



ELKHON PROMENADE CAPSONE REPORT



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Masters of Real Estate
Development
Sp2016

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I. EXECUTIVE SUMMARY

1. Summary

- a. The Elkhorn Promenade project revitalizes the Owen Brown Village Center in Columbia, Maryland into a competitive and locally sourced mixed use residential and retail destination. The Elkhorn Promenade will give residents a strong desire to walk, bike or even take a short drive to a destination with a tailored experience. Don't go downtown; go next door!

2. Key Challenges/Risks

- a. Redesigning a historical new town neighborhood village center with little zoning guidance
- b. Environmental sensitivity to reconnecting one of the largest Maryland lakes to the storm water management ponds creating a canal and promenade
- c. A drastic change in grade from the village center to the lake

3. Key Opportunities

- a. Opportunity to redevelop the property into a lucrative locally sourced village center with retailers who provide for the needs of the immediate residents
- b. Return the village center to a competitive position with the 9 other historical village centers by highlighting the unique water feature
- c. Profiting from grade change by providing a dual level retail destination a promenade walk along the water to the active lakeside

4. Market Context and Market Opportunities

- a. There are 12 grocery anchored retail centers surrounding Owen Brown village; the Elkhorn Promenade will move away from this traditional model

- b. The retail rental rates have been consistently \$25-\$30 per square foot, despite economic downturn
- c. Median income is expected to be \$97,807 by 2017
- d. Households in Owen Brown village are 30% renter occupied and 40% non-husband & wife with no children under 18; new apartment options will be welcomed
- e. Current retail vacancy rates in Columbia are 0% to 5%
- f. Real economic drivers are the historic appeal of Columbia, the low 4.4% unemployment rate, and the appeal of a retail destination that is tailored especially to current residents
- g. Competition would come from retail and residential options in the 9 other villages, some of which are currently being redeveloped
- h. A sudden influx of for sale properties may delay user demand for the newly developed space
- i. Another dip in the economy may delay the use demand for the newly developed retail space if smaller businesses cannot sustain

5. Financial Information

- | | |
|--|--|
| <ul style="list-style-type: none"> a. Total cost: \$42,064,363
(\$258,064 per unit, \$177 per square foot) | <ul style="list-style-type: none"> 2. Loan to Value: 63% 3. Cap rate: 7.00% |
| <ul style="list-style-type: none"> b. Key Pro Forma Assumptions <ul style="list-style-type: none"> i. Debt ratios <ul style="list-style-type: none"> 1. Loan to Cost: 75% | <ul style="list-style-type: none"> ii. Interest rates <ul style="list-style-type: none"> 1. Construction Loan: 2.7% |

- 2. Permanent Loan:
 - 4.56%
- 3. Refinance in year 7: 6.0%
- iii. Term
 - 1. Construction: 18 months
 - 2. Permanent Loan: 10 months
- iv. Exit term
 - 1. Sale in year 11 based on year 10
- c. Sources of Capital Stack
 - i. Debt – \$31,548,272
 - ii. Equity – \$10,516,091
- iii. Private funds
- d. Financial Returns
 - i. Leveraged/Unleveraged IRR- 22.3%/13.20%
 - ii. Return on Cost- 47%
 - iii. Cash on Cash return – 13.20%
 - iv. Goss rent Multiplier – 10.63
 - v. Equity multiplier – 3.79
 - vi. Debt Coverage Ration – 1.7
 - vii. Debt Service Ration – 59%

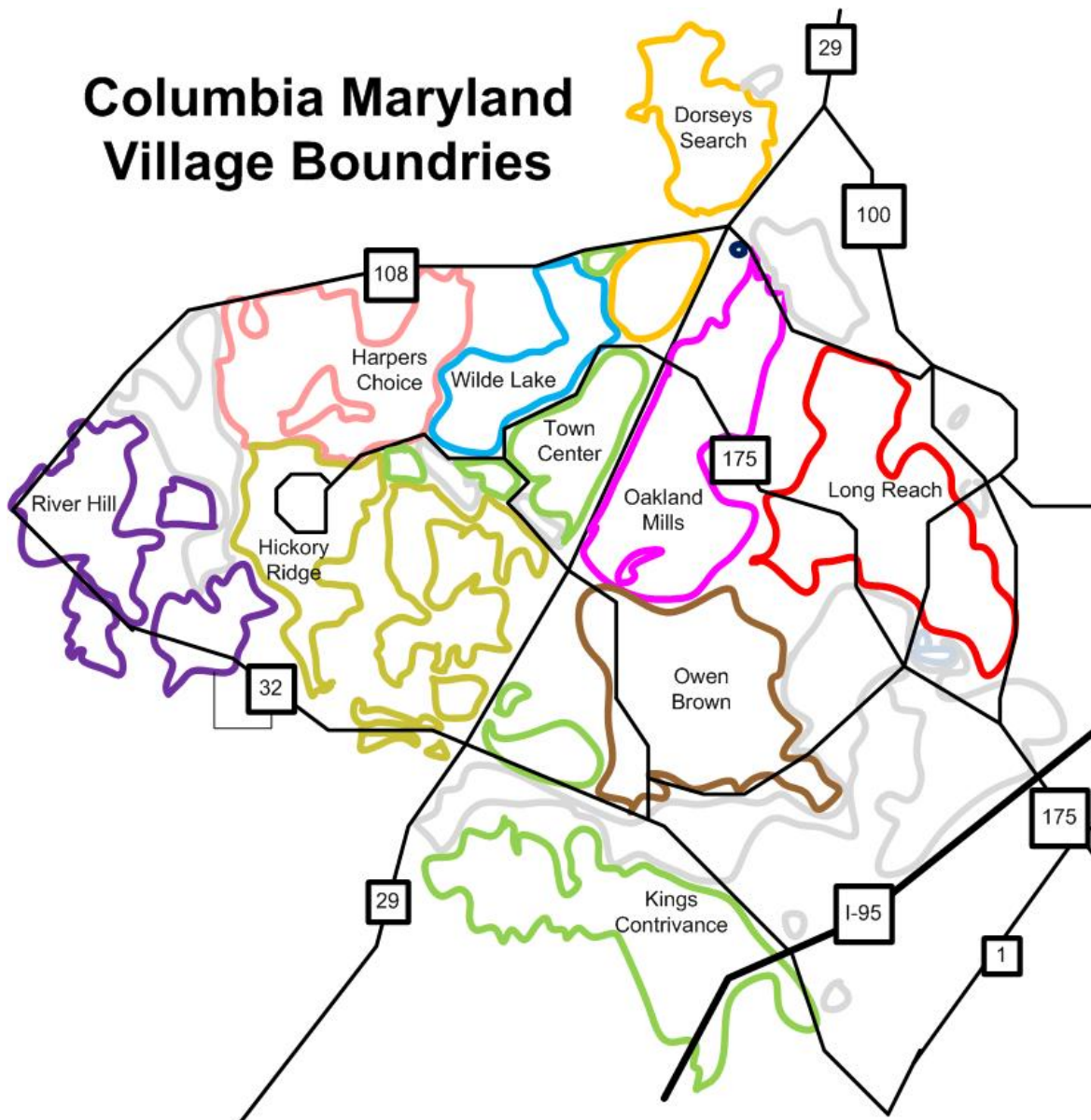
II. PROJECT

OVERVIEW



- 1. Owen Brown Village in Columbia, Maryland
 - a. The project site is located in the Owen Brown village center of Columbia Maryland in Howard County. Specifically the site is main retail center of the village. The map above shows the site as it stands today. The surrounding uses include established single family residential and a 55+ community. There is also a high school and two public ball fields. Across one of the main arterial roads is a public park and access to the largest lake in Columbia.
 - b. Owen Brown is one of the 9 villages created by founder James Rouse in the late 1960's. The diagram below shows the location of the villages that make up Columbia today. It was as a haven for all types of people including all walks of life, all income levels, all races and all creeds. Each village was created to house around 10,000 people. Owen Brown village was established in 1975 is a total of 37 acres.

Columbia Maryland Village Boundries



2. Size General Site characteristics

- a. The size of the current site is about 65,000 square feet of retail, not including the Owen Brown Interfaith Center and the Columbia Association tennis center. The site is mostly flat except for the sharp incline toward the south with leads to the underpass of Cradlerock Way that connects to the lake, park and play area. The underpass picks

up between the Giant grocery store and the smaller corporate building. This area is set up as a storm water management location. Though surrounded by mature trees the site itself is not wooded. Any new external connections made may require tree removal. The area surrounding the lake is considered wetlands. Three retail units totally 3,123 square feet are vacant. The other 15 units are leased.

- b. Per the image below, the existing buildings on the site include several retail units, the Owen Brown Interfaith Center, the CA tennis courts and a gas station.



3. Road Access

- a. The site is accessed by Cradlerock way, Broken Land Parkway, Route 32 and Route 29. From Route 29, Interstate 95 can be easily reached. These roads are 4 to 5 lane

highways and cannot be considered walkable. Parts of Cradlerock Way and Broken Land Parkway have sidewalks.

- b. Per historical convents, there are no retail signs visible from Cradlerock or Broken Land and there is intensive tree coverage. Without GPS or prior knowledge of the site it is unlikely that visitors will discover Owen Brown Village or its retail. However, access to Route 32 and Route 29 is direct and thereby Route 95, Route 495 and Route 295. Residents of Owen Brown have easy access to the Washington D.C. and Baltimore corridor.
- c. The drive time to Washington D.C. is between an hour and an hour and a half. The drive time to Baltimore is about 25 minutes. The drive time to the closet airport, Thurgood Marshall Baltimore Washington International Airport is 35 minutes. There is bike access to the Owen Brown village, but there is no pedestrian access for anyone who lives outside the Owen Brown Village. The drive time to major employment centers for Owen Brown is 15 minutes.

4. Transit Access

- a. There is a local connector that runs between the villages and downtown Columbia. It runs every 30 minutes. The BWI Airport also serves as the nearest Amtrak train station. From the BWI Amtrak station a resident can reach points north including New York, and south including Washington D.C. There are regional bus options but they are not suitable for commuter travel. There is no reasonably close Washington D.C. or Baltimore metro station. The connections to light rail stations in Baltimore County are about 30 minutes away.

5. Neighborhood Services & Amenities

- a. Owen Brown village has a large grocery anchored shopping center. There is also a Jerry's Subs and McDonalds. The only non-food shopping in Owen Brown is a dollar tree and nail salon. There are also service industry locations such as a Hair Cuttery, barbershop, hair braiding studio, an auto body shop, cigar shop and bank of America. Most of the heavy shopping is done one village over in the Mall at Columbia. Owen Brown Village has a Columbia Association tennis court, as well as two ball fields within walking distance. There are also boating and water sport activity available seasonally on the lake. The assigned schools are Cradlerock Elementary School and Lake Elkhorn Middle School. The nearest health care location in Owen Brown Village is the Concentra Urgent Care center that is 3.5 miles or 10 minutes away.

III. MARKET

ANALYSIS

1. Market Area

- a. The Market area for this project includes the Owen Brown Village Center, Owen Brown Village and the city of Columbia as a whole. The proposed project will be a residential and mixed building within the larger redesign of the village center. Currently in the village center there are 7 food service locations, 6 of which are fast food and 1 of which includes a gas station. There are also 10 general service locations including 5 hair salons, 9 small business locations including 5 doctor offices and one bank and finally 5 other retail locations including a dollar tree and wine & spirits store. The anchors for this village center are Giant Food and the Owen Brown Interfaith Center. Surrounding the retail center are a senior living apartment building, town homes, single family homes, a tot lot, and a large manmade lake.

2. Demographic Characteristics.

- a. Basic demographics - Per the 2010 census and Table 3 above, formatted into the table below Owen Brown Village is 52% white, 28% black and 11% asian. Only 9% of the residents are hispanic or latino. This is inline with the city of Columbia as a whole. The mean household income of Owen Brown is \$96,894. Only 29% percent is renter occupied. Most households are of a couple only, followed by a couple with children under 18. Only 35% of total households are made up of non-family. More than half of Owen Brown is older than 25 with a bachelors degree.
- b. Population - Per the table below, the 2010 census showed that 17,281 people lived within a 5 minute driviving radius from Owen Brown Village By 2017 that population is predicted to grow to 18,035 people. Only 5 minutes further and there were 135,290 people and by 2017 there will be 147,521. There will be a 0.94%

change in households from 2010 to 2017 within 5 minutes, and 1.25% change within 10 minutes.

