June 13, 2007

Mr. Steven W. Berglund Chief Executive Officer Trimble Navigation Limited 935 Stewart Drive Sunnyvale, CA 94085

Re: Trimble Navigation Limited

Form 10-K for the Fiscal Year Ended December 29, 2006

Filed February 23, 2007

Form 10-Q for the Quarterly Period Ended March 30, 2007

File No. 001-14845

Dear Mr. Berglund:

We have reviewed your filings and your response letter dated April 30, 2007 and we have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. Where indicated, we think you should revise your documents in future filings 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 information so we may better understand your disclosure. After reviewing this information, we may raise 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-K for the Fiscal Year Ended December 29, 2006

Item 8. Financial Statements and Supplementary Data, page 42

Note 2. Accounting Policies, page 46

-Goodwill, Purchased Intangible Assets and Long-Lived Assets, page 47

1. Please refer to prior comment 3. In your March 30, 2007 Form 10-Q, you disclose on page 7 that you perform your annual goodwill impairment testing "in the fourth fiscal quarter of each year, using information as of the end of the third fiscal quarter." While you may perform the annual goodwill impairment test "any time during the fiscal year provided the test is performed at the same time every year," consistent with paragraph 26 of SFAS 142, please tell us why you believe it is appropriate under U.S. GAAP to test the ending balance of your third quarter goodwill in the fourth quarter of your fiscal year. To help us understand your accounting, please tell us in which quarter you would record an impairment loss if an impairment existed. We also note the provisions of paragraph 22 of SFAS 142. We also note your disclosure on page 10 that you would incur an accounting charge "for the amount of impairment during the fiscal quarter in which the determination is made."

Note 5. Joint Ventures, page 57

- 2. Please refer to prior comment 7. Please respond to the following comments to help us gain a better understanding of your transactions associated with CTCT:
 - Please provide to us the timing of when you record these journal entries to CTCT for the "royalty payment". For instance, please explain to us if you record these journal entries related to CTCT at the time that you manufacture and sell a product to a third party-dealer.
 - Please also provide to us the timing of when you record your 50% share of CTCT's profit.
 - Please explain to us if you eliminate your "other cost of sales" account when you record your 50% share of CTCT's profit. Otherwise, please explain to us how you eliminate your intercompany transactions associated with this related party entity.
- 3. Please refer to prior comment 11. We note from your response that the amounts due to and from CTCT are on a net basis within your consolidated balance sheet. Please revise your future filings to present the amounts due to and due from CTCT on a gross basis, to the extent material. Refer to paragraphs 5-6 of FIN 39.

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Form 10-Q for the Quarterly Period Ended March 30, 2007

Financial Statements, page 3

Note 3. Acquisitions, page 8

4. We note that the excess of the purchase price over the net assets acquired in your @Road acquisition resulted in goodwill of approximately \$263 million. In future filings where you discuss a material acquisition, please include a discussion of the factors that contributed to a purchase price that resulted in recognition of a significant amount of goodwill. Refer to paragraph 51(b) of SFAS 141.

Note 8. The Company and Segment Information, page 16

- 5. In future filings, please disclose total assets for each reportable segment for which there has been a material change from the amount disclosed in your last annual report, consistent with paragraph 33(d) of SFAS 133.
- 6. In future filings, your reconciliation of your segments' measure of profit or loss should be reconciled to the company's consolidated income before taxes, consistent with paragraph 33(d) of SFAS 133. Further, that paragraph requires you to separately identify and describe significant reconciling items.

Note 10. Product Warranties, page 19

7. Your warranty reconciliation shows changes for 'warranty accrued' and 'warranty claims.' It is not clear whether these items represent the items required in the reconciliation by paragraph 14(b) of FIN 45. In future filings it should be clear from your presentation that you reflect (a) the aggregate reductions in that liability for payments made (in cash or in kind) under the warranty, (b) the aggregate changes in the liability for accruals related to product warranties issued during the reporting period, and (c) the aggregate changes in the liability for accruals related to preexisting warranties (including adjustments related to changes in estimates), consistent with paragraph 14(b) of FIN 45.

Controls and Procedures, page 33

8. You disclose that your "Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures are effective in recording, processing, summarizing and reporting, on a timely basis, information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act." The language that is currently included after the word "effective" in your disclosure appears to be superfluous, since the meaning of "disclosure controls and procedures" is established by Rule 13a-15(e) of the Exchange Act. Please

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remove the language in your future filings or revise the disclosure so that the language that appears after the word "effective" is substantially similar in all material respects to the language that appears in the entire two-sentence definition of "disclosure controls and procedures" set forth in Rule 13a-15(e).

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3604 if you have questions regarding these comments. In this regard, do not hesitate to contact Kevin Vaughn, Branch Chief, at (202) 551-3643.

Sincerely,

Kate Tillan Assistant Chief Accountant