

Presale Report

DC Commercial Mortgage Trust 2023-DC

DBRS Morningstar

August 15, 2023

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Capital Structure

Commercial Mortgage Pass-Through Certificates

Description	Rating Action	Balance (\$)	BLTV (%)	DBRS Morningstar Rating	Trend
Class A	New Rating - Provisional	564,300,000	48.1	AAA (sf)	Stable
Class X	New Rating - Provisional	680,200,000	n/a	AA (sf)	Stable
Class B	New Rating - Provisional	115,900,000	57.9	AA (low) (sf)	Stable
Class C	New Rating - Provisional	96,600,000	66.2	A (low) (sf)	Stable
Class D	New Rating - Provisional	157,800,000	79.6	BBB (low) (sf)	Stable
Class HRR	New Rating - Provisional	55,400,000	84.3	BB (sf)	Stable
Class R	n/a	-	-	NR	n/a

Notes:

1. Class X Certificates will not be entitled to distributions of principal and accrue interest on the related Notional Amount. The Notional Amount of the Class X Certificates will be equal to the aggregate of the Certificate Balances of the Class A and Class B Certificates.
2. The Class HRR Certificates are expected to represent at least 5% of the fair value of all "ABS interests" issued by the Issuer and will constitute an "eligible horizontal residual interest" that will be purchased and retained by a "third party purchaser".
3. The Class R Certificates will not have a Certificate Balance or a Notional Amount. The Class R Certificates represent the residual interests in the Lower-Tier REMIC and Upper-Tier REMIC and are not entitled to distributions of principal or interest.

n/a = Not applicable.

NR = Not Rated

Estimated Closing Date: August 30, 2023

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Collateral Spotlight



Source: DBRS Morningstar.



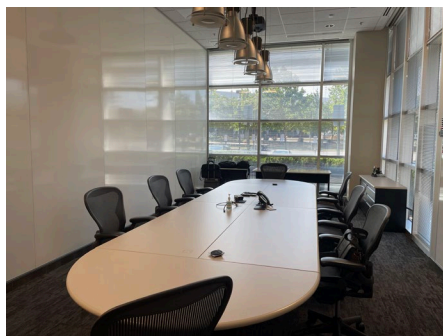
Source: DBRS Morningstar.



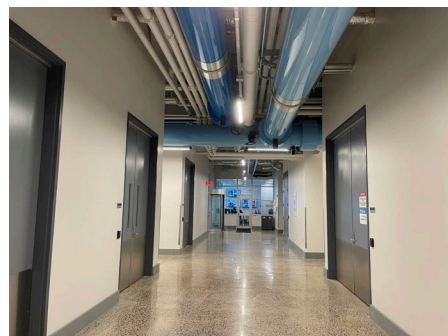
Source: DBRS Morningstar.



Source: Appraisal.



Source: DBRS Morningstar.



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Source: Appraisal.



Source: Appraisal.



Source: DBRS Morningstar.



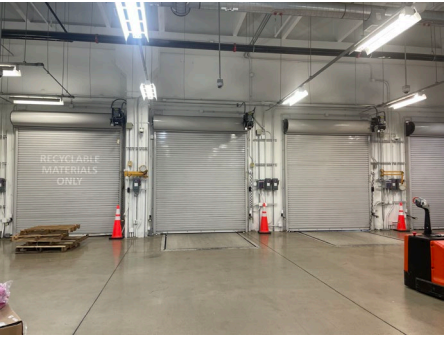
Source: DBRS Morningstar.



Source: DBRS Morningstar.



Source: DBRS Morningstar.



Source: DBRS Morningstar.



Source: DBRS Morningstar.

Transaction Summary

Trust Characteristics			
Trust Loan Notional Balance (\$)	990,000,000	No. Properties / No. Buildings	2 / 3
Loan Purpose	Recapitalization	Property Type	Data Center
Structure	REMIC	Location(s)	Ashburn, VA
Rated Final Distribution Date	Sep-40	DBRS Morningstar Market Rank	3
DBRS Morningstar BLTV (%)	84.3	DBRS Morningstar Cap Rate (%)²	7.5
DBRS Morningstar ELTV (%)	84.3	DBRS Morningstar Value (\$)²	1,174,017,707
DBRS Morningstar Debt Yield (%)	8.9	Quality/Volatility Adjustment (%)²	7.50
DBRS Morningstar DSCR (x)²	1.27	Herfindahl Adjustment (%)	0.32
Appraised LTV (%)¹	64.8	Other Adjustments (Y/N)²	Y
Issuer UW DSCR (x)	1.47	DBRS Morningstar NCF Variance (%)	-14.8

¹ Based on the As-Is Appraised value of \$1.528 billion provided by Newmark Knight Frank as of July 20, 2023, inclusive of a portfolio premium of approximately 1.3%

² For more information on DBRS Morningstar Metrics and Adjustments, please see the DBRS Morningstar LTV Sizing Benchmarks and Adjustments section.

Participants	
Depositor	Citigroup Commercial Mortgage Securities Inc.
Mortgage Loan Sellers	Citi Real Estate Funding Inc. Goldman Sachs Mortgage Company Morgan Stanley Mortgage Capital Holdings LLC
Trustee	Computershare Trust Company, N.A.
Servicer	Midland Loan Services, a Division of PNC Bank, National Association
Special Servicer	Situs Holdings, LLC
Certificate Administrator	Computershare Trust Company, N.A.
Operating Advisor	Park Bridge Lender Services LLC

DBRS Morningstar Perspective

DC Commercial Mortgage Trust 2023-DC (DC 2023-DC) is a single asset/single-borrower transaction collateralized by the borrower's fee-simple interest in two data center properties totaling three buildings in Ashburn, Virginia. DBRS Morningstar generally takes a positive view of the credit profile of the overall transaction based on the portfolio's favorable market position, affordable power rates, desirable efficiency metrics, and strong tenancy profile. The loan is unclosed but is expected to close on or before August 30, 2023, and terms of the loan are subject to change.

Data centers, while having existed in one form or another for many years, have become a key component in the modern global technology industry. The advent of cloud computing, streaming media, file storage, and artificial intelligence applications has increased the need for these facilities over the last 10 years in order to manage, store, and transmit data globally. While previous incarnations of data centers were often constructed in existing buildings that were converted, the needs of the market require purpose-built facilities that are engineered for this single use.

From the standpoint of the physical plants, the data center assets are heavily powered with more than 104 megawatts (MW) of critical IT load and feature N+2 redundancy for all building systems. DBRS Morningstar views the data center collateral as strong assets with strong critical infrastructure, including power and redundancy, built to accommodate the technology needs not only of today, but also well into the future. Digital Realty, 20% owner and the operator of the portfolio, currently owns and operates more than 300 data center properties across 28 countries.

Strengths

- **Northern Virginia Location with High Barriers to Entry** – Data center operators have historically benefited from high barriers to entry because of the complexity of their operations along with the specialized knowledge required to operate the facilities to extraordinarily demanding uptime and reliability standards. Furthermore, the high upfront capital costs and necessary power infrastructure also make speculative development more difficult than with other property types. Moreover, local power provider Dominion Energy announced in July 2022 that it cannot allocate additional power to new data center developments in Northern Virginia, essentially delaying new data center development through 2026.
- **Below Market Rents** – The portfolio's Issuer UW rent for data center space is approximately 17.9% below the sponsor's market rent estimates and recent leasing data. This represents an opportunity for the sponsor to push rolling and expiring leases to a higher rental rate that is closer to the market rent. Leases signed since Q4 2022 at both the subject property and in Digital Realty's Northern Virginia portfolio exhibit an average rent of \$150 per kilowatt (kW) per month, which is significantly higher than the Issuer UW rent of \$95.88 per kW per month. According to market data listed in the term sheet, the Ashburn submarket generally commands rents between 10% and 15% above the remaining Northern Virginia market.
- **Clustering and Network Effects** – Data center operators benefit from strong clustering and network effects attributable to the complex IT environments of their tenants. For various reasons, larger tenants strongly prefer to scale within existing environments rather than add capacity at a facility with a different provider.
- **Favorable Power Costs and Efficiency Metrics** – The assets are located in Ashburn, Virginia, which is part of the greater Northern Virginia market known as Data Center Alley. Northern Virginia is the largest data center market in the world and is supported by some of the most favorable wholesale power costs and tax rates in the country. Ashburn's wholesale power costs are approximately \$0.05 per kilowatt hour (kWh), which compares favorably with other nearby markets where power costs can be higher, such as Pennsylvania, New Jersey, and Manhattan, which exhibit power costs of \$0.0771/kWh, \$0.1105/kWh,

and \$0.13/kWh, respectively. The properties within the portfolio—named ACC5, ACC6, and ACC7—exhibit power utilization efficiency (PUE) ratios of 1.48, 1.47, and 1.20, respectively, which indicates a relatively efficient delivery of power to critical IT infrastructure. However, the properties have design PUE ratios of 1.28, 1.28, and 1.15, respectively. Typical PUE ratios range from 1.2 to 3.0 and, according to a third-party market report outlined in the Term Sheet, average annual PUE across all data centers in the United States is approximately 1.80.

- **Diversification and Granular Tenancy** – The cross-collateralized portfolio benefits from relatively granular tenancy and favorable industry diversification. The portfolio also benefits from the tenancy of numerous Cloud and IT tenants and hosts service provider tenants whose significant power consumption and complex needs are only projected to grow over time. Additionally, approximately 58.7% of the DBRS Morningstar in-place base rent is attributable to investment-grade tenants across the portfolio, which is a highly favorable ratio.
- **Leverage Profile and Cash Equity** – The \$990.0 million mortgage loan represents an 84.33% LTV on the DBRS Morningstar value of \$1.174 billion, which is relatively modest compared with more fully leveraged single-asset/single-borrower transactions.
- **Experienced Operator with Institutional Sponsorship** – Digital Realty is an experienced data center operator with a portfolio of more than 300 data centers in 28 countries on six continents. The company has established relationships with significant power users across various industries. Furthermore, the company has committed to improving the sustainability of their operation with approximately 62% of their global power provided through a renewable source. The sponsor on the transaction is a joint venture between Digital Realty and TPG, a global private equity firm founded in 2009 with approximately \$139.0 billion in AUM as of the end of 2022. The experienced institutional sponsorship of TPG complements Digital Realty’s experience in operating the data center assets. TPG has a dedicated team focused on real estate with more than \$19 billion in AUM.
- **Property Quality** – ACC5 and ACC7 are LEED Gold certified and exhibit strong design PUE ratios of 1.28 and 1.15, respectively, while ACC6 is LEED Silver certified and exhibits a design PUE ratio of 1.28. All the data center buildings in the portfolio were constructed with N+2 redundancy, which will allow for two failures of any system. N+2 redundancy also allows for more flexibility for repair and maintenance of the various mechanical systems at the property.

Concerns

- **Operationally Intensive Asset** – Data center properties require specialized operational knowledge and expertise in order to operate to extremely high uptime and reliability standards set forth in various service-level agreements (SLAs) with tenants. Therefore, the pool of potential buyers may be more limited than for other asset types, such as warehouse or distribution properties. Furthermore, a substantial component of the portfolio’s value is dependent on Digital Realty’s tenant roster and extensive industry relationships and technical expertise. However, Digital Realty has significant experience in the operation and management of data centers, especially in Northern Virginia where it has significant experience and manages 16 data center properties. The loan documents require that any replacement manager meet certain qualifications, including but not limited to, at least five years’ experience in the management of at least five data centers totaling 1.0 million sf, or be one of the pre-approved managers outlined in the offering documents.

