NEED AND DEMAND ANALYSIS

FOR

EAST GATE VILLAGE II

IN

GORDONSVILLE, VIRGINIA

Prepared for
East Gate Village II VA, LLC
for submission to
the Virginia Housing Development Authority

VHDA Application: 2020 - C - 13

As of February 21, 2020

T Ronald Brown: Research & Analysis

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A. EXECUTIVE SUMMARY

The following provides a brief summary of each of the major sections in the market analysis.

East Gate Village II is located adjacent to East Gate Village, on Ashlawn Drive, off Cox Mill Road, to the east of Gordonsville. There are no apparent physical, environmental, or other constraints upon the construction and marketing of the proposed project at this location.

The proposed project will comprise the construction of 37 units - 19 two-bedroom units and 18 three-bedroom units. There will be four units targeted at 30 percent of the median income, 18 units targeted to households with incomes up to 50 percent of the median, and 15 units targeted at 80 percent of the median.

Employment in Orange County fell from 14, 614 in 2009 to 14,178 in 2010. Since then, employment has grown - to 16,459 in 2018.

For Augusta County, the current unemployment rate is 3.0 percent, down from 3.8 percent the previous year. The rate was 8.3 percent in 2010.

The market area for the proposed development is defined as south central Orange County and immediately adjacent census tracts in Albemarle and Louisa counties.

The population of the market area is projected to increase from 22,149 in 2020, to 22,766 in 2025. The number of households is projected to increase, from 8,755 in 2020 to 9,037 in 2025. The number of renter households in the market area is projected to increase from 1,949 to 2,011 over the 2020 to 2025 projection period.

The initial phase at the subject property - the East Gate Apartments - is the only (family) apartment complex in the market area, as defined. This is a USDA/Rural Development complex, with full rental assistance.

Based on our survey, there is a market-wide calculated occupancy rate of 83.3 percent - reflecting ongoing rehabilitation at East Gate Village. This translates to effective full occupancy.

The total need for tax credit units such as is proposed in the Gordonsville area by 2025 is calculated to be for 209 units. The net need is for 209 units. Given the calculated net need, the proposed 37-unit development amounts to 17.7 percent of the need.

Consideration of the capture rate (17.7 percent), the (4.5 percent) affordability analysis capture and (4.5 percent) penetration rate, suggests that the proposed development is marketable, as proposed.

Based on the above, the project could expect to lease-up (reach stabilized occupancy) over an estimated six- month period, or so.

The proposed development will not have an impact on existing housing in the area.

The proposed development is considered marketable and can be developed as proposed.

Project Wide Capture Rate, LIHTC units: 17.7 percent

Project Wide Capture Rate, market units: n/a
Project Wide Capture Rate, all units: 17.7 percent
Project Wide Absorption Period (Months): six months

B. INTRODUCTION AND SCOPE OF WORK

This report is a professional market analysis of the need and demand for the proposed development.

The report is prepared for East Gate Village II VA LLC, for submission to the Virginia Housing Development Authority.

The report is designed to satisfy the underwriting criteria of the reviewing agency for which it was performed, and the conclusions, based on the results of our research, experience, and expertise reflect the predicted ability of the project, as presented to us, to meet or exceed that reviewing agency's guidelines. Thus, a positive conclusion does not necessarily imply that the project would be found to be feasible or successful under different underwriting standards, and this study does not necessarily incorporate generally accepted professional market study standards and elements pre-empted by the guidelines set out by the reviewing agency.

The report was completed using professional market techniques. The findings of this study are predicated upon the assumption that the proposed development, as presented to us, will be located at the site described in the report, that it will be funded through the program under which it was prepared, and within the stated projection period.

Further, the findings are based on the assumption that once funded, the complex will be well-designed, well-marketed, and professionally managed.

The site of the proposed apartments was visited (on February 21, 2020)

The site was visited by T. Ronald Brown.

T. Ronald Brown: Research & Analysis is a planning and economics consulting firm which provides real estate market analysis. The President of the firm is T. Ronald Brown. Mr. Brown has a Honours Master of Arts degree in Geographical Studies from the University of St. Andrews in St. Andrews, Scotland. He has 35 years experience in the provision of market studies for subsidized and unsubsidized apartment developments and for-sale housing. Over the last three decades or so, Mr. Brown has produced more than 3,000 studies in at least 20 states, predominantly in the Southeast.

Mr. Brown is responsible for the analysis and write-up of this report – performing the role of both analyst and author.

To the best of our knowledge, this report is an accurate representation of market conditions. While due care and professional housing market study techniques were used, no guarantee is made of the findings.

It is stated that we do not have, nor will have in the future, any material interest in the proposed development, and that there is no identity of interest between us and the party for whom the project was prepared. Further, we state that the payment of the fee is not contingent upon a favorable conclusion, nor approval of the project by any agency before or after the fact. The payment of the fee does not include payment for testimony nor further consultation.

Submitted, and attested to, by:

T. Ronald Brown, President
T. Ronald Brown: Research & Analysis
P.O. Box 18534
Asheville, North Carolina 28814
919. 233.0670 or 919.612.5328

Date: March 9, 2020

J. Rould B

C. PROJECT DESCRIPTION

East Gate Village II will comprise 37 units - 19 two- bedroom units and 18 three-bedroom units. The project is new construction.

The project is to be configured as follows:

	<u>Units</u>	sq. ft	Rent	Targeting*
2 bedroom/1½ bath	2	789	\$430	less than 30 percent
2 bedroom/1½ bath	9	789	\$695	less than 50 percent
2 bedroom/1½ bath	8	789	\$850	less than 80 percen
3 bedroom/2 bath	2	1,252-1,255	\$490	less than 30 percent
3 bedroom/2 bath	9	1,252-1,255	\$750	less than 50 percent
3 bedroom/2 bath	7	1,252-1,255	\$925	less than 80 percent

Of the 37 unit total, there will be four units targeted to households with incomes up to 30 percent of the median, 18 units targeted to households with incomes up to 50 percent of the median, and 15 units will be targeted at 80 percent of the median, and therefore qualify the apartments for low income housing tax credit status. Given that the project will include units targeted to households with incomes in excess of 60 percent of the local area median income, income averaging is applied. Thus, the average target income, overall, cannot exceed 60 percent of the median.

Utilities (excluding trash collection) will be paid by the tenant - utility allowances are: \$110 for the two-bedroom units and \$131 for the three -bedroom units. Based on information supplied by the developer, the proposed apartments will meet energy-saving standards, both for construction and for appliances provided.

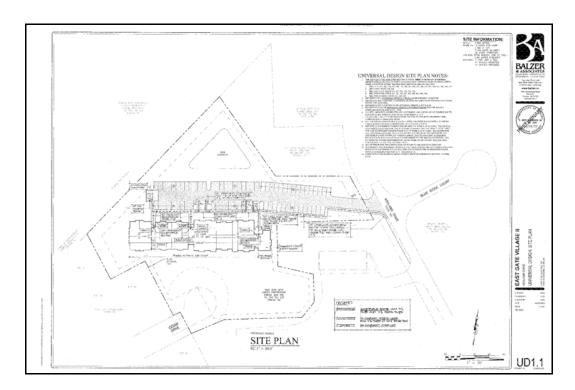
The property will feature a single, three-story, building and will have a brick exterior. Common area and site amenities include a multi-purpose room and laundry. The property will offer various enhancements, as per VHDA guidelines.

There are 74 parking spaces.

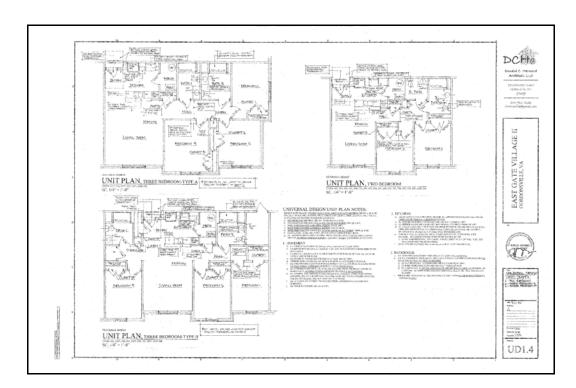
Representative architectural drawings are set out on the following pages.

It is understood that the construction program would commence in March 2021 and would be completed within 12 months, or so.

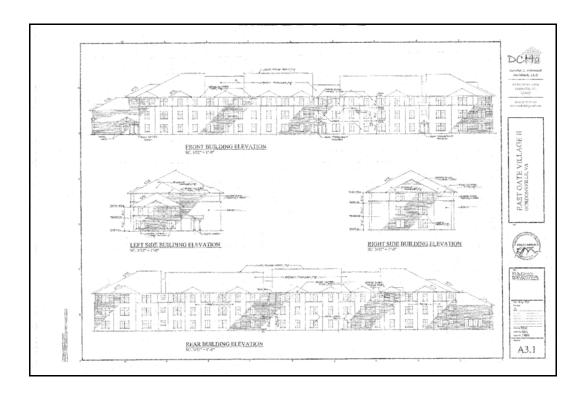
Site plan



Floor plans



Elevations



D. LOCATION

East Gate Village II is to be located adjacent to East Gate Village, on Ashlawn Drive, off Cox Mill Road, to the east of Gordonsville. Adjacent properties include the existing apartments, single-family homes, and undeveloped land. East Gate Village is currently being rehabilitated using tax credit financing. There is a railroad track to the north of the property, beyond which are the Meadow Run Apartments which is a USDA/Rural Development complex, designated for seniors.





