



McCormac Amphitheater Feasibility Study

MGT- 611

Fall 2014-Capstone Project

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Executive Summary

Overview

The city of Winchester has an opportunity to capitalize on a unique, outdoor venue with the potential to become a center piece for entertainment and community events. The Winchester McCormac Amphitheater (WMCA) with its historical richness and family atmosphere in the countryside make it an ideal venue. One of the strongest considerations for revitalization is its close proximity to major cities and interstates. This makes it convenient for visitors and locals to make day trips for entertainment and leisure. This study recommends viable alternatives for consideration to bring the project to fruition.

Shenandoah University (SU), MGT-611, Fall 2014, Capstone Group in collaboration with Winchester Parks and Recreation (WPR), conducted a feasibility study. The purpose of the study is to determine the need for an entertainment venue capable of holding 2,000-3,000 people; and if a revitalized Winchester McCormac Amphitheater meets this need. The study was conducted in the following manner:

- Market Analysis
- Evaluation of the Physical Suitability
- Financial Analysis
- Summary Conclusion

Market Analysis

Data for the Winchester and Frederick County Metropolitan Statistical Area (WFMSA) reveals that the overall population and median income is on a steady rise. The tapestry characteristics and consumer spending patterns for this growing population appears conducive to an entertainment site such as WMCA.

A needs survey was conducted in conjunction with the feasibility study to assess the overall demand for the amphitheater. Using this data, it was determined that WFMSA, has a market potential of 34,534 ticket sales for 2014. Said differently, the WFMSA has at least 34,534 individuals willing to attend one event at WMCA each year; this number will grow with the population.

An industry comparison and competitor analysis was conducted and determined WMCA could become an easily sought after entertainment venue. Our research compared five amphitheaters, with similar capacity and offerings of the proposed WMCA. The competitor's analysis determined there are four direct competitors in the Winchester area. It is noted that the competitors offer alcoholic beverages at their venue. Current policy of the WPR does not permit the sale or use of alcohol on its properties. This may be problematic.

Physical Suitability

A thorough review of the site shows that there are no physical or environmental issues that could impact the construction and operation of the WMCA. No zoning issues were identified since WPR owns the land and it was previously developed. The site currently has the necessary infrastructure in place that should help speed the completion of the project. Finally, current traffic patterns and parking would not be hindered by events in the park.

Financial Analysis

This analysis was conducted in order to determine if it is financially feasible, to construct the WMCA based on the current budget of \$2,065,000. The cost of construction and a list of operating expenses were analyzed to determine if the amphitheater could become self-sustaining. The analysis looked at break-even period in years, Net Present Value (NPV), and Benefit Cost Ratio (BCR). Using sensitivity analysis, it was determined that based on the current funding, the WMCA would not be financially sustainable.

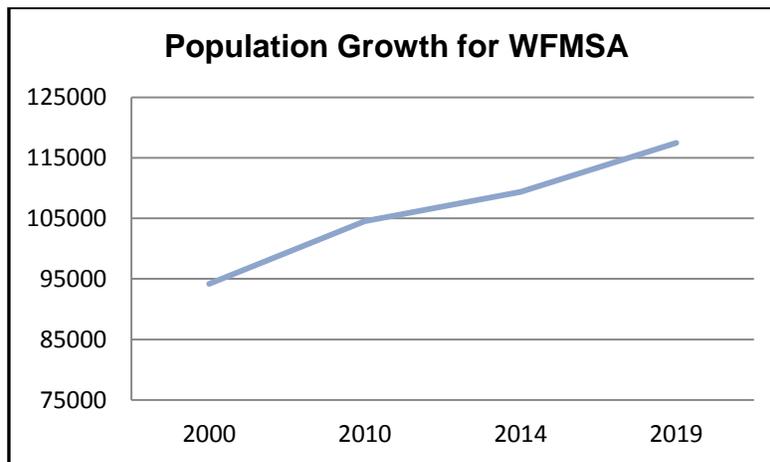
Summary Conclusion

- The current market conditions in the WFMSA are suitable for an entertainment venue such as the WMCA. The growing population and overall prosperity will continue the trend of increased consumer spending.
- The overall spending in entertainment and recreation currently exceeds the national average which shows that there is a gap that can be satisfied by the WMCA.
- Assuming WPR decides to revitalize the amphitheater, there would be no physical issues that would obstruct the construction or operation.
- Major concerns for the operation of this project are marketing and advertising. WPR will have to invest in a professional promoter and/or Marketing and Events Coordinator.
- WPR should form a marketing alliance with businesses in Old Town Winchester. This cooperative agreement will highlight the symbiotic monetary benefits of attracting new visitors to the community.
- City Council should consider a policy modification to permit adult beverages at certain concerts and theater events at WMCA. As noted, competitor venues offer adult beverages. Having this available at certain events could enhance marketability of the WMCA.
- Finally, the current funding available for the project is not sufficient to produce an economically sound investment.
 - Considering the fact that the proposed events will not require overnight stays, there may not be sufficient tax revenue (hotel/motel) to supplement income from out-of-town visitors.
 - As long as there is reliance on interest-bearing debt, the NPV will always be negative.
 - Furthermore, the Capstone group does not recommend renovating the WMCA unless WPR embark on a major Capital Campaign Drive to augment the cost of construction and/or allow other tax revenue to subsidize operations.
 - Securing funds to cover the cost of construction will insure positive returns and make the WMCA an economically sustainable entertainment venue.

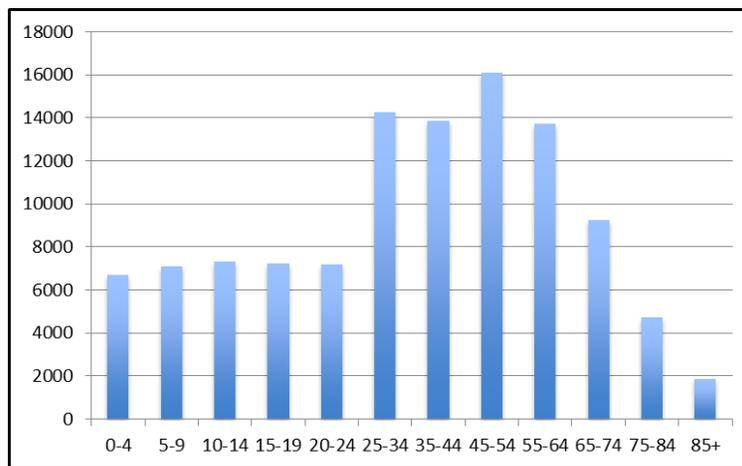
Market Analysis

Understanding the characteristics of WFMSA is important in the development of recommendations for investment in entertainment services for the region. In this analysis, the data regarding the income, age and spending will be outlined, tapestry segmentation presented, and the supply & demand gaps identified. Additional insight of the WFMSA residents' characteristics and spending habits will also be provided.

Data gathered from the Frederick County Economic Development Authority (EDA) show that the county has a positive growth trend; current population is 109,362. This growth will result into a rise in demand for products and services in Frederick County, including entertainment offerings. The following chart presents the WFMSA population between the years of 2000-2020.

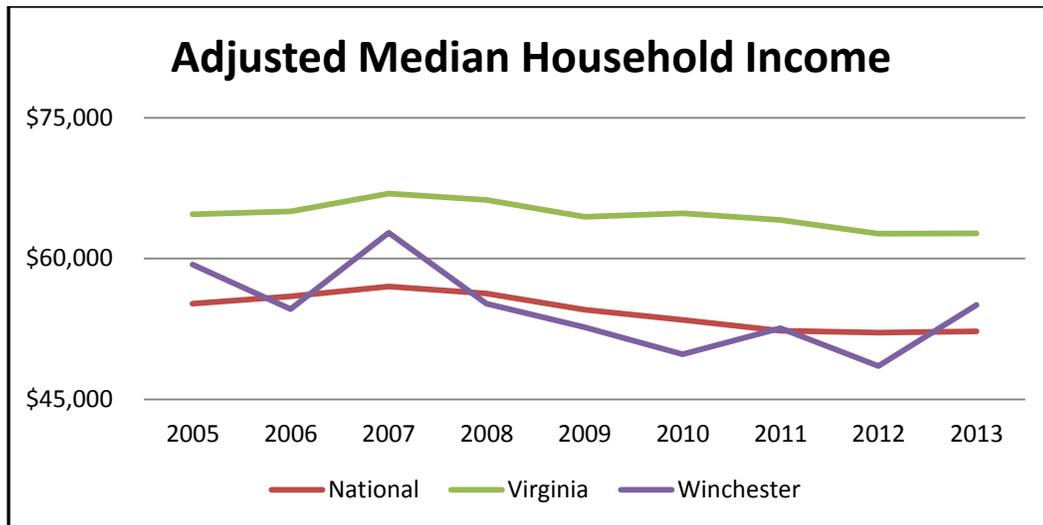


The overall age distribution for WFMSA shows an aging population. Data indicates that about 12% of the youth will be moving into the 25-34 age range, which is a significant segment of those willing and able to attend events at WMCA. The following chart presents the current age distribution.



