Rolling Valley: Discovering Highest and Best Use

Matthew Michetti  
Cornell University

Pike Oliver  
Cornell University

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Abstract
This case introduces students to many of the real estate issues faced when evaluating a real estate development opportunity with an emphasis on market assessment and financial feasibility. Over a two-week period, Brian Langston, a Development Associate and new hire at California-based land developer CALD, is tasked with making a recommendation regarding a 150-acre suburban parcel in Rolling Valley, California, called Village Green. The decision boils down to whether an entirely single-family community or a mixed-use community provides a greater residual land value for the project. Brian must make a recommendation to CALD’s partners in a way that recognizes and balances qualitative forces with quantitative metrics, and represents a viable project in either case.

Keywords
Cornell University, real estate, residential development, use selection, feasibility analysis, residual land value, market assessment, financial feasibility, market assessment and financial feasibility, master-planned, residential, community, market, subdivision, soft costs, site, amenities, walkability

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Rolling Valley: Discovering Highest & Best Use

By: Matthew Michetti and H. Pike Oliver
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This Cornell University Real Estate Case was prepared to stimulate analysis and discussion in undergraduate and graduate real estate courses. While the case is drawn from a range of actual experiences, it is not intended to illustrate correct or incorrect applications.
ABSTRACT

This case introduces students to many of the real estate issues faced when evaluating a real estate development opportunity with an emphasis on market assessment and financial feasibility. Over a two-week period, Brian Langston, a Development Associate and new hire at California-based land developer CALD, is tasked with making a recommendation regarding a 150-acre suburban parcel in Rolling Valley, California, called Village Green. The decision boils down to whether an entirely single-family community or a mixed-use community provides a greater residual land value for the project. Brian must make a recommendation to CALD’s partners in a way that recognizes and balances qualitative forces with quantitative metrics, and represents a viable project in either case.

This case study incorporates the following real-estate themes and issues:

- Residential Development
- Use Selection
- Feasibility Analysis
- Residual Land Value
On an early Monday morning in late June, 2011, Kenneth Olinger, President and Director of Development at California Land Developers (CALD), together with John Hartzel, CALD’s COO, Peter Batts, CALD’s Director of Planning & Design, and Brian Langston, a Development Associate at CALD, sat down to discuss how the company would move forward with Village Green, a large suburban parcel located in Rolling Valley, California.

The project represented a great opportunity for CALD, however the company had recently begun to doubt whether developing a project limited to single-family housing was truly the highest and best use for the site, given the way that the market had changed over the past few years. The task of analyzing how to move forward would fall on Brian’s shoulders. For a young real estate professional eager to prove his worth, it was as much an opportunity to shine as it was a burden. He would have to quickly conduct extensive analysis in order to figure out whether a mixed-use concept was more appropriate and if so, what the ideal mix of uses was. For CALD, the critical issue was maximizing residual land value, while not losing sight of the many qualitative factors at play. Brian had recently finished graduate school and it was an opportunity for him to put all of his newfound knowledge to the test, but this time with a real world project.

Project Background

Kenneth, John, and Peter had intimate knowledge of the project, however it was a new project for Brian. In order to get him up to speed, Kenneth laid a site plan across the conference room table and began to describe the site:

“Village Green consists of about 150 acres. We bought the parcel in late 2007 for about $4.75 million. We would have typically secured a purchase option on the land and made the acquisition contingent upon obtaining governmental approvals. At the time, however, the land market was on fire and sellers simply did not have to provide this luxury to buyers. After the acquisition we moved to secure entitlements for a single-family community until we were stopped in our tracks as the market dropped out from under us. There was no way that we could have moved forward with the project, if for no other reason than the fact that we would have never obtained financing. After the acquisition we moved to secure entitlements for a single-family community until we were stopped in our tracks as the market dropped out from under us. There was no way that we could have moved forward with the project, if for no other reason than the fact that we would have never obtained financing. Looking back, it was a rash decision to move to closing so quickly. Nevertheless, we have carried the property since 2007 for about $200,000 in property taxes in addition to insurance premiums and other administrative costs.

Prior to the acquisition, the site was in agricultural production. It is sparsely vegetated, with only a few mature trees surrounding a single rural residence and a farm structure. The site slopes a bit to the northeast at about a .5% slope, is bordered to the south and east by farmland and rural residences, and by residential subdivisions to its north and west.” (See Exhibit 1 – Existing Site Conditions).

