

May 31, 2005

Mail Stop 0409

VIA U.S. MAIL AND FAX (770) 243-8286

Mr. Leo F. Wells, III
President, Principal Executive Officer and Sole Director
Wells Capital, Inc.
6200 The Corners Parkway
Norcross, GA 30092

**Re: Wells Real Estate Fund XIII, L.P.
Form 10-K for the year ended December 31, 2004
Filed March 31, 2005
File No. 0-49633**

Dear Mr. Wells:

We have reviewed your filing and have the following comment. Please be as detailed as necessary in your explanations. In our comment, 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 comment or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the year ended December 31, 2004

Note 4. Investment in Joint Ventures, page F-12

1. Clarify to us and in future filings whether you have adopted FIN 46(R), as required by the effective date. Refer to paragraph 29 of the Interpretation. If you have adopted the Interpretation, please explain whether any of your equity method investments are variable interest entities under paragraph 5(c) of FIN 46 (R) and briefly tell us how you concluded that you were not the primary beneficiary.

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Leo F. Wells, III
Wells Real Estate Fund XIII, L.P.
May 31, 2005
Page 2

As appropriate, please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your response to our comment 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 comment.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

If you have any questions, you may contact Eric McPhee at (202) 551-3693 or me at (202) 551-3486.

Sincerely,

Daniel L. Gordon
Branch Chief