Executive Summary

2101 Crystal Drive is proposed as a 115,280 gross square foot (GSF) four story urban in-fill project located in Crystal City, Arlington, Virginia. The building is designed to be 103,176 rentable[1] square feet (RSF), with 21,903 RSF of ground floor retail space and 81,273 RSF of office space in the second through fourth floors at 27,071 RSF per floor. 2101 Crystal Drive will also have a usable roof terrace of about 18,000 square feet.

The footprint of the building measures 262 feet long by 110 feet wide, with all 262 feet of frontage along Crystal Drive, a main retail street in Crystal City. 2101 Crystal Drive will complete a currently missing section of ground level retail along Crystal Drive and provide three levels of unique semi-loft style office space that is not currently available elsewhere in the submarket.

The site is currently a landscaped plaza that is the top of an existing three-level underground parking garage. This existing garage will provide parking for 2101 Crystal Drive. The site is bordered on the South, East, and North by an access road serving three adjacent eleven-story office buildings totaling approximately 1.5 million square feet. The three adjacent buildings are part of a five building office complex containing approximately 2.26 million square feet of office and retail space and 3,714 underground parking spaces. The owner of this five building office complex and garage already owns the plaza that is the proposed site, and will develop and own 2101 Crystal Drive. The land basis of the site is currently carried by the existing 5-building complex so no traditional land acquisition costs will be incurred.

Entitlements for 2101 Crystal Drive will require that Arlington County rezone the site area of approximately 100,000 square feet from CO-1.5 to CO in order to provide the additional

[1] Building Owners and Managers Association (1996) Standard Method for Measuring Floor Area in Office Buildings.

density needed by the project. The rezoning is justified by providing "community benefits" in the form of a $4.2 million monetary contribution to Arlington County for the construction of a nearby regional park facility called Long Bridge Park. Arlington County currently owns the Long Bridge Park property but has a budget shortfall for the planned construction. The proposed $4.2 million contribution is determined by using a fair market development density value of $40.71 per rentable square foot. Entitlements and permits are expected to take approximately eighteen months from submission.

Beginning in January 2009, the total project schedule is expected to be approximately forty-two months from design through project lease-up stabilization. Current rents, expenses and costs are escalated at 3% through the appropriate project period to provide a stabilized yield on costs of 7.96% from 2013 net operating income (NOI) of $3,335,707 ($32.33 net per rsf after vacancy) and total project costs of $41,898,652. Estimated 2009 net rents of $30.50 are escalated through lease-up at 3% annually.

Shell building construction is schedule to take 14 months, with 12 months of tenant improvements starting six months before shell building completion and extending six months thereafter.

Site Selection and Analysis

The proposed site is an urban in-fill location in Crystal City. It is located adjacent to 2121 Crystal Drive, Arlington, Virginia. Arlington is an urban county of about 26 square miles located directly across the Potomac River from Washington DC as shown in figure 1. Arlington's central location in the Washington DC metropolitan area, its ease of access by car and public transportation, and its highly skilled labor force have attracted an increasingly varied residential and commercial mix. According to the 2000 U.S. Census, Arlington was the 13th most densely-population jurisdiction in the U.S. (7,287 persons per square mile.) As

of July 2008, the population density was about 8,062 people per square mile. The estimated 2008 Arlington population of 208,000 people is projected to grow to 242,500 by year 2030.

Figure 1 - Vicinity Map

Arlington's tax base is approximately divided between 45% commercial and 55% residential properties, enabling the County to maintain a competitive property tax rate in the Washington DC region. In 2008, the base commercial tax rate is $0.838 per $100 of assessed value, excluding a newly levied transit tax on commercial properties (office and retail) only. In 2005, Arlington was ranked first on the list of the top ten most walkable cities in the nation by the American Podiatric Society. In 2002, Arlington received the highest reward given by the EPA for smart growth. A USA Today article quoted Arlington as the "gold standard" among urban planners for residential development near transit stations. A 2004 survey of residents ranked Arlington among the very best places to live in the nation

The County attracts several business sectors including information technology, telecommunications, management consulting, defense contractors, aerospace companies and related policy consultants. Proximity to Washington, DC, along with Metrorail access, draws companies to locate in Arlington, which is often their first stop when choosing to leave the District of Columbia. In addition to location and transit infrastructure, Arlington has one of

the most highly educated and affluent workforces in the nation, which is very attractive to employers. As shown in figure 2, Arlington has the second highest percentage of people with bachelor's or graduate/professional degrees in the Washington DC area (after the City of Falls Church).

Jurisdiction	Percent High School Graduates	Percent Bachelor's Degree or Higher	Percent Graduate or Professional Degree
Alexandria City	86.8%	54.3%	24.8%
Arlington County	87.8%	60.2%	30.6%
Fairfax City	88.6%	45.7%	20.8%
Fairfax County	90.7%	54.8%	24.4%
Falls Church City	95.9%	63.7%	33.8%
Fauquier County	84.5%	27.1%	8.8%
Loudoun County	92.5%	47.2%	15.2%
Manassas City	81.3%	28.1%	10.3%
Manassas Park	76.4%	20.3%	5.9%
Prince William County	88.8%	31.5%	11.2%

Source: US Department of Commerce, Bureau of Census

Figure 2 - Workforce Education Level

Federal spending in the National Capital Region has increased every year for the last 20 years, and Arlington County, with its concentration of contractors and federal government users, benefits tremendously from the federal spending. Arlington's tech community has also seen significant growth in recent years. A healthy tenant mix has rendered Arlington much more impervious to industry-specific declines. The steady improvement in Arlington is also driven by demand from tenants who want convenient access to the District but benefit from lower rents; there is a strong economic incentive to relocate to Arlington where the rental rate can be as much as $20.00 less than comparable properties in the District. Many such tenants are 501(3)c non-profit organizations and trade associations. Crystal City is currently home to a number of Arlington's major employers, including Lockheed Martin and Boeing.

Strong urban planning has led to the bulk of Arlington's office market being developed along Metrorail served corridors: The Rosslyn/Ballston Corridor and the Jefferson Davis Corridor are the major commercial business centers. One in five Northern Virginia jobs is located in Arlington. Situated directly west of the District, the Rosslyn/Ballston Corridor offers excellent opportunities for tenants who desire proximity to Washington, DC but with less

expensive rental rates. The Jefferson Davis Corridor, which includes Crystal City and Pentagon City, is situated between the District of Columbia and Alexandria and borders Ronald Reagan Washington National Airport. Immediate access to the Pentagon and Capitol Hill has attracted a significant number of federal government tenants and defense related firms.

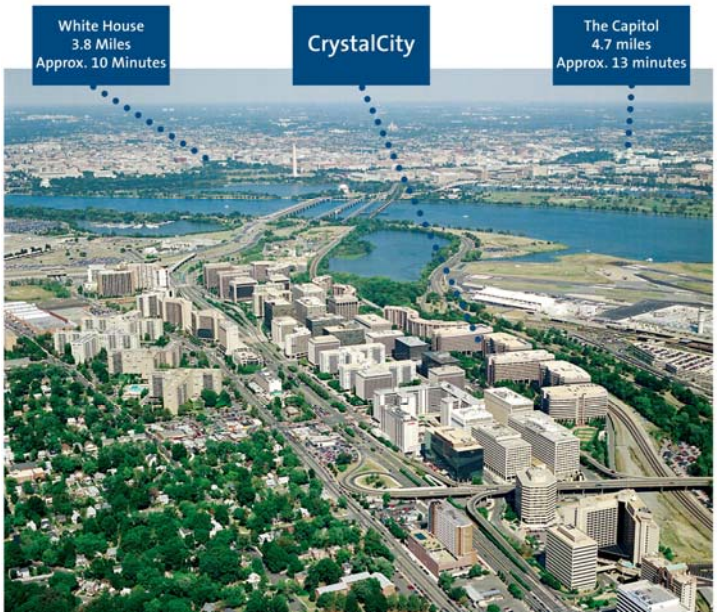

Figure 3 - Crystal City View From South

As shown in figure 3, the Crystal City/Pentagon City area encompasses approximately 390 acres of land on either side of Jefferson Davis Highway, from the City of Alexandria to the south, to I-395 at the base of the 14th Street Bridge to the North, less than five miles to the Capitol. Until the early 1960s, much of the land in Crystal City was devoted to low-intensity industrial uses and RF&P Railroad right-of-way. Crystal City's proximity to Washington, D.C. and Washington Reagan National Airport stimulated significant office, retail, residential and hotel development beginning in the mid-1960s. The opening of the Metrorail blue line in 1977 created opportunities for major development projects in Crystal City. In the 1980s alone, over 4.5 million square feet of office space; 2,000 residential units; and 1,872 hotel rooms were built in the submarket. Almost half of all hotel rooms in Arlington County are located within the Crystal City Metro station area.

