

AGENDA

ECONOMIC DEVELOPMENT AUTHORITY

| THURSDAY, JULY 12 |

| 8:00 AM |

COUNTY ADMINISTRATION BUILDING @ FIRST FLOOR CONFERENCE ROOM

107 N. KENT STREET WINCHESTER, VA

1. Call to Order
2. Approval of Minutes 10th | May || ACTION
3. Treasurer's Report || ACTION
4. Target Business Update || ACTION
 - *Review and endorsement of targeted business. Principal marketing point with State, Corporate Real Estate Individuals and Site Selectors*
5. Virginia Business Ready Sites Program Results || ACTION
 - *Review of results from the site assessments of 4 large business sites in Frederick County using the guidelines of the Virginia Business Ready Sites Program with a discussion of next steps.*
6. Such other business as may come before this Authority

MINUTES
ECONOMIC DEVELOPMENT AUTHORITY
| THURSDAY, MAY 10, 2018 |

A meeting of the Frederick County Economic Development Authority was held on Thursday, May 10, 2018, at 8:00A.M. in the County Administration Building, First Floor Conference Room, 107 North Kent Street, Winchester, Virginia.

PRESENT: Stan Crockett, Robert Claytor, John Riley, Doug Rinker, Gary Lofton, Bryan Fairbanks, and Heather McKay

STAFF: Patrick Barker, Sally Michaels, and Donna McIlwee, Frederick County Economic Development Authority, Jay Tibbs, Deputy County Administrator, and Michael Bryan, Attorney

MEETING CALLED TO ORDER: Chairman Crockett called the meeting to order at 8:00 a.m.

APPROVAL OF MINUTES

The minutes from the April 5, 2018, meeting were presented.

Upon a motion duly made by Mr. Rinker and seconded by Mr. Riley, the minutes from the April 5, 2018 meeting were approved.

J. Stanley Crockett	Aye
Robert Claytor	Aye
Bryan Fairbanks	Aye
Gary Lofton	Aye
Heather McKay	Aye
John Riley	Aye
Doug Rinker	Aye

TREASURER'S REPORT

Mr. Barker submitted the following report:

Checking Account - Bank of Clarke County as of April 30, 2018 - \$110,191.67.
Savings Account - Scott & Stringfellow as of April 30, 2018 - \$1,043,124.73.

The Treasurer's Report was approved as submitted by the following recorded vote:

J. Stanley Crockett	Aye
Robert Claytor	Aye
Bryan Fairbanks	Aye
Gary Lofton	Aye
Heather McKay	Aye
John Riley	Aye
Doug Rinker	Aye

WORKFORCE PIPELINE DEVELOPMENT

Dr. David Sovine, Superintendent, Frederick County Public Schools, reviewed workforce development successes of the school system, which included their 6-year partnership with Valley Health System and being a recipient of the Governor's Innovation Award. He stated their goal is to create partnerships to benefit our community.

Mary Beth Echeverria, Supervisor of Career and Technical Education, reviewed slides of the career and technical education opportunities available to Frederick County students.

Missy McDonald, Work-Based Learning Coordinator, spoke about what has been accomplished through work-based learning in County schools, which includes job shadowing, service learning, mentorships and cooperative education, and what future plans entail.

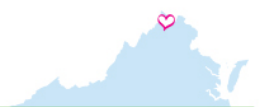
Mr. Crockett suggested they may want to get in front of local service clubs so they will know about cooperative education and youth programs.

Dr. Sovine stated they welcome any assistance trying to change the paradigm and are working with students and parents to make them aware of careers in the community not requiring a 2- or 4-year college degree.

Mr. Lofton inquired if the school's program has a liaison who polls businesses in the County to determine what kind of skills and education are needed to fill positions. Dr. Sovine responded they have representatives from different clusters who give feedback.

Mr. Fairbanks asked what percentage of students at the junior/senior level in Frederick County are involved in work-based learning. Dr. Sovine responded the goal is to get all students involved in CTE classes.

Mr. Riley suggested the school system should tout the high graduation rate of students involved in CTE as a success story.



Mr. Lofton asked how the schools reach parents. Dr. Sovine stated the presentation done today for the EDA Board was also presented to a group of parents this year and they hope to do the same next year.

WIDGET CUP TRADEMARKING

Mr. Barker explained that the Board had approved the expenditure of up to \$5000 to obtain a trademark license and copyright services for the Widget Cup at its September 2017 meeting. An amendment to that action is needed to also permit expenditures related to consulting fees.

On motion of Mr. Rinker, seconded by Ms. McKay, the Board voted to approve the expenditure of up to \$5000 for filing fees and professional service fees related to the Widget Cup trademarking.

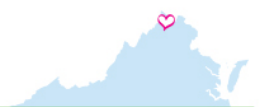
J. Stanley Crockett	Aye
Robert Claytor	Aye
Bryan Fairbanks	Aye
Gary Lofton	Aye
Heather McKay	Aye
John Riley	Aye
Doug Rinker	Aye

AMENDMENT TO THE VILLAGE OF ORCHARD RIDGE BOND DOCUMENTS

Mr. Bryan, legal counsel for the EDA Board, explained that this entity has negotiated a lower interest rate (6.5%) for the bonds issued in 2011 and have requested a revision to the bond documents to reflect the lower interest rate.

On motion of Mr. Rinker, seconded by Mr. Riley, the Board voted to approve a supplement to the bond documents to set the interest rate at 6.5% through the maturity date of July 1, 2046.

J. Stanley Crockett	Aye
Robert Claytor	Aye
Bryan Fairbanks	Aye
Gary Lofton	Aye
Heather McKay	Aye
John Riley	Aye
Doug Rinker	Aye



SUCH OTHER BUSINESS AS MAY COME BEFORE THIS AUTHORITY

Mr. Lofton distributed copies of the Ordinance creating the Industrial Development Authority of the County of Frederick, Virginia, in 1967; the Ordinance in 2014 amending a name change to the Economic Development Authority of the County of Frederick, Virginia; Title 15.2-4905, "Powers of Authority" from the Code of Virginia. He stated there are some items in these documents he would like to see the EDA do and asked Board members to review the documents.

ADJOURN

There being no further business to come before this Authority, the meeting was adjourned. (8:55 A.M.)

Stan Crockett
Chairman

Kris Tierney
Secretary



DATE: July 5, 2018

TO: Board of Directors,
Frederick County Economic Development Authority

FROM: Patrick Barker, CECD
Executive Director

CC: Jay Tibbs
Deputy County Administrator

RE: Targeted Business Update

For over a decade, Frederick County has employed a target industry analysis to analytically identify the County's best fits relative to traded-sector industries – those industries that would most benefit from Frederick County's assets and be willing to expand and/or relocate to the area – and those industries that bring value to Frederick County in the form of investment, jobs, payroll and local purchasing.

This analysis serves several important roles in Frederick County's economic development efforts. First, the County's economic development strategy finds its center with targeted industries selected. Site selectors, corporate real estate leaders and representatives from the Virginia Economic Development Partnership expect communities to provide a list of targeted businesses to show a strategic direction and a proactive nature to business. Additionally, it helps community partners understand where economic development efforts will be targeted.