- c. Income - By 2017 the median household income is projected to be \$97,807 within 5 minutes and \$101,679 within 10 minutes. The median age in 2017 will be almost 40 closer to the village center and almost 37 a little further out. Renter occupied households will continue to represent 29% of the market area. Per the table below, the Owen Brown village center has the third least median household income of all the villages of Columbia. In 2012 the median household income was \$88,292.

Table 4: Median Household Incomes, by Village Center, 2012

Village Center	Median HH Income W/ 5-Minute Drive
Oakland Mills	\$ 73,246
Long Reach	\$ 82,417
Owen Brown	\$ 88,292
Harper's Choice	\$ 92,533
King's Contrivance	\$ 99,180
Dorsey's Search	\$ 101,059
Hickory Ridge	\$ 102,053
River Hill	\$ 170,708

Source: RDS; WTL+a; Folan Consulting, March 2014.

Table 6: Five & 10-Minute Drive Time Demographics—Owen Brown Village (

	0 - 5 Minutes	0 - 10 Minutes
Population		
2010	17,281	135,290
2012	17,356	138,696
2017 Forecast	18,035	147,521
Total Change 2012 - 2017	679	8,825
Annual Growth Rate, 2012 - 2017	0.77%	1.24%
Households		
2010	6,820	52,940
2012	6,869	54,330
2017 Forecast	7,197	57,825
Total Change 2012 - 2017	328	3,495
Annual Growth Rate, 2012 - 2017	0.94%	1.25%
Median Household Income		
2012	\$ 88,292	\$ 91,677
2017	\$ 97,807	\$ 101,679
Median Age		
2012	39.2	36.5
2017	39.6	36.7
2010 Housing Tenure		
Owner-Occupied Households	71.0%	67.0%
Renter-Occupied Households	29.0%	33.0%

Source: ESRI Business Analyst; RDS; Folan Consulting, March 2014.

Table 3: Demographic Characteristics, 2010—Owen Brown Village Center

	Village of Owen Brown		Columbia	
		%		%
Race & Hispanic Ethnicity				
White	5,124	52%	51,150	57%
African American or Black	2,707	28%	22,201	25%
American Indian & Alaska Native	39	0%	368	0%
Asian	1,064	11%	9,955	11%
Native Hawaiian & Other Pacific Islander	4	0%	29	0%
Some Other Race	399	4%	2,579	3%
Population of Two or More Races	448	5%	4,033	4%
Total Population:	9,785	100%	90,315	100%
Hispanic or Latino	902	9%	7,146	8%
Non-Hispanic or Latino	8,882	91%	83,170	92%
Mean Household Income	\$ 96,894		\$ 112,900	
Total Occupied Housing Units				
Owned	3,815		35,811	
Renter-Occupied	2,709	71%	24,198	68%
	1,106	29%	11,613	32%
Total Households	3,815		35,812	
Total Families (1)				
Husband/Wife Family	2,488	65%	23,770	66%
Husband/Wife with Children < 18	1,898	76%	18,190	77%
Other Family	859	35%	8,441	36%
Other Family with Children < 18	590	24%	5,579	23%
	364	15%	3,516	15%
% 25+ with Bachelor's Degree	52%		61%	
% 25+ with Graduate/Prof Degree	N/A		30%	

(1) A family consists of two or more people (one of whom is the householder) related by birth, marriage, or adoption residing in the same housing unit.

Source: Columbia Association; RDS; Folan Consulting, January 2014.

3. Employment

a. Labor Force. Per the table below, by 2020 there will be 24,000 jobs in Howard County, and 4,885 self-employed or part-time jobs. Most of these jobs will be in the service industry followed by wholesale & retail trade and then manufacturing or government. The city of Columbia will maintain 38% of all Howard County jobs in 2020.

4. Unemployment. Per the Maryland State Economy website, in 2014 Howard County was tied with Montgomery County at having the lowest unemployment rate in the state at 4.4%.

a. Employers. Per the Howard County Department of Commerce, the largest employer in Howard County is John Hopkins University Applied Physic Laboratory, followed by Lorien Health Systems and then Howard Country General Hospital. Giant and Wegmans are also top employers, as well as the Columbia Association, Enterprise Community Partners, Target and Walmart. The smallest employers are Home Depot, Republic National Distributing and Motorola.

Table 11: Employment Forecasts & Allocation to Columbia

	2010	2012	As % of Total	2020	2012-2020 Forecast
Howard County: All Jobs					
BMC Round 8 Total Jobs (1)	181,381	187,381	100.0%	211,381	24,000
Less Self-Employed/Part-time (2)		38,151	20.4%	43,037	4,886
Total - Full-time Jobs (2012-2020):		149,230	79.6%	168,344	19,114
Howard County: Full-time Jobs Only (3)					
Mining & Natural Resources		2,522	1.7%	2,845	323
Construction		11,031	7.4%	12,444	1,413
Manufacturing		10,675	7.2%	12,042	1,367
Transportation & Warehousing		3,879	2.6%	4,376	497
Communications		2,195	1.5%	2,476	281
Utilities		594	0.4%	670	76
Wholesale & Retail Trade		31,496	21.1%	35,530	4,034
Finance/Insurance/Real Estate		9,308	6.2%	10,500	1,192
Services		66,790	44.8%	75,345	8,555
Government		10,740	7.2%	12,116	1,376
Total - Full-time Jobs (2012-2020):		149,230	100.0%	168,344	19,114
Columbia (CDP)					
FAIR SHARE:			(4)		
Total Jobs (2012-2020):		71,153	38%	80,266	9,113

(1) Reflects Round 8 employment forecasts for "Retail" and "Non-Retail" jobs for 2010-2020, as prepared by the Howard County Department of Planning & Zoning, and used by the Baltimore Metropolitan Council (BMC). BMC does not prepare job forecasts by industry sector.

(2) The forecasts include both part-time and self-employment jobs. These are excluded from the analysis because it is unknown how many part-time and self-employed jobs will demand workplace real estate such as office or industrial space.

(3) This illustrates the distribution of jobs, by industry sector, in 2012. The analysis assumes that the distribution of jobs, by industry sector, will remain the same in 2020.

(4) Columbia's current (2012) share of all jobs in Howard County was 38%. The analysis assumes that Columbia maintains its share in 2020.

Source: Baltimore Metropolitan Council (BMC) Round 8 Forecasts; ESRI Business Analyst; RDS; WTL+a, revised April 2014.

1. Retail Market

- a. Per Co-Star's yearly Baltimore Retail Report, Columbia, specifically Columbia South is a submarket of Baltimore and its numbers are often combined with Ellicott City, MD.

2. Construction Activity

- a. Co-Star defines "general retail" as freestanding retail structures with parking. Power Center is a 250,000-600,000 sf shopping center made of several unattached anchors

and often store that offer large selections

of merchandise. A Lifestyle center is an

"upscale, specialty retail, main street

concept" shopping center, usually without

anchors and totally 300,000 sf. A

Regional Mall provides a large variety of

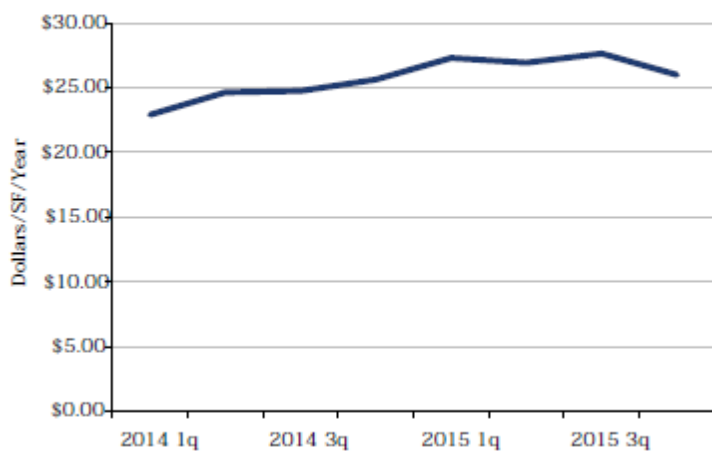
goods and services, and includes an

anchor department store. This type can be

between 300,000sf to 1,000,000 sf.

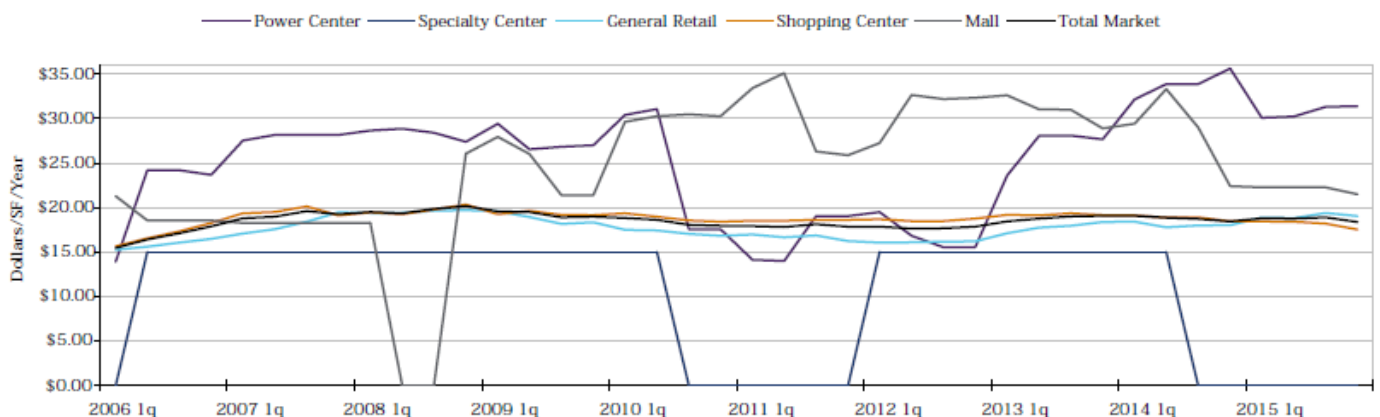
Quoted Rental Rates

Historical Analysis, All Classes



Historical Rental Rates

Based on NNN Rental Rates

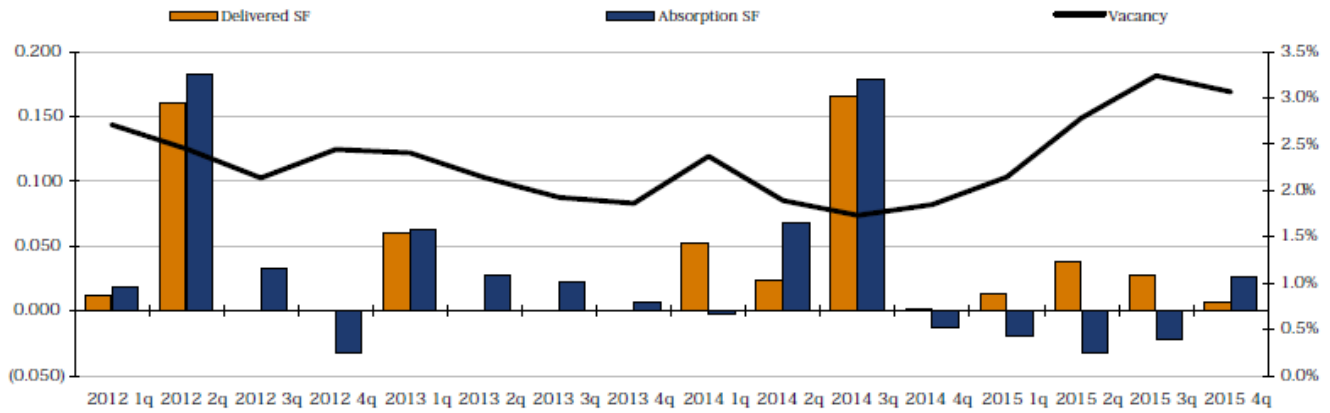


Source: CoStar Property®

Super Regional Mall is similar, but draws from a larger population and is bigger than the biggest Regional Mall. A Market Mall is considered a retail center that combines lifestyle centers, regional mall and super regional mall. Per the graph to the left, quote rental rates had been rising in the Ellicott City/Columbia market for the past 3 quarters but is slowly declining. Per the graph below, rental rates for all retail types has been cyclical. The Power Center commands the highest rent, and the Shopping Center the lowest