Crystal City and Pentagon City are tracked as one submarket by CoStar, but approximately 75% of the submarket density is located in Crystal City.[2] The submarket contains approximately 13.4 million square feet of office space, as reported by CoStar. The Crystal City/Pentagon City office market has historically remained an attractive location for federal agencies and government contractors due to its proximity to the Pentagon. Federal agencies include the Drug Enforcement Administration, Environmental Protection Agency, the Departments of Army and Navy, US Marshal Service, Homeland Security (TSA) and the Federal Supply Service. Major government contractors in the submarket that that work with such agencies are Booz Allen Hamilton, Lockheed Martin Corporation, and Boeing. Non government contractors located in this market include the Bureau of National Affairs, Conservation International, the National Cooperative Bank, and Public Broadcasting Services.

Figure 4 - Crystal City Overhead Aerial

The office space in Crystal City has long been dominated by government agencies and their contractors because of its proximity to the Pentagon and Reagan National Airport. Crystal City was home to the Naval Sea Systems Command before it moved to the Navy Yard in southeast Washington. But, in the past few years, Crystal City has been evolving into an urban business core, in part due to two major federal tenants relocating elsewhere.

Since 2001, two substantial federal tenants have vacated Crystal City. In 2001 through 2002, NAVAIR and NAVSEA relocated from 1.5 million square feet in Crystal City to federal property at the Navy Yard. In 2003 through 2004, the Patent & Trademark Office relocated

[2] Third Quarter 2008 Report (2008): The Washington/Baltimore Office Market, Delta Associates, October 1, 2008.

1.5 million square feet from Crystal City to its consolidated headquarters in Alexandria. During these periods, vacancy rates in Crystal City increased from about 2% to over 17%. These substantial relocations and ensuing vacancies prompted property owners to make Crystal City more attractive to private sector tenants by adding amenities such as restaurants and street retail and to renovate space for re-leasing.

The combination of location, transportation, infrastructure, new amenities, and attractive rental rates, as compared with many surrounding jurisdictions, attracted a wide range of new public and private sector tenants. Since 2003, almost all of the prior Navy and PTO vacancy was filled by companies such as Boeing, Lockheed Martin, the Federal Supply Service, KBR Halliburton, Public Broadcasting Service, FEMA, Conservation International, and National Cooperative Bank among others, resulting in strong market conditions and relatively high net effective rents. Asking rental rates in the Crystal City/Pentagon City market for class A properties average approximately $35.50 full service per square foot. The Crystal City market continues to attract federal agencies, government contractors, and private sector tenants with rents in Class A office space in the $33.00 - $42.00 per square foot range.

Though vacancy rates decreased during the first quarter of 2006, rates increased again to 12.3% by the end of the year, which was due in large part to US Airways' move from 205,000 square feet at 2345 Crystal Drive. This was a result of US Airways' merger with America West Airlines and their relocation to Tempe, Arizona.

In 2007, vacancy rates remained relatively stable, decreasing only slightly to 12.0%. Though there has been a shuffling of tenants moving in and out of the Crystal City/Pentagon City market through the third quarter of 2008, rates remained stable at about 12.0%. An additional 181,000 square feet of the office space at Plaza Two, 220 20th Street, is being converted into a 19-story, 265 unit residential tower. That leaves about a half million square feet of former PTO space remaining to be re-leased.[3]

[3] The State of the Market (2008), GVA Advantis, October 2008

In 2004, the repositioning and redevelopment of Crystal City began. Streets that were previously one-way were converted to two-way traffic, thus creating a typical urban grid. Buildings were re-addressed to correspond with specific street locations, as found in most downtowns. Additional amenities were also added, including outdoor cafes, colorful signage, shops, and destination restaurants. All of these changes have made Crystal City more attractive to new tenants. A number of quality tenants relocated from Washington, DC to Crystal City, including companies such as PBS, National Cooperative Bank, Smithsonian Institution, Conservation International, Sigal Construction, KBR and Council on Foundations. Also, non-profits and associations in particular are finding Crystal City to be an ideal location.

In 2005, leases signed by KBR (165,000 square feet), FEMA (102,500 square feet), and The Library of Congress (99,090 square feet) continued to fill the vacant blocks that the PTO left behind. And, by 2006, more than half of the 1.5 million square feet that was vacated by the PTO was leased. While 2007 was not reflective of the pick-up in activity that we saw in 2005 and 2006, leasing activity still remained very strong. Among the most notable transactions of 2007, IBM Corporation signed a renewal/expansion for 103,000 square feet at 2733 Crystal Drive; Booz Allen & Hamilton renewed 45,575 square feet at 1550 Crystal Drive; the Council on Foundations leased 41,551 square feet at 2121 Crystal Drive; the US Environmental Protection Agency signed an expansion for 41,062 square feet, also at 2733 Crystal Drive; the General Services Administration leased 38,478 square feet at 2450 Crystal Drive; and the Department of Defense leased 37,150 square feet at 2800 Crystal Drive. As a result, eighty percent of the PTO space was backfilled by the end of 2007.

In 2008, the majority of leasing activity to date has been renewals, as many tenants elected to forego relocation or expansion plans given the current state of the economy. For example, representative renewals in the Crystal/Pentagon City submarket in 2008 included Raytheon's renewal for 52,194 square feet; Decisive Analytics Corporation's renewal for 23,622 square

feet at 1235 South Clark Street; and Unisys Corporation's renewal for 21,106 square feet at 1200 South Hayes Street (Pentagon City). The following is a list of representative leasing activity in Crystal City.

- Department of Defense (renewal) 2530 Crystal Drive 547,930 SF
- National Guard Bureau (renewal) 1411-&1421 Jefferson Davis Hwy 310,202 SF
- Department of Defense (renewal) 400 Army Navy Drive 235,983 SF
- US Customs & Border Protection 1901 South Bell Street 77,454 SF
- Raytheon (renewal) 2450 Crystal Drive 52,194 SF
- Battelle Memorial Institute 1550 Crystal Drive 50,080 SF
- US Marshalls 1901 South Bell Street 33,990 SF
- Bureau of Immigration and Customs 2451 Crystal Drive 31,888 SF
- US Department of Defense 2450 Crystal Drive 26,097 SF
- Decisive Analytics Corporation (renewal) 1235 Clark Street 23,622 SF
- International Justice Mission 1235 South Clark Street 23,621 SF

The following projects are currently under construction or planned for construction in Arlington Metro corridors:

<u>Arlington Rosslyn-Ballston Corridor</u>

1310 North Courthouse
Currently under renovation and expected to deliver about 300,000 SF of space in mid-2009. Verizon had previously occupied the building. Future tenants include Fitness First and Arnold Worldwide.

Clarendon Center
Construction was scheduled to start in the second quarter of 2008. The project is a 471,000 square foot mixed-use complex in Clarendon. Clarendon Center will occupy nearly two

entire city blocks adjacent to the Clarendon Metro station. The south block of the project includes an 85,000 square nine-story office building, 244 apartment units within a 12-story building, and 34,000 square feet of ground-level retail space, all atop four levels of below-grade parking. The north block includes an additional 98,000 square feet of office space in a six-story structure, 14,000 square feet of ground-level retail, and three levels of below-grade parking. Delivery is projected for 24 months after commencement.

1716 Wilson Boulevard

Medical Service Corporation International plans to build an approximately 134,000-square-foot office and retail building to consolidate three properties that include its current offices. About 25 employees work in Medical Service's office and its neighboring property. The new building would have all of those operations on one floor. The remaining office and retail uses for the property are still being determined.

Central Place - Rosslyn

The 30-story residential building will have 350 units, and the 31-story office building will have 570,000 square feet of office. The buildings will include 44,500 square feet of retail space. The buildings will be 390 feet tall. Delivery is expected in 2010 pending construction financing and commencement.

