

## **The Oasis at Druid Lake**



Capstone Fall 2016

Development Feasibility Analysis

735-745 & 747-757 Druid Park Lake Drive

Baltimore, MD 21217

Jeremiah Battle

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## **Chapter 1- General Context**

### Location

The selected site is comprised of two vacant lots, and its location can be identified as 735-745 & 747-757 Druid Park Lake Drive in the Reservoir Hill neighborhood of Baltimore, MD.

Specifically, the site falls within block 3641, lot number 35, which is 16,416sf and lot number 36, 17,760sf. The parcels are currently owned by the Mayor and City Council of Baltimore.

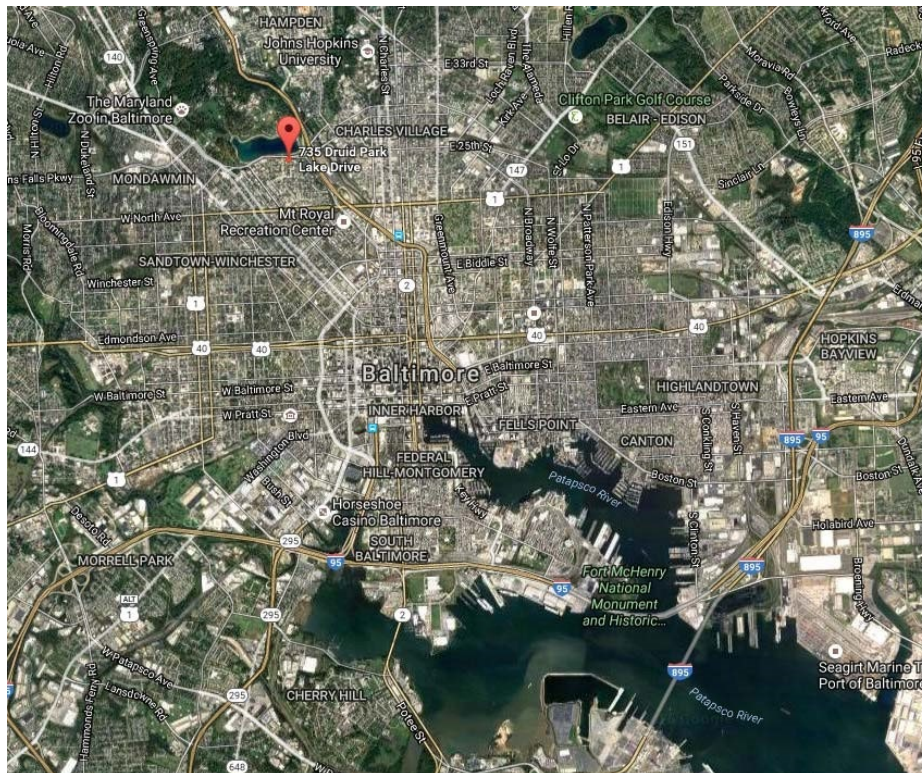
According to the Mayor's blight elimination initiative *Vacants to Value*, the two parcels originally housed three 3-story apartments built in the 1920s which became privately managed public housing in the 1970s, and as a result of housing violations and deteriorating conditions, were demolished in 1999. Currently, the site falls within a number of Baltimore City-designated Business Incentive Zones, particularly as an Apartment Tax Credit Area, and a Food Desert Incentive Area. The City of Baltimore offers two types of High Performance Market Rate Tax Credits: 1) a City-wide 10 year tax credit, and 2) a 15-year credit for specifically targeted areas. The selected site for this proposed project falls into the latter type<sup>i</sup>.

From a construction standpoint, eligibility for the 15 year credit, which will be taken into consideration for the proposed use of the site, requires at least 50 market rate residential units, construction costs of more than \$60,000 per unit, and a minimum of a LEED Silver certification or the Baltimore City's Green Building Code's Two Green Star rating. According to the Baltimore Development Corporation, the Food Desert Incentive Area designates the site as one in which the distance to a supermarket is more than ¼ mile, the median household income is at

or below 185 percent of the Federal Poverty Level, more than 30 percent of households have no vehicle available, and the average Healthy Food availability Index (HFAI) score is low.

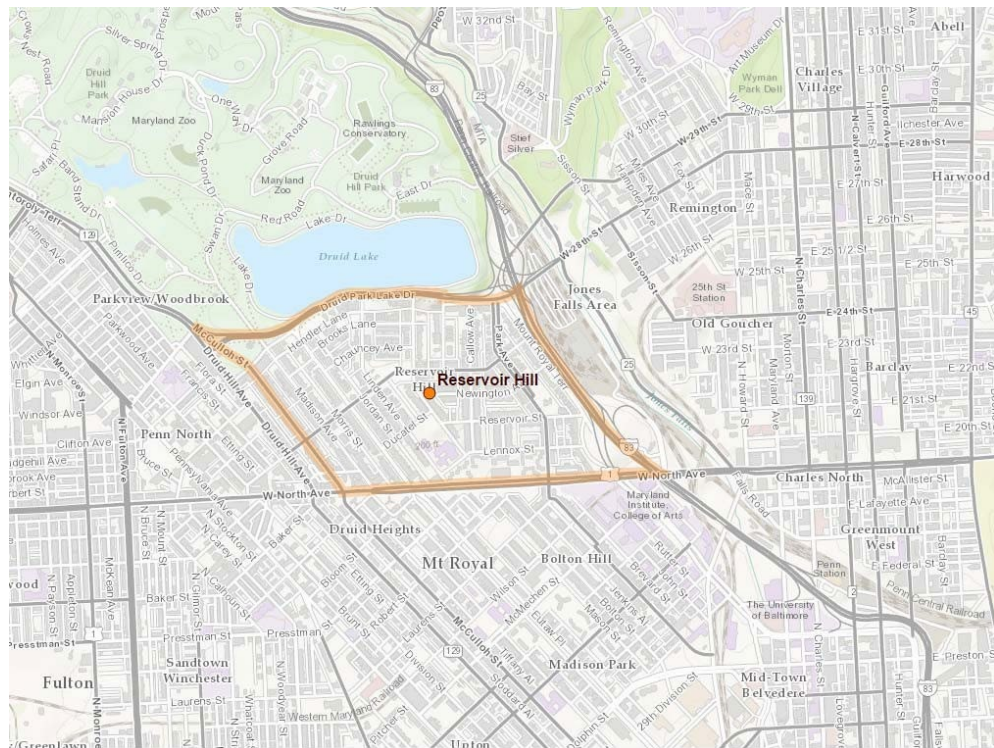
## Geography & Topography

**Figure I- Site within Larger City Context**



As seen in Figure I, From a geographical standpoint, the site is located 3.5 miles or a 13 minute drive NW of downtown Baltimore. It is physically bordered to the North by Druid Lake and the 745-acre Druid Hill Park. As aforementioned, the site falls within the Reservoir Hill neighborhood, which is bordered by Druid Park Lake Drive, McCulloh St., W North Ave and I-83.

**Figure II- Neighborhood Map**



Source: Baltimore Cityview

The neighborhoods surrounding the site are Bolton Hill and Druid Heights to the South and Penn North to the West. Aside from Druid Hill Park and Druid Lake, the predominant land uses in the immediate area of the subject site as well as the surrounding neighborhoods are residential.

### **Proximity of Services & Amenities**

#### **Public Schools, Grocery and Retail**

The public elementary school located within the Reservoir Hill neighborhood 0.5 miles from the site is John Eager Howard Elementary School. Within 0.7 miles of the site, in the Penn North neighborhood is Westside Elementary School. Frederick Dougless High School is located 1.4 miles west of the subject site. As previously mentioned, the site falls within a city-designated food desert. The closest grocery store is a Safeway, located 1.1 miles East of the site, in the Old

Goucher Neighborhood, an approximately ten minute drive for vehicle owners. The grocery store is much less convenient for transit users, as it would require walking 0.75 miles South to North Ave before being able to catch a bus that would provide access. The next grocery store option is a Shoppers located at Mondawmin Mall, which is 1.1 mile West of the subject in geographic proximity. This is a less convenient option, however, for potential vehicle owners at the subject site. Although only approximately a 10 minute drive, the road/traffic patterns do not allow for a left turn onto Druid Park Lake Drive, and instead require first traveling East across I-83, before having to come back west past the starting point before reaching the destination. Traveling to this supermarket by public transportation would be equally as cumbersome, as it would require walking .3 miles South to Whitelock St. before an approximately twenty minute bus ride. Mondawmin Mall also provides a concentration of the closest retail options in the proximity of the subject site. The Shopping Center is anchored by a Marshall's, Target and the aforementioned Shopper's supermarket.

#### Pharmacy/Healthcare/Medical Services

The nearest Health Center is the Mt. Royal Health Center, located on W North Ave 0.6 miles, a three minute drive or a ten minute bus ride South of the subject site. The two closest pharmacies are located in the same vicinity of the previously mentioned two closest grocery stores, one within the Shoppers supermarket, and the other a CVS at the Penn/North Station on W North Ave, 1 mile away from the subject. Within the same distance is another CVS across the street from the aforementioned Safeway in the Old Goucher Neighborhood. MedStar Union Memorial Hospital is 1.6 miles NE of the subject.



