FINANCIAL FEASIBILITY & AFFORDABILITY

Kansas State University

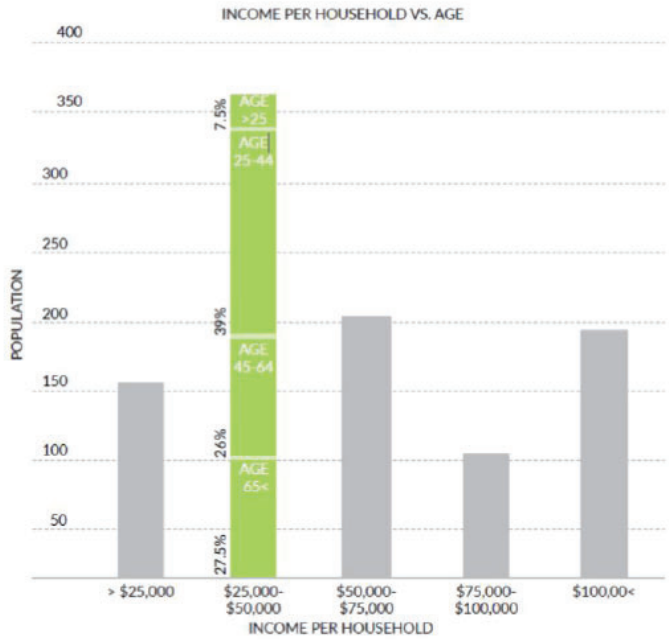
AFFORDABILITY

Approach

Nearly half of Americans earning under $50,000 per year are now overburdened by housing costs, spending more than 30% of their income on housing. Yet for every home built for under $150k, more than 18 homes are built for over $300k. (Source: 2016 U.S. Census) These statistics illustrate the broken system of housing in the U.S, which has evolved to preference larger, expensive, and energy- intensive housing. Meanwhile, older housing is not always a 'bargain' for new homeowners, with deferred maintenance commonly making mortgages impossible. If you are young, retired, a single parent, a one-income household, or simply have a modest income, affordable housing options are limited, scarce, or even nonexistent in many places.

The significant problem with current housing market is, the home values continue to rise. The average income of homeowners is becoming less capable of maintaining their property, especially in small towns, with poor housing quality. The use of local materials and businesses, prefabrication, and reduced labor and material waste can cut the prices of the home considerably.

In talking to our client and community members, we learned that members of the local workforce (such as teachers, public safety officers, or health care workers) made up the intended market for the home. An analysis of household income versus age in St. John showed that most of the households earned between $25,000 to $50,000 per year, and many of these households were of working age, which trends below the area median income (AMI) of $47,000; 11.5% of the population live below the $25,000 poverty line.



Relation of the income to population and age ratio in the town of St. John. [Source: U.S. Census]

AFFORDABILITY

Addressing the affordability of a single family home we must consider more than just the initial home value. The properties available have issues with decreasing quality, increasing prices and maintenance costs. The average income of homeowners makes it difficult to maintain or improve, leading to deteriorating home conditions, especially in small towns. Through the use of local materials and companies, reduced labor and material waste and prefabrication we are able to build a home of much greater quality for considerably less solving the issues of quality and price. The prefabrication and understanding of passive design allows us to drastically lower the reoccurring costs of maintaining and conditioning the home which overtime become increasing burdens on the occupants.

While millions of people suffer from poor-quality housing, there are ways to ease this overwhelming burden. Through the pillars of sustainable, affordable, and livable construction, we can create a new revolutionized modern housing to aid its owner rather than increase their financial burdens. Through the Net Positive Studio, we have created a home that can help future residents to live comfortably, while they leave their troubles at the door.

