

COLCHESTER BLAKELEY ROAD/I-89 BRIDGE OPTION STUDY

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FITZPATRICK-LLEWELLYN INCORPORATED

Engineering and Planning Services

One Wentworth Drive • Williston • Vermont • 05495 • (802) 878-3000

31 August 1993

Mr. Brian Osborn, Public Works Director
Town of Colchester
P.O. Box 55
Colchester, Vermont 05446

RE: I-89 Pedestrian and Bicycle Crossing at Blakely Road
Colchester, Vermont
FILE: 93013

Dear Mr. Osborne:

Included in the expanded scope of work of our Regional Transportation grant, we were directed by the Town of Colchester to prepare concept plans and preliminary cost estimates for a pedestrian and bicycle crossing of I-89 at Blakely Road. The following is a summary of our findings which addresses the attached line item descriptions, estimates, and bridge sections.

The Town has identified the need for a pedestrian and bicycle crossing in the vicinity of the existing Blakely Road/I-89 bridge overpass. Two alternatives were investigated including a 10' wide cantilevered bridge extension on the north side of the existing bridge and second alternative being a separate 10' wide free standing bridge north of and parallel to the existing roadway bridge.

Based on preliminary construction estimates and conversations with the State Agency of Transportation (VAOT), a separate bridge would be less expensive and more feasible than an extension because it eliminates the added expense of working with the VAOT to redesign and retrofit the existing bridge without jeopardizing its structural integrity. A separate, free standing pedestrian bridge 10 to 20 feet north of the existing roadway bridge could be constructed on its own piers without adversely affecting the existing bridge structure and with less inconvenience to Blakely Road traffic during construction. VAOT prefers the separate bridge alternative, and advises that a separate new bridge is possible as long as it serves a municipal function.

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Either alternate would require similar amounts of fill and retaining structures such as gabions to widen the shoulders along the approach ramps. The difference in preliminary construction cost is in the type of bridge structure. The attached cross sections and preliminary cost estimates describe the alternate crossings.

We appreciate the opportunity to work with the Town and explore these alternatives. We would welcome the opportunity to assist the Town in developing more detailed plans for improved pedestrian crossing at Blakely Road.

Sincerely,

FITZPATRICK-LLEWELLYN INCORPORATED



John A. Steele

JAS#5/baf:93013-7

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31 August 1993

ALTERNATE TRANSPORTATION PATH PLAN FOR COLCHESTER

RE: I-89 Pedestrian and Bicycle Crossings at the Blakely Road
 Bridge
 FILE: 93013

Alternate A - Cantilevered Bridge Extension, North side of Existing
 Roadway Bridge