Glebe Road and Wilson Boulevard

Virginia Tech announced its plans for a major research facility in Ballston. The 145,000 square foot building at the corner of North Glebe Road and Wilson Boulevard will be part of a broader development by The JBG Cos. at the former Bob Peck Chevrolet site. The research operation will target the defense industry and will involve network and computational research, as well as policy work related to technology and homeland security. Virginia Tech will own the building and will eventually employ up to 150 researchers, faculty and staff at the site. The property will include first-floor space for the Ballston Science & Technology Alliance. JBG's overall project will include about 414,000 square feet of office and retail

space, 90 units of affordable housing, and 28 market-rate townhouses. Demolition started at this site in early June 2008, and Virginia Tech officials hope to move into their building sometime in 2010.

Founders Square

This mixed-use project would be built adjacent to the Ballston Common Mall at the current site of a Metro bus yard on Wilson Boulevard. The project would include 660,290 square feet of office space, 362 residential units and 26,900 square feet of ground floor retail space. A significant aspect of the project is that one of the site's office buildings will have an 82-foot setback from the road and comply with federal security requirements. Arlington Economic Development officials have been in talks with DARPA since an announcement in 2005 that called for DARPA to move out of Arlington as part of the Base Realignment and Closure process. DARPA plans to occupy the secure building in the project.

Crystal City/Pentagon City

National Gateway

Meridian Group, the Bethesda, MD-based real estate investment and development firm, has broken ground on the first two buildings of National Gateway at Potomac Yards. The buildings, known as National Gateway I and II, are twin nine-story structures linked by a common parking facility that will comprise a total of 373,057 square feet of office space and 69,797 square feet of retail space. The buildings are projected to deliver in December 2009. L.A Fitness has leased 46,000 square feet for a new health club, leaving 23,000 square feet of remaining retail space at the buildings. Meridian plans to develop four additional National Gateway buildings with a total of 1.1 million square feet of office space and 19,100 square feet of retail space. Earlier in 2007, Meridian sold development sites at Potomac Yard to Marriott International, which will develop two hotels with 625 rooms, and to Archstone-Smith, which acquired two sites approved for a total of 692 luxury apartments and additional retail space. When completed, National Gateway at Potomac Yard will total more than 2

million square feet of office space, 210,000 square feet of retail space and more than 2,000 residential units and hotel rooms. The Potomac Yard project is south of Crystal City, between Route 1 and the George Washington Parkway.

Pentagon Centre

New York-based Kimco Realty Corp. and DRA Associates, owners of the 16.8-acre Pentagon Centre, received approval of a phased development site plan (PDSP) and final site plan approval for phase 1, which includes the addition of two office towers adjacent to the Pentagon City Metro entrance on Hayes Street. Costco occupies the opposite corner of the site and is likely to stay because of its long-term lease and extraordinary success of that location. Therefore, anything beyond Phase 1 will likely not happen for at least 25 years.

Monument View

This mixed-use project at the very north end of Crystal City was approved in 2008. The project includes an eight-story, 323,200 square foot office tower and 3,500 square feet of ground-level retail as well as separate 352 unit residential building that tapers form seven to four stories tall. Along with giving its approval of the project, the County Board authorized a long standing proposed land swap with the project owner, Monument Realty, leaving the county with an additional two acres for the Long Bridge Park project. Long Bridge Park is proposed to be 30 acres, including an aquatics and sports facility surrounded by a public park.

The following projects were recently delivered:

Arlington Rosslyn-Ballston Corridor

Arlington Gateway

This 1.2 million square foot mixed use, located at 901 North Glebe Road, opened to new tenants in February of 2005. Watson Wyatt & Co. preleased 120,000 square feet and other occupants include law firm Nixon & Vanderhye (52,000square feet), and project management training and consulting firm ESI, which committed to 45,000 square feet.

One Liberty Center

The 316,000 square foot project, located at 875 North Randolph Street delivered in May of 2005. About 98% of the 13-story high rise is occupied by the federal government, with employees of the Office of Naval Research and the Air Force Office of Scientific Research accounting. The building is one phase of the 1.1 million square foot mixed-use development owned by Ballston Investor Group I, located at the corner of North Randolph and North Ninth Street on a parcel that had been the site of three 1960's era office buildings and a small apartment structure. One Liberty Center also features a five level underground parking facility, office buildings and a small apartment structure.

Navy League Building

In September of 2005, this 214,000 square foot building located at 2300 Wilson Boulevard was delivered. This project was Arlington County's first official green building. The seven-story building serves as the new headquarters for the Navy League, a nonprofit civilian organization founded in 1902 as an advocacy group for the sea-related armed services. They occupy 20,000 square feet. The General Services Administration (GSA) leased the entire fifth floor of 30,898 square feet on behalf of the U.S. Coast Guard Recruiting Command TCI has also leased the entire sixth floor of 30,031 square feet. The Association of General Contractors of America’s leases 24,000 square feet.

3434 North Washington Boulevard

George Mason University Foundation owns the project, which is a 200,000 square foot building in the Virginia Square submarket that delivered in July 2007. SRA occupies the entire building except for 13,000 square feet of retail space on the ground level.

4401 Wilson Boulevard

The 250,652-square-foot office building is located at the corner of Wilson Boulevard and Glebe Road and delivered in November 2007. This building is the final phase of the mixed-use Ellipse project. Plateau Systems, a provider of management software for organizations, occupies 48,016 square feet in the building. The Newspaper Association of America leased 37,000 square foot space, relocating from its previous headquarters at 1921 Gallows Road in Tysons Corner.

The Regent

This 250,000 square foot building at 950 North Glebe Road delivered during the first quarter of the year. The project is located across the street from JBG's Arlington Gateway, which delivered in February of 2005. In April of 2005, The American Trucking Association signed a 15-year lease for 105,900 square feet of office space, becoming the lead tenant and a 50% equity partner with the developer and owner of The Regent, The JBG Cos. The ATA occupies the entire 2nd, 3rd, 4th, and 12th floors and part of the 5th floor. The ATA relocated its headquarters from 2200 Mill Road in Alexandria, VA. In December of 2007, Solers signed a lease for 44,000 square feet in the new building.

Two Liberty Center

A 177,046 square foot building at 4075 Wilson Boulevard delivered in December of 2007. DFI occupied 102,568 square feet and Strategic Analysis occupied 52,500 square feet.

Waterview

The 633,000 square foot development, at the cross streets of North Lynn Street and North 19th Street in Rosslyn delivered the second quarter of 2008. The 24-story office building is entirely leased by the Corporate Executive Board. This 20-year lease deal, was signed in October of 2004, and is the largest private sector lease transaction ever to be executed in the DC Metro area market.

Randolph Square

This 202,234 square foot building at 2800 South Randolph Street was completed in May of 2008. The building is part of a $130 million, mixed-use project that was developed by Rockville-based Federal Realty Investment Trust. The project has 16,000 square feet of retail space and parking for 200 cars. During the first quarter of 2008, Randolph Square secured its first tenant. The United States Patent & Trademark Office preleased 146,744 square feet in the new building.

Crystal City/Pentagon City

Potomac Yard

One and Two Potomac Yard, located at 2733 and 2777 Crystal Drive delivered a 310,741 square foot and 318,418 square foot building, respectively, during the second quarter of 2006. The U.S. Environmental Protection Agency leased 405,177 square feet of office space, taking the entire office portion of Building One, and three floors in Building Two. The lease was signed for 10 years. The buildings are nine office floors sitting on top of six levels of parking (three levels below grade and three levels above grade). From ground level, the building appears to be 12 stories tall. In addition, the first floor at grade parking level includes 6,000 square feet of retail space and 7,364 square feet of retail/office space.

Investment Sales

During the second quarter of 2006, BPG Properties Ltd. (BPG), the operating affiliate of Berwind Property Group Ltd., acquired 2800 and 2900 Crystal Drive from Monday Properties. The 2006 assessed value for the two properties is $82.22 million. The two 10-story office properties in Washington, D.C.'s Crystal City submarket were acquired last June as part of Beacon Capital Corp.'s $960 million acquisition of the former Westfield Realty portfolio in Northern Virginia. Built in 1990, the buildings total 326,743 square feet. The buildings share a three-level below-grade parking garage. When Beacon Capital bought the Westfield portfolio last summer, Monday Properties recapitalized the two Crystal City buildings with Beacon Capital to take advantage of some anticipated short-term upside in this submarket which was ultimately realized with the recent sale to BPG Properties. Monday Properties and Beacon Capital Partners held the two buildings as a short term venture in Crystal City.