A brief overview of the methodology is as follows: local industry clusters are identified, along with Frederick County's average wage, then compared to the State's high growth sectors and the region's labor availability to arrive at the selected targeted industries. (Full details of methodology used to identify the targeted industries are included.)

This year's analysis suggests retaining the overall industry targets from last year with minor additions of specific targeted sectors. For example, Bioscience is recommended for inclusion within Advanced Manufacturing to accompany In-Vitro Diagnostic Substance Manufacturing.

Staff is seeking authority approval of the 2018-2019 Targeted Industry List for Frederick County.

Target Industry Identification Process

Frederick County EDA

The following process was utilized to identify target business for Frederick County.

Step 1 || Identify average annual wages for employees working in Frederick County

Step 2 || Cluster Map (LQ) and Large Employers in Frederick County


Step 3 || Discover what industry sectors in Virginia have high growth and average wages at or above Frederick County

Step 4 || Review purchasing leakage from Frederick County for current basic employers

Step 5 || Reviewed detail level data from resulting sectors via Step 3 and 4 who were identified as high growth with wages at or above Frederick County average

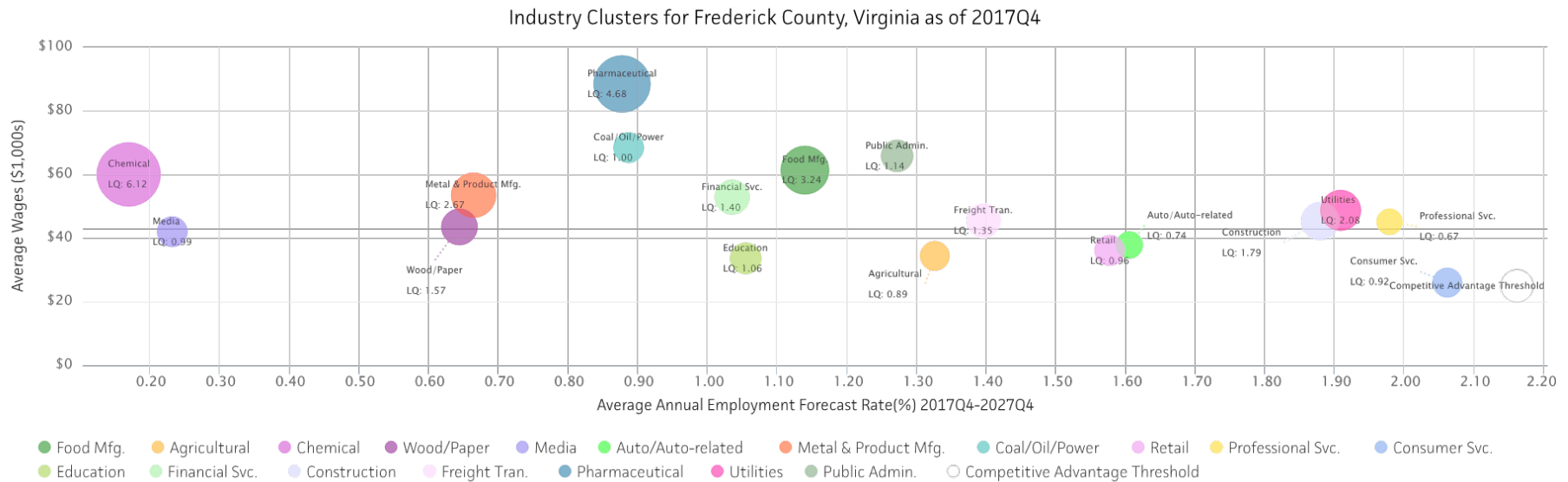
Step 6 || Conducted labor availability test for expansion of average size new business location for Virginia in the past 3 years to ensure talent exists to meet industry demand

Step 1 || Identify average annual wages for employees working in Frederick County

NAICS	Industry	Current			5-Year History			1-Year Forecast				
		Four Quarters Ending with 2017q4			Total Change	Empl Last 'n' Years	Avg Ann % Chg in Empl	Separations (Approximate)			Growth	
		Empl	Avg Ann Wages	LQ				Total New Demand	Exits	Transfers	Empl	Avg Ann Rate
	Total - All Industries	33,996	\$42,898	1.00	6,234		4.1%	4,268	1,600	2,132	536	1.6%

Result || \$42,898

Step 2 || Cluster Map (LQ) and Large Employers in Frederick County



Source: JobsEQ®, Data as of 2017Q4

Result || Top Industry Clusters in Frederick County

1. Pharmaceuticals
2. Food Manufacturing
3. Metal & Product Manufacturing
4. Utilities
5. Wood & Paper Manufacturing
6. Freight Transportation
7. Construction
8. Financial Services

Step 3 || Discover what industry sectors in Virginia have high growth and average wages at or above Frederick County

- Completed at 3-digit NAICS level
- Focus on basic employers
- Filter some based on known assets
- High growth demand (total approx replacement demand + total growth demand)