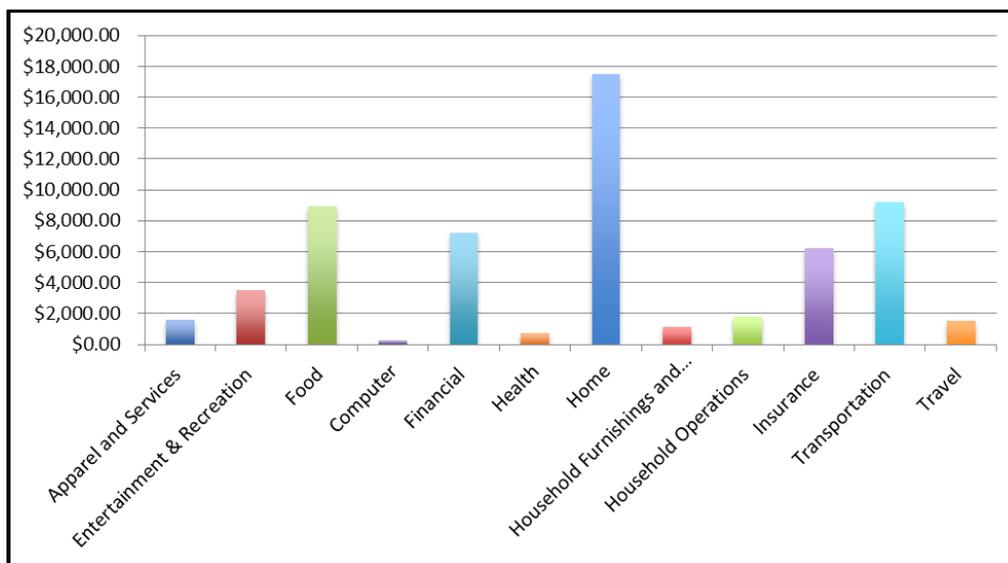
Source: EDA

Median income is a crucial factor in estimating the total volume of disposable income among the residents. Winchester has seen steady growth in median income from 2012 – 2014 and is currently above the national average; current median income is \$60,398 (not shown in the graph). Healthy growth in median income indicates a return to pre-recessionary income and that most residents can increasingly afford entertainment services provided by an amphitheater. The following chart depicts the overall trend in median income.



Source: deptofnumbers.com

The following chart shows that Winchester & Frederick county consumers allocate a significant amount of their disposable income to entertainment. The dollar amounts represent average annual expenditures per household.



Source: EDA

Tapestry segments based on socioeconomic and demographic characteristics provide an accurate, detailed description of WFMSA neighborhoods. Top Tapestry Segments represented in Winchester and Frederick County, according to ESRI Business Analyst, are as follows:

Soccer Moms (11.8%) - Soccer Moms are an affluent, family-oriented market with a country flavor. Family-oriented purchases and activities dominate, like 4+ televisions, movie purchases or rentals, children’s apparel and toys, and visits to theme parks or zoos.

Green Acres (11.3%) - Lifestyle features country living and self-reliance. They are cautious consumers with a focus on quality and durability. Residents are active in their communities and a variety of social organizations, from fraternal orders to veterans’ clubs.

Middleburg (8.5%) - Residents are conservative, family-oriented consumers. This market is younger but growing in size and assets. Entertainment is primarily family-oriented, TV and movie rentals or theme parks and family restaurants.

Bright Young Professionals (8.5%) - Large market, primarily located in urban outskirts of large metropolitan areas. These communities are home to young, educated, working professionals. One out of three householders is under the age of 35. Find leisure going to bars & clubs, attending concerts, going to the zoo, and renting DVDs from Redbox or Netflix.

Salt of the Earth (6.5%) - Salt of the Earth residents are entrenched in their traditional, rural lifestyles. Citizens here are older, and many have grown children that have moved away. They still cherish family time. Outdoor sports and activities, such as fishing, boating, hunting, and overnight camping trips are popular.

The top five tapestry segments represented in Frederick county provides a wide spectrum of socio-economic and entertainment preferences that the WMCA can market to. “Young professionals” and “salt of the earth” segments may seem like polar opposites, but both groups enjoy outdoor activities and are willing to spend money on quality entertainment that allows them to spend time with family and friends. The county is largely made up of family oriented, upwardly mobile groups that represent a growing segment of the American landscape. Most importantly, each group is heavily invested in the community and would welcome the WMCA as a landmark addition to the Winchester community.

Finally, the following table presents the gap analysis for entertainment and recreation for the WFMSA.

Consumer Spending	Demand	Supply	Gap
Entertainment & Recreation	\$146,059,148.00	\$132,781,043.64	(\$13,278,104.36)
Fees & Admissions	\$28,381,070.00	\$26,037,678.90	(\$2,343,391.10)
Membership Fees for Clubs	\$7,557,722.00	\$6,870,656.36	(\$687,065.64)
Fees for Participant Sports, excluding trips	\$5,378,844.00	\$4,845,805.41	(\$533,038.59)
Admission to Movie/Theater/Opera/Ballet	\$7,136,576.00	\$6,607,940.74	(\$528,635.26)
Admission to Sporting Events, excluding trips	\$2,965,181.00	\$2,671,334.23	(\$293,846.77)
Fees for Recreational Lessons	\$5,317,816.00	\$4,923,903.70	(\$393,912.30)
Dating & Services	\$24,931.00	\$24,204.85	(\$726.15)

Source: EDA

McCormac Amphitheater – Feasibility Study

The fore mentioned data shows considerable gaps in select consumer expenditures for entertainment and recreation. Shortages between supply and demand indicate the opportunity for WMCA to fill those gaps.

Chain Ratio Analysis

The chain ratio assesses the overall market potential for Frederick County. It uses the demographic data collected from EDA along with the data from the needs survey to calculate the number of potential attendees. A summary of the need survey data is presented in *Appendix A*.

Chain Ratio Analysis	
WFMSA Residents	109,362
Targeted Consumers (20-74)	68.10%
Consumers willing and able to attend	46.37%
Market Potential (Individual Ticket Sales)	34,534

Although the needs survey did not gather data on residents under twenty-five years of age, the age range from 20-24 is included in the target market. It is a safe assumption that many college students in the area will be willing and able to attend. Total target market is the population in the range of 20-74 years; this represents 68.1% of the Frederick County's population. Of all respondents from the needs survey, only 46.37% of the target population are willing and able to attend the WMCA. The market potential of 34,534 is a conservative estimate as those willing and able does not include individuals under the age of 20.

Industry Analysis

The industry analysis focuses on comparable amphitheaters and outdoor venues of similar offerings. A list of amphitheaters is presented in *Appendix B*. We identified five notable venues, located in Virginia because of their offerings and pricing that may be considered for WMCA.

Another venue outside of Virginia is the Warren Community Amphitheater located Warren, Ohio. It closely resembles what the WMCA could become in terms of events and appearance. The theater is centrally located in town and sits in a bowl that allows it to use the natural contours of the land to provide great sight lines and additional lawn seating. The theater is owned and maintained by the city of Warren. The park is also funded by local business sponsors such as radio stations and banks.



