a municipality's urban compact area, ultimate responsibility and authority for the implementation of land use and access management in Maine lies primarily with the municipalities. Bath Road lies outside the urban compact area and therefore MaineDOT administers access permits. This Plan includes an introduction to access management; local and state access management processes and standards; an introduction to the MaineDOT Traffic Movement Permit process; and examples of best-practices solutions.

This Plan does not identify specific recommendations on how to correct existing deficiencies, but provides the framework for how driveway design is an important part of a healthy transportation corridor and what factors will need to be considered during the development process for a local site plan or Traffic Movement Permit approval.

C.2 Introduction to Access Management

Access Management is a set of techniques used to preserve highway capacity, manage highway congestion and reduce crashes. Examples include:

- Traffic signal spacing;
- Driveway location, spacing, and design;
- Use of service and frontage roads; and
- Land Use policies that control right-of-way access to highways.

Specific benefits of Access Management include:

- Preserve integrity of the roadway system
- Improve safety and highway capacity
- Extend *functional* life of the roadways
- Preserve public investment in infrastructure
- Preserve private investment in properties
- Provide a more efficient (and predictable) motorist experience
- Improve "thru" times through a corridor
- Improve aesthetics (less pavement, more green)

C.3 Town of Wiscasset and MaineDOT Driveway Standards

The following summarizes existing driveway design and construction standards per the Town of Wiscasset and MaineDOT.

Town of Wiscasset Ordinance (Site Plan Standards)

- Access into site. Vehicular access to and egress from the development shall be safe and convenient.
 - Any driveway or proposed street shall be designed so as to provide at least the minimum sight distance as noted below:

Posted Highway Speed (MPH)	Minimum Sight Distance (in feet)	MaineDOT (in feet)
2	25	20
3	30	25
3	35	30
4	40	36
4	45	42
5	50	49
5	55	57

- o Points of access and egress shall be located to avoid hazardous conflict with existing turning movements and traffic flows.
- The grade of any proposed drive or street shall not be more than plus or minus 3% for a minimum of 40 feet, from the edge of travel way.
- O The intersection of any access/egress drive or proposed street shall function at Level of Service D or better following development if the project will generate 100 or more peak hour trips or at a level which will allow safe access into and out of the project if less than 100 peak hour trips are generated.
- o Where a lot has frontage on two or more streets, the primary access to and egress from the lot shall be provided from the street where there is less potential for traffic congestion and for traffic and pedestrian hazards. Access from other streets may be allowed by the Planning Board if it finds if it is safe and does not promote shortcutting through the site.
- O Where it is necessary to safeguard against hazards to traffic and pedestrians and/or to avoid traffic congestion, and if required by the MaineDOT or if recommended by a traffic engineer, the Planning Board in consultation with the appropriate town official may require the applicant to provide turning lanes, traffic directional islands and traffic controls within public streets.
- o Accessways shall be designed and have sufficient capacity to avoid queuing of entering vehicles on any public street.

- The following criteria shall be used to limit the number of accessways serving a proposed project:
 - No use which generates fewer than 100 vehicle trips per day shall have more than one two-way driveway onto a single roadway. Such accessway shall be no greater than 30 feet wide.
 - No use which generates 100 or more vehicle trips per day shall have more than two points of entry from and two points of egress to a single roadway. The combined width of all accessways shall not exceed 60 feet.
- o Accessway location and spacing. Accessways shall meet the following standards:
 - Private entrances/exits shall be located at least 50 feet from the closest unsignalized intersection and 150 feet from the closest signalized intersection, as measured from the edge of the private entrances/exits to the edge of the intersection, excluding radii. This requirement may be reduced if the shape of the site does not allow conformance with this standard.
 - Private accessways in or out of a development shall be separated by a minimum of 75 feet where possible.

MaineDOT Standards (See http://www.maine.gov/mdot/ppp/accessmgmt/index.htm)

The following summarizes MaineDOT driveway standards per their Highway Driveway and Entrance Rules as they apply to Bath Road, which is characterized as a Retrograde Arterial. A Retrograde Arterial is defined by MaineDOT as a Mobility Arterial having an access-related crash-per-mile rate exceeding the 1999 statewide average for arterial highways of the same posted speed limit. A Mobility Arterial is defined as an arterial highway not located within an Urban Compact Area (none in Wiscasset) that has a posted speed limit of 40 mph or more and is:

- (1) Part of an arterial corridor located between Urban Compact Areas or Service Centers that carries an average annual daily traffic of at least 5,000 vehicles per day for at least 50% of its length, or
- (2) Is part of a Retrograde Arterial Corridor located between Mobility Arterials described in (1).
- Number of Driveways Except for forestry management and farming activities, lots on Mobility Arterials will be limited to one two-way or two one-way entrances, unless a waiver is granted.
- Corner Clearance (distance to an intersection) Mobility Arterial Corner Clearance. The minimum corner clearance for entrances onto Mobility Arterials must be no less than 125 feet.
- Driveway Spacing

Spacing Standards
Entrance Separation
(Feet)
Not applicable
Not applicable
Not applicable
175
265
350
525

• Sight Distance (Mobility Corridor)