- b. In 2015, Ellicott City/Columbia had a total of 3 buildings under construction. The square footage for these buildings was not pre-leased. The average building size for Ellicott City/Columbia buildings is 19,600 square feet, while these 3 buildings were 8,200 square feet. All are significantly smaller than the proposed 205,000 Postmaster Square.
- c. The General Retail market for Ellicott City/Columbia consists of 309 buildings totally 2.9MM sf. Its vacancy rate was 5.2% with a net absorption of (17,600). The quote rates for this type were \$27.98 per sf. Specifically for Columbia South, where the Elkhorn Promenade project is located, there are 102 General Retail buildings. They total 1.1MM sf and have a vacancy of 2.5%. The quoted rent was \$22.64.
- d. There was only one case of a Market Mall for Ellicott City/Columbia totally 1.6MM sf. Its vacancy 1% there was no net absorption or quote rate. There are not Market Malls in Columbia South, but there is one in Columbia Town Center.
- e. The Power Center market for Ellicott City/Columbia includes 5 centers totally 2.5MM sf. The vacancy rate was 0.2% and the net absorption was (4,600). The

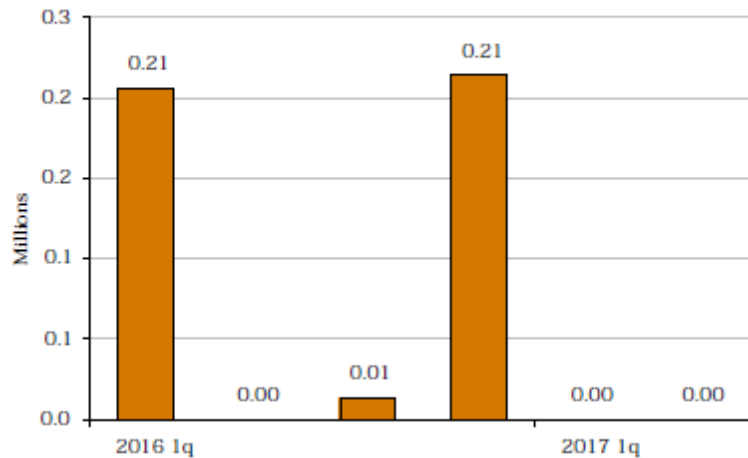
- quoted rate was \$40 per sf. Specifically in Columbia South there is 1 Power Center. It totals 570,164 sf and has a 0% vacancy and no quoted rent amount.
- f. The Shopping Center market for Ellicott City/Columbia included 67 centers totally 3.5MM sf. They had a vacancy of 4.3% and a net absorption of (22,890). The quote rate was \$20 per sf. specifically for Columbia South there are 26 Shopping Centers totally 1.3MM sf. The vacancy is 4.9% and the net absorption is (10,163). The quoted rent is \$20.54 per sf.
 - g. The Specialty Center market for Ellicott City/Columbia included only 1 center totally 253,438 sf. Its vacancy was 2.4% and there was no quoted rate. Specifically in Columbia South, there is only one specialty center. It has 253,438 sf and a vacancy rate of 2.4%. The net absorption is (2,362).
 - h. On average, per the chart below, the retail market for Ellicott City/Columbia includes 549 buildings, more than 6.7MM sf, has a vacancy rate of 3.1% and net absorption of (47,431). The quoted rate was \$26 per sf. Specifically in Columbia South there are 112 retail buildings totally 3.2MM sf with a vacancy rate of 3%. The net absorption is (10,465).



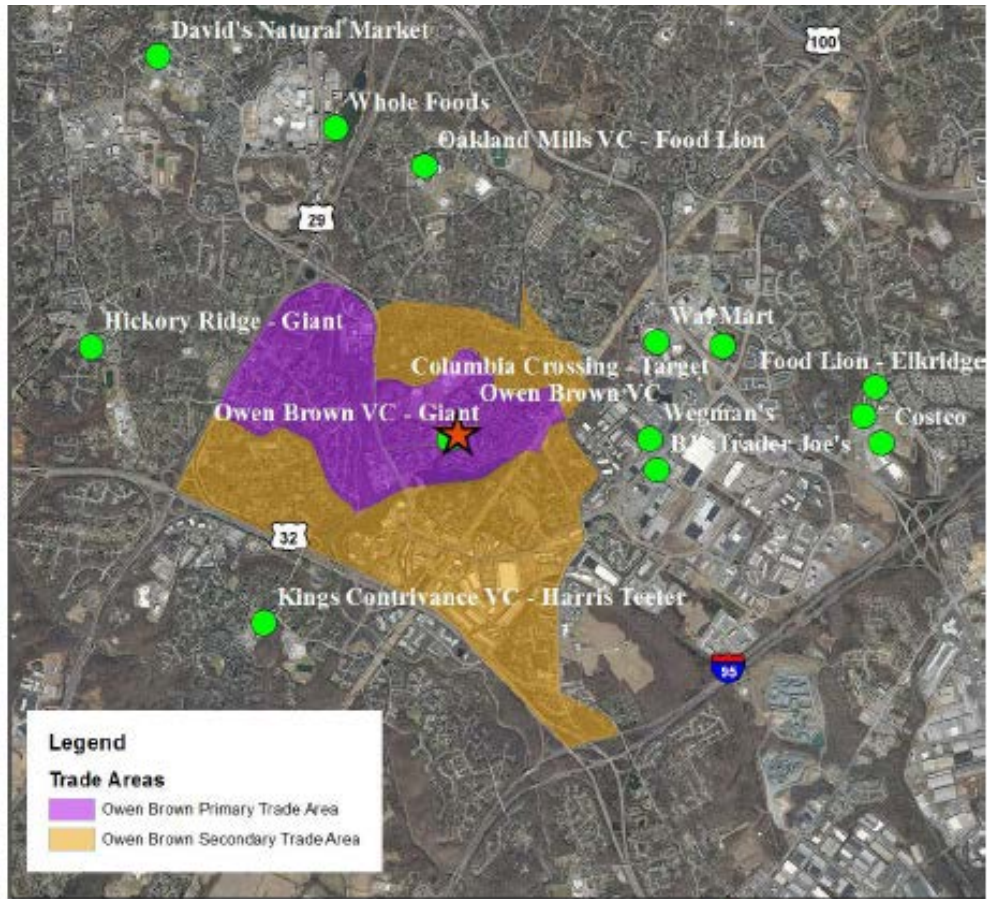
Source: CoStar Property®

- i. Per the chart below, there is expected to be 0.21 Million square feet of retail coming online in the Baltimore retail market by the 1st quarter of 2017. Specific information was not available for Ellicott City/Columbia South.

Future Space Available Space Scheduled to be Available for Occupancy*



* Includes Under Construction Spaces Source: CoStar Property®



Columbia Market Analysis and Economic Development Services Study



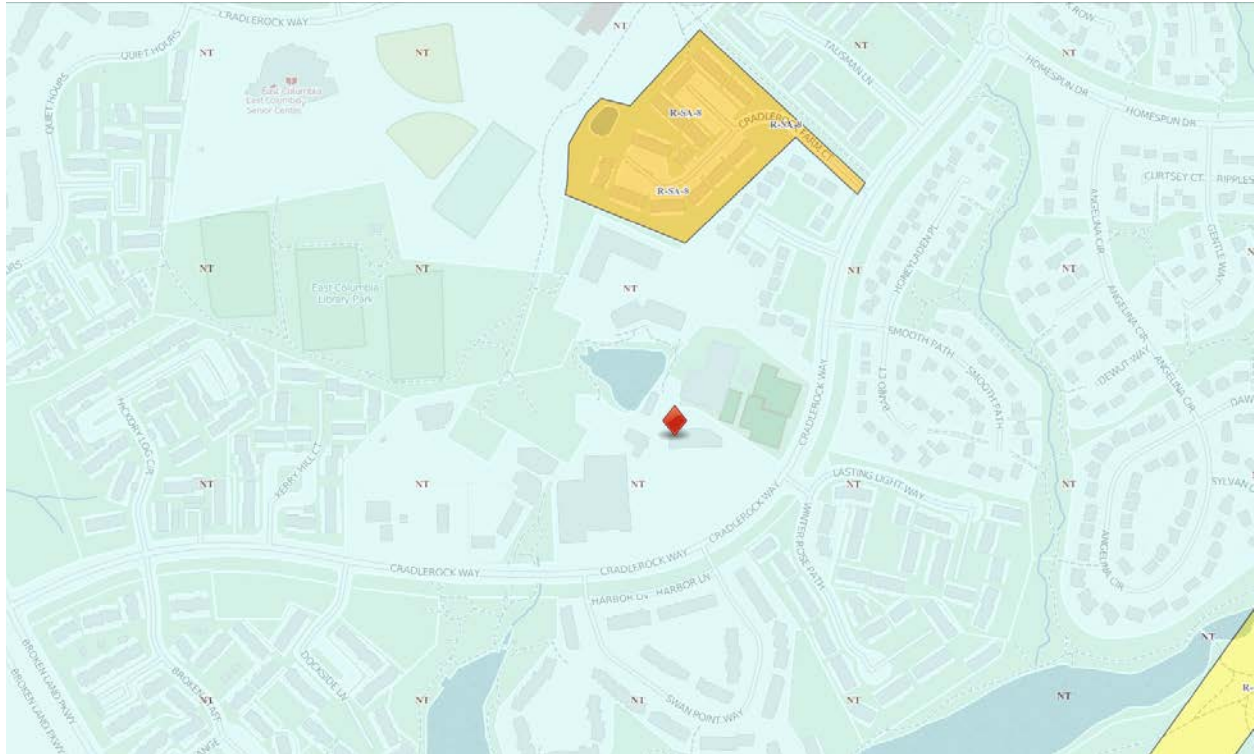
- j. While Elkhorn Promenade will revitalize the Owen Brown Village Center there are several comparable for its current rendition. The image to the left, commissioned by the CA in 2014, shows the competing grocery store anchored retail centers in the nearby vicinity of Owen Brown. There 12 total centers, varying from traditional grocery to organic to department stores.
- k. The chart below give more detail about these competing grocery anchor retail centers. Aside from the recently upgraded Columbia Town Center, the largest is the Gateway Overlook. Built in 2007 it ask rents of \$23 per sf. The smallest is the Dobbin Center, built in 1982, asking rents of \$39 per sf.

Table 5: Nearby Regional Retail Centers—Owen Brown Village Center

Competitive Retail Centers	Size (SF) & % Leased	Properties & Year Built	Average Rents	Major Tenants	Other
Dobbin Center 6435 Dobbin Road Columbia Manager: Rosenthal Properties	295,150 96%	12 1982	\$ 39.00	Wal*Mart, Ross Dress for Less, Offenbachers, Haverty's	Six non-owned outparcels include: bank, McDonald's, Chik-fil-A, Wendy's Starbucks
Columbia Crossing I & II Dobbin Rd & Rte. 175 Columbia Manager: Kimco Realty Corp. (majority of center)	495,953 100%	16 1996/1997	\$ 28.00	Big Lots, Nordstrom Rack, Books-A-Million, Dick's Sporting Goods, TJ Maxx, Staples, Jo-Ann Fabrics, Old Navy, Target, REI, Toys R Us, Babies R Us	Restaurant cluster includes La Madeleine, Famous Dave's Ribs, Don Pablo's, Macaroni Grill
Gateway Overlook Off I-95 at Rte. 175 & Rte. 108 Columbia Manager: Washington Real Estate Investment Trust (214,281 SF) & General Growth Properties	528,350 99%	9 2007	\$ 23.00	Costco, Lowe's, Trader Joe's, Best Buy, Office Depot, Golf Galaxy	Restaurants include: Houlihan's, Mimi's Café, Paragon at Gateway Overlook (340 apartments)
Snowden Square Snowden River Pkwy & Robert Fulton Columbia Manager: Manekin LLC	500,000 100%	17 1993	\$ 28.00	United Artists 14 Theaters, Bed Bath & Beyond, Marshalls, BJs, Michael's, Home Depot, PetSmart	Built to complement the 295,200 SF Dobbin Center
Dobbin Station 6781 Dobbin Road Columbia	N/A 100%	4 N/A	N/A	Petco, LaZBoy	Food service tenants include: Chipotle, Noodles and Company
Columbia Mall 10300 Little Patuxent Parkway Columbia Manager: General Growth Properties	1,390,000 N/A	1 1971	N/A	Lord & Taylor, Macy's, Nordstrom, Sears, AMC Theaters, JC Penney	Expansion added 40,000 SF; Restaurant cluster includes: Cheesecake Factory, PF Chang's, Uno Chicago Grill, Champs Americana
Long Gate Shopping Center 4310 Montgomery Road Ellicott City Manager: Kimco Realty Corp.	595,410 100%	11 1996/1997	N/A	Target, Safeway, Kohl's, Barnes & Noble, Michaels	Originally developed by Opus

Source: Various centers; CoStar, Inc.; RDS; Folan Consulting, January 2014.

