DEARBORN ST. MARKET

Garfield Comprehensive Incentive Implementation and Economic Analysis 16 December, 2011 Hank Mei, Talia Perry, Medha Singh, Jessica Wang, Zachary Weimer

Credits, Acknowledgements, and Declarations

"Six Percent Place" is an ongoing project by cityLAB; the production of incentive implementation plans is the responsibility of the students of the fall 2011 class of Issues of Practice at Carnegie Mellon University, under the instruction of John Folan. Unless otherwise noted, he text and graphics of this book were completed by the Dearborn Street Market Incentive Group of students: Hank Mei, Talia Perry, Medha Singh, Jessica Wang, and Zachary Weimer.

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Six Percent Place Study Summary Narrative

Inspired by a study done by CEOs for Cities called "Creative Neighborhoods" and aided by research and proposals provided in the Garfield 2030 Plan by Perkins Eastman, Pittsburgh's own cityLAB "do tank" seeks to take the research apply it in the community of Garfield.

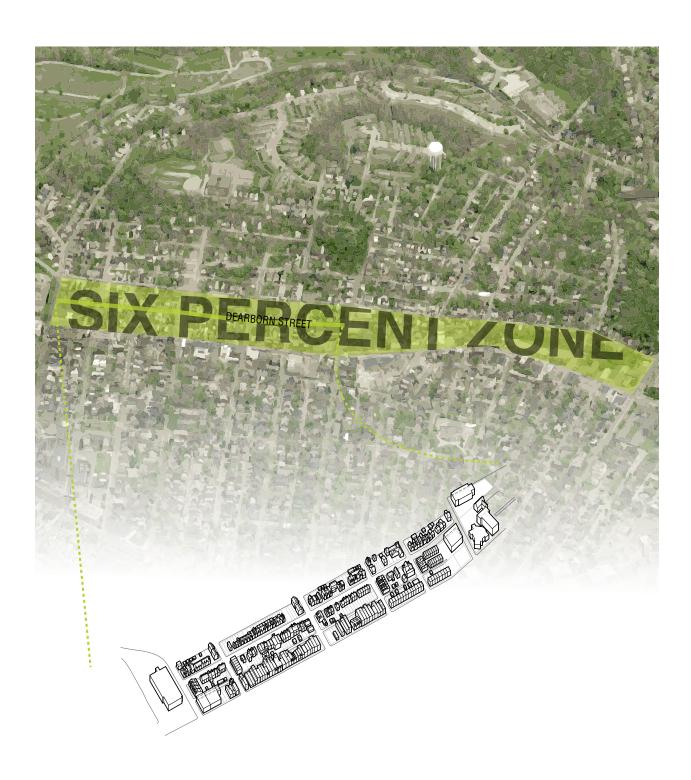
Derived from the original study, the concept of a "six percent place" offers an advantageous opportunity to the community: when the number of creative workers in a sub-region of a city reaches a tipping point — a target of six percent of the population — socio-economic activity has a tendency to flourish. For the past year and a half,² cityLAB has been compiling substantial research on the existing conditions of Garfield — mapping demographic, economic, social, and environmental factors, interviewing and surveying residents — and Garfield's potential, with the intention of inspiring six percent of creative workers to move into the neighborhood.

This information and an ongoing dialogue with members of the community as well as potential incomers resulted in a list of priorities defined to help reach the goal of six percent creative workers, and a much longer list of ways to make them happen. These priorities are:

- 1) Make Garfield more visible.
- Make Garfield an entrepreneurial hotbed.
- 3) Make Garfield a creative hotbed.
- 4) Make Garfield diverse.
- 5) Make Garfield family friendly.
- 6) Make Garfield clean and safe.3

A "6% Toolbox" of how to accomplish these priorities was compiled based upon incentives or projects that both local residents and possible incomers both found potentially interesting and valuable to the community.

- CEOs for Cities, "a civic lab of today's urban leaders catalyzing a movement to advance the next generation of great American cities," presented
 their study in 2007. "Creative Neighborhoods" intended to investigate, among other things, the relationship between creative workers and the cities
 they live in, the social and economic benefits of this population when "clustered" in a particular neighborhood. See http://www.ceosforcities.org/
 about for more information on CEOs for Cities, and http://www.citylabpgh.org/wp-content/uploads/2011/04/CREATIVE-NEIGHBORHOODS-THESTUDY-THAT-STARTED-IT-ALL.pdf for the study itself.
- 2. To follow the progression of the project, see more at http://www.citylabpgh.org/experiments/six-percent-place/blog/.
- 3. cityLAB's "Six Percent Place Study Draft Report," August 28, 2011, p. 45.



Above: Overview satellite image of Garfield, overlaying the Six Percent Zone. Original capture taken from Bing Maps satellite imagery, modified by Dearborn Street Market Group. Axo of Dearborn Street drawn by Dearborn Street Market Group.

Incentive Summary Narrative

The community of Garfield feels invested in the well-being of their neighborhood, but residents do not have access to certain basic amenities and services. As part of the 6% Place Initiative, the Dearborn Street Market Incentive aims to provide residents of the Garfield area with goods and commodities that would be otherwise difficult for them to obtain. At the same time, the project has the potential to attract people from the greater Pittsburgh region or beyond, which would help to strength widespread community identity, an important goal outlined in the Six Percent Place Study. This further stimulates the neighborhood by bringing outside capital into the area and providing a venue for entrepreneurship to residents. The establishment of a permanent¹ market with a physical presence in the community, with a specific focus on food products, will improve the quality of living in Garfield and help to attract creative workers.

Although Dearborn is classified as a residential street, its proximity to Penn Avenue and access to a number of community establishments² help to overcome some of the difficulties that come with introducing such an active social and commercial environment that comes with a market. Dearborn is currently suffering from challenges related to its high vacancy rates that have made even community members question the safety of their environment: The street market is a way to take a block back.

The benefits of a regularly occurring market to a host neighborhood include access to certain fresh food products that have been raised or husbanded in or near the community - further promoting the economic and social ties of Garfield's community. Prices are not inflated, by minimizing transportation costs, and any carbon footprint associated with shipping goods is mediated. Entrepreneurial individuals in the community will be provided with the opportunity to establish a profitable business, and larger organizations³ in the area can come together to network, generate revenue, as well as promote individual agendas.

Many neighborhoods within the city of Pittsburgh have healthy, thriving market cultures: residents of Garfield are aware of successes in other areas and are excited by the possibility of a local market.⁴ Because nearby stores are convenience-oriented and do not provide fresh groceries and other provisional foodstuffs, residents believe that a market will fill a vacant niche in neighborhood economy.

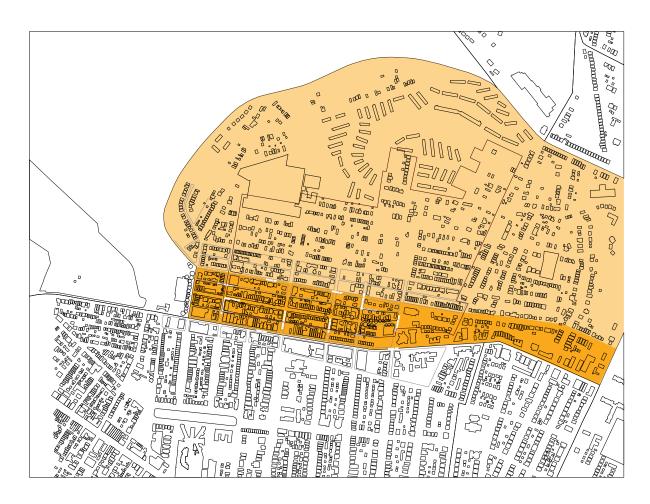
For the market to succeed and become sustainable, a framework for its foundation and growth must be established, and community leaders must take hold of the initiative and move forward with an established agenda.

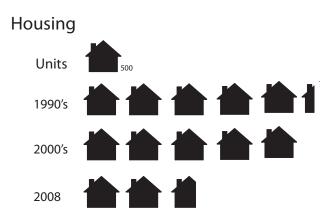
For those who have just moved or are undergoing the process of moving into the community, the market will not only provide a place to shop, but is an ongoing event that allows them to meet and develop relationships with their neighborhos, an activity that allows people of all ages and backgrounds to come together. For those completely outside of the Garfield community, the market will be a way of forming ties between the detached neighborhoods of Pittsburgh. Garfield has opportunities that ousiders may not typically get to see, and the market would be a way to introduce these resources to a community beyond its own locality.

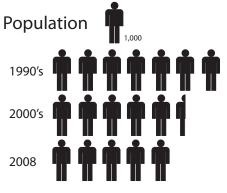
- 1. "Permanent" here means lasting over a period of at least several years, not year-round.
- 2. For example, church groups, youth groups, fire departments, and education or athletic groups.
- 3. The street is capped by the St. Lawrence O'Toole Community Center to the east, and also contains the BGC Community Activity Center.
- 4. This information and all thereafter relating to the opinions of Garfield residents are based off 1) the community meeting held on September 7, 2011, 2) a street-wide survey of Dearborn, individual and group interviews conducted with everyone who was home at the time, on September 14, 2011, 3) introductory conversations with contacts provided by Nina Barbuto on September 17, 2011, and 4) a community meeting held on October 4, 2011.



Above: The market shown in this image is situated along the length of Dearborn, organized linearly to take back a portion of the street, between Winebiddle and Evaline. The image is showing a preliminary market that could easily pop up twice a month to begin to establish a presence on the street. The market's primary goal is to bring people together and provide opportunities for both entrepreneaurs and consumers. The other criteria highlighted in this image are the market's family-friendly attributes.







Vacancy

2000's

2008

Median Income \$ Garfield \$\$\$\$\$\$\$\$\$\$\$

\$\$\$\$\$\$\$

Housing Value Price



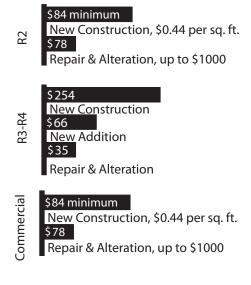
Property Value



Poverty



Code/Utility



- 4.2313 cent per killwatt-hour Eletricity

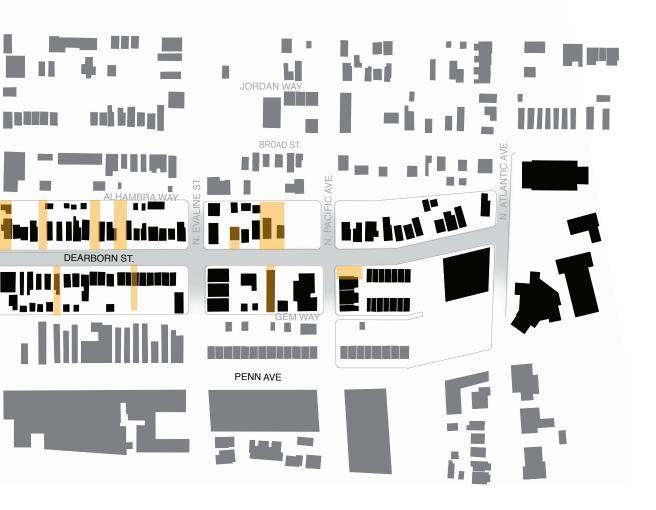
Water - \$15.80, 0~1000 Gallon

Gas - \$.54414 per Ccf Garfield's population has decreased consistently since 1965. Between the years 1990 and 2008 the number of occupied homes decreased from 2,700 to 1,250. In the last 10 years, however, the vacancy percentage has dropped slowly, from 23% in 2000 to 13% in 2008. Incentive programs such as the Dearborn St. Market could help to continue that trend. A new market in the area could help to draw in new residents while improving the quality of life of existing homeowners by allowing access to fresh produce and other food products. A market also provides a way for residents to sell products at a profit. Ultimately, this project can bolster the economy in the neighborhood, provide more convient services to residents, and potentially bring more people creative individuals into Garfield. The median income of Pittsburgh neighborhoods is considerably diverse; for this reason, the market should aim to not be exclusive in its goods and their prices. For a family that is bringing much less money into its household and cannot afford certain products and lifestyle choices, it is still important that the market provide them with a place to shop. Many residents of Garfield do no own cars, and rely on public transportation to access food and other items, so the market would offer an opportunity for them to get both groceries and also possibly second hand goods.

Information taken from www.pittsburghpa.gov, www.bloomfield-garfield.org, garfield's 2030 plan







The demographics on Dearborn Street are representative of the demographics in Garfield in general. The percentages of vacant lots and property sales are generally in the same range on Dearborn Street as that of Garfield's overall population.

Property in Garfield is much less expensive than most of Pittsburgh's neighborhoods, which would be helpful if the market necessitated the purchase of land. Dearborn Street's proximity to Penn Avenue at the bottom of the hill, though, means it is easily linked to the rest of the city. Dearborn has recently faced some challenges economically and socially, the result of which can be seen in the high number of vacancies on this street. But these vacancies can provide opportunities for a comunity market to flourish, to bring the neighborhood together and introduce other people to Garfield.

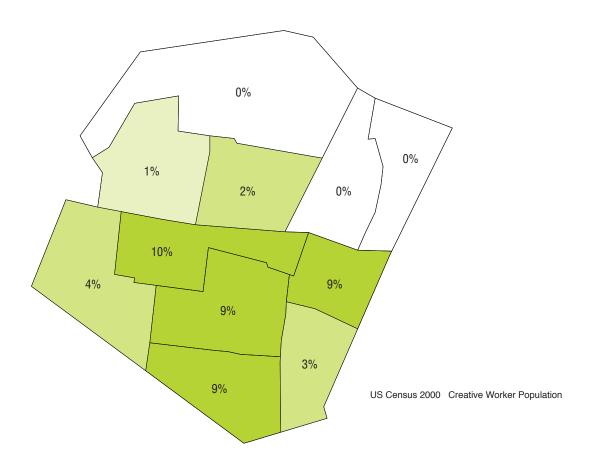




Since walking is a primary mode of transportation for many residents of Garfield, accessibility and proximity of essential goods is vital to maintain a healthy lifestyle. And since many residents also have at least two jobs, time dedicated to travel is quite low. Many residents are currently unhappy about the current available options for grocery stores.

The only grocery-type store within a ten minute walk from the center of Dearborn Street is the Family Dollar Store. Not far beyond a ten minute bike ride are a few existing farmers markets, but not many residents utilize this form of transportation. Another difficulty is the time these markets are open; two out of the three shown here are seasonal, and offered during the evening on weekdays, when many people are still working.

A new market is needed to balance the community's needs with the goal of bringing new, creative workers into Garfield.



Garfield's New Residents

The US Census in 2000 maps out the percentage of creative workers in the Garfield/Friendship neighborhoods. The map shows that the percentage of creative workers in Garfield is low, ranging from 1-2%.

The icons to the right represent the target audience for the incoming residents in Garfield, the neighborhood characteristics that would attract these residents, and the characteristics the Dearborn Street Market could help provide.

The icons in orange represent the new audience that City Lab and the Garfield 2030 plan is aiming for. The incomers are represented by the creative workers, young entrepreneurs, college graduates, medical professionals, and middle-income families.

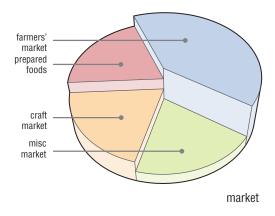
The icons in black represent the essential neighborhood characteristics that City Lab has outlined. City Lab has interviewed and collected information on what their target audience hopes to find. These characteristics include affordable housing, a family-friendly environment, affordability, walkability, diversity, and job opportunities.

The Dearborn Street Market can help bring some of those positive attributes to Garfield, represented in green. The market will bring more opportunities and activities, providing a range of family friendly events to buy food, crafts, etc. The market also aims to provide goods at affordable products for residents and visitors. Grocery stores and fresh food is currently located outside of Garfield and can only be accessed by residents with a car. The market, however, will bring fresh food and a variety of other products within walking distance. By providing a diversity of products, the market reaches a broader audience and expands the culture and community of Garfield. The market also promotes local entrepreneurs and businesses. By giving them an opportunity to promote their work in the market, the number of jobs and creative forces in Garfield can grow.



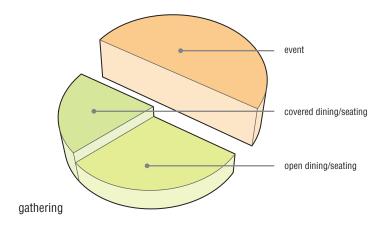
Markets have identities that relate to their typology – to the types of goods that are sold. In order for a farmers' market, flea market, or craft market to be successful, potential visitors must be able to identify it as an event with a particular type of good, service, or ware that is dominant. When organizing a start-up market, the type must be clearly defined and products sold outside of that type should not exceed twenty percent of total market sales. A general survey of the inhabitants of Dearborn St. revealed that many people in the area are enthusiastic about the possibility of a market in the area, and are especially interested in one that might bring fresh produce and other food products into the area, making goods that are otherwise difficult to obtain readily accessible at reasonable prices. The Dearborn St. Market has the potential to provide these basic goods in a manner that strengthens the sense of community in the neighborhood. With produce and foodstuffs as the main focus of the market, the opportunity still exists for other types of goods and services to be exchanged. Crafts, antiques and other "flea market" type goods might still be sold as an offshoot of the major market, allowing for community to engage in buying products from people in nearby communities while providing the opportunity to sell homemade goods.

The Dearborn St. Market should therefore be a mixed-type market with a specific focus on farm-grown, local produce: a farmers' market with smaller craft and flea market sections. Prepared foods also help to create social spaces conducive to gathering and socializing as they require room to pause and eat. Such stands should also make up a portion of the vendor program. A program of vendor types that could be successful at a Dearborn St. Market would be divided into several the following categories: approximately half would fall loosely into a farmer's market type. Vendors might sell produce, meat products, or other foodstuffs such as preservatives and non-perishables.

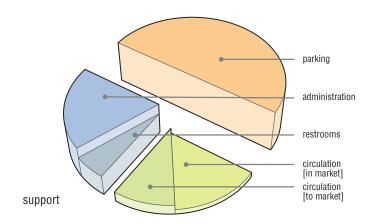


Twenty percent of additional vendors might also fall into a similar category of food-related services, selling prepared meals and snacks on-site to attract larger crowds near meal-times. An additional twenty percent of vendors, coming from both nearby areas and the community of Garfield, would sell crafts and artwork. The final ten percent of vendors would sell miscellaneous goods in separate, flea market-like portion of the Street event.²

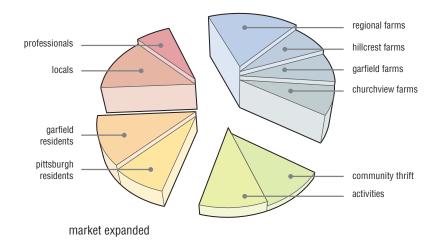
- This information and all thereafter relating to the opinions of Garfield residents are based from 1) the community meeting held on September 7, 2011, 2) a street-wide survey of Dearborn, individual and group interviews conducted with everyone who was home at the time, on September 14, 2011, 3) introductory conversations with contacts provided by Nina Barbuto on September 17, 2011, and 4) a community meeting held on October 4, 2011.
- Percentages are based upon conversations held with representatives from several farmers' markets in the Pittsburgh area. Most specific values were provided by Katie Zawrotniak of the Pittsburgh Downtown Partnership - the organization responsible for the Market Square Farmers' Market located in Downtown, Pittsburgh - citing documentation from the Pennsylvania Association for Sustainable Agriculture and personal experience.



Primary public space within the market is organized into two categories. The term event space refers to strictly programmed, exchange-oriented zones. This includes vendor space and correponding support space. It will comprise at least 50% of the overall market footprint. Less tightly programmed gathering space that will contain seating and possibly performance, display and exhibition space will also be important to the success of the market.



Support space for vendors, not including parking, will make up approximately 15-20% of the overall program. Parking will require a considerably larger footprint and will be offset by street parking and potentially nearby parking lots, depending upon whether the market is linear or centrally organized.



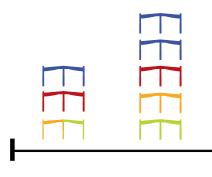
Specific type-organized markets within the larger farmers' market will be subdivided according to their relationship to the Garfield community. When possible, local resources will be utilized with the hope that the market will generate revenue for resident entrepreneurs as well as provide a vital resource. As the market develops, the majority of vendors will be from or near to the community.

A comprehensive phasing strategy is key to the success of the Dearborn Street Market. Most markets begin very humbly and grow slowly over an extended period of time as they establish a stable consumer and vendor base. As will be discussed in greater detail in IS8, phasing is broken down into three parts. Phase one is characterized by impermanent structures detailed in IP5, and will begin after a fund-raising campaign, which will cover costs associated with tent manufacturing. It is anticipated that, at startup, the market will attract between five and ten vendors. Vendors providing fresh produce would most likely come directly from the community - Garfield Farms, Hillcrest Farms, and Churchview farms are all viable options and have expressed interest. Vendors serving prepared foods would most likely come from outside the community initially, with room for Garfield residents of varying skill levels to become entrepreneurial as the market expands. The portion of the market dedicated to the sale of craft items would be developed in collaboration with existing art and craft sale venues in Pittsburgh - specifically the I Made It! Market and active parties involved in the Penn Ave Arts Initiative.

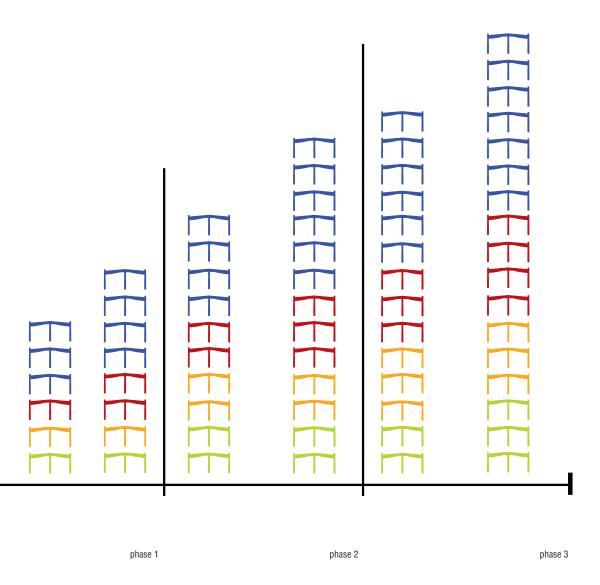
It will likely take two to five years to reach a critical threshold for the implementation of phase two. Another fund-raising campaign will allow for investment in semi-permanent structures, which will be utilized with the impermanent tents designed and manufactured at the beginning of phase one to compensate for expansion.

Because the crossing of a threshold requires a significant increase in finances for investment in structures, each is defined by profit margins. As the main source of revenue for the market is vendor fees, profits are directly proportional to the number of vendors participating on any given market day. The phase two threshold is thus set to begin when an annual average of eighteen vendors is achieved, for a total incoming revenue of \$4400. Phase two will be transitional and potentially of a shorter duration that phase one, with the threshold for phase three set at twenty eight vendors, or \$5400. A third and final fund-raising campaign will be necessary to allow for a shift to permanent structures located strategically, possibly in vacant lots, to allow for the continued expansion of the the impermanent portion of the market as well.

