

**ARROWHEAD CENTER DEVELOPMENT
PROJECT COORDINATION, PLANNING, AND
PROGRAM MANAGEMENT**

Project ID: CEEn_2017CPST_005

by

KAM Engineering

Mitchell Smith

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A Capstone Project Final Report

Submitted to

Bob Tandler

Fritzi Realty

**Department of Civil and Environmental Engineering
Brigham Young University**

April 18, 2018

Executive Summary

PROJECT TITLE: Project Coordination, Planning, and Program Management
PROJECT ID: CEEEn-2017 CPST-005
PROJECT SPONSOR: Fritzi Realty
TEAM NAME: KAM Engineering

Fritzi Realty is interested in developing four parcels of land in Spanish Fork, Utah. Currently, the Arrowhead center is the only existing development on the site, specifically, on parcel three. The problem given to this team was to propose a development plan which would balance the interests of the developer, the community, and the local government. Some of the interests include social approval, economic benefit, environmental impact, and feasibility of construction.

The project required the team to analyze four parcels of land and determine the optimal development plan for each parcel. The team assessed several ideas designed to maximize the benefit to the community, the planet, and the development company, Fritzi Realty. An economic analysis and weighted evaluation process were provided for two of the top proposals.

Fritzi Realty initially presented a development plan which included mixed use commercial space, a possible 55+ development, and residential space. In order to fully evaluate the plan proposed by Fritzi Realty, KAM Engineering proposed their own development plan which would be used as a comparison. This plan included a grocery store, residential space, and a park space.

Using the weight evaluation scheme, KAM engineering determined that their proposed plan was more profitable to the community as a whole. However, the plan proposed by Fritzi Realty would have a greater return on investment for the developer.

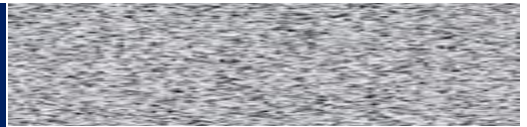
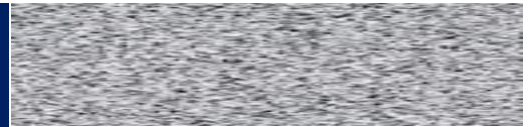


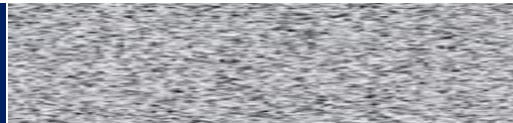
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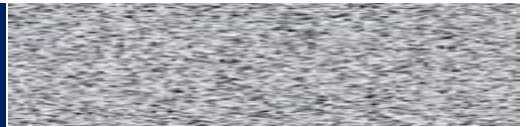
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Introduction

The Arrowhead center in Spanish Fork, Utah has housed several different businesses since it's construction in the 1920's. What began as a cannery now houses several small businesses including Habitat for Humanity. Today, Spanish Fork is preparing to expand to the south in the area surrounding this center and the city council expresses great hopes for additional development. The purpose of this project is to present a development plan that is affordable, has a reasonable return on investment, and will be a benefit to both the developer and the city of Spanish Fork.

Currently, there are four parcels of land owned by Fritzi Realty near the intersection of Arrowhead road and US 198 in Spanish Fork, Utah. The first parcel is currently unmaintained greenspace. Fritzi Realty has donated the far east portion of this parcel to the city of Spanish Fork for a river walk which currently exists. The second also contains green space on a slope connected to parcel three. Parcel three contains the 1920's cannery which has been retrofitted into office/warehouse spaces for businesses. Parcel four also contains a large amount of undeveloped greenspace. Fritzi Realty wishes to develop this land.

KAM engineering was asked to propose and evaluate a plan that is a benefit to people, planet and also provides a profit to the developer. As part of the team's task, they have been asked to create a detailed preliminary development Master Plan for the development of the four parcels that belong to Fritzi Realty. The team is to propose the best use of the properties in accordance with the owner's objective as well as Spanish Fork city parameters. Once the proposed master plan is finished it would need to be reviewed and approved by a Utah licensed professional engineer of the Sponsor's choosing prior to initiating Spanish Fork's property development application process.

Various factors were researched such as an economic analysis, potential environmental and social factors, and the feasibility of the project. With these factors researched, a weighted evaluation was created to evaluate the two proposed development plans for the site. From the evaluation weight scheme, KAM Engineering was able to determine the development plan that would be best for the Arrowhead center.

Schedule

	September	October	November	December	January	February	March	April
Introduction								
Research								
Design								
Analysis								
Report								

Figure 1: Timeline of Project

The figure above presents a simple timeline of this project. Over the course of eight months, KAM Engineering went through several phases. Much of our introduction to the project was given in September and October as we attended a presentation with our sponsor and meetings with our mentor.

The research phase of the project involved filtering through the CE EN 201, Sustainable Infrastructure, class projects whose goals and aims were similar to this project. In addition, research was done to understand the limitations of the project such as city zoning requirements, feasibility of a school, city council preferences and physical land limits through site visits. Once our design was finalized, we began to research individual influence factors such as social, economical, environmental and construction which we would use in our analysis of the two development plans. This research included gathering information on local opinions, how to evaluate a development plan and the return on investment and how many airborne emissions were produced by a grocery store.

The design portion of this process involved the design of KAM Engineering's development plan. We met with our mentor and the other design team to go through the ideas presented in the CE EN 201 final projects. Once the ideas were filtered through, our team created a visual division of the parcels, each with a description of what the parcel would contain. This information was sent to our sponsor and the evaluation teams to determine whether the plans were feasible based on the five areas of engineering: transportation, water resources, environmental, structural and geotechnical.

Analysis involved creating a weighted evaluation scheme to compare the development plans proposed by KAM Engineering and Fritzi Realty. An economic analysis was performed to show the fiscal benefits of each plan. Other factors were evaluated based on the previous research.

The reporting stage occurred consistently within the last four months of the project. Monthly reports were sent to our sponsor and our mentor to be displayed on the BYU capstone website. Additionally, we would meet monthly with our mentor to answer questions and report our progress. A 50% report was completed in March 2018 for evaluation by our sponsor and mentor. Our final product was presented on April 12th, 2018 to our mentors, sponsor, the civil engineering student body and local ASCE chapter members.

Assumptions & Limitations

The assumptions and limitations of this project varied somewhat between the two phases of the project: design and analysis.

During the design phase, some simple assumptions made in regard to limitations. The project goal, as explained above was to present several a possible development plan, regardless of cost or what was placed on each parcel. There was no budget that would limit the possible development plans. Therefore, during the design process, it was assumed that anything could be built on these parcels of land at any cost, implying no physical construction restraints or zoning restraints. The only physical constraint was the outline of the land parcels. Any structures or roadways etc. could not be built outside the designated parcels.

As KAM Engineering began to analyze the different proposals, the assumptions were then adjusted to reflect the needs of the sponsor, the needs of the community and the needs of the environment. The economic analysis performed assumed average square footage construction costs from market research, and expected inflation. The outcomes of the study were then evaluated along with several other factors considered to be important in the implementation of this development plan. The preferences of the city council and local community were assumed to be in opposition to high density housing based on previous reports from city council meetings and our mentor Mitchell Smith. Based on interactions with our sponsor and assumptions about the nature of his job as a developer, it was assumed that Fritzi Realty required a positive return on the investment. Disregarding the specific costs or profits, Fritzi realty was mostly interested in the long term benefits as a percentage.

Limitations in the accuracy of our analysis are due to the lack of expertise and knowledge in land development. The weighting scheme chosen to evaluate the two development plans was subjective. The ranking values and the weighted values were decided solely on the opinion of the members of KAM engineering. We acknowledge that this weighting scheme could yield different results should another party choose to evaluate these plans in a similar fashion. The weighted values may be changed based on the needs or concerns of the specific party which would change the overall results. The results presented in this report are a reflection of the opinions of the members of KAM Engineering.

Design, Analysis & Results

The project required the team to analyzed four parcels of land and determine the optimal development plan for each parcel. The team assessed several ideas designed to maximize the benefit to the community, the planet, and the development company, Fritzi Realty. An economic analysis and weighted evaluation process were provided for two of the top proposals.

