

Moffett Gateway

Mortgage Loan Information

Mortgage Loan Seller:	JPMCB
Original Principal Balance⁽¹⁾:	\$20,000,000
Cut-off Date Principal Balance⁽¹⁾:	\$20,000,000
% of Pool by IPB:	2.5%
Loan Purpose:	Refinance
Borrower:	441 Real Estate LLC
Sponsor⁽²⁾:	Joseph K. Paul
Interest Rate:	3.319403%
Note Date:	9/22/2016
Maturity Date:	4/1/2027
Interest-only Period:	60 months
Original Term:	126 months
Original Amortization⁽³⁾:	360 months
Amortization Type:	IO-Balloon
Call Protection:	L(32),Def(87),O(7)
Lockbox / Cash Management:	Hard / In Place
Additional Debt:	Yes
Additional Debt Balance⁽⁴⁾:	\$223,000,000 / \$102,000,000 / \$50,000,000
Additional Debt Type:	Pari Passu / B-Note / Mezzanine Loan

Property Information

Single Asset / Portfolio:	Single Asset
Title:	Fee
Property Type - Subtype:	Office – Suburban
Net Rentable Area (SF):	612,691
Location:	Sunnyvale, CA
Year Built / Renovated:	2016 / N/A
Occupancy⁽⁴⁾:	100.0%
Occupancy Date:	6/1/2017
Number of Tenants:	1
2013 NOI⁽⁵⁾:	N/A
2014 NOI⁽⁵⁾:	N/A
2015 NOI⁽⁵⁾:	N/A
TTM NOI⁽⁵⁾:	N/A
UW Economic Occupancy:	95.0%
UW Revenues:	\$35,097,235
UW Expenses:	\$6,170,971
UW NOI:	\$28,926,265
UW NCF:	\$27,631,280
Appraised Value / Per SF⁽⁶⁾:	\$525,000,000 / \$857
Appraisal Date:	7/20/2016

Escrows and Reserves

	Initial	Monthly	Initial Cap
Taxes:	\$180,864	\$180,864	N/A
Insurance:	\$0	Springing	N/A
Replacement Reserves:	\$0	\$0	N/A
TI/LC:	\$0	\$0	N/A
Other⁽⁷⁾:	\$86,961,915	\$0	N/A

Financial Information⁽¹⁾

	A-Notes	Whole Loan
Cut-off Date Loan / SF:	\$397	\$563
Maturity Date Loan / SF:	\$337	\$503
Cut-off Date LTV⁽⁶⁾:	46.3%	65.7%
Maturity Date LTV⁽⁶⁾:	39.3%	58.7%
UW NCF DSCR⁽⁸⁾:	1.95x	1.43x
UW NOI Debt Yield:	11.9%	8.4%

Sources and Uses

Sources	Proceeds	% of Total	Uses	Proceeds	% of Total
A-Notes ⁽¹⁾	\$243,000,000	61.5%	Payoff Existing Debt	\$216,321,083	54.8%
B-Note ⁽¹⁾	102,000,000	25.8	Upfront Reserves	87,142,779	22.1
Mezzanine Loan	50,000,000	12.7	Closing Costs	7,532,290	1.9
			Return of Equity	84,003,847	21.3
Total Sources	\$395,000,000	100.0%	Total Uses	\$395,000,000	100.0%

(1) The Moffett Gateway loan is part of a whole loan evidenced by five *pari passu* notes with an aggregate principal balance as of the Cut-off Date of \$243.0 million (the "A-Notes") and a subordinate companion loan (the "B-Note"). The A-Notes Financial Information presented in the chart above reflects the Cut-off Date balance of the A-Notes but excludes the related B-Note and mezzanine loan. The Whole Loan Financial Information presented in the chart above reflects the Cut-off Date balance of the A-Notes and B-Note evidencing the Moffett Gateway Whole Loan, but excludes the related mezzanine loan.

(2) For a full description of Sponsor, please refer to "The Loan" below.

(3) The Moffett Gateway A-Notes will amortize in accordance with the amortization schedule set forth in Annex F to the Prospectus subsequent to a five-year interest-only period. The principal payments that would otherwise have been paid to the B-Note will be used to pay down the aggregate principal balance of the A-Notes.