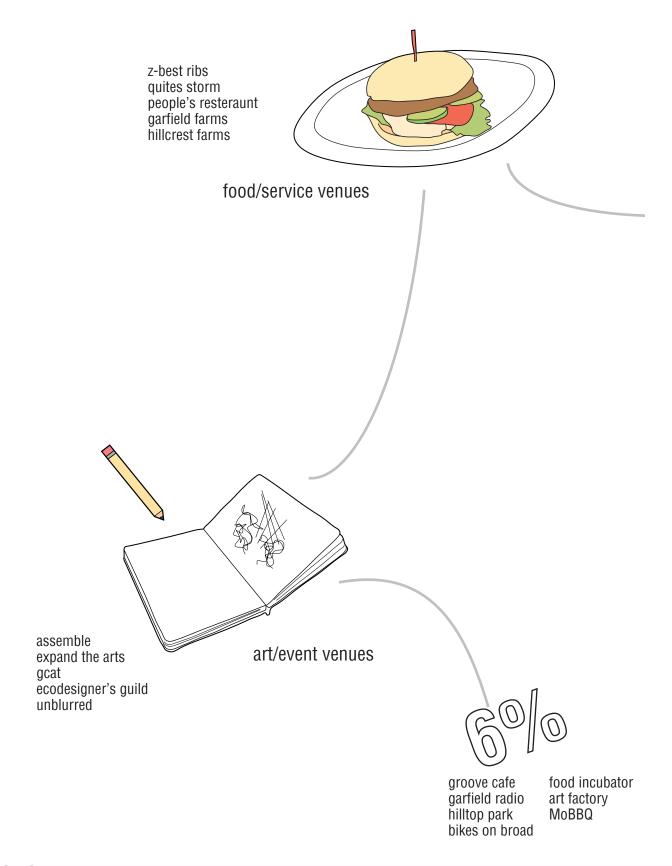


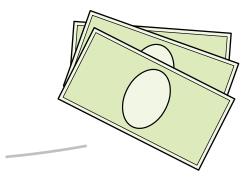


market growth



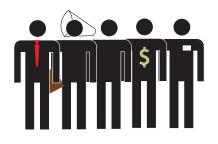
Above: Diagram illustrates growth of market and corresponding phase transitions as they relate to the number of vendors participating in market events.





sponsorships

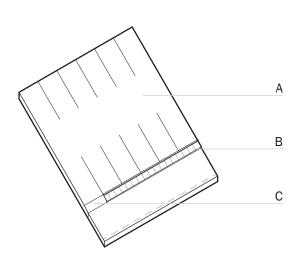
local businesses state & federal grants private donors

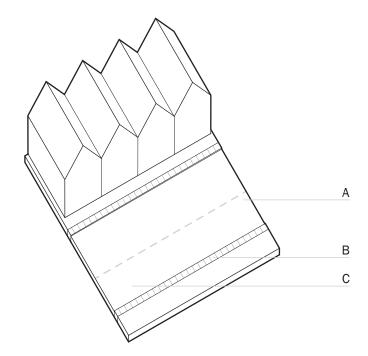


the board

The market stands to benefit in many ways from pooling resources with other 6% Place Incentive Groups. For the project to expand and achieve a measure of sustainability, it must establish a presence in the larger Pittsburgh community, and in so doing establish a place for Garfield in that same community. Collaboration with other incentive groups provides the Dearborn Street Market with two important things. Event planning that is coordinated between event-oriented incentives such as the Exercise Park/Bikes on Broad Initiative will help both respective proposals to achieve more widespread publicity and have a greater outreach. Resource-oriented incentives such as Art Factory and the Food Incubator can provide goods and displays at the market that would simultaneously strengthen their independent objectives while helping the market to a strong start.

It is also essential that the market function as an organizational node capable of pooling community resources so that it represents and is propelled forward because of the qualities specific to Garfield that make it unique. From food-service oriented venues in the area such as Z-Best Ribs and The People's Restaurant to creative venues - products of the Expand the Arts Initiative and the endeavors of hardworking individuals - such as Assemble, the market will quickly establish a series of mutually beneficial relationships that will help to ensure success.





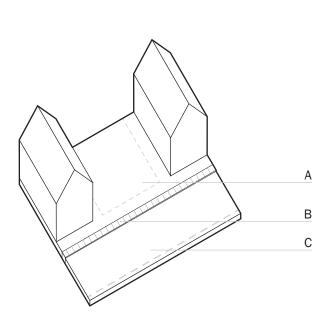
Parking Lot

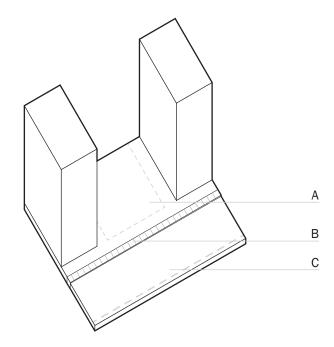
A parking lot provides a suitable site for the first phase of development. The large open space allows for flexibility in the circulation and layout of the market. The vehicular access and parking for vendors in a parking lot is also a convenient asset.

Street

The street can be utilized during the first phase of development for the market. The street provides a large space for the market, but creates a more linear layout. Vehicular and pedestrian access is also convenient for this type of site.

- A open + flexible space
- B pedestrian access
- C vehicular access



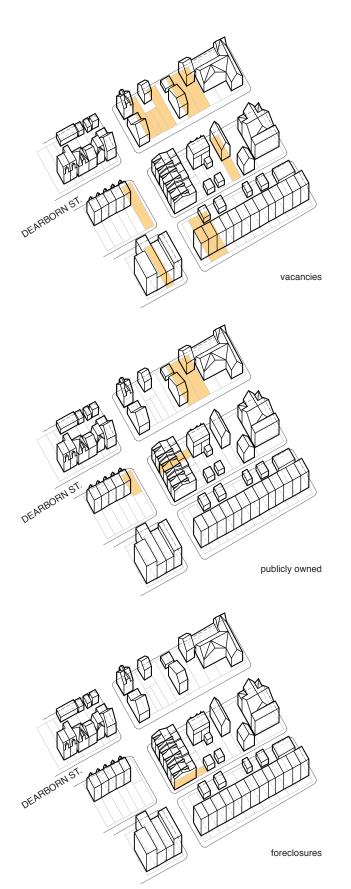


Vacant Lot

Vacant lots on Dearborn can be used to build semipermanent structures. Pulling the market off the street and into a vacant lot gives the Dearborn residents more privacy while still maintaining close proximity to the Garfield residents.

Storefront

Creating a storefront for the market is the goal for the third phase of the market. The storefront creates a permanent space for the market. A permanent structure on a main road, such as Penn Avenue, can still be combined with tents to lead the market into Garfield, creating a physical connection between Penn and Garfield.



Sites 1 & 2 - N. Evaline St. & Dearborn St.

By combining Dearborn Street with a cross-street, the market has the potential to draw more people up from Penn Avenue. N. Evaline Street is one such road. There are already a number of empty lots and vacant buildings along Evaline, most of which are publically owned.

A potential scheme in this site could include one or two "storefronts" facing Penn Avenue to attract shoppers and visitors of Garfield and encourage people to walk up the two short blocks to a larger market.

Two corner sites are available for use - this is desirable not just for visibility, but for its slightly less intrusive position along a residential street. These spaces on the western side of N. Evaline Street would further draw people into the neighborhood as the market pours into Dearborn.

The northern block of Dearborn Street between N. Evaline Street and N. Pacific Avenue has recently become almost completely vacated. This space could provide a significant-scaled space for larger-scale vendors, or could serve as a central gathering space for people to sit, eat, and talk.

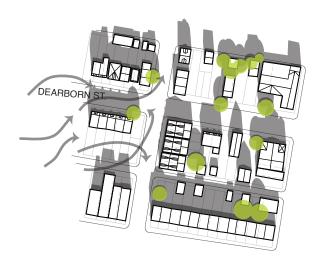
The site shown here offers various types of spaces around which a market could be organized; more specific strategies for organization of program and its integration into the site can be found on sheets IS8.04-IS8.05.

The collection of vacant lots with the most potential for future adaptation for the market are located on Dearborn between the cross streets North Evaline Street and North Pacific Avenue. This block's many vacancies may eventually contribute to a green, park-like space that could be utilized by the market as demand for the market grows. This space could be used for activities that require more open space, such as certain cooking demonstrations or game events for the children of market-goers. The potential lots are 50-I-275, 50-I-274, 50-I-274b, and 50-I-272. Though surrounded by residential units, they are not far from the church and the community center on the same block. When not in use, the spaces could be left alone as open green space until further, more permanent development of the market. The parcels would be consolidated in the future, giving the joined lots a total square footage of approximately 5063 sf.



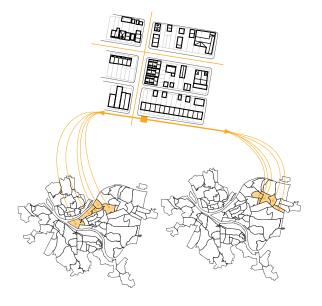
Sites 1 & 2: Topography

Although Garfield's hills can be intimidating for the most experienced of community members, this particular part of Dearborn has some flatter areas to offer. Additionally, the topography can be utilized as a way to organize the market; taking into account how far people are willing to walk, small resting/gathering spaces will have to be available to users of the market. The topography means water makes its way very quickly through the site and does not seem to collect anywhere in particular.



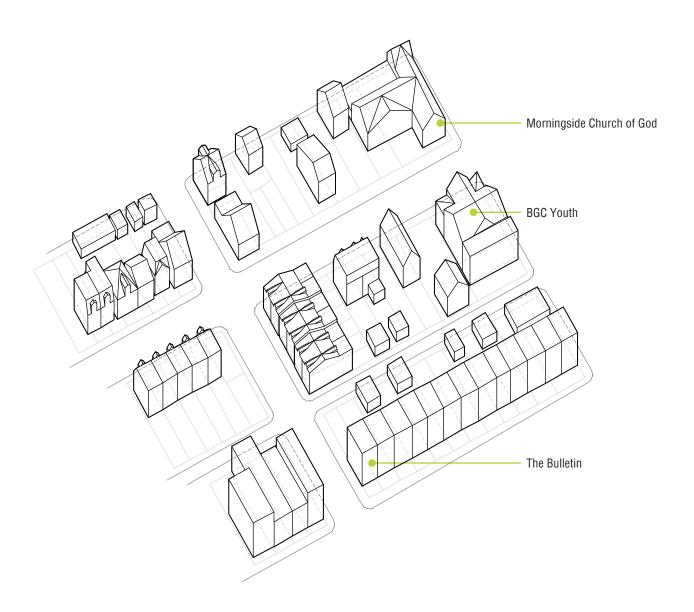
Sites 1 & 2: Shading & Wind

Because of Dearborn Street's orientation and breadth, many of the vacant lots receive lots of sun throughout the year. Tents of varying permanance can be employed to shade the vendors and their goods; shading is important for all occupants to achieve a level of comfort that will encourage people to stay. This area also anticipates a certain level of wind protection during the winter (for environmental data and considerations, see sheets IS7.00-IS7.01), especially to the west of N. Evaline Street. Other areas of the street, including the northern block between N. Evaline and N. Pacific are for the most part blocked by surrounding buildings; summer winds, however, which come from a slightly more southern angle, may be able to help ventilate the market.



Sites 1 & 2: Transportation

In addition to the road and sidewalk networks that connect various transportation types (from walking to cycling to automotive traffic), the corner of Penn Avenue and N. Evaline Street is a bus stop for the 88 route - linking this site to other neighborhoods (Point Breeze, East Liberty, Friendship; Bloomfield, Lawrenceville, Strip, Downtown) through public transportation.



Sites 1 & 2 - N. Evaline St. & Dearborn St.

These intersecting streets have many community-based organizations that could help to innitiate and grow a local market. A church, community center, and publication are all located along the axes of the market; all three already have established a strong relationship of communication and activity within the neighborhood. The market is a way to bring these entities together and strengthen the positive connections that already exist in Garfield.



5173 Dearborn Street -Morningside Church of God

Residents have explained that the Morningside Church of God draws a large crowd on Sundays, including people who live outside of the neighborhood. This is an opportunity to start drawing more people from outside of Garfield into the market. This church also has held flea-market-type sales, and could be a way to encourage further community involvement in this new market typology.



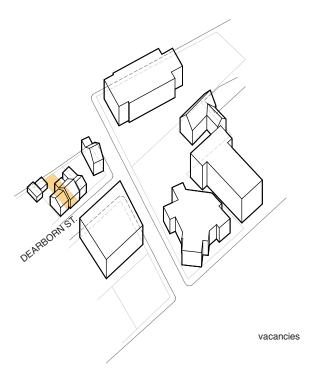
113 N. Pacific Avenue - BGC Youth

This space is used by the Bloomfield-Garfield Corporation for its youth development proramming. The market has a lot of potential in how it engages the younger population of Garfield: cooking classes, job opportunities, and nutrition education are just a few examples of ways this could happen. The connection to this demographic group is essential to the success of the market, as so much of the neighborhood is structured around its children.



5149 Penn Avenue - The Bulletin

The Bulletin is a monthly newsletter published by the Bloomfield-Garfield Corporation, established to serve the local communities in its reporting of events, expression of opinions, and encourage communication among and between these neighborhoods. Close proximity would encourage a symbiotic relationship between the market and the newsletter, the former increasing circulation beyond the immediate community, the latter advertising and publicizing the market to the local neighborhoods.

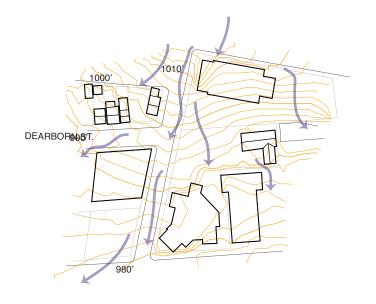


Site 3 - Parking Lot at N. Atlantic Ave. & Dearborn St.

This site does not currently have any opportunities for the construction of permanent structures for a market, but provides a large, open area in which to organize a central market for the community.

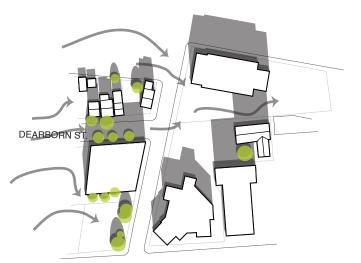
The parking lot is close to Penn Avenue as well as being very visually accessible from here. The location is sited at a place that may residents of Garfield are familiar with already, and frequent for either church- or community-based activities.

Solutions to problems that may arise from other sites are also available in this parking lot: for example, privacy and noise limitations are important to a residential street, and by putting the market at the starting edge of the street rather than somewhere within it, these problems can be minimized.



Site 3: Topography

The topography of this site and the access leading to it is a major difficulty when proposing a market. The parking lot itself is fairly level, but the surrounding site is quite steep. The market will have to serve as its own beacon, and get people to climb either up or down the hill. A way to aid this promenade would be to provide benches or smaller-scale vending booths along N. Atlantic Avenue for pedestrians approaching from either Penn Aven or from higher up Garfield's hills. The hills do help the site shed water quickly, so the market would not need to negotiate a soggy landscape - the ground, at least, will never be wet for long.



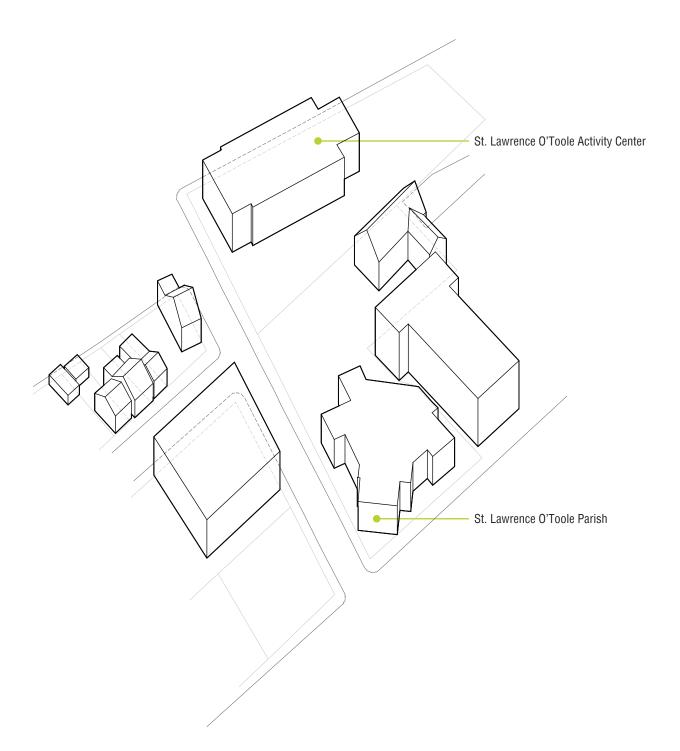
Site 3: Shading & Wind

The parking lot is much more exposed than the compact spaces embedded within the residential fabric of the neighborhood. Currently, shading is minimal - within the site as well as approaching it. Wind from the west is able to get to the slightly raised, barren space. So, although this site would work well as a temporary, innitial phase market, it would require a more robust level of protection from the environment than a typical temporary tented outdoor market. Pittsburgh's western wind is partially blocked by the houses and trees to the west of the parking lot, but because of its size and the width of Dearborn, it is likely this site would be breezier than the last.



Site 3: Transportation

To add to what was mentioned for the first two sites (see sheet IS3.03), the 89 bus route also runs up N. Atlantic Avenue from Penn; it too offers a connective network to neighborhoods further east (Negley Place, East Liberty, Larimer, Friendship).



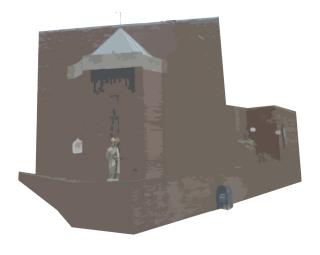
Site 3 - Parking Lot at N. Atlantic Ave. & Dearborn St.

The parking lot currently serves the St. Lawrence O'Toole Activity Center and the St. Lawrence O'Toole Parish - both of which afford promising connections to the community and beyond.



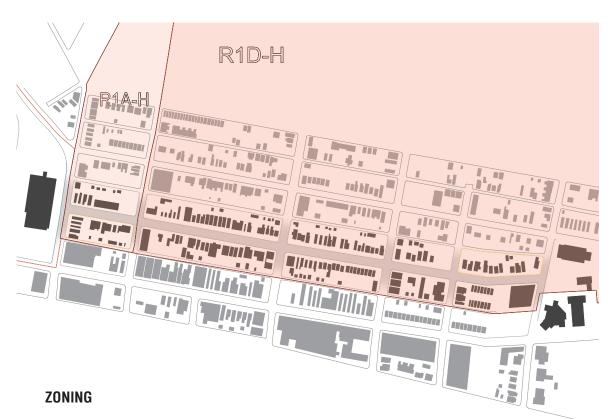
140 N. Atlantic Avenue -St. Lawrence O'Toole Activity Center

Hosting neighborhood meetings, banquets, sporting events, and various other activities, residents of Garfield are very familiar with the building. It also has a significant interior space that could potentially allow certain programmatic elements of the market to spread inside the existing structure.



5323 Penn Avenue -St. Lawrence O'Toole Parish

Although the St. Lawrence O'Toole Activity Center is used primarily by residents of Garfield, the parish serves the greater Pittsburgh area. By siting a temporary market between these two buildings, besides the opportunities presented by the existing social structures they offer, the market can literally and figurative bridge the gap between Garfield and a larger community.



The entire length of Dearborn Street is currently classified as some form of Residential Zone - primarily single unit detached houses, with attached houses on towards the west end. However, it sits close to the edge of these zones, which opens up some opportunities for engaging the community in the surrounding business areas: one block to the south, Gem Way, is the boundary between a residential zone and local neighborhood commerce surrounding Penn Avenue. Another potential asset is the designated park to the west of Dearborn Street.

R residential

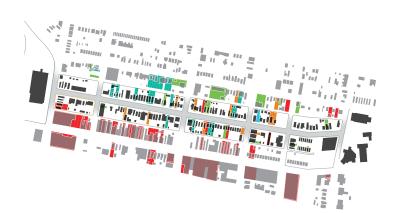
1 single-family

A attached dwelling

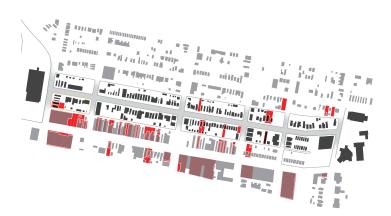
D detached dwelling

H high density

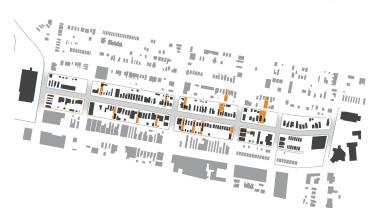
EMPTY/VACANT LOT MAPPING



VACANCIES



PUBLICLY OWNED



FORECLOSURES



BLOOMFIELD - GARFIELD PROJECT



R1D-H: Single-Unit Detached Residential -High Density

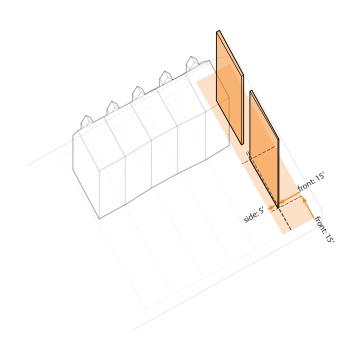
minimum lot size: 1800 sf minimum lot size per unit: 750 sf

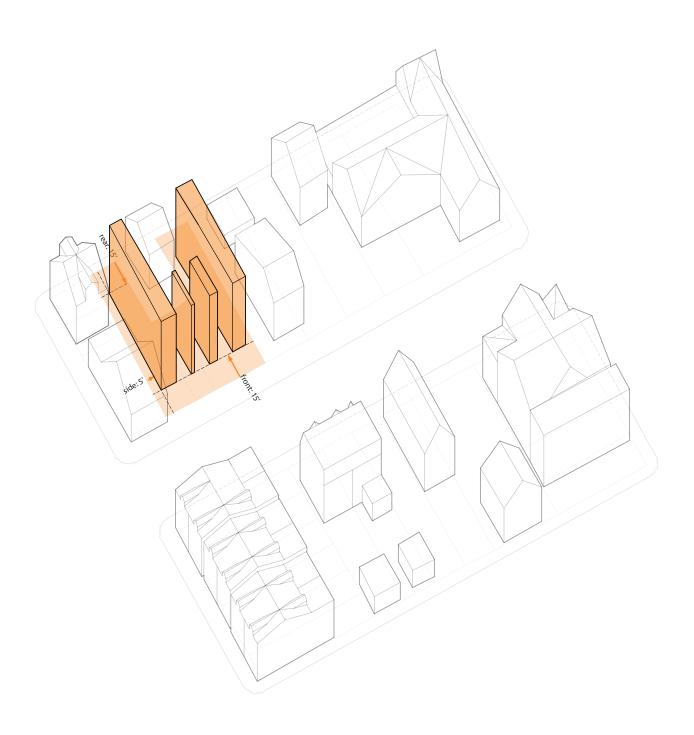
maximum height: 40 ft or 3 stories

minimum front setback: 15 ft minimum rear setback: 15 ft minimum side setback: 5 ft

According to the Pittsburgh city, Dearborn Street and its neighboring blocks are in a Single-Unit Detached Residential Zone with High Density. The code stipulates the maximum and minimum building area of all of the lots located in this zone.

The two vacant lots along the edge of Evaline Street on the corner of Dearborn Street are unbuildable due to the setback constraints, as are two of the lots on the empty lot on Dearborn. Should the market grow to establish a headquarters building, the two side lots on the empty lot would be the most viable options.





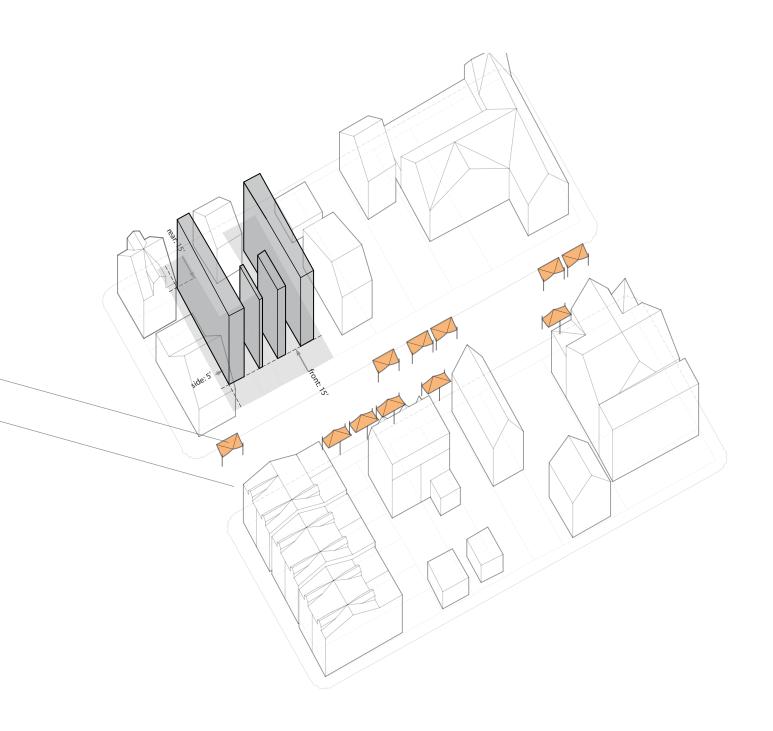
Pittsburgh, Pennsylvania, Code of Ordinances

A Title Four: Public Places and Property
Article I: Streets and Sidewalks
Chapter 411: Users of the Public Rights-of-Way

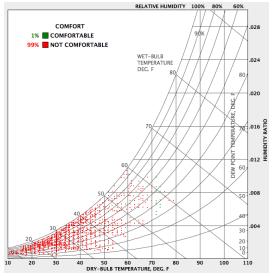
B Title Four: Public Places and Property Article I: Streets and Sidewalks Chapter 416: Obstructions

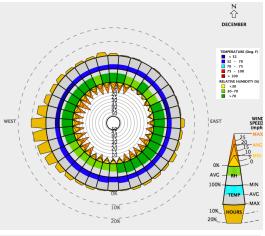
For the first two phases of the Dearborn Street Market, the Residential Zoning Code is unapplicable, due to the temporary condition of the tent structures and their location on the street and sidewalk rather than the empty land lots.