### Culture/Recreation/Entertainment

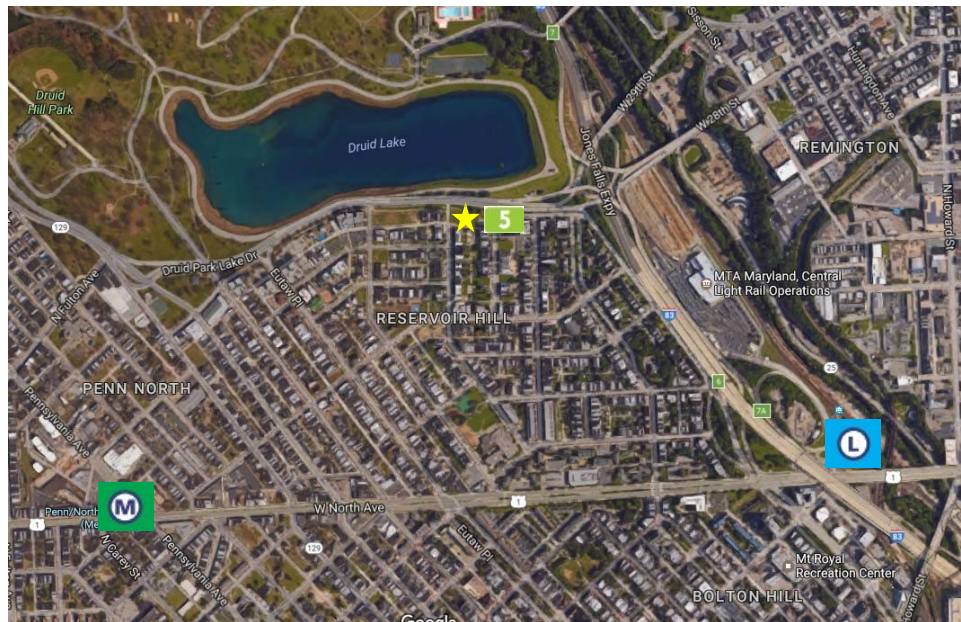
There are a number of cultural amenities within close proximity of the subject site, but few recreation and entertainment options. Within 1.7 miles South or an approximately fifteen minute drive are the Patricia & Arthur Modell Performing Arts Center, and the Meyerhoff Symphony Hall. The Baltimore Museum of Art is within 1.1 miles, or a seven minute drive NE, just South of Johns Hopkins University. Additionally, the Maryland Zoo in Baltimore is two miles or an approximately ten minute drive from the subject site. The Mt. Royal Recreation Center is within one mile and less than a five minute drive from the site.

### Job Centers

The most prominent Job Centers and economic drivers in the closest proximity of the site are academic institutions. Coppin State University has approximately 3100 students as of 2015,<sup>ii</sup> and 240 faculty and staff members as of 2014<sup>iii</sup>. Johns Hopkins University has approximately 23,000 students as of 2015,<sup>iv</sup> and is the city's largest employer, at 44,000 employed among the University and Hospital as of October 2015, according to the Maryland Department of Commerce.<sup>v</sup> The University of Baltimore has approximately 6,200 students<sup>vi</sup> and the Maryland Institute College of Art has approximately 2100 students<sup>vii</sup> and 2,100 employees. Additional job drivers are Union Memorial Hospital is adjacent to Johns Hopkins University and the aforementioned Mondawmin Mall. All of these institutions as well as the mall are within two miles of the subject site.

## Site Access- Transit

**Figure III- Transit Connections**



Source: Maryland Department of Transportation



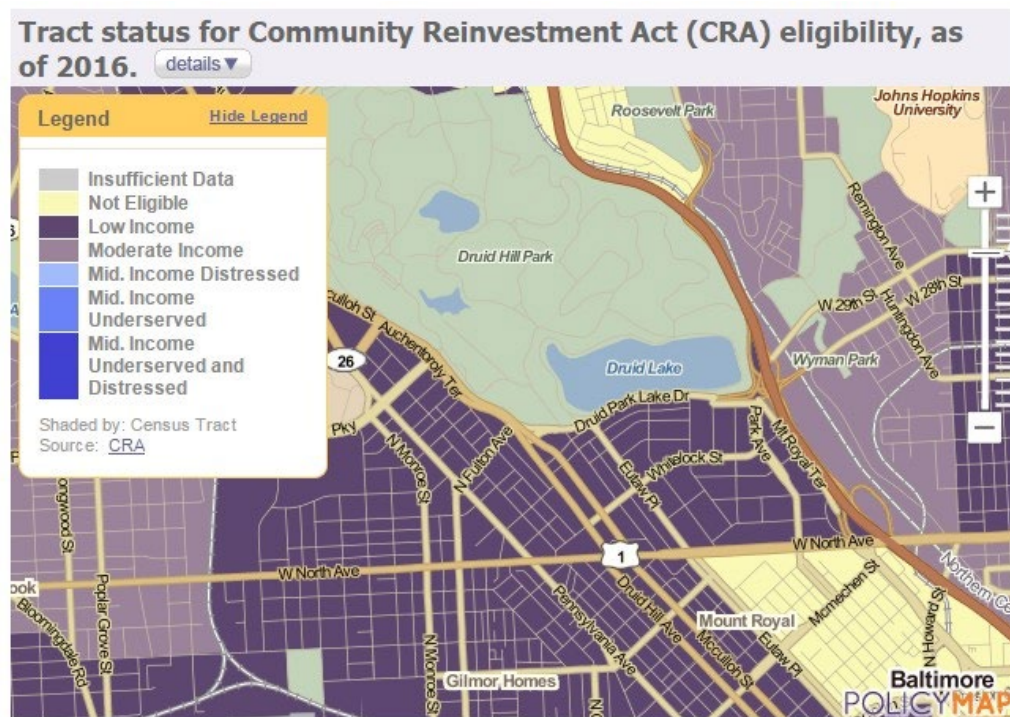
As seen in Figure III, the site is accessible within walking distance to the 005 bus, of which the nearest stop is at Lakeview Towers, an apartment building neighboring the site to the East. The 005 bus allows for an easy transfer to the 091 route on North Ave, a short ride from the Lakeview Towers stop. The nearest metro station is the Penn/North Station, which provides access to Mondawmin Mall one station to the North, with endpoints of Owings Mill Mall, and the Johns Hopkins Hospital.

Baltimore Penn Station is located 1.7 miles or a 10 minute drive from the subject, and Baltimore Washington International Airport is within 13 miles and an approximately 30 minute drive. The Eastern location along Druid Park Lake Drive serves as a challenge for capturing Westbound traffic. Additionally, the vehicular speed along Druid Park Lake Drive, in addition to the site being at a lower grade than Druid Park Lake Drive are factors that contribute to the site not being currently pedestrian oriented, but rather more conducive to vehicular use.

#### Economic Context/Proposed Use

In addition to the aforementioned Apartment Tax Credit and Food Desert Business Incentive Zones designations of Baltimore City, the site is currently located within Census Tract 1301, in which the median family income of \$10,880<sup>viii</sup> within the tract is less than 50% of the area median household income of \$42,241<sup>ix</sup>.as seen in Figure IV.

**Figure IV- Census Tract Income Designation**



Source: Baltimore PolicyMap

The proposed use of the site is 126 market rate housing units. Market rate housing responds to the Apartment Tax credit benefit that the City has already indicated a desire to implement on this site specifically. Additionally, given that the site is of a lower grade than Druid Hill Park, the ground level of a proposed residential building would not bode well for the marketability of residential units, but could be used as community space. This space could potentially serve as a job-training facility or community recreation center to be managed by the Mount Royal Community Development Corporation.

## References

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- <sup>i</sup> <http://cityview.baltimorecity.gov/CityView/> <sup>ii</sup>  
[http://nces.ed.gov/globallocator/col\\_info\\_popup.asp?ID=162283](http://nces.ed.gov/globallocator/col_info_popup.asp?ID=162283) <sup>iii</sup>  
Coppin State University Report on Cultural Diversity Initiatives 2014  
<sup>iv</sup> [http://nces.ed.gov/globallocator/col\\_info\\_popup.asp?ID=162928](http://nces.ed.gov/globallocator/col_info_popup.asp?ID=162928)  
<sup>v</sup> <http://commerce.maryland.gov/Documents/ResearchDocument/MajorEmployersInBaltimoreCity.pdf> <sup>vi</sup>  
[http://nces.ed.gov/globallocator/col\\_info\\_popup.asp?ID=161873](http://nces.ed.gov/globallocator/col_info_popup.asp?ID=161873) <sup>vii</sup>  
[http://nces.ed.gov/globallocator/col\\_info\\_popup.asp?ID=163295](http://nces.ed.gov/globallocator/col_info_popup.asp?ID=163295)  
<sup>viii</sup> [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_15\\_5YR\\_B19013&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_B19013&prodType=table)  
<sup>ix</sup> <http://www.census.gov/quickfacts/table/PST045215/24510>

