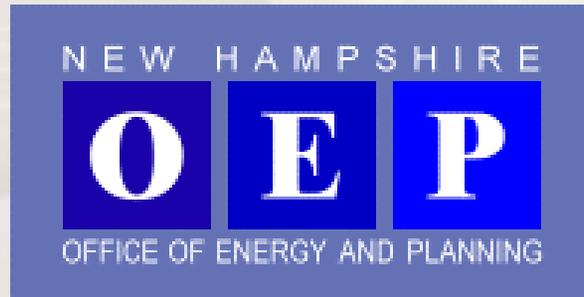


An Overview of the NHDOT Driveway Permit Process

Presented for:



*Spring Planning and Zoning
Conference*

Saturday, June 11, 2011

Manchester, NH

Presented by:

Steven Ireland, P.E.

NHDOT Dist. 6

Assistant Engineer

Bob Bollinger, P.E., PTOE

NHDOT Bureau of Traffic

Traffic Operations Engineer

Michael Dugas, P.E.

NHDOT Bureau of Highway Design

Chief of Preliminary Design

Why do I need a Driveway Permit?

“A Policy for the Permitting of Driveways & Other Accesses to the State Highway System”, AKA, The Driveway Manual

- Jurisdiction RSA 236:13
- Driveway Manual Delegation of Authority

HIGHWAY DISTRICTS

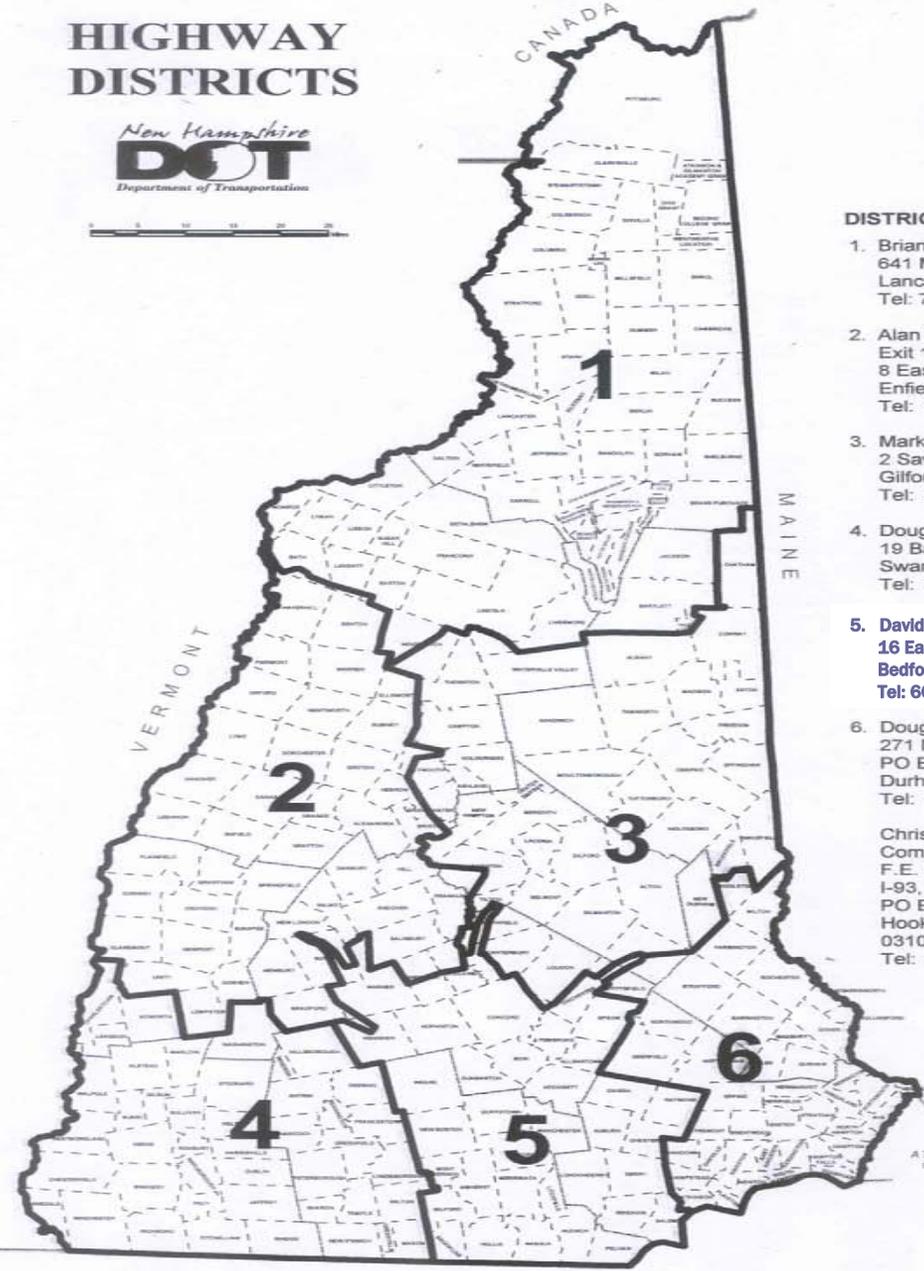


CANADA



DISTRICT ENGINEERS

1. Brian Schutt
641 Main St.
Lancaster, NH 03584
Tel: 788-4641
 2. Alan G. Hanscom
Exit 16, I-89 Enfield
