



TOWN OF CHATHAM

OFFICE OF THE SELECTMEN
TOWN MANAGER

549 Main Street, Chatham, Massachusetts 02633
(508) 945-5100



TRANSMITTAL MEMORANDUM

TO: Michael Delaney, Acting District Highway Director
Massachusetts Highway Department – District 5

FROM: Mark Pawlina, Interim Town Manager *M.P.*

DATE: July 15, 2011

RE: **PROJECT INITIATION FORM (PIF) SUBMISSION**
West Chatham Main Street Intersections
& Corridor Design Project

In accordance with the Massachusetts Department of Transportation's (MassDOT) 2006 *Project Development and Design Guide* attached for your review and consideration, please find a Project Initiation Form (PIF) and supporting materials for the Town of Chatham's proposed "West Chatham Main Street Intersections & Corridor Design Project" for improvements to Route 28. The Town wants to pursue a project in West Chatham that embraces the traffic calming principles embodied in Chapter 16 of the *Design Guide* to create a corridor that recognizes and is sensitive to the local context and community character.

The attached package contains the following:

- Project Locus Map
- Project Initiation Form (PIF)

If you need any additional information or clarification on the materials included in the package, please do not hesitate to contact Terence Whalen, Principal Planner at 508-945-5168 or twhalen@chatham-ma.gov. We look forward to working with you to implement a project which will allow this small stretch of road to be rebuilt in a fashion that is aesthetically pleasing, safe, pedestrian friendly and conforming to the Town's Long Range Comprehensive Plan's goal of making a neighborhood center of West Chatham.

attachments: Locus Map & PIF Package

cc: Priscilla Leclerc, Cape Cod Commission MPO Staff

D. Facility Location

If the need and/or opportunity are related to a particular facility, please fill as a much of the following information that applies. Please include a locus map.

Route Number(s): Route 28

Street Name(s): West Main Street

From Cross Street: Barn Hill Road

To Cross Street: George Ryder Road

Mile Marker: From: 11.5 To: 11.7

Intersection of: Barn Hill Road and George Ryder Road

Address: 1563 West Main Street to 1700 West Main Street

Other Location Info: Route 28 Station 142+00 to 159+00

If work is proposed on a bridge or bridges as part of the project, please complete the following:

Bridge ID Number(s): NA

Facility Carried on Bridge: _____

Facility Bridge is Over: _____

E. Area Type

Please denote the area type of the project's location, as defined in the Chapter 3 of the Guidebook. Project limits may include more than one area type.

- | | | | | | |
|-----------------|-------------------------------------|------------------------------|--------------------------|-------------------|--------------------------|
| Rural Natural | <input type="checkbox"/> | Suburban High Density | <input type="checkbox"/> | Urban Park | <input type="checkbox"/> |
| Rural Village | <input checked="" type="checkbox"/> | Suburban Village/Town Center | <input type="checkbox"/> | Urban Residential | <input type="checkbox"/> |
| Rural Developed | <input checked="" type="checkbox"/> | Suburban Low Density | <input type="checkbox"/> | Urban CBD | <input type="checkbox"/> |

Part II: Project or Program Description**A. Please briefly describe the proposed transportation project or program:**

The proposed project is to re-design and modify a 1,700+ foot section of Route 28 (West Main Street) in West Chatham to bring it into conformity and appearance with the rest of Route 28 in Chatham, and make adjustments that will enhance safety, mobility of all users, calm traffic and improve the appearance of the corridor, reflecting the intent of the Town of Chatham's Comprehensive Long Range Plan and supporting the vision for this portion of West Chatham to become a pedestrian-friendly neighborhood center.

The roadway is 38-42 feet wide in this corridor today, which encourages motorists to travel above the posted 40 mph speed limit. In addition, there is a two-way center left-turn lane along the corridor which is somewhat confusing for many drivers. It is the only such center-turn lane existing on Route 28 in its 13-mile passage through Chatham. There is a 5-foot wide sidewalk to the north side, but most businesses are located on the south side, where there is no sidewalk. During the 2010 summer peak periods, George Ryder Road to the west operates at Level of Service (LOS) "D/F", (AM/PM), and Barn Hill Road to the east operates at a LOS of E/F (AM/PM) respectively. Both locations have limited sight lines and lack turn lanes. The right-of-way (ROW) is 60 feet in some locations.

