**Forward**

In the fall of 2004 a team of consultants lead by the architectural firm of Ziger/Snead LLP was contracted by Howard County to provide advice on the future of Merriweather Post. As part of the project entitled "Feasibility Study Associated with the Possible Purchase and Renovation of Merriweather Post Pavilion," the team was charged with analysis of the physical structure, its operation, the performing arts industry in which it operated, and the need for arts and entertainment facilities in Howard County. Based on the results of the study, a presentation which included an Industry Overview, a Review of Operations, a Physical Review, and a Needs Assessment was made to the Citizen Advisory Panel on Merriweather Post Pavilion in early 2005. Subject to the results of that work, a follow-up study involving development of physical and operating plans for Merriweather had initially been planned but was not executed. Based on the presentation of the Ziger/Snead findings the Citizens Group compiled its own report of recommendations for further public deliberation.

In early 2014 Ziger/Snead was again contracted by Howard County to update the Physical Review and Needs Assessment portions of their 2004 Feasibility Study. As before, a physical review of the structures and their condition, technical accommodations, the site, parking, access, and other conditions influencing the physical operation of the Pavilion were to be addressed. The focus was intended to remain on the larger scale physical needs affecting Merriweather's long term health as opposed to those of maintenance and upkeep. Design proposals expanding the present facility to another scale or description were not a part of the requested study. The Ziger/Snead update examination process involved a number of visits to the site to observe existing conditions as well as interviews of the operator I.M.P., a representative of the Inner Arbor Trust, Civil engineering consultants Gutschick, Little, and Weber, and representatives of Howard County Building, Emergency, Police, and Health Safety Departments.

The present update document maintains a similar format and organization to the 2004 Physical Review report for convenient reference between the two. It retains as well some streamlined descriptions of the pre-existing site and facilities addressed in the earlier document, and it includes brief comparisons of the present conditions with the former to permit it to stand alone. But the reader is encouraged to review the original 2004 report to assure a more complete historical perspective. As before, detailed cost investigations were beyond the scope of this expedited update study; the updated and expanded budget allowances identified are for the purposes of a general scope of magnitude only.
Introduction

Since Ziger/Snead completed its 2004 report, a lively public discussion on the appropriate future of the Merriweather venue has continued. Simultaneously, Howard County Planning Board has continued to update the 2000 Howard County General Plan, particularly with respect to policy affecting Downtown Columbia. Following solicitation of community input through public hearings and commissioning of focus groups to identify key issues and provide advice, the Howard County Department of Planning and Zoning released in 2007 “Downtown Columbia: A Community Vision” articulating planning guidelines for the redevelopment of Downtown Columbia. In 2008 General Growth Properties submitted its Downtown Columbia redevelopment proposal package as provided for in the Community Vision document. This was subsequently approved, and the “Downtown Columbia Plan, a General Plan Amendment” was adopted in 2010. The Amendment implemented new zoning regulations, formalized Downtown Columbia Design Guidelines, and identified a list of Downtown Community Enhancement, Programs and Public Amenities (CEPPAS) to be undertaken by General Growth Properties and other property owners in prescribed timetable and sequence.

The General Plan Amendment recognized Merriweather-Symphony Woods as Columbia’s Central Park and, together with the iconic Merriweather Post Pavilion, crucial to the future of Downtown Columbia. Significant improvements to the venue were recommended as informed by the 2005 report of the Citizen Advisory Panel on Merriweather Post Pavilion. Further, the encompassing woodland was re-envisioned as a “new kind of cultural park where the landscape becomes a setting for the arts, cultural, and civic uses.” The park was to be bounded by the mixed-use Symphony Overlook Neighborhood to the north and Crescent Neighborhood to the south and west. Neighborhood Specific Design Guidelines pertaining to the Merriweather-Symphony Woods Neighborhood were enacted in 2012.

In early 2013 the Inner Arbor Trust, a corporation commissioned by Howard County to develop and fund cultural improvements in the new Symphony Woods Park, began work on design concepts to bring more activity to the property. Their development masterplan, presented in December of 2013 includes a new amphitheater, children's maze, art gallery, and dining pavilion, in addition to new paths, boardwalks, picnic areas, and other creative features. The IAT’s longer term concept development proposals foresee new facilities within the present Merriweather Pavilion property line. These include venues to extend the seasonal use of the property to year round, potentially comprising a pair of black box theaters, a ballroom-type venue, a restaurant, an art gallery, and a new public Merriweather entrance. Public funding has been pledged by Howard County to fund initial efforts. The Trust has expressed hope to begin work on the new amphitheater in the fall of 2014.

With the active support of the community and with significant development now to be realized around it, the Merriweather Post seems to have a bright place in the future. But serious issues still require resolution in order for Merriweather to thrive. Most important of these is the replacement of public parking as the fields to the south historically dedicated to this purpose are transformed into the mixed-use Crescent Neighborhood. And a host of other issues involve concerns with deterioration of a forty-five year old facility that has experienced year-round exposure to the elements and an apparent lack, to date, of commitment to longer term improvements.
Physical Review

I. Recent Developments

At its opening in 1967, the Merriweather Post Pavilion was intended to serve as an outdoor venue for a mix of performance types but the heart of the program was to be classical music; the amphitheater was conceived as the summer home for the National Symphony. But although the orchestra has long departed and the original acoustical shell and house acoustical treatments have all been removed, the venue now nearing its 50th year, is going strong. With a thriving performance industry and an active and growing seasonal event schedule owing largely to the efforts and creative business initiatives of IMP Productions, Inc., the operator of the venue since 2003, the future success of the operation seems likely. Since 2003 the yearly total of events has increased from 26 to 37 according to the operator. And average event attendance has increased from 5,000 to 7,000 with festival events now hosting between 30,000 and 40,000 on occasion. In 2013, Rolling Stone Magazine ranked the Merriweather Post Pavilion #4 on their list of Best Amphitheaters in America.

Between the months of April and October the Pavilion now hosts a combination of music concerts, school graduations, fund raisers, and a variety of other civic events. Concerts range across numerous musical styles from rock to jazz, country, and pop. The larger scale festival events now include the Capital Jazz Fest, the Vans Warped Tour, the M3 Rock Festival, the MoShows events, and the Columbia Association’s own Wine in the Woods Festival. Such events typically expand off the Merriweather property occupying Symphony Woods and the west parking fields. In this lively performance business world, touring artists are providing ever more elaborate stage performances as well as arriving with ever more expansive, more technical requirements of the venues. More lighting, more sound, more video, and more props. On-stage pyrotechnics have become a common entertainment feature, for example. Artist contracts now routinely incorporate technical riders requiring more generous support spaces accommodating sound/lighting/video, band and crew dressing, catering, exercise equipment, massage services, meet and greet with family and friends, “Village Green” mingling of for audience and non-profit organizations before and after performances, etc. Environmental Green riders included by some artists call for recycling programs, carpooling programs, local and organic catering foods, biodiesel vehicle fuels, reusable dishes and flatware, etc., all to be furnished by the venue operator.

Meanwhile, the open air Merriweather Pavilion, always known for its minimalist configuration, a single lowly-sloped slab roof spanning over both audience and performers, without fly tower, remains largely unchanged in its character, as does the broad lawn accommodating additional audience seating beyond. The minimal accommodations within the original structure for a control room, two small crew restrooms, two small dressing rooms, a few offices, and limited space for laundry and storage remain substantially in their original configuration as well. The 1970 era concrete risers and canvas awnings located to each side of the original covered seating area remain in place, still providing seating on folding chairs.

Other support facilities including administration, ticket sales, public restrooms, concessions, first aid, dressing and catering, V.I.P accommodations, storage, etc. continue to be located in small scale, independent outbuildings ringing the amphitheater. For the most part, the grading around
the venue has not been modified since 2003, and paving also remains principally applied to the original 1967 surface, still enveloping the aging trees on the site.

Now established as operator for nearly ten years, IMP has been kept busy with upkeep of the aging facility as well as solicitation of touring artists and meeting of their requirements. The operator has managed to complete a number of construction projects during their more recent tenure as described below and within the next section of this report.

A new permanent structure, Stand Two, housing both food concession and public restrooms has been constructed on the west side of the site within the past year. This facility significantly upgrades conditions for food preparation and restroom accommodations but only for a portion of the site. It may contain the only public restroom on the property with hot water. The roof structure for Stand Two was reportedly designed to accommodate a green roof in the future. The construction also included a buried infiltration utility for the first compliant stormwater management on the property. The site in front of the food service windows has been leveled providing the first large, paved space suitable for use as a “Village Green”.

The dilapidated West Box Office has been demolished and replaced with a new structure in its place. The East, Main Box Office has been physically raised on a curb and its roof structure, having collapsed from snow loading, has been rebuilt.

Wood steps and a wood-frame viewing deck have been added at the center rear of the Lawn seating area to improve access to and enliven that space. Color LED lighting mounted on trees along the rear perimeter on the lawn and tied to performance lighting systems also add interest.