IV. ZONING



1. Current zoning

- a. Currently the site for the Elkhorn Promenade project in the Owen Brown Village Center is zoned NT for New Town District. This zone was created by Howard County to encourage and facilitate the redevelopment of village centers. These village centers are considered out of date and are no longer financially viable. The cause of which, is deemed to be the design of the centers, which is why the rezoning has occurred. There will be a required design review of the site plan, as well as a community review. The zoning commission and its necessary counterparts will receive and provide recommendations, solicit public response and ultimately approve or deny the major village center redevelopment.
- b. The zoning code section 125.0 describes NT Districts as having at least 2,500 contiguous acres. The maximum number of dwelling units allowed is 2.5 times the total acres of the specific NT district. Specifically, there may be 2 times the total acreage

of single family low density, 4 times the total acreage of single family medium density, and 15 times the total acreage of apartments. The apartments may only be grouped a maximum of 10 dwellings side by side or 16 front to back. Open space is defined as uses that do not include coverage of land by structures.

- c. All legal uses are permitted except those designated to zone R-MH residential mobile home and M-2 manufacturing. Furthermore, each NT district must provide the following uses in these proportions

	(1) Minimum Percentage of Total Area of the District	(2) Maximum Percentage of Total Area of the District
Open Space Uses	36%	N/A
Single-family—Low Density	10%	N/A
Single-family—Medium Density	20%	N/A
Apartments	N/A	13%
Commercial (POR, B-1, B-2 and SC uses)	2%	10%
Industrial Uses (M-1 uses)	10%	20%
Other uses presently permitted in any zoning district other than those permitted only in R-MH or M-2 Districts	N/A	15%

2. Development Process

- a. The Elkhorn Promenade Project will be considered a Major Village Center Redevelopment because it is a mixed used development within the New Town district. It is meant to service the surrounding local village by specifically providing

outdoor use, pedestrian accessibility, day to day commercial needs, institutional uses and residential uses. In order to complete a redevelopment there are three steps required first the developer must complete the village center community planning process. Secondly, the developer must amend the preliminary development plan. Lastly, she must complete the land review process. There are several stages where community input is accepted via letter, email or phone.

- b. Step 1: Village Center Community Planning Process. The developer will deliver a notice of intent to develop. The village board may update the Owen Brown Village Center Community Plan. The developer will then participate in the village center concept-planning workshop. After which, the developer will create a concept plan based on new updates to the Owen Brown Village Center Plan. The developer will then prepare for and attend two pre-submission community meetings. Finally within step 1, the developer will present concept plan and design guidelines to the Design Advisory Panel.
- c. Step 2: Amending Preliminary Development Plan. The developer will submit a preliminary development plan amendment petition to the department of zoning. Within 2 days of accepting this petition, the Department of Zoning will send a notice to the Village Board to request a Community Response Statement. Within 45 days of this notice the Village Board sends a response to the Department of Zoning. The Department of Zoning then sets a Planning Board Meeting date. The Department of Zoning will then issue a technical staff report within 3 weeks. The Department of Zoning then presents the preliminary development plan amendment petition to the planning board, who then issues their recommendations. The Zoning board then

issues a decision and order based on whether the amendment petition is in compliance of the zoning code.

- d. Step 3: The developer submits an amended comprehensive sketch plan, amended final development plan and environmental concept plan to the Department of Zoning. These plans must be approved by the Design Advisory Panel before they are submitted to the Department of Zoning. Any revisions must be made within 45 days. Within 3 or 4 weeks of the submission, the Subdivision Review Committee reviews the plans. Once the development plan is approved, the amended comprehensive sketch plan or amended final development plan is submitted to the planning board for public hearing or meeting. Simultaneously the environmental concept plan original mylars are submitted for signature approval which will take up to 45 days. Meanwhile after the public hearing or meeting, the original mylars are submitted to the department of zoning and within 45 days a decision and order are made. The developer also executes a developer's agreement and payment of fees based on the site development plan, within 180 days.

3. Rezoning/PUD

- a. The closest thing Howard County has to a PUD would be a CEF = Community Enhancement Floating District. Its intention is to more finely blend surrounding uses with new development, enhance architectural design, and encourage mixed use centers. Developers are discouraged from trying to convert commercial zones into residential ones. The Elkhorn Promenade Project will not need a PUD or CEF district.
- b. In order to get a CEF district approved the developer must submit a development concept plan to the zoning board. Uses that are excluded in this zone include flea

markets, gasoline storage, kennel, retail with more than one drive through lane, and public utility uses. A minimum of 10% of the total number of dwelling units must be moderate-income housing units, if there was no requirement on the land prior to the CEF district. The zoning board could also require that residential density be acquired by neighborhood preservation density exchange.

4. Height Limits

- a. Details such as architectural guidelines, covenants and community desires can be located in the Own Brown Village Center Plan. Here the document describes the allowable building height limit. Buildings should not exceed 7 stories. Also, the taller the building and the closer to the residential, the more stepped back each level should be. This is so Elkhorn Promenade will appear to be a cohesive redevelopment to the village town center.

5. Parking Requirements

- a. The parking requirements are as per the following charts:

3. Office Uses

a. General office	3.3 spaces per 1,000 sf
b. Medical clinic or medical office building in which more than 50% of the floor area is used for medical offices	5.0 spaces per 1,000 sf

5. Industrial Uses

a. Warehouse and distribution	0.75 spaces per 1,000 sf
b. Flex Space	
Hybrid industrial/office space	For buildings meeting the definition of flex space as defined in these Regulations, 3.3 spaces per 1,000 sf
c. Manufacturing uses	2.0 spaces per 1,000 sf
d. Self-storage facility	4.0 spaces per 1,000 sf of office area
e. Research laboratories	3.3 spaces per 1,000 sf

6. Recreational Uses

a. Athletic centers, health clubs, or similar indoor uses	10 spaces per 1,000 sf of assembly area(s)
b. Clubs, lodges and similar uses	10.0 spaces per 1,000 sf of assembly area(s)
c. Golf courses	8.0 spaces per hole. Calculate spaces for ancillary uses separately.
d. Golf driving range, miniature golf course, baseball batting cages, and go-carts	1.5 spaces per tee, hole, cage, or go-cart
e. Indoor commercial recreation use	5.0 spaces per 1,000 sf
f. Swimming pool, commercial	1.0 space per 4 persons permitted in the pool at one time by the Health Department
g. Swimming pool, community—operated by a community association or nonprofit organization and open only to members and their guests	1.0 space per 7 persons permitted in the pool at one time by the Health Department
h. Swimming pool, private—in a townhouse or apartment complex	1.0 space per 10 persons permitted in the pool at one time by the Health Department
i. Theater, auditorium, stadium, conference center, banquet halls, night clubs, or other place of assembly or amusement	1.0 space per three fixed seats. If there are no fixed seats, 10.0 spaces per 1,000 sf of assembly area(s).

	section or as determined by the Director of Planning and Zoning based on a parking needs study provided with the Site Development Plan submission (see Subsection D.8.).
k. Personal service establishments	5.0 spaces per 1,000 sf
l. Restaurants, carryout	6.0 spaces per 1,000 sf
m. Restaurants, fast food	14.0 spaces per 1,000 sf
n. Restaurants, standard, and beverage establishments	14.0 spaces per 1,000 sf
o. Restaurants, outdoor seating area	7.0 spaces per 1,000 sf for standard or carry out restaurants, 3 spaces per 1,000 for fast food
p. Retail nurseries and gardens	6.0 spaces per 1,000 sf plus 1.0 space per 1,000 sf of outdoor display area or greenhouse area—the requirement for outdoor display area shall also apply to outdoor display areas for plants or garden supplies which are accessory to a home improvement or other store.
q. Retail, general (any retail use other than those specifically listed in this section)	5.0 spaces per 1,000 sf
r. Shopping Centers	For retail areas meeting the definition of shopping center as defined in these Regulations, 6.0 spaces per 1,000 sf for all uses within the shopping center, regardless of the standards for specific uses listed in this section, except that parking for theaters and other public assembly uses and parking for any freestanding buildings on the shopping center site shall be calculated separately.

4. Commercial Uses

a. Animal hospitals	4.0 spaces per 1,000 sf
b. Banks and similar financial institutions	3.3 spaces per 1,000 sf
c. Car washes (principal or accessory use)	1 space per employee and 1 space for customers. Must always provide a minimum of 2 spaces total.
d. Commercial schools (driving, trade, business, etc.)	5 spaces per 1,000 sf
e. Convenience stores	5.0 spaces per 1,000 sf
f. Day spas and similar uses	3.3 spaces per 1,000 sf
g. Furniture or carpet store	2.5 spaces per 1,000 sf
h. Gasoline service stations without service bays, with or without car washes	3.0 spaces without car wash; 4.0 spaces with car wash.
i. Gasoline service stations with service bays	3.0 spaces plus 3.0 spaces per service bay
j. Hotels, motels, bed and breakfast inns, guest houses, and country inns	1.0 space per guest room. Additional spaces provided shall be as required by this

7. Institutional and Other Uses

a. Day care centers	3.0 spaces per 1,000 sf
b. Funeral homes	10.0 spaces per public viewing room, or 1 space per 50 square feet of floor area in public rooms (chapel, reception rooms, visitation rooms, and any flexible space adjacent to these rooms that can be used as overflow when necessary), whichever is greater, based upon a required floor plan of the proposed facility submitted with a Conditional Use petition or a Site Development Plan
c. Hospitals	7 spaces per bed
d. Museums, art galleries, and similar uses	3.3 spaces per 1,000 sf
e. Nursing homes, residential care facilities and similar uses	1.0 space per 2 beds
f. Post offices	7.0 spaces per 1,000 sf
g. Religious facilities, structures and land used primarily for religious activities	10.0 spaces per 1,000 sf in the assembly area(s). The requirement may be reduced by up to 33% if the use is located within 500 feet of the parking facility where sufficient spaces are available by permission of the owner during the time of services. The distance shall be measured between the entrance to the structure and the parking space closest to the entrance.
h. Schools, private academic—elementary and middle	1.0 space per 6 students. The Director of DPZ may require additional spaces based on the capacity of assembly areas or other facilities.
i. Schools, private academic—secondary, colleges, universities	1.0 space per 3 students. The Director of DPZ may require additional spaces based on the capacity of assembly areas or other facilities.

b. Parking may also be shared between uses per the following charts

	Weekday				Weekend		Night-time
	Morning 6am-8am	Mid-day 8am-3pm	Afternoon 3pm-5pm	Evening 5pm-mid	Daytime 6am-6pm	Evening 6pm-mid	Mid-6am
Residential	80%	60%	60%	100%	100%	100%	100%
Office or industrial	80%	100%	100%	10%	10%	5%	5%
Retail	20%	60%	60%	90%	100%	70%	5%
Hotel or Motel	75%	75%	75%	100%	75%	100%	100%
Restaurant (not fast food)	50%	50%	50%	100%	100%	100%	10%
Theater, commercial recreation, nightclub, or restaurant with entertainment	40%	40%	40%	100%	80%	100%	10%

Land Use	Weekday		Weekend		Unit
	Visitor	Employee	Visitor	Employee	
General Retail/Personal Service	2.90	0.70	3.20	0.80	/ksf GLA
Shopping Center	3.20	0.80	3.60	0.90	/ksf GLA
Restaurants, standard, and beverage establishments	15.25	2.75	17.00	3.00	
Fast Food Restaurant	12.75	2.25	12.00	2.00	/ksf GLA
Cinema	0.19	0.01	0.26	0.01	/seat
Performing Arts Theater	0.30	0.07	0.33	0.07	/seat
Health Club	6.60	0.40	5.50	0.25	/ksf GLA
Hotel	0.90	0.25	1.00	0.18	/room
Restaurant/Lounge	10.00		10.00		/ksf GLA
Conference Ctr./Banquet (20 to 50 sq ft/guest room)	30.00		30.00		/ksf GLA
Convention Space (>50 sq ft/guest room)	20.00		10.00		/ksf GLA
Residential(1)	0.15	1.50	0.15	1.50	/unit
General Office up to 100 ksf	0.275	3.30	0.028	0.33	/ksf GLA
General Office over 100 ksf	0.20	2.60	0.02	0.26	/ksf GLA
Medical/Dental Office	3.00	1.50	3.00	1.50	/ksf GLA

Note(s):	(1) 1.0 space reserved for residents' sole use; remainder may be shared.
	(2) For all other land uses, data from the current edition of "Parking Generation" (ITE), "Shared Parking" (ULI), the Howard County Zoning Regulations or other applicable sources may be used.





