According to the community and real estate data, we discovered housing and rental options are limited in St. John. There are mainly three options – buy a good quality house (expensive), buy a house and then renovate it to an acceptable living condition, or buy land and build a new house. Buying a cheap house and renovating it is not an option for many home buyers, because the poor conditions of the house would make it unmortgageable by the bank, and repair and improvement costs are high. The result is that inexpensive bargain homes have to be purchased and improved with cash: something many home buyers looking for affordable housing don't have. For the construction of new homes, Stafford Eco Devo plans to use funds from Kansas Housing Resources Corporation's Moderate Income Housing (MIH) program to supplement homeowner financing on future builds, which typically provides $25,000 in down payment assistance to qualified home buyers.

While the current prototypes costs have been higher than anticipated, we are confident that construction could be streamlined during multi-unit development to bring costs more in line with these targets

AFFORDABILITY

Using the prevailing affordability criteria that housing costs should not exceed 30% of net income for a family earning 80% AMI, an affordable home needs to be mortgaged for below $105,000 before accounting for utilities and potential maintenance costs.

Affordability Analysis

	Typ. New Home, Stafford County	St. John Prototype Home [2]
Mortgaged Cost	$ 183,000 [1]	$ 87,000 [2]
Annual Income @ 80% AMI [3]	$ 37,660	$ 37,660
Monthly Income After Taxes	$ 2,755	$ 2,755
Monthly Mortgage Payment	$ 1,428	$ 633
% of Income Spent on Housing	52%	24%
Monthly Utility Bills	$ 189	$ 0
Available Income After Housing and Utility Costs	**$ 1,138**	**$ 2,092**

[1] Typical 1500 ft2 new home construction for Stafford County area.

[2] Mortgaged cost after $25,000 in down payment assistance from the KHRC Moderate Income Home program; assumes total project cost of $112,000 if constructed with a general contractor, including PV array.

[3] Stafford County Median Income is $47,075 [Source: U.S. Census]

COST MANAGEMENT

While the design is a core element of our work, we also need to understand the implications of what we've created. Cost management allows us to understand and gain control of this aspect of the project. For a time-sensitive project, how we build it and with what materials are crucial questions for developing an accurate characterization of project costs, whereby the conceptual form is molded by the lens of realism. Hours of labor, material types, quantities, and sizes; procurement; and costs, turn an abstract project into something tangible. Just as importantly, looking at costs critically helps us to understand how the details, materials, and approach to prefabrication in our Net Positive home compare to typical construction.

A growing issue for housing is the constant changes in construction costs. As prices for materials and labor go up and down with the overall economy, contractors often characterize construction with terms such as "cost-per-square foot" to obfuscate actual project costs. A rigorous cost analysis not only sheds light on the details of project costs but can also be valuable information for organizations that are interested in adopting similar construction methods.

By using "unit-level cost estimating," precise "takeoffs" of material quantities can be taken from the BIM model, and we can manage and keep track of the price of specific building elements and categories. Cost estimating began with RSMeans Residential Construction Cost Data using takeoffs, and then was supplemented by precise numbers as we selected materials and products from specific sources. Through this process, we could provide a precise construction cost for the studio's scope of work (without labor), while also estimating costs for what a future build with a contractor might cost. Through rigorous cost estimation, we keep updated estimates on the design as well as use cost information to make decisions along the way, helping to keep close to cost targets.

Energy Optimization

Another important consideration is the balance between savings through energy efficiency and the initial cost of the building envelope. Materials such as insulation offer energy savings as thickness and thermal resistance increases. In terms of affordability, one must also analyze when adding insulation starts offering diminishing long-term savings. Using energy and cost analysis together kept the insulation levels in the envelope reasonable in terms of cost, yet still delivering net zero performance.

Reducing Waste

An advantage of the prefabrication process is the fine-tuning that goes into planning each fabrication panel. While typical construction leads to cutting multiple pieces of insulation and lumber to unusable lengths, our prefab process allows us to find a location for each component before we even begin construction.