The proposed project's design objective is to make safety and design improvement in a context-sensitive manner, balancing the needs of the corridor's users and property owners by signaling the Barn Hill Road intersection, narrowing the curb-to-curb width of the road by the elimination of the two-way center turn lane, providing crossings for pedestrians and bicyclists, adding a sidewalk on the south side separated from the road by a suitable green strip, and adding an adequate multi-use sidewalk on the north side that would be separated from the roadway by a 2- or 4-foot wide green strip. In addition, a single-lane roundabout is proposed at the George Ryder Road/George Ryder South intersection that will serve to calm traffic entering the corridor. Future 2020 traffic analysis indicates a LOS A/A for the roundabout, and LOS B/B for the new signal at Barn Hill Road and Route 28, AM and PM respectively.

B. Estimated Costs

Please list available cost estimates or estimated cost ranges in current-year dollars. Please attach any cost estimate work sheets or summaries:

Estimated Construction Costs:

Construction Items: \$1,170,000
 Contingencies (@ 25 %): \$292,500
 Other Constr. Costs (@ 3 %): \$35,000
 Total Est. Construction Cost: \$1,497,500

Estimated Other Costs:

Planning/Design: \$180,000
 Right-of-way: \$50,000
 Env. Mitigation: NA
 Total Other Costs: \$20,000

C. Funding

Please identify any current or expected funding related to this need or opportunity, including federal earmarks in legislation, budget acts, or programs; state earmarks in bond bills, budget

acts, or programs; funding provided by the municipality or other local agency; and/or funding provided by private entities:

Federal: NA Year(s) _____ Amount: _____
 State: TIP Year(s) 2013-2015 Amount: \$1.5M
 Municipal: Chapter 90 and CIP Year(s) 2013-2015 Amount: \$200,000
 Private: _____ Year(s) _____ Amount: _____
 Other: _____ Year(s) _____ Amount: _____

D. Cross Section Data

Please fill in as much of the following project cross section information that applies. “Current” data should describe actual current conditions. “Future w/o Project” should describe estimated future (20 years from now) conditions if the project is not implemented. “Future with Project” should describe estimated future conditions if the project is implemented.

	Current	Future w/o Project	Future with Project	Data Source
Project length (mi)	1,300+/- feet	1,300+/- feet	1,700+/- feet	Site Visit & concept design
Speed limit (mph)	40 mph	40 mph	25 - 30 mph	Site Visit
Design speed (mph)	45 mph	45 mph	30 - 35 mph	Site Visit & concept design
Number of travel lanes	3	3	2	Site Visit & concept design
Travel lane width (ft)	13-14	13-14	11 feet	Site Visit & concept design
Bike lane width (ft)	0	0	0 feet	Site Visit & concept design
Shoulder width (ft)	1 foot	1 foot	2 - 4 feet	Site Visit & concept design
Sidewalk width (ft)	5 feet	5 feet	5 & 10 feet*	Site Visit & concept design
Median width (ft)	0	0	0	Site Visit
Total cross section (ft)	43-47	43-47	34	Site Visit & concept design

* 5 foot sidewalk on south side – 10 foot multi-use path on north side

E. Usage Section Data

Please fill in as much of the following usage information that applies. “Current” data should describe actual current conditions. “Future w/o Project” should describe estimated future (20 years from now) conditions if the project is not implemented. “Future with Project” should describe estimated future conditions if the project is implemented.

	Current	Future w/o Project	Future with Project	Data Source
Traffic volume (AADT)	12,800	15,500	15,500	CCC data
Percentage of Trucks (%)	4.1	4.1	4.1	CCC data
Number of Pedestrians	20/peak hour	25/peak hour	30/peak hour	CCC data
Number of Bicyclists	17/peak hour	21/peak hour	26/peak hour	CCC data
Number of Transit Riders	2/peak hour	2/peak hour	4/peak hour	Field observations
Num. of Parking spaces	none	none	none	Site Visit & concept design
Parking Utilization (%)	NA	NA	NA	Site visit

Part III: Summary of Project Planning and Public Process Activities and Results

A. Planning Summary

Please summarize project-planning activities that were undertaken prior to the submission of this PIF. Please refer to pages 2-12 to 2-27 of the Guidebook for descriptions of suggested activities:

Prior to submission of this PIF, there were summertime observations of traffic operations and field visits to measure roadway geometry to, collect a sign and pavement marking inventory and identify traffic control devices. Recent traffic information was collected including traffic counts, accident data and vehicle speeds, all as a result of this project initiation. A detailed photo log was also collected. Numerous meetings were held locally, in addition to in-house staff meeting as well as meetings with MassDOT District 5 project development staff. Various concept plans were developed and traffic analysis conducted testing the alternatives. With input from local groups and the Board of Selectmen, a preferred concept was developed that accommodated all road users (vehicles, pedestrians and bicycles) and provided acceptable levels of service in the 2020 Build condition.

None, other than completing the PNF (please attach). Please describe any updated PNF information, if any:

Project-focused planning study (please attach document).

Comprehensive corridor study and alternatives analysis (please attach document).

B. Public Participation Summary

Please summarize any public participation activities and results that were undertaken prior to the submission of this PIF. Please include meeting dates, participants, issues, and outcomes, and note any opposition to the project/program. Please refer to Section 2-9 of the Guidebook for descriptions of suggested public participation activities.

There have been numerous meetings on this West Main Street project. Noted below is a listing:

<u>DATE</u>	<u>PARTICIPANTS</u>	<u>PURPOSE</u>	<u>OUTCOME</u>
1. 12/17/09	75+/-	- Interactive public active workshop	- Issues list
2. 2/7/10	50+/-	- Public Presentation of Alternatives	- DOT process
3. 3/12/10	8	- Inter-department meeting	- Police/Fire input
4. 6/14/10	5	- Solicit MassDOT D5 input	- DOT direction
5. 6/30/11	50+/-	- Alternatives Presentation	- Citizen participation
6. 9/21/11	50+/-	- Roadway ownership & utilities	- Corridor Plan
7. 3/1/11	8	- Inter-department meeting update	- Plan refinement
8. 3/3/11	50+/-	- Presented 2 scenarios	- Plan detailed
9. 4/15/11	4	- Solicit MassDOT D5 input	- DOT direction
10. 4/26/11	50+/-	- Board of Selectmen presentation	- Board direction
11. 5/3/11	50+/-	- Board of Selectmen presentation	- Board vote

C. Environmental Coordination Activities

Please summarize any environmental coordination activities and results that were undertaken prior to the submission of this PIF, such as meetings, filings, etc. Please include meeting dates, participants, issues, and outcomes.

It is not anticipated that any wetland impacts will occur with project.

D. Design Activities

Please summarize any design activities that were undertaken prior to the submission of this PIF.

Conceptual design was developed for various corridor alternatives using AASHTO standards and Project Development and Design Guide criteria. Base plans were secured from the consultant to the Town on the sewer design project that is currently under construction. Various alignment schemes and concepts were developed for Town and public review. Traffic analysis was also conducted for existing 2010 and future 2020 conditions. Design alternatives included traffic signals, round-about and unsignalized intersections.

E. Right-of-Way Activities

Please describe any activities related to right-of-way undertaken prior to the submission of this PIF.

At the conceptual level, encroachments outside the right-of-way (ROW) were identified, primarily at the intersections. Area encroachments outside the ROW totaled approximately 7,900 SF-17,600 SF for the composite scenarios developed. Discussions occurred in the public forum and in a few meetings with town staff and area abutters. The consensus of the

Board of Selectmen is that they are not in favor of widespread land takings, which is why they support as small a roundabout as possible.

Part IV: Project or Program Activities, Benefits, and Impacts

Please complete all applicable sections of Part IV to the extent possible.

A. Condition

1. Please describe the effect of the project/program on the surface condition of the roadway, path, or other horizontal facility.

West Main Street (Route 28) was recently under construction due to the sewer installation and has a temporary overlay. The roadway is planned to be repaved completely sometime in 2012.

2. Please describe the effect of the project/program on the condition of any roadside/facility appurtenances, such as signs, signals, lighting, median barriers, guardrail, pavement markings, drainage facilities, curbs/sidewalks, fences, etc.

All signing is expected to be upgraded, with a new traffic signal, a new round-about and pavement markings, curbing and crosswalks. A new sidewalk will be added to the south side.