6. Storm Water Management







- a. The State of Maryland has adopted new storm water management regulations and Howard County has also begun requiring all new development to adhere to sustainable storm water management techniques. The idea is to protect the environment by treating storm water runoff from the buildings on site. This reduces stream channel erosion and other harmful results to the surrounding environment and wildlife. Each new development larger than 5,000 square feet is required to submit storm water management measures to be approved from the county as part of a separate approval process. These measures should prevent both two-year and ten-year frequency storm events. The storm water management practices required included

storm water management ponds, wetlands, infiltration, filtering systems and open channel systems.

- b. The minimum control planning techniques required are as follows:
- i. Preserving and protecting natural resources
 - ii. Conserving natural drainage patterns
 - iii. Minimizing impervious area
 - iv. Reducing runoff volume
 - v. Maintain 100 % of the annual predevelopment groundwater
 - vi. Recharge volume
 - vii. Using green roofs, permeable pavement, reinforced turf, and other alternative surfaces;
 - viii. Limiting soil disturbance, mass grading, and compaction
- ix. Clustering development
- c. The minimum site design techniques required are as follows:
- i. Disconnection of non-rooftop runoff;
 - ii. Sheetflow to conservation areas;
 - iii. Rainwater harvesting;
 - iv. Submerged gravel wetlands via
 - v. Landscape infiltration;
 - vi. Infiltration berms;
 - vii. Dry wells;
 - viii. Micro-bioretenion;
 - ix. Rain gardens;
 - x. Swales;
 - xi. Enhanced filters; and
 - xii. Any practices approved by the administration.

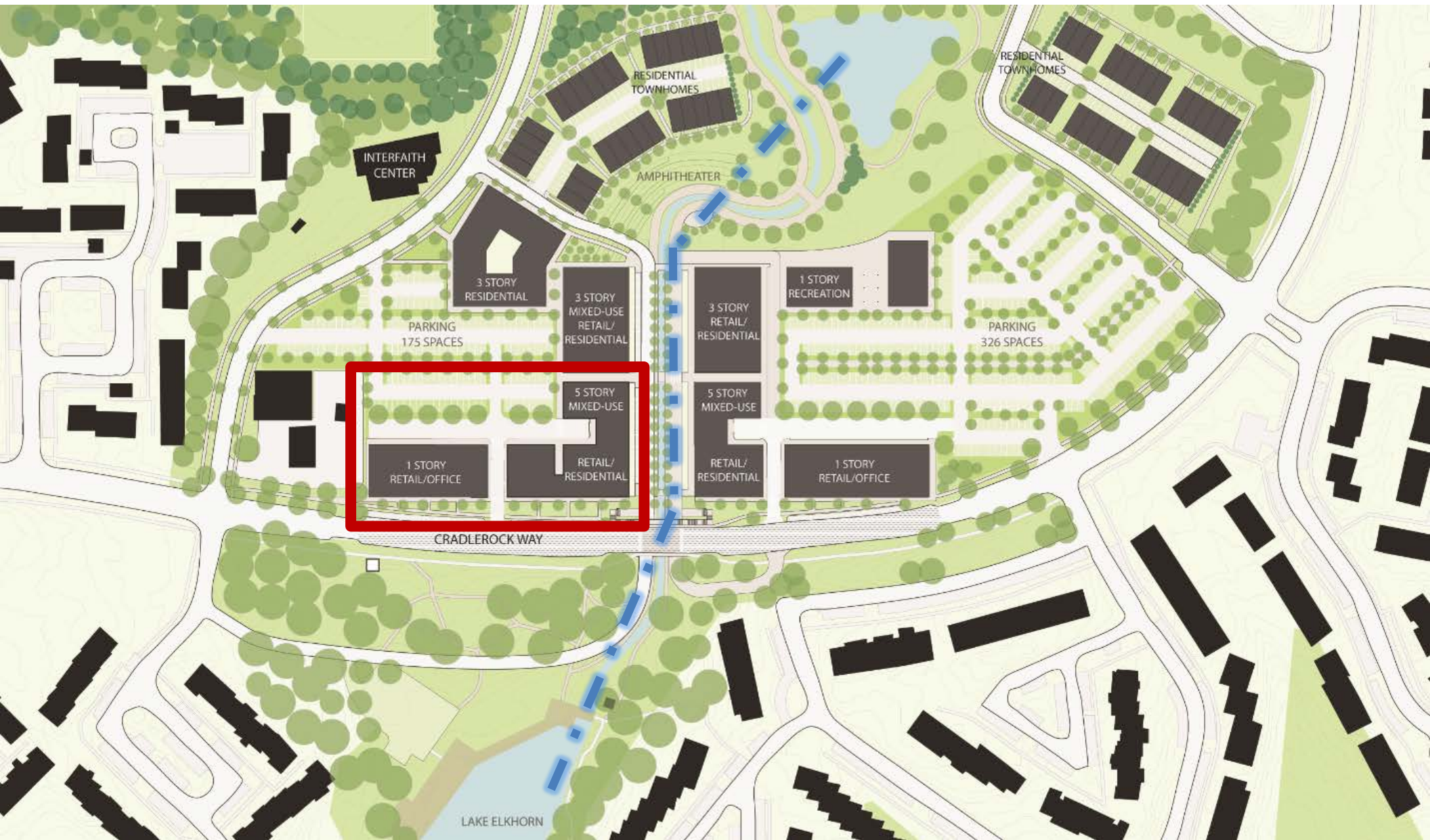
d. Examples of storm water techniques are given in the charts below:.

GSI Tool	How it Works	Benefits
 <p>Bioretention</p>	 SOAKS IN  SLOWS  CLEANS	<ul style="list-style-type: none"> • Can manage large amounts of runoff • Can be designed to calm traffic • Adds beauty, habitat, and green space • Protects against future flooding risks due to climate change • Can be used for Green Factor requirements
 <p>Rain Gardens</p>	 SOAKS IN  SLOWS  CLEANS	<ul style="list-style-type: none"> • Manages runoff from roofs, paths, driveways • Adds beauty and habitat to your property • No technical knowledge is required for routine maintenance
 <p>Stormwater Cisterns</p>	 SLOWS  STORES + REUSES	<ul style="list-style-type: none"> • Easy to design, install, and maintain • During winter, cistern slowly releases water to yard or side sewer to make room for more • During summer, water can be used for irrigation and can reduce overall water use
 <p>Dispersion</p>	 SLOWS  SOAKS IN	<ul style="list-style-type: none"> • Manages runoff from roof, paths and driveways • Inexpensive in settings with sufficient space
 <p>Dry Well/ Infiltration Trench</p>	 SLOWS  SOAKS IN	<ul style="list-style-type: none"> • Manages runoff from roof, paths and driveways • Inexpensive in settings with sufficient space
 <p>Biofiltration</p>	 SLOWS  CLEANS	<ul style="list-style-type: none"> • Cleans large amounts of runoff • Can add beauty and habitat to a range of sites

GSI Tool	How it Works	Benefits
 <p>Permeable Paving</p>	 SOAKS IN	<ul style="list-style-type: none"> • Manages runoff and maintains a durable driving surface for cars and people • Can add visual interest/design detail
 <p>Green Roofs</p>	 SLOWS  EVAPORATES	<ul style="list-style-type: none"> • Adds more green space to your property • Adds habitat for birds and beneficial insects • Improves air quality • Has potential for LEED™ credits • May be designed for food production
 <p>Depaving</p> <p><small>Photo Courtesy of Sustainable Seattle</small></p>	 SLOWS  SOAKS IN	<ul style="list-style-type: none"> • Frees up underutilized paved space for trees, plantings, and other uses, including GSI • Allows stormwater to soak into the ground where it falls instead of picking up and carrying pollutants into creeks and waterways • Can restore habitats for birds, insects, and other wildlife
 <p>Tree Canopy</p>	 SLOWS  EVAPORATES	<ul style="list-style-type: none"> • Tree planting and care is easy and fun • Mature trees improves air quality • Trees offer cool shade in summer and protect against harsh wind in winter • Adds beauty and green space to urban areas
 <p>Compost & Mulch</p>	 SLOWS  SOAKS IN	<ul style="list-style-type: none"> • Mulching is easy • Amending soil with compost helps rain soak in and builds healthier landscapes • Saves money by reducing need for irrigation, fertilizers and pesticides

- e. The storm water management design process is separate than the aforementioned zoning process.
 - i. There is a concept stage where an initial assessment is completed on the proposed project. The submittal include a map, a site plan, preliminary estimates of storm water management requirements and a brief narrative.
 - ii. The next stage is the site development stage. The submittals required include a site layout plan including topography and drainage areas, proposed erosion and sediment control plan, and a brief narrative. The concept stage submittals should also be re-submitted.
 - iii. The final stage includes all the drawings from the site development stage, but finalized. There also need to be geotechnical investigations, hydrologic computations, drainage maps, and a brief narrative. There will also be specific construction drawings submitted. These will include easements and rights-of-way, the delineation of the 100-year flood plain, construction sequence, materials to be used, soil boring logs and locations, and as-built certificates as needed.
- f. There may also be a fee paid in lieu of implementing best storm water management practices. The Department of Public Works or the Department of Planning and Zoning must determine that the best practices are not feasible or would be ineffectual for the project. The Department of Planning and Zoning will determine the fee, based on a per acre-foot of storage volume. The developer will still need to pay the annual watershed protection and restoration fee and provide a performance bond for all storm water management implementations.

V. DESIGN





7. Importance of Design

- a. The design of the Elkhorn Promenade is very important to the developer because it will determine the success of the end user. Above is the proposed site plan. Howard County is looking to revitalize the Owen Brown Village Center into a competitive and locally appreciated retail destination. The design will be important in determining the emotional connection that the residents of Owen Brown have to the new space, and how it pay homage to the historic Columbia Village.
- b. The program for Elkhorn Promenade includes a combination local brewery, small grocery and restaurant, artisan work shop space, convenience stores kayak shop, ice cream shop, multifamily units, community center, teen center, and small retailers. The Interfaith center, gas station and 55+ building will remain. The program intends to be hyper local so that residents especially will feel a strong need and desire to walk, bike or even drive a short while to enjoy a tailored experience, as opposed to driving next door to downtown Columbia or any other village center.

8. Materials

- a. The design will not be extremely modern but instead fit into the current façade aesthetic of light brick, lighter EIFS and colored roof. The buildings will be built to a scale that connections to the new integrated stream of Lake Elkhorn, as well as the two level access change from Cradlerock way. The design will facilitate a mix of indoor/outdoor use and include buildings no higher than 2 or 3 stories. They will be visible from the major roads, and also scaled for lake access.

9. Design Features

a. Because there is a level change from Cradlerock way to the water, a centrally located stair plaza will be designed. This will provide a cross access and connect the interfaith center with the new Lake Elkhorn stream. Patrons will be encouraged to not only access the restaurants and retail by the water, but to also sit right on the stair and watch the action. In this sense it will be most a mode a transportation and a destination.