View on Ashlawn Dr., looking towards site entrance



View onto site from Ashlawn Dr.



View onto property



View towards site from existing complex



View onto site from existing complex



Ongoing rehabilitation at East Gate Village



View on Ashlawn Dr., looking towards Cox Mill Rd.

East Gate Village II is on Ashlawn Drive, off Cox Mill Road, to the east of Gordonsville. Access to the site is good.

Given the site location and its situation, the site is visible.

Access from the site to major thoroughfares, and local shopping, and other local services is good - which is largely a function of the size of the community.

The site is within three fourths of one mile of North Main Street - the major north-south route serving Gordonsville. The site is within one mile of US Highways 15 and 33, to the north.

The site is within one and one-half miles of the Gordonsville Plaza shopping center, which is anchored by a Food Lion grocery store and a Family Dollar store.

The Green-Barbour Elementary store is located across West Gordon Avenue from Gordonsville Plaza. The site is within ten mile of the Prospect Heights Middle School and the Orange High School, both in Orange.

The Gordonsville Library is within one mile of the East Gate Apartments, and the Town Hall and Post Office are approximately three-fourths of a mile from the property, on Main Street.

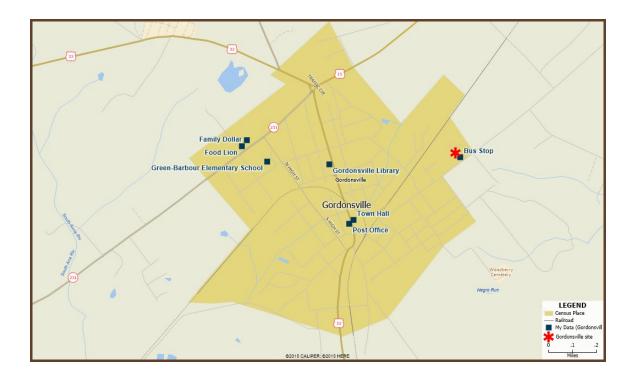
The following table illustrates the various local amenities serving the site and the (driving) distance to the site.

Table 1 - Distance to Neighborhood and Community Amenities

Category	Neighborhood/Community Amenity	Distance (miles
Highways	US 15/US 33	0.6
Public Transportation	Town of Orange Transit	adjacent
Retail - Grocery	Food Lion	1.4
Retail - Other	Family Dollar	1.4
Schools	Green Barbour Elementary	1.1
	Prospect Heights Middle School	9.2
	Orange High School	9.8
Post Office	Gordonsville	0.8
Government	Town Hall	0.8
Library	Gordonsville Library	0.9

Source: T.Ronald Brown: Research & Analysis

Site map



Public transportation is available at the site.

Based on our observations during our site visit, there is no reason to expect that the risk of crime in this neighborhood would be greater or less than that for other parts of the market area.

There are no apparent physical, environmental, or other constraints upon the construction and marketing of the proposed project at this location.

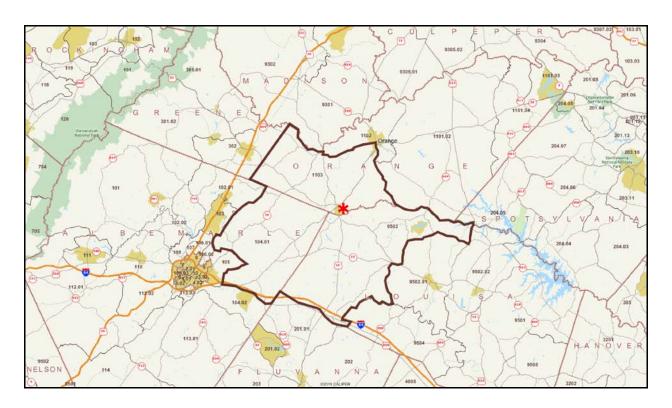
E. MARKET AREA DEFINITION

Market areas are defined on the basis of the consideration of many inter-related factors. These include consideration of the site location, consideration of socio-demographic characteristics of the area (tenure, income, rent-levels, etc.), local commuting patterns, physical (or other) boundaries, census geographies, and especially the location of comparable and/or potentially competing communities.

In communities such as county seats where that community is the county's largest community and is centrally located and can draw from the entire county, the county may be the market area. In circumstances where there are potentially competing communities in one county, the market area will be that part of the county (and, potentially, portions of adjacent counties) which the proposed development is most likely to draw from. Here, a combination of census county subdivisions (townships) may be used to define the market area. In urban or suburban markets, the market area will be areas adjacent to the site and will extend to all locations of relatively similar character, and with residents or potential residents likely to be interested in the project. Here combinations of census county subdivisions (townships) or combinations of census tracts, may be used to define the market area.

The proposed development is located in Gordonsville, on the southern edge of Orange County, in west-central Virginia. The market area for the proposed development is defined as south central Orange County and immediately adjacent census tracts in Albemarle and Louisa counties. This area is focused on the site of the proposed development and extends to up to an approximately six to 12-mile rural hinterland. This area excludes neighboring and potentially competing communities such as Orange and Charlottesville. The market area, as defined, therefore is that which constitutes the area adjacent to the site of the proposed development and extends to all locations of relatively similar character, and with residents or potential residents likely to be interested in the project.

Market Area Map



F. EMPLOYMENT AND ECONOMY

The makeup and trends of the labor force and employment have a strong influence on the growth and stability of the local housing market in general.

Employment trends

Employment trends for Orange County are illustrated in the table, below. Employment fell from 14, 614 in 2009 to 14,178 in 2010. Since then, employment has grown - to 16,459 in 2018.

Table 2 - Total Employment

		Change ove number	r previous year <u>percent</u>	
2009	14,614			
2010	14,178	-436	-3.0	
2011	14,606	428	3.0	
2012	14,817	211	1.4	
2013	15,161	344	2.3	
2014	15,311	150	1.0	
2015	15,313	2	0.0	
2016	15,669	356	2.3	
2017	16,211	542	3.5	
2018	16,459	248	1.5	

Employment trends, by sector

Information on employment, by industry for Orange County in 2017 and 2018 (the most recent annualized data) is set out in Table 2, below. From this it is seen that, with respect to employment, the largest subsectors were manufacturing, retail trade, and education which employed 14.5 percent, 12.1 percent, and 12.1 percent of the total.

Table 3 - Employment, by sector

	20:	17	20:	18	
	number	<u>percent</u>	<u>number</u>	percent	pct change
Agriculture, Forestry, etc	544	5.6	504	5.1	-7.4
Mining, etc.					
Utilities					
Construction	510	5.2	517	5.3	1.4
Manufacturing	1,298	13.3	1,427	14.5	9.9
Wholesale trade	547	5.6	502	5.1	-8.2
Retail trade	1,193	12.2	1,190	12.1	-0.3
Transp. and Warehousing	235	2.4	241	2.5	2.6
Information	36	0.4	35	0.4	-2.8
Finance and Insurance	149	1.5	139	1.4	-6.7
Real estate	358	3.7	353	3.6	-1.4
Professional and Technical services	231	2.4	240	2.4	3.9
Management					
Administrative and Waste services	367	3.8	356	3.6	-3.0
Educational services	1,213	12.4	1,190	12.1	-1.9
Health Care and Social Assistance	896	9.2	882	9.0	-1.6
Arts, Entertainment, Recreation	189	1.9	180	1.8	-4.8
Accommodation and Food services	797	8.2	852	8.7	6.9
Other Services	496	5.1	510	5.2	2.8
Public Administration	604	6.2	610	6.2	1.0
Unclassified	37	0.4	26	0.3	-29.7
Total	9,755		9,808		0.5

Unemployment trends

Unemployment trends for Orange County are illustrated in the table, below. Rates for Virginia and for the U.S as a whole are also shown, for reference. Here it is seen that the most recent annual unemployment rate is 3.0 percent, down from 3.8 percent the previous year. The rate was 8.3 percent in 2010.

Table 4 - Unemployment trends

	Orange <u>County</u>	<u>Virginia</u>	<u>U.S.</u>	
2009	7.7%	6.7%	9.3%	
2010	8.3%	7.1%	9.6%	
2011	7.5%	6.6%	8.9%	
2012	6.7%	6.1%	8.1%	
2013	5.9%	5.7%	7.4%	
2014	5.3%	5.2%	6.2%	
2015	4.6%	4.5%	5.3%	
2016	4.1%	4.1%	4.9%	
2017	3.8%	3.7%	4.4%	
2018	3.0%	3.0%	3.9%	

Major Employers

The major employers in the Orange County area are listed in Table 5, below. From this table it is seen that the area's largest single employers include a variety of manufacturing and non-manufacturing companies. Other significant employers would include the local school systems, and local governments.

