

NOTICE TO BIDDERS

Crack Sealing of County Bridges Worcester County, Maryland

The Worcester County Commissioners are currently accepting bids for county-wide crack sealing on the asphalt wearing surface of various bridges in Worcester County to be completed by June 15, 2018 for the Roads Division of the Worcester County Department of Public Works. Bid specification packages and bid forms are available from the Office of the County Commissioners, Room 1103 - Worcester County Government Center, One West Market Street, Snow Hill, Maryland 21863, obtained online under the "Bids" drop-down menu in the lower right hand side of the home page at www.co.worcester.md.us or by calling the Commissioners' Office at 410-632-1194 to request a package by mail. **Sealed bids will be accepted until 1:00 PM, Tuesday, March 13, 2018** in the Office of the County Commissioners at the above address, at which time they will be opened and publicly read aloud. Envelopes shall be marked "**Crack Seal Bid**" in the lower left-hand corner. After opening, bids will be forwarded to the Department of Public Works for tabulation, review and recommendation to the County Commissioners for their consideration at a future meeting. In awarding the bid, the Commissioners reserve the right to reject any and all bids, waive formalities, informalities and technicalities therein, and to take whatever bid they determine to be in the best interest of the County considering lowest or best bid, quality of goods and work, time of delivery or completion, responsibility of bidders being considered, previous experience of bidders with County contracts, or any other factors they deem appropriate. All inquiries shall be directed to Frank Adkins, Roads Superintendent, at 410-632-2244, Monday through Thursday, 6:00 am to 4:30 pm.

Bid Specifications

The Worcester County Commissioners are currently accepting bids for crack sealing the asphalt wearing service on various County-wide bridges. Sealed bids will be accepted until **1:00 PM, Tuesday, March 13, 2018**, at the Worcester County Commissioners Office, Room 1103, Worcester County Government Center, One West Market Street, Snow Hill, MD 21863 at which time they will be opened and publicly read aloud. After opening, bids will be forwarded to the Department of Public Works for tabulation, review and recommendation to the County Commissioners for award at a future date. **Envelopes must be marked in lower left corner with "Crack Seal Bid"**.

LATE BIDS: Bids should be mailed or hand delivered to the Office of the County Commissioners by **1:00 PM, Tuesday, March 13, 2018**. Bids received after the appointed time will not be considered.

PRE-CONSTRUCTION: A mandatory pre-construction meeting will be required within five (5) days prior to commencement of work at the Roads Division building located at 5764 Worcester Highway, Snow Hill, MD 21863.

TIMELINE: The work is to be completed by **June 15, 2018**. If all work is not completed as specified within liquidated damages shall be imposed as stated. **No work will be performed on weekends or holidays.**

BOND: Performance and Labor and Materials Bond – Bidders/Contractors shall furnish a Performance and Labor and Materials Payment Bond covering the faithful performance of the Contract and the payment of all obligations arising there under and complying with the requirements of Maryland law. Both bonds shall be in the amount of one hundred percent (100%) of the Contract amount and shall name the County Commissioners of Worcester County as the obligee. Firms issuing bonds must be licensed to write bonds in the State of Maryland. The Contractor shall pay premiums for required bonds. The Bidders total price to perform this contract shall include all costs for the bonds.

WARRANTY: All work and materials shall be warranted for a period of one year.

SCOPE OF WORK/SPECIFICATIONS:

Description:

Clean then fill or seal cracks between 1/8 inch and of 1 inch wide. Repair cracks 1 inch or larger with asphalt repair mastic. Do not fill or seal cracks less than 1/8 inch wide. Repair distressed areas as specified and as directed.

Materials:

Referenced SHA section 510.02: Crack filler 911.01; crack sealer 911.01; and asphalt repair mastic 911.01.02.

Equipment:

Referenced SHA section 510.03.01:

- a) **Air Compressor.** Air compressors shall be portable, oil-free and capable of furnishing air a minimum of 100 cfm with a minimum blast flow of 150 cfm. The compressor shall have a ¾ inch diameter nozzle.
- b) **Hot Air Lance.** The Hot Air Lance shall produce a minimum temperature of 750 F at a minimum velocity of 650 fps. The Hot Air Lance shall be designed so that the flame does not come in contact with the pavement.
- c) **Melting Kettle:** The Melting Kettle shall be a self-contained double boiler capable of heating the sealant to 400 F using oil as a heat transfer medium. The kettle shall be equipped with an automatic temperature control unit capable of achieving and maintaining a predetermined sealant temperature. The temperature control unit should not allow the heat transfer oil to exceed 525 F. The unit shall be capable of reading the temperature of the sealant within the melting vessel and within the discharge plumbing. The kettle shall also have a means to strongly and continuously agitate the sealant and apply the sealant to the pavement under pressure supplied by a gear pump with a direct connecting applicator tip. Do not use direct-fired kettles.
- d) **Hand Tools.** Provide all hand tools such as brooms, shovels, metal bars with chisel shaped ends, tamping equipment and other miscellaneous tools necessary to complete the work.
- e) **Squeegee.** Provide a metal industrial-type squeegee no more than 2-1/2 inch wide to shape the material into a feather-edge band.
- f) **Crack Router.** The crack router shall be capable of following random cracks and be designed to adjust cutting widths. The router width shall touch both sides of the crack for proper cutting. The router shall remove 1/8 inch from each side of the crack and cut back to sound pavement.
- g) **Mastic Mixer.** The Mastic Mixer shall be thermostatically controlled and capable of heating the mastic mixture using oil as a heat transfer medium. The Mastic mixer must be equipped with a full sweep horizontal agitator cable of gently lifting the material from the bottom of the reservoir and mixing the material thoroughly. The agitator shall be capable of mixing and suspending materials filled with aggregates with a specific gravity as high as 3.0.

Crack Identification:

Referenced SHA section 510.03.04.

Wheel Path. Wheel path is defined as a distance of 16 inch to 56 inches (width of 40 inches) from the left or right of the center line of the roadway travel lane.

Non-Working Cracks. Cracks with little annual horizontal or vertical movements that are less than 0.1 inches.

Working Cracks. Cracks with significant annual horizontal or vertical movements (≥ 0.1 inches).

- a) **Crack Filling.** Identify non-working cracks within the wheel path 1/8 to 1 inch wide at the pavement joints including paving and patching construction joints and transverse cracks. Identify longitudinal cracks outside of wheel path areas.
- b) **Crack Sealing.** Identify working cracks within the wheel path 1/8 to 1 inch wide at the pavement surface, including transverse reflective cracks. Identify longitudinal cracks outside of wheel path areas.
- c) **Asphalt Repair Mastic.** Identify cracks of a least 1 inch width, potholes and other vertically uneven roadway elements as directed.

Cleaning and Preparation:

Referenced SHA section 510.03.05.

Cleaning. All surfaces shall be dry and free of all dirt, dust, grease, and loose material prior to application of the filler. The cracks shall be cleaned by the use of compressed air produced from an air-compressor. The use of portable handheld or backpack blowers is not allowed. Direct the compressed air cleaning away from the passing traffic and do not blow debris into an already cleaned crack. Alternative methods of cleaning are subject to review and approval.

Drying. Dry the crack using a hot air lance prior to filler placement. The use of direct flame dryers is not permitted. Do not overheat pavement surfaces.

Crack Routing. For crack sealing, route cracks to be sealed by forming a reservoir with a width between 0.5 to 1.5 in and a depth of ¾ inch. Perform routing in such a way that the pavement does not spall. Do not perform routing on longitudinal joint cracks unless otherwise directed.

Weather Restrictions. Perform crack filling or sealing when the ambient and pavement surface temperatures are at least 45 F and rising, unless otherwise recommended by the manufacturer and as approved. Do not place sealant material if the pavement is wet. Should rain fall before the sealant has properly cured, remove and replace at no additional cost.

Installation:

Referenced SHA section 510.03.07. Heat the filler or sealant to recommended application temperature. Fill the crack using the flush fill method. Using the overband method is not permitted. Perform material handling and installation in accordance with the manufacturer's instructions. Level and smooth the material to the desired level immediately after placement using a straight metal or rubber squeegee.

Traffic Restrictions. Apply sand or the manufacturer's recommended blotter material to minimize tracking and remove excess material before opening to traffic.

Acceptance. Filler that pulls loose within 96 hours after opening the pavement to traffic shall be repaired at no additional costs.