## **Ch. 2- Market Conditions**

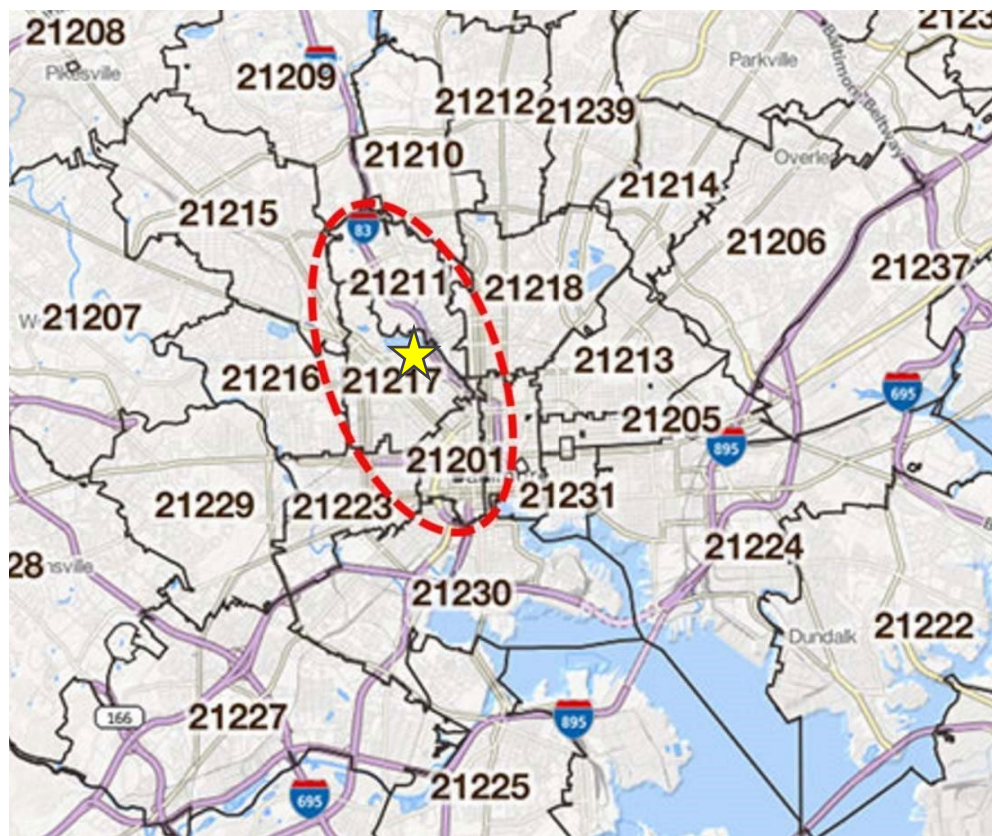
### History

Reservoir Hill, the neighborhood in which the subject site is located, was once one of Baltimore's most prominent neighborhoods. As evidenced by the architectural intricacy of some of the large Victorian row houses coupled with the tree-lined streets as a reflection of urban design intentions, the sense of a rich history is evident when either driving through, or viewing images of the neighborhood. However, as crime, blight and deterioration began in the 1960s, the neighborhood developed a negative reputation, and has yet to fully recover. An indication of a plan of improvement, however, is the case of Madison Park North Apartments. This property epitomizes the struggles of not only the Reservoir Hill neighborhood, but of other historic and recently documented struggles in nearby neighborhoods. It is a 202-unit subsidized Section 8 multifamily complex, dubbed "Murder Mall" which has been particularly troubled with drugs and crime since the 1970s.

It is worth noting, however, that the 2010 proposed plan for demolishing the property has been approved, and as of August 2014, current residents have been informed, and the property will be demolished 10 months after the final tenant's lease expires.<sup>i</sup> Additionally, the current Mayoral Administration has instituted an initiative entitled *Vacants to Value*, an aspect of which is issuing RFPs for the development of vacant lots, including the subject site. The program was designed a blight elimination initiative, For this reason, in addition to the planned demolition of a notorious housing project, and a desire to assist in the revitalization efforts of Innovation Village, the site at 735-757 Druid Park Lake Drive offers an opportunity to serve as a catalytic statement of neighborhood investment restoration.

For the purpose of a present-day context, American Community Survey US Census information was extrapolated for analysis of both Baltimore City as a whole, and the Primary Market Area of the site. The Primary Market Area chosen for the site were the areas of Baltimore City covered by the 21201, 21217 and 21211 zip codes. The PMA is circled in Figure VI below, and the site is identified with the star.

**Figure VI- City and PMA Population 2012-2014**



This area was chosen because of the Colleges/Universities that are located within it (Johns Hopkins, Coppin State, University of Baltimore, and MICA), amenities including the Maryland Zoo and Meyerhoff Symphony Orchestra, and the newly constructed/renovated apartment buildings that would serve as comparables to the proposed development on the subject site.

### Demographics



As indicated by Figure VII, from a demographics standpoint on a city-wide level, the population as of 2012 was 620,644 and increased slight rate of 0.3% to 622,271 by 2014. Within the identified Primary Market Area specifically, the percentage difference between 2012 and 2014 was higher, at 2.0%, but for conservative estimation, the projected 2016 and 2018 population change was reduced slightly for purposes of analysis.

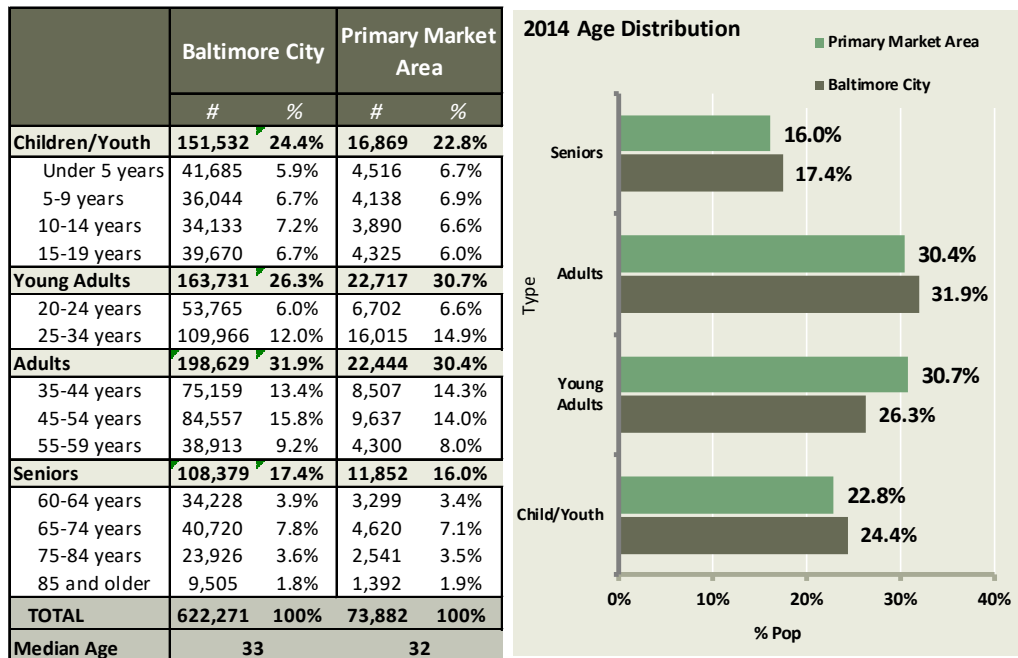
**Figure VII- City and PMA Population 2012-2014**

		Baltimore City						Primary Market Area			
Population	Count	Total Change		Annual Change		Count	Total Change		Annual Change		
		#	%	#	%		#	%	#	%	
2012	620,644					72,262					
2014	622,271	1,627	0.3%	814	0.1%	73,882	1,620	2.2%	810	1.1%	
2016 proj.	624,138	1,867	0.3%	933	0.1%	75,360	1,478	2.0%	739	1.0%	
2018 proj.	625,386	1,248	0.2%	624	0.1%	76,716	1,356	1.8%	678	0.9%	
Households	Count	Total Change		Annual Change		Count	Total Change		Annual Change		
		#	%	#	%		#	%	#	%	
2012	240,630					31,700					
2014	242,212	1,582	0.7%	791	0.3%	32,405	705	2.2%	353	1.1%	
2016 proj.	243,423	1,211	0.5%	606	0.3%	33,053	648	2.0%	324	1.0%	
2018 proj.	244,397	974	0.4%	487	0.2%	33,648	595	1.8%	297	0.9%	

Source: 2010-2014 American Community Survey 5-Year Estimates

Within the entire population of Baltimore, as shown in Figure VIII below, as of 2014 the median age for the city is 33 years old, and the population was relatively balanced with each age group relative to the whole. However, within the Primary Market Area, not only is the median age slightly lower, at 32 years of age, but the largest age group is are the 20-34 year old college student/young professionals.

**Figure VIII- Age Distribution for Baltimore and PMA 2014**



Source: US Census American Fact Finder 2010-2014 estimates

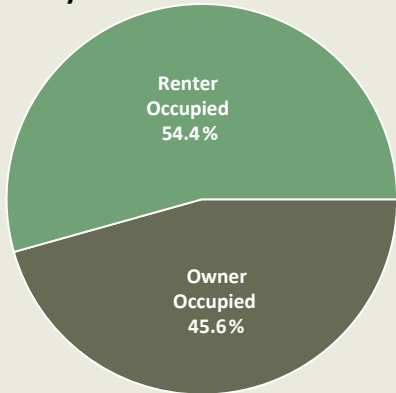
Figure IX below, shows the breakdown of housing types in Baltimore City as well as the primary market area. Within the Primary market area, vacancy decreased from 2012 to 2014 for both renter and owner households. However, drilling down the overall vacancy further, apartment vacancy remained relatively stable, decreasing from 7.36% to 7.28%. When taking this into consideration, in conjunction to the policy initiatives, city property tax credits for apartments developed in specific areas, the proposed development for multifamily housing appears to bode well.