LEED v4 for BD+C: Retail
Project Checklist

Project Name: Postmaster Square Village Center
Date: 2016

Y ? N
1

Credit Integrative Process 1

3	4	#	Location and Transportation	16
1			Credit LEED for Neighborhood Development Location	16
1			Credit Sensitive Land Protection	1
2			Credit High Priority Site	2
		5	Credit Surrounding Density and Diverse Uses	5
		5	Credit Access to Quality Transit	5
1			Credit Bicycle Facilities	1
1			Credit Reduced Parking Footprint	1
1			Credit Green Vehicles	1

0	10	0	Sustainable Sites	10
Y			Prereq Construction Activity Pollution Prevention	Required
1			Credit Site Assessment	1
2			Credit Site Development - Protect or Restore Habitat	2
1			Credit Open Space	1
3			Credit Rainwater Management	3
2			Credit Heat Island Reduction	2
1			Credit Light Pollution Reduction	1

10	2	0	Water Efficiency	12
Y			Prereq Outdoor Water Use Reduction	Required
Y			Prereq Indoor Water Use Reduction	Required
Y			Prereq Building-Level Water Metering	Required
2			Credit Outdoor Water Use Reduction	2
7			Credit Indoor Water Use Reduction	7
2			Credit Cooling Tower Water Use	2
1			Credit Water Metering	1

24	6	3	Energy and Atmosphere	33
Y			Prereq Fundamental Commissioning and Verification	Required
Y			Prereq Minimum Energy Performance	Required
Y			Prereq Building-Level Energy Metering	Required
Y			Prereq Fundamental Refrigerant Management	Required
6			Credit Enhanced Commissioning	6
18			Credit Optimize Energy Performance	18
1			Credit Advanced Energy Metering	1
2			Credit Demand Response	2
		3	Credit Renewable Energy Production	3
1			Credit Enhanced Refrigerant Management	1
2			Credit Green Power and Carbon Offsets	2

13	0	0	Materials and Resources	13
Y			Prereq Storage and Collection of Recyclables	Required
Y			Prereq Construction and Demolition Waste Management Planning	Required
5			Credit Building Life-Cycle Impact Reduction	5
2			Credit Building Product Disclosure and Optimization - Environmental Product Declarations	2
2			Credit Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
2			Credit Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit Construction and Demolition Waste Management	2

15	0	0	Indoor Environmental Quality	15
Y			Prereq Minimum Indoor Air Quality Performance	Required
Y			Prereq Environmental Tobacco Smoke Control	Required
2			Credit Enhanced Indoor Air Quality Strategies	2
3			Credit Low-Emitting Materials	3
1			Credit Construction Indoor Air Quality Management Plan	1
2			Credit Indoor Air Quality Assessment	2
1			Credit Thermal Comfort	1
2			Credit Interior Lighting	2
3			Credit Daylight	3
1			Credit Quality Views	1

1	5	0	Innovation	6
5			Credit Innovation	5
1			Credit LEED Accredited Professional	1

0	4	0	Regional Priority	4
1			Credit Regional Priority: Specific Credit	1
1			Credit Regional Priority: Specific Credit	1
1			Credit Regional Priority: Specific Credit	1
1			Credit Regional Priority: Specific Credit	1

67 31 13 TOTALS Possible Points: **110**
Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

10. LEED

- a. The Elkhorn Promenade project will be certified LEED v4 for Neighborhood Development. Specifically the anchor building of brewery, grocery and restaurant will be certified LEED Building Design and Construction Retail. LEED was chosen as the sustainable marker because of its direct ties to the USGBC and its respected stance in the real estate community. Often funding sources require LEED certifications, and tenants have come to recognize it as high quality green building.
- b. The scorecard above shows the points acquired for the anchor building. A total of 67 points mean the project will be certified LEED Gold. However, with the additional 31 points that have yet to be verified, the project could easily acquire LEED Platinum. The required credits to certify for LEED v4 BD+C Retail include Construction Activity Pollution Prevention, Outdoor & Indoor Water Use Reduction, Building-Level Water Metering, Minimum Energy Performance, Building-Level Energy Metering, Fundamental Refrigerant Management, Storage and Collection of Recyclables, Construction and Demolition Waste Management Planning, Indoor Air Quality Performance, and Environmental Tobacco Smoke Control.



VIEW 5: The Brewery

11. Storm Water Management


















- a. The State of Maryland has adopted new storm water management regulations and Howard County has also begun requiring all new development to adhere to sustainable storm water management techniques. The idea is to protect the environment by treating storm water runoff from the buildings on site. Each new development larger than 5,000 square feet is required to submit storm water management measures to be approved from the county as part of a separate approval process. The storm water management practices required included storm water















management ponds, wetlands, infiltration, filtering systems and open channel systems.

- b. The minimum control planning techniques required are as follows:
 - i. Preserving and protecting natural resources
 - ii. Conserving natural drainage patterns
 - iii. Minimizing impervious area
 - iv. Reducing runoff volume
 - v. Maintain 100 % of the annual predevelopment groundwater recharge volume
 - vi. Recharge volume
 - vii. Using green roofs, permeable pavement, reinforced turf, and other alternative surfaces;
 - viii. Limiting soil disturbance, mass grading, and compaction
 - ix. Clustering development
- c. The minimum site design techniques required are as follows:
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 - ii. Sheetflow to conservation areas;
 - iii. Rainwater harvesting;
 - iv. Submerged gravel wetlands via
 - v. Landscape infiltration;
 - vi. Infiltration berms;
 - vii. Dry wells;
 - viii. Micro-bioretenment;
 - ix. Rain gardens;

- x. Swales
- xi. Enhanced filters; and
- xii. Any practices approved by the administration.

d. Examples of storm water techniques are given in the charts below:

GSI Tool		How it Works	Benefits
Bioretention		 SOAKS IN  SLOWS  CLEANS	<ul style="list-style-type: none"> • Can manage large amounts of runoff • Can be designed to calm traffic • Adds beauty, habitat, and green space • Protects against future flooding risks due to climate change • Can be used for Green Factor requirements
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Depaving	 <small>Photo Courtesy of Sustainable Seattle</small>	  <p>SLOWS SOAKS IN</p>	<ul style="list-style-type: none"> • Frees up underutilized paved space for trees, plantings, and other uses, including GSI • Allows stormwater to soak into the ground where it falls instead of picking up and carrying pollutants into creeks and waterways • Can restore habitats for birds, insects, and other wildlife
Tree Canopy		  <p>SLOWS EVAPORATES</p>	<ul style="list-style-type: none"> • Tree planting and care is easy and fun • Mature trees improves air quality • Trees offer cool shade in summer and protect against harsh wind in winter • Adds beauty and green space to urban areas
Compost & Mulch		  <p>SLOWS SOAKS IN</p>	<ul style="list-style-type: none"> • Mulching is easy • Amending soil with compost helps rain soak in and builds healthier landscapes • Saves money by reducing need for irrigation, fertilizers and pesticides

- e. The storm water management design process is separate than the aforementioned zoning process.
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12. Operations

- a. The Elkhorn Promenade will operate like a lively mixed used neighborhood center. Retail loading will take place in the back of the buildings, shielded by parking and trees. The kayak shop and ice stand are not large enough to command extremely large deliveries. The community center and teen center will most likely be used most in the afternoon. The retail would be active sporadically throughout the weekdays and intensely during the weekend. The restaurants will serve quick breakfast, lunch fare, dinner and late night. The multifamily will exist on the quieter side of the complex, near the Interfaith center and the 55+ community.



VIEW 6: Lake Elkhorn

VI. FINANCIALS

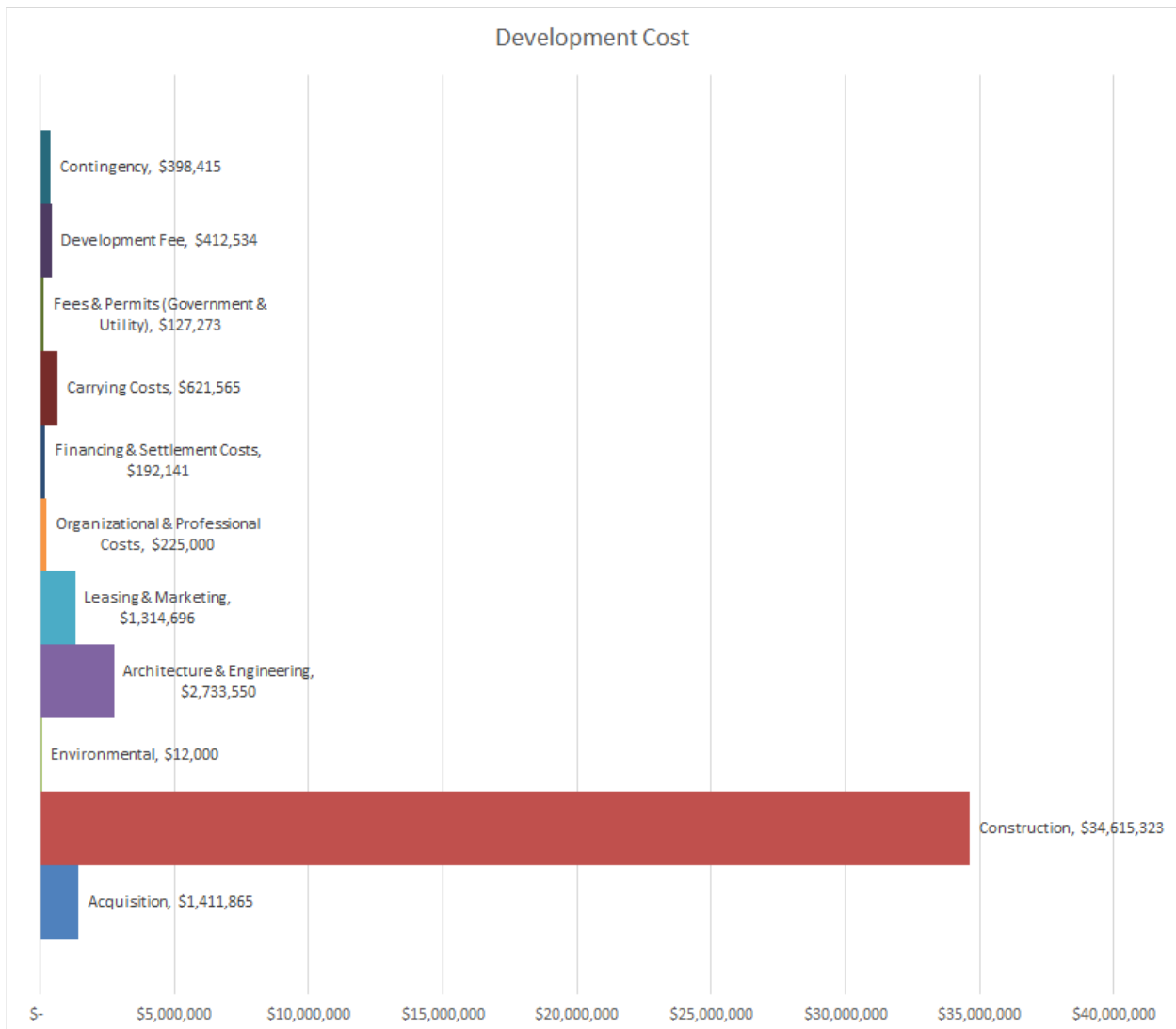
1. Source of Funds

- a. Per the table below, the sources for the Elkhorn Promenade total \$42,064,363. These simply includes split equity between the developer and the sponsor, totally \$5,258,045 or of 25% of the total sources. The remaining 75% is the construction loan totaling \$31,548,272. This capital stack does not include deferred development fee. The developer is confident several lending sources will believe in the Elkhorn Promenade Project and be willing to loan the total construction loan.
- b. The finance assumptions for this project include construction loan amortize over for 30 years at a rate of 2.7%. The term will be for 7 years. The permanent loan will total \$17,400,000, be amortized over 30 years at a rate of 4.56%. The term is 10 years. It is assumed the cap rate will be 6%. Over the ten year period, the retail commissions are expected to total \$994,897. The residential commission during the lease up period are expected to be \$407,200.