Asphalt Repair Mastic:

Referenced SHA section 510.03.08.

Primer. Apply a surface conditioner or primer when recommended by the mastic manufacturer to the surfaces prior to placement of the asphalt repair mastic. Apply in accordance with manufacturer's recommendations to promote increased surface adhesion to the existing pavement. The surface conditioner or primer must thoroughly cover all surface areas where the asphalt repair mastic will be placed. Do not install the asphalt repair mastic until the surface conditioner or primer has sufficiently cured per recommendations.

Application Temperature. The minimum application temperature shall be per the manufacturer's recommendations. The maximum application shall be 410 F, or per the manufacturer's recommendations.

Installation. The installer must be trained and approved by the mastic manufacturer.

a) Heat the asphalt repair mastic using the Mastic Mixer. Place the heated mastic onto the properly prepared pavement in layers if necessary.

- b) Use the heated hand squeegee to level and smooth the mastic until the material has formed a durable, well-bonded, level repair. Keep the heated hand squeegee free of material buildup to ensure a smooth, quality finished product.
- c) Apply the mastic to the surface area from the bottom up in lifts appropriate to the specific application. Due to the depths of some of the repair locations, multiple lifts may be required to obtain a level surface. In the event that multiple lifts are required, allow each lift to be properly cooled before any subsequent lifts are applied on top. The final lift shall fill the uppermost 0.5 to 1 inch of the work area. Remove and dispose of all excess material from the roadway.

MAINTENANCE OF TRAFFIC

Conformance requirements:

SHA "Standard Specifications for Construction and Materials" (SHA Standard Specifications)
section 104

SHA "Book of Highway Standards"

FHA "Manual on Uniform Traffic Control Devices" (MUTCD)

The contractor must maintain traffic at all times throughout the entire length of the project, including public and private and commercial entrances, street intersections, etc.

Traffic Manager (TM) - Traffic Control Plan (TCP)

Referenced SHA section 104.02.03

The contractor shall appoint a Traffic Manager responsible for Maintenance of Traffic conformance requirements. This individual shall develop and submit to the County a Traffic Control Plan suitable to his plan of construction for a given location. This plan will be reviewed with the project inspector and jointly agreed upon prior to starting the work. If during the course of the work adjustments are necessary to traffic control measures the contractor shall take corrective action as required or directed.

Temporary Traffic Signs (TTS):

The contractor shall furnish and install all necessary TTS as required by Sec. 6B of the MUTCD.

Cones:

Cones shall meet the requirements of Sec. 104.14 SHA Standard Specifications.

Flaggers-Pilot Vehicles-Radio Communication:

The contractor shall furnish all necessary MD SHA Certified flag persons in conformance with Section 6F of the MUTCD and Sec. 104.15 of the SHA Standard Specifications. Flaggers shall use STOP/SLOW paddles. Two-way radios or pilot vehicles shall be used whenever flaggers are not within sight distance of each other, or when directed by the Engineer. If there are not enough Certified Flaggers, the paving operation will cease until adequate safety concerns are addressed.

Basis of Payment:

All aforementioned items under this section Maintenance of Traffic will NOT be paid for directly and shall be considered incidental to the other pay items.

MOBILIZATION:

Movement of personnel and equipment to and from the project sites and staging equipment will not be paid for directly and shall be considered incidental to the other pay items.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

All correspondence and invoices are to be sent to the Worcester County Department of Public Works, Roads Division, 5764 Worcester Highway, Snow Hill, MD 21863.

The County Commissioners shall be the sole judge as to whether or not any bid meets specifications. The County Commissioners reserve the right to accept or reject any bid in the best interest of the County.

- 1. **LIQUIDATED DAMAGES** - For each day that the work shall remain uncompleted after the time specified for completion, the sum per day, given in the following schedule shall be deducted by the County from monies due the Contractor, not as a penalty, but as liquidated damaged.

<u>Amount of Contract</u>	<u>Amount of Liquidated Damages per Day</u>
Less than \$10,000	\$ 80.00
\$10,000 and less than \$50,000	\$160.00
\$50,000 and less than \$100,000	\$240.00
Greater than \$100,000	\$400.00

- 2. **CONTRACTOR’S INSURANCE** - The contractor shall take out and maintain during the life of this contract, Workmen’s Compensation Insurance for all of his or any subcontractor’s employees employed at the site of the work; and such Public Liability and Property Damage Insurance as shall protect him from claims which may arise from operations under this contract for personal injury (including accidental death) as well as for property damage - whether such operations are by himself or by any subcontractor, or by anyone directly employed by them.

Public Liability Insurance shall be in the amount not less than \$500,000 for injuries, including wrongful death to any one person; and, subject to the same limit for each person, in an amount not less than \$1,000,000 on account of one accident.

Property Damage Insurance shall be in an amount not less than \$500,000 for damages on account of any one accident, and in an amount not less than \$1,000,000 for damages on account of all accidents.

MEASUREMENT AND PAYMENT

- 1. **MEASUREMENT OF QUANTITIES** - The Engineer shall make final measurements to determine the quantities of various items of work performed as the basis of final settlement. Pay weight for all items to be paid for by weight shall be determined by actual certified scale weight, certified shipping weight, or by computed weight as specified herein. Materials specified for measurement by tallying of vehicles shall be hauled only in approved units, the carrying capacity of which has been pre-determined. Each hauling unit shall be marked to designate its approved capacity.
- 2. **PARTIAL PAYMENTS** - Partial payments shall be made monthly in an amount not greater than 90% of the money earned during the pay month. The Contractor shall prepare the application for payment in form satisfactory to the Engineer. Process time shall be thirty (30) days upon receipt.

3. **ACCEPTANCE AND FINAL PAYMENT** - When in the opinion of the Engineer, the Contractor has completed the work in a satisfactory manner in accordance with the terms of the contract, the Engineer shall make final inspection of the entire project and shall certify in writing to the County as to the completion of the work submitting with this report the final estimate showing the amount of each item of work performed as the value thereof.
4. **RELEASE OF LIENS** - The Contractor shall deliver (in a form satisfactory to the owner) a written report to the effect that all bills for labor, materials, and supplies have been paid or satisfactorily secured.
5. **CONSENT OF SURETY** – Projects bonded by a surety bond will require written **CONSENT OF SURETY FOR FINAL PAYMENT**.

BID FORM

“Crack Seal Bid – FY18”

I/We the undersigned have received and reviewed all the bid documents for crack sealing the asphalt wearing surface on various bridges in Worcester County, and fully understand the documents and requirements in their entirety. The County reserves the right to increase or decrease quantities depending on the bid amount as approved by the County Commissioners

Total Bid Price \$ _____

Work is to be completed by **June 15, 2018**.

BID MUST BE SIGNED TO BE VALID.