In May of 2006, Brookfield Properties Corp. affiliate Brookfield Financial Properties LP signed a definitive agreement to purchase a 540,000 square foot office complex for $235.4 million. The two-building site is currently the headquarters of the Transportation Security Administration. Orlando-based Commercial Net Lease Realty Properties was the seller. Located in the Pentagon City submarket, the TSA buildings are located at 601 and 701 South 12th Street, and sit within close proximity to the Pentagon and Washington Reagan National Airport. The towers were developed in 1983 and 1982, respectively, and underwent a multimillion upgrade under Commercial Net Lease's ownership. TSA's lease of the entire property is not scheduled to expire until 2014. Commercial Net Lease acquired the site, which includes a two-story parking facility, in 2003 for approximately $143 million.

Representative Investment Sales:

- 1900/1916 Wilson Boulevard Zom, Inc. $531.56 40,548 4/15/08 Weissberg Corporation
- 2800 Shirlington Road Choi Cos. LLC $302.00 206,992 3/15/08 Federal Capital Partners
- 1411/1421 Jefferson Davis Hwy Lowe Enterprises $289.96 517,305 1/28/08 Jefferson Plaza I & II LLC
- 2500 Wilson Boulevard TCAM Core Property Fund $343.37 98,000 12/27/07 Electronic Industries Alliance
- 2000 N. 15th Street Arlington Plaza LLC $369.21 193,657 10/17/07 VNO RTR AP LLC
- 1801 South Bell Street BNA $355.76 281,087 8/9/07 Vornado Realty Trust
- 950 North Glebe Road Morgan Stanley Real Estate $415.93 247,436 7/30/07 The JBG Cos.
- N Lynn Street @ N 19th St. Paramount Group $652.41 633,000 5/30/07 CIM/JBG/Brookfield
- 1801 North Lynn Street Morgan Stanley Real Estate $139.99 339,303 3/1/07 Steuart Investment Co.
- 1735 North Lynn Street Beacon Capital Partners $361.59 273,791 1/19/07 Seaton Benkowski Partners
- 4501 North Fairfax Drive Grosvenor $493.83 194,600 12/28/06 Jamestown
- 1310 North Courthouse Road MRP Realty $302.47 380,198 12/15/06 RREEF America
- 4350 North Fairfax Drive TIAA $433,50 196,242 11/10/06 Miller Global Properties
- 4201 Wilson Boulevard Ralph Dweck $358.66 550,000 11/6/06 Carr Real Estate
- 2511 Jefferson Davis Highway Transwestern LLC $306.37 332,928 10/17/06 LHL Realty Co. LLC
- 1005 North Glebe Road TA Associates Realty $374.50 137,117 9/8/06 TIAA CREF

- 1919 South Eads Street Consumer Electronics Assoc. $388.86 98,750 6/20/06 Charles E. Smith Cos.
- 1500 Wilson Boulevard Penzance Companies $255.73 247,726 4/24/06 Juster Development Co.
- 1801 North Lynn Street Morgan Stanley $296.78 339,303 10/3/05 JBG Cos.
- 1655 North Fort Meyer Drive CarrAmerica $365.80 168,672 8/12/05 Walton Street Capital
- 4005 South 31st Street AEW $295.21 233,000 7/7/05 Transwestern Quincy LLC
- 4121 Wilson Boulevard Ralph Dweck $425.00 175,000 5/24/05 Lord Baltimore Properties
- 901 North Glebe Road Arlington Gateway Inv. $385.61 325,460 5/6/05 JBG Companies
- 4200 Wilson Boulevard Ballston Office Center $351.43 175,000 4/15/05 TA Associates Realty
- 4401 North Fairfax Drive FAP-Arlington Square $307.41 135,000 3/14/05 The Washington Corp.
- 4401 North Fairfax Drive FAP-Arlington Square $307.41 135,000 3/14/05 The Washington Corp.
- 2000 North Fourteenth Street Penzance Properties $260.48 115,172 12/23/04 Heitman Financial
- 3100 Clarendon Boulevard Wells Real Estate $348.89 238,183 12/10/04 Jamestown 19, LP
- 3811 Fairfax Drive Alaska State Pension $405.74 158,230 11/1/04 Principal Life Insurance

Site Description

The proposed site is an urban in-fill location in the center of Crystal City as shown in figure 5. It is located adjacent to 2121 Crystal Drive, Arlington, Virginia. The site is currently a landscaped plaza that sits atop of an existing three-level underground parking garage. The parking garage is connected to the adjacent office buildings and provides all parking for such buildings. The plaza is privately owned in conjunction with the adjacent office buildings. The plaza is a combination of landscaped and hard surface areas, as shown in figure 6. The site part of an existing site plan with the adjacent office buildings, and is used in the floor area ratio calculations of that site plan. It is located along the east side of Crystal Drive and is bordered on the South, East, and North by an access road serving three, eleven-story office buildings totaling approximately 1.5 million square feet. The area across Crystal Drive includes new in-fill low-rise retail space at the base of a large mixed use block. This new retail space, shown in exhibit 7, delivered in 2004 and is generally successful. Tenants include several full service restaurants such as Jaleo, Ted's Montana Grill and Bebo Tratoria.

Figure 5 - Site Location

Figure 6 - Existing Plaza

Figure 7 - Existing Crystal Drive Retail

During the 1980's, five office buildings and four residential buildings were developed along the east side of Crystal Drive under a common site plan. The five office buildings total approximately 2.26 million square feet over a total land area of 34.6 acres. Three of these existing buildings border the proposed site and use the site area for various site plan area calculations including floor area ratio (FAR). The site, and surrounding area east of Crystal Drive, is zoned CO-1.5 allowing total FAR of 1.5. Several open spaces were created in order to combine enough land to maximize the density and height of these buildings to the FAR limits of the zoning classification. The proposed site is one of these open spaces. The site therefore has no allowable density available under the existing zoning. The total site area inside the access road is approximately 100,000 square feet. We have proposed that Arlington County rezone this site area to CO to allowable FAR of up to 3.8 for office. This zoning change will provide sufficient density to allow the site area to fulfill its density obligation to the existing site plan (1.5 FAR) and still have sufficient density for development of 2101 Crystal Drive. The imputed density available will be 2.3 FAR, calculated as 3.8-1.5. Alternately, the site could be subdivided into a separate site plan and transfer excess density rights to the existing site plan. Otherwise, the remaining area under the existing site plan would be considered a non-conforming allowable use since the FAR of the remaining area allocated to the existing office space would increase to 1.61 once the subject site is subdivided into a stand-alone site plan. . The area to the west of Crystal Drive is already zoned CO, allowing office density up 3.8 FAR and residential density up to 4.8 FAR. The rezoning of the subject site to CO should not be objectionable to the neighboring uses or property owners given the high density of the existing properties. At 115,280 gross square feet, 2101 Crystal Drive will have a stand-alone floor area ration of 1.15 (115,280 GSF divided by 100,000 site SF). The FAR of the existing site plan would

change from 1.5 to 1.61 by removing 100,000 of site area. Please see appendix A for the area calculations of the existing site plan and proposed modification

There are several applicable layers of zoning in Arlington County that apply to rezoning this site. From broadest to most specific, the layers are as follows:

The General Land Use Plan (GLUP) as shown in figure 8 for Crystal City. The GLUP provides a vision for the desired future development in the County. Other documents in the GLUP called Sector Plans provide extensive narratives and illustrations of specific future potential development in specific areas of the County. For example, there are "Sector" plans for the Ballston and Rosslyn Metro areas, but no Sector plan for the subject Crystal City area. The GLUP and Sector Plans set forth the County's vision and desired development. The current ongoing Crystal City planning process may result in a future sector plan for Crystal City. The proposed project fits within the current GLUP designation for the area.