Industry Snapshot in Virginia, 2017q4												
NAICS	Industry	Current			5-Year History		10-Year Forecast					
		Four Quarters Ending with 2017q4			Total Change	Avg Ann % Chg in Empl	Separations (Approximate)			Growth		
		Empl	Avg Ann Wages	LQ			Total New Demanc	Exits	Transfer	Empl	Avg Ann Rate	
541	Professional, Scientific, and Technical Services	454,203	\$100,961	1.68	20,734	0.9%	494,563	156,487	262,368	75,708	1.6%	
611	Educational Services	364,062	\$44,225	1.08	-148	0.0%	373,351	167,318	180,156	25,876	0.7%	
621	Ambulatory Health Care Services	191,092	\$63,460	0.92	22,280	2.5%	235,850	88,464	96,016	51,369	2.4%	
238	Specialty Trade Contractors	149,612	\$49,805	1.03	9,991	1.4%	174,548	55,868	101,575	17,105	1.1%	
622	Hospitals	129,049	\$62,055	0.76	5,936	0.9%	107,133	49,198	52,241	5,693	0.4%	
522	Credit Intermediation and Related Activities	73,872	\$83,367	1.04	5,205	1.5%	79,678	28,270	45,901	5,506	0.7%	
922	Justice, Public Order, and Safety Activities	81,784	\$65,807	1.63	2,392	0.6%	75,976	31,892	43,063	1,021	0.1%	
441	Motor Vehicle and Parts Dealers	56,423	\$49,548	1.03	4,393	1.6%	71,770	26,784	40,692	4,295	0.7%	
551	Management of Companies and Enterprises	73,090	\$125,856	1.21	-3,127	-0.8%	71,655	25,119	42,615	3,922	0.5%	
423	Merchant Wholesalers, Durable Goods	59,900	\$78,165	0.74	1,293	0.4%	62,495	23,098	38,831	566	0.1%	
928	National Security and International Affairs	69,115	\$109,195	4.50	2,019	0.6%	59,032	22,740	35,475	817	0.1%	
531	Real Estate	52,044	\$57,870	0.96	3,005	1.2%	56,505	25,270	27,798	3,437	0.6%	
524	Insurance Carriers and Related Activities	52,413	\$75,368	0.80	10,731	4.7%	55,726	20,235	30,819	4,672	0.9%	
236	Construction of Buildings	51,014	\$59,546	0.99	5,133	2.1%	55,152	18,482	31,294	5,377	1.0%	
237	Heavy and Civil Engineering Construction	40,052	\$54,430	1.28	1,413	0.7%	51,734	15,591	27,972	8,172	1.9%	
811	Repair and Maintenance	40,593	\$44,055	1.00	1,638	0.8%	46,375	17,039	27,014	2,322	0.6%	
424	Merchant Wholesalers, Nondurable Goods	33,753	\$58,689	0.61	-122	-0.1%	37,754	14,224	22,847	682	0.2%	
484	Truck Transportation	33,629	\$49,332	0.78	1,684	1.0%	36,890	14,170	21,818	902	0.3%	
921	Executive, Legislative, and Other General Government Support	35,231	\$52,442	0.44	2,783	1.7%	34,076	14,609	19,043	424	0.1%	
926	Administration of Economic Programs	31,919	\$87,105	2.04	-579	-0.4%	28,565	11,792	16,609	164	0.1%	
999	Unclassified	19,144	\$46,149	2.20	14,645	33.6%	27,781	10,026	13,698	4,056	1.9%	
488	Support Activities for Transportation	22,047	\$56,043	1.04	3,320	3.3%	26,825	9,391	14,802	2,631	1.1%	
425	Wholesale Electronic Markets and Agents and Brokers	19,980	\$112,112	0.82	-1,396	-1.3%	26,293	8,389	14,096	3,808	1.8%	
711	Performing Arts, Spectator Sports, and Related Industries	15,860	\$44,260	0.71	544	0.7%	19,954	8,722	10,081	1,151	0.7%	
221	Utilities	18,539	\$88,411	0.85	102	0.1%	17,376	6,121	10,795	460	0.2%	
481	Air Transportation	13,868	\$81,654	1.05	115	0.2%	15,935	5,791	8,832	1,312	0.9%	
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	14,900	\$157,047	0.56	1,965	2.9%	15,602	4,765	9,057	1,779	1.1%	
519	Other Information Services	9,966	\$63,824	0.85	1,028	2.2%	15,136	3,775	6,954	4,408	3.7%	
562	Waste Management and Remediation Services	11,487	\$48,960	0.95	438	0.8%	14,401	4,917	8,164	1,319	1.1%	
532	Rental and Leasing Services	12,306	\$44,651	0.80	228	0.4%	14,042	5,514	8,308	220	0.2%	
518	Data Processing, Hosting, and Related Services	12,181	\$117,780	1.36	1,334	2.3%	12,920	3,742	7,360	1,818	1.4%	
924	Administration of Environmental Quality Programs	8,716	\$73,934	1.02	-115	-0.3%	7,930	3,251	4,613	66	0.1%	
925	Administration of Housing Programs, Urban Planning, and Community Development	3,682	\$54,279	1.49	-423	-2.2%	3,564	1,507	1,991	66	0.2%	

Result || Top Sectors in Virginia with High Growth and Wages above Frederick County's average

1. Professional, Scientific, And Technical Services
2. Administrative and Support Services
3. Credit Intermediation and Related Services
4. Other Information Services
5. Management of Companies and Enterprises
6. Support Activities for Transportation
7. Data Processing, Hosting and Related Activities
8. Truck Transportation

Step 4 || Review purchasing leakage from Frederick County for current basic employers

Buyer Industry: Manufacturing (31) in Frederick County, Virginia

<input type="checkbox"/>	NAICS	Supplier Industries	Purchases from US Firms	Purchases from In-Region Firms	Purchases from Out-of-Region Firms	Total Supplier Employment (In-Region)	Supplier Location Quotient (In-Region)	% In-Region Purchases
<input type="checkbox"/>	112000	Animal Production (Proprietors)	\$97,342,000	\$378,000	\$96,964,000	4	0.04	0%
<input type="checkbox"/>	112120	Dairy Cattle and Milk Production	\$82,803,000	\$0	\$82,803,000	0	0.00	0%
<input type="checkbox"/>	551114	Corporate, Subsidiary, and Regional Managing Offices	\$91,139,000	\$24,995,000	\$66,144,000	346	0.72	27%
<input type="checkbox"/>	324110	Petroleum Refineries	\$63,908,000	\$0	\$63,908,000	0	0.00	0%
<input type="checkbox"/>	425120	Wholesale Trade Agents and Brokers	\$41,155,000	\$1,788,000	\$39,367,000	45	0.23	4%
<input type="checkbox"/>	325211	Plastics Material and Resin Manufacturing	\$61,362,000	\$24,738,000	\$36,624,000	27	2.15	40%
<input type="checkbox"/>	311119	Other Animal Food Manufacturing	\$30,757,000	\$736,000	\$30,021,000	37	4.85	2%
<input type="checkbox"/>	325199	All Other Basic Organic Chemical Manufacturing	\$26,920,000	\$0	\$26,920,000	0	0.01	0%
<input type="checkbox"/>	484121	General Freight Trucking, Long-Distance, Truckload	\$33,078,000	\$7,984,000	\$25,094,000	165	1.28	24%

Results || Top Findings

- \$82 million out-of region (OORP) purchases on dairy cattle and milk production
- Estimated \$30 million out of region purchases for trucking (specialized, general, long and short distance)
- \$66 million OORP for corporate, subsidiary and regional managing offices
- \$15 million OORP Data Processing & Hosting
- Crude Petroleum, Refineries, Resin Manufacturing, and Utilities have high OORP but do not “fit” for Frederick County
- These results are for manufacturing buyers only

Step 5 || Reviewed detail level data from resulting sectors via Step 3 and 4 who were identified as high growth with wages at or above Frederick County average to discover specific targeted sectors.