Date: _____ Signature: _____

Typed Name: _____

Title: _____

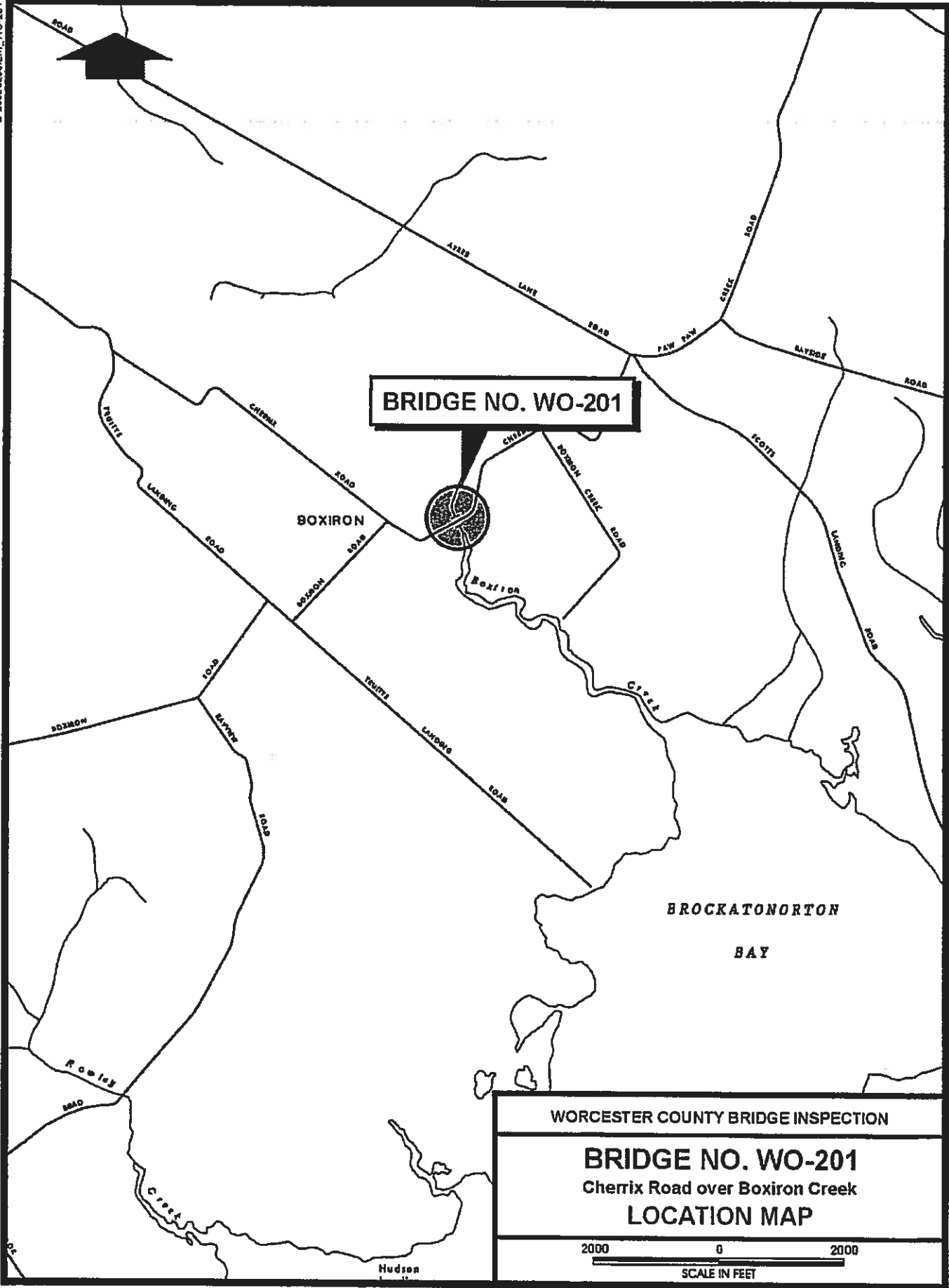
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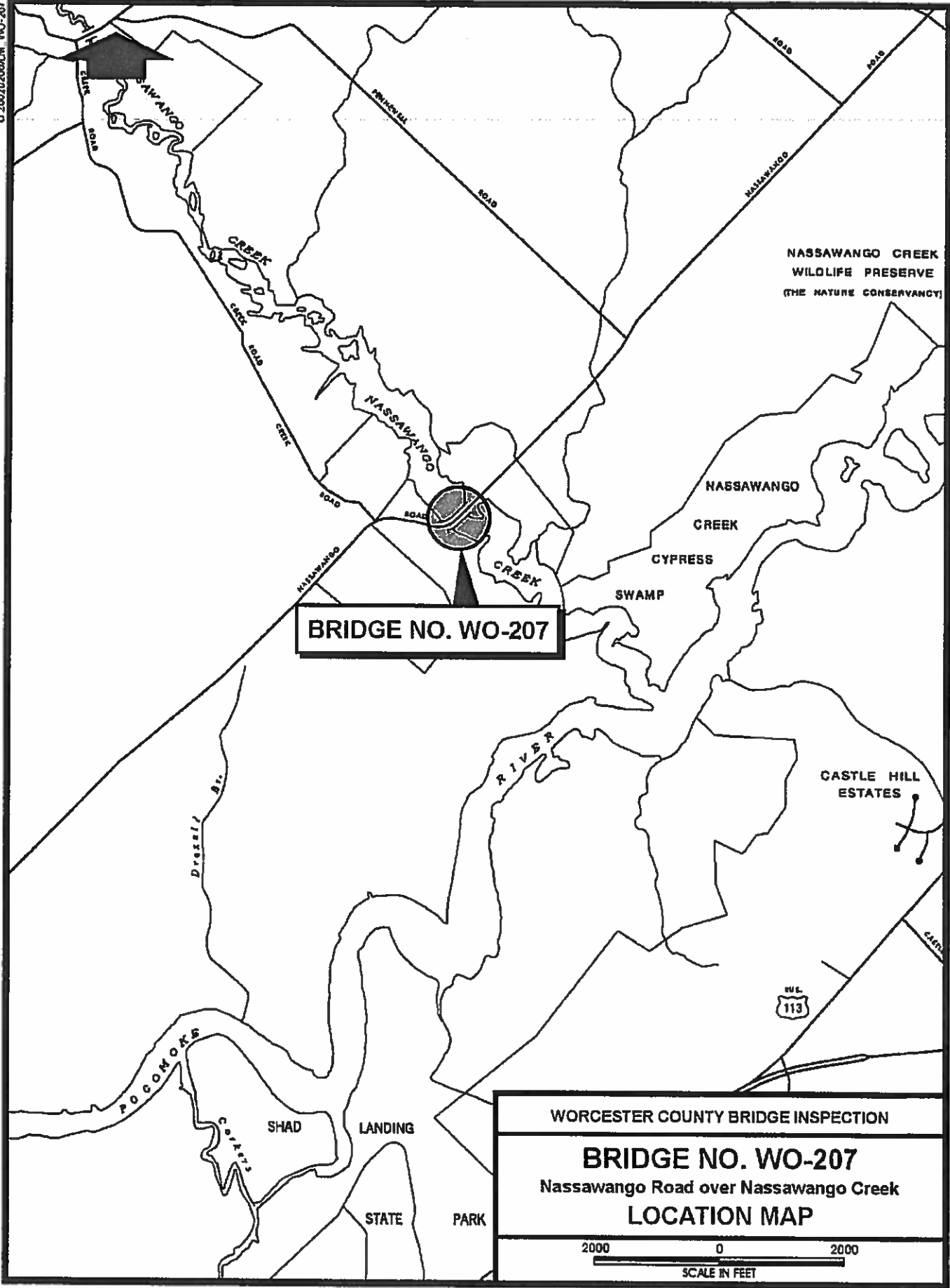
Address: _____