The covered Loading area has been fitted with a 24-panel, roof-mounted photovoltaic solar array which is used to heat the Dressing modular and back feed the utility grid in summer months. A small public dispensing facility for bio-diesel fuel, reputed to be the only such amenity in Columbia, is now located outside the west performer entrance gate.

Miscellaneous other changes have been made to improve both the performer and audience experience. These include creation of an artist relaxation retreat in the forest behind the venue, expansion of the V.I.P. decks and restrooms, creation of a “GA Deck” at the front of the pavilion seating area for standing audience, upgrade of the video, sound, and lighting systems for the lawn seating areas, and installation of a monumental site sculptures and smaller scaled art. Most projects are funded from surplus rent payments to the owner of the property.

With a goal of exploiting Merriweather’s recent new status as a top 4 amphitheater and in the context of major development now proposed for Symphony Woods and the Crescent, I.M.P has offered initial concepts for a fully renovated and much-expanded Merriweather venue. These plans on a grand scaler include a significantly elevated roof over the entire Pavilion to improve sightlines from the Lawn and accommodate installation of new V.I.P box seating and green roof lawn seating at the level of permanent roofs over the side Loges. A reconfigured stagehouse and two story rear addition of approximately 40,000 gross square feet would accommodate a more generous performance stage, dressing, catering, V.I. P entertainment, production suites, operations and concessionaires offices, multi-purpose spaces, and a 12,000 square foot warehouse. Consolidated restrooms and food concession facilities similar to new Stand Two would replace the existing ones. Numerous green features such as solar farming and rainwater storage would be included in the plans which have been budgeted to cost up to $40 million.
II. Description of the Present Site and Structures  
Refer also Photographs and Drawings in Appendix A

A. The Site

The expanse of land surrounding the Merriweather Post Pavilion to the south of the Columbia Mall, remains largely undeveloped. Roughly bounded by Little Patuxent Parkway to the north, Broken Land Parkway to the west and south, and South Entrance Road/Symphony Woods Road to the east, this gently rolling woodland bisected by the Symphony Stream valley is only broken by the open Merriweather parking fields to the south. Ownership of the lands remains divided between the Merriweather Post Business Trust, the Columbia Association, and Howard Development and Research.

The Merriweather Post Business Trust parcel remains 10.8 acres within a perimeter still closely defined by the amphitheatre and its various outbuildings. Contained within the site are facilities for performance and seating, catering, concessions, toilet rooms, administration, box office, and miscellaneous storage. Performer parking remains also located on the Merriweather Post property, but public ADA parking, Administration parking, and concessionaires' office trailers are on Columbia Association land. With the exception of cars bearing a handicapped symbol, there is no public vehicular traffic currently permitted within the Pavilion grounds, and public arrival/drop-off remains a largely informal experience.

Completely encompassing the Merriweather property are the Symphony Woods, owned by the Columbia Association and totaling 36.2 acres. This community-owned parcel includes the stream and adjacent ponds (wetland and 100-year flood plain area) in addition to the picnic grounds adjacent to Little Patuxent Parkway. Also situated within or passing through this surrounding property are all entrance roads and paths, all supporting utilities including electrical power, telephone, water, sanitary, and storm water, and the aforementioned support parking. There remain no gas or cable TV service to the Pavilion nor are there currently any stormwater management utilities. Nearby Lake Kittamaqundi, is still listed as the stormwater runoff management utility.

The 65.7 acre parcel immediately to the south and west of the Merriweather/Columbia properties, and owned by Howard Research and Development still includes several large open fields which continue to serve as parking for up to 5,500 audience vehicles as well as "tailgate" recreation areas before the summer events at the Merriweather. The fields occasionally serve as actual performance/seating areas for Merriweather festivals such as the Capital Jazz Fest. Overflow storage for IMP operation in the form of cargo containers also occupies a portion of the land. These parking fields are at a distance of 500 feet, just sufficiently removed from the amphitheatre to maintain the Pavilion’s woodland ambiance yet close enough to limit walking time to a few minutes.

Achieving sufficient parking for the larger festivals becomes a coordinated effort. Owners of local garages, other flat lots across Little Patuxent Parkway, the community college, the hospital, and other office properties across Broken Land Parkway are all solicited to provide additional parking space.
B. The Pavilion

1. General:

The original trapezoidal shaped pavilion “shed” remains open on three sides beyond the stagehouse and has a simple long span roof structure comprised of deep steel trusses supported on eight columns. The main trusses, spanning over 140 feet, are fanned to extend the plan of the stage out over the fixed audience seating. Flanking the original shed structure on each side are waterproof seasonal tents protecting the Loge sections from the elements. These are supported on steel cables from fixed masts and removed at the end of each season and placed into storage. Wrapping the side and rear portions of the stage are the lower, wood-framed original “saddle bag” spaces housing the control room, dressing rooms, toilets and offices.

New antenna systems for enhanced cell phone service by both AT&T and Verizon are presently being installed on and under the Pavilion roof. Ground-based equipment is being installed in the service areas behind the stage.

2. The House

Reserved seating areas, accommodating 4,650 covered seats and an open audience standing area at the front for an additional 1,000 are situated on a concrete slab-on-grade in stepped risers. The roughly 3,150 fixed seats in the original shed are riser-mounted type with cast iron frames; with the exception of the odd replacement and several entire rows up front, these are the original furniture. The approximately 1,500 Loge seats remain heavy-duty folding chairs. The step sections through the original seating concrete risers and the newer Loge risers still have slightly different profiles and the concrete cheek wall which formed an edge to the original seating, remains in place. This still forms a continuous barrier to circulation between the Center and Loge seating. Box seating platforms are located at center and left front Loge. Dedicated ADA seating for three or four is located in the middle right Loge as well as additional individuals at the top and bottom perimeters of the seating risers. Primary lighting, sound, and camera control locations remain in right center and right rear. Additional control locations remain above center orchestra and above the rear of the center seating area on both the left and right sides. The control above the center seating is still accessed from a hatch in the roof and the remaining two are accessed via ladder from the ground.

New LED House lighting was more recently installed by the Operator as have been a series of large diameter ceiling fans.

Unreserved Lawn Seating is still without cover and is natural grass with an irrigation system.
3. The Stagehouse

There appear to have been no substantive modifications to the performance stage since 2004.

The open working area of the stage is trapezoidal in plan and roughly 60 feet deep by 56 feet wide at the rear increasing to 87 feet wide at the proscenium. The performance area in the same shape, wood-framed with a strip wood flooring finish over a crawlspace, is approximately 53 feet deep and 46 feet wide at the rear growing to 77 feet wide at the proscenium. Perimeter floor areas of the stage are concrete slab on grade. The proscenium opening is 67 feet wide by 30 feet high to the underside of the deep truss supporting both the stagehouse roof trusses and long span house roof trusses. The clear height of the stage is an average of 36 feet.

There remain neither grid iron nor catwalks above the performance area and the number of performance lighting fixtures is very limited. I.M.P., who also runs a separate event production business, now provides lighting fixtures for fund-raisers, graduations, and similar gatherings as a part of a separate production agreement for these types of events. A small number of head blocks and battens are suspended from the roof trusses and controlled with hand-raised hemp lines from a traditional wood pin rail above each wing. These are support light flats used as backdrops during high school graduations and similar small scale productions. The predominance of visiting shows continue to work around these obstructions, however, bringing in their own lines, blocks, lifts, battens, flats, trusses, performance lighting, etc. and rigging either directly to the roof structure or to the supplementary steel beams installed in between the trusses. Visiting productions must also work around the diagonal steel members bracing the perimeter enclosure around the upper stagehouse. Beside and behind the open portions of the stage remain an electrical control area which has more recently been enclosed, two small dressing rooms, a promoters office and toilet room, a stagehands office and toilet room, a laundry room with two residential washers and dryers, and separate access to the adjacent dressing rooms and the loading area to the rear.

Open to the east outside of the stagehouse remain the original men’s and women’s restrooms for catering staff. A storage trailer now also resides immediately adjacent to the east side of the stagehouse; this provides space for video production equipment. Next to the equipment trailer is a newer wood “Video Deck” used for filming artist interviews.

Attached to the west of the original stagehouse is the 30 foot by 75 foot loading platform serving six docks. On the roof of the Loading Dock addition is located the aforementioned PV solar panel array.

C. Dressing and Catering

1. Dressing:

The main Performer Dressing suites are still located immediately behind the stagehouse in a double-wide manufactured unit accessed via a short enclosed connector. This facility lacks a structural foundation but is served with plumbing and communications provisions and air conditioning by means of multiple packaged units with exposed flexible ductwork.
under floor. Since 2004 the scale of performances has grown such that the original five dressing suites became inadequate. The operator has installed on the south side of the rear service drive two additional dressing trailers with wood decks providing an additional five dressing rooms for a total of ten located on the site. For the larger music festivals, an additional four trailers are leased to provide a total of twenty-five dressing rooms. Temporary plumbing hook-ups are presently in place to the south of the Loading Dock area to accommodate them. Electrical hook-up provisions were not observable. As mentioned earlier, an informal artist relaxation retreat has been created in the woods behind the venue, outside of the rear fence. This small, landscaped glen overlooking the ponds along Symphony Stream, has pathways and a tented deck for massage, providing artists with a welcome opportunity to get away for a time.