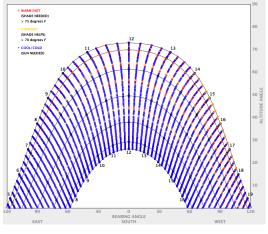
The code that does apply to the first two phases of the Market are the Obstructions code for the temporary tent structures and the Users of the Public Rights-of-Way code for the use of the sidewalk and streets. See sheets CA1.00 - CA1.07 for further information on the codes that apply.



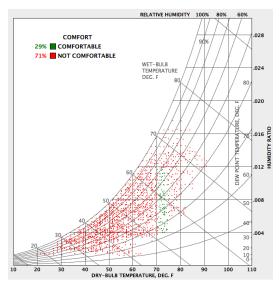


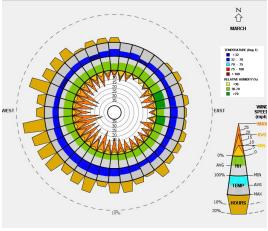








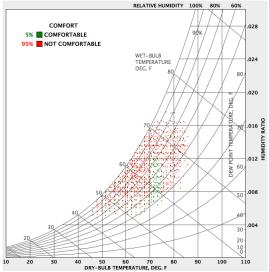


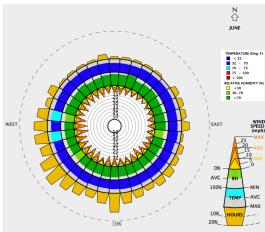


The weather conditions in Pittsburgh create an unhospitable environment for an outdoor market during the winter and most of the spring seasons. The cold temperatures and the harsh winds are too unbearable and cannot be easily protected against.

However, towards the end of spring, the temperatures rise significantly, and the winds carry less chill, which will create a much more pleasant environment for a street market.



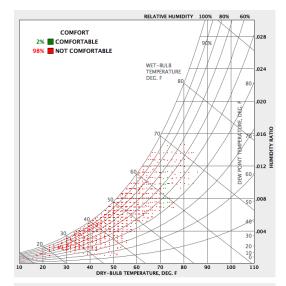


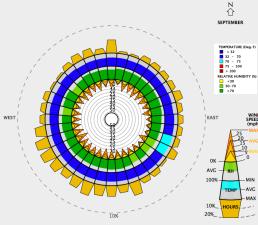


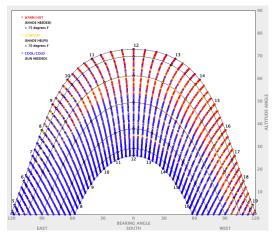
The summer months will be the most ideal months for the marketplace. Though there may be times when the temperatures may be uncomfortably warm, comfort can still be attained by shading and capitalizing on winds or fanning.

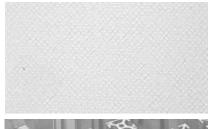
The weather is pleasant in the beginning of the fall season, where the temperatures cool only slightly, and there is still enough wind to keep the market cool on warmer days. However, towards the end of the fall season, the weather becomes too harsh for the outdoor street market.





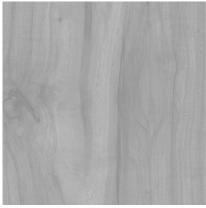






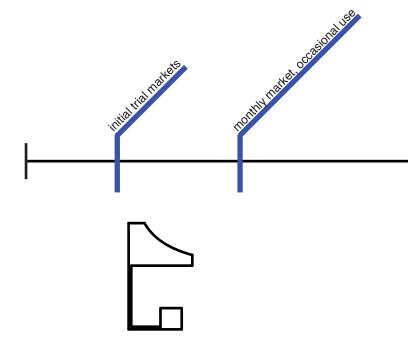






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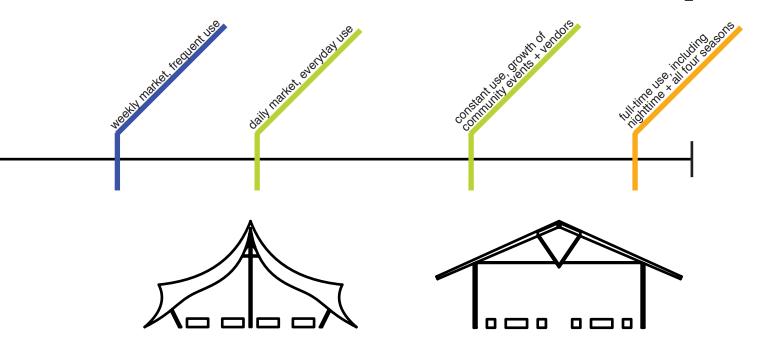


Phase 1: Temporary Structures

The first phase of the incentive proposal is composed of primarily temporary structures. This phase of the incentive begins as a trial, in order to gauge the level of interest in the market as well as try different methods of management, different focuses for vendors, different locations, and different times of the week/times of the day.

Because this stage is experimental, it is prudent to conduct the market with minimal costs and labors, thus the temporary structures are ideal. These structures can be simply tables and chairs set up at the market location for the hours of the market, or can be booths located under the shelter of temporary tents and canopies. Not only would the structures be affordable, but they would also be easy to assemble and dissemble.

The growth of the temporary structures is dependent on the growth of the market. While the market is still in its beginning stages, the structures will be more temporary and easy to handle, such as the tables. As the market grows and is utilized more frequently, on a regular monthly or weekly basis, the scope of the structure can grow to include more booths, stands, and tents.



Phase 2: Semi-Permanent Structures

Phase 3: Permanent Structures

The second phase of the incentive will be composed of both temporary and semi-permanent structures. At this stage, the market will be an established event in the community, occuring either daily or multiple times during the week. There will not only be strong community support for the market, but also a draw for members of neighboring communities in Pittsburgh.

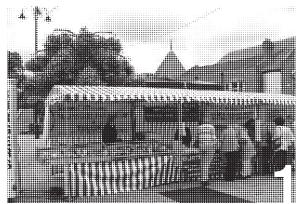
The success of the market and the revenue accrued will allow for a larger budget for the structures for the vendors. These structures will still include tables and booths, as well as larger, semi-permanent tents that encompass larger regions of the market, and possible adaptive reuse of vacant storefronts and vacant lots in the area.

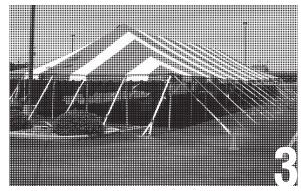
This phase of the built structures will involve more construction. The tents will be much larger, and thus require more framing and support, and more time for assembly and dissembly. The adaptive reuse of vacant lots with market tents may be more feasible, but as the market grows, there will be the possibility of permanent storefronts.

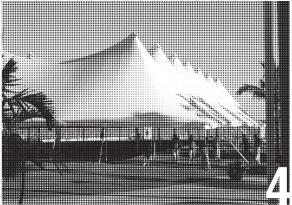
The third phase of the incentive is the projected growth of the market into a full-fledged entrepreneurial community on Dearborn Street and in Garfield. This phase suggests there is a demand in the community for a marketplace throughout the day and night, and throughout the year. In order for this stage to be realized, the market will not only need support from the community and its neighbors, but it will need to bring in support from all over the city, and outside of the city as well.

Because the market will be operating at all times during this phase, it will require much more shelter in order to protect the market-goers from the elements and the night. A permanent pavilion that provides shelter from rain, ventilation in the warmer months, heating in the cooler months, and lighting for the night hours would be required in order to hold the market during these times of the year.

Another option would be adaptive reuse of vacant storefronts to provide shelter for certain vendors of the market who are open throughout the day and year. This project would require much more construction and funding.







PHASE 1: Market Stall

Dimensions:

5' - 10'

Materials: Canopy - Vinyl, Polyester

Frame - Aluminum

Properties: Temporary, easy to assemble/dissemble,

shade from awning, rain barrier

PHASE 1: Canopy Tent / Pop-up Tent

Dimensions:

10'x10', 10'x15', 10'x20', 13'x13', 16'x16'

Materials: Canopy - Vinyl, Polyester

Frame - Aluminum

Properties: Temporary, easy to assemble/dissemble,

shade from awning, rain barrier

PHASE 1: Pole Tent

Dimensions: 30', 40', 50', 60', 80', 90', 100'

Materials: Canopy - Laminated Vinyl, Coated Vinyl

Frame - Powder-coated aluminum, leather

stainless steel hardware

Properties: Rain flap, detachable sidewall, mildew/

flame resistant, comply with code

PHASE 2: Eurotent

Dimensions (Modular Length):

Single peak - 20', 30', 40', 50'

Double peak - 60', 80', 100'

Materials: Canopy - Laminated Vinyl, Coated Vinyl

Frame - Aluminum poles (spaced 10'), stainless steel hardware, unexposed 2 catenary webbing between side

Properties: Semi permanent, floored, heated/cooled,

rainflap/weatherproof

PHASE 2: Tension Tent

Dimensions:

36', 48', 72', 112' width Lengths expandable

Materials: Canopy - Premium grade fabrics

Frame - anodized aluminum, steel hardware

Properites: 10-15 yr life expectancy, semi-permanent, min. interior obstruction, all weather applications, snow load upgrades, waterproof, exceeds code requirements

PHASE 2: Clearspan Tent

Dimensions: 30' - 100'

Materials: Canopy - Coated Vinyls

Frame - Aluminum box beam (temporary) or steel struss structures (permanent)

Properties: Meets wind load of 90 mph, roll-up doors, access doors, lighting packages, semipermanent and permanent

PHASE 2/3: Storefront

Dimensions: 30' - 100'

Materials: Canopy - Coated Vinyls

Frame - Aluminum box beam (temporary)

or steel struss structures (permanent)

Properties: Meets wind load of 90 mph, roll-up doors, access doors, lighting packages, semipermanent and permanent

PHASE 3: Market Paviliion

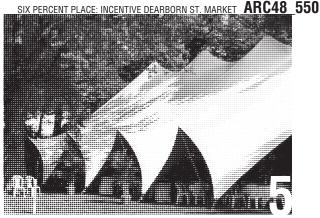
Dimensions: 10' wide modular units

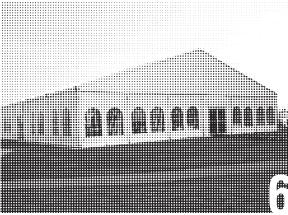
Materials: Roof - Wood covered in galvanized steel

Frame - Steel structure Floor - Locust Deck

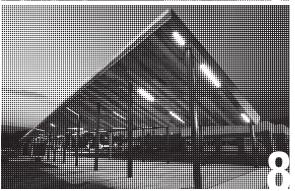
Properties: Roof collects water to irrigate surrounding landscape and flush toilets, roof directshot air up and out,

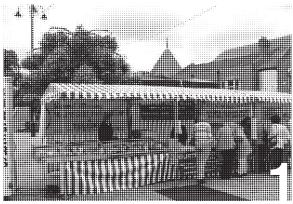
providing ventilation, low energy LED lights

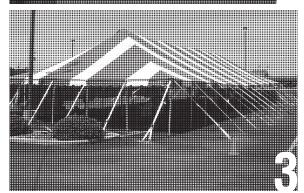


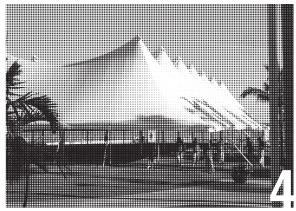












PHASE 1: Market Stall

Advantages:

Cost-effective Minimal construction Flexibility of arrangement Compact

Disadvantages:

Minimal canopy coverage Common market typology One-sided approach Linear

PHASE 1: Canopy Tent / Pop-up Tent

Advantages:

Cost-effective Minimal construction Flexibility of arrangement Four-sided approach Compact tent storage

Disadvantages:

Minimal canopy coverage Common market typology

PHASE 1: Pole Tent

Advantages:

Flexibility of arrangement within Maximum canopy protection Four-sided approach Spacious

Disadvantages:

Large square footage Rigid dimensions / site requirements Moderate construction

PHASE 2: Eurotent

Advantages:

Flexibility of arrangement within Maximum canopy protection Conditioned space Iconic form

Disadvantages:

Cost

Large square footage Rigid dimensions / site requirements Moderate construction

PHASE 2: Tension Tent

Advantages:

Flexibility of arrangement within Maximum canopy protection Weather durability

Iconic form

Disadvantages:

Cost

Large square footage

Rigid dimensions / site requirements

Moderate construction

PHASE 2: Clearspan Tent

Advantages:

Flexibility of arrangement within Maximum canopy protection

Conditioned space Interior lighting

Semi-permanent or permanent

Disadvantages:

Cost

Large square footage

Rigid dimensions / site requirements

Moderate construction

PHASE 2/3: Storefront

Advantages:

Fully conditioned and enclosed

MEP of a building

Permanent

Establishes market cornerstone Adaptive reuse of vacant buildings

Disadvantages:

Elaborate construction

Expenses - lot acquisition, construction, maintenance

PHASE 3: Market Paviliion

Advantages:

Flexibility of arrangement within

Conditioned Space Interior lighting Iconic form

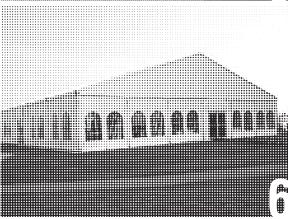
Disadvantages:

Elaborate construction

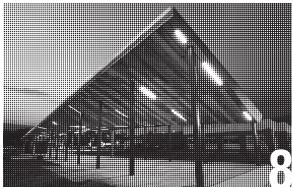
Expenses - lot acquisition, construction,

maintenance Nighttime security











Off-the-Shelf Technology

Canopy tent structures are accessible and efficient for their collapsible frames and simple assemblies. Looking further into collapsible structures, tripods and telescopic legs are basic off-the-shelf units that can be used in assembling a custom tent. Tensile fabric structures also provide the ability for more permutations.

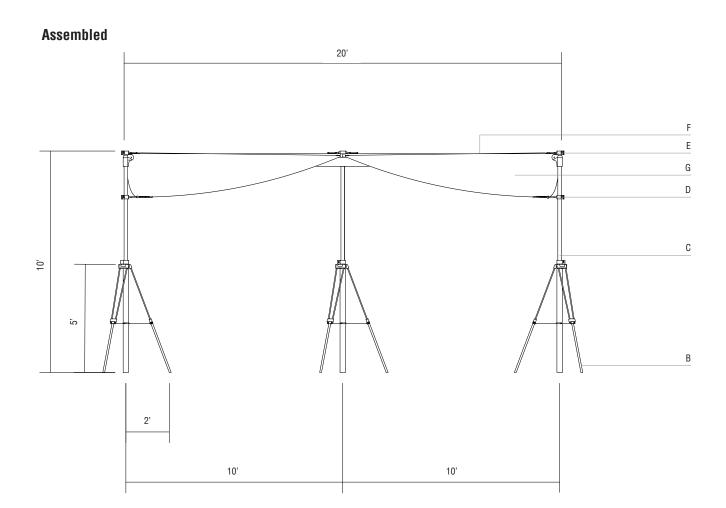
In our tents for Garfield, we applied this technology, using steel telescopic legs that are supported by steel tripod extensions. The canopy is vinyl for durability and weathering, which is further supported with the use of steel tension cables and aluminum X-bracing. (See sheets SP1.00-SP1.01 for the specifications of the materials and detailed dimensions of the tent and its components.)

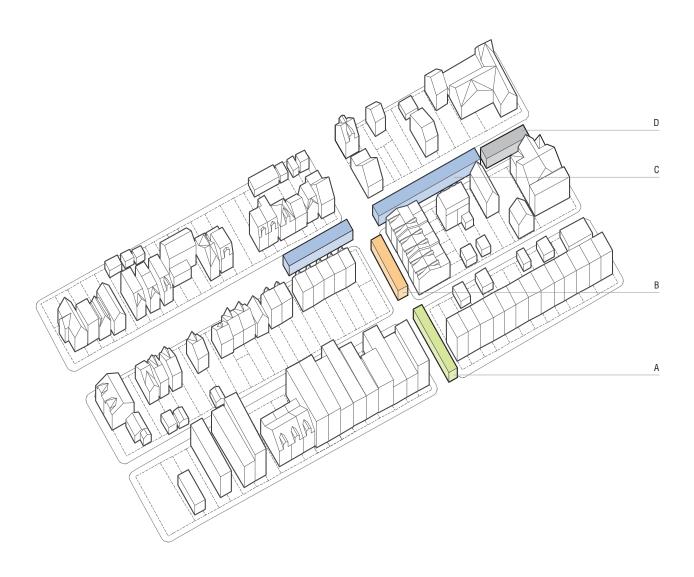
Collapsed



- A B C D E F G
- Collapsible structure Steel tripod extensions Steel telescopic legs Steel membrane plates Steel tension cables

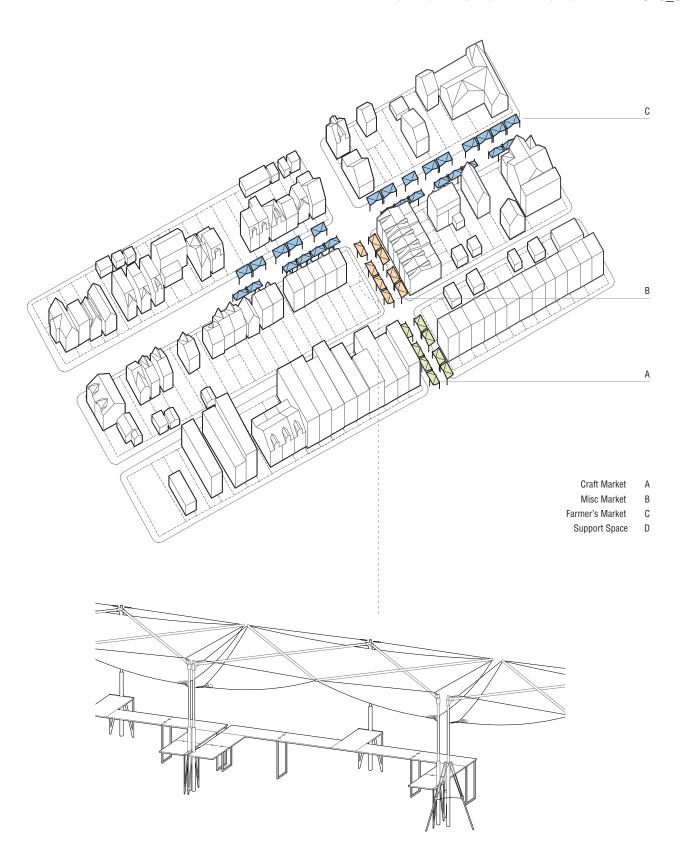
- Aluminum X bracing
- Vinyl tent canopy

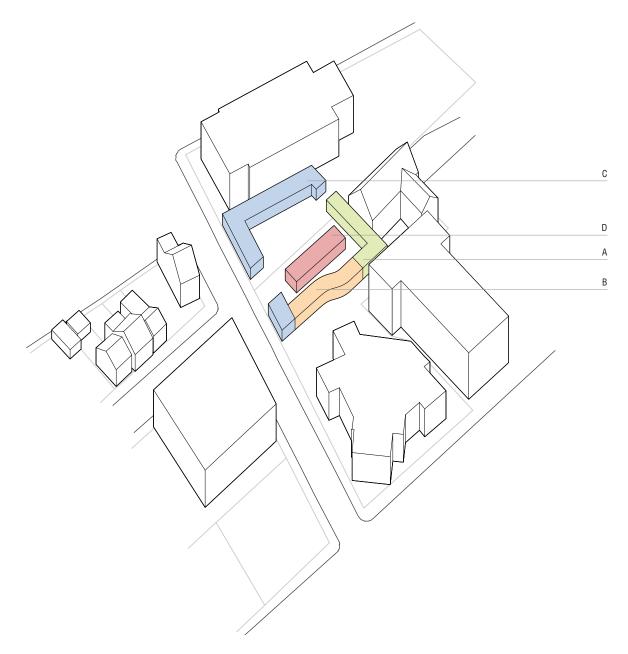




Sites 1 & 2: Programmatic Layout

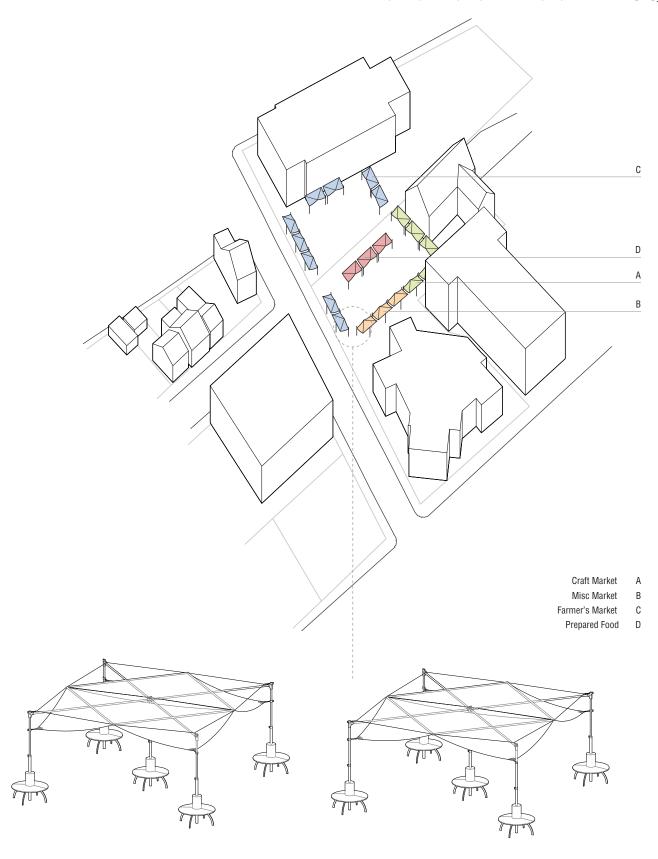
Programmatic chucks were laid on the site: the "miscellaneous" market would work well on Penn as a sort of storefront for the whole market, offering an eclectic variety of goods and drawing people up into the neighborhood; following is the "craft" market, further up the hill but playing on the relationship to Penn Avenue and the importance of art on that street; the farmers market, with fresh produce, meats, bread, etc., in blue in this diagram, is the greatest necessity of the Dearborn street community, so should be sited centrally in this program diagram, in close proximity to the residents of the street itself; prepared food (in red, not shown here) could either incorporate into the miscellaneous collection of goods on Penn, and/or into the farmers market, possibly adding an educational element to the market, allowing people to learn about how to use the foods they are buying. (Colors taken from pie-chart on sheet IS2.00; for further information regarding the breakdown of programmatic elements, see sheets IS2.00-01.)



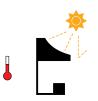


Site 3: Programmatic Layout

Similar to the linear market, this central organization allows for the development of a sequence the market users can experience. Again, the craft market (orange) is located to the south, closer to Penn, to attract those interested in artistry and craft; the farmers market (blue) circles part of the space, and is easily accessible from both within and around the market, but prepared food (red) is placed in the middle, with seating for people to stop and eat, and take in the experience of the market around them. Stalls are loosely organized by type of good being exchanged, but with room for bleeding out. Support spaces (grey) could be tucked behind the market alongside the community center.



incentive scope: desirable material and construction typologies/requirements 188.11















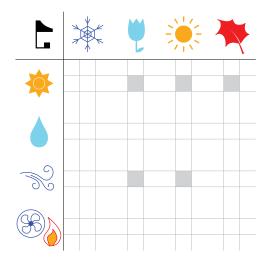


Due to the environmental conditions of Pittsburgh in the winter months, that extend into the beginning of spring and the end of fall, and outdoor market is mostly only feasible during the few months of the summer when the weather is pleasant.

The summer months, though they are more bearable than winter months, provide environmental problems as well, such as high temperatures, rainfall, and wind. The diagrams above describe how the different phases of the market structures can counteract these natural phenomena.

The first phase, booths and tables, are mostly exposed to the elements. The awnings provide shading from the sun and help to channel wind gusts, in order to counter the excessive heat. However, the awnings are often futile during Pittsburgh's heavy rains, leaving the vendors exposed.

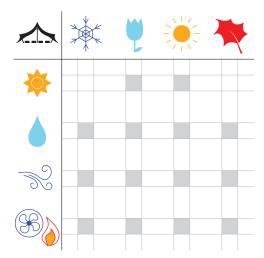
The semi-permanent and more permanent structures are much more resistant to weather and wind. The tents and pavilion are designed to provide shelter from the warm sun and heavy rain, and capitalize on winds.