The first proposal is Mr. Tandler's proposed plan which was presented to the capstone class at Brigham Young University in September 2017. Parcel 1 would consist of making it a mixed use/residential area that could possibly have a 55+ community at medium density. Parcel 2 would consist of commercial and mixed-use buildings including possible light or live/work office and medium density multifamily residential. Parcel 3 would be to possibly retain the current industrial building or make it a low-density residential area. Parcel 4 would consist of low-density residential housing.

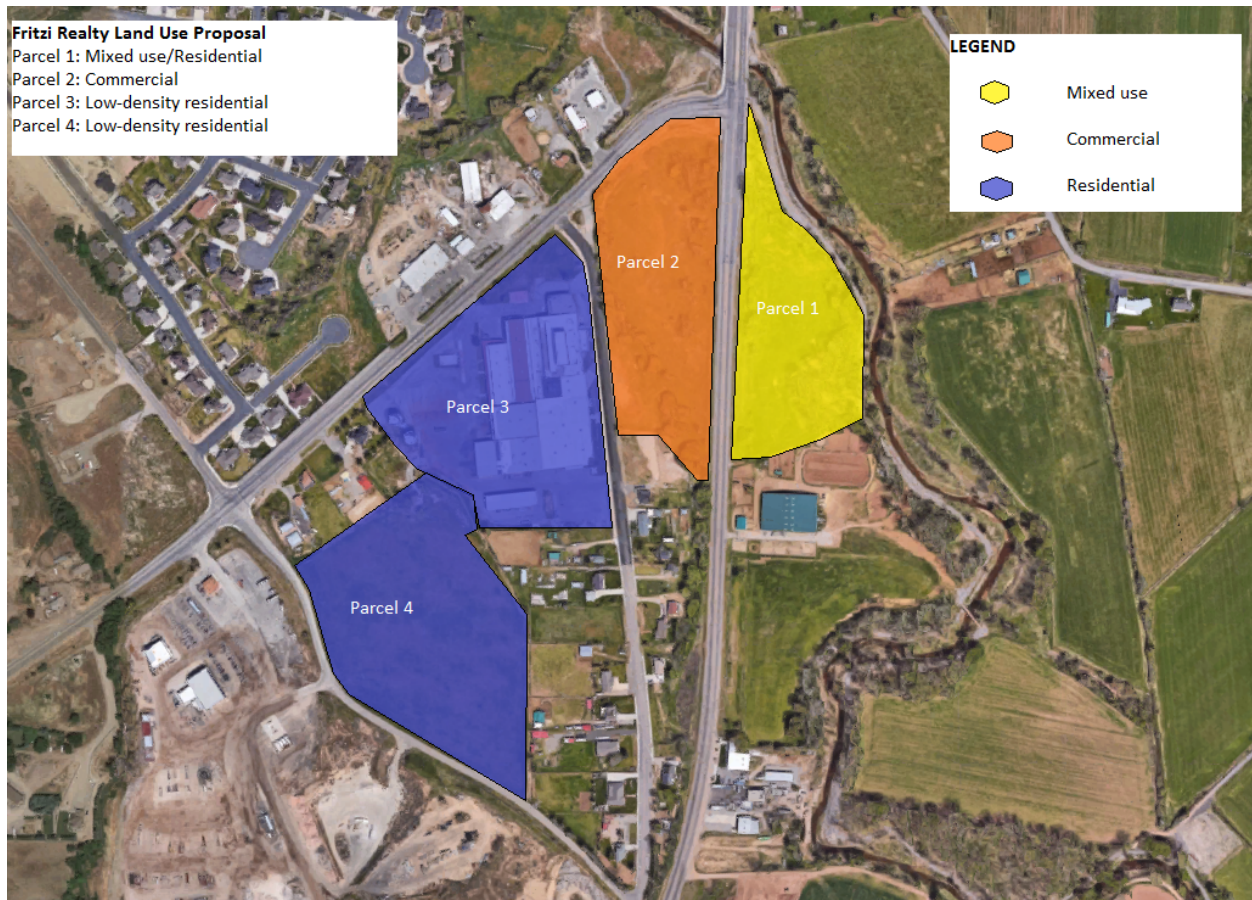


Figure 2. Fritzi Realty Land Use Proposal for Arrowhead site

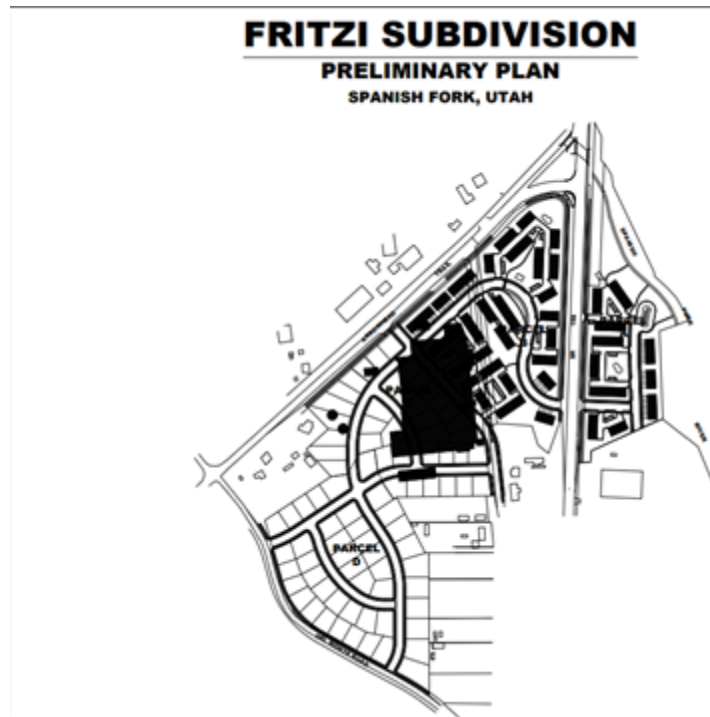


Figure 3: Proposed Parcel Division, Courtesy of Fritzi Realty

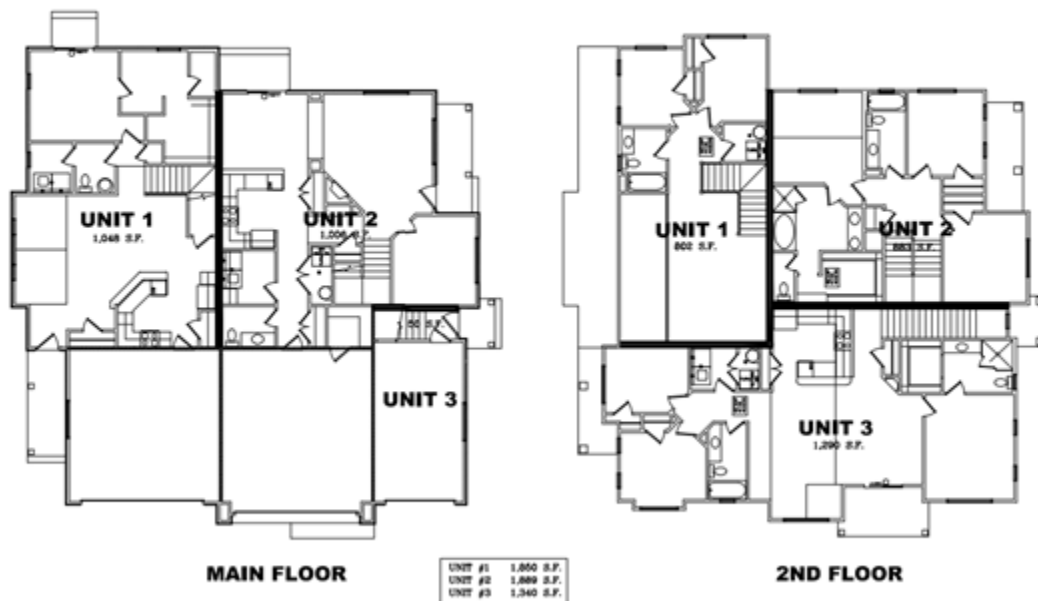


Figure 4: Proposed 3-plex Floor Plan, Courtesy of Fritzi Realty

After analyzing the proposals created by the CE En 201 Sustainable Infrastructure class, KAM Engineering decided that the best developmental plans for the four parcels were to make Parcel 1 a green space/recreation area. This would be accomplished by cleaning it up and providing a river walk for the citizens of Spanish Fork. Parcel 2 would be used to create small retail stores as well as office spaces. Parcel 3 would be used to construct a grocery store to provide to the new housing developments and other local subdivisions nearby. KAM Engineering decided that because of the addition of a grocery store on parcel 3 the existing businesses at Arrowhead center would need a new location to relocate to, hence the new small retail and office space on parcel 2. Parcel 4 would be used to create family housing consisting of medium-sized lots.