2. Catering:

The covered and screened-in decks of treated lumber constructed behind the dressing facilities also continue to serve as dining and recreation space for performers and hands. However the east pavilion of the assembly, formerly serving as the seasonal catering kitchen, has now been limited to preparation of cold foods, salads, and drinks. Cooking now takes place on an added wood-framed deck with an overhead awning cover. Dishwashing, ice production, and drink storage are now located in yet another new covered and screened wood structure located across the service driveway from the catering decks.

D. Administration Building and Box Office

At or outside the enclosure fence for the Pavilion are the operator’s offices and the box offices located in separate structures. The operator’s offices are accommodated in a two story frame farmhouse which existed prior to the construction of the Pavilion. Approximately 450 feet away from the administration building, adjacent to the South Entrance gate is a small frame structure for the South Box Office. This Box Office is accessed by footpath from the south parking fields and lacks vehicular access. A second West Box Office is located at the west drive to the performer parking entrance and serves 31 ADA parking spaces.

E. Accessory Structures

Ringing the Pavilion on three sides and clustered at varying distances of between 40 and 350 feet from the “shed” are a collection of freestanding wood frame structures serving as restroom facilities, concession and food sales booths, V.I.P. club, first aid station, storage, etc. Grouped with these in apparently random fashion are fenced enclosures shielding the public’s view from walk-in coolers, ice machines, air conditioning units, trash containers, and a variety of other functions associated with an informal collection of basically independent operations.

1. Restrooms:

There are presently five structures on the site housing public restrooms. The two South Restrooms are located on the South Plaza adjacent to the East Box Office. The West Restroom is located adjacent to the West Box Office. The Barn Restrooms are located in that historic structure, and the “L-Barn” Restrooms are located in that historic structure. All of the above are original to the Merriweather venue, and all presently lack hot water.
Only the new Stand Two restrooms on the west side of the property are code compliant and suitable for long term use.

2. Food Concessions:

There are presently five structures on the site serving as permanently permitted food concessions. Stand One is located on the west side of the site, Stand Three is located in the L-Barn with the L-Barn restrooms, and Stands Five and Six are located on the South Plaza. All of the above are original to the Merriweather venue. Only the new Stand Two facility on the west side of the property is code compliant and suitable for long term use.

Stand Four, the V.I.P. Deck Margaritaville, the Back Yard, and a number of other seasonally erected and permitted food concessions are informally dispersed around the grounds.

3. 932 Club

A VIP entertainment space, the “932 Club”, constructed c. 2003 immediately adjacent to Stand One continues to serve as a lounge with both a riser for live bands and limited food service. This wood framed, open-sided structure expands out to new seating decks with a view of the Pavilion stage.

3. Merchandizing:

The South Plaza and West Tee Shirt stands serve as the main merchandizing structures.

4. First Aid

A fabric yurt, located within the grounds adjacent to the Administration parking gate serves as a public first aid station.

F. Storage

This subject, not directly addressed in the 2004 report, has become more topical in recent years. As IMP has established a continuing operation on the site, a pressing need has been recognized for off-season storage provisions for tents and awnings, facades, food equipment, furnishings, grounds maintenance equipment, vehicular signage, and all of the accoutrements of a three season outdoor entertainment business. Storage is also needed for linens, non-perishable foods and drinks, paper goods, etc. To meet storage needs, the Pavilion Stage and House are loaded in the off-season with tents, chairs, golf carts, etc. The food concession stands are packed with portable food service equipment. The venue caterer, Charm City, retains a collection of vans and trailers around the site. Even with these storage options, IMP has had to either purchased or lease numerous storage trailers and cargo containers and locate them around the Merriweather property and on the south parking fields wherever space is available.
III. Evaluation of the Site and Structures
See also Photographs and drawings in Appendix A

A. Site Evaluation

1. Parking

Public Parking: Clearly a major consideration in the evaluation of Merriweather’s future as a thriving performance venue is the availability of convenient parking. Without abundant, convenient parking, the Pavilion would clearly not survive. But the 5,500 spaces currently provided by the south and west parking fields will now need to be replaced as development of the Crescent Neighborhood begins.

ADA Accessible Parking: Currently the 31 spaces remain on the Columbia Association property to the west of the Pavilion and served by an accessible entrance to the fenced Merriweather grounds at the West Box Office. But although this location has sufficed from a practical standpoint, the number of spaces necessary remains at least double the number currently provided according to ADA requirements.

Performer Parking: Due the continued expansion of loosely spaced backstage facilities as well as the obstruction presented by a number of storage trailers, performer parking is now even tighter than in 2004. Parking for artist buses, formerly accommodated along the south fence line, is now occasionally blocked by the added performer dressing trailers. A concept plan by the Operator to expand bus parking over the 100 year flood plain has so far been unaccepted by Howard County authorities.

Administration Parking: Located adjacent to the Administration building, this appears to be adequate, at least until construction on the planned Symphony Woods amphitheater venue or associated facilities commences. Concessionaire’s parking, less formally defined, appears to be accommodated satisfactorily at present.

2. Access

Vehicular Access: Authorized vehicles still enter the Merriweather property either from little Patuxent Parkway or South Entrance Road and must pass through Columbia Association property in either case. The West Box Office, ADA parking, performer entrance, west concessions booths, and north visitor gate are accessed from the former, while the Administration building and concessionaires offices and south concessions booths are all accessed from the latter. This arrangement is generally adequate with the exception of service access to the rear of the stagehouse which is now quite restricted from the installation of new trailers and other temporary accommodations.

Pedestrian Access: The principal pedestrian access to the Pavilion from the south remains a single footpath leading over the bridge and to the South Box Office and South Plaza gate. While the slight 20 foot descent from the fields down through the woods to a bridge over the Symphony Stream and the 20 foot climb back up to the entrance gates is picturesque, it is not handicapped accessible, and likely somewhat difficult to negotiate for even certain able bodied individuals. Though more easily approachable from the ADA parking to the west as well as from Little Patuxent Parkway, the site itself retains some fairly steep and often compound slopes before the front of the venue is reached.
Emergency Access: Concern for reliable emergency access to the grounds and Pavilion has been expressed by Fire and Rescue officials. One fire hydrant on the north side of the property is situated outside the fence and in a location where access could be obstructed by crowds. A second and only other site fire hydrant is located behind the stage. Access to this critical utility as to the backstage area can be blocked by performer trucks or buses as drive space behind the stage has shrunk over time.

3. Utilities

Most of the original underground utilities serving Merriweather are believed to be either reaching an end to their practical life or are in need of modernizing for the sake of efficiency. This pertains especially to the terra cotta sanitary drains across the site. Electrical transformers serving the facility are located in Symphony Woods near Little Patuxent Parkway; these continue to serve the multiple individually metered concession stands, restrooms, etc. constituting a highly inefficient configuration. The existing telephone lines are also outdated, but the operator believes the present cell phone improvements will render unnecessary the replacement needed prior.

4. Storm Water Drainage:

Surface drains and underground storm piping remain quite limited, and much of the storm runoff for the site continues to simply make its way across grass and paved areas, undirected in a sheet flow down to the bottom edge of the site. The infiltration-type trench drain at the foot of the lawn seating area now appears to be clogged with silt. These conditions have been the source of continuing problems with temporary flooding around the backstage area. Drainage must be better controlled via swales or underground conductors to resolve these issues.

Though no stormwater management has been required in the past, changes in State of Maryland requirements enacted since 2004 now dictate that the various sitework and structure improvements recommended herein will trigger the requirement for new on-site stormwater management facilities. Stand Two, permitted and constructed most recently of all site structures, incorporates a compliant infiltration utility according to the Civil Engineers. This type of small scale SWM installation could serve as a model for multiple ones in the future.

B. Pavilion Evaluation

1. General Structure

The Pavilion is comprised of the covered “House” seating area, the Stagehouse, and the attached loading docks. Multiple dressing and catering structures are situated adjacent. Although the steel superstructure of the Merriweather shed appears to remain sound, the roofing systems are now at or near the end of their useful life. The Operator reports persistent problems with multiple roof leaks over both audience, lighting and sound board locations, and the stage. Inspection of the mineral surface roofing indicates advanced aging and evidence of numerous patches. Most likely as a result of older leaks the structural wood roof decking has begun to fail from rot and drop out in selected locations. This obviously creates a hazard for audiences in the seating areas below. The Operator has installed short sections of angle iron to the underside of the wood decking...
to support soft area of planking as they become apparent. The roof drains located above the lower stage portion of the roof are original and show evidence of numerous repairs. The fiberglass shingles on the saddlebag perimeter of the stagehouse remain in need replacement as reported in the earlier investigation. All roofing and flashings should now be replaced. Similarly, the original rough sawn board enclosure around the perimeter of the roof has deteriorated over time and become riddled with holes from boring bees. Daylight now shines clearly through the gapped joints between boards and through the bug holes. Asphalt felts applied to the inside face of the boards above the stage at some time in the past to stop driving rains are now torn and ineffective. The seasonal Loge tents remain a poor long term solution for weather cover to the side seating as reported in 2004. Costly to install, dismantle and maintain on a yearly basis, these canvas awnings have served only as a perpetually temporary solution. The guy cables stabilizing the temporary masts impede circulation at ground level, and the fixed masts installed to support the inside edge of each Loge tent, four on each side, obstruct views from the Loge seating.