3. If the project/program includes a bridge or bridges, please describe its/their condition, such as bridge ratings, dates of inspection, weight restrictions, closings, structural adequacy, functional obsolescence, condition of other bridge elements, etc., and the benefit/impact of project:

NA

4. Please describe effect of the project on the condition of other facilities, structures, or equipment (buildings, noise barriers, bus shelters, bike racks, etc.)

The proposed project is expected to be designed and operated to enable safe access for all users, thus it is anticipated that area business will make provisions for bike racks and accommodations for pedestrians off-site.

5. Please describe the most recent repairs, preventive maintenance, rehabilitation, reconstruction, or replacement of the facility, including the extent and date.

See # 1 above

B. Mobility

1. Please describe the effect of the project/program on the magnitude and duration of traffic congestion.

Presently George Ryder Road to the west operates at Level of Service (LOS) "D/F", " (AM/PM), and Barn Hill Road to the east operates at Level of Service (LOS) "E/F" (AM/PM), respectively). Both locations have limited sight lines and lack turn lanes. With implementation of the new traffic control measures, George Ryder Road/George Ryder South intersection will operate in the future 2020 condition at a LOS A/A for the round-about and LOS B/B for the new signal at Barn Hill Road will be serve to decrease congestion and side street delays. As a 'complete street' project, pedestrian and bicycle amenities will be added. A multi-use path is also proposed to accommodate pedestrian and bicycle movement.

2. Please describe the effect of the project/program on travel time (not congestion-related) and connectivity/access for users.

The corridor travel speeds are desired to be lowered to 25 mph as compared to 42 mph today. The posted speed limit is 40 mph today. The round-about and narrowed corridor will serve to calm traffic and provide safe pedestrian crossings.

3. Please describe the effect of the project/program on other users of the facility including changes in service quality, number of existing and new users, and accessibility.

The new facility is proposed to better accommodate all users (bicycles, pedestrians and vehicles). As noted in #1 above improved Level of Service will occur. Future year projections will accommodate additional users. A new sidewalk will be provided on the south side of the road where the businesses exist. In addition, a new shared use path will be provided on the north side.

4. Please describe any proposed Intelligent Transportation System components of the project.

Other than Opticom, none are proposed at this time.

C. Safety and Security

1. Please describe any highway safety concerns, such as number and severity of vehicle crashes, crash rates, fatalities, etc., and the effect of the project/program on safety.

According to records provided by the Chatham Police department for the years 2006-2010, both George Ryder Road/George Ryder South and the Barn Hill Road intersections are not high crash rate locations and are below the MassDOT District 5 average of 0.62 MEV. The corridor link between the intersections recorded 19 accidents for the same time period. The calculated crash rate for this corridor segment is 2.78 accidents per million miles traveled, which is above the State-wide average rate of 1.16 accidents per million miles traveled for a rural minor arterial. MassDOT data from 1999-2001 showed the Route 28/George Ryder Road/George Ryder South intersection to experience over 6 accidents per year. At that time this was one of the high accident locations in-town. No pedestrian or bicycle accidents were

reported along this corridor. There are only 2 crosswalks across Route 28 and with a 38-42 curb-to-curb width, crossings are somewhat difficult. A narrowed roadway will decrease crossing times and enhance safety. With the proposed project, 3 additional crosswalks are proposed across Route 28 and 5 additional on the side streets.

2. Please describe any safety issues for other users such as pedestrians, bicyclists, persons with disabilities, transit riders, trucks, schoolchildren, etc., and the effect of the project/program.

There are presently no on-road accommodations for bicycles. The present 5-foot wide sidewalk on the north side is used by both pedestrians and bicycles. There is no designated CCRTA bus stop, although field observations indicated bus boardings/unloadings occur at the Route 28/Barn Hill Road intersection. There is constrained geometry at both the Route 28/George Ryder Road/George Ryder South intersection and the Route 28/Barn Hill Road intersection.

3. Please describe the effect of the project/program on security, such as vulnerability, evacuation procedures, hazardous materials, etc.

An improved corridor will provide a safe evacuation route and a better route for emergency vehicles.