- **Elevated Capital Requirements** – DBRS Morningstar views data center properties as significantly more capital intensive beyond the identifiable shell building repairs captured by a typical engineering report. Data center properties typically have dedicated on-site utility substations, complex closed loop and evaporative cooling systems, and substantial uninterruptible power supply (UPS) and backup generator systems that must be proactively maintained and replaced to ensure the highest level of uptime and reliability. The property condition report (PCR) report estimated \$1.24 psf in ongoing capex needs across the portfolio. DBRS Morningstar assumed higher ongoing capex requirements of \$4.00 per kW per month in its concluded cash flow to reflect the higher capital intensive needs of the properties.
- **Low Property Release Premium** – The loan agreement permits the borrower to release individual properties across the portfolio pursuant to a release premium of 110% of the ALA. DBRS Morningstar considers 110% to be weaker than a generally credit-neutral standard of 115%. As a result, DBRS Morningstar applied a penalty to the sizing hurdles to account for this release structure. As it relates to the release of individual properties, ACC5 and ACC6 are located on the same tax parcel and must be released together. ACC7 is located on its own tax parcel and can be released on its own. After a release, the debt yield for the remaining property must be equal to or higher than 9.7%, which is lower than the in-place debt yield of 10.6% based on the Issuer NOI.
- **Legal and Structural Considerations**
 - **Non-Recourse Carveout Guaranty Cap** – The liability of the carveout guarantor is capped at 15% of the then-outstanding loan amount for bankruptcy events. Full recourse is triggered by such bankruptcy events. Full recourse is also triggered if the SPE covenants are breached and a court orders substantive consolidation of the borrower and a transfer in violation of the Loan Agreement.
 - **Weak Qualified Transferee and Replacement Guarantor Criteria** – The qualified transferee provisions allow the borrowers to transfer the properties to an entity having total assets of at least \$1.0 billion and shareholder equity of \$500.0 million. Additionally, there is a \$400.0 million net worth requirement for the guarantor at closing and for any replacement guarantor, which DBRS Morningstar believes is relatively weak compared with the mortgage loan amount of \$990.0 million. Despite this structural weakness, DBRS Morningstar did not elect to apply a penalty.
 - **No Warm Body Guarantor** – The guarantors are Digital Realty Trust, L.P. and TPG Real Estate Partners IV, L.P., which limits the recourse back to the sponsor for bad boy carveouts. Bad boy guarantees and access to the guarantor help mitigate the risk and increased loss severity of bankruptcy, unapproved transfers, fraud, misappropriation of rents, and other potential bad acts of the sponsor.

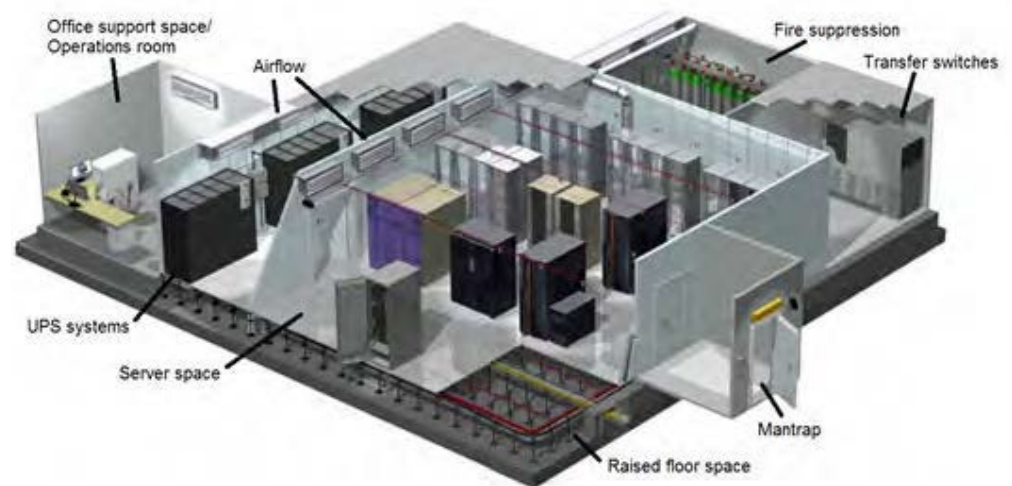
Key Data Center Industry Metrics

DBRS Morningstar has compiled the following table of key metrics relevant to the analysis of data center facilities along with its opinion of each metric relative to industry standards.

Metric	DC 2023-DC Portfolio WA	Explanation	Comment
Percentage of Hyperscale Users	100.0	Hyperscale users are responsible for a large proportion of new leasing activity in the data center market, and typically represent the largest power users (more than 250 kW, typically multiple MWs).	The subject portfolio contains a significant percentage of hyperscale tenants, which are usually the larger Cloud and IT tenants that occupy significant space in data center properties.
Average Year Built	2012	Newer facilities benefit from the very latest technologies and tend to be more energy efficient. However, it can take time to ramp up a new facility.	The portfolio is, on average, more than a decade old. While the properties are certainly not outdated, they are older than data centers analyzed in other data center transactions. However, the sponsor has invested more than \$19.0 million in capex since the start of 2020.
Average PUE Ratio	Various	The PUE ratio is an industry metric for infrastructure energy efficiency. Lower PUE ratios represent more efficient power utilization.	DBRS Morningstar considers the portfolio's PUE ratios to be very favorable. Typical data center PUEs range between 1.2 and 3.0 depending on a number of factors; the portfolio is on the low end of the range of figures typically seen.
Average Wholesale Power Costs	\$0.05/kWh	Data centers consume tremendous amounts of power. Therefore, affordability and reliability of power is of paramount importance for data center operators and tenants.	The portfolio's concentration in the Northern Virginia market results in extremely favorable power costs. Wholesale power rates in large markets can range from \$0.02/kWh to \$0.25/kWh and Northern Virginia is on the lower end of the range of figures typically seen.
Occupancy (%)	97.2	The proportion of leased MW as a percentage of built MW is an approximation of occupancy based on leased capacity and full capacity across all data centers. However, actual power utilization ratios typically tend to be significantly lower than leased power supply at any given point in time.	The occupancy based on the in-place rent roll is favorable within the context of the portfolio and the market. The market usually exhibits an average occupancy rate well-above 95.0% and, despite recent volatility in occupancy due to a departure from a significant tenant, the property is operating at an occupancy relatively in-line with the rest of the submarket.

Data Center Sector Discussion

Data center properties are typically large warehouse-like facilities that house servers and other technical infrastructure for a wide variety of tenants and users. Data centers can take several forms, including large build-to-suit facilities for single users, wholesale turnkey facilities for large-format users, and co-location facilities for smaller retail users. Data centers utilize tremendous amounts of power and require significant bandwidth and internet connectivity along with redundant power supply and cooling systems to operate effectively. Therefore, power supply costs, connectivity, and natural disaster risks are primary determinants of demand for space in a given market.



Source: Appraisal.

Unlike typical commercial property leases where tenants lease space by the square foot, data center tenants lease power capacity from the operator. Power is typically measured in the form of kW or MW. Price per kilowatt per month is the most commonly used metric when determining rent for data center customers, with customers under 250 kW of leased power capacity generally classified as "retail" tenants and those with over 250 kW classified as "wholesale" tenants. According to the appraisal, retail pricing ranges from about \$110 to \$150 kWh/month, while wholesale pricing ranges from as low as \$95 to \$125 per kWh/month.

In most cases, the landlord is responsible for providing the physical space, the power distribution units (PDUs), the utility power supply, and cooling and backup power supply along with access to significant connectivity from multiple providers (tenants pay separately for internet access). The tenants are generally responsible for their own servers, data storage, and other equipment housed in racks or access-controlled cages on the data center floor. According to commentary from data center operators,

the value of the on-site server and storage equipment owned by the tenants can be many times the value of the landlord's building infrastructure.

In order to attract and retain tenants, data center operators and landlords need to provide significant on-site infrastructure to ensure the highest levels of uptime and reliability for mission-critical IT infrastructure. Tenants negotiate SLAs with landlords, which are contracts that outline minimum uptime standards, power and space requirements, and the desired performance standards. Generally, power availability and environmental service are customary in SLAs, but it is becoming increasingly common to include service levels for other mission-critical data center services including response time, security, and delivery service levels.

Tenants also require various compliance certifications depending on the industry, including HIPAA and PCI compliance for the healthcare and payment processing industries, respectively. Most modern facilities feature multiple layers of redundant systems to ensure that there is a backup to the backup in the event of a catastrophic mechanical event or utility power failure. For example, an N+1 facility has a single component added to support a single failure, while an N+2 facility has two components added to support up to two similar failures. A 2N facility has fully redundant dual mirrored independent systems. Facilities with more redundant systems are able to support higher SLA terms (for example, 99.999% uptime). Downtime and outages are extremely costly, with the average data center outage costing more than \$740,000, according to the Ponemon Institute.

Supply and Demand Metrics

The data center sector has experienced tremendous growth over the past two decades and is expected to expand to 22.9 gigawatts (GW) of capacity by 2023 from approximately 9.6 GW of total capacity in 2020, according to information provided in the term sheet from a third-party industry report. In 2022, vacancy rates across six of the seven top data center markets tightened on a year-over-year (YOY) basis, according to data provided by CBRE Research, despite primary market supply growing 17% YOY to more than 3,900 MW in a constrained capital markets environment.

Mortgage Loan and Debt Capital Structure

The \$990.0 million mortgage loan was co-originated by Citi Real Estate Funding Inc., Goldman Sachs Bank USA, and Morgan Stanley Bank, N.A. The loan pays an assumed fixed-rate interest of 7.000% on an IO basis through the entire five-year loan term. The loan is expected to close on or before August 30, 2023, and terms of the loan are subject to change.

Mortgage Loan Summary			
Mortgage Loan Balance (\$)	990,000,000	Cash Management	Springing
Amortization	IO	Lockbox	Hard
Interest Rate	7.000%	Interest Accrual	Actual/360
Fixed/Floating Rate	Fixed	Assumable	Yes
Interest Rate Cap, Strike Rate	n/a	Prepayable	Yes
Initial Loan Term	60 months	Extension Terms	None

Debt Structure					
Tier	Debt Amount (\$)	Interest Rate (%)	Payment Terms	DBRS Morningstar DSCR (x)	DBRS Morningstar LTV (%)
Senior A Notes	990,000,000.00	7.000%	IO	1.27	84.3
Total/WA	990,000,000.00	7.000%	IO	1.27	84.3

Note	Balance (\$)	Originator
Note A-1	396,000,000	Citi Real Estate Funding Inc.
Note A-2	297,000,000	Morgan Stanley Bank, N.A.
Note A-3	297,000,000	Goldman Sachs Bank USA
Total Whole Loan	990,000,000	Various

This securitization transaction will be subject to the credit risk retention requirements of Regulation RR, 12 C.F.R. Part 244. An economic interest in the credit risk of the mortgage loan is expected to be retained as an eligible horizontal residual interest in the form of the Class HRR Certificates. The depositor intends to satisfy its risk retention requirements through a third-party purchaser, which is expected to be Core Credit Partners A LLC.

Risk Retention			
Applicable	Type	Interest	Risk Retention Holder
Yes	Eligible Horizontal Interest	Class HRR Certificates	To Be Determined

Note: Risk retention is defined as the credit risk retention requirements of Section 15G of the Exchange Act, as added by Section 941 of the Dodd-Frank Act.

Sources and Uses

TPG is purchasing an 80% ownership position in the portfolio. The total debt of \$990.0 million, combined with \$423.9 million of new cash equity contributed by TPG and \$106.0 million of equity contributed by Digital Realty, was used to recapitalize the portfolio at an implied total purchase price of \$1.5 billion; establish upfront reserves of \$1.2 million consisting of unfunded obligations of tenant buildouts, leasing costs, and free rent; and pay closing costs.