John added:
“The original concept was a 550-unit, three and four-bedroom single-family community, and a 27-acre community park. The parkland allocation was in part a response to open space requirements set forth by the city. At the time, it was a no-brainer that a single-family community was the way to go. I don’t think that it is so cut and dry anymore. Single-family is beginning to gain traction again, but market conditions have been shifting and it’s unclear whether an exclusively single-family community still represents the site’s highest and best use. There is no doubt that the city needs development; the lull in development over the last few years makes it in my assessment an attractive time to deliver new space to the community. How we do that is the question. Despite the $900,000 or so that we have into the single-family approach, we cannot seek entitlements for a project that fails to maximize investor returns. Looking at other uses may prove to yield a greater residual land value if we are able to increase absorption by segmenting our product mix. I think it’s appropriate to consider the alternate scheme to include single-family - 250 units if I had to guess - but that leaves significant acreage for apartment, retail, or any other uses that makes sense. We must consider this as an option and evaluate it against the entirely single-family community and let our quantitative and qualitative analyses dictate the best path forward.”

John and Peter exited the conference room as Kenneth and Brian continued to discuss the task ahead.

“The first step,” Kenneth explained, “is to understand the market and to identify the opportunity that exists beyond single-family residential. We can then look into zoning issues, product mix, costs and structure, and begin to underwrite both stories.”

The local authorities and the community had considerable interest in the Village Green development. Village Green was a significant development for the community, in fact it was the largest that the community had seen in years. The city was known to take a very hands-on approach to its role in regulating and facilitating new development, and Village Green was no exception. The city had implemented an annual cap on the number of building permits issued annually. It was not that the city fundamentally opposed large-scale development, but a mixed-use community was a new concept for the area and the city felt obliged to promote responsible growth and to protect existing property owners. Assessing community acceptance would play a major role in determining feasibility. As Kenneth told Brian,

“Bringing together the needs as the community and city perceive them in a way that maintains, if not enhances, feasibility is not an easy task. These issues influence the entitlement period and often compromise the ability to maximize the site’s development potential, all of which compromise profitability. I will forward you an e-mail from Mark Stiles, the Director of Planning and Development at Rolling Valley’s Planning and Zoning Department (see Exhibit 14 – Email from Planning Commission). The e-mail outlines the city’s residential growth management plan, as well as its open space requirements for new developments. Keep in mind, Brian, that Mark is a valuable resource. Despite the city’s reputation for running a tight ship, it is very easy to work with and it encourages communication with developers at the very early stages of a project. I also advise you reach out to Jeff Sorici. Jeff is a principal at a construction-estimating firm that we have used extensively. He will be more than willing to provide preliminary hard costs of construction numbers that you can use in your financial analysis of the two site plan concepts.”

Kenneth got up from the table and stopped as he walked out of the conference room, noting,
“The partners and I would like to meet to discuss Village Green next Friday. Aim to have a brief synopsis of your findings at that time, and expect to deliver a five-to-ten minute pitch that includes a recommendation on how to proceed. In other words, does the mixed-use concept or the single-family concept maximize residual land value? And remember, the objective here is to determine what an investor/developer would pay for the land using an unleveraged, before-tax net present value (NPV) analysis. Also, be sure to consider the numerous qualitative factors at play here; the ‘why’ is much more important than the ‘what’.”

Brian headed back to his office and began to assemble the information that he needed to tackle his new assignment. He was at once a bit overwhelmed, and also excited as he tried to digest the many moving parts that he would have to get his head around in the next two weeks.

**California Land Developers (CALD)**

CALD was an entrepreneurial land developer based in California. Its primary business model was to gain control over large suburban parcels in growing residential communities and process or gain discretionary approvals for the land before acquiring and eventually disposing of it once its value had been enhanced. The team sold either entire parcels or individual lots to homebuilders to realize the value that they had created in obtaining entitlements, and oftentimes in developing the land. CALD specialized in master-planned communities with residential lots often numbering in the hundreds, or even thousands, and its partners rarely strayed from this area of expertise.

CALD had an impressive record of accomplishments, with a strong reputation among industry professionals and consumers alike. Three partners, Kenneth Olinger, John Hartzel, and Peter Batts founded CALD in the spring of 1990. The team members prided themselves as being a well-rounded group that was able to tackle challenging projects and yield impressive returns. In fact, their required hurdle for any land development project was 15%, though they routinely realized IRRs in the high 20% range.

