# Data Gathered Pertaining

# To

# The Mid South Coliseum

# April 14, 2011

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# Tab 1

# Code Analysis

# Mid South Coliseum

# By

# Code Solutions Group. LLC

# Dated

# July 30, 2009

# Code Solutions Group, LLC

*Building Code Consultants*

Memphis Office 901-552-5772, Cell 731-549-6333


7/30/2009

# Code analysis of existing building

# Mid South Coliseum

# 940 Early Maxwell

# O. T. Marshall Architects

## Code Requirements Using the 2003 IBC

Occupancy Classification A-4

Type of Construction I-B, using foot note C for roof construction

Non Sprinklered Building

Maximum area is unlimited

Maximum number of stories is 11

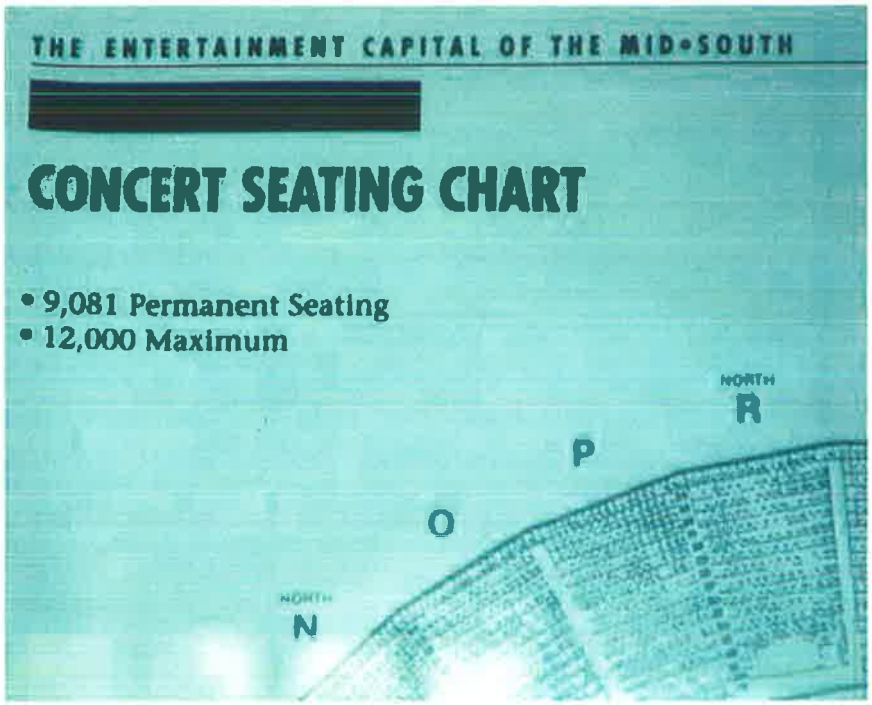
Maximum height is 160 feet

Seating or Capacity: 9081 fixed seats, 2919 non-fixed in concert arrangement, Total 12,000

Required egress width for stairs = 0.3 inches x 12,000 occupants =227 feet

Stair width provided 178.6 feet

Other egress components = 0 .20 inches per occupant = 200 feet of doors, ramps or corridors widths




Doors provided = on 2nd concourse 32 pairs of 32 inch doors or 170.6 feet

Doors provided on 1st floor concourse 16 pair of 32 inch doors or 85.3 feet + 2 single leaf 32 inch doors or 5.3 feet.

Total exit capacity from arena area to 1st and 2nd floor concourses is 10016 people.

Stairs form concourses to exit door required width is 250.4 feet.

Provided stair width is 246.5 feet.

Maximum number of occupants due to available egress width of stairs 9,860.

Accessible means of egress is required from wheel chair spaces, accessible routes complying with 1104

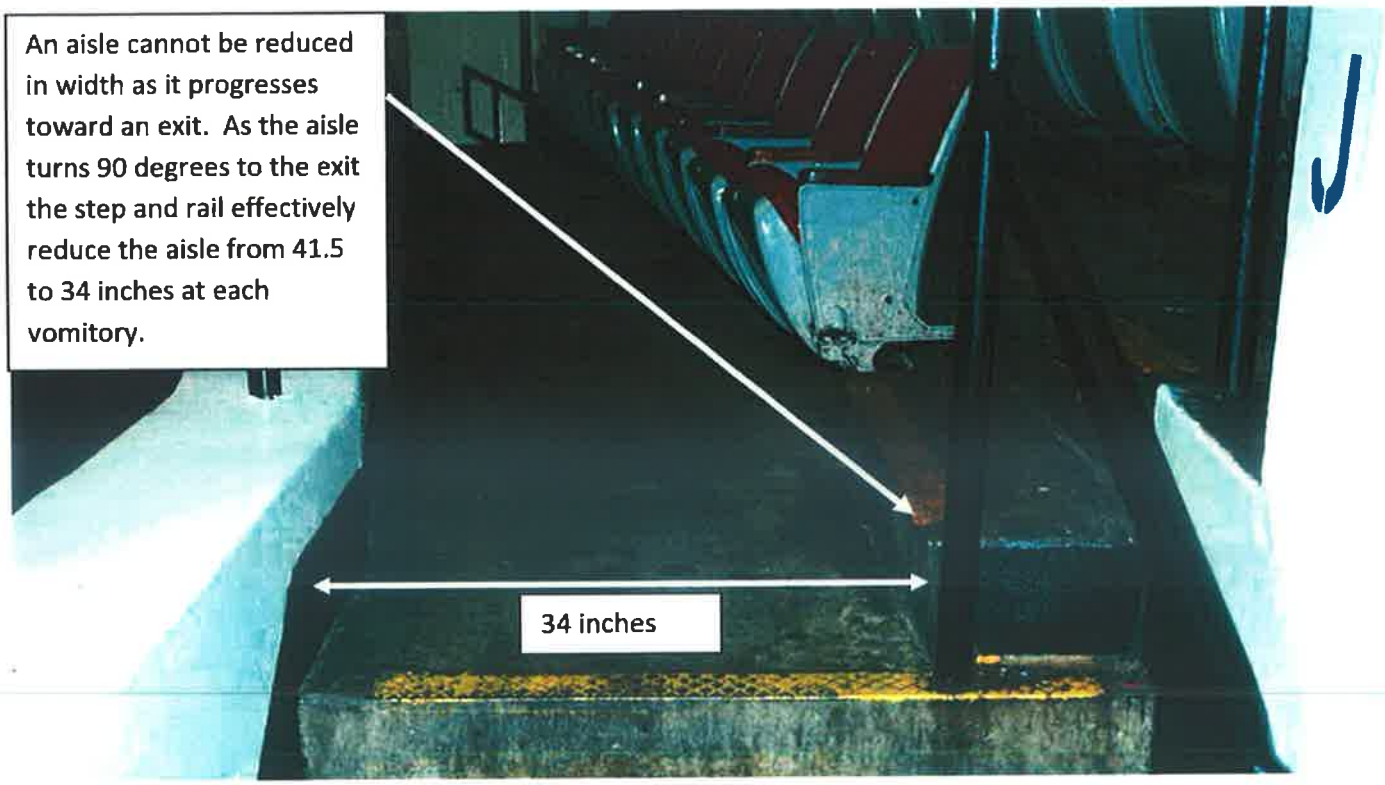
Maximum travel distance 200 feet

Average number of seats per row = 13 seats

Number of row in catchment area = 9

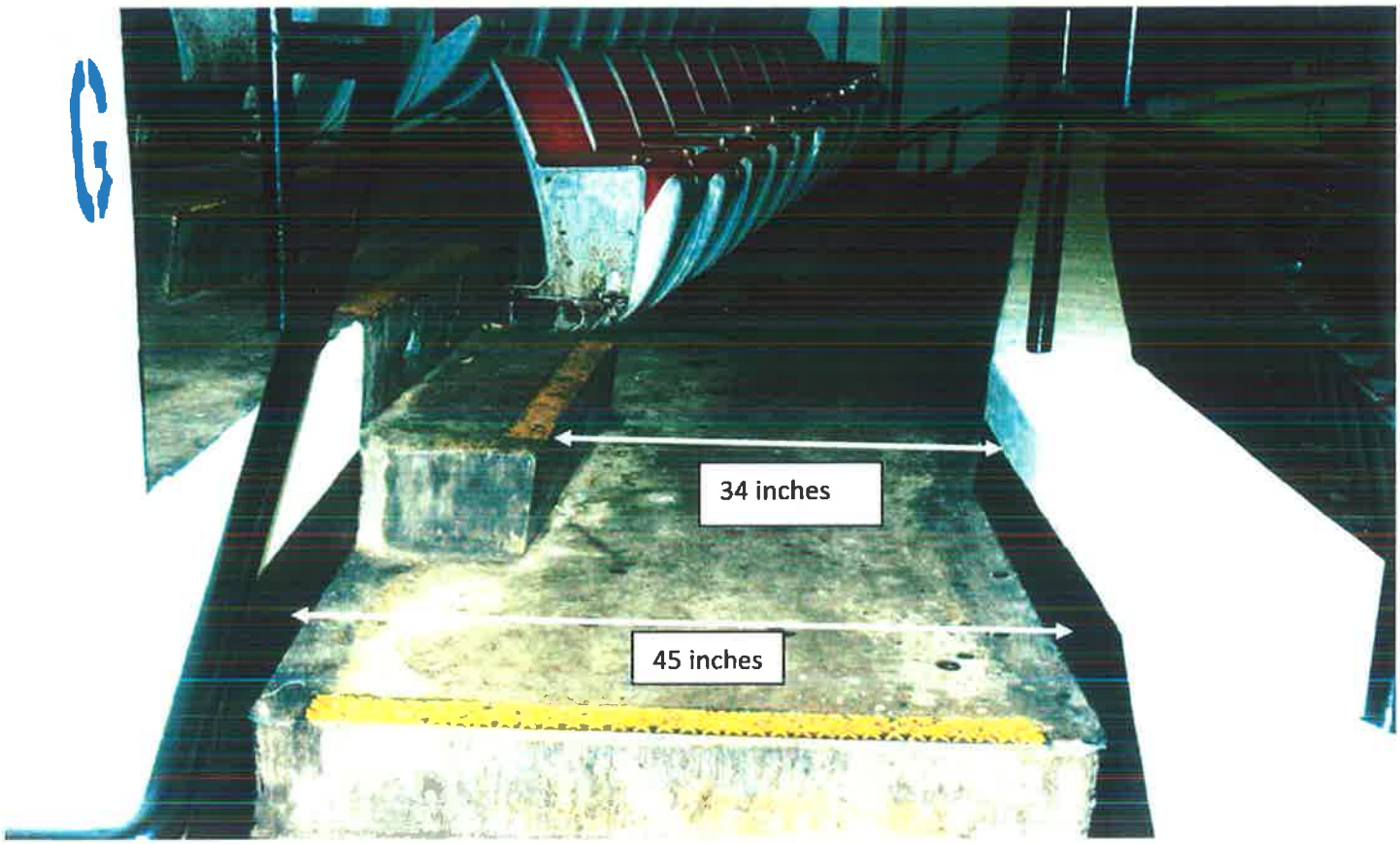
Seat per catchment area 242

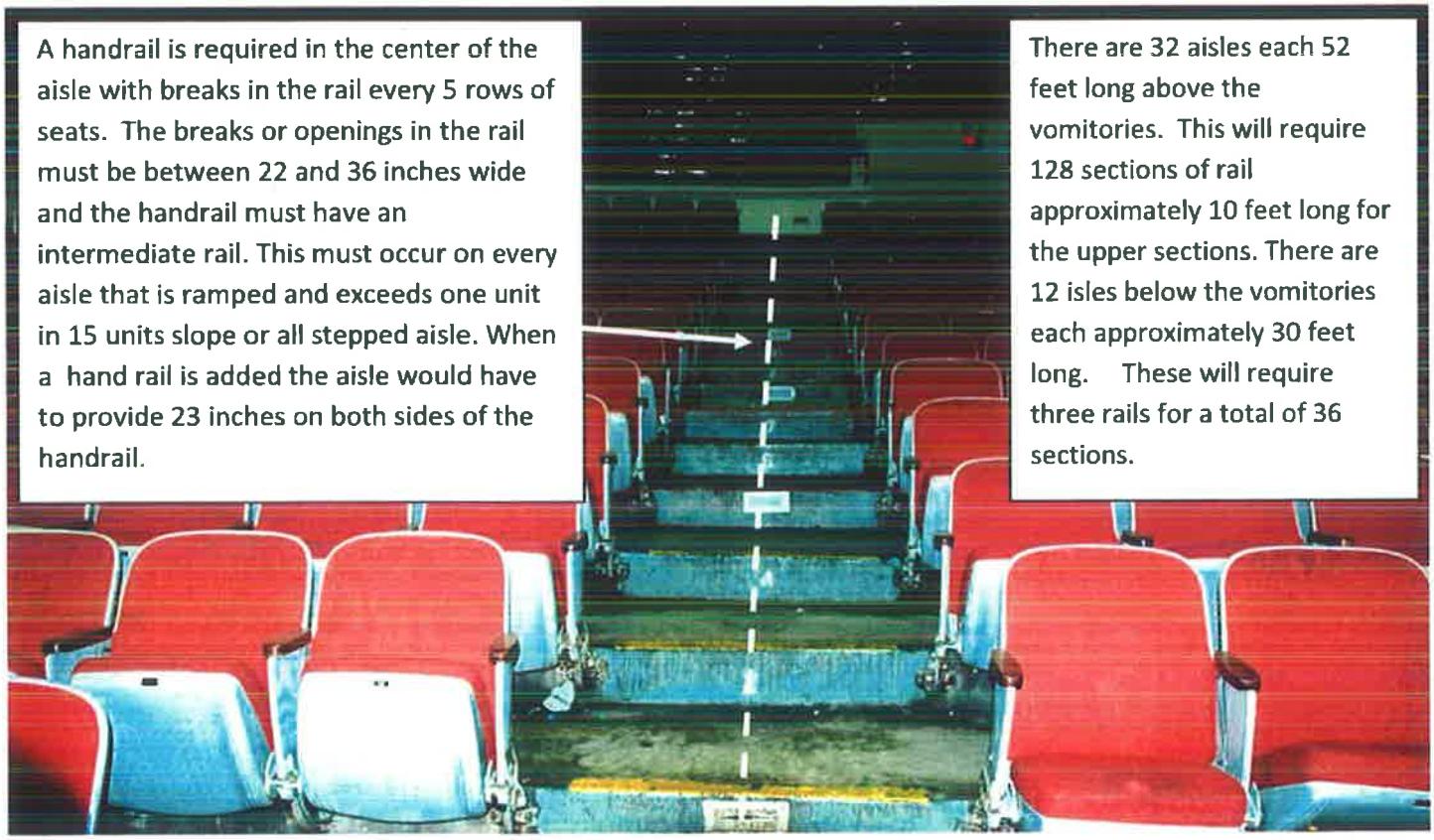
The required minimum clear width of an aisle serving seating on both sides is 48 inches.




An aisle cannot be reduced in width as it progresses toward an exit. As the aisle turns 90 degrees to the exit the step and rail effectively reduce the aisle from 41.5 to 34 inches at each vomitory.

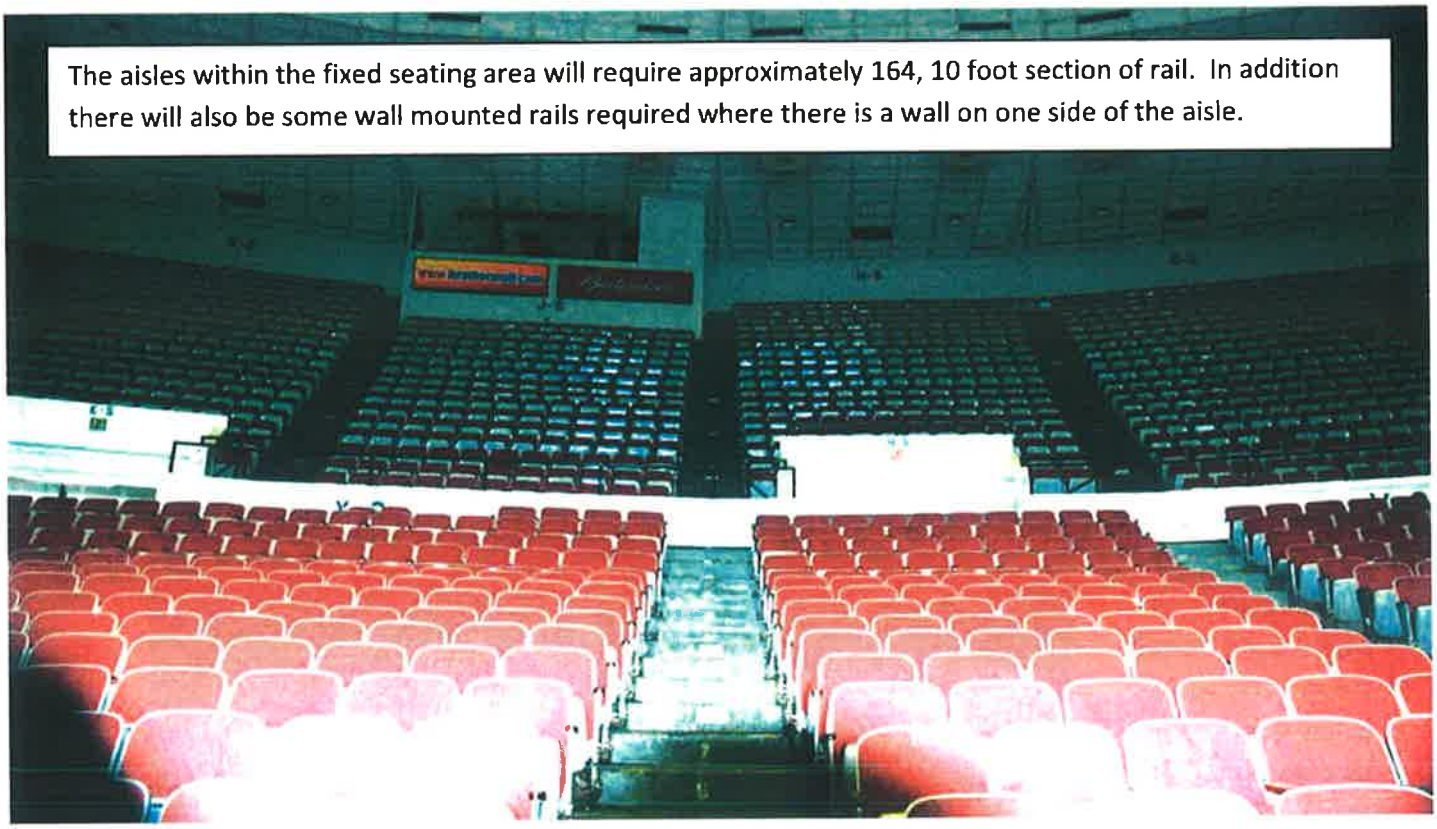
G



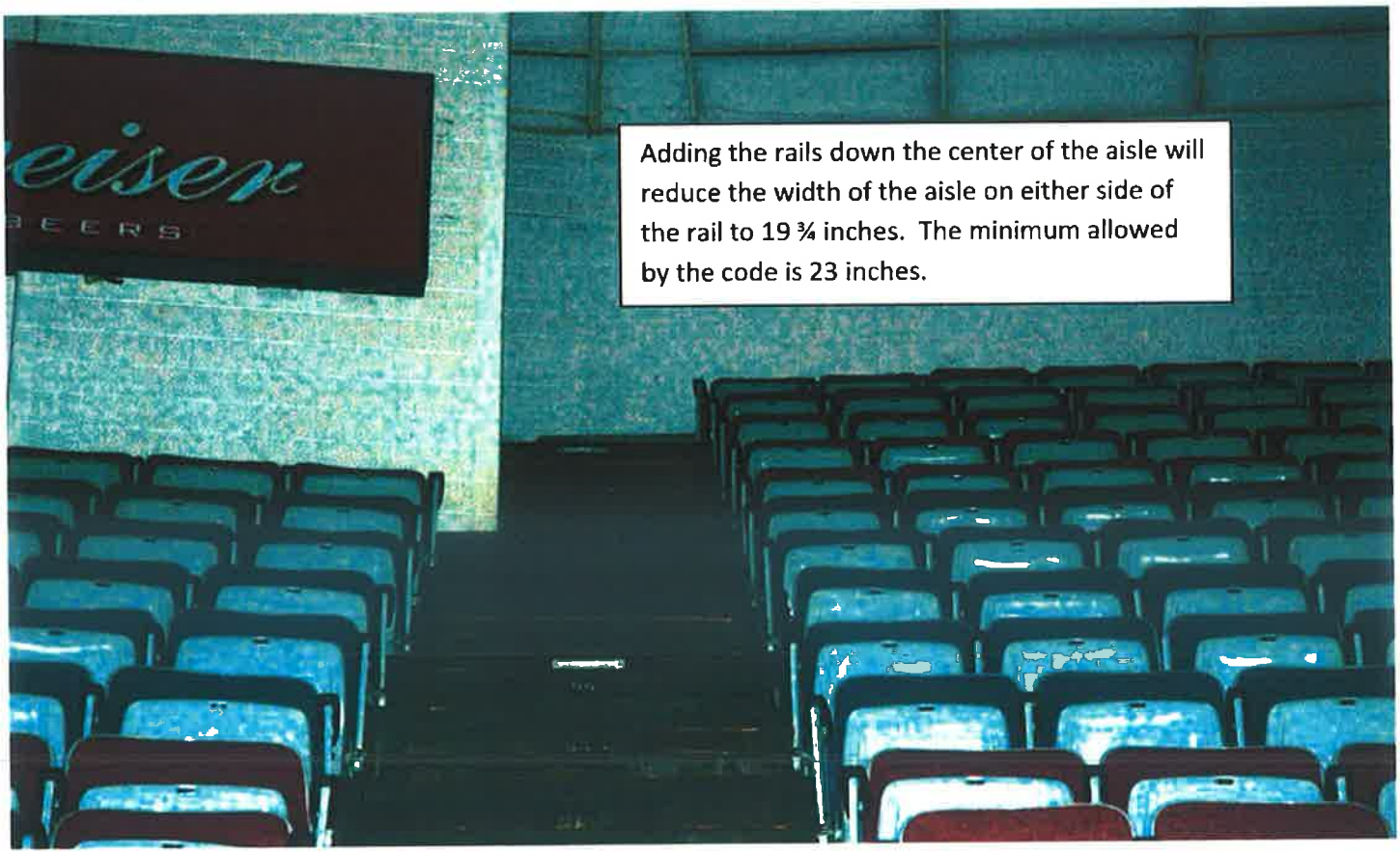



A handrail is required in the center of the aisle with breaks in the rail every 5 rows of seats. The breaks or openings in the rail must be between 22 and 36 inches wide and the handrail must have an intermediate rail. This must occur on every aisle that is ramped and exceeds one unit in 15 units slope or all stepped aisle. When a hand rail is added the aisle would have to provide 23 inches on both sides of the handrail.

There are 32 aisles each 52 feet long above the vomitories. This will require 128 sections of rail approximately 10 feet long for the upper sections. There are 12 isles below the vomitories each approximately 30 feet long. These will require three rails for a total of 36 sections.



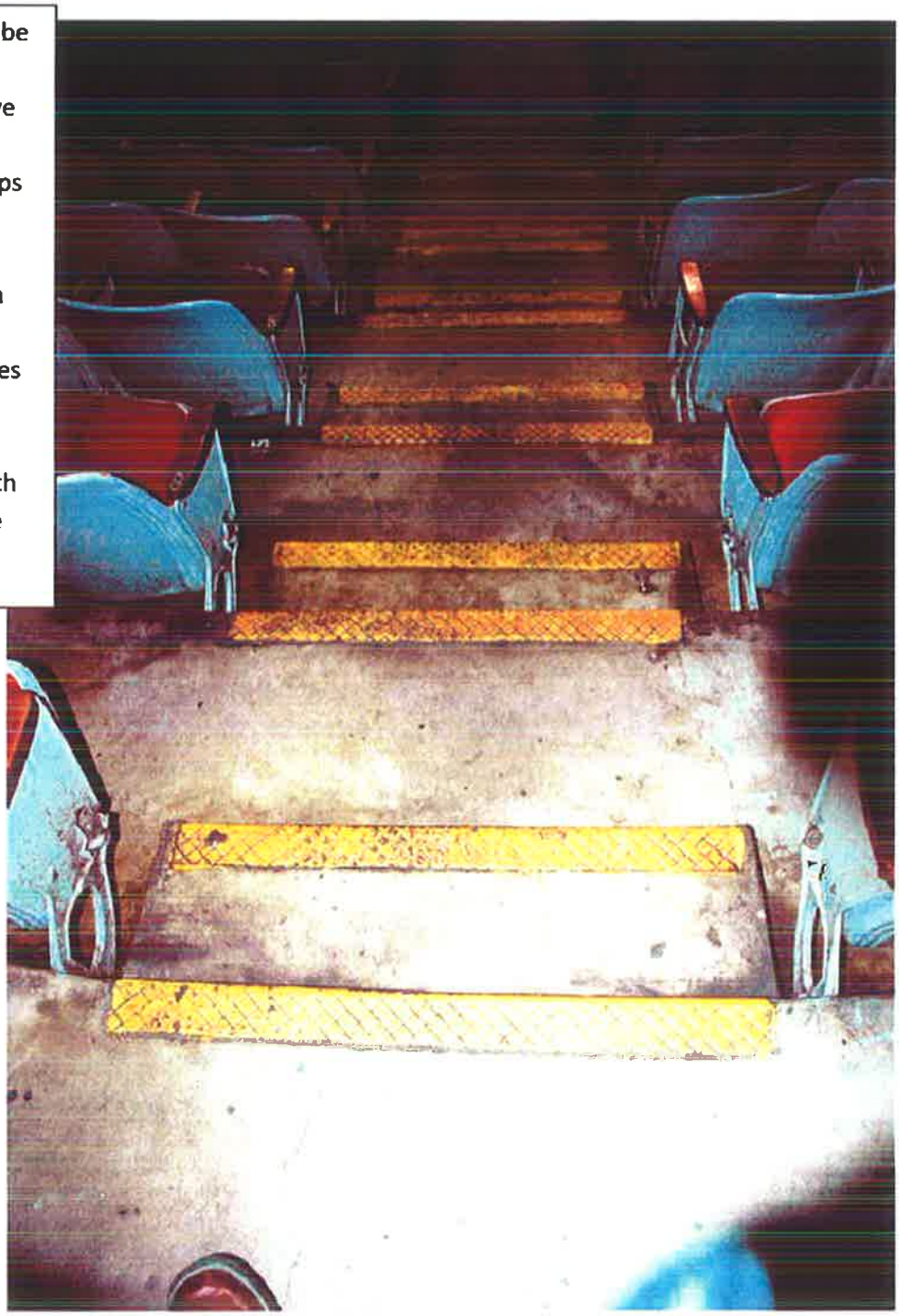
The aisles within the fixed seating area will require approximately 164, 10 foot section of rail. In addition there will also be some wall mounted rails required where there is a wall on one side of the aisle.




Adding the rails down the center of the aisle will reduce the width of the aisle on either side of the rail to 19 ¾ inches. The minimum allowed by the code is 23 inches.

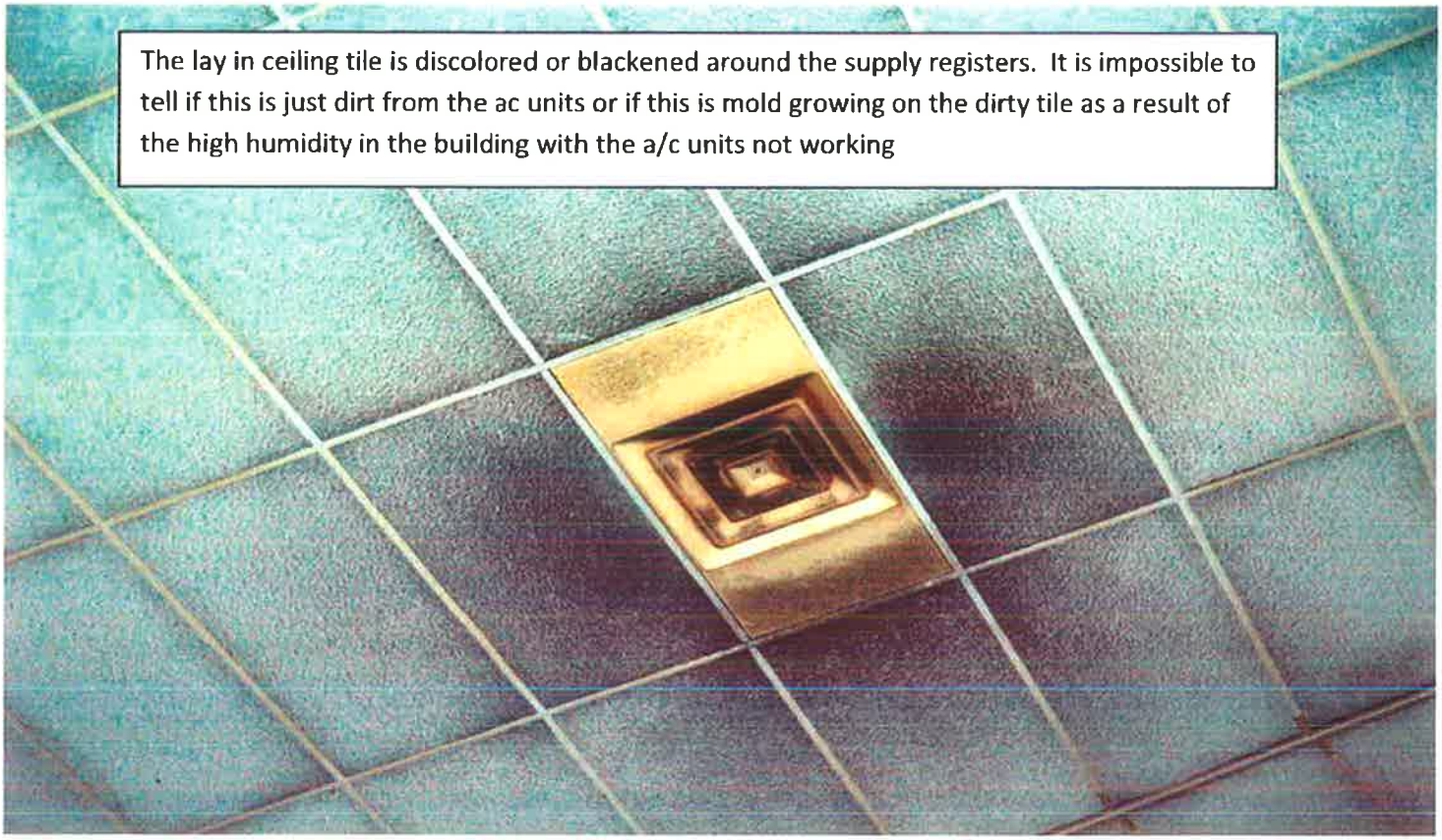
While it is an existing building and was built under the 1949 Memphis City Code and was in compliance when it was built in 1964, one injury or death due to a fall down the steep steps from the seats at the top of the coliseum would place the City in a difficult and embarrassing defense position. The new codes were written as experience proved that this type of seating required hand rails for the occupants to steady themselves with or to grab in the event of an impending fall.

Treads depths shall be a minimum of 11 inches and shall have dimensional uniformity. The steps shown here have alternating 11 inch treads and a 22 inch treads. This occurs below the cross aisles on both sides of the arena. There are a total of 12 aisles with this situation on the top 5 rows of seats.