Sources of Funds	Budget	% of Total
Equity		
Equity - Developer	\$ 5,258,045	12.50%
Equity - Investor	\$ 5,258,045	12.50%
Construction Loan	\$ 31,548,272	75.00%
Total Sources	\$ 42,064,363	100.00%
Uses of Funds	Budget	% of Total
Acquisition	\$ 1,411,865	3.3564%
Construction	\$ 34,615,323	82.29%
Environmental	\$ 12,000	0.03%
Architecture & Engineering	\$ 2,733,550	6.50%
Leasing & Marketing	\$ 1,314,696	3.13%
Organizational & Professional Costs	\$ 225,000	0.53%
Financing & Settlement Costs	\$ 192,141	0.46%
Carrying Costs	\$ 621,565	1.48%
Fees & Permits (Government & Utility)	\$ 127,273	0.30%
Development Fee	\$ 412,534	0.98%
Contingency	\$ 398,415	0.95%
Total Uses	\$ 42,064,363	100.00%

2. Use of Funds

- a. Per the table below, the uses for the Elkhorn Promenade also total \$42,064,363. Most of the funds are being used for the construction of the project, followed by design and then marketing. The developer fee is less than 1%, as is the contingency. The lowest cost associated with the uses of funds are the acquisition, environmental work, fee & permits, and financing & settlement costs.



	Development Period		Operations			10 Year Total
	Dev./Const.	Construction	Lease Up	Stabilization		
	Year 1	Year 2	Year 1	Year 2	Year 10	
Gross Potential Income			4,195,375	4,236,197	5,042,400	45,855,658
Effective Gross Income			3,188,113	4,110,345	4,895,011	43,621,049
Total Operating Expenses			(948,564)	(758,548)	(1,141,696)	(10,183,248)
Net Operating Income			2,239,549	3,351,797	3,753,315	33,437,800
Net Income less Debt Service			1,387,746	5,157,586	24,583,681	39,829,663
Debt Service Coverage Ratio			2.63	1.52	1.71	1.68
Cash Flow Including Residual	(10,516,091)		1,387,746	5,157,586	24,544,112	39,829,663
Cash on Cash			13.20%	49.04%	233.40%	
IRR - 10 Year			22.3%			
Multiple			3.79			

3. Calculation of returns

- a. Per the table below, the IRR in year 10 is expected to be 22.3%. The cash on cash in year 1 is 13.2%. The cash flow for Elkhorn Promenade is positive in year 1. The total ten year cash flow for the project is \$39,829,663. In the year of the sale, year 10, the cap rate is 7.00%. The Net Operating Income is \$3,753,315. The value for the property is \$53,618,790. The rental per square foot per year is \$153.16 for the entire project. The total cost per square foot is \$1,345.69.

Key Financial Returns		Year 10 Sale	
Value	\$ 47,882,812	NOI	\$ 3,753,315
LTV	75%	CAP Rate	7.0%
Loan Amnt.	\$ 35,912,109	Value	\$ 53,618,790
Return on Cost/Investment	7.00%	YR Loan Balance	\$ (30,053,309)
Return on Cash	13.20%	Principal & Interst	\$ (2,198,927)
Leverage IRR	22.29%	Closing Cost	\$ (536,188)
Equity Multiplier	3.79	Net Proceeds	\$ 24,583,681

4. Exit Strategy

- a. The project will be built in phases. Phase 1 includes the three buildings modeled in this feasibility report. The cos calculated in this proforma allow for the demolition of the three buildings in Phase 1, as well as the rechanneling of the canal between Lake Elkhorn and the storm water management lagoon to the north. It is intended that the property will be held for at least ten years, in hopes that the subsequent phases will have taken place. By year 10 it is intended that the project will be more complete and therefore the value, sale price, and cap rate will rise. If the other phases have not commenced substantially, then the proceeds from the can be used to continue the redevelopment.

Operating Expenses (per unit or psf)	
Retail	
OpEX - Annual Escalator	2.75%
OpEx Per SqFt	\$7.25
Property Taxes - Howard County	1.190%
Property Taxes - Maryland - \$0.112 per \$100 of value	0.112%
Residential/Parking	
Op Ex Allowance per Unit (excluding RE Tax)	\$ 5,207
# of Units	142
Annual Op Ex (Stabilized Year)	\$ 739,367
Annual Property Tax Bill	\$ 205,794
# of Units	142
Property Taxes per Unit	\$ 1,449
Total Op Ex + RE Taxes Per Unit	\$ 6,656
Escalation - Expenses	
Retail	2.50%
Parking	2.50%
Residential & Parking	2.50%
Real Estate Taxes	1.00%

Residential Operating Expenses	BDG	
Marketing	\$ 450	
Payroll	\$ 1,100	
Admin	\$ 400	
Management Fee (Based on Revenue)	\$ 453	4%
Asset Management Fee (Based on Revenue)	\$ 453	4%
Repairs and Maint	\$ 1,100	
Utilities	\$ 1,000	
Insurance	\$ 250	
Total Operating Expenses / unit	\$ 5,207	

Retail Operating Expenses		
CAM Utilities	\$1.25	
Waste Removal	\$0.05	
HVAC	\$0.25	
Elevator	\$0.25	
R&M	\$0.20	
Parking	\$0.10	
Grounds	\$0.05	
Security & Communications	\$0.50	
Housekeeping	\$1.25	
Extermination	\$0.05	
Payroll	\$0.50	
G&A	\$0.40	
Management Fees	\$1.00	
Insurance	\$0.10	
Direct Billed Utilities	\$1.30	
Total Operating Expenses / sqft	\$7.25	
Total Reimbursed Operating Expenses / sqft	\$7.03	97%

VII. CONSTRUCTION MANAGEMENT & SCHEDULING

1. Construction contract

- a. The construction contract for Elkhorn Promenade will be a Guaranteed Maximum Price. The GC that does the Preconstruction Services will doing the complete construction work. This will be a sole-source job, unless something in the preconstruction services becomes evident that they selected GC cannot handle. In that case a best-value procurement process will take place. The GC will be procured early so that they will be better acquainted with the project design and scope. This scope will need to be well defined before the contract is executed. I believe this feasibility study will help to define the scope of this phase of the project, including the bridge/overpass, water site work, demolition and new construction of 3 buildings.
- b. In selecting a GC I will request not only a proposal, but also a propose project schedule, references for projects & people, resumes of key personnel including the PM and superintendent, financials and especially a project narrative. This narrative will need to align closely with that of the Postmaster Square. It is important that not only do all parties involved in the project profit, but that we have the same vision for the end user.
- c. The maximum amount that will be paid is approximately \$34,615,323, which is the total cost of construction. Any cost savings or overruns will go into a contingency that will be split 75/25; 25% to the GC. Hopefully there won't be a lot of change orders that will adjust the contract amount.
- d. I will expect that the GC secures a performance bond, to insure that the work is completed and all subcontractors are paid. I expect they will have a reasonable fee

included in the GMP, based on past work in Howard County and having dealt with large amounts of demolition and water before.

- e. I will expect that the GC has experience complexly such large scale projects, including those with Multi-family, retail and civil work. These projects will need to have been the same construction style or low rise stick. Aside from the bonding capacity I hope that company has some sort of a philanthropic nature. This is to say that they don't complete LEED certified buildings just for the reputation of doing so. But instead they are committed to construction building and spaces that enable healthy and sustainable lifestyles.

2. Construction Cost

- a. Per the table below, the total construction cost for Elkhorn Promenade is \$34,615,323. This includes 435 parking spaces at 10,000 a space, \$900,000 is site work, and \$900,000 in demolition. The residential and retail units will be constructed at \$110 and \$120 per square foot respectively. The FFE for all buildings will be \$200,000. To secure LEED Gold \$692,306. There will also be an additional \$12,000 paid to complete the Phase 1 environmental report.

CONSTRUCTION				
Preconstruction Services				
		LS		\$ -
		LS		\$ -
		LS		\$ -
Site Work (Outside of GMP)				
Surface Parking	437	Space	\$ 10,000	\$ 4,371,370
Right of Way Work	1	Allowance	\$ -	\$ -
Tree Trimming	1	Allowance	\$ -	\$ -
				\$ 4,371,370
Base Building				
Sitework	1	LS	\$ 900,000	\$ 900,000
Additional Demo	1	LS	\$ 900,000	\$ 900,000
	-	psf	\$ -	\$ -
Residential	163,250	psf	\$ 110	\$ 17,957,500
Inflation	\$ 19,757,500	%	0.0%	\$ -
	19,920,752.00			\$ 19,757,500
Tenant Improvements				
			\$ -	\$ -
Retail	74,182		\$ 120	\$ 8,901,840
				\$ 8,901,840
FF&E (For Common Areas and Site)				
	1.00	Allowance	\$ 200,000	\$ 200,000
LEED Premium - Core & Shell- GMP				
LEED Premium - Silver		% of GMP	1.00%	
LEED Premium - Gold	\$ 34,615,323	% of GMP	2.00%	\$ 692,306
LEED Premium - Platinum		% of GMP	3.00%	\$ -
				\$ 692,306
LEED Premium - TI				
LEED Premium - Silver	-	% of GMP	1.00%	
LEED Premium - Gold	\$ 34,615,323	% of GMP	2.00%	\$ 692,306
LEED Premium - Platinum		% of GMP	3.00%	\$ -
				\$ 692,306
Subtotal: Construction				\$ 34,615,323

3. Construction Schedule

- a. Per the schedule below, shown in terms of 5 day work weeks, construction will not begin until the Notice to Proceed is issued. It's important to note that all three buildings will be built up simultaneously. The site work to connect the storm water management pond to Lake Elkhorn will take place simultaneously as well. This also comes with the construction of the widened overpass and bridge of Cradle rock Way. I expect to work with the GC's Project Management team along with Architect. This team will be responsible or Change Orders RFIs, and CCDS. The superintendent and

team will be responsible for the subcontractor, maintain project schedule, materials and job site safeness.

Activity	1	2	3	4	5	7	8	16	17	18
Notice to Proceed										
Drive Piles										
Building Excavation										
Footings										
Slab on Grade										
Below Grade Supported Slabs										
Building Slabs										
Roof Slab										
Office Skin										
Roofing										
Mechanical and Electrical										
Building Finishes										
Substainal Complete										

Activity	19	20	21	22	23	24	25	26	27	28
Notice to Proceed										
Drive Piles										
Building Excavation										
Footings										
Slab on Grade										
Below Grade Supported Slabs										
Building Slabs										
Roof Slab										
Office Skin										
Roofing										
Mechanical and Electrical										
Building Finishes										
Substainal Complete										

Activity	29	30	31	32	33	34	35	36	37	38
Notice to Proceed										
Drive Piles										
Building Excavation										
Footings										
Slab on Grade										
Below Grade Supported Slabs										
Building Slabs										
Roof Slab										
Office Skin										
Roofing										
Mechanical and Electrical										
Building Finishes										
Substainal Complete										

Activity	39	40	41	42	43	44	45	46	47	48
Notice to Proceed										
Drive Piles										
Building Excavation										
Footings										
Slab on Grade										
Below Grade Supported Slabs										
Building Slabs										
Roof Slab										
Office Skin										
Roofing										
Mechanical and Electrical										
Building Finishes										
Substainal Complete										

Activity	49	50	51	52	53	54	55	56	57	58
Notice to Proceed										
Drive Piles										
Building Excavation										
Footings										
Slab on Grade										
Below Grade Supported Slabs										
Building Slabs										
Roof Slab										
Office Skin										
Roofing										
Mechanical and Electrical										
Building Finishes										
Substainal Complete										

Activity	59	60	61	62
Notice to Proceed				
Drive Piles				
Building Excavation				
Footings				
Slab on Grade				
Below Grade Supported Slabs				
Building Slabs				
Roof Slab				
Office Skin				
Roofing				
Mechanical and Electrical				
Building Finishes				
Substainal Complete				

4. Project Schedule

- a. Per the table below, the Elkhorn Promenade project will take 33 months, finishing in September 2018. The feasibility and preconstruction services began in January 2016. The acquisition and finance will not take more than a month each. A good deal of Schematic Design has been completed and Design Development should not take longer than normal. The construction document will be completed with the review

and assistance of the GC. The construction contract scheduled activity will give the GC time to align subcontractors. The actual building of the buildings and site will take no more than a year.