COST MANAGEMENT

Lean System

Prefabrication allowed for waste reduction but also leaner systems. The studio designed the thickened-edge slab foundation type, combined roof and ceiling assemblies, and integration of casework as partition walls, specifically to reduce overall material usage. Redundant systems such as nonstructural walls for closets, multiple concrete pours for conventional foundations, and separated ceiling and roof assemblies increase costs and construction time. By designing the home around lean construction, we can put resources into maximizing the home's size and the quality of its materials and finishes, while keeping the final cost low.

Overall, prefabrications allows the studio to build the project with precision and quality, while also keeping overall costs low and affordable. The prefabricated design allowed us to verify the amount of work needed on our home and the cost, while also maintaining budget. Furthermore, when using cost management efficiently and effectively, you do not need to sacrifice beauty for affordability.

PRELIMINARY COST ESTIMATE

The preliminary cost estimate tracks the known construction costs. This process also helped discover costs in the project which are not inherently obvious, in an effort to minimize total build cost. The chart is divided into 10 categories allowing us to visualize the costs of construction associated with each area of construction. Then, subdivided into materials and labor. This chart was used as an aid to organize funding costs between the Net Positive Studio and our partner Eco Devo. It was important to use the cost estimate to clearly identify the cost of the studio's prefab activities

The preliminary cost estimate explored the construction cost of this home if built by conventional contractors and paid market price for all the material and labor. This is important to understand because this is a prototype home and the end goal is that the project be capable of reproduction at a affordable rate. The final costs of the project have escalated in the last year but we have more projects on the horizon.

We have learned in the past year that costs on the client's side for foundations and MEP installations were significantly higher than we originally projected, and we adjusted our cost estimate accordingly. Despite St. John's location within one of the lowest cost construction markets in the state, we believe that small town economics is contributing to the higher costs, along with some escalation caused by the small size of the home. Because the size of the house is small, subcontractors still need to have enough profit margin in their bids to make the job worth their time, in comparison with their other work, and this seems to have affected foundations and MEP the most.

PRELIMINARY COST ESTIMATE

During the build, Stafford Eco Devo was able to secure $500,000 in additional development financing from the Kansas Housing Resources Corporation to build an addition four homes, based on the studio's design and incorporating its passive design and net zero features. The studio is excited to see how their project transforms in this next phase, and how the prototype can be improved and further systematized for these future builds.

The cost estimate below shows and breaks down costs between the Net Positive Studio and Eco Devo.

Estimating Summary

		Material	Labor	Subtotal Cost	Notes
	Existing Conditions	$0.00	$0.00	$0.00	
1	Site Work	$2,474.88	$4,884.02	$10,358.90	
2	Foundations	$6,895.28	$3,822.48	$10,717.76	
3	Framing	$4,136.51	$0.00	$4,136.51	
4a	Exterior Walls - Prefab/KSU	$11,756.98	$0.00	$12,826.23	
4b	Exterior Wall Cladding & Finishes	$0.00	$0.00	$4,487.00	
5a	Roofing - Prefab/KSU	$14,943.76	$0.00	$16,149.51	
5b	Exterior Roof Cladding & Finishes			$3,752.00	
6a	Interiors - Prefab/KSU	$4,839.00	$0.00	$4,839.00	
6b	Interior - onsite			$14,424.16	
7	Specialties	$0.00	$0.00	$0.00	
8	Mechanical (Plumbing and HVAC)	$0.00	$0.00	$28,700.00	Estimates from local MEP subcontractor; includes under slab rough-In
9	Electrical	$0.00	$0.00	$8,600.00	Estimates from local MEP subcontractor;
10	Landscaping	$3,175.00	$0.00	$1,887.50	