At the time of the Village Green project, Kenneth offered more than 30 years of real estate development experience. Having held positions with some of California’s most admired land developers, Kenneth led the development of numerous master-planned communities across California. His forte was in working closely with local governments and communities to develop land and projects that created value for investors, while satisfying the needs of the community.

The office liked to refer to Peter as the ‘recovering architect.’ Peter had over two decades of experience in residential architectural design and had consulted on dozens of master-planned communities across California at the time of the Village Green project. Peter’s experience added tremendous value in managing the design process, the entitlement process, construction activities, and in developing a vision for projects that communities and local governments were often more willing to embrace.

John had worked in real estate finance and investments since the early 1980s. A lawyer by trade, John’s experience included more than 15 years as a Managing Director at a nationally recognized private equity firm in its real estate division. John’s extensive experience in financial underwriting of real estate, as well as his experience negotiating and executing real estate transactions made him an indispensable member of CALD’s team.

Brian was CALD’s newest hire and a recent graduate of a prestigious university’s graduate real estate program where he studied real estate finance and development. Prior to attending graduate school, Brian worked for a number of years as an architect on numerous single-family and multi-family developments. He was a young and ambitious student of real estate seeking to leverage his experience as an architect in a successful career in real
estate development. He viewed CALD as the perfect fit for his talents and his personality. He was eager to illustrate how his diverse skill set would complement that of CALD’s other team members.

**Market Conditions**

The City of Rolling Valley was incorporated in 1910 and for decades served as a thriving agricultural center. The city began to garner attention in the 1960s and 1970s when California constructed additions to the interstate highway system, providing Rolling Valley with greater accessibility. Rolling Valley’s location and accessibility made it an affordable and popular alternative to living in San Francisco, some 65 miles to the west.

In 2011, Rolling Valley had a population of just over 84,000. Home affordability and the city’s proximity to numerous employment centers fueled continued population growth in the area despite the great recession. Rolling Valley was highly accessible by highway and was serviced by numerous commuter rail lines. Additionally, at least six nearby colleges and universities provided steady housing demand from students and recent graduates, who overwhelmingly opted to rent.

Rolling Valley’s population grew by over 45% in the decade spanning 2000 to 2010 and expanded at an even greater pace throughout the 1990s. In 2010, less than 7% of Rolling Valley’s population was over 65 years old, about half of the national average. Additionally, over 30% were under the age of 18, a figure significantly higher than the national average.

In 2011, the unemployment rate in Rolling Valley was 7.3%. The median value of homes was $267,800 in 2010, while average household incomes were just north of $88,000, with more than 32% of families earning greater than $100,000 annually, a figure expected to exceed 40% by 2015. In 2011, 69.4% of residents were homeowners. While homeownership had trended lower in the few years following 2007 due to a weakened national housing market, it remained higher than that of California and was consistent with national averages. In 2011, a third of Rolling Valley’s population was renters and they paid on average $1,343 per month in rent, up 34% over the preceding five years.

Class-A apartment buildings in recent years – 2008 to 2011 – traded at a 6.5% cap rate on average, while less desirable apartment buildings traded between a 6.75% to 8.0% cap rate.1 Apartment supply was slow to respond to strong demand and spiking rents, with fewer than 200 units delivered to the market over the preceding five years, more than half of which rented for under $1,200 per month. The lull in development activity was in part a result of a difficult financing environment. Nevertheless, occupancy rates were north of 95% on average, investor appetite for apartment development was considerable, and the city had the capacity for significant new apartment stock.

Successful young professionals and families continued to settle in Rolling Valley. A rise in income levels, an increase in the educational attainment of residents, and an aging housing stock supported development opportunity in the upper-middle tranche of the single-family market, though apartment demand was as strong as it had ever been. Young professionals were opting to rent in greater numbers, and the rental options for this demographic were in disproportionately short supply. A large portion of the renting population lived in two and three dwelling structures, whereas less than 5% of renters lived in structures with greater than 20 units. Young professionals sought newer apartments, with ample amenities, a sense of community, and above all walkability. These types of rentals were difficult to come by in Rolling Valley.