**Figure IX- Housing Type Breakdown**

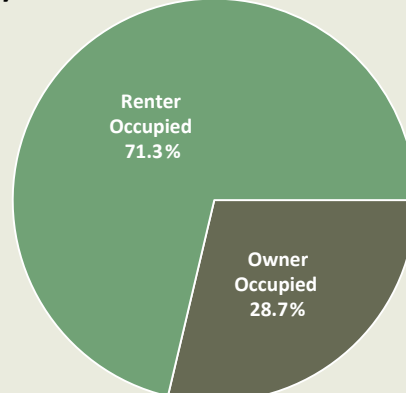
Baltimore City	2012		2014		2016 proj.		2018 proj.	
Housing Units	#	%	#	%	#	%	#	%
Owner Occupied	117,500	48.8%	114,407	47.2%	111,314	45.6%	108,221	44.0%
Renter Occupied	123,130	51.2%	127,805	52.8%	132,480	54.3%	137,155	55.9%
<b>Total Occupied</b>	<b>240,630</b>	<b>100%</b>	<b>242,212</b>	<b>100%</b>	<b>243,794</b>	<b>100%</b>	<b>245,376</b>	<b>100%</b>
Vacancy	55,807	18.8%	54,419	18.3%	53,031	17.9%	51,643	17.4%
<b>TOTAL UNITS</b>	<b>296,437</b>		<b>296,631</b>		<b>296,825</b>		<b>297,019</b>	
Primary Market Area	2012		2014		2016 proj.		2018 proj.	
Housing Units	#	%	#	%	#	%	#	%
Owner Occupied	9,688	30.6%	9,594	29.6%	9,500	28.7%	9,406	27.8%
Renter Occupied	22,012	69.4%	22,811	70.4%	23,610	71.3%	24,409	72.2%
<b>Total Occupied</b>	<b>31,700</b>	<b>100%</b>	<b>32,405</b>	<b>100%</b>	<b>33,110</b>	<b>100%</b>	<b>33,815</b>	<b>100%</b>
Total Vacant	9,756	23.5%	9,400	22.5%	9,044	21.5%	8,688	20.4%
<b>TOTAL UNITS</b>	<b>41,456</b>		<b>41,805</b>		<b>42,154</b>		<b>42,503</b>	

Source: 2010-2014 American Community Survey 5-Year Estimates

**2016 proj. Occupied Units by Tenure  
Baltimore City**



**2016 proj. Occupied Units by Tenure  
Primary Market Area**

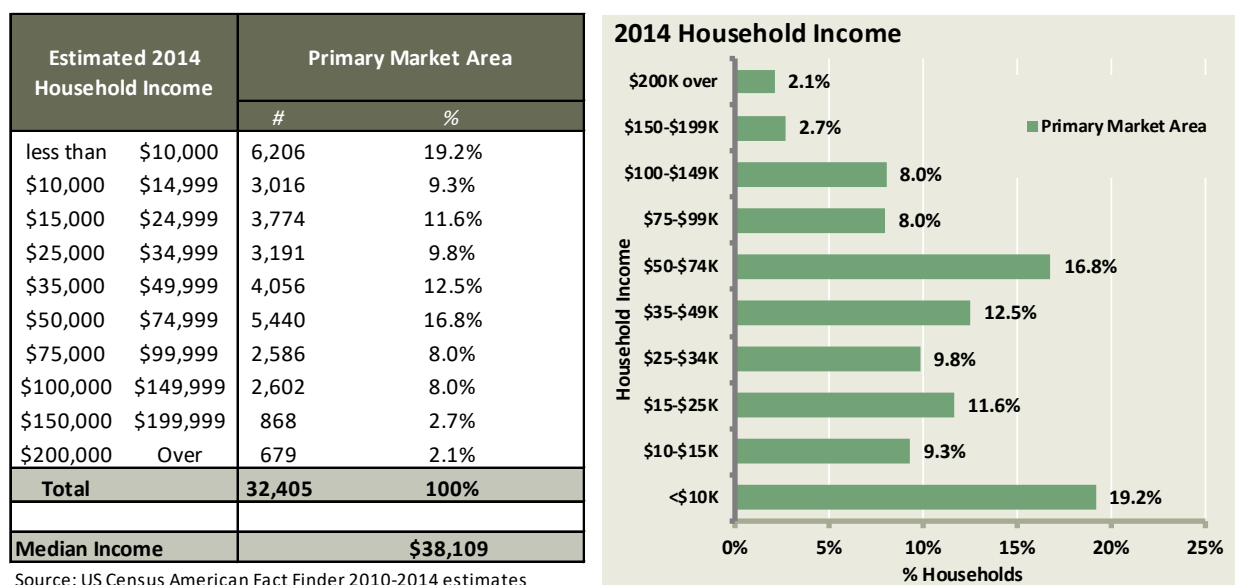


### Economic Context

The current economic state of the Reservoir Hill neighborhood is very unfavorable and plays a major factor in the household income figures of the primary market area. As indicated in Figure

X below, as of 2014, not only do 50% of households earn less than \$35K per year, 19.2% earn less than \$10K. When isolating the 21217 zip code, 57.6% of the households as of 2014 earned less than \$35K, and 22.7% earned less than \$10K.

**Figure X- Primary Market Area 2014 Household Income**



### Major Employers/Stakeholders

According to the Maryland Department of Commerce, as of October 2015, the top 15 employers in Baltimore City, MD are below in Figure XI<sup>ii</sup>. Johns Hopkins University and Health System are the largest employers, MICA is in the top 15 as well. Despite the challenges that Reservoir Hill faces, it offers excellent access to both Universities, in addition to the growing University of Baltimore. All of the aforementioned educational institutions, in addition to nonprofit organizations are potential stakeholders with a vested interest in the neighborhood's revitalization. Additionally, organizations such as the Reservoir Hill Improvement Council have a number of beautification and economic improvement interests, such as "Greening Reservoir Hill, in addition to promoting homeownership of currently vacant homes."<sup>iii</sup>

Figure XI- top 15 Employers in Baltimore City, MD

<b>Major Employers in Baltimore City, Maryland</b>			
<b>Company</b>	<b>Number Employed</b>	<b>Product / Service</b>	<b>Industry</b>
Johns Hopkins University	25,000	Higher education	Educational services
Johns Hopkins Hospital & Health System 1/	19,340	Medical services	Health care
University of Maryland Medical System 2/	9,830	Medical services	Health care
University System of Maryland 3/	9,111	Higher education	Educational services
MedStar Health 4/	6,027	Medical services	Health care
LifeBridge Health 5/	5,316	Medical services	Health care
Mercy Health Services	4,028	Medical services	Health care
St. Agnes HealthCare	3,267	Medical services	Health care
Exelon	2,952	Energy products & services	Utilities
Kennedy Krieger Institute	2,417	Health services for children with disabilities	Health care
Maryland Institute College of Art	2,142	Higher education	Educational services
Horseshoe Casino	2,140	Casino	Arts Entertainment and Recreation
Veterans Health Administration* 6/	2,061	Medical services	Health care
Under Armour	1,853	HQ / athletic apparel	Manufacturing
FutureCare	1,709	Nursing care	Health care

Source: Maryland Department of Commerce

### Competitive Analysis

Four existing properties were used for the purpose of identifying and analyzing properties comparable to the subject. As shown in Figure XII, the four comparables were Remington Row, 520 Park Avenue, Landmark Lofts and the ICON Residence at the Rotunda. The information was provided by Costar data. These properties were chosen given 1) their proximity to the subject within the aforementioned Primary Market Area, 2) their age, and 3) the mid-rise property type that mirrors the subject. The Studio, One and Two bedroom unit types, and average ratio among them within the comparables were mirrored by the proposed subject.

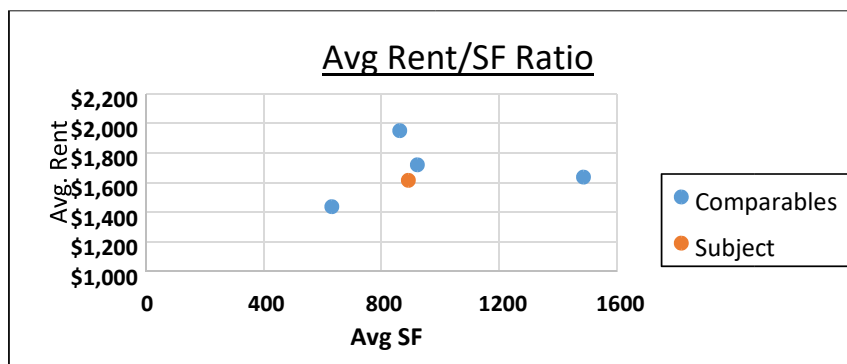


**Figure XII- Comparable Matrix**

Community	Year Built	Vacancy	Type	Total Units	Studio Units				One Bedroom Units				Two Bedroom Units				Avg SF	Avg Rent	Avg Rent/SF
Subject				Units	Rent(1)	SF	Rent/SF		Units	Rent(1)	SF	Rent/SF	Units	Rent(1)	SF	Rent/SF			
Oasis at Druid Lake (Proposed)				126	14	\$1,350	600	\$2.25	76	\$1,575	825	\$1.91	36	\$1,800	1,150	\$1.57	892	\$1,614	\$1.81
				Unit distribution	126	11%			60%				29%						
Comparables																			
Remington Row	2016	0.00%	Mid Rise	108	0	\$0	0	N/A	70	\$1,610	821	\$1.96	38	\$1,919	1,111	\$1.73	923	\$1,719	\$1.86
520 Park Avenue	2014	4.10%	Mid Rise	171	12	\$1,163	410	\$2.84	136	\$1,384	610	\$2.27	23	\$1,883	881	\$2.14	632	\$1,436	\$2.27
Landbank Lofts	2010	6.20%	Mid Rise	63	0	\$0	0	N/A	49	\$1,592	1,383	\$1.15	14	\$1,789	1,857	\$0.96	1488	\$1,636	\$1.10
ICON Residences at the Rotunda	2016	75.70%	Mid Rise	379	64	\$1,413	583	\$2.42	191	\$1,680	753	\$2.23	124	\$2,643	1,178	\$2.24	863	\$1,950	\$2.26
Total/Average within Comps				721	76	\$1,288	497	\$2.59	446	\$1,567	892	\$1.76	199	\$2,059	1,257	\$1.64	951	\$1,673	\$1.76
				Unit distribution	721	11%			62%				28%						
				% of Total	100%														

Figure XIII below shows a ratio between the average rental rates and average square footages, comparing the subject to the comparables. When analyzing both the matrix and the ratio chart, the \$1.85/SF or \$1614/month rents are lower than all but one of the comparables. The average unit size of 892 sf are very competitive, in that they align with ICON Residences and Remington Row, which both charge higher rents. Remington Row is currently fully leased, and ICON is in its lease-up period and therefore highest vacancy, but the largest number of units in the set of comparables. Landbank Lofts offer the best Rent/SF ratio, and is likely to be the most prominent competition for the subject, given the fact that it is within one block of the aforementioned Old Goucher neighborhood Safeway grocery store, and is along the shuttle line for Johns Hopkins University. The 520 Park building has the advantage of being within 1 block of the W Centre Street Light Rail station and in an overall more walkable area of the city, but have the smallest units among the subject and the comparables.