Table 5 - Major Employers

<u>Employer Name</u>	<u>Product/Service</u>
Aerojet	Missile components
American Woodwork Corporation	Kitchen cabinets
Battlefield Farms	Plants
Dogwood Village	Nursing home
Germanna Community College	Higher education
Green Applications	Commercial screen printing
MPS	Book publishing and distribution
Montpelier Foundation	Historical sites
Rigid Products	Industrial machinery
Wal-Mart	Retail
Zamma Corporation	Profile molding

Virginia Economic Development Partnership reports 181 jobs lost in layoffs in recent years in Orange County. With respect to expansions, the Virginia Economic Development Partnership similarly reports 477 new jobs in new firms and the addition of 94 persons in existing firms in the three-county area in recent years.

The proposed development is not located in a market - such as a resort area - that would need housing for employees in such a specific market, although, as noted, the tourism industry is significant.

Wages by Industry Sector

Information on wages, by employment sector, for Orange County is set out in Table 6, below. Here, average wages show some variation - both between sectors and also over time - with average wages increasing by 1.9 percent between 2017 and 2018.

Table 6 - Wages by Industry Sector

	2017	2010	
	<u>2017</u>	<u>2018</u>	pct change
Agriculture, Forestry, etc	\$675	\$692	2.5
Mining, etc.			
Utilities	.001		
Construction	\$792	\$780	-1.5
Manufacturing	\$922	\$989	7.3
Wholesale trade	\$1,012	\$874	-13.6
Retail trade	\$494	\$514	4.0
Transp. and Warehousing	\$1,176	\$1,154	-1.9
Information	\$810	\$897	10.7
Finance and Insurance	\$966	\$1,024	6.0
Real estate	\$776	\$770	-0.8
Professional and Technical services	\$1,042	\$970	-6.9
Management	57.000.2410		
Administrative and Waste services	\$619	\$635	2.6
Educational services	\$657	\$698	6.2
Health Care and Social Assistance	\$573	\$578	0.9
Arts, Entertainment, Recreation	\$557	\$569	2.2
Accommodation and Food services	\$318	\$318	0.0
Other Services	\$610	\$621	1.8
Public Administration	\$747	\$756	1.2
Unclassified	\$451	\$471	4.4
Louren	W72709907		
Total	\$702	\$715	1.9

Commuting patterns

With respect to commuting, data from the American Community Survey, 20.4 percent of workers resident in Gordonsville were employed there. The average driving time to work for residents of Gordonsville was 30.0 minutes.

Table 7 - Commuting Data

	number	<u>percent</u>	
Total Workers	882	100.0	
Worked in Place of residence Worked in County of residence	180 344	20.4 39.0	
Worked outside Place of residence Worked outside County of residence	702 538	79.6 61.0	
Mean travel time to work (minutes)	30.0		

Source: 2014 to 2018 American Community Survey; T.Ronald Brown: Research & Analysis

The most recent Census data for commuting patterns for persons who live and/or work in the Gordonsville area are illustrated, below.

Here it is seen that almost 1,500 persons who work in Orange County commute into the County from the neighboring Spotsylvania, Madison, and Louisa Counties. Likewise, many residents of Orange County commute to work in Culpeper County and Spotsylvania County.

Table 8 - Commuting Patterns

Place of work	<u>Place of Residence</u>	Number of Workers
Orange County	Orange County	5,175
Culpeper County	Orange County	1,458
Spotsylania County	Orange County	1,336
Orange County	Spotsylania County	516
Orange County	Madison County	457
Orange County	Louisa County	482

Source: US County to County Commuting Flows; T.Ronald Brown: Research & Analysis

While the local economy remains somewhat stable, the local economic conditions will not have a direct positive or negative impact on the subject property.

G. DEMOGRAPHIC CHARACTERISTICS

Population and Household Trends

In 2000, the population of Orange County was 25,881, and in 2010 the population was recorded as 33,481. Population projections for Orange County are provided by the Virginia State Data Center. Based on these data, the population of the area is projected to be 36,119 by 2020, and to be around 38,468 by 2025.

In 2000, the population of the market area was 16,257, and in 2010 the population was recorded as 19,858. Population projections for the market area are based on the average of several small area population projection techniques using census tract trends for 2000 to 2010 in Orange County, and in the other two counties that the market area extends into, corrected for the official State Data Center numbers. Based on these data, the population of the area is projected to be 22,149 by 2020, and to be around 22,766 by 2025.

Information on population trends and changes between 2000 and 2025 are set out in Table 9, below.

Table 9 - Population Trends

	Gordonsville	Market Area	Orange County
2000	1,498	16,257	25,881
2010	1,496	19,858	33,481
2020	n/a	22,149	36,119
2025	n/a	22,766	38,468
absolute change			
2000-2010	-2	3,601	7,600
2010-2020	n/a	2,291	2,638
2020-2025	n/a	617	2,349
annual change			
2000-2010	0	360	760
2010-2020	n/a	229	264
2020-2025	n/a	123	470

Source: 2000 and 2010 Census; Virginia State Data Center; T.Ronald Brown: Research & Analysis

Projections of the number of households for Gordonsville, the market area, and for Orange County are set out in Table 10, below.

In 2000, there were 10,510 households in Orange County and 12,895 in 2010. Based on the population projections set out, above, there will be around 13,668 households in 2020 and 14,434 in 2025.

There were 6,342 households in the market area in 2000 and 7,768 in 2010. Projections show around 8,755 and 9,037 households in 2020 and 2025, respectively

Table 10 - Household Trends

	Gordonsville	Market Area	Orange County
2000	628	6,342	10,150
2010	632	7,768	12,895
2020	n/a	8,755	13,668
2025	n/a	9,037	14,434
absolute change			
2000-2010	4	1,426	2,745
2010-2020	n/a	987	773
2020-2025	n/a	282	766
annual change			
2000-2010	0	143	275
2010-2020	n/a	99	77
2020-2025	n/a	56	153

Source: 2000 Census and 2010 Census; T.Ronald Brown: Research & Analysis

Population and household characteristics

Age distribution

The distribution of the population, by age, for Gordonsville, the market area, and Orange County is set out in Table 11, below. These data are from the 2010 Census. Here it is seen that the median age of the population of Gordonsville was 40.8 years, and that for Orange County was recorded as 42.6 years. The estimated median age for the market area is around 41.2 years.

Table 11 - Age Distribution

	Gordonsville		Market	Area	Orange County	
	<u>number</u>	<u>percent</u>	<u>number</u>	<u>percent</u>	<u>number</u>	percent
Under 5 years	98	6.6	1,154	5.8	2,008	6.0
5 to 9 years	110	7.4	1,205	6.1	2,070	6.2
10 to 14 years	103	6.9	1,185	6.0	2,258	6.7
15 to 19 years	90	6.0	1,171	5.9	2,042	6.1
20 to 24 years	85	5.7	944	4.8	1,538	4.6
25 to 29 years	77	5.1	1,056	5.3	1,700	5.1
30 to 34 years	105	7.0	1,141	5.7	1,880	5.6
35 to 39 years	65	4.3	1,113	5.6	2,008	6.0
40 to 44 years	96	6.4	1,457	7.3	2,369	7.1
45 to 49 years	119	8.0	1,746	8.8	2,623	7.8
50 to 54 years	113	7.6	1,771	8.9	2,480	7.4
55 to 59 years	115	7.7	1,586	8.0	2,253	6.7
60 to 64 years	86	5.7	1,333	6.7	2,189	6.5
65 to 69 years	64	4.3	1,027	5.2	1,902	5.7
70 to 74 years	64	4.3	816	4.1	1,607	4.8
75 to 79 years	49	3.3	534	2.7	1,143	3.4
80 to 84 years	32	2.1	349	1.8	768	2.3
85 years and over	25	1.7	270	1.4	643	1.9
55 and older	435	29.1	5,915	29.8	10,505	31.4
65 and older	234	15.6	2,996	15.1	6,063	18.1
median	40.8		41.2	*	42.6	

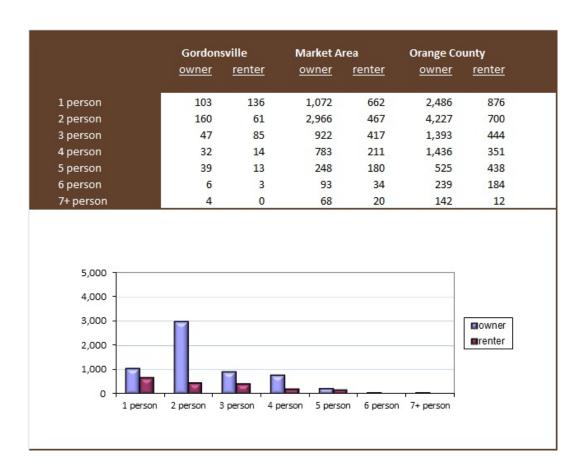
^{*} estimate

Source: 2010 Census; T.Ronald Brown: Research & Analysis

Household size

Table 12 below, sets out household size, by tenure, for households in Gordonsville, the market area, and Orange County.

Table 12 - Household Size



Source: 2014 to 2018 American Community Survey; T.Ronald Brown: Research & Analysis

Tenure

Table 13, below, sets out the number and proportion of owner and renter households for Gordonsville, the market area, and Orange County. In the years beyond 2010, the tenure proportions are based on 2000 to 2010 tenure trends. In 2010, 39.2 percent of households in Gordonsville were renters, 22.3 percent of households in the market area were renters, and 23.3 percent in Orange County were renters.