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1 Cap Rate: The relationship between a property’s net operating income (NOI) and its fair market value (V), calculated as NOI/V
Monday, June 25: 8:20am

Back in the quiet of his office, Brian got to work. He began by analyzing CALD’s plan for Village Green as an entirely single-family development.

Option One: Single-Family Residential Subdivision

Large single-family communities were commonplace in Rolling Valley. Residents loved the sense of neighborhood and the safe environment that these communities created for children. As such, CALD had anticipated the entitlement process for the 550 single-family homes and park space to generate little resistance from the community. However, that did not mean that it was the best approach.

The 27-acre park would offer four softball fields, four soccer fields, picnic and play areas, community and maintenance buildings, as well as restrooms and parking (see Exhibit 2 – Single-Family Concept). The city insisted that the park become part of the subdivision, a kind of development impact fee for the project. City officials believed that Rolling Valley lacked the necessary recreational and community facilities to meet the needs of its growing population.

The community park at Village Green would nearly double the recreational opportunities within a three-mile radius of the site. CALD welcomed the community park, as it had the foresight to see its value, despite the significant cost that it added to the project. CALD had worked in the community for years and it was important to future projects to preserve its reputation. Its only concern was the influence that the park would have on potential homebuyers. Would the presence of the public park erode the privacy typically afforded by residential subdivisions? Would a house by the park be perceived as a value-add, or a nuisance?

As per the residential growth management restrictions set forth by the city, Brian outlined a construction schedule that identified a mix of three and four-bedroom units (see Exhibit 9 – Single-Family Project Schedule). The Village Green project was not unlike many of the residential land development projects that CALD had successfully completed. Using data collected over decades of experience, Kenneth pulled together some of the assumptions that Brian needed to evaluate the single-family site plan concept (see Exhibit 13 – Single-Family Absorption).

Kenneth explained that Homeowners Association (HOA) costs and real estate taxes would transfer to individual homeowners and would thus decline proportionally with home sales. HOA fees were necessary to maintain common areas and essential neighborhood services, including trash pickup and landscaping, among others. However, HOA costs would not cover the maintenance and repair costs associated with the community park. Fortunately for CALD and homeowners, the municipality agreed to bear these costs. Kenneth also instructed Brian to include a 5% (of total project costs) development contingency in the project budget, as there was a large degree of uncertainty in ground-up development and a contingency helped to protect against this. Other soft costs were assumed to be incurred evenly over the construction period with the exception of the costs associated with permits and fees, which would be incurred in year three prior to the start of construction (see Exhibit 3 – Single-Family Soft Costs).

Thursday, June 28: 3:30pm

Development Impact Fee: Often referred to as ‘exactions’, development impact fees require developers to contribute towards the improvement and development of public facilities. Fees can vary widely and may include a monetary sum, infrastructure improvements, the construction of community facilities, or other similar improvements.
With a better understanding of the existing site plan concept, and having spent a few days gaining a better understanding for the potential of the site, Brian popped his head into Kenneth’s office,

“Hey Kenneth, do you have a minute? I have been wading through market data for days now and I discovered that Rolling Valley has only about 14 square feet of retail space per resident. That compares to about 24 square feet on average nationwide. In addition, soaring apartment rents and a growing young professional demographic support the opportunity for apartment development. With that in mind, I talked with Mark Stiles. He clarified that the growth management restrictions apply only to for-sale, single-family residential development. In other words, we are restricted only by zoning density allowances for other asset classes. If we reduce the number of single-family units, and introduce retail and apartments to the site, we may be able to shrink the overall project schedule through increased absorption and boost the land’s residual value.”

“Interesting,” Kenneth replied. “Dig into the details a bit further. How much retail, how many apartments?”

**Evaluating Mixed-Use**

With just over a week left to finish his analysis, Brian had little time to engage an architect to develop a clear vision for the mixed-use community. However, he needed at least a schematic understanding of the site layout. With a schematic site plan, along with absorption rates observed in the market, demographic trends, apartment supply, vacancy trends, an understanding of the construction pipeline, and the current supply of retail space, Brian would be able to identify how much of each product type to include in his analysis. Remembering John’s comment that at least 250 single-family units should remain and having the benefit of an existing site plan design for the single-family community, Brian created an acreage reconciliation chart that assigned enough acreage to single-family to achieve this number (see *Exhibit 4 – Acreage Reconciliation*). The acreage reconciliation chart and site plan diagram assigned acreage to each land use and illustrated land use adjacencies. A quick telephone call to Mark Stiles at the zoning department revealed that the city would allow a maximum density of 18 residential units per acre for multifamily development.

