

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

December 28, 2012

Via Email
Paul F. Brauneis
Chief Financial Officer
Sycamore Networks, Inc.
220 Mill Road
Chelmsford, MA 01824

Re: Sycamore Networks, Inc.

Preliminary Proxy Statement on Schedule 14A

Filed on November 15, 2012

File No. 000-27273

Dear Mr. Brauneis:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Kathleen Krebs, for

Larry Spirgel
Assistant Director