

United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form



This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Agawam Diner (The Diners of Massachusetts MPS)

other names/site number N/A

2. Location

street & number 166 Newburyport Turnpike not for publication

city or town Rowley vicinity

state Massachusetts code MA county Essex code 09 zip code 01969

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this ☒ nomination
☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of
Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property
☒ meets ☐ does not meet the National Register Criteria. I recommend that this property be considered significant
☐ nationally ☒ statewide ☐ locally. (☐ See continuation sheet for additional comments.)

Judith B. McDonough
Signature of certifying official/Title Judith B. McDonough, Executive Director
Massachusetts Historical Commission, State Historic Preservation Officer

7/29/99
Date

State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. (☐ See continuation sheet for additional Comments.)

Signature of certifying official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:

- ☒ entered in the National Register
☐ See continuation sheet.
☐ determined eligible for the
National Register
☐ See continuation sheet.
☐ determined not eligible for the
National Register
☐ removed from the
National Register
☐ other (explain):

Signature of the Keeper

Patrick Andrews

Date of Action

9/30/99

Agawam Diner
Name of Property

Rowley, Essex County, Massachusetts
County and State

5. Classification

Ownership of Property

(Check as many boxes as apply)

☒ private
☐ public-local
☐ public-State
☐ public-Federal

(Check only one box)

☒ building(s)
☐ district
☐ site
☐ structure
☐ object

Number of Resources within Property

(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
1	0	building
0	0	sites
0	0	structures
0	0	objects
1	0	Total

Name of related multiple property listing

(Enter "N/A" if property is not part of a multiple property listing.)

Twentieth-Century Commercial Architecture:

The Diners of Massachusetts

Number of contributing resources previously listed in the National Register

N/A

6. Function or Use

Historic Functions

(Enter categories from instructions)

COMMERCE/TRADE/restaurant

Current Functions

(Enter categories from instructions)

COMMERCE/TRADE/restaurant

7. Description

Architectural Classification

(Enter categories from instructions)

Other: Stainless Steel Diner

Materials

(Enter categories from instructions)

foundation concrete

walls stainless steel

roof metal

other

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

Agawam Diner
Name of Property

Rowley, Essex County, Massachusetts
County and State

8.

Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- ☒ **A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ **B** Property is associated with the lives of persons significant in our past.
- ☒ **C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ **D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- ☐ **A** owned by religious institution or used for religious purposes.
- ☒ **B** removed from its original location.
- ☐ **C** a birthplace or grave.
- ☐ **D** a cemetery.
- ☐ **E** a reconstructed building, object, or structure.
- ☐ **F** a commemorative property.
- ☒ **G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

Areas of Significance

(Enter categories from instructions)

Architecture

Commerce

Period of Significance

1954-1970

Significant Dates

1954

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Fodero Dining Car Company

9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary location of additional data:

- ☒ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Name of repository:

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

The Diners of Massachusetts MPS
Agawam Diner
Rowley (Essex Co.), MA

Section number 7 Page 1

7. Description

Agawam Diner, 166 Newburyport Turnpike, Rowley (MHC #139) is unique in Rowley and important in Massachusetts as a fine example of a large stainless steel diner. Fodero Dining Car Company of Bloomfield, New Jersey manufactured the diner in 1954. Originally installed in the neighboring town of Ipswich, the diner was moved in 1970 to its current site in the Kent's Corner section of Rowley. The site is at the southwest corner of the intersection of U. S. Route 1 (Newburyport Turnpike) and State Route 133 (Haverhill Street). The diner is set back about fifty feet from the Newburyport Turnpike, and has a parking area in the front and at the sides.