Additionally, given the considerable parking that zoning required for retail space (about 5 parking stalls per 1,000 square feet of retail area) Brian assumed a Floor Area Ratio (FAR) of .25 for the retail parcel. Using the acreage reconciliation chart, Brian could now extrapolate the number of apartment units and gross retail space that would maximize the site’s zoning potential.

**Monday, July 2: 10:30pm**

Before moving ahead with the financial analysis, Brian wanted to get the nod from Peter, the resident architect, to confirm that he was on the right track with the site plan layout. Brian used the plan design from the single-family development concept previously developed as the basis to generate the mixed-use site plan design. Confident in his planning decisions, he took his drawing to Peter’s office (see *Exhibit 5 – Mixed-Use Concept*). “Hey Peter, do you have a moment? I wanted to pick your brain on the site plan concept for the

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3 Floor Area Ratio (FAR): A ratio describing allowable building square footage relative to total parcel square footage. For example, if a site is 20,000 square feet and has a FAR of 3, 3*20,000 (60,000 sf) would be the allowable gross building square footage for the site.
mixed-use plan of Village Green.” “Always happy to discuss a planning problem,” Peter said, as he waved him inside. Laying the drawing across a relatively clean area of Peter’s desk, Brian explained his approach:

“It’s a bit rough, I know, but I think that it gets at what’s important. The community park is located along 11th Street. This is the most public area of the site and offers easy accessibility to the community without requiring visitors to enter the residential areas of the site. It also offers the opportunity to locate the retail component at the center of the site, just south of the park. For me, the centrally located retail would define Village Green as a mixed-use community. I think that the park and retail space have the potential to play off each other nicely. Restaurants overlooking the park or just a retail boulevard that opens to the park, something along those lines. I have located the apartment buildings on either side of the retail and community park. Located here, the denser, more populated uses are closer to 11th Street and afford the single family portion of the development the most privacy at the rear of the site.”

Peter replied,

“At first glance, it makes sense. What you have drawn here provides enough to quantify each land use, and what is important is to understand the site’s fullest zoning and market potential. I’m excited to see how this scheme pencils out!”

Feeling sufficiently validated, Brian got back to work developing his mixed-use option for the site.

**Option 2: Mixed-Use Development**

**Single Family Residential:**

Brian’s plan for the mixed-use concept included 271 three and four-bedroom single-family homes. To exact expected sales prices for the single-family units, Brian looked to sales comps and current residential inventory. However, since Village Green would be the first mixed-use, walkable community of its kind in Rolling Valley, Brian was a bit wary of this method and wondered if Village Green would perhaps trade at a premium to other homes on the market. Brian contacted Rebecca Marosh, an executive at a sales and marketing group that specialized in single-family residential sales. Few in the industry had as keen a sense of what the market could bear as she did. Brian explained the Village Green concept in detail to Rebecca and asked her to offer some insight into what the homes would likely sell for in both the single-family community, as well as in the mixed-use concept.

Rebecca explained that while the proposed development was unique to the area and perhaps more valuable in the eyes of some homebuyers, the single-family homes in the mixed-use concept would not necessarily trade at a premium. “While it is possible,” Rebecca remarked, “there is little evidence to support the notion. I have provided conservative numbers that I suggest you use in your analysis of both site plan concepts.” (See Exhibit 11 – Single-Family Sales Prices).

**Apartment:**

Higher-end rentals targeting young professionals and families with children was a central component of the mixed-use concept. However, Brian was unsure about the rental rates that he should use in his analysis. He decided to list all of the qualities and characteristics that he anticipated the new buildings would have, including the unit sizes, level of interior and exterior finish, building amenities, and more. Brian assumed that the
buildings would each have a free gym and dedicated parking. Additionally, each unit would have its own washer and dryer. Brian assumed that tenants would pay all unit-related utilities except water, which would average $40 per month per unit. Tenant-paid utilities were treated as a reimbursable expense and amounted to about 80% of total utility expense for the apartment buildings. Using these assumptions, Brian was able to evaluate competitive apartment buildings in the market and derive apartment rental rates. One-bedroom apartments would rent at $1,525 per month, 2 bedrooms at $1,655 per month, and 3 bedrooms at $1,790 per month (see Exhibit 6 – Apartment Comparables).