	Stafford Co Eco Devo Costs	**$85,091.81**	Material + Sub Labor for categories 1, 2, 8, 9, + 5% contingency; tax, assembly labor and markup not included.
	KSU Studio Costs	**$41,830.69**	Material for categories 3, 4, 5, 6, 7 + 5% contingency
	Total Net Positive Studio Build Costs - AY2019-20	**$126,922.50**	EcoDevo + KSU Costs
	Costs for Conventional GC Build w/ Financing		
	Net Positive Studio Build Costs (from above)	$136,922.50	Allowances of $6,000 for appliances, $4000 for windows added
	General Conditions (Div. 1) Allowance	$6,043.93	5% of project cost
	Subcontractor Labor and Markup on KSU Studio Items	$18,920.56	Based on 48.7% labor factor for ave. construction material costs for typ 1-story home [Source: RSMeans 2018]
	Sales Tax (mat'ls & equip) @ 8.6%	$4,147.04	
	GC Overhead	$13,979.91	10%
	GC Profit	$6,989.96	5%
	Misc Fees	$3,053.00	Transportation of panels and equipment rental
	Design Fees	$0.00	
	3.2 kW Grid-Tied Photovoltaic System	$6,130.00	Kit price; homeowner, co-op, or volunteer install
	Lot Costs (Paid by Owner)	$2,000	
	Financing Costs	$2,000	
	Project Cost for Conventional Build	**$196,186.90**	

AFFORDABILITY

Conclusion

We have learned in the past year that costs on the client's side for foundations and MEP installations were significantly higher than we originally projected, and we adjusted our cost estimate accordingly. Despite St. John's location within one of the lowest cost construction markets in the state, we believe that small town economics is contributing to the higher costs, along with some escalation caused by the small size of the home. Because the size of the house is small, subcontractors still need to have enough profit margin in their bids to make the job worth their time, in comparison with their other work, and this seems to have affected foundations and MEP the most.

During the build, Stafford Eco Devo was able to secure $500,000 in additional development financing from the Kansas Housing Resources Corporation to build an addition four homes, based on the studio's design and incorporating its passive design and net zero features. The studio is excited to see how their project transforms in this next phase, and how the prototype can be improved and further systematized for these future builds.

Net Positive Studio - AY2019-20

Cost Estimating Workbook

Project	St. John Prototype Home - Solar Decathlong
Completed By:	Studio
Date:	4/6/2020 - rev. 3/1/2021

Estimating Summary

		Material	Labor	Subtotal Cost	Notes
	Existing Conditions	$0.00	$0.00	$0.00	
1	Site Work	$2,474.88	$4,884.02	$10,358.90	
2	Foundations	$6,895.28	$3,822.48	$10,717.76	
3	Framing	$4,136.51	$0.00	$4,136.51	
4a	Exterior Walls - Prefab/KSU	$11,756.98	$0.00	$12,826.23	
4b	Exterior Wall Cladding & Finishes	$0.00	$0.00	$4,487.00	
5a	Roofing - Prefab/KSU	$14,943.76	$0.00	$16,149.51	
5b	Exterior Roof Cladding & Finishes			$3,752.00	
6a	Interiors - Prefab/KSU	$4,839.00	$0.00	$4,839.00	
6b	Interior - onsite			$14,424.16	
7	Specialties	$0.00	$0.00	$0.00	
8	Mechanical (Plumbing and HVAC)	$0.00	$0.00	$28,700.00	Estimates from local MEP subcontractor; includes under slab rough-In
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	Design Fees	$0.00	
	3.2 kW Grid-Tied Photovoltaic System	$6,130.00	Kit price; homeowner, co-op, or volunteer install
	Lot Costs (Paid by Owner)	$2,000	
	Financing Costs	$2,000	
	Project Cost for Conventional Build	**$196,186.90**	