The Agawam has a steel frame with stainless steel cladding that incorporates horizontal and vertical bands in red. Steel fluted pilasters between the windows serve a functional as well as ornamental purpose, by enclosing the downspouts that channel roof run-off to the ground. Seven bays wide and six bays deep, excluding the rounded front corners, the pre-fabricated part of the diner is roughly square in massing. The projecting center-entry vestibule is a character-defining feature of stainless steel diners of this period. The vestibule has steel and glass doors on the sides, brick steps, and a clock centered over the front window. Fabric canopies and wrought iron railings at the vestibule are reversible alterations that do not compromise the historic architectural integrity of the diner. There is secondary entry with a glazed steel door on the north elevation; this entry is not in use. Windows in the diner are fixed plate glass, and the rounded corner windows contain curved glass. Signage consists of an internally lit box sign mounted on the roof of the entry vestibule. At the rear (western side) of the diner is a one-story, shed-roofed, wood-frame rear addition (ca. 1970). This addition is unobtrusive and does not compromise the integrity of the 1954 diner.

On the Agawam's well preserved interior, the dining and counter area occupy the front half (three bays deep) of the diner. The rear three bays of the diner are occupied by the kitchen (at the northern end and center) and restrooms (at the southern end). There is booth seating along the east (façade) wall, and banquettes with tables up the north and south walls. The booths are upholstered in red vinyl and the tables have Formica tops on steel posts. The original interior color scheme of salmon and yellow is retained throughout. The salmon and yellow monitor ceiling incorporates recessed lights. The white Formica counter has an apron of salmon-colored Formica with steel accents. The counter has staff entrances at the center and at the curved ends. Twelve counter stools are steel and the seats are upholstered in red vinyl. Other intact interior finishes include terrazzo tiles on the floors and at the foot rest of the counter, a steel back bar, salmon-colored Formica panels on the walls below the windows, and steel trim between the windows. Paired kitchen doors at the center of the back bar area are clad in stainless steel that displays a quilted design.

The tag over the entrance to the restrooms notes that Fodero Dining Car Company of Bloomfield, New Jersey manufactured the diner.

Archaeological Description

While no prehistoric sites are recorded on the nominated property, it is possible that sites are present. Eight sites are recorded in the general area (within one mile). Environmental characteristics of the property also represent favorable locational criteria for many types of prehistoric sites. The property is situated on a well drained, level terrace within 1000 feet of Bachelder Brook and related wetlands, part of the Parker River drainage. In general, however, the potential for locating significant prehistoric resources on the Agawam Diner property is low. Installation of an earlier diner on the site in 1947, the present diner in 1970, related utilities (sewage, water), and parking in the front and sides of the diner, all

(continued)

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

The Diners of Massachusetts MPS
Agawam Diner
Rowley (Essex Co.), MA

Section number 7/8 Page 2/1

on a 0.75 acre parcel have probably impacted any prehistoric resources present on the site. There is also a low potential for locating historic archaeological resources on the Agawam Diner property. No historic period resources have been identified on the property that predate the installation of the first diner in 1947. Structural remains and archaeological features related to the installation of that diner and its utilities may exist, however, these resources would be of limited research value.

(end)

8. Statement of Significance

Agawam Diner is a fine example of the Fodero-built diner in Massachusetts and Rowley's only pre-fabricated diner. The diner is locally significant for its association with the diner business run by the Galanis family, who have maintained a diner at this Rowley location since 1947. The existing diner, a 1954 Fodero, was moved to the site in 1970. The Agawam reflects the expansion of the Galanis family's diner operations in the region from 1940 to 1960, after which business consolidations led to the closing of diners in three other locations and the preservation of the existing diner in Rowley. For these reasons, the diner is of exceptional significance. Its relocation in 1970, from the original site in the neighboring town of Ipswich, is characteristic of the portable nature of diners and has not adversely affected the diner's historic and architectural integrity. The diner maintains a roadside orientation and setting at its current location. Retaining integrity of design, setting, materials, workmanship, feeling, and association, the Agawam Diner meets Criteria A and C and Criteria Considerations B and G of the National Register of Historic Places at the state and local levels.