**Figure XIII- Avg Rent/SF Ratio**



Finally, as shown in Figure XIV, the subject is competitive from an amenity standpoint with both what is feasible on the site, as well as allowed per zoning. The outlier amenities among the comparables are 1) On-site retail offered by Remington Row (this is not allowed per zoning for the subject) and 2) the outdoor swimming pool offered by only the ICON property. It should be noted that both Remington and Landbank offer free parking, as would be offered by the subject.

**Figure XIV- Amenity Comparison**

	Fitness Center	Car Wash Area	Concierge	Garage Parking	Rooftop Lounge	Swimming Pool	Community Room	On-Site Retail	Business Center
<b>Community</b>									
<b>Subject</b>									
Oasis at Druid Lake (Proposed)	X			X	X		X		X
<b>Comparables</b>									
Remington Row	X	X	X	X			X	X	X
520 Park Avenue	X			X			X		
Landbank Lofts	X		X		X		X		X
ICON Residences at the Rotunda	X		X	X		X	X		X

Although the Reservoir Hill neighborhood is currently economically challenged, stakeholders have taken notice, initiatives have been put in place, and plans to start anew have been solidified. The site offers access to key employers, and potential for excellent, marketable views. Despite being on the edge of a neighborhood, census tract, the Innovation Village boundaries, and in an identified food desert, additional housing can be supported by the market, and has the potential to be a catalyst for neighborhood re-investment.

## References

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- <sup>i</sup> <http://www.baltimoresun.com/business/bs-bz-madison-park-demolition-20161130-story.html> <sup>ii</sup>  
<http://commerce.maryland.gov/Documents/ResearchDocument/MajorEmployersInBaltimoreCity.pdf>  
<sup>iii</sup> <http://www.reservoirhill.net/greening-reservoir-hill/>

## Chapter 3- Zoning and Regulatory Context

### General Context

As indicated in Figure XV below, the subject site finds itself located within the R-9 district, categorized as General Residence in the Baltimore City Zoning Code. Among the uses permitted are multifamily detached dwellings, the category in which the proposed property falls. Within the R-9 district, the building square footage and height are controlled by lot occupancy per unit in addition to Floor Area Ratio (FAR), which is 3.0 in the subject's case. Specifically, the R9 district requires a minimum of 370sf of lot coverage for each efficiency unit, and 550sf for all other unit types. Additionally, the setback requirements relative to the proposed site and unit type do not require either a front or side yard but do require a 10ft rear yard. Within the R-9 district, 79 multifamily units are permitted per acre. A variance changing the district to R-10 would allow for up 218 units per acre. Finally, the off-street parking requirements that would be required per code within this district are 1 space per two dwelling units<sup>1</sup>.

Figure XV- Zoning

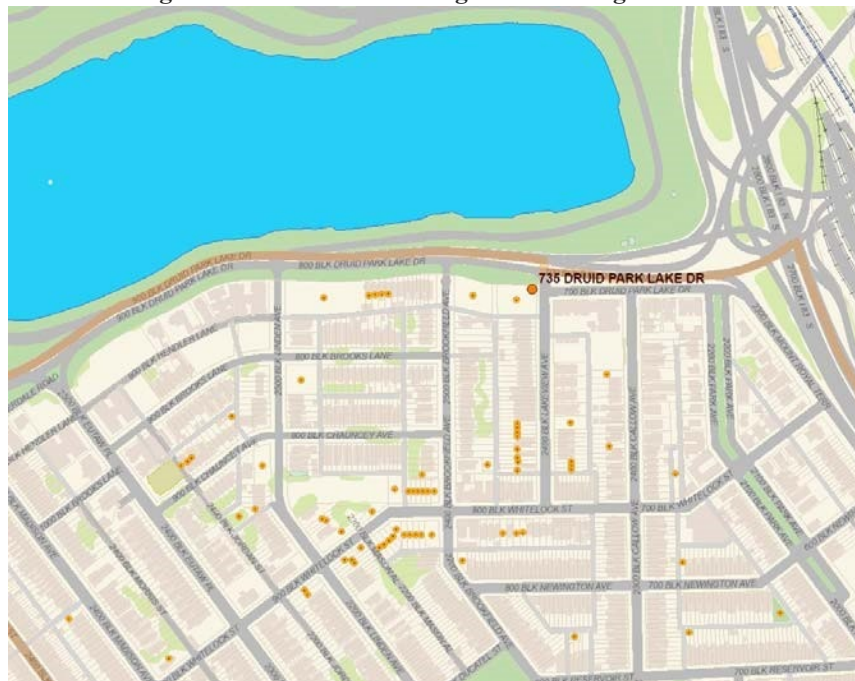


### Business Initiative Zones

In addition to the zoning category, as aforementioned, the subject site falls within of number of city-designated Business Incentive Zones. Particularly relevant to the proposed project is the Tax Credit Incentive zone, which qualifies the site for the 15-Year High Performance Market Rate Rental Tax Credit, assuming that the project features at least 50 market rate units constructed for a cost of at least \$60,000 per unit. Although the proposed project includes some affordable housing, this tax benefit would help the cash flow of the property.

Finally, as also aforementioned, the sites, being vacant lots, are a part of the Baltimore City Mayoral Initiative *Vacants to Value*<sup>ii</sup>. Specifically, the proposed sites are offered in a surplus land sale commensurate with an approved Request for Proposal for re-development. The vacant buildings and sites and buildings can be found in figure XVI below.

**Figure XVI- Vacant Buildings/Sites in Neighborhood**



Given that the proposed project falls within a designated Tax Credit Zone, and a neighborhood that was once prominent, but has had economic and crime challenges since the 1960s, the



development of this site is highly incentivized. Responding to the RFP through the application listed on the website of the V2V initiative and subsequently having the application for development accepted would provide an alternative to the typical approval process for development in the City. However, both processes will be taken into consideration for analysis.

#### Public Approval Process- responding to V2V RFP

As indicated in the Surplus Sale application, the approval process through the Department of Housing and Community Development is comprehensive. It provides potential developers with the goals for the initiative, requirements for eligibility, and the standards by which the proposal will be measured. Essentially, among other requirements, the project is required to indicate how it will provide benefits to the community, how it is economically feasible and pulls from various funding sources, how it affects the environment, and ultimately, how well the proposal meets the re-development goals. It is also made clear that the developer is also required to include the community in the process, holding a series of meetings for community input at their own discretion, and reporting on the conclusions within the RFP process.

#### Public Approval Process- Standard

In the standard review process, if the proposed project is not a Planned Unit Development, it would qualify as a By-Right development. The lots are currently owned by Baltimore City and the proposed improvements of them would trigger the Development process pursuant to the *City's Guide to the Development Process*<sup>iii</sup>. Under this process, if the project proposed 79 or less multifamily units, it would bypass the opportunity for public comment, since it would be compliant with all existing laws and regulations. However, an R-10 variance would be needed for this project, as well as the Project Reviews, including a Site Plan Review, Urban Design and

Architecture Review Panel (UDARP), Traffic Impact Study, and Stormwater Management review, before beginning Public Hearings from the Planning Commission and City Council. The Traffic Impact study, as instructed by the Baltimore City Department of Transportation is required to include, at a minimum, a report of 1) Existing Conditions- including baseline traffic data, roadway geometry, alternative modes of access and existing levels of service/volume 2) Background Conditions- including other current or approved developments in the area and 3) a projection of Future Conditions.<sup>iv</sup> After all approvals are granted, construction permits would be issued. The Stormwater Management permitting and approval process is administered by the Department of Public Works and would require that a Best Management Practice (BMP) be applied to control a 24-hour, 10-year frequency storm event.<sup>v</sup>

### **Zoning of Current Site**

#### **Potential Pushback**

Given the heavy focus that the site already has from the City of Baltimore, whether by being a part of the *Vacants to Value* surplus land sale, or through falling into a designated property Tax Credit zone, it is not likely that the proposal for newly constructed multifamily housing would encounter a significant amount of pushback from the City. As it was shown in the map of vacant sites/buildings, there are a number of buildings/sites in the neighborhood alone that are currently not producing revenue for the City and benefits to the neighborhood.

The regulatory formalities that would need to be addressed, currently, would be 1) combining the two parcels that make up the site into one site, and 2) the zoning variance to change from R-9 to R-10. The rezoning process would have to go through the Planning Department and requires two public hearings before an ordinance would be approved.<sup>vi</sup> The lot consolidation process would require a zoning appeal within the Board of Municipal and Zoning Appeals, in addition to further public hearings.<sup>vii</sup>

In addition to the regulatory steps required, it is possible that the current residents of Reservoir Hill would be concerned about how the improvements of the site would affect their properties' tax assessments. For this reason, community involvement meetings would need to provide a legitimate opportunity for the current residents to have their voices heard, and the community space proposed for the first floor of the proposed development would be influenced by their judgement. With these steps in place, the regulatory processes should be overcome.