Source	Amount (\$)	% of Total	Uses	Amount (\$)	% of Total
Mortgage Proceeds	990,000,000.00	65.07%	Portfolio Purchase Price	1,500,000,000.00	98.69%
New Sponsor Equity	423,899,680.00	27.94%	Estimated Closing Costs	18,665,382.00	1.23%
Digital Realty Existing Equity	105,974,920.00	5.09%	Leading Reserve	1,209,218.00	0.08%
Totals	1,519,874,600	100.00%		1,519,874,600	100.00%

Portfolio Summary

The DC 2023-DC transaction is collateralized by a portfolio of two data center properties in Ashburn totaling three buildings.

The fee-simple assets, named ACC5, ACC6, and ACC7, primarily serve hyperscale users with a significant amount of cloud tenants. The three data center buildings, which are located on adjacent plots of land in

Ashburn, collectively have 104.0 MW of total physical capacity. The adjusted occupancy rate based on current capacity of the centers is approximately 97.2% for all three centers.

ACC5, built in 2009, totals 36.4 MW of total power and 176,200 raised floor sf. ACC6, built in 2011, totals 26.0 MW of total power and 130,412 raised floor sf. ACC7, built in 2014, totals 41.6 MW of total power and 246,000 raised floor sf. The properties generally exhibit strong occupancy rates as ACC5, ACC6, and ACC7 are approximately 98.0%, 91.5%, and 100.0% occupied, respectively. Each data center property has an N+2 redundancy across all systems. The portfolio exhibits a WA remaining lease term (WALT) of approximately 4.1 years, with ACC5 exhibiting a WALT of 3.3 years, ACC6 exhibiting a WALT of 7.0, and ACC7 exhibiting a WALT of 3.3.

Property Name	City, State	Year Built	Power Capacity (MW)	Leased (MW)	Occupancy (%)	Mortgage ALA (\$MM)	% of Mortgage ALA	Appraised Value (\$MM)	% of Aggregate Appraised Value
ACC5	Ashburn, VA	2009	36.4	35.7	98.0	522.0	52.7	500.0	33.2
ACC6	Ashburn, VA	2011	26.0	23.8	91.5	522.0	52.7	296.0	19.6
ACC7	Ashburn, VA	2014	41.6	41.6	100.0	468.0	47.3	712.0	47.2
Total Portfolio		Various	104.00	101.1	100.0	96.5	990.0	1,508.00	100.00

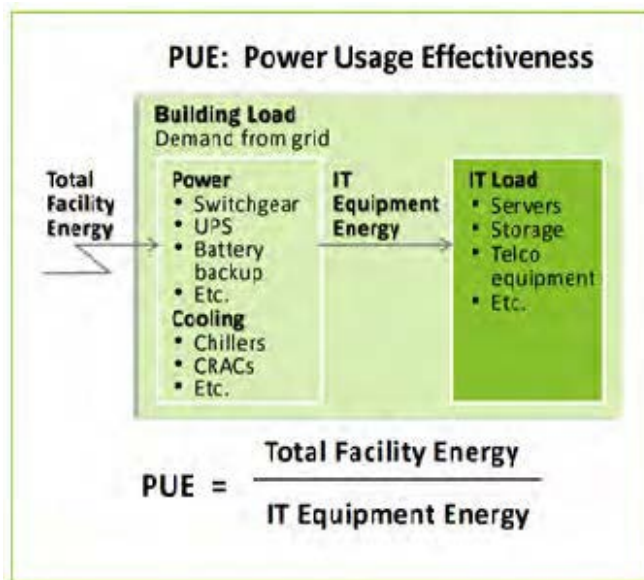
*ACC5 and ACC6 are located on the same tax parcel and therefore must be released together. As a result, the combined ALA for both properties is \$520.0 million. The appraised value for ACC5 is \$204.0 million higher than ACC6.

ACC5 and ACC7 are LEED Gold certified and exhibit strong design PUE ratios of 1.28 and 1.15, respectively, while ACC6 is LEED Silver certified and exhibits a design PUE ratio of 1.28. All the data center buildings in the portfolio were constructed with N+2 redundancy, which will allow for two failures of any system. N+2 redundancy also allows for more flexibility for repair and maintenance of the various mechanical systems at the property. Furthermore, each of the data center properties is classified as a Tier III data center, which is designed to run without interruption of equipment replacement or maintenance and each component can be shut down and maintained without any impact on operations.

The portfolio's tenancy is predominantly hyperscale (more than 250 kW of contracted power) and minimal enterprise (less than 250 kW of contracted power) tenants across a wide array of industries. The portfolio's largest hyperscale tenants are digital media and cloud service providers with significant IT footprints and power needs. Generally, hyperscale tenants commit to longer leases than retail or enterprise tenants, who sign leases between one to three years. Additionally, larger hyperscale tenants generally tend to be stickier than smaller tenants who have shorter lease commitments. Confidential Tenant 7, who leases approximately 9.1 MW, has the right to terminate its lease if a governmental authority takes any action that would make it illegal for the tenant to operate in the United States. The parent company of such Confidential Tenant 7 is currently the subject of various ongoing investigations by the United States government.

Power Costs and Efficiency Metrics

Data centers consume tremendous amounts of power. Therefore, affordability and reliability of power is of paramount importance for data center operators and tenants. The efficiency of power available to supply critical IT load (servers, storage, etc.) as opposed to baseline building infrastructure (cooling, UPS systems, switchgears, etc.) is an important industry metric and is generally measured using the PUE ratio, which is described below:



Source: Appraisal.

Overall, the portfolio’s Design PUE ratios for the individual data centers range from 1.15 to 1.28 on a stabilized basis, which is extremely favorable compared with the national average of 1.80, according to a third-party market data in the term sheet. Lower PUE ratios represent more efficient power utilization. Typical data center PUE ratios range between 1.2 and 3.0, depending on a number of factors.

Given the significant power consumption, the cost and availability of wholesale power is a significant factor in the data center industry. The portfolio’s concentration in the Northern Virginia market, which has some of the lowest power costs in the country, results in extremely favorable portfolio-wide power costs, with a WA of approximately \$0.05/kWh. For reference, wholesale power rates in primary data center markets can range from \$0.02/kWh to as high as \$0.25/kWh.

	Physical Capacity (MW)	Shell SF	Raised Floor SF	Raised Floor % of Total SF	Power Costs (\$ per kWh)	PUE	Design PUE
ACC5	36.4	360,000	176,200	48.9	0.05	1.48	1.28
ACC6	26.0	261,997	130,412	49.8	0.05	1.47	1.28
ACC7	41.6	446,000	246,000	55.2	0.05	1.20	1.15
Total	104.0	1,067,997	552,612	51.7	0.05	Various	Various

Portfolio Leasing History

The portfolio's occupancy rate has continued to improve since 2021 when the portfolio experienced significant lease expirations at ACC5 and ACC6 from the departure of a large technology company that consolidated some of its operations in Northern Virginia at a nearby facility not owned or operated by the sponsors. As of the July 25, 2023, rent roll, the portfolio is 97.2% leased, which is about 750 basis points above 2021 occupancy of 89.7%. However, there is a tenant that is known to be vacating at the end of December 2023 that will bring physical occupancy down to 93.0%. DBRS Morningstar did not give credit to this vacating tenant in its NCF analysis.

Tenant Summary and Lease Terms

Tenant	Original Lease Commencement Year	Lease Expiration ¹	Leased MW	% of Total Capacity	DBRS Morningstar Gross Rent (\$)	% of DBRS Morningstar Gross Rent	Investment Grade
Confidential Tenant 1	May-15	Feb-25	14.6	14.0	23,049,950	17.80	Y
Confidential Tenant 2	Sep-14	Jul-27	18.4	17.7	17,105,574	13.21	Y
Confidential Tenant 3	Jun-16	Dec-28	11.7	11.2	12,048,504	9.31	Y
Confidential Tenant 4	Dec-19	Dec-26	11.4	10.9	12,420,626	9.59	N
Confidential Tenant 5	Apr-10	Sep-24	6.8	6.6	13,334,099	10.30	Y
Confidential Tenant 6	Apr-12	Jul-38	9.8	9.4	13,537,790	10.46	N
Confidential Tenant 7	Mar-22	Apr-29	9.1	8.7	8,063,672	6.23	N
Confidential Tenant 8	May-16	Jan-26	4.2	4.0	5,943,430	4.59	Y
Confidential Tenant 9	Sep-16	Jun-29	6.2	5.9	5,619,121	4.34	Y
Confidential Tenant 10	Jun-14	Oct-26	3.0	2.9	5,913,605	4.57	N
Confidential Tenant 11	Jan-15	Apr-25	2.0	1.9	3,618,082	2.79	Y
Confidential Tenant 12	Apr-10	Oct-24	1.1	1.1	2,650,869	2.05	Y
Confidential Tenant 13	Mar-10	Apr-24	0.6	0.5	1,406,424	1.09	Y
Confidential Tenant 14	Nov-09	Jan-27	0.6	0.5	1,364,319	1.05	N
Confidential Tenant 15	Sep-09	Dec-24	0.6	0.5	1,194,989	0.92	N
Sub-Total					129,484,006	98.3	Various

¹ The Lease Expiration Date presented above is the stated expiration date for each respective customer's current lease term. For customers with multiple leases, the Lease Expiration Date presented above represents the weighted average lease expiration based. The Lease Expiration Date does not take into consideration any such renewal options that a customer may have rights to exercise under the terms of its lease.

Rollover Schedule

Prior to loan maturity in 2028, approximately 69.7% of the portfolio in-place rent is scheduled to roll over, with a significant concentration of 25.3% rolling in 2025. While this is a higher proportion relative to other single-asset/single-borrower portfolios, it is not atypical nor unexpected given the shorter lease terms in multitenant data centers. The relatively significant rollover is mitigated by the in-place Issuer rents that are approximately 17.9% below the market rents, based on recent leasing in Digital Realty's portfolio in Northern Virginia, including leases signed at the subject properties. The submarket also exhibits strong vacancy characteristics, with a vacancy rate of 0.98% in H2 2022, according to market data provided in the term sheet, and limited new supply over the next few years because of power constraints. This should continue to put upward pressure on rents in the submarket and help maintain the submarket's low vacancy rate.

Year	Total Capacity (MW)	% of Total Capacity	Cumulative % of Total Capacity	Gross DBRS Morningstar Rent (\$)	% of Gross DBRS Morningstar Rent	Cumulative % of Gross DBRS Morningstar Rent
2023 & MTM	4.3	4.2	4.2	121,848.00	0.0	0.0
2024	8.0	7.7	11.8	16,071,746	12.4	12.4
2025	20.4	19.6	31.5	32,737,387	25.3	37.7
2026	14.6	14.0	45.5	19,767,062	15.3	53.0
2027	18.0	17.3	62.8	18,557,297	14.3	67.3
2028	3.4	3.3	66.1	2,959,579	2.3	69.6
2029	15.3	14.7	80.7	13,682,793	10.6	80.1
2030	0.0	0.0	80.7	0.00	0.0	80.1
2031	7.3	7.0	87.8	12,048,504	9.3	89.5
2032	0.0	0.0	87.8	0.00	0.0	89.5
Thereafter	9.8	9.4	97.2	13,537,790	10.5	100.0
Vacant	3.0	2.8	100.0	0.00	0.0	100.0
Total	104.1	100.0	100.0	129,484,006	100.0	100.0

Market Summary

The portfolio is located entirely in the Northern Virginia market, which is the largest data center market in the world in terms of operational square footage and megawatts. Approximately 70% of the world's internet traffic passes through this region every day. According to 451 Research, the Northern Virginia data center market is home to approximately 2,260 MW of power capacity.