The Pavilion lacks sprinkler fire protection, and with the advent of pyrotechnics as a frequent feature of performances, fire has become even more of a concern. A fully supervised system should be installed serving the stagehouse, loading docks, dressing and catering areas, and House seating areas.

2. House Seating Area

Covered Seating Risers: The concrete riser slabs which underlie the reserved seating areas are problematic from a number of perspectives including deterioration/settlement, restricted ADA accessibility, and, more recently, emergency egress. Subjected to 30 years of use, yearly freeze-thaw cycles, and full rain/ice weathering near the shed's perimeters, the slabs are experiencing areas of spalling, cracking, and general wear. Riser mounted seats anchored to the slab occasionally work loose and require substrate repairs and reinstallation. Though concrete's deterioration raises a parallel question of a configuration with safety issues and large inaccessible sections. Constructed in 1967 the seating layout of the Merriweather Post Pavilion lacks both handrails and the more broad distribution of available seating now required by law for accommodation of the disabled in new performance facilities. Although the small area of dedicated H/C accessible seating presently exists in the west Loge, and both the front and rear of the reserved seating areas are accessible, there is no location at the center of the amphitheatre that is configured for handicapped accessibility. And the number of accessible seats required by the ADA for accommodation far exceeds the number currently dedicated. The creation of the flat GA Deck at the front of the House has added approximately 650 occupants at that location, and emergency egress has become more constricted as a result.

Audience Sightlines: Sightlines from the original reserved seating area and from much of the lawn remain quite good. But much of the Loge seating still experiences a partially obstructed view of the stage resulting from both the tight aspect in plan relative to the proscenium opening and the location of the steel masts within the seating area which support the Loge tents. View restrictions range from an obstructed upstage corner at the rear of the seating to a loss of the entire rear of the stage at the seating down front.
The Loge tents have become maintenance headaches, particularly as the performance season has extended at each end into April and October. Periodic replacement of the tents due to wear and tear including snow damage has become a significant operating expense. The painted metal folding chairs are also at the end of their life and either refurbishment or replacement is essential.

3. Stagehouse

As stated above, the roofing and enclosure above the stagehouse are now in need of replacement. As visiting performers continue to stage increasingly elaborate shows the facility must be verifiably up to the task of supporting them.

The existing proscenium opening dimensions and clear height-to-structure in the stagehouse have all been identified by the current operator as limiting for concerts. Also of some concern is the tapered configuration of the loft space above the stage which limits flexibility in rigging shows within the depth of the stage. The stagehouse has a poor configuration to support either theater or dance. Though the width of the proscenium could be marginally increased without undue cost to improve sightlines and sound wings, substantial increases in the other clearances would be quite expensive in view of the longspan nature of the roof structure.

Most of the functional spaces in the rear and wing portions of the stagehouse have received superficial remodeling and infill over the years and are in need of renovations to their finishes, fixtures, and lighting.

The existing 2,400 Amp electrical service to the stage is reported by the Operator to still be adequate, however Howard County inspection officials have expressed concerns that the complex configuration of older panels and limited provisions for safe performer electrical hook-up are no longer suitable. The panels should be replaced with a new service entrance configured for modern performance use.

No access to the crawlspace below the stage floor could be attained at the time of the field examinations in either 2004 nor 2014. However a 2003 report contracted by the operator cited some corrosion concerns observed during an examination of the stage floor framing in this area. A proper inspection of the crawlspace by a structural consultant remains recommended.

3. Loading Area

The 1997 modifications to the dock area greatly improved conditions for loading shows in and out. Up to 4 large trailers can simultaneously unload under cover with space on the dock for temporary laydown with 6 trucks accommodated on occasion. The existing 60 Amp shore power panel at the Loading Area is said by the operator to be undersized.

4. Dressing Area

Installed around 1990, the dressing trailers added significant space and flexibility to the performer’s accommodations, and the operator has worked hard to maintain them in acceptable shape. However these manufactured units lack substantial construction, even suitable foundations, and upkeep is a constant effort to maintain water-tightness,
structural integrity, temperature control, and finish continuity. The entire plywood floor deck in the modular assembly had to be replaced recently. As described earlier, the Operator has recently added five new dressing suits in the form of two trailers situated on the south side of the rear service drive. An additional fifteen dressing suites are occasionally necessary. As recommended in 2004, the present dressing facilities should be replaced with a permanent addition, now accommodating at least ten dressing suites.

5. Catering Structures

Similar to the Dressing trailers the two catering decks are essentially screened-in porches made from treated lumber framing with fiberglass shingle roofs. The new tented catering cooking deck is considered a potential fire hazard by Howard County Fire Prevention. And the entire food production set-up, with remote Dishwash hut, is a concern to Howard County Health and Safety. All is managed within the casual summertime environment associated with the summer concert series, but the catering facilities are clearly space-inefficient and of limited expected life. As recommended in 2004, they should be replaced with permanent, code-compliant construction.

C. Administration Building Evaluation

The historic farmhouse currently housing the Operator’s offices continues to experiences all the maintenance issues normally associated with an aging residence. In 2004 the Operator identified replacement of the single gazed, double hung windows with a more thermally efficient model for better energy performance as their highest priority for the structure. Central air-conditioning has now been added to the wish list.

D. Box Offices Evaluation

The newly constructed replacement West Box Office, though a bland aesthetic statement, is now suitable for long term services if needed. The recently raised and re-covered East Box Office continues to suffer from severe water infiltration at its foundation and a sump pump is still required to maintain its function. The location of the Box Office adjacent to the south entrance gate requires that to purchase tickets there in advance of a show, patrons must make the 5 minute woodland round trip on foot; a inconvenience that the Operator has identified as undesirable.

E. Outbuildings Evaluation

With the exception of the new combined food concessions/restroom structure on the west side of the Pavilion site known as Stand Two, all outbuildings currently continue to function on a marginal and highly stressed basis. Each of these operation experiences difficulties stemming from insubstantial construction, lack of space, insufficient utility support, or combinations of the above.

1. Restrooms:

Most critical currently are problems with public restrooms as these have never been supplied with hot water, and they suffer from deterioration due to rot, mold, damaged finishes, and multiple plumbing failures stemming principally from freezing over the winter season. Periodic intrusion into attic areas by raccoon and other pests add to
maintenance headaches. The original West Restrooms are now used only sparingly as conditions there continue to worsen. All toilet rooms, believed to house approximately 105 toilet fixtures in total and almost equally split between males and female facilities, tend to be greatly over crowded, for female users in particular. As recommended in 2004, all older facilities should be completely replaced with expanded, fully code compliant structures as soon as possible.

2. Food Concessions

The original, permanently licensed food concession stands continue to cope with similar problems of deteriorating enclosure, a shortage of adequate electrical power, outdated kitchen equipment, and a pervasive lack of back-of-house support space for refrigeration units, trash containers, etc. Health Dept. officials have expressed concerns regarding these conditions including the shortage of screening, windows, or other means of limiting access to food by flying insects in the summer months. Insufficient means of preventing passage of food grease into sanitary drains also was identified as a concern.

A growing collection of even more limited food stands, somewhat informally located about the property on wood decks and fit with seasonally installed facades and awnings and requiring individual seasonal permits, is also of concern to the Health Department. Although some of these have with hand sinks, most lack hot water, a paved standing surface for patrons, or substantial support in the way of cooling/heating provisions, trash disposal enclosure, etc. The Health Dept. recommends that if such seasonal decks are to remain they be clustered about a central core housing essential plumbing and other services. As recommended in 2004, all should be replaced by more permanent, code-compliant facilities. Smaller food stands could be situated about a series of central services cores.

3. 932 Club

Constructed c. 2003 this light wood-framed structure still serves its purpose as an informal lounge. But as a true performance venue, albeit smaller than the main Pavilion, it requires an approved sprinkler system at a minimum.

4. Merchandizing

These small stands function adequately but should be replaced with new, in a common, integrated design aesthetic, as other facilities are replaced with more permanent structures.

5. First Aid

This facility may function satisfactorily as a temporary structure provided services need only be limited to addressing superficial injuries and complaints and the location is easily accessed by Fire and Rescue vehicles and personnel.

With the number of outbuildings and associated support equipment surrounding the Pavilion having proliferated greatly since the initial construction of Merriweather, these facilities now lack an appropriate visual or operational integrity. Now a confusing din of competing graphics, structural expressions, material uses, and varying scales, these
functions need general replacement with more ordered and unified facilities. It should be noted that the Operator has come to the same conclusion and developed concept site layouts to this end.