(4) The property is 100.0% leased to Google Inc. ("Google") through March 2027. Google has executed two leases for the property but is not yet in occupancy of either space. Google leases the property under two separate leases, one for 1225 Crossman Avenue ("Building One") and the second for 1265 Crossman Avenue ("Building Two"). Google is expected to take occupancy for both spaces by September 2017 and, subsequent to any applicable free rent periods, is required to begin paying full rent as applicable under each lease as follows: Building One in July 2018 and Building Two in July 2017.

(5) Historical cash flows are not available as the property was constructed in 2016.

(6) The Appraised Value / Per SF, Cut-off Date LTV and Maturity Date LTV are calculated based on the "hypothetical market value as stabilized", which assumes that all tenant improvement construction is complete and that all contractual free rent has "burned off" at the "stabilized" value date. At origination, the borrower reserved approximately \$87.0 million for unfunded obligations (approximately \$49.4 million for outstanding tenant improvements and leasing commissions and approximately \$37.6 million for free rent). The "as-is" value as of July 20, 2016 is \$430.0 million, which results in a Cut-off Date LTV and Maturity Date LTV of 56.5% and 48.0%, respectively, and a Whole Loan Cut-off Date LTV and Maturity Date LTV of 80.2% and 71.7%, respectively.

(7) Initial Other Escrows and Reserves include approximately \$87.0 million for unfunded obligations which included (i) approximately \$49.4 million for outstanding tenant improvements and leasing commissions, (ii) \$37.6 million for free rent reserves and (iii) \$180,864 for tax reserves.

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(8) The UW NCF DSCR is calculated using the sum of principal and interest payments over the first 12 months following the expiration of the interest-only period based on the assumed principal payment schedule provided on Annex F to the Prospectus.

The Loan. The Moffett Gateway loan is secured by a first mortgage lien on the borrower's fee interest in a newly constructed corporate office campus consisting of two seven-story towers, an amenities building and a parking garage, located in Sunnyvale, California. The whole loan has an outstanding principal balance as of the Cut-off Date of \$345.0 million (the "Moffett Gateway Whole Loan") and is comprised of five *pari passu* senior notes, each as described below, with an aggregate outstanding principal balance as of the Cut-off Date of \$243.0 million (collectively, the "Moffett Gateway A-Notes") and a subordinate B-Note with an outstanding principal balance as of the Cut-off Date of \$102.0 million (the "Moffett Gateway Subordinate Companion Loan"), each as described below. Note A-4, with an outstanding principal balance as of the Cut-off Date of \$20.0 million, is being contributed to the JPMCC 2017-JP6 Trust (the "Moffett Gateway Mortgage Loan"). Note A-1 with an outstanding principal balance as of the Cut-off Date of \$80.0 million was contributed to the JPMCC 2017-JP5 trust, Note A-2, with an outstanding principal balance as of the Cut-off Date of \$60.0 million, was contributed to the JPMCC 2016-JP4 trust, Note A-3, with an outstanding principal balance as of the Cut-off Date of \$40.0 million was contributed to the JPMDB 2017-C5 trust and Note A-5, with an outstanding principal balance as of the Cut-off Date of \$43.0 million was contributed to the JPMDB 2016-C4 trust (together, the "Moffett Gateway Pari Passu Companion Loans"). The Moffett Gateway Subordinate Companion Loan has been sold to a third party investor. Under the related intercreditor agreement, prior to a control appraisal period with respect to the Moffett Gateway Subordinate Companion Loan, under certain circumstances, the holder of the Moffett Gateway Subordinate Companion Loan will have the right to approve certain major decisions with respect to the Moffett Gateway Whole Loan, to exercise certain cure rights and to replace the related special servicer with or without cause. The holder of the Moffett Gateway Subordinate Companion Loan will also have the right to purchase the Moffett Gateway A-Notes under certain circumstances. After the occurrence and during the continuance of a control appraisal period with respect to the Moffett Gateway Subordinate Companion Loan, the holder of Note A-2 will be entitled to exercise the rights of the controlling noteholder for the Moffett Gateway Whole Loan, which rights will be exercised by the related trustee (or, prior to the occurrence and continuance of a control termination event under the related pooling and servicing agreement, by the related directing certificateholder); however, the holders of the Moffett Gateway Mortgage Loan and Moffett Gateway Pari Passu Companion Loans will be entitled, under certain circumstances, to be consulted with respect to certain major decisions. The Moffett Gateway Whole Loan has a 10-year, six-month term and, subsequent to a five-year interest-only period, the Moffett Gateway A-Notes will amortize in accordance with the amortization schedule set forth on Annex F to the Prospectus. The principal payments that would otherwise have been paid to the Moffett Gateway Subordinate Companion Loan are included as part of the scheduled amortization of the Moffett Gateway A-Notes.