Constructed in the first decade of the 19th century as the Newburyport Turnpike, U. S. Route 1 provides the most direct highway route from Boston north to the Merrimack River and onward to the New Hampshire state line. Rowley has far fewer commercial establishments on U. S. Route 1 (also known in Rowley as Newburyport Turnpike) than many of the other Route 1 communities north of Boston. The presence of the Agawam Diner here since 1947, however, reflects the importance of this highway to the region's character. The increasing popularity of the automobile and the inception of automobile tourism led to the expansion of roadside commercial activity in this highway corridor, which was designated a part of U. S. Route 1 in the late 1920s. A 1937 WPA map of Rowley indicates thirteen commercial establishments along the Rowley segment of the highway. From the 1920s to the late 1930s, a gas station occupied the approximate site of the present diner. [Johnson] Interstate 95, constructed in the late 1940s and early 1950s, bypasses U. S. Route 1 about two to three miles west of the diner site.

The history of the Agawam Diner spans three generations of the Galanis family and involves four separate diners located in three communities. In 1940, Peter Galanis, an Ipswich resident, opened the original diner near Market Street in Ipswich. According to a recent history of the Agawam [Garbin and Thomas], Worcester Lunch Car Company of Worcester manufactured this first diner. In 1947, the family opened a second diner on the site of the current diner, on U. S. Route 1 in Rowley, the town immediately northwest of Ipswich. Both branches of the Agawam operated out of Worcester-built diners, with the Ipswich location receiving a new Worcester manufactured in 1947, and the Rowley location receiving the original Worcester manufactured in 1940 and moved from Ipswich.

The business operated out of the two Worcester diners in Ipswich and Rowley until 1954, when the Galanis family purchased two diners built by Fodero Dining Car Company of Bloomfield, New Jersey. According to a son of the

(continued)

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

The Diners of Massachusetts MPS
Agawam Diner
Rowley (Essex Co.), MA

Section number 8 Page 2

original owner, the outdated appearance of Worcester diners at that time caused the family to change manufacturers. [Garbin and Thomas] The traditional barrel-roofed diner form popularized by Worcester Lunch Car Company did not survive the 1950s, as it became less desirable than the more modern stainless steel diner. The Galanis family installed one of the Fodero diners at its flagship location in Ipswich, and the second Fodero at a new location on U. S. Route 1 northbound in Peabody, roughly twelve miles south of the Rowley diner. With a new Fodero diner replacing the 1947 Worcester diner in Ipswich, the family sold that Worcester diner, which was then moved to Salem. The family's original 1940 Worcester diner remained at the location in Rowley.

From 1954 to 1960, the Galanis family operated an Agawam Diner in three locations – Ipswich, Rowley, and Peabody – until consolidating operations in 1960 and again in 1970. The Peabody branch of the Agawam was closed in 1960, and the Fodero diner at that location sold. Moved to Saugus and later known as the Thunderbird Diner, the former Peabody diner burned in 1963. A slow-down at the Sylvania plant in Ipswich contributed to a decline in the Agawam's business there, and the Ipswich location was closed in 1970. At that time, the Fodero diner in Ipswich was moved to the Rowley site, and survives today as the sole location of the Agawam Diner. The family's first Worcester diner, originally installed in 1940 in Ipswich, and moved in 1947 to Rowley, was sold in 1970. This diner survives about eight miles north of the Rowley site as the Fish Tale Diner, on Bridge Street off U. S. Route 1 in Salisbury.

Joseph Fodero started Fodero Dining Car Company in 1933. Earlier in his career, he worked for diner manufacturers P. J. Tierney and Sons, as foreman of the metal shop, and then Kullman Dining Car Company, as foreman. From 1939 to World War II, Fodero's business was known as National Dining Car Company. This business, which Fodero maintained in partnership with Milton Glick, shut down when World War II brought "depleted manpower and the government confiscating steel, copper, and other essentials." [Gutman, 135] Fodero resumed production under his own name after the war, at which point his sons, Pat and Ted, joined the company. The business moved production to Bloomfield in 1953, one year before the Agawam was manufactured, and continued operations until 1981. According to Gutman, Fodero diners are highly decorative with outstanding stainless steel work. [Gutman, 230]