F. Storage Evaluation

As described, permanent on-site provisions for off-season and other storage needs are sorely needed. The Operator has proposed a warehouse of a scale that could not be reliably evaluated without further programming input. Nevertheless, it is clear a substantial area of on-site storage space could be of great value.
IV. Conclusions

As we stated in the 2004 recommendations the condition of the primary Merriweather Pavilion facility is characteristic of any older open-air building that has experienced yearly 100 degree temperature swings, and 45 winters of daily freeze thaw. Serving thousands of patrons a year without major renovations has taken its toll. While the basic superstructure of the Pavilion appears to still be sound and capable of continuing to serve well into the future, a substantial amount of remodeling work is sorely needed. Food, restroom, dressing and miscellaneous support facilities now require replacement. And an ever growing hodgepodge of temporary decks, tents, trailers, and other clutter of insubstantial construction need to be cleared out and replaced with more permanent consolidated facilities.

In accomplishing the recommended changes the property owner will no doubt be required to bring all features up to current code requirements, including ADA provisions.

Below are summarized the main tasks identified in this update report pertinent to sustaining the present operation. Recommendations are generally intended to meet present needs rather than take the venue to the "next level." It should be left to others to determine whether greater upgrades would actually be merited. However the recommendations and associated costs below do expand significantly upon those in 2004. Appendix B contains back-up for our budget cost estimating.

A. Resolve the Parking Question. Once the Crescent is developed into the planned high business/residential, parking for approximately 5,500 parked cars will need to be accommodated elsewhere than the current parking fields. Pavilion out-of season storage provisions, currently accommodated in the fields, will also require replacement. ADA parking on Columbia Association property should be doubled in capacity.

No budget cost has been associated with this item.

B. Replace Audience Restrooms: Demolish and replace three cramped, deteriorating existing facilities and replace with expanded, reconfigured code-compliant structures to provide safer, more convenient access as well as increased fixture counts including ADA accessible fixtures. Renovate two existing historic restroom facilities to the same criteria. Restore exterior of both historic structures as well as a third historic maintenance barn with new, painted wood siding and new painted metal roofing.

Budget Allowance: $2,015,000

C. Replace Aging Site Utilities and Install Stormwater Management: Replace site water, storm water, sanitary, and electrical power utilities to serve Pavilion and all newly configured outbuildings. Install new unified 3,000A metered electrical service powering all replacement structures with the exception of the Pavilion which will have its own dedicated new service under item L. Install new site lighting throughout the property.

Install code complaint, on-site, buried stormwater management utilities commensurate with full scope of sitework and building construction recommended under this report.

Budget Allowance: $2,508,000
D. Re-grade Site Pedestrian Access: Reduce steep slopes and minimize cross slopes with new paving, ramps, steps, retaining walls, railings, etc. where required to assure convenience, accessibility, and safety. Create a new level area to the east side of the site for access to facilities and a second “Village Green” space similar to that adjacent to existing Stand Two Food Concessions and Restrooms.

Budget Allowance: $700,000

E. Replace Temporary Loge Tents with Permanent Roof: Eliminate complex, maintenance-intensive assemblies of canvas, guy wires, and posts and replace with substantial roof structure visually compatible with existing. Install LED house lighting and fans matching the existing House. Install dry sprinkler system.

Budget Allowance: $1,682,500

F. Replace and Reconfigure Seating Base: Remove deteriorating, access-restricted stepped concrete slab and replace with new, configured to provide safe and convenient access and egress, solid seating anchorage, and more varied viewing options including more evenly distributed ADA seating. Modify subgrade as necessary; install new underground utilities, safety railings, and step lighting as required. Repair existing concrete foundations. Install 3,650 new arena-type fixed seats.

Budget Allowance: $2,600,000

G. Replace Temporary Performer Dressing, Catering, V.I.P., Production, and Storage Structures with New Two Story Addition: Remove space-inefficient, deteriorating quarters with permanent 15,000 gsf building incorporating ten dressing suites, dining and lounge space, catering kitchen, V.I.P. entertainment rooms and deck, production studio and interview deck, and storage spaces. Install sprinkler fire protection throughout, including stagehouse and loading areas.

Budget Allowance: $3,965,000

H. Replace, Relocate, and Coordinate Box Office, Concessions, and Related Functions, including Associated Graphics: Address the practical needs of these essentially permanent functions with proper enclosure and code-compliant provisions and services, organized and located as a part of a unified, coherent design expression. Locate one Box Office so that it is conveniently accessible to the public arriving by car.

Budget Allowance: $2,600,000

I. Widen Proscenium Opening: Widen wood framed opening to improve “sound wings” to Loges.

Budget Allowance: $350,000

J. Replace Windows in Administration Building

Budget Allowance: $41,000
K. Raise Stagehouse Roof: Remove and reconstruct Stagehouse roof 20'-0" higher than present, extend existing columns, adding structural reinforcement for required stiffness and lateral bracing, and construct new steel bar joist structure with acoustical metal decking, and mineral surface bituminous roofing. Replace wood siding and enclosure construction. Fabricate and install custom built operable performance lighting support gridiron truss, trapezoidal in plan to match stagehouse with 80,000# capacity and 12 motorized pick points. New sprinkler protection is recommended under item G.

Budget Allowance: $1,255,450

L. Replace Stage Electrical Panels and Distribution: Reconfigure and Upgrade existing electrical service entrance for modern installation, supporting performance facility needs including house power infrastructure and visiting artist requirements. Reconnect existing and new power/lighting circuits. Increase shore power panel capacity at Loading Dock. Extend permanent power distribution to rear of facility providing site hook-ups for six buses.

Budget Allowance: $288,000

M. Restore Pavilion Roof and Enclosure and Install Sprinkler Protection: Remove existing mineral surface bituminous roofing and flashings over entire house seating area down to wood substrate. Inspect wood roof decking and blocking for rot and other deterioration. Replace deteriorated areas of decking area with new to match. Install mineral surface, modified bituminous roofing system. Remove and replace entire vertical wood board enclosure, preparing openings for existing lighting and speakers. Install dry pipe sprinkler coverage for house seating area. Stage, Loge, and addition sprinkler protection are recommended under other line items.

Budget Allowance: $437,900

N. Install Sprinkler at existing wood frame “932 Club”: Dry pipe system for seasonal use.

Budget Allowance: $12,000

O. Construct Site Trash/Recycling Enclosure: Construct an concrete-paved area backstage for trash and recycling dumpsters and containers, approximately 2,000 sq ft. Install vertical wood board enclosure fencing with two large swing gates.

Budget Allowance: $62,000

P. Replace Fire Alarm System for Main Facility and Extend to New Addition: Provide main alarm panel, smoke and heat detection devices, audio-visual notification devices, pull stations, with interconnects to sprinkler system, sound system, elevator, etc.

Budget Allowance: $289,500
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Budgeted Costs Less Parking Provisions</td>
<td>$18,946,350</td>
</tr>
<tr>
<td>Add Soft Costs @ 30%</td>
<td>$5,683,905</td>
</tr>
<tr>
<td>Total with Soft Costs (as of 2014)</td>
<td>$24,630,255</td>
</tr>
</tbody>
</table>
APPENDIX A

Photographs and Drawings
Appendix A – Photographs and Drawings

Google Maps aerial view of Merriweather Post Pavilion and surrounding region showing existing parking fields to the south on property now designated as the Crescent Neighborhood. The Symphony Woods property, immediately surrounding the site, is now planned as a cultural park.
Composite Site Plan by Century Engineering, showing proposed 2001 improvements.

Enlarged portion of aerial view above showing limits of property under ownership by Merriweather Post Business Trust; property lines are roughly determined by the extent of the outbuildings serving the Pavilion. Note the Loge seating still with seasonal tent cover. White-roofed building at upper left is new Stand Two.
Merriweather Post Pavilion from Northeast.

Stage Proscenium and covered House portion of the venue remain from the original.
Original historic structures remain in use for public restrooms and maintenance storage.

Historic “L-Barn” remains in use as public restrooms and food concessions.
Parking fields to the south and west of the Pavilion double as event and off-season storage space.

Pathway from the parking fields to the South Entrance.
Elevated and re-roofed South Box Office with dilapidated South Restrooms beyond.

South Entrance Gate with South Box Office to left.
A total of 31 ADA parking spaces remain outside West Entrance gate.

ADA parking and reconstructed West Box Office with seldom-used West Restrooms to right
New West Box Office.

Performer entrance gate on west side of grounds with biofuel dispensing station at left side.
Approach from Little Patuxent Parkway to Northeast gate.

Historic Maintenance Barn and Northwest Gate.
Merriweather Pavilion from northeast.

Northwest view of Merriweather Pavilion from new seating decks outside 932 Club.
Assembly of modular buildings, trailers, and wood decks along southeast side of Pavilion.

Loading Dock modular dressing rooms and catering decks along southwest side of Pavilion.
Stage Proscenium and center reserved seating with box seats and GA Deck at front.