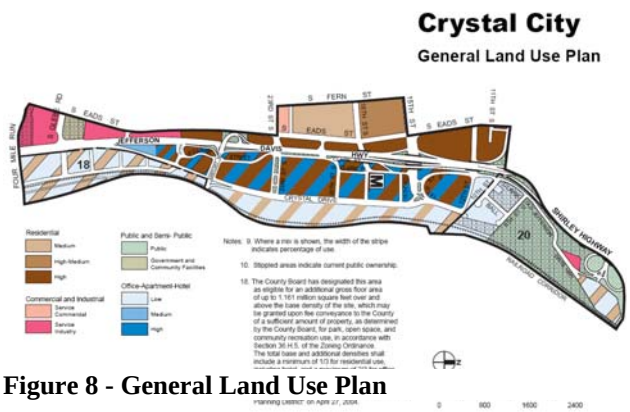

Figure 8 - General Land Use Plan

Zoning for Crystal, as shown in figure 9 establishes the specific permitted uses and restrictions for particular properties. Every property in the County is located within a particular zoning classification called a zoning district. Each zoning district has permitted uses. A permitted use, also called a "by-right" use, is a use which allows a property owner to develop property in accordance with the restrictions and

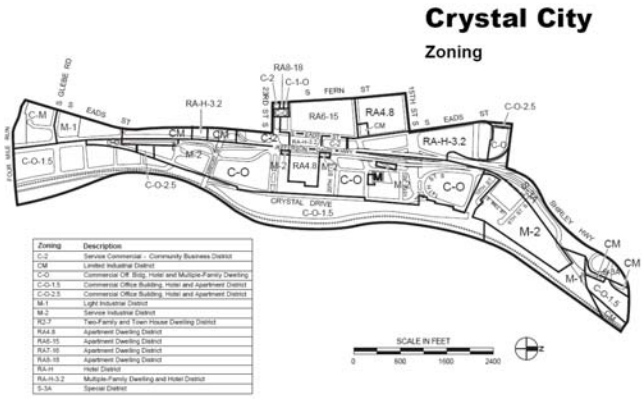

Figure 9 - Zoning Map

limitations expressly set forth in the Zoning Code for that district without further review by the County. A "by-right" development receives only an administrative review by County staff. If the proposed development meets the regulations in the zoning classification, the County is required to approve the proposed development. Since the subject site is already under siteplan with the adjacent buildings, a by-right option is not available. There are no by-right buildings east of Jefferson Davis Highway in Crystal City.

The density of virtually all by right uses in Metro areas is nominal, as compared with the existing density and uses. Therefore, by right development in these dense, high value, areas is typically not economically feasible. The land in these Metro corridors is too well located and too valuable to develop a small office, retail, or apartment building conforming to a by-right use. Additionally, the by-right uses also have limited parking ratios and other aspect that are tailored to low density single use development.

The GLUP and Sector Plans envision greater development and density than would be allowed by right under the zoning district for the property. In order to obtain this more dense development or greater uses, the owner must seek approval by the County Board of what is called a “site plan”. A site plan is also known as a "special exception" in Arlington County. In other words, the use or the size of the use requested is not allowed "by right," rather it is allowed only by an "exception" to the zoning regulations as granted by the County Board.[4]

To obtain site plan approval in Arlington, we must first show that the proposed 2101 Crystal Drive development is consistent with the GLUP and any applicable Sector Plan. Since it is, County Staff and various Boards and Commission will review the proposed site plan application. We project the following process and schedule:

- Site Plan acceptance – Estimate 2 resubmissions over 4 months
- Site Plan Review Committee – Estimate 5 meetings over 8 months
- Transportation Committee – one month once schedule

[4] Kansas-Lincoln, L.C. vs. County Board of Arlington Virginia and Arlington County, Virginia (2004) Circuit Court of the County of Arlington.

- Planning Commission – one month once scheduled
- Community Benefit negotiations with County Manager - two months
- County Board – one month once scheduled

The main regulatory challenge will be getting the County to agree that the proposed community benefits is sufficient to justify adding the new proposed density. The County Board holds a public hearing on the project. The County Board then votes as to whether the site plan should be approved. The approval is discretionary. The Board can deny approval of a site plan that has been recommended for approval by the various commissions, or the Board may approve a site plan that has not been recommended for approval by the various commissions. The various commissions only make recommendations but have no standing to deny the Board from hearing or approving a site plan.

The County Board has the right to put additional conditions on the project to make sure it meets the County's vision for development and to make sure the project addresses well substantiated concerns of the neighbors and the community. There are about 100 conditions in a typical site plan approval which include requirements for traffic mitigation, architecture, layout and size of improvements, and contributions to the County for items such as affordable housing funds, utility improvement funds, and several others. Our detailed pro-forma soft and hard costs include estimated costs for such conditions.

Proffer Analysis

Arlington County historically values metro corridor density at $40/FAR SF. The subject density would be valued by an appraiser as transferable development rights (TDR's) in lieu of Fee Simple land because of the existing garage relationship. We are confident that $40.71/SF is the appropriate value of the density, but have also conducted sensitivity analysis of the project yield and required rental rate if such value should change. At $50/FAR SF the

land cost in the pro-forma increases approximately $1.0 million to $5,250,000, thus lowering the yield to 7.72%. An increase in 2009 rent of $1.00 returns the yield to 7.96%. The project pro-forma includes costs for all standard Arlington County proffers, also called site plan conditions including the following:

Utility Fund	$30,303
TDM Compliance	252,500
Art Contribution	75,000
Affordable Housing	$412,017

Table 1 – Partial Standard Proffer Costs

Since the adjacent buildings were constructed in the 1980's, Arlington County has progressively allowed higher density development in areas served by mass transit. As shown by exhibit 5, the Crystal City metro is within walking distance of the site. Similarly, the Crystal City Virginia Railway Express (VRE) is located only slightly further to the North. Arlington County also has future plans for a bus rapid transit (BRT) transit way network to run North-South through Crystal City that will further enhance transit options. The planned alignment of the future transit way is shown in figure 10. Arlington County is currently engaged in a long term planning process to determine, in part, if higher density development and redevelopment should be allowed in Crystal City.

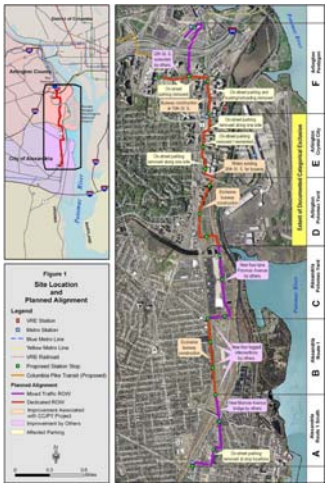

Figure 10 - Proposed Transit

The process is still ongoing, but is likely to result in higher allowable density throughout all of Crystal City. The allowed density in other Arlington metro areas has been similarly increased through the implementation of "sector plans" for those areas. Based on Arlington's historic preference for smart growth and concentrating high density in metro areas, it is highly likely that the planning process will result in substantially higher allowable densities. For example, Rosslyn-CO zoning allows for a FAR of up to 10.0 in exchange for "Community Benefits" Regardless of the Crystal City planning process, rezoning the 2101 Crystal Drive site area can be justified through community benefits as described in Proffer Analysis section.

Project Description

The proposed project is intended to create a true two-sided retail street along Crystal Drive near the center of Crystal City. The American Planning Society has emphasized the benefits of convenient "cross street" shopping and promotes pedestrian routes that allow shoppers to walk by each storefront only once.[5] In 2008, The American Planning Association named the "Wilson Boulevard-Clarendon Boulevard Corridor" one of the ten great streets in the United States. There are very few areas along this corridor without 2-sided retail. A perspective drawing of the building is shown in figure 11.

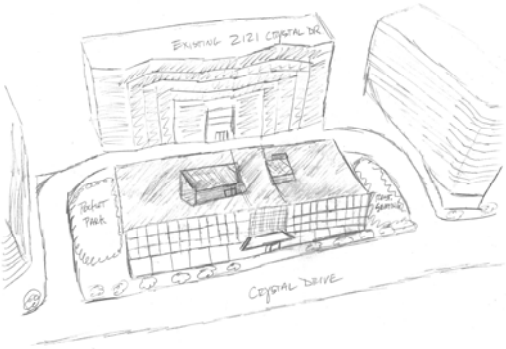

Figure 12 - Perspective Drawing

The four-story building will contain 21,903 RSF of ground floor retail space with 27,091 RSF of office space in three levels above.

Figure 11 - Atrium

The building footprint is 28,820 GSF, with overall dimensions of 262' by 110'. The full 262' length fronts Crystal Drive. The rentable retail area on the first floor is only about seventy-six percent of the gross floor area due to the center public through atrium not being counted as rentable area. This seventy-six percent efficiency ratio for the first floor would typically be about eighty-five percent without the public through atrium. The atrium is, however, needed to conveniently connect the front and rear of the building to allow for retail circulation and provide convenient pedestrian access to 2121 Crystal Drive. The atrium will serve as and interesting public amenity and could also be used for weather protected seating. A representative view of the atrium is shown in

[5] Brodeur M., (2003) Ten Tips for Designing a Consumer Friendly Downtown, American Planning Association

figure 12. The project will also include a pocket park on the north end and restaurant seating at the south end of the building. The upper floorplates are also 28,820 gross square feet and provide 27,091 rentable square feet using the 1996 BOMA area calculation method. 1996 BOMA is a standard market acceptable measurement method. The typical floor efficiency factor is about ninety four percent. The floorplates are shown in figure 13. The project will utilize curb side loading rather than a full dock better utilize the retail frontage and so as to not create an unattractive rear area of the building. As noted in the Arlington County Retail Action Plan, one goal should be to establish a balanced mix of retail (both national chain stores and local independents) and cultural activities in a lively physical environment that communicates a distinctive sense of place in each of the County's downtown areas.

