David C. Mancuso President Lake Shore Bancorp, Inc. 125 East Fourth Street Dunkirk, New York 14048

Re: Lake Shore Bancorp, Inc.

Form S-1, amendment number 1, filed January 13, 2006

File Number 333-129439

Dear Mr. Mancuso:

We have reviewed your amended Form S-1 and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information we may have additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Allowance for Loan Losses, page 78

1. We refer to prior comments 11 and 12 in our letter dated December 2, 2005. Please revise your disclosure to clarify the methodology used to determine the unallocated portion of your allowance for loan losses and discuss the factors which led to the significant unallocated component of your allowance for loan losses, and provide additional discussion as necessary in your response letter. For example, we note that on

pages 79 and 82, you cite downturns in the local economy as an uncertainty that could affect management's estimate of probable losses the unallocated component is maintained to cover. However, it is unclear the proportion of the unallocated allowance attributable to this estimate. Further, you state that the unallocated portion recognizes the imprecision inherent in the underlying assumptions used in the methodologies for estimating allocated and general losses in the portfolio. However, it is unclear why such a considerable portion of the allowance would be attributable to such imprecision.

<u>Financial Statements for the Nine Months Ended September 30, 2005 and for the Years Ended</u> December 31, 2004 and 2005

General

- 2. Please note the updating requirements of Item 3-12 of Regulation S-X
- 3. Please file updated consents for all audited financial statements included in your next amendment.

Note 16 – Subsequent Events, page F-34

4. Please provide in your response letter additional information regarding the check kiting matter involving one of your customers, including your assessment of the likelihood of potential loss and the known timeline of occurrences related to the matter, such as the carrying out and discovery of the scheme. Please also revise your footnote to clarify, as necessary. Refer to the guidance provided by paragraphs 8-12 of FAS 5.

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Closing Comments

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

Lake Shore Bancorp, Inc.
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Direct any questions on accounting matters to Amanda Roberts at 202-551-3417, or to John Nolan, Accounting Branch Chief, at 202-551- 3492. Please direct any other questions to David Lyon at 202-551-3421, or to me at 202-551- 3491.

Sincerely,

Todd K. Schiffman Assistant Director

By fax: V. Gerard Comizio

Fax number 202-626-1930