D. Land Use and Economic Development

1. Please describe any project/program issues or opportunities related to area businesses, such as access to labor, parking, noise, freight access, etc.

Access management is proposed along the corridor to better consolidate the curb cuts along the corridor. Shared parking is proposed for area businesses to minimize access openings.

2. Please describe any project/program issues or opportunities related to economic development and job creation, and the relationship of the project/program to particular development projects or attractions.

A majority on the Chatham Board of Selectman have voted in favor of returning this corridor to its historic 2-lane configuration to adhere to Chatham's Comprehensive Long Range Plan, in which the economic vitality of neighborhood center of West Chatham will be enhanced by slower traffic, enhanced green space, and a more pedestrian-friendly atmosphere.

3. Please describe any project/program issues or opportunities related to land use, smart growth, and transit-oriented development, as well as the relationship of the project to local and regional economic development and land use plans, zones, or districts.

The Town is presently reviewing the West Chatham corridor with a visualization and land use planning study which is intended to dove-tail into the proposed context sensitive traffic safety and design improvements described above. There is presently some residential

housing above the businesses on the south side and single family residences on the north side but the corridor is primarily retail.

E. Environmental and Air Quality/Climate Effects

1. Please describe any project/program environmental quality issues or opportunities related to wetlands.

There are no anticipated impacts to wetlands.

2. Please describe any project/program environmental quality issues or opportunities related to water quality and water supply.

There is no anticipated degradation to water quality or water supply with the proposed project.

3. Please describe any project/program environmental quality issues or opportunities related to wildlife habitat and endangered species.

There are no anticipated impacts to wildlife or endangered species.

4. Please describe any project/program environmental quality issues or opportunities related to historic and cultural resources.

Two historic structures have recently been renovated. They are the Dunkin Donuts site at 1563 Main Street and the Fisherman Association, located at 1566 Main Street. All proposed improvements have been developed to not impact these sites in a detrimental way.

5. Please describe any project/program environmental quality issues or opportunities related to air quality and climate change.

With the improved corridor, vehicle delays are expected to be decreased, thus improving air quality.

F. Community Effects and Environmental Justice

1. Please describe any project/program community or neighborhood issues or opportunities such as emergency vehicle access, access to schools, cut-through traffic, etc.

Two neighborhood associations have been very active in the planning process and have been given presentation times in the public forum by the BOS. With Opticom proposed the new signal at Barn Hill Road, enhanced mobility is expected for emergency vehicles. Area residential abutters have been vocal at public hearings requesting for improved crosswalks across West Main Street. There are no public schools in the area and neighborhoods are directly accessed by the intersecting street and cut-through traffic has not been a concern.

- Please describe the type, magnitude, and extent of any project/program right-of-way impacts including takings, noise, property values, etc., and any associated mitigation efforts.

Minor encroachments are anticipated to occur at key area intersections. At the 25% stage, it is possible that easements will be explored to expedite the project. Major takings are not anticipated. It is anticipated that with the proposed neighborhood center concept, property values will be improved while the composition of traffic will remain the same, those not impacting noise levels from what they are today.

- Please note whether the project/program is in an environmental justice community/area as defined by the MPO, and describe any community or neighborhood issues or opportunities that the project or program may address related to environmental justice.

The West Main Street corridor is not an Environmental Justice area, as identified by the Cape Cod Commission (CCC) and defined by EOEEA. With the upgrade to the corridor, businesses are anticipated to grow, thus creating full and part-time jobs. There presently is limited residential housing along the corridor, but with the visioning study and development of the neighborhood center, additional housing may be forthcoming.

- Please describe any project/program community or neighborhood issues or opportunities related to the creation or rehabilitation of housing.