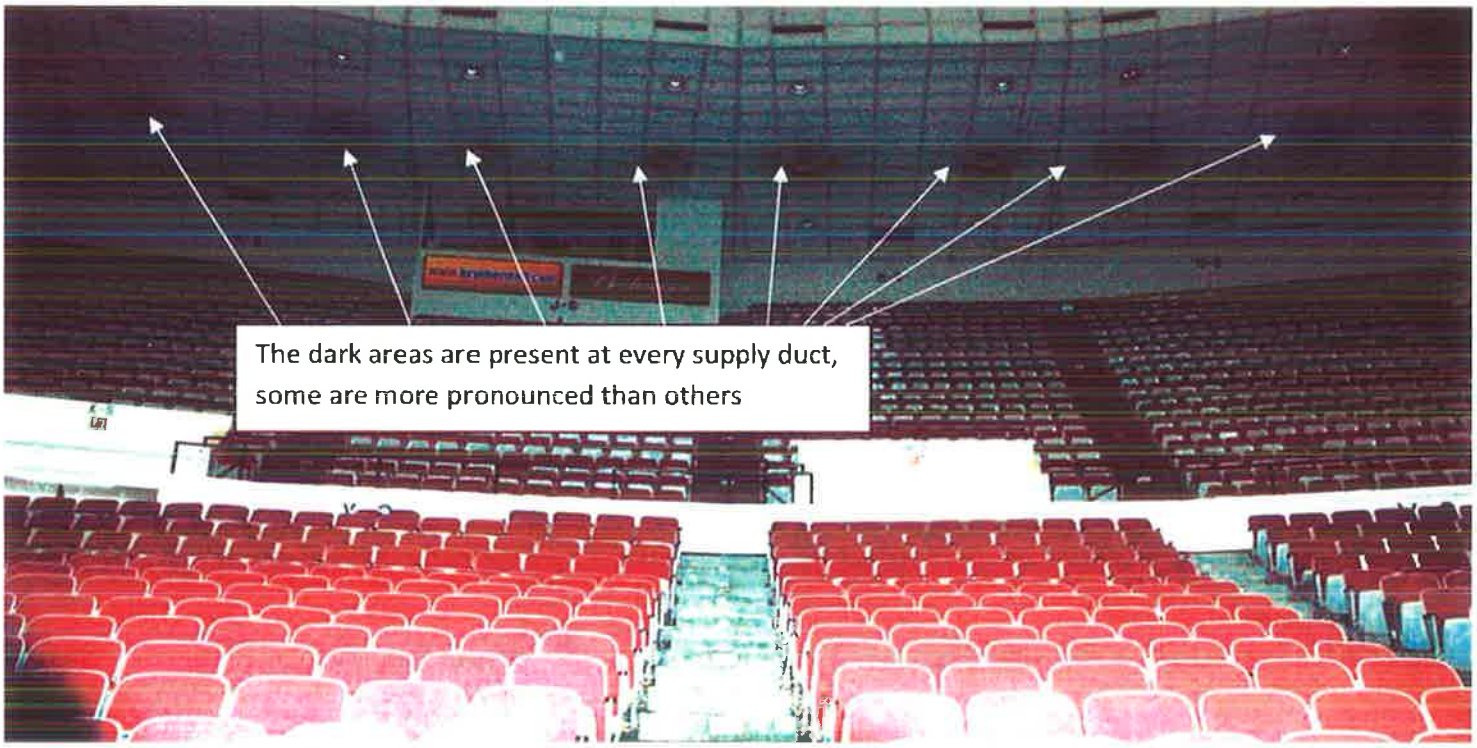


The un-uniform treads result in a very awkward stride as a person progresses up or down the stairs

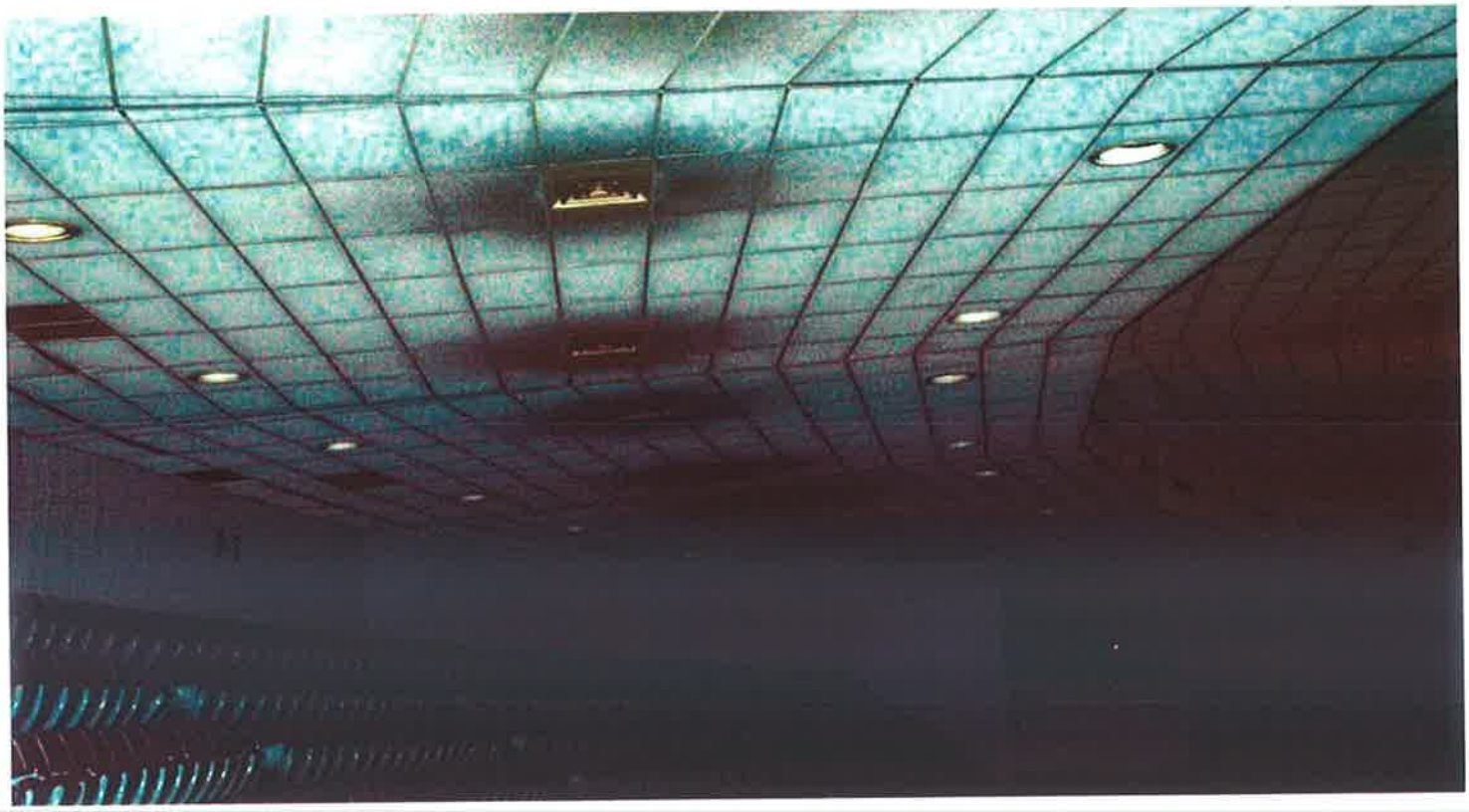
Non-uniform tread area

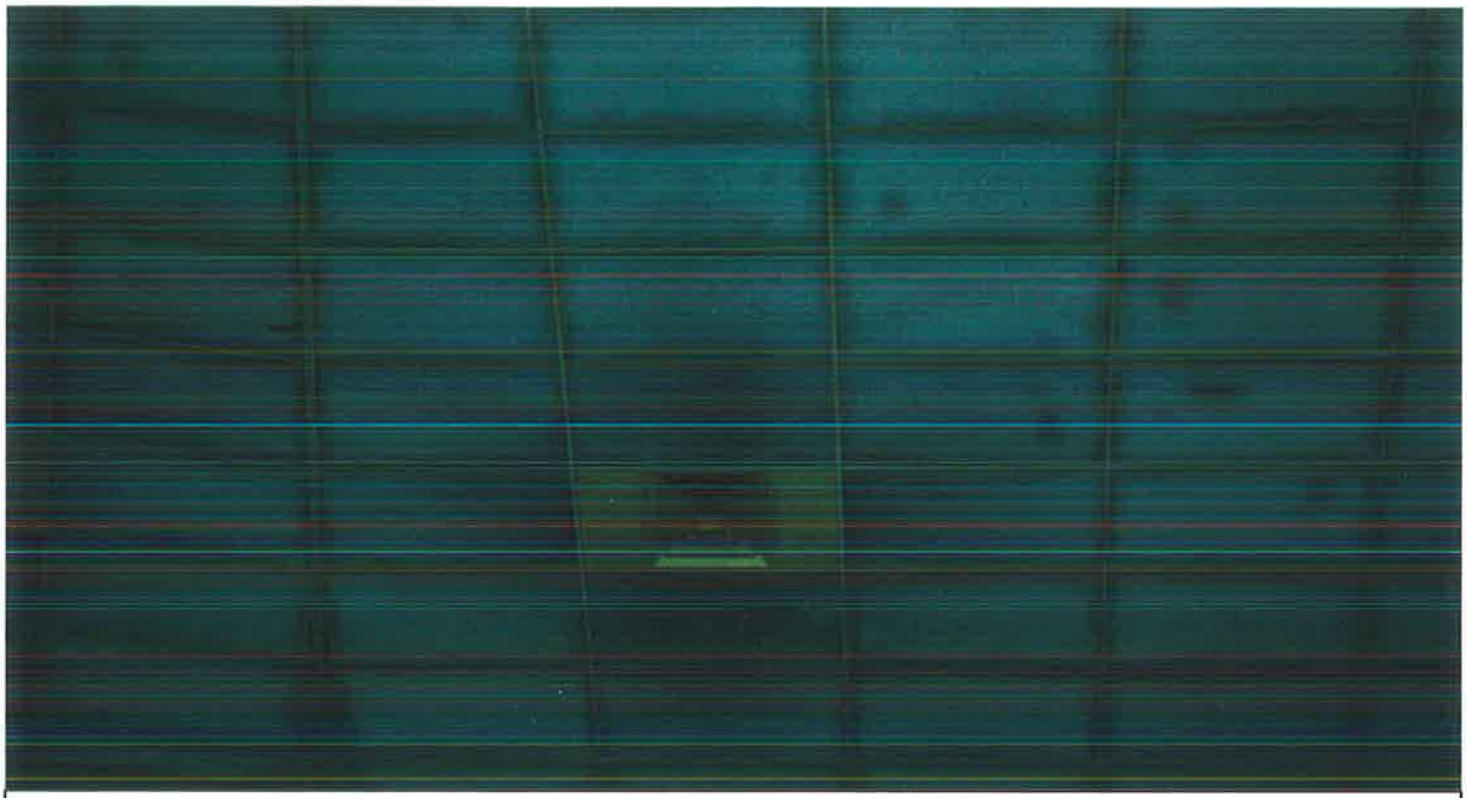


The lay in ceiling tile is discolored or blackened around the supply registers. It is impossible to tell if this is just dirt from the ac units or if this is mold growing on the dirty tile as a result of the high humidity in the building with the a/c units not working

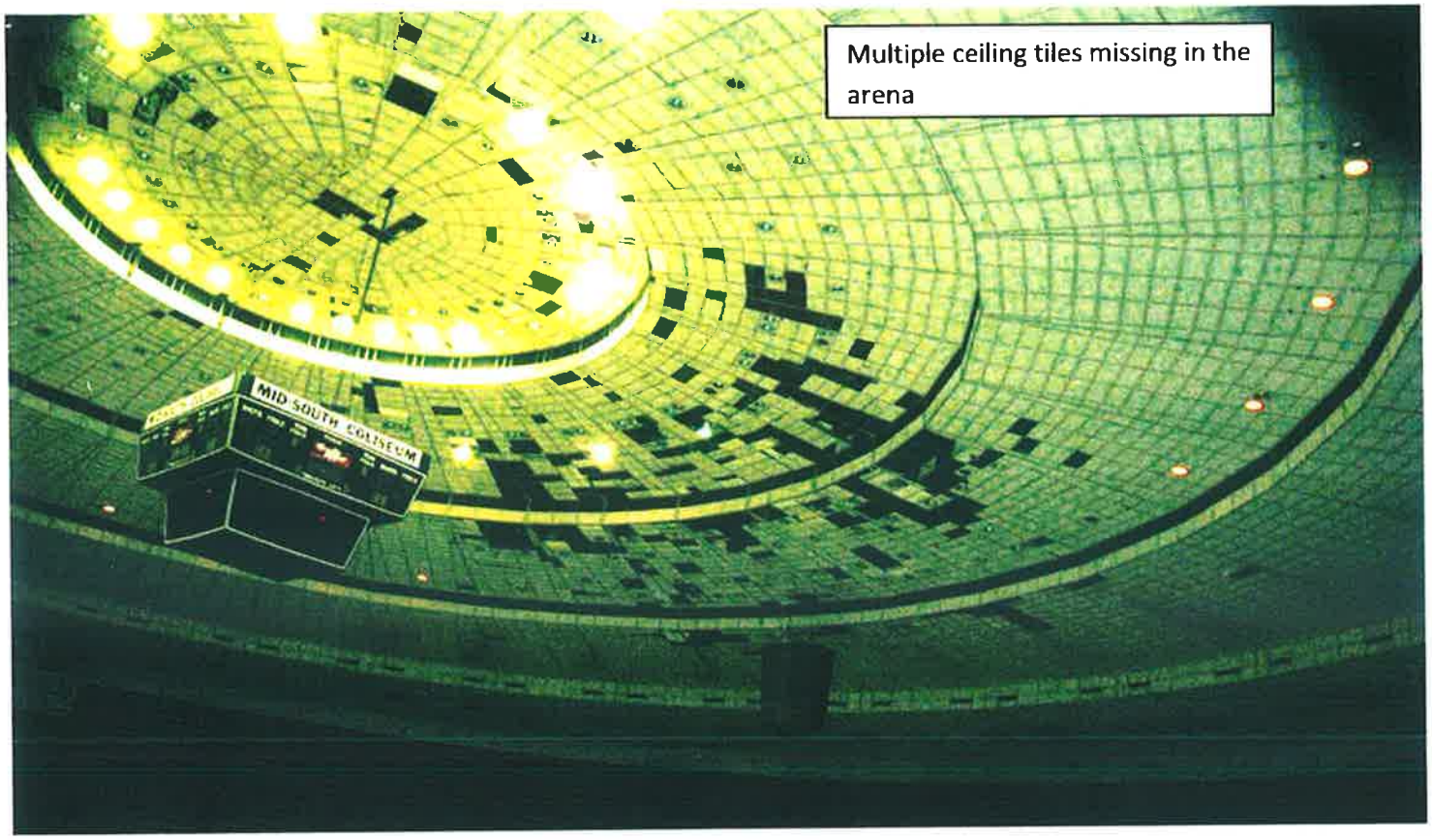


The dark areas are present at every supply duct, some are more pronounced than others

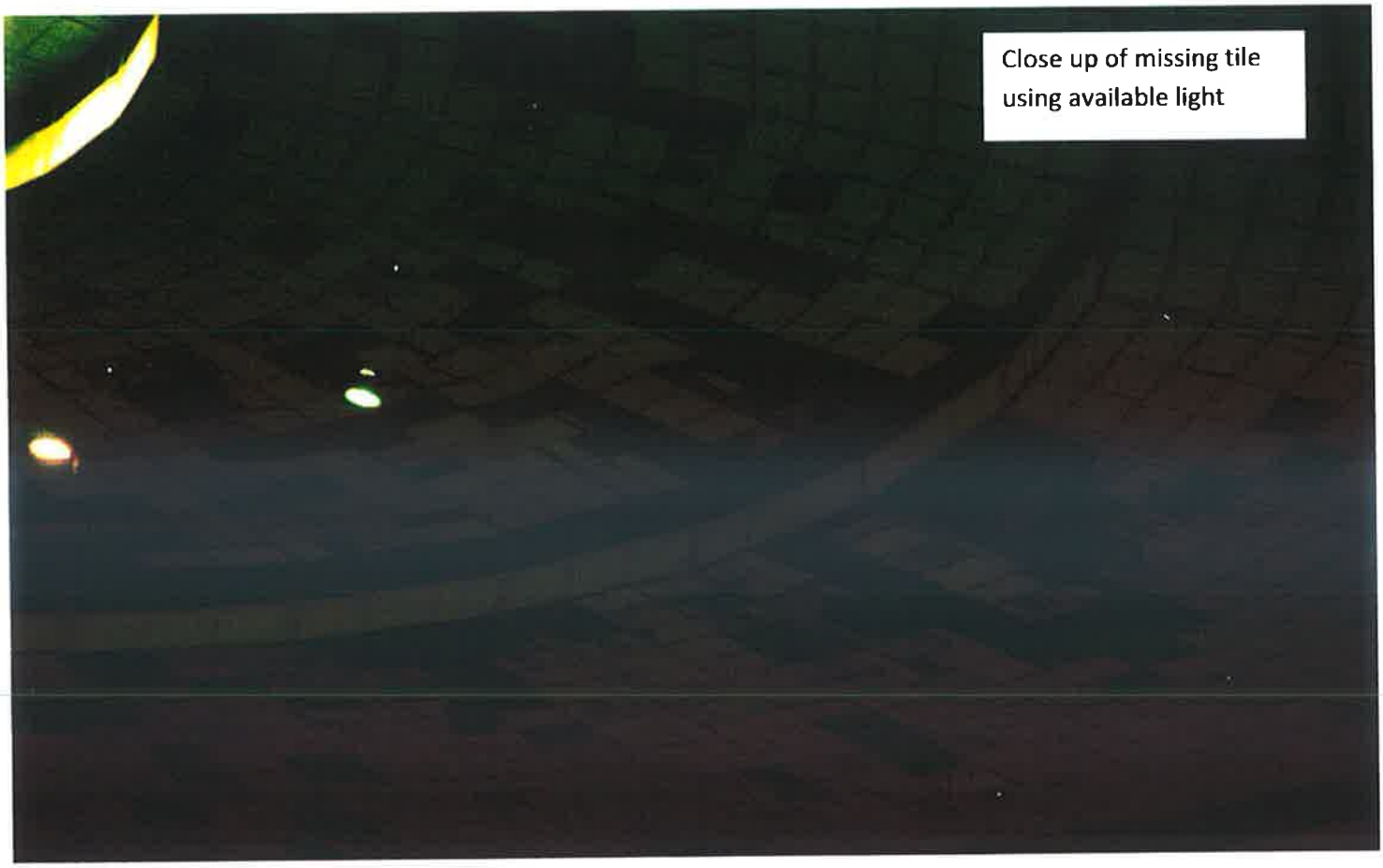




There appears to be some type of staining on some tiles which could indicate water leakage which may or may not have been repaired. It is recommended that a mold analysis be conducted on the dark stained tiles from all locations to insure that no health problems are present.




Multiple ceiling tiles missing in the arena

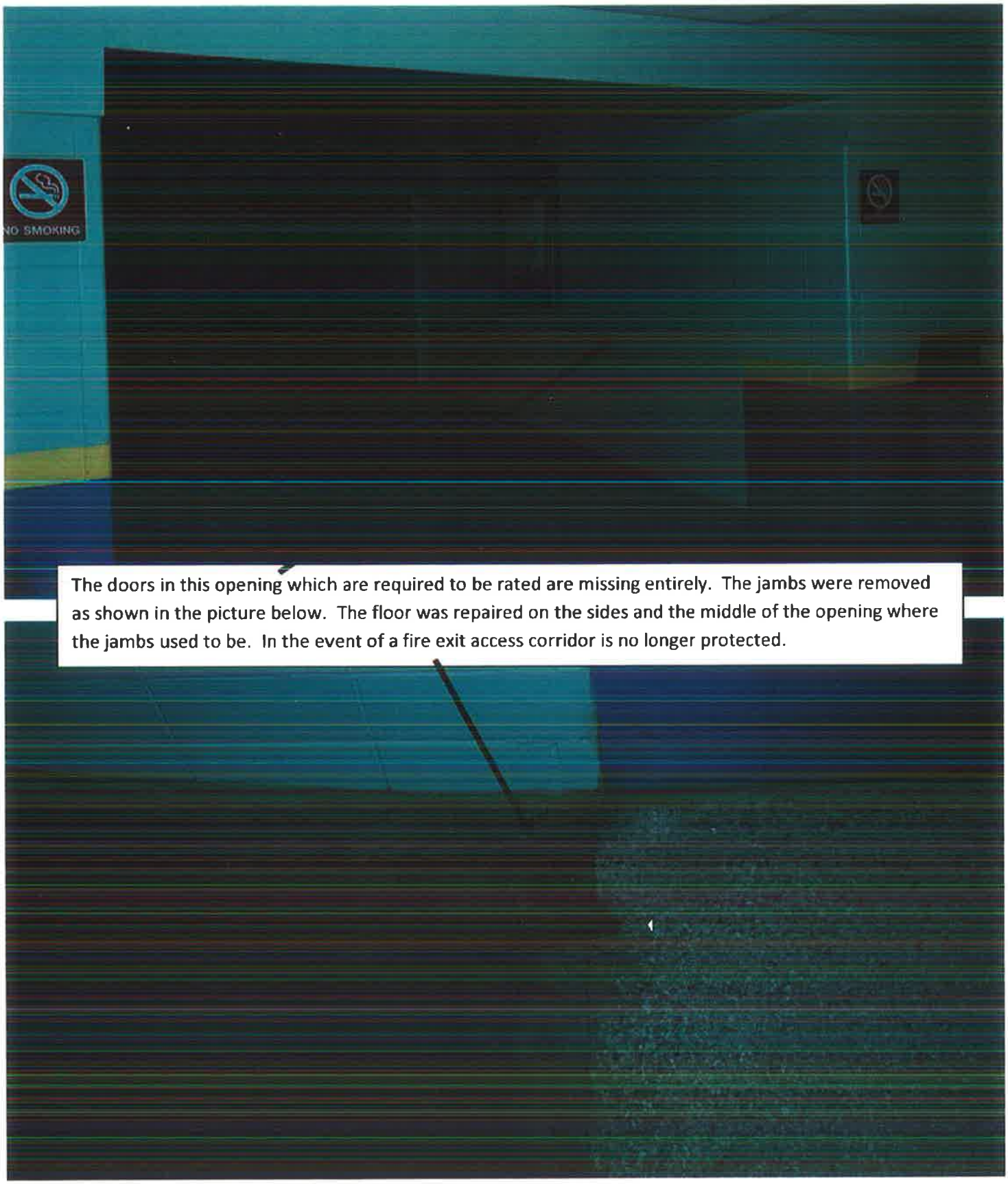


Close up of missing tile using available light

Water stained from leaks and condensation, sagging tiles due to high humidity and dirty or moldy tiles are present throughout the building. If just the damaged tiles were replaced, the new tiles would be whiter and not match the existing tiles creating an unsightly appearance. The only answer is to replace all tiles throughout the entire building once the source of staining and damage has been determined and corrected.

There are 16 vomitories each with 4 doors for a total of 64 doors which provides the emergency egress from the arena to the upper concourse and then down the open stairs to the exit doors. There are 18 doors which provide egress from the floor of the arena to the lower concourse and then up the open stairs to the exit doors. The concourse walls are required to be 1-hour fire resistant rated since the building is not fully sprinklered. The doors separate the concourses from the arena and are required to be self closing, self latching and 1/3-hour rated. In the event of a fire in the arena the occupants would exit through these doors and be protected from the fire until they had time to exit the building. There is no visible label on the doors or the jambs which would indicate that they were never tested or approved as a 1/3-hour rated door assembly. There are closers on the doors although some are inoperable but there are no self latching devices or panic hardware. The protection for the exit access corridor is not provided. Doors at other locations were removed to install chair lifts or for other reasons. This eliminates the required protection which creates an unsafe situation in the event of a fire.

The doors are damaged in many locations where the plastic veneer is chipped off or loose. The plastic veneer has sharp edges at some of the chipped areas which are unsightly and dangerous.




The doors in this opening which are required to be rated are missing entirely. The jambs were removed as shown in the picture below. The floor was repaired on the sides and the middle of the opening where the jambs used to be. In the event of a fire exit access corridor is no longer protected.

The required number of plumbing fixtures is determined by the number of occupants that will use the building during its largest event. The method of calculating the minimum number is as follows:

Occupancy Classification: **A-4 Coliseums, Arenas, Skating rinks, pools, and tennis courts for indoor sporting events and activities.**

Male Water closets, 1 per 75 occupants for the first 1,500 and 1 per 120 occupants for the remainder exceeding 1,500

| | |
|---|---|
| Maximum occupant load due to exit restraints is | 9,860 |
| Divide by 2 for male and female | 4,930 |
| Subtract the first | 1,500 |
| | 3,430 |
| Divide by 120 | 29 |
| 1500 / 75 | + 20 |
| | 49 water closets for males |
| | (urinals are allowed to be substituted for a percentage of water closets) |

Female water closets, 1 per 40 occupants for the first 1500 and 1 per 60 occupants for the remainder exceeding 1,500

| | |
|---|---|
| | 3,430 |
| Divide by 40 | 58 |
| 1500 / 40 | +38 |
| | 96 water closets for female |

Male Lavatories are calculated at one per 200 occupants or 25 lavatories.

Female lavatories are calculated at on e per 150 occupants or 33 lavatories.

Results of comparison of existing fixture count to present requirements

| | | |
|---|---|---|
| Male | Water closets Provided = 39 | Lavatories provided = 18 |
| | Water closets Required = 49 | Lavatories Required = 25 |
| | **Total -10** | **-7** |
| Female | Water closets Provided = 39 | Lavatories Provided = 22 |
| | Water closets Requires = 96 | Lavatories Required = 33 |
| | **Total -57** | **-11** |

We were advised that there was an energy survey done by Memphis Light Gas and Water which indicates that the interior lighting fixtures are inefficient and should be replaced. A copy could not be obtained.

We were advised there are problems with the chillers for the A/C system which prevents the system from being put back into operation.

An existing Building Code evaluation was conducted to determine if any existing conditions could remain as is. The evaluation process assigns a value to each item of the building as it pertains to fire safety, means of egress and general safety and the score is then totaled to determine compliance or failure. The work sheet follows on the next page. It should be noted that the building did not receive a good enough score to comply with the International Existing Building Code. The bottom right hand corner shows that the building failed in all three categories

# International Existing Building Code
# TABLE 1201.7 SUMMARY SHEET -
# Mid South Coliseum 940 Early Maxwell

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Existing occupancy | A-4 Assembly | | | | | | Proposed occupancy | | A-4 Assembly | | | |
| Year building was constructed | 1964 | | | | | | Number of stories | 2 | Height in feet | 160 | | |
| Type of construction | 1-B | | | | | | Area per floor | | | | | |
| Percentage of open perimeter | 100 | % | 75% | | | | % of height reduction | | 73% | | | |
| Completely suppressed: | Yes | | No | X | | | No Corridor wall rating | | Yes | | No | X |
| Compartmentation: | Yes | | No | x | | | Required door closers: | | Yes | | No | X |
| Fire resistance rating of vertical opening enclosures | | | | | | | | | | | | |
| Type of HVAC system | SPLIT | | | | | | Serving number of floors | | 2 | | | |
| Automatic fire detection: | Yes | X | No | | | | Type and location | | | | | |
| Fire alarm system: | Yes | X | No | | | | Type | | | | | |
| Smoke control: | Yes | | No | X | | | Type | | | | | |
| Adequate exit routes: | Yes | | No | X | | | Dead ends: | | Yes | | No | X |
| Maximum exit access travel distance | 200 | | | | | | Elevator controls: | | Yes | | No | X |
| Means of egress emergency lighting: | Yes | X | No | | | | Mixed occupancies: | | Yes | | No | X |

| SAFETY PARAMETERS | FIRE SAFETY (FS) | MEANS OF EGRESS (ME) | GENERAL SAFETY (GS) |
|---|---|---|---|
| 1201.6.1 Building Height | 3.84 | 3.84 | 3.84 |
| 1201.6.2 Building Area | 14.5 | 14.5 | 14.5 |
| 1201.6.3 Compartmentation | 4 | 4 | 4 |
| 1201.6.4 Tenant and Dwelling Unit Separations | -4 | -4 | -4 |
| 1201.6.5 Corridor Walls | -5 | -5 | -5 |
| 1201.6.6 Vertical Openings | -3 | -3 | -3 |
| 1201.6.7 HVAC Systems | 5 | 5 | 5 |
| 1201.6.8 Automatic Fire Detection | 4 | 4 | 4 |
| 1201.6.9 Fire Alarm System | -5 | -5 | -5 |
| 1201.6.10 Smoke control | **** | 0 | 0 |
| 1201.6.11 Means of Egress | **** | 0 | 0 |
| 1201.6.12 Dead ends | **** | 2 | 2 |
| 1201.6.13 Maximum Exit Access Travel Distance | **** | 0 | 0 |
| 1201.6.14 Elevator Control | -4 | -2 | -2 |
| 1201.6.15 Means of Egress Emergency Lighting | **** | 0 | 0 |
| 1201.6.16 Mixed Occupancies | 0 | **** | 0 |
| 1201.6.17 Automatic Sprinklers | 0 | 0 ÷ 2 = 0 | 0 |
| 1201.6.18 Standpipes | 6 | 6 | 6 |
| 1201.6.18 Incidental Use Area Protection | 0 | 0 | 0 |
| **Building Score — Total Value** | 16.34 | 20.34 | 20.34 |

**TABLE 1201.9**
**VALUATION FORMULAS**

| FORMULA | Table 1201.7 | | | Table 1201.8 | | | SCORE | PASS/FAIL |
|---|---|---|---|---|---|---|---|---|
| FS - MFS ≥ 0 | 16.34 | (FS) | - | 29 | (MFS) | = | -12.66 | FAIL |
| ME - MME > 0 | 20.34 | (ME) | - | 40 | (MMS) | = | -19.66 | FAIL |
| GS - MGS > 0 | 20.34 | (GS) | - | 40 | (MGS) | = | -19.66 | FAIL |

# Summary:

In most existing building there are usually some code violations that where compliant at the time of construction or not noticed and or corrected up by the designers, contractors or inspecting authorities. There are also items that have been modified during the life of the structure by maintenance workers or contractors which may not have been reviewed by the code enforcement authorities. These items in some cases can be corrected or removed and the building brought into a safe and useful condition.

The International Existing Building Code (IEBC) as adopted by Memphis and Shelby County Office of Construction Code Enforcement is an excellent tool for returning an existing building to useful life, although, the IEBC Evaluation process cannot be used if the emergency egress is insufficient for the occupant load. The fact that there are not enough doors, aisle width, stair width, and hand rails to safely allow the occupants to exit creates a dangerous condition in the event of an emergency. The people sitting in the top rows will be the first affected in a fire or smoke event, as the smoke will rise and accumulate at the ceiling. When it is realized that there is a problem and people start to move toward the exits there will be a backup do the narrow aisle, lack of hand rails and the even narrower cross aisle which is reduced by the step and hand rail protruding into walking space. If one person where to panic and trip do to the slow moving crowd and the deteriorating conditions, a domino effect could be created causing people to fall into each other and down the steep steps. Anyone who ever had to sit in the upper seats at a Memphis State Basketball game at the Mid South Coliseum can attest to the length of time it took to finally get to the exit doors and outside. If you throw some smoke and panic into the equation you can imagine the results.