It should be noted that the proportion of renters in very many markets increased between 2000 and 2010, given that that was not the case in this market, projections that do not show such an increase may be conservative.

Table 13 - Tenure

Gordonsvill		<u>households</u>	persons per <u>household</u>	Owner-oc number	cupied percent	Renter-oc number	cupied percent
2000	1,498	628	2.39	375	59.7	253	40.3
2010	1,496	632	2.37	384	60.8	248	39.2
2020	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2025	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Market Are	a	ı per:		Owner-occupied		Renter-occupied	
	<u>population</u>	<u>households</u>	<u>household</u>	number	<u>percent</u>	<u>number</u>	<u>percent</u>
2000	16,257	6,342	2.56	4,929	77.7	1,413	22.3
2010	19,858	7,768	2.56	6,038	77.7	1,730	22.3
2020	22,149	8,755	2.53	6,806	77.7	1,949	22.3
2025	22,766	9,037	2.52	7,026	77.7	2,011	22.3
Orange Cou	Orange County		persons per	ons per Owner-occupied		Renter-occupied	
	population	households	household	number	percent	<u>number</u>	percent
2000	25,881	10,150	2.55	7,822	77.1	2,328	22.9
2010	33,481	12,895	2.60	9,890	76.7	3,005	23.3
2020	36,119	13,668	2.64	10,432	76.3	3,236	23.7

Source: 2000 Census and 2010 Census; Virginia State Data Center T.Ronald Brown: Research & Analysis

Income Distribution

The distribution of household incomes for Gordonsville, the market area, and Orange County are set out in Table 14, below. These figures are taken from the 2014 to 2018 American Community Survey, and as such are subject to the limitations imposed by this source.

The median household income for Gordonsville is around \$45,046, and that for Orange County as a whole is seen to be \$68,481. The median income for the market area is estimated at \$57,777.

Table 14 - Household Income

	Gordonsville		Market area		Orange County	
	<u>number</u>	<u>percent</u>	<u>number</u>	<u>percent</u>	<u>number</u>	<u>percent</u>
less than \$10,000	55	8.4	312	4.5	28	1.7
\$10,000 to \$14,999	93	14.3	292	4.2	41	2.4
\$15,000 to \$19,999	38	5.8	316	4.6	48	2.9
\$20,000 to \$24,999	22	3.4	330	4.8	46	2.7
\$25,000 to \$29,999	24	3.7	312	4.5	114	6.8
\$30,000 to \$34,999	47	7.2	320	4.7	43	2.6
\$35,000 to \$39,999	29	4.5	287	4.2	69	4.1
\$40,000 to \$44,999	43	6.6	441	6.4	100	5.9
\$45,000 to \$49,999	38	5.8	253	3.7	64	3.8
\$50,000 to \$59,999	65	10.0	741	10.8	150	8.9
\$60,000 to \$74,999	55	8.4	663	9.6	116	6.9
\$75,000 to \$99,999	76	11.7	1,107	16.1	196	11.6
\$100,000 to \$124,999	22	3.4	649	9.4	176	10.5
\$125,000 to \$149,999	14	2.2	289	4.2	63	3.7
\$150,000 to \$199,999	19	2.9	370	5.4	108	6.4
\$200,000 or more	11	1.7	192	2.8	321	19.1
median income	\$45,046		\$57,777 *		\$68,481	

^{*} estimate

Source: 2014 to 2018 American Community Survey; T.Ronald Brown: Research & Analysis

Renter Income

The distribution of household incomes for renter households for Gordonsville, the market area, and Orange County are set out in Table 15, below. These figures are also taken from the 2013 to 2017 American Community Survey.

The median household income for Gordonsville is around \$30,882, and that for Orange County as a whole is seen to be \$40,839. The median income for the market area is estimated at \$42,842.

Table 15 - Household Income, Renter Households

	Gordons	Gordonsville		irea	Orange Co	ounty
	<u>number</u>	percent	number	percent	number	percent
less than \$10,000	12	3.2	155	7.8	217	7.2
\$10,000 to \$19,999	24	6.4	248	12.5	462	15.4
\$20,000 to \$34,999	96	25.7	387	19.4	568	18.9
\$35,000 to \$49,999	90	24.1	392	19.7	621	20.7
\$50,000 to \$74,999	101	27.0	450	22.6	490	16.3
\$75,000 to \$99,999	7	1.9	208	10.4	459	15.3
\$100,000 or more	44	11.8	151	7.6	188	6.3
median income	\$30,882		\$42,842 *	k	\$40,839	

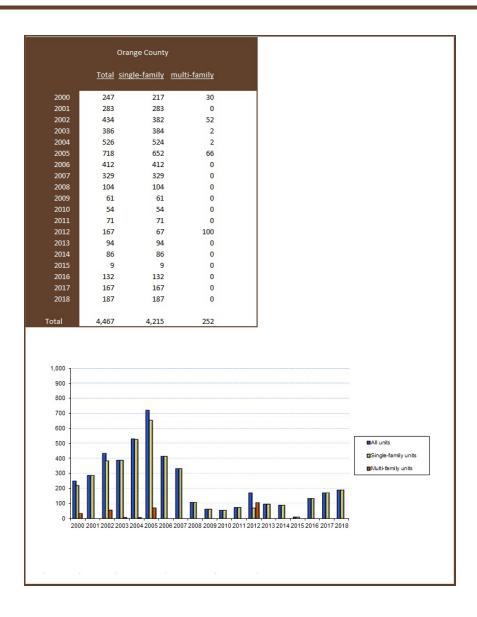
^{*} estimate

Source: 2014 to 2018 American Community Survey; T.Ronald Brown: Research & Analysis

Building permit trends

Table 16 below gives details of residential construction in Orange County since 2000. Where the data exist, it can be seen that a total of 4,467 units were added throughout Orange County - of which 252 were multifamily units. No data exist for Gordonsville or the market area.

Table 16 - Residential Construction Since 2000



Source: Current Construction Reports, Bureau of the Census; T. Ronald Brown: Research & Analysis

H. COMPETITIVE ENVIRONMENT

East Gate Village - is the only (family) apartment complex in the market area, as defined.

The 43-unit USDA/RD financed Meadows Run property, located north of the subject property, acorss the railroad, is designated for the elderly, handicapped, and disabled.

There are no new units in the area.

There is a privately-owned apartment development on West Gordon Avenue which is understood to date from 1992. We were unable to hear from the owner.

The nearest unsubsidized tax credit property is the 48-unit Lily Ridge complex in Ruckersville. Lily Ridge opened in 2017 and provides eight one-bedroom units, 28 two-bedroom units, and 12 three-bedroom units. The one-bedroom units rent for \$525 to \$676, the two-bedroom units rent for \$840 to \$845, and the three-bedroom units rent for \$925-\$950. Currently, the property is reported to have no vacant units. The property is reported stay effectively fully occupied on an ongoing basis (with a waiting list).

The Round Hill Meadows and Round Hill Meadows Place offer tax credit and market rate units in Orange, outside the market area for the proposed development, to the north. There, two bedroom tax credit financed units rent for \$765 and the three bedroom units rent for \$855 (both targeted at 50 percent of the median). The market rate units range from \$920 for a one-bedroom unit to \$1,020 to \$1,130 for a two bedroom unit, with three-bedroom units renting for \$1,190. This property is reported to stay effectively fully occupied on an ongoing basis.

Oak Brook Terrace is another established tax credit complex in Orange. This property opened in 1996 and was rehabilitated in 2016. There is a mix of 16 two-bedroom units that rent for \$780, and 64 three-bedroom units that rent for \$872. The property is fully occupied, which is typical, and there is a waiting list.

The nearest, newest, market rate property is Terrace Greene in Barboursville. This complex opened in 2011 and offered 260 units. A further 90 units were added, opening in late 2019. There is a mix of one- and two-bedroom units. The one-bedroom units rent for \$1,109 to \$1,549 per month. The two-bedroom units are offered in the \$1,239 to \$1,999 range (the higher rents reflecting the newer units). Current occupancy reflects the leasing of the new units (82.9 percent). In recent years, typical occupancy is reported to be 100 percent, with a waiting list.

As noted, the Lily Ridge Apartments are new units in the wider area.

Based on our survey, there is a market-wide calculated occupancy rate of 83.3 percent - reflecting ongoing rehabilitation . This translates to effective full occupancy.

Occupancy at the nearest unsubsidized tax credit property is 100 percent.

Occupancy at the nearest market rate property is seen to be 82.9 - reflecting the fact that the property is leasing-up a 90-unit third phase (commenced in October 2019).

The location of the various properties cited above, relative to the market area boundary and the location of the East Gate property is mapped, below.



As noted, there are no comparable market rate apartment developments in the Gordonsville market area. VHDA market study guidelines require the inclusion of at least three developments in adjacent localities with similar characteristics to be included in the analysis. Thus, in order to try to establish some benchmark for determining market rents we surveyed additional market-rate properties in adjacent communities. Here, these projects were in Charlottesville, Barboursville, and the southern part of Culpeper.

Information for two- and three-bedroom units at these various properties is summarized below.