The Warren Amphitheater has had great success by booking cover bands that span a wide array of musical genres such as classic rock, 80's, hip-hop, and country music. The sheer variety attracts a wide swath of consumers. The Amphitheater is highly rated on Trip Advisor and Google, consumers repeatedly mention the high quality acts, outdoor setting, food and beverages offered on site, and perceived value for their money.

The WMCA could employ a similar cover band strategy. The intent is to provide affordable entertainment that will get consumers through the door and hopefully start a positive grassroots campaign that will make WMCA “the place” to catch a show in Winchester.

Competitor Analysis

The following venues are all located in or near Winchester and are considered the closest rivals or have substitute offerings similar to the WMCA. Each venue has strengths that must be overcome, as well as weaknesses the WMCA can capitalize on. A list of competitors is also presented in *Appendix B*.

Bright Box Theater - The Bright Box (BB) is centrally located in the heart of the revitalized Old Town Walking Mall. It is a privately owned entertainment venue. BB has quickly established itself as an adult entertainment hotspot on weekends due to an intimate setting, sheer variety of shows and food and drink offerings. BB actively engages their customer base in order to glean insight on what events they are interested in seeing. BB's intimate setting and ability to offer alcoholic beverages set it apart from the WMCA. The BB is limited by its small seating capacity and adult oriented lineup. Events hosted at the WMCA will appeal to a broader audience and can accommodate larger crowds. The WMCA can possibly incorporate a BB strength by offering a high quality food at events.

Museum of the Shenandoah Valley (MSV) - The MSV has had great success with their outdoor concert events. This seems to suggest there is a potential market for the WMCA. MSV is not an ideal setting for concerts due to a lack of proper seating and non-existent acoustics. The WMCA should be able to capitalize on these weaknesses while retaining the charm of experiencing a concert in an outdoor setting.

Barns of Rose Hill (Berryville, VA) - Barns of Rose Hill is an indoor theater that hosts art exhibits and live bands. They also cater to families by hosting children's activities that are usually free of charge. The space is also available to rent for special occasions such as weddings. The stated goal of the Barns is to make a cultural contribution to the community by offering varied events and charging a fair price. The Barns is also supported financially by donations and grants from the city. The Barns could siphon off customers from the WMCA due to similar events, a year round schedule and the ability to serve alcoholic beverages. The WMCA's unique setting and proximity to Old Town restaurants and shopping will be seen as an attractive close to home date-night or family outing for Berryville residents.

Shiley Acres – Shiley Acres (SA) is an outdoor concert venue located in Inwood, West Virginia. It reopened in 2012 after a twenty-one year hiatus. Prior to which, it enjoyed continuous operation from 1976 - 1993. Total capacity is estimated at 9,000 and all tickets are sold as standing room only as there is no fixed seating. Rock concerts are the main appeal, but there are also onsite camping facilities for larger events such as “Pickin in the Panhandle”, a bluegrass and barbecue competition. Ticket prices range from \$15-35 and the main events are usually hard rock concerts. Food and alcohol are sold on site.

Discussions with SA promoters mentioned the difficulty of making a profit on most shows due to the large and rapidly growing fees for booking well-known acts. Alcohol and food sales are supposed to supplement ticket sales revenue, but have been difficult because concert-goers tend to tailgate rather

than buy within the premises. The WMCA will offer fixed seating and a family-friendly atmosphere that will help distinguish it from Shiley Acres.

Porter's Five Forces Model

Porter five forces analysis is a framework to analyze the level of competition the WMCA will face and the potential attractiveness of entering the market:

The Threat of new Entrants (Low) - The WMCA will have to establish itself as a premier venue that offers products and services that nearby competitors will not be able to match. This offerings differentiation strategy will distinguish WMCA in the Shenandoah Valley. In addition, the significant cost to start up a similar venue may discourage other competitors from entering the market.

The Bargaining Power of Buyers (High) - The WMCA will be largely at the discretion of Winchester consumers which has significant impact on overall pricing. Nonexistent switching cost and the capability of buyers to force down ticket prices or demand higher quality programming will be a constant hurdle for the WMCA to overcome. The WMCA will have to rely on a differentiation strategy that will create value for consumers.

Threat of Substitute products and services (High) - Potential profits of the WMCA could be limited due to the high number of substitute venues and entertainment options in the Winchester area. The WMCA must not only compete against similar performing arts venues but also traditional entertainments such as movies and festivals. The abundance of substitute services will effectively cap ticket prices for WMCA events.

Bargaining Power of Suppliers (High) - Suppliers for the WMCA will be defined as bands, performing arts groups and vendors. The long term success of the WMCA will be highly dependent on the perceived quality of the offerings. These suppliers could potentially limit the profits of the WMCA by commanding higher performance or vendor fees. This would take away from operating income and make it difficult for WMCA to become economically sustainable. A limited supply of performers or a broad range of entertainment events may cause consumers to seek other venues.

Intensity of Rivalry (Medium) - The reconstruction of the WMCA and its potential as a new entertainment site should not create intense competition from existing venues. Local performing arts venues do not offer the same seating capacity of the WMCA and may not view it as direct competitor. The expectation is that the WMCA will be regarded as a grand addition to the burgeoning arts and entertainment scene in Winchester. Competitors could react by enacting price-cutting measures but it seems unlikely in a market with already slim operating margins.

Market Analysis Summary

A growing population with accompanying prosperity indicates a healthy market for the next few years. The significant market potential, above average consumer spending, and the noticeable gap between recreational supply and demand presents a great opportunity for WPR. The current market signals ripe conditions for renovation of WMCA.

The large seating capacity and unique setting of the amphitheater should enable the WMCA to become an immediately sought after entertainment venue in the Winchester area. In order to exploit these strengths the WMCA must also pursue a differentiation strategy that further separates it from the competition. The WMCA will be an ideal setting to hold concerts, but it could also highlight its flexibility

by hosting plays, weddings, food tastings, movie nights and other seasonal themed events. This variety of offerings will keep the WMCA in consumers' minds throughout the year.

The WMCA should initially seek bands with a strong local following in order to get people in the seats and expose them to the superior setting and acoustics of the WMCA. A strong marketing plan paired with positive word of mouth could eventually lead to nationally recognized headliners performing at the WMCA.

Winchester lacks a clearly defined place to hold large entertainment gatherings. This is most evident during the annual Apple Blossom Festival. Popular music events such as the 80's concert and Disco night are held offsite in a large tent because no other existing venue can handle the crowds. The MSV has experienced great success with their outdoor concert series despite less-than-ideal seating or acoustics. These crowds are a testament to an entertainment need in the community that the WMCA can clearly fill.

Physical Suitability

The site and setting study is an evaluation of the physical suitability of revitalizing and expanding the old McCormac Amphitheater. The physical suitability study will present any physical constraints that may hinder the construction of the amphitheater, zoning and utilities issues, traffic and parking constraints, and any environmental issues that may arise from this project.

Site Survey

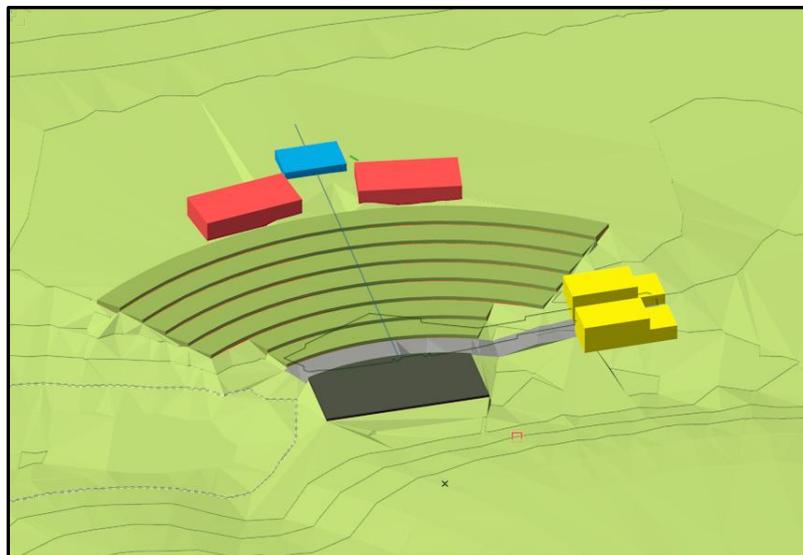
The site of the original amphitheater has been neglected and little maintenance has been done to keep the area clean. The original McCormac amphitheater sign has some damage and is in need of repair. The two paths leading to the amphitheater may need to be expanded to accommodate heavy foot traffic. In between the paths, there are drainage issues that will have to be considered during any design or construction phase. Designers should take into account the service pipe that drains into the culvert.