The Agawam is among the better preserved of six Fodero diners extant in Massachusetts, and the best preserved of the Foderos that post-date 1950. Others post-1950 examples include the former Jimmy's Diner, Route 138, Stoughton (1958, formerly located in Mattapan and Quincy), which has been bricked over and converted to office use; the Olympian Diner (ca. 1960, formerly in Braintree), a colonial-style diner that is now in storage; and the Beckwith Elevator Building, 274 Southamptton Street, Boston (1971, formerly the Newmarket Diner and the Supreme Diner), which was originally a colonial-style diner and later an office. There are only a small number of pre-1950s Foderos left [Dancing, 32]. In Massachusetts, they include the Charles Diner, 218 Union Street, West Springfield (1948) and the Edgemere Diner, 51 Hartford Turnpike (U. S. Route 20), Shrewsbury (late 1940s). With a combination of monitor roof, porcelain enamel wall panels, and steel ornament at the rounded corners, the Edgemere, for example, illustrates a transition between the streetcar-inspired diner form common before World War II and the modern, stainless steel diner represented by the Agawam.

(end)

Agawam Diner
Name of Property

Rowley, Essex County, Massachusetts
County and State

10. Geographical Data

Acreage of Property three-quarters of an acre

UTM References See continuation sheet.

(Place additional UTM references on a continuation sheet.)

1. 19 343550 4729570
Zone Easting Northing

2.
Zone Easting Northing

3.
Zone Easting Northing

4.
Zone Easting Northing
— See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Kathleen Kelly Broomer, consultant, with Betsy Friedberg, NR Director, MHC

organization Massachusetts Historical Commission date July 1999

street & number 220 Morrissey Boulevard telephone (617) 727-8470

city or town Boston state Massachusetts zip code 02125

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name Agawam Restaurant Inc.

street & number 166 Newburyport Turnpike telephone 978-948-2705

city or town Rowley state MA zip code 01969

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503. NPS Form 10-900 OMB No.

1024-0018
(Rev. 10-90)

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

The Diners of Massachusetts MPS
Agawam Diner
Rowley (Essex Co.), MA

Section number 9/10 Page 1

9. Major Bibliographical References

Garbin, Randolph and Gary Thomas. "Diner to Diner: Diner School. The Agawam Diner." *Roadside Online* (www.roadsidemagazine.com), Coffee Cup Publications, 1998.
Gutman, Richard J. S. *American Diner Then and Now*. New York: Harper Collins Publishers, 1993.
MHC Inventory Form for Agawam Diner, Rowley (recorded by Sanford Johnson), February 1997.
Crowley and Lunt. *Ipswich, Massachusetts Street and House Directory*, 1940-1942.
Interview with diner historian Richard Gutman (see also above), November 23, 1998.
Interview with diner historian Larry Cultrera (also author of "Diner Hotline," a regular feature in *Society of Commercial Archeology's Journal*), November 19, 1998.
Diner Finder Deluxe: Massachusetts. Watertown, MA: Coffee Cup Publications, 1991.
Dancing, Mariah. "Back from the Edge (Edgemere Diner, Shrewsbury)." *Roadside Magazine* #24, 1997, pp. 10ff.

(end)

10. Geographical Data

Verbal Boundary Description

The boundary of the nominated property is shown on the accompanying detail of the Town of Rowley assessors' map.

Boundary Justification

The boundary includes the entire parcel that has been associated with the Agawam Diner since placement of the existing diner on this site in 1970.

(end)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Agawam Diner
NAME:

MULTIPLE Diners of Massachusetts MPS
NAME:

STATE & COUNTY: MASSACHUSETTS, Essex

DATE RECEIVED: 8/09/99 DATE OF PENDING LIST: 8/24/99
DATE OF 16TH DAY: 9/09/99 DATE OF 45TH DAY: 9/23/99
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 99001124

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

___ ACCEPT ___ RETURN ___ REJECT ___ DATE

ABSTRACT/SUMMARY COMMENTS:

*Historically and architecturally significant
mid-20th century diner*

RECOM./CRITERIA accept A&C

REVIEWER Patrick Ardus DISCIPLINE Historian

TELEPHONE _____ DATE 9/22/99

DOCUMENTATION see attached comments Y/N see attached SLR Y/N



AGAWAM
DINER

Agawam Diner
166 Newburyport Turnpike
Rowley, Essex County, Mass.