- There is a method of correcting the vertical aisle width problem but there is not a good method for correcting the cross aisle problem at the vomitories. One seat in each row, in every other section could be removed. This would let the rest of the seats slide over correcting the width of two vertical aisles. The front wall of each vomitory cannot move forward 14 inches to correct the width of the cross aisle as this would reduce the cross aisle below the wall. The step and rail cannot be removed or pushed up the hill due to the structure. The reduced width at this point will cause the back up of people as they exit. With the additional width and new rails in the middle of the aisle there is room for 2 people to exit down the aisle side by side. This doubles the exit capacity of the aisle but when the occupants reach the cross aisles at the vomitories, only one person can proceed at a time, slowing the egress. (Pages 3 & 4)
- 168 sections of hand rails would have to be added. (Pages 4 & 5)
- The smaller of the irregular treads in the top of the lower sections would be removed and replaced with treads that split each tier equally. (Pages 6 & 7)
- The entire ceiling both inside the arena and in the concourses will have to be replaced. (Pages 8, 9, 10, 11 and 12)

- The missing doors from the arena to the corridors would have to be replaced and self latching, panic hardware installed on all the doors. (Pages 13 & 14)
- The toilet facilities would need to be added to bring the ratio of, fixtures to occupants, to the correct number and the percentage of handicap facilities will have to be provided. (Page 15) Many people have complained in the past about the long lines at the restrooms during a concert or sporting event.
- The items that contain negative and low numbers on the IEBC Summary sheet will need to be installed or corrected in order to receive a passing score.
- One method of increasing the safety of the building would be to provide an approved sprinkler system and smoke control system.
- The lighting system in the arena has been deemed to be inefficient and should be replaced.
- The air conditioning system is not functioning and will need repairing or replacement.
- A separate study on accessibility issues has been conducted. These items will have to be addressed as well.

**While the building is a land mark and in physically could condition the question is:**

Would the cost of repairs and complying with the presently adopted building, accessibility and life safety, codes provide a venue that would serve the needs of the people of Memphis and benefit the redevelopment of the fairgrounds better than a new building? If a dedicated performing arts venue seating 8,000 to 12,000 people is needed, then a new building with a full working stage, fly gallery, proscenium protection, good acoustics, theatrical lighting, and adequate exit capacity for the designed seating and with full sprinkler protection might be the right answer. While the coliseum is a unique building there is physically no way a 1960's multi functional facility could be redesigned to provide this type of venue.

# Tab 2

# Abestos Survey Report

# Mid South Coliseum

# By

# Ensafe

# Dated

# September 11, 2009

# ASBESTOS SURVEY REPORT

## MID-SOUTH COLISEUM
## EARLY MAXWELL BOULEVARD
## MEMPHIS, TENNESSEE

**Prepared for:**

**O.T. Marshall Architects, P.C.**
**5859 Ridge Bend Road**
**Memphis, Tennessee 38120**

**Prepared by:**

**EnSafe Inc.**
**5724 Summer Trees Drive**
**Memphis, Tennessee 38134**
**(901) 372-7962**
**(800) 588-7962**
**www.ensafe.com**

**September 11, 2009**

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Appendix A Homogeneous Area Summary and Laboratory Report

## 1.0 INTRODUCTION

This report summarizes the asbestos-containing materials (ACM) survey conducted at the Mid-South Coliseum on Early Maxwell Boulevard in Memphis, Tennessee.

The survey was conducted to identify ACM prior to demolition of the building. All asbestos sampling was conducted by U.S. Environmental Protection Agency (USEPA) Asbestos Hazard Emergency Response Act (AHERA)-accredited inspectors. EnSafe assessed all accessible areas within the Mid-South Coliseum. Survey procedures included review of available floor plan drawings of the Mid-South Coliseum, visual observation, destructive wall, flooring, and insulation penetrations, physical inspection, and bulk sample collection of materials suspected of containing asbestos. Site-specific information was recorded at each sample location, including a brief description of each suspect ACM, sample locations, and the sample-specific identification number. The survey described herein was conducted between August 14 and 31, 2009.

EnSafe visually identified homogenous areas (defined by USEPA as areas that are uniform by color, texture, construction/application date, and general appearance) of suspect ACM within the Mid-South Coliseum. A representative number of samples was collected from each homogeneous area. Each sample was placed into a sealable plastic bag and marked with a unique sample identification code (e.g., MSC01-FTM2-01; MSC — Mid-South Coliseum; 01 — first floor; FTM2 — Floor Tile and Mastic Homogeneous Area Designation; 01 — Sequential Sample Number). Samples were maintained under chain-of-custody and were submitted to Scientific Analytical Institute, Inc. (SAI) of Greensboro, North Carolina, an independent laboratory, for analysis of asbestos content. SAI is accredited for asbestos analysis by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program. Samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 [Improved]).

The asbestos survey described herein was limited to suspect materials that were visually and physically accessible. EnSafe attempted to also identify the locations of concealed suspect materials (i.e., materials behind walls, above ceilings, etc.), and collect representative samples. EnSafe did not breach every wall or operating building systems in search of hidden materials. If additional suspect materials — such as those behind walls or not identified because of other limitations during this survey — are identified during building demolition, they should be sampled by a certified building inspector prior to disturbance. Samples were collected from each homogeneous area in accordance with standard sampling protocols.

The following sections of this report detail the materials determined to be asbestos-containing within the Mid-South Coliseum. The U.S. Environmental Protection Agency and the Memphis-Shelby County Health Department regulations define ACM as a material containing more than 1% asbestos, by volume, as determined by PLM analysis. In the case of multi-layer systems (e.g., floor tile/mastic layers), the laboratory analyzed each layer separately.

The materials found to contain more than 1% asbestos by PLM analysis are summarized in Table 1. The table displays the homogeneous area (material) description; the homogeneous area sample identification; the asbestos content and type; and the approximate quantity of the ACM.

A complete list of homogenous areas (materials) sampled is included in the appendix, along with a copy of the laboratory report (includes sample descriptions and analytical results) and chain-of-custody.

## 2.0 FINDINGS: MID-SOUTH COLISEUM

Analytical results for confirmed ACM identified at the Mid-South Coliseum are summarized in the table below. A copy of the analytical laboratory report and EnSafe's chain-of-custody record for samples collected from the Mid-South Coliseum are in Appendix A, along with a complete list of homogeneous areas sampled.

**Table 1**
**Confirmed ACM Sample Summary**
**Mid-South Coliseum**

| Homogeneous Area Description | Sample ID | Asbestos Components | Estimated Quantity[1] |
|---|---|---|---|
| **Coliseum First Floor** | | | |
| **12 X 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (Two Layers — Second Layer 9 X 9), 1st Floor, Dressing, Blue and Green Rooms** | MSC01-FTM2-03 - D | 8%Chrysotile (mastic) | 2,516 SF |
| **12 X 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (Two Layers — Second Layer 9 X 9), 1st Floor, Dressing, Blue And Green Rooms** | MSC01-FTM2-04 - B | 8%Chrysotile (mastic) | 2,516 SF |
| **9 X 9 Beige Floor Tile WwBlack Mastic — Rooms A, B, And C** | MSC01-FTM-01 - A | 3%Chrysotile (tile) | 1,122 SF |
| **9 X 9 Beige Floor Tile W/Black Mastic — Rooms A, B, and C** | MSC01-FTM-01 - B | 8%Chrysotile (mastic) | 1,122 SF |
| **Spray-On-Ceiling — North, South, and West Lobbies** | MSC01-SOC-01 | 8%Chrysotile | 6,831 SF |
| **Coliseum Boiler Room (First Floor)** | | | |
| **9 X 9 Brown Floor Tile With Black Mastic, Boiler Room Office** | MSC01A-FTM-01 - A | 3%Chrysotile (tile) | 216 SF |
| **9 X 9 Brown Floor Tile with Black Mastic, Boiler Room Office** | MSC01A-FTM-01 - B | 8%Chrysotile (mastic) | 216 SF |
| **Boiler #1 and #2, Sides** | MSC01A-B2-02S | 5%Chrysotile | Insulation on 2 Boilers |
| **Blue Chiller Pumps (4 Total) — Second Story** | MSC01A-CHLPUMPEB-01 - B | 5%Chrysotile (mud) | All hard packed materials (i.e., risers, runs, elbows) associated with chiller pumps (blue wrap) |
| **4" Elbow on Blue Chiller Lines** | MSC01A-CHLTSIEB2-01 - B | 5%Chrysotile (mud) | All hard packed elbows associated with chiller (blue) |
| **Valves on Blue Chiller Pump** | MSC01A-CHLPUMPVL-01 - B | 5%Amosite (mud) | All wrapping/ insulation on blue pump chiller valves |
| **2" Grey Non Potable Water** | MSC01A-NPOTTSIEB-01 - B | 5%Amosite | All elbows |

**Table 1**
**Confirmed ACM Sample Summary**
**Mid-South Coliseum**

| Homogeneous Area Description | Sample ID | Asbestos Components | Estimated Quantity[1] |
|---|---|---|---|
| **Line Elbows** | | (mud) | |
| **8" Blue Chiller Line Elbows** | MSC01A-CHLTSIEB4-01 - B | 3% Chrysotile 5%Amosite (mud) | All elbows |
| **18" Blue Chiller Line Elbows** | MSC01A-CHLEB1-01 - B | 5%Chrysotile (mud) | All elbows |
| **Brine Unit Holding Tank — Sides — Second Story** | MSC01A-BUHT2S-01 | 5%Amosite | Exterior insulation on 3 separate tanks (purple) |
| **Brine Unit Holding Tank — Ends — Second Story** | MSC01A-BUHT2E-01 - B | 5%Amosite (mud) | Exterior insulation on 3 separate tanks (purple) |
| **4" Orange Boiler Line — Second Story** | MSC01A-B1TSI2-01 - B | 5%Chrysotile (mud) | All elbows, risers and runs |
| **Brine Unit Valve Boxes** | MSC01A-BU-B1 | 20%Chrysotile (mud on foam) | All wrapping/ insulation on 10 boxes total on 1st and 2nd stories (purple) |
| **8" Orange Line Fitting (Elbow)** | MSC01A-B1TSIFIT-01 - B | 5%Chrysotile (mud) | All elbows |
| **8" Orange Pipe from Boilers #1 and #2** | MSC01A-B1TSI-01 | 20%Chrysotile | All elbows, risers, and runs |
| **18" Purple Elbow — Brine Unit** | MSC01A-BUTSIEB1-01 | 20%Chrysotile | All hard packed elbows |
| **Brine Unit Purple Holding Tank — Ends — Second Story** | MSC01A-BUHT3E-01 - B | 3%Chrysotile 5%Amosite (mud) | Exterior insulation on 3 separate tanks (purple) |
| **Brine Unit Purple Holding Tank — Sides — Second Story** | MSC01A-BUHT3S-01 | 3%Chrysotile 5%Amosite (mud on foam) | Exterior insulation on 3 separate tanks (purple) |
| **Orange Hot Water Tank #1 — End (West Tank) — Second Story** | MSC01A-ORHT1E-01 | 10%Chrysotile 20%Amosite | Exterior insulation on tank ends and sides |
| **Brine Unit Holding Tank — Sides — Second Story** | MSC01A-BUHT1S-01 | 5%Amosite 20%Chrysotile | Exterior insulation on 3 separate tanks (purple) |
| **6" Orange Boiler Line — Second Story** | MSC01A-B1TSI3-01 | 20%Amosite | All elbows, risers, and runs |
| **4" Orange Boiler Line Elbows** | MSC01A-B1TSIEB2-01 | 30%Chrysotile | All elbows, risers, and runs |
| **6" Orange Boiler Line Elbows** | MSC01A-B1TSIEB3-01 | 20%Chrysotile | All elbows, risers, and runs |
| **Brine Unit Purple Holding Tank — Ends — Second Story** | MSC01A-BUHT1E-01 | 20%Amosite | Exterior insulation on 3 separate tanks (purple) |
| **Boiler #1 Exhaust** | MSC01A-B1ESH-01 | 5%Chrysotile 15%Amosite | 24" diameter line up to ceiling |

**Table 1**
**Confirmed ACM Sample Summary**
**Mid-South Coliseum**

| Homogeneous Area Description | Sample ID | Asbestos Components | Estimated Quantity[1] |
|---|---|---|---|
| **Orange Hot Water Tank #2 — Sides (East Tank) — Second Story** | MSC01A-ORHT2S-01 | 15%Chrysotile 15%Amosite | Exterior insulation on tank ends and sides |
| **Orange Hot Water Tank #1 — Sides (West Tank) — Second Story** | MSC01A-ORHT1S-01 | 30%Chrysotile | Exterior insulation on tank ends and sides |
| **Orange Hot Water Tank #2 — Ends (East Tank) — Second Story** | MSC01A-ORHT2E-01 | 15%Chrysotile 15%Amosite | Exterior insulation on tank ends and sides |
| **Blue Chiller Holding Tank — (North Side of Boiler Room) — Second Story** | MSC01A-CHLT1-01 - B | 3%Chrysotile 5%Amosite (mud) | Exterior Tank Insulation |
| **6" Brine Unit Purple Pipe Elbow** | MSC01A-BUTSIEB3-01 - B | 3% Chrysotile 5%Amosite (mud) | All hard packed elbows |
| **8" Brine Unit Purple Pipe Elbow** | MSC01A-BUTSIEB2-01 | 3% Chrysotile 5%Amosite | All hard packed elbows |
| **Blue Chiller Pumps (4 Total) — Second Story** | MSC01A-CHLPUMP-01 - B | 3%Chrysotile 5%Amosite (mud) | All hard packed materials (i.e., risers, runs, elbows) associated with chiller pumps (blue) |
| **First Floor Wood Shop Area** | | | |
| **Heating Tank Elbow in Wood Shop** | MSC01B-HTTSIEB-01 - B | 3%Chrysotile 5%Amosite (mud) | All elbows in Wood Shop |
| **Heating Tank Line in Wood Shop** | MSC01B-HTLTSI-01 | 20%Amosite | Tank wrap, lines, and elbows |
| **Holding Tank in Wood Shop** | MSC01B-HTTSI-01 | 5%Chrysotile 15%Amosite | Exterior tank insulation, wrap, lines, and elbows |
| **6" Water Line Elbow — Wood Shop** | MSC01B-WL3TSIEB-02 - B | 3%Chrysotile 5%Amosite (mud) | Elbows only |
| **2" Overhead Water Line Elbow — Wood Shop** | MSC01B-WL1TSIEB-01 - B | 5%Chrysotile (mud) | Elbows only |
| **4" Overhead Water Line Elbow — Wood Shop** | MSC01B-WL2TSIEB-02 | 5%Chrysotile 5%Amosite (mud) | Elbows only |
| **Coliseum Second Floor** | | | |
| **Pipe Elbow — TSI Sample in South Lobby Hallway** | MSC02-HALTSIEBS-01 | 5%Chrysotile 5%Amosite | All hard packed elbows |
| **Equipment Room — Pipe Fitting — 2nd Floor** | MSC02-EQPTSIFIT01-01 | 5%Chrysotile 5%Amosite | All hard packed elbows and fittings |
| **Equipment Room — Pipe Run — 2nd Floor** | MSC02-EQPTSI01-01 | 5%Chrysotile 5%Amosite | All non-fiberglass pipe runs |

**Homogeneous Area Descriptions/Chain of Custody**
**Mid South Coliseum**

| | | | |
|---|---|---|---|
| MSC01-SRJC-01 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - River Kings Room | [Enter data of your choosing he |
| MSC01-SRJC-02 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - River Kings Room | [Enter data of your choosing he |
| MSC01-SRJC-03 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - North Lobby | [Enter data of your choosing he |
| MSC01-SRJC-04 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - Meeting Room | [Enter data of your choosing he |
| MSC01-SRJC-05 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - Locker Room | [Enter data of your choosing he |
| MSC01-SRJC-06 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - North Lobby | [Enter data of your choosing he |
| MSC01-SOC-01 | [Enter data of your choosing here] | Spray-on-Ceiling - South Lobby | [Enter data of your choosing he |
| MSC01-SOC-02 | [Enter data of your choosing here] | Spray-on-Ceiling - South Lobby | [Enter data of your choosing he |
| MSC01-SOC-03 | [Enter data of your choosing here] | Spray-on-Ceiling - North Lobby | [Enter data of your choosing he |
| MSC01-SOC-04 | [Enter data of your choosing here] | Spray-on-Ceiling - North Lobby | [Enter data of your choosing he |
| MSC01-SOC-05 | [Enter data of your choosing here] | Spray-on-Ceiling - West Lobby | [Enter data of your choosing he |
| MSC01-SOC-06 | [Enter data of your choosing here] | Spray-on-Ceiling - West Lobby | [Enter data of your choosing he |
| MSC01-CT-01 | [Enter data of your choosing here] | Ceiling Tile - First Aid | [Enter data of your choosing he |
| MSC01-CT-02 | [Enter data of your choosing here] | Ceiling Tile - River Kings Room | [Enter data of your choosing he |
| MSC01-CT-03 | [Enter data of your choosing here] | Ceiling Tile - Outer Locker Room | [Enter data of your choosing he |
| MSC01-CT-04 | [Enter data of your choosing here] | Ceiling Tile - 2nd Floor South Entrance / Women Restroom Hallway Area | [Enter data of your choosing he |
| MSC01-CT-05 | [Enter data of your choosing here] | Ceiling Tile - 2nd Floor South Entrance / West Area (Entrance) | [Enter data of your choosing he |
| MSC01-CT-06 | [Enter data of your choosing here] | Ceiling Tile - 2nd Floor West Side @ Ramp | [Enter data of your choosing he |
| MSC01-CT-07 | [Enter data of your choosing here] | Ceiling Tile - Main Gym / Aud. Floor - North Side | [Enter data of your choosing he |
| MSC01-CT-08 | [Enter data of your choosing here] | Ceiling Tile - Main Gym / Aud. Floor - South Side | [Enter data of your choosing he |
| MSC01-CT-09 | [Enter data of your choosing here] | Ceiling Tile - Main Gym / Aud. Floor - West Side | [Enter data of your choosing he |
| MSC01A-B2-01S | [Enter data of your choosing here] | Boiler #2 Sides | [Enter data of your choosing he |
| MSC01A-B2-02S | [Enter data of your choosing here] | Boiler #2 Sides | [Enter data of your choosing he |
| MSC01A-B2-03S | [Enter data of your choosing here] | Boiler #2 Sides | [Enter data of your choosing he |
| MSC01-GDC2-01 | [Enter data of your choosing here] | Blue Glue Down Carpet (Plush) w/Yellow Adhesive - Conference Room | [Enter data of your choosing he |
| MSC01-GDC2-02 | [Enter data of your choosing here] | Blue Glue Down Carpet (Plush) w/Yellow Adhesive - Conference Room | [Enter data of your choosing he |
| MSC01-GDC2-03 | [Enter data of your choosing here] | Blue Glue Down Carpet (Plush) w/Yellow Adhesive - Conference Room | [Enter data of your choosing he |
| MSC01-CB5-01 | [Enter data of your choosing here] | 4" Grey Cove Base (Painted White) w/Tan Adhesive - River Kings Room | [Enter data of your choosing he |
| MSC01-CB5-02 | [Enter data of your choosing here] | 4" Grey Cove Base (Painted White) w/Tan Adhesive - River Kings Room | [Enter data of your choosing he |
| MSC01-CB5-03 | [Enter data of your choosing here] | 4" Grey Cove Base (Painted White) w/Tan Adhesive - River Kings Room | [Enter data of your choosing he |
| MSC01-CUR-01 | [Enter data of your choosing here] | Black Curtains | [Enter data of your choosing he |
| MSC01-CUR-02 | [Enter data of your choosing here] | Black Curtains | [Enter data of your choosing he |
| MSC03-FTM-01 | [Enter data of your choosing here] | Grey Tile - Skybox | [Enter data of your choosing he |
| MSC03-FTM-02 | [Enter data of your choosing here] | Grey Tile - Skybox | [Enter data of your choosing he |
| MSC03-FTM-03 | [Enter data of your choosing here] | Grey Tile - Skybox | [Enter data of your choosing he |
| MSC01A-CHLPUMPEB-0 | [Enter data of your choosing here] | Blue Pumps, elbow, South pump | [Enter data of your choosing he |
| MSC01A-CHLPUMPEB-0 | [Enter data of your choosing here] | Blue Pumps, elbow, North pump | [Enter data of your choosing he |
| MSC01A-CHLPUMPEB-0 | [Enter data of your choosing here] | Blue Pumps, Elbow, Northeast Corner, | [Enter data of your choosing he |
| MSC01A-CHLTSIEB2-01 | [Enter data of your choosing here] | Blue Chiller Line, 4" Line Elbow, Second Story, Coming off Tank T1 | [Enter data of your choosing he |
| MSC01A-CHLTSIEB2-02 | [Enter data of your choosing here] | Blue Chiller Line, 4" Line Elbow, Second Story, Coming off Tank T1 | [Enter data of your choosing he |
| MSC01A-CHLPUMPVL-01 | [Enter data of your choosing here] | Blue Pump Chiller Valve | [Enter data of your choosing he |
| MSC01A-CHLPUMPVL-02 | [Enter data of your choosing here] | Blue Pump Chiller Valve | [Enter data of your choosing he |
| MSC01A-CHLTSI-01 | [Enter data of your choosing here] | 18" Blue Chiller Line (Fiberglass) | [Enter data of your choosing he |
| MSC01A-CHLTSI-02 | [Enter data of your choosing here] | 18" Blue Chiller Line (Fiberglass) | [Enter data of your choosing he |
| MSC01A-CHLTSI-03 | [Enter data of your choosing here] | 18" Blue Chiller Line (Fiberglass) | [Enter data of your choosing he |
| MSC01A-NPOTTSIEB-01 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing he |
| MSC01A-NPOTTSIEB-02 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing he |
| MSC01A-NPOTTSIEB-03 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing he |
| MSC01A-NPOTTSIEB-04 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing he |
| MSC01A-NPOTTSIEB-05 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing he |
| MSC01A-CHLTSIEB4-01 | [Enter data of your choosing here] | 8" Blue Chiller Line, Elbow | [Enter data of your choosing he |
| MSC01A-CHLTSIEB4-02 | [Enter data of your choosing here] | 8" Blue Chiller Line, Elbow | [Enter data of your choosing he |
| MSC01A-CHLTSIEB4-03 | [Enter data of your choosing here] | 8" Blue Chiller Line, Elbow | [Enter data of your choosing he |
| MSC01A-CHLEB1-01 | [Enter data of your choosing here] | 18" Blue Chiller Line, Elbows | [Enter data of your choosing he |
| MSC01A-CHLEB1-02 | [Enter data of your choosing here] | 18" Blue Chiller Line, Elbows | [Enter data of your choosing he |
| MSC01A-CHLEB1-03 | [Enter data of your choosing here] | 18" Blue Chiller Line, Elbows | [Enter data of your choosing he |
| MSC01A-BUHT2S-01 | [Enter data of your choosing here] | Brine Unit Holding Tank #2 Sides, Second Floor, Middle Tank, Purple | [Enter data of your choosing he |
| MSC01A-BUHT2S-02 | [Enter data of your choosing here] | Brine Unit Holding Tank #2 Sides, Second Floor, Middle Tank, Purple | [Enter data of your choosing he |
| MSC01A-BUHT2E-01 | [Enter data of your choosing here] | Brine Unit Holding Tank #2 Ends, Second Floor, Middle Tank, Purple | [Enter data of your choosing he |
| MSC01A-BUHT2E-02 | [Enter data of your choosing here] | Brine Unit Holding Tank #2 Ends, Second Floor, Middle Tank, Purple | [Enter data of your choosing he |
| MSC01A-B1TSI2-01 | [Enter data of your choosing here] | 4" Orange Boiler Line, Second Story | [Enter data of your choosing he |
| MSC01A-B1TSI2-02 | [Enter data of your choosing here] | 4" Orange Boiler Line, Second Story | [Enter data of your choosing he |
| MSC01A-B1TSI2-03 | [Enter data of your choosing here] | 4" Orange Boiler Line, Second Story | [Enter data of your choosing he |
| MSC01A-BU-B1 | [Enter data of your choosing here] | Purple Boxes "Brine Unit" | [Enter data of your choosing he |
| MSC01A-BU-B2 | [Enter data of your choosing here] | Purple Boxes "Brine Unit" | [Enter data of your choosing he |
| MSC01A-BU-B3 | [Enter data of your choosing here] | Purple Boxes "Brine Unit" | [Enter data of your choosing he |
| MSC01A-BU-B4 | [Enter data of your choosing here] | Purple Boxes "Brine Unit" | [Enter data of your choosing he |
| MSC01A-B1TSIFIT-01 | [Enter data of your choosing here] | 18" Orange Fitting (Elbow) | [Enter data of your choosing he |
| MSC01A-B1TSIFIT-02 | [Enter data of your choosing here] | 18" Orange Fitting (Elbow) | [Enter data of your choosing he |
| MSC01A-B1TSIFIT-03 | [Enter data of your choosing here] | 18" Orange Fitting (Elbow) | [Enter data of your choosing he |
| MSC01A-B1TSI-01 | [Enter data of your choosing here] | 18" Orange Pipe off Boiler #1 and #2 | [Enter data of your choosing he |
| MSC01A-B1TSI-02 | [Enter data of your choosing here] | 18" Orange Pipe off Boiler #1 and #2 | [Enter data of your choosing he |
| MSC01A-B1TSI-03 | [Enter data of your choosing here] | 18" Orange Pipe off Boiler #1 and #2 | [Enter data of your choosing he |
| MSC01A-BUTSIEB1-01 | [Enter data of your choosing here] | 18" Purple Elbow, Brine Unit | [Enter data of your choosing he |
| MSC01A-BUTSIEB1-02 | [Enter data of your choosing here] | 18" Purple Elbow, Brine Unit | [Enter data of your choosing he |
| MSC01A-BUTSIEB1-03 | [Enter data of your choosing here] | 18" Purple Elbow, Brine Unit | [Enter data of your choosing he |
| MSC01A-BUHT3E-01 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #3 - Ends | [Enter data of your choosing he |
| MSC01A-BUHT3E-02 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #3 - Ends | [Enter data of your choosing he |
| MSC01A-BUHT3S-01 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #3 - Sides | [Enter data of your choosing he |
| MSC01A-BUHT3S-02 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #3 - Sides | [Enter data of your choosing he |
| MSC01A-ORHT1E-01 | [Enter data of your choosing here] | Orange Hot Water Tank #1 - End | [Enter data of your choosing he |
| MSC01A-ORHT1E-02 | [Enter data of your choosing here] | Orange Hot Water Tank #1 - End | [Enter data of your choosing he |
| MSC01A-ORHT1E-03 | [Enter data of your choosing here] | Orange Hot Water Tank #1 - End | [Enter data of your choosing he |
| MSC01A-CHLTSI2-01 | [Enter data of your choosing here] | 4" Blue Chiller Line, Coming off Tank #1 | [Enter data of your choosing he |
| MSC01A-CHLTSI2-02 | [Enter data of your choosing here] | 4" Blue Chiller Line, Coming off Tank #1 | [Enter data of your choosing he |
| MSC01A-BUHT1S-01 | [Enter data of your choosing here] | Brine Unit Holding Tank #1 Sides, Second Floor | [Enter data of your choosing he |
| MSC01A-BUHT1S-02 | [Enter data of your choosing here] | Brine Unit Holding Tank #1 Sides, Second Floor | [Enter data of your choosing he |
| MSC01A-B1TSI3-01 | [Enter data of your choosing here] | 6" Orange Boiler Line, Second Story | [Enter data of your choosing he |
| MSC01A-B1TSI3-02 | [Enter data of your choosing here] | 6" Orange Boiler Line, Second Story | [Enter data of your choosing he |
| MSC01A-B1TSI3-03 | [Enter data of your choosing here] | 6" Orange Boiler Line, Second Story | [Enter data of your choosing he |
| MSC01A-B1TSIEB2-01 | [Enter data of your choosing here] | 4" Orange Boiler Line Elbows | [Enter data of your choosing he |
| MSC01A-B1TSIEB2-02 | [Enter data of your choosing here] | 4" Orange Boiler Line Elbows | [Enter data of your choosing he |
| MSC01A-B1TSIEB2-03 | [Enter data of your choosing here] | 4" Orange Boiler Line Elbows | [Enter data of your choosing he |
| MSC01A-B1TSIEB3-01 | [Enter data of your choosing here] | 6" Orange Boiler Line Elbows | [Enter data of your choosing he |
| MSC01A-B1TSIEB3-02 | [Enter data of your choosing here] | 6" Orange Boiler Line Elbows | [Enter data of your choosing he |
| MSC01A-B1TSIEB3-03 | [Enter data of your choosing here] | 6" Orange Boiler Line Elbows | [Enter data of your choosing he |