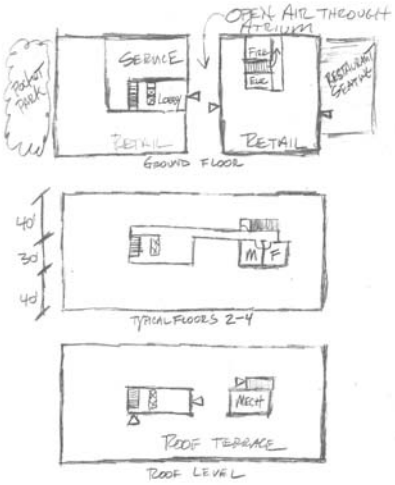

Figure 13 - Floorplans

The existing underground garage that serves the adjacent office buildings contains approximately 3,714 parking spaces. Given expected reductions of required parking by Arlington County, the proposed project will utilize this existing parking. The existing parking ratio of the garage is 1.68 spaces per 1000 GSF of existing 2,211,000 office and retail served. The addition of this project minimally changes the parking ratio to 1.62 spaces per 1,000 GSF. The zoning classification of the site does not require that ancillary retail area be included in the parking ratio calculations. The existing parking information is shown in appendix A. The ground floor retail of this project would be considered ancillary to the over two million square feet of office served by the existing parking. This parking methodology is consistent with the latest version of Arlington's Master Transportation Plan which proposed parking ratios as low as 1.0 per thousand square feet in metro accessible locations.

Arlington's implementation of smart growth measures in the Rosslyn-Ballston corridor have resulted in above-average Metro use, mixed-use development, increased density and a reduced carbon footprint. Similarly, Crystal City has above average metro usage with the Crystal City Metro Station having the fourth highest usage among Arlington Metro stations in 2007 with a weekday average of 27,293 daily trips as shown in appendix B. As shown by the chart in appendix B, approximately 44% of workers in Crystal City travel by mass transit, including Metro, Virginia Railway Express, and commuter bus. This exceptionally high transit mode split is the highest in Arlington County and further justifies adding additional density without adding additional parking spaces.

Two projects in Rosslyn recently approved by Arlington County demonstrate the County trend of promoting much less parking. 1201 Wilson Boulevard (Central Place) is a 535,000 square foot building with an approved parking ratio of 1.0 spaces per 1,000 square feet of office. 1812 North Moore Street is a 648,000 square foot building with an approved parking ratio of 0.83 spaces per 1,000 square feet of office. Please see appendix C for additional specific details of these projects.

Building Description

The ground level floor to floor height is 18' to create an exciting retail façade storefront and provide retail signage opportunities. This height also provides sufficient clearance for white table cloth restaurants and other high-end retail uses. Floors 2 through 4 are designed with higher than average typical floor to floor heights of 14.5 feet. This height will allow for a semi-loft style type of office with open ceilings and exposed MEP services. This type of office space is not available elsewhere in the area submarket and will be attractive to users with open space plans, or studio type uses such as architecture firms. Alternately a user with traditional office space plan needs can elect for finished ceiling heights of up to approximately ten and one-half feet. Higher ceilings allow for more natural daylight to

penetrate further into the office space. With an open ceiling configuration and the clear height proposed, light reflecting window heads can be used to direct large amounts of natural daylight deep into the building interior. With high ceilings, light reflectors, and a building depth of 110 feet, abundant natural light will be available over the entirety of an open space office plan.

The building roof includes about 18,000 square feet of usable vegetated and hardscaped terrace. The usable green roof serves several important purposes including reducing stormwater runoff, being an amenity for the building occupants, and creating a visually pleasing appearance from the upper floors of the surrounding buildings. Given the relatively low elevation of the green roof, and the partial-day shade and wind buffer created by the adjacent office buildings, the viability of roof plantings is greatly improved. The roof is accessed by an elevator and egress stair and will be made available to the surrounding office building tenants as an amenity.

Major mechanical equipment and elevator equipment will be located in the existing garage structure beneath the site rather than on the roof as is often typical. This will be more costly but will provide additional usable space on the roof and eliminate the visual impact from the adjacent buildings. The additional cost is estimated at approximately $10 per square foot and is included in enclosed cost projections.

The building exterior is designed with full curtainwall glazing and will appear highly transparent to the surrounding area. The design is intended to standout as a glass "jewel box" among the existing Crystal City Architecture. "The modernist idea of completely see-through architecture is finally being realized as glass curtain walls become more weather-tight, energy –efficient and transparent."[6]

[6] Dietsch, D. (Fall 2007) Glass, Washington Business Journal On Site Magazine, pp. 66-71

The building structure is designed with light-weight materials in consideration of the existing foundations and columns being utilized. Steel columns will align with the thirty-foot column grid of the garage below. Floor slabs will utilize economical bar joists with metal deck and lightweight concrete fill. Bar joists will help add to the open ceiling loft style design concept and allow for easy access to overhead data and communication wiring in cable trays.

Site Details

The site area is situated above an existing three-level underground garage that serves the adjacent office buildings. Because of the proximity of the site area to the adjacent buildings and the access road, the existing structure under the area is a two-way beam "waffle slab" as shown in figure 14. The existing structure is designed to accommodate approximately 350 pounds per square foot loading to allow for fire truck access on the travel ways, and approximately 4-5 feet of soil fill in the planting areas. A condition of the existing site plan is that this area be "designed to accommodate the weight of the heaviest fire department apparatus." The existing caisson foundations, garage, and plaza improvements have been in place for approximately 20 years. Therefore initial and long-term load induced ground settlement under the structure has long since occurred. With the weight of the soil and landscaping removed, the existing columns and foundations have sufficient load capacity to accommodate the weight of the proposed structure without undesirable settlement occurring. The calculations have been confirmed by geotechnical and structural engineers. The load from the proposed four-story structure, using lightweight construction materials, is the maximum

Figure 14 - Garage Structure

load that can be accommodated by the garage structure and foundations. The calculated loads accounts for the accessible roof terrace. Usable roof terrace areas are considered "assembly" areas by the building code and must be designed to 100 pounds per square foot live load.

Design Considerations

This site is surrounded by 11-story office buildings on three sides and is currently open space. The proposed development will be highly visible from multiple angles and elevations from the adjacent buildings. Views from the existing buildings are considered in the project design. The project will also be highly visible from the main north-south local road in Crystal City, Crystal Drive. The design considers, and is complementary to the adjacent surroundings.

As shown by the photo in figure 15, taken from the 6th floor of the adjacent 2121 Crystal Drive building, the rooftop of the project will be highly visible from the adjacent buildings. The size of the mechanical penthouse has therefore been kept to a minimum, with much of the typical rooftop equipment such as the emergency generator located in the existing garage rather than the penthouse. Additionally, the building will utilize individual floor package units rather than a central roof-top air handler. The other benefit of using individual package units is that the mechanical space is counted as floor service area in rentable calculations whereas duct shafts from a central unit are not. Additionally, the penthouse will house the elevator and egress

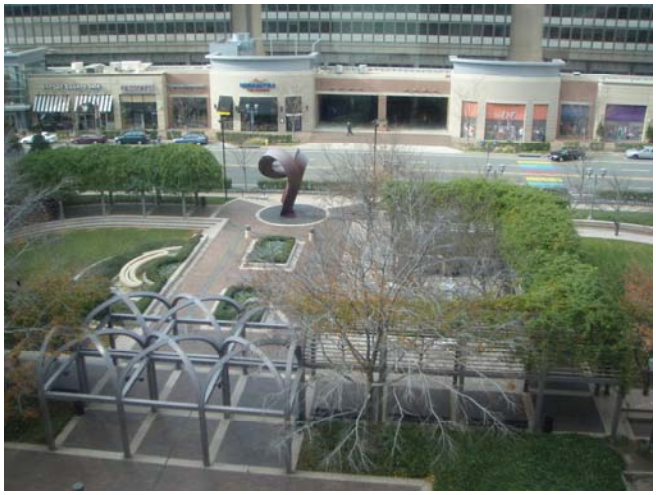

Figure 15 - View From 2121 Crystal Drive

stairs for the roof terrace. The design of the penthouse will be spandrel glass curtainwall to complement the building skin.