Brian decided on a unit mix of 60% one-bedroom units, 30% two-bedroom units and 10% three-bedroom units, a decision driven by both market sentiment and his experience with apartment building design and construction. The apartments would average 810 square feet, 985 square feet, and 1,230 square feet for the one, two, and three-bedroom units, respectively. He estimated that each one and two-bedroom unit would include a single, dedicated parking space and that each three-bedroom unit would have two dedicated parking spaces. 753 parking spaces would be included and those not dedicated to a specific unit would rent for $55 per month. To determine the project’s gross square footage for construction costs, Brian applied a building efficiency ratio of 80% to the rentable unit square footage, a conservative ratio for new apartment development. Brian was confident that Village Green had Rolling Valley’s newest and most luxurious apartment buildings. As such, Brian estimated that the Village Green project would demand higher rents than its competition, operate at occupancy levels of 97%, and require very few rent concessions at .25% of gross potential rent.

Retail:

Brian envisioned neighborhood retail with mostly local retailers and restaurants and if lucky, perhaps a national tenant. The tenant mix would have to satisfy all of the daily needs of its community and would likely include a dry cleaner, a wine and spirits store, and a pharmacy, among others. However, without a precise understanding of the project’s tenant mix, there was significant uncertainty in projecting revenues and lease terms, and consequently a developed retail center’s market value using the income approach to valuation. Retail lease terms could be widely disparate depending on the size of the space, the credit worthiness of the tenant, reimbursable expense arrangements, market conditions, the length of the lease term, renewal terms, and landlord concessions, among other factors. Brian instead employed the comparable and cost approach to assign a value to the 18.6 acres, rather than apply a cap rate to projected cash flows. Brian found the three recent sales among a list of six that most closely resembled the Village Green parcel, and used a sales price per buildable square foot of $18.09 to determine an appropriate market value for the unimproved land (see Exhibit 7 – Retail Comparables). Next, Brian added the cost to improve the site, estimated at $3 per retail parcel square foot. This figure, added to value of the unimproved lot, would provide a fair market value for the retail parcel.

Soft Costs:

The soft costs for the mixed-use development would differ materially given the difference in project schedule, development density, and required design and engineering services, among other factors (see Exhibit 8 – Mixed-Use Soft Costs). Brian keenly

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4 Building Efficiency: Represents the ratio of total gross square footage to rentable square footage. For example, if a building has 100,000 sf of rentable area and an efficiency of 80%, the building’s total square footage would be 100,000 / .8 (125,000 sf.)

5 Anchor Tenant: The major tenant in a retail center that serves as a primary draw of customers and an incentive for other smaller tenants to lease space in the center.
recognized that the real estate taxes would be treated differently and derived them in proportion to each use’s revenue acres. For the apartment and retail portion of the project, these costs would be incurred annually until disposition, which for the retail parcel was at the end of year three and for the apartment component the end of year five. Like the single-family development option, taxes would decline proportionally with home sales.

Putting it All Together

In modeling out the two alternatives, Kenneth directed Brian to use an annual pro forma without escalating costs or revenues. “The objective,” Kenneth explained, “is to evaluate our options in a back-of-the-envelope style analysis. After we make a decision on how we intend to move forward, we will develop a more precise analysis, refine our cost assumptions, product mix and project schedule, and determine with greater precision the land’s inherent value.”

Option 1: Single-Family Development

Brian estimated that the single-family option would take one year of planning and processing before land development could begin. Road infrastructure and utility construction would occur in year two, as would the construction of the community park. The City of Rolling Valley was adamant that the community park be part of the initial construction phase. In fact, the approvals would be made contingent upon the park’s availability to the community prior to new residents moving into the neighborhood. Home construction would begin in year two and would follow the growth management schedule dictated by the approvals and highlighted in Exhibit 9 – Single-Family Project Schedule. Homes delivered would be considered built and sold in the same analysis year.