**Homogeneous Area Descriptions/Chain of Custody**
**Mid South Coliseum**

| | | | |
|---|---|---|---|
| MSC01A-BUHT1E-01 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #1 - Ends | [Enter data of your choosing he |
| MSC01A-BUHT1E-02 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #1 - Ends | [Enter data of your choosing he |
| MSC01B-HTTSIEB-01 | [Enter data of your choosing here] | Heating Tank Elbow In Wood Shop | [Enter data of your choosing he |
| MSC01B-HTTSIEB-02 | [Enter data of your choosing here] | Heating Tank Elbow in Wood Shop | [Enter data of your choosing he |
| MSC01A-B2EXH-01 | [Enter data of your choosing here] | Boiler #2 Exhaust | [Enter data of your choosing he |
| MSC01A-B2EXH-02 | [Enter data of your choosing here] | Boiler #2 Exhaust | [Enter data of your choosing he |
| MSC01A-B2EXH-03 | [Enter data of your choosing here] | Boiler #2 Exhaust | [Enter data of your choosing he |
| MSC01B-HTLTSI-01 | [Enter data of your choosing here] | Heating Tank Line in Wood Shop | [Enter data of your choosing he |
| MSC01B-HTLTSI-02 | [Enter data of your choosing here] | Heating Tank Line in Wood Shop | [Enter data of your choosing he |
| MSC01A-B1ESH-01 | [Enter data of your choosing here] | Boiler #1 Exhaust | [Enter data of your choosing he |
| MSC01A-B1ESH-02 | [Enter data of your choosing here] | Boiler #1 Exhaust | [Enter data of your choosing he |
| MSC01A-B1ESH-03 | [Enter data of your choosing here] | Boiler #1 Exhaust | [Enter data of your choosing he |
| MSC01A-BUTSI-01 | [Enter data of your choosing here] | 18" Purple Line Brine Unit | [Enter data of your choosing he |
| MSC01A-BUTSI-02 | [Enter data of your choosing here] | 18" Purple Line Brine Unit | [Enter data of your choosing he |
| MSC01A-BUTSI-03 | [Enter data of your choosing here] | 18" Purple Line Brine Unit | [Enter data of your choosing he |
| MSC01A-ORHT2S-01 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Sides, East Tank, | [Enter data of your choosing he |
| MSC01A-ORHT2S-02 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Sides, East Tank, | [Enter data of your choosing he |
| MSC01A-ORHT2S-03 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Sides, East Tank, | [Enter data of your choosing he |
| MSC01A-ORHT1S-01 | [Enter data of your choosing here] | Orange Hot Water Tank #1, Sides, West Tank, | [Enter data of your choosing he |
| MSC01A-ORHT1S-02 | [Enter data of your choosing here] | Orange Hot Water Tank #1, Sides, West Tank, | [Enter data of your choosing he |
| MSC01A-ORHT1S-03 | [Enter data of your choosing here] | Orange Hot Water Tank #1, Sides, West Tank, | [Enter data of your choosing he |
| MSC01A-ORHT2E-01 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Ends | [Enter data of your choosing he |
| MSC01A-ORHT2E-02 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Ends | [Enter data of your choosing he |
| MSC01A-ORHT2E-03 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Ends | [Enter data of your choosing he |
| MSC01A-CHLTSI4-01 | [Enter data of your choosing here] | 8" Blue Chiller Line | [Enter data of your choosing he |
| MSC01A-CHLTSI4-02 | [Enter data of your choosing here] | 8" Blue Chiller Line | [Enter data of your choosing he |
| MSC01A-CHLTSI4-03 | [Enter data of your choosing here] | 8" Blue Chiller Line | [Enter data of your choosing he |
| MSC01B-HTTSI-01 | [Enter data of your choosing here] | Holding Tank in Wood Shop | [Enter data of your choosing he |
| MSC01B-HTTSI-02 | [Enter data of your choosing here] | Holding Tank in Wood Shop | [Enter data of your choosing he |
| MSC01A-BUTSI3-01 | [Enter data of your choosing here] | 6" Brine Unit Purple Pipe | [Enter data of your choosing he |
| MSC01A-BUTSI3-02 | [Enter data of your choosing here] | 6" Brine Unit Purple Pipe | [Enter data of your choosing he |
| MSC01B-WL3TSIEB-01 | [Enter data of your choosing here] | 6" Water Line, Elbow - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL3TSIEB-02 | [Enter data of your choosing here] | 6" Water Line, Elbow - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL1TSIEB-01 | [Enter data of your choosing here] | 2" Overhead Water Line, Elbow - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL1TSIEB-02 | [Enter data of your choosing here] | 2" Overhead Water Line, Elbow - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL2TSIEB-01 | [Enter data of your choosing here] | 4" Overhead Water Line, Elbow - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL2TSIEB-02 | [Enter data of your choosing here] | 4" Overhead Water Line, Elbow - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL1TSI-01 | [Enter data of your choosing here] | 2" Water Line - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL1TSI-02 | [Enter data of your choosing here] | 2" Water Line - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL2TSI-01 | [Enter data of your choosing here] | 4" Water Line - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL2TSI-02 | [Enter data of your choosing here] | 4" Water Line - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL3TSI-01 | [Enter data of your choosing here] | 6" Overhead Water Line - Wood Shop | [Enter data of your choosing he |
| MSC01B-WL3TSI-02 | [Enter data of your choosing here] | 6" Overhead Water Line - Wood Shop | [Enter data of your choosing he |
| MSC01A-CHLT1-01 | [Enter data of your choosing here] | Second Story Blue Tank - North Side of Boiler Room | [Enter data of your choosing he |
| MSC01A-CHLT1-02 | [Enter data of your choosing here] | Second Story Blue Tank - North Side of Boiler Room | [Enter data of your choosing he |
| MSC01A-CHLTSIEB3-01 | [Enter data of your choosing here] | 4" Blue Chiller Line, Elbow | [Enter data of your choosing he |
| MSC01A-CHLTSIEB3-02 | [Enter data of your choosing here] | 4" Blue Chiller Line, Elbow | [Enter data of your choosing he |
| MSC01A-BUTSIEB3-01 | [Enter data of your choosing here] | 6" Brine Unit Purple Pipe, Elbow | [Enter data of your choosing he |
| MSC01A-BUTSIEB3-02 | [Enter data of your choosing here] | 6" Brine Unit Purple Pipe, Elbow | [Enter data of your choosing he |
| MSC01A-BUTSI2-01 | [Enter data of your choosing here] | 8" Brine Unit Purple Pipe | [Enter data of your choosing he |
| MSC01A-BUTSI2-02 | [Enter data of your choosing here] | 8" Brine Unit Purple Pipe | [Enter data of your choosing he |
| MSC01A-FLEXDUCT1-01 | [Enter data of your choosing here] | Grey Flex Duct, Second Story, Boiler Room | [Enter data of your choosing he |
| MSC01A-FLEXDUCT1-02 | [Enter data of your choosing here] | Grey Flex Duct, Second Story, Boiler Room | [Enter data of your choosing he |
| MSC01A-CHLTSI3-01 | [Enter data of your choosing here] | 4" Blue Chiller Line, Second Story | [Enter data of your choosing he |
| MSC01A-CHLTSI3-02 | [Enter data of your choosing here] | 4" Blue Chiller Line, Second Story | [Enter data of your choosing he |
| MSC01A-BUTSIEB2-01 | [Enter data of your choosing here] | 8" Brine Unit Purple Pipe, Elbow | [Enter data of your choosing he |
| MSC01A-BUTSIEB2-02 | [Enter data of your choosing here] | 8" Brine Unit Purple Pipe, Elbow | [Enter data of your choosing he |
| MSC01A-CHLPUMP-01 | [Enter data of your choosing here] | Blue Chiller Pumps, Second Story - Boiler Room | [Enter data of your choosing he |
| MSC01A-CHLPUMP-02 | [Enter data of your choosing here] | Blue Chiller Pumps, Second Story - Boiler Room | [Enter data of your choosing he |
| MSC01A-CHLPUMP-03 | [Enter data of your choosing here] | Blue Chiller Pumps, Second Story - Boiler Room | [Enter data of your choosing he |
| MSC01A-BUSPG-01 | [Enter data of your choosing here] | Dark Blue Sponge, (Neoprene) - Boiler Room | [Enter data of your choosing he |
| MSC01A-BUSPG-02 | [Enter data of your choosing here] | Dark Blue Sponge, (Neoprene) - Boiler Room | [Enter data of your choosing he |
| MSC01A-BUSPG-03 | [Enter data of your choosing here] | Dark Blue Sponge, (Neoprene) - Boiler Room | [Enter data of your choosing he |
| MSC01A-NPOTTSI-01 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing he |
| MSC01A-NPOTTSI-02 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing he |
| MSC01A-NPOTTSI-03 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing he |
| MSC01A-NPOTTSI-04 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing he |
| MSC01A-NPOTTSI-05 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing he |
| MSCRF-RF02-01 | [Enter data of your choosing here] | Asphalt Shingles, East Roofs | [Enter data of your choosing he |
| MSCRF-RF02-02 | [Enter data of your choosing here] | Asphalt Shingles, East Roofs | [Enter data of your choosing he |
| MSCRF-RF02-03 | [Enter data of your choosing here] | Asphalt Shingles, East Roofs | [Enter data of your choosing he |
| MSC02-HALTSIN-01 | [Enter data of your choosing here] | Pipe TSI Sample in North Lobby Hallway | [Enter data of your choosing he |
| MSC03M-CPTSIEB01-01 | [Enter data of your choosing here] | Elbow for Continuous Pipe Run on 3rd Floor - East | [Enter data of your choosing he |
| MSC03M-CPTSIEB01-02 | [Enter data of your choosing here] | Elbow for Continuous Pipe Run on 3rd Floor - North | [Enter data of your choosing he |
| MSC03M-CPTSIEB01-03 | [Enter data of your choosing here] | Elbow for Continuous Pipe Run on 3rd Floor - South | [Enter data of your choosing he |
| MSC02-HALTSIW-01 | [Enter data of your choosing here] | Pipe TSI Sample in West Lobby Hallway | [Enter data of your choosing he |
| MSC02-HALTSIEBS-01 | [Enter data of your choosing here] | Pipe Elbow TSI Sample in South Lobby Hallway | [Enter data of your choosing he |
| MSC03M-HVAC16TSIA-0 | [Enter data of your choosing here] | HVAC Unit #16, Line "A", Pillar 1 | [Enter data of your choosing he |
| MSC03M-CPTSI03-01 | [Enter data of your choosing here] | Continuous Pipe Run, Level Three, Fiberglass - East | [Enter data of your choosing he |
| MSC03M-CPTSI03-02 | [Enter data of your choosing here] | Continuous Pipe Run, Level Three, Fiberglass - North | [Enter data of your choosing he |
| MSC03M-CPTSI03-03 | [Enter data of your choosing here] | Continuous Pipe Run, Level Three, Fiberglass - West | [Enter data of your choosing he |
| MSC03M-CPTSI03-04 | [Enter data of your choosing here] | Continuous Pipe Run, Level Three, Fiberglass - South | [Enter data of your choosing he |
| MSC03M-CPTSIEB02-01 | [Enter data of your choosing here] | Continuous Pipe Rune, Elbow, Second Level Pipe Run - East @ stairwell | [Enter data of your choosing he |
| MSC03M-CPTSIEB02-02 | [Enter data of your choosing here] | Continuous Pipe Rune, Elbow, Second Level Pipe Run - North | [Enter data of your choosing he |
| MSC03M-CPTSIEB02-03 | [Enter data of your choosing here] | Continuous Pipe Rune, Elbow, Second Level Pipe Run - West | [Enter data of your choosing he |
| MSC03M-CPTSIEB02-04 | [Enter data of your choosing here] | Continuous Pipe Rune, Elbow, Second Level Pipe Run - South | [Enter data of your choosing he |
| MSC02-EQPTSIEB01-01 | [Enter data of your choosing here] | Equipment Room Pipe Run, 2nd Floor, Elbow | [Enter data of your choosing he |
| MSC03M-HVAC17TSIAEE | [Enter data of your choosing here] | Elbow for line "A" on HVAC unit 17, pillar 28 | [Enter data of your choosing he |
| MSC03M-CPTSI02-01 | [Enter data of your choosing here] | Continuous Pipe Run, Level Two - East @ stairwell | [Enter data of your choosing he |
| MSC03M-CPTSI02-02 | [Enter data of your choosing here] | Continuous Pipe Run, Level Two - North | [Enter data of your choosing he |
| MSC03M-CPTSI02-03 | [Enter data of your choosing here] | Continuous Pipe Run, Level Two - West | [Enter data of your choosing he |
| MSC03M-CPTSI02-04 | [Enter data of your choosing here] | Continuous Pipe Run, Level Two - South | [Enter data of your choosing he |
| MSC03M-HVAC17TSIBEE | [Enter data of your choosing here] | Elbow for Line "B" on HVAC Unit 17, pillar 23 | [Enter data of your choosing he |
| MSC03M-CPTSIEB03-01 | [Enter data of your choosing here] | Elbow for Level 3 Pipe, pillar 32 - West | [Enter data of your choosing he |
| MSC03M-CPTSIEB03-02 | [Enter data of your choosing here] | Elbow for Level 3 Pipe, pillar 13 - South East Side | [Enter data of your choosing he |
| MSC03M-HVAC17TSIB-0 | [Enter data of your choosing here] | Line "B" on HVAC unit 17 | [Enter data of your choosing he |

**Homogeneous Area Descriptions/Chain of Custody**
**Mid South Coliseum**

| | | | |
|---|---|---|---|
| MSC03M-FLEXDUCT1-01 | [Enter data of your choosing here] | Flex Duct @ Pillar 21 | [Enter data of your choosing he |
| MSC03M-HVAC16TSIAEE | [Enter data of your choosing here] | HVAC Unit #16, Line "A", Elbow, pillar 1 | [Enter data of your choosing he |
| MSCRF-RF01-01 | [Enter data of your choosing here] | East Roof, tar w/pea gravel | [Enter data of your choosing he |
| MSCRF-RF01-02 | [Enter data of your choosing here] | East Roof, tar w/pea gravel | [Enter data of your choosing he |
| MSCRF-RF01-03 | [Enter data of your choosing here] | East Roof, tar w/pea gravel | [Enter data of your choosing he |
| MSC03M-HVAC17TSIA-0 | [Enter data of your choosing here] | Line "A" on HVAC Unit 17 | [Enter data of your choosing he |
| MSCRF-FLM01-01 | [Enter data of your choosing here] | Flashing Mastic, East Roof | [Enter data of your choosing he |
| MSCRF-FLM01-02 | [Enter data of your choosing here] | Flashing Mastic, East Roof | [Enter data of your choosing he |
| MSCRF-FLM01-03 | [Enter data of your choosing here] | Flashing Mastic, East Roof | [Enter data of your choosing he |
| MSC03M-HVAC16TSIBEE | [Enter data of your choosing here] | HVAC Unit #16, Line "B", Elbow, pillar 1 | [Enter data of your choosing he |
| MSC03M-HVAC16TSIB-0 | [Enter data of your choosing here] | HVAC Unit 16, Line "B", pillar 1 | [Enter data of your choosing he |
| MSC02-EQPTSIFIT01-01 | [Enter data of your choosing here] | Equipment Room Fitting - 2nd Floor | [Enter data of your choosing he |
| MSC02-EQPTSI01-01 | [Enter data of your choosing here] | Equipment Room Pipe Run, 2nd Floor | [Enter data of your choosing he |
| MSC03M-CPTSI01-01 | [Enter data of your choosing here] | Continuous Pipe Run, Level 1, 3rd Floor - East | [Enter data of your choosing he |
| MSC03M-CPTSI01-02 | [Enter data of your choosing here] | Continuous Pipe Run, Level 1, 3rd Floor - North | [Enter data of your choosing he |
| MSC03M-CPTSI01-03 | [Enter data of your choosing here] | Continuous Pipe Run, Level 1, 3rd Floor - South | [Enter data of your choosing he |
| MSC03M-CPTSIFIT03-01 | [Enter data of your choosing here] | Fitting for Continuous Pipe Run, 3rd Floor, Lower Level Pipe Run - East | [Enter data of your choosing he |
| MSC03M-BLTSI1-01 | [Enter data of your choosing here] | Blower Unit #1 @ Pillar 21 | [Enter data of your choosing he |
| MSC03M-HVAC5CUPTSI | [Enter data of your choosing here] | HVAC Unit #5 Coupling, Side Sample, Pillar 32 | [Enter data of your choosing he |
| MSC03M-HVAC5CUPTSII | [Enter data of your choosing here] | HVAC Unit #5 Coupling, Front Sample, Pillar 32 | [Enter data of your choosing he |

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**Homogeneous Area Descriptions/Chain of Custody**
**Mid South Coliseum**

| | | | |
|---|---|---|---|
| **Client:** | EnSafe, Inc. | **Instructions:* | ***Scientific Analytical*** |
| **Contact:** | Quent Barrett | *Use Column "B" for your contact info* | ***Institute, Inc.*** |
| **Address:** | 5724 Summer Trees Dr. Memphis, TN 38134 | | |
| **Phone:** | 901-372-7962 | *To See an Example Click the* | |
| **Fax:** | [Enter fax here] | *bottom Example Tab.* | ***302-L Pomona Dr.*** |
| **Email:** | qbarrett@ensafe.com | | ***Greensboro, NC 27407*** |
| | | ***Enter samples between "<<" and ">>"*** | ***Phone: 336.292.3888*** |
| **Project:** | Coliseum - 0888808150 (Phase 01) | ***Begin Samples with a "<< "above the first sample*** | ***Fax: 336.292.3313*** |
| | | ***and end with a ">>" below the last sample.*** | ***Email: lab@sailab.com*** |
| **Client Notes:** | **Set 2** | *Only Enter your data on the first sheet "Sheet1"* | |
| **P.O. #:** | MSA | *Note: Data 1 and Data 2 are optional* | ***POSITIVE STOPS*** |
| **Date Submitted:** | 9/2/2009 0:00 | *fields that do not show up on the official* | |
| | | *report, however they will be included* | |
| **Analysis:** | PLM | *in the electronic data returned to you* | |
| **TurnAroundTime:** | 12 Hour TAT (if possible) | *to facilitate your reintegration of the report data.* | |

| Sample Number | Data 1 | Sample Description | Data 2 |
|---|---|---|---|
| << | | | |
| MSCRF-FLM3-01 | [Enter data of your choosing here] | Flashing Mastic (for Brown Asphalt Shingles) over Coliseum Sigr | [Enter data of your choosing he |
| MSCRF-FLM3-02 | [Enter data of your choosing here] | Flashing Mastic (for Brown Asphalt Shingles) over Coliseum Sigr | [Enter data of your choosing he |
| MSCRF-FLM3-03 | [Enter data of your choosing here] | Flashing Mastic (for Brown Asphalt Shingles) over Coliseum Sigr | [Enter data of your choosing he |
| MSCRF-RF03-01 | [Enter data of your choosing here] | Brown Asphalt Shingles over Coliseum Sigr | [Enter data of your choosing he |
| MSCRF-RF03-02 | [Enter data of your choosing here] | Brown Asphalt Shingles over Coliseum Sigr | [Enter data of your choosing he |
| MSCRF-RF03-03 | [Enter data of your choosing here] | Brown Asphalt Shingles over Coliseum Sigr | [Enter data of your choosing he |
| MSCRF-RF02A-01 | [Enter data of your choosing here] | Sandy Material under Asphalt Shingles, Coliseum Roo | [Enter data of your choosing he |
| MSCRF-RF02A-02 | [Enter data of your choosing here] | Sandy Material under Asphalt Shingles, Coliseum Roo | [Enter data of your choosing he |
| MSCRF-RF02A-03 | [Enter data of your choosing here] | Sandy Material under Asphalt Shingles, Coliseum Roo | [Enter data of your choosing he |
| >> | | | |

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-TC-01 / *908589PLM_1* | 1st Floor Concrete Column Textured Coating - North Lobby | **None Detected** | **3% Cellulose** | 97% Other | White Non Fibrous Heterogeneous / Teased |
| MSC01-TC-02 / *908589PLM_2* | 1st Floor Concrete Column Textured Coating - South Lobby | **None Detected** | **3% Cellulose** | 97% Other | White Non Fibrous Heterogeneous / Teased |
| MSC01-TC-03 / *908589PLM_3* | 1st Floor Concrete Column Textured Coating - West Lobby | **None Detected** | **3% Cellulose** | 97% Other | White Non Fibrous Heterogeneous / Teased |
| MSC01-PC-01 - A / *908589PLM_4* | 1st Floor Lathe and Plaster Ceiling - Concession Stand / *finish* | **None Detected** | | 100% Other | White Non Fibrous Heterogeneous / Crushed |
| MSC01-PC-01 - B / *908589PLM_212* | 1st Floor Lathe and Plaster Ceiling - Concession Stand / *base* | **None Detected** | | 80% Other 20% Quartz | Gray Non Fibrous Heterogeneous / Crushed |
| MSC01-PC-02 - A / *908589PLM_5* | 1st Floor Lathe and Plaster Grey Locker Room / *finish* | **None Detected** | | 100% Other | White Non Fibrous Heterogeneous / Crushed |
| MSC01-PC-02 - B / *908589PLM_213* | 1st Floor Lathe and Plaster Grey Locker Room / *base* | **None Detected** | | 80% Other 20% Quartz | Gray Non Fibrous Heterogeneous / Crushed |
| MSC01-PC-03 - A / *908589PLM_6* | 1st Floor Lathe and Plaster Red Locker Room / *finish* | **None Detected** | | 100% Other | White Non Fibrous Heterogeneous / Crushed |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-PC-03 - B | 1st Floor Lathe and Plaster Red Locker Room | None Detected | | 80% Other 20% Quartz | Gray Non Fibrous Heterogeneous |
| *908589PLM_214* | *base* | | | | Crushed |
| MSC01-PC-04 - A | 1st Floor Lathe and Plaster South Womans Restroom | None Detected | | 100% Other | White Non Fibrous Heterogeneous |
| *908589PLM_7* | *finish* | | | | Crushed |
| MSC01-PC-04 - B | 1st Floor Lathe and Plaster South Womans Restroom | None Detected | | 80% Other 20% Quartz | Gray Non Fibrous Heterogeneous |
| *908589PLM_215* | *base* | | | | Crushed |
| MSC01-PC-05 - A | 1st Floor Lathe and Plaster Ladies Handicap Restroom | None Detected | | 100% Other | White Non Fibrous Heterogeneous |
| *908589PLM_8* | *finish* | | | | Crushed |
| MSC01-PC-05 - B | 1st Floor Lathe and Plaster Ladies Handicap Restroom | None Detected | | 80% Other 20% Quartz | Gray Non Fibrous Heterogeneous |
| *908589PLM_216* | *base* | | | | Crushed |
| MSC01-PC-06 - A | 1st Floor Lathe and Plaster Mens Restroom | None Detected | | 100% Other | White Non Fibrous Heterogeneous |
| *908589PLM_9* | *finish* | | | | Crushed |
| MSC01-PC-06 - B | 1st Floor Lathe and Plaster Mens Restroom | None Detected | | 80% Other 20% Quartz | Gray Non Fibrous Heterogeneous |
| *908589PLM_217* | *base* | | | | Crushed |
| MSC01A-B2-01E | Boiler #2 Ends (mud) - Inside | None Detected | 40% Fiber Glass | 60% Other | Gray Fibrous Heterogeneous |
| *908589PLM_10* | | | | | Teased |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-B2-02E | Boiler #2 Ends (mud) - Inside | **None Detected** | **40% Fiber Glass** | 60% Other | Gray<br>Fibrous<br>Heterogeneous |
| *908589PLM_11* | | | | | Teased |
| MSC01A-B2-03E | Boiler #2 Ends (mud) - Inside | **None Detected** | **40% Fiber Glass** | 60% Other | Gray<br>Fibrous<br>Heterogeneous |
| *908589PLM_12* | | | | | Teased |
| MSC01-CB2-01 - A | 4" Brown Cove Base with Tan Mastic | **None Detected** | | 100% Other | Brown<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_13* | *covebase* | | | | Dissolved |
| MSC01-CB2-01 - B | 4" Brown Cove Base with Tan Mastic | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_218* | *mastic* | | | | Dissolved |
| MSC01-CB2-02 - A | 4" Brown Cove Base with Tan Mastic | **None Detected** | | 100% Other | Brown<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_14* | *covebase* | | | | Dissolved |
| MSC01-CB2-02 - B | 4" Brown Cove Base with Tan Mastic | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_219* | *mastic* | | | | Dissolved |
| MSC01-CB2-03 - A | 4" Brown Cove Base with Tan Mastic - North Lobby | **None Detected** | | 100% Other | Brown<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_15* | *covebase* | | | | Dissolved |
| MSC01-CB2-03 - B | 4" Brown Cove Base with Tan Mastic - North Lobby | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_220* | *mastic* | | | | Dissolved |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-CB4-01 - A | 6" Light Brown/Tan Cove Base with Yellow Adhesive - Conference Room | **None Detected** | | 100% Other | Tan<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_16* | *covebase* | | | | Dissolved |
| MSC01-CB4-01 - B | 6" Light Brown/Tan Cove Base with Yellow Adhesive - Conference Room | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_221* | *mastic* | | | | Dissolved |
| MSC01-CB4-02 - A | 6" Light Brown/Tan Cove Base with Yellow Adhesive - Conference Room | **None Detected** | | 100% Other | Tan<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_17* | *covebase* | | | | Dissolved |
| MSC01-CB4-02 - B | 6" Light Brown/Tan Cove Base with Yellow Adhesive - Conference Room | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_222* | *mastic* | | | | Dissolved |
| MSC01-CB4-03 - A | 6" Light Brown/Tan Cove Base with Yellow Adhesive - Conference Room | **None Detected** | | 100% Other | Tan<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_18* | *covebase* | | | | Dissolved |
| MSC01-CB4-03 - B | 6" Light Brown/Tan Cove Base with Yellow Adhesive - Conference Room | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_223* | *mastic* | | | | Dissolved |
| MSC01A-FTM-01 - A | 9 X 9 Brown Floor Tile with Black Mastic - Boiler Room Office | **3% Chrysotile** | | 97% Other | Brown<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_19* | *tile* | | | | Dissolved |
| MSC01A-FTM-01 - B | 9 X 9 Brown Floor Tile with Black Mastic - Boiler Room Office | **8% Chrysotile** | **5% Cellulose** | 87% Other | Black<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_224* | *mastic* | | | | Dissolved |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-FTM-02 - A / *908589PLM_20* | 9 X 9 Brown Floor Tile with Black Mastic - Boiler Room Office / *tile* | **Not Analyzed** | | | |
| MSC01A-FTM-02 - B / *908589PLM_225* | 9 X 9 Brown Floor Tile with Black Mastic - Boiler Room Office / *mastic* | **Not Analyzed** | | | |
| MSC01A-FTM-03 - A / *908589PLM_21* | 9 X 9 Brown Floor Tile with Black Mastic - Boiler Room Office / *tile* | **Not Analyzed** | | | |
| MSC01A-FTM-03 - B / *908589PLM_226* | 9 X 9 Brown Floor Tile with Black Mastic - Boiler Room Office / *mastic* | **Not Analyzed** | | | |
| MSC01-GDC04-01 / *908589PLM_22* | Tan carpet in upstairs ticket booth / *mastic on carpet* | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous<br>Dissolved |
| MSC01-GDC04-02 / *908589PLM_23* | Tan carpet in upstairs ticket booth / *mastic on carpet* | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous<br>Dissolved |
| MSC01-GDC04-03 / *908589PLM_280* | / *mastic on carpet* | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous<br>Dissolved |
| MSC01A-B2-01G / *908589PLM_24* | Boiler #2 Gaskets / | **None Detected** | **85% Fiber Glass** | 15% Other | Yellow<br>Fibrous<br>Heterogeneous<br>Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-B2-02G | Boiler #2 Gaskets | **None Detected** | **85% Fiber Glass** | 15% Other | Brown Fibrous Heterogeneous |
| *908589PLM_25* | | | | | Teased |
| MSC01A-B2-03G | Boiler #2 Gaskets | **None Detected** | **85% Fiber Glass** | 15% Other | Brown Fibrous Heterogeneous |
| *908589PLM_26* | | | | | Teased |
| MSC01-CB3-01 - A | 4" Light Brown/Tan Cove Base with Tan Mastic - Executive Office | **None Detected** | | 100% Other | Tan Non Fibrous Heterogeneous |
| *908589PLM_27* | *covebase* | | | | Dissolved |
| MSC01-CB3-01 - B | 4" Light Brown/Tan Cove Base with Tan Mastic - Executive Office | **None Detected** | **3% Cellulose** | 97% Other | White Non Fibrous Heterogeneous |
| *908589PLM_227* | *mastic* | | | | Dissolved |
| MSC01-CB3-02 - A | 4" Light Brown/Tan Cove Base with Tan Mastic - Executive Office | **None Detected** | | 100% Other | Tan Non Fibrous Heterogeneous |
| *908589PLM_28* | *covebase* | | | | Dissolved |
| MSC01-CB3-02 - B | 4" Light Brown/Tan Cove Base with Tan Mastic - Executive Office | **None Detected** | **3% Cellulose** | 97% Other | White Non Fibrous Heterogeneous |
| *908589PLM_228* | *mastic* | | | | Dissolved |
| MSC01-CB3-03 - A | 4" Light Brown/Tan Cove Base with Tan Mastic - Executive Office | **None Detected** | | 100% Other | Tan Non Fibrous Heterogeneous |
| *908589PLM_29* | *covebase* | | | | Dissolved |
| MSC01-CB3-03 - B | 4" Light Brown/Tan Cove Base with Tan Mastic - Executive Office | **None Detected** | **3% Cellulose** | 97% Other | White Non Fibrous Heterogeneous |
| *908589PLM_229* | *mastic* | | | | Dissolved |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

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5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-CB-01 - A | 6" Brown Cove Base with Brown Mastic | None Detected | | 100% Other | Brown Non Fibrous Heterogeneous |
| *908589PLM_30* | *covebase* | | | | Dissolved |
| MSC01-CB-01 - B | 6" Brown Cove Base with Brown Mastic | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_230* | *mastic* | | | | Dissolved |
| MSC01-CB-02 - A | 6" Brown Cove Base with Brown Mastic | None Detected | | 100% Other | Brown Non Fibrous Heterogeneous |
| *908589PLM_31* | *covebase* | | | | Dissolved |
| MSC01-CB-02 - B | 6" Brown Cove Base with Brown Mastic | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_231* | *mastic* | | | | Dissolved |
| MSC01-CB-03 - A | 6" Brown Cove Base with Brown Mastic | None Detected | | 100% Other | Brown Non Fibrous Heterogeneous |
| *908589PLM_32* | *covebase* | | | | Dissolved |
| MSC01-CB-03 - B | 6" Brown Cove Base with Brown Mastic | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_232* | *mastic* | | | | Dissolved |
| MSC01-CB-04 - A | 6" Brown Cove Base with Brown Mastic - 2nd Floor South Entrance | None Detected | | 100% Other | Brown Non Fibrous Heterogeneous |
| *908589PLM_33* | *covebase* | | | | Dissolved |
| MSC01-CB-04 - B | 6" Brown Cove Base with Brown Mastic - 2nd Floor South Entrance | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_233* | *mastic* | | | | Dissolved |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

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**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-CB-05 - A | 6" Brown Cove Base with Brown Mastic - 2nd Floor Southwest Entrance | None Detected | | 100% Other | Brown Non Fibrous Heterogeneous |
| *908589PLM_34* | *covebase* | | | | Dissolved |
| MSC01-CB-05 - B | 6" Brown Cove Base with Brown Mastic - 2nd Floor Southwest Entrance | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_234* | *mastic* | | | | Dissolved |
| MSC01-CB-06 - A | 6" Brown Cove Base with Brown Mastic - 2nd Floor Southwest Hall (Mens Restroo | None Detected | | 100% Other | Brown Non Fibrous Heterogeneous |
| *908589PLM_35* | *covebase* | | | | Dissolved |
| MSC01-CB-06 - B | 6" Brown Cove Base with Brown Mastic - 2nd Floor Southwest Hall (Mens Restroo | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_235* | *mastic* | | | | Dissolved |
| MSC01-GDC-01 | Multi Color Blue Glue Down Carpet - Office Area | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_36* | *mastic on carpet* | | | | Dissolved |
| MSC01-GDC-02 | Multi Color Blue Glue Down Carpet - Office Area | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_37* | *mastic on carpet* | | | | Dissolved |
| MSC01-GDC-03 | Multi Color Blue Glue Down Carpet - Office Area | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_38* | *mastic on carpet* | | | | Dissolved |
| MSC02-TC-01 | 2nd Floor Column Textured Coating - East Side Near Pizza Hut @ Ramp | None Detected | | 100% Other | White Non Fibrous Heterogeneous |
| *908589PLM_39* | | | | | Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

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5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC02-TC-02 / *908589PLM_40* | 2nd Floor Column Textured Coating - South Side @ Stairs Near Ramp | **None Detected** | | 100% Other | White Non Fibrous Heterogeneous / Teased |
| MSC02-TC-03 / *908589PLM_41* | 2nd Floor Column Textured Coating - West Side Across Womens Restroom | **None Detected** | | 100% Other | White Non Fibrous Heterogeneous / Teased |
| MSC01-GR-01 / *908589PLM_42* | Wall Grout in Between Concrete Blocks - North Area | **None Detected** | | 70% Other 30% Quartz | White Non Fibrous Heterogeneous / Crushed |
| MSC01-GR-02 / *908589PLM_43* | Wall Grout in Between Concrete Blocks - North East | **None Detected** | | 70% Other 30% Quartz | White Non Fibrous Heterogeneous / Crushed |
| MSC01-GR-03 / *908589PLM_44* | Wall Grout in Between Concrete Blocks - East | **None Detected** | | 70% Other 30% Quartz | White Non Fibrous Heterogeneous / Crushed |
| MSC01-GR-04 / *908589PLM_45* | Wall Grout in Between Concrete Blocks - South East | **None Detected** | | 70% Other 30% Quartz | White Non Fibrous Heterogeneous / Crushed |
| MSC01-GR-05 / *908589PLM_46* | Wall Grout in Between Concrete Blocks - South | **None Detected** | | 70% Other 30% Quartz | White Non Fibrous Heterogeneous / Crushed |
| MSC01-GR-06 / *908589PLM_47* | Wall Grout in Between Concrete Blocks - West | **None Detected** | | 70% Other 30% Quartz | White Non Fibrous Heterogeneous / Crushed |

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Ired Gulley (436)
**Analyst**