The actual site no longer has any seating and has been paved over. The amphitheater has two hills that form a western and eastern border. The west side hill is steep and is the preferable area for any possible seating arrangements. The east side hill is covered with trees and has electrical utility lines; it would be the backside of the stage and any electrical requirements could be accommodated. On the opposite side of the trails that lead up to the amphitheater, is what would be the access road to provide services for any events.

McCormac Amphitheater – Feasibility Study



Designs for the amphitheater have been considered from the art student designs from *Partnership Community Day* (spring of 2013). Of these designs, the only one possibly capable of accommodating 2,000-3,000 attendees was the design that has seating on the west hill. The other designs could not meet the required capacity and any attempt to expand the site by digging into the hillsides could increase the cost of construction severely.



Picture by Alec Sparks

An interview was conducted with a preconstruction engineer to assess the cost of construction to include both design and construction fees. An initial estimate, based off similar venues, put the cost of construction around \$5 million; however this could be more or less depending on construction requirements, design details, and other amenities for the McCormac Amphitheater. A conceptual budget proposal can be found in *Appendix C*. This proposal provides a base-bid for an amphitheater with minimal design and construction and is in line with the aforementioned cost estimate. It is not the actual figure for the WCMA as this will require a more, in-depth, survey and design.

Zoning & Utilities

There are no zoning or utilities issues that would hinder construction of the amphitheater. There was mention of a line leak in the area, but this has been corrected according to the Park Director. Again, there is a drain pipe underneath the paved area that must be considered during the design and construction phase. Because there is an electrical line in the area, power should not be an issue. The site already has restrooms located around the area and it should not be difficult to expand existing facilities to accommodate 2,000-3,000 attendees. Portable bathrooms could be another consideration.



Traffic & Parking

There should be no traffic issues for large events that would be held at the McCormac Amphitheater. Large events would use the same traffic patterns as the annual *Sunday at the Park* event during the Apple Blossom Festival (see *Appendix D*). With the completed renovations to Millwood Avenue, traffic flow should be even smoother.

Current parking capacity at the Park can accommodate around 530 vehicles. Additional parking can be accommodated through SU for another 335 vehicles; SU would reserve the right to charge for parking. Assuming three people per vehicle, the parking at the park will accommodate 1,590 people and SU could accommodate 1,005 people for a total of 2,595 attendees. Another 135 spaces would be needed to accommodate up to 3,000 attendees.

Parking Site:	Capacity:	People:
Main SU Garage BSC	225	675
SU parking lot BSC	110	330
Christensen Playground	45	135
Restrooms above playground	16	48
Across from restrooms	15	45
Roadside on Maple Drive	70	210
War Memorial	225	675
Baseball Fields	160	480
Total	866	2,598
Needed	134	402
Assumptions:		
3 people per car; SU will allow parking for events		

McCormac Amphitheater – Feasibility Study

If necessary, additional parking may be offered at Halpin-Harrison Hall. Winchester Park & Recreation could also consider using the land to the right of the McCormac Amphitheater sign for additional thirty parking spaces. In addition to parking, WPR could consider using the WinTran to service the events.

Environmental Issues

Rebuilding on this site would essentially be recycling the area for the overall use and benefit of the community. There would be no necessary environmental permits to renovate the area. Further expansion into the hillsides would not be an issue either. Trees located on the site are not native to the area and since there are no running streams, trees and brush can be removed without issue.



Other considerations for design and construction would be location of the sun, insects such as mosquitos, and noise. The location of the sun should be considered for the inclusion of shade cover. Insects could be a problem during warmer months, when most of the events will most likely be held. Adequate insect control measures should be considered. The noise from the events may carry over into the adjacent housing area, which could be an issue, especially for night events. City Ordinance does not place noise restrictions in the park and is at the discretion of the Park Director and her designee. However, it would be courteous to the nearby neighborhoods to conclude all events at a reasonable hour.

Physical Suitability Summary

There are no significant physical/environmental issues for renovating and operating the WMCA. As long as the amphitheater is financially sustainable, WPR should proceed with the project.



Financial Analysis

Budget

The total fund of \$2.065 Million is based on what the City of Winchester and Shenandoah University will be contributing to the overall project. A \$5 Million cost of construction is based off a quote from an engineering firm; their estimate is comparable to a similar project and includes construction for the seating, stage, bathrooms, concession stands, and architectural fees. Based on the industry analysis, \$1.5 Million is spent for every 1,000 seats which is in line with the overall estimate. The extra \$500,000 included, is for fixed stage lighting and state-of-the-art sound systems. The budget is summarized in the table below.

McCormac Amphitheater Budget				
Funds From Winchester	\$1,665,000.00	\$1,665,000.00	\$1,665,000.00	\$1,665,000.00
Funds From Shenandoah University	\$400,000.00	\$400,000.00	\$400,000.00	\$400,000.00
Total Funds for WMCA	\$2,065,000.00	\$2,065,000.00	\$2,065,000.00	\$2,065,000.00
Cost of Construction:	Engineering Quote*	1	2	3
Total Cost	\$5,000,000.00	\$4,500,000.00	\$3,750,000.00	\$3,000,000.00
Deficit	-\$2,935,000.00	-\$2,435,000.00	-\$1,685,000.00	-\$935,000.00
Capacity	3000	3000	2500	2000
*Includes fixed stage lighting and state-of-the-art sound equipment				

Financial Statements

An annual income statement was calculated and is presented in *Appendix E*. The income statement presented is for a capacity of 3,000 people, fixed cost of \$5 Million, a price of \$13 based off of the needs survey, and 11 events planned each year. Four scenarios are presented as A, B, C, and D and represent 50%, 67%, 83%, and %100 annual attendance respectively. Other assumptions are as follows:

- Life – 25 year average life based on General Obligation (GO) Bond’s maturity between 20 and 30 years.
- A 5% discount rate base on the market value of GO Bonds in Virginia.
- Salary – Based on the City of Winchester figures, the average salary per person at an event is \$25 per hour.
- Promoters – Usually charge 10-30% of sales per event; 10% was used for calculations.
- Advertising – According to the City of Winchester, they spent \$1,500 advertising for an event for 500 people. The assumption is that a venue of this size will require more advertising. At the same time, the promoter will be splitting costs therefore; \$1,500 per event is used.
- Sound system rental & equipment – Based on rental prices for all sound system and equipment, it would be cheaper to buy all the equipment needed. It will cost \$20,000 for all the equipment needed for the proposed venue. \$20,000 is the fixed cost for each scenario.

Analysis

The analysis includes the break-even, NPV, and BCR analysis for the above situation. It is presented in the following table. Left to right is scenario A-D.

Break-Even (Years)	Never	Never	133	57
Net Present Value (NPV)	(\$5,895,408.03)	(\$5,182,998.60)	(\$4,470,589.16)	(\$3,758,179.73)
Benefit Cost Ratio (BCR)	(0.18)	(0.04)	0.11	0.25

Based on the breakeven analysis above, at full attendance (scenario D), the project will take fifty-seven years to pay off the amphitheater’s debt. From a financial perspective, the added value is negative due to the long pay-back period and because the net income from operations is not enough to service the debt within the maturity date of the bonds. According to the BCR, the overall benefit is significantly smaller than the overall costs indicating an inefficient use of funds. WPR would be better off financing a project with a positive NPV and a BCR greater than one.

The above case was based off of the analysis of the needs survey. In order to fully account for any discrepancies with pricing or fixed costs, sensitivity analysis was completed and presented in *Appendix F*. The sensitivity analysis takes into account price ranges from \$8-20 and varying fixed cost for capacities between 2,000-3,000 seats. NPV is negative in all cases, indicating renovation should not be undertaken. A second analysis was done in to compare price ranges with number of annual events. These analyses produced positive NPVs, but presented combinations that are unrealistic in most situations.