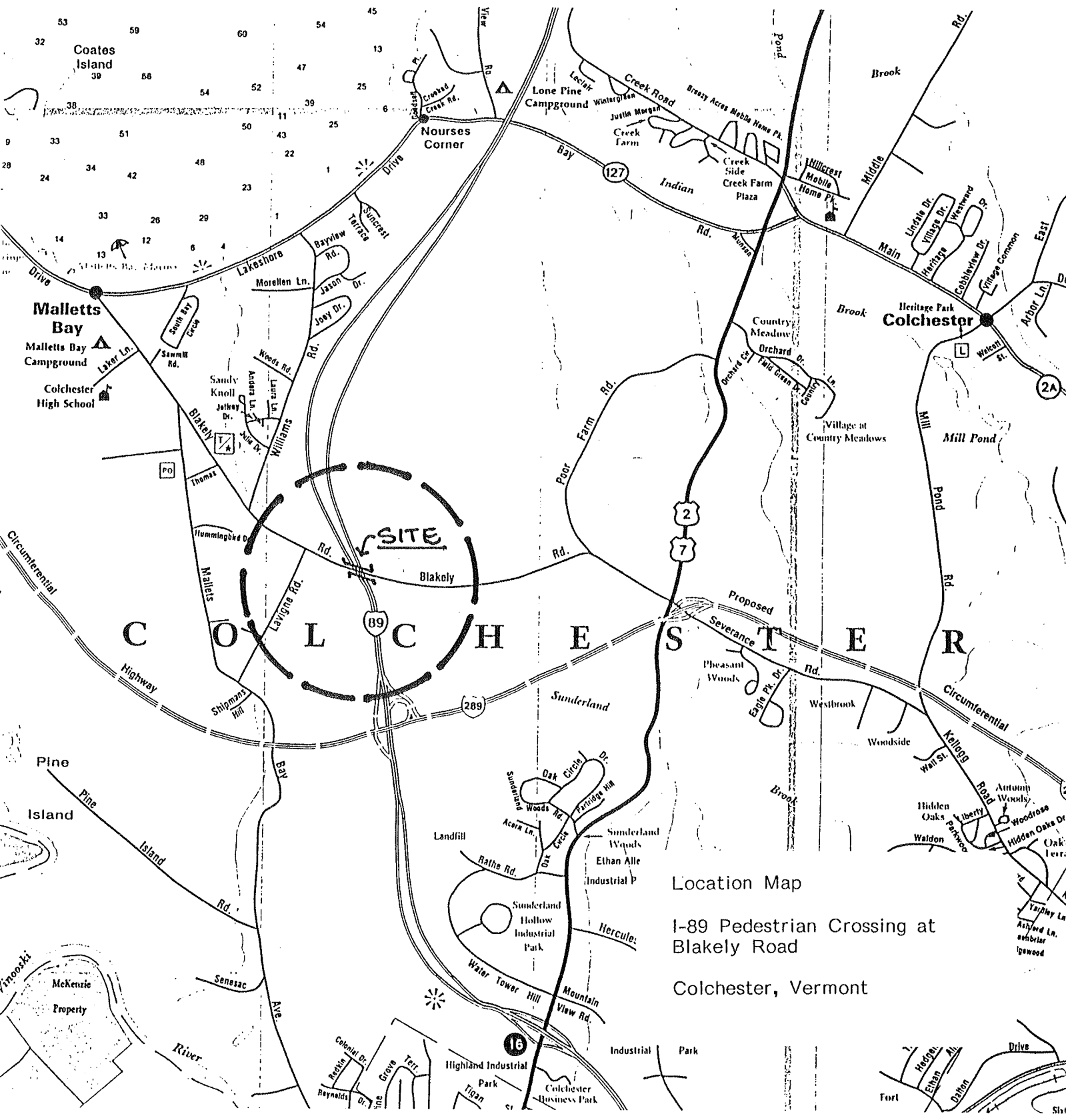
| | |
|---------------------------------------|------------|
| cantilevered structure, 10' x 275' | \$ 316,000 |
| gabion retaining wall and fill | 92,000 |
| 10' asphalt path and base (1000 L.F.) | 20,000 |
| 4' chain link fence 1000 L.F. | 12,000 |
| signs, painted markings, etc. | 3,000 |
| | \$ 443,000 |
| 10% Contingency | 44,300 |
| | \$ 487,300 |

Alternate B - Separated Pedestrian Bridge, 10' North of Existing
 Bridge

| | |
|---------------------------------------|------------|
| free standing bridge, 10' x 275' | \$ 206,000 |
| gabion retaining wall and fill | 134,000 |
| 10' asphalt path and base (1000 L.F.) | 20,000 |
| 4' chain link fence 1000 L.F. | 12,000 |
| signs, painted markings, etc. | 3,000 |
| | \$ 375,000 |
| 10% Contingency | 37,500 |
| | \$ 412,500 |

