

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

May 27, 2011

By U.S. Mail and facsimile to (415) 738-6501

Mr. A. William Stein, Chief Financial Officer
Digital Realty Trust, Inc.
Digital Realty Trust, L.P.
560 Mission Street, Suite 2900
San Francisco, CA 94105

RE: Digital Realty Trust, Inc. Digital Realty Trust, L.P. File No. 001-32336 and File No. 000-54023 Form 10-K for the year ended December 31, 2010

Dear Mr. Stein:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K

Properties, page 32

1. From footnote 4, you indicate that annualized rents, which is used to calculate your rentals per occupied square foot, by multiplying the December contractual rent by 12. Please tell us whether your rental disclosures reflect the tenant reimbursements and concessions.

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2. In future periodic filings, please expand your disclosure to discuss embedded rent growth in your portfolio related to rent escalators in your leases. To the extent practicable, please quantify the percentage of leases that have escalators and provide a range of escalation.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 50

- 3. To the extent that funds from operations is a key financial performance indicator, please include such disclosure in future periodic reports.
- 4. In future periodic filings, to the extent you have material lease expirations in the year following the reporting period, please include disclosure comparing the rents on expiring leases to market rents.
- 5. In future periodic reports, please discuss your leasing activities for the reported period, including the volume of new or renewed leases, average tenant improvement costs, leasing commissions and tenant concessions. Also, please discuss the relationship between rents on leases that expired in the current reporting period and rents on executed renewals or new leases.

Critical Accounting Policies, page 55

6. In future filings please consider adding a critical accounting policy regarding capitalization of costs as it appears that you expect this to become more significant in future periods. Please discuss how it is determined when capitalization begins and ends as part of your critical accounting policy. In addition please revise future filings to include similar disclosures for your significant accounting policy for cost capitalization within your footnotes to your financial statements.

Liquidity and Capital Resources of the Parent Company, page 63

- 7. In future filings please include an analysis of your capitalized expenditures by breaking down total capitalized expenditures between new development, redevelopment and other cap-ex by year. In addition please provide a narrative discussion for fluctuations from year to year and expectations for the future. As part of this analysis discuss the amounts of indirect costs (soft costs) capitalized each year and reasons for fluctuations.
- 8. We note the disclosure of several acquisitions made in the reporting period. To the extent that aggregate acquisitions in future reporting periods are material, please include capitalization rates for such acquisitions. Also include a clear

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description of how you calculate capitalization rates, including how you calculate net operating income for such purposes.

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 Exchange Act rules require. 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 responding to our comments, please provide a written 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.

You may contact Jorge L. Bonilla at (202) 551-3414 or me at (202) 551-3486 if you have questions regarding comments on the financial statements and related matters. Please contact Jerard Gibson at (202) 551-3473 or Duc Dang at (202) 551-3386 with any other questions.

Sincerely,

Daniel L. Gordon Branch Chief