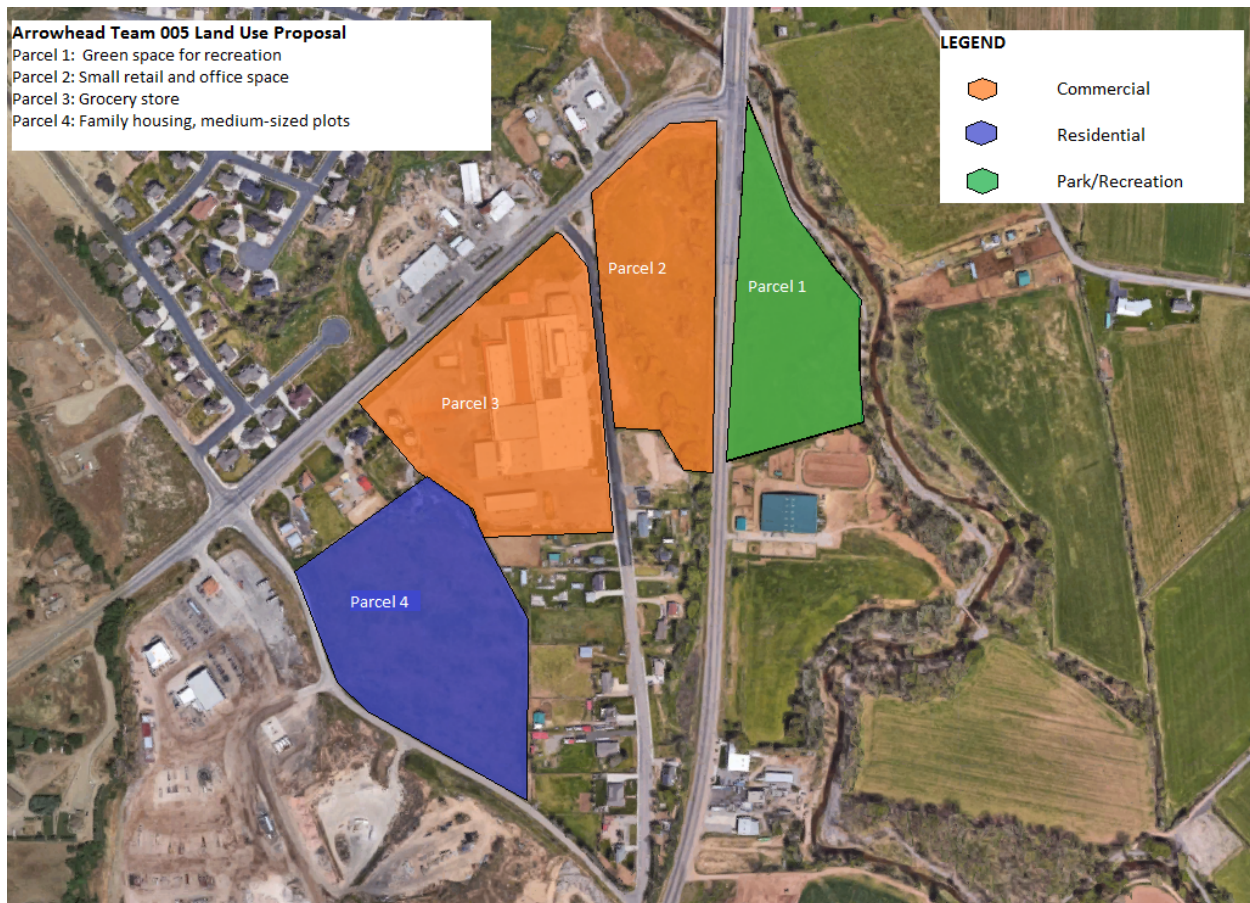


Figure 5. KAM Engineering Land Use Proposal for Arrowhead Site

The reason we are placing commercial buildings in parcels 2 and 3 are because we plan on tearing down the Arrowhead center and building a grocery store with the goal of moving the current businesses to the new proposed commercial buildings on parcel 2. The reason we chose to build a grocery store was due to the fact that the closest grocery store to that location was about 4 miles away. With a new grocery store in place, it would serve to the surrounding neighborhoods and provide reduced traveling distances and times for the citizens of Spanish Fork. The team looked at the travel distance between the Walmart in Orem on Sandhill Dr. and

the Neighborhood Walmart on University Pkwy. and noticed the distance was less than 3 miles. KAM Engineering decided that because of this distance that a grocery store would be beneficial for the development plan. The reason behind proposing commercial buildings/office space was due to the removal of the Arrowhead center. The team wanted to create spaces for the current businesses to move into and provide the opportunity for future companies to operate from.

KAM Engineering created the table below to list the main criteria that concerns this project and the specific factors that fall under the respective criteria. The factors have been chosen on the suggestions from Mr. Tandler's presentation to the capstone class at Brigham Young University in September 2017 and the textbook used by the Sustainable Infrastructure class also at Brigham Young University.

Table 1: Evaluation Factors

Social	Economic	Environmental	Feasibility
<ul style="list-style-type: none"> • City Council Desires • City residents' preferences • Increased population creates busier streets/stores 	<ul style="list-style-type: none"> • Cost • Return on investment • Total additional output of all industries in the area • Total number of new jobs created • Total value added (the sum of all goods and services produced) • Total amount of additional personal income (wages, profits, dividends, interest, rents, transfer payments) • Total amount of additional labor income • Total amount of additional city and county tax revenue 	<ul style="list-style-type: none"> • Water contamination • Air quality 	<ul style="list-style-type: none"> • Zoning requirements • Construction limitations

To evaluate the economic factors pertaining to the development plans, KAM Engineering performed an analysis, which can be found in Appendices B and C. This analysis included a multi-year development plan, development and infrastructure costs, infrastructure cost per year, and income statements regarding the various building types. Using these analyses, the rate of return to the developer was calculated.

A weight evaluation scheme was created to analyze the two projects to determine which one would be the best developmental project for the proposed area. Each parameter was assigned a

weight value between 1 - 5 depending on how KAM Engineering felt was accurate for each parameter. Following the assigned weight values to each parameter, KAM Engineering carefully assigned a value of 0 or 1 to each parcel's proposed development plan.

		Parameters													
		City Council Preference	Citizen Preference	Increase in Population	Construction Cost	ROI	Industry Output	# new jobs	City Tax revenue	Water quality	Air Quality	Zoning	Construction limits	Total Score	
	Weight value	2	3	1.5	3	5	2	2	3	3	1	4	5		
Parcel 1	Fritzi Relaty	0	0	1	0	1	1	1	1	0	0	0	0	13.5	
	KAM Engineering	1	1	0	1	0	0	0	0	1	1	1	1	21	
Parcel 2	Fritzi Relaty	1	1	1	1	1	1	1	1	1	1	1	1	34.5	
	KAM Engineering	1	1	1	1	1	1	1	1	1	1	1	1	34.5	
Parcel 3	Fritzi Relaty	0	0	0	0	1	1	0	1	1	1	0	1	19	
	KAM Engineering	1	1	1	1	0	1	1	0	1	0	1	1	25.5	
Parcel 4	Fritzi Relaty	1	1	1	1	1	1	1	1	1	1	1	1	34.5	
	KAM Engineering	1	1	1	1	1	1	1	1	1	1	1	1	34.5	
Key	Social Factors													Total	
	Economic Factors													Fritzi	101.5
	Environmental Factors													KAM	115.5
	Feasibility														

Figure 6. Evaluation Weight Scheme

Lessons Learned

The challenges and lessons we learned from this project revolve around soft factors such as communication or design. There were very few technical challenges due to the subjective nature of this project. We did not see errors in calculations or unsavory lab testing results, rather we dealt with opinion based challenges.