Table 17 - Market Rate Properties

Property	<u>Location</u>	Year built	Two-bedroom rents	Three-bedroom rent
Arden Place	Charlottesville	2011	\$1,654-1,719	\$1,957-1,974
Friendship Heights	Culpeper	1987	\$1,050-1,200	\$1,000-1,200
Greens at Hollymead	Charlottesville	1991	\$1,190-1,395	\$1,350-1,479
South Ridge	Culpeper	1989	\$1,209-1,339	\$1,510
Terrace Greene	Barboursville	2011	\$1,239-1,299	

Source: Apartment Managers; T.Ronald Brown: Research & Analysis

The location, rent levels, unit size, age, features, and amenities were analyzed in order to try to establish an estimate of market rent levels for the subject property. Following this approach we have determined that, all things being equal, these market properties suggest a rent of around \$1,045 for a two-bedroom unit, and \$1,260 for a three-bedroom unit.

These rents are seen to be significantly above the proposed rents at the proposed development.



Arden Place



Greens at Hollymead



Terrace Greene



Friendship Heights



Southridge



East Gate Village

Location: 19302 Ashlawn Dr., Gordonsville

Financing: USDA/RD § 515

Year built: 1986, undergoing rehabilitation

Total units: 24

Rental assistane:24

Typical occupancy: 100%

	<u>1 br/1 ba</u>	<u>2br/1ba</u>	3 br/1½ ba
Units:	8	12	4
Unit size (sq. ft.):	545-671	619-792	789-1,029
Basic rent:	\$432	\$482	\$507
Market rent:	\$651	\$701	\$726

Vacant units: 4, overall (83 percent occupancy -reflecting impact of rehabilitation program)

Management GEM Management (Alex - 704.357.6000 [2/27])

Utilities in rent: Water Ø Sewer Ø Trash Ø Heat □ Electricity □

Amenities: Club House/fitness center □ Pool □ Tennis □ Playground Ø Business Center □

Security gate □ Garages □ Laundry Ø

Washer/Dryer □ Washer/Dryer Hook-up □

Unit features: Blinds/Drapes Ø Carpet Ø AC Ø Fireplaces (\$) □ Patio/balconies □

I. AFFORDABILITY ANALYSIS, DEMAND ANALYSIS, CAPTURE RATES, AND PENETRATION RATES

Demand Analysis

The market for the proposed apartments is derived from two principal sources: the population and household growth market, and from existing households currently living in the area who could move to the project were it to be made available.

Income is a key variable in the analysis of housing markets. Of the 37 units proposed, four will be targeted at 30 percent of the median, 18 will be targeted to households with incomes up to 50 percent of the median, with 15 units targeted at 80 percent of the median (and therefore applying income averaging). Thus, the apartments qualify for low income housing tax credit status.

The HUD income limits for Orange County are set out below. The median income for Orange County in 2019 is \$80,2000 - having been \$76,000 in 2018, and \$65,600 in 2009. This represents a 5.5 percent increase over the previous year, and a 22.3 percent increase over the last decade (or an average of 2.03 percent per year).

The maximum housing expenses for the proposed units are based on these income limits and assume an average 1.5 persons per household and that renters will pay no more than 30 percent of their incomes on housing expenses (rent plus utilities).

Table 18 - Income Limits and Maximum Housing Costs

	30 percent	50 percent	80 percent
1 person	\$16,860	\$28,100	\$44,960
2 person	\$19,260	\$32,100	\$51,360
3 person	\$21,660	\$36,100	\$57,760
4 person	\$24,060	\$40,100	\$64,160
5 person	\$26,010	\$43,350	\$69,360
5 person	\$27,930	\$46,550	\$74,480
l Maximum Hou	sing Costs		
	30 percent	50 percent	80 percent
1 bedroom	\$452	\$753	\$1,204
2 bedroom	\$542	\$903	\$1,444

Source: HUD

Information as to rents and income targeting are set out in Table 19, below

Table 19 - Rents and Income Targeting

income targetii		50	00	T-4-1
	30 percent	50 percent	80 percent	<u>Total</u>
2 bedroom	2	9	8	19
3 bedroom	2	9	7	18
Total	4	18	15	37
proposed rents				
	30 percent	50 percent	80 percent	
2 bedroom	\$430	\$695	\$850	
3 bedroom	\$490	\$750	\$925	
		(0/) .		
proposed rents				
	30 percent	50 percent	80 percent	
2 bedroom	99.7	87.7	63.7	
z pearoom				

Source: Applicant; T Ronald Brown: Research & Analysis

Utilities (excluding trash collection) will be paid by the tenant - utility allowances are \$110 for a two-bedroom unit, and \$131 for a three bedroom unit.

From the table above, it can be seen that housing expenses at the proposed apartments effectively fall at the maximum allowable for the units targeted at the 30 percent level, between 82 percent and 88 percent of the maximum for the units targeted at 50 percent, with those at 80 percent of the median seen to be 60 to 64 percent of the maximum allowable at that level.

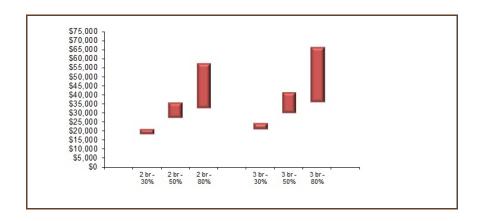
Qualifying income ranges are a function of the income needed to afford the proposed units and the mandated upper income limits. There is no official lower income limit for the proposed apartments. However, for the purposes of this report it is assumed that tenants will pay no more than 35 percent of their income on housing costs (rent and utilities). The upper limits are a function of household size - based on a standard of one and one-half persons per bedroom. The qualifying income limits for one - and four-bedroom units are based on the proposed rents level relative to the maximum allowable.

Table 20 - Qualifying Income Ranges

	30 pe	rcent	
	lower	upper	
2 bedroom	\$18,514	\$21,660	
3 bedroom	\$21,291	\$25,035	
1	<u>50 pe</u>	rcent	
	lower	upper	
2 bedroom	\$27,600	\$36,100	
3 bedroom	\$30,206	\$41,725	
	80 pe	rcent	
	lower	upper	
2 bedroom	\$24,514	\$43,320	
3 bedroom	\$28,491	\$50,070	

Source: Applicant; T Ronald Brown: Research & Analysis

The various qualifying income ranges, by bedroom mix and income targeting are illustrated, below. Any gaps and/or overlaps between these target income ranges will necessarily be taken into consideration in our calculations. Given the gap between the 30 percent income limits and the incomes needed to afford the units at the 50 percent level, some units at the 50 percent level may be occupied by tenants paying more than 35 percent of their income on rent (and utilities). This cohort does not meet market study underwriting criteria and as such are not included in this analysis. In this regard, the figures derived from this analysis may be considered somewhat conservative as a consequence.



The major variables to be examined are tenure and income. These data are no longer available from the Decennial Census. Nonetheless, data can be extrapolated from the most recent American Community Survey - again, subject the limitations of those data. These data, for the market area for the proposed complex, are set out below.

Table 21 - Household Income, Renter Households

	All Rent	ters (Overburdened Renters		
Income	<u>Number</u>	Percent	<u>Number</u>	<u>Percent</u>	
Up to \$10,000	155	7.8	70	14.6	
\$10,000 - \$19,999	248	12.5	151	31.5	
\$20,000 - \$34,999	387	19.4	190	39.6	
\$35,000 - \$50,000	392	19.7	43	9.0	
\$50,000 - \$75,000	450	22.6	0	5.4	
\$75,000 - \$100,000	208	10.4	0	0.0	
\$100,000 and over	151	7.6	0	0.0	
Total	1,991		480		

Source: 2014 to 2018 American Community Survey; T.Ronald Brown: Research & Analysis

As noted, these data are necessarily from the American Community Survey and are based on the 5-year average for the period from 2014 to 2018 - and not for a specific year.

From this table it can be seen that 7.8 percent of the market area renter households have incomes less than \$10,000, and a further 12.5 percent have incomes between \$10,000 and \$20,000. Around 19.4 percent of renters are seen to be in the \$25,000 to \$35,000 income range. Around 24 percent of all renters are rent-overburdened - a relatively low proportion. This table also illustrates how rent-overburdened households are concentrated in the lower income groups.

Based on the income ranges set out in Table 20 and the income distribution set out in Table 21, it is found that around 4.4 percent of market area renter households qualify for units at 30 percent of the median, and the corresponding figures for units at the 50 percent and 80 percent levels are 13.0 percent and 15.3 percent, respectively.

Projections of need and demand are based upon a 2020 to 2025 projection period and the resulting calculations are corrected to account for any construction of comparable projects and/or planned comparable units.

Based on the projections set out in Table 13, a total of 62 new rental units are needed between 2020 and 2025. A total of 17 units will be for households eligible for the proposed project.

Again, the market for the proposed apartments comprises not only demand from population and household growth, but also from existing renter households who would move to the new apartments were they made available. The extent to which any new development is able to attract a certain share of this market is largely a factor of several interrelated factors. These include the location of the development, the amenities it offers, the quality of design and the effectiveness of the development's marketing and management. That is, the perceived value of the community in terms of price, convenience, and life-stye.