Phone: _____

PROPOSED CRACK SEALING FY18

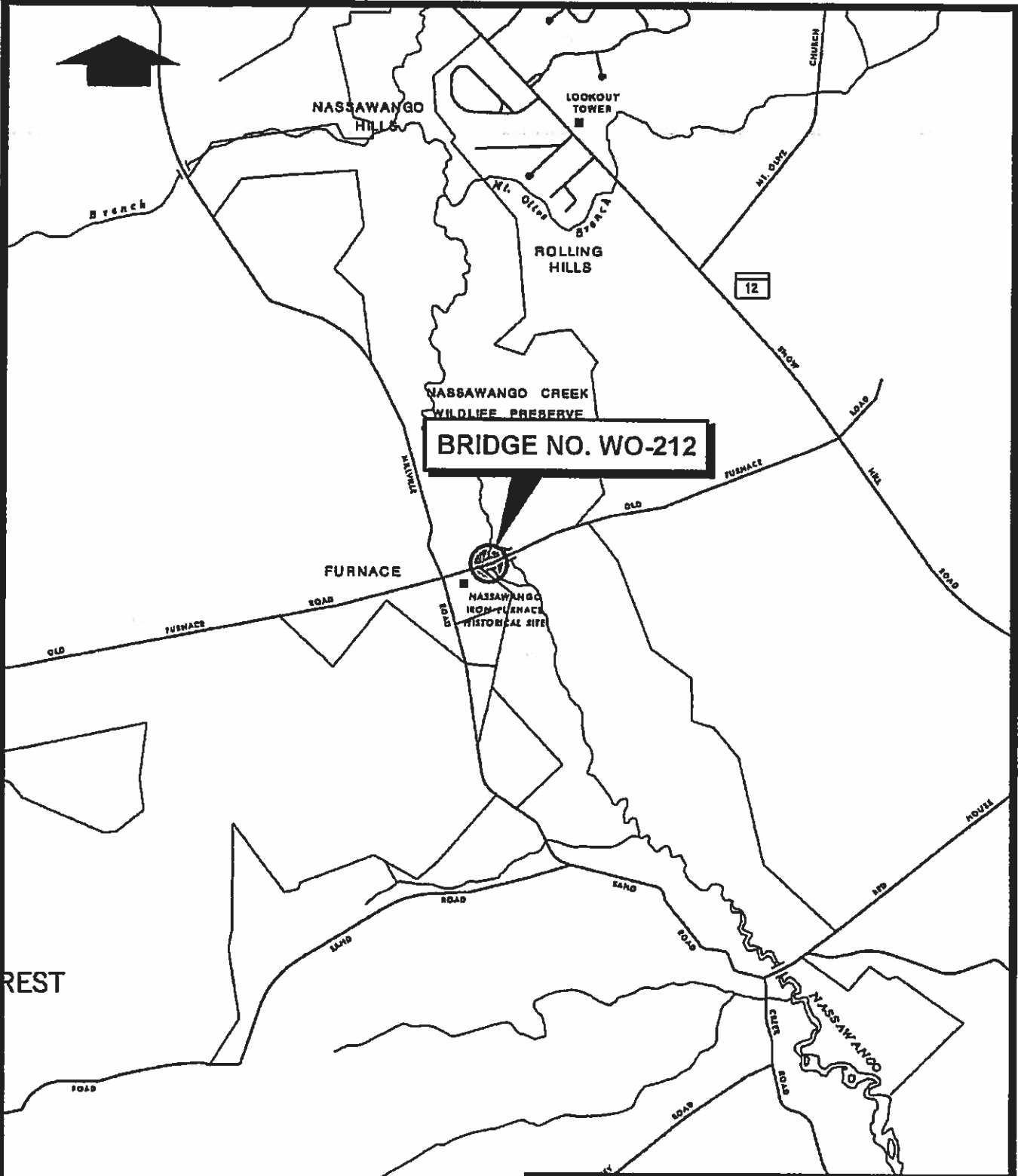
Bridge #	Roadway	Crossing
WO201001	Cherrix Road	Box Iron Creek
WO207001	Nassawango Road	Nassawango Creek
WO212001	Old Furnace Road	Nassawango Creek
WO213001	Porters Crossing Road	Pocomoke River
WO302001	Hayes Landing Road	Newport Creek
WO308001	Timmonstown Road	Narrow Branch
WO309001	Massey Crossing Road	Pocomoke River
WO403001	Whiton Crossing Road	Pocomoke River
WO404001	Sandyfield Road	Ninepin Branch
WO405001	Ninepin Branch Road	Ninepin Branch
WO501001	Campbelltown Road	Birch Branch
WO703001	Whitesburg Road	Pusey Branch
WO705001	Five Bridges Road	Dividing Creek
WO804001	Kleg Grange Road	Jones Ditch





BRIDGE NO. WO-207

WORCESTER COUNTY BRIDGE INSPECTION		
BRIDGE NO. WO-207		
Nassawango Road over Nassawango Creek		
LOCATION MAP		
2000	0	2000
SCALE IN FEET		