Financial Analysis Summary

Given the current funding scenario presented by WPR and the analysis of the needs survey, renovation of the WMCA is not financially viable. Unless more funds are received by WPR, the cost of construction is over budget and the revenue received is not enough to cover the annual operating expenses. Under the current funding model, the WMCA is not economically viable. WPR will have difficulty paying back any municipal bonds utilized to finance the project. Alternative funding solutions, such as, the private sector, fund raising, bequeaths; substantial taxpayer subsidies or combinations of these options will be needed to help cover the cost of construction and make WMCA a reality.

Overall Summary

The purpose of this feasibility study was to evaluate if the City of Winchester is in need of an entertainment venue capable of holding 2,000 to 3,000 people. WPR is considering the potential renovation of the WMCA to meet this need.

Winchester is a community on the rise. Anecdotal evidence and quantifiable numbers support this statement. Population and housing demands are trending upward. Consumer spending is above the national average with a substantial portion of that spent on entertainment.

Winchester is centrally located and well positioned to attract event goers from surrounding communities and bordering states. Store fronts in Old town are no longer empty and recent downtown events have drawn record crowds. New national retailers are coming to town, such as the recently announced Dicks Sporting Goods. Tapestry analysis further indicates Winchester residents are seeking quality entertainment options.

In light of all these positives, and the potential community benefits, the Capstone group cannot recommend the renovation of the WMCA as currently budgeted. Without additional funding or subsidies to help absorb construction, the amphitheater will not be a self-sustaining event center.

Considerations and Recommendations

This feasibility study is only one-step in the process towards determining whether the WCMCA renovation should be undertaken. Additional effort is required to continue moving forward. The following recommendations are considerations to make the McCormac Amphitheater a reality:

1. Winchester Parks and Recreation should embark on a major Capital Campaign Drive to help fund the construction of the WMCA. Our research indicates the current budget allocation and financial projections will leave the WMCA with a substantial monetary burden not easily overcome. A Capital Campaign Drive can help alleviate the gap and start the WMCA on the path towards commercial and debt free success. It would also be a great way to build community support before renovation. Naming rights should also be viewed as a potential source of revenue.
2. Winchester Parks and Recreation should establish a permanent Marketing and Events Coordinator position focused exclusively on promoting and booking the Amphitheater. A low budget effort focused only on social media and word of mouth will not suffice. The WMCA will offer a unique outdoor setting in Winchester. A creative marketing campaign will be necessary to capitalize on this strength. This position will also be responsible for creating distinctive events and booking top talent to perform at the venue.
3. The Winchester Parks and Recreation Department should strongly consider allowing the sale of alcoholic beverages at the WMCA. These sales alone are not a financial panacea; however the high margin on adult beverage sales will assist in making the WMCA a self-sustaining event center. For example, the WMCA could capitalize on the exploding popularity of craft beers and wines by featuring Virginia beers and local vineyards. These types of adult beverages will entice customers who enjoy experiencing one of Virginia's own rich heritages. Regulating sales to adult themed events, such as rock concerts, could mitigate potential moral objections to adult beverages.
4. Winchester Parks and Recreation should form a marketing alliance with businesses in Old Town Winchester. This cooperative agreement will highlight the symbiotic monetary benefits of attracting new visitors to the downtown core. The revitalization of Old Town is a great achievement, a premier events center in close proximity will only further supplement this success. Also, Winchester Parks and Recreation could follow the blueprint of the recent successful renovation of the Taylor Hotel on the Old Town Mall. Extensive coordination between stakeholders and resourceful strategic planning was necessary to secure the required funds.

Economic soundness is a vital consideration; WPR should also consider the profound impact the WMCA could have on the community. Assuming the foregoing recommendations are implemented the McCormac Amphitheater could be a catalyst for further growth and prosperity.

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Appendix A – Needs Survey Data Summary

Needs Survey Summary								
Survey Respondents			Total Yes		Female	Registered Voters	Homeowner	Renters
Random	178	31%	120	67%	66%	52%	73%	15%
Outsource	400	69%	148	37%	70%	59%	82%	14%
Total	578	100%	268	46%	68%	56%	78%	15%
Age		<25y/o	25-34	35-44	45-54	55-64	65-75	75+
Random		0%	21%	10%	19%	25%	13%	12%
Outsource		0%	19%	34%	20%	16%	6%	3%
Total		0%	20%	24%	20%	21%	9%	7%
Household Income	<25K	25-49K	50-74K	75-99K	100-149K	150-199K	200-249K	250K+
Random	5%	26%	15%	14%	14%	6%	3%	3%
Outsource	5%	14%	18%	20%	22%	9%	4%	3%
Total	5%	19%	16%	18%	18%	7%	3%	3%

Based on the needs survey, 46% is the representative population willing and able attend events at the McCormac Amphitheater.

	Annual Attendance per Event			Willingness to Pay per Event			Willingness to pay is divided into four brackets. People not willing to pay anything were given "1", \$1-10 = "2", \$11-20 = "3", \$20+ = "4". The averages and modes for the need survey are summarized in the table to the left.
	Concert	Theater	Children Programs	Concert	Theater	Children Programs	
AVERAGE	6	4	4	2.6	2.5	1.8	
MODE	2	2	0	3	3	2	
AVERAGE	5	4	5	2.6	2.5	2.0	
MODE	4	1	0	2	2	2	
AVERAGE	5	4	4	2.6	2.5	1.9	
MODE	4	0	0	2	2	2	

Total Attendance	Attendance by Household Income				Total Attendance	Attendance by Respondent Age			
Random = 30 ; All = 11	Random		All		Random = 26 ; All = 11	Random		All	
Household Income	Coefficients	t Stat	Coefficients	t Stat	Respondent Age	Coefficients	t Stat	Coefficients	t Stat
<25K	3	0.31	10	2.28	<25 y/o	0	65535	0	65535
25-49K	8	1.53	9	4.22	25-34	26	4.51	20	8.90
50-74K	30	4.72	20	8.35	35-44	8	1.02	10	4.88
75-99K	4	0.66	7	3.15	45-54	7	1.20	9	4.26
100-149K	6	0.94	10	4.20	55-64	7	1.23	8	3.69
150-199K	3	0.28	6	1.66	65-74	6	0.89	8	2.40
200-249K	-2	-0.11	12	2.38	75+ y/o	4	0.51	4	1.15
250K+	1	0.10	9	1.63					
Average	30		11		Average	26		11	

The above tables represent attendance by household income and respondent age. Do note that there were no respondents under the age of 25 years. Averages are based on statistically significant coefficients. These are t stats > 1.65 for "Random" samples and t stats > 1.96 for "All" samples.

Appendix A - Demographics

2014 Data for Frederick & Winchester, Va		
Source: http://www.yesfrederickva.com/build-a-report/results/		

	2010	2014	2019
Population	104508	109,362	117435
Households	39471	41,429	44204
Families	27231	28,347	30279
Avg. Household Size	2.6	2.61	2.61
Owner Occupied Housing Units	27534	28,075	30082
Renter Occupied Housing Units	11937	13,174	14122
Median Age	38	38.7	38.9

Population by Age:		
0-4	6,716	6.10%
5-9	7,104	6.50%
10-14	7,341	6.70%
15-19	7,216	6.60%
20-24	7,201	6.60%
25-34	14,275	13.10%
35-44	13,882	12.70%
45-54	16,097	14.70%
55-64	13,707	12.50%
65-74	9,246	8.50%
75-84	4,712	4.30%
85+	1,865	1.70%

Households by Income:		
<\$15,000	3,223	7.80%
\$15,000 - 24,999	3,221	7.80%
\$25,000 - 34,999	4,096	9.90%
\$35,000 - 49,999	6,012	14.50%
\$50,000 - 74,999	7,921	19.10%
\$75,000 - 99,999	5,722	13.80%
\$100,000 - 149,999	7,419	17.90%
\$150,000 - 199,999	2,092	5.00%
\$200,000+	1,543	3.70%