Option 2: Mixed Use Development

Brian estimated that the mixed-use concept required two years of planning and processing prior to the start of construction. The development of the community park would occur in year three, as would the utilities and infrastructure work. Brian knew that residents of the community might resist the increased density to the area, or perhaps contend that a mixed-use community was not in keeping with the character and history of Rolling Valley. CALD had seen residents’ disapproval stall a development’s progress for years and knew that in many cases it was strong enough to kill even the most profitable of projects. Resident sentiment aside, CALD surely faced a more complex entitlement process with the mixed-use approach. The mixed-use plan more drastically changed the ecology of the site, the number of residents introduced to the community, the amount of impervious surface area, traffic, and more. While two years sounded like a long time, Brian knew that it was an aggressive schedule.

Brian anticipated apartment construction to begin in year three, together with the lease-up. The apartment component was expected to stabilize by January 1 of analysis year six. Brian capitalized the cash flow from operations in year six to arrive at the reversion value in year five. With only the total number of apartment units and not the exact number of buildings, Brian devised a revenue schedule using stabilized NOI for his analysis. Brian assumed 8% of stabilized NOI in year three, 40% in year four, and 75% in year five. Construction costs were spread evenly over the three-year construction period (see Exhibit 12 – Apartment Expense Ratios).

Lot improvements to the retail portion of the site would occur in year three. Brian anticipated a development schedule that disposed of the retail parcel in year three after
entitlements were obtained and the site was improved.

**Tuesday, July 2: 9:15am**

With his presentation to the partners just three days away, Brian needed to pull together some construction cost numbers. Brian took Kenneth’s advice and set up a meeting with Jeff Sorici.

“Hey Brian. I pulled together some preliminary numbers for the Village Green project. If I understand the plans you sent over, the community park is the same in both options, though the road and infrastructure costs are a bit different, due to among other things fewer lots requiring utility service connections in the mixed-use concept. As such, I have estimated the off-site construction costs slightly higher in the mixed-use concept. The direct costs for the single-family homes assume standard wood-framed construction practices.”

“For the apartment buildings,” he continued, “my estimates assume four-story stick-framed6 buildings. I have budgeted for a combination of a rain screen system and wood siding exterior. Additionally, each building includes elevator service. The gym and other building amenities are included in the direct construction costs. The site work and landscaping figures for each development approach are comprehensive and we can assume these costs are incurred evenly over the construction schedule (see Exhibit 10 – Construction Costs).”

Brian thanked Jeff for his efforts and took the construction numbers back to his office to begin to layer them into his financial analysis.

**Friday, July 6: 8:15am**

Earlier in the week, Kenneth helped Brian with some of his financial analysis. Brian ran an annualized pro forma for both options using net present value, and ran a single-year stabilized apartment pro forma in order to generate a reversion value for the apartment buildings. Brian decided to cap the year six operating cash flow rather than NOI, a more conservative approach, to generate the market value in year five of his analysis. He recalled that more often than not, capping NOI does not account for capital expenditures and is too aggressive in evaluating a project’s true market value. For this purpose he used a 6.25% cap rate.

Brian tried to quell his anxiety over the opportunity to present his analysis to the partners. Over the previous two weeks, he had gathered together a great amount of information and made numerous decisions about everything from the real estate market to construction costs, product mix, construction type, site plan concepts, and more. Minutes away from his meeting with Kenneth, John and Peter, Brian began to second-guess some of the decisions that he had made. Did he provide too few single-family homes in the mixed-use option? Did he overestimate the demand for apartments? Was too much acreage allocated to retail space? Was he too aggressive in estimating rental rates, or too conservative in estimating single-family home sales?

Brian reminded himself that operating in an uncertain environment was part of the business, especially in the early stages of analysis. He took comfort in knowing that the assumptions and decisions he made were a function of thorough and thoughtful analysis, and felt confident that he could defend each of them. With a deep breath, he walked into the conference room where Kenneth, John and Peter sat waiting to hear his recommendation.