Whole Loan Summary				
Note	Original Balance	Cut-off Date Balance	Note Holder	Controlling Piece
A-1	\$80,000,000	\$80,000,000	JPMCC 2017-JP5	No
A-2	60,000,000	60,000,000	JPMCC 2016-JP4	No
A-3	40,000,000	40,000,000	JPMDB 2017-C5	No
A-4	20,000,000	20,000,000	JPMCC 2017-JP6	No
A-5	43,000,000	43,000,000	JPMDB 2016-C4	No
B-1	102,000,000	102,000,000	Third Party Investor	Yes
Total	\$345,000,000	\$345,000,000		

The borrowing entity for the Moffett Gateway Whole Loan is 441 Real Estate LLC, a Delaware limited liability company and special purpose entity.

The loan sponsor is Joseph K. Paul ("Jay Paul") and the nonrecourse carve-out guarantors are Jay Paul, Jay Paul Revocable Living Trust Dated November 9, 1999, as Amended and Restated on March 19, 2010, and Paul Guarantor LLC, a Delaware limited liability company. Jay Paul is the founder of the Jay Paul Company. The Jay Paul Company is an owner and developer of commercial office properties throughout California. Founded in 1975, the Jay Paul Company has developed or acquired over 8.5 million square feet of office space, including 21 buildings in Moffett Park totaling 5.0 million square feet. Jay Paul Company has built projects for many notable companies including Apple, Google, Amazon, Motorola, Microsoft, Boeing, Philips Electronics, HP and DreamWorks, among others. The loan sponsor focuses on sustainable design and has closed in excess of \$12.0 billion in equity and debt financings since inception. The borrower is permitted to obtain the release of Jay Paul and the trust from the guaranty and environmental indemnity upon satisfaction of certain conditions in the loan documents, which include, without limitation, Paul Guarantor LLC maintaining a net worth of not less than \$300.0 million and liquidity of not less than \$20.0 million.

The loan sponsor purchased the land and previous buildings in 2012 for approximately \$50.4 million and, according to the loan sponsor, has spent approximately \$182.5 million (\$298 per square foot) on the development of the Moffett Gateway office complex. Additionally, the loan sponsor has indicated it spent approximately \$55.1 million (\$90 per square foot) in tenant improvement and leasing commission costs. The loan sponsor's total cost basis is approximately \$336.1 million (\$549 per square foot).

The Property. The Moffett Gateway property is comprised of two newly-constructed seven-story Class A LEED Platinum-Certified towers totaling 597,848 square feet and is located in Sunnyvale, California. The property is situated on approximately 15.5 acres and

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features a 14,843 square foot amenities building, which contains a fitness center with locker rooms, showers, steam rooms and a yoga studio, a rooftop dining area, bocce court area and common and recreation areas. Additionally, the property contains 2,022 parking spaces resulting in a parking ratio of approximately 3.3 spaces per 1,000 square feet of space. The property benefits from its location at the intersection of Highways 237 and 101, two regional highway systems that provide direct access to the surrounding areas as well as the San Francisco central business district, located approximately 38.4 miles north of the property. The property is part of the larger Moffett Park development, a 519-acre area comprised of recently developed office spaces and research and development buildings. Additionally, a Santa Clara Light Rail System is located adjacent to the property, which provides service to the surrounding residential communities. The Santa Clara County Transit System provides bus service county-wide and has four stops nearby the property.