One of the biggest challenges we encountered while working on this projects was communication. Communication was an important aspect of our task as we had to communicate with the other teams who worked on the same project, but worked on different civil engineering aspects such as environmental, structural, and transportation. Also, communicating with our project manager was important because he had direct contact with the sponsor and would relay important information from the sponsor directly to us.

Another challenge we ran into was the challenge of urban planning. Often times as engineers we seek a single technical solution, or one answer that can solve any number of calculated factors. The difference we found in planning was that we cannot solve for our factors to result in one solution. Often the factors we were trying to satisfy have opinions of their own and are certainly subject to change without any warning. This certainly made it difficult to please all of the interested parties. Each party has different interests that may be sacrifices or challenges for another party. Sometimes this can present difficult situations where the developer must take sides. However, we learned that it is important to understand that there are several more factors that go into a design besides the engineers ok. If we understand these other factors as well as do our best to compromise, the project will be a benefit to all of its parties.

Conclusions

Due to a combination of factors, KAM Engineering concluded that the best overall proposal for the Arrowhead site would be proposal 2 which includes a green space, small retail/office spaces, a grocery store, and medium-sized residential housing. This was found based on the evaluation weight scheme created by the team.

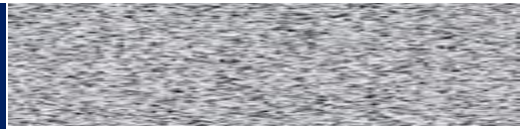
The economic analysis concluded that the Fritzi Realty development plan would have a 19.2% return on investment, while the KAM engineering proposed plan would have 15.7% return on investment. KAM engineering acknowledges the importance of economic returns to the developer, and advises the developer to take this factor into account.

However, in the larger evaluation that included social, environmental, and economic factors, KAM Engineering provided Fritzi Realty with a development plan that would be more profitable to the community as a whole. Nevertheless, because the evaluation weight scheme can be affected by personal bias it is recommended that other parties evaluate this project as well to conclude what the best proposal be for Fritzi Realty. The team recommends that further analysis be done as well as working with the city of Spanish Fork to determine what is the best development plan for the four parcels of land owned by Fritzi Realty.

Recommendations

KAM Engineering recommends their proposed plan be considered as a potential implementation plan for the four parcels in Spanish Fork, Utah. However, the choice of development is at the complete discretion of the developer, Fritz Realty.

Once a development plan is chosen, it would need to be reviewed and approved by a Utah licensed professional engineer of the Sponsor's choosing prior to initiating Spanish Fork's property development application process. In addition, city council approval is required. Due to the lack of expertise, as was acknowledged previously, we also recommend having a professional developer analyze our findings to make sure they are correct. Likewise, any experts, such as engineers, accountants, contractors or members of the local government, should be brought in to ensure the proposal is up to standard.



Appendix A

Austin M. Fox

13871 S 1950 W, Bluffdale, UT 84065 ♦ (916) 690-6162 (mobile) ♦ austinmfox92@gmail.com

Summary of Skills: Involved with many large and complex building construction projects, working continuously through high school and college. Worked with all kinds of tools and machinery. Fast learner, hard working, dependable, efficient, trustworthy, and good sense of humor.

EXPERIENCE

RESEARCH ASSISTANT – Provo, UT

January 2018 – Present

- Currently researching traffic incident management (TIM) for UDOT
- Researching ways to make TIM team more effective throughout state
- Using Microsoft Excel, PeMS and iPeMS to analyze collected data

INTRO TO TRANSPORTATION TEACHING ASSISTANT – Provo, UT

August 2017 – December 2017

- Help students and myself better understand transportation principles
- Able to work with professor and better understand material
- Able to effectively communicate with students

RESEARCH ASSISTANT/LAB TECH – Provo, UT

January 2017 – July 2017

- Maintained labs at BYU Civil Engineering department
- Assisted on various research projects
- Tested materials and equipment

BYU CENTRAL STORES – Provo, UT

April 2016 – December 2016

- Managed deliveries and made sure they were on time
- Operated large vehicles and forklifts

FOX CONSTRUCTION - Sacramento, CA

2004 - 2014

- Construction Worker
- Experienced with electrical, framing, concrete, foundation, plumbing projects
- Operating machinery: forklift, bobcat
- Responsible for \$20,000 project that was completed on time with high customer satisfaction
- Became trusted supervisor for general contractor

EDUCATION

BYU - Provo, UT

2014 - Present

- EIT as of April 10, 2018
- Current Senior Student, majoring in Civil Engineering
- Expected Graduation Date: June 2018
- Maintaining a 3.1 GPA
- Active Member of BYU ASCE
- Working on Bachelor's degree

PERSONAL

Working to fund my own education Married in
December 2015

Hobbies include all team sports (BYU Intramurals), camping, hiking with friends Salta
Argentina Mission; Missionary for the LDS church

Megan Peffer

425-530-6315 | meganelizabeth300@gmail.com | <https://www.linkedin.com/in/megan-peffer-98026a112/>

Education

BRIGHAM YOUNG UNIVERSITY

Bachelor of Science: Civil Engineering

Minor in Mathematics

GPA: 3.28

Pending EIT

AUGUST 2018

Provo, UT

AUGUST 2018

Projects/Research

SELF-CONSOLIDATING GROUT

Research Assistant

SEPTEMBER 2017

Brigham Young University

- Assisted in the mixing of 4 different grout designs.
- Conducted testing for compression strength, slump and segregation for 4 variations of grout. Research still being performed.

GREENPLEX PROJECT

Research Assistant

SEPTEMBER 2014

Brigham Young University

- Built a 3D printed model of Provo, Utah as a proposed Greenplex currently on display in the Engineering Building.
- Presented information on the environmental sustainability of the Greenplex project.

Experience

BRIGHAM YOUNG UNIVERSITY

Assistant Lab Manager

JANUARY 2017-PRESENT

Provo, UT

- Ensured all Civil Engineering labs were kept well stocked and clean for lab use.
- Assisted professors with research projects upon request.

STUDY ABROAD-ENGINEERING

Student

MAY 2017

Peru

- Worked with engineers of other disciplines to build sustainable products and instructions for native peoples.
- ORCA research grant awarded for project.

TRANSPORTATION ENGINEERING ALLIANCE

Lab Tech

MAY 2016-AUGUST 2016

Murray, UT

- Performed quality assurance testing for asphalt, road base, and concrete to be used in 6 projects within Salt Lake County.
- Reported findings to the Utah Department of Transportation.

Other positions held: Manager, Peer Mentor

Volunteer Experience

HABITAT FOR HUMANITY

Volunteer

OCTOBER 2014-PRESENT

Provo, UT

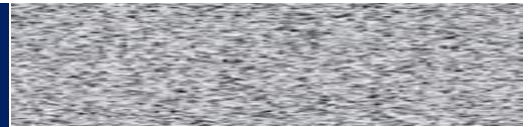
BOY SCOUT OF AMERICA

VOLUNTEER/INSTRUCTOR

MARCH 2016-PRESENT

Skills & Hobbies

- Revitt
- Visual Basic in Excel
- Office Suite
- AutoCad
- Surveying Basics
- Cooking
- Team Management
- Material Testing
- Rock Climbing



KAELA NORDLIN NICHOL

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EDUCATION

Brigham Young University

Provo, UT

Bachelor of Science in Civil Engineering, April 2018

Zurich International School

Zurich, Switzerland

High School Diploma, June 2014

EMPLOYMENT HISTORY

Product Design Intern

September 2017 - Present

San Diablo Artisan Churros, Draper, UT

- Analyzes best practices, material use, production time, and costs for brand-focused product design.
- Develops full line of To-Go packaging for 1, 3, 6, 12, and 24 Churros.
- Establishes interior experience design for Pop-Up events, catering events, and complete concept restaurant.
- Prepares detailed drawings and schematics for new products.

Structural Engineering Intern

June 2016 - September 2016

Focus Engineering and Surveying, Midvale, UT

- Assisted in structural evaluation, analysis, and design of structural elements of existing or new architectural and industrial buildings.
- Performed construction observation of building projects, including extensive communication with Architects and Contractors throughout the building process.
- Developed project scopes, budgets, and proposals for future work to Focus Clients.
- Developed departmental strategic initiatives for both marketing and technical growth.