8 Eastman Hill Rd
Enfield NH 03748
Tel: 448-2654
 3. Mark Morrill
2 Sawmill Rd
Gilford, NH 03246
Tel: 524-6667
 4. Douglas Graham
19 Base Hill Rd
Swanzey, NH 03446
Tel: 352-2302
 5. David Rodrigue
16 East Point Dr
Bedford, NH 03110
Tel: 666-3336
 6. Douglas DePorter
271 Main St
PO Box 740
Durham, NH 03824-0740
Tel: 868-1133
- Chris Waszczuk
Communications Section
F.E. Everett Turnpike
I-93, Exit 11
PO Box 16476
Hooksett, NH
03106-6476
Tel: 485-3806



Highway Maintenance Districts



Key Components to Every Drive Permit

- Lot of Record on July 1, 1971
- 400 feet all season safe sight distance
- Amount of Frontage

Minor versus Major Drive

Threshold is typically 100 trips in the peak hour.

Minor Drive

- Application

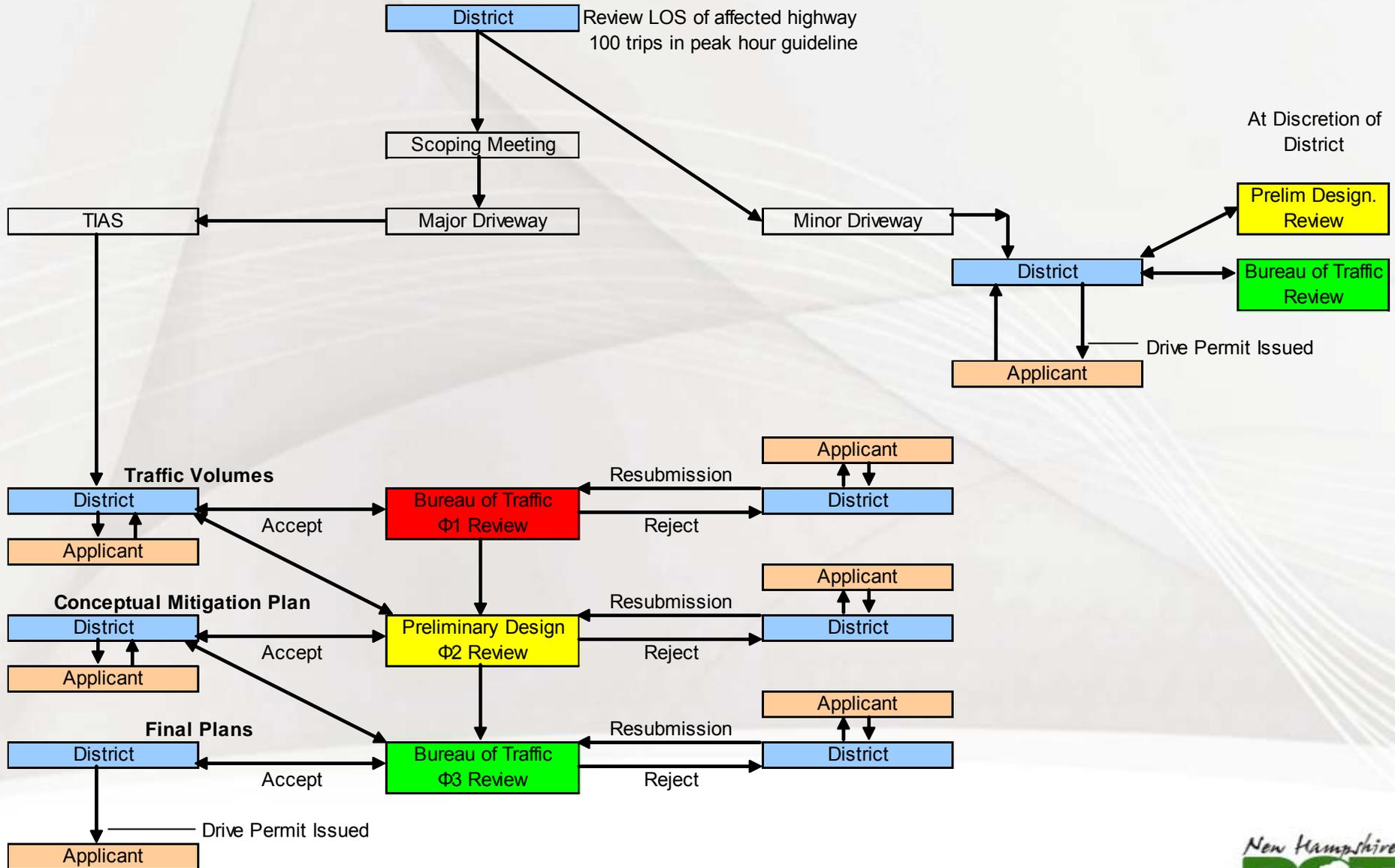
<http://www.nh.gov/dot/business/municipalities.htm>