Task Name	Start	Finish	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	
Project Development	Jan-16	May-16											
Acquisition	Jun-16	Jun-16											
Finance	Jul-16	Jul-16											
Schematic Design	Aug-16	Dec-16											
Design Development	Dec-16	Apr-17											
Construction Documents	Apr-17	Jun-17											
Construction Contract	Jun-17	Jul-17											
Construction Notice to Proceed	Jul-17	Aug-17											
Construction Project Complete	Oct-17	Oct-18											

Task Name	Start	Finish	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17
Project Development	Jan-16	May-16										
Acquisition	Jun-16	Jun-16										
Finance	Jul-16	Jul-16										
Schematic Design	Aug-16	Dec-16										
Design Development	Dec-16	Apr-17										
Construction Documents	Apr-17	Jun-17										
Construction Contract	Jun-17	Jul-17										
Construction Notice to Proceed	Jul-17	Aug-17										
Construction Project Complete	Oct-17	Oct-18										

Task Name	Start	Finish	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18
Project Development	Jan-16	May-16										
Acquisition	Jun-16	Jun-16										
Finance	Jul-16	Jul-16										
Schematic Design	Aug-16	Dec-16										
Design Development	Dec-16	Apr-17										
Construction Documents	Apr-17	Jun-17										
Construction Contract	Jun-17	Jul-17										
Construction Notice to Proceed	Jul-17	Aug-17										
Construction Project Complete	Oct-17	Oct-18										

Task Name	Start	Finish	Jul-18	Aug-18	Sep-18
Project Development	Jan-16	May-16			
Acquisition	Jun-16	Jun-16			
Finance	Jul-16	Jul-16			
Schematic Design	Aug-16	Dec-16			
Design Development	Dec-16	Apr-17			
Construction Documents	Apr-17	Jun-17			
Construction Contract	Jun-17	Jul-17			
Construction Notice to Proceed	Jul-17	Aug-17			
Construction Project Complete	Oct-17	Oct-18			

VIII. MARKETING & MANAGEMENT

5. Marketing Options

- a. In order to lease-up the Elkhorn Promenade apartments the property will need to be marketed to young professionals, most likely without children, or mature adults with adult children. Though there is a large population of middle and elementary aged children, this mixed used destination is not family focused. The mean household income of Owen Brown is \$96,894. While only 29% is renter occupied, most households are of a married couple without children. An additional 35% of the households are made up of non-family members. This means that almost a third of the local market are renting with roommates. More units will be welcome and especially the lifestyle being offered.
- b. In order to market this lifestyle of localized specialities encouraging residents to “go next door, not downtown”, marketing will be done in non-traditional locations. There will be full two page spreads in lifestyle magazines like Vogue, Conde Nast Traveler and HGTV magazine. These spreads will appear as advertisements but will read like short bio within the magazines for the subscribers to in the Columbia and but also D.C. and Baltimore market area. Additional magazines to place lifestyle advertisements include the Food Network Magazine, the Owen Brown Association newsletter, and the circulars that have coupons for retail locations. The idea is to sell the new Elkhorn Promenade to the current residents, who will go on to tell their friends. Those friends may want to move in, or know someone who will.
- c. In order to market the lifestyle there will also be several iterations of moving pictures created. These moving picture will be activated on mobile device and laptop computers that fall within a specific radius of Columbia, D.C. and Baltimore. These

moving pictures will take the form of .gifs and place on the popular websites Pinterest and Instagram. The .gif will be activated once the user scrolls past it. The moving picture will also take the form a movie trailer to be shown not only in actual movies, but on popular website like youtube.com and facebook.com. A movie will display not only renderings, but “a day in life” with d-list actors and catchy lingo. The moving picture can also be shown at the local stadiums, focusing specifically on the retail. The product placement should be enticing such that people want to google.com where to find the local items and come upon Postmaster Square. Such advertisements can be played over the Pandora radio website & application, highlighting the conversation and agenda of “a day in the life”.

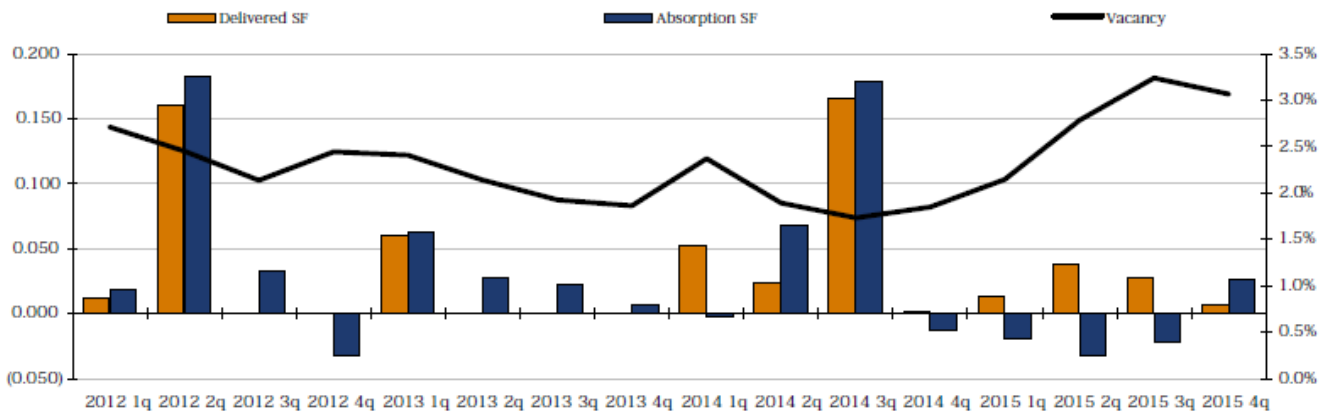
- d. In order to market the lifestyle a blog will be set up linking all the leased retailers to a homepage and detailing a blog. If the public response is positive the blog can be open for commentary. The blog will also have e-mail blasts. The email will be made of corresponding content and links that keep the reader excited about the grand opening. This content will include things like recipes with ingredients found at the grocer, or pairings to go with the craft beer, or outfit ideas for date nights from the local boutique.
- e. The grand opening will be a celebration of the revitalized village center. Lake Elkhorn will be connected to the stormwater management lake, but mostly the site will be bare. Large 1-story images will be printed on canvas or tarp made of the rendering. So while the grand opening happens at the 3 buildings in this phase of the project, from along the water people will be able to look toward the 55+ apartments and see large images of what will soon be developed.

6. Management

- a. The management of the Elkhorn Promenade multifamily will be done by an internal department of the developing company. This additional income will definitely add to the returns. Furthermore, local members of the community will be hired as part of the staff. This will add to the idea that Elkhorn Promenade is a local destination. If no locals are available with minimal experience or qualifications then a training program will be set up. There will be front desk security, campus security, leasing agents, and also property management.
- b. There will be a 3rd party hired to manage the retail. This company will be brought in as soon as the renderings and construction documents are complete and will be maintained until 95% lease-up. This company will receive the standard pay and will be instructed to first find local retailers before considering big box corporations. A bonus will be paid to any agent who signs the most small business, start-ups and minority owned companies. This company will facilitate the aforementioned realtors' events.
- c. Lease-Up- Due to a healthy absorption rate, it is expected that it will take no more than a year to reach 95% occupancy. If the economy continues to stabilize and certainly not decline, the absorption rate should remain steady. It is expected that the one bedroom dens will lease-up the quickly, followed by the studio and then two bedroom. The one bedroom absorption should be steady as the most popular option. The young childless couples, downsizers and roommates will be very excited to join the lifestyle provided by the localized live, work, play available at the Elkhorn Promenade.

d. Should the lease-up not be as swift as predicted, certain concessions will be available.

One month free rent will be considered a last option. Instead, 6 month discounted amenity fee and vouchers to the local restaurants will be offered. The application fee will be waved, or the parking fee will be waved for 6 months.



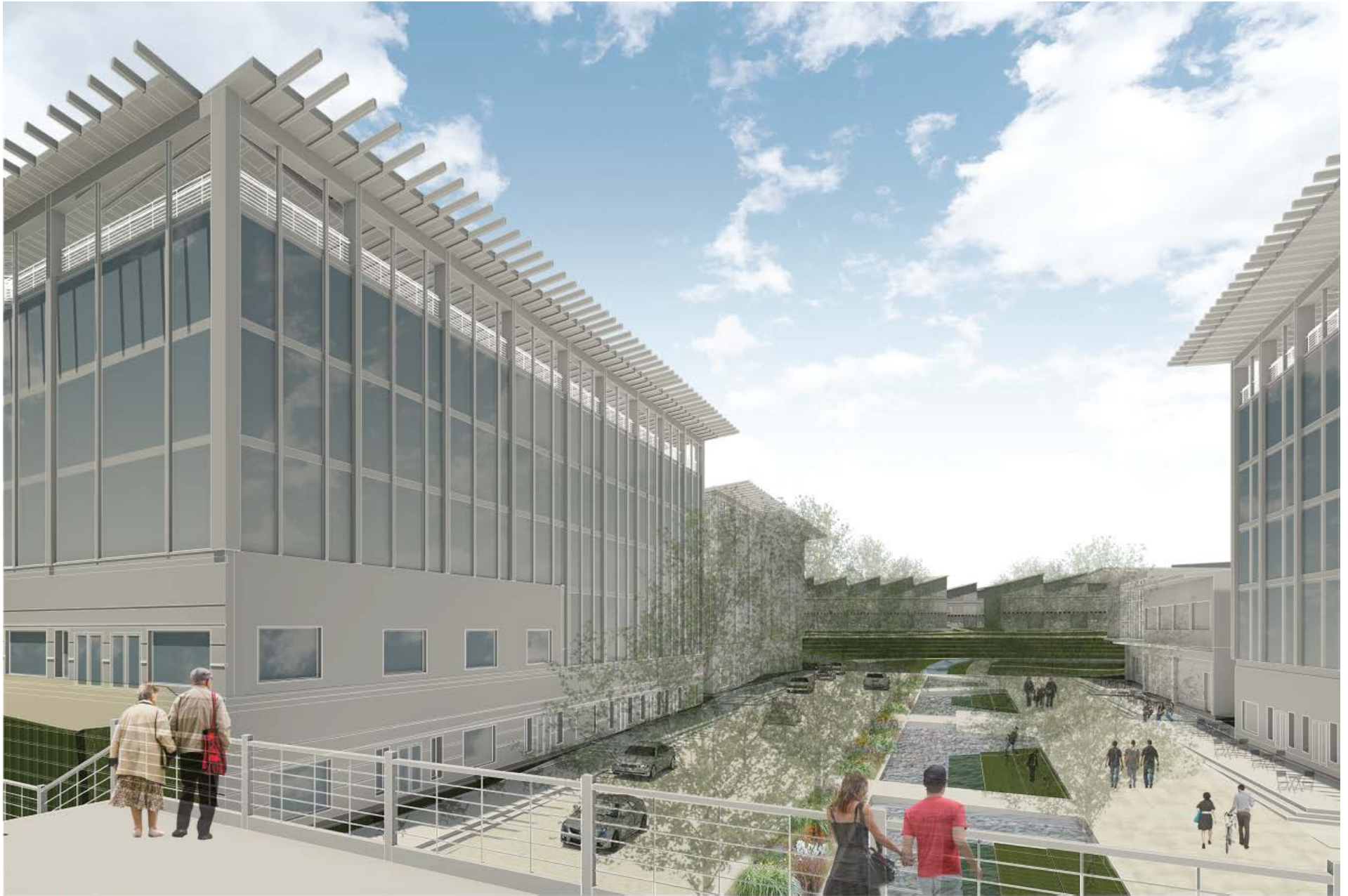
Source: CoStar Property®

IX. CONCLUSION

Elkhorn Promenade will revitalize the Owen Brown Village Center of Columbia, MD into a competitively priced but locally focused mixed use destination. In addition to new LEED Certified multi-family units, the town center will include new LEED Certified local brewery, small grocery, farm to table restaurant, artisan work shop space, sustainable convenience retailers, kayak shop, and community center.

The project will be mutually beneficial to investors, lenders, patrons and residents. There is a projected year 10 NOI of \$33,437,800, a debt service coverage ratio average 1.68, and a total cash flow of \$39,829,663. The net proceeds from the sale is year 10 will be \$24,583,681. The 10 IRR is projected to be 22.3%, with a cash-on-cash return of 13.2%. The LTV is 75%, and the exit cap rate is 7%.

Elkhorn Promenade looks to invigorate the active lakeside lifestyle by extending Lake Elkhorn into a river walk. Residents will want to walk, bike or take a short drive to this tailored destination, rather than leave the village. Why go downtown? Go next door!



VIEW 3: The River Walk