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# Bulk Asbestos Analysis

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**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-CT2-01 | 2 x 4 Lay in Ceiling Tile | **None Detected** | **40% Cellulose**<br>**40% Fiber Glass** | 10% Perlite<br>10% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_48* | | | | | Teased |
| MSC01-CT2-02 | 2 x 4 Lay in Ceiling Tile - Rooms A, B, C | **None Detected** | **40% Cellulose**<br>**40% Fiber Glass** | 10% Perlite<br>10% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_49* | | | | | Teased |
| MSC01-CT2-03 | 2 x 4 Lay in Ceiling Tile | **None Detected** | **40% Cellulose**<br>**40% Fiber Glass** | 10% Perlite<br>10% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_50* | | | | | Teased |
| MSC01-CT3-01 | 12 x 12 T & G Ceiling Tile - Office Area | **None Detected** | **95% Cellulose** | 5% Other | Brown, White<br>Fibrous<br>Heterogeneous |
| *908589PLM_51* | | | | | Teased |
| MSC01-CT3-02 | 12 x 12 T & G Ceiling Tile - Office Area | **None Detected** | **95% Cellulose** | 5% Other | Brown, White<br>Fibrous<br>Heterogeneous |
| *908589PLM_52* | | | | | Teased |
| MSC01-CT3-03 | 12 x 12 T & G Ceiling Tile - Office Area | **None Detected** | **95% Cellulose** | 5% Other | Brown, White<br>Fibrous<br>Heterogeneous |
| *908589PLM_53* | | | | | Teased |
| MSC01-CT4-01 | 2 x 4 Lay in Ceiling Tile - Executive Office | **None Detected** | **90% Fiber Glass** | 10% Other | White, Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_54* | | | | | Teased |
| MSC01-CT4-02 | 2 x 4 Lay in Ceiling Tile - Executive Office | **None Detected** | **90% Fiber Glass** | 10% Other | White, Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_55* | | | | | Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-CT4-03 | 2 x 4 Lay in Ceiling Tile - Executive Office | **None Detected** | **90% Fiber Glass** | 10% Other | White, Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_56* | | | | | Teased |
| MSC01-CT5-01 | 2 x 2 Lay In Ceiling Tile - Conference Room | **None Detected** | **40% Cellulose**<br>**40% Fiber Glass** | 10% Perlite<br>10% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_57* | | | | | Teased |
| MSC01-CT5-02 | 2 x 2 Lay In Ceiling Tile - Conference Room | **None Detected** | **40% Cellulose**<br>**40% Fiber Glass** | 10% Perlite<br>10% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_58* | | | | | Teased |
| MSC01-CT5-03 | 2 x 2 Lay In Ceiling Tile - Conference Room | **None Detected** | **40% Cellulose**<br>**40% Fiber Glass** | 10% Perlite<br>10% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_59* | | | | | Teased |
| MSC01-FTM2-01 - A | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic - Dressing Room | **None Detected** | | 100% Other | White<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_60* | *tile* | | | | Dissolved |
| MSC01-FTM2-01 - B | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic - Dressing Room | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_281* | *mastic* | | | | Dissolved |
| MSC01-FTM2-02 - A | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Blue Roo | **None Detected** | | 100% Other | White<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_61* | *tile #1* | | | | Dissolved |
| MSC01-FTM2-02 - B | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Blue Roo | **None Detected** | **3% Cellulose** | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_282* | *mastic #1* | | | | Dissolved |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

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**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-FTM2-02 - C | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Blue Roo | None Detected | | 100% Other | Brown Non Fibrous Heterogeneous |
| *908589PLM_284* | *tile #2* | | | | Dissolved |
| MSC01-FTM2-02 - D | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Blue Roo | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_285* | *mastic #2* | | | | Dissolved |
| MSC01-FTM2-03 - A | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Green R | None Detected | | 100% Other | White Non Fibrous Heterogeneous |
| *908589PLM_62* | *tile #1* | | | | Dissolved |
| MSC01-FTM2-03 - B | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Green R | None Detected | 3% Cellulose | 97% Other | Yellow Non Fibrous Heterogeneous |
| *908589PLM_283* | *mastic #1* | | | | Dissolved |
| MSC01-FTM2-03 - C | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Green R | None Detected | | 100% Other | Brown Non Fibrous Heterogeneous |
| *908589PLM_286* | *tile #2* | | | | Dissolved |
| MSC01-FTM2-03 - D | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Green R | 8% Chrysotile | 5% Cellulose | 87% Other | Black, Yellow Non Fibrous Heterogeneous |
| *908589PLM_287* | *mastic#2* | | | | Dissolved |
| MSC01-FTM2-04 - A | | None Detected | | 100% Other | White Non Fibrous Heterogeneous |
| *908589PLM_288* | *tile, not on chain of custody* | | | | Dissolved |
| MSC01-FTM2-04 - B | | 8% Chrysotile | 5% Cellulose | 87% Other | Black Non Fibrous Heterogeneous |
| *908589PLM_289* | *mastic, not on chain of custody* | | | | Dissolved |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

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**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-FTM2-05 - A | | None Detected | | 100% Other | White<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_290* | *tile, not on chain of custody* | | | | Dissolved |
| MSC01-FTM2-05 - B | | None Detected | 5% Cellulose | 95% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_291* | *mastic, not on chain of custody* | | | | Dissolved |
| MSC01-FTM2-06 - A | | None Detected | | 100% Other | White<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_292* | *tile #1, not on chain of custody* | | | | Dissolved |
| MSC01-FTM2-06 - B | | None Detected | 3% Cellulose | 97% Other | Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_293* | *mastic #1, not on chain of custody* | | | | Dissolved |
| MSC01-FTM2-06 - C | | None Detected | | 100% Other | Brown<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_294* | *tile #2, not on chain of custody* | | | | Dissolved |
| MSC01-FTM2-06 - D | | None Detected | 5% Cellulose | 95% Other | Gray, Yellow<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_295* | *mastic #2, not on chain of custody* | | | | Dissolved |
| MSC01-CT6-01 | 2 x 4 Ceiling Tile - Blue & Green Dressing Room Hallway | None Detected | 95% Fiber Glass | 5% Other | White, Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_63* | | | | | Teased |
| MSC01-CT6-02 | 2 x 4 Ceiling Tile - Red & Green Dressing Room Hallway | None Detected | 95% Fiber Glass | 5% Other | White, Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_64* | | | | | Teased |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

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Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-CT6-03 / *908589PLM_65* | 2 x 4 Ceiling Tile - Red & Green Dressing Room Hallway | None Detected | 95% Fiber Glass | 5% Other | White, Yellow Fibrous Heterogeneous / Teased |
| MSC02-PC-01 - A / *908589PLM_66* | Second Floor Plaster Ceiling - Southwest Concession Stand (Less PC on Second Floor) / *finish* | None Detected | | 100% Other | White Non Fibrous Heterogeneous / Crushed |
| MSC02-PC-01 - B / *908589PLM_296* | Second Floor Plaster Ceiling - Southwest Concession Stand (Less PC on Second Floor) / *base* | None Detected | | 80% Other 20% Quartz | Gray Non Fibrous Heterogeneous / Crushed |
| MSC02-PC-02 - A / *908589PLM_67* | Second Floor Plaster Ceiling - West Area Women's Restroom (Less PC on Second Floor) / *finish* | None Detected | | 100% Other | White Non Fibrous Heterogeneous / Crushed |
| MSC02-PC-02 - B / *908589PLM_297* | Second Floor Plaster Ceiling - West Area Women's Restroom (Less PC on Second Floor) / *base* | None Detected | | 80% Other 20% Quartz | Gray Non Fibrous Heterogeneous / Crushed |
| MSC02-PC-03 - A / *908589PLM_68* | Second Floor Plaster Ceiling - Main Entrance Mens Restroom (Less PC on Second / *finish* | None Detected | | 100% Other | White Non Fibrous Heterogeneous / Crushed |
| MSC02-PC-03 - B / *908589PLM_298* | Second Floor Plaster Ceiling - Main Entrance Mens Restroom (Less PC on Second / *base* | None Detected | | 80% Other 20% Quartz | Gray Non Fibrous Heterogeneous / Crushed |
| MSC01-FTM-01 - A / *908589PLM_69* | 9 x 9 Beige Floor Tile w/Black Mastic - Room A / *tile* | 3% Chrysotile | | 97% Other | Brown Non Fibrous Heterogeneous / Dissolved |

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Ired Gulley (436)
Analyst

Approved Signatory

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-FTM-01 - B / *908589PLM_236* | 9 x 9 Beige Floor Tile w/Black Mastic - Room A / *mastic* | 8% Chrysotile | 5% Cellulose | 87% Other | Black, Non Fibrous, Heterogeneous / Dissolved |
| MSC01-FTM-02 - A / *908589PLM_70* | 9 x 9 Beige Floor Tile w/Black Mastic - Room B / *tile* | Not Analyzed | | | |
| MSC01-FTM-02 - B / *908589PLM_237* | 9 x 9 Beige Floor Tile w/Black Mastic - Room B / *mastic* | Not Analyzed | | | |
| MSC01-FTM-03 - A / *908589PLM_71* | 9 x 9 Beige Floor Tile w/Black Mastic - Room C / *tile* | Not Analyzed | | | |
| MSC01-FTM-03 - B / *908589PLM_240* | 9 x 9 Beige Floor Tile w/Black Mastic - Room C / *mastic* | Not Analyzed | | | |
| MSC01-GDC03-01 / *908589PLM_72* | Light Blue Spec Carpet w/Yellow Adhesive - River Kings Room / *mastic on carpet* | None Detected | 3% Cellulose | 97% Other | Yellow, Non Fibrous, Heterogeneous / Dissolved |
| MSC01-GDC03-02 / *908589PLM_73* | Light Blue Spec Carpet w/Yellow Adhesive - River Kings Room / *mastic on carpet* | None Detected | 3% Cellulose | 97% Other | Yellow, Non Fibrous, Heterogeneous / Dissolved |
| MSC01-GDC03-03 / *908589PLM_74* | Light Blue Spec Carpet w/Yellow Adhesive - River Kings Room / *mastic on carpet* | None Detected | 3% Cellulose | 97% Other | Yellow, Non Fibrous, Heterogeneous / Dissolved |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-SRJC-01 / *908589PLM_75* | Sheet Rock & Joint Compound - River Kings Room / *sheetrock: none detect; joint compnd: none detect* | **None Detected** | **15% Cellulose** | 85% Other | Brown, White Fibrous Heterogeneous / Teased |
| MSC01-SRJC-02 / *908589PLM_76* | Sheet Rock & Joint Compound - River Kings Room / *sheetrock: none detect; joint compnd: none detect* | **None Detected** | **15% Cellulose** | 85% Other | Brown, White Fibrous Heterogeneous / Teased |
| MSC01-SRJC-03 / *908589PLM_77* | Sheet Rock & Joint Compound - North Lobby / *sheetrock: none detect; joint compnd: none detect* | **None Detected** | **15% Cellulose** | 85% Other | Brown, White Fibrous Heterogeneous / Teased |
| MSC01-SRJC-04 / *908589PLM_78* | Sheet Rock & Joint Compound - Meeting Room / *sheetrock: none detect; joint compnd: none detect* | **None Detected** | **15% Cellulose** | 85% Other | Brown, White Fibrous Heterogeneous / Teased |
| MSC01-SRJC-05 / *908589PLM_79* | Sheet Rock & Joint Compound - Locker Room / *sheetrock: none detect; joint compnd: none detect* | **None Detected** | **15% Cellulose** | 85% Other | Brown, White Fibrous Heterogeneous / Teased |
| MSC01-SRJC-06 / *908589PLM_80* | Sheet Rock & Joint Compound - North Lobby / *sheetrock: none detect; joint compnd: none detect* | **None Detected** | **15% Cellulose** | 85% Other | Brown, White Fibrous Heterogeneous / Teased |
| MSC01-SOC-01 / *908589PLM_81* | Spray-on-Ceiling - South Lobby | **8% Chrysotile** | | 82% Other<br>10% Vermiculite | Brown Fibrous Heterogeneous / Teased |
| MSC01-SOC-02 / *908589PLM_82* | Spray-on-Ceiling - South Lobby | **Not Analyzed** | | | |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

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**By Polarized Light Microscopy**
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NVLAP Lab Code: 200664-0

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**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01-SOC-03 / *908589PLM_83* | Spray-on-Ceiling - North Lobby | **Not Analyzed** | | | |
| MSC01-SOC-04 / *908589PLM_84* | Spray-on-Ceiling - North Lobby | **Not Analyzed** | | | |
| MSC01-SOC-05 / *908589PLM_85* | Spray-on-Ceiling - West Lobby | **Not Analyzed** | | | |
| MSC01-SOC-06 / *908589PLM_86* | Spray-on-Ceiling - West Lobby | **Not Analyzed** | | | |
| MSC01-CT-01 / *908589PLM_87* | Ceiling Tile - First Aid | **None Detected** | **95% Fiber Glass** | 5% Other | White, Yellow Fibrous Heterogeneous / Teased |
| MSC01-CT-02 / *908589PLM_88* | Ceiling Tile - River Kings Room | **None Detected** | **95% Fiber Glass** | 5% Other | White, Yellow Fibrous Heterogeneous / Teased |
| MSC01-CT-03 / *908589PLM_89* | Ceiling Tile - Outer Locker Room | **None Detected** | **95% Fiber Glass** | 5% Other | White, Yellow Fibrous Heterogeneous / Teased |
| MSC01-CT-04 / *908589PLM_90* | Ceiling Tile - 2nd Floor South Entrance / Women Restroom Hallway Area | **None Detected** | **95% Fiber Glass** | 5% Other | White, Yellow Fibrous Heterogeneous / Teased |

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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-CHLPUMPEB-03 - C | Blue Pumps, Elbow, Northeast Corner, | None Detected | 95% Fiber Glass | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_261* | *insulation* | | | | Teased |
| MSC01A-CHLTSIEB2-01 - A | Blue Chiller Line, 4" Line Elbow, Second Story, Coming off Tank T1 | None Detected | 40% Cellulose | 60% Other | Blue Fibrous Heterogeneous |
| *908589PLM_113* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLTSIEB2-01 - B | Blue Chiller Line, 4" Line Elbow, Second Story, Coming off Tank T1 | 5% Chrysotile | 30% Fiber Glass | 65% Other | Gray Fibrous Heterogeneous |
| *908589PLM_262* | *mud* | | | | Teased |
| MSC01A-CHLTSIEB2-02 - A | Blue Chiller Line, 4" Line Elbow, Second Story, Coming off Tank T1 | None Detected | 40% Cellulose | 60% Other | Blue Fibrous Heterogeneous |
| *908589PLM_114* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLTSIEB2-02 - B | Blue Chiller Line, 4" Line Elbow, Second Story, Coming off Tank T1 | Not Analyzed | | | |
| *908589PLM_263* | *mud* | | | | |
| MSC01A-CHLPUMPVL-01 - A | Blue Pump Chiller Valve | None Detected | 40% Cellulose | 60% Other | Blue, Silver Non Fibrous Heterogeneous |
| *908589PLM_115* | *wrap* | | | | Dissolved |
| MSC01A-CHLPUMPVL-01 - B | Blue Pump Chiller Valve | 5% Amosite | 30% Fiber Glass | 65% Other | Gray Fibrous Heterogeneous |
| *908589PLM_264* | *mud* | | | | Teased |
| MSC01A-CHLPUMPVL-01 - C | Blue Pump Chiller Valve | None Detected | 5% Fiber Glass | 95% Other | Black Non Fibrous Heterogeneous |
| *908589PLM_265* | *mastic* | | | | Dissolved |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-CHLPUMPVL-01 - D | Blue Pump Chiller Valve | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_266* | *insulation* | | | | Teased |
| MSC01A-CHLPUMPVL-02 - A | Blue Pump Chiller Valve | **None Detected** | **40% Cellulose** | 60% Other | Brown, Blue Fibrous Heterogeneous |
| *908589PLM_116* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLPUMPVL-02 - B | Blue Pump Chiller Valve | **Not Analyzed** | | | |
| *908589PLM_267* | *mud* | | | | |
| MSC01A-CHLPUMPVL-02 - C | Blue Pump Chiller Valve | **None Detected** | **5% Fiber Glass** | 95% Other | Black Non Fibrous Heterogeneous |
| *908589PLM_268* | *mastic* | | | | Dissolved |
| MSC01A-CHLTSI-01 - A | 18" Blue Chiller Line (Fiberglass) | **None Detected** | **40% Cellulose** | 60% Other | Brown, Blue Fibrous Heterogeneous |
| *908589PLM_117* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLTSI-01 - B | 18" Blue Chiller Line (Fiberglass) | **None Detected** | **60% Cellulose** | 40% Other | Brown, Black Fibrous Heterogeneous |
| *908589PLM_269* | *paper* | | | | Teased, Dissolved |
| MSC01A-CHLTSI-01 - C | 18" Blue Chiller Line (Fiberglass) | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_270* | *insulation* | | | | Teased |
| MSC01A-CHLTSI-02 - A | 18" Blue Chiller Line (Fiberglass) | **None Detected** | **40% Cellulose** | 60% Other | Brown, Blue Fibrous Heterogeneous |
| *908589PLM_118* | *wrap* | | | | Teased, Dissolved |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-CHLTSIEB4-01 - B | 8" Blue Chiller Line, Elbow | 5% Amosite<br>3% Chrysotile | 30% Fiber Glass | 62% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_299* | *mud* | | | | Teased |
| MSC01A-CHLTSIEB4-02 - A | 8" Blue Chiller Line, Elbow | None Detected | 40% Cellulose | 60% Other | Blue, White<br>Fibrous<br>Heterogeneous |
| *908589PLM_126* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLTSIEB4-02 - B | 8" Blue Chiller Line, Elbow | Not Analyzed | | | |
| *908589PLM_300* | *mud* | | | | |
| MSC01A-CHLTSIEB4-03 - A | 8" Blue Chiller Line, Elbow | None Detected | 40% Cellulose | 60% Other | White, Blue<br>Fibrous<br>Heterogeneous |
| *908589PLM_127* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLTSIEB4-03 - B | 8" Blue Chiller Line, Elbow | Not Analyzed | | | |
| *908589PLM_301* | *mud* | | | | |
| MSC01A-CHLEB1-01 - A | 18" Blue Chiller Line, Elbows | None Detected | 40% Cellulose | 60% Other | White, Blue<br>Fibrous<br>Heterogeneous |
| *908589PLM_128* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLEB1-01 - B | 18" Blue Chiller Line, Elbows | 5% Chrysotile | 30% Fiber Glass | 65% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_302* | *mud* | | | | Teased |
| MSC01A-CHLEB1-01 - C | 18" Blue Chiller Line, Elbows | None Detected | 5% Fiber Glass | 95% Other | Black<br>Fibrous<br>Heterogeneous |
| *908589PLM_303* | *mastic* | | | | Teased, Dissolved |

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Ired Gulley (436)
Analyst

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NVLAP Lab Code: 200664-0

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**Date Received:** 8/24/2009
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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-CHLEB1-01 - D | 18" Blue Chiller Line, Elbows | None Detected | 95% Fiber Glass | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_304* | *insulation* | | | | Teased |
| MSC01A-CHLEB1-02 - A | 18" Blue Chiller Line, Elbows | None Detected | 40% Cellulose | 60% Other | White, Blue Fibrous Heterogeneous |
| *908589PLM_129* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLEB1-02 - B | 18" Blue Chiller Line, Elbows | Not Analyzed | | | |
| *908589PLM_305* | *mud* | | | | |
| MSC01A-CHLEB1-03 - A | 18" Blue Chiller Line, Elbows | None Detected | 40% Cellulose | 60% Other | White, Blue Fibrous Heterogeneous |
| *908589PLM_130* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLEB1-03 - B | 18" Blue Chiller Line, Elbows | Not Analyzed | | | |
| *908589PLM_306* | *mud* | | | | |
| MSC01A-BUHT2S-01 | Brine Unit Holding Tank #2 Sides, Second Floor, Middle Tank, Purple | 5% Amosite | 30% Fiber Glass | 65% Other | Gray Fibrous Heterogeneous |
| *908589PLM_131* | *unable to separate wrap* | | | | Teased |
| MSC01A-BUHT2S-02 | Brine Unit Holding Tank #2 Sides, Second Floor, Middle Tank, Purple | Not Analyzed | | | |
| *908589PLM_132* | | | | | |
| MSC01A-BUHT2E-01 - A | Brine Unit Holding Tank #2 Ends, Second Floor, Middle Tank, Purple | None Detected | 40% Cellulose | 60% Other | Purple Fibrous Heterogeneous |
| *908589PLM_133* | *wrap* | | | | Teased, Dissolved |

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| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-CHLTSI2-01 - A | 4" Blue Chiller Line, Coming off Tank #1 | **None Detected** | **40% Cellulose** | 60% Other | White, Blue Fibrous Heterogeneous |
| *908589PLM_158* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLTSI2-01 - B | 4" Blue Chiller Line, Coming off Tank #1 | **None Detected** | **60% Cellulose** | 40% Other | Brown, Black Fibrous Heterogeneous |
| *908589PLM_315* | *paper* | | | | Teased, Dissolved |
| MSC01A-CHLTSI2-01 - C | 4" Blue Chiller Line, Coming off Tank #1 | **None Detected** | **95% Cellulose** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_316* | *insulation* | | | | Teased |
| MSC01A-CHLTSI2-02 - A | 4" Blue Chiller Line, Coming off Tank #1 | **None Detected** | **40% Cellulose** | 60% Other | White, Blue Fibrous Heterogeneous |
| *908589PLM_159* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLTSI2-02 - B | 4" Blue Chiller Line, Coming off Tank #1 | **None Detected** | **60% Cellulose** | 40% Other | Brown, Black Fibrous Heterogeneous |
| *908589PLM_317* | *paper* | | | | Teased, Dissolved |
| MSC01A-CHLTSI2-02 - C | 4" Blue Chiller Line, Coming off Tank #1 | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_318* | *insulation* | | | | Teased |
| MSC01A-BUHT1S-01 | Brine Unit Holding Tank #1 Sides, Second Floor | **20% Chrysotile**<br>**5% Amosite** | | 75% Other | White Fibrous Heterogeneous |
| *908589PLM_160* | *unable to separate wrap* | | | | Teased |
| MSC01A-BUHT1S-02 | Brine Unit Holding Tank #1 Sides, Second Floor | **Not Analyzed** | | | |
| *908589PLM_161* | | | | | |

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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-B1TSI3-01 | 6" Orange Boiler Line, Second Story | 20% Amosite | | 80% Other | White Fibrous Heterogeneous |
| *908589PLM_162* | *unable to separate wrap* | | | | Teased |
| MSC01A-B1TSI3-02 | 6" Orange Boiler Line, Second Story | Not Analyzed | | | |
| *908589PLM_163* | | | | | |
| MSC01A-B1TSI3-03 | 6" Orange Boiler Line, Second Story | Not Analyzed | | | |
| *908589PLM_164* | | | | | |
| MSC01A-B1TSIEB2-01 | 4" Orange Boiler Line Elbows | 30% Chrysotile | 20% Fiber Glass | 50% Other | Gray Fibrous Heterogeneous |
| *908589PLM_165* | *unable to separate wrap* | | | | Teased |
| MSC01A-B1TSIEB2-02 | 4" Orange Boiler Line Elbows | Not Analyzed | | | |
| *908589PLM_166* | | | | | |
| MSC01A-B1TSIEB2-03 | 4" Orange Boiler Line Elbows | Not Analyzed | | | |
| *908589PLM_167* | | | | | |
| MSC01A-B1TSIEB3-01 | 6" Orange Boiler Line Elbows | 20% Chrysotile | 30% Fiber Glass | 50% Other | White Fibrous Heterogeneous |
| *908589PLM_168* | *unable to separate wrap* | | | | Teased |
| MSC01A-B1TSIEB3-02 | 6" Orange Boiler Line Elbows | Not Analyzed | | | |
| *908589PLM_169* | | | | | |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-B1TSIEB3-03 / *908589PLM_170* | 6" Orange Boiler Line Elbows | **Not Analyzed** | | | |
| MSC01A-BUHT1E-01 / *908589PLM_171* | Brine Unit Purple Holding Tank #1 - Ends | **20% Amosite** | | 80% Other | White Fibrous Heterogeneous / Teased |
| MSC01A-BUHT1E-02 / *908589PLM_172* | Brine Unit Purple Holding Tank #1 - Ends | **Not Analyzed** | | | |
| MSC01B-HTTSIEB-01 - A / *908589PLM_173* | Heating Tank Elbow in Wood Shop / *wrap* | **None Detected** | **95% Cellulose** | 5% Other | White Fibrous Heterogeneous / Teased |
| MSC01B-HTTSIEB-01 - B / *908589PLM_319* | Heating Tank Elbow in Wood Shop / *mud* | **5% Amosite**<br>**3% Chrysotile** | **30% Fiber Glass** | 62% Other | Gray Fibrous Heterogeneous / Teased |
| MSC01B-HTTSIEB-02 - A / *908589PLM_174* | Heating Tank Elbow in Wood Shop / *wrap* | **None Detected** | **95% Cellulose** | 5% Other | White Fibrous Heterogeneous / Teased |
| MSC01B-HTTSIEB-02 - B / *908589PLM_320* | Heating Tank Elbow in Wood Shop / *mud* | **Not Analyzed** | | | |
| MSC01A-B2EXH-01 / *908589PLM_175* | Boiler #2 Exhaust / *insulation only* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |

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**EPA Method: 600/R-93/116 and 600/M4-82-020**

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**Date Received:** 8/24/2009
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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-B2EXH-02 - A | Boiler #2 Exhaust | None Detected | 30% Cellulose<br>10% Fiber Glass | 60% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_176* | *wrap* | | | | Teased, Dissolved |
| MSC01A-B2EXH-02 - B | Boiler #2 Exhaust | None Detected | 95% Fiber Glass | 5% Other | Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_321* | *insulation* | | | | Teased |
| MSC01A-B2EXH-03 - A | Boiler #2 Exhaust | None Detected | 30% Cellulose<br>10% Fiber Glass | 60% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_177* | *wrap* | | | | Teased, Dissolved |
| MSC01A-B2EXH-03 - B | Boiler #2 Exhaust | None Detected | 95% Fiber Glass | 5% Other | Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_322* | *insulation* | | | | Teased |
| MSC01B-HTLTSI-01 | Heating Tank Line in Wood Shop | 20% Amosite | | 80% Other | Gray<br>Fibrous<br>Heterogeneous |
| *908589PLM_178* | *unable to separate wrap* | | | | Teased |
| MSC01B-HTLTSI-02 | Heating Tank Line in Wood Shop | Not Analyzed | | | |
| *908589PLM_179* | | | | | |
| MSC01A-B1ESH-01 | Boiler #1 Exhaust | 15% Amosite<br>5% Chrysotile | | 80% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_180* | *unable to separate wrap* | | | | Teased |
| MSC01A-B1ESH-02 | Boiler #1 Exhaust | Not Analyzed | | | |
| *908589PLM_181* | | | | | |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
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NVLAP Lab Code: 200664-0

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**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-ORHT1S-02 / *908589PLM_190* | Orange Hot Water Tank #1, Sides, West Tank, | **Not Analyzed** | | | |
| MSC01A-ORHT1S-03 / *908589PLM_191* | Orange Hot Water Tank #1, Sides, West Tank, | **Not Analyzed** | | | |
| MSC01A-ORHT2E-01 / *908589PLM_192* | Orange Hot Water Tank #2, Ends / *unable to separate wrap* | **15% Chrysotile**<br>**15% Amosite** | | 70% Other | Gray, White<br>Fibrous<br>Heterogeneous<br>Teased |
| MSC01A-ORHT2E-02 / *908589PLM_193* | Orange Hot Water Tank #2, Ends | **Not Analyzed** | | | |
| MSC01A-ORHT2E-03 / *908589PLM_194* | Orange Hot Water Tank #2, Ends | **Not Analyzed** | | | |
| MSC01A-CHLTSI4-01 - A / *908589PLM_195* | 8" Blue Chiller Line / *wrap* | **None Detected** | **45% Cellulose** | 55% Other | Brown, Blue<br>Fibrous<br>Heterogeneous<br>Teased, Dissolved |
| MSC01A-CHLTSI4-01 - B / *908589PLM_323* | 8" Blue Chiller Line / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow<br>Fibrous<br>Heterogeneous<br>Teased |
| MSC01A-CHLTSI4-02 - A / *908589PLM_196* | 8" Blue Chiller Line / *wrap* | **None Detected** | **45% Cellulose** | 55% Other | Brown, Blue<br>Fibrous<br>Heterogeneous<br>Teased, Dissolved |

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# Bulk Asbestos Analysis

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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-CHLTSI4-02 - B / *908589PLM_324* | 8" Blue Chiller Line / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC01A-CHLTSI4-03 - A / *908589PLM_197* | 8" Blue Chiller Line / *wrap* | **None Detected** | **45% Cellulose** | 55% Other | Brown, Blue Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-CHLTSI4-03 - B / *908589PLM_325* | 8" Blue Chiller Line / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC01B-HTTSI -01 / *908589PLM_198* | Holding Tank in Wood Shop / *unable to separate wrap* | **15% Amosite**<br>**5% Chrysotile** | | 80% Other | Gray, White Fibrous Heterogeneous / Teased |
| MSC01B-HTTSI -02 / *908589PLM_199* | Holding Tank in Wood Shop | **Not Analyzed** | | | |
| MSC01A-BUTSI3-01 / *908589PLM_200* | 6" Brine Unit Purple Pipe / *wrap on foam* | **None Detected** | **40% Cellulose** | 60% Other | Purple Fibrous Heterogeneous / Teased |
| MSC01A-BUTSI3-02 / *908589PLM_201* | 6" Brine Unit Purple Pipe / *wrap on foam* | **None Detected** | **40% Cellulose** | 60% Other | Purple Fibrous Heterogeneous / Teased, Dissolved |
| MSC01B-WL3TSIEB-01 - A / *908589PLM_202* | 6" Water Line, Elbow - Wood Shop / *wrap* | **None Detected** | **80% Cellulose** | 20% Other | Brown Fibrous Heterogeneous / Teased |