## References

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<sup>i</sup> <http://archive.baltimorecity.gov/Portals/0/Charter%20and%20Codes/Code/Art%2000%20-%20Zoning.pdf>

<sup>ii</sup> <http://www.vacantstoalvalue.org/Content/docs/surplus/V2VSurplusSaleApplication2016.pdf> <sup>iii</sup> <http://communitylaw.org/wp-content/uploads/2013/10/The-Community-Associationss-Guide-to-theDevelopment-Process-in-Baltimore-City-.pdf>

<sup>iv</sup> [http://nacto.org/docs/usdg/traffic\\_impact\\_study\\_baltimore.pdf](http://nacto.org/docs/usdg/traffic_impact_study_baltimore.pdf)

<sup>v</sup> [http://cityservices.baltimorecity.gov/dpw/generalservices/final\\_swm\\_manual.pdf](http://cityservices.baltimorecity.gov/dpw/generalservices/final_swm_manual.pdf) <sup>vii</sup>

<http://www.baltimorecity.gov/sites/default/files/BMZA%20Rules%20-%20current.pdf>

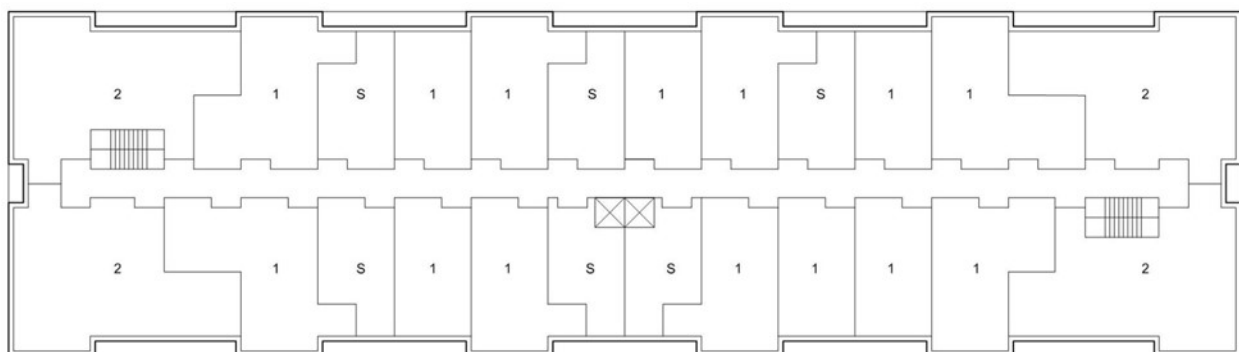
## Chapter 4- Design/Environmental Analysis

### Programmatic Use

Given the zoning of the site, as well as a response to the fact that the site falls within one of Baltimore's High Performance Market Rate Tax Credit business incentive districts, the programmatic use proposed is multifamily residential. The existing zoning is R9, and allows for a maximum of 79 units per acre. For this project, a zoning variance would be sought, with the desire of a change to R10. This change would allow for increased density, for a maximum of 218 units per acre. Given the size of the site (.78 acres), this would net 170 units as a maximum. The square footages and unit types chosen for the project are based on market surveyed comparable information, in conjunction with the desire to cater to the intended renters.

Costar was used to analyze the current climate of the multifamily market relative to the proposed subject's comparables. The square footages of the studio, 1 and 2 bedroom units for the proposed subject will be comparably sized within the recommend architectural arrangements. A total of 126 units were selected for the project size per market analysis, and Figure XVII below shows the typical layout for the top two floors.

**Figure XVII- Layout for Floors 4 & 5**



### Amenities- Building Features



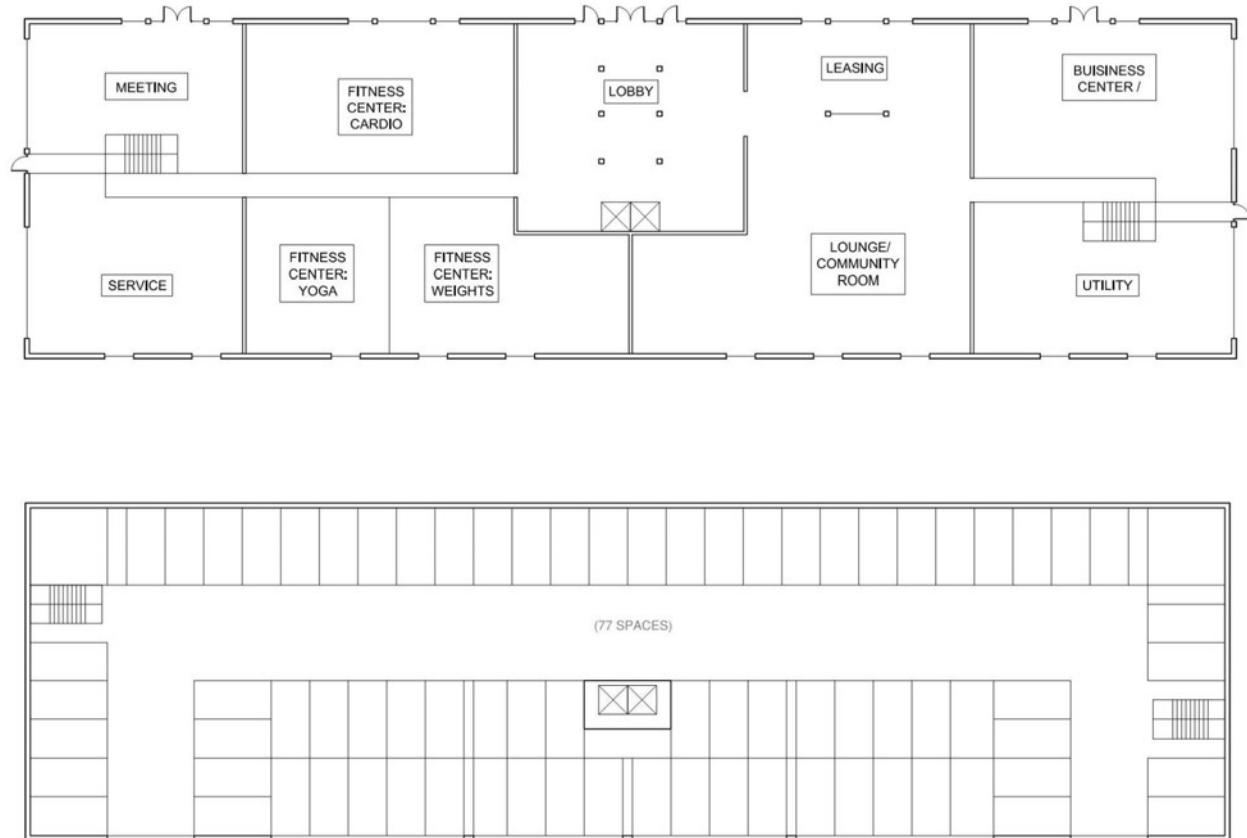
As aforementioned, the proposed subject seeks to provide a set of amenities consistent with the market comparables. Therefore, the proposed project would offer controlled access, a club room, game room and fitness center. Figure XVIII shows the ground floor plan with amenity and service locations, as well as the parking level plan.

Inherent in the nature of a project of this quality is the probability that the proposed development would conflict with some of the current neighborhood residents' interests. Despite the fact that the city has placed incentives in place to indicate its interest in Market Rate Housing on the site, such development would increase the property value of neighboring properties, and cause their tax bills to increase. As a way of showing that the proposed development would be intended to be an investment into the community rather than a statement of sheer exclusivity, possible community benefits that the proposal could provide will be taken into consideration. First, given that the site sits at a lower grade than Druid Lake, it is not envisioned that the first level of the proposed building would be comprised of residential units. One space of the first level will be designated as community space, to be used at the discretion of the Mount Royal Community Development Corporation. The remaining spaces are amenity and service spaces.

As it stands, the site, and the majority of the surrounding neighborhood finds itself in a city-designated Food Desert. The closest grocery store is Shopper, which serves as an anchor in the very congested Mondawmin Shopping Center. The next grocery option is a Safeway in the Charles Village neighborhood, a 10-minute, 2.1-mile drive away. Ideally, a new residential development such as the one proposed for the subject site would be able to feature an element on the ground level such as small organic market. However, the traffic patterns are not conducive to retail, and the General Residence existing zoning would not be likely be granted a variance to a commercial use. As a proposed alternative, and responding to

one of the initiatives of the Mount Royal CDC, it is envisioned that an organization such as City Seeds would use the Community Space for some of its initiatives, such as the “School of Food” for local burgeoning food entrepreneurs.

**Figure XVIII- Ground Floor and Parking Plan**



### Amenities- Unit Features

Within the units, each unit would feature 9-foot ceilings, washers/dryers, modern window treatment, contemporary faucets, granite countertops, stainless steel appliances, and tile flooring in the kitchens and bathrooms.

### Construction Type

The first level would be at a lower grade than Druid Lake. It would therefore benefit the programmatic intentions of the project to construct the first level using concrete podium construction, and allow for the units to be built above the first level. Referring to Figure XIX below, the net rentable area for the residential floors is 112,446sf. Assuming an 80% building efficiency, net of common areas, this comes to 26,987sf per floor. When adding the ground level, this brings the total GBA to 161,922sf.

**Figure XIX- Net Rentable Area**

# of Units	%/Total Market Rate Units	SF/Unit
14	11.20%	600
76	60.30%	825
36	28.50%	1,150
0	0.00%	0
		892
126	100.00%	112,446

The height limit in the R-10 zone for multifamily dwellings is determined by FAR. In order to abide by the proposal of a podium first level and construct five stories above, the proposed Construction Type would be IIIA, wood framing construction, which is permitted for up to five stories per the IBC.<sup>ii</sup> This would allow for hard construction costs to achieve the most efficiency. Below is an example of such a design, *Marselle Condominiums*, a 160,000sf complex located in Seattle, WA<sup>iii</sup>

**Figure XX- Wood Frame over Podium Example**



Source: Building Design+ Construction, PB Architects, *Marselle Condominiums*

To fit within what the architect defines as a "contextual modernism" design approach, the exterior of the building will feature a non-load-bearing brick veneer, to fit into the aesthetic characteristics of the existing neighborhood. Additionally, the units will be designed to have operable, yet generously sized and aesthetically modern windows that maximize views, and from a facade standpoint in elevation view, fit into an attractive architecturally intentioned grid system.