Our calculations show that there will be a total of 541 renter households in the qualifying income range in the project market area. These figures have to be adjusted to reflect the proportion that are likely to move to a new complex. With respect to existing households in the project market area it is found that, based on the most recent American Community Survey data, 53.4 percent of renters qualifying for units at 30 percent of the median are rent-overburdened. Likewise, 33.6 percent and 20.8 percent of those qualifying for units at the 50 percent and 80 percent levels, respectively, are rent-overburdened. Here, these proportions are applied to the number of income eligible existing renter households to estimate how many of those households are likely to consider moving to the proposed apartments.

State Agency market study guidelines allow for the replacement of rental units due to demolition, abandonment, obsolescence and the like. This based on an annual average rate of 0.6 percent of the rental housing stock. The proportion is based on a two-year loss of 1.2 percent of rental units detailed in the 2016 Edition of "Components of Inventory Change" published by HUD. Based on the number of rental units in the project market area this translates to a need for an additional 25 units.

Total demand is therefore seen to amount to 209 units. These figures are based on a 2020 to 2025 projection period and therefore have been corrected to account for the funding and/or construction of any directly comparable projects in the market area. No directly comparable projects have been added in the project market area over the projection period, and no other complexes have been funded or are under construction. The initial phase of the East Gate Village development is not comparable in that it is the rehabilitation of an existing, subsidized, complex. The net need is therefore for 209 units.

The preceding calculations are summarized in the table on the following page.

Table 22 - Demand Calculations

		30 percent	50 percent	80 percent	<u>Total</u> *
(i)	income eligible new renter households	3	8	10	17
(ii)	income eligible existing renter households	88	262	308	541
(iii)	existing households, likely to move	47	88	64	168
(iv)	need from obsolete housing	4	12	14	21
	Total demand (i)+(iii)+(iv)	54	108	88	209
	Supply	0	0	0	0
	Net demand	54	108	88	209

Source: T. Ronald Brown: Research & Analysis

Demand has to be segmented to determine demand by number of bedrooms per unit. Based on the distribution of household size in the market area and given data from the American Housing Survey correlating typical household size and number of bedrooms, we have determined that one-bedroom units should account for 29 percent of the total, two-bedroom units should account for 41 percent of the total, and three-bedroom units should account for 26 percent of the total with four- or more bedroom units accounting for 5 percent.

Capture rates are illustrated in the table on the following page.

Table 23 - Capture Rates

	02402/0000	WW.03393.	12000000	50.500
Tabel damand	30 percent	50 percent	80 percent	<u>Total*</u>
Total demand				
1 bedroom	15	31	25	60
2 bedroom	22	45	36	86
3 bedroom	14	28	23	54
4 bedroom	2	5	4	9
Total	54	108	88	209
Supply				
1 bedroom	0	0	0	0
2 bedroom	0	0	0	0
3 bedroom	0	0	0	0
4 bedroom	0	0	0	0
Total	0	0	0	0
Net demand				
1 bedroom	15	31	25	60
2 bedroom	22	45	36	86
3 bedroom	14	28	23	54
4 bedroom	2	5	4	9
Total	54	108	88	209
Units proposed				
1 bedroom	0	0	0	0
2 bedroom	2	9	8	19
3 bedroom	2	9	7	18
4 bedroom	0	0	0	0
Total	4	18	15	37
Capture rates				
1 bedroom	0.0%	0.0%	0.0%	0.0%
2 bedroom	9.1%	20.2%	22.1%	22.0%
3 bedroom	14.5%	32.4%	31.1%	33.5%
4 bedroom	0.0%	0.0%	0.0%	0.0%
Total	7.5%	16.6%	17.1%	17.7%

Source: T. Ronald Brown: Research & Analysis

Given the calculated need, the proposed 37-unit development amounts to 17.7 percent of the total net need.

The capture rate, by bedroom, is determined to be 7.5 percent for the 19 two-bedroom units, and 33.5 percent for the 18 three-bedroom units.

The four units at 30 percent of the median amount to 7.5 percent of the net demand at that level, the 18 units at 50 percent of the median amount to 16.6 percent of demand at that target level, and the 15 units targeted at the 80 percent level amount to around 17.1 percent of demand at that level.

The capture rates presented above are considered reasonable for a property of this size in a non-urban market.

As noted, the capture rates presented above are considered realistic. Based on the above, the project could expect to lease-up (reach stabilized occupancy) over an estimated six month period, or so.

Affordability Analysis

Here, an affordability analysis addresses the total number of income eligible renter households in the market are relative to the size of the proposed development.

The minimum income is that associated with the rent for the least expensive unit offered, and the upper limit is based on the 80 percent limit (the highest target income range) for the largest unit size, by number of bedrooms. Here, the lower income is seen to be that for the proposed one-bedroom units that will be targeted to households at the 30 percent level. That is, lower qualifying income is seen to be \$18,514. The upper income is \$50,070. Based on the income data set out in Table 21, there are found to be 824 renter households in that range. Thus, the proposed 37-unit development corresponds to a 4.5 percent affordability analysis capture rate.

Penetration rate.

A penetration rate is defined, for the purposes of this analysis, as the proportion of income-eligible households needed to fill the proposed development, plus those in existing competitive units, plus any in competitive units that are approved and funded for future development.

The lower income limit for this analysis is the income needed to afford the least expensive competitive unit in the market (or the rent for the least-expensive proposed unit, if lower), and the upper income limit is the upper income limit for the competitive units (or the proposed units, if higher). Our survey of the existing, competitive inventory, shows that the lowest one bedroom units are those for the more deeply targeted units at the proposed development. Thus, given the rents for the proposed development, the target income range for this market is that for the proposed development. That is, from \$18,514 to \$50,070. There are as, noted,824 qualifying renter households in the market area. It is seen that no new units are proposed, and there are no existing comparable tax credit properties units, with the proposed 37 units, this yields 37 units. Thus, the penetration rate - as defined - amounts to 4.5 percent.

Summary

Consideration of the capture rate (17.7 percent) and the (4.5 percent) affordability analysis capture rate and (4.5 percent) penetration rate suggests that the proposed development is marketable, as proposed.

J. LOCAL PERSPECTIVE OF RENTAL HOUSING MARKET

As part of the research for this market study, interviews were held with property managers, local government officials, and others with particular knowledge of the local housing market. The proposed development will offer and attractive, new, apartment complex - to be leased subject to the provisions of the Low Income Housing Tax Credit program. Property managers of existing complexes and/or other representatives of management companies were a potential source of information.

As noted, property managers are a major source of information for a project such as that proposed (their contact details are provided as part of the rental survey set out in the previous pages). It should be noted that there are no properties in the local market which are directly comparable to the proposed development.

K. ANALYSIS/CONCLUSIONS

Based on the above, the project could expect to lease-up (reach stabilized occupancy) over an estimated six month period, or so.

Based on the proposed development's site, bedroom mix, amenities and features, utility provision and costs, the proposed development is considered marketable and should be well–accepted in this market, particularly as it will be a new, affordable, property.

The proposed development should not have a negative impact on existing housing.

It is our recommendation that, based upon our analysis, the proposed apartments should be developed as proposed, and that the project should be awarded low income housing tax credits. This conclusion is based on our analysis of the economic and demographic criteria of the project market area as defined and on our project specific demand analysis and survey of the supply of rental housing in the market--as set out in the foregoing report and summarized in the Executive Summary.

L. OTHER REQUIREMENTS

Statement and signature

I affirm the following:

- 1. that I have made a physical inspection of the site and market area.
- 2. The appropriate information has been used in the comprehensive evaluation of the need and demand for the proposed rental units.
- 3. To the best of my knowledge the market can support the demand shown in this study. I understand that any misrepresentation in this statement may result in the denial of participation in the Low Income Housing Tax Credit Program in Virginia as administered by the Virginia Housing Development Authority.
- 4. Neither I nor anyone at my firm has any interest in the proposed development or relationship with the ownership entity.
- 5. Neither I nor anyone at my firm nor anyone acting on behalf of my firm is representing VHDA or in any way acting for, at the request of, or on behalf of VHDA
- 6. Compensation for my services is not contingent upon this development receiving a reservation or allocation of tax credits.

Market Analyst

T. Rould B

March 9, 2020

As affirmed in the Scope of Work, there is no identity of interest between the analyst and the entity for which the report has been prepared.

Similarly, the recommendations and conclusions are based solely on the analyst's experience, opinion, and best efforts.

Analyst Qualifications

T. Ronald Brown: Research & Analysis is a planning and economics consulting firm which provides real estate market analysis.

The President of the firm is T. Ronald Brown. He has 35 years experience in the provision of market studies for subsidized and unsubsidized apartment developments and for-sale housing. Over the last two decades or so, Mr. Brown has produced around 3,000 studies in at least 20 states, predominantly in the Southeast.

Mr. Brown has a Honours Master of Arts degree in Geographical Studies from the University of St. Andrews in St. Andrews, Scotland.

The firm has primary experience in market analysis for residential projects including both single-family homes and multi-family units (for sale and for rent). A significant proportion of the firm's business focuses on apartment market studies—for family renters and for elderly persons. These reports include conventionally financed projects (including HUD 221 (d) (4) projects), affordable housing (including low income tax credit financed projects) and subsidized housing.

Clients include for-profit developers, non-profit developers and community development corporations, state housing finance agencies, syndicators, and municipalities.