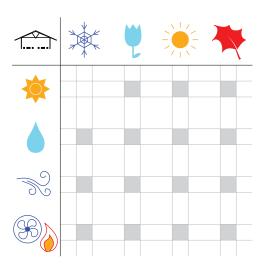


As the diagram to the left demonstrates, the temporary booths and stalls do not function well in an outdoor market during any season other than spring or summer, possibly the early months of fall.

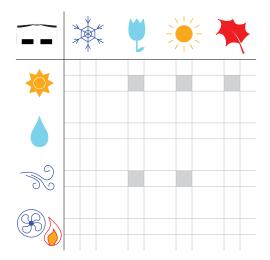
However, the semi-permanent and permanent tents and pavilions provide much more protection from the elements, allowing for a broader timeline for market. Apart from the summer, the tens can be used in colder months for markets by heating the interiors of the tents to keep vendors and visitors warm. The heating systems in the semi-permanent structures, though helpful, can be ineffective during the colder months, causing the market to close due to the weather.

The permanent structures, pavilions and/or storefronts, can remain open during all times of the day and the year. The design of the structures allow for sunlight to penetrate during the colder months to allow for additional heating combined with the heating system in place, allowing the market to take place for a longer span of time.



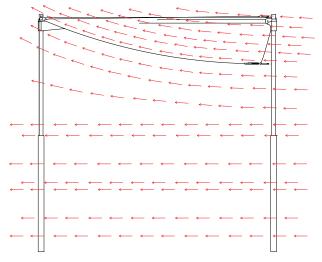




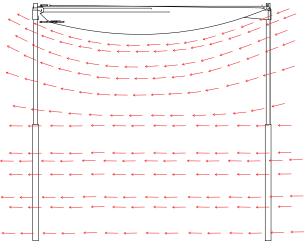


Similarly to other temporary tents, this design is mostly exposed to the elements. The canopy provides shading from the sun and helps to channel wind gusts, in order to counter the excessive heat. The tensile fabric structure allows for flexibility to manage rain drainage. However, the canopy is often futile during Pittsburgh's heavy rains, leaving the vendors exposed.

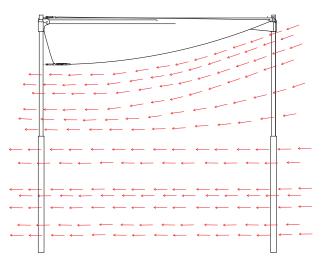
The new tent design is still not as resistant to extreme weather, providing no conditioned space within. The tent is most effective during the summer, spring, and fall.



CONFIGURATION A



CONFIGURATION B



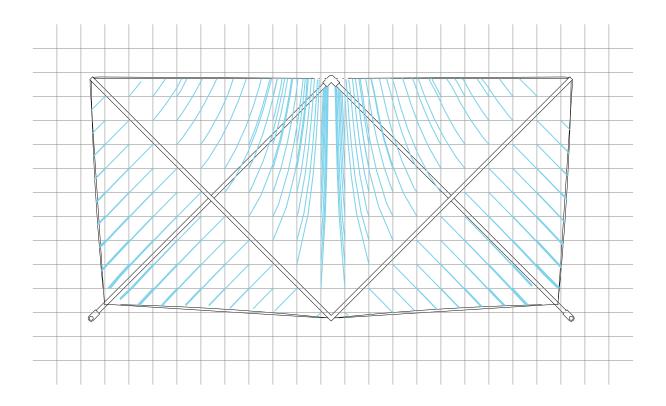
The structure of the tent allows for flexibility. The canopy of the tent consists of vinyl fabric supported by steel tensions cables and aluminum X-bracing. When dealing with environmental factors, such as wind, the tent can be adjusted to address the different comfort levels of the occupants throughout the seasons.

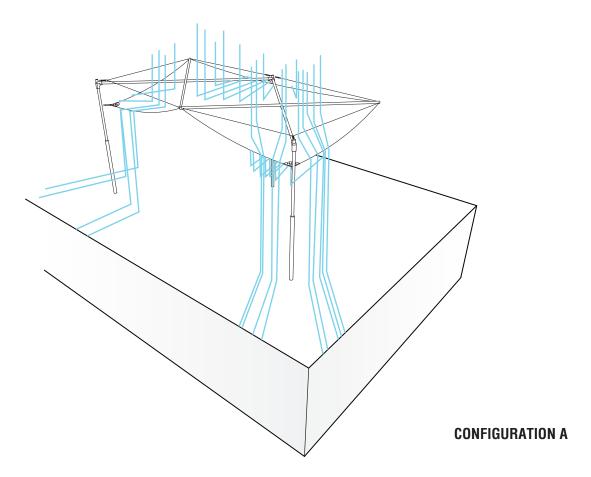
Configuration A depicts a canopy adjustment option for colder days. The curvature of the vinyl fabric can better channel the wind upwards, over the top of the tent. As a result, less wind will move under the tent, brushing past the customers and venders below.

Configuration B presents a canopy curvature for a more stagnant wind condition. On days when occupants wouldn't want or need much wind and when there isn't much wind around, the wind slowly flows below the canopy.

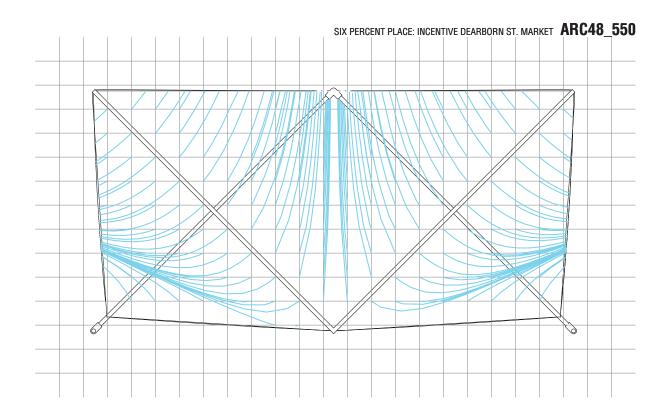
Configure C diagrams an option for warmer days. The canopy curvature helps to channel the wind below, to keep the air moving through the tent. The constant air flow and channeling can increase air velocity to help cool the occupants inside and around the tent.

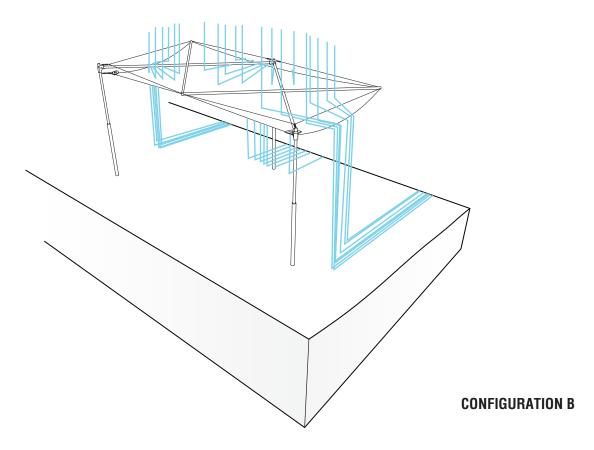
The vinyl fabric, steel tension cables, and aluminum X-bracing allows for an unlimited amount of configurations to address multiple sites, multiple cardinal orientations, multiple wind conditions, and multiple seasons. While these materials allow for flexibility, the X-bracing and tension cables are also used to anchor the canopy, keeping the fabric stiff enough to avoid uplift.

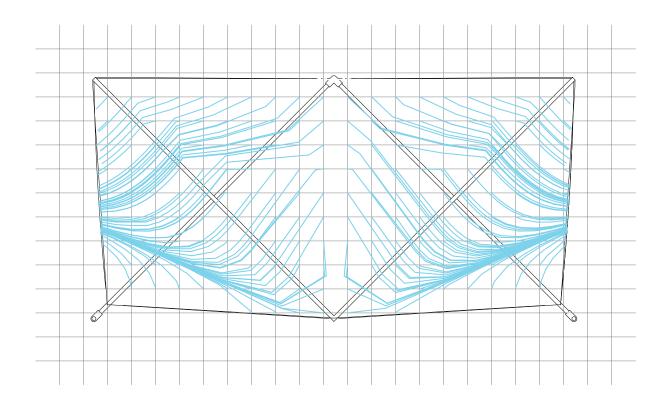


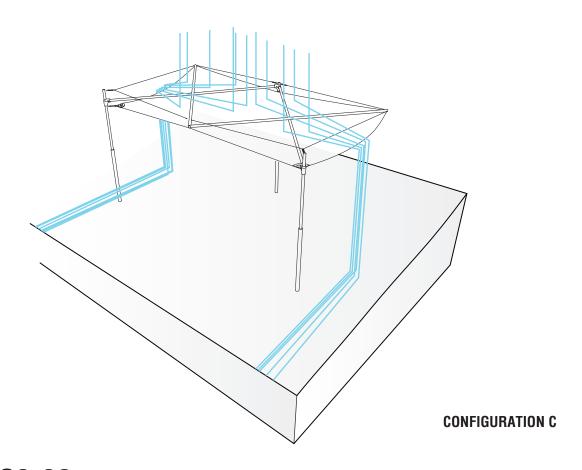


189.04 INCENTIVE SCOPE: DESIRABLE/REQUIRED ENVIRONMENTAL CONTROL SYSTEMS









189.06 INCENTIVE SCOPE: DESIRABLE/REQUIRED ENVIRONMENTAL CONTROL SYSTEMS

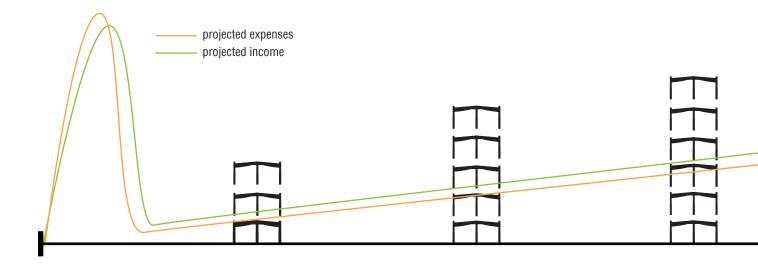
The flexibility of the tent's canopy can also be used to address environmental conditions like snow and rain. The multiple fabric curvatures provide different solutions depending on the site and orientations.

Configuration A shows the tent on a slightly flatter site, with the water draining off the back of the tent and the front corners of the tent. The plan view includes the contours of the fabric, in order to understand the path of each drop of water sliding off the canopy.

Configuration B presents a site in which the back of the tent is oriented on a downward slope. This canopy option allows for the rainfall to slide off the back of the tent and then down the slope of the site. By draining off the back of the canopy, the users can avoid walking through a waterfall at the entrance of the tent. The draining arrangement also helps prevents the canopy drainage from running through the ground of the tent.

Configuration C depicts a site which the front of the tent is oriented on a downward slope. If the water were to drain off the back of the tent on this site, the water would then run downhill, through the inside of the tent. Therefore, this canopy option moves each drop of water off to the side of the tents. As the water drains off the side of the tent, it continues downhill, outside of the perimeter of the tent.

The canopy structure also allows for a variety of permutations, so that the structure can easily adjust to fit any site and orientation. The tension cables and X-bracing also provides a level of stiffness and support to withstand the load from the precipitation.

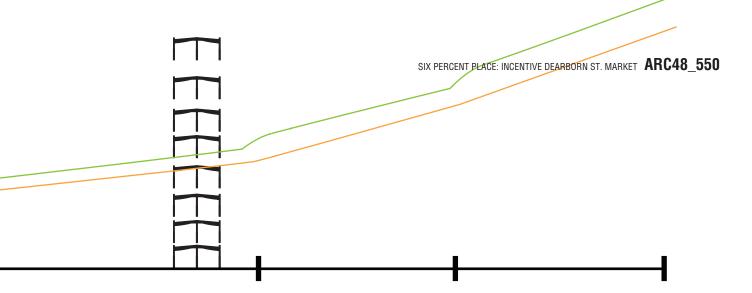


Start-up Budget Analysis/Proposal

projected income	\$ / event	\$ / annum	# of vendors	revenue high low
farm vendor fees	25	125	3-5	375 625
prepared food vendor fees	25	125	2-4	250 500
misc vendor fees	30	N/A	1-5	600 3000
sponsorships				3000 9000
total				4225 13125

projected expenses	\$ / event	# of events	expenses
event insurance	150 ²	20	3000
restroom facilities	420 ³	5	2100
advertizing	20	20	400
street obstruction permit	150 ⁴	20	3000
manager salary			0 ⁵
support staff compensation			0 ⁵
tent costs			
material costs			2054.5
assembly/packaging			356.9
total			850

- Vendor fees have been established based upon the established rates of other market-organizing entities in the greater Pittsburgh area. The fee
 corresponds with that of CityParks' markets, which currently offer the lowest going rate per annum. Low rates will help to attract vendors who might
 otherwise be wary of a startup market.
- 2. Estimate based upon a preliminary quote by Private Event Insurance, Inc. The \$150.00 rate is a one-time fee and purchased a \$500,000 policy that is the equivalent of minimum coverage for a typical market event.
- 3. \$420.00 represents the total montly rate for three single-unit port a john, at \$140.00 each. Rates by Mr. John, Inc. of McKees Rocks, PA.
- 4. Permit Fee is paid to the Bureau of Building Inspection.



Above: Diagram illustrates projected revenue and expenses as they relate to number of vendors over time.

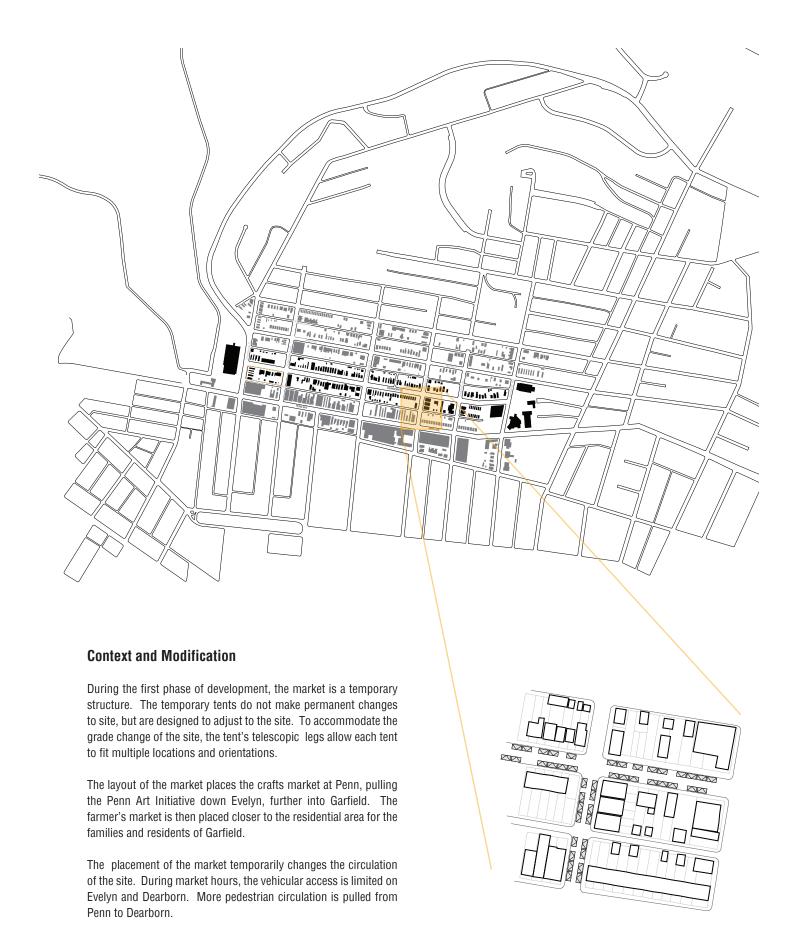
Opertational Budget Analysis/Proposal

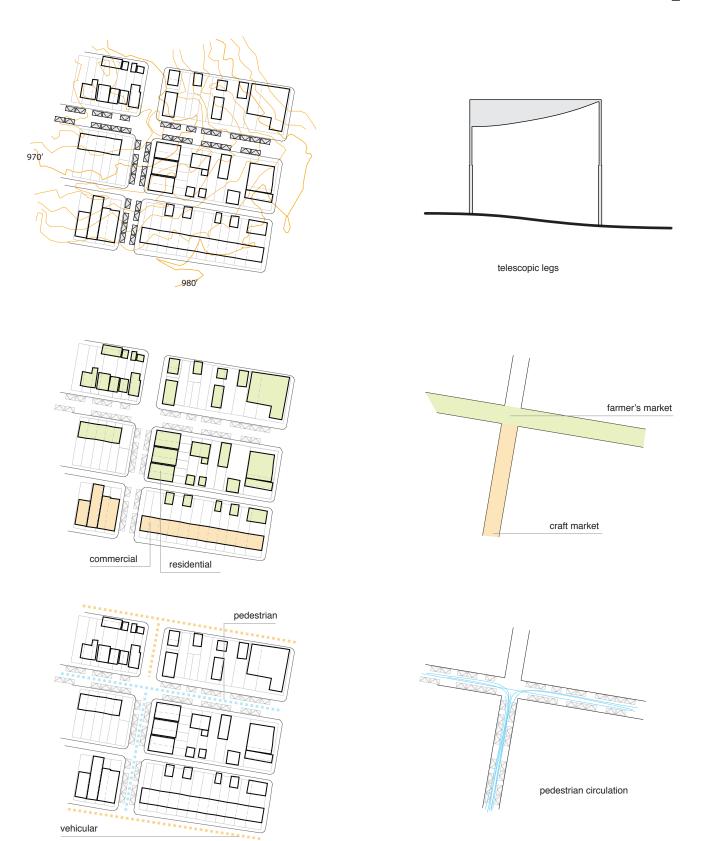
projected income	\$ / event	\$ / annum	# of vendors	revenue high low
farm vendor fees	25	125	6-8	750 1000
prepared food vendor fees	25	125	3-6	375 750
misc vendor fees	30	N/A	2-6	1200 3600
sponsorships				500 1000
total				2825 6350

projected expenses	\$ / event		# of events	expenses
event insurance	150 ²		20	3000
restroom facilities	420 ³		7	2940
advertizing	20		20	400
street obstruction permit	150		20	3000
	\$ / hr	hr/events	# of events	
manager salary				
support staff compensation				
total				6640

- In phase one, managerial positions are filled by volunteers.
- Operational budget here illustrates projected income and expenses for the Dearborn Street Market approximately midway through phase one.

Budget based upon data from the New York Farmers' Market Manager Training Manual and from pasafarming.org.

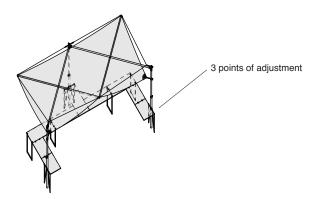


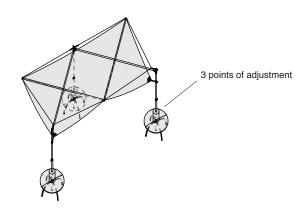


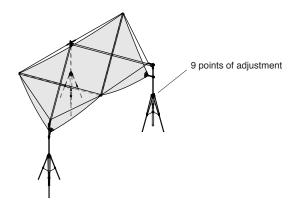
Context and Additional Options for Adjustment

The various options one has to choose from in the tent assembly allows for further adaptation of the environment without making any major modifications to the site - an important factor to consider especially taking into account the impermanence of the earlier phases of the market.

The base of the tent structure has three main variations: the chair, the table, and the tripod. These bases can be mixed and matched to some extent, but can also be used to help organize program (for example, the chair base for a resting / eating area, the table for a two-vendor set-up, the tripods for activities that require more space, e.g. games). The tripod structure has the most flexibility as far as adjusting to topography, but both the table and chair bases are adjustable in the vertical axis and can also modulate to secure the tent on a sloped site.







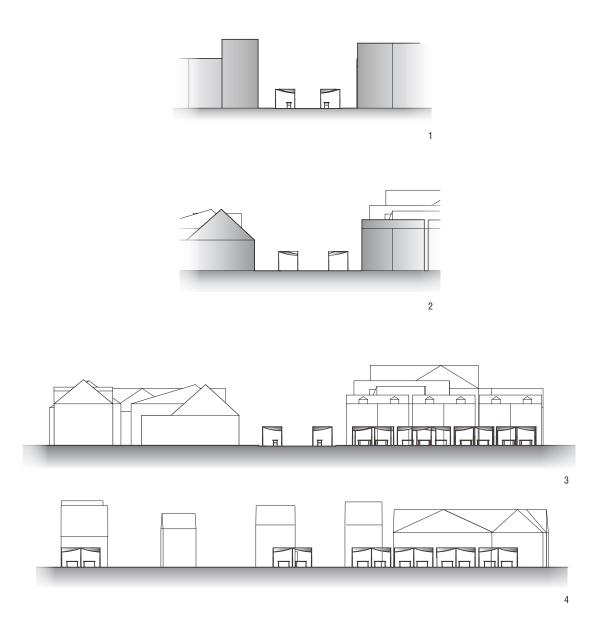


In order to aid in the process of drawing people into the community, the market establishes a presence on Penn Avenue, bringing people deeper into the neighborhood with a semi-storefront organization. (IP2.02-03)

As visitors reach the top of the market, the street opens up even more, with the added space of some vacant lots, and the market's various goods and activities become more visible on and around the street. (IP2.04-05)

Professional vendors can set up alongside newcomers; there is an open exchange of related knowledge and manual skills, from formal cooking instructions to fleeting conversations across tables and under tents. (IP2.06-07)

The market can give vacant lots back to the community, using the tents to shade the area while keeping the space beneath relatively open for activities, with other tents providing seating for market-goers to stop and rest or enjoy their freshly prepared food. (IP2.08-09)





















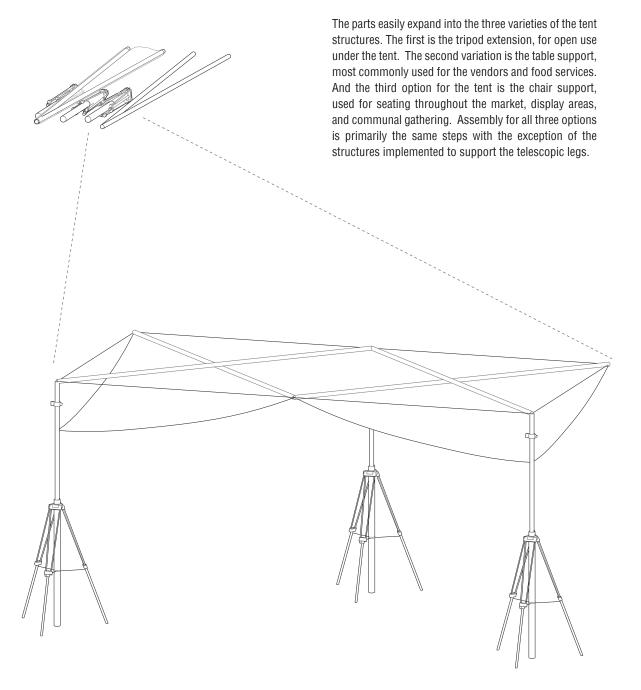


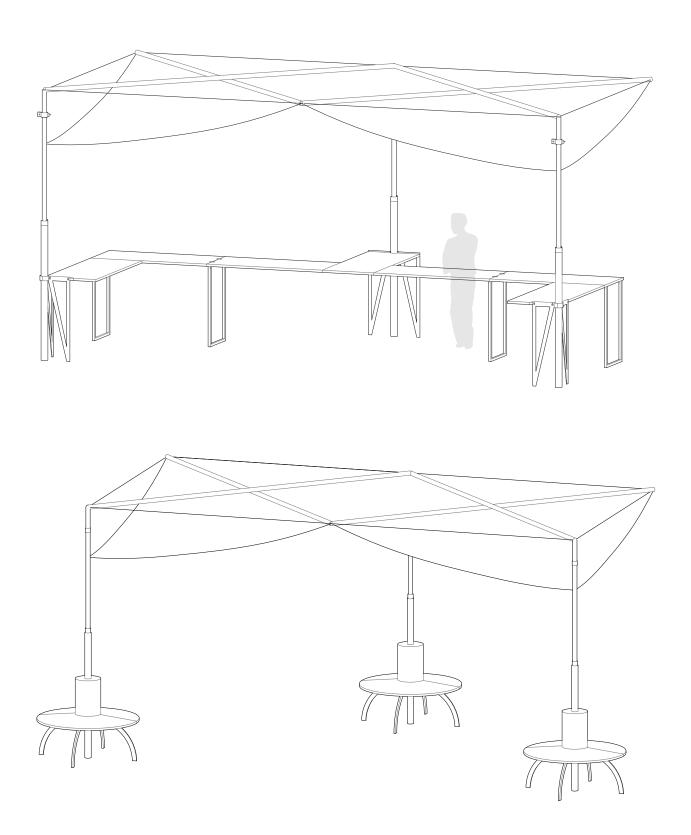


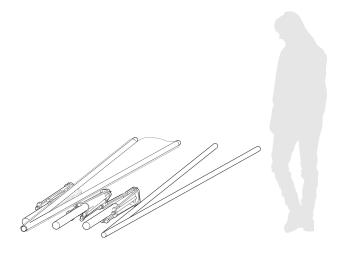


Collapsible . Efficient . Simple

The tent is packaged fully collapsed for ease of storage and shipping. The package contains three telescopic legs with the tripod extensions attached, two aluminum v-braces, one of which is rolled around the vinyl canopy of the tent, steel tension cables, and steel hardware.