### Sustainability Aspects

The Sustainability efforts of the project would respond to the requirement identified in the parameters of the 15-year High Performance Market Rate Tax Credit Business Incentive Zone

within which the site falls. To comply, the building would be designed in order to qualify for LEED Silver at the least. This would be done by using sustainable materials, as well as other features including low pressure water/sewage appliances, motion detected lighting, and energy efficient windows. Additionally, it is the vision of the development team that the roof will be flat and accessible. In addition to a rooftop lounging area, the roof would be used as a green roof, helping to keep the building cooler during hot summer months and reduce energy consumption.

**Figure XXI- Green Roof Precedent Image**



Source: Jamboree Housing, Buena Park, CA

## References

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<sup>i</sup> <http://www.cityseeds.org/>

<sup>ii</sup> <http://www.rethinkwood.com/sites/default/files/Multi-Story-Wood-Construction.pdf> (page 3) <sup>iii</sup>  
<https://www.bdcnetwork.com/building-wood-towers-how-high-timber-structures>

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## Chapter 5- Construction Management/Scheduling

### Construction Costs

Number of Units	Cost/ Unit	Total Cost	Cost/sf
126	\$127,000	16,002,000	\$142.31

As indicated by the above chart extracted from the development pro forma, the cost assumptions for the proposed project are \$127,000 per unit, which comes out to \$142/sf at an average unit square footage of 892sf. This assumes that the project will be stick-built above a podium first level of construction. Also included in these hard costs are the costs for the parking spaces, which will be tucked under the building, and require a partial excavation.

### **Construction Schedule**

#### Due Diligence- Three Months

One month is estimated for the due diligence period. During this portion of the project, the land will be surveyed, as well as environmentally tested, to determine the next steps, if necessary, for mitigating unforeseen issues. An example of such would include the unlikely case of a utility, historic preservation or some other type of easement not already taken into consideration for the manner in which the land is offered for purchase.



### Public Approval Process- Three Months

Three months are allocated for the total public approval process. The two parcels of land that make up the site are currently owned by the City of Baltimore. Additionally, the parcels happen to both be eligible for development under the *Vacants to Value* surplus sale initiative as well as a 15-year High Performance Market Rate Tax Credit. Because of these factors, it is estimated that the purchase of the land from the City, subject to favorable surveys/environmental studies would not be an arduous process. A cost of \$5.00 per square foot was used as a projection, bringing the total estimated land acquisition cost to \$170.9K.

The bulk of the aforementioned three months in this phase are allocated toward the application process for the *Vacants to Value* program intended to be used for the proposed development.

The first portion of the application requires that the development team provide credentials and prove their capacity to complete the project, to the City. Next the project concept, including scope of work, scale and architectural character are required to be presented with the application. Additionally, the cost estimate including a Development Budget and Project Timeline are required to be submitted. Finally, the Community Benefits, whether physical, economic or social that the project will provide, are required to be described.

The application also states, but does not explain with specificity, that Community Participation and approval is required, and that the development team is responsible for coordinating. To fulfill this requirement, the development team plans to coordinate with the Reservoir Hill Improvement Council, and hold community meetings.

### Zoning Variance

At the same time as navigating the V2V application, the development team would seek a variance to the existing R-9 zoning, requesting R-10, which would allow for the proposed 126 residential units.

### Design- Twelve Months

As aforementioned, the preliminary stages of design are required as a part of the V2V application. Upon securing an approved V2V application, community buy-in and zoning variance, the design would transition into full construction documents, and the construction permitting and contracting process would begin. To further appease the V2V application incentives, if a reputable Minority or Women-owned business could be secured, they would take precedent for the Contracting or Engineering services.

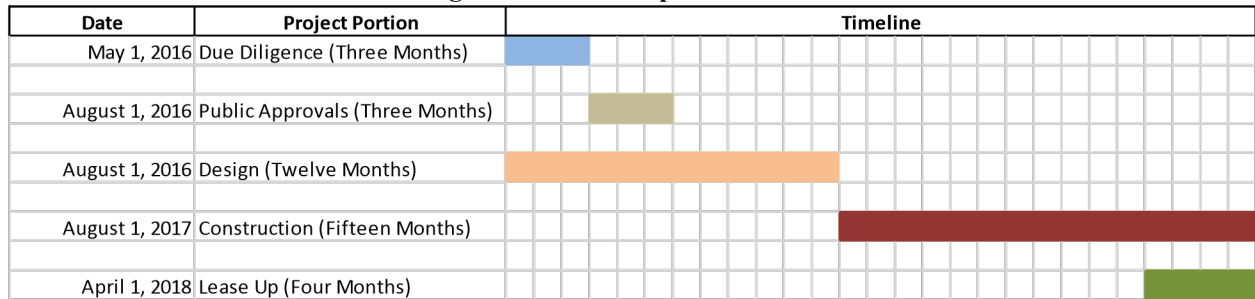
### Construction-15 months

Given the scope of work, scale and nature of the subject, it is predicted that 12 months will suffice, but an extra three months is considered for conditional purposes. The project plans require an aforementioned partial excavation on-grade to allow for tuck under parking to be accessed at the rear of the property, three-sided retaining walls subsequently, a concrete podium first level, and stick built framing for 126 units spread out over four stories above the podium. The skin is projected to feature glass and non load-bearing brick veneer to fit into the surrounding context, and ultimately provide a “contextual modernism” aesthetic. Finally, the roof will feature a green roof, and be accessible for resident lounging.

### Lease Up- Four Months

During the ninth month, of construction, the pre-leasing will begin. As a conservative projection, the Operating budget estimates a vacancy of 10% in Year 1, however, the preleasing should mitigate such a deficit.

**Figure XXII- Development Timeline**



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## Chapter 6- Financing Assumptions

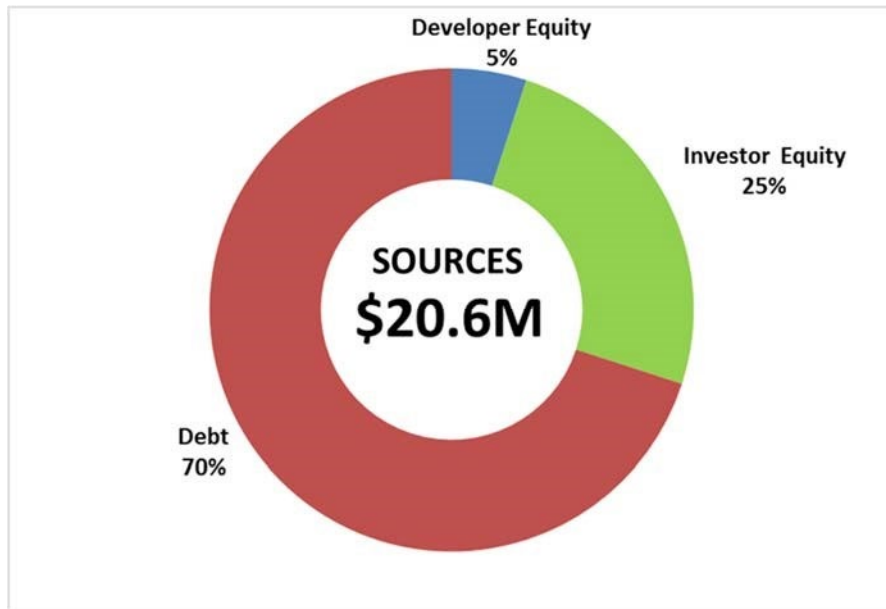
### Sources

The Sources of funds for the project are 5% Developer Equity, 20% Investor Equity, and Conventional debt of 70%.

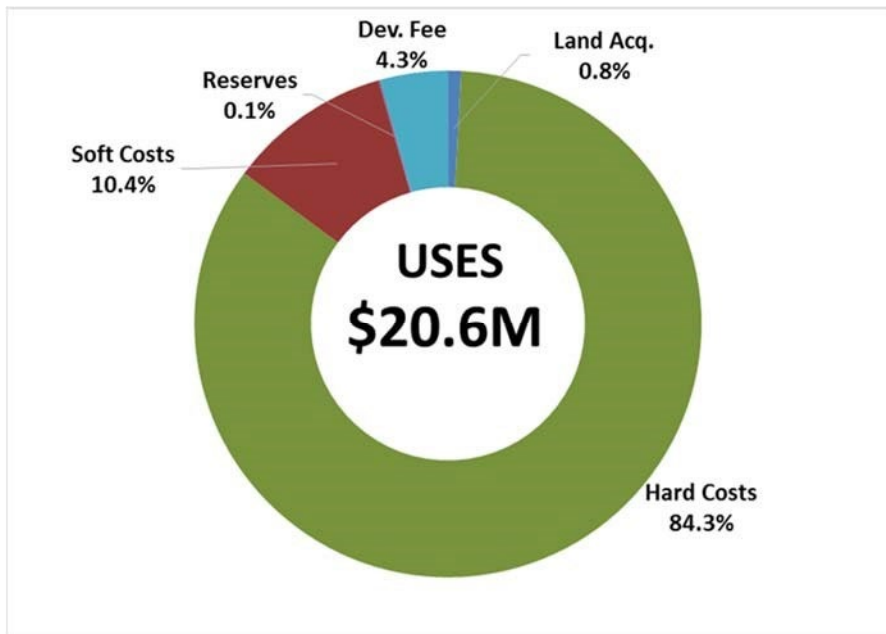
### Uses/Project Budget

The Project budget is are broken down into six categories and are shown graphically in Figure . The first is *Land Acquisition*, which comprises 0.8% of the total uses due to the highly incentivized nature of the city-owned land. A \$5.00/sf cost was modeled for acquisition of the two parcels. The second category is *Hard Costs*, which comprises 84% of the total uses, includes the construction of residential units, required parking spaces, and an 8% construction contingency. The third category, *Soft Costs*- include, but are not limited to Architectural and Engineering Fees, Surveys, Appraisal and Legal fees, Fixtures, Furniture and Equipment and a lease up reserve, for a total of 10.4% of the uses. The fourth category, *Reserves*, include a \$25,200/year, or \$200/unit/year replacement reserve allocation. Finally, a \$888K Development Fee comprises 4.3% of the uses.