List of sources

The foregoing report contains information from a variety of sources - those sources (such as contact numbers for property interviews) are cited at the appropriate place in the report itself. The major sources of data include:

The U.S. Census - 2000 and 2010, and the American Community Survey (2014-2018)
Virginia Housing Development Authority
U.S. Department of HUD
U.S. Department of Agriculture
Virginia State Data Center/Weldon Cooper Center for Public Service
Virginia Employment Commission
Virginia Economic Development Partnership
Orange County

U.S. Bureau of Labor Statistics

HUDUSER (e.g., SOCDS building permits database)

Market study checklist

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MARKET STUDY TERMINOLOGY

The following presents the accepted definitions of various terms typically found in real estate market studies. These definitions are typically followed unless reviewing agency requirements differ.

Absorption period - the period of time necessary for a newly constructed or renovated property to achieve the *stabilized level of occupancy*. The absorption period begins when the first certificate of occupancy is issued and ends when the last unit to reach the *stabilized level of occupancy* has a signed lease. Assumes a typical premarketing period, prior to the issuance of the certificate of occupancy, of about three to six months. The month that leasing is assumed to begin should accompany all absorption estimates.

Absorption rate - the average number of unites rented each month during the absorption period.

Acceptable rent burden - the rent-to-income ratio used to qualify tenants for both income-restricted and non-income restricted units. The acceptable rent burden varies depending on the requirements of funding sources, government funding sources, target markets, and local conditions.

Achievable rents - See Market Rent, Achievable Restricted Rent.

Affordable housing - housing affordable to low or very low-income tenants.

Amenity - tangible or intangible benefits offered to a tenant. Typical amenities include on-site recreational facilities, planned programs, services and activities.

Annual demand - the total estimated demand present to the market in any one year for the type of units proposed.

Assisted housing - housing where federal, state or other programs *subsidize* the monthly costs to the tenants.

Bias - a proclivity or preference, particularly one that inhibits or entirely prevents an impartial judgment.

Capture rate - the percentage of age, size, and income qualified renter households in the *primary market* area that the property must capture to fill the units. Funding agencies may require restrictions to the qualified households used in the calculation including age, income, living in substandard housing, movership and other comparable factors. The Capture Rate is calculated by dividing the total number of units at the property by the total number of age, size and income qualified renter households in the *primary market* area. See also: penetration rate.

Comparable property - a property that is representative of the rental housing choices of the subject's *primary market area* and that is similar in construction, size, amenities, location, and/or age. Comparable and *competitive* properties are generally used to derive market rent and to evaluate the subject's position in the market.

Competitive property - a property that is comparable to the subject and that competes at nearly the same rent levels and tenant profile, such as age, family or income.

Comprehensive market study - NCHMA (the National Council of Housing Market Anlysts) defines a comprehensive market study for the purposes of IRC Section 42 as a market study compliant with its Model Content Standards for Market Studies for Rental Housing. Additionally, use of the suggested wording in the NCHMA certification without limitations regarding the comprehensive nature of the study, shows compliance with the IRC Section 42 request for completion of a market study by a 'disinterested party.'

Concession - discount given to a prospective tenant to induce the tenant to sign a least. Concessions typically are in the form of reduced rent or free rent for a specific lease term, or for free amenities, which are normally charged separately (i.e. washer/dryer, parking).

Demand - the total number of households in a defined market area that would potentially move into the proposed new or renovated housing units. These households must be the appropriate age, income, tenure and size for a specific proposed development. Components of demand vary and can include household growth; turnover, those living in substandard conditions, rent over-burdened households, and demolished housing units. Demand is project specific.

Effective rents - contract rent less concessions.

Household trends - changes in the number of households for a particular area over a specific period of time, which is a function of new household formations (e.e. at marriage or separation), changes in average household size, and net *migration*.

Income band - the range of incomes of households that can afford to pay a specific rent but do not have below any applicable program-specific maximum income limits. The minimum household income typically is based on a defined *acceptable rent burden* percentage and the maximum typically7 is pre-defined by specific program requirements or by general market parameters.

Infrastructure - services and facilities including roads, highways, water, sewerage, emergency services, parks and recreation, etc. Infrastructure includes both public and private facilities.

Market advantage - the difference, expressed as a percentage, between the estimated market rent for an apartment property without income restrictions and the lesser of (a) the owner's proposed rents or (b) the maximum rents permitted by the financing program for the same apartment property. (*market rent - proposed rent*) / *market rent * 100*

Market analysis - a study of real estate market conditions for a specific type of property.

Market area - See primary market area.

Market demand - the total number of households in a defined market area that would potentially move into any new or renovated housing units. Market demand is not project specific and refers to the universe of tenure appropriate households, independent of income. The components of market demand are similar to those used in determining project-specific demand. A common example of market demand used by

HUD's MAP program, which is based on three years of renter household growth, loss of existing units due to demolition, and market conditions.

Market rent - the rent that an apartment, without rent or income restrictions or rent subsidies, would command in the *primary market area* considering its location, features and amenities. Market rent should be adjusted for *concessions* and owner paid utilities included in the rent.

Market study - a comprehensive study of a specific proposal including a review of the housing market in a defined market area. Project specific market studies are often used by developers, syndicators, and government entities to determine the appropriateness of a proposed development, whereas market specific market studies are used to determine what housing needs, if any, exist within a specific geography.

Marketability - the manner in which the subject fits into the market; the relative desirability of a property (for sale or lease) in comparison with similar or competing properties in the area.

Market vacancy rate, economic - percentage of rent loss due to concessions, vacancies, and non-payment of rent on occupied units.

Market vacancy rate, physical - average number of apartment units in any market which are unoccupied divided by the total number of apartment units in the same market, excluding units in properties which are in the lease-up stage.

Migration - the movement of households into or out of an area, especially a *primary market area*.

Mixed income property - an apartment property containing (1) both income restricted and unrestricted units or (2) units restricted at two or more income limits (i.e. low income tax credit property with income limits of 30%, 50%, and 60%).

Mobility - the ease with which people move from one location to another.

Move-up demand - an estimate of how many consumers are able and willing to relocate to more expensive or desirable units. Examples: tenants who move from class-C properties to class-B properties, or tenants who move from older tax credit properties to new tax credit properties.

Multi-family - structures that contain more than two housing units.

Neighborhood - an area of a city or town with common demographic and economic features that distinguish it from adjoining areas.

Net rent (also referred to as contract rent or lease rent) - Gross rent less tenant paid utilities.

Penetration rate - The percentage of age and income qualified renter households in the *primary market* area that all existing and proposed properties, to be completed with six months of the subject, and which are competitively priced to the subject that must be captured to achieve the *stabilized level of occupancy*. Funding agencies may require restrictions to the qualified households used in the calculation including age,

income, living in substandard housing, mover ship and other comparable factors. Units in all proposals / households in market * 100, see also: capture rate.

Pent-up demand - a market in which there is a scarcity of supply and vacancy rates are very low.

Population trends - changes in population levels for a particular area over a specific period of time – which is a function of the level of births, deaths, and net *migration*.

Primary market area - a geographic area from which a property is expected to draw the majority of its residents.

Programmatic rents - See restricted rents.

Project based rent assistance - rental assistance from any source that is allocated to the property or a specific number of units in the property and is available to each income eligible tenant of the property or an assisted unit.

Redevelopment - the redesign or rehabilitation of existing properties.

Rent burden - gross rent divided by adjusted monthly household income.

Rent burdened households - households with *rent burden* above the level determined by the lender, investor, or public program to be an acceptable rent-to-income.

Restricted rent - the rent charged under the restrictions of a specific housing program or subsidy.

Restricted rent, achievable - the rents that the project can attain taking into account both market conditions and rent in the *primary market area* and income restrictions.

Saturation - the point at which there is no longer demand to support additional unit. Saturation usually refers to a particular segment of a specific market.

Secondary market area - the portion of a market that supplies additional support to an apartment property beyond that provided by the primary market area.

Special needs population - specific market niche that is typically not catered to in a conventional apartment property. Examples of special needs population include: substance abusers, visually impaired person or persons with mobility limitations.

Stabilized level of occupancy - the underwritten or actual number of occupied units that a property is expected to maintain after the initial rent-up period, expressed as a percentage of the total units.

Subsidy - monthly income received by a tenant or by an owner on behalf of a tenant to pay the difference between the apartment's *contract rent* and the amount paid by the tenant toward rent.

Substandard conditions - housing conditions that are conventionally considered unacceptable which may be defined in terms of lacking plumbing facilities, one or more major systems not functioning properly, or overcrowded conditions.

Target income band - the income band from which the subject property will draw tenants.

Target population - the market segment or segments a development will appeal or cater to. State agencies often use target population to refer to various income set asides, elderly v. family, etc.

Tenant paid utilities - the cost of utilities (not including cable, telephone, or internet) necessary for the habitation of a dwelling unit, which are paid by the tenant.

Turnover period - 1. An estimate of the number of housing units in a market area as a percentage of total housing units in the market area that will likely change occupants in any one year. See also: vacancy period. Housing units with new occupants / housing units * 100 2. The percent of occupants in a given apartment complex that move in one year.

Unmet housing need - new units required in the market area to accommodate household growth, homeless people, and housing in substandard conditions.

Unrestricted rents - rents that are not subject to restriction.