Structural Engineering Research Assistant

August 2014 - August 2015

Brigham Young University, Civil Engineering Department

- Collected data for 'Greenplex' structures, focusing in behavioral research and environmentally conscious building processes and materials for an environmentally conscious, dense community for 100,000 people in a small area.
- Established criteria for the costs, constraints, and structural engineering requirements, then analyzed data to design a greenplex suited to the criteria, and created both physical models and graphic models through Revit.

Architecture Intern

June 2013 – July 2013

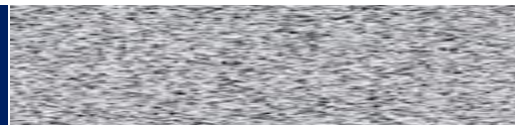
SteigerConcept, Zurich, Switzerland

- Assisted in commercial building projects through drafting, utilizing both ArchiCad and AutoCad.

SKILLS

Technology

- Microsoft Excel and Visual Basic for Applications (VBA)
- Adobe Photoshop, Adobe InDesign, Adobe Illustrator
- CAD software including Revit, Solidworks, AutoCAD, and ArcGIS



Appendix B

Table 2. KAM Engineering Economic Summary

Summary of Results - KAM Engineering Proposal															
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Net Operating Income															
For-sale Housing	-	8,254.3	8,502.0	11,676.0	(16,536.2)	-	-	-	-	-	-	-	-	-	-
Office/Commercial	-	861.6	1,772.6	3,659.7	5,634.0	7,736.3	9,990.4	1,026.4	1,057.8	1,088.8	1,123.7	1,158.3	1,192.5	1,226.3	1,264.0
Grocery	-	-	-	2,905.5	4,351.3	5,092.3	6,361.1	1,582.6	1,632.1	1,676.8	1,730.4	1,783.6	1,836.6	1,889.1	1,945.9
Parking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total NOI	\$ -	\$ 9,116.0	\$ 10,274.5	\$ 18,241.2	\$ (6,550.9)	\$ 12,828.6	\$ 16,351.5	\$ 2,609.0	\$ 2,689.9	\$ 2,765.6	\$ 2,854.1	\$ 2,941.9	\$ 3,029.1	\$ 3,115.4	\$ 3,209.9
Development Costs															
For-sale Housing	7,766.8	7,877.2	10,818.0	(15,321.0)	-	-	-	-	-	-	-	-	-	-	-
Office/Commercial	9,770.4	9,627.7	19,833.0	20,428.0	21,040.8	21,242.8	(100,449.9)	-	-	-	-	-	-	-	-
Grocery	174.6	-	9,262.6	4,293.2	1,965.3	3,399.4	(15,811.5)	-	-	-	-	-	-	-	-
Parking	528.7	36.0	148.7	110.7	94.5	(362.9)	(503.0)	-	-	-	-	-	-	-	-
Other Infrastructure (1)	300.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Development Costs	\$ 18,540.4	\$ 17,540.9	\$ 40,062.3	\$ 9,510.9	\$ 23,100.7	\$ 24,279.3	\$ (116,764.4)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Cash Flow															
Net Operating Income	\$ -	\$ 9,116.0	\$ 10,274.5	\$ 18,241.2	\$ (6,550.9)	\$ 12,828.6	\$ 16,351.5	\$ 2,609.0	\$ 2,689.9	\$ 2,765.6	\$ 2,854.1	\$ 2,941.9	\$ 3,029.1	\$ 3,115.4	\$ 3,209.9
Total Asset Value@ 10%															32,099.3
Total Costs of Sale (2) @ 5%															(1,605.0)
Total Development Costs	(18,540.4)	(17,540.9)	(40,062.3)	(9,510.9)	(23,100.7)	(24,279.3)	116,764.4	-	-	-	-	-	-	-	-
Net Cash Flow	\$ (18,540.4)	\$ (8,424.9)	\$ (29,787.7)	\$ 8,730.3	\$ (29,651.6)	\$ (11,450.7)	\$ 133,116.0	\$ 2,609.0	\$ 2,689.9	\$ 2,765.6	\$ 2,854.1	\$ 2,941.9	\$ 3,029.1	\$ 3,115.4	\$ 33,704.2
Net Present Value @ 10% \$ 18,328.1															
Unleveraged IRR: 15.7%															

Table 3. KAM Engineering Multi-Year Development Program

KAM Engineering Multi-Year Development Program															
Total Buildout	Year-by-Year Cumulative Absorption														
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Project Buildout by Development Units															
For-sale Housing	45 units	-	30	60	100	45	45	45	45	45	45	45	45	45	45
Office/Commercial	50,000 sq. ft.	-	50,000	100,000	200,000	300,000	400,000	500,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Grocery	48,333 sq. ft.	-	-	-	100,000	145,000	165,000	200,000	48,333	48,333	48,333	48,333	48,333	48,333	48,333
Parking	250 spaces	-	127	254	763	1,131	1,436	1,780	250	250	250	250	250	250	250
Project Buildout by Square Feet															
For-sale Housing	112,500	-	75,000	150,000	250,000	112,500	112,500	112,500	112,500	112,500	112,500	112,500	112,500	112,500	112,500
Office/Commercial	50,000	-	50,000	100,000	200,000	300,000	400,000	500,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Grocery	48,333	-	-	-	100,000	145,000	165,000	200,000	48,333	48,333	48,333	48,333	48,333	48,333	48,333
Parking	81,250	-	41,275	82,550	247,975	367,575	466,700	578,500	81,250	81,250	81,250	81,250	81,250	81,250	81,250
Total	292,083	-	166,275	332,550	797,975	925,075	1,144,200	1,391,000	292,083	292,083	292,083	292,083	292,083	292,083	292,083

Table 4. KAM Engineering Development and Infrastructure Costs

KAM Engineering Unit Development Costs and Infrastructure Costs							
Commercial Development Unit Costs							
Contingency Costs = 10% of Development Costs							
	Unit Cost Before Contingency			Contingency Costs			Total Unit Costs Including Contingency
For-sale Housing	\$	225,000	per unit	\$	22,500	per unit	\$ 247,500 per unit
Office/Commercial		165.00	per SF		16.50	per SF	181.50 per SF
Grocery		77.06	per SF		7.71	per SF	84.77 per SF
Parking		243	per space		24	per space	267 per space
Other Infrastructure Improvements							
Park/Landscaping	\$	300,000					
Total Infrastructure Costs	\$	300,000					

Table 5. KAM Engineering Infrastructure Allocation

KAM Engineering Infrastructure Allocation by Distribution of Space		
	Square Feet	% of Total
For-sale Housing	112,500	38.5%
Office/Commercial	50,000	17.1%
Grocery	48,333	16.5%
Parking	81,250	27.8%
Project Total	292,083	100.0%

Table 6. KAM Engineering Infrastructure Costs by Year

KAM Engineering																
Infrastructure Costs by Year																
Based on Distribution of Space																
Thousands of Dollars/Inflation: 3%																
		Phase I					Phase II					Phase III				
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Inflation Factor		1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	1.38	1.43	1.47	1.51	1.56
Commercial Infrastructure																
For-sale Housing	38.5%	119.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Office/Commercial	17.1%	423.2	-	-	-	-	(429.2)	-	-	-	-	-	-	-	-	-
Grocery	16.5%	174.6	-	-	-	-	(143.1)	-	-	-	-	-	-	-	-	-
Parking	27.8%	493.7	-	-	-	-	(472.7)	-	-	-	-	-	-	-	-	-
Subtotal	100.0%	\$ 1,210.5	\$ -	\$ -	\$ -	\$ -	\$ (1,045.1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Infrastructure																
Park/Landscaping		\$ 309.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal		\$ 309.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Infrastructure Costs																
Total Costs		\$ 1,519.5	\$ -	\$ -	\$ -	\$ -	\$ (1,045.1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Present Value of Costs @ 10%		\$ 791.4														