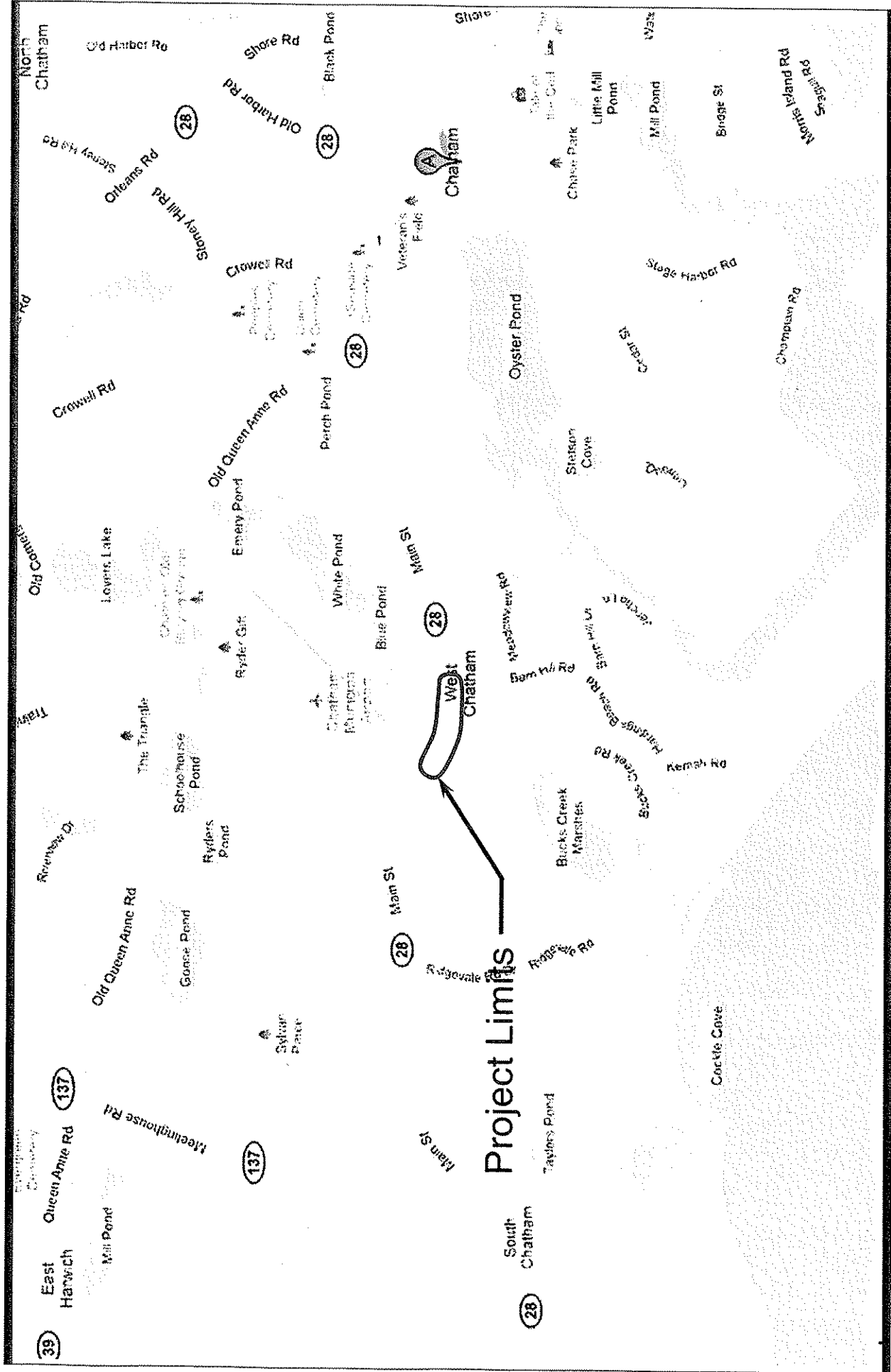
See # 3 above in addition to 3E above.

Part V: Future Activities and Project Management

- If the Highway Division approves this project, please check all remaining activities that will be necessary to implement this project/program and the responsible entity:

	<u>N/A</u>	<u>HighwayDivision</u>	<u>Municipality</u>	<u>Other</u>
State MEPA Env. Notification Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State MEPA Draft EIR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State MEPA EIR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal NEPA Categorical Exclusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal NEPA Environmental Assessment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal NEPA DEIS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal NEPA EIS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preliminary Design	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Final Design	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other Environmental Permitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Right-of-Way Permits and Takings	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for completing this form. Please submit this form and attachments to your local MassDOT Highway Division District Office.



West Chatham Corridor – Route 28 (Main Street)
Town of Chatham, Massachusetts

Locus Map

Schematic Diagram:
Not to Scale



Fay, Spofford & Thorndike, LLC
Engineers • Planners • Scientists