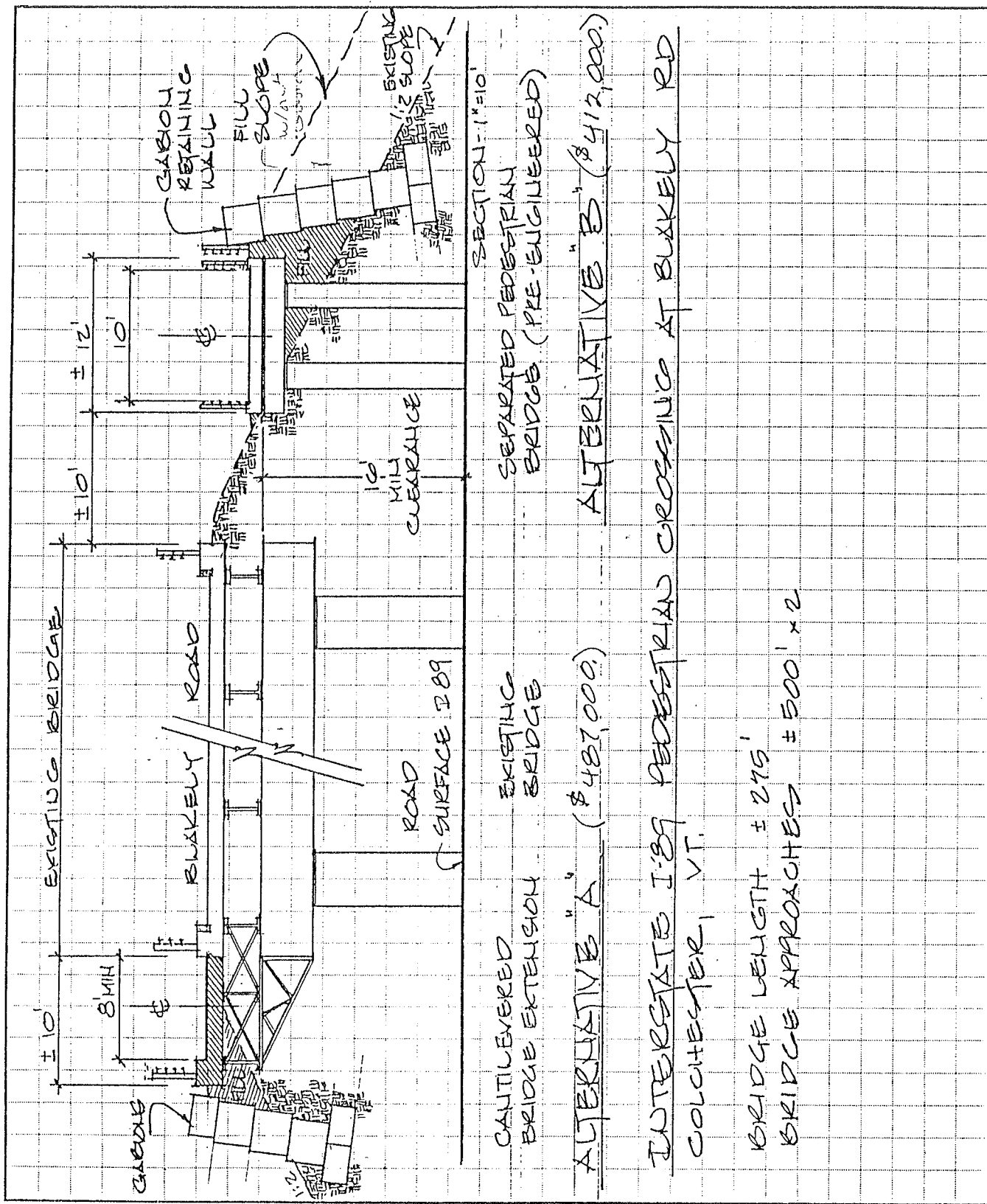
JAS#5:93013-5

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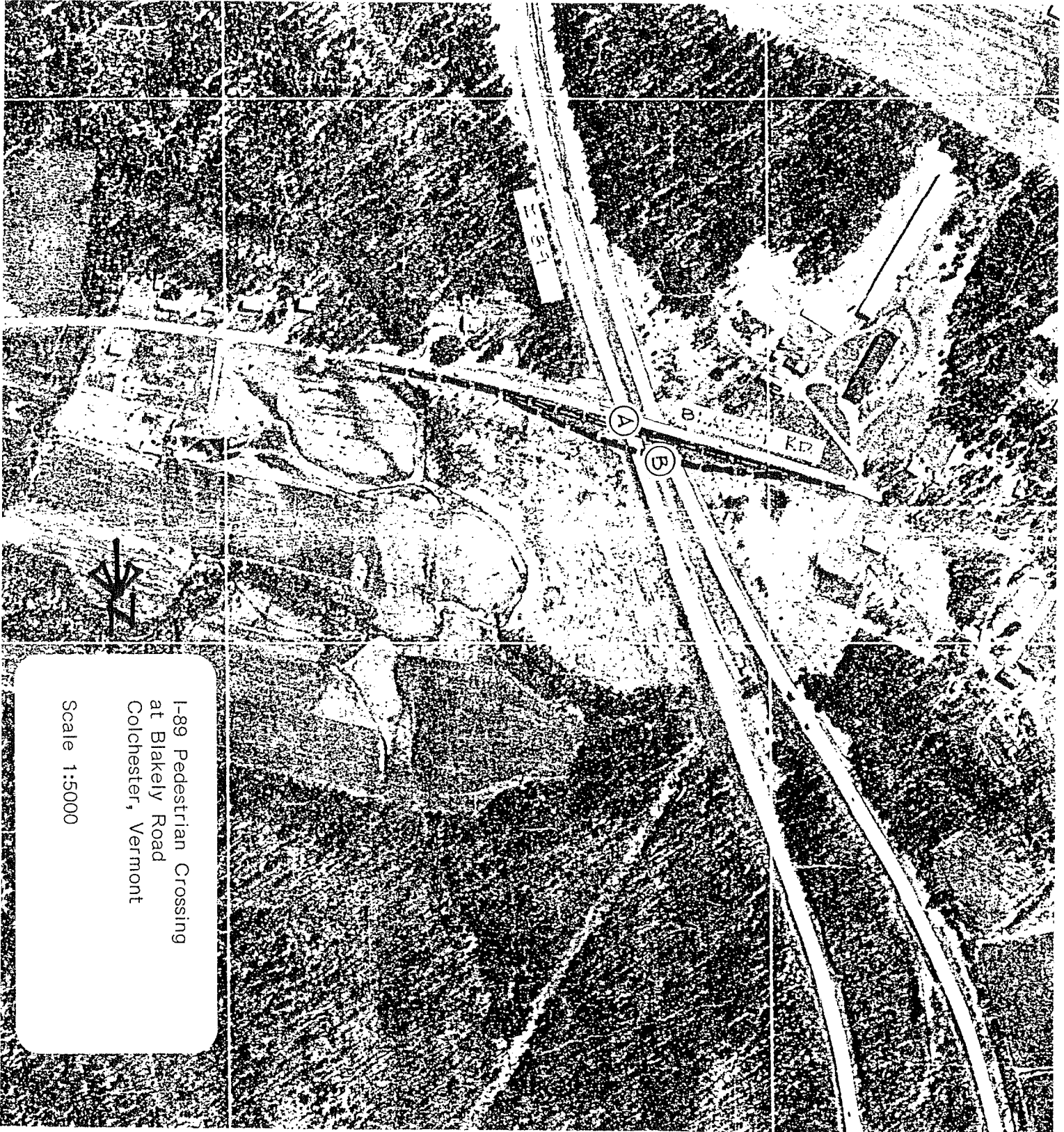


Location Map
 I-89 Pedestrian Crossing at
 Blakely Road
 Colchester, Vermont

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I-89 Pedestrian Crossing
at Blakely Road
Colchester, Vermont
Scale 1:5000