## Development Sources



## Development Uses



Beginning with the aforementioned unique nature of the land, the project consists of two parcels, both of which are included in the city's *Vacants to Value* program and targeted/incentivized for re-development. Additionally, the site falls within a city-designated High Performance Market Rate Tax Credit Zone. Because of these factors, it is assumed that the city-owned land would be transferred for a nominal fee. The fee modeled for this proposed development is \$5.00/sf, based upon a recent appraisal of vacant city owned property in Oldtown/Somerset., The total at \$5.00/sf is \$170,880 for the two parcels.

The parking spaces are required at a 1:2 ratio per unit per zoning requirements. Assuming an approved variance to zoning from R-9 to R-10, the project would seek to develop 126 residential units, requiring 63 parking spaces. Given the slightly sloping nature of the site, it is assumed that only partial excavation would be required for the site.

The development proposes market rate housing units, to be built to a high-quality modern standard. Additionally, the aforementioned High Performance Market Rate Tax Credit program requires that a proposed building be constructed to at least a LEED silver standard, with construction costs of at least \$60K per unit. This proposal seeks to exceed both of those requirements, and as such, assumes construction costs of \$127,000/unit, or \$142.3/residential unit sf. The hard cost contingency is modeled at 8.00% of hard costs.

The largest percentage of soft costs are allocated toward Architectural & Engineering Fees, which are modeled at 5% of Hard Costs. The second largest percentage of soft costs is the contingency, which is projected to be 5.00% of soft costs. Overall, the total projected soft costs are \$2.15M, which is 12.4% of the hard costs.

The FF&E figure of \$150K is reflective of an estimated \$1,190 per unit, to cover appliances, and outside of the unit, to cover lobby furniture and computers. Finally, the proposed Development Fee of \$888.2M is reflective of 4.3% of the Total Development Budget of \$20.6M.

### Financing Assumptions

The financing assumptions stem from the overall business plan. The comparable properties in the market have average rents of \$1,673/month. However, those properties benefit from having a more favorable location than the subject relative to neighborhood amenities and site access. Therefore, the rents are modeled with base case and stress case rents. The operating budget is modeled with 5% vacancy for stabilized years 2-15. The projected escalations for Rental Income and Operating Expense growth are 2.00% and 3.00% respectively. Overall operating expenses are projected to be approximately \$6,422 per unit for year 1. Noteworthy within that figure is that the Property Taxes are reflective of the 15-year High-Performance Tax Credit, and they are modeled according to the programmatic standards. The tax credit begins as a 100% credit for years 1 and 2, is 80% for years 3-5, 70% in year 6, 60% in year 7, 50% for years 8-10, 40% in year 11, 30% in year 12, and 20% for years 13-15. The total projected reduction in taxes paid over the course of the 15 years is \$7,227,867.

### Matrix of rental rates

Due to a combination of market analysis and architectural sensibilities, the proposed 126 units are broken down into 14 studio units, priced in the base case for year 1 at \$1,350/month, or \$2.25/sf, 76 2-bedroom units, priced at \$1,575/month, or \$1.91/sf, and 36 2-bedroom units, priced at \$1,800/month, or \$1.57/sf. At 100% occupancy, this would result in a Gross Potential



Rental amount of \$2,440,255. In the stress case, studios are \$1,250/month or \$2.08/sf, 1BR units are \$1,400/month, or \$1.70/sf and 2BR units are \$1,650/month, or \$1.43/sf, resulting in a GPR of \$2,199,128.

#### Debt Calculation

The debt was sized using NOI based on the above Year-1 GPR and Operating Expenses. The projected NOI is \$1,657,277, and two calculation methods were used. First, a 1.20x DSCR requirement was factored. Based on the NOI assuming a 4.50% interest rate, this resulted in \$20.2M of maximum debt. Second, a 75% LTV calculation method was used. Once again assuming a 4.50% interest rate, and using the above NOI, this resulted in 27.6M of debt. Modeled within the Sources and Uses is \$14.4M of debt, which falls below the two calculated results.

#### Summary of Returns

Using the aforementioned assumptions for Income, Expenses and annual debt service, the cash flow for year one is projected to be positive in both scenarios of the 15 year analysis period. The base case IRR, therefore for a 15-year period, is 14.63%, and the cash on cash would be 13.6%. The base case exit strategy for the subject assumes an exit cap rate of 6.00% relative to the NOI before debt service and Replacement Reserves, and assumes either a sale or refinance of the property. The proceeds would be divided between the Developer and Investors based on their share of the total initial equity investment. The stress case assumptions are the aforementioned lower rents, as well as a cap rate increased to 6.5%, which results in a 10% IRR and 7.45% Cash on Cash.

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Section 7

## **Chapter 7- Marketing & Management**

### **Marketing**

The marketing plan for the property seeks to reach potential residents through both digital technology and intentional in-person advertising. From the standpoint of digital advertising, it is proposed that the property utilizes resources that can be accessible online.

#### **1. Property Website**

A portion of what is built into the Advertising/Marketing line item is the cost of maintaining a property website. The proposed site would be [oasisdruidlake.com](http://oasisdruidlake.com) and would serve as a one stopshop for potential and current residents. Potential residents would be able to schedule a tour of the building, view availability for desired units/floorplan options, apply online for an apartment, view images of the property, learn about the amenities, pet policies, leasing office hours and other pertinent information. Current residents would be able to login to pay their rent, access their leases, view their resident profiles, send a maintenance request to the leasing office and view general announcements relative to the property and community. Social Media outlets including Facebook, Twitter and Instagram will also be used to drive traffic to the website.

#### **2. Database Websites**

In addition to the property site, the property would also maintain a presence on database sites including apartments.com, aptguide.com, forrent.com and craigslist for as long as they prove to be effective forms of traffic generation.



In terms of the aforementioned intentional in-person advertising, it is proposed that the management team will partner with the nearby colleges/universities including Johns Hopkins University, Coppin State University, Maryland Institute of College and Art and the University of Baltimore, and hand out printed flyers in order to capture potential student, professor and employee renters. Given the projected construction timeline of fifteen months, it is the plan of the development company to use the final four months of construction for lease-up. It is during this initial time period that the heaviest efforts will be done, but it is proposed to take place in line with semester schedules each year.

### **Absorption**

The estimated absorption rate is 25 units per month. Given the size of the property (126 units), this translates to an average absorption of 19.8% per month. Ideally, the lease-up period would help the management company spur traffic and gauge the success of the various marketing sources. At the estimated rate, it would take the property six months to fully lease up. A typical year is modeled with 5% vacancy, but Year 1 of operation is modeled with 10% to be slightly more conservative.

### **Management/Operations**

#### **1. Management Company/Responsibilities**

Given the fact that the proposed site has been vacant for a significant amount of time, and the Reservoir Hill neighborhood has faced economic challenges, it is proposed that the property engage a Baltimore-based third-party management company. The responsibilities of the company would include, but not be limited to maintaining lease files, collecting rent, monitoring

traffic, paying operating expenses to vendors/employees and ensure that the property remains in line with the yearly operating budget.

## 2. Operating Budget

Relative to the agreed upon budget at closing, the estimated Gross Potential Rent for Year 1 is \$2.4M. As aforementioned, Year 1 vacancy is modeled at 10%. As it stands, no sources of Other Income are modeled. Typically, Other Income would include Amenity Fees, Pet Fees, Utility Reimbursements, etc. These fees were not modeled, with the intention of the property offering a bonus otherwise not likely found in the market, another aspect that should aid in the lease-up. However, as ownership sees fit, if after stabilization the property and the market are receptive to such fees, they will be a source of additional income. The Operating Expenses breakdown can be found below in Figure XXIII.

**Figure XXIII- Year 1 Operating Expenses**

Payroll	\$ 277,500.00
R&M	\$ 165,000.00
G&A	\$ 87,000.00
Utilities	\$ 135,000.00
Advertising/Marketing	\$ 18,750.00
Real Estate Taxes	\$ 26,198.00
Insurance	\$ 43,650.00
Management Fees	\$ 56,078.00
<b>Total Operating Expenses</b>	<b>\$ 809,176.00</b>

Controllable expenses include Payroll, Repairs/Maintenance, General/Administrative costs, and finally Advertising/Marketing costs. Non-controllable expenses include Real Estate Taxes and Insurance, both of which would be paid out of an Escrow Account by the lender. Below the line of all those expenses is Debt service and Replacement Reserves, both paid to the lender by the property. The net of all the aforementioned Income and Expenses results in a cash flow figure

and Debt Service Coverage ratio. The annual Operating Budget for the upcoming year would be provided to the management company by the end of January of said year.

### **3. Lease Terms/Pricing**

In order to maximize GPR, the owners and investors will have full control over pricing its units. However, the property will utilize an LRO daily pricing system to track the property's rents relative to markets rents. The units will be priced slightly lower than market rents, given the economic challenges of the site/neighborhood, lack of immediate neighborhood amenities as well as the tax relief offered through the High Performance Tax Credit.

### **4. Management Fee**

As agreed upon at closing, the compensation to the management company for performing its responsibilities will be 3.00% of EGI each year.