As of June 1, 2017, the property is 100.0% leased to Google pursuant to two separate 298,924 square foot triple net leases through March 31, 2027 for Building One and Building Two, each with two seven-year extension options and no early termination options. Google does not directly lease the amenities building from the landlord. Instead, Google's right to use the amenities building is contained within each individual lease. Google's right to use the amenities building is exclusive during any period when Google leases both office buildings and is non-exclusive for any period of time that an additional tenant leases space at the property in the future. Additionally, the amenities building, which includes the parking structure, is part of the common areas which are owned in fee simple by an owners association, which is wholly owned by the borrower. The borrower has pledged the ownership interests in the owner's association as collateral for the Moffett Gateway Whole Loan.

Google's main headquarters in Mountain View, California is located approximately 6.4 miles west of the property. On October 2, 2015, Google implemented a holding company reorganization in which Alphabet became the successor issuer to Google. At that time, Alphabet recognized the assets and liabilities of Google at carryover basis. Alphabet, through its subsidiaries, provides online advertising services in the United States, the United Kingdom and rest of the world. Alphabet is the second largest publicly traded company (NASDAQ: GOOG) in the world as measured by market capitalization and is rated Aa2 and AA by Moody's and S&P, respectively. Google represents approximately 99.4% of Alphabet's total revenues, based on Alphabet's 2015 annual report.

The Market. The property is located in the Sunnyvale office submarket. The submarket features one of the highest concentrations of technology, software and creative tenants within Silicon Valley. Moffett Gateway is located along Moffett Park Avenue, a part of the larger Moffett Park development, which is a 519-acre area comprised of recently developed office spaces and research and development buildings. Moffett Park is home to several notable technology firms including Amazon.com, Google, Hewlett-Packard, Juniper Networks, Lockheed Martin, Microsoft, and Yahoo!. Google owns or leases approximately 3.5 million square feet of office space in Sunnyvale, making it the largest corporate occupier in the submarket. Additionally, Google collectively owns or leases approximately 15.1 million square feet in Silicon Valley and the greater San Francisco area. As of the second quarter of 2016, the Sunnyvale market had a Class A office inventory of approximately 8.9 million square feet with an overall vacancy rate of 8.8% and annual asking rents between \$43.80 and \$45.60 per square foot on a triple-net basis.

Tenant	Ratings ⁽²⁾ Moody's/S&P/Fitch	Tenant Summary ⁽¹⁾			% of Total Base Rent	Lease Expiration Date
		Net Rentable Area (SF)	% of Total NRA	Base Rent PSF ⁽³⁾		
Google ⁽⁴⁾	Aa2 / AA / NA	612,691	100.0%	\$50.87	100.0%	3/31/2027

(1) Based on the underwritten rent roll.

(2) Ratings provided are for the parent company of the entity listed in the "Tenant" field whether or not the parent company guarantees the lease.

(3) Base Rent PSF includes the 14,843 square foot amenities building, for which approximately \$785,298 of base rent has been underwritten. Google's right to use the amenities building is exclusive during any period when Google leases both office buildings and is non-exclusive for any additional tenant that may sign a lease at the property in the future. Additionally, Base Rent PSF represents the straight-line average of Google's rent steps over the course of the loan term inclusive of the free rent reserve.

(4) Google has two seven-year renewal options remaining for each lease. Google must provide notice of its intention to renew no earlier than January 2026 or later than June 2026.