Reserve seating in east Loge with box seats.
East Loge and original "saddle bag" wrap around stage for minimal functional support.

GA Deck, for up to 1,000 standing, is used for off-season storage. Seven seating rows were removed.
Replacement parts for original riser-mounted cast iron seating have run out.

Original concrete cheek wall between original and newer Loge seating obstructs ingress/egress.
Concrete seating risers and masts to support West Loge tents. Note bridge over stormwater swale.

Characteristic concrete deterioration at Pavilion seating base, east side.
Characteristic settlement cracking East Loge seating base.

Failing winch hardware at Loge tent masts has required replacement as needed.
Stage remains trapezoidal in plan with restricted overhead. Door to Loading is beyond.

Minimal and outdated support spaces backstage. Double doors lead to dressing modular.
Low, wood-framed stage roof structure constricts performances and remains without sprinkler.

Loading Dock suitably supports six trailers but requires additional shore power for buses.
Pavilion roof showing access to follow-spot booth over center of reserved seating area.

View of Pavilion roof above rear of stage. Roof, flashings and drains are now in need of replacement.
Modular dressing and screened catering deck remain behind Pavilion. New dressing trailers are beyond.

Video Production trailer, Interview, Catering Cooking, and Dishwash Decks, and Storage are all newer.
Performer Dressing trailers with artist relaxation retreat beyond. Note solar array on Loading roof.

Four additional, leased Dressing trailers are parked next to the south fence when needed.
Most performer Dressing remains in modular building. Entire floor deck has been replaced.

Typical performer Dressing Lounge.
Performer Dressing trailers have exterior decks.

Temporary above-ground plumbing provisions for four additional Dressing trailers.
Screened performer Catering decks remain backstage behind Dressing.

Performer Catering decks backstage behind Dressing.
Catering Cooking Deck and enclosed Dishwash hut beyond with Catering storage trailers

Interior view of Catering Dishwash structure with ice machines
Parking for performer buses has become tight, prompting concerns for reliable emergency access.

Access to rear of Pavilion is now more cramped for both service an emergency vehicles.
Expanded east V.I. P Decks with original South Plaza Stands Five and Six beyond

South Plaza Food and Merchandizing Concessions. Paving has steep cross slope.
Food Concessions Five and Six at South Plaza

Representative view of interior of permanent Food Concession construction; Stand Six.
Exterior refrigeration support for South Plaza Stands Five and Six.

Exterior ice and trash enclosure for South Plaza Stands Five and Six.
Upper South Plaza temporary stands, representative of seasonally permitted Food Concessions.

Seasonally plumbed handsink without hot water is typical of seasonally permitted Food Concessions.
Access to East Restrooms remains steep and non-ADA compliant.

East Restrooms remain cramped and deteriorated.
West Tee Shirt Concession, old Stand One Food Concession, with old West Restrooms beyond

Interior of original Stand One Food Concession which requires constant repair
Original Stand One with 2003-era “932 Club” and recently constructed decks to the right.

“932 Club,” an Assembly Occupancy, requires a seasonal food permit, and sprinklering is now advised.
Service windows at recently completed Stand Two Food Concession

Stand Two has a large, modern kitchen. Prepared foods are delivered to small stands.
Stand Two incorporates modern, ADA accessible Restrooms.

Stand Two Restrooms are the only compliant public restroom facilities on the property.
Public Restrooms in the Barn to the left are out of date and require remodeling complete with hot water.

The exterior enclosures of all three historic structures require replacement with new siding and roofing.
Restrooms in the “L-Barn” are outdated and require remodeling complete with hot water.

Interior of “L-Barn” Restrooms. These are adequately proportioned but inaccessible and out of date.
Numerous seasonal Food Concessions require seasonal permits and food prep. “Margaritaville.”

“Back Yard” seasonal Food Concession is representative of numerous stands around the grounds.
Pinball museum in Stand Two is representative of the IMP’s efforts to ensure a lively venue.

Numerous pieces of sculpture and public art have been located by IMP around the grounds.
First Aid Service.

A need for permanent, efficient on-site enclosed storage is pervasively evident.
Administration remains in the historic house but is seriously under sized to serve the maintenance-intensive, year-round operation of the pavilion.

Trailers to support concessions operations, located on Columbia Association land adjacent to Administration Building should be removed.
APPENDIX B

Budget Costs Support
MEMORANDUM

Date  11 February, 2014

To  File

Project #  1403.00
Project  Merriweather Post Pavilion Physical Review Update
Regarding  Ballpark Pricing for Updated Physical Needs Component
From  Hugh McCormick
Copies To  File

Below is an update of the 2004 pricing scope based on our recent investigations. For convenient estimating comparison, we have retained the format from the earlier report, now incorporating the scope of the February 2005 Stagehouse Roof modifications, and all new line items L. through P.

PHYSICAL NEEDS

A. Resolve Parking Question: No cost estimate.

B. Replace Audience Restrooms:
   1. Demolish three existing wood frame and slab restroom structures, 2000 sq ft total.
   2. Selectively demolish (gut) two existing, farm-type, wood frame and slab, restroom facility structures, 6,000 sq ft total.
   3. Construct three new, 1,200 sq ft, each standalone, cmu and wood-frame, ADA accessible, dual-sex restroom facilities.
   4. Renovate two existing, farm-type, non-ADA accessible, dual-sex restroom facilities, 6,000 sq ft. total.
   5. Renovate exteriors of three existing, historic farm-type structures (two restroom facilities above plus one maintenance barn) with new board and batten painted wood siding and pre-painted, manufactured, simulated standing seam metal roofing. Total footprint approximately 7,500 sq ft. Total exterior wall surface approximately 13,000 sq ft.

C. Replace Aging Site Utilities and Install On-Site Stormwater Management:
   1. Abandon existing site water, sanitary, storm water and telephone utilities, removing as necessary. Remove existing site lighting. Existing performance LED lighting to remain.
   2. Install new water service to four new restroom structures, main pavilion, new backstage addition, three new food concession facilities, new box office, and renovated administration building. Water service to be sized for fire protection system in entire main pavilion and new backstage addition. (Sprinkler coverage now includes House/Loges and “932 Club”.)
   3. Install new sanitary and storm water lines from four restroom structures, main pavilion, new backstage addition, four food concession facilities, two box offices,
MEMORANDUM

and renovated administration building. Install additional underground storm water network to coordinate with new stormwater management utilities.

4. Replace existing, individually metered existing electrical services and site utilities to new food/souvenir concession and restrooms with new 3,000A consolidated service serving all site structures with the exception of the main pavilion to have separate new service.

5. Install new site pedestrian lighting throughout.

6. Install (2) new site fire hydrants at perimeter of site at locations accessible to fire fighting apparatus.

7. Install (10) on-site buried stormwater management infiltration utilities sized to address entire 5 acres of construction disturbance on the 10.5 acre Merriweather site.

8. Install buried domestic water and sanitary hook-ups for (4) Dressing Modulars occasionally leased by the Operator for larger shows and located in the parking area backstage, along the south property line.

D. Re-grade Site Pedestrian Access: Reduce steep slopes, minimize cross slopes, and provide permanent railings where required to assure convenience and safety.

1. Demolish existing macadam paving and remove existing trees as necessary.

2. Regrade 200,000 sq ft of existing pedestrian walks and adjacent support facilities to be renovated or replaced.

3. Install new ADA accessible, pedestrian paving, ramps, steps, railings, and site furnishings.

E. Replace Temporary Loge Tents with Permanent Roof:

1. Demolish existing steel columns and cable anchorage points.

2. Install new concrete foundations and long span steel structure similar to existing in main pavilion.

3. Install acoustical metal roof deck and modified bituminous roofing similar to existing in main pavilion.

4. Install board enclosure at perimeter of roof structure similar to existing in main pavilion.

5. Install new house lighting. Match existing LED house lighting in main pavilion.

6. Install dry-pipe sprinkler system throughout new Loge roof area.

7. Install total (12) ceiling fans 20'-0" diameter to match existing in House.

F. Replace and Reconfigure Seating Base:

1. Demolish 40,000 sq ft existing slab on grade concrete audience seating risers.

2. Modify subgrade as necessary to suit new profiles.

3. Install new underground communications/control wiring.

4. Install 40,000 sq ft concrete slab on grade audience seating risers to proper sightlines with aisles, box seat terracing, ADA viewing, etc. as required.

5. Install safety railings, ground level lighting, etc. as necessary.

6. Install 5,000 new arena-type fixed seats, including ADA seat as necessary.

7. Repair deterioration at existing structural concrete foundations as necessary.

G. Replace Temporary Performer Dressing and Catering, V.I. P., Production, and Storage Structures with New Addition:
MEMORANDUM

1. Remove/demolish roughly twelve existing temporary structures, approximately 6,000 sq ft total.
2. Construct new two story, steel-frame addition with elevator for ten dressing suites including private restroom facilities, dining/lounge space, catering kitchen, V.I.P. entertainment rooms and deck, production studio and interview deck, and storage 15,000 sq ft total.
3. Install fire protection sprinkler system throughout addition and stage portion of main pavilion.