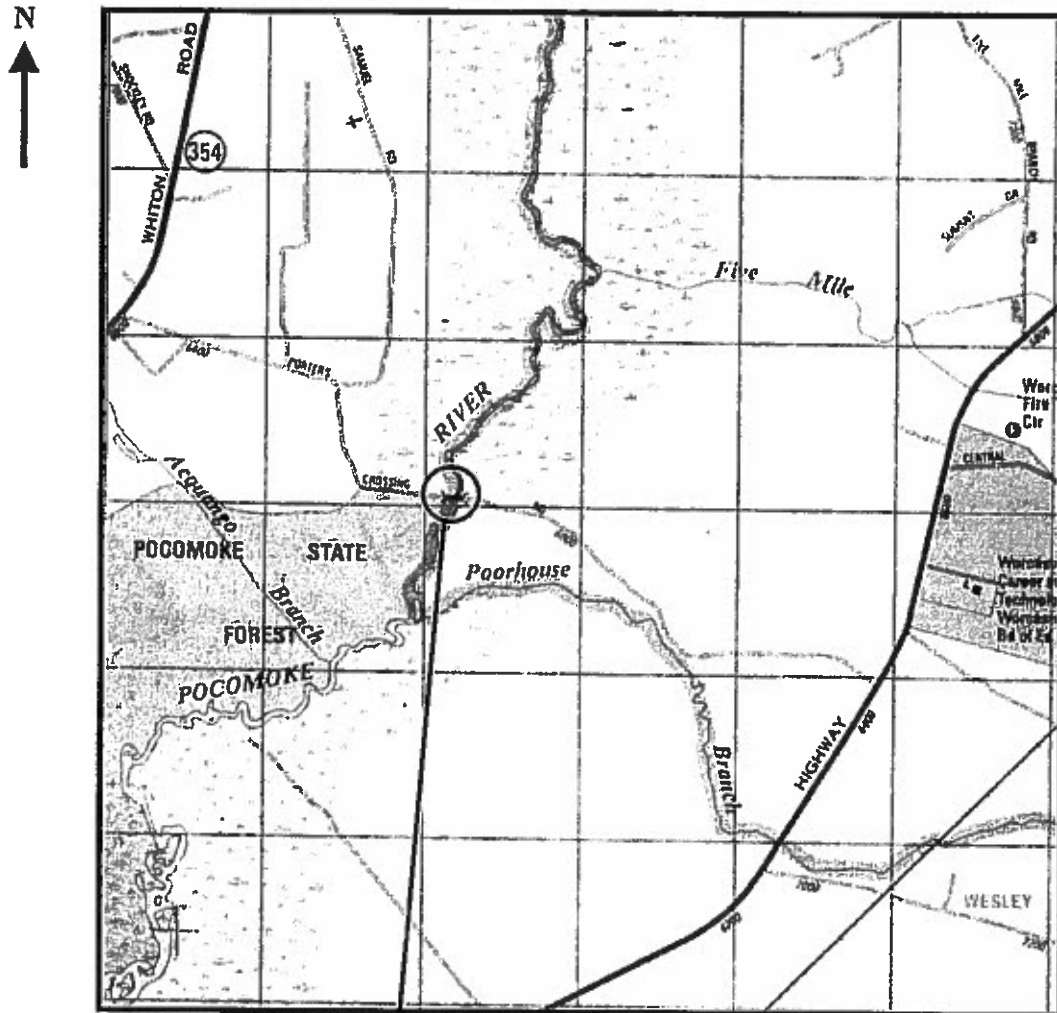
BRIDGE NO. WO-212

WORCESTER COUNTY BRIDGE INSPECTION

BRIDGE NO. WO-212
Old Furnace Road over Nassawango Creek
LOCATION MAP



2016 WORCESTER COUNTY BRIDGE INSPECTION
BRIDGE No. WO-0213001 – PORTERS CROSSING ROAD over POCOMOKE
RIVER

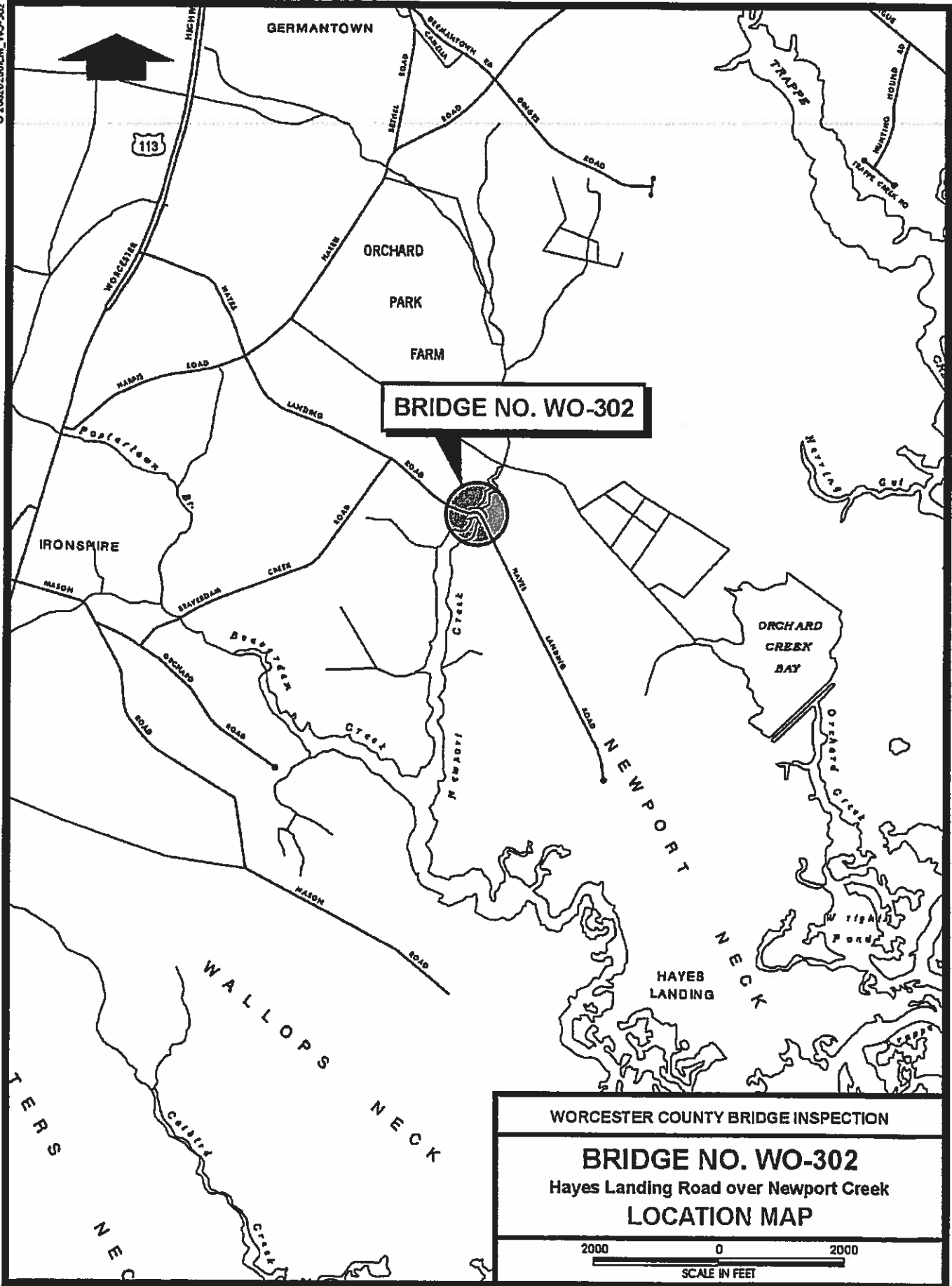


BRIDGE No. WO-0213001
PORTERS CROSSING ROAD
over POCOMOKE RIVER

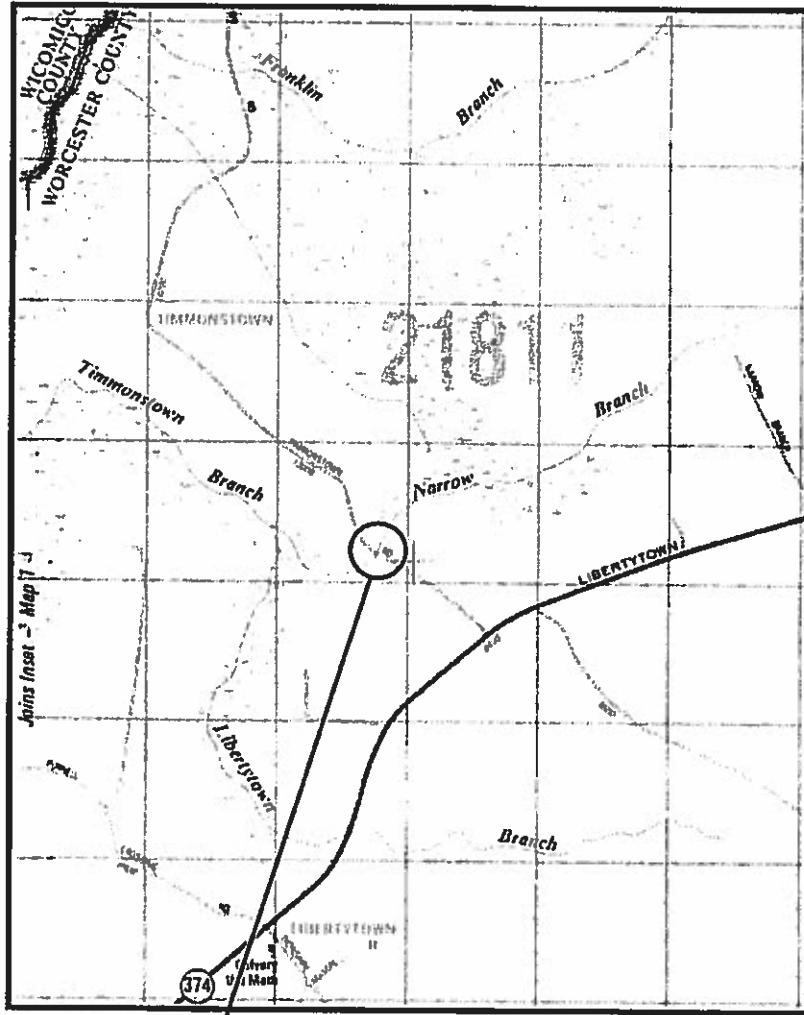
ADC Street Grid Location: 21-C3