Comparison of potential uses for the site:

Retail requirements vary greatly by specific use, but generally require 40 to 60 feet of depth for an efficient layout. Retail uses greatly activate the streetscape, but single story retail at this location would likely not justify the costs of removing the existing plaza space and the entitlement process. Multi-level retail was considered, but such requires substantial "destination" demand and large economies of scale to successfully implement and operate. Typically, only regional malls with large department store anchors can effectively support multi-level retail, the Fashion Center at Pentagon City is one such mall and is less than two miles from the site. Creating convenient, attractive, yet cost effective accessibility to multiple retail levels is the primary complexity for a small footprint such as the 2101 site. Large retail malls can effectively incorporate grand vertical access into amenity areas such as atriums and central interior courtyards. This vertical access is typically in the form of open escalators and stairs, complemented by attractive elevators. By comparison, in urban in-fill retail development, vertical transportation is typically limited to a stair with an adjacent small elevator. Trying to do more is typically financially infeasible in small-scale development because of the large amount of floor space required for grand vertical access.

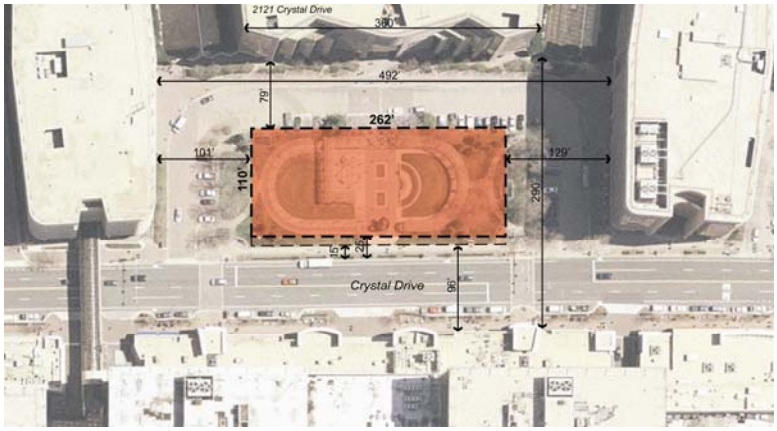

Figure 16 - Site Dimensions

Residential and hotel uses are typically 55-70 feet deep. While these narrow depths provide for greater potential setbacks from existing buildings, these uses are not

ideally compatible with the adjacent office buildings. There would be a perception of little privacy for the residential and hotel occupants since the adjacent office buildings will have clear views of almost all sides of the proposed project. Additionally, the views will be from multiple higher angles rendering even a typical clearstory high glass design ineffective at protecting privacy. From the standpoint of the adjacent office building occupants, residential and hotel buildings tend to be less transparent than office. These uses often have less window area, and have a much higher likelihood of such window area being obscured by window coverings and shades. Office use designed with a glass façade would appear much more transparent to adjacent users.

Office use is typically 90 to 120 feet deep. Office on the ground level does not provide the same level of street activity or eyes on the street. While an efficient office floorplate requires more buildable area depth, the façade can more easily be designed as a creation of art since privacy is typically not an issue.

2101 Crystal Drive is proposed to be office over ground floor retail. "Increasingly, office uses are positioned directly over retail space in open-air settings. This blending of uses has multiple benefits. Whereas offices occupy second and third floors only, tenants tend to be small, professional, medical, legal, or real estate businesses and provide moderate daily traffic flow for the retail space tenants, particularly restaurants." [7]

Public Use Space Analysis – There are currently many separate similar open space areas in Crystal City. These spaces are very well landscaped and maintained, but are not activated. As noted in a prior ULI article, "Parks can be too large-or even too plentiful-to be successful, which might help to explain Crystal City's underused places as well as some other little-used American parks and plazas."[8] The existing site plan for the Crystal Parks development identifies three areas of open space including the proposed site. However, the site plan specifically identifies the use and design of only one of these open spaces as a park with a

[7] Urban Land Institute (2008) Retail Development
[8] Houston, L. Jr. (October 2006), Ingredients for Successful Public Spaces, Urban Land, pp. 100-105.

public use easement. The proposed site is not designated as a park nor is there any legal requirement to maintain accessibility to the public. The project will incorporate a public art component in the open air thru atrium area.

Financial Analysis

Given the ownership structure, the use must be financially complementary to the surrounding buildings because of the relatively small size of the project as compared with the 1.5 million square feet of adjacent office space. If the project in any way compromised the obtainable rental rate of the adjacent buildings, it would likely not make sense for the current owner to cooperate in the development.

Retail – 45,000 SF of high clear-height one-story retail was constructed and delivered along Crystal Drive in 2004. Similar style one-story retail was considered for the Site but was determined to not be the highest and best use. One-story retail would provide approximately 24,000 rentable square feet on the site. The single story building would be more efficient because single story retail does not require the same amount of common and service areas such as a lobby, elevator shafts, mechanical shafts, and egress stairs. However, despite a more efficient floorplate, providing approximately 24,000 RSF as compared with 21,903 usable SF in a multi-story building, however, the rentable SF is not drastically different because of the use of current BOMA standards. Demolition, sitework and utility costs are generally the same for one-story. The usable roof terrace would also likely not be feasible in a one-story configuration due to required ADA access and increased costs of the terrace area.

Office only – Office use typically provides the highest yields if there is sufficient demand. Ground floor office use does not provide the same level of street activation or eyes on the street in the evening. It was determined that office only use would not complement the substantial amount of surrounding office space.

Residential – There is a concern about the perception of being surrounded by office towers. The site allows for little setback from Crystal Drive and would not have any exciting views. By comparison, competitive residential properties such as the new 220 20th Street apartment building is nineteen stories with spectacular views of the Potomac River and the District of Columbia.

Hotel – Hotel use was strongly considered because of market demand, street activity, footprint, and limited parking requirements. However, height limits due to the limited load capacity of the existing structure makes it difficult to provide sufficient minimum number of rooms needed for efficient hotel operations.

The combination of office over retail was selected to maximize the potential value of the project itself and to complement the surrounding uses. Additionally, the uses should be supported by County planning staff. The retail is consistent with the County retail action plan.

Rents, tenant improvement allowances and operating expenses are escalated at 3% from 2009 through lease-up as follows:

	(2009$) Current	(2013$) Stabilized
Office Base Rent (NNN)	$ 30.50	$ 34.75
Office Tenant Improvement Allowance	$ 50.00	$ 56.97
Retail Base Rent (NNN)	$ 30.50	$ 34.75
Retail Tenant Improvement Allowance	$ 50.00	$ 56.97
Real Estate Taxes	$ 4.82	$ 5.49
Operating Expenses	$ 8.43	$ 9.60
Total OpEx	$ 13.24	$ 15.09

Table 2 - Rent and Expense Assumptions

Operating Expenses are consistent with other retail and office uses. Property taxes are projected to be about 25% higher than other Crystal City office buildings due to the typical higher assessments on newer properties. The tax rate of $1.016 per $100 of assessed values

the base rate, $0.125 transit tax and $0.045 BID tax. The pro-forma uses the NOI assessment method prescribed by Arlington County. For new office and retail product, the value is determined by capitalizing the NOI, excluding a deduction for real estate taxes, at 7%. The capitalization rate is increased for older properties. The project NOI is as follows:

Stabilized NOI		
Office Rent	$2,478,808	$2,742,427
Office OpEx reimbursement	1,076,284	1,226,378
Retail Rent	668,048	744,603
Retail OpEx reimbursement	290,062	330,513
Net Parking Revenues (NNN)	0	0
Other Income	0	0
Gross Potential Income	4,513,202	5,043,921
Less Vacancy @ 3%	(135,396)	(151,323)
Total Operating Income	4,377,806	4,892,599
Less Office Operating Expenses	(1,076,284)	(1,226,378)
Less Retail Operating Expenses	(290,062)	(330,513)
Initial Stabilized NOI	3,011,460	3,335,707

Table 3 - NOI Calculation

A construction loan is conservatively budgeted at 65% loan to cost at 7% interest. A loan draw schedule is shown on pages 5 through 11 of appendix D.