Northern Virginia's data center industry has benefited from considerable investment over the last decade. According to the appraisal, it attracted more than \$12 billion in investment since 2006, resulting in the creation of nearly 7,000 regional jobs. Cushman & Wakefield ranked Northern Virginia as the number one data center market in the world for its 2023 Global Data Center Market Comparison, a spot the market has held for four consecutive years. The report, which uses a methodology of 13 unique factors to determine an overall market score, ranked the market at or near the top in market size, tax incentives, low vacancy, power costs, and other factors.

Demand for data centers in the Mid-Atlantic region is in part driven by affordable power rates. Virginia, for instance, has a relatively lower power price of \$0.0677 per kWh. In comparison, the rates in Pennsylvania, New Jersey, and Manhattan are \$0.0771 per kWh, \$0.1105 per kWh, and \$0.13 per kWh, respectively. Power rates are significantly less expensive in Ashburn, averaging \$0.0502 per kWh. This is slightly lower than the rate in Charlotte, North Carolina, where the power rate is \$0.0506 per kWh.

Dominion Energy, the power supplier for the region, continues to use coal-fired power plants as part of its energy mix. As of 2022, approximately 9.7% of its power generated by coal. The utility has shuttered some older coal plants and pledged a largely coal-free energy mix by 2030. The costs of converting to renewable and lower-emission fuels may increase power costs for customers and put some incremental downward pressure on demand for data center space in the market. Low tax rates are another demand driver for the Virginia data center market. The average combined sales tax rate in Virginia (5.3%) is lower than the tax rate in Pennsylvania (6.34%), North Carolina (6.9%), New Jersey (7.03%), and New York

(8.48%), according to the appraisal. The lower average combined rate in Virginia is a result of sales tax incentives for owners and tenants of data center campuses in Loudoun County and Richmond.

Another major demand driver for data centers in Northern Virginia is its connectivity. The region is home to MAE-East, a central connectivity point for internet traffic, and has some of the highest density of dark fiber in the world. MAE-East was the world's first Internet Exchange Point and is a central connectivity point for internet traffic. The proximity of MAE-East Virginia Beach further drives strong latency characteristics as many subsea fiber networks land in Virginia Beach.

As shown in the chart above, the Northern Virginia market is at a record low vacancy rate of approximately 1.0% backed by continued strong demand and supply constraints. A record level of approximately 436.9 MW of net absorption was set in 2022. DBRS Morningstar assumed a vacancy rate of 7.1% in its cash flow analysis.

Site Inspection

DBRS Morningstar found the property to be Above Average. DBRS Morningstar toured the property with management on Tuesday, August 8, 2023. DBRS Morningstar observed that the property was in good condition, with strong security, clean common areas, and generally impressive mechanical systems.

The property consists of three hyperscale data centers in Ashburn, Virginia, which is a concentrated data center market of Loudoun County. The data center property is approximately six miles north of Dulles International Airport and 31 miles northwest of Washington, D.C. The surrounding area of the property is known as the Data Center Alley, which boasts the largest concentration of data centers in the U.S. The facility was easily accessible via the Dulles Greenway, a toll road that connects Dulles International Airport with Leesburg, Virginia, a city northwest of Ashburn. Northern Virginia has a strong network of data centers primarily because of its access to fiber connectivity and its inexpensive power. However, over the next several years new data center developments' access to power is expected to be significantly constrained as Dominion Energy, a power utility serving the subject market, has publicly stated that its power generation capacity has reached its maximum capacity. According to the property manager, existing facilities that have already contracted with the utility for power will have access; however, new entrants to the market may be unable to add new capacity. As a result, existing facilities or those with excess contracted power may become more valuable. In the immediate surrounding area, DBRS Morningstar observed a significant number of competitive data centers, including those operated by CloudHQ, Equinix, and QTS. Additionally, DBRS Morningstar noticed several large, ongoing construction projects in the neighboring area that appeared to be data centers.

The subject data centers are primarily hyperscale in nature, which allow tenants to deploy extra resources and IT load without requiring additional cooling systems, electrical power, connectivity, or physical space. They allow massively scalable data center infrastructures and solutions to their tenants, and their tenancy is not limited to large technology or cloud providers such as Google and Amazon. There was one tenant, whose name was not disclosed, that recently scaled down some of its leased power in a toured computer room. Management revealed that it was in talks with hyperscale tenants who could lease all of the remaining power in the computer room as well as smaller tenants who could collectively lease the available power. The need for security has also pushed companies toward large

professionally managed centers that can maintain high security standards and full-time professional staff at a lower cost, such as the subject.

The property operates at an N+2 redundancy for all building systems including cooling and power, which require two additional components to support the failure of a single system. The redundancy also allows for the maintenance of the various systems without any outages. While a 2N configuration, which is a fully mirrored redundant backup, is more secure in the event of total failure of one system and is superior in terms of uptime, 2N systems also create high levels of complexity and can significantly increase costs.

The two properties consist of three buildings, ACC5, ACC6, and ACC7, providing 36.4, 26.0, and 41.6 megawatts of critical IT load, respectively. The ACC5 and ACC7 buildings are both LEED Gold certified, whereas the ACC6 building is LEED Silver certified. DBRS Morningstar toured the ACC5 and ACC7 data halls, all of which were at high occupancy and active stage of operations with similar build-outs. The nearly complete data halls depicted the customizable nature of the data halls, and each tenant's configurations were a little different. Tenants who wanted additional security configurations would include metal walls with a keypad locking system surrounding their racks and servers. Each data hall has restricted access with a keycard and fingerprint scanner with closed circuit cameras. The open configuration and design of the data halls make them suitable for tenants of any size, although the property manager indicated a preference for fewer large tenants as opposed to many smaller tenants.

In addition to data halls in ACC5 and ACC7, DBRS Morningstar toured the common areas; office space; and most of the mechanical and electrical systems, including the diesel power generators.

Built in 2014, ACC7 is the newest and largest of the three buildings. The building has a new generation electrical design with a higher voltage power management system with a centralized uninterruptible power supplies (UPS) system that improves power usage effectiveness by connecting all data halls in one big loop of electrical and power distribution.

By contrast, building ACC5 had a different electrical system that connected each UPS system directly with data halls. According to management, the UPS system can provide emergency power for several minutes until the diesel generators are ramped up to full capacity. The diesel generators are on the roof or mezzanine level of the buildings, and each generator was connected to a diesel storage tank that stored enough diesel to generate 48 hours of backup power. At the time of inspection, each diesel storage tank contained more than 72 hours of power. Backup generators also had a filtration system to maintain the quality of diesel in storage and prevent any humidity buildup. The property also has diesel service contracts in place to ensure the reliability of the supply throughout the year.

Buildings ACC7 and ACC5 also deployed different types of cooling systems. Building ACC5 has a raised floor with cooled water and air flowing from the floor up into the data hall. Building ACC7 has a newer cooling system in which cooled water flows through pipes in the ceiling, not below the raised floors. The new cooling system allows cooled air to naturally disperse through the data hall from the ceiling, increasing the cooling efficiency of the system.

Each building deployed a high-level security system. Each building maintains a security office in the main lobby beyond the front entrance. Access to the data center is restricted by a secured revolving door, which can be entered only after security clearance. Keycard access is required to open nearly every door within the data center, and some areas including data halls require a fingerprint scanner along with keycard access. DBRS Morningstar observed hundreds of cameras in each building with nearly all doors accompanied by a designated security camera. In addition to strong security, all common areas appeared to be well-maintained and clean.

Third-Party Reports

As part of its analysis, DBRS Morningstar reviewed the appraisal reports, engineering reports, and environmental reports prepared in connection with the subject financing.

Appraisal

DBRS Morningstar reviewed the appraisal reports prepared by Newmark Valuation & Advisory, LLC for the properties in the portfolio. The concluded as-is appraised value of the portfolio is \$1.528 billion. Please see below for more information on the appraisal reports.

Appraisal Summary			
Provider	Date	Portfolio Value	Go Dark Value
Newmark Valuation & Advisory, LLC	July 20, 2023	\$1,528,000,000	N/A

Land Value	Insurable Value	Aggregate Individual As-Is Appraised Value	DBRS Morningstar Comments
\$174,400,000	\$936,000,000	\$1,508,000,000	The mortgage loan represents an 64.8% LTV based on the appraiser's as-is portfolio value.

Property Condition Assessments

Atlas performed property condition assessment (PCA) reports for each of the properties in the portfolio. The reports, which are dated July 14, 2023, identified \$7,500 in immediate and short-term repairs. The engineer recommended \$1.24 psf in inflated replacement reserves over a seven-year period with assumed annual inflation of 3.0%. Please see below for more information on the property condition assessments.

Engineering/PCA Summary			
Provider	Date	Immediate and Short-Term Repairs (Y/N)	Immediate Repair Costs (\$)
Atlas	March 7-9, 2023	Y	7,500

Recommended Reserves (\$/PSF/YR)¹	DBRS Morningstar Reserves	DBRS Morningstar Comments
\$1.24 psf	\$4.67 psf	DBRS Morningstar's capital reserves figure represents a conclusion of \$4.00/kW/month.

Environmental Reports

Atlas performed a phase I environmental site assessment (ESA) at each of the portfolio's properties between March 7, 2023, and March 9, 2023. The reports did not identify any on-site recognized environmental conditions (REC). However, the ESAs did identify underground storage tanks containing diesel fuel for each property's emergency generators as a business environmental risk. However, these tanks were installed between 2008 and 2014 and DBRS Morningstar does not believe they pose a significant risk to the environmental wellbeing of the properties.

DBRS Morningstar NCF Analysis

DBRS Morningstar determined its sustainable NCF of the underlying property by applying the *DBRS Morningstar North American Commercial Real Estate Property Analysis Criteria*. DBRS Morningstar typically makes adjustments to the property rental stream to account for vacancies, market rents, other income, reimbursable expenses per the lease terms, and any other relevant items. To estimate the property's normalized revenue stream, the DBRS Morningstar analysis includes a review of lease terms along with historical financial statements, third-party market reports, appraisal data, PCAs, ESAs, seismic reports, and relevant market data.

DBRS Morningstar's revenue and expense estimates, as well as its analytical approach, are discussed below:

NCF Analysis							
	2021	2022	March TTM	Sponsor's In-Place	Issuer NCF	DBRS Morningstar NCF (\$)	NCF Variance (%)
Base Rent	131,753,453	114,390,763	111,336,711	114,521,168	114,116,553	109,153,856	-4.35%
Contractual Rent Steps (\$)	0	0	0	0	3,006,835	2,907,581	-3.30%
SL IG Rent Steps	0	0	0	0	1,332,105	374,214	-71.91%
Potential Vacant Income	0	0	0	0	4,129,846	8,016,921	94.12%
Utility Reimbursements	18,379,386	21,692,090	25,769,067	44,280,234	44,280,234	44,280,234	0.00%
Other Reimbursements	27,316,192	24,108,939	20,094,241	18,280,861	19,391,872	20,337,813	4.88%
Interconnection Revenue	252,089	359,864	376,196	454,062	454,062	454,062	0.00%
Other Revenue	414,885	541,348	547,161	865,926	865,926	865,926	0.00%
Vacancy (\$)	-894,774	-9,299,725	-7,817,802	0	-4,129,846	-10,001,453	142.17%
EGI (\$)	177,221,230	151,793,279	150,305,574	178,402,251	183,447,587	176,389,154	-3.85%
Utilities	17,681,940	21,179,566	25,382,152	44,280,234	44,280,234	44,280,234	0.00%
All Other Operating Expenses (\$)	28,088,140	31,894,047	33,810,309	34,708,210	34,708,210	36,525,196	5.24%
NOI (\$)	131,451,150	98,719,666	91,113,113	99,413,807	104,459,143	95,583,723	-8.50%
Capex (\$)	0	0	0	0	1,148,956	4,992,382	334.51%
TI/LC (\$)	0	0	0	0	0	2,540,013	0.00%
NCF (\$)	131,451,150	98,719,666	91,113,113	99,413,807	103,310,187	88,051,328	-14.77%

EGI – DBRS Morningstar concluded its EGI based on the leases-in-place pursuant to the July 25, 2023, rent roll provided, including 12 months of contractual rent steps for all tenant leases that featured rent steps (inclusive of booked-but-not-billed revenue). Booked-but-not-billed in the data center industry is synonymous with a typical commercial lease that has been fully executed prior to the origination date, however, the tenant has not yet taken occupancy. Interconnection revenue reflects the in-place amount billed to tenants. DBRS Morningstar applied a straight-line average of contractual rent steps through the

loan term for one investment grade tenant with a lease expiration that is more than three years beyond the loan term. Unleased power capacity was grossed up at rates consistent with both recently signed leases at the portfolio and proximate comparable properties. Vacancy is based on the in-place economic vacancy. Reimbursements are based on the in-place and contractual reimbursements per the lease structures for reimbursement related to all expenses excluding utilities and power. In its analysis, DBRS Morningstar reimbursed 100% of utilities and power expenses.