Table 7. KAM Engineering Housing Income Statement

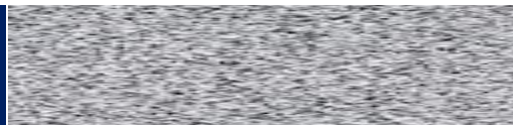
KAM Engineering																
Income Statement - For-sale Housing																
Thousands of Dollars/Inflation: 3%																
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Assumptions																
Inflation Factor	3.0%	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	1.38	1.43	1.47	1.51	1.56
Number of Units	45															
Average Unit Size (1)	2,500	-	75,000	75,000	100,000	(137,500)	-	-	-	-	-	-	-	-	-	-
Net Usable Area	84%	-	63,000	63,000	84,000	(115,500)	-	-	-	-	-	-	-	-	-	-
Sales Price/SF	\$ 130.00															
Net Operating Income																
Sales Revenues	\$ -	\$ 8,688.8	\$ 8,949.4	\$ 12,290.6	#####	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Builder Profit (% of Rev.)	15.0%	\$ -	\$ 1,303.3	\$ 1,342.4	\$ 1,843.6	\$ (2,611.0)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Costs of Sales (% of Rev.)	5.0%	\$ -	\$ 434.4	\$ 447.5	\$ 614.5	\$ (870.3)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Operating Income	\$ -	\$ 8,254.3	\$ 8,502.0	\$ 11,676.0	#####	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Development Costs																
Percent Built by Year		66.7%	66.7%	88.9%	-122.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Development Costs	\$ 11,137.5	\$ 7,647.8	\$ 7,877.2	\$ 10,818.0	\$ (15,321.0)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Infrastructure Costs	\$ 119.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Development Costs	\$ 7,766.8	\$ 7,877.2	\$ 10,818.0	\$ (15,321.0)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Cash Flow																
Net Operating Income	\$ -	\$ 8,254.3	\$ 8,502.0	\$ 11,676.0	#####	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Development Costs	\$ 7,766.8	\$ 7,877.2	\$ 10,818.0	\$ (15,321.0)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Cash Flow	\$ (7,766.8)	\$ 377.1	\$ (2,316.0)	\$ 26,997.0	#####	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Present Value @ 10%		(\$317.4)		Internal Rate of Return:		6.9%										

Table 8. KAM Engineering Office/Mixed-Use Income Statement

KAM Engineering Income Statement - Office/Mixed-Use Thousands of Dollars/Inflation: 3%															
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Assumptions															
Inflation Factor	3.0%	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	1.38	1.43	1.47	1.51
GLA Absorbed	50,000	-	50,000	100,000	200,000	300,000	400,000	500,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Net Rentable Area	90%	-	45,000	90,000	180,000	270,000	360,000	450,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
Vacancy Factor	5%														
Net Lease Revenue per SF	\$ 26.00	\$ 26.80	\$ 27.60	\$ 28.40	\$ 29.30	\$ 30.10	\$ 31.00	\$ 32.00	\$ 32.90	\$ 33.90	\$ 34.90	\$ 36.00	\$ 37.10	\$ 38.20	\$ 39.30
Net Operating Income															
Leasing Revenues	\$ -	\$ 1,179.9	\$ 2,428.2	\$ 5,010.3	\$ 7,720.7	\$ 10,602.0	\$ 13,680.0	\$ 14,065.5	\$ 1,449.2	\$ 1,492.0	\$ 1,539.0	\$ 1,586.0	\$ 1,633.1	\$ 1,680.1	\$ 1,731.4
Op. & Maint. Expenses (per SF)	\$ 6.00	\$ -	\$ 318.3	\$ 655.6	\$ 1,350.6	\$ 2,086.7	\$ 2,865.7	\$ 3,689.6	\$ 380.0	\$ 391.4	\$ 403.2	\$ 415.3	\$ 427.7	\$ 440.6	\$ 453.8
Net Operating Income	\$ -	\$ 861.6	\$ 1,772.6	\$ 3,659.7	\$ 5,634.0	\$ 7,736.3	\$ 9,990.4	\$ 10,264.4	\$ 1,057.8	\$ 1,088.8	\$ 1,123.7	\$ 1,158.3	\$ 1,192.5	\$ 1,226.3	\$ 1,264.0
Development Costs															
Percent Built by Year		100.0%	100.0%	200.0%	200.0%	200.0%	200.0%	-900.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Development Costs	\$ 9,075.0	\$ 9,347.3	\$ 9,627.7	\$ 19,833.0	\$ 20,428.0	\$ 21,040.8	\$ 21,672.0	\$ (100,449.9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Infrastructure Costs	\$ 423.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (429.2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Development Costs	\$ 9,770.4	\$ 9,627.7	\$ 19,833.0	\$ 20,428.0	\$ 21,040.8	\$ 21,242.8	\$ (100,449.9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Cash Flow															
Net Operating Income	\$ -	\$ 861.6	\$ 1,772.6	\$ 3,659.7	\$ 5,634.0	\$ 7,736.3	\$ 9,990.4	\$ 10,264.4	\$ 1,057.8	\$ 1,088.8	\$ 1,123.7	\$ 1,158.3	\$ 1,192.5	\$ 1,226.3	\$ 1,264.0
Asset Value (1) @ 10%															\$ 12,639.8
Costs of Sale @ 5%															\$ (632.0)
Total Development Costs	\$ (9,770.4)	\$ (9,627.7)	\$ (19,833.0)	\$ (20,428.0)	\$ (21,040.8)	\$ (21,242.8)	\$ 100,449.9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Cash Flow	\$ (9,770.4)	\$ (8,766.0)	\$ (18,060.4)	\$ (16,768.3)	\$ (15,406.9)	\$ (13,506.5)	\$ 110,440.3	\$ 1,026.4	\$ 1,057.8	\$ 1,088.8	\$ 1,123.7	\$ 1,158.3	\$ 1,192.5	\$ 1,226.3	\$ 13,271.8
Net Present Value @ 10%	\$4,289.6														
Internal Rate of Return:	11.9%														

Table 9. KAM Engineering Grocery Store Income Statement

KAM Engineering Income Statement - Grocery Store Thousands of Dollars/Inflation: 3%															
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Assumptions															
Inflation Factor	3.0%	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	1.38	1.43	1.47	1.51
GLA Absorbed	48,333	-	-	-	100,000	145,000	165,000	200,000	48,333	48,333	48,333	48,333	48,333	48,333	48,333
Net Rentable Area	85%	-	-	-	85,000	123,250	140,250	170,000	41,083	41,083	41,083	41,083	41,083	41,083	41,083
Vacancy Factor	5%														
Net Lease Revenue per SF	\$ 33.00	\$ 34.00	\$ 35.00	\$ 36.10	\$ 37.10	\$ 38.30	\$ 39.40	\$ 40.60	\$ 41.80	\$ 43.10	\$ 44.30	\$ 45.70	\$ 47.10	\$ 48.50	\$ 49.90
Net Operating Income															
Leasing Revenues	\$ -	\$ -	\$ -	\$ 3,524.5	\$ 5,275.8	\$ 6,176.0	\$ 7,714.0	\$ 1,919.3	\$ 1,979.0	\$ 2,034.1	\$ 2,098.4	\$ 2,162.7	\$ 2,226.9	\$ 2,291.2	\$ 2,360.1
Op. & Maint. Expenses (per SF)	\$ 5.50	\$ -	\$ -	\$ 619.0	\$ 924.5	\$ 1,083.6	\$ 1,352.9	\$ 336.7	\$ 346.8	\$ 357.3	\$ 368.0	\$ 379.0	\$ 390.4	\$ 402.1	\$ 414.2
Net Operating Income	\$ -	\$ -	\$ -	\$ 2,905.5	\$ 4,351.3	\$ 5,092.3	\$ 6,361.1	\$ 1,582.6	\$ 1,632.1	\$ 1,676.8	\$ 1,730.4	\$ 1,783.6	\$ 1,836.6	\$ 1,889.1	\$ 1,945.9
Development Costs															
Percent Built by Year		0.0%	0.0%	206.9%	93.1%	41.4%	72.4%	-313.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Development Costs	\$ 4,096,995	\$ -	\$ -	\$ 9,262.6	\$ 4,293.2	\$ 1,965.3	\$ 3,542.5	\$ (15,811.5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Infrastructure Costs	\$ 174.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (143.1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Development Costs	\$ 174.6	\$ -	\$ -	\$ 9,262.6	\$ 4,293.2	\$ 1,965.3	\$ 3,399.4	\$ (15,811.5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Cash Flow															
Net Operating Income	\$ -	\$ -	\$ -	\$ 2,905.5	\$ 4,351.3	\$ 5,092.3	\$ 6,361.1	\$ 1,582.6	\$ 1,632.1	\$ 1,676.8	\$ 1,730.4	\$ 1,783.6	\$ 1,836.6	\$ 1,889.1	\$ 1,945.9
Asset Value (1) @ 10%															\$ 19,459.4
Costs of Sale @ 5%															\$ (973.0)
Total Development Costs	\$ (174.6)	\$ -	\$ (9,262.6)	\$ (4,293.2)	\$ (1,965.3)	\$ (3,399.4)	\$ 15,811.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Cash Flow	\$ (174.6)	\$ -	\$ (9,262.6)	\$ (1,387.7)	\$ 2,386.0	\$ 1,692.9	\$ 22,172.6	\$ 1,582.6	\$ 1,632.1	\$ 1,676.8	\$ 1,730.4	\$ 1,783.6	\$ 1,836.6	\$ 1,889.1	\$ 20,432.4
Net Present Value @ 10%	\$14,922.1														
Internal Rate of Return:	34.7%														