Quantity Survey

1-Site Work

Description of Task, Activity, Materials	Quantity	Unit	Cost per Unit: Material	Cost per Unit: Labor	Subtotals: Material	Subtotals: Labor	Totals: Material+Labor	Source	Notes
SITE WORK									
Building, 26'x46' (4' Deep)	1	Each	0	$2,630.66	$0.00	$2,630.66	$2,630.66	RSM, Fooring Excavation Systems, pg. 102	
Building Pad Construction									
Poured Concrete System (4' Wide) - Porch	253	SF	$2.46	$2.37	$622.38	$599.61	$1,221.99	RSM, Sidewalk Systems, pg. 108	
Poured Concrete System (4' Wide) - Sidewalks	75	SF	$2.46	$2.37	$184.50	$177.75	$362.25	RSM, Sidewalk Systems, pg. 108	
Poured Concrete - Driveway	600	SF	$2.78	$2.46	$1,668.00	$1,476.00	$3,144.00	RSM, Sitework Driveway Systems, pg. 110	
CONNECTIONS									
Water, Sewer, and Electrical Connections							$3,000.00	Estimate from Davis	
					Material	Labor	Division Total		
				Totals	$2,474.88	$4,884.02	$10,358.90		

Quantity Survey

2-Foundations

			Cost per Unit		Subtotals				
Description of Task, Activity, Materials	Quantity	Unit	Material	Labor	Material	Labor	Totals Material+Labor	Source	Notes
SLAB									
6" Thick Slab	1100	SF	$3.07	$1.96	$3,377.00	$2,156.00	$5,533.00	RSM, Floor Slab System, pg. 126	
FOOTINGS									
12" Thick by 24" Wide Footing	148	LF Slab Perimeter	$11.77	$11.26	$1,741.96	$1,666.48	$3,408.44	RSM, Footing Systems, pg. 118	
INSULATION									
Underslab Insulation	1100	SF	$0.91		$1,001.00	$0.00	$1,001.00	Home Depot	R10 XPS Insulation
Slab Edge Insulation	552	SF	$0.91		$502.32	$0.00	$502.32	Home Depot	R10 XPS Insulation - (Includes Footings)
Horizontal Perimeter Slab Insulation	300	SF	$0.91		$273.00	$0.00	$273.00	Home Depot	R10 XPS Insulation
					Material	Labor	Division Total		
				Totals	$6,895.28	$3,822.48	$10,717.76		

Quantity Survey

3-Framing

Description of Task, Activity, Materials	Quantity	Unit	Cost per Unit: Material	Cost per Unit: Labor	Subtotals: Material	Subtotals: Labor	Totals: Material+Labor	Source	Notes
ROOF									
2" x 12" x 12'	24	Each	$31.89		$765.36	$0.00	$765.36	Mead Lumber	Rafters
2" x 12" x 16'	29	Each	$41.89		$1,214.81	$0.00	$1,214.81	Mead Lumber	Cut 5 Pieces Of 16' In Half For 9 Pieces of 8' Lengths
EXTERIOR WALLS									
2" x 4" x 8' (SYP #2 Treated)	21	Each	$4.83		$101.43	$0.00	$101.43	Mead Lumber	Sole Plates
2" x 4" x 10' (SYP #2 Treated)	3	Each	$5.69		$17.07	$0.00	$17.07	Mead Lumber	Sole Plates
2" x 4" x 8' (SPF #2 & BTR)	164	Each	$3.41		$559.24	$0.00	$559.24	Mead Lumber	Framing Studs/Cap Plates
2" x 4" x 10' (SPF #2 & BTR)	34	Each	$4.55		$154.70	$0.00	$154.70	Mead Lumber	Framing Studs
2" x 4" x 12' (SPF #2 & BTR)	72	Each	$5.51		$396.72	$0.00	$396.72	Mead Lumber	Framing Studs
HEADERS									
2" x 8" x 16' (SPF #2 & BTR)	2	Each	$17.73		$35.46	$0.00	$35.46	Mead Lumber	Window Headers
2" x 12" x 8' (HF #2 & BTR)	4	Each	$12.45		$49.80	$0.00	$49.80	Mead Lumber	Window Headers
1 3/4"W x 7 1/4"D x 10'L	40	FT	$3.57		$142.80	$0.00	$142.80	Mead Lumber	(2.0E Microllam LVL) - South Window Header, North Door Header (Doubled)
RIDGE BEAM									
1 3/4" x 14" LVL	92	LF	$6.99		$643.08	$0.00	$643.08	Mead Lumber	Laminate 2 EA 1 3/4" x 14" LVL Together for Beam (12', 14', 20')
POSTS									
4" x 4" x 12' (SYP #2 Treated)	4	Each	$14.01		$56.04	$0.00	$56.04	Mead Lumber	
					Material	Labor	Division Total		
				Totals	$4,136.51	$0.00	$4,136.51		