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6 Stick-Framed: Standard dimensional lumber assembled on-site.
Exhibit 1
Existing Site Conditions

Exhibit 2
Single-Family Concept

Exhibit 3
Single-Family Soft Costs

**Soft Cost**

<table>
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<tr>
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<th>Amount</th>
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<tbody>
<tr>
<td>Finance &amp; Legal</td>
<td>$1,250,000</td>
</tr>
<tr>
<td>Development Fee</td>
<td>$2,750,000</td>
</tr>
<tr>
<td>Permits &amp; Fees</td>
<td>$950,000</td>
</tr>
<tr>
<td>Design &amp; Engineering</td>
<td>$675,000</td>
</tr>
<tr>
<td>Marketing</td>
<td>$660,000</td>
</tr>
<tr>
<td>Real Estate Taxes (Annually)</td>
<td>$200,000</td>
</tr>
<tr>
<td>HOA (Annually)</td>
<td>$135,000</td>
</tr>
<tr>
<td>Closing Costs</td>
<td>2.50%</td>
</tr>
<tr>
<td>Project Contingency</td>
<td>5.00%</td>
</tr>
<tr>
<td>Land Use</td>
<td>Acreage</td>
</tr>
<tr>
<td>------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Single-Family</td>
<td>56.6</td>
</tr>
<tr>
<td>Apartment</td>
<td>36.3</td>
</tr>
<tr>
<td>Retail</td>
<td>18.6</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>111.5</strong></td>
</tr>
<tr>
<td>Parks &amp; Recreation &amp; Community Park</td>
<td>27</td>
</tr>
<tr>
<td>Major Roadways</td>
<td>10.7</td>
</tr>
<tr>
<td><strong>Total Parcel</strong></td>
<td><strong>149.2</strong></td>
</tr>
</tbody>
</table>

![Mixed-Use Concept Diagram]
Exhibit 6
Apartment Comparables

Exhibit 7
Retail Comparables

Exhibit 8
Mixed-Use Soft Costs

Soft Costs
Finance & Legal $ 1,850,000
Development Fee $ 3,650,000
Permits & Fees $ 1,400,000
Design & Engineering $ 1,850,000
Marketing $ 850,000

Real Estate Taxes (Annually) $ 200,000
HOA (Annually) $ 75,000

Closing Costs 2.50%

Project Contingency 5.00%
### Construction Costs

#### GENERAL
- Road Infrastructure & Utilities: $2,250,000 ($2,450,000)  
- Community Park: $2,450,000 ($2,450,000)  
- Site Work & Landscaping: $8,000,000 ($7,500,000)

#### SINGLE-FAMILY
- Hard Cost:
  - 3 Bedroom (per unit): $235,000 ($235,000)  
  - 4 Bedroom (per unit): $287,000 ($287,000)

#### APARTMENT
- Hard Construction Costs (per SF): $132

#### RETAIL
- Lot Improvement (per SF): $  

### Single-Family Sales Prices

<table>
<thead>
<tr>
<th>Unit</th>
<th>Average (SF)</th>
<th>Market Value</th>
<th>Sales / SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 bedroom</td>
<td>1950</td>
<td>$331,000</td>
<td>$170.00</td>
</tr>
<tr>
<td>4 bedroom</td>
<td>2450</td>
<td>$391,000</td>
<td>$160.00</td>
</tr>
</tbody>
</table>

### Operating Expense Ratios (% Of Gross Potential Rent)

- Vacancy: 3.0%
- Concessions: 0.25%
- Repairs & Maintenance: 2.5%
- Marketing: 2.0%
- Total Utilities: 9.00%
- G&A: 1.5%
- Insurance: 1.50%
- Taxes: $65,112
- Payroll: 5.0%
- Management Fee: 3.5%
- Water (all units / year): $313,440
- Cap Ex (per unit): $160.00
### Market Absorption

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Absorption</td>
<td>235</td>
<td>250</td>
<td>265</td>
<td>300</td>
<td>345</td>
<td>325</td>
</tr>
<tr>
<td>Village Green SF Deliveries</td>
<td>0</td>
<td>0</td>
<td>150</td>
<td>225</td>
<td>125</td>
<td>50</td>
</tr>
<tr>
<td>% of Total Absorption</td>
<td>0%</td>
<td>0%</td>
<td>57%</td>
<td>75%</td>
<td>63%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Exhibit 14
Email from Planning Commission

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As you know, Reflect Valley is a desirable and growing suburb. It is increasingly difficult to meet the needs of the community and developers are required to ensure smart growth and the best community for residents.

There are two important zoning regulations to note:

- Open Space Requirements
  - Wetlands
  - Parks

- Residential Growth Management
  - New residential developments are required to include a park for every 200 people residing in the community. We are proposing a new park located near the Reflect Valley High School.

We welcome the participation of all stakeholders including developers, residents, and the community. We look forward to working with you in the coming months.