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**Analyst**

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# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01B-WL3TSIEB-01-B | 6" Water Line, Elbow - Wood Shop | None Detected | 30% Cellulose | 70% Other | Gray Fibrous Heterogeneous |
| *908589PLM_326* | *mud* | | | | Teased |
| MSC01B-WL3TSIEB-02-A | 6" Water Line, Elbow - Wood Shop | None Detected | 80% Cellulose | 20% Other | Brown Fibrous Heterogeneous |
| *908589PLM_203* | *wrap* | | | | Teased |
| MSC01B-WL3TSIEB-02-B | 6" Water Line, Elbow - Wood Shop | 5% Amosite<br>3% Chrysotile | 30% Fiber Glass | 62% Other | Gray Fibrous Heterogeneous |
| *908589PLM_327* | *mud* | | | | Teased |
| MSC01B-WL1TSIEB-01-A | 2" Overhead Water Line, Elbow - Wood Shop | None Detected | 90% Cellulose | 10% Other | Brown Fibrous Heterogeneous |
| *908589PLM_204* | *wrap* | | | | Teased |
| MSC01B-WL1TSIEB-01-B | 2" Overhead Water Line, Elbow - Wood Shop | 5% Chrysotile | 30% Fiber Glass | 65% Other | Gray Fibrous Heterogeneous |
| *908589PLM_328* | *mud* | | | | Teased |
| MSC01B-WL1TSIEB-02-A | 2" Overhead Water Line, Elbow - Wood Shop | None Detected | 90% Cellulose | 10% Other | Brown Fibrous Heterogeneous |
| *908589PLM_205* | *wrap* | | | | Teased |
| MSC01B-WL1TSIEB-02-B | 2" Overhead Water Line, Elbow - Wood Shop | Not Analyzed | | | |
| *908589PLM_329* | *mud* | | | | |
| MSC01B-WL2TSIEB-01-A | 4" Overhead Water Line, Elbow - Wood Shop | None Detected | 90% Cellulose | 10% Other | Brown Fibrous Heterogeneous |
| *908589PLM_206* | *wrap* | | | | Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01B-WL2TSIEB-01 - B / *908589PLM_330* | 4" Overhead Water Line, Elbow - Wood Shop / *mud* | **None Detected** | **30% Fiber Glass** | 70% Other | Gray Fibrous Heterogeneous / Teased |
| MSC01B-WL2TSIEB-02 / *908589PLM_207* | 4" Overhead Water Line, Elbow - Wood Shop / *mud only* | **5% Chrysotile 5% Amosite** | **30% Fiber Glass** | 60% Other | Gray Fibrous Heterogeneous / Teased |
| MSC01B-WL1TSI-01 - A / *908589PLM_208* | 2" Water Line - Wood Shop / *wrap* | **None Detected** | **90% Cellulose** | 10% Other | Brown, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC01B-WL1TSI-01 - B / *908589PLM_406* | 2" Water Line - Wood Shop / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC01B-WL1TSI-02 - A / *908589PLM_209* | 2" Water Line - Wood Shop / *wrap* | **None Detected** | **90% Cellulose** | 10% Other | Brown Fibrous Heterogeneous / Teased |
| MSC01B-WL1TSI-02 - B / *908589PLM_407* | 2" Water Line - Wood Shop / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC01B-WL2TSI-01 - A / *908589PLM_210* | 4" Water Line - Wood Shop / *wrap* | **None Detected** | **90% Cellulose** | 10% Other | Brown, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC01B-WL2TSI-01 - B / *908589PLM_408* | 4" Water Line - Wood Shop / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01B-WL2TSI-02 - A / *908589PLM_211* | 4" Water Line - Wood Shop / *wrap* | **None Detected** | **90% Cellulose** | 10% Other | Brown, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC01B-WL2TSI-02 - B / *908589PLM_409* | 4" Water Line - Wood Shop / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC01B-WL3TSI-01 - A / *908589PLM_331* | 6" Overhead Water Line - Wood Shop / *wrap* | **None Detected** | **90% Cellulose** | 10% Other | Brown, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC01B-WL3TSI-01 - B / *908589PLM_410* | 6" Overhead Water Line - Wood Shop / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC01B-WL3TSI-02 - A / *908589PLM_332* | 6" Overhead Water Line - Wood Shop / *wrap* | **None Detected** | **90% Cellulose** | 10% Other | Brown, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC01B-WL3TSI-02 - B / *908589PLM_411* | 6" Overhead Water Line - Wood Shop / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC01A-CHLT1-01 - A / *908589PLM_333* | Second Story Blue Tank - North Side of Boiler Room / *wrap* | **None Detected** | **40% Cellulose** | 60% Other | White, Blue Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-CHLT1-01 - B / *908589PLM_412* | Second Story Blue Tank - North Side of Boiler Room / *mud* | **5% Amosite**<br>**3% Chrysotile** | **30% Fiber Glass** | 62% Other | Gray Fibrous Heterogeneous / Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

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NVLAP Lab Code: 200664-0

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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-CHLT1-02 - A | Second Story Blue Tank - North Side of Boiler Room | **None Detected** | **40% Cellulose** | 60% Other | White, Blue Fibrous Heterogeneous |
| *908589PLM_334* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLT1-02 - B | Second Story Blue Tank - North Side of Boiler Room | **Not Analyzed** | | | |
| *908589PLM_413* | *mud* | | | | |
| MSC01A-CHLTSIEB3-01 - A | 4" Blue Chiller Line, Elbow | **None Detected** | | 100% Other | White, Blue Non Fibrous Heterogeneous |
| *908589PLM_335* | *wrap* | | | | Dissolved |
| MSC01A-CHLTSIEB3-01 - B | 4" Blue Chiller Line, Elbow | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_414* | *insulation* | | | | Teased |
| MSC01A-CHLTSIEB3-02 | 4" Blue Chiller Line, Elbow | **None Detected** | | 100% Other | White, Blue Non Fibrous Heterogeneous |
| *908589PLM_336* | *wrap only* | | | | Dissolved |
| MSC01A-BUTSIEB3-01 - A | 6" Brine Unit Purple Pipe, Elbow | **None Detected** | **40% Cellulose** | 60% Other | Purple Fibrous Heterogeneous |
| *908589PLM_337* | *wrap* | | | | Teased, Dissolved |
| MSC01A-BUTSIEB3-01 - B | 6" Brine Unit Purple Pipe, Elbow | **5% Amosite**<br>**3% Chrysotile** | **30% Fiber Glass** | 62% Other | Gray Fibrous Heterogeneous |
| *908589PLM_416* | *mud* | | | | Teased |
| MSC01A-BUTSIEB3-02 - A | 6" Brine Unit Purple Pipe, Elbow | **None Detected** | **40% Cellulose** | 60% Other | Purple Fibrous Heterogeneous |
| *908589PLM_338* | *wrap* | | | | Teased, Dissolved |

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**Analyst**

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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-BUTSIEB3-02 - B / *908589PLM_423* | 6" Brine Unit Purple Pipe, Elbow / *mud* | **Not Analyzed** | | | |
| MSC01A-BUTSI2-01 / *908589PLM_339* | 8" Brine Unit Purple Pipe / *wrap on foam* | **None Detected** | **50% Cellulose** | 50% Other | Purple Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-BUTSI2-02 / *908589PLM_340* | 8" Brine Unit Purple Pipe / *wrap on foam* | **None Detected** | **50% Cellulose** | 50% Other | Purple Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-FLEXDUCT1-01 / *908589PLM_341* | Grey Flex Duct, Second Story, Boiler Room | **None Detected** | **80% Fiber Glass** | 20% Other | Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-FLEXDUCT1-02 / *908589PLM_342* | Grey Flex Duct, Second Story, Boiler Room | **None Detected** | **80% Fiber Glass** | 20% Other | Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-CHLTSI3-01 - A / *908589PLM_343* | 4" Blue Chiller Line, Second Story / *wrap* | **None Detected** | **60% Cellulose** | 40% Other | Brown, Blue Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-CHLTSI3-01 - B / *908589PLM_424* | 4" Blue Chiller Line, Second Story / *insulation* | **None Detected** | **90% Fiber Glass** | 10% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC01A-CHLTSI3-02 - A / *908589PLM_344* | 4" Blue Chiller Line, Second Story / *wrap* | **None Detected** | **60% Cellulose** | 40% Other | Brown, Blue Fibrous Heterogeneous / Teased, Dissolved |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-CHLTSI3-02 - B | 4" Blue Chiller Line, Second Story | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_425* | *insulation* | | | | Teased |
| MSC01A-BUTSIEB2-01 | 8" Brine Unit Purple Pipe, Elbow | **5% Amosite**<br>**3% Chrysotile** | **30% Fiber Glass** | 62% Other | Gray<br>Fibrous<br>Heterogeneous |
| *908589PLM_345* | *unable to separate wrap* | | | | Teased |
| MSC01A-BUTSIEB2-02 | 8" Brine Unit Purple Pipe, Elbow | **Not Analyzed** | | | |
| *908589PLM_346* | | | | | |
| MSC01A-CHLPUMP-01 - A | Blue Chiller Pumps, Second Story - Boiler Room | **None Detected** | | 100% Other | White, Blue<br>Fibrous<br>Heterogeneous |
| *908589PLM_347* | *wrap* | | | | Teased, Dissolved |
| MSC01A-CHLPUMP-01 - B | Blue Chiller Pumps, Second Story - Boiler Room | **5% Amosite**<br>**3% Chrysotile** | **30% Fiber Glass** | 62% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_426* | *mud* | | | | Teased |
| MSC01A-CHLPUMP-01 - C | Blue Chiller Pumps, Second Story - Boiler Room | **None Detected** | **5% Fiber Glass** | 95% Other | Black<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_427* | *mastic* | | | | Dissolved |
| MSC01A-CHLPUMP-01 - D | Blue Chiller Pumps, Second Story - Boiler Room | **None Detected** | **90% Hair** | 10% Other | Brown<br>Fibrous<br>Heterogeneous |
| *908589PLM_428* | *insulation* | | | | Teased |
| MSC01A-CHLPUMP-02 - A | Blue Chiller Pumps, Second Story - Boiler Room | **None Detected** | | 100% Other | Blue<br>Fibrous<br>Heterogeneous |
| *908589PLM_348* | *wrap* | | | | Teased, Dissolved |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-CHLPUMP-02 - B | Blue Chiller Pumps, Second Story - Boiler Room | Not Analyzed | | | |
| *908589PLM_429* | *mud* | | | | |
| MSC01A-CHLPUMP-02 - C | Blue Chiller Pumps, Second Story - Boiler Room | None Detected | 5% Fiber Glass | 95% Other | Black<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_430* | *mastic* | | | | Dissolved |
| MSC01A-CHLPUMP-02 - D | Blue Chiller Pumps, Second Story - Boiler Room | None Detected | 95% Fiber Glass | 5% Other | Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_431* | *insulation* | | | | Teased |
| MSC01A-CHLPUMP-03 - A | Blue Chiller Pumps, Second Story - Boiler Room | None Detected | | 100% Other | Blue<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_349* | *wrap* | | | | Dissolved |
| MSC01A-CHLPUMP-03 - B | Blue Chiller Pumps, Second Story - Boiler Room | Not Analyzed | | | |
| *908589PLM_432* | *mud* | | | | |
| MSC01A-BUSPG-01 | Dark Blue Sponge, (Neoprene) - Boiler Room | None Detected | | 100% Other | Black, Blue<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_350* | | | | | Teased |
| MSC01A-BUSPG-02 | Dark Blue Sponge, (Neoprene) - Boiler Room | None Detected | | 100% Other | Black, Blue<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_351* | | | | | Teased |
| MSC01A-BUSPG-03 | Dark Blue Sponge, (Neoprene) - Boiler Room | None Detected | | 100% Other | Black, Blue<br>Non Fibrous<br>Heterogeneous |
| *908589PLM_352* | | | | | Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-NPOTTSI-01 - A | Grey 2" Non Potable Water Line | **None Detected** | **80% Cellulose** | 20% Other | Black, Silver Fibrous Heterogeneous |
| *908589PLM_353* | *wrap* | | | | Dissolved |
| MSC01A-NPOTTSI-01 - B | Grey 2" Non Potable Water Line | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_433* | *insulation* | | | | Teased |
| MSC01A-NPOTTSI-02 - A | Grey 2" Non Potable Water Line | **None Detected** | **80% Cellulose** | 20% Other | Brown, Silver Fibrous Heterogeneous |
| *908589PLM_354* | *wrap* | | | | Teased, Dissolved |
| MSC01A-NPOTTSI-02 - B | Grey 2" Non Potable Water Line | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_434* | *insulation* | | | | Teased |
| MSC01A-NPOTTSI-03 - A | Grey 2" Non Potable Water Line | **None Detected** | **80% Cellulose** | 20% Other | Brown, Black, Silver Fibrous |
| *908589PLM_355* | *wrap* | | | | Teased, Dissolved |
| MSC01A-NPOTTSI-03 - B | Grey 2" Non Potable Water Line | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_435* | *insulation* | | | | Teased |
| MSC01A-NPOTTSI-04 - A | Grey 2" Non Potable Water Line | **None Detected** | **80% Cellulose** | 20% Other | Brown, Silver Fibrous Heterogeneous |
| *908589PLM_356* | *wrap* | | | | Teased, Dissolved |
| MSC01A-NPOTTSI-04 - B | Grey 2" Non Potable Water Line | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_436* | *insulation* | | | | Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-NPOTTSI-05 - A / *908589PLM_357* | Grey 2" Non Potable Water Line / *wrap* | **None Detected** | **80% Cellulose** | 20% Other | Brown, Silver Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-NPOTTSI-05 - B / *908589PLM_437* | Grey 2" Non Potable Water Line / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Brown, Silver Fibrous Heterogeneous / Teased, Dissolved |
| MSCRF-RF02-01 / *908589PLM_358* | Asphalt Shingles, East Roofs | **None Detected** | **20% Fiber Glass** | 80% Other | White, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSCRF-RF02-02 / *908589PLM_359* | Asphalt Shingles, East Roofs | **None Detected** | **20% Fiber Glass** | 80% Other | White, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSCRF-RF02-03 / *908589PLM_360* | Asphalt Shingles, East Roofs | **None Detected** | **20% Fiber Glass** | 80% Other | White, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC02-HALTSIN-01 - A / *908589PLM_361* | Pipe TSI Sample in North Lobby Hallway / *wrap* | **None Detected** | **80% Cellulose** | 20% Other | Brown, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC02-HALTSIN-01 - B / *908589PLM_438* | Pipe TSI Sample in North Lobby Hallway / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC03M-CPTSIEB01-01 / *908589PLM_362* | Elbow for Continuous Pipe Run on 3rd Floor - East / *unable to separate wrap* | **5% Chrysotile**<br>**5% Amosite** | **30% Fiber Glass** | 60% Other | Gray, White Fibrous Heterogeneous / Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC03M-CPTSIEB01-02 / *908589PLM_363* | Elbow for Continuous Pipe Run on 3rd Floor - North | **Not Analyzed** | | | |
| MSC03M-CPTSIEB01-03 / *908589PLM_364* | Elbow for Continuous Pipe Run on 3rd Floor - South | **Not Analyzed** | | | |
| MSC02-HALTSIW-01 - A / *908589PLM_365* | Pipe TSI Sample in West Lobby Hallway / *wrap* | **None Detected** | **80% Cellulose** | 20% Other | Brown, Black<br>Fibrous<br>Heterogeneous / Teased, Dissolved |
| MSC02-HALTSIW-01 - B / *908589PLM_439* | Pipe TSI Sample in West Lobby Hallway / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow<br>Fibrous<br>Heterogeneous / Teased |
| MSC02-HALTSIEBS-01 / *908589PLM_366* | Pipe Elbow TSI Sample in South Lobby Hallway / *unable to separate wrap* | **5% Chrysotile**<br>**5% Amosite** | **30% Fiber Glass** | 60% Other | Gray<br>Fibrous<br>Heterogeneous / Teased |
| MSC03M-HVAC16TSIA-01 / *908589PLM_367* | HVAC Unit #16, Line "A", Pillar 1 / *unable to separate wrap* | **20% Amosite** | | 80% Other | Gray<br>Fibrous<br>Heterogeneous / Teased |
| MSC03M-CPTSI03-01 - A / *908589PLM_368* | Continuous Pipe Run, Level Three, Fiberglass - East / *wrap* | **None Detected** | **60% Cellulose** | 40% Other | Brown, Black<br>Fibrous<br>Heterogeneous / Teased, Dissolved |
| MSC03M-CPTSI03-01 - B / *908589PLM_456* | Continuous Pipe Run, Level Three, Fiberglass - East / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow<br>Fibrous<br>Heterogeneous / Teased |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC03M-CPTSI03-02 - A | Continuous Pipe Run, Level Three, Fiberglass - North | **None Detected** | **60% Fiber Glass** | 40% Other | Brown, Black Fibrous Heterogeneous |
| *908589PLM_369* | *wrap* | | | | Teased, Dissolved |
| MSC03M-CPTSI03-02 - B | Continuous Pipe Run, Level Three, Fiberglass - North | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_457* | *insulation* | | | | Teased |
| MSC03M-CPTSI03-03 - A | Continuous Pipe Run, Level Three, Fiberglass - West | **None Detected** | **60% Cellulose** | 40% Other | Brown, Black Fibrous Heterogeneous |
| *908589PLM_370* | *wrap* | | | | Teased, Dissolved |
| MSC03M-CPTSI03-03 - B | Continuous Pipe Run, Level Three, Fiberglass - West | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_458* | *insulation* | | | | Teased |
| MSC03M-CPTSI03-04 - A | Continuous Pipe Run, Level Three, Fiberglass - South | **None Detected** | **60% Fiber Glass** | 40% Other | Brown, Black Fibrous Heterogeneous |
| *908589PLM_371* | *wrap* | | | | Teased, Dissolved |
| MSC03M-CPTSI03-04 - B | Continuous Pipe Run, Level Three, Fiberglass - South | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_459* | *insulation* | | | | Teased |
| MSC03M-CPTSIEB02-01 | Continuous Pipe Rune, Elbow, Second Level Pipe Run - East @ stairwell | **20% Amosite** | | 80% Other | Gray Fibrous Heterogeneous |
| *908589PLM_372* | *unable to separate wrap* | | | | Teased |
| MSC03M-CPTSIEB02-02 | Continuous Pipe Rune, Elbow, Second Level Pipe Run - North | **Not Analyzed** | | | |
| *908589PLM_373* | | | | | |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC03M-CPTSIEB02-03 / *908589PLM_374* | Continuous Pipe Rune, Elbow, Second Level Pipe Run - West | **Not Analyzed** | | | |
| MSC03M-CPTSIEB02-04 / *908589PLM_375* | Continuous Pipe Rune, Elbow, Second Level Pipe Run - South | **Not Analyzed** | | | |
| MSC02-EQPTSIEB01-01 - A / *908589PLM_376* | Equipment Room Pipe Run, 2nd Floor, Elbow / *wrap* | **None Detected** | **60% Cellulose** | 40% Other | Brown, Black Fibrous Heterogeneous / Teased, Dissolved |
| MSC02-EQPTSIEB01-01 - B / *908589PLM_440* | Equipment Room Pipe Run, 2nd Floor, Elbow / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow Fibrous Heterogeneous / Teased |
| MSC03M-HVAC17TS1AEB-01 / *908589PLM_377* | Elbow for line "A" on HVAC unit 17, pillar 28 / *unable to separate mastic* | **20% Chrysotile** | **30% Fiber Glass** | 50% Other | Gray Fibrous Heterogeneous / Teased |
| MSC03M-CPTSI02-01 / *908589PLM_378* | Continuous Pipe Run, Level Two - East @ stairwell / *unable to separate wrap* | **20% Chrysotile** | | 80% Other | Gray Fibrous Heterogeneous / Teased, Dissolved |
| MSC03M-CPTSI02-02 / *908589PLM_379* | Continuous Pipe Run, Level Two - North | **Not Analyzed** | | | |
| MSC03M-CPTSI02-03 / *908589PLM_380* | Continuous Pipe Run, Level Two - West | **Not Analyzed** | | | |

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Ired Gulley (436)

**Analyst**

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# Bulk Asbestos Analysis

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**EPA Method: 600/R-93/116 and 600/M4-82-020**

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**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC03M-CPTSI02-04 / *908589PLM_381* | Continuous Pipe Run, Level Two - South | **Not Analyzed** | | | |
| MSC03M-HVAC17TSIBEB-01 / *908589PLM_382* | Elbow for Line "B" on HVAC Unit 17, pillar 23 / *unable to separate wrap* | **5% Chrysotile**<br>**5% Amosite** | **30% Fiber Glass** | 60% Other | Gray<br>Fibrous<br>Heterogeneous / Teased |
| MSC03M-CPTSIEB03-01 / *908589PLM_383* | Elbow for Level 3 Pipe, pillar 32 - West / *unable to separate wrap* | **5% Chrysotile**<br>**5% Amosite** | **30% Fiber Glass** | 60% Other | Gray<br>Fibrous<br>Heterogeneous / Teased |
| MSC03M-CPTSIEB03-02 / *908589PLM_384* | Elbow for Level 3 Pipe, pillar 13 - South East Side | **Not Analyzed** | | | |
| MSC03M-HVAC17TSIB-01 - A / *908589PLM_385* | Line "B" on HVAC unit 17 / *wrap* | **None Detected** | **90% Cellulose** | 10% Other | Brown<br>Fibrous<br>Heterogeneous / Teased |
| MSC03M-HVAC17TSIB-01 - B / *908589PLM_445* | Line "B" on HVAC unit 17 / *insulation* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow<br>Fibrous<br>Heterogeneous / Teased |
| MSC03M-FLEXDUCT1-01 / *908589PLM_386* | Flex Duct @ Pillar 21 | **None Detected** | **80% Fiber Glass** | 20% Other | Black<br>Fibrous<br>Heterogeneous / Teased, Dissolved |
| MSC03M-HVAC16TSIAEB-01 / *908589PLM_387* | HVAC Unit #16, Line "A", Elbow, pillar 1 / *unable to separate wrap* | **20% Chrysotile** | **30% Fiber Glass** | 50% Other | Gray<br>Fibrous<br>Heterogeneous / Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

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5730 Summer Trees Drive
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**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSCRF-RF01-01 / *908589PLM_388* | East Roof, tar w/pea gravel | **15% Chrysotile** | **20% Cellulose** | 65% Other | Black Fibrous Heterogeneous / Teased |
| MSCRF-RF01-02 / *908589PLM_389* | East Roof, tar w/pea gravel | **Not Analyzed** | | | |
| MSCRF-RF01-03 / *908589PLM_390* | East Roof, tar w/pea gravel | **Not Analyzed** | | | |
| MSC03M-HVAC17TSIA-01 / *908589PLM_391* | Line "A" on HVAC Unit 17 / *unable to separate wrap* | **20% Amosite** | | 80% Other | Gray Fibrous Heterogeneous / Teased |
| MSCRF-FLM01-01 / *908589PLM_392* | Flashing Mastic, East Roof | **15% Chrysotile** | **30% Cellulose** | 55% Other | Black, Silver Fibrous Heterogeneous / Teased, Dissolved |
| MSCRF-FLM01-02 / *908589PLM_393* | Flashing Mastic, East Roof | **Not Analyzed** | | | |
| MSCRF-FLM01-03 / *908589PLM_394* | Flashing Mastic, East Roof | **Not Analyzed** | | | |
| MSC03M-HVAC16TSIBEB-01 / *908589PLM_395* | HVAC Unit #16, Line "B", Elbow, pillar 1 / *unable to separate wrap* | **5% Chrysotile**<br>**5% Amosite** | **30% Fiber Glass** | 60% Other | Gray Fibrous Heterogeneous / Teased |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC03M-HVAC16TSIB-01 - A | HVAC Unit 16, Line "B", pillar 1 | **None Detected** | **60% Cellulose** | 40% Other | Brown, Black<br>Fibrous<br>Heterogeneous |
| *908589PLM_396* | *wrap* | | | | Teased, Dissolved |
| MSC03M-HVAC16TSIB-01 - B | HVAC Unit 16, Line "B", pillar 1 | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_446* | *insulation* | | | | Teased |
| MSC02-EQPTSIFIT01-01 | Equipment Room Fitting - 2nd Floor | **5% Chrysotile**<br>**5% Amosite** | **30% Fiber Glass** | 60% Other | White<br>Fibrous<br>Heterogeneous |
| *908589PLM_397* | *unable to separate wrap* | | | | Teased |
| MSC02-EQPTSI01-01 | Equipment Room Pipe Run, 2nd Floor | **5% Chrysotile**<br>**5% Amosite** | **30% Mineral Wool** | 60% Other | Gray<br>Fibrous<br>Heterogeneous |
| *908589PLM_398* | *unable to separate wrap* | | | | Teased |
| MSC03M-CPTSI01-01 - A | Continuous Pipe Run, Level 1, 3rd Floor - East | **None Detected** | **60% Cellulose** | 40% Other | Brown, Black<br>Fibrous<br>Heterogeneous |
| *908589PLM_399* | *wrap* | | | | Teased, Dissolved |
| MSC03M-CPTSI01-01 - B | Continuous Pipe Run, Level 1, 3rd Floor - East | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_447* | *insulation* | | | | Teased |
| MSC03M-CPTSI01-02 - A | Continuous Pipe Run, Level 1, 3rd Floor - North | **None Detected** | **60% Cellulose** | 40% Other | Brown, Black<br>Fibrous<br>Heterogeneous |
| *908589PLM_400* | *wrap* | | | | Teased, Dissolved |
| MSC03M-CPTSI01-02 - B | Continuous Pipe Run, Level 1, 3rd Floor - North | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow<br>Fibrous<br>Heterogeneous |
| *908589PLM_448* | *insulation* | | | | Teased |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC03M-CPTSI01-03 - A | Continuous Pipe Run, Level 1, 3rd Floor - South | None Detected | 60% Cellulose | 40% Other | Brown, Black Fibrous Heterogeneous |
| *908589PLM_401* | *wrap* | | | | Teased, Dissolved |
| MSC03M-CPTSI01-03 - B | Continuous Pipe Run, Level 1, 3rd Floor - South | None Detected | 95% Fiber Glass | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_449* | *insulation* | | | | Teased |
| MSC03M-CPTSIFIT03-01 | Fitting for Continuous Pipe Run, 3rd Floor, Lower Level Pipe Run - East | 5% Chrysotile<br>5% Amosite | 30% Fiber Glass | 60% Other | Gray Fibrous Heterogeneous |
| *908589PLM_402* | *unable to separate wrap* | | | | Teased |
| MSC03M-BLTSI1-01 | Blower Unit #1 @ Pillar 21 | 20% Chrysotile | 30% Fiber Glass | 50% Other | Gray Fibrous Heterogeneous |
| *908589PLM_403* | *unable to separate wrap* | | | | Teased |
| MSC03M-HVAC5CUPTSIS-01 - A | HVAC Unit #5 Coupling, Side Sample, Pillar 32 | None Detected | 70% Cellulose | 30% Other | White Fibrous Heterogeneous |
| *908589PLM_404* | *wrap* | | | | Teased |
| MSC03M-HVAC5CUPTSIS-01 - B | HVAC Unit #5 Coupling, Side Sample, Pillar 32 | 5% Chrysotile | 90% Fiber Glass | 5% Other | Yellow Fibrous Heterogeneous |
| *908589PLM_450* | *insulation* | | | | Teased |
| MSC03M-HVAC5CUPTSIF-01 | HVAC Unit #5 Coupling, Front Sample, Pillar 32 | 5% Chrysotile<br>5% Amosite | 30% Fiber Glass | 60% Other | Gray Fibrous Heterogeneous |
| *908589PLM_405* | *unable to separate wrap* | | | | Teased |
| MSCRF-FLM02-01 | | None Detected | | 100% Other | Tan Non Fibrous Heterogeneous |
| *908589PLM_451* | *flashing mastic, not on chain of custody* | | | | Ashed |

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Ired Gulley (436)

**Analyst**

**Approved Signatory**

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSCRF-FLM02-02 / *908589PLM_452* | *flashing mastic, not on chain of custody* | **None Detected** | | 100% Other | Tan, Non Fibrous, Heterogeneous / Ashed |
| MSCRF-FLM02-03 / *908589PLM_453* | *flashing mastic, not on chain of custody* | **None Detected** | | 100% Other | Tan, Non Fibrous, Heterogeneous / Ashed |
| MSC02HALTSIE-01-A / *908589PLM_454* | *wrap, not on chain of custody* | **None Detected** | **80% Cellulose** | 20% Other | Brown, Fibrous, Heterogeneous / Teased |
| MSC02HALTSIE-01-B / *908589PLM_455* | *insulation, not on chain of custody* | **None Detected** | **95% Fiber Glass** | 5% Other | Yellow, Fibrous, Heterogeneous / Teased |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

908589

| | |
|---|---|
| Client: | EnSafe, Inc. |
| Contact: | Quent Barrett |
| Address: | 5724 Summer Trees Dr. Memphis, TN 38134 |
| Phone: | 901-372-7962 |
| Fax: | [Enter fax here] |
| Email: | qbarrett@ensafe.com |
| Project: | Coliseum - 0888806150 (Phase 01) |
| Client Notes: | [Enter Client Notes Here] |
| P.O. #: | M$A |
| Date Submitted: | 3/21/2009 0:00 |
| Analysis: | PLM |
| TurnAroundTime: | 48 Hour TAT |

*Instructions:*
*Use Column "B" for your contact info*

*To See an Example Click the bottom Example Tab*

*Enter samples between "<<" and ">>"*
*Begin Samples with a "<< "above the first sample and end with a ">>" below the last sample.*
*Only Enter your data on the first sheet "Sheet1"*

*Note: Date 1 and Date 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data*


**Scientific Analytical Institute, Inc.**

302-L Pomona Dr.
Greensboro, NC 27407
Phone: 336.292.3888
Fax: 336.292.3313
Email: lab@sailab.com


POSITIVE STOPS

W. Jyre 02409 9/m

| Sample Number | Date 1 | Sample Description | Date 2 |
|---|---|---|---|
| << | | | |
| MSC01-TC-01 | [Enter data of your choosing here] | 1st Floor Concrete Column Textured Coating - North Lobby | [Enter data of your choosing here] |
| MSC01-TC-02 | [Enter data of your choosing here] | 1st Floor Concrete Column Textured Coating - South Lobby | [Enter data of your choosing here] |
| MSC01-TC-03 | [Enter data of your choosing here] | 1st Floor Concrete Column Textured Coating - West Lobby | [Enter data of your choosing here] |
| MSC01-PC-01 | [Enter data of your choosing here] | 1st Floor Lathe and Plaster Ceiling - Concession Stand | [Enter data of your choosing here] |
| MSC01-PC-02 | [Enter data of your choosing here] | 1st Floor Lathe and Plaster Grey Locker Room | [Enter data of your choosing here] |
| MSC01-PC-03 | [Enter data of your choosing here] | 1st Floor Lathe and Plaster Red Locker Room | [Enter data of your choosing here] |
| MSC01-PC-04 | [Enter data of your choosing here] | 1st Floor Lathe and Plaster South Womans Restroom | [Enter data of your choosing here] |
| MSC01-PC-05 | [Enter data of your choosing here] | 1st Floor Lathe and Plaster Ladies Handicap Restroom | [Enter data of your choosing here] |
| MSC01-PC-06 | [Enter data of your choosing here] | 1st Floor Lathe and Plaster Mens Restroom | [Enter data of your choosing here] |
| MSC01A-B2-01E | [Enter data of your choosing here] | Boiler #2 Ends (mud) - Inside | [Enter data of your choosing here] |
| MSC01A-B2-02E | [Enter data of your choosing here] | Boiler #2 Ends (mud) - Inside | [Enter data of your choosing here] |
| MSC01A-B2-03E | [Enter data of your choosing here] | Boiler #2 Ends (mud) - Inside | [Enter data of your choosing here] |
| MSC01-CB2-01 | [Enter data of your choosing here] | 4" Brown Cove Base with Tan Mastic | [Enter data of your choosing here] |
| MSC01-CB2-02 | [Enter data of your choosing here] | 4" Brown Cove Base with Tan Mastic | [Enter data of your choosing here] |
| MSC01-CB2-03 | [Enter data of your choosing here] | 4" Brown Cove Base with Tan Mastic - North Lobby | [Enter data of your choosing here] |
| MSC01-CB4-01 | [Enter data of your choosing here] | 6" Light Brown/Tan Cove Base with Yellow Adhesive - Conference Room | [Enter data of your choosing here] |
| MSC01-CB4-02 | [Enter data of your choosing here] | 6" Light Brown/Tan Cove Base with Yellow Adhesive - Conference Room | [Enter data of your choosing here] |
| MSC01-CB4-03 | [Enter data of your choosing here] | 6" Light Brown/Tan Cove Base with Yellow Adhesive - Conference Room | [Enter data of your choosing here] |
| MSC01A-FTM-01 | [Enter data of your choosing here] | 9 X 9 Brown Floor Tile with Black Mastic - Boiler Room Office | [Enter data of your choosing here] |
| MSC01A-FTM-02 | [Enter data of your choosing here] | 9 X 9 Brown Floor Tile with Black Mastic - Boiler Room Office | [Enter data of your choosing here] |
| MSC01A-FTM-03 | [Enter data of your choosing here] | 9 X 9 Brown Floor Tile with Black Mastic - Boiler Room Office | [Enter data of your choosing here] |
| MSC01-GDC04-01 | [Enter data of your choosing here] | Tan carpet in upstairs ticket booth | [Enter data of your choosing here] |
| MSC01-GDC04-02 | [Enter data of your choosing here] | Tan carpet in upstairs ticket booth | [Enter data of your choosing here] |
| MSC01A-B2-01G | [Enter data of your choosing here] | Boiler #2 Gaskets | [Enter data of your choosing here] |
| MSC01A-B2-02G | [Enter data of your choosing here] | Boiler #2 Gaskets | [Enter data of your choosing here] |
| MSC01A-B2-03G | [Enter data of your choosing here] | Boiler #2 Gaskets | [Enter data of your choosing here] |
| MSC01-CB3-01 | [Enter data of your choosing here] | 4" Light Brown/Tan Cove Base with Tan Mastic - Executive Office | [Enter data of your choosing here] |
| MSC01-CB3-02 | [Enter data of your choosing here] | 4" Light Brown/Tan Cove Base with Tan Mastic - Executive Office | [Enter data of your choosing here] |
| MSC01-CB3-03 | [Enter data of your choosing here] | 4" Light Brown/Tan Cove Base with Tan Mastic - Executive Office | [Enter data of your choosing here] |
| MSC01-CB-01 | [Enter data of your choosing here] | 6" Brown Cove Base with Brown Mastic | [Enter data of your choosing here] |
| MSC01-CB-02 | [Enter data of your choosing here] | 6" Brown Cove Base with Brown Mastic | [Enter data of your choosing here] |
| MSC01-CB-03 | [Enter data of your choosing here] | 6" Brown Cove Base with Brown Mastic | [Enter data of your choosing here] |
| MSC01-CB-04 | [Enter data of your choosing here] | 6" Brown Cove Base with Brown Mastic - 2nd Floor South Entrance | [Enter data of your choosing here] |
| MSC01-CB-05 | [Enter data of your choosing here] | 6" Brown Cove Base with Brown Mastic - 2nd Floor Southwest Entrance | [Enter data of your choosing here] |
| MSC01-CB-06 | [Enter data of your choosing here] | 6" Brown Cove Base with Brown Mastic - 2nd Floor Southwest Hall (Mens Restroom) | [Enter data of your choosing here] |
| MSC01-GDC-01 | [Enter data of your choosing here] | Multi Color Blue Glue Down Carpet - Office Area | [Enter data of your choosing here] |
| MSC01-GDC-02 | [Enter data of your choosing here] | Multi Color Blue Glue Down Carpet - Office Area | [Enter data of your choosing here] |
| MSC01-GDC-03 | [Enter data of your choosing here] | Multi Color Blue Glue Down Carpet - Office Area | [Enter data of your choosing here] |
| MSC02-TC-01 | [Enter data of your choosing here] | 2nd Floor Column Textured Coating - East Side Near Pizza Hut @ Ramp | [Enter data of your choosing here] |
| MSC02-TC-02 | [Enter data of your choosing here] | 2nd Floor Column Textured Coating - South Side @ Stairs Near Ramp | [Enter data of your choosing here] |
| MSC02-TC-03 | [Enter data of your choosing here] | 2nd Floor Column Textured Coating - West Side Across Womans Restroom | [Enter data of your choosing here] |
| MSC01-GR-01 | [Enter data of your choosing here] | Wall Grout in Between Concrete Blocks - North Area | [Enter data of your choosing here] |
| MSC01-GR-02 | [Enter data of your choosing here] | Wall Grout in Between Concrete Blocks - North East | [Enter data of your choosing here] |