Unrestricted units - units that are not subject to any income or rent restrictions.

Vacancy period - the amount of time that an apartment remains vacant and available for rent.

Vacancy rate-economic vacancy rate - physical - maximum potential revenue less actual rent revenue divided by maximum potential rent revenue. The number of total habitable units that are vacant divided by the total number of units in the property.

Other Terms

The following terms are also to be found in professional market studies - here, this information is drawn from various sources including HUD, the Census Bureau, and the Urban Land Institute.

Area Median Income (AMI) - 1005 of the gross median household income for a specific Metropolitan Statistical Area, county or non-metropolitan area established annually by HUD.

Attached housing - two or more dwelling units connected with party walls (e.g. townhouses or flats).

Basic rent - the maximum monthly rent that tenants who do not have rental assistance pay to lease units developed through the USDA-RD Section 515 Program, the HUD Section 236 Program and HUD Section 223(d)(3) Below Market Interest Rate Program. The Basic Rent is calculated as the amount of rent required to operate the property, maintain debt service on a subsidized mortgage with a below-market interest rate, and provide a return on equity to the developer in accordance with the regulatory documents governing the property.

Below Market Interest Rate program (BMIR) - Program targeted to renters with income not exceeding 80% or area median income by limiting rents based on HUD's BMIR Program requirements and through the provision of an interest reduction contract subsidize the market interest rate to a below-market rate. Interest rates are typically subsidized to effective rates of one percent or three percent.

Census tract - a small, relatively permanent statistical subdivision delineated by a local committee of census data users for the purpose of presenting data. Census tract boundaries normally follow visible features, but may follow governmental unit boundaries and other non-visible features; they always nest within counties. They are designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time of establishment. Census tracts average about 4,000 inhabitants.

Central Business District (CBD) - the center of commercial activity within a town or city; usually the largest and oldest concentration of such activity.

Community Development Corporation (CDC) - entrepreneurial institution combining public and private resources to aid in the development of socio-economically disadvantaged areas.

Condominium - a form of join ownership and control of property in which specified volumes of space (for example, apartments) are owned individually while the common elements of the property (for example, outside walls) are owned jointly.

Contract rent - 1. The actual monthly rent payable by the tenant, including any rent subsidy paid on behalf of the tenant, to the owner, inclusive of all terms of the lease. (HUD & RD) 2. The monthly rent agreed to between a tenant and a landlord (Census).

Difficult Development Area (DDA) - an area designated by HUD as an area that has high construction, land, and utility costs relative to the Area Median Gross Income. A project located in a DDA and utilizing the Low Income Housing Tax Credit may qualify for up to 130% of eligible basis for the purpose of calculating the Tax Credit allocation.

Detached housing - a freestanding dwelling unit, typically single-family, situated on its own lot.

Elder or senior housing - housing where (1) all units in the property are restricted for occupancy by persons 62 years of age order or (2) at least 805 of the units in each building are restricted for occupancy by households where al lease on household member is 55 years of age or older and the housing is designed with amenities and facilities designed to meet the needs of senior citizens.

Extremely low income - person or household with income below 30% of the Area Median Income adjusted for household size.

Fair Market Rent (FMR) - the estimates established by HUD of the Gross rents (Contract rent plus Tenant Paid Utilities) needed to obtain modest rental units in acceptable condition in a specific county or metropolitan statistical area. HUD generally set FMR so that 40% of the rental units have rents below FMR. In rental markets with a shortage of lower priced rental units HUD may approve the use of Fair Market Rents that are as high as the 50th percentile of rents.

Garden apartments - apartments in low-rise buildings (typically two or four stories) that feature low density, ample open-space around buildings, and on-site parking.

Gross rent - the monthly housing cost to a tenant which equals the Contract rent provided for in the lease plus the estimated cost of all Tenant Paid Utilities.

High-rise - a residential building having more than ten stories.

Household - one or more people who occupy a housing unit as their usual place of residence.

Housing unit - house, apartment, mobile home, or group of rooms used as a separate living quarters by a single household.

Housing Choice Voucher (Section 8 Program) - federal rent subsidy program under Section 8 of the U.S. Housing Act, which issues rent vouchers to eligible households in the use of the housing of their choice. The voucher payment subsidizes the difference between the Gross Rent and tenant's contribution of 30% of adjusted income, (or 10% of gross income, whichever is greater). In cases where 30% of the tenants' income is less than the utility allowance, the tenant will receive an assistance payment. In other cases, the tenant is responsible for paying his share of the rent each month.

Housing Finance Agency (FHA) - state or local agencies responsible for financing housing and administering assisted housing programs.

HUD Section 8 Program - federal program that provides project based rental assistance. Under the program HUD contracts directly with the owner for the payment of the difference between the contract rent and a specified percentage of tenants' adjusted income.

HUD Section 202 Program - federal program which provides direct capital assistance (i.e. grant) and operating or rental assistance to finance housing designed for occupancy by elderly households who have income not exceeding 50% of Area Median Income. The program is limited to housing owned by 501(c)(3) nonprofit organizations or by limited partnerships where the sole general partner is a 501(c)(3) nonprofit organization. Units receive HUD project based rental assistance that enables tenants to occupy units at rents based on 30% of tenant income.

HUD Section 811 Program - federal program which provides direct capital assistance and operating of rental assistance to finance housing designed for occupancy by persons with disabilities who have income not exceeding 50% of Area Median Income. The program is limited to housing owned by 501(c)(3) nonprofit organizations or by limited partnerships where the sole general partner is a 510(c)(3) nonprofit organization.

HUD Section 236 Program - federal program which provides interest reduction payments for loans which finance housing targeted to households with income not exceeding 80% of area median income who pay rent equal to the greater of Basic Rent or 30 percent of their adjusted income. All rents are capped at a HUD approved market rent.

Income limits - maximum household income by county or Metropolitan Statistical Area, adjusted for household size and expressed as a percentage of the Area Median Income for the purpose of establishing an upper limit for eligibility for a specific housing program. Income limits for federal, state and local rental housing programs typically are established at 30%, 50%, 60% or 80% of AMI. HUD publishes income limits each year for 30% median. Very low income (50%), and low income (80%), for households with 1 through 8 people.

Low income - person or household with gross household income below 80% of Area Median Income adjusted for household size.

Low income housing tax credit - a program to generate equity for investment in affordable rental housing authorized pursuant to Section 42 of the Internal Revenue Code, as amended. The program requires that a certain percentage of units built be restricted for occupancy to households earning 60% or less of Area Median Income, and that the rents on those units be restricted accordingly.

Low rise building - a building with one to three stories.

Metropolitan Statistical Area (MSA) - a geographic entity defined by the federal Office of Management and Budget for use by federal statistical agencies, based on the concept of a core area with a large population nucleus, plus adjacent communities have a high degree of economic and social integration with that core. Qualification of an MSA requires the presence of a city with 50,000 or more inhabitants, or the presence of an Urbanized Area (UA) and a total population of at lease 100,000 (75,000 in New England). The county or counties containing the largest city and surrounding densely settled territory are central counties of the MSA. Additional outlying counties qualify to be included in the MSA by meeting certain other criteria of metropolitan character, such as a specified minimum population density or percentage of the population that is urban.

Mid-rise - a building with four to ten stories.

Moderate income - person or household with gross household income between 80 and 120 percent of area median income adjusted for household size.

Public Housing or Low Income Conventional Public Housing - HUD program administered by local (or regional) Housing Authorities which serves low- and very-low income households with rent based on the same formula used for HUD Section 8 assistance.

Qualified Census Tract (QCT) - any census tract (or equivalent geographic area defined by the Bureau of the Census) in which at least 50% of households have an income less than 60% of the area median income or where the poverty rate is at lease 25%. A project located in a QCT and receiving Low Income Housing Tax Credit may qualify for up to 130% of the eligible basis for the purpose of calculating the Tax Credit allocation.

Rural Development (RD) market rent - a monthly rent that can be charged for an apartment under a specific USDA-RD housing program, that reflects the agency's estimate of the rent required to operate the property, maintain debt service on an unsubsidized mortgage and provide an adequate return to the property owner. The rent is the maximum rent that a tenant can pay at an RD Property.

Rural Development (RD) Program (Formerly the Farmers Home Administration Section 515 Rural Rental Housing Program) - federal program which provides the low interest loans to finance housing which serves low- and moderate-income persons in rural areas who pay 30 percent of their adjusted income on rent or the basic rent, which is the higher (but not exceeding the market rent). The program may include property based rental assistance and interest reduction contracts to write down the interest on the loan to as low as one percent.

Single-family housing - a dwelling unit, either attached or detached, designed for use by one household and with the direct access to a street. It does not share heating facilities or other essential building facilities with any other dwelling.

State Data Center (SDC) - a state agency or university facility identified by the governor of each state to participate in the Census Bureau's cooperative network for the dissemination of the census data.

Tenant - one who rents real property from another.

Tenure - the distinction between owner-occupied and renter-occupied housing units.

Townhouse (or Row House) - single-family attached residence separated from another by party walls, usually on a narrow lot offering small front and back-yards; also called row house.

Very low income - person or household whose gross household income does not exceed 50% of Area Median Income adjusted for household size.

Zoning - classification and regulation of land by local governments according to use categories (zones); often also includes density designations.