Quantity Survey

4-Exterior Walls			Cost per Unit		Subtotals		Totals (KSU)	Totals (ECO DEVO)		
Description of Task, Activity, Materials	Quantity	Unit	Material	Labor	Material	Labor	Material+Labor	Material+Labor	Source	Notes
METAL SIDING										
Concealed seam metal paneling and trim								$4,487		
ZIP BOARD										
4' x 8' x 7/16" OSB ZIP Sheathing	50	Each	$18.99		$949.50	$0.00	$949.50		Mead Lumber	
INSULATION										
4' x 8' x 1 1/2" Insulation	48	Each	$23.89		$1,146.72	$0.00	$1,146.72		Home Depot	
OSB SHEATHING										
4' x 8' x 7/16" OSC Sheathing	50	Each	$14.45		$722.50	$0.00	$722.50		Mead Lumber	
RAYCORE SIPS										
4' x 8' - 2x4 Raycore Panel (Walls)	20	Each	$169.28		$3,385.60	$0.00	$3,385.60		raycore.com	$5.29/ft2
4' x 10' - 2x4 Raycore Panel (Walls)	5	Each	$211.06		$1,055.30	$0.00	$1,055.30		raycore.com	
4' x 12' - 2x4 Raycore Panel (Walls)	8	Each	$253.92		$2,031.36	$0.00	$2,031.36		raycore.com	
Raycore Shipping Price					$0.00	$0.00	$1,069.25			$2,275 x 47% of total order
MISC HARDWARE AND SUPPLIES										
Fasteners, Structural Connectors, Sealants, and Lumber for On-Site Work					$2,466.00	$0.00	$2,466.00		actual costs	includes steel porch columns
DOORS AND WINDOWS										
Windows and sliding patio door							$0.00		Interstate Glass	donated; valued at $3771.01
					Material	Labor	Division Total (KSU)	Division Total (Eco Divo)		
				Totals	$11,756.98	$0.00	$12,826.23	$4,487.00		

Quantity Survey

5-Roofing			Cost per Unit		Subtotals		Totals	Totals		
Description of Task, Activity, Materials	Quantity	Unit	Material	Labor	Material	Labor	Material+Labor	Material+Labor	Source	Notes
RAYCORE SIPS										
4' x 8' - 2x4 Raycore Panel (Roof)	42	Each	$169.28		$7,109.76	$0.00	$7,109.76		raycore.com	
Raycore Shipping Price							$1,205.75			$2,275 x 53% of total order
ZIP BOARD										
4' x 8' x 7/16"	50	Each	$22.50		$1,125.00	$0.00	$1,125.00			
INSULATION										
4' x 8' x 1 1/2" R-7.5 XPS Fomular 150	84	Each	$23.98		$2,014.32	$0.00	$2,014.32		Home Depot	
OSB SHEATHING										
4' x 8' x 7/16"	42	Each	$15.65		$657.30	$0.00	$657.30			
INTERIOR FINISH										
4' x 8' x 1/2" CDX Plywood	42	Each	$21.39		$898.38	$0.00	$898.38		Mead Lumber	
ROOFING										
Concealed seam metal paneling w/ trim								$3,752	Beachy Contract	Actual Contract Price
MISC HARDWARE AND SUPPLIES										
Fasteners, Structural Connectors, Sealants, and Lumber for On-Site Work					$3,139.00		$3,139.00			actual costs
					Material	Labor	Division Total (KSU)	Division Total (Eco Divo)		
				Totals	$14,943.76	$0.00	$16,149.51	$3,752.00		

