



Implementation of the GreenDOT Policy through the MassDOT Permitting Process

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GreenDOT Vision

- MassDOT will be a national leader in promoting sustainability in the transportation sector. Through the full range of our activities, from strategic planning to construction and system operations, MassDOT will promote sustainable economic development, protect the natural environment, and enhance the quality of life for all of the Commonwealth's residents and visitors. This will enable MassDOT to use resources in a manner that serves its existing customers while preserving our resources for future generations.

State Policy Context

- Coordinated approach to sustainability
- Integrate sustainability into responsibilities in the private development mitigation requirements
- Comprehensive response to a range of state and MassDOT laws, policies, and initiatives
 - Global Warming Solutions Act
 - Green Communities Act
 - Healthy Transportation Compact
 - Leading by Example
 - youMove Massachusetts
 - Complete Streets

GreenDOT Policy Goals

- Reduce greenhouse gas (GHG) emissions
- Promote the healthy transportation modes of walking, bicycling, and public transit
- Support smart growth development

State Regulatory Context

- MEPA Regulations (301 CMR 11.00)
- Greenhouse Gas Emissions Policy and Protocol
- Approval of Access to State Highways (720 CMR)
 - “In order to minimize damage to the environment caused by transportation-related air pollution, including greenhouse gas emissions, MassHighway shall, in cooperation with the Secretary of EOEEA, review and comment on measures identified in the MEPA process to avoid, minimize, or mitigate such transportation-related air pollution, and shall include as conditions in its Section 61 Finding measures to avoid, minimize, or mitigate such transportation-related air pollution.”

Public/Private Development Unit

- Roles & Responsibilities
 - Monitor all development proposals that exceed MEPA thresholds
- Review development proposals
 - 40–80 projects per year, depending on the economy
- General impacts on transportation system
 - Projects generate from 3,000 up to 30,000 vehicle trips per day

How can MassDOT reduce GHG through the Permitting Process?

- Permitting Process
- Transportation Planning Principles
- Implementation of Planning Consideration
- Linkage to Planning

Development Permitting Process

- Early Environmental Coordination
- Environmental Review
- Section 61 Finding
- Access Permits
- Transportation Monitoring and Reporting

Early Environmental Coordination

- Describe project
- Agree on assumptions used in calculations
- Identify impacts
- Identify multimodal mitigation measures
- Agree on commitment and implementation plan

Environmental Review

- MEPA Thresholds
- Public Review
- MEPA Certificate
 - Identify GHG Mitigation Commitment
 - Require GHG Self-Certification

Section 61 Finding

- Issued by MassDOT Highway Division
- Identifies multimodal mitigation measures
- Condition of the Access Permit



Access Permit

- MEPA Approval
- Section 61 Finding
- Design and Construction of Improvements
- GHG Requirements



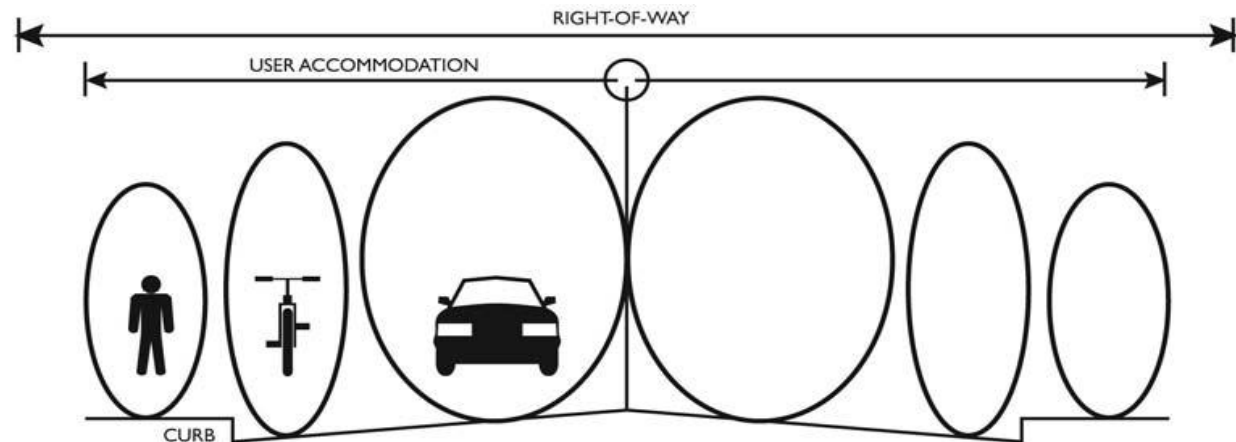
Transportation Planning Principles

- Three planning principles are followed in the Private Development planning process:
 1. Complete Streets
 - Mobility and safety for all users
 2. Multimodal Mitigation Measures
 - Balance needs of all users
 3. Aggressive Transportation Demand Management (TDM) Programs
 - Implement site-appropriate measures

Transportation Planning Principles

Complete Streets

- Core design philosophy of MassDOT's *Project Development and Design Guide*
 - Accommodation for all users
 - Design roadways “from the outside in”



Transportation Planning Principles

Multimodal Mitigation Measures

- Mitigation for all modes
 - Pedestrian
 - Bicycle
 - Transit
 - Roadway
- Mitigation measures must be
 - Integrated
 - User-friendly
 - Reliable
 - Accessible

Transportation Planning Principles

Aggressive TDM Programs

- Physical Actions at time of approval
- Non-Physical Actions upon site opening



How are GreenDOT goals implemented?