Variable and Fixed Expenses – Power/utility expenses, other expenses, and real estate taxes reflect the sponsor’s budgeted expense figures. For insurance, DBRS Morningstar utilized the actual insurance premiums per the provided insurance analysis report.

Management Fee – DBRS Morningstar applied a management fee of 1.5% of EGI, which is lower than the contractual management fee of 3.0% of EGI.

Replacement Reserves and TI/LCs – DBRS Morningstar concluded capex/replacement reserves of \$4.0 per kW per month, which is lower than the conclusion of \$7.50 per kW per month provided in the appraisal. The sponsor provided a schedule of capex spend between 2020 and the end of 2022 that showed an average capex spend across all three properties of approximately \$5.08 per kW per month. As mentioned previously, this conclusion is still significantly higher than the engineer’s recommended inflated reserves of \$0.04 psf in the PCA.

DBRS Morningstar applied TI expenses of \$25.00 per kW per year for new leases and \$0.00 per kW per year for renewal leases on a five-year term. TI costs mainly represent any incidental costs associated with re-wiring or re-configuring space for tenants at the properties. Leasing costs of 4.0% and 2.0% for new and renewal leases, respectively, were applied across all tenant categories. All renewal probabilities were set to 80.0%, which reflects the significant investment from tenants, difficulty in moving data center operations, limited available power in Northern Virginia, and the sponsor’s demonstrated renewal rate. This is higher than renewal probabilities for tenants at traditional real estate properties such as office, retail, or industrial.

Metric	DBRS Morningstar	Issuer/Arranger
Net Cash Flow (\$)	88,051,328	103,310,187
Variance to Arranger NCF (%)	-14.77	n/a
Capitalization Rate (%)	7.50	6.76
Concluded Value/Appraised Value (\$)	1,174,017,707	1,528,000,000
Value per kW (\$)	11,289	14,692
Whole Loan DSCR on NCF (x)	1.27	1.47
Whole Loan-to-Value Ratio (%)	84.3%	64.8%

DBRS Morningstar Valuation

DBRS Morningstar applied a capitalization rate of 7.50%, which resulted in a DBRS Morningstar estimated value of approximately \$1,174,017,717 (\$11,289 per kW), resulting in a DBRS Morningstar LTV of 84.3%. The portfolio’s as-is appraised value of \$1,528,000,000 billion (\$14,692 per kW) represents an

LTV of 64.8%. The DBRS Morningstar concluded value estimate represents a variance of -23.2% to the appraiser's as-is value estimate.

DBRS Morningstar LTV Sizing Benchmarks and Adjustments

DBRS Morningstar determined the ratings on each class of certificates by performing quantitative and qualitative collateral, structural, and legal analysis. This analysis incorporates DBRS Morningstar's *North American Single-Asset/Single-Borrower Ratings Methodology* and the DBRS Morningstar LTV Benchmark Sizing tool. DBRS Morningstar determined its sustainable NCF and sustainable value of the underlying properties by applying the *DBRS Morningstar North American Commercial Real Estate Property Analysis Criteria*. DBRS Morningstar's maximum LTV thresholds at each rating category were based on the transaction's sequential-pay waterfall, the underlying property type, lack of amortization (based on the loan's full-term IO debt service payments), borrowers, trust LTV, limited property type and geographic diversity, and other factors relevant to the credit analysis. DBRS Morningstar adjusted its maximum LTV thresholds (the Quality/Volatility Adjustment) to account for the following factors:

- **Cash Flow Volatility** – Data center operators have historically benefited from high barriers to entry because of the complexity of their operations along with the specialized knowledge required to operate the facilities to extraordinarily demanding uptime and reliability standards. Furthermore, the high upfront capital costs and necessary power infrastructure also make speculative development more difficult than in other industries. More than 58.7% of the DBRS Morningstar in-place base rent is attributable to investment-grade tenants across the portfolio, which is a highly favorable proportion. As a result, DBRS Morningstar elected to raise its maximum LTV threshold by 3.00% to account for cash flow volatility.
- **Property Quality** – The portfolio exhibits a strong property quality. With a WA age of 12 years, the portfolio data centers are very efficient with strong redundancy and connectivity, which is attractive to a wide array of large tenants. The portfolio's PUE ratios range between 1.20 and 1.48, significantly below the national average of 1.80, indicating the portfolio's properties operate very efficiently with respect to power availability for critical IT load. Furthermore, Digital Realty is an experienced data center operator of a portfolio of more than 300 data centers with 16 in the Northern Virginia market. As a result, DBRS Morningstar elected to increase its maximum LTV threshold by 2.25% to account for property quality.
- **Market Fundamentals** – The properties are located in Northern Virginia in a corridor often referred to as Data Center Alley. The broader Loudoun County has a number of advantages for data center operators including superior connectivity via an existing fiber network, low costs for power, and tax incentives for operators. While data centers exist in other markets, these three factors have made Loudoun County the largest data center market in the United States with more than double the space of New York, which is the second largest. Robust demand for data center space in the area means that the property will likely continue to be attractive to both the current users and to other potential tenants. As a result of these factors, DBRS Morningstar elected to increase its maximum LTV threshold by 2.25% to account for market fundamentals.
- **Other Adjustments** – DBRS Morningstar applied an adjustment of -0.5% penalty to the transaction's capital structure for credit negative release premiums.

DBRS Morningstar SASB Legal Considerations

Benchmark Features	<p>Credit Neutral Benchmark: The section highlights items that DBRS Morningstar considers to have credit neutral properties with respect to legal considerations. Structurally, DBRS Morningstar does not require legal documents to include specific features. However, DBRS Morningstar typically looks for certain items to be addressed (in context) or otherwise and, if not credit neutral, include an appropriate mitigant. DBRS Morningstar reserves discretion to apply structural or cash flow penalties, or highlight weaknesses or strengths based on any deviation from its credit neutral expectations for individual features and/or for the totality of cumulative weaknesses or strengths throughout a particular structure, which penalties or highlights may or may not apply similarly in the context of another transaction depending on the totality strengths or weaknesses of the transaction.</p>	<p>Loan Specific – Features may not apply depending on transaction/interest rate/security type below.</p> <p>Trust Specific – Most features are standard and will apply.</p> <p>Identify deviations from the benchmark and classify as individual weakness or mitigant.</p> <p>+/- Column will generally be reserved for exceptions falling outside of the benchmarks. Any deviation that merits an LTV-based adjustment in the tool should receive either a "+" or "-" depending on the direction.</p>	+/-
Loan-Level Legal Considerations			
Mortgage Summary	<p>Loan Structure (vs. Trust Structure): Initial Term/Extension Conditions Interest Rate (Floating vs. Fixed) Portfolio or Single Asset: Security Type(s): Fee or Leasehold Note vs. Pass-Through Structure Agented (Y/N) Additional Debt (outside of the trust)</p>	<p>Whole Loan Amount: \$990,000,000 Trust Loan Amount: \$990,000,000 Initial Term: Five Years Extension Options: None Interest Rate type: Fixed Rate of 7.000% Single Asset or Portfolio: Portfolio Fee/Leasehold Interest: Fee Simple Existing Additional Debt: None</p>	
Existing Debt	<p>DBRS Morningstar quantitatively factors in existing whole loan debt (in and outside of Trust) into the ratings analysis, including (1) pari passu companion debt (outside the trust), (2) existing subordinate debt, (3) mezzanine debt, and (4) debt-like preferred equity. DBRS Morningstar evaluates in-place industry standard co-lender, subordination agreement, and/or intercreditor agreements as applicable. See CLA/ICA benchmark standards below. DBRS Morningstar evaluates maximum LTV and minimum DSCR/debt yield tests and prerequisites.</p>	<p>Whole Loan Amount: \$990,000,000, with three promissory A notes of 40%, 30%, and 30% of the Whole Loan Amount, with a cut-off date principal balance of \$990,000,000</p> <p>Trust Loan Amount: \$990,000,000, or all three pari passu notes, componentized in up to seven components (A, X, B, C, D, HRR, and R)</p>	
Floating Rate: Interest Rate Cap Benchmark	<p><i>Floating-rate loan to include benchmark with appropriate fallback language and appropriate mechanism for conforming loan alternative rate with cap (minimizing cost and liability to the Trust). Follow CREFC and ARRC guidelines.</i></p> <p>Floating-rate mortgage borrowers acquire an interest rate cap to mitigate interest rate exposure during the loan term (including any extensions) in a notional amount at least equal to the mortgage balance. Loan documents require rate cap providers to meet the DBRS Morningstar counterparty rating of "A" or higher, or, if not rated by DBRS Morningstar, an equivalent rating by another NRSRO. DBRS Morningstar calculates a stressed DSCR at the lower of the strike rate or the Unified Interest Rate Analytical Tool rate to ensure appropriate debt service coverage in the context of the ratings assigned. <i>Methodology: Interest Rate Stresses for U.S. Structured Finance Transactions</i></p>	<p>Interest Rate Benchmark: n/a</p> <p>Benchmark Fallback: n/a</p> <p>Rate Cap Provider/Rating: n/a</p> <p>Actual/Maximum Permitted Strike Rate: n/a</p> <p>Rate Cap Required for Extension(s): n/a</p>	
Security	<p>The security for a securitized mortgage loan includes a perfected, first-priority security interest subject only to customary permitted exceptions (with no unsubordinated purchase option or ROFR) in (1) the fee-simple estate or (2) ground leasehold estate, provided customary ground lease lender protections are provided [see for example CREFC Model Rep 36 and leasehold estate collateral section below].</p>	<p>The loan is primarily secured by first-priority mortgages on the Borrowers' fee-simple interests in three data center properties with three data center buildings. Two of the data center buildings, ACC5 and ACC6, are on the same tax parcel and considered a single property.</p> <p>Notable Title Restrictions: n/a</p> <p>Purchase Options/ROFR: Confidential Tenant 3 has the right to purchase its related Property in the event of a proposed transfer of such Property (including a foreclosure sale) to an entity ("prohibited purchaser") that is (i) a competitor, (ii) a foreign government (or is controlled by any such party), (iii) does not satisfy the net worth or market capitalization requirements set forth in such lease, or (iv) does not have the requisite experience in the business of owning and/or operating wholesale data centers as set forth in such lease pursuant to the related lease.</p>	