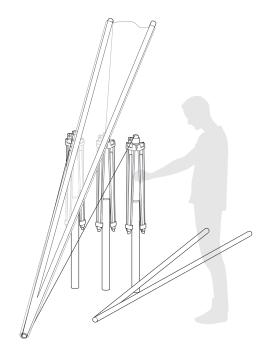






STEP 1: Flat Package

The packaged tent is a collapsible kit of parts, including the tripod legs, canopy, and the necessary hardware to assemble the tent.

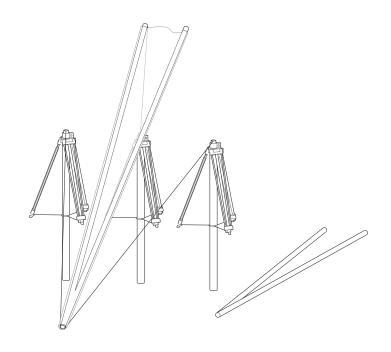


STEP 2: Tension Attachments

The first step is to set the telescopic legs upright and hook the tension cables to the eyebolts attached to the ends of the legs.

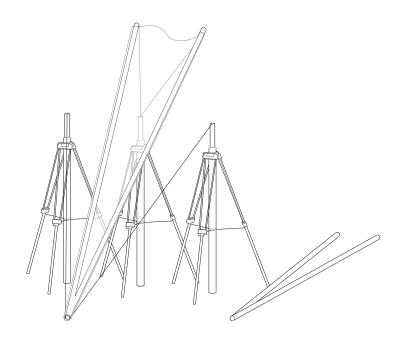
STEP 3: Tripod Extension

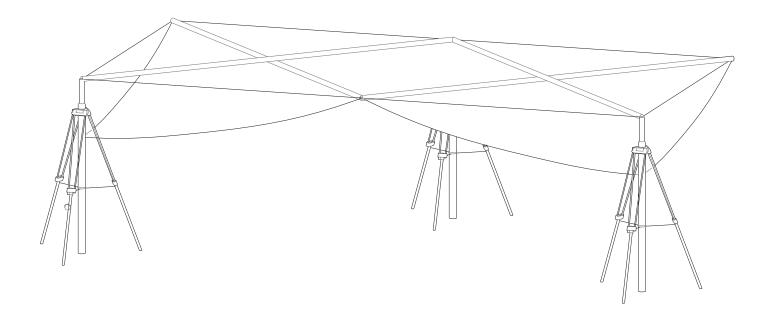
After securing the tension cables, the next step is to begin to extend out the legs of the tripods, to support the telescopic legs.



STEP 4: Tripod + Canopy Extension

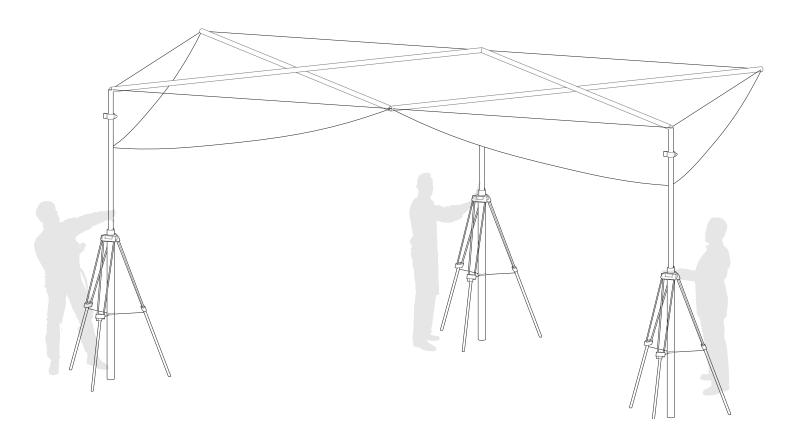
When the tripod legs are fully extended, the canopy is ready to be unrolled off of the V-brace by spreading apart the three legs.





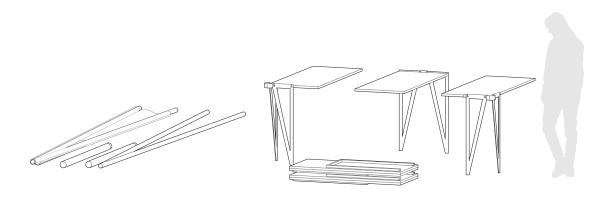
STEP 5: X-Bracing

The penultimate step in assembly is to attach the second V-brace to the naked corners of the canopy in order to create the X-brace which provides the structure holding the canopy in place.



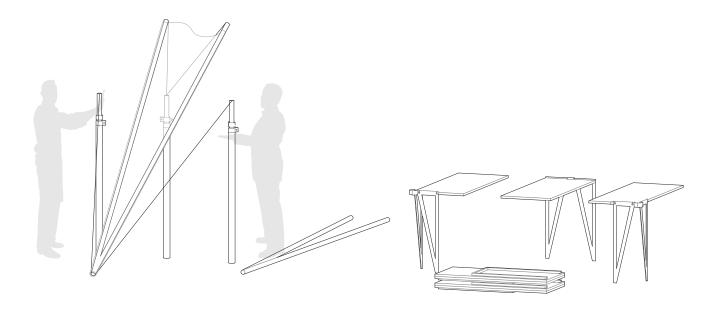
STEP 6: Telescopic Extension

When the canopy is fully unrolled and supported, the last step is to extend the telescopic legs to the full height of the tent and to lock the legs in place.



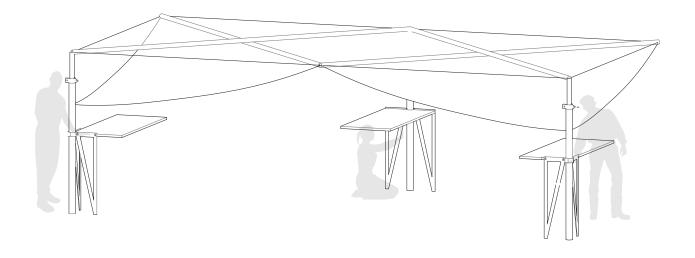
STEP 1: Flat Package

The packaged tent is a collapsible kit of parts, including the folding tables, canopy, and the necessary hardware to assemble the tent.



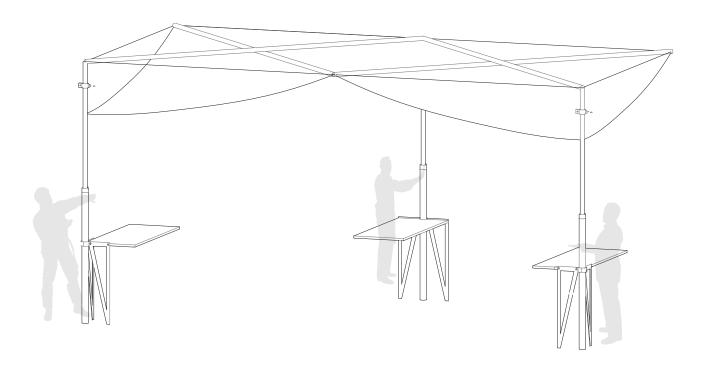
STEP 2: Tension Attachment

The first step is to set the telescopic legs upright and hook the tension cables to the eyebolts attached to the ends of the legs.



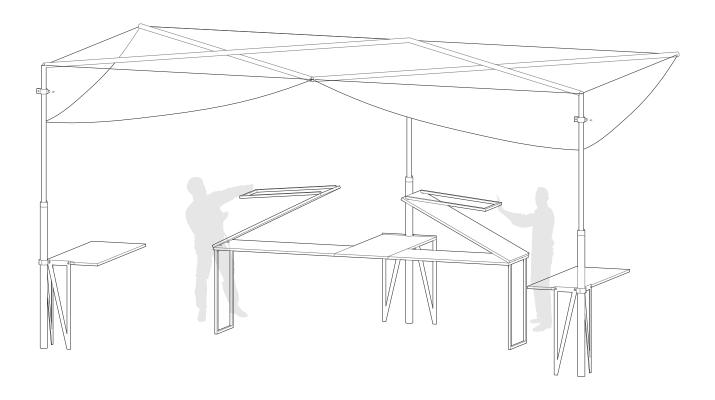
STEP 3: Table Supports

As the canopy is unrolled and the X-bracing installed in place, the table supports are attached to the telescopic legs in order to provide the lateral support needed.



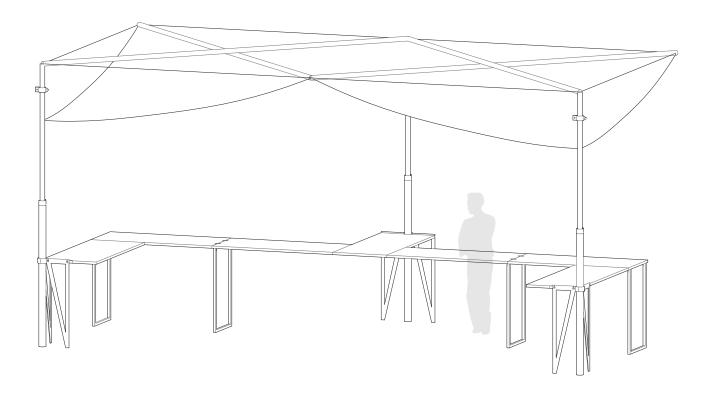
STEP 4: Telescopic Extension

When the table supports are firmly attached, the telescopic legs are extended to the full height of the tent.



STEP 5: Additional Tables

When the tent is fully assembled, the additional tables for the vendors are attached to the table supports and unfolded.



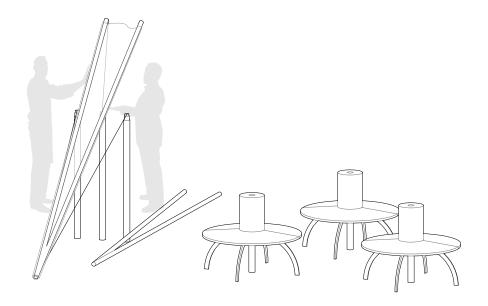
STEP 6: Full Table Tent

The fully assembled table tent includes seven tables to be shared between the two possible vendors under the tent, with ample storage space behind and underneath the tables.



STEP 1: Flat Package

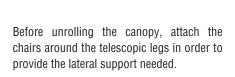
The packaged tent is a collapsible kit of parts, including the stacking chairs, canopy, and the necessary hardware to assemble the tent.

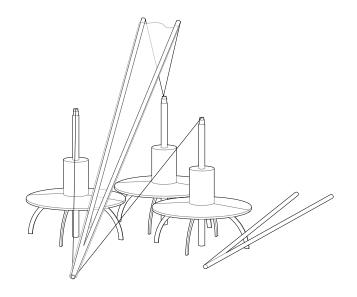


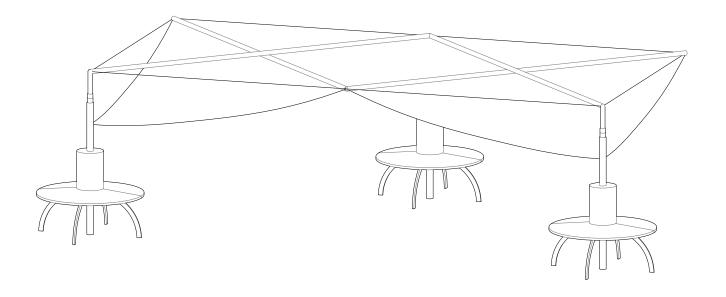
STEP 2: Tension Attachment

The first step is to set the telescopic legs upright and hook the tension cables to the eyebolts attached to the ends of the legs.



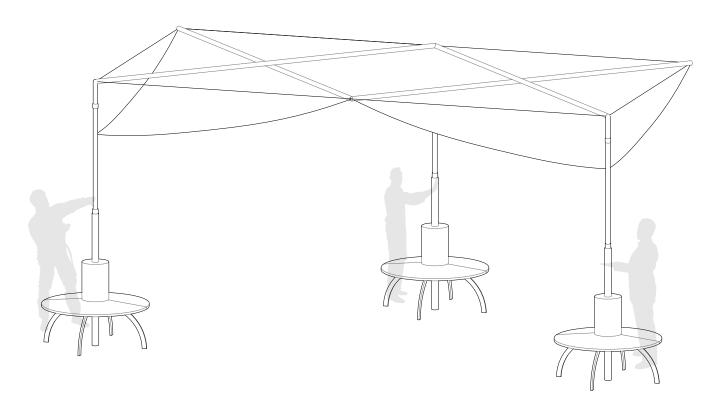






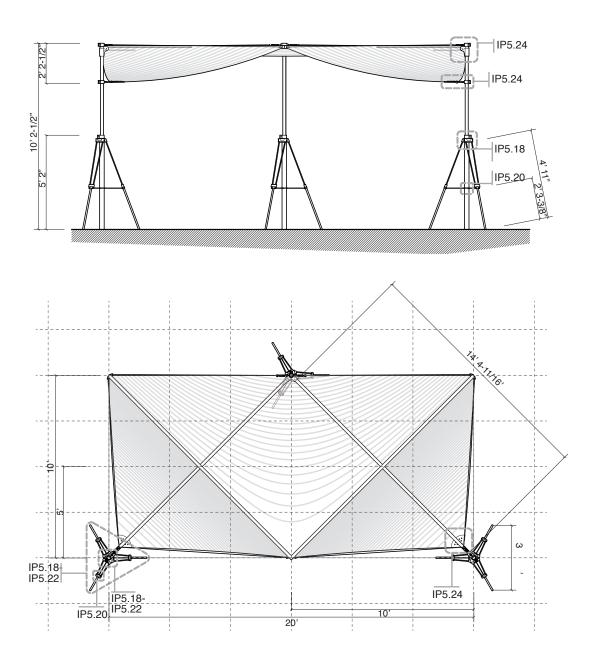
STEP 4: Canopy Extension + X-bracing

When the chairs are firmly attached, unroll the canopy while moving the legs to the edges of the tent. Attach the X-bracing to provide full support for the canopy.



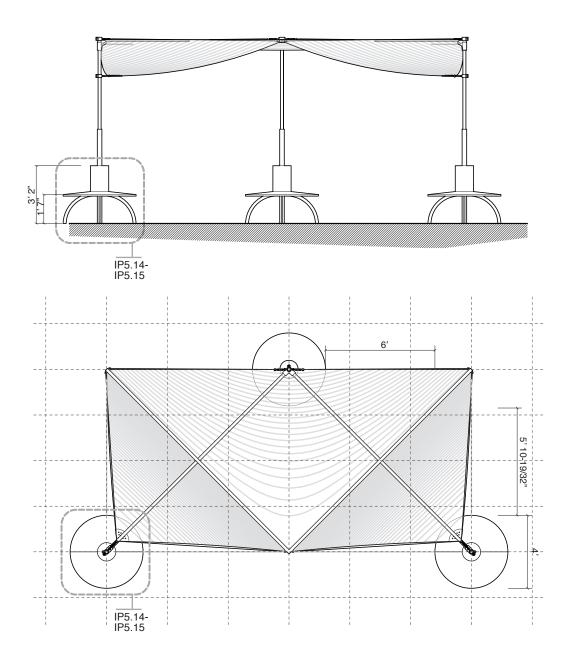
STEP 5: Telescopic Extension

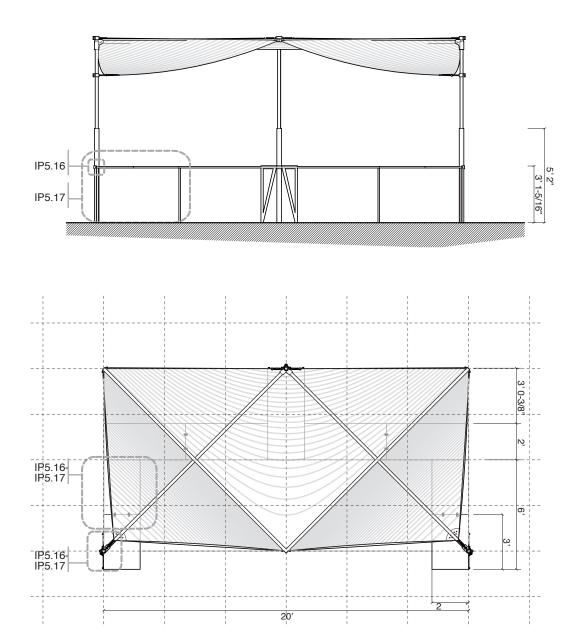
The final step is to extend the telescopic legs to the full height of the tent, creating a large open space underneath the tent with seating or display areas on the outskirts.

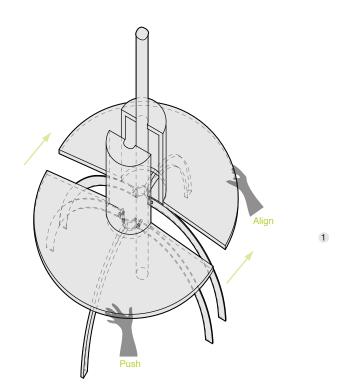


GENERAL NOTES:

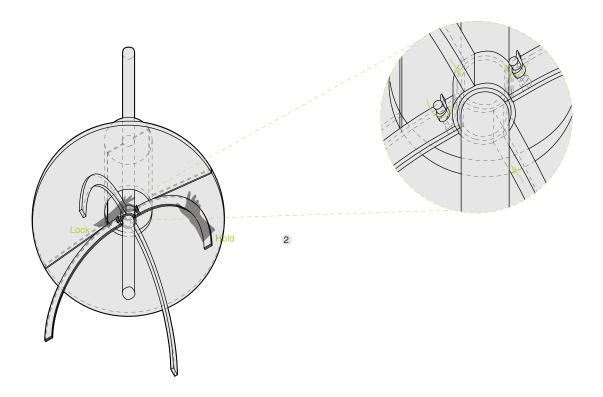
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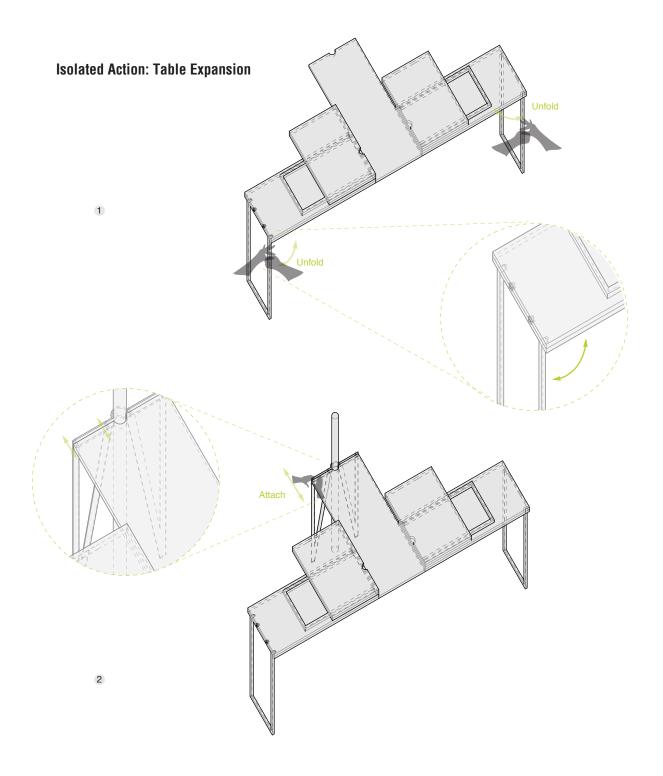


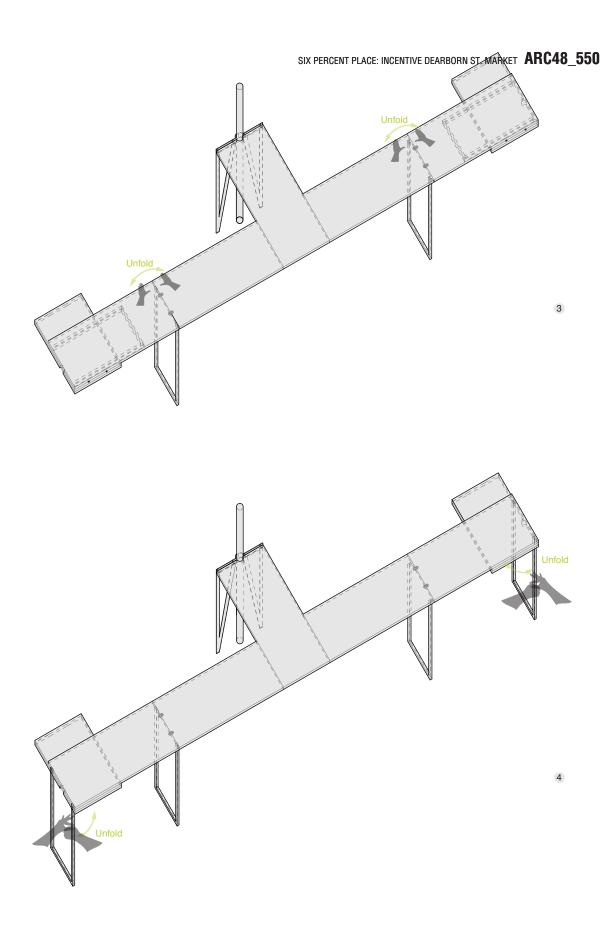


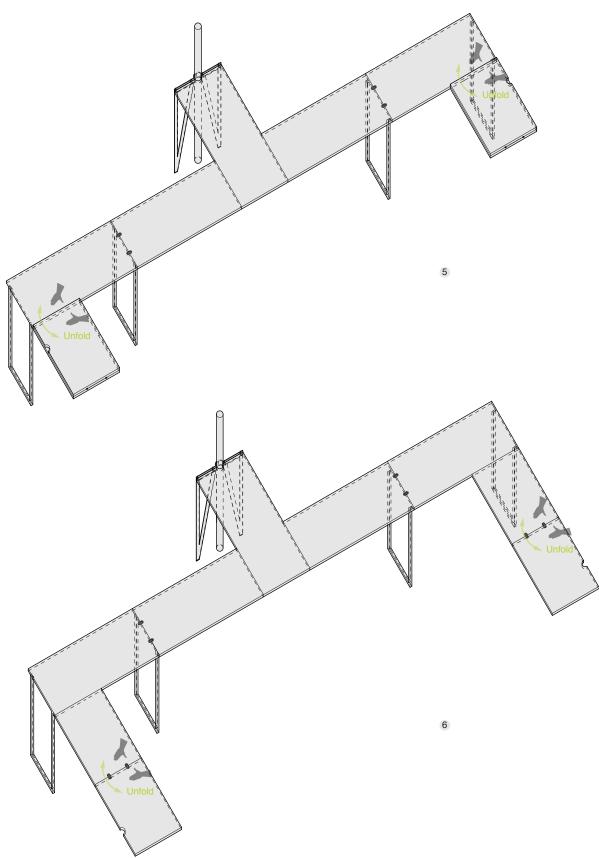


Isolated Action: Chair Assembly

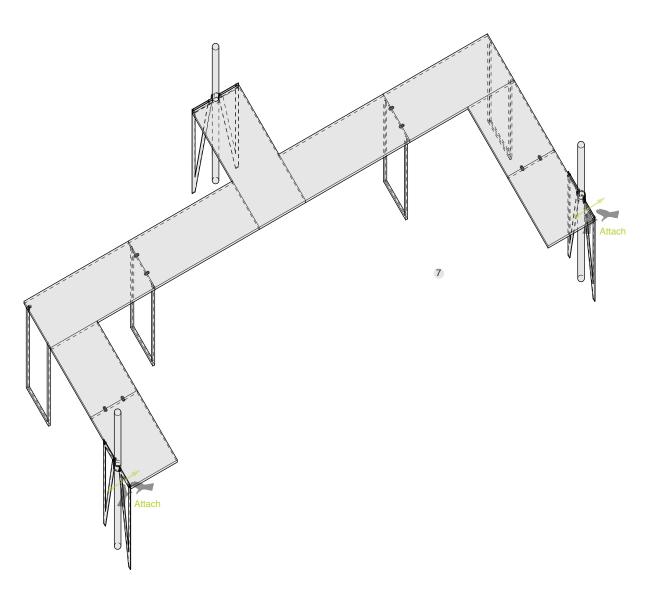


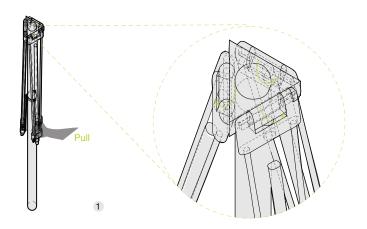


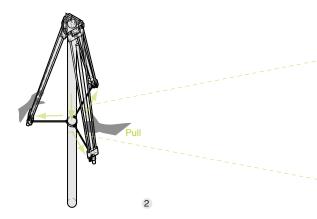




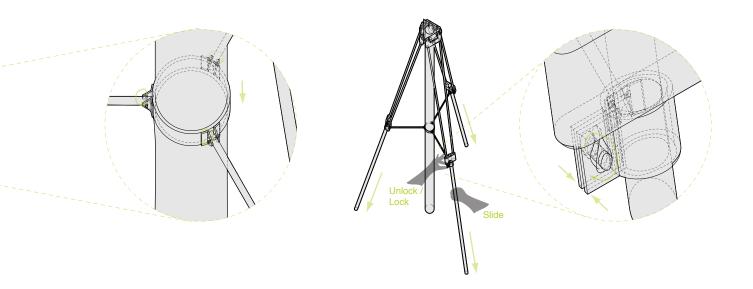
IP5.08 INCENTIVE PROPOSAL: PICTORIAL ASSEMBLY DETAIL