Industry Snapshot of Professional, Scientific, and Technical Services in Virginia												
NAICS	Industry	Current			Total Change over the Last 5 Years	Historical			Forecast			
		Four Quarters Ending with 2017q1				Average Annual % Change in Employment 2012q1-2017q1			Over the Next 10 Years			
		Employment	Avg. Annual Wages	Location Quotient		Employment	Virginia	Virginia	USA	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth Percent
541512	Computer Systems Design Services	107,884	\$118,007	4.11	10,309	2.0%	2.0%	5.3%	21,005	26,585	2.2%	
541611	Administrative Management and General Management Consulting Services	41,684	\$108,187	2.34	5,452	2.8%	2.8%	5.9%	9,608	11,602	2.5%	
541511	Custom Computer Programming Services	41,748	\$114,053	1.73	2,764	1.4%	1.4%	4.8%	8,170	10,813	2.3%	
541330	Engineering Services	50,705	\$99,916	1.87	-5,134	-1.9%	-1.9%	1.1%	11,712	4,907	0.9%	
541614	Process, Physical Distribution, and Logistics Consulting Services	13,325	\$104,607	3.95	-2,342	-3.2%	-3.2%	3.8%	3,050	3,479	2.3%	
541690	Other Scientific and Technical Consulting Services	9,217	\$102,422	1.52	632	1.4%	1.4%	1.1%	2,125	2,567	2.5%	
541519	Other Computer Related Services	8,677	\$113,259	2.71	634	1.5%	1.5%	0.4%	1,700	2,270	2.4%	
541990	All Other Professional, Scientific, and Technical Services	14,725	\$79,740	1.40	2,725	4.2%	4.2%	2.7%	3,124	1,954	1.3%	
541613	Marketing Consulting Services	6,112	\$81,635	0.80	1,074	3.9%	3.9%	6.3%	1,406	1,667	2.4%	
541618	Other Management Consulting Services	5,862	\$115,038	2.03	187	0.7%	0.7%	1.4%	1,344	1,548	2.4%	
541712	Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)	19,098	\$111,752	1.50	-5,073	-4.6%	-4.6%	0.8%	4,414	1,465	0.7%	
541940	Veterinary Services	12,284	\$38,215	1.26	1,548	2.7%	2.7%	3.7%	2,561	1,152	0.9%	
541513	Computer Facilities Management Services	4,707	\$68,489	2.41	-71	-0.3%	-0.3%	4.7%	914	1,131	2.2%	
541620	Environmental Consulting Services	4,169	\$88,757	1.65	-178	-0.8%	-0.8%	0.7%	958	1,129	2.4%	
541612	Human Resources Consulting Services	2,784	\$94,209	1.18	85	0.6%	0.6%	0.3%	644	794	2.5%	
541211	Offices of Certified Public Accountants	20,242	\$104,400	1.58	3,103	3.4%	3.4%	3.1%	4,734	650	0.3%	
541219	Other Accounting Services	12,843	\$63,679	1.41	625	1.0%	1.0%	1.6%	3,022	579	0.4%	
541930	Translation and Interpretation Services	2,240	\$66,377	1.64	297	2.9%	2.9%	5.5%	478	334	1.4%	
541910	Marketing Research and Public Opinion Polling	2,163	\$67,784	0.74	63	0.6%	0.6%	-0.7%	460	301	1.3%	

- Reviewed 6-digit NAICS for those 3-digit sectors identified as high growth with wages at or above Frederick County average

Results || Specific Target Sectors

1. Food Manufacturing
 - Speciality manufacturing
 - Fluid milk manufacturing
 - Coffee and tea manufacturing
 - Miscellaneous foods
 - Breweries
 - Dry Pasta/Flour Mix manufacturing
2. Plastic and Rubber Manufacturing
 - Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing
 - Plastics Bottle Manufacturing
 - Miscellaneous Plastic and Rubber Manufacturing
3. Metal Manufacturing
 - Machine shops
 - Metal Can Manufacturing
 - Fabricated Structural Metal Manufacturing
4. In-Vitro Diagnostic Substance Manufacturing
5. Professional, Scientific, Technology
 - Computer system design
 - Administrative management and general management consulting services
 - Customer computer programming
 - Engineering services
 - Physical distribution and logistics consulting services
 - R&D in the physical, engineering and life sciences
6. Administration and Support Services
 - Office and administrative support services
 - Professional employer organizations
7. Credit Card Issuing
8. Other Support Activities for Road Transportation

Step 6 || Conducted labor availability test for expansion of average size new business location for Virginia in the past 3 years to ensure talent exists to meet industry demand

What-If Report for FredVA_Draw45miles, NAICS 5415 - Computer Systems Design and Related Services

<input type="checkbox"/>	SOC	Title	New Employer Demand	Empl (Place of Residence) ¹	Unempl ¹	Regional Avg Wage ²	National Avg Wage ²	Empl Extended	Unempl Extended	Potential Candidate / Opening Ratio
<input type="checkbox"/>	15-1132	Software Developers, Applications	15	1,809	34	\$99,400	\$104,300	6,028	132	123
<input type="checkbox"/>	15-1121	Computer Systems Analysts	9	1,492	31	\$85,800	\$91,600	3,597	82	169
<input type="checkbox"/>	15-1151	Computer User Support Specialists	7	1,453	65	\$53,600	\$53,100	901	39	217
<input type="checkbox"/>	15-1133	Software Developers, Systems Software	7	1,328	26	\$104,900	\$110,600	8,575	182	193
<input type="checkbox"/>	15-1131	Computer Programmers	6	639	21	\$81,700	\$85,200	2,203	49	110
<input type="checkbox"/>	11-3021	Computer and Information Systems Managers	4	940	17	\$134,800	\$145,700	3,893	85	239
<input type="checkbox"/>	15-1142	Network and Computer Systems Administrators	4	1,174	15	\$90,100	\$84,500	3,892	72	297
<input type="checkbox"/>	15-1199	Computer Occupations, All Other	3	1,369	39	\$97,200	\$88,900	9,124	230	470
<input type="checkbox"/>	11-1021	General and Operations Managers	3	5,404	92	\$112,900	\$122,100	12,952	196	1,832
<input type="checkbox"/>	41-3099	Sales Representatives, Services, All Other	3	2,269	56	\$61,700	\$63,100	n/a	n/a	775
<input type="checkbox"/>	15-1143	Computer Network Architects	2	568	5	\$96,900	\$104,200	8,220	168	287
<input type="checkbox"/>	15-1152	Computer Network Support Specialists	2	607	25	\$59,300	\$67,800	n/a	n/a	316
<input type="checkbox"/>	43-4051	Customer Service Representatives	2	6,245	268	\$33,500	\$35,200	5,925	288	3,256
<input type="checkbox"/>	13-1111	Management Analysts	2	2,746	83	\$88,300	\$91,900	5,255	138	1,415
<input type="checkbox"/>	11-9199	Managers, All Other	2	2,659	17	\$108,500	\$112,200	7,510	190	1,338
<input type="checkbox"/>	13-1161	Market Research Analysts and Marketing Specialists	2	1,183	30	\$59,400	\$70,600	2,120	48	607
<input type="checkbox"/>	43-9061	Office Clerks, General	2	6,489	285	\$31,400	\$33,000	6,412	258	3,387

- a. Labor availability tested for each of the sectors from Step 5
- b. Average size of new business location for Virginia last 3 years = 50
 - i. 100 employee operation used for analysis to be conservative

Results || Targets

Advanced Manufacturing

- *Plastics Products
- *Engineered Wood Products
- *Fabricated Metal
- *Supportive Logistic Consulting
- *Supportive Trucking Operations

Headquarters and Back Office

- *Corporate Headquarters
- *Back Office
- *Service Centers

Retail

- *Specialty Retailers
- *Casual Dining and Fast Casual Restaurants

Professional and Creative Services

- *Information and Communication Technology
- *Data Centers
- *Cyber Security
- *Engineering

Food Processing and Agribusiness

- *Specialty foods and beverages
- *Packaged Foods
- *Perishable Foods
- *Beverages and Breweries

Note || If an existing business was not on the list at the end of the study then it was added back in to show commitment to the sector

DATE: July 5, 2018

TO: Board of Directors,
Frederick County Economic Development Authority

FROM: Patrick Barker, CEcD
Executive Director

CC: Jay Tibbs
Deputy County Administrator

RE: Virginia Business Ready Sites Program Results

As discussed at April’s Joint Meeting with the Board of Supervisors, available land remains a top factor in site selections by corporations. For a community to succeed, they need ready to go sites.