Borrower Structure	<p>Borrower entity(ies) are structured as a bankruptcy-remote SPE. Recycled SPEs address risks related to prior operations and have no outstanding obligations or liabilities.</p> <p>Delivery of an organization chart to identify sponsor/guarantor relationships, satisfactory organization and authority opinions, including standard Delaware (or other state) bankruptcy opinions and a nonconsolidation opinion that considers the impact of any affiliate guarantees or agreements, any other bad facts affecting consolidation, along with appropriate party pairings rendered by experienced BK counsel. <i>Lack of a satisfactory Nonconsolidation Opinion could render the transaction not ratable.</i></p>	<p>SPE Exceptions: No</p> <p>Nonconsolidation Opinion: Yes</p> <p>Independent Director/Manager: Yes, at least two for each SPE owner.</p> <p>Weak or no Guarantor: Yes, no warm-body guarantor and there is a \$400 million net worth requirement for current guarantor(s) and replacement guarantor.</p>
Recourse Carveout Guaranty	<p>Market recourse carveout guaranty covering typical bad boy events, [e.g., fraud, misrepresentation, environmental liabilities, prohibited transfers and debt, and voluntary or collusive bankruptcy events provided by a sponsor affiliate with ongoing net worth and liquidity covenants commensurate with the loan size without a cap on bad boy event loss].</p>	<p>Recourse Carveout Cap Amount: 15% of loan balance</p> <p>Qualified or Unusual Carveouts: Carveouts are standard but weak, heavily qualified, and limited to the extent that sufficient cash flow is not available.</p>
Permitted Indebtedness	<p>Permitted Future Indebtedness: Limited to unsecured short-term trade payables incurred in the ordinary course of business and certain lease obligations capped at 2%–4% of the outstanding balance of the loan (or ALA, if portfolio) (Customary Permitted Indebtedness).</p> <p>If other future additional debt is permitted, provisions to include (1) maximum LTV, minimum debt yield, and DSCR tests; (2) requirement for the lenders to enter into an industry standard intercreditor agreement subject to servicer approval under the servicing standard; (3) rating agency confirmation (RAC); (4) delivery of a REMIC opinion; and (5) preclusion on debt secured by the property.</p>	<p>Other Than Customary Permitted Indebtedness, Future Additional Debt Permitted: No</p>
Co-Lender Agreement Additional Debt Pari Passu/Senior, Subordinate	<p>If the mortgage loan in a the trust is split into multiple notes so the whole loan is not in the trust, there is a co-lender agreement as follows: (1) on a customary form for similar rated transactions and satisfactory to a prudent mortgage lender, (2) contains certain consent and/or consultation rights among the note holders, (3) contains appropriate (industry/market) transfer restrictions and requirements related to the notes (including the portion of the loan not being deposited into the CMBS trust issuing the rated certificates), (4) includes a requirement for lead servicer subject to the servicing standard and consistent provisions applicable to the non-trust companion loans, and (5) contains appropriate payment allocations for amounts received on the whole loan among the noteholders. <i>Payments to be applied first to the senior notes, on a pro rata and pari passu basis based on their relative principal balances and then to junior notes (if any) on a pro rata and pari passu basis based on their relative principal balances.</i> If junior notes are being deposited into the trust and used to make payments on rated certificates, principal payments on the senior notes will not be made until after interest payments are made on the junior notes. As long as any junior note is included in a securitization, any purchase option or cure rights of a junior noteholder under the co-lender agreement do not apply.</p>	<p>Not applicable as the entire whole loan will be securitized as part of the subject transaction.</p> <p>The loan is expected to be co-originated on August 30, 2023, by Citi Real Estate Funding Inc., Goldman Sachs Bank USA, and Morgan Stanley Bank, N.A. on a 40.0%, 30.0%, and 30.0%, respectively, pari passu basis with all notes to be contributed to the Trust.</p>
Mezzanine Intercreditor Agreement	<p>Any mezzanine loan (x) to be subject to a pre-determined interest rate and (y) to have a term that is co-terminous with the mortgage loan. Mezzanine lender to be “qualified transferee” unaffiliated with the borrower. <i>[See permitted transfers.]</i></p> <p>The holders of the senior loan and the mezzanine loan will enter into an intercreditor agreement on a customary form for similar rated transactions and satisfactory to a prudent mortgage. The intercreditor agreement to include mezzanine lender transfer restrictions, restriction on access to information and rights of any borrower or borrower-related party, subordination of mezzanine loan payments, and certain restrictions and requirements related to mezzanine lender remedies and rights while the senior loan is outstanding and may include certain consent, cure, purchase option, and/or other rights of the mezzanine lender (so long as mezzanine lender is unaffiliated with borrower).</p>	<p>Not applicable as there is no existing mezzanine debt.</p>

Reserves	All unfunded obligations, including outstanding TI/LCs and free/gap rent, along with any amount necessary to cover immediate repairs and zoning or fire/life safety issues are reserved upfront at closing. In certain cases, certain obligations may be secured by an LOC or guaranteed by a creditworthy entity so long as the amount does not trigger a nonconsolidation opinion exception.	<p>Upfront Reserve: Borrower will fund \$1,209,218, which represents unfunded obligations for leasing costs, gap rent, and tenant buildout in effect as of the Origination Date. Such amount may be reduced in accordance with the loan agreement.</p> <p>Tax/Insurance reserves are required only after a monetary or material non-monetary EOD that continues for more than 30 days.</p> <p>Reserve Alternatives: Borrower has the option to post an LOC in lieu of the Upfront Unfunded Obligations Reserve.</p>
Lockbox and Cash Management	The loan documents should require a hard in-place lender-controlled lockbox where tenants or the property manager (as applicable) are directed to deposit payments at closing with an Eligible Institution, therefore preventing delays upon the occurrence of a cash management trigger. DBRS Morningstar evaluates cash management triggers on a case-by-case basis, but generally expects market trigger levels to be set within a reasonable range relative to the initial DSCR or debt yield levels, and for certain property types (e.g., office, retail, industrial) upon appropriate major lease non-renewal or termination events and any uncured EOD and lender control and discretion over application of funds following an EOD.	<p>Lockbox at Close: Yes</p> <p>Cash Management Triggers: Default Trigger:</p> <ul style="list-style-type: none"> • Event of Default (EOD) (as defined in the Loan Agreement) • Debt Yield (DY) Trigger: Following DY Determination Date (as defined), DY falls below 7.50% (the Minimum DY) for two consecutive quarters. <p>Trigger Avoidance—Cures:</p> <ul style="list-style-type: none"> • Default Trigger is cured when the underlying EOD is cured. • DY Trigger is cured when DY is equal to or greater than the applicable DY Trigger for two consecutive months; or prepayment in accordance with Loan Agreement delivery of cash to Lender, and/or delivery of LOC to Lender in amount sufficient to satisfy the applicable Minimum DY (provided LOC does not exceed 15% of the Loan Amount when added to any other Ancillary Guaranties).
Permitted Transfers	Transfer provisions are evaluated on a case-by-case basis. Typically, qualified transferee criteria are appropriate to the size and complexity of the securitized loan. For transfers of a controlling interest and/or significant equity interest, loan documents should provide for a new nonconsolidation opinion and new carveout guaranty in substantially the same form as closing guaranty with creditworthy (experienced) replacement guarantor with qualifications at least commensurate with existing guarantor. If the lender has discretion to approve a transferee notwithstanding other criteria, RAC is customary for such transfers.	<p>Permitted Transferee: The sale, assignment, transfer, or pledge of indirect interests in the Borrowers will be permitted, so long as they meet conditions set forth in the loan agreement, including but not limited to at least 20% owned by a Qualified Equityholder, as defined in the loan agreement, have not been the subject of a bankruptcy proceeding within the last seven years, and have never been convicted of a felony.</p> <p>New Nonconsolidation Required: Yes</p> <p>New Carveout Guaranty Required: Yes</p>
Prepayments	Principal payments [including payments and proceeds paid post-EOD and casualty and condemnation proceeds] on the note components are allocated sequentially, and correspondingly, among the certificates. If any portion of principal payments are allocated pro rata, DBRS Morningstar may apply a penalty based on a quantitative analysis. Application of those penalties are outlined in the <i>North American Single-Asset/Single-Borrower Ratings Methodology</i> are also paid sequentially. <i>Full pro rata payment of such proceeds may not permit DBRS Morningstar to rate the transaction.</i>	Prepayment Structure: Borrower may prepay the Mortgage Loan in whole after the Permitted Prepayment Date in September 2025 subject to conditions set forth in the Loan Documents, including but not limited to the Yield Maintenance Premium. If prepayment is made after the Open Period Start Date occurring in September 2027, then a Yield Maintenance Premium may not be applicable.
Property Releases	Property partial release provisions to include typical provisions of a prudent lender for a partial release (including no EOD, title, zoning, covenant compliance updates). <u>For portfolio transactions</u> : should include “no cherry picking” provisions that reduce the risk of adverse selection of the portfolio assets. These provisions may include, among others, minimum DSCR or debt yield provisions, maximum LTV, or a combination thereof, which are evaluated on a case-by-case basis. Typically, properties that can be released from a securitized portfolio of assets will have a minimum release price of at least 115% of the ALA to be co-ordinated with prepayments (above). Release price(s) are expected to remain fixed throughout the life of the transaction without provisions for reappraisal or reallocation (which are generally credit negative).	Borrower may release a property at an amount equal to the greater of the ALA for such individual multiplied by 110% (Release Price) and the DY requirement; however, if the release is in connection with a sale to a third party, the greater of the Release Price and the lesser of (x) the net sale proceeds derived from the sale of the released property and (y) an amount necessary to satisfy the Debt Yield requirement after giving effect to such release.
Property Management	The property manager may be affiliated with borrower, as determined in the context of borrower strength, or a third-party manager in either case with experience, and reputation commensurate with deal size and property type. The lender typically retains the right to replace the	<p>Affiliated Property Manager?: Yes</p> <p>Qualified Manager Definition: Any affiliate of the initial Property</p>