Appendix C

Table 10. Fritz Realty Economic Summary

Fritz Realty Summary of Results Thousands of Dollars															
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Net Operating Income															
Rental Housing	\$ -	\$ 2,390.3	\$ 4,923.9	\$ 8,241.4	\$ 3,682.8	\$ 3,793.2	\$ 3,907.0	\$ 4,024.3	\$ 4,145.0	\$ 4,269.3	\$ 4,397.4	\$ 4,529.3	\$ 4,665.2	\$ 4,805.2	\$ 4,949.3
For-sale Housing	-	8,940.1	9,208.3	12,646.0	-	-	-	-	-	-	-	-	-	-	-
Parking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total NOI	\$ -	\$ 11,330.3	\$ 14,132.2	\$ 20,887.4	\$ 3,682.8	\$ 3,793.2	\$ 3,907.0	\$ 4,024.3	\$ 4,145.0	\$ 4,269.3	\$ 4,397.4	\$ 4,529.3	\$ 4,665.2	\$ 4,805.2	\$ 4,949.3
Development Costs															
Rental Housing	\$ 14,845.4	\$ 15,170.9	\$ 19,532.5	\$ (29,614.4)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
For-sale Housing	7,773.2	7,877.2	10,818.0	-	-	-	-	-	-	-	-	-	-	-	-
Parking	420.4	36.1	149.1	111.0	94.8	(258.9)	(504.3)	-	-	-	-	-	-	-	-
Other Infrastructure (1)	300.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Development Costs	\$ 23,339.1	\$ 23,084.2	\$ 30,499.6	\$ (29,503.4)	\$ 94.8	\$ (258.9)	\$ (504.3)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Cash Flow															
Net Operating Income	\$ -	\$ 11,330.3	\$ 14,132.2	\$ 20,887.4	\$ 3,682.8	\$ 3,793.2	\$ 3,907.0	\$ 4,024.3	\$ 4,145.0	\$ 4,269.3	\$ 4,397.4	\$ 4,529.3	\$ 4,665.2	\$ 4,805.2	\$ 4,949.3
Total Asset Value@ 10%															49,493.3
Total Costs of Sale (2) @ 5%															(2,474.7)
Total Development Costs	(23,339.1)	(23,084.2)	(30,499.6)	29,503.4	(94.8)	258.9	504.3	-	-	-	-	-	-	-	-
Net Cash Flow	\$ (23,339.1)	\$ (11,753.8)	\$ (16,367.4)	\$ 50,390.8	\$ 3,588.0	\$ 4,052.1	\$ 4,411.3	\$ 4,024.3	\$ 4,145.0	\$ 4,269.3	\$ 4,397.4	\$ 4,529.3	\$ 4,665.2	\$ 4,805.2	\$ 51,968.0
Net Present Value @ 10% \$ 21,291.3 Unleveraged IRR: 19.2%															

Table 11. Fritz Realty Multi-Year Development Program

Fritz Realty Multi-Year Development Program															
Total Buildout	Year-by-Year Cumulative Absorption														
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Project Buildout by Development Units															
Rental Housing	141 units	-	100	200	325	141	141	141	141	141	141	141	141	141	141
For-sale Housing	100 units	-	30	60	100	100	100	100	100	100	100	100	100	100	100
Parking	250 spaces	-	127	254	763	1,131	1,436	1,780	250	250	250	250	250	250	250
Project Buildout by Square Feet															
Rental Housing	141,000	-	100,000	200,000	325,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000
For-sale Housing	152,000	-	45,600	91,200	152,000	152,000	152,000	152,000	152,000	152,000	152,000	152,000	152,000	152,000	152,000
Parking	81,250	-	41,275	82,550	247,975	367,575	466,700	578,500	81,250	81,250	81,250	81,250	81,250	81,250	81,250
Total	374,250	-	186,875	373,750	724,975	660,575	759,700	871,500	374,250	374,250	374,250	374,250	374,250	374,250	374,250

Table 12. Fritz Realty Unit Development Costs

Fritz Realty							
Unit Development Costs and Infrastructure Costs							
Commercial Development Unit Costs							
Contingency Costs = 10% of Development Costs							
	Unit Cost Before Contingency			Contingency Costs		Total Unit Costs Including Contingency	
Rental Housing	\$	130,000 per unit		\$	13,000 per unit	\$	143,000 per unit
For-sale Housing		225,000 per unit			22,500 per unit		247,500 per unit
Parking		243 per space			24 per space		267 per space
Other Infrastructure Improvements							
Park/Landscaping	\$	300,000					
Total Infrastructure Costs	\$	300,000					

Table 13. Fritz Realty Infrastructure Allocation

Fritz Realty		
Infrastructure Allocation by Distribution of Space		
	Square Feet	% of Total
Rental Housing	141,000	37.7%
For-sale Housing	152,000	40.6%
Parking	81,250	21.7%
Project Total	374,250	100.0%

Table 14. Fritzi Realty Infrastructure Costs by Year

Fritzi Realty																
Infrastructure Costs by Year																
Based on Distribution of Space																
Thousands of Dollars/Inflation: 3%																
		Phase I					Phase II					Phase III				
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Inflation Factor		1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	1.38	1.43	1.47	1.51	1.56
Commercial Infrastructure																
Rental Housing	37.7%	\$ 116.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
For-sale Housing	40.6%	125.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parking	21.7%	385.3	-	-	-	-	(368.9)	-	-	-	-	-	-	-	-	-
Subtotal	100.0%	\$ 627.2	\$ -	\$ -	\$ -	\$ -	\$ (368.9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Infrastructure																
Park/Landscaping		\$ 309.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal		\$ 309.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Infrastructure Costs																
Total Costs		\$ 936.2	\$ -	\$ -	\$ -	\$ -	\$ (368.9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Present Value of Costs @ 10%		\$ 642.9														