Race & Ethnicity		
White	91,715	83.86%
Black	6,661	6.09%
Native American	353	0.32%
Asian	1,793	1.64%
Pacific Islander	44	0.04%
Some Other Race	5,896	5.39%
Two or More Races	2,900	2.65%

Median Income	\$60,398.00
Average Income	\$77,414.00
Per Capita Income	\$29,272.00

Appendix A – Household Description & Pricing per Event

Total Attendance Random = 18 ; All = 12 <i>Household Description</i>	Concert Attendance				Theater Attendance				Children Programming Attendance			
	Random		All		Random		All		Random		All	
	<i>Coefficients</i>	<i>t Stat</i>	<i>Coefficients</i>	<i>t Stat</i>	<i>Coefficients</i>	<i>t Stat</i>						
Single without Children	3	1.46	4	3.84	2	0.82	2	2.13	1	0.23	0	0.36
Single with Children	5	1.77	5	4.15	5	1.74	5	4.40	2	0.69	5	3.02
Single with Children, no longer at home	1	0.44	2	1.69	2	0.64	2	1.75	0	0.05	0	0.08
Couple without Children	2	1.05	3	3.74	2	0.73	3	3.06	1	0.28	1	0.63
Couple with Children	6	3.33	5	8.70	5	3.04	4	7.29	8	3.58	6	8.35
Couple with Children, no longer at home	4	2.10	4	5.04	2	1.36	3	3.76	1	0.30	2	1.51
Average	5		4		5		3		8		5	

The above tables represent the offering mixes in relation to the types of families that make up the City of Winchester. Coefficients are the number events willing and able to attend. Averages are based on statistically significant coefficients. These are t stats > 1.65 for "Random" samples and t stats > 1.96 for "All" samples.

Price per Event Random = \$9 ; All = \$13	Concerts				Theater				Children's Programming			
	Random		All		Random		All		Random		All	
	<i>Coefficients</i>	<i>t Stat</i>	<i>Coefficients</i>	<i>t Stat</i>	<i>Coefficients</i>	<i>t Stat</i>						
None	0	0.14	0	0.41	1	0.22	0	0.34	1	0.28	1	1.40
\$1-10	5	3.23	4	7.68	5	3.32	4	7.73	9	4.43	6	8.29
\$11-20	4	2.44	4	6.73	3	1.98	3	6.00	2	0.77	5	4.10
\$20+	4	1.75	5	5.71	4	1.50	4	3.90	0	65535	12	4.58
Weighted Average Price	\$ 14.15		\$ 15.36		\$ 8.68		\$ 15.28		\$ 5.03		\$ 9.46	

The price per event was based off of the weighted average price per event. Coefficients represent the number of events that respondents are willing to attend for each price range. Averages are based on statistically significant coefficients. These are t stats > 1.65 for "Random" samples and t stats > 1.96 for "All" samples. The exception is the yellow highlighted which was skewed by a single, wealthy respondent.

Appendix B – Industry Comparable and Local Competitors

Comparable Amphitheaters & Outdoor Venues

Name of facility	Location (City, State)	Distance (Miles)	Capacity	Ticket Price	Cost to Build	Present Day Cost	Year Built
Martinsburg Main Pavilion	Martinsburg, WV	24	160				2007
Orkney Spring Stage	Orkney Springs, VA	55	1400	\$20-\$50			1963
Reston Town Center	Reston, VA	55	2000+	\$9-\$10 or \$195-\$395			
Bull Run Regional Park	Centreville, VA	56	600	\$16 - \$19.50			1862
Wolf Trap National Park	Vienna, Virginia	57.5	7000	\$25-\$27			1966/1970
Vienna Town Green	Vienna, VA	61	500	\$0			2007
Mary Louise Jackson	Manassas, VA	66	700	\$3	\$300,000.00	\$331,668.86	2008
Jiffy Lube Live	Bristow, VA	66	25,000	\$175			1995
The Jean Smith Amphitheater	Triangle, VA	74.4	200	\$4			1996
Carter Barron Amphitheater	Washington, D.C.	80	4,000	\$15 - \$25	\$564,000.00	\$5,570,518.01	1950
Pocahontas State Park Amph.	Richmond, VA	150	350- 4000	\$12-\$70			1997
Clarksburg Amphitheater	Clarksburg, WV	170	2,000				
Classic Amphitheatre at Strawberry Hill	Richmond, VA	174	7,000				1991
Lake Matoaka Amphitheater	Williamsburg, VA	190	1,100	\$10-\$15	\$7,600,000.00	\$8,724,887.38	2007
nTelos Wireless Pavilion	Portsmouth, VA	226	6500	\$33-\$100			2001
Farm Bureau Live at Virginia Beach	Virginia Beach, VA	233	20,000				
Ritter Park Amphitheater	Huntington, WV	338	1,500	\$5-\$25	\$200,000.00	\$321,229.42	1913/1994
Warren Community Amphitheater	Warren, Oh	265	2500	\$5-7			

Local Entertainment Venues

Name of facility	Location	Distance From Winchester	Capacity	Events	Avg Ticket Price	Alcohol Permitted?
Bright Box	Winchester, VA	0.0 mi	300	Live Music & Stand-up Comedy Shows	\$15-\$25	Yes
The Barns of Rose Hill	Berryville, VA	10.9 mi	300	Live Music, Exhibits, & Film Screenings	\$10-\$12-\$20	Yes
Museum of the Shenandoah Valley	Winchester, VA	0.0 mi	2500+	Live Music	\$8-\$10	Yes
Piccadilly's	Winchester, VA	0.0 mi	75-200	Live Music, Karaoke, & Sports Entertainment	\$11-\$30	Yes
Blue Fox	Winchester, VA	0.0 mi	300	Live Music	\$20-25	Yes
Family Drive-In Theater	Stephen City, VA	5.0 mi	500+	Outdoor Movies	\$4 - \$8	No
Shenandoah Conservatory	Winchester, VA	0 mi	300 & 500	Theater & Orchestra	Free - \$15-\$50	No
Shiley Acres	Inwood, WV	17 mi	3000+	Outdoor Live Music	\$25-\$35	Yes

Appendix C – Conceptual Budget Proposal

The conceptual proposal was provided by Howard Shockey & Sons Inc. and is meant to provide a basic understanding of the costs that would be required to construct the WMCA. The base bid was provided without any specific design or specifications and should not be interpreted as absolute cost of construction. Only a thorough analysis and preparation of intended design will provide a more accurate cost. Actual costs will most likely be significantly larger.

See Attachment on following page.

Appendix D – Sunday in the Park Traffic Pattern

See Attachment on following page.

Appendix E – Financial Statement & Financial Analysis

Total Capacity	3,000	Fixed Cost	\$5,000,000.00
Price	\$ 13.00	NPER	25
# of events	11	Rate	5%

Scenario	A	B	C	D
Attendance	50%	67%	83%	100%

McCormac Amphitheater				
Income Statement				
	A	B	C	D
Total Revenue	\$214,500.00	\$286,000.00	\$357,500.00	\$429,000.00
Expenses				
Advertising	\$16,500.00	\$16,500.00	\$16,500.00	\$16,500.00
Maintenance	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
Equipment (Backline)	\$8,800.00	\$8,800.00	\$8,800.00	\$8,800.00
Entertainer	\$110,000.00	\$110,000.00	\$110,000.00	\$110,000.00
Labor/Salary	\$110,000.00	\$123,750.00	\$137,500.00	\$151,250.00
Power and Water & Sewer	\$1,281.40	\$1,334.20	\$1,387.00	\$1,439.80
Promoter	\$21,450.00	\$28,600.00	\$35,750.00	\$42,900.00
Total Expenses	\$278,031.40	\$298,984.20	\$319,937.00	\$340,889.80
Net Gain/(Loss) & Annual Contribution Margin	(\$63,531.40)	(\$12,984.20)	\$37,563.00	\$88,110.20

Appendix F – Sensitivity Analysis Tables

Sensitivity analysis representing break-even and NPV for different combinations of ticket pricing and fixed costs for each fixed capacity scenario. Fixed-cost ranges from \$3.0 to \$4.5 Million for 2,000-3,000 fixed seats. Scenario A, B, C, and D represent 50%, 67%, 83%, and 100% attendance respectively.