- On-Site Mitigation
- Off-Site Mitigation
- TDM programs
- Transportation Monitoring and Reporting

GHG Reduction: On-Site Mitigation

- Driveway Design
- Building Arrangement
- Parking Management
- Internal Circulation
- Pedestrian Accommodations
- Bicycle Accommodations
- Transit Accommodations

GHG Reduction: Off-Site Mitigation

- Multi-Modal Measures
- Traffic Signal Reconstruction, Coordination, Interconnection, and/or Optimization
- Intersection Reconstruction
- Roadway Widening
- Bicycle Accommodations
- Pedestrian Accommodations
- Transit Service Improvements
- Bus Priority Traffic Signal Systems
- Access Management

Examples of Private Development

Haverhill — Lowe's and Wal-Mart

- Poor internal circulation
- No pedestrian access
- Excessive parking



Examples of Private Development

Newton — Chestnut Hill Square

- Example of good site design choices
- Pedestrian-friendly
- Transit on site
- Shared access with abutters
- Car sharing
- Minimum parking

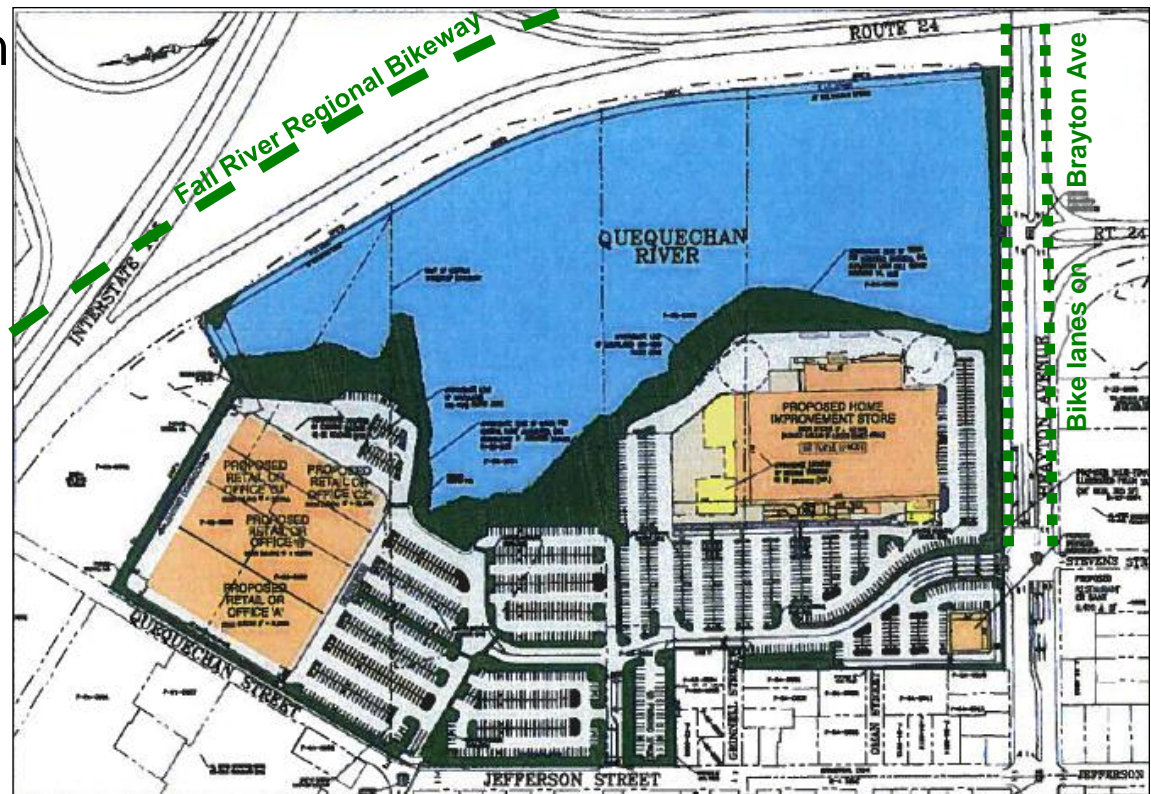


Chestnut Hill Square, Newton, Mass.
NPC, EEA #12928, August 16, 2010

Examples of Private Development

Fall River — Crossroads at 24

- Example of “Complete Streets” design
- Near proposed Fall River Regional Bikeway
- Bike lanes on Brayton Ave will connect project to bikeway