	<p>property manager with a Qualified Manager following certain insolvency or bankruptcy actions or an EOD under the loan documents. The Qualified Manager should be defined in the context of deal size and property type to be consistent with initial property manager.</p>	<p>Manager or Digital Realty, a property management company owned or controlled by TPG or an affiliate of TPG, a reputable and experienced management company having at least five years' experience in the management of at least five data centers of a similar class and totaling at least 1.0 million leasable sf (excluding the Property), other pre-approved firms listed in the offering documents, or approved by the Lender.</p>
Property Insurance	<p>Borrowing entities should maintain an adequate level of all risk hazard insurance on the securitized property(s) on a full replacement-cost basis together with other customary and prudent insurance coverage in scope and amount including terrorism insurance; provided a premium cap is acceptable and flood, wind, and seismic insurance, if applicable. Property-level insurers should meet a DBRS Morningstar minimum rating of A (low), or an equivalent rating from at least one other NRSRO. Certain syndicate level coverages are also acceptable. For seismic insurance, DBRS Morningstar may evaluate insurance providers on a case-by-case basis.</p> <p>Properties with elevated probable maximum loss estimates, generally greater than 20%, should carry seismic/earthquake insurance or funds for seismic retrofitting have been reserved in the loan documents.</p>	<p>Appraiser Insurable Value: ACC5: \$328.0 million ACC6: \$234.0 million ACC7: \$374.0 million Seismic Insurance: n/a</p> <p>With respect to All-Risk coverage, Terrorism coverage, Wind/Named Storm coverage, Flood coverage, and Earthquake coverage, the deductible for each is \$250,000.</p> <p>With respect to All-Risk coverage, Wind/Named Storm coverage, Business Interruption coverage, and Law and ordinance coverage, there is a \$1.0 billion blanket coverage limit (including properties other than the collateral) applying per occurrence and reinstating after every loss. With respect to Terrorism coverage, there is a \$2.0 billion limit. With respect to Flood coverage and Earthquake coverage (neither of which are required by Loan Documents), there is a \$250.0 million limit.</p> <p>Borrower is required to obtain rental loss and/or business income interruption insurance in an amount equal to 100% of the projected Gross Rents from the Property (less noncontinuing expenses) on an actual loss sustained basis for a period beginning on the date of the Casualty and continuing until the Restoration of the Property is completed, or the expiration of 24 months, whichever first occurs, to be revisited at least once each year thereafter based on the Borrower's reasonable estimate of the Gross Rents from the Property (less noncontinuing expenses) for the succeeding 24 month period.</p> <p>The portfolio is also subject to General Liability insurance, with limits of \$1.0 million per occurrence, \$2.0 million in the aggregate, and \$250,000 deductible.</p> <p>General Liability coverage is provided through Endurance Assurance Corporation, which is rated A+ by S&P and A+ XV by A.M. Best. Additionally, there is an Umbrella Liability insurance, which is provided through a number of insurers stated to meet the qualified carrier (rating) criteria set forth in the loan agreement, that provide an additional \$100.0 million of liability insurance per occurrence and in the aggregate.</p>
Environmental	<p>DBRS Morningstar reviews Phase I environmental site assessment (ESA) reports (generally expected to be current within 12 months or loan closing and meet ASTM standards) and evaluates environmental risk on a case-by-case basis. Handling of recognized environmental conditions (RECs) are addressed in the loan documents including reserves, if applicable, and an Environmental Indemnity executed by a creditworthy guarantor. Environmental insurance policies may be acceptable in addition to cash reserves, LOCs, or an indemnity if the policy limits are sufficient given the level of risk and the policy is for a term that extends beyond the latest possible extended maturity date of the loan.</p>	<p>ESAs revealed no active RECs.</p> <p>Indemnity: Yes</p> <p>Reserves: No</p> <p>Insurance: Yes; Not required by the Loan Agreement but included in the blanket environmental insurance policy (which also covers non-collateral) provided by Beazley, with total policy limits of \$5.0 million per incident and \$15.0 million in the aggregate, subject to a \$50,000 deductible that expires in March 2024.</p>
Zoning/Building Code	<p>Properties should conform to zoning and use laws, or constitute legal nonconforming uses or structures covered by law and ordinance insurance, and if legal nonconforming use or structure cannot be rebuilt to the same use and structure (after any event or time), another other satisfactory risk mitigant to minimize the potential deficiency. No building code violations should exist unless sufficient reserves or mitigants are in place for timely cure without interfering with operation and occupancy. [See Reserves section above.]</p>	<p>Legal Nonconforming Use(s): n/a</p> <p>Law and Ordinance Insurance Required: Not required by Loan Documents but in place through January 2024.</p>
Casualty/Condemnation	<p>The lender should have control of awards in excess of 5% of the loan amount (or 5% of the ALA for portfolio loans). Proceeds and awards are expected to be held and disbursed by the lender or an eligible</p>	<p>Casualty and Condemnation Restoration Threshold: An amount equal to 5% of the original principal balance of the Loan provided that the Restoration Threshold will be equal to the applicable Release Price of</p>

	institution and made available to the borrower only with lender consent for restoration if the casualty exceeds customary thresholds or following condemnation so long as leases contributing sufficient NRI remain in place. Loan documents should provide for awards to be paid sequentially. [See Prepayments section above.]	the remaining property following the release of any Property. If casualty or condemnation proceeds are less than the Restoration Threshold, proceeds will be disbursed to Borrower for restoration and if greater proceeds will be held by Lender and disbursed for restoration subject to additional customary conditions in the Loan Agreement.
		Business Interruption Insurance Terms: Borrower is required to get business interruption insurance as noted above and currently has business interruption insurance as noted through January 2024.
Servicing Expenses	The loan documents require that special servicing, workout, and liquidation fees and expenses and other fees related to administration and servicing of the loan are covered by the borrower.	Limits on Borrower Obligations: the greater of 0.25% or \$5,000 per month for special servicing, 0.25% for workout, and 0.5% for liquidation fees, which are only payable by the Borrower if the Loan is in workout or forbearance or is otherwise in special servicing.
Trust-Level Considerations		
Certificate Summary	n/a	<p>P&I Certificate(s) to Be Issued: Classes A, B, C, D, HRR, and R</p> <p>IO Certificate(s) to Be Issued: Class X</p> <p>Distribution Date(s): Fourth business day of each calendar month after the Determination Date (which is the sixth day of each calendar month), but if such day is not a business day, then the immediately succeeding business day.</p>
Rated Final Distribution/Hard Tail Period	DBRS Morningstar determines a credit neutral hard tail period and rated final distribution date on a case-by-case basis based on the complexity and potential delays in realization on the collateral (such as multiple debtors and properties, multiple notes and creditors, complex collateral structure and delays in the exercise of remedies under various state foreclosure laws). The Hard Tail period is the period between (x) the maturity date of the loan plus (1) loan extensions contemplated in the loan documents and (2) extension modification periods exercisable by the special servicer in the servicing agreement, and (y) the rated final distribution date. If a ground lease constitutes a portion of the collateral, the Trust & Servicing Agreement (TSA) is expected to restrict the rights of the special servicer to extend the loan to a date no longer than 20 years prior to the termination date of the ground lease. The hard tail period should reflect an appropriate period of time to realize on the collateral assuming the occurrence of a maturity date payment default. For example, operationally complex property types, transactions with multiple layers of debt, and/or portfolios of assets might warrant hard tail periods of seven or nine years, while less complex transactions might only warrant a five-year hard tail period. In order to maintain the integrity of the hard tail period during the transaction, the TSA should preclude maturity date extensions during any portion of the hard tail period.	<p>Rated Final Distribution: September 2040</p> <p>Hard Tail Period: Seven years</p> <p>Servicer Permitted Extensions: Standard</p>
Payment Structure	DBRS Morningstar generally views sequential payment of principal and interest distributions on the certificates as credit neutral. If a portion of principal payments are allocated pro rata, DBRS Morningstar may apply a penalty based on a quantitative analysis. Any pro rata prepayment provisions are expected to (1) be limited to a specified percent or amount, (2) not apply post default, and (3) pertain to voluntary prepayments (i.e., not casualty or condemnation proceeds). DBRS Morningstar evaluates IO certificates, payment priorities, and corresponding ratings according to its <i>Rating North American CMBS Interest-Only Certificates</i> methodology.	<p>P&I: Sequential pay and reverse sequential losses</p> <p>Pro Rata Cap: n/a</p> <p>IO Certificates: The Class X Certificates will be paid pari passu with the Class A Certificates in the waterfall.</p>
Payment Timing	Since DBRS Morningstar's ratings address timely payment of interest and ultimate payment of principal on the rated principal certificates, a review of the loan documents and securitization documents is generally conducted to confirm if payment dates on the loan(s) and any hedges, taking into account any grace and cure periods, are at times sufficient to accommodate timely receipt of proceeds from such collateral for distribution to certificateholders on the distribution date enumerated in the servicing agreement. In addition, P&I advancing by the servicer or trustee (advancing agent) are expected to be performed in time for distribution to certificateholders on the distribution date.	Exceptions: n/a

Realized Losses	Any realized loss applied to reduce principal balance certificates should be applied bottom up beginning with the lowest rated class until reduced to zero. Any realized loss applied to a principal balance certificate should also reduce the notional amount of any corresponding IO certificate. Any exceptions are evaluated on a case-by-case basis.	Loss Allocation: Classes HRR, D, C, B, and A
Appraisal Reductions	The TSA should require the special servicer to calculate and apply Appraisal Reduction Amounts (ARAs) in conformity with the TSA and market practice. This process generally includes obtaining new appraisal(s) for the collateral within a customary time frame if certain triggers occur, such as an uncured default, certain material modifications of the loan, the property becoming REO property, a receiver being appointed for the property, or certain bankruptcy or insolvency actions involving the borrower. If such appraisals are not received within a customary time frame, the TSA generally should include application of an automatic haircut for purposes of calculating the ARA.	<p>New Appraisals Required Upon Triggers: Yes</p> <p>Major Triggers: 60 days after uncured payment delinquency (other than maturity default), 90 days after an uncured balloon payment default (unless a refinancing or sale is anticipated within 120 days), certain bankruptcy events related to borrower, and other customary triggers.</p> <p>New Appraisal Deadline: Generally, 60 days after the underlying trigger event occurs</p> <p>Auto-ARA Feature: Yes</p> <p>Auto-ARA Amount: 75% of the most recent appraisal value if no new appraisal within 60 days of the occurrence of the underlying trigger event</p> <p>ARA Amount: The amount equal to the excess of (1) the outstanding loan principal balance plus all accrued and unpaid interest, unreimbursed administrative and property protection advances and interest on all advances, all currently due and unpaid real estate taxes and assessments and insurance premiums, and other amounts due including all unpaid trust fund expenses over (2) the sum of the aggregate of either (x) 90% of the related appraised value or (y) the assumed appraised value of the property, net of any senior liens, plus any escrows or reserve amounts, including for taxes and insurance premiums.</p>
Credit Risk Retention	U.S.-originated transactions are subject to the U.S. credit risk retention rules. An economic interest in the credit risk of the trust loan is expected to be retained as either an eligible horizontal or vertical interest. The retaining sponsor intends to satisfy the risk retention requirements through the purchase and retention by an issuer-affiliated entity or third-party purchaser (TPP).	<p>Reg RR Risk Retention Required: Yes</p> <p>Economic Interest Type: Eligible Horizontal Interest</p> <p>Economic Interest Form: Class HRR Certificates</p> <p>TPP: Yes</p> <p>TPP Entity: Expected to be Core Credit Partners A LLC</p>
Controlling Class/Directing Certificateholder	Typically, one or more of the subordinate classes of certificates (or a representative or directing certificateholder appointed by the applicable class) are provided certain consent and direction rights over major decisions under the TSA prior to the occurrence and continuance of certain trigger events. After the occurrence and during the continuance of such triggers, the consent and/or direction rights will terminate. The controlling class is also typically provided the right to terminate and replace the special servicer. Any consent and direction rights of controlling certificateholders or the directing certificateholder should be subject to a servicing standard override and an immediate action override, any borrower or borrower affiliate to be precluded from exercising any such rights, and customary formulas based on the outstanding principal of the respective holder to determine the termination of a consent or consultation period (typically 25% of the control eligible class outstanding).	<p>Controlling Eligible Class: Class HRR Certificates</p> <p>Controlling Class Representative: Will be elected by holders of more than 50% of controlling class balance</p> <p>On the Closing Date, Core Credit Partners A LLC (Retaining Third Party Purchaser) is expected to purchase the HRR Certificates and is expected to appoint itself as the initial Controlling Class Representative.</p>
Servicing and Special Servicing	The servicing and special servicing of mortgage loans and REO loans should be performed by qualified servicer/special servicer in accordance with a servicing standard on behalf of the trust and in the best interests of the certificate holders as a collective whole and without regard to any conflicts of interest. Customary special servicing events should result in the transition of the loan to special servicing.	<p>Servicing Standard: Yes</p> <p>Servicer: Midland Loan Services, a Division of PNC Bank, National Association</p> <p>Servicer Ranking: Midland Loan Services, a Division of PNC Bank, National Association, MOR CS2</p> <p>Special Servicer: Situs Holdings, LLC</p> <p>Special Servicer Ranking: MOR CS2</p>
Replacement of Special Servicer	The TSA typically provides rights to certain parties to remove the special servicer, with or without cause. Any termination of the special servicer or servicer should require replacement with a special servicer or servicer meeting certain customary requirements. The TSA is also expected to specify certain events that provide rights to terminate the servicer or special servicer for certain material breaches, bankruptcy actions, or failure to maintain specified ratings or rankings.	Special Servicer Replacement Rights: Yes, with or without cause, market standard
Advancing	The TSA should provide for (1) P&I advancing, (2) property protection advancing, and (3) administrative expense advancing. Advancing	Advancing: Yes