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Lease Rollover Schedule ⁽¹⁾									
Year	Number of Leases Expiring	Net Rentable Area Expiring	% of NRA Expiring	Base Rent Expiring	% of Base Rent Expiring	Cumulative Net Rentable Area Expiring	Cumulative % of NRA Expiring	Cumulative Base Rent Expiring	Cumulative % of Base Rent Expiring
Vacant	NAP	0	0.0%	NAP	NAP	0	0.0%	NAP	NAP
2017 & MTM	0	0	0.0	\$0	0.0%	0	0.0%	\$0	0.0%
2018	0	0	0.0	0	0.0	0	0.0%	\$0	0.0%
2019	0	0	0.0	0	0.0	0	0.0%	\$0	0.0%
2020	0	0	0.0	0	0.0	0	0.0%	\$0	0.0%
2021	0	0	0.0	0	0.0	0	0.0%	\$0	0.0%
2022	0	0	0.0	0	0.0	0	0.0%	\$0	0.0%
2023	0	0	0.0	0	0.0	0	0.0%	\$0	0.0%
2024	0	0	0.0	0	0.0	0	0.0%	\$0	0.0%
2025	0	0	0.0	0	0.0	0	0.0%	\$0	0.0%
2026	0	0	0.0	0	0.0	0	0.0%	\$0	0.0%
2027	2	612,691	100.0	31,169,318	100.0	612,691	100.0%	\$31,169,318	100.0%
2028 & Beyond	0	0	0.0	0	0.0	612,691	100.0%	\$31,169,318	100.0%
Total	2	612,691	100.0%	\$31,169,318	100.0%				

(1) Based on the underwritten rent roll dated June 1, 2017.

Google Rent Schedule						
Period	Building One Base Rent per Year	Building One Base Rent per Year PSF	Building Two Base Rent per Year	Building Two Base Rent per Year PSF	Cumulative Base Rent per Year	Cumulative Base Rent per Year PSF
Months 1 – 10 ⁽¹⁾	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00
Months 11 – 22 ⁽¹⁾	0	\$0.00	12,232,568	\$20.46	\$12,232,568	\$20.46
Months 23 – 34	12,599,545	\$21.07	13,738,744	\$22.98	\$26,338,289	\$44.06
Months 35 – 46	14,150,907	\$23.67	14,150,907	\$23.67	\$28,301,813	\$47.34
Months 47 – 58	14,575,434	\$24.38	14,575,434	\$24.38	\$29,150,868	\$48.76
Months 59 – 70	15,012,697	\$25.11	15,012,697	\$25.11	\$30,025,394	\$50.22
Months 71 – 82	15,463,078	\$25.86	15,463,078	\$25.86	\$30,926,156	\$51.73
Months 83 – 94	15,926,970	\$26.64	15,926,970	\$26.64	\$31,853,940	\$53.28
Months 95 – 106	16,404,779	\$27.44	16,404,779	\$27.44	\$32,809,559	\$54.88
Months 107 – 118	16,896,923	\$28.26	16,896,923	\$28.26	\$33,793,845	\$56.53
Months 119 – 128	14,431,037	\$24.14	14,431,037	\$24.14	\$28,862,073	\$48.28
Total/Wtd. Avg.⁽²⁾	\$135,461,369	\$25.34	\$148,833,136	\$25.09	\$284,294,505	\$49.53

(1) The property is 100.0% leased to Google through March 2027. Google has executed two leases for the property but is not yet in occupancy of either space. Google leases the property under two separate leases, one for Building One and the second for Building Two. Google is expected to take occupancy by September 2017 and, after any applicable free rent periods, is required to begin paying full rent as applicable under each lease as follows: Building One in July 2018 and Building Two in July 2017. At origination, the borrower reserved approximately \$87.0 million for unfunded obligations (approximately \$49.4 million for outstanding tenant improvements and leasing commissions and approximately \$37.6 million for free rent).

(2) The Total/Wtd. Avg. Base Rent and PSF numbers exclude the 14,843 square foot amenities building, for which approximately \$785,298 of base rent has been underwritten. Google's right to use the amenities building is exclusive during any period when Google leases both office buildings and is non-exclusive for any period of time an additional tenant leases space at the property in the future.