- Process and Time Frame to Permit
- Permit Issuance Good for 1 Year

Major Drive

- Application (same as Minor Drive)
- Typical Time Frame to Permit (1 to 3 years)
- Scoping Meeting
- Traffic Impact Study
- Preliminary Plans
- Final Plans
- Permit Issuance Good for 1 Year

Driveway Review Process



Do I need a Traffic Study?

- At the discretion of the District.
- General threshold: More than 100 peak hour trips during adjacent street peak hour.
- Traffic study can be required below threshold volume.
- Formal need and all requirements are determined at Scoping Meeting

Scoping Meeting

Purpose is to gather input from stakeholders to reasonably assure that interests/issues related to the transportation network are identified.

- Stakeholders: NHDOT (District, Traffic, Highway Design), Municipality, and Planning Agencies
- Discussions limited to requirements of Traffic Study.
- Avoid topics dealt with at municipal land use boards.

Traffic Study Requirements

The Basics

- Driveway Manual – Section 6a-6n
- Traffic Data Collection
- Peak Month Seasonal Adjustment (exception?)
- Background Traffic Growth Rate
- Trip Generation
- Trip Distribution/Assignment
- Opening Year & Horizon Year (OY+10) Analysis
- What's not there? Study Area

Study Area

- Based on input from stakeholders
- At a minimum includes site driveway(s)
- NHDOT generally interested in:
 - major intersections w/in 0.5 to 1(±) mi of site
 - intersections that are part of a coordinated signal system
 - other known/historical areas of interest
- Municipalities and Planning Agencies may have different interests.

Traffic Data Collection

- Intersection Turning Movement Counts
 - All Study Area Intersections
 - Data collected in 15 minute intervals
 - Count duration typically 2 hrs/peak
 - More data required if a new traffic signal is under consideration
- Automatic Traffic Recorder Counts
 - Done on State Highways
 - Typically 2 to 3 weekdays (Sat. if necessary)

Peak Month Adjustment

Should be based on:

- Closest permanent recorder station.
- Similar functional class.
- Use Group Averages only if no permanent counter is reasonably close.
- Adjustment to average month for signal warrants.

Traffic Growth Rate

Should be based on:

- Permanent recorder stations
- NHDOT calculates Regional Growth Factor trends.
- Coverage/Short-term counts (AADTs collected every 3 years) do not necessarily provide good reflection of trends.

Trip Generation - How Many?

- ITE “Trip Generation” (8th Edition, 2008).
- Local data.
- NHDOT encourages the use of local data, if applicable.

Trip Distribution - Where are they going?

- Existing Travel Patterns
- Cordon Method
- Journey to Work
- Gravity Model (modified)
- Others?

Opening Year & Horizon Year Volumes

Function of:

- Raw data.
- Seasonal Adjustment.
- Background traffic growth.
- Other Development.
- Trip Generation.
- Trip Distribution/Assignment.

Bottom line – Is it reasonable?

Engineering Review

- Adequacy of site access
- Need for off-site mitigation

Adequacy of Site Access

- Access management
 - Number and placement of driveways
 - Internal connections to adjacent lots
- Sight distance
 - Driveway policy: 400'
 - AASHTO: need to consider when speed is greater than 40 mph
- Traffic operations

Off-site Mitigation

- Is mitigation required?
- Is the proposed mitigation sufficient?
 - At a minimum: should preserve existing operations

Evaluation of Traffic Impacts

- Level of service
 - Intersection
 - Approaches / lane groups
- Queuing
 - Lane failures
 - Effect on adjacent intersections and driveways

Mitigation Measures

Roadway improvements to offset impact of new traffic

- Traffic control: signs, signals, roundabouts
- Road expansion to increase capacity
- Auxiliary lanes for left and right turns
- Contribution to future improvements
- Right of way dedication

Construction of the Permitted Work

- DOT Inspections
- Consultant Inspections
- Compliance with the Permit
- Time Extensions
- Bond Release
- Future Maintenance

Access Management MOUs

- Agreement between Municipality and DOT
- Good components of an MOU
 - Structures Communication
 - Can be more restrictive than Drive Manual
 - Best when based on a study or master plan
- Rochester Example

Q & A