H. Replace, Relocate, and Coordinate Box Office, Concessions, and Related Functions, including Associated Graphics:
1. Demolish approximately fifteen existing wood frame and slab structures, 10,000 sq ft total.
2. Construct in five standalone one-story CMU and wood-frame structures, 15,000 sq ft of new box office, souvenir concessions, and food concessions, including necessary kitchen facilities and food service equipment to support catering for the venue.
3. Install coordinated signage for all audience services.

I. Widen Proscenium Opening: Widen wood framed opening to improve “sound wings” to Loges.
1. Relocate existing roof access ladder, stage left power panel, house lighting controls, site lighting controls, and miscellaneous electrical as necessary.
2. Reconfigure non-structural proscenium wing walls to increase opening size by fifteen feet.

J. Replace Windows in Administration Building:
1. Remove all existing double hung wood windows.
2. Install pre-painted aluminum, insulated windows throughout.

K. Raise Stagehouse Roof:
1. Selectively demolish 6,350 sq ft existing stagehouse roofing, wood decking, and steel bar joist structure, including (7) large capacity roof drains/leaders as well as very limited performance and work lighting. Demolish existing stage level dressing rooms. Protect existing offices, laundry room, restrooms, and electrical equipment in shed spaces, as well as existing wood stage floor.
2. Selectively demolish 170 running ft x 12 ft high existing wood siding and wood stagehouse enclosure construction including diagonal steel angle wind bracing to existing roof.
3. Extend four existing steel roof support columns 20'-0" vertically, adding structural reinforcement for required stiffness and lateral bracing.
4. Construct 6,350 sq ft new stagehouse roofing, wood decking, and steel bar joist structure. Steel roof structure configured and sized to accommodate not only snow loads but those of new gridiron equipment described in item # 11. (Existing columns and footings are assumed to be of sufficient capacity.)
5. Construct 270 running feet x 32" high wood siding and stagehouse enclosure construction, structurally stiffening existing three perimeter bar joists originally
MEMORANDUM

only designed to carry lower enclosure. Stiffen enclosure for lateral loads as required.

6. Extend existing roof access ladder to serve new stagehouse roof in addition to existing house roof. Install new roof scuttle and access door.

7. Install associated stagehouse roof drains/leaders and limited performance and work lighting.

8. Install electrical wiring infrastructure to support gridiron motors as well as plugs for temporary performance lighting to be suspended by traveling groups from the grid.

9. Stiffen existing longspan roof trusses over house to handle new drifting snow.

10. Install roof drains and leaders in house roof to serve existing 22,500 sq portion of existing roof to remain. Route these underground to existing site storm water utilities.

11. Fabricate and install custom built operable performance lighting support gridiron truss, trapezoidal in plan to match stagehouse with 80,000# capacity and 12 motorized pick points.
(refer to item I for Stagehouse sprinklering already included in earlier estimate)

L. Replace Stage Electrical Panels and Distribution:

1. Demolish existing electrical panels and stage/backstage distribution complete. Reconfigure and upgrade existing 2,400A service entrance to 3,000A for modern installation, supporting performance facility needs including house power infrastructure and visiting artist requirements.

2. Reconnect existing and new power/lighting circuits.

3. Increase shore power panel capacity from 60A to 200A at Loading Dock.

4. Extend permanent power distribution to rear of facility providing site hook-ups for six busses.

M. Restore Pavilion Roof and Enclosure; Install Sprinkler:

1. Remove 23,000 sf mineral surface bituminous roofing and flashings over entire house seating area down to wood substrate.

2. Inspect wood roof decking and blocking for rot and other deterioration.

3. Replace 10% of decking area with new to match.

4. Install mineral surface, modified bituminous roofing system.

5. Remove and replace 5,000 sq ft. vertical wood board enclosure, preparing openings for existing lighting and speakers.

6. Install dry pipe sprinkler coverage for 23,000 original house seating area

N. Install Sprinkler at existing wood frame “932 Club”: Dry pipe system for seasonal use, 3000 sq. ft.

O. Construct Site Trash/Recycling Enclosure

1. Construct an asphalt-paved area backstage for trash and recycling dumpsters and containers, approximately 2,000 sq ft.

2. Install vertical wood board enclosure fencing, approximately 100 lineal feet, 8’-0” high, with two 12’-0” swing gates.
MEMORANDUM

P. Replace Fire Alarm System for Main Facility and Extend to New Addition
   1. Provide main alarm panel, smoke and heat detection devices, audio-visual notification devices, pull stations, with interconnects to sprinkler system, sound system, elevator, etc.

End of Update Scope Descriptions Memo
Merriweather Post Pavilion
Physical Review Update

Ballpark Pricing Cost Estimate

Prepared for:
Ziger/Snead Architects
1006 Morton Street
BALTIMORE, MD 21201

Prepared by:
DMS
5550 Sterrett Place, Suite 300
Columbia, MD 21044
(410) 740-1671

2014-267

February 12, 2014
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Replace Audience Restrooms</td>
<td>$2,015,000</td>
</tr>
<tr>
<td>C</td>
<td>Replace Aging Site Utilities And Install On-Site Stormwater Management</td>
<td>$2,508,000</td>
</tr>
<tr>
<td>D</td>
<td>Re-Grade Site Pedestrian Access</td>
<td>$700,000</td>
</tr>
<tr>
<td>E</td>
<td>Replace Temporary Loge Tents With Permanent Roof</td>
<td>$1,682,500</td>
</tr>
<tr>
<td>F</td>
<td>Replace And Reconfigure Seating Base</td>
<td>$2,740,000</td>
</tr>
<tr>
<td>G</td>
<td>Replace Temporary Performer Dressing/Catering, VIP Production, And Storage Structures With New Addition</td>
<td>$3,965,000</td>
</tr>
<tr>
<td>H</td>
<td>Replace, Relocate, And Coordinate Box Office, Concessions, And Related Functions, Including Associated Graphics</td>
<td>$2,600,000</td>
</tr>
<tr>
<td>I</td>
<td>Widen Proscenium Opening</td>
<td>$350,000</td>
</tr>
<tr>
<td>J</td>
<td>Replace Windows In Administration Building</td>
<td>$41,000</td>
</tr>
<tr>
<td>K</td>
<td>Raise Stagehouse Roof</td>
<td>$1,255,450</td>
</tr>
<tr>
<td>L</td>
<td>Replace Stage Electrical Panels And Distribution</td>
<td>$288,000</td>
</tr>
<tr>
<td>M</td>
<td>Restore Pavilion Roof And Enclosure; Install Sprinkler</td>
<td>$437,900</td>
</tr>
<tr>
<td>N</td>
<td>Install Sprinkler At Existing Wood Frame &quot;932 Club&quot;</td>
<td>$12,000</td>
</tr>
<tr>
<td>O</td>
<td>Construct Site Trash/Recycling Enclosure</td>
<td>$62,000</td>
</tr>
<tr>
<td>P</td>
<td>Replace Fire Alarm System For Main Facility And Extend To New Addition</td>
<td>$289,500</td>
</tr>
</tbody>
</table>

**SUBTOTAL**  
$18,946,350

**ADD SOFT COSTS**  
30.0%  
$5,683,905

**TOTAL WITH SOFT COSTS**  
$24,630,255
## B: Replace Audience Restrooms

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate</th>
<th>Line Total</th>
<th>Subtotal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolish existing restrooms</td>
<td>2,000</td>
<td>sf</td>
<td>$13.00</td>
<td>$26,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selectively demo two existing farm type restroom facilities</td>
<td>6,000</td>
<td>sf</td>
<td>$8.00</td>
<td>$48,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>renovate two existing farm type restroom facilities</td>
<td>6,000</td>
<td>sf</td>
<td>$142.00</td>
<td>$852,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three new standalone restrooms</td>
<td>3,600</td>
<td>sf</td>
<td>$200.00</td>
<td>$720,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renovate exteriors of three existing, historic farm-type structures</td>
<td>20,500</td>
<td>sf</td>
<td>$18.00</td>
<td>$369,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$2,015,000</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## C: Replace Aging Site Utilities And Install On-Site Stormwater Management

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate</th>
<th>Line Total</th>
<th>Subtotal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>abandon existing site water, sanitary, storm water and telephone utilities</td>
<td>1</td>
<td>ls</td>
<td>$80,000.00</td>
<td>$80,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove existing site lighting</td>
<td>1</td>
<td>ls</td>
<td>$50,000.00</td>
<td>$50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install new water service (11 areas)</td>
<td>3,000</td>
<td>lf</td>
<td>$120.00</td>
<td>$360,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install new storm water service</td>
<td>3,000</td>
<td>lf</td>
<td>$165.00</td>
<td>$495,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install new sanitary water service</td>
<td>3,000</td>
<td>lf</td>
<td>$165.00</td>
<td>$495,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove and consolidate 16 existing BGE transformers/metering, provide single 3000amp service</td>
<td>1</td>
<td>ls</td>
<td>$500,000.00</td>
<td>$500,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install new site pedestrian lighting</td>
<td>1</td>
<td>ls</td>
<td>$200,000.00</td>
<td>$200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install new site fire hydrants utilities</td>
<td>2</td>
<td>ea</td>
<td>$25,000.00</td>
<td>$50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install buried domestic water and sanitary hook-ups</td>
<td>8</td>
<td>ea</td>
<td>$3,500.00</td>
<td>$28,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$2,508,000</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## D: Re-Grade Site Pedestrian Access