View NW

1998

Photo: KK Broomer

Neg: MHC



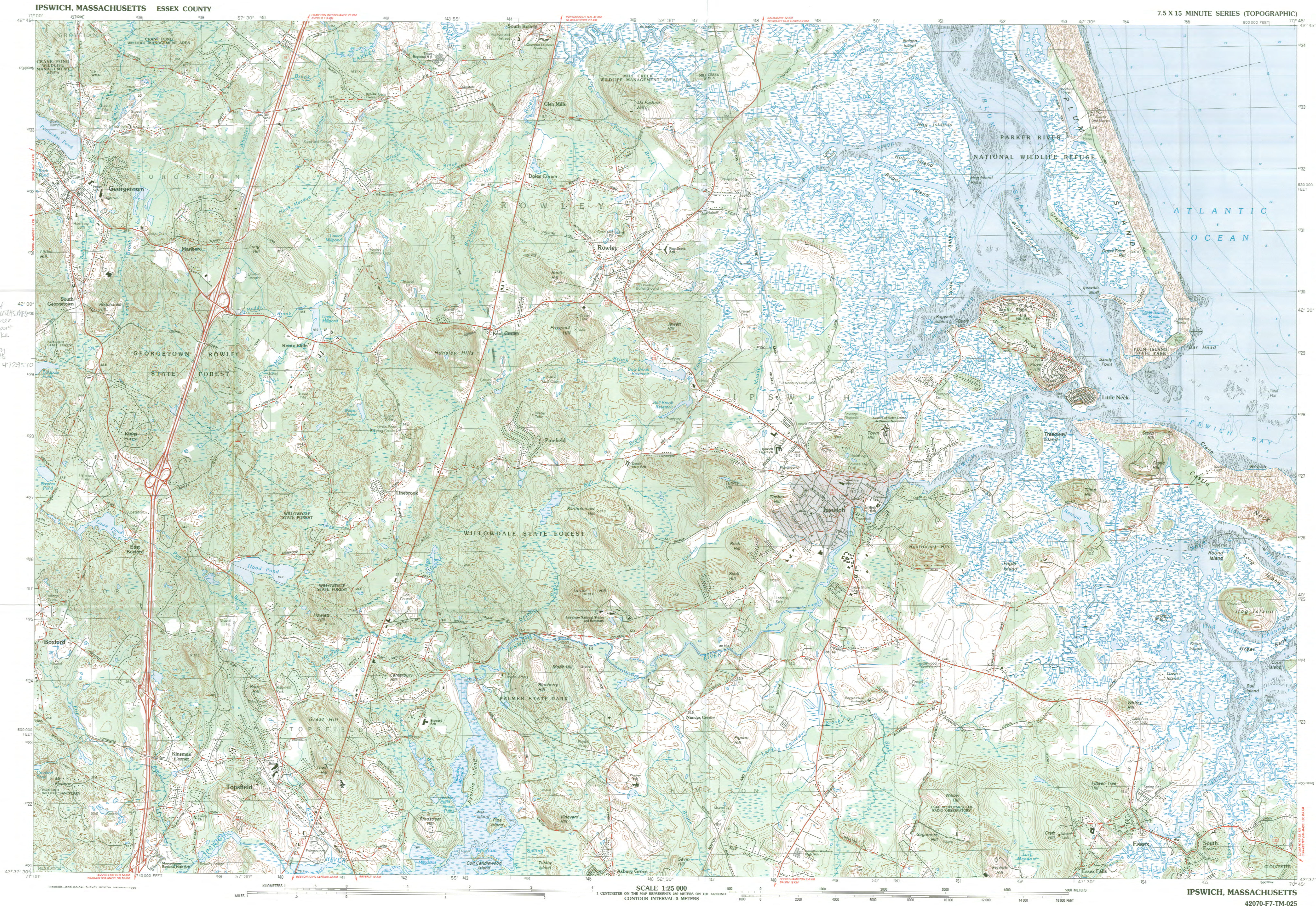
Agawam Diner
166 Newburyport Turnpike
Rowley, Essex County, Mass.