Scenario A Break-Even				Scenario A NPV			
Ticket Price	Fixed Capacity			Ticket Price	Fixed Capacity		
	2,000	2,500	3,000		2,000	2,500	3,000
\$ 8.00	Never	Never	Never	\$ 8.00	-\$5,781,138.35	-\$6,252,450.33	-\$6,723,762.31
\$ 10.00	Never	Never	Never	\$ 10.00	-\$5,502,078.25	-\$5,903,625.20	-\$6,305,172.15
\$ 12.00	Never	Never	Never	\$ 12.00	-\$5,223,018.14	-\$5,554,800.07	-\$5,886,582.00
\$ 14.00	Never	Never	Never	\$ 14.00	-\$4,943,958.04	-\$5,205,974.94	-\$5,467,991.84
\$ 16.00	Never	Never	Never	\$ 16.00	-\$4,664,897.94	-\$4,857,149.82	-\$5,049,401.69
\$ 18.00	Never	Never	Never	\$ 18.00	-\$4,385,837.84	-\$4,508,324.69	-\$4,630,811.54
\$ 20.00	Never	Never	220	\$ 20.00	-\$4,106,777.74	-\$4,159,499.56	-\$4,212,221.38
Scenario B Break-Even				Scenario B NPV			
Ticket Price	Fixed Capacity			Ticket Price	Fixed Capacity		
	2,000	2,500	3,000		2,000	2,500	3,000
\$ 8.00	Never	Never	Never	\$ 8.00	-\$5,603,346.06	-\$5,981,762.03	-\$6,360,178.00
\$ 10.00	Never	Never	Never	\$ 10.00	-\$5,231,265.92	-\$5,516,661.86	-\$5,802,057.79
\$ 12.00	Never	Never	Never	\$ 12.00	-\$4,859,185.78	-\$5,051,561.69	-\$5,243,937.59
\$ 14.00	Never	Never	Never	\$ 14.00	-\$4,487,105.65	-\$4,586,461.52	-\$4,685,817.38
\$ 16.00	Never	Never	170	\$ 16.00	-\$4,115,025.51	-\$4,121,361.35	-\$4,127,697.18
\$ 18.00	Never	564	68	\$ 18.00	-\$3,742,945.38	-\$3,656,261.17	-\$3,569,576.97
\$ 20.00	Never	95	43	\$ 20.00	-\$3,370,865.24	-\$3,191,161.00	-\$3,011,456.77
Scenario C Break-Even				Scenario C NPV			
Ticket Price	Fixed Capacity			Ticket Price	Fixed Capacity		
	2,000	2,500	3,000		2,000	2,500	3,000
\$ 8.00	Never	Never	Never	\$ 8.00	-\$5,425,553.77	-\$5,711,073.73	-\$5,996,593.69
\$ 10.00	Never	Never	Never	\$ 10.00	-\$4,960,453.60	-\$5,129,698.52	-\$5,298,943.44
\$ 12.00	Never	Never	Never	\$ 12.00	-\$4,495,353.42	-\$4,548,323.30	-\$4,601,293.18
\$ 14.00	Never	Never	106	\$ 14.00	-\$4,030,253.25	-\$3,966,948.09	-\$3,903,642.92
\$ 16.00	Never	145	49	\$ 16.00	-\$3,565,153.08	-\$3,385,572.88	-\$3,205,992.67
\$ 18.00	Never	56	32	\$ 18.00	-\$3,100,052.91	-\$2,804,197.66	-\$2,508,342.41
\$ 20.00	116	35	24	\$ 20.00	-\$2,634,952.74	-\$2,222,822.45	-\$1,810,692.16
Scenario D Break-Even				Scenario D NPV			
Ticket Price	Fixed Capacity			Ticket Price	Fixed Capacity		
	2,000	2,500	3,000		2,000	2,500	3,000
\$ 8.00	Never	Never	Never	\$ 8.00	-\$5,247,761.47	-\$5,440,385.43	-\$5,633,009.38
\$ 10.00	Never	Never	Never	\$ 10.00	-\$4,689,641.27	-\$4,742,735.17	-\$4,795,829.08
\$ 12.00	Never	Never	117	\$ 12.00	-\$4,131,521.06	-\$4,045,084.92	-\$3,958,648.77
\$ 14.00	Never	131	46	\$ 14.00	-\$3,573,400.86	-\$3,347,434.66	-\$3,121,468.46
\$ 16.00	Never	48	29	\$ 16.00	-\$3,015,280.65	-\$2,649,784.41	-\$2,284,288.16
\$ 18.00	78	29	21	\$ 18.00	-\$2,457,160.45	-\$1,952,134.15	-\$1,447,107.85
\$ 20.00	38	21	16	\$ 20.00	-\$1,899,040.25	-\$1,254,483.89	-\$609,927.54

Appendix F – Sensitivity Analysis

Below is a sensitivity analysis representing the different combinations of ticket prices and number of annual events for each scenario. The assumption is a \$5 Million fixed cost with a fixed capacity of 3,000 seats.