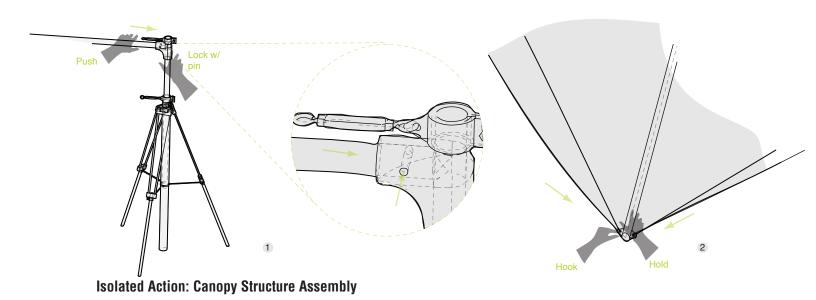


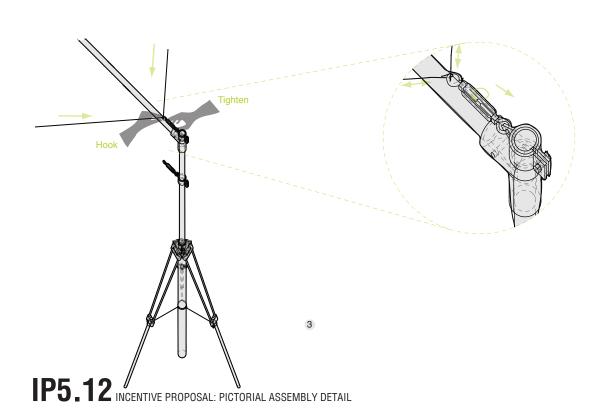


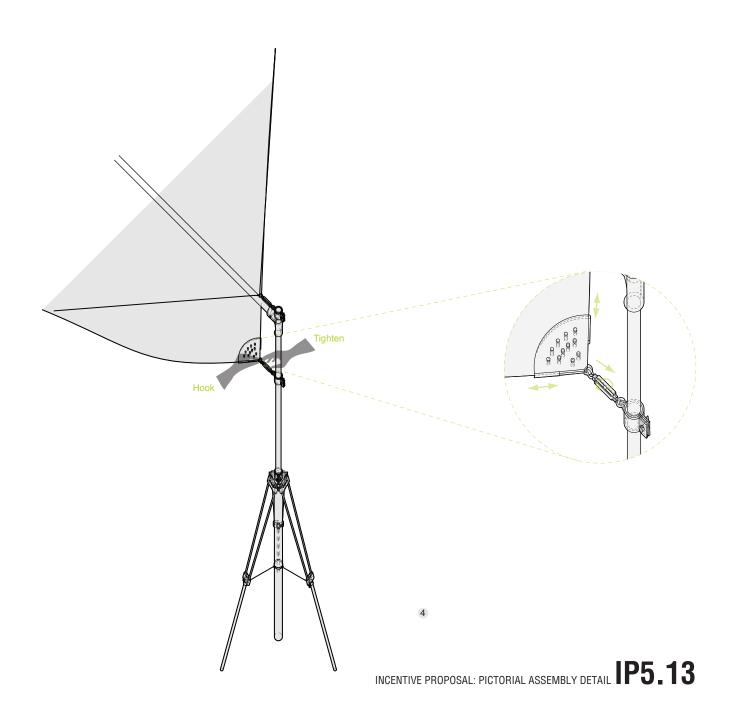


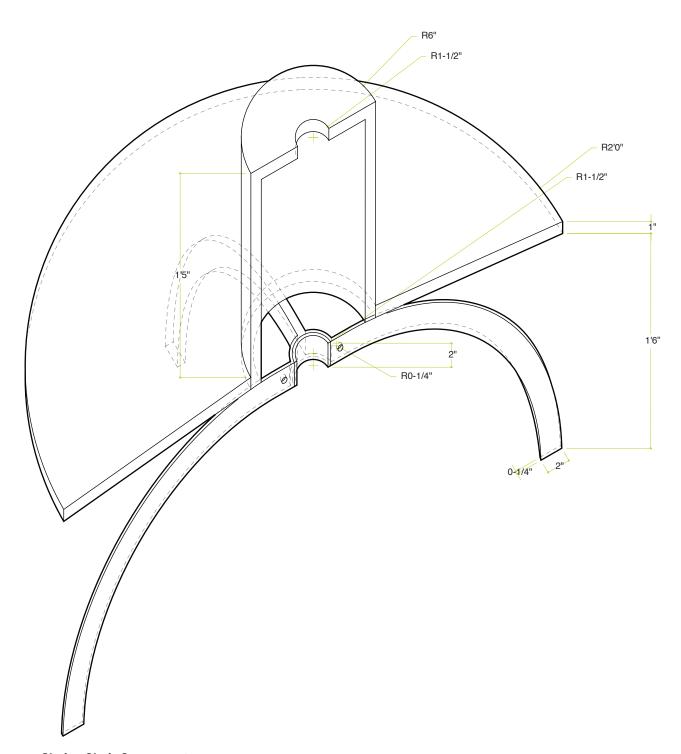
Isolated Action: Tripod Expansion





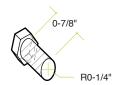




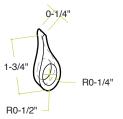


Chair - Chair Component
12 52 13: Chairs:
formed plastic and steel composite semi-circle element with collar (1-1/2" int. radius)

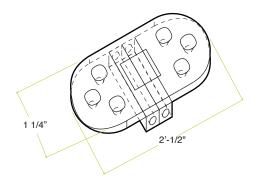
IP5.14 INCENTIVE PROPOSAL: PICTORIAL ASSEMBLY DETAIL



Chair - Bolt (same as Tent - Bolt) 05 05 23 100600: Bolts & Hex Nuts: steel hexagonal bolt, 1/4" radius



Chair - Lock (same as Tent - Lock) 05 05 23 100600: Bolts & Hex Nuts: custom steel nut with handle, 1/4" int. radius



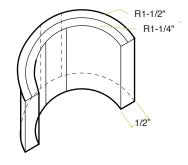


Table - Hinge 08 71 20.90 00 12: Special Funtion Hardware: steel hinge, with 6 screws



Table - Attached legs05 19 19: Canopy Support Truss Assembly: formed steel element with collar (1-1/2" int. radius)



Table - Bolt 05 05 23.10 06 00: Bolts & Hex Nuts: hexagonal bolt, 1/4" radius

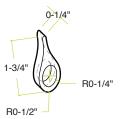


Table - Lock 05 05 23: Metal Fastenings: custom nut with handle, 1 1/2" ext. radius

IP5.16 INCENTIVE PROPOSAL: PICTORIAL ASSEMBLY DETAIL

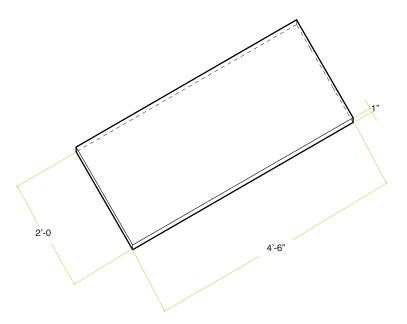


Table - Surface 12 93 43 53: Site Tables: hard plastic sheets, 1" thick, 9 sf

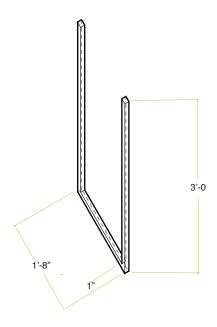
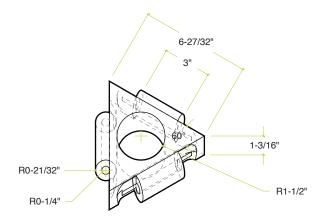
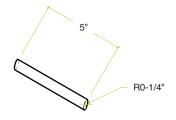


Table - Legs05 19 19: Canopy Support Truss Assembly hollow steel tube, 1" square section



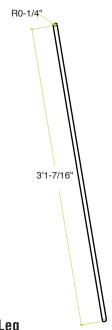


Tripod - Housing Rod05 19 19: Canopy Support Truss Assembly: steel rod, 1/4" radius

Tripod - Housing 05 19 19: Canopy Support Truss Assembly: formed steel element

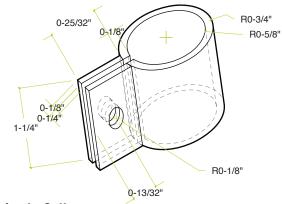
5-25/32"
R0-21/32"
R0-1/4"
R0-1/2"
1-31/32"
1-3/16"
1-1/2"

Tripod - Leg Cap05 19 19: Canopy Support Truss Assembly: formed steel element

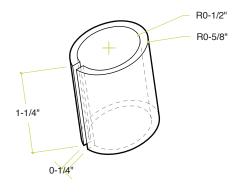


Tripod - Leg05 19 19: Canopy Support Truss Assembly: steel rod, 3/4" radius

IP5.18 INCENTIVE PROPOSAL: PICTORIAL ASSEMBLY DETAIL



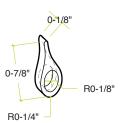
Tripod - Collar 05 05 23: Metal Fastenings: locking steel collar, 3/4" ext. radius



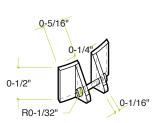
Tripod - Collar Pad05 19 19: Canopy Support Truss Assembly: foam padding, 1/8" thick

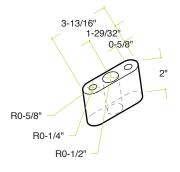


Tripod - Bolt 05 05 23 100600: Bolts & Hex Nuts: steel hexagonal bolt, 1/8" radius



Tripod - Lock05 05 23 100600: Bolts & Hex Nuts:
custom steel nut with handle, 1/8" int. radius

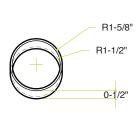




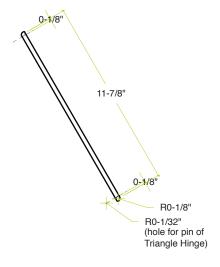
Tripod - Triangle Hinge

08 71 20 900950: Canopy Support Truss Assembly: steel hinge piece, 1/2" high with 1/32" rod

Tripod - Extension Cap0519 19: Canopy Support Truss Assembly: formed steel element



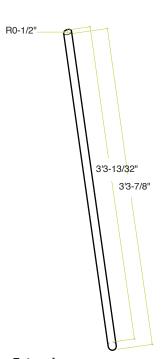




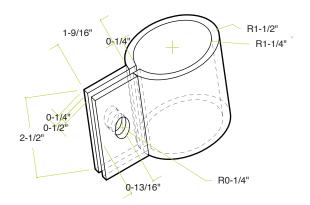
Tripod - Sliding Collar 05 19 19: Canopy Support Truss Assembly: steel ring, 1/2" high, 1-5/8" ext. radius

Tripod - Sliding Collar Brace 05 19 19: Canopy Support Truss Assembly: steel rod, 1/8" radius

IP5.20 INCENTIVE PROPOSAL: PICTORIAL ASSEMBLY DETAIL

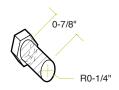


Tripod - Extension05 19 19: Canopy Support Truss Assembly: steel rod, 1/2" radius

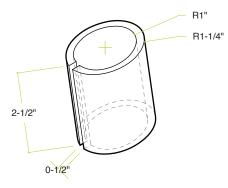


Tent - Standard Collar

05 05 23: Metal Fastenings: locking steel collar, 1-1/2" ext. radius

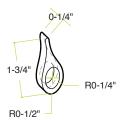


Tent - Bolt (same as Chair - Bolt) 05 05 23 10 06 00: Bolts & Hex Nuts: steel hexagonal bolt, 1/4" radius

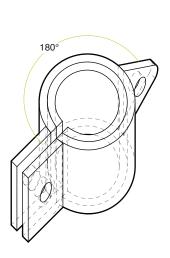


Tent - Collar Pad

05 19 19: Canopy Support Truss Assembly: foam padding, 1/4" thick

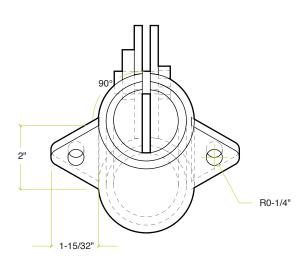


Tent - Lock (same as Chair - Bolt) 05 05 23 10 06 00: Bolts & Hex Nuts: custom steel nut with handle, 1/4" int. radius



Tent - Single Triangle Collar (see Tent - Collar)

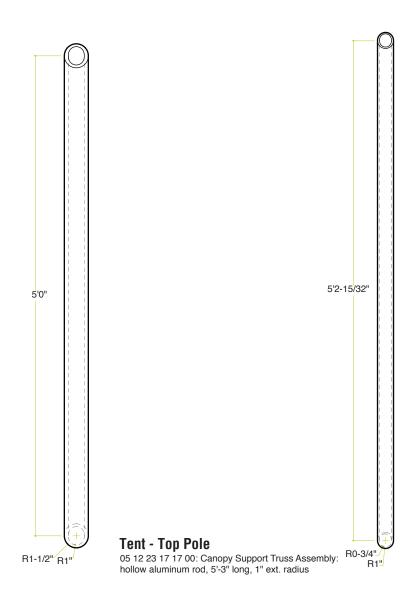
05 05 23: Metal Fastenings: locking steel collar, 1-1/2" ext. radius (w/ welded triangular extension)



Tent - Double Triangle Collar (see Tent - Collar)

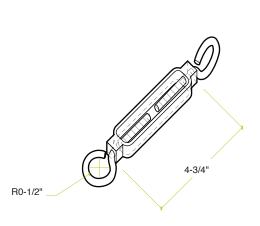
05 05 23: Metal Fastenings:

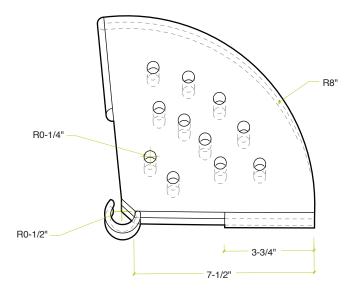
locking steel collar, 1-1/2" ext. radius (w/ welded triangular extensions)



Tent - Bottom Pole

05 12 23 17 17 00: Canopy Support Truss Assembly: hollow aluminum rod, 5' long, 1-1/2" ext. radius



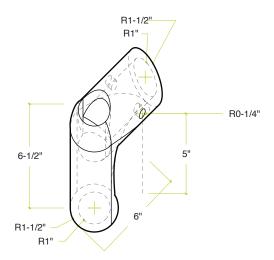


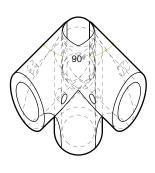
Tent - Turnbuckle 05 05 23: Metal Fastenings:

eyebolt, 1/8" radius 05 12 23 40 14 00: Metal Fastenings: turnbuckle, approx. 4-1/2" long

Tent - Membrane Plate

01 07 31 62: Metal Canopies: steel membrane plate, 8" radius hook 05 05 23 10: Bolts & Hex Nuts: round bolt, 1/4" radius





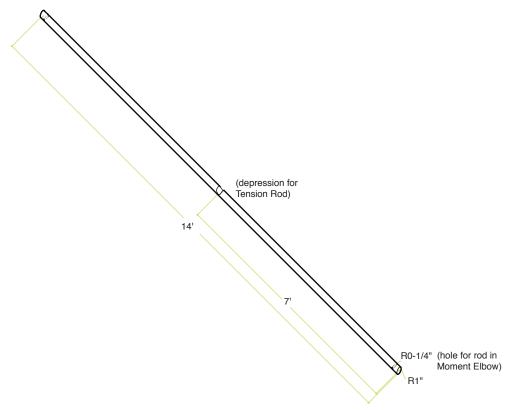
Tent - Moment Elbow "L"

22 11 13 45 15 40: Canopy Support Truss Assembly: steel connection piece, approx. 6" x 6", 1-1/2" int. radius

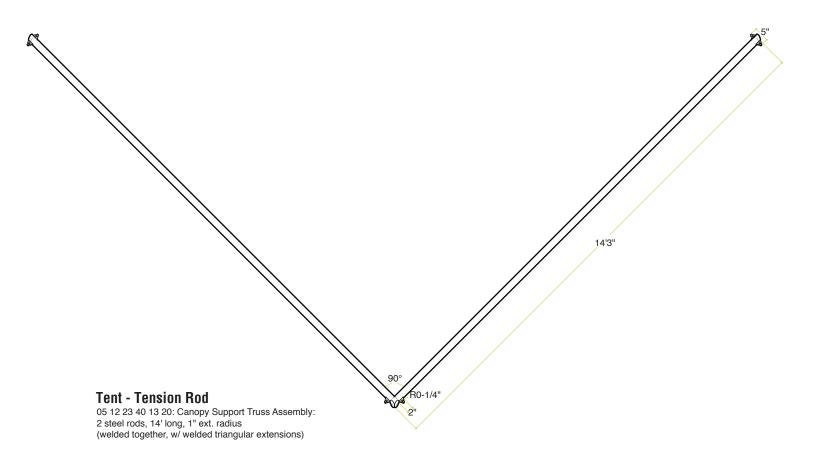
Tent - Moment Elbow "Y"

22 11 13 45 15 40: Canopy Support Truss Assembly: steel connection piece, approx. 6" x 6", 1-1/2" int. radius

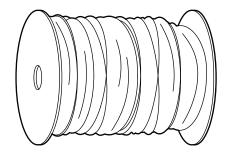
IP5.24 INCENTIVE PROPOSAL: PICTORIAL ASSEMBLY DETAIL



Tent - Compression Rod05 12 23 40 13 20: Canopy Support Truss Assembly: steel rod, 14' long, 1" ext. radius







Tent - Canopy Fabric 10 73 16 00 00 00: Canopies: PVC-coated PVS membrane, 200 sf

Tent - Cable05 15 16 50 05 60: Canopy Support Truss Assembly: steel tension cable, 1/8" radius

IP5.26 INCENTIVE PROPOSAL: PICTORIAL ASSEMBLY DETAIL

CSI Designation	CSI Description	Page Number	Component Title*
05 19 19	Canopy Support Truss Assembly	23	Tripod - Extension
05 05 23	Metal Fastenings	24	Tent - Standard Collar 1
05 05 23	Metal Fastenings	21	Tripod - Collar
05 05 23	Metal Fastenings	24	Tent - Single Triangle Collar
05 05 23	Metal Fastenings	24	Tent - Double Triangle Collar
05 05 23.10 06 00	Bolts & Hex Nuts	24	Tent - Lock ²
05 05 23.10 06 00	Bolts & Hex Nuts	24	Tent - Bolt
05 19 19	Canopy Support Truss Assembly	24	Tent - Collar Pad
05 19 19	Canopy Support Truss Assembly	20	Tripod - Leg
05 19 19	Canopy Support Truss Assembly	22	Tripod - Sliding Collar Brace
08 71 20.90 09 50	Canopy Support Truss Assembly	22	Tripod - Triangle Hinge
05 19 19	Canopy Support Truss Assembly	22	Tripod - Sliding Collar
05 19 19	Canopy Support Truss Assembly	22	Tripod - Extension Cap
05 19 19	Canopy Support Truss Assembly	20	Tripod - Leg Cap
05 19 19	Canopy Support Truss Assembly	20	Tripod - Housing
05 19 19	Canopy Support Truss Assembly	20	Tripod - Housing Rod
05 12 23.17 17 00	Canopy Support Truss Assembly	25	Tent - Bottom Pole
05 12 23.17 17 00	Canopy Support Truss Assembly	25	Tent - Top Pole
22 11 13.45 15 40	Canopy Support Truss Assembly	26	Tent - Moment Elbow "L"
22 11 13.45 15 40	Canopy Support Truss Assembly	26	Tent - Moment Elbow "Y"
05 12 23.40 13 20	Canopy Support Truss Assembly	27	Tent - Compression Rod
05 12 23.40 13 20	Canopy Support Truss Assembly	28	Tent - Tension Rod
05 05 23	Metal Fastenings	26	
05 12 23.40 14 00	Metal Fastenings	26	Tent - Turnbuckle
05 15 16.50 05 60	Canopy Support Truss Assembly	28	Tent - Cable
01 07 31 62	Metal Canopies	26	
05 05 23 10	Bolts & Hex Nuts	26	Tent - Membrane Plate
10 73 16.00 00 00	Canopies	28	Tent - Canopy Fabric
12 52 13	Chairs	16	Chair - Chair Component
05 05 23.10 06 00	Bolts & Hex Nuts	17	Chair - Bolt
05 05 23.10 06 00	Bolts & Hex Nuts	17	Chair - Lock
08 71 20.90 0012	Special Function Hardware	18	Table - Hinge
05 19 19	Canopy Support Truss Assembly	19	Table - Legs
12 93 43 53	Site Tables	19	Table - Surface
05 19 19	Canopy Support Truss Assembly	19	Table - Attached Legs
05 05 23.10 06 00	Bolts & Hex Nuts	18	Table - Bolt
05 05 23.10 06 00	Bolts & Hex Nuts	18	Table - Lock
05 19 19	Canopy Support Truss Assembly	21	Tripod - Collar Pad
05 05 23.10 06 00	Bolts & Hex Nuts	21	Tripod - Bolt
05 05 23.10 06 00	Bolts & Hex Nuts	21	Tripod - Lock

- Costs for items with a five digit CSI are sourced /unit from mcmaster.com. Extended total is unit cost multiplied by number of components per tent.
 Extended total is derived by taking the dividing the extended total cost by the average of the ratios between extended total and extended total o & p for materials as calculated by meanscostworks.com
- Items with eleven digit CSI designations are sourced directly from meanscostworks.com. In cases where specific hardware was not available, the closest similar item was selected.
- 3. F-7 Refers to column F, row 7, Bolts & Hex Nuts, immediately above the footnoted cell. In instances where distinctions between two similar items could not be made on meanscostworks.com, both items were specd as one.

^{*}Note: Some components are eitehr identical or variations from a standard. See catalogue for comparisons. May effect bulk pricing

Extended Description	Number / Tent*	Cost / Unit	Extended Total
steel rod, 1/2" radius	9		
locking steel collar, 1-1/2" ext. radius	3	11.68	35.04
locking steel collar, 3/4" ext. radius	9	9.39	84.51
locking steel collar, 1-1/2" ext. radius (w/ welded triangular extension)	4	11.68	46.72
locking steel collar, 1-1/2" ext. radius (w/ welded triangular extensions)	1	11.68	11.68
custom steel nut with handle, 1/4" int. radius	17		43.18
steel hexagonal bolt, 1/4" radius ³	17		43.18
foam padding, 1/4" thick	17		
steel rod, 3/4" radius	18		342.27
steel rod, 1/8" radius	9		152.12
steel hinge piece, 1/2" high with 1/32" rod	18		423
steel ring, 1/2" high, 1-5/8" ext. radius	3	7.15	21.45
formed steel element	9		
formed steel element	9		
formed steel element	3		
steel rod, 1/4" radius	9		
hollow steel rod, 5' long, 1-1/2" ext. radius	3		600
hollow steel rod, 5'-3" long, 1" ext. radius	3		600
steel connection piece, approx. 6" x 6", 1-1/2" int. radius	2		66
steel connection piece, approx. 6" x 6", 1-1/2" int. radius	1		33
steel rod, 14' long, 1" ext. radius	2		5
2 steel rods, 14' long, 1" ext. radius (welded together, w/ welded triangular extensions)	1		5
eyebolt, 1/8" radius	12	2.76	33.12
turnbuckle, approx. 4-1/2" long	6		13.74
steel tension cable, 1/8" radius	1		4.16
steel membrane plate, 8" radius hook	2		
round bolt, 1/4" radius	11		
PVC-coated PVS membrane, 200 sf	1		
formed plastic and steel composite semi-circle element with collar (1-1/2" int. radius)	6		
steel hexagonal bolt, 1/4" radius	6		43.18
custom steel nut with handle, 1/4" int. radius	6		43.18
steel hinge, with 6 screws	14	6.2	86.8
hollow steel tube, 1" square section	1		32.03
hard plastic sheets, 1" thick, 9 sf	1		
formed steel element with collar (1-1/2" int. radius)	3		
steel hexagonal bolt, 1/4" radius	6		45.72
custom steel nut with handle, 1/4" int. radius	6		45.72
foam padding, 1/8" thick	9		
steel hexagonal bolt, 1/8" radius	9		53.34
custom steel nut with handle, 1/8" int. radius	9		53.34
			2913.14

All CSI designations and costs are either determined using the search function on www.meanscostworks.com or via www.mcmaster.com.