Interior view NW

1998

Photo: KK Broomer

Neg: MHC



The Drivers of
Massachusetts
Rte Newburyport
Rowley
Essex County
Massachusetts
19 343550 4729570

Ipswich
MASSACHUSETTS

1:25 000-scale metric
topographic map

7.5 X 15 MINUTE QUADRANGLE
SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names

GEOLOGICAL SURVEY

1985

Published by the United States Geological Survey
in cooperation with Massachusetts Department
of Public Works

Control by USGS, NOS/NOAA, USCE, and Commonwealth
of Massachusetts agencies

Compiled by photogrammetric methods from aerial photographs
taken 1978. Field checked 1979. Map dated 1985

Supersedes Georgetown and Ipswich 1:25,000-scale maps dated 1966

Selected hydrographic data compiled from NOS charts 13279 (1983)
and 13282 (1978). This information is not intended for navigational
purposes

Projection and 1000-meter grid: Universal
Transverse Mercator, zone 19

10,000-foot grid ticks based on Massachusetts coordinate
system, mainland zone

1927 North American Datum

To place on the predicted North American Datum 1983
move the projection lines 6 meters south and
42 meters west as shown by dashed corner ticks

There may be private inholdings within the boundaries of
the National or State reservations shown on this map

CONTOUR INTERVAL 3 METERS

NATIONAL GEODETIC VERTICAL DATUM OF 1929
CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 METER
OTHER ELEVATIONS SHOWN TO THE NEAREST 0.5 METER

DEPTH CURVES AND SOUNDINGS IN METERS

DATUM IS MEAN LOW WATER

THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE
OF MEAN HIGH WATER

THE MEAN RANGE OF TIDE IS APPROXIMATELY 2.6 METERS

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

CONVERSION TABLE	DECLINATION DIAGRAM	ADJOINING MAPS
Meters	Feet	1 2 3
1,000	3,281	4 5
2,000	6,562	6 7 8
3,000	9,843	
4,000	13,123	
5,000	16,404	
6,000	19,685	
7,000	22,966	
8,000	26,247	
9,000	29,528	
10,000	32,809	

To convert meters to feet:
multiply by 3.281

To convert feet to meters:
multiply by 0.3048

UTM grid convergence
(NM) and 1983 magnetic
declination (NM)
at center of map
Diagram is approximate

1 Haverhill
2 Newburyport
3 Lawrence
4 Rockport
5 Reading
6 Gloucester

ISBN 0-607-23452-0
9 780607 234527

Topographic Map Symbols

Symbol	Description
Primary highway, hard surface	
Secondary highway, hard surface	
Light-duty road, hard or improved surface	
Unimproved road, trail	
Route marker: Interstate, U. S., State	
Relief: standard gage, narrow gage	
Bridge: drawbridge	
Footbridge, overpass, underpass	
Built-up area: only selected landmark buildings shown	
House, barn, church, school, large structure	
Boundary	
National, with monument	
State	
County, parish	
Civil township, precinct, district	
Incorporated city, village, town	
National or State reservation, small park	
Land grant with monument, land section corner	
U. S. public lands survey: range, township, section	
Range, township, section line: location approximate	
Fence or field line	
Power transmission line, located tower	
Dam; dam with lock	
Cemetery, grave	
Campground, picnic area, U. S. location monument	
Wellhead, water well, spring	
Mine shaft; prospect, adit or cave	
Control: horizontal station; vertical station; spot elevation	
Contour: index, intermediate, supplementary, depression	
Disturbed surface: strip mine, levee, sand	
Barometric contours: index, intermediate	
Perennial lake and stream, intermittent lake and stream	
Rapids, large and small; falls, large and small	
Submerged marsh, marsh, swamp	
Land subject to controlled inundation; woodland	
Scrub, mangrove	
Orchard; vineyard	

A pamphlet describing topographic maps is available on request