Scenario A Break-Even						Scenario A NPV					
Ticket Price	Number of Annual Events					Ticket Price	Number of Annual Events				
	10	15	20	25	30		10	15	20	25	30
\$ 8.00	Never	Never	Never	Never	Never	\$ 8.00	-\$7,060,027.31	-\$7,878,631.80	-\$8,697,222.20	-\$9,515,826.68	-\$10,334,431.17
\$ 10.00	Never	Never	Never	Never	Never	\$ 10.00	-\$6,679,490.81	-\$7,307,827.05	-\$7,936,149.19	-\$8,564,485.43	-\$9,192,821.66
\$ 12.00	Never	Never	Never	Never	Never	\$ 12.00	-\$6,298,954.31	-\$6,737,022.29	-\$7,175,076.18	-\$7,613,144.17	-\$8,051,212.15
\$ 14.00	Never	Never	Never	Never	Never	\$ 14.00	-\$5,918,417.80	-\$6,166,217.54	-\$6,414,003.18	-\$6,661,802.91	-\$6,909,602.64
\$ 16.00	Never	Never	Never	Never	Never	\$ 16.00	-\$5,537,881.30	-\$5,595,412.78	-\$5,652,930.17	-\$5,710,461.65	-\$5,767,993.13
\$ 18.00	Never	Never	652	293	189	\$ 18.00	-\$5,157,344.80	-\$5,024,608.03	-\$4,891,857.16	-\$4,759,120.39	-\$4,626,383.62
\$ 20.00	316	129	81	59	47	\$ 20.00	-\$4,776,808.29	-\$4,453,803.27	-\$4,130,784.16	-\$3,807,779.14	-\$3,484,774.11
Scenario B Break-Even						Scenario B NPV					
Ticket Price	Number of Annual Events					Ticket Price	Number of Annual Events				
	10	15	20	25	30		10	15	20	25	30
\$ 8.00	Never	Never	Never	Never	Never	\$ 8.00	-\$6,729,496.13	-\$7,382,835.02	-\$8,036,159.82	-\$8,689,498.71	-\$9,342,837.61
\$ 10.00	Never	Never	Never	Never	Never	\$ 10.00	-\$6,222,114.12	-\$6,621,762.01	-\$7,021,395.81	-\$7,421,043.70	-\$7,820,691.60
\$ 12.00	Never	Never	Never	Never	Never	\$ 12.00	-\$5,714,732.12	-\$5,860,689.01	-\$6,006,631.80	-\$6,152,588.69	-\$6,298,545.58
\$ 14.00	Never	Never	8,666	608	315	\$ 14.00	-\$5,207,350.11	-\$5,099,616.00	-\$4,991,867.79	-\$4,884,133.68	-\$4,776,399.57
\$ 16.00	235	107	69	51	40	\$ 16.00	-\$4,699,968.11	-\$4,338,542.99	-\$3,977,103.79	-\$3,615,678.67	-\$3,254,253.56
\$ 18.00	87	50	35	27	22	\$ 18.00	-\$4,192,586.10	-\$3,577,469.99	-\$2,962,339.78	-\$2,347,223.66	-\$1,732,107.54
\$ 20.00	54	32	23	18	15	\$ 20.00	-\$3,685,204.10	-\$2,816,396.98	-\$1,947,575.77	-\$1,078,768.65	-\$209,961.53
Scenario C Break-Even						Scenario C NPV					
Ticket Price	Number of Annual Events					Ticket Price	Number of Annual Events				
	10	15	20	25	30		10	15	20	25	30
\$ 8.00	Never	Never	Never	Never	Never	\$ 8.00	-\$6,398,964.94	-\$6,887,038.24	-\$7,375,097.44	-\$7,863,170.74	-\$8,351,244.04
\$ 10.00	Never	Never	Never	Never	Never	\$ 10.00	-\$5,764,737.43	-\$5,935,696.98	-\$6,106,642.43	-\$6,277,601.98	-\$6,448,561.53
\$ 12.00	Never	4,505	436	229	155	\$ 12.00	-\$5,130,509.93	-\$4,984,355.72	-\$4,838,187.42	-\$4,692,033.22	-\$4,545,879.01
\$ 14.00	140	73	49	37	30	\$ 14.00	-\$4,496,282.42	-\$4,033,014.46	-\$3,569,732.41	-\$3,106,464.45	-\$2,643,196.50
\$ 16.00	62	37	26	20	17	\$ 16.00	-\$3,862,054.92	-\$3,081,673.21	-\$2,301,277.40	-\$1,520,895.69	-\$740,513.98
\$ 18.00	40	25	18	14	11	\$ 18.00	-\$3,227,827.41	-\$2,130,331.95	-\$1,032,822.39	\$64,673.07	\$1,162,168.54
\$ 20.00	29	18	13	11	9	\$ 20.00	-\$2,593,599.90	-\$1,178,990.69	\$235,632.62	\$1,650,241.84	\$3,064,851.05
Scenario D Break-Even						Scenario D NPV					
Ticket Price	Number of Annual Events					Ticket Price	Number of Annual Events				
	10	15	20	25	30		10	15	20	25	30
\$ 8.00	Never	Never	Never	Never	Never	\$ 8.00	-\$6,068,433.75	-\$6,391,241.46	-\$6,714,035.07	-\$7,036,842.77	-\$7,359,650.48
\$ 10.00	Never	Never	Never	Never	Never	\$ 10.00	-\$5,307,360.74	-\$5,249,631.95	-\$5,191,889.06	-\$5,134,160.26	-\$5,076,431.46
\$ 12.00	155	79	53	40	32	\$ 12.00	-\$4,546,287.74	-\$4,108,022.44	-\$3,669,743.04	-\$3,231,477.74	-\$2,793,212.44
\$ 14.00	58	35	25	19	16	\$ 14.00	-\$3,785,214.73	-\$2,966,412.93	-\$2,147,597.03	-\$1,328,795.23	-\$509,993.42
\$ 16.00	36	22	16	13	10	\$ 16.00	-\$3,024,141.72	-\$1,824,803.42	-\$625,451.02	\$573,887.29	\$1,773,225.60
\$ 18.00	26	16	12	9	8	\$ 18.00	-\$2,263,068.72	-\$683,193.91	\$896,695.00	\$2,476,569.81	\$4,056,444.62
\$ 20.00	20	13	9	8	6	\$ 20.00	-\$1,501,995.71	\$458,415.60	\$2,418,841.01	\$4,379,252.32	\$6,339,663.64

HOWARD SHOCKEY & SONS INC.

EST. NO.
JOB NO.

PROJECT: McCormac Amphitheatre
LOCATION: Winchester, VA

SPEC DIV. SEC.	CODE	SUB DIVISION OF WORK	SUB/SUPP	BASE BID
	010000	General Conditions	HSS	350,000
	022000	Site Grading & Excavation	Perry Engineering	973,735
	024000	Stamped Concrete	Perry Engineering	330,946
	030000	Stage Concrete and Canopy Structure	HSS	900,000
	043000	Brick Pavers	Perry Engineering	361,454
	040000	Stone Finishes	Perry Engineering	159,000
	900000	Contingency	10%	292,000
		SUB-TOTAL		3,367,135
		OVERHEAD %	5	168,357
		FEE %		
6/2006	017500	CONTRACTOR LICENSE & BUSINESS TAX	0.1602564103%	5,666
	018000	BUILDERS RISK INSURANCE		
6/2006	018500	GENERAL LIABILITY	0.0685469546%	2,427
		SUB-TOTAL		3,543,585
1/2006	910000	DESIGN-BUILD BOND		32,088
		Additional Bonding (Projects 24 to 36 Months)		0
		Additional Bonding (Projects longer than 36 Months)		0
		TOTAL		3,575,673
		Subcontractor Bonding		
		Adjustment		327
		---- CONCEPTUAL BUDGET PROPOSAL ----		3,576,000

This budget was developed without any design input and can be greatly affected by design input criteria.

HOWARD SHOCKEY & SONS, INC.

ESTABLISHED 1896

P. O. BOX 2530, WINCHESTER, VIRGINIA 22604-1730
(540) 667-7700 FAX (540) 665-3201

November 21, 2014

Timothy Hatcher
Shenandoah University MBA

RE: McCormac Amphitheatre Conceptual Budget, Winchester, VA

Mr. Hatcher,

Howard Shockey and Sons, Inc. is pleased to provide conceptual budget pricing for the McCormac Amphitheatre located in Jim Barnett Park

BASE BID

Three million five hundred seventy six thousand dollars\$3,576,000

ALTERNATE No. 1 – Parking Lot (30 cars)

One hundred eighty thousand six hundred seventy seven dollars\$180,677

ALTERNATE No. 2 – Restrooms (1 men’s, 1 women’s, 1 family)

Two hundred fifty thousand dollars\$250,000

ALTERNATE No. 3 – Stage Rooms (2 each)

One hundred fifty thousand dollars\$150,000

ALTERNATE No. 4 – Design Fee (10% of construction cost)

Three hundred fifty seven thousand six hundred dollars\$357,600

Please see Attachment “A” for General Estimate Summary Sheet and Attachment “B” for Clarifications.

If you have any questions regarding this proposal, feel free to contact Emily Roy at 540-723-4147.

Sincerely,

Emily Roy
Project Estimator



McCormac Amphitheatre

Winchester, VA
November 21, 2014

CLARIFICATIONS

The following clarifications are based on conceptual sketches and notes only provided by Shenandoah University Timothy Hatcher. No design drawings or specifications were provided. Proposal is based without civil, theatrical, or geotechnical design information which may significantly impact pricing.

Division 1 – General Conditions

Inclusions:

1. General condition pricing is based on a 10 month project schedule with most or all grading done during favorable weather (March through December)

Division 2 – Site Construction

Inclusions:

1. Site pricing includes grading (17,958 CY), erosion control, returning topsoil (1,500 CY) and permanent seeding (9,000 SY)
2. Site utilities include an 8" fire line (800 LF), fire hydrant assemblies (2 EA), 18" domestic water line (100 LF), water meter assembly, 2" force main (800 LF), pump station, roof drainage, storm line (600 LF) and storm structures (5 EA)
3. Under drainage storm piping included at base of each seating row (2,140 LF)
4. Stamped concrete (23,257 SF) is included around perimeter walkways and includes concrete steps (257 EA)
5. Pricing includes a percentage of rock blasting with minor amount of hoe ramming

Exclusions:

1. Pricing does not include removal of unsuitable materials and replacement with structural fill

Division 3 - Concrete

Inclusions:

1. Stage concrete pricing is based on footings, foundation walls, fill within walls, raised slab on grade stage (120' x 60') 4 feet above adjacent grade with columns, beams, bar joist and sloped metal roof panels

Division 4 - Masonry

Inclusions:

1. Brick paver pricing is included at tops of each seating row (15,789 SF)
2. Stone pricing based on front faces of seating rows and outside two sides based on retaining wall design

Division 16 - Electrical

Exclusions:

1. Pricing does not include any electrical equipment, theatrical stage lighting or rigging, audio/visual equipment or infrastructure



Shenandoah Apple Blossom Festival Weekend in the Park