^{*}Note: Count assumes tent is using only one of three support systems (chair, table, or tripod) and not a combination of the three.

Pittsburgh, Pennsylvania, Code of Ordinances

Title Four: Public Places and Property

Article I: Streets and Sidewalks

Chapter 411: Users of the Public Rights of Way



Singular Point of Contact

a. the Director of the Department of Public Works



Use of Rights-of-Way

- a. permit or bond required before providing services or utilities on public ways
- b. assigned priorities for conflicting users
- c. yearly fees
- d. submit detailed plans to the City before use
- e. all construction conforms to City regulations
- f. permit holder agrees to specified conditions



Registration Required

- a. users must register with the City Department of Public Works
- b. request renewal 90 days before permit expiration



No Construction Without Registration

a. registration must be fully completed before any construction can begin



Registration Information

- a. name, address, email address, telephone, and fax no
- b. local representative's name and contact information
- c. a certificate of insurance
 - i. verifying insurance policy is issued
 - ii. verifying applicant is insured against damages
 - iii. naming the city as an additional insured
 - iv. notification 60 days in advance of cancellation
- d. in lieu of insurance, proof of self-insuring status
- e. if in a corporation, authorization to do business
- f. copy of the applicant's certificate of authority Pennsylvania Public Utility Commission
- g. proof that bonds and financial resources have been handled



Reporting Obligations

- a. construction and major maintenance plan with registration
 - i. specific locations and timelines for construction for one year
 - ii. tentative locations and timeline for construction for the next 5 years
- b. maintain records of the location of all equipment in the rights-of-way



Vehicles and Equipment

a. all vehicles associated with a person working within the City right-of-way must have identification displayed and visible from a 25 foot distance

For more detail information, please go to Title Four - Article I - Chapter 411.

Pittsburgh, Pennsylvania, Code of Ordinances

Title Four: Public Places and Property

Article I: Streets and Sidewalks Chapter 416: Obstructions



Minor Street Obstructions; Permit Required

a. no temporary obstructions will be constructed without a permit from the Department of Public Works

b. permit agrees to:

i. remove/relocate within 5 days of City requests

ii. City is nonliable for any removal/relocation iii. notify adjacent property owners of the obstruction 5 days before its installation

iv. no blame to City for any losses

v. remove all extensions and installations at the end of business hours



Permit Fee for Minor Street Obstructions

a. canopies, awnings, etc. - \$150.00



Work Approval

 a. any persons applying for a permit are required to do the work as specified by the Department of Public Works



Use of Constructions within Public Right-of-Way

a. no person will use any public right-of-way for any auxiliary purpose without permission from the Director of Public Works

For more detail information, please go to Title Four - Article I - Chapter 416.

Pittsburgh, Pennsylvania, Code of Ordinances

Title Seven: Business Licensing Article III: Sales Businesses

Chapter 719: Vendors and Peddlers

719.03	Information Required a. description of the nature of business b. information of employed c. duration and hours of operation d. description of a vehicle used and license number e. registration f. health licenses g. permitted location
719.05A	Permitted Locations a. locations are based upon sites reviewed and approved by the Council of the City of Pittsburgh
719.05B	Permit Application and Duration a. valid for one year and may be renewed b. approvals from the Council of the City of Pittsburgh and the Department of Public Works
719.05C	Use of Streets, Parks and Trails a. No vendor shall be permitted to operate between the hours of 9:00 pm and 7:00 am in residential districts b. thirty-gallon minimum capacity trash container if vendor sells products that generate trash
719.08	Fees for Venders, Vehicular Vendors or Peddler's License a. vendor = \$500.00

For more detail information, please go to Title Seven - Article III - Chapter 719.

Title Seven: Business Licensing . Article III: Sales Businesses . Chapter 719: Vendors and Peddlers

719.05B: valid for one year and may be renewed

719.05C: no vendor shall be permitted to operate between the hours of 9pm and 7am in residential districts

719.08: vendor = \$500.00

Title Four: Public Places and Property . Article I: Streets and Sidewalks . Chapter 411: Users of the Public Rights of Way

412.01: Contact Director of the Department of Public Works

412.02: permit or bond required before providing services or utilities on public ways; yearly fees; submit detailed plans to the City before use; permit holder agrees to specified conditions

412.03: users must register with the City Department of Public Works; request renewal 90 days before permit expiration

412.04: registration must be fully completed before any construction can begin

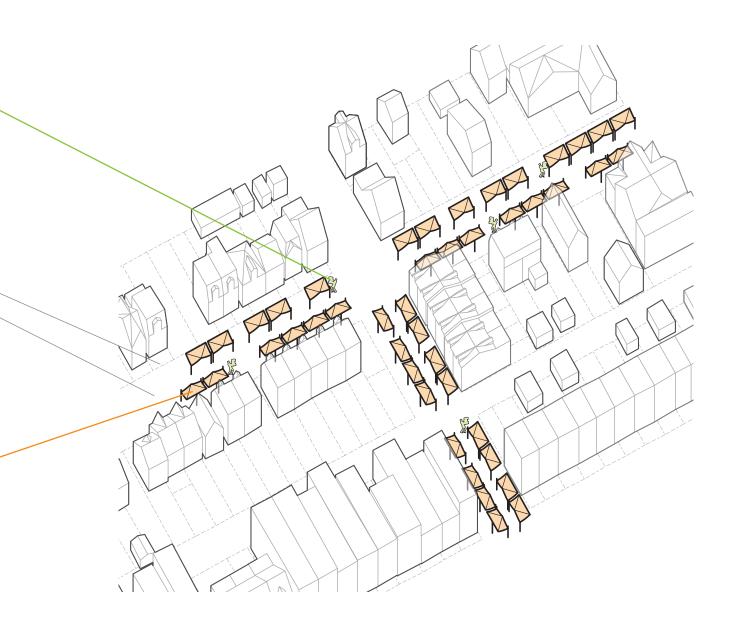
412.05: registration information

Title Four: Public Places and Property . Article I: Streets and Sidewalks . Chapter 416: Obstructions

416.01: minor street obstructions; permit required

416.02: canopies, awnings, etc. = \$150.00

416.15: no person will use any public right-ofway for any auxiliary purpose without permission from the Director of Public Works



International Building Code 2009

Chapter 31: Special Construction **Section 3103:** Temporary Structures



General.

The provisions of this section shall apply to structures erected for a period of less than 180 days. Tents and other membrane structures erected for a period of less than 180 days shall comply with the International Fire Code. Those erected for a longer period of time shall comply with applicable sections of this code.



Permit required.

Temporary structures that cover an area in excess of 120SF, including connecting areas or spaces with a common means of egress or entrance which are used or intended to be used for the gathering of 10 or more persons, shall not be erected, operated, or maintained for any purpose without obtaining a permit from the building official.

Tent length = 20ft Tent width = 10ft

Tent SF = 10ft * 20ft = 200SF

For more detail information, please go to IBC Chapter 31 - Section 3103.



Construction Documents.

A permit application and construction documents shall be submitted for each installation of a temporary structure. The construction documents shall include a site plan indicating the location of the temporary structure and information delineating the means of egress and the occupant load.

See sheets IP5.00 - IP5.27 for construction documents Total Occupants = 200SF / 7SF = 28 per tent



Location.

Temporary structures shall be located in accordance with the requirements of Table 602 based on the fire-resistance rating of the exterior walls for the proposed type of construction.

No exterior walls. All materials used in the construction of the tents are fire-safe steel and aluminum except the vinyl canopy.

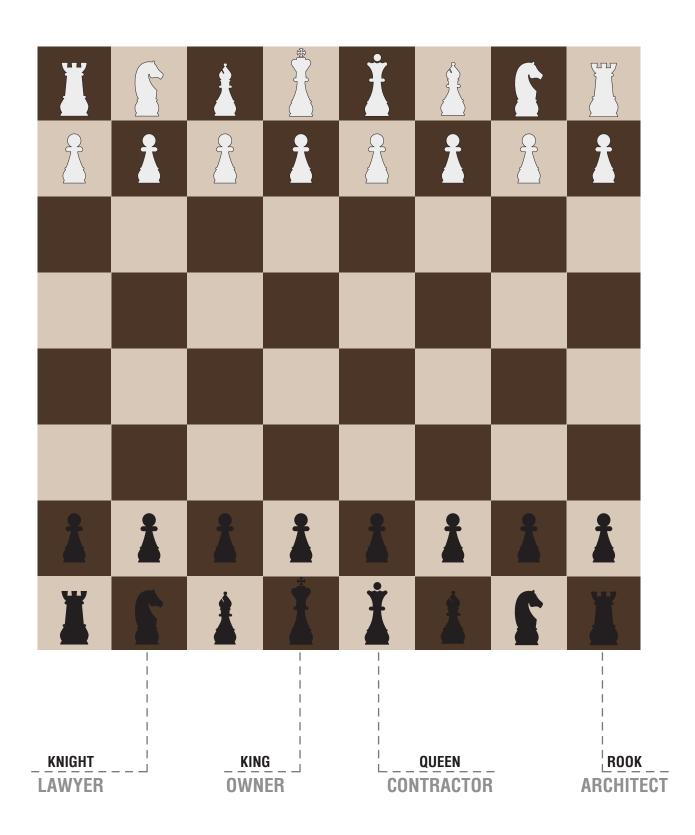


Means of egress.

Temporary structures shall conform to the means of egress requirements of Chapter 10 and shall have a maximum exit access travel distance of 100 feet.

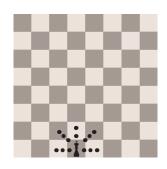
With no exterior walls, every side of the tent is a means of egress. The maximum distance from the interior of the tent to the exterior is from the center, at 5ft.

For more detail information, please go to IBC Chapter 31 - Section 3103



IMP1.00 IMPLEMENTATION DOCUMENTATION: LOGISTICS

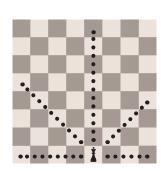




KING | OWNER

In the process of starting and running the Dearborn Street Market, the Owner is the top of the hierarchy, playing a role similar to that of the King on a chessboard. The Owner, a board composed of the Garfield community, manages the entirety of the market, from generating the initial startup costs to coordinating with all of the individual entities involved in the market. All decisions need the final approval of the owner.

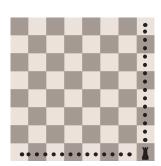




QUEEN | CONTRACTOR

Another key player is the Contractor, who has a close relationship with the Owner and Architect, and carries a lot of weight in the decision making process, similar to the role of the Queen in chess. While the architect typically suggest contractors for the project, the contract holds more liability and responsibility for the construction of the market.

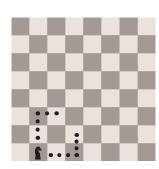




ROOK | ARCHITECT

The Architect, who is represented by a rook piece, is in control of the initial design of the tent structures and the layout of the market, but does not necessarily play much of a role in running the market. The architect works closely with both the owner and the contractor, often mediating the communication between the different players involved in the creation of the market.

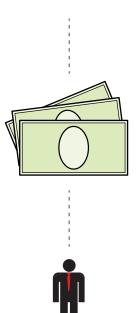




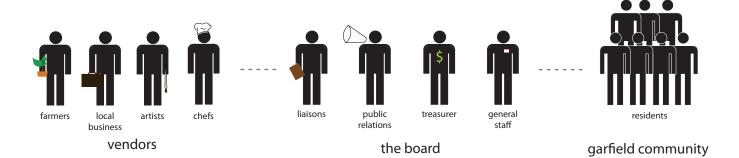
KNIGHT | LAWYER

The lawyer, who plays a role similar to the knight on a chessboard, is related to all three of the key players in the market, and serves to protect each player from any legal conflicts.

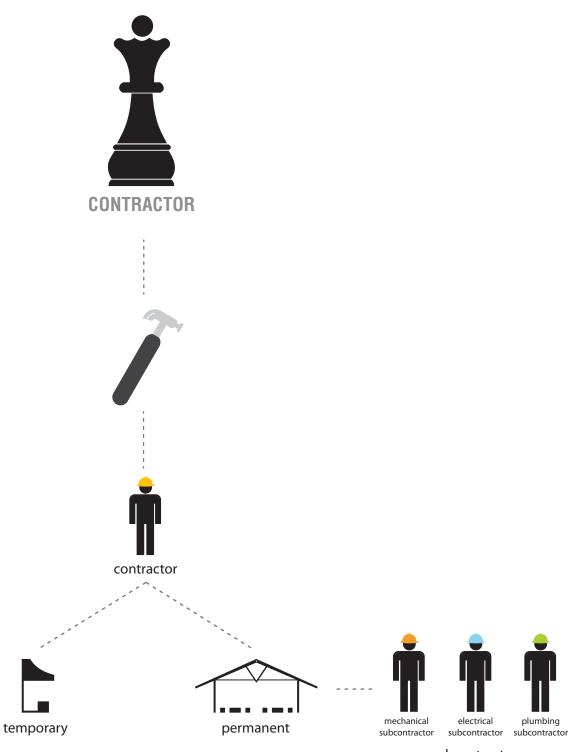




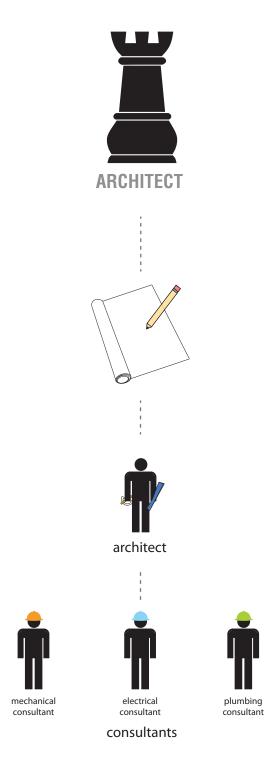
manager

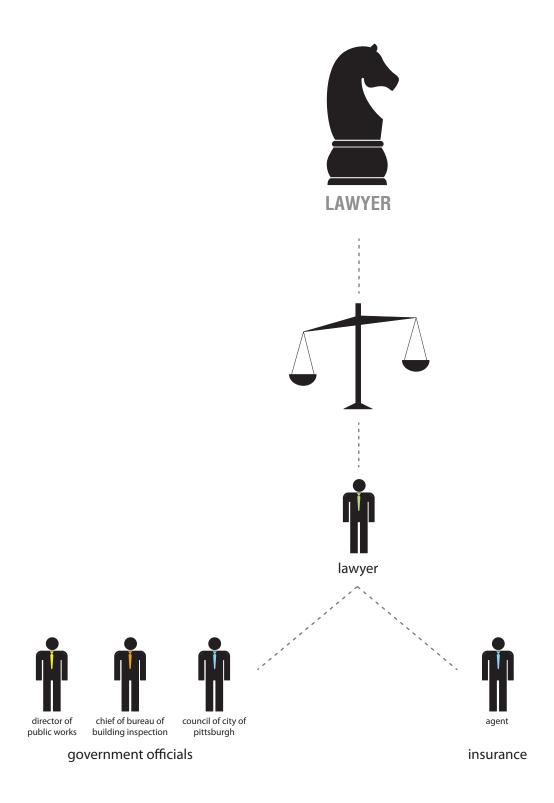


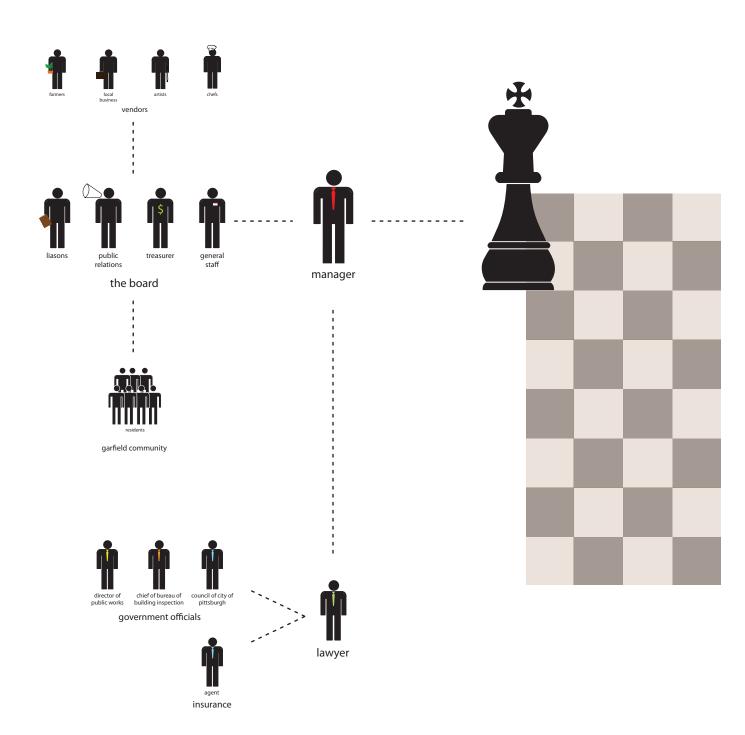
IMP1.02 IMPLEMENTATION DOCUMENTATION: LOGISTICS

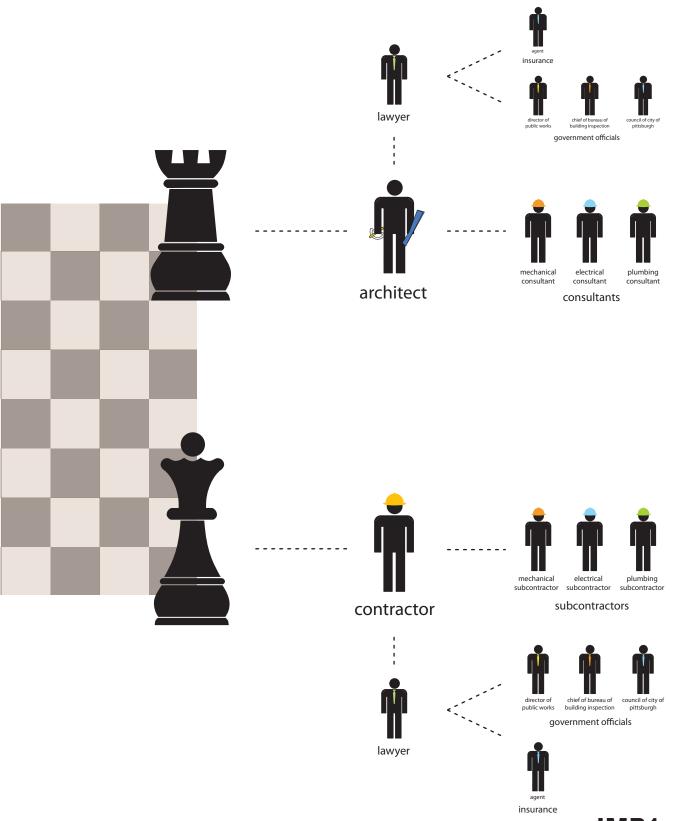


subcontractors

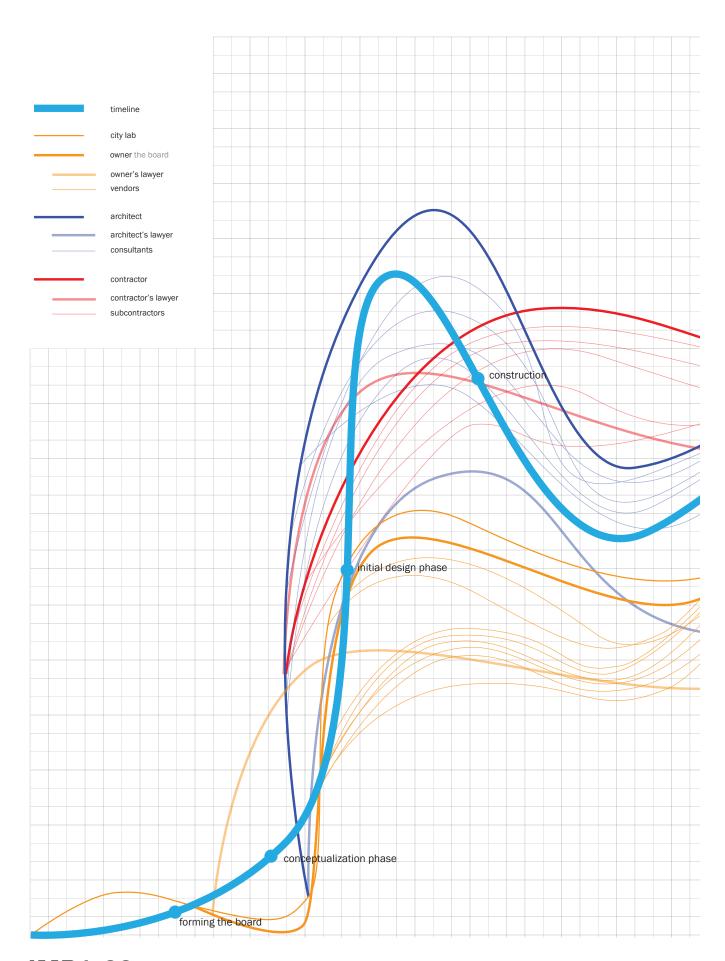




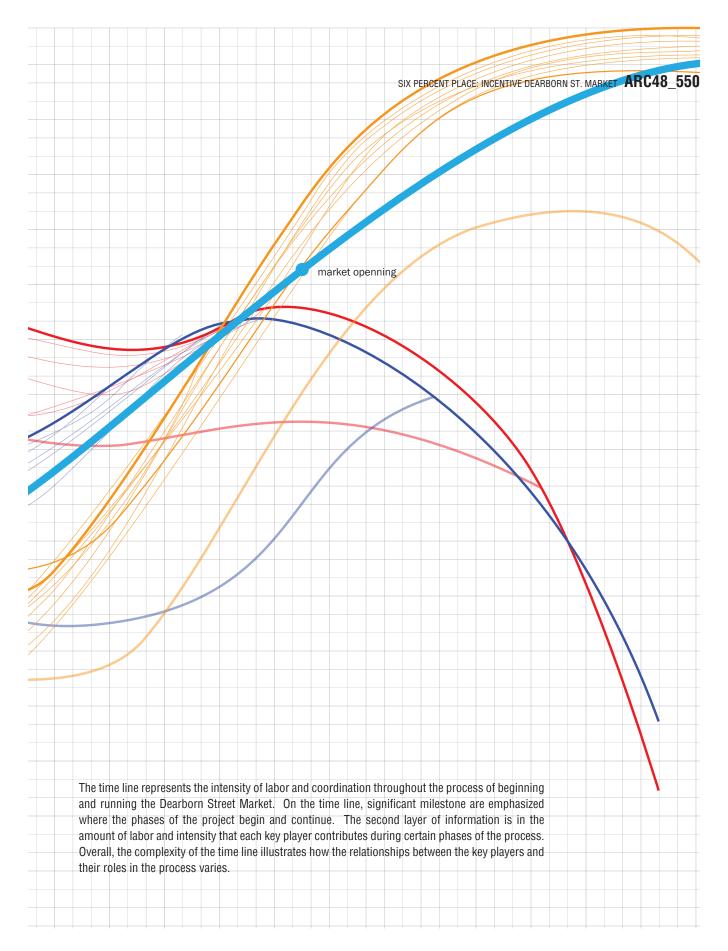


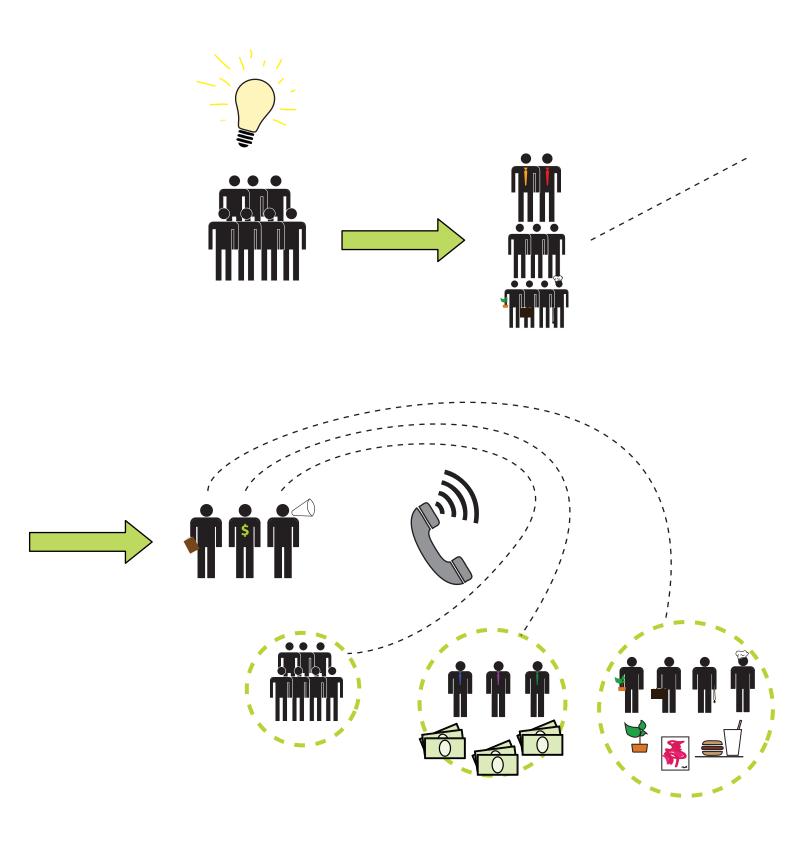


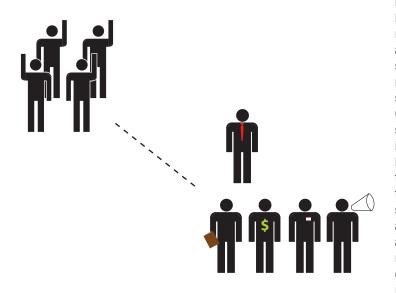
IMPLEMENTATION DOCUMENTATION: LOGISTICS IMP1.07