Total project costs are as follows:

	2013 Stabilized Costs		
	Amount	$ Per RSF	% of Total
Total Land Costs	$4,356,000	$42.22	10.40%
Total Hard Costs	$27,162,181	$263.26	64.83%
Total Soft Costs	$10,380,471	$100.61	24.78%
TOTAL PROJECT COST	$41,898,652	$406.09	100.00%
NET OPERATING INCOME	$3,335,707		
UNLEVERAGED YIELD	7.96%		
TOTAL PROJECT COST W/O LAND	$37,698,652		

Table 4 - Total Project Costs and Yield

Base Building Construction Costs are higher than average due to several factors. Locating the mechanical equipment from the roof to the garage adds and estimated $10 per square foot over the building. The accessible roof terrace adds approximately $750,000 or about $8.75 per square foot over the building due to having an elevator access the roof, increased structural costs, and furnishing the 18,000 SF roof terrace area. The last substantial cost difference is the building façade, which is designed with high efficiency yet transparent full curtainwall glass. However, not building parking tends to counter these additional costs. Total hard costs are as follows:

			2009 Current Costs	2013 Stabilized Costs
Site Construction Costs	Quantity	Unit Price		
Demolition & Removal Costs				
Demolition	115,280	$1.00	115,280	125,042
Subtotal Demolition & Removal Costs			$115,280	$125,042
Sitework Costs				
Sitework	115,280	$12.50	1,441,000	1,563,027
Subtotal Sitework Costs			$1,441,000	$1,563,027
Total Site Construction Costs			**$1,556,280**	**$1,688,069**
Base Building Costs	Quantity	Unit Price		
General Conditions and Fee (11% Base Bldg)	115,280	$13.75	$1,585,100	$1,719,329
Base Building				
Office and Retail Structure	115,280	$125.00	$14,410,000	$15,630,265
Parking Structure			0	0
Subtotal Base Building			$14,410,000	$15,630,265
Hard Costs - Miscellaneous				
Liability Insurance	$17,601,380	1.04%	$183,054	$198,556
Excess Liability	1.17	$75,000	87,500	94,910
Builder's Risk Insurance	$33,000,000	$0.03	9,900	10,738
Signage			50,000	54,234
Subtotal Hard Costs - Miscellaneous			$330,454	$358,438
Total Base Building Costs	115,280	$141.62	**$16,325,554**	**$17,708,032**
Total Furniture Freight & Equipment			**$200,000**	**$216,936**

Table 5 - Total Base Building Costs

Since the project is still in the conceptual design phase, a 7.5% contingency on all hard costs including the Tenant Improvement allowance, is being carried as shown below:

Hard Costs Contingency	Quantity	Unit Price		
Construction Contingency (% on hard costs)		7.50%	1,780,196	1,895,036
Total Hard Costs Contingency			**$1,780,196**	**$1,895,036**

*Contingency Includes TI's and FF&E

Table 6 - Hard Cost Contingency

Tenant Improvement Costs. The asking rental rate provides a tenant allowance of $50/RSF. Higher allowances may be amortized over the lease period in the form of additional rent.

Office Tenant Improvements

	Quantity	$/RSF	Total
OFFICE LEASE-UP ASSUMPTIONS			
Tenant	Square Feet	TI	Total
Tenant #11 - 4th Fl	27,091	$ 54.50	$1,476,501
Tenant #11 - 3rd Fl	27,091	$ 54.50	$1,476,501
Tenant #11 - 2nd Fl	27,091	$ 55.31	$1,498,485
Total Office Tenant Improvements	**81,272**	**$ 54.77**	**$4,451,487**

Retail Tenant Improvements

	Quantity	$/RSF	Total
Retail	21,903	$ 54.91	$1,202,621
Total Retail Tenant Improvements	**21,903**	**$ 54.91**	**$1,202,621**

Table 7 - Tenant Improvement Allowances

31.50 Rent ($1.00 Increase)	2013 Stabilized Costs		
	Amount	$ Per RSF	% of Total
Total Land Costs	$4,356,000	$42.22	10.38%
Total Hard Costs	$27,162,181	$263.26	64.73%
Total Soft Costs	$10,446,836	$101.25	24.89%
TOTAL PROJECT COST	$41,965,017	$406.73	100.00%
NET OPERATING INCOME	$3,446,044		
UNLEVERAGED YIELD	8.21%		
TOTAL PROJECT COST W/O LAND	$37,765,017		

Table 8 - Rent Sensitivity (Increase $1.00)

75.00 TI's ($25 Increase)	2013 Stabilized Costs		
	Amount	$ Per RSF	% of Total
Total Land Costs	$4,356,000	$42.22	9.67%
Total Hard Costs	$30,201,264	$292.72	67.02%
Total Soft Costs	$10,503,535	$101.80	23.31%
TOTAL PROJECT COST	$45,060,799	$436.74	100.00%
NET OPERATING INCOME	$3,335,707		
UNLEVERAGED YIELD	7.40%		
TOTAL PROJECT COST W/O LAND	$40,860,799		

Table 9 - TI Allowance Sensitivity (Increase $25)

As shown in tables 8 and 9 above, sensitivities were run at a $1.00 increased rent to look at upside, and also run at base case rent with an additional $25 of TI allowance. In both cases the results were as expected and within and acceptable range. As shown on page 31 of appendix D, the base case 5 year internal rate of return (IRR) is 16.94%.

Investment Structure

Under the proposed structure, $14,085,537 of equity would be funded prior to construction loan proceeds of $26,158,855 being drawn. Construction loan interest will accrue until project cash flow can cover the construction loan interest only debt service. Given that no land cost outlay is required before entitlements, project and equity risks are greatly reduced.

Marketing Strategy

A third party leasing and market firm will be hired to promote the following for 2101 Crystal Drive:

2101 Crystal Drive is located across the street from the new "Main Street" in Crystal City — putting exciting restaurants, eateries, catering options and shopping just steps away. Metro and VRE are located within two blocks.

Crystal City has the best transportation in the Washington area. No other location has more transportation systems converging in one place. Crystal City has its own Metro, its own Virginia Railway Express (VRE) station that services both the Fredericksburg and Manassas lines, direct access to major highways—and even a direct connection to the Mt. Vernon Bike Trail. Several Metro bus lines also serve Crystal City in a new transit hub connected directly to the Crystal City Metro.

Crystal City has fast access to Reagan National Airport — connected both by Metro rail and by an overpass over the George Washington Parkway, making it extremely accessible — even by walking.

Crystal City provides fast access to major highways and interstates — for employees coming from Virginia, DC, or Maryland. Within a half-mile are ramps to several freeways including I-395, Route 110 (which connects directly to I-66 and US Route 50) and the George Washington Parkway.

Crystal City Metro Rail serves the blue and yellow lines — making Reagan National Airport just one stop away and Washington, DC just a short metro ride. The Metro rail system serves over 185 million riders per year, and connects government, business and residential neighborhoods throughout Washington, DC and the close-in Virginia and Maryland suburbs. It is the nation's second-most utilized subway system after New York—providing convenient access to transit-oriented employees. The Crystal City Metro is the 12th busiest station in the system.

The Virginia Railway Express Commuter Rail serves commuters living in popular, affordable residential neighborhoods west and south of Arlington. Over 3 million passengers ride VRE—with over 126,000 daily riders from 18 stations. The system is among the fastest growing commuter rail system in the country. Crystal City has the only Northern Virginia stop that serves BOTH Fredericksburg and Manassas lines—providing excellent access to a wide range of employees.

A number of quality tenants have recently relocated to Crystal City creating a new and diverse tenant mix. The stream of new tenants flowing into Crystal City includes companies such as PBS, National Cooperative Bank, Smithsonian Institution, Conservation International, Sigal Construction Corporation, KBR and Council on Foundations — many of which have crossed the river to re-settle in Virginia.

And, a new trend has emerged: non-profits and associations in particular, are finding Crystal City to be an ideal location. Due area's proximity to Reagan National Airport and Capitol

Hill, its significant concentration of hotels and conference facilities, its on-site Metro/VRE, its great visibility and views and now extensive amenities.

Alternative Exit Strategy

As an alternative to developing and holding the project, there are two alternative strategies. The first is to entitle the site and sell the entitled site to another developer. Fully entitled land in Arlington County is often worth up to $70/FAR SF. The second alternative is to develop and sell the project. In both instances, the site would have to be horizontally subdivided into an air-rights parcel, which is allowed in Arlington. Alternatively the owner could lease the site under a long term land lease to avoid taxable gains of a sale.