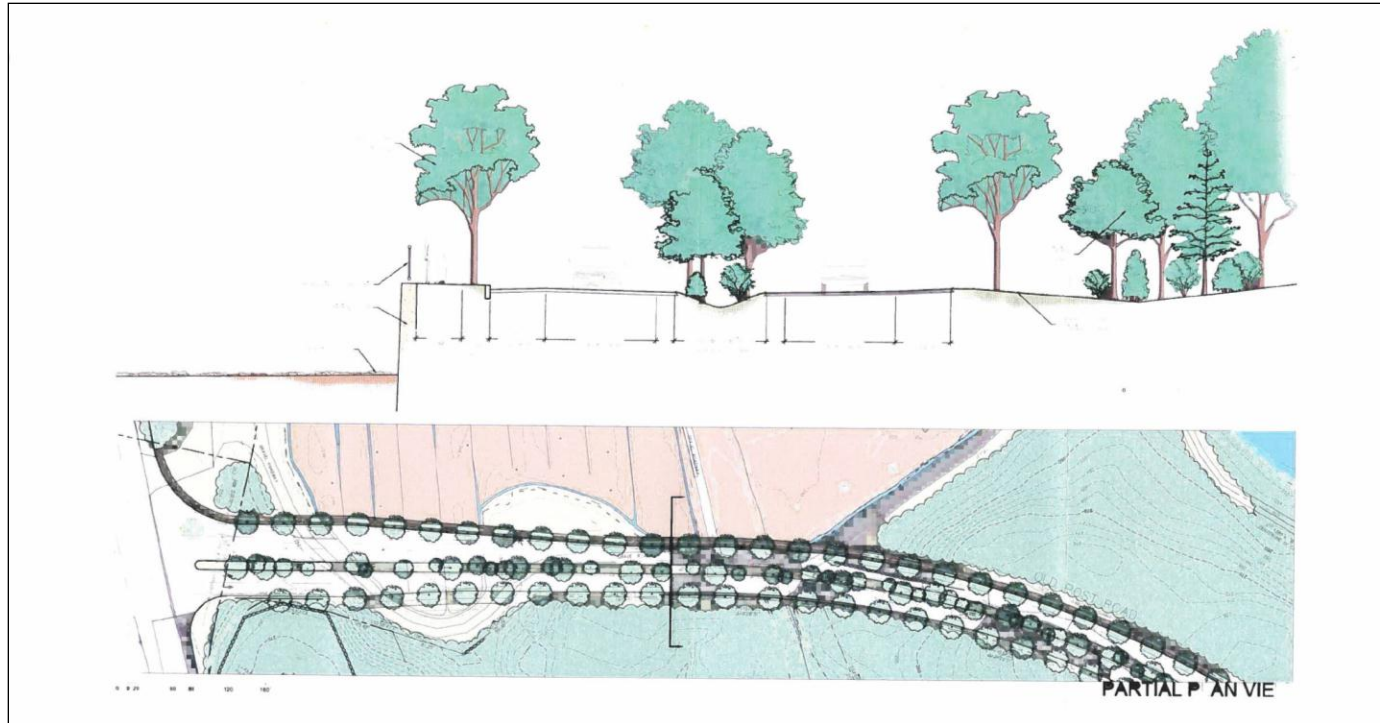


Crossroads at 24, Fall River, Mass.
FEIR, EEA #14459, May 2010

Examples of Private Development

Sharon — Sharon Commons

- Site driveway will be designed as “Boulevard” and will accommodate bicycles and pedestrians



Sharon Commons Lifestyle Center, Sharon, Mass., DEIR, EEA #14081, January 2008

Promote healthy transportation modes:

Walking, Bicycling, Riding public transit

- Connect site to share-used path, bike lanes, sidewalks
- On-site services for employees
- Effective ridesharing programs
- Incentives to use dedicated HOV vehicles and transit
- Provide on-site secure amenities for bicycles
- Preferential parking for car/vanpool
- Cash bonus for employees who don't use parking facilities ("Parking Cash-Out Program")
- Support from MassRides and local TMAs

Smart Growth Development

- Corridor Plan
- TOD Grant Program
- Priority Site Designation (43D Program)
- PWED Grant



Linkages to Planning

- Goals and Objectives of Access Permitting
- Metrics: Transportation Operations or Site Trip Generation
- Transportation Operation Same or better in Future Conditions
- Traffic Monitoring and Analysis Program
- MEPA GHG Self-Certification

Next

- Develop Multimodal Set of Metrics
- Develop Multimodal Targets
- Improve Monitoring and Reporting