LOCATION MAP

Map Copyright © Universal Map Group LLC, (800) 829-6277



2016 WORCESTER COUNTY BRIDGE INSPECTION
BRIDGE No. WO-0308001 – TIMMONTOWN ROAD over NARROW BRANCH

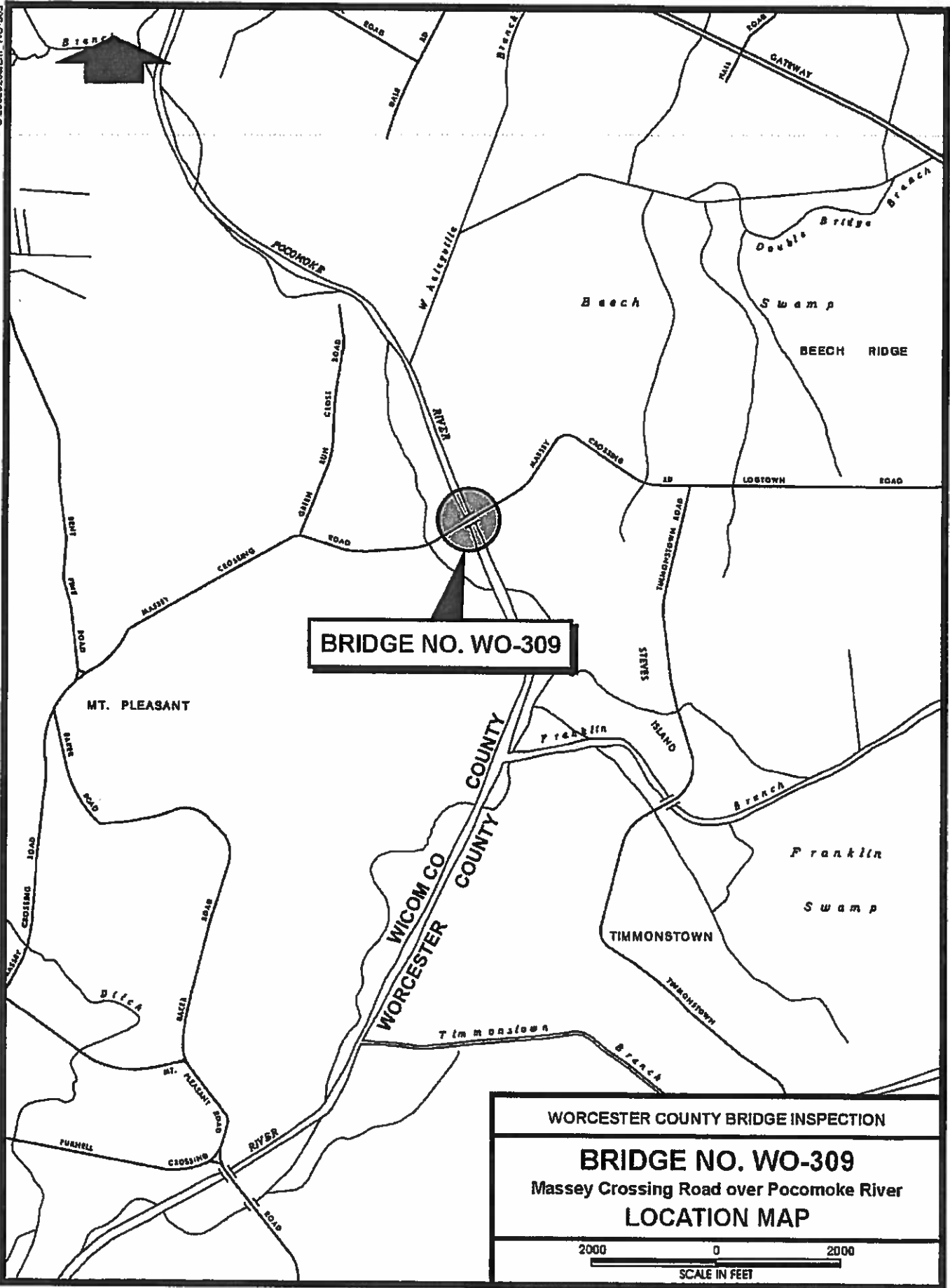


BRIDGE No. WO-0308001
TIMMONTOWN ROAD
over NARROW BRANCH

ADC Street Grid Location: 6-C9

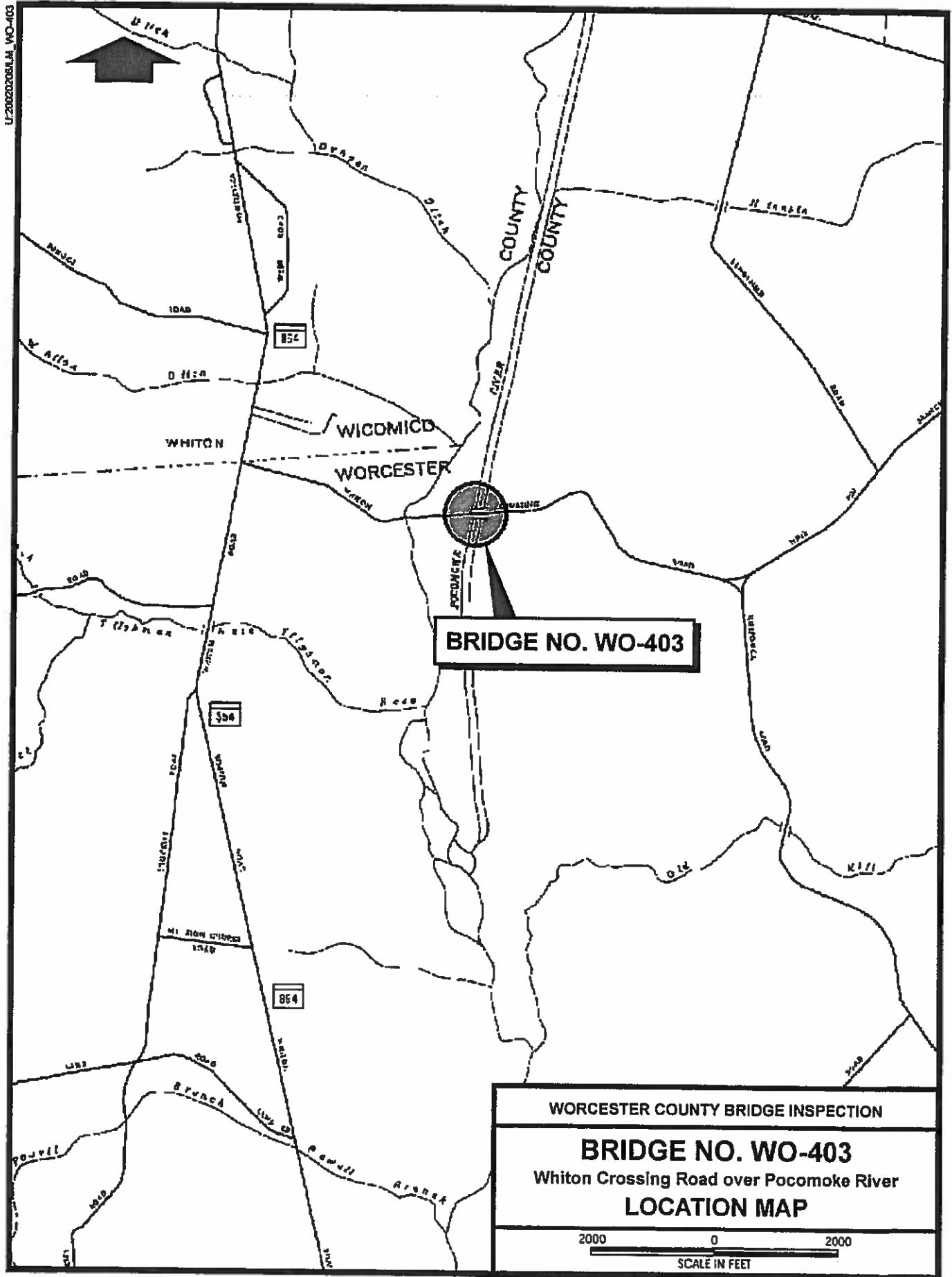
LOCATION MAP

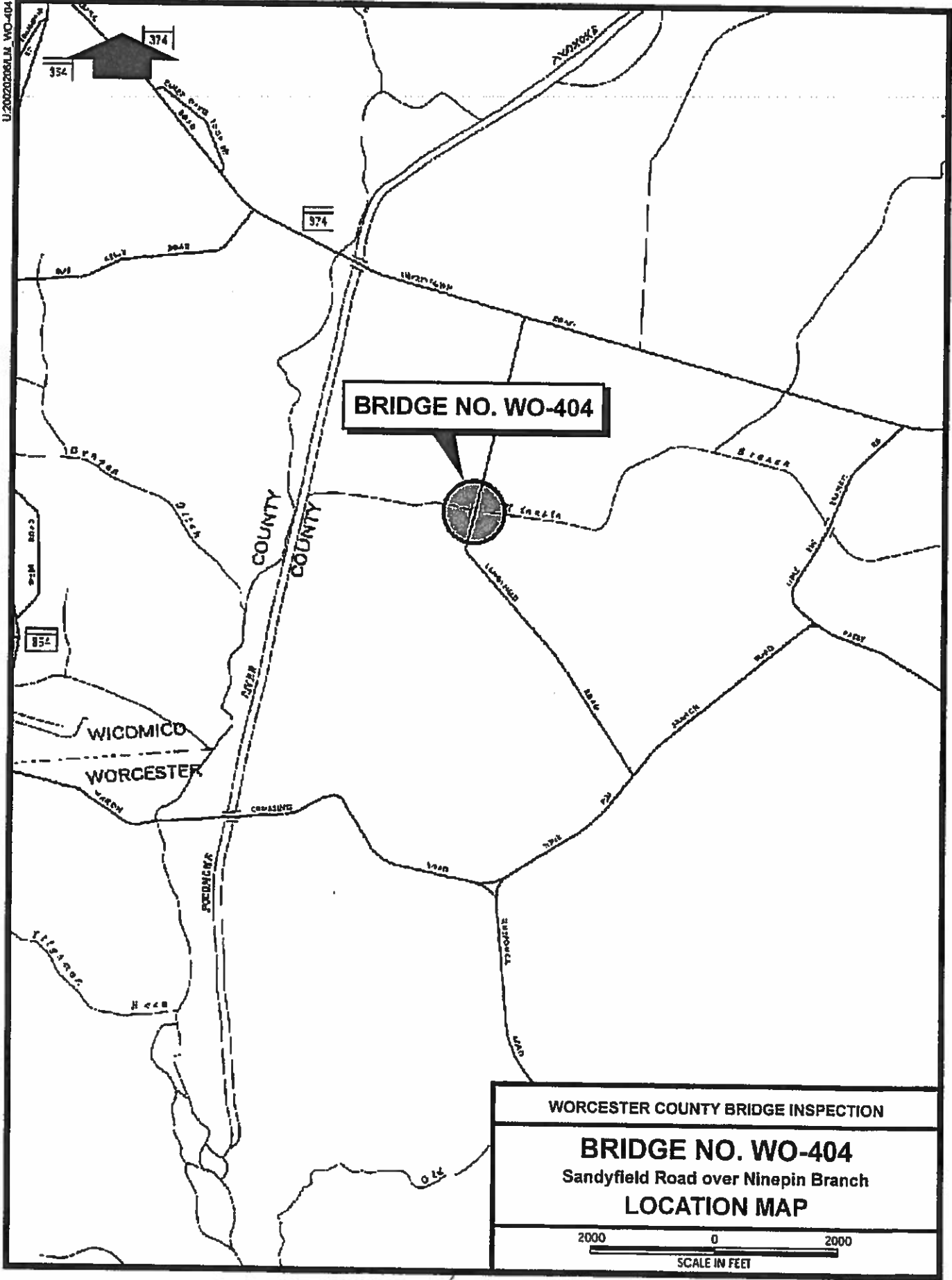
Map Copyright © Universal Map Group LLC, (800) 829-6277