In recognition of this top factor, a site assessment of four (4) business sites in Frederick County was conducted, following the guidelines of the Virginia Business Ready Sites Program. Draper Aden Associates, a licensed civil engineer firm, conducted the evaluation to determine each site’s current tier level and what additional development would needed to move each site to the next tier.

In summary, all of the studied business sites were categorized as Tier 2 and were very close to being a Tier 3 or higher, pending the completion of a variety of studies. The following table provides more details. The full report is enclosed.

Business Site	Tier	Needed to Next Tier (Tier #)	Costs for Next Tier
Graystone Business Park	2	Cultural Resources Study (4)	\$3,000
Carroll Industrial Park	2	Waters of the US delineation from the Army Corps of Engineers, geotechnical borings, cultural resources review, and endangered species review (3)	\$30,000
Artillery Business Park	2	Master Development Plan, Phase 1 Environmental (3)	\$150,000
Carbaugh Business Center	2	Phase 1 Environmental Site Assessment Report, Waters of the US survey with Army Corps of Engineers, geotechnical borings, boundary and topographic survey, cultural resources review, endangered species review, and an estimate of development costs (3)	\$120,000

Staff is the Authority’s acceptance of the report and discussion on potential ways to partner with landowners to reach the next Tier.

Virginia Business Ready Sites Program Sites Characterizations Report

Frederick County, Virginia



Frederick County
Economic Development Authority
45 E. Boscawen Street
Winchester, VA 22601
June 25, 2018

DAA Project Number:
17010133-010301



Draper Aden Associates
Engineering • Surveying • Environmental Services

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	ARTILLERY BUSINESS PARK.....	2
2.1	Current Land Use, Zoning, and Site Conditions	2
2.2	Infrastructure.....	2
2.2.1	Roads.....	2
2.2.2	Wastewater.....	3
2.2.3	Water	3
2.2.4	Electric / Gas / Telecommunications / Fiber.....	3
2.3	VBRSP Site Characterization Tier Level	4
2.4	Recommendations	4
2.4.1	Master Plan.....	4
2.4.2	Due Diligence	4
2.5	Order of Magnitude Estimates of Probable Costs.....	4
2.5.1	Due Diligence	4
2.5.2	'Pad-Ready'	5
3.0	CARROLL INDUSTRIAL PARK.....	6
3.1	Current Land Use, Zoning, and Site Conditions	6
3.2	Infrastructure.....	6
3.2.1	Roads.....	6
3.2.2	Wastewater and Water.....	6
3.2.3	Electric / Gas / Telecommunications / Fiber.....	7
3.3	VBRSP Site Characterization Tier Level	7
3.4	Recommendations	7
3.4.1	Due Diligence	7
3.5	Order of Magnitude Estimates of Probable Costs.....	8
3.5.1	Due Diligence	8
3.5.2	'Pad-Ready'	8
4.0	GRAYSTONE BUSINESS PARK.....	9
4.1	Current Land Use, Zoning, and Site Conditions	9
4.2	Infrastructure.....	9
4.2.1	Roads.....	9

4.2.2	Wastewater and Water.....	9
4.2.3	Electric / Gas / Telecommunications / Fiber.....	10
4.3	Master Plan	10
4.4	VBRSP Site Characterization Tier Level	10
4.5	Recommendations	10
4.5.1	Due Diligence	10
4.6	Order of Magnitude Estimates of Probable Costs.....	11
4.6.1	Due Diligence	11
4.6.2	'Pad-Ready'	11
5.0	CARBAUGH TRACT	12
5.1	Current Land Use, Zoning, and Site Conditions	12
5.2	Infrastructure.....	12
5.2.1	Roads.....	12
5.2.2	Wastewater.....	13
5.2.3	Water	13
5.2.4	Electric / Gas / Telecommunications / Fiber.....	13
5.3	VBRSP Site Characterization Tier Level	14
5.4	Recommendations	14
5.4.1	Master Plan.....	14
5.4.2	Due Diligence	14
5.5	Order of Magnitude Estimates of Probable Costs.....	15
5.5.1	Due Diligence	15
5.5.2	'Pad-Ready'	15

FIGURES

ARTILLERY BUSINESS PARK

- 2.0 Location Map
- 2.1 Zoning Map
- 2.2 Kernstown Land Use Plan
- 2.3 Utility Plan

CARROLL INDUSTRIAL PARK

- 3.0 Location Map
- 3.1 Zoning Map
- 3.2 Topographic Map
- 3.3 Floodplain Map
- 3.4 Utility Plan

GRAYSTONE BUSINESS PARK

- 4.0 Location Map
- 4.1 Zoning Map
- 4.2 Topographic Map
- 4.3 Floodplain Map
- 4.4 Waters of the US Delineation Map dated July 7, 2016, prepared by Virginia Waters & Wetlands
- 4.5 Proposed Lot Configuration dated May 17, 2017, prepared by Stowe Engineering, Inc.
- 4.6 Base Sewer Flows-Graystone and Stephenson Village Developments dated October 6, 2017
- 4.7 Utility Map
- 4.8 Washington Gas Corporate Engineering-Graystone Load Evaluation Study dated March 10, 2017
- 4.9 Graystone Commerce Illustrative Layout Plan dated April 2016, prepared by The Land Planning & Design Group, Inc.

CARBAUGH TRACT

- 5.0 Location Map
- 5.1 Zoning Map
- 5.2 Floodplain Map
- 5.3 Waters of the US Delineation Map dated August 19, 2016, prepared by Virginia Waters & Wetlands
- 5.4 Utility Map
- 5.5 Final Master Development Plan-Carbaugh Business Center dated December 15, 2017, prepared by Stowe Engineering, PLC

APPENDICIES

- A VBRSP Site Characterization Tier Levels Criteria Table
- B Impact Analysis Statement for the Carbaugh Rezoning dated October 21, 2016

1.0 INTRODUCTION

In 2015, the Virginia General Assembly passed legislation to create and fund the Virginia Business Ready Sites (VBRS) Program to be administered by the Virginia Economic Development Partnership. The impetus for this legislation was the lack of “pad-ready” sites for economic development purposes. VEDP has estimated that as much as \$60 Million in corporate investment has not been realized due to this lack of sites. The VBRS Program was established to promote development and characterization of sites to enhance the Commonwealth’s infrastructure and promote the Commonwealth’s competitive business environment. VBRS evaluates current available land – both publicly and privately owned – in a tiered system, where Tier 1 is basically raw land, and Tier 5 is a “pad-ready” site, the latter being most attractive to site selection consultants, commercial realtors and businesses and manufacturers desiring to move or expand to Virginia. (Refer to Appendix A for the VBRSP Site Characterization Tier Levels Criteria Table.) Site characterizations are designed to assess the level of existing development at a site and the additional development required to bring the site to a level that will enable the site to be marketed for industrial or commercial economic development purposes. The only requirement for a site to be characterized by VEDP is that it is listed in VA SCAN, VEDP’s database of economic development sites.