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Proforma and Underwritten Net Cash Flow						
	Proforma 2017	Proforma 2018	Proforma 2019	Underwritten	Per Square Foot	% ⁽¹⁾
Rents in Place ⁽²⁾	\$3,318,057	\$17,393,064	\$28,439,878	\$31,169,318	\$50.87	84.4%
Vacant Income	0	0	0	0	0.00	0.0
Gross Potential Rent	\$3,318,057	\$17,393,064	\$28,439,878	\$31,169,318	\$50.87	84.4%
Total Reimbursements	4,112,410	6,072,471	6,503,937	5,775,140	9.43	15.6
Net Rental Income	\$7,430,467	\$23,465,535	\$34,943,815	\$36,944,458	\$60.30	100.0%
(Vacancy/Credit Loss)	0	0	0	(1,847,223)	(3.01)	(5.0)
Other Income	0	0	0	0	0.00	0.0
Effective Gross Income	\$7,430,467	\$23,465,535	\$34,943,815	\$35,097,235	\$57.28	95.0%
Total Expenses	\$5,583,716	\$6,204,727	\$6,692,827	\$6,170,971	\$10.07	17.6%
Net Operating Income	\$1,846,751	\$17,260,808	\$28,250,988	\$28,926,265	\$47.21	82.4%
Total TI/LC, Capex/RR	0	0	0	1,294,985	2.11	3.7
Net Cash Flow	\$1,846,751	\$17,260,808	\$28,250,988	\$27,631,280	\$45.10	78.7%

(1) % column represents percent of Net Rental Income for all revenue lines and represents percent of Effective Gross Income for the remainder of fields.

(2) The property is 100.0% leased to Google through March 2027. Google has executed two leases for the property but is not yet in occupancy of either space. Google leases the property under two separate leases, one for Building One and the second for Building Two. Google is expected to take occupancy by September 2017 and, after any applicable free rent periods, is required to begin paying full rent as applicable under each lease as follows: Building One in July 2018 and Building Two in July 2017. At origination, the borrower reserved approximately \$87.0 million for unfunded obligations (approximately \$49.4 million for outstanding tenant improvements and leasing commissions and approximately \$37.6 million for free rent). Additionally, Underwritten Rents in Place represents the straight-line average of Google's rent steps over the course of the loan term.

Additional Debt. There is a \$102.0 million Moffett Gateway Subordinate Companion Loan and a \$50.0 million mezzanine loan, both coterminous with the Moffett Gateway A-Notes. The Moffett Gateway Subordinate Companion Loan and the mezzanine loan have each been sold to separate third party investors. The Moffett Gateway Subordinate Companion Loan has a 5.00000% coupon and is interest only for the entire term. All principal payments on the Moffett Gateway Whole Loan once amortization begins after the expiration of the interest-only period will be applied to the Moffett Gateway A-Notes, which will cause hyper-amortization of the Moffett Gateway A-Notes. The mezzanine loan has a 6.35000% coupon and is interest only for the full term of the loan. Including the Moffett Gateway Subordinate Companion Loan and mezzanine loan, the cumulative Cut-off Date LTV, cumulative UW NCF DSCR and cumulative UW NOI Debt Yield are 75.2%, 1.22x and 7.3%, respectively. The mortgage and mezzanine lenders have entered into an intercreditor agreement.

Partial Release. The borrower is permitted to release Building One or Building Two from the lien of the security instrument through a partial defeasance of the Moffett Gateway Whole Loan at any time after the expiration of the lockout period if, among other conditions, (i) no event of default has occurred and is continuing, (ii) the borrower defeases a portion of the Moffett Gateway Whole Loan in an amount equal to (a) the allocated loan amount for the applicable building (which is \$170.0 million for each building with respect to the Moffett Gateway Whole Loan and \$27.5 million for each building with respect to the mezzanine loan) plus (b) if the Google Tenancy Condition (as defined below) is not satisfied, 25% of the allocated loan amount, (iii) after giving effect to the release, the debt service coverage ratio of the remaining portion of the property based on the trailing 12-month period equals or is greater than the greater of (a) 1.23x and (b) the debt service coverage ratio for the property (including the building being released) immediately preceding the release based on the trailing-three month period.

"Google Tenancy Condition" means (a) there is no Cash Sweep Period caused by a Specified Tenant Trigger and (b) either the Google lease or a lease for the Google leased premises with a tenant that has a long term unsecured debt rating of BBB or its equivalent is in full force and effect for the remaining property.

Right of First Offer. Google has a right of first offer, so long as the borrower or an affiliate owns the property, to purchase all or any portion of the property that the borrower is willing to sell. The right of first offer expressly does not apply to any third party (including any owner by reason of foreclosure or any successor-in-interest) who subsequently owns all or any portion of the property.