BRIDGE NO. WO-309

WORCESTER COUNTY BRIDGE INSPECTION		
BRIDGE NO. WO-309		
Massey Crossing Road over Pocumoke River		
LOCATION MAP		
2000	0	2000
SCALE IN FEET		





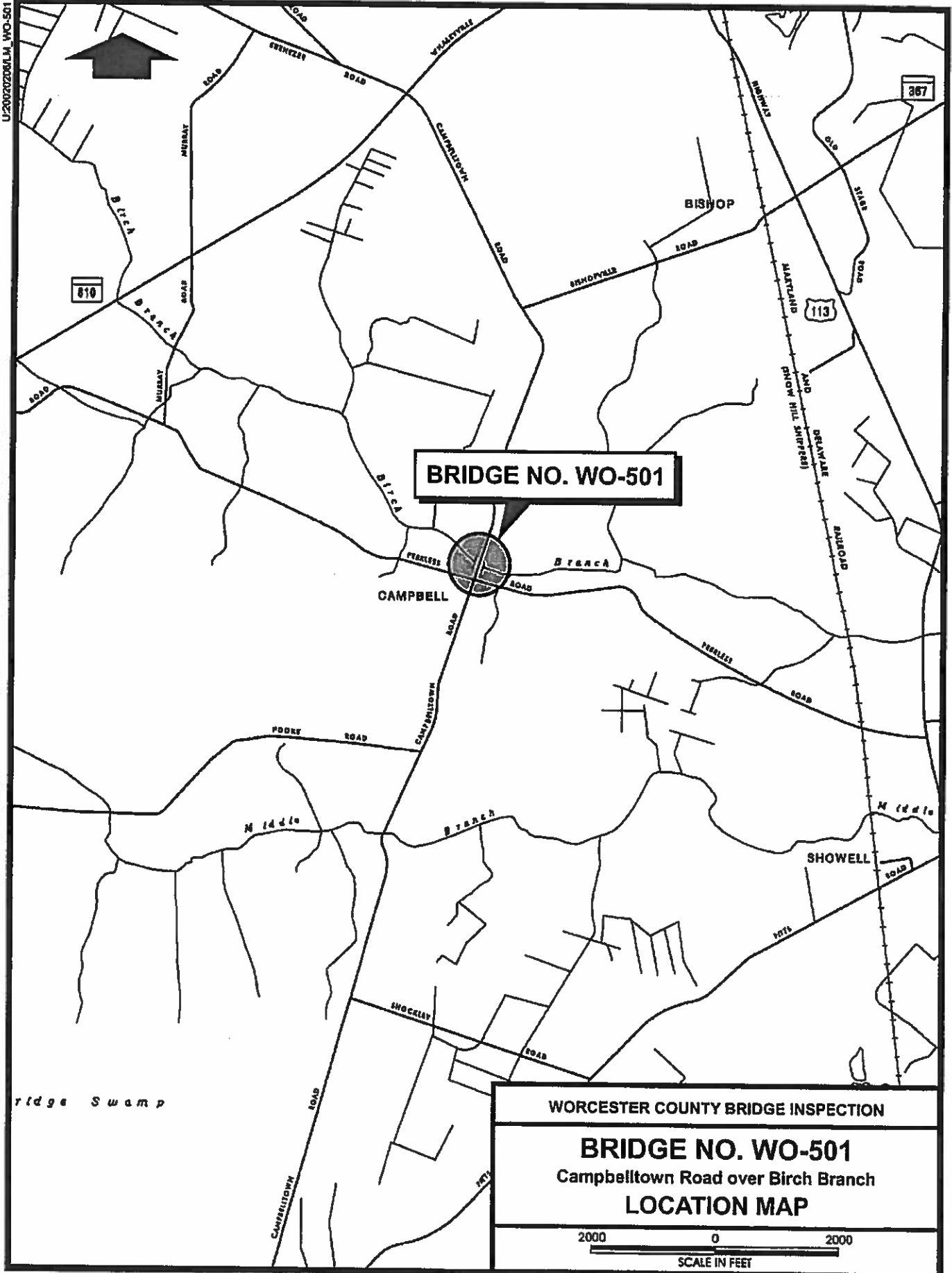
BRIDGE NO. WO-404

WORCESTER COUNTY BRIDGE INSPECTION

BRIDGE NO. WO-404
Sandyfield Road over Ninepin Branch
LOCATION MAP

2000 0 2000
SCALE IN FEET

U:\2002\2002\611.WO-501



BRIDGE NO. WO-501

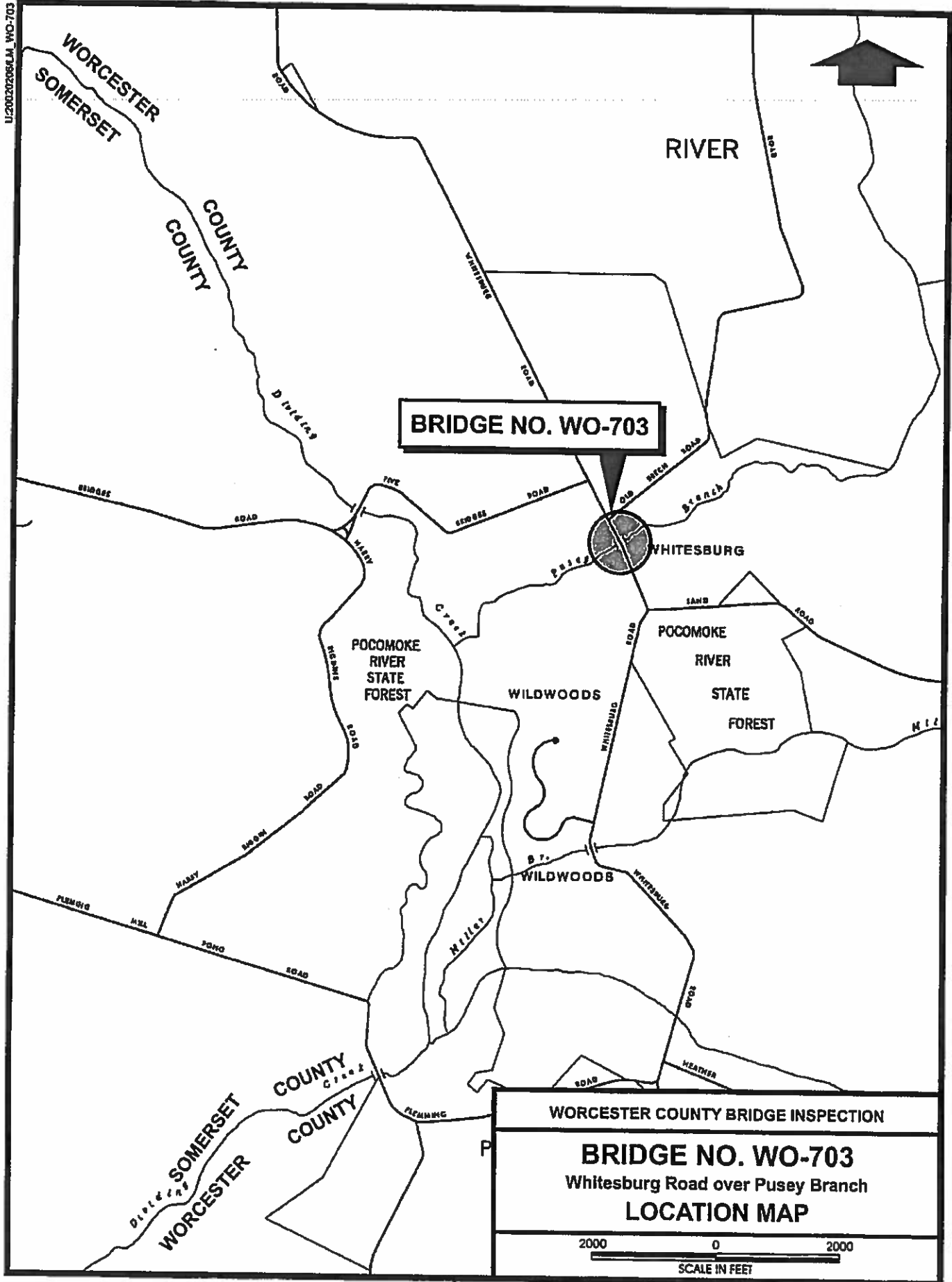
ridge Swamp

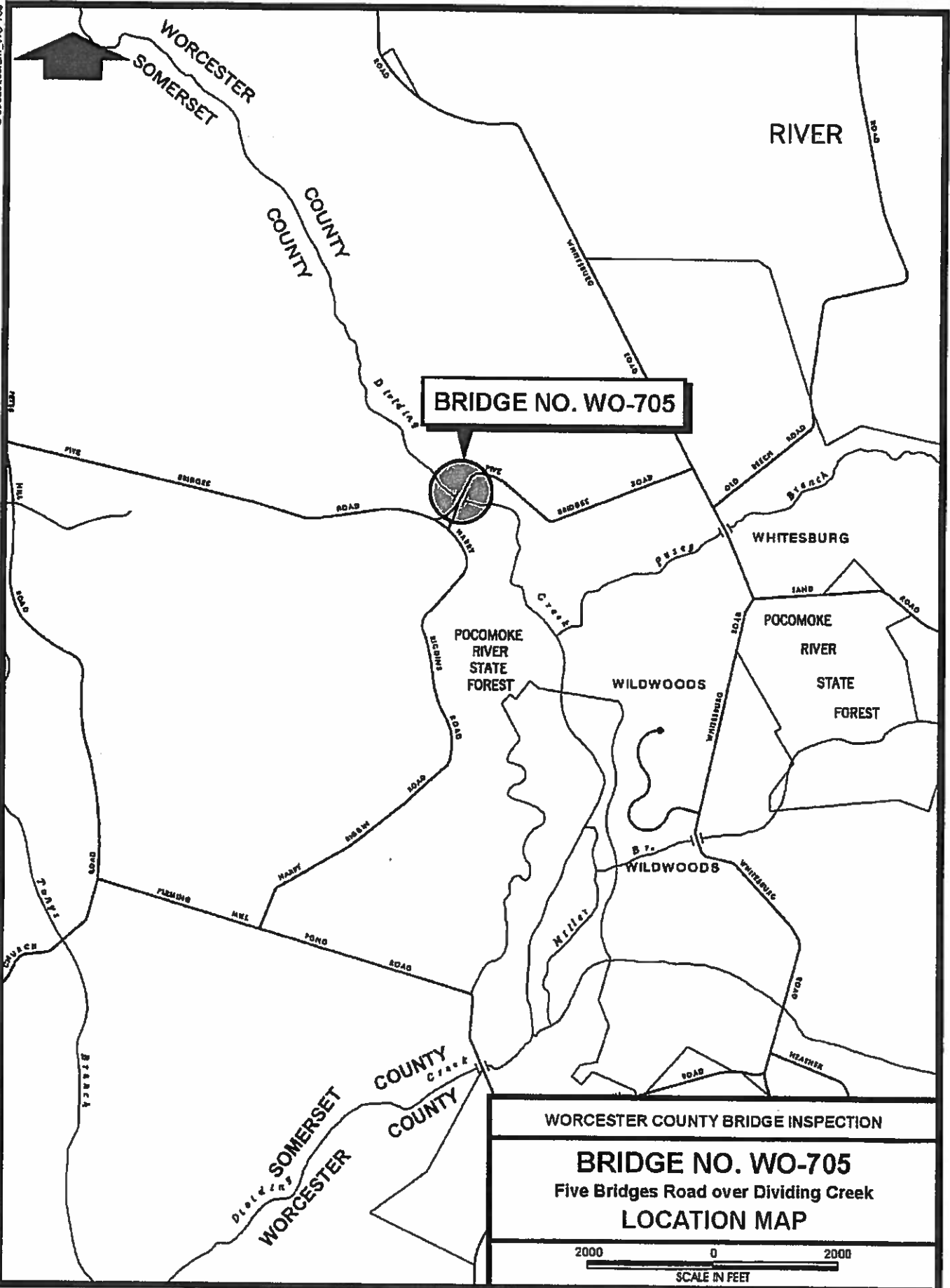
WORCESTER COUNTY BRIDGE INSPECTION

BRIDGE NO. WO-501