Applicable Speed	Sight Distance
(MPH)	(Feet)
20	Not applicable
25	Not applicable
30	Not applicable
35	Not applicable
40	580
45	710
50	840
55	990
60	1,150

- Driveway Width If 30% or less of the traffic projected to use the proposed entrance will be larger vehicles, the width of a two-way entrance within the highway right of way must be between 22 and 30 feet inclusive, unless a waiver is granted. If more than 30% of the traffic projected to use the proposed entrance will be larger vehicles, the width of a two-way entrance within the highway right of way must be between 30 and 42 feet.
- Double Frontage Lots. Unless a waiver is granted, entrances for lots with frontage on a Non-compact Arterial and another public way will be restricted to the other public way, unless MaineDOT determines that queuing of traffic using an entrance off the other public way would interfere with traffic on the Non-compact Arterial due to insufficient lot frontage along the other public way. If the other public way is a mobility or retrograde arterial the entrance must be located on the highway frontage that allows the intent of this rule to be most effectively and efficiently met.

The following notes key differences between Town and MaineDOT standards. The more stringent rules apply.

- Sight Distance MaineDOT sight distance standards are less than Town requirements with the exception of roads with a speed limit of 55 mph.
- Number of Driveways MaineDOT limits lots to one two-way driveway or two one-way driveways. The Town allows for two driveways for developments that generate 100 or more daily vehicle trips.

- Corner Clearance MaineDOT requires 125 feet of corner clearance while the Town requires 50 feet of clearance to an unsignalized intersection and 150 feet to a signalized intersection.
- Driveway Spacing MaineDOT standards are greater than Town requirements. For 45 mph (the
 most common speed limit in the study area), MaineDOT requires 265 feet of separation while the
 Town requires 75 feet.

C.4 MaineDOT Driveway / Entrance Permits

A MaineDOT Driveway or Entrance permit is required under the following criteria.

- Driveways: less than 50 passenger car equivalents (PCE) per day. Examples:
 - o Up to 5 dwelling units
 - Home-based occupations
 - o Forest management & farming
 - o Low-impact industrial (i.e., substations)
- Entrances: more than 50 PCEs/Day. Examples:
 - o Over 5 dwelling units and housing developments
 - o Retail, office or service business including department store, strip mall, convenience store, gas station, auto repair shop, restaurant, etc.

MaineDOT Access Management Rules

- Applies to State and State-Aid Highways (Bath Road) to:
 - o Preserve Mobility
 - o Preserve Safety
 - o Reduce Negative Drainage impacts
 - o Preserve Economic Productivity Related to Highways
 - o Avoid Long-Term Cost of Adding New Highway Capacity
- Excludes Portions of highways located inside Urban Compact limits

Applicability

- Changes to access location, width, cross-section, grade or drainage characteristics
- Change in Use: Activity that will result in
 - o Intermittent or seasonal use becoming permanent or year-round use
 - Increase in daily traffic from under 50 Passenger Car Equivalents PCE/Day or 99 PCE/Hour
 - Significant drainage risk
 - o Exclusion Change in ownership only

Three Levels

- Basic (Lower Classification Roads through Major Collectors)
- Mobility Arterials
 - o Posted Speeds of 40 MPH or Greater
 - o AADT of 5,000 or more
- Retrograde Arterials (incl. US Route 1 Bath Road)
 - Mobility Arterials having Access-Related Crash Rates greater than the 1999 Statewide Average for Similar Arterials
 - o Applicant must Avoid, Minimize or Mitigate Reduction in Safety or Posted Speed Limit

Design Considerations

- Sight Distance
- Spacing between Access Points
- Spacing of Access Points to Intersections
- Drainage Impacts
- Mitigation (Retrograde Arterials)
 - o Signage, Lighting, Trimming Vegetation, etc.
 - o Addition of Shoulders, Turn Lanes, Traffic Signals
 - o Changes in Highway Alignment
 - o In-Lieu Impact Fee Payments (Town or State)

Access Management Waivers

- Criteria that can be waived for reason
 - o Access point spacing
 - o Spacing from access points to intersections
 - o Traffic signal spacing
 - o Mobility Sight Distances
- Criteria that cannot be waived
 - o Safety Sight Distances

C.5 MaineDOT Traffic Movement Permit Process

For developments that generate significant traffic levels, a Traffic Movement Permit (TMP) may be required. In many cases the TMP requires developers to prepare a traffic impact study assessing the impact the project may have on the public street system. Details of the TMP process are noted as follows.

Traffic Movement Permit (TMP) required:

- Project abuts any (public or private) road, and
- Project includes any construction, alteration or conversion of a site, building or development, and
- Adds 100 or more PCEs/ Peak Hour
 - o Per ITE Trip Generation Guide
- Exemptions
 - Solid Waste Facility
 - o Hazardous Waste Transfer or Storage Facility
 - Waste Oil Storage Facility or Biomedical Waste Facility

Off-Site Traffic Study Area Requirements

- 1st major intersection in each direction from entrances and exits
- Additional intersections where proposed development adds
 - o 25 additional left-turns
 - o 35 additional through-, right-turn or combined through- and right-turn
 - o 35 additional (multiplying left-turn by 1.5) in combined left-turn plus through, or combined left-turn, through- and right-turn