The Shenandoah Valley – which stretches from Warren and Frederick Counties, down the I-81 Corridor to Rockbridge County and the City of Buena Vista, and to the west to Bath County, for purposes of this report – currently has only two VBRS characterized sites: Mill Place Commerce Park in Augusta County and Turkey Knob in Shenandoah County. Recognizing the need to evaluate and characterize many more sites in the Valley, local economic developers from two Planning District Commissions, which included 10 local governments, contracted with Draper Aden Associates to provide an overview of current conditions and VBRS Characterization Tiers, along with recommendations and cost estimates for higher tier attainment.

Under this contract, the Frederick County VA Economic Development Authority (EDA) submitted four sites to be characterized: Artillery Business Park, Carroll Industrial Park, Graystone Business Park, and Carbaugh.

2.0 ARTILLERY BUSINESS PARK

The Artillery Business Park (Park) is a privately-owned, 45-acre parcel located southwest of Route 37, northwest of the CSX railroad tracks and US Route 11, and southeast of Shady Elm Road in Frederick County, Virginia; refer to Figure 2.0-Location Map. Note: Artillery Business Park is adjacent to the Carbaugh Tract; refer to Section 5.0 of this report.

2.1 Current Land Use, Zoning, and Site Conditions

The site is currently undeveloped, partially forested, and zoned Light Industrial (M-1), which is compatible with commercial / industrial uses; refer to Figure 2.1-Zoning Map. This site is located within the Shady Elm Economic Development Area; refer to Figure 2.2-Kernstown Land Use Plan.

The site has gently-rolling topography, which is conducive to commercial / industrial use; refer to Figure 2.0. The site is not encumbered by a Federal Emergency Management Agency regulatory floodplain, and does not appear to have any Waters of the US (streams and wetlands) on site; however, reconnaissance should be completed to confirm this. Any proposed impacts to Waters of the US, if any, will require permits from the US Army Corps of Engineers and the County.

2.2 Infrastructure

2.2.1 Roads

Currently the site is accessed only by Shady Elm Road. Industrial traffic would need to travel northeast 1.1 miles on Shady Elm, then east on Route 652 approximately 1400 feet to US Route 11; a more direct access to US Route 11 is preferred for industrial prospects. As shown on Figure 2.2-Kernstown Land Use Plan, Frederick County envisions extending Renaissance Drive to the northwest, crossing the CSX tracks and connecting to Shady Elm Road, to provide direct access to US 11, and ultimately I-81, to this site.

A traffic impact analysis will be required for the extension of Renaissance Drive and possibly the development of the site. The traffic impact analysis will define specific roadway and signalization improvements, including turn-lanes and widening, required within the network associated with the project.

2.2.2 Wastewater

As per the Impact Analysis Statement for the Carbaugh Rezoning dated October 21, 2016 (Appendix A), Frederick Water owns and maintains wastewater systems in this area with a 5 million gallons per day treatment capacity. The Impact Analysis Statement also stated that development in this area will require improvements to the Battlefield Pump Station. There is an existing sewer northwest of and adjacent to the property along Shady Elm Road; size and capacity of the sewer is unknown.

Specific site development for any use will require analysis to confirm downstream system capacities are adequate for the proposed use and extensions of the sewer mains into the site. Also, a tenant with high wastewater volume or biochemical oxygen demand (BOD) generation may necessitate an analysis of the downstream sewer system, including the wastewater treatment plant.

2.2.3 Water

Frederick Water provides water service to this area. According to the Impact Analysis Statement for the Carbaugh Rezoning dated October 21, 2016 (Appendix A), a water main will be extended north and cross the CSX tracks from an existing 20-inch water main in Valley Pike. Extension of the water main and development for any use will require analysis to confirm system capacity and pressures are adequate for the proposed use and fire protection.

2.2.4 Electric / Gas / Telecommunications / Fiber

Note: The following is based on readily available information.

Rappahannock Electric Cooperative currently provides three-phase electric power with redundant feeds to the site.

Washington Gas provides natural gas to the area; there is an existing line within 1500 feet of the site.

Verizon is the telecommunications and fiber provider in this area; a redundant feed is currently available.

2.3 VBRSP Site Characterization Tier Level

Based on information provided by the Owner and EDA, and readily available information, this site has a VBRSP Site Characterization Tier Level of 2. Refer to Appendix A for the VBRSP Site Characterization Tier Levels criteria table.

2.4 Recommendations

2.4.1 Master Plan

The Property Owner and/or EDA should develop a Master Plan for the site. The Master Plan would help to define and plan for pad development, future infrastructure projects, including internal road extensions / improvements, and wastewater and water system upgrades and extensions, to support commercial / industrial development in this area.

2.4.2 Due Diligence

A Phase 1 Environmental Site Assessment Report, Waters of the US survey with Army Corps of Engineers, geotechnical borings, boundary and topographic survey, cultural resources review, endangered species review, and an estimate of development costs (a master plan), are required to achieve a VBRSP Site Characterization Tier Level of 3. These studies should be completed prior to development to further define development constraints, and refine the overall estimate of probable 'pad-ready' cost and regulatory permit and/or mitigation requirements and costs.

2.5 Order of Magnitude Estimates of Probable Costs

2.5.1 Due Diligence

The order of magnitude estimate of probable project costs to raise the site characterization tier level of these parcels to 3 is \$150,000; this includes the required due diligence items discussed in Sections 2.4.1 and 2.4.2. Additional studies, including Phase 2 Environmental Site Assessments, and/or remediation work that may be required by regulatory agencies are unknown at this time, and therefore are not included in the estimate.

2.5.2 'Pad-Ready'

The order of magnitude estimate of probable project costs to raise the site characterization tier level to 'pad-ready' (Tier 5) is \$2,000,000.

The Tier 5 order of magnitude estimate of probable project costs are based on the following assumptions:

- A. Mass grading and stormwater management facilities are included. Site development, including parking and access drives, and associated utilities are not included.
- B. Road improvements, utility extensions, electric, gas, telecommunications, and fiber service improvements are not included.
- C. Professional service fees to achieve 'pad-ready' are included.

3.0 CARROLL INDUSTRIAL PARK

The Carroll Industrial Park (Park) is a privately-owned, 76.7-acre parcel located south and east of and adjacent to I-81, north of and adjacent to the CSX tracks, and west of Easy Living Estate in Frederick County, Virginia; refer to Figure 3.0-Location Map.

3.1 Current Land Use, Zoning, and Site Conditions

The site is currently undeveloped, used as a materials staging area, and zoned Industrial General (M2), which is compatible with commercial / industrial uses; refer to Figure 3.1-Zoning Map.

The site has flat topography, which is conducive to commercial / industrial use; refer to Figure 3.2-Topographic Map. The site is encumbered by a Federal Emergency Management Agency regulatory Zone A floodplain and floodway and potentially Waters of the US (streams and wetlands) along Hitt Run and the west property lines; refer to Figure 3.3-Floodplain Map. Any proposed impacts to the regulatory floodplain and waters of the US will require approvals from FEMA and the US Army Corps of Engineers, respectively, and the County.