	should be subject to a recoverability determination and appraisal reductions, as applicable. In certain circumstances, emergency advancing or other mechanics are expected to allow payment of emergency expenses (such as to avoid an insurance lapse or tax lien).	Details: Generally standard and required subject to recoverability determination and ARAs
Operating Advisor	Where an operating advisor is being engaged under the TSA, it should have certain limited rights to monitor the performance of the special servicer and provide certain oversight with respect to the special servicer. An operating advisor consultation trigger event generally occurs when the outstanding certificate balance of the control class certificates (after applying any realized losses and cumulative ARAs) is 25% or less than its initial certificate balance. After such trigger event occurs, the operating advisor may also consult on a non-binding basis with the special servicer regarding any asset status reports and with respect to major decisions processed by the special servicer.	Operating Advisor: Park Bridge Lender Services LLC
Rating Agency Confirmation and Notices	DBRS Morningstar evaluates RAC or rating agency notification (RAN) requirements (or lack thereof) on a case-by-case basis. DBRS Morningstar generally anticipates that the TSA and/or the loan documents will require a RAC prior to certain material loan amendments, modifications, borrower requests, and/or material amendments to the loan agreement and the TSA. Where applicable, RAC is also expected over material amendments to mezzanine intercreditor agreements and co-lender agreements. DBRS Morningstar evaluates any timing restrictions and/or notice requirements for a RAC on a case-by-case basis. The TSA should provide for certain material documents and notices to be provided for review during the term of the securitization trust.	Standard
Trust Fees/Borrower Fees	Certain administrative fees may be paid out of payments received on the loan prior to payments being made to the certificateholders, such as the servicing fee, the trustee fee, the certificate administrator fee, the CREFC fee and any applicable operating advisor fees. Special servicing fees, liquidation fees, and workout fees are expected not to exceed any caps on such fees in the loan agreement and to be paid by the borrower. Generally, there is no cap on modification fees that the special servicer may charge the borrowers, and typically modification fees received by the special servicer over the lifetime of the mortgage loan are required to offset (on a 1:1 basis) any liquidation and workout fees that the special servicer could otherwise charge the issuing entity. Modification fees are fees with respect to a modification, extension, waiver, or amendments that modify, extend, amend, or waive any term of the loan documents, other than (1) any assumption fees, defeasance fees, consent fees, or assumption application fees and (2) liquidation, workout, and special servicing fees.	Trustee Name and Rating: Computershare Trust Company, N.A., Baa2/BBB Servicing Fee: 0.0025% Special Servicing Fee: 0.15% Trustee/Certificate Administrator Fee: 0.0051% CREFC Licensing Fee: 0.0005% Operating Advisor Fee: 0.0014141% Workout Fee: 0.25% Liquidation Fee: 0.25% of the liquidation, casualty, or condemnation proceeds
Borrower and Borrower Affiliate Restrictions	Any controlling class certificateholder, directing certificateholder, certificateholder, additional debtholder (mezz), servicer, special servicer or other applicable party should be subject to restrictions on consent rights, consultation rights, decisions and/or access to workout, and other related information if such entity is a borrower or borrower affiliate.	None, typical restrictions
Minimum Rating Requirements	DBRS Morningstar maintains minimum rating requirements for permitted investments, eligible trust accounts, eligible institutions, and insurer ratings in accordance with its <i>Legal Criteria for U.S. Structured Finance</i> methodology, among others. Generally, DBRS Morningstar requires a minimum rating for investments with a maturity of 30 days or less, a DBRS Morningstar short-term rating of at least R-1(middle) or long-term rating of at least "A"; with a maturity of 90 days or less, a DBRS Morningstar short-term rating of at least R-1 (middle) or long-term rating of at least AA (low); with a maturity of 180 days or less, a DBRS Morningstar short-term rating of at least R-1 (high) or long-term rating of at least AA; and with a maturity of 365 days or less, a DBRS Morningstar short-term rating of at least R-1 (high) or long-term rating of at least AAA, in each case, if not rated by DBRS Morningstar, then at least an equivalent rating by two other NRSROs.	Trustee Rating: Computershare Trust Company, N.A., Baa2/BBB (Moody's/DBRS Morningstar) Certificate Administrator Rating: Computershare Trust Company, N.A., Baa2/BBB Custodian Rating: Computershare Trust Company, N.A., Baa2/BBB Advancing Agent Rating: PNC Bank, N.A. (as Servicer), AA (low)/R-1 (middle) (DBRS Morningstar Long-Term /DBRS Morningstar Short-Term) DBRS Morningstar was comfortable with Computershare Trust Company, N.A. despite its rating not meeting the minimum threshold because of PNC Bank N.A.'s sufficient rating and role of advancing agent.

Green Bonds Principles (GBP)

The Issuer intends for the Certificates to align with the Green Bond Principles, 2021 (the GBP) published by International Capital Market Association. Sustainalytics U.S., Inc. (Sustainalytics), a provider of environmental, social, and governance (ESG) research and analysis, was engaged to analyze and evaluate the offering of the Certificates as described in the Offering Circular for the Certificates against the GBP and its own green bond analysis framework as adapted to green buildings. Sustainalytics is expected to give a second-party opinion to the effect that the financing provided by the Certificates is credible and impactful and aligns to the four core components of the GBP; however, that opinion has not yet been issued.

For more information on a framework of ESG factors that may influence ratings, please see *DBRS Morningstar Criteria: Approach to Environmental, Social, and Governance Risk Factors in Credit Ratings*.

Sustainalytics is a subsidiary of Morningstar Inc., which is also the parent company of DBRS Morningstar.

Methodologies

The principal methodology DBRS Morningstar applied to assign ratings to this transaction is the *North American Single-Asset/Single-Borrower Ratings Methodology*. This methodology can be found on www.dbrsmorningstar.com or by contacting the primary analysts whose information is listed in this report.

For a list of the structured-finance-related methodologies that may be used during the rating process, please see the *DBRS Morningstar Global Structured Finance Related Methodologies* document on www.dbrsmorningstar.com. Please note that not every related methodology listed under a principal Structured Finance asset class methodology may be used to rate or monitor an individual structured finance or debt obligation.

Surveillance

DBRS Morningstar will perform surveillance subject to *North American CMBS Surveillance Methodology*.

Notes:

All figures are in U.S. dollars unless otherwise noted.

This report is based on information as of August 15, 2023. Subsequent information may result in material changes to the rating assigned herein and/or the contents of this report.

Glossary

ADR	average daily rate	MTM	month to month
ALA	allocated loan amount	MSA	metropolitan statistical area
ARA	appraisal-reduction amount	n.a.	not available
ASER	appraisal subordinate entitlement reduction	n/a	not applicable
BOV	broker's opinion of value	NCF	net cash flow
CAM	common area maintenance	NNN	triple net
capex	capital expenditures	NOI	net operating income
CBD	central business district	NRA	net rentable area
CBRE	CB Richard Ellis	NRI	net rental income
CMBS	commercial mortgage-backed securities	NR – PIF	not rated – paid in full
CRE	commercial real estate	OSAR	operating statement analysis report
CREFC	CRE Finance Council	PCA	property condition assessment
DPO	discounted payoff	PCR	property condition report
DSCR	debt service coverage ratio	P&I	principal and interest
DSR	debt service reserve	POD	probability of default
EGI	effective gross income	PIP	property improvement plan
EOD	event of default	PILOT	payment in lieu of taxes
F&B	food & beverage	PSA	pooling and servicing agreement
FF&E	furniture, fixtures, and equipment	psf	per square foot
FS Hotel	full-service hotel	R&M	repairs and maintenance
G&A	general and administrative	REIT	real estate investment trust
GLA	gross leasable area	REO	real estate owned
GPR	gross potential rent	RevPAR	revenue per available room
HVAC	heating, ventilation, and air conditioning	sf	square foot/square feet
IO	interest only	SPE	special-purpose entity
LC	leasing commission	TI	tenant improvement
LGD	loss severity given default	TIC	tenants in common
LOC	letter of credit	T-12	trailing 12 months
LOI	letter of intent	UW	underwriting
LS Hotel	limited-service hotel	WA	weighted average
LTC	loan-to-cost ratio	WAC	weighted-average coupon
LTCT	long-term credit tenant	x	times
LTV	loan-to-value ratio	YE	year end
MHC	manufactured housing community	YTD	year to date

Definitions

Capital Expenditure (capex)

Costs incurred in the improvement of a property that will have a life of more than one year.

DBRS Morningstar Market Rank (DBRSM MR)

The Market Rank is a number of one through eight that corresponds to the underlying property's zip code. For portfolio loans with multiple underlying properties, the Market Rank applied reflects an approximation of the weighted-average figure based on the corresponding model coefficients.

DBRS Morningstar MSA Group (DBRSM MSA)

The MSA Group is a number of one through three for the top 25 largest MSAs and is based on the MSA's historical performance. All MSAs outside of the top 25 reflect a MSA Group number of zero. For portfolio loans with multiple underlying properties, the MSA Group applied reflects an approximation of the weighted-average figure based on the corresponding model coefficients.

DBRS Morningstar Refi DSCR

A measure that divides the DBRS Morningstar Stabilized NCF by the product of the loan's maturity balance and a stressed refinance debt constant.

DBRS Morningstar Term DSCR

A measure that divides the DBRS Morningstar Stabilized NCF by the actual debt service payment.

Debt Service Coverage Ratio (DSCR)

A measure of a mortgaged property's ability to cover monthly debt service payments, defined as the ratio of net operating income or net cash flow to the debt service payments.

Effective Gross Income (EGI)

Rental revenue minus vacancies plus miscellaneous income.

Issuer UW

Issuer underwritten from Annex A or servicer reports.

Loan-to-Value Ratio (LTV)

The ratio between the principal amount of the mortgage balance, at origination or thereafter, and the most recent appraised value of the underlying real estate collateral, generally from origination.

Net Cash Flow (NCF)

The revenue earned by a property's ongoing operations less the expenses associated with such operations and the capital costs of tenant improvements, leasing commissions, and capex (or reserves). Moreover, NCF is net operating income less tenant improvements, leasing commissions, and capex.

NNN (Triple Net)

A lease that requires the tenant to pay operating expenses such as property taxes, insurance, and maintenance, in addition to the rent.

Net Operating Income (NOI)

The revenue earned by a property's ongoing operations less the expenses associated with such operations but before mortgage payments, tenant improvements, replacement reserves, and leasing commissions.

Net Rentable Area (NRA)

The area (sf) for which rent can be charged. NRA includes the tenant's premises plus an allocation of the common area directly benefiting the tenant, such as common corridors and restrooms.

Revenue Per Available Room (RevPAR)

A measure that divides revenue by the number of available rooms, not the number of occupied rooms. It is a measure of how well the hotel has been able to fill rooms in the off-season, when demand is low even if rates are also low, and how well it fills the rooms and maximizes the rate in the high season, when there is high demand for hotel rooms.

Tenant Improvements (TIs)

The expense to physically improve the property or space, such as new improvements or remodeling, paid by the borrower.

Weighted Average (WA)

Calculation is weighted by the size of each mortgage in the pool.

Weighted-Average Coupon (WAC)

The average coupon or interest payment on a set of mortgages, weighted by the size of each mortgage in the pool.

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