Campbelltown Road over Birch Branch

LOCATION MAP

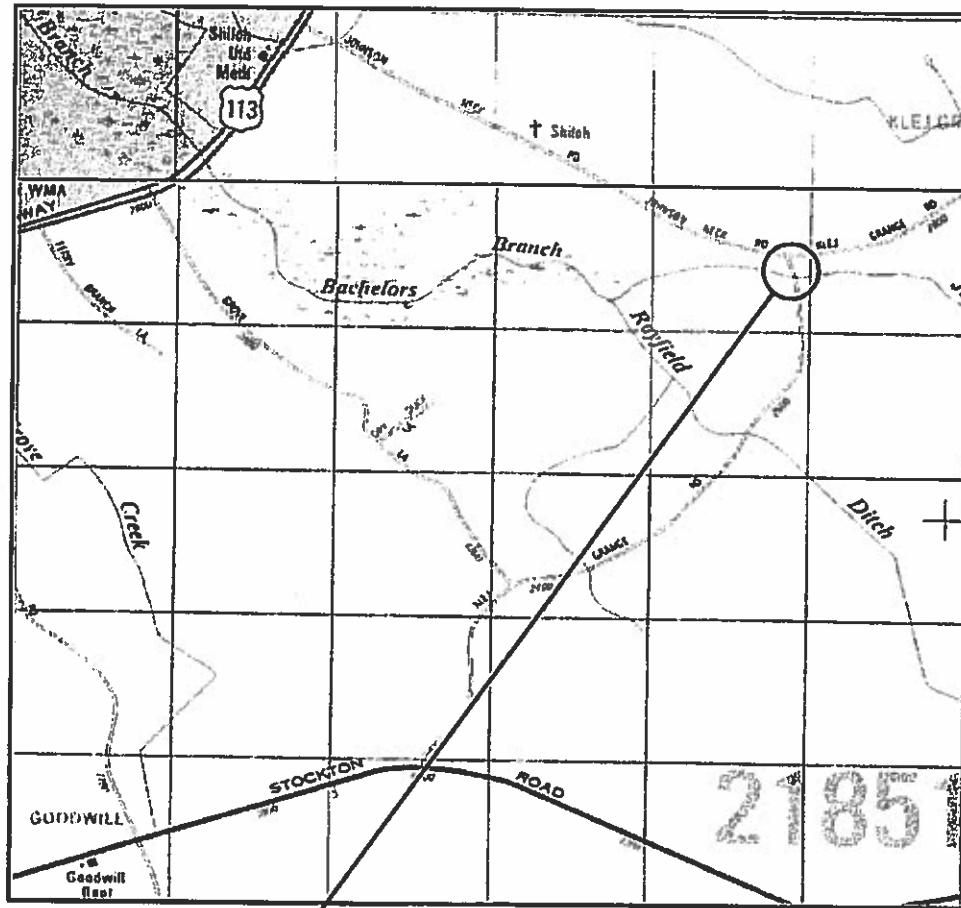
2000 0 2000
SCALE IN FEET





<p>WORCESTER COUNTY BRIDGE INSPECTION</p> <p>BRIDGE NO. WO-705</p> <p>Five Bridges Road over Dividing Creek</p> <p>LOCATION MAP</p>
<p>2000 0 2000</p> <p>SCALE IN FEET</p>

2016 WORCESTER COUNTY BRIDGE INSPECTION
BRIDGE No. WO-0804001 – KLEJ GRANGE ROAD over JONES DITCH



BRIDGE No. WO-0804001
KLEJ GRANGE ROAD over
JONES DITCH

ADC Street Grid Location: 33-G1

LOCATION MAP

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