Accepted ☑
Rejected ☐

908589 c,

| | | | |
|---|---|---|---|
| MSC01-GR-03 | [Enter data of your choosing here] | Wall Grout in Between Concrete Blocks - East | [Enter data of your choosing here] |
| MSC01-GR-04 | [Enter data of your choosing here] | Wall Grout in Between Concrete Blocks - South East | [Enter data of your choosing here] |
| MSC01-GR-05 | [Enter data of your choosing here] | Wall Grout in Between Concrete Blocks - South | [Enter data of your choosing here] |
| MSC01-GR-06 | [Enter data of your choosing here] | Wall Grout in Between Concrete Blocks - West | [Enter data of your choosing here] |
| MSC01-CT2-01 | [Enter data of your choosing here] | 2 x 4 Lay in Ceiling Tile | [Enter data of your choosing here] |
| MSC01-CT2-02 | [Enter data of your choosing here] | 2 x 4 Lay in Ceiling Tile - Rooms A, B, C | [Enter data of your choosing here] |
| MSC01-CT2-03 | [Enter data of your choosing here] | 2 x 4 Lay in Ceiling Tile | [Enter data of your choosing here] |
| MSC01-CT3-01 | [Enter data of your choosing here] | 12 x 12 T & G Ceiling Tile - Office Area | [Enter data of your choosing here] |
| MSC01-CT3-02 | [Enter data of your choosing here] | 12 x 12 T & G Ceiling Tile - Office Area | [Enter data of your choosing here] |
| MSC01-CT3-03 | [Enter data of your choosing here] | 12 x 12 T & G Ceiling Tile - Office Area | [Enter data of your choosing here] |
| MSC01-CT4-01 | [Enter data of your choosing here] | 2 x 4 Lay in Ceiling Tile - Executive Office | [Enter data of your choosing here] |
| MSC01-CT4-02 | [Enter data of your choosing here] | 2 x 4 Lay in Ceiling Tile - Executive Office | [Enter data of your choosing here] |
| MSC01-CT4-03 | [Enter data of your choosing here] | 2 x 4 Lay in Ceiling Tile - Executive Office | [Enter data of your choosing here] |
| MSC01-CT5-01 | [Enter data of your choosing here] | 2 x 2 Lay in Ceiling Tile - Conference Room | [Enter data of your choosing here] |
| MSC01-CT5-02 | [Enter data of your choosing here] | 2 x 2 Lay in Ceiling Tile - Conference Room | [Enter data of your choosing here] |
| MSC01-CT5-03 | [Enter data of your choosing here] | 2 x 2 Lay in Ceiling Tile - Conference Room | [Enter data of your choosing here] |
| MSC01-FTM2-01 | [Enter data of your choosing here] | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic - Dressing Room | [Enter data of your choosing here] |
| MSC01-FTM2-02 | [Enter data of your choosing here] | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Blue Room (Second Layer 9 x 9 Brown w/Black Mastic) | [Enter data of your choosing here] |
| MSC01-FTM2-03 | [Enter data of your choosing here] | 12 x 12 White/Grey Spec Floor Tile w/Clear/Yellow Mastic (two layers) - Green Room (Second Layer 9 x 9 Brown w/Black Mastic) | [Enter data of your choosing here] |
| MSC01-CT6-01 | [Enter data of your choosing here] | 2 x 4 Ceiling Tile - Blue & Green Dressing Room Hallway | [Enter data of your choosing here] |
| MSC01-CT6-02 | [Enter data of your choosing here] | 2 x 4 Ceiling Tile - Red & Green Dressing Room Hallway | [Enter data of your choosing here] |
| MSC01-CT6-03 | [Enter data of your choosing here] | 2 x 4 Ceiling Tile - Red & Green Dressing Room Hallway | [Enter data of your choosing here] |
| MSC02-PC-01 | [Enter data of your choosing here] | Second Floor Plaster Ceiling - Southwest Concession Stand (Less PC on Second Floor) | [Enter data of your choosing here] |
| MSC02-PC-02 | [Enter data of your choosing here] | Second Floor Plaster Ceiling - West Area Women's Restroom (Less PC on Second Floor) | [Enter data of your choosing here] |
| MSC02-PC-03 | [Enter data of your choosing here] | Second Floor Plaster Ceiling - Main Entrance Mens Restroom (Less PC on Second Floor) | [Enter data of your choosing here] |
| MSC01-FTM-01 | [Enter data of your choosing here] | 9 x 9 Beige Floor Tile w/Black Mastic - Room A | [Enter data of your choosing here] |
| MSC01-FTM-02 | [Enter data of your choosing here] | 9 x 9 Beige Floor Tile w/Black Mastic - Room B | [Enter data of your choosing here] |
| MSC01-FTM-03 | [Enter data of your choosing here] | 9 x 9 Beige Floor Tile w/Black Mastic - Room C | [Enter data of your choosing here] |
| MSC01-GDC03-01 | [Enter data of your choosing here] | Light Blue Spec Carpet w/Yellow Adhesive - River Kings Room | [Enter data of your choosing here] |
| MSC01-GDC03-02 | [Enter data of your choosing here] | Light Blue Spec Carpet w/Yellow Adhesive - River Kings Room | [Enter data of your choosing here] |
| MSC01-GDC03-03 | [Enter data of your choosing here] | Light Blue Spec Carpet w/Yellow Adhesive - River Kings Room | [Enter data of your choosing here] |
| MSC01-SRJC-01 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - River Kings Room | [Enter data of your choosing here] |
| MSC01-SRJC-02 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - River Kings Room | [Enter data of your choosing here] |
| MSC01-SRJC-03 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - North Lobby | [Enter data of your choosing here] |
| MSC01-SRJC-04 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - Meeting Room | [Enter data of your choosing here] |
| MSC01-SRJC-05 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - Locker Room | [Enter data of your choosing here] |
| MSC01-SRJC-06 | [Enter data of your choosing here] | Sheet Rock & Joint Compound - North Lobby | [Enter data of your choosing here] |
| MSC01-SOC-01 | [Enter data of your choosing here] | Spray-on-Ceiling - South Lobby | [Enter data of your choosing here] |
| MSC01-SOC-02 | [Enter data of your choosing here] | Spray-on-Ceiling - South Lobby | [Enter data of your choosing here] |
| MSC01-SOC-03 | [Enter data of your choosing here] | Spray-on-Ceiling - North Lobby | [Enter data of your choosing here] |
| MSC01-SOC-04 | [Enter data of your choosing here] | Spray-on-Ceiling - North Lobby | [Enter data of your choosing here] |
| MSC01-SOC-05 | [Enter data of your choosing here] | Spray-on-Ceiling - West Lobby | [Enter data of your choosing here] |
| MSC01-SOC-06 | [Enter data of your choosing here] | Spray-on-Ceiling - West Lobby | [Enter data of your choosing here] |
| MSC01-CT-01 | [Enter data of your choosing here] | Ceiling Tile - First Aid | [Enter data of your choosing here] |
| MSC01-CT-02 | [Enter data of your choosing here] | Ceiling Tile - River Kings Room | [Enter data of your choosing here] |
| MSC01-CT-03 | [Enter data of your choosing here] | Ceiling Tile - Outer Locker Room | [Enter data of your choosing here] |
| MSC01-CT-04 | [Enter data of your choosing here] | Ceiling Tile - 2nd Floor South Entrance / Women Restroom Hallway Area | [Enter data of your choosing here] |
| MSC01-CT-05 | [Enter data of your choosing here] | Ceiling Tile - 2nd Floor South Entrance / West Area (Entrance) | [Enter data of your choosing here] |
| MSC01-CT-06 | [Enter data of your choosing here] | Ceiling Tile - 2nd Floor West Side @ Ramp | [Enter data of your choosing here] |
| MSC01-CT-07 | [Enter data of your choosing here] | Ceiling Tile - Main Gym / Aud. Floor - North Side | [Enter data of your choosing here] |
| MSC01-CT-08 | [Enter data of your choosing here] | Ceiling Tile - Main Gym / Aud. Floor - South Side | [Enter data of your choosing here] |
| MSC01-CT-09 | [Enter data of your choosing here] | Ceiling Tile - Main Gym / Aud. Floor - West Side | [Enter data of your choosing here] |
| MSC01A-B2-01S | [Enter data of your choosing here] | Boiler #2 Sides | [Enter data of your choosing here] |
| MSC01A-B2-02S | [Enter data of your choosing here] | Boiler #2 Sides | [Enter data of your choosing here] |
| MSC01A-B2-03S | [Enter data of your choosing here] | Boiler #2 Sides | [Enter data of your choosing here] |
| MSC01-GDC2-01 | [Enter data of your choosing here] | Blue Glue Down Carpet (Plush) w/Yellow Adhesive - Conference Room | [Enter data of your choosing here] |
| MSC01-GDC2-02 | [Enter data of your choosing here] | Blue Glue Down Carpet (Plush) w/Yellow Adhesive - Conference Room | [Enter data of your choosing here] |
| MSC01-GDC2-03 | [Enter data of your choosing here] | Blue Glue Down Carpet (Plush) w/Yellow Adhesive - Conference Room | [Enter data of your choosing here] |
| MSC01-CBS-01 | [Enter data of your choosing here] | 4" Gray Cove Base (Painted White) w/Tan Adhesive - River Kings Room | [Enter data of your choosing here] |
| MSC01-CBS-02 | [Enter data of your choosing here] | 4" Gray Cove Base (Painted White) w/Tan Adhesive - River Kings Room | [Enter data of your choosing here] |

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| MSC01-CB5-03 | [Enter data of your choosing here] | 4" Grey Cove Base (Painted White) w/Tan Adhesive - River Kings Room | [Enter data of your choosing here] |
| MSC01-CUR-01 | [Enter data of your choosing here] | Black Curtains | [Enter data of your choosing here] |
| MSC01-CUR-02 | [Enter data of your choosing here] | Black Curtains | [Enter data of your choosing here] |
| MSC03-FTM-01 | [Enter data of your choosing here] | Grey Tile - Skybox | [Enter data of your choosing here] |
| MSC03-FTM-02 | [Enter data of your choosing here] | Grey Tile - Skybox | [Enter data of your choosing here] |
| MSC03-FTM-03 | [Enter data of your choosing here] | Grey Tile - Skybox | [Enter data of your choosing here] |
| MSC01A-CHLPUMPEB-01 | [Enter data of your choosing here] | Blue Pumps, elbow, South pump | [Enter data of your choosing here] |
| MSC01A-CHLPUMPEB-02 | [Enter data of your choosing here] | Blue Pumps, elbow, North pump | [Enter data of your choosing here] |
| MSC01A-CHLPUMPEB-03 | [Enter data of your choosing here] | Blue Pumps, Elbow, Northeast Corner, | [Enter data of your choosing here] |
| MSC01A-CHLTSIEB2-01 | [Enter data of your choosing here] | Blue Chiller Line, 4" Line Elbow, Second Story, Coming off Tank T1 | [Enter data of your choosing here] |
| MSC01A-CHLTSIEB2-02 | [Enter data of your choosing here] | Blue Chiller Line, 4" Line Elbow, Second Story, Coming off Tank T1 | [Enter data of your choosing here] |
| MSC01A-CHLPUMPVL-01 | [Enter data of your choosing here] | Blue Pump Chiller Valve | [Enter data of your choosing here] |
| MSC01A-CHLPUMPVL-02 | [Enter data of your choosing here] | Blue Pump Chiller Valve | [Enter data of your choosing here] |
| MSC01A-CHLTSI-01 | [Enter data of your choosing here] | 18" Blue Chiller Line (Fiberglass) | [Enter data of your choosing here] |
| MSC01A-CHLTSI-02 | [Enter data of your choosing here] | 18" Blue Chiller Line (Fiberglass) | [Enter data of your choosing here] |
| MSC01A-CHLTSI-03 | [Enter data of your choosing here] | 18" Blue Chiller Line (Fiberglass) | [Enter data of your choosing here] |
| MSC01A-NPOTTSIEB-01 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing here] |
| MSC01A-NPOTTSIEB-02 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing here] |
| MSC01A-NPOTTSIEB-03 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing here] |
| MSC01A-NPOTTSIEB-04 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing here] |
| MSC01A-NPOTTSIEB-05 | [Enter data of your choosing here] | 2" Grey Non Potable Water Line Elbows | [Enter data of your choosing here] |
| MSC01A-CHLTSIEB4-01 | [Enter data of your choosing here] | 6" Blue Chiller Line, Elbow | [Enter data of your choosing here] |
| MSC01A-CHLTSIEB4-02 | [Enter data of your choosing here] | 6" Blue Chiller Line, Elbow | [Enter data of your choosing here] |
| MSC01A-CHLTSIEB4-03 | [Enter data of your choosing here] | 6" Blue Chiller Line, Elbow | [Enter data of your choosing here] |
| MSC01A-CHLEB1-01 | [Enter data of your choosing here] | 18" Blue Chiller Line, Elbows | [Enter data of your choosing here] |
| MSC01A-CHLEB1-02 | [Enter data of your choosing here] | 18" Blue Chiller Line, Elbows | [Enter data of your choosing here] |
| MSC01A-CHLEB1-03 | [Enter data of your choosing here] | 18" Blue Chiller Line, Elbows | [Enter data of your choosing here] |
| MSC01A-BUHT2S-01 | [Enter data of your choosing here] | Brine Unit Holding Tank #2 Sides, Second Floor, Middle Tank, Purple | [Enter data of your choosing here] |
| MSC01A-BUHT2S-02 | [Enter data of your choosing here] | Brine Unit Holding Tank #2 Sides, Second Floor, Middle Tank, Purple | [Enter data of your choosing here] |
| MSC01A-BUHT2E-01 | [Enter data of your choosing here] | Brine Unit Holding Tank #2 Ends, Second Floor, Middle Tank, Purple | [Enter data of your choosing here] |
| MSC01A-BUHT2E-02 | [Enter data of your choosing here] | Brine Unit Holding Tank #2 Ends, Second Floor, Middle Tank, Purple | [Enter data of your choosing here] |
| MSC01A-B1TSI2-01 | [Enter data of your choosing here] | 4" Orange Boiler Line, Second Story | [Enter data of your choosing here] |
| MSC01A-B1TSI2-02 | [Enter data of your choosing here] | 4" Orange Boiler Line, Second Story | [Enter data of your choosing here] |
| MSC01A-B1TSI2-03 | [Enter data of your choosing here] | 4" Orange Boiler Line, Second Story | [Enter data of your choosing here] |
| MSC01A-BU-B1 | [Enter data of your choosing here] | Purple Boxes "Brine Unit" | [Enter data of your choosing here] |
| MSC01A-BU-B2 | [Enter data of your choosing here] | Purple Boxes "Brine Unit" | [Enter data of your choosing here] |
| MSC01A-BU-B3 | [Enter data of your choosing here] | Purple Boxes "Brine Unit" | [Enter data of your choosing here] |
| MSC01A-BU-B4 | [Enter data of your choosing here] | Purple Boxes "Brine Unit" | [Enter data of your choosing here] |
| MSC01A-B1TSIFIT-01 | [Enter data of your choosing here] | 18" Orange Fitting (Elbow) | [Enter data of your choosing here] |
| MSC01A-B1TSIFIT-02 | [Enter data of your choosing here] | 18" Orange Fitting (Elbow) | [Enter data of your choosing here] |
| MSC01A-B1TSIFIT-03 | [Enter data of your choosing here] | 18" Orange Fitting (Elbow) | [Enter data of your choosing here] |
| MSC01A-B1TSI-01 | [Enter data of your choosing here] | 18" Orange Pipe off Boiler #1 and #2 | [Enter data of your choosing here] |
| MSC01A-B1TSI-02 | [Enter data of your choosing here] | 18" Orange Pipe off Boiler #1 and #2 | [Enter data of your choosing here] |
| MSC01A-B1TSI-03 | [Enter data of your choosing here] | 18" Orange Pipe off Boiler #1 and #2 | [Enter data of your choosing here] |
| MSC01A-BUTSIEB1-01 | [Enter data of your choosing here] | 18" Purple Elbow, Brine Unit | [Enter data of your choosing here] |
| MSC01A-BUTSIEB1-02 | [Enter data of your choosing here] | 18" Purple Elbow, Brine Unit | [Enter data of your choosing here] |
| MSC01A-BUTSIEB1-03 | [Enter data of your choosing here] | 18" Purple Elbow, Brine Unit | [Enter data of your choosing here] |
| MSC01A-BUHT3E-01 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #3 - Ends | [Enter data of your choosing here] |
| MSC01A-BUHT3E-02 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #3 - Ends | [Enter data of your choosing here] |
| MSC01A-BUHT3S-01 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #3 - Sides | [Enter data of your choosing here] |
| MSC01A-BUHT3S-02 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #3 - Sides | [Enter data of your choosing here] |
| MSC01A-ORHT1E-01 | [Enter data of your choosing here] | Orange Hot Water Tank #1 - End | [Enter data of your choosing here] |
| MSC01A-ORHT1E-02 | [Enter data of your choosing here] | Orange Hot Water Tank #1 - End | [Enter data of your choosing here] |
| MSC01A-ORHT1E-03 | [Enter data of your choosing here] | Orange Hot Water Tank #1 - End | [Enter data of your choosing here] |
| MSC01A-CHLTSI2-01 | [Enter data of your choosing here] | 4" Blue Chiller Line, Coming off Tank #1 | [Enter data of your choosing here] |
| MSC01A-CHLTSI2-02 | [Enter data of your choosing here] | 4" Blue Chiller Line, Coming off Tank #1 | [Enter data of your choosing here] |
| MSC01A-BUHT1S-01 | [Enter data of your choosing here] | Brine Unit Holding Tank #1 Sides, Second Floor | [Enter data of your choosing here] |
| MSC01A-BUHT1S-02 | [Enter data of your choosing here] | Brine Unit Holding Tank #1 Sides, Second Floor | [Enter data of your choosing here] |
| MSC01A-B1TSI3-01 | [Enter data of your choosing here] | 6" Orange Boiler Line, Second Story | [Enter data of your choosing here] |
| MSC01A-B1TSI3-02 | [Enter data of your choosing here] | 6" Orange Boiler Line, Second Story | [Enter data of your choosing here] |
| MSC01A-B1TSI3-03 | [Enter data of your choosing here] | 6" Orange Boiler Line, Second Story | [Enter data of your choosing here] |
| MSC01A-B1TSIEB2-01 | [Enter data of your choosing here] | 4" Orange Boiler Line Elbows | [Enter data of your choosing here] |

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|---|---|---|---|
| MSC01A-B1TSIEB2-02 | [Enter data of your choosing here] | 4" Orange Boiler Line Elbows | [Enter data of your choosing here] |
| MSC01A-B1TSIEB2-03 | [Enter data of your choosing here] | 4" Orange Boiler Line Elbows | [Enter data of your choosing here] |
| MSC01A-B1TSIEB3-01 | [Enter data of your choosing here] | 6" Orange Boiler Line Elbows | [Enter data of your choosing here] |
| MSC01A-B1TSIEB3-02 | [Enter data of your choosing here] | 6" Orange Boiler Line Elbows | [Enter data of your choosing here] |
| MSC01A-B1TSIEB3-03 | [Enter data of your choosing here] | 6" Orange Boiler Line Elbows | [Enter data of your choosing here] |
| MSC01A-BUHT1E-01 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #1 - Ends | [Enter data of your choosing here] |
| MSC01A-BUHT1E-02 | [Enter data of your choosing here] | Brine Unit Purple Holding Tank #1 - Ends | [Enter data of your choosing here] |
| MSC01B-HTTSIEB-01 | [Enter data of your choosing here] | Heating Tank Elbow in Wood Shop | [Enter data of your choosing here] |
| MSC01B-HTTSIEB-02 | [Enter data of your choosing here] | Heating Tank Elbow in Wood Shop | [Enter data of your choosing here] |
| MSC01A-B2EXH-01 | [Enter data of your choosing here] | Boiler #2 Exhaust | [Enter data of your choosing here] |
| MSC01A-B2EXH-02 | [Enter data of your choosing here] | Boiler #2 Exhaust | [Enter data of your choosing here] |
| MSC01A-B2EXH-03 | [Enter data of your choosing here] | Boiler #2 Exhaust | [Enter data of your choosing here] |
| MSC01B-HTLTSI-01 | [Enter data of your choosing here] | Heating Tank Line in Wood Shop | [Enter data of your choosing here] |
| MSC01B-HTLTSI-02 | [Enter data of your choosing here] | Heating Tank Line in Wood Shop | [Enter data of your choosing here] |
| MSC01A-B1ESH-01 | [Enter data of your choosing here] | Boiler #1 Exhaust | [Enter data of your choosing here] |
| MSC01A-B1ESH-02 | [Enter data of your choosing here] | Boiler #1 Exhaust | [Enter data of your choosing here] |
| MSC01A-B1ESH-03 | [Enter data of your choosing here] | Boiler #1 Exhaust | [Enter data of your choosing here] |
| MSC01A-BUTSI-01 | [Enter data of your choosing here] | 18" Purple Line Brine Unit | [Enter data of your choosing here] |
| MSC01A-BUTSI-02 | [Enter data of your choosing here] | 18" Purple Line Brine Unit | [Enter data of your choosing here] |
| MSC01A-BUTSI-03 | [Enter data of your choosing here] | 18" Purple Line Brine Unit | [Enter data of your choosing here] |
| MSC01A-ORHT2S-01 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Sides, East Tank, | [Enter data of your choosing here] |
| MSC01A-ORHT2S-02 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Sides, East Tank, | [Enter data of your choosing here] |
| MSC01A-ORHT2S-03 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Sides, East Tank, | [Enter data of your choosing here] |
| MSC01A-ORHT1S-01 | [Enter data of your choosing here] | Orange Hot Water Tank #1, Sides, West Tank, | [Enter data of your choosing here] |
| MSC01A-ORHT1S-02 | [Enter data of your choosing here] | Orange Hot Water Tank #1, Sides, West Tank, | [Enter data of your choosing here] |
| MSC01A-ORHT1S-03 | [Enter data of your choosing here] | Orange Hot Water Tank #1, Sides, West Tank, | [Enter data of your choosing here] |
| MSC01A-ORHT2E-01 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Ends | [Enter data of your choosing here] |
| MSC01A-ORHT2E-02 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Ends | [Enter data of your choosing here] |
| MSC01A-ORHT2E-03 | [Enter data of your choosing here] | Orange Hot Water Tank #2, Ends | [Enter data of your choosing here] |
| MSC01A-CHLTSI4-01 | [Enter data of your choosing here] | 6" Blue Chiller Line | [Enter data of your choosing here] |
| MSC01A-CHLTSI4-02 | [Enter data of your choosing here] | 6" Blue Chiller Line | [Enter data of your choosing here] |
| MSC01A-CHLTSI4-03 | [Enter data of your choosing here] | 6" Blue Chiller Line | [Enter data of your choosing here] |
| MSC01B-HTTSI-01 | [Enter data of your choosing here] | Holding Tank in Wood Shop | [Enter data of your choosing here] |
| MSC01B-HTTSI-02 | [Enter data of your choosing here] | Holding Tank in Wood Shop | [Enter data of your choosing here] |
| MSC01A-BUTSI3-01 | [Enter data of your choosing here] | 6" Brine Unit Purple Pipe | [Enter data of your choosing here] |
| MSC01A-BUTSI3-02 | [Enter data of your choosing here] | 6" Brine Unit Purple Pipe | [Enter data of your choosing here] |
| MSC01B-WL3TSIEB-01 | [Enter data of your choosing here] | 6" Water Line, Elbow - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL3TSIEB-02 | [Enter data of your choosing here] | 6" Water Line, Elbow - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL1TSIEB-01 | [Enter data of your choosing here] | 2" Overhead Water Line, Elbow - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL1TSIEB-02 | [Enter data of your choosing here] | 2" Overhead Water Line, Elbow - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL2TSIEB-01 | [Enter data of your choosing here] | 4" Overhead Water Line, Elbow - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL2TSIEB-02 | [Enter data of your choosing here] | 4" Overhead Water Line, Elbow - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL1TSI-01 | [Enter data of your choosing here] | 2" Water Line - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL1TSI-02 | [Enter data of your choosing here] | 2" Water Line - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL2TSI-01 | [Enter data of your choosing here] | 4" Water Line - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL2TSI-02 | [Enter data of your choosing here] | 4" Water Line - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL3TSI-01 | [Enter data of your choosing here] | 6" Overhead Water Line - Wood Shop | [Enter data of your choosing here] |
| MSC01B-WL3TSI-02 | [Enter data of your choosing here] | 6" Overhead Water Line - Wood Shop | [Enter data of your choosing here] |
| MSC01A-CHLT1-01 | [Enter data of your choosing here] | Second Story Blue Tank - North Side of Boiler Room | [Enter data of your choosing here] |
| MSC01A-CHLT1-02 | [Enter data of your choosing here] | Second Story Blue Tank - North Side of Boiler Room | [Enter data of your choosing here] |
| MSC01A-CHLTSIEB3-01 | [Enter data of your choosing here] | 4" Blue Chiller Line, Elbow | [Enter data of your choosing here] |
| MSC01A-CHLTSIEB3-02 | [Enter data of your choosing here] | 4" Blue Chiller Line, Elbow | [Enter data of your choosing here] |
| MSC01A-BUTSIEB3-01 | [Enter data of your choosing here] | 6" Brine Unit Purple Pipe, Elbow | [Enter data of your choosing here] |
| MSC01A-BUTSIEB3-02 | [Enter data of your choosing here] | 6" Brine Unit Purple Pipe, Elbow | [Enter data of your choosing here] |
| MSC01A-BUTSI2-01 | [Enter data of your choosing here] | 8" Brine Unit Purple Pipe | [Enter data of your choosing here] |
| MSC01A-BUTSI2-02 | [Enter data of your choosing here] | 8" Brine Unit Purple Pipe | [Enter data of your choosing here] |
| MSC01A-FLEXDUCT1-01 | [Enter data of your choosing here] | Grey Flex Duct, Second Story, Boiler Room | [Enter data of your choosing here] |
| MSC01A-FLEXDUCT1-02 | [Enter data of your choosing here] | Grey Flex Duct, Second Story, Boiler Room | [Enter data of your choosing here] |
| MSC01A-CHLTSI3-01 | [Enter data of your choosing here] | 4" Blue Chiller Line, Second Story | [Enter data of your choosing here] |
| MSC01A-CHLTSI3-02 | [Enter data of your choosing here] | 4" Blue Chiller Line, Second Story | [Enter data of your choosing here] |
| MSC01A-BUTSIEB2-01 | [Enter data of your choosing here] | 8" Brine Unit Purple Pipe, Elbow | [Enter data of your choosing here] |
| MSC01A-BUTSIEB2-02 | [Enter data of your choosing here] | 8" Brine Unit Purple Pipe, Elbow | [Enter data of your choosing here] |