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate</th>
<th>Line Total</th>
<th>Subtotal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolish existing macadam paving and remove existing trees as necessary</td>
<td>1</td>
<td>ls</td>
<td>$100,000.00</td>
<td>$100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regrade existing pedestrian walks and adjacent support facilities</td>
<td>200,000</td>
<td>sf</td>
<td>$1.00</td>
<td>$200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New paving/steps/ramps</td>
<td>1</td>
<td>ls</td>
<td>$400,000.00</td>
<td>$400,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$700,000</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Quantity</td>
<td>Unit</td>
<td>Rate</td>
<td>Line Total</td>
<td>Subtotal</td>
<td>Total</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>------</td>
<td>-------</td>
<td>------------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>E: Replace Temporary Loge Tents With Permanent Roof</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>demo</td>
<td>25,000</td>
<td>sf</td>
<td>$1.00</td>
<td>$25,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New structure/roof</td>
<td>25,000</td>
<td>sf</td>
<td>$50.00</td>
<td>$1,250,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New house lighting</td>
<td>25,000</td>
<td>sf</td>
<td>$7.50</td>
<td>$187,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install dry pipe sprinkler system</td>
<td>25,000</td>
<td>sf</td>
<td>$4.00</td>
<td>$100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceiling fans/wiring</td>
<td>12</td>
<td>ea</td>
<td>$10,000.00</td>
<td>$120,000</td>
<td></td>
<td>$1,682,500</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,682,500</td>
</tr>
<tr>
<td><strong>F: Replace And Reconfigure Seating Base</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc demo</td>
<td>40,000</td>
<td>sf</td>
<td>$7.50</td>
<td>$300,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New in ground conduits</td>
<td>40,000</td>
<td>sf</td>
<td>$2.50</td>
<td>$100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New in ground cabling</td>
<td>40,000</td>
<td>sf</td>
<td>$3.00</td>
<td>$120,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New concrete SOG/risers</td>
<td>40,000</td>
<td>sf</td>
<td>$20.00</td>
<td>$800,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety railing/flow level lighting</td>
<td>40,000</td>
<td>sf</td>
<td>$6.00</td>
<td>$240,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New seating</td>
<td>4,650</td>
<td>ea</td>
<td>$200.00</td>
<td>$930,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc structural repairs</td>
<td>1</td>
<td>ls</td>
<td>$250,000.00</td>
<td>$250,000</td>
<td></td>
<td>$2,740,000</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2,740,000</td>
</tr>
<tr>
<td><strong>G: Replace Temporary Performer Dressing/Catering, VIP Production, And Storage Structures With New Addition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demolish existing</td>
<td>6,000</td>
<td>sf</td>
<td>$10.00</td>
<td>$60,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New steel framed additions with elevator</td>
<td>15,000</td>
<td>sf</td>
<td>$255.00</td>
<td>$3,825,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New fire protection system to main pavilion</td>
<td>20,000</td>
<td>sf</td>
<td>$4.00</td>
<td>$80,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,965,000</td>
</tr>
<tr>
<td><strong>H: Replace, Relocate, And Coordinate Box Office, Concessions, And Related Functions, Including Associated Graphics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demolish existing</td>
<td>10,000</td>
<td>sf</td>
<td>$10.00</td>
<td>$100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New structures</td>
<td>15,000</td>
<td>sf</td>
<td>$150.00</td>
<td>$2,250,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signage</td>
<td>1</td>
<td>ls</td>
<td>$250,000.00</td>
<td>$250,000</td>
<td></td>
<td>$2,600,000</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2,600,000</td>
</tr>
</tbody>
</table>
## I: Widen Proscenium Opening

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate</th>
<th>Line Total</th>
<th>Subtotal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relocate as necessary</td>
<td>1</td>
<td>ls</td>
<td>$150,000.00</td>
<td>$150,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconfigure non-structural proscenium wing walls</td>
<td>1</td>
<td>ls</td>
<td>$200,000.00</td>
<td>$200,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sub-total $350,000

## J: Replace Windows In Administration Building

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate</th>
<th>Line Total</th>
<th>Subtotal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove windows</td>
<td>40</td>
<td>ea</td>
<td>$125.00</td>
<td>$5,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New windows</td>
<td>40</td>
<td>ea</td>
<td>$900.00</td>
<td>$36,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sub-total $41,000

## K: Raise Stagehouse Roof

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate</th>
<th>Line Total</th>
<th>Subtotal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demo stagehouse roofing, decking and bar joists</td>
<td>6,350</td>
<td>sf</td>
<td>$10.00</td>
<td>$63,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demo wood siding and wood enclosure</td>
<td>2,040</td>
<td>sf</td>
<td>$10.00</td>
<td>$20,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extend steel roof support columns</td>
<td>4</td>
<td>ea</td>
<td>$30,000.00</td>
<td>$120,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New roof, deck, and bar joist</td>
<td>6,350</td>
<td>sf</td>
<td>$35.00</td>
<td>$222,250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct wood siding and stagehouse enclosure</td>
<td>8,640</td>
<td>sf</td>
<td>$25.00</td>
<td>$216,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extend roof ladder, new roof scuttle and access door</td>
<td>1</td>
<td>ls</td>
<td>$15,000.00</td>
<td>$15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof drains/leader, and limited performance work lighting</td>
<td>6,350</td>
<td>sf</td>
<td>$8.00</td>
<td>$50,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install electrical wiring infrastructure to support gridiron motors</td>
<td>1</td>
<td>ls</td>
<td>$50,000.00</td>
<td>$50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stiffen existing long span roof trusses</td>
<td>22,500</td>
<td>ea</td>
<td>$8.00</td>
<td>$180,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install roof drains and leaders in house roof</td>
<td>22,500</td>
<td>ea</td>
<td>$3.00</td>
<td>$67,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabricate and install custom built operable performance lighting support gridiron truss</td>
<td>1</td>
<td>ls</td>
<td>$250,000.00</td>
<td>$250,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sub-total $1,255,450
<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate</th>
<th>Line Total</th>
<th>Subtotal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>L: Replace Stage Electrical Panels And Distribution</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demolish existing electrical panels and stage/backstage distribution</td>
<td>1</td>
<td>Is</td>
<td>$15,000.00</td>
<td>$15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconfigure/upgrade to 3000a service entrance</td>
<td>1</td>
<td>Is</td>
<td>$200,000.00</td>
<td>$200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconnect existing and new power/lighting circuits</td>
<td>1</td>
<td>Is</td>
<td>$30,000.00</td>
<td>$30,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase shore power panel capacity from 60a to 200a at loading dock</td>
<td>1</td>
<td>Is</td>
<td>$8,000.00</td>
<td>$8,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extend permanent power distribution to rear of facility providing site hook-ups for six busses</td>
<td>1</td>
<td>Is</td>
<td>$35,000.00</td>
<td>$35,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td>$288,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>M: Restore Pavilion Roof And Enclosure; Install Sprinkler</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove roofing, inspect decking</td>
<td>23,000</td>
<td>sf</td>
<td>$3.50</td>
<td>$80,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace 10% of roof decking with new New roof</td>
<td>2,300</td>
<td>sf</td>
<td>$8.00</td>
<td>$18,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove and replace vertical wood board enclosure</td>
<td>5,000</td>
<td>sf</td>
<td>$8.00</td>
<td>$40,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry pipe sprinkler system</td>
<td>23,000</td>
<td>sf</td>
<td>$4.00</td>
<td>$92,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td>$437,900</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N: Install Sprinkler At Existing Wood Frame “932 Club”</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry pipe sprinkler system</td>
<td>3,000</td>
<td>sf</td>
<td>$4.00</td>
<td>$12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td>$12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Quantity</td>
<td>Unit</td>
<td>Rate</td>
<td>Line Total</td>
<td>Subtotal</td>
<td>Total</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------</td>
<td>------</td>
<td>-------</td>
<td>------------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>O: Construct Site Trash/Recycling Enclosure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphalt paved area</td>
<td>2,000</td>
<td>sf</td>
<td>$6.00</td>
<td>$12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical wood board enclosure</td>
<td>100</td>
<td>lf</td>
<td>$500.00</td>
<td>$50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td></td>
<td></td>
<td>$62,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P: Replace Fire Alarm System For Main Facility And Extend To New Addition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove fire alarm system</td>
<td>51,000</td>
<td>sf</td>
<td>$0.50</td>
<td>$25,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New fire alarm system</td>
<td>66,000</td>
<td>sf</td>
<td>$4.00</td>
<td>$264,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td></td>
<td></td>
<td>$289,500</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>