3.2 Infrastructure

3.2.1 Roads

The Park is accessed via Milton Ray Drive and Ebert Road from US Route 11, east of I-81 Exit 317; refer to Figure 3.0. Milton Ray Drive is an existing, dead-end road with a cul-de-sac providing access to the Park's lots. Ebert Road crosses the CSX tracks with an un-signalized, at-grade crossing; signalization of this track may be required in the future, depending on rail and local traffic volume.

3.2.2 Wastewater and Water

The Frederick Water owns the wastewater and water systems in this area. There is an existing 8-inch sewer and a 10-inch water main along Ebert Road and Milton Ray Drive; refer to Figure 3.4-Utility Plan.

Development of the site for any use will require analysis to confirm downstream system capacities are adequate for the proposed use and extensions of the sewer mains into the site. Also, a tenant with high

wastewater volume or biochemical oxygen demand (BOD) generation may necessitate an analysis of the downstream sewer system, including the wastewater treatment plant.

Additionally, connection to the water main and development for any use will require analysis to confirm system capacity and pressures are adequate for the proposed use and fire protection.

3.2.3 Electric / Gas / Telecommunications / Fiber

Note: The following is based on readily available information.

Rappahannock Electric Cooperative currently provides three-phase electric power with no redundant feeds to the site.

Washington Gas provides natural gas to the area; there is an existing 6-inch line that would need to be extended 5780 feet to the site.

Verizon is the telecommunications and fiber provider in this area. Fiber would need to be extended 2000 feet to serve this site.

3.3 VBRSP Site Characterization Tier Level

Based on information provided by the Owner and EDA, and readily available information, this site has a VBRSP Site Characterization Tier Level of 2. Refer to Appendix A for the VBRSP Site Characterization Tier Levels criteria table.

3.4 Recommendations

3.4.1 Due Diligence

An approved Waters of the US delineation from the Army Corps of Engineers, geotechnical borings, cultural resources review, and endangered species review, are required to achieve a VBRSP Site Characterization Tier Level of 3. These studies should be completed prior to development to further define development constraints, and refine the overall estimate of probable 'pad-ready' cost and regulatory permit and/or mitigation requirements and costs.

3.5 Order of Magnitude Estimates of Probable Costs

3.5.1 Due Diligence

The order of magnitude estimate of probable project costs to raise the site characterization tier level of these parcels to 3 is \$30,000; this includes the required due diligence items discussed in Section 3.4.1. Additional studies, including Phase 2 Environmental Site Assessments, and/or remediation work that may be required by regulatory agencies are unknown at this time, and therefore are not included in the estimate.

3.5.2 'Pad-Ready'

Since the sites are flat, and cleared, the order of magnitude estimate of probable project costs to raise the site characterization tier level to 'pad-ready' (Tier 5) will be minimal - less than \$75,000 per site, excluding building and material removal.

4.0 GRAYSTONE BUSINESS PARK

The Graystone Business Park (Park) is a privately-owned, 270-acre site located southeast of US Route 11, south of and adjacent to CSX tracks, north of Redbud Road, and south of McCanns Road in Frederick County, Virginia; refer to Figure 4.0-Location Map.

4.1 Current Land Use, Zoning, and Site Conditions

The site is currently undeveloped, mainly cleared, and zoned Light Industrial (M1), which is compatible with commercial / industrial uses; refer to Figure 4.1-Zoning Map.

The site has rolling topography, which is conducive to commercial / industrial use; refer to Figure 4.2-Topographic Map. The site is not encumbered by a Federal Emergency Management Agency regulatory floodplain; refer to Figure 4.3-Floodplain Map. There are existing regulatory wetlands and streams (waters of the US) onsite; refer to Figure 4.4-Waters of the US Delineation Map dated July 7, 2016, prepared by Virginia Waters & Wetlands. Any proposed impacts to the regulatory Waters of the US will require approvals from the US Army Corps of Engineers and the County.

4.2 Infrastructure

4.2.1 Roads

The Park is accessed via Snowden Bridge Boulevard from US Route 11, east of I-81 Exit 317; refer to Figure 4.0. Snowden Bridge Boulevard was recently extended from US Route 11 southeast through the Park to its east property line. Access to the Park's parcels will be limited to Snowden Bridge Boulevard.

4.2.2 Wastewater and Water

The Frederick Water owns the wastewater and water systems in this area. There is a 12-inch sewer extension project currently under construction to provide service to Lots 1 and 1A initially; refer to Figure 4.5-Proposed Lot Configuration dated May 17, 2017, prepared by Stowe Engineering, Inc. The sewer has a reserved capacity of 750,000 gallons per day for the Park; refer to Figure 4.6-Base Sewer Flows-Graystone and Stephenson Village Developments dated October 6, 2017.

There is an existing 16-inch water main along Lots 1, 1A, and 2 with a capacity of one million gallons per day; refer to Figure 4.5 and 4.7-Utility Plan. Connection to the water main and development for any use will require analysis to confirm system capacity and pressures are adequate for the proposed use and fire protection.

4.2.3 Electric / Gas / Telecommunications / Fiber

Note: The following is based on readily available information.

Rappahannock Electric Cooperative currently provides 34.5KV, three-phase electric power with redundant feeds to the site.

Washington Gas provides natural gas to the area; there is an existing 6-inch line that would need to be extended 5400 feet to the site; refer to Figure 4.8-Washington Gas Corporate Engineering-Graystone Load Evaluation Study dated March 10, 2017 for additional information on existing system capacities and potential system improvements.

Verizon provides the telecommunications and fiber service to the Park. Fiber is available with a redundant route.

4.3 Master Plan

The Owner has prepared a master plan for the site in 2016. Refer to Figure 4.9 Graystone Commerce Illustrative Layout Plan dated April 2016, prepared by The Land Planning & Design Group, Inc.

4.4 VBRSP Site Characterization Tier Level

Based on information provided by the Owner and EDA, and readily available information, this site has a VBRSP Site Characterization Tier Level of 2, but is actually a Tier 4, pending completion of the cultural resources study. Refer to Appendix A for the VBRSP Site Characterization Tier Levels criteria table.

4.5 Recommendations

4.5.1 Due Diligence

A cultural resources review is required to achieve a VBRSP Site Characterization Tier Level of 4.

4.6 Order of Magnitude Estimates of Probable Costs

4.6.1 Due Diligence

The order of magnitude estimate of probable project costs to raise the site characterization tier level of these parcels to 4 is \$3,000. Additional studies, including Phase 2 Environmental Site Assessments, and/or remediation work that may be required by regulatory agencies are unknown at this time, and therefore are not included in the estimate.

4.6.2 'Pad-Ready'

The order of magnitude estimate of probable project costs to raise the entire site concurrently to a 'pad-ready' (Tier 5) site characterization tier level to is \$3,900,000.

The Tier 5 order of magnitude estimate of probable project costs are based on the following assumptions:

- A. Mass grading and stormwater management facilities are included. Site development, including parking and access drives, and associated utilities are not included.
- B. Road improvements, utility extensions, electric, gas, telecommunications, and fiber service improvements are not included.
- C. Professional service fees to achieve 'pad-ready' are included.

5.0 CARBAUGH TRACT

The Carbaugh Tract is a privately-owned, 107-acre parcel located southwest of Route 37, northwest of the CSX tracks and US Route 11, and southeast of Shady Elm Road in Frederick County, Virginia; refer to Figure 5.0-Location Map. This site is adjacent to and southwest of the Artillery Business Park.