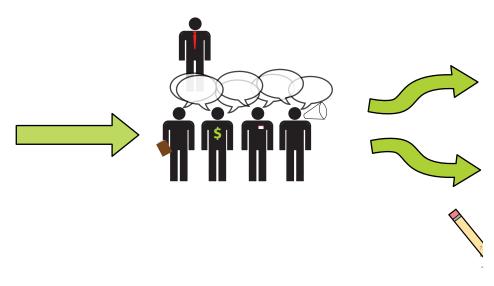
IMP1.08 IMPLEMENTATION DOCUMENTATION: LOGISTICS

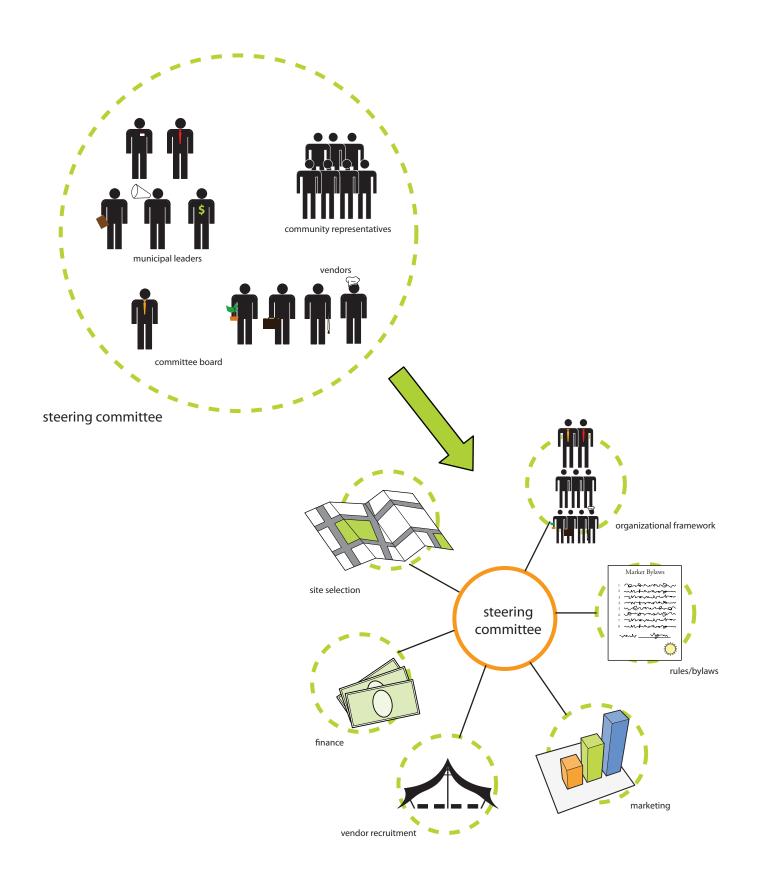






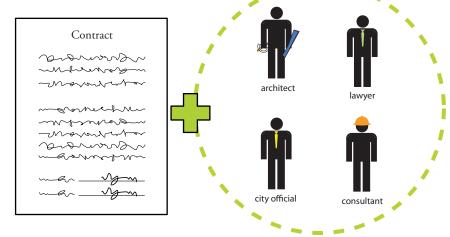
For those interested in initiating a market, a board must be formed to guide the process. Interested community members, neighborhood vendors, etc. should join together and begin to discuss organization of management. Leaders should be appointed to act as mediators between the neighborhood group and external parties, such as possible sponsors and vendors from beyond the boundaries of Garfield. These leaders should contact the external parties as soon as possible to develop a more concrete budget so that implementation can begin. Contact should be maintained between this group of community members and the rest of the neighborhood, from these initial developmental phases through construction. Members of the administrative board should also be effective communicators internally, passing along information gathered from all respective parties and filtering the data into a comprehensive organizational methodology. After the board has developed and has a clear vision, a document should be written as a constant reminder of the goals and intended outcomes of such an organization. Site analysis can be reopened at this point, and an evaluation of the properties proposed here as well as neighboring lots should be researched again before the board can move forward in its organization of an actual market.



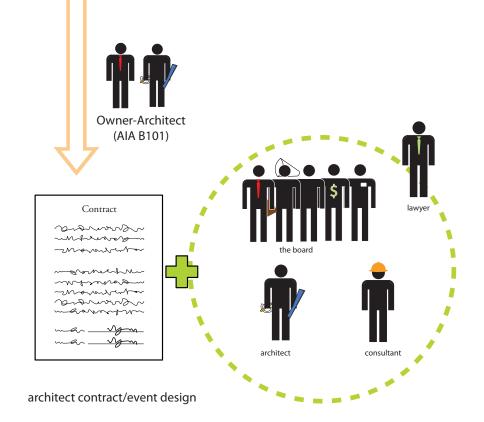


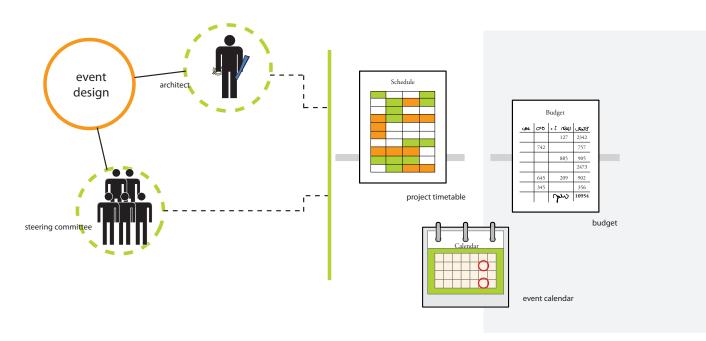


The steering committee essentially acts as owner in contractual relationships with contractor and architect but also has the responsibility of event planning and representing the interests of the community of Garfield. It plays an essential role in preliminary site and environmental research and in design and program studies.



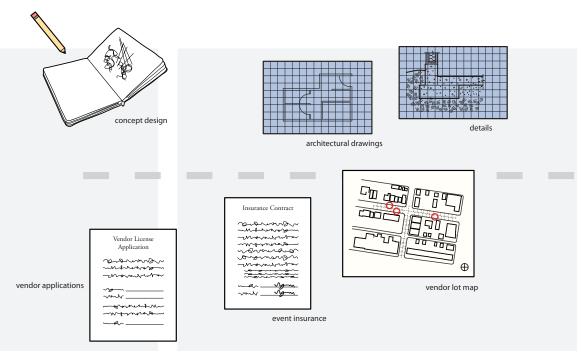
general conditions contract





schematic design

Design and implementation for the Dearborn Street Market cannot follow a typical model for design and construction. Both an event and an environment must be planned, and each seperate task is the responsibility of either the designer/architect or the board/steering committee. Though tasks overlap between parties, the board in most cases is responsible for event planning while the architect is responsible for the development of organizational schemes and systems of enclosure. Tasks such as plot maps and budgets are more shared between parties, while the production of architectural drwings and legal documents such as vendor applications and event calendars are more distinct to each party.

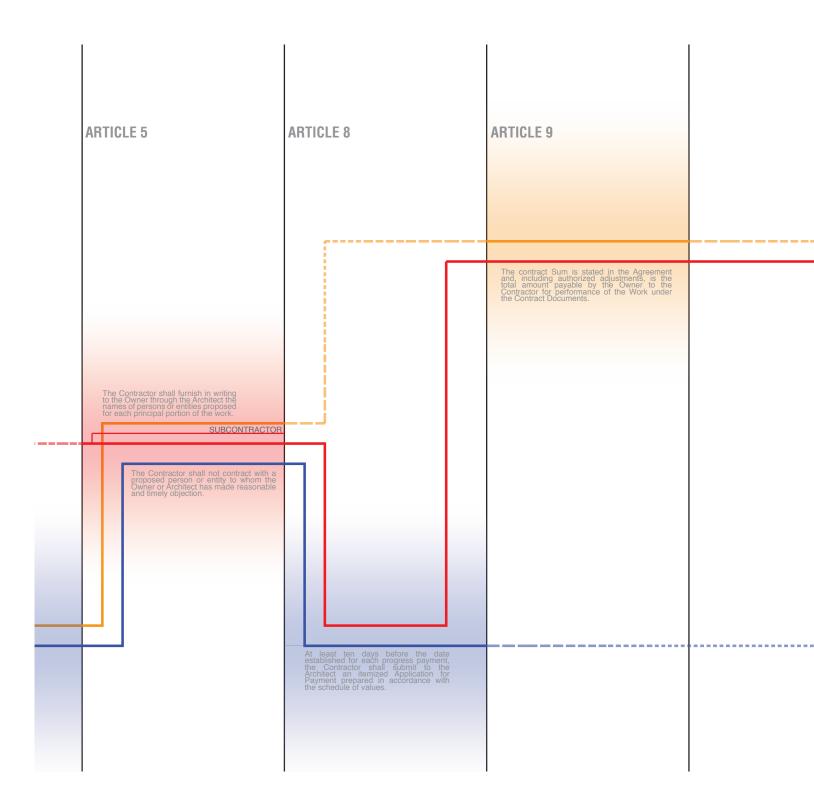


design development

AIA DOCUMENT A201-2007

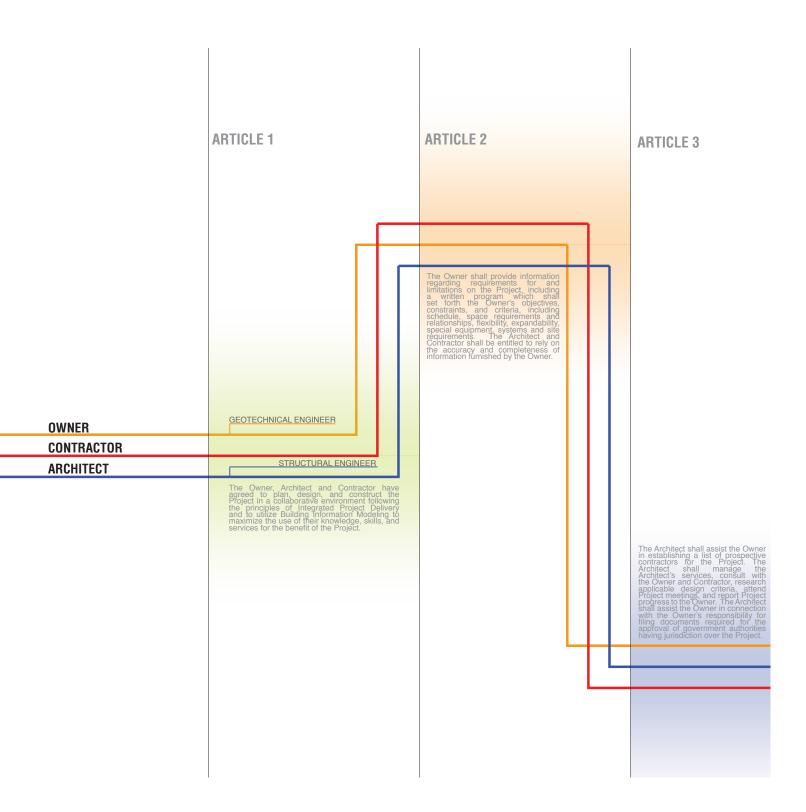
General Conditions of the Contract for Construction

	ARTICLE 2	ARTICLE 3	ARTICLE 4
OWNER CONTRACTOR ARCHITECT	Owner shall secure and pay for necessar approvals, easements, assessments an charges required for construction, use o occupancy of permanent structures or for permanent changes in existing facilities.	The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.	
		portions of the Work under the Contract.	

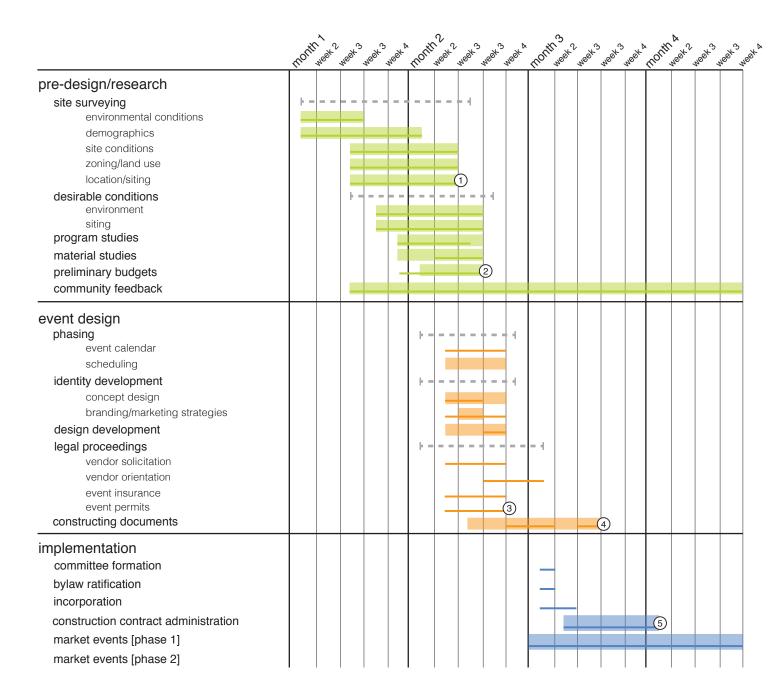


AIA DOCUMENT A295-2008

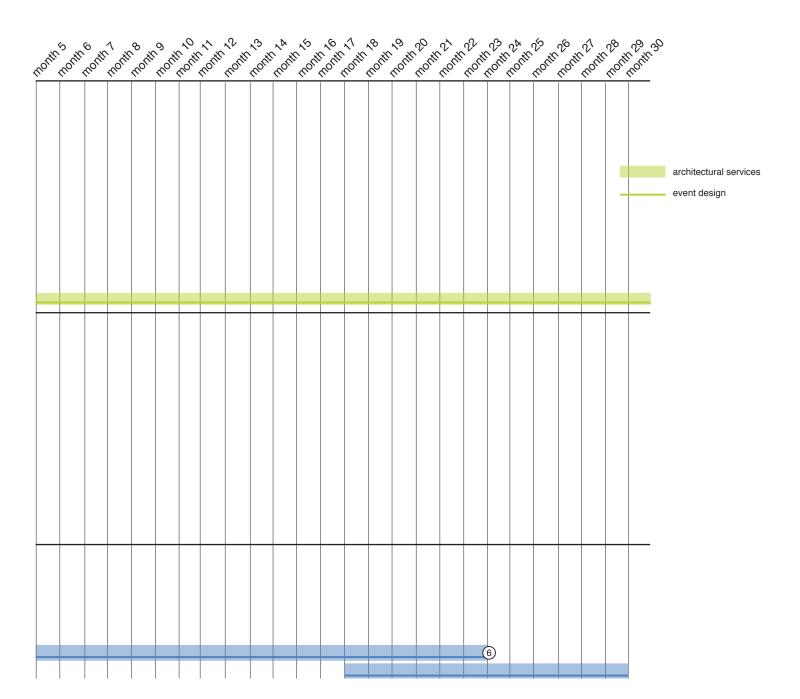
General Conditions of the Contract for Integrated Project Delivery



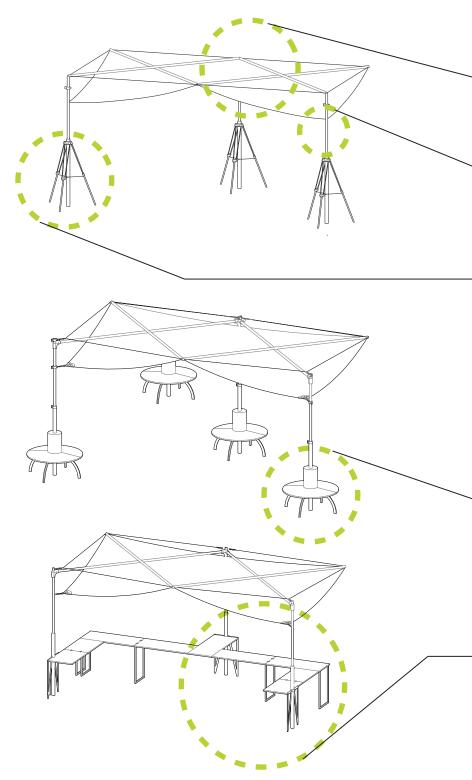
ARTICLE 3	ARTIC	LE 4	
The Architect shall be entitled to rely on the accuracy and completeness of the Contractor's Estimates as the Architect progresses with the preparation of Design and Documents. The Architect shall review and report to the Owner any material inaccuracies or inconsistencies noted during Estimate reviews.		The Contractor shall assist the Owner in connection with the Owner's responsibility for obtaining approval for the Work from governmental authorities having jurisdiction over the Project.	



- Benchmark one is defined by the completion of site and community surveying that will influence early design strategies identified in the predesign/ research phase.
- Benchmark two is characterized by the completion prescriptive design strategies that will significantly influence design development and implementation.
- 3. Benchmark three marks the completion of schematic design for both architectural services and event design and will allow for detailed event planning and a construction document set.



- Benchmark four marks the completion of construction documents and the initiation of the contract administration process.
- 5. Benchmark five will be reached upon the completion of the conract administration process with respect to tent manufacture and construction.
- 6. Benchmark six delineates the end of phase one of the market's physical and organizational structure and the transition to phase two.



Hard costs are all expenses pertaining to the manufacturing of the impermanent tent structure for phase one of the Dearborn Street Market. Costs are here organized by component of the structure: tripod, pole and membrane structure. Specific prices for individual materials, CSI designations and extended total and extended total) & P costs can be found in document SP1.

moment compression rod tension connection turnbuckle tension rod w/ 2 welded triangle extenders tension cable tension connection eyebolt pvc coated pvs membrane Total: \$61.02 main hollow pole, bottom moment elbow main hollow pole, top moment "y" elbow Total: \$1602 steel tripod leg extension tripod leg standard telescoping steel collar horizontal brace half-size telescoping steel collar triangle hinges std. telescoping steel collar w/ triangle extension central collar std. telescoping steel collar w/ two triangle extensions leg extension fork brace custom nut with handle top leg fork brace hexagonal bolt leg tripod housing collar padding tripod housing rotator rods Total: \$694.49 formed plastic and steel composite element 1/4" steel hexagonal bolt custom steel nut with handle Total: \$162.72 formed steel element w/ collar steel hinge w/ screws 1" hollow steel tube 1/4" steel hexagonal bolt 1" hard plastic sheets custom steel nut with handle Total: \$290.63

min/max cost per tent:

\$3707.31/\$5202.63

of tents at startup:

6

 $$3707.31 \times 6 = $22,243.86$ $$5202.63 \times 6 = $31,215.78$



10%

architect

 $$22,243.86 \times .10 = $2,224.39$

\$31,215.78 x .10 = \$3,121.58

consultants











fees: (max/min)

model 1 (39.5%)	11%	1%	24.4%	1%	2.1%
\$878.64 \$1,233.00	244.68 343.37	22.25 31.22	542.75 761.65	22.25 31.22	46.71 65.55
model 2 (50%)	17%	2%	27%	2%	2.1%
\$1,112.20 \$1,560.75	378.15 530.66	44.49 62.43	600.59 842.81	44.49 62.43	46.71 65.55
model 3 (30%)	9%	1%	18%	1%	1%
\$667.32 \$936.45	200.20 280.94	22.25 31.22	400.39 561.87	22.25 31.22	22.25 31.22

architect fee (-consultant fees)

model 1 \$1345.75/\$1888.50

model 2 \$1112.29/\$1560.75

model 2 \$1557.07/\$2185.05







additional fees:

(permits, bonding fees, etc.)

Event Insurance: \$150

Street Obstruction Permit: \$150

Total: \$300

soft cost:

\$2,524.39/\$3,421.50

Soft costs are all expenses pertaining to the administration of the Dearborn Street Market during phase one of expansion. Costs are here organized by the agent to whom they are attributed: the market governing board and individual vendors. Expenses can be viewed in relationship to projected market income in document IS10.

Extended Description	Number / Tent*	Cost / Unit	Extended Total
steel rod, 1/2" radius	9		
locking steel collar, 1-1/2" ext. radius	3	11.68	35.04
locking steel collar, 3/4" ext. radius	9	9.39	84.51
locking steel collar, 1-1/2" ext. radius (w/ welded triangular extension)	4	11.68	46.72
locking steel collar, 1-1/2" ext. radius (w/ welded triangular extensions)	1	11.68	11.68
custom steel nut with handle, 1/4" int. radius	17		43.18
steel hexagonal bolt, 1/4" radius ³	17		43.18
foam padding, 1/4" thick	17		
steel rod, 3/4" radius	18		342.27
steel rod, 1/8" radius	9		152.12
steel hinge piece, 1/2" high with 1/32" rod	18		423
steel ring, 1/2" high, 1-5/8" ext. radius	3	7.15	21.45
formed steel element	9		
formed steel element	9		
formed steel element	3		
steel rod, 1/4" radius	9		
hollow steel rod, 5' long, 1-1/2" ext. radius	3		600
hollow steel rod, 5'-3" long, 1" ext. radius	3		600
steel connection piece, approx. 6" x 6", 1-1/2" int. radius	2		66
steel connection piece, approx. 6" x 6", 1-1/2" int. radius	1		33
steel rod, 14' long, 1" ext. radius	2		5
2 steel rods, 14' long, 1" ext. radius (welded together, w/ welded triangular extensions)	1		5
eyebolt, 1/8" radius	12	2.76	33.12
turnbuckle, approx. 4-1/2" long	6		13.74
steel tension cable, 1/8" radius	1		4.16
steel membrane plate, 8" radius hook	2		
round bolt, 1/4" radius	11		
PVC-coated PVS membrane, 200 sf	1		
formed plastic and steel composite semi-circle element with collar (1-1/2" int. radius)	6		
steel hexagonal bolt, 1/4" radius	6		43.18
custom steel nut with handle, 1/4" int. radius	6		43.18
steel hinge, with 6 screws	14	6.2	86.8
hollow steel tube, 1" square section	1		32.03
hard plastic sheets, 1" thick, 9 sf	1		
formed steel element with collar (1-1/2" int. radius)	3		
steel hexagonal bolt, 1/4" radius	6		45.72
custom steel nut with handle, 1/4" int. radius	6		45.72
foam padding, 1/8" thick	9		
steel hexagonal bolt, 1/8" radius	9		53.34
custom steel nut with handle, 1/8" int. radius	9		53.34
			2913.14

All CSI designations and costs are either determined using the search function on www.meanscostworks.com or via www.mcmaster.com.

^{*}Note: Count assumes tent is using only one of three support systems (chair, table, or tripod) and not a combination of the three.