Quantity Survey

6-Interiors			Cost per Unit		Subtotals		Totals (KSU)	Totals (Eco Divo)		
Description of Task, Activity, Materials	Quantity	Unit	Material	Labor	Material	Labor	Material+Labor	Material+Labor	Source	Notes
CASEWORK										
12mm Sanded Birch B-B Plywood	26	sheet	$29.00		$754.00		$754.00		Home Depot	
3/4" Baltic Birch A-B Plywood	45	sheet	$73.00		$3,285.00		$3,285.00		Roberson's Lumber	
Cabinet Hardware			$800.00		$800.00		$800.00			
WALL FINISHES										
Moldings	2908	FT2	$1.25	$1.87				$9,072.96	RS MEANS	
CEILING FINISHES										
Moldings	276	FT2	$0.68	$1.77				$676.20	RS MEANS	
INTERIOR DOORS										
Flush hollow core birch door	5	each	$110.00	$134				$1,220.00	Menards, Homeguide.com	
Flush bypass closet door	3	each	$165.00	$320.00				$1,455.00	Menards, Homeguide.com	
MISC TRIM AND FINISHES										
Additional trim and hardware		`						$2,000		
					Material	Labor	Division Total (KSU)	Division Total (Eco Divo)		
				Totals	$4,839.00	$0.00	$4,839.00	$14,424.16		

Quantity Survey

8-Mechanical			Cost per Unit		Subtotals		Totals		
Description of Task, Activity, Materials	Quantity	Unit	Material	Labor	Material	Labor	Material+Labor	Source	Notes
HVAC									
Ducted Mini Split HVAC System w/ Ductwork (Mitsubishi model) and ERV	1	System					$16,600.00	Estimate	Davis Electrical Inc.
Plumbing									
Whole house plumbing system w/ tankless WH as spec'd	1	System					$12,100.00	Estimate	Davis Electrical Inc.
					Material	Labor	Division Total		
				Totals	$0.00	$0.00	$28,700.00		

Quantity Survey

9-Electrical			Cost per Unit		Subtotals		Totals		
Description of Task, Activity, Materials	Quantity	Unit	Material	Labor	Material	Labor	Material+Labor	Source	Notes
Electrical									
Whole house electrical system as specified	1	System					$8,600.00	Estimate	Davis Electrical Inc.
					Material	Labor	Division Total		
				Totals	$0.00	$0.00	$8,600.00		

Quantity Survey

10-Landscaping			Cost per Unit		Subtotals		Totals
Description of Task, Activity, Materials	Quantity	Unit	Material	Labor	Material	Labor	Material+Labor
TREES							
Royal Raindrops Crabapple	2	2"	$295.00		$590.00	$0.00	$590.00
Frontier Elm	2	1.5-2"	$200.00		$400.00	$0.00	$400.00
Black Hills Spruce	1	6-7"	$325.00		$325.00	$0.00	$325.00
Taylor Juniper	3	6-7"	$220.00		$660.00	$0.00	$660.00
							$1,975.00
Grasses							
Feather Reed Grass	4	1gal	$20.00		$80.00	$0.00	$80.00
Shenandoah Switchgrass	8	1gal	$20.00		$160.00	$0.00	$160.00
Little Devil Ninebark	6	15-18"	$40.00		$240.00	$0.00	$240.00
Autumn Fire Sedum	2	1gal	$20.00		$40.00	$0.00	$40.00
Dark Towers Penstemon	6	15-18"	$40.00		$240.00	$0.00	$240.00
Patriot Hosta	3	1gal	$20.00		$60.00	$0.00	$60.00
Green Velvet Boxwood	4	15-18"	$50.00		$200.00	$0.00	$200.00
May Night Salvia	3	1gal	$20.00		$60.00	$0.00	$60.00
orange Rocket Barberry	3	2gal	$40.00		$120.00	$0.00	$120.00
					Material	Labor	Division Total
				Totals	$3,175.00	$0.00	$987.50
							$900.00
							$1,887.50