Table 15. Fritzi Realty Income Statement - Rental Housing

Fritzi Realty																	
Income Statement - Rental Housing																	
Thousands of Dollars/Inflation: 3%																	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	
Revenue Assumptions																	
Inflation Factor	3.0%	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	1.38	1.43	1.47	1.51	1.56	
Projected Unit Absorption	141	-	100	200	325	141	141	141	141	141	141	141	141	141	141	141	
Average Unit Size	1,000	-	100,000	200,000	325,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000	
Net Rentable Area	840	-	84,000	168,000	273,000	118,440	118,440	118,440	118,440	118,440	118,440	118,440	118,440	118,440	118,440	118,440	
Monthly Rent/SF	\$ 3.00	\$ 3.09	\$ 3.18	\$ 3.28	\$ 3.38	\$ 3.48	\$ 3.58	\$ 3.69	\$ 3.80	\$ 3.91	\$ 4.03	\$ 4.15	\$ 4.28	\$ 4.41	\$ 4.54	\$ 4.67	
Occupancy Factor	96.0%																
Net Operating Income																	
Gross Lease Revenues	\$	-	\$ 3,079.8	\$ 6,344.5	\$ 10,619.0	\$ 4,745.2	\$ 4,887.6	\$ 5,034.2	\$ 5,185.3	\$ 5,340.8	\$ 5,501.0	\$ 5,666.1	\$ 5,836.0	\$ 6,011.1	\$ 6,191.5	\$ 6,377.2	
Annual Operating Exp./SF	\$ 6.50	\$	-	\$ 689.6	\$ 1,420.5	\$ 2,377.6	\$ 1,062.5	\$ 1,094.3	\$ 1,127.2	\$ 1,161.0	\$ 1,195.8	\$ 1,231.7	\$ 1,268.7	\$ 1,306.7	\$ 1,345.9	\$ 1,386.3	\$ 1,427.9
Net Operating Income	\$	-	\$ 2,390.3	\$ 4,923.9	\$ 8,241.4	\$ 3,682.8	\$ 3,793.2	\$ 3,907.0	\$ 4,024.3	\$ 4,145.0	\$ 4,269.3	\$ 4,397.4	\$ 4,529.3	\$ 4,665.2	\$ 4,805.2	\$ 4,949.3	
Development Costs																	
Percent Built by Year		70.9%	70.9%	88.7%	-130.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Development Costs	\$ 20,163.0	\$	14,729.0	\$ 15,170.9	\$ 19,532.5	\$ (29,614.4)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Infrastructure Costs		\$	116.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Development Costs		\$	14,845.4	\$ 15,170.9	\$ 19,532.5	\$ (29,614.4)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Annual Cash Flow																	
Net Operating Income		\$	-	\$ 2,390.3	\$ 4,923.9	\$ 8,241.4	\$ 3,682.8	\$ 3,793.2	\$ 3,907.0	\$ 4,024.3	\$ 4,145.0	\$ 4,269.3	\$ 4,397.4	\$ 4,529.3	\$ 4,665.2	\$ 4,805.2	\$ 4,949.3
Asset Value (1) @ 10%																	\$ 49,493.3
Costs of Sale @ 5%																	\$ (2,474.7)
Total Development Costs		\$	(14,845.4)	\$ (15,170.9)	\$ (19,532.5)	\$ 29,614.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Cash Flow		\$	(14,845.4)	\$ (12,780.6)	\$ (14,608.6)	\$ 37,855.8	\$ 3,682.8	\$ 3,793.2	\$ 3,907.0	\$ 4,024.3	\$ 4,145.0	\$ 4,269.3	\$ 4,397.4	\$ 4,529.3	\$ 4,665.2	\$ 4,805.2	\$ 51,968.0
Net Present Value @ 10%																	
		\$20,578.0															
Internal Rate of Return: 20.1%																	

Table 16. Fritzi Realty Income Statement - For Sale Housing

Fritzi Realty																
Income Statement - For-sale Housing																
Thousands of Dollars/Inflation: 3%																
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	
Assumptions																
Inflation Factor	3.0%	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	1.38	1.43	1.47	1.51	1.56
Number of Units	95															
Average Unit Size (1)	1,600	-	48,000	48,000	64,000	-	-	-	-	-	-	-	-	-	-	-
Net Usable Area	84%	-	40,320	40,320	53,760	-	-	-	-	-	-	-	-	-	-	-
Sales Price/SF	\$ 220.00															
Net Operating Income																
Sales Revenues	\$ -	\$ 9,410.6	\$ 9,692.9	\$ 13,311.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Builder Profit (% of Rev.)	15.0%	\$ -	\$ 1,411.6	\$ 1,453.9	\$ 1,996.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Costs of Sales (% of Rev.)	5.0%	\$ -	\$ 470.5	\$ 484.6	\$ 665.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Operating Income	\$ -	\$ 8,940.1	\$ 9,208.3	\$ 12,646.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Development Costs																
Percent Built by Year		31.6%	31.6%	42.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Development Costs	\$ 23,512.5	\$ 7,647.8	\$ 7,877.2	\$ 10,818.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Infrastructure Costs	\$ 125.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Development Costs	\$ 7,773.2	\$ 7,877.2	\$ 10,818.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Cash Flow																
Net Operating Income	\$ -	\$ 8,940.1	\$ 9,208.3	\$ 12,646.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Development Costs	\$ 7,773.2	\$ 7,877.2	\$ 10,818.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Cash Flow	\$ (7,773.2)	\$ 1,062.9	\$ (1,609.7)	\$ 12,646.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Present Value @ 10% \$1,239.8																
Internal Rate of Return: 16.2%																

Appendix D

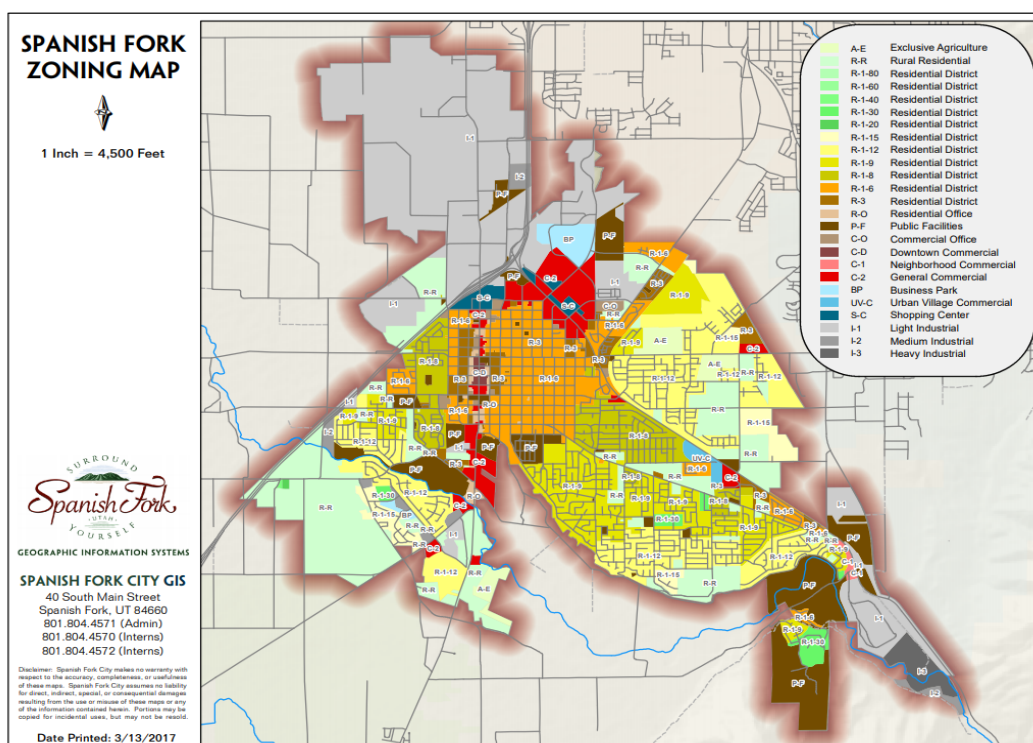


Figure 7. Zoning Map of Spanish Fork, Courtesy of the City of Spanish Fork

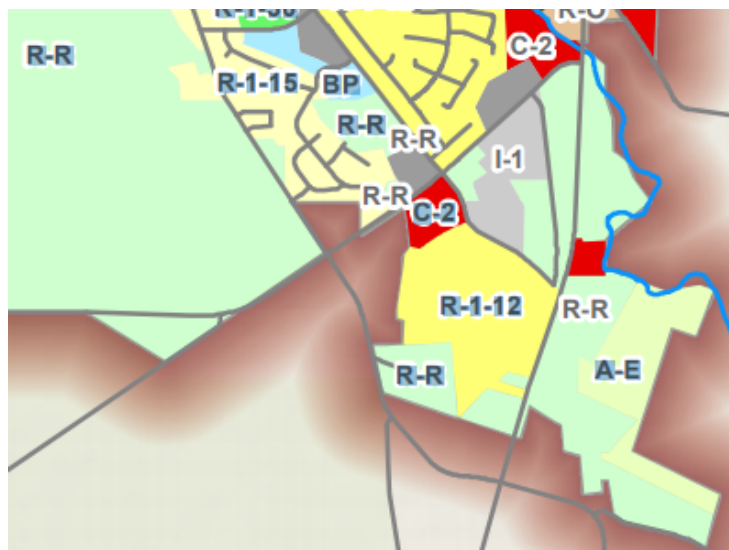


Figure 8. Close-up view of Arrowhead Site Zoning



Figure 9: Single Family Lot sizes, Courtesy of Fritz Realty

Appendix E

Works Cited

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