5.1 Current Land Use, Zoning, and Site Conditions

The site is currently undeveloped, used for agriculture, and zoned Light Industrial (M-1), which is compatible with commercial / industrial uses; refer to Figure 5.1-Zoning Map. This site is located within the Shady Elm Economic Development Area; refer to Figure 2.2-Kernstown Land Use Plan.

The site has gently-rolling topography, which is conducive to commercial / industrial use; refer to Figure 2.0. The site is not encumbered by a Federal Emergency Management Agency regulatory floodplain. There are wetlands and streams (Waters of the US) on site; refer to Figure 5.3- Waters of the US Delineation Map dated August 19, 2016, prepared by Virginia Waters & Wetlands. Any proposed impacts to Waters of the US, if any, will require permits from the US Army Corps of Engineers and the County.

5.2 Infrastructure

5.2.1 Roads

Currently the site has access only to Shady Elm Road. Industrial traffic would have to travel northeast 1.5 miles on Shady Elm, then east on Route 652 approximately 1400 feet to US Route 11-a more direct access to US Route 11 is preferred for industrial prospects. As shown on Figure 2.2-Kernstown Land Use Plan, Frederick County envisions extending Renaissance Drive to the northwest, crossing the CSX railroad tracks and connecting to Shady Elm Road, to provide direct access to US 11, and ultimately I-81, to this site.

A traffic impact analysis will be required for the extension of Renaissance Drive and possibly the development of the site. The traffic impact analysis will define specific roadway and signalization improvements, including turn-lanes and widening, required within the network associated with the project.

5.2.2 Wastewater

As per the Impact Analysis Statement for the Carbaugh Rezoning dated October 21, 2016 (Appendix B), Frederick Water owns and maintains wastewater systems in this area with a 5 million gallons per day treatment capacity. The Impact Analysis Statement also stated that this development will require improvements to the Battlefield Pump Station. There are existing sewers adjacent to the property at the northeast corner along Shady Elm Road and at the southwest corner of the site; size and capacity of the sewer mains are unknown.

Specific site development for any use will require analysis to confirm downstream system capacities are adequate for the proposed use and extensions of the sewer mains into the site. Also, a tenant with high wastewater volume or biochemical oxygen demand (BOD) generation may necessitate an analysis of the downstream sewer system, including the wastewater treatment plant.

5.2.3 Water

Frederick Water provides water service to this area. According to the Impact Analysis Statement for the Carbaugh Rezoning dated October 21, 2016 (Appendix B), a water line is to be extended north and crossing the CSX tracks from an existing 20-inch water main in Valley Pike. Extension of the water main and development for any use will require analysis to confirm system capacity and pressures are adequate for the proposed use and fire protection.

5.2.4 Electric / Gas / Telecommunications / Fiber

Note: The following is based on readily available information.

Rappahannock Electric Cooperative currently provides electric power with redundant feeds to the site.

Washington Gas provides natural gas to the area; there is an existing 4-inch line to the site.

Verizon is the telecommunications and fiber provider in this area. Fiber would need to be extended approximately 800 feet to the site; a redundant feed is currently not available.

5.3 VBRSP Site Characterization Tier Level

Based on information provided by the Owner and EDA, and readily available information, this site has a VBRSP Site Characterization Tier Level of 2. Refer to Appendix A for the VBRSP Site Characterization Tier Levels criteria table.

5.4 Recommendations

5.4.1 Master Plan

A Master Development Plan was prepared for the site, providing general information and proffers required for rezoning of the site to Light Industrial (M1); refer to Figure 5.5- Final Master Development Plan-Carbaugh Business Center dated December 15, 2017, prepared by Stowe Engineering, PLC. This Master Development Plan is the starting point for a more-detailed master plan, which would define pad development, and the necessary internal road extensions / improvements, and wastewater and water system upgrades and extensions; and inform updated estimates of probable costs for site development.

5.4.2 Due Diligence

A Phase 1 Environmental Site Assessment Report, Waters of the US survey with Army Corps of Engineers, geotechnical borings, boundary and topographic survey, cultural resources review, endangered species review, and an estimate of development costs (a master plan), are required to achieve a VBRSP Site Characterization Tier Level of 3. These studies should be completed prior to development to further define development constraints, and refine the overall estimate of probable 'pad-ready' cost and regulatory permit and/or mitigation requirements and costs.

5.5 Order of Magnitude Estimates of Probable Costs

5.5.1 Due Diligence

The order of magnitude estimate of probable project costs to raise the site characterization tier level of these parcels to 3 is \$120,000; this includes the required due diligence items discussed in Sections 5.4.1 and 5.4.2. Additional studies, including Phase 2 Environmental Site Assessments, and/or remediation work that may be required by regulatory agencies are unknown at this time, and therefore are not included in the estimate.

5.5.2 'Pad-Ready'

The order of magnitude estimate of probable project costs to raise the site characterization tier level to 'pad-ready' (Tier 5) is \$2,800,000.

The Tier 5 order of magnitude estimate of probable project costs are based on the following assumptions:

- A. Mass grading and stormwater management facilities are included. Site development, including parking and access drives, and associated utilities are not included.
- B. Road improvements, utility extensions, electric, gas, telecommunications, and fiber service improvements are not included.
- C. Professional service fees to achieve 'pad-ready' are included.

APPENDIX A

VBRSP Site Characterization Tier Levels Criteria Table

Site Characterization Tier Levels

An applicant will retain a Site Development Professional to assess a site and to designate one of the following Site Characterization Tier Levels to such site:

- (i) **Tier 1:** Site under (a) public ownership, (b) public/private ownership, or (c) private ownership which such private owner(s) agreeable to marketing the site for economic development purposes and to allowing access to the property for site assessment and marketing purposes, but at no established sales price. Comprehensive plan reflects site as appropriate for industrial or commercial development and use, but site is not zoned as such. Site has minimal or no infrastructure. Minimal or no due diligence has been performed.
- (ii) **Tier 2:** Site under (a) public ownership, (b) public/private ownership, or (c) private ownership with an option agreement or other documentation of a commitment by the private owner(s) to a competitive sales price, to permit access to the site for site assessment, construction, and marketing, and to market the site for industrial or commercial economic development purposes. Comprehensive Plan reflects site intended for industrial or commercial development and use, but site is not zoned as such and a rezoning hearing needs to be scheduled. Site has minimal or no infrastructure. Minimal or no due diligence has been performed.
- (iii) **Tier 3:** Site is zoned for industrial or commercial development and use. Site has minimal or no infrastructure. Due diligence including, among other things, a wetlands survey with Army Corps of Engineers approval within the last five years, geotechnical borings, boundary and topographical survey, cultural resources review, an Endangered Species review, and a Phase I Environmental Site Assessment, has been completed. Estimated costs of development have been quantified.
- (iv) **Tier 4:** All infrastructure is in place or will be deliverable within 12 months. All permit issues have been identified and quantified.
- (v) **Tier 5:** All permits are in place and the site is ready for a site disturbance permit from the locality in which the site is located.