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| MSC01A-CHLPUMP-01 | [Enter data of your choosing here] | Blue Chiller Pumps, Second Story - Boiler Room | [Enter data of your choosing here] |
| MSC01A-CHLPUMP-02 | [Enter data of your choosing here] | Blue Chiller Pumps, Second Story - Boiler Room | [Enter data of your choosing here] |
| MSC01A-CHLPUMP-03 | [Enter data of your choosing here] | Blue Chiller Pumps, Second Story - Boiler Room | [Enter data of your choosing here] |
| MSC01A-BUSPG-01 | [Enter data of your choosing here] | Dark Blue Sponge, (Neoprene) - Boiler Room | [Enter data of your choosing here] |
| MSC01A-BUSPG-02 | [Enter data of your choosing here] | Dark Blue Sponge, (Neoprene) - Boiler Room | [Enter data of your choosing here] |
| MSC01A-BUSPG-03 | [Enter data of your choosing here] | Dark Blue Sponge, (Neoprene) - Boiler Room | [Enter data of your choosing here] |
| MSC01A-NPOTTSI-01 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing here] |
| MSC01A-NPOTTSI-02 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing here] |
| MSC01A-NPOTTSI-03 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing here] |
| MSC01A-NPOTTSI-04 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing here] |
| MSC01A-NPOTTSI-05 | [Enter data of your choosing here] | Grey 2" Non Potable Water Line | [Enter data of your choosing here] |
| MSCRF-RF02-01 | [Enter data of your choosing here] | Asphalt Shingles, East Roofs | [Enter data of your choosing here] |
| MSCRF-RF02-02 | [Enter data of your choosing here] | Asphalt Shingles, East Roofs | [Enter data of your choosing here] |
| MSCRF-RF02-03 | [Enter data of your choosing here] | Asphalt Shingles, East Roofs | [Enter data of your choosing here] |
| MSC02-HALTSIN-01 | [Enter data of your choosing here] | Pipe TSI Sample in North Lobby Hallway | [Enter data of your choosing here] |
| MSC03M-CPTSIEB01-01 | [Enter data of your choosing here] | Elbow for Continuous Pipe Run on 3rd Floor - East | [Enter data of your choosing here] |
| MSC03M-CPTSIEB01-02 | [Enter data of your choosing here] | Elbow for Continuous Pipe Run on 3rd Floor - North | [Enter data of your choosing here] |
| MSC03M-CPTSIEB01-03 | [Enter data of your choosing here] | Elbow for Continuous Pipe Run on 3rd Floor - South | [Enter data of your choosing here] |
| MSC02-HALTSIW-01 | [Enter data of your choosing here] | Pipe TSI Sample in West Lobby Hallway | [Enter data of your choosing here] |
| MSC02-HALTSIEBS-01 | [Enter data of your choosing here] | Pipe Elbow TSI Sample in South Lobby Hallway | [Enter data of your choosing here] |
| MSC03M-HVAC16TSIA-01 | [Enter data of your choosing here] | HVAC Unit #16, Line "A", Pillar 1 | [Enter data of your choosing here] |
| MSC03M-CPTSI03-01 | [Enter data of your choosing here] | Continuous Pipe Run, Level Three, Fiberglass - East | [Enter data of your choosing here] |
| MSC03M-CPTSI03-02 | [Enter data of your choosing here] | Continuous Pipe Run, Level Three, Fiberglass - North | [Enter data of your choosing here] |
| MSC03M-CPTSI03-03 | [Enter data of your choosing here] | Continuous Pipe Run, Level Three, Fiberglass - West | [Enter data of your choosing here] |
| MSC03M-CPTSI03-04 | [Enter data of your choosing here] | Continuous Pipe Run, Level Three, Fiberglass - South | [Enter data of your choosing here] |
| MSC03M-CPTSIEB02-01 | [Enter data of your choosing here] | Continuous Pipe Runs, Elbow, Second Level Pipe Run - East @ stairwell | [Enter data of your choosing here] |
| MSC03M-CPTSIEB02-02 | [Enter data of your choosing here] | Continuous Pipe Runs, Elbow, Second Level Pipe Run - North | [Enter data of your choosing here] |
| MSC03M-CPTSIEB02-03 | [Enter data of your choosing here] | Continuous Pipe Runs, Elbow, Second Level Pipe Run - West | [Enter data of your choosing here] |
| MSC03M-CPTSIEB02-04 | [Enter data of your choosing here] | Continuous Pipe Runs, Elbow, Second Level Pipe Run - South | [Enter data of your choosing here] |
| MSC02-EQPTSIEB01-01 | [Enter data of your choosing here] | Equipment Room Pipe Run, 2nd Floor, Elbow | [Enter data of your choosing here] |
| MSC03M-HVAC17TSIAEB-01 | [Enter data of your choosing here] | Elbow for line "A" on HVAC unit 17, pillar 28 | [Enter data of your choosing here] |
| MSC03M-CPTSI02-01 | [Enter data of your choosing here] | Continuous Pipe Run, Level Two - East @ stairwell | [Enter data of your choosing here] |
| MSC03M-CPTSI02-02 | [Enter data of your choosing here] | Continuous Pipe Run, Level Two - North | [Enter data of your choosing here] |
| MSC03M-CPTSI02-03 | [Enter data of your choosing here] | Continuous Pipe Run, Level Two - West | [Enter data of your choosing here] |
| MSC03M-CPTSI02-04 | [Enter data of your choosing here] | Continuous Pipe Run, Level Two - South | [Enter data of your choosing here] |
| MSC03M-HVAC17TSIBEB-01 | [Enter data of your choosing here] | Elbow for Line "B" on HVAC Unit 17, pillar 23 | [Enter data of your choosing here] |
| MSC03M-CPTSIEB03-01 | [Enter data of your choosing here] | Elbow for Level 3 Pipe, pillar 32 - West | [Enter data of your choosing here] |
| MSC03M-CPTSIEB03-02 | [Enter data of your choosing here] | Elbow for Level 3 Pipe, pillar 13 - South East Side | [Enter data of your choosing here] |
| MSC03M-HVAC17TSIB-01 | [Enter data of your choosing here] | Line "B" on HVAC unit 17 | [Enter data of your choosing here] |
| MSC03M-FLEXDUCT1-01 | [Enter data of your choosing here] | Flex Duct @ Pillar 21 | [Enter data of your choosing here] |
| MSC03M-HVAC16TSIAEB-01 | [Enter data of your choosing here] | HVAC Unit #16, Line "A", Elbow, pillar 1 | [Enter data of your choosing here] |
| MSCRF-RF01-01 | [Enter data of your choosing here] | East Roof, tar w/pea gravel | [Enter data of your choosing here] |
| MSCRF-RF01-02 | [Enter data of your choosing here] | East Roof, tar w/pea gravel | [Enter data of your choosing here] |
| MSCRF-RF01-03 | [Enter data of your choosing here] | East Roof, tar w/pea gravel | [Enter data of your choosing here] |
| MSC03M-HVAC17TSIA-01 | [Enter data of your choosing here] | Line "A" on HVAC Unit 17 | [Enter data of your choosing here] |
| MSCRF-FLM01-01 | [Enter data of your choosing here] | Flashing Mastic, East Roof | [Enter data of your choosing here] |
| MSCRF-FLM01-02 | [Enter data of your choosing here] | Flashing Mastic, East Roof | [Enter data of your choosing here] |
| MSCRF-FLM01-03 | [Enter data of your choosing here] | Flashing Mastic, East Roof | [Enter data of your choosing here] |
| MSC03M-HVAC16TSIBEB-01 | [Enter data of your choosing here] | HVAC Unit #16, Line "B", Elbow, pillar 1 | [Enter data of your choosing here] |
| MSC03M-HVAC16TSIB-01 | [Enter data of your choosing here] | HVAC Unit 16, Line "B", pillar 1 | [Enter data of your choosing here] |
| MSC02-EQPTSIFIT01-01 | [Enter data of your choosing here] | Equipment Room Fitting - 2nd Floor | [Enter data of your choosing here] |
| MSC02-EQPTSI01-01 | [Enter data of your choosing here] | Equipment Room Pipe Run, 2nd Floor | [Enter data of your choosing here] |
| MSC03M-CPTSI01-01 | [Enter data of your choosing here] | Continuous Pipe Run, Level 1, 3rd Floor - East | [Enter data of your choosing here] |
| MSC03M-CPTSI01-02 | [Enter data of your choosing here] | Continuous Pipe Run, Level 1, 3rd Floor - North | [Enter data of your choosing here] |
| MSC03M-CPTSI01-03 | [Enter data of your choosing here] | Continuous Pipe Run, Level 1, 3rd Floor - South | [Enter data of your choosing here] |
| MSC03M-CPTSIFIT03-01 | [Enter data of your choosing here] | Fitting for Continuous Pipe Run, 3rd Floor, Lower Level Pipe Run - East | [Enter data of your choosing here] |
| MSC03M-BLTSI1-01 | [Enter data of your choosing here] | Blower Unit #1 @ Pillar 21 | [Enter data of your choosing here] |
| MSC03M-HVAC5CUPTSIS-01 | [Enter data of your choosing here] | HVAC Unit #5 Coupling, Side Sample, Pillar 32 | [Enter data of your choosing here] |
| MSC03M-HVAC5CUPTSIF-01 | [Enter data of your choosing here] | HVAC Unit #5 Coupling, Front Sample, Pillar 32 | [Enter data of your choosing here] |

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# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis, TN 38134

**Attn:** Quent Barrett
Amy McCaffery

**Lab Order ID:** 909075
**Analysis ID:** 909075PLM
**Date Received:** 9/3/2009
**Date Reported:** 9/3/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSCRF-FLM3-01 | Flashing Mastic (for Brown Asphalt Shingles) over Coliseum Sign | None Detected | 5% Cellulose<br>5% Fiber Glass | 90% Other | Black<br>Non Fibrous<br>Homogeneous |
| *909075PLM_1* | | | | | Dissolved |
| MSCRF-FLM3-02 | Flashing Mastic (for Brown Asphalt Shingles) over Coliseum Sign | None Detected | 5% Cellulose<br>5% Fiber Glass | 90% Other | Black<br>Non Fibrous<br>Homogeneous |
| *909075PLM_2* | | | | | Dissolved |
| MSCRF-FLM3-03 | Flashing Mastic (for Brown Asphalt Shingles) over Coliseum Sign | None Detected | 5% Cellulose<br>5% Fiber Glass | 90% Other | Black<br>Non Fibrous<br>Homogeneous |
| *909075PLM_3* | | | | | Dissolved |
| MSCRF-RF03-01 | Brown Asphalt Shingles over Coliseum Sign | None Detected | 15% Fiber Glass<br>10% Cellulose | 75% Other | Black, Brown<br>Non Fibrous<br>Heterogeneous |
| *909075PLM_4* | | | | | Dissolved |
| MSCRF-RF03-02 | Brown Asphalt Shingles over Coliseum Sign | None Detected | 15% Fiber Glass<br>10% Cellulose | 75% Other | Black, Brown<br>Non Fibrous<br>Heterogeneous |
| *909075PLM_5* | | | | | Dissolved |
| MSCRF-RF03-03 | Brown Asphalt Shingles over Coliseum Sign | None Detected | 15% Fiber Glass<br>10% Cellulose | 75% Other | Black, Brown<br>Non Fibrous<br>Heterogeneous |
| *909075PLM_6* | | | | | Dissolved |
| MSCRF-RF02A-01 | Sandy Material under Asphalt Shingles, Coliseum Roof | None Detected | | 90% Other<br>10% Vermiculite | Brown<br>Non Fibrous<br>Heterogeneous |
| *909075PLM_7* | | | | | Teased |
| MSCRF-RF02A-02 | Sandy Material under Asphalt Shingles, Coliseum Roof | None Detected | | 90% Other<br>10% Vermiculite | Brown<br>Non Fibrous<br>Heterogeneous |
| *909075PLM_8* | | | | | Teased |

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Sharon Donald (9)

**Analyst**

**Nathaniel Durham, MS or Approved Signatory**

**Scientific Analytical Institute, Inc.** 302-L Pomona Dr. Greensboro, NC 27407 (336) 292-3888

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**Customer:** EnSafe Inc.
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**Attn:** Quent Barrett
Amy McCaffery

**Lab Order ID:** 909075
**Analysis ID:** 909075PLM
**Date Received:** 9/3/2009
**Date Reported:** 9/3/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSCRF-RF02A-03 | Sandy Material under Asphalt Shingles, Coliseum Roof | None Detected | | 90% Other<br>10% Vermiculite | Brown<br>Non Fibrous<br>Heterogeneous |
| *909075PLM_9* | | | | | Teased |

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Sharon Donald (9)

**Analyst**

**Nathaniel Durham, MS or Approved Signatory**

90907,

| | | | |
|---|---|---|---|
| Client: | EnSafe, Inc | *Instructions: | Scientific Analytical |
| Contact: | Quent Barrett | Use Column "B" for your contact info | Institute, Inc. |
| Address: | 5724 Summer Trees Dr. Memphis, TN 38134 | To See an Example Click the bottom Example Tab | 302-L Pomona Dr. |
| Phone: | 901-372-7952 | | Greensboro, NC 27407 |
| Fax: | [Enter fax here] | Enter samples between "<<" and ">>" | Phone: 336.292.3888 |
| Email: | qbarrett@ensafe.com | Begin Samples with a "<< "above the first sample and end with a ">>" below the last sample. | Fax: 336.292.3313 |
| Project: | Coliseum - 0888808150 (Phase 01) | Only Enter your data on the first sheet "Sheet 1" | Email: lab@salilab.com |
| Client Notes: | Set 2 | | |
| P.O. #: | MSA | Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data. | POSITIVE STOPS |
| Date Submitted: | 9/2/2009 0:00 | | |
| Analysis: | PLM | | |
| TurnAroundTime: | 12 Hour TAT (if possible) | | |

| Sample Number | Data 1 | Sample Description | Data 2 |
|---|---|---|---|
| << | | | |
| MSCRF-FLM3-01 | [Enter data of your choosing here] | Flashing Mastic (for Brown Asphalt Shingles) over Coliseum Sign | [Enter data of your choosing here] |
| MSCRF-FLM3-02 | [Enter data of your choosing here] | Flashing Mastic (for Brown Asphalt Shingles) over Coliseum Sign | [Enter data of your choosing here] |
| MSCRF-FLM3-03 | [Enter data of your choosing here] | Flashing Mastic (for Brown Asphalt Shingles) over Coliseum Sign | [Enter data of your choosing here] |
| MSCRF-RF03-01 | [Enter data of your choosing here] | Brown Asphalt Shingles over Coliseum Sign | [Enter data of your choosing here] |
| MSCRF-RF03-02 | [Enter data of your choosing here] | Brown Asphalt Shingles over Coliseum Sign | [Enter data of your choosing here] |
| MSCRF-RF03-03 | [Enter data of your choosing here] | Brown Asphalt Shingles over Coliseum Sign | [Enter data of your choosing here] |
| MSCRF-RF02A-01 | [Enter data of your choosing here] | Sandy Material under Asphalt Shingles, Coliseum Roof | [Enter data of your choosing here] |
| MSCRF-RF02A-02 | [Enter data of your choosing here] | Sandy Material under Asphalt Shingles, Coliseum Roof | [Enter data of your choosing here] |
| MSCRF-RF02A-03 | [Enter data of your choosing here] | Sandy Material under Asphalt Shingles, Coliseum Roof | [Enter data of your choosing here] |
| >> | | | |

# Bulk Asbestos Analysis

**By Polarized Light Microscopy**
**EPA Method: 600/R-93/116 and 600/M4-82-020**

NVLAP Lab Code: 200664-0

**Customer:** EnSafe Inc.
5730 Summer Trees Drive
Memphis TN 38134

**Attn:** Quent Barrett

**Lab Order ID:** 908589
**Analysis ID:** 908589_PLM
**Date Received:** 8/24/2009
**Date Reported:** 8/26/2009

**Project:** Coliseum 0888808150 (Phase 01)

| Sample ID / *Lab Sample ID* | Description / *Lab Notes* | Asbestos | Fibrous Components | Non-Fibrous Components | Attributes / Treatment |
|---|---|---|---|---|---|
| MSC01A-B1ESH-03 / *908589PLM_182* | Boiler #1 Exhaust | **Not Analyzed** | | | |
| MSC01A-BUTSI-01 / *908589PLM_183* | 18" Purple Line Brine Unit / *wrap on foam* | **None Detected** | **40% Cellulose** | 60% Other | Pink Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-BUTSI-02 / *908589PLM_184* | 18" Purple Line Brine Unit / *wrap on foam* | **None Detected** | **40% Cellulose** | 60% Other | Pink Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-BUTSI-03 / *908589PLM_185* | 18" Purple Line Brine Unit / *wrap on foam* | **None Detected** | **40% Cellulose** | 60% Other | Pink Fibrous Heterogeneous / Teased, Dissolved |
| MSC01A-ORHT2S-01 / *908589PLM_186* | Orange Hot Water Tank #2, Sides, East Tank, / *unable to separate wrap* | **15% Chrysotile**<br>**15% Amosite** | | 70% Other | Gray, White Fibrous Heterogeneous / Teased |
| MSC01A-ORHT2S-02 / *908589PLM_187* | Orange Hot Water Tank #2, Sides, East Tank, | **Not Analyzed** | | | |
| MSC01A-ORHT2S-03 / *908589PLM_188* | Orange Hot Water Tank #2, Sides, East Tank, | **Not Analyzed** | | | |
| MSC01A-ORHT1S-01 / *908589PLM_189* | Orange Hot Water Tank #1, Sides, West Tank, / *unable to separate wrap* | **30% Chrysotile** | | 70% Other | Gray Fibrous Heterogeneous / Teased |

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Ired Gulley (436)
**Analyst**

**Approved Signatory**

# Tab 3

# Fiscal Recovery Plan

# Mid South Coliseum

# By

# The City of Mempis

# Date

# Unknown

**CITY OF MEMPHIS**
**FISCAL RECOVERY PLAN**
**ASSET MANAGEMENT STRATEGY[1]**

**MID-SOUTH COLISEUM**

**PROPOSED OPERATING STRATEGY**

## OVERVIEW

The Mid-South Coliseum is a 40+ year old facility with a seating capacity of 11,500. Given the age of the facility, its condition, location and competitive disadvantages, the Coliseum is challenged to continue to operate as a viable facility. The last major study on the facility was completed in the year 2000 (see Exhibit 1). The study in 2000 said the coliseum's future was in doubt at that point and that was prior to the opening of the FEDEX Forum. Given the opening of the forum and its ability to lure events away from both the Pyramid and the Coliseum, together with the deteriorating condition of the Coliseum, continued operation of the facility as a viable (let alone profit making) entity is called into question. There are a number of issues that need to be explored with the coliseum, including the following:

### Immediate Operating Action

The decision will be made to keep the facility open through October 31, 2006 which provides time to complete the following:

* Resolve operating decisions
* Complete Fairgrounds Economic Development Plan
* Allow the scheduling of major summer/fall events, e.g. Mid-South Fair, Southern Heritage Classic, etc.
* This time is also a period where the facility can make money or at least breakeven

### Facility Assessment

A review of local facilities will be conducted to determine the demand for space and the ability of existing facilities to accommodate that demand.

Best Practices

A Review of peer cities will be conducted to determine if they have multiple facilities/venues and how those facilities have performed.

Number of Events

Are there an adequate number of events in the marketplace such as concerts, special events, graduations, etc. to justify this facility. The other question is: Are there enough alternative venues in the marketplace such as the Orpheum, Cook Convention Center, The Cannon Center, The FEDEX Forum, large high school facilities (to support high school graduations) etc. that provide adequate event capacity for this marketplace?

Exploration of Additional Events to Support this Facility

We need to schedule meetings with the following entities to determine if a long term stable tenant can be attracted to the marketplace, including the following:

Professional Sports:

* Hockey
* Soccer
* Arena Football

Both the football and hockey teams are owned by the same entity and there needs to be a discussion held with the ownership to determine under what circumstance(s) would they consider relocating the team(s) to Memphis.

Amateur Sports

* Soccer
* Hockey
* Skating

If the above tenants survive the non compete clause with the FEDEX Forum, this offers some promise for the facility.

Financial Ramifications

The facility has incurred operating losses over the past 3 years in excess of $880,000. The City of Memphis has funded these deficits from the General Fund. Originally the facility was operated in partnership with Shelby County and any operating losses were to be shared between the city and county at a rate of 60% and 40%, respectively. The county advised the city in 2003 that it would not honor the agreement and a decision should have been made at that point what to do with the facility, however no decision has been made and we need to determine the future operation of the facility.

The facility expects to operate at a deficit again in fiscal year 2006 (July1, 2005-June 30, 2006) in the amount of approximately $300,000. This deficit must again be funded from the City of Memphis General Fund.

Operations

The facility is managed by a staff headed by Steve Fox, Facility Manager. The staff is experienced and has been in place a number of years. There needs to be an exploration of various options to lower the cost of operating the facility to reduce the cost of operations and therefore the amount of funding from the city to cover the annual deficit.

There must be a stable tenant with a long term lease to insure the long term viability of the facility.

Renovation Issues

Given the age of the facility, it is in need of serious repairs. The facility is over 40 years old with deferred maintenance problems such as the roof, AC, electrical, seating, etc. In addition to the repairs the facility must make ADA adjustments to the facility as well. Estimates for the repair of the facility, including ADA requirements range from $5 to $8 million dollars.

There needs to be a correct estimate completed on the cost of the facility renovation, inclusive of ADA requirements. The estimates have ranged from $3 million to $12 million and we need to determine the most accurate cost of renovating the facility.

Renovation Options/Cost/Funding Options

The facility is eligible for both New Markets Tax Credits (NMTC's) and Historic Tax Credits (HTC's). If these credits were used a private owner would also have to be identified. The renovation costs could then be offset via the use of these federal incentives. In addition to the NMTC's and HTC's, State Senator Steve Cohen is proposing a bill in the senate(SB2448/HB2769) that would allow the recapture of sales and use taxes generated at the coliseum to be used to assist with the cost of ADA required facility renovations. All of these financing tools may be used in collaboration to provide the necessary renovations to the facility with minimum financial support from the City of Memphis.

Options

We need to review the following:

* Determine the event capacity in the marketplace and if we need the coliseum as a venue or if current facilities can accommodate.
* What is the economic impact/market value of the events at the coliseum that could be lost to Desoto County Civic Center if we lose the facility--In the same light does this hurt the city from a competitive standpoint.?
* Can the facility attract a stable tenant (Professional/amateur sports, etc.)?

* Are there alternatives for this site in the Fairgrounds Master Plan (demolition cost of $1million+).
* Facility Renovations-Can equipment from the Pyramid (assuming the Bass Pro deal is concluded) such as the seating, scoreboard, concessions, etc. be used to help with the renovations of the facility?
* If the facility is viable and attracts a stable tenant base, is there any benefit in joint management with the FEDEX Forum?
* Given the lack of funding support from the county, does the city want to continue to be the sole funding source?
* Given the bill in the state legislature to provide a sale tax rebate to the coliseum (Sen. Cohen), will that provide an adequate revenue source to assist with the operating cost?
* Who should be involved in the above decisions and how much time should be given prior to making a decision on the building's future?
* Identify the exact amount of incentives available (NMTC's/HTC's), their impact, and the ultimate net exact cost of renovating the facility.

Strategic Issues

* If dollars are identified for renovation of the Coliseum – should these dollars be used to fund a new smaller facility?
* Is the current site the best site for a new facility?
* Does a renovated Coliseum fit with the overall vision of the Fairgrounds?

# Tab 4

# Assessment of Operations

# Mid South Coliseum

# By

# Arthur Anderson

# Dated

# July, 2000

*Assessment of Options*
*for the*

# Mid-South Coliseum

## City of Memphis, Shelby County, Tennessee

*July 2000*

PREPARED FOR

**City of Memphis, Tennessee**
**Shelby County, Tennessee**

PREPARED BY

**ARTHUR ANDERSEN LLP**

# ASSESSMENT OF OPTIONS FOR THE MID-SOUTH COLISEUM

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## *Introduction*

The City of Memphis and Shelby County jointly own two arenas: the Mid-South Coliseum and The Pyramid. In light of current conditions and recent trends, as well as the likely need for future capital investment in one or both buildings, the City and County engaged Arthur Andersen LLP to identify and evaluate realistic strategic options for the Mid-South Coliseum. The principal objective of the analysis is to assist the City and County in setting a course of action for the Coliseum and recommending appropriate next steps.

This report is not intended as a feasibility analysis for any one course of action or proposed plan. Rather, it is an exploration of market options for the Coliseum and an assessment of the relative advantages and disadvantages of each. This report is intended as an aid to policymakers in deciding upon a course of action for the Coliseum. Depending on the course of action chosen, additional analysis and planning may be required.

## ***Summary of Findings, Conclusions, and Recommendations***

### *Findings*

The 11,500 seat Mid-South Coliseum was for years the premier sports and entertainment venue not only in the Memphis area, but also within the broader mid-south region of the country. Today, it is approaching 40 years of age and is now one of three arenas in the Memphis metropolitan area alone.

Thus, City and County management are confronted with an aging building that is losing money, is in need of capital improvements, and is facing increased competition in the marketplace. Although the Coliseum has always been a public asset, it has also been very autonomo , and financially self-sufficient, even delivering financial surpluses to the City and County in years past. Historically, it has required very little oversight.

In the last few years, the Coliseum has begun to lose money and has needed to use its capital reserves for annual operating expenses. Having lost its primary tenant, the River Kings of the Central Hockey League ("CHL"), to the new DeSoto County Civic Center in DeSoto County, Mississippi, the Coliseum is facing increased financial pressures.

Without significant capital improvements (in the range of $4 to $5 million) to update the Coliseum and make it competitively appealing to the public, the Coliseum will not be able to attract the events it needs and will continue to lose money. Even though a new prime tenant in the building will greatly improve the building's financial health, that tenant will not last without such improvements to the building.

The Coliseum is located in the mid-town neighborhood of Memphis, in Shelby County, and is part of the 60 acre Mid-South Fairgrounds complex. The Fairgrounds property is in generally poor condition and the Memphis Park Commission has recently proposed a re-development planning process. The Coliseum enjoys a good location in relation to the regional marketplace, adequate access and visibility. However, the signage, lighting, interior road systems, and landscaping of the Fairgrounds detracts from the arena's presentation to the public. The arena itself, while still very functional, is dated and generally void of the fan amenities common in newer arenas.

Management of the Coliseum has been in discussions with the owners of an East Coast Hockey League ("ECHL") franchise regarding a long-term lease at the Coliseum. This franchise has also talked to management of The Pyramid about playing there. The 20,000 seat Pyramid is only 10 years old, but has no ice sheet and would need to make a significant capital investment to accommodate professional ice hockey.

It is questionable whether two minor league hockey franchises can operate successfully in the Memphis market (the CHL River Kings in DeSoto County and an ECHL team in Memphis). The only current precedent identified is in Cincinnati where both an American Hockey League team and an International Hockey League team are achieving attendance levels at or near their respective league averages in buildings that are less than 10 miles apart. The Cincinnati metropolitan area has a population of approximately 1.6 million versus 1.1 million in the Memphis area.

However, there is a strong likelihood that an ECHL franchise could achieve the attendance levels it needs (4,000 to 5,000 per game in paid attendance) at the Coliseum for the following reasons:

- the management of this particular ECHL franchise is experienced and has studied the Memphis market carefully;
- ECHL offers a higher level of professional hockey than does the CHL;
- although DeSoto Civic Center is new and has excellent highway access, it is a fairly basic building and is somewhat "off-center" in relation to the bulk of the region's population in Shelby County, Tennessee.

Four different operating scenarios were evaluated with regard to the probable financial performance of the Coliseum under each. The Pyramid's operating performance under each was also taken into account as was anticipated capital expenditures needed under each of these alternatives. The four scenarios are:

I. No hockey at either the Coliseum or The Pyramid and a reduced calendar of events at the Coliseum as a result of increased market competition.

II. ECHL hockey played at the Coliseum. The remainder of the Coliseum's calendar of events is reduced as a result of increased market competition.

III. ECHL hockey played at The Pyramid. The Coliseum's calendar of events is reduced as a result of increased market competition.

IV. ECHL hockey is played at The Pyramid and the Coliseum is closed.

Estimated financial results are presented in the following table.

***Estimated Financial Results***
***Illustrative Operating Scenarios***
***The Mid-South Coliseum and The Pyramid***
***(in Thousands of 2000 Dollars)***

| | Current | Scenario I (No hockey) | Scenario II (ECHL at Coliseum) | Scenario III (ECHL at The Pyramid) | Scenario IV (ECHL at Pyr/ Coliseum closed) |
|---|---|---|---|---|---|
| *The Coliseum* | | | | | |
| Net Operating Income | ($571.4) | ($977.1) | ($566.8) | ($977.1) | ($100.0) |
| Incremental Debt Service | - | (419.0) | (454.0) | (419.0) | - |
| Net Income after Debt Service | ($571.4) | ($1,396.1) | ($1,020.8) | ($1,396.1) | ($100.0) |
| *The Pyramid* | | | | | |
| Net Operating Income | $287.3 | $287.3 | $287.3 | $572.7 | $908.0 |
| Incremental Debt Service | - | (285.0) | (285.0) | (500.0) | (500.0) |
| Net Income after Debt Service | $287.3 | $2.3 | $2.3 | $72,651 | $408.0 |
| | | | | | |
| Combined Net Income | ($284.0) | ($1,393.8) | ($1,018.5) | ($1,323.5) | $308.0 |
| | | | | | |
| *New Capital Investment* | | | | | |
| Coliseum | - | $4,190.0 | $4,540.0 | $4,190.0 | - |
| Pyramid | - | $2,850.0 | $2,850.0 | $5,000.0 | $5,000.0 |
| Total New Investment | - | $7,040.0 | $7,390.0 | $9,190.0 | $5,000.0 |

*Conclusions*

- Continuing operations at the Coliseum will maximize the number and variety of events hosted in the City, but will also require $7+ million in capital expenditures at the Coliseum and The Pyramid over the next two to three years and will result in continued operating deficits unless new uses and users for the Coliseum are effectively cultivated.

  - If the Coliseum continues operations, it is assumed that $4.5 million will be invested in the Coliseum and $2.85 million in The Pyramid for a total of $7.4 million. If the Coliseum is closed, it is assumed that ice will be installed in The Pyramid and a total of $5 million will be spent on The Pyramid. Thus, the incremental capital cost of keeping the Coliseum operating is approximately $2.4 million.

  - With an ECHL team (Scenario II), the Coliseum could have an annual loss of approximately $1 million after estimated annual debt service on $4.5 million of capital improvements including about $350,000 in depreciation (non-cash) expense. The Pyramid would be at about break-even with approximately $100,000 in depreciation expense. If the Coliseum closes and an ECHL team plays at The Pyramid (Scenario IV), combined net operating income will be about $300,000 after incremental debt service including $100,000 in depreciation. Thus, the incremental annual cost of keeping the Coliseum operating is estimated at $1.3 million including about $450,000 in depreciation or $850,000 in cash. This loss might be reduced with cost efficiencies from consolidated management.

- Continuing operations at the Coliseum provides the City and County with a more flexible set of venues to attract events and a broader calendar of events that will take place in the City each year.

- Fostering an ECHL team in the Coliseum can give the Coliseum a good economic base (though not a total solution) to help it serve as a core element in the rejuvenation of the Fairgrounds. If the Coliseum is to be kept open, it will be financially important to secure a prime tenant such as an ECHL team.

- As long as the Coliseum continues to operate, it does not make economic sense to make the investment to put ice in The Pyramid and secure a minor league hockey team there.

- Closing the Coliseum and securing a minor league professional ice hockey team at The Pyramid will minimize the City and County's required capital outlay and maximize operating income unless a new market niche can be found for the Coliseum.

- Unless a new market niche and marketing strategy is found for the Coliseum, it will make economic sense to close the Coliseum, put an ice sheet in The Pyramid, sign a minor league hockey franchise to play at The Pyramid and work aggressively to move selected events from the Coliseum to The Pyramid.

- Closing the Coliseum, however, will have a negative impact on the Fairgrounds and the mid-town neighborhood as well as on the youth hockey league in the area and various community organizations that currently utilize the Coliseum.

- A potential new market orientation for the Coliseum is the development of an amateur sports complex utilizing the other assets in the Fairgrounds complex and the organizational infrastructure already in place including the Memphis and Shelby County Sports Authority, Memphis Youth Hockey, and the Memphis Park Commission.

- Even with a focus on amateur sports, the Coliseum should still be marketed to a professional minor league hockey team and selected concerts and family shows that fit its size and features.

- The key to an "amateur sports" strategy will be the development of a viable plan for a major re-development of the larger Fairgrounds complex and securing public and private financial backing for the program.

  - With a minor league hockey franchise as a prime tenant and with a full amateur sports calendar, It is possible that the Coliseum could cover operating expenses but it is most unlikely that it could generate sufficient cash flow from operations to pay debt service on required capital improvements.

  - Thus, a feasible plan will require capital finding from outside sources based on the Coliseum's role in the overall Fairgrounds re-development and on the value of economic benefits to the regional economy (for example, amateur sports tournaments often bring in significant numbers of people for extended stays).

- If the Coliseum continues operations, single management of both the Coliseum and The Pyramid will provide for greater coordination and flexibility in the marketplace and be more efficient and cost effective.

*Recommendations*

- Pursue the feasibility of developing an amateur sports complex as part of a larger Fairgrounds re-development plan.
- Determine the "public service" value of the Coliseum in terms of hosting various civic and community events and in terms of its impact on the mid-town neighborhood and establish some appropriate level of public subsidy as part of an overall financing plan for improving and maintaining the Coliseum.
- If the Coliseum continues in operation for the foreseeable future, the Coliseum and The Pyramid should be put under joint management to optimize the marketing and booking of events. As a secondary benefit, there should be some benefit from eliminating duplicate costs.
- If an amateur sports complex is found not feasible and if the "public service" value of the Coliseum is judged not worth $1+ million in annual operating subsidies, then move to shut down the Coliseum and optimize use of The Pyramid.

## *Background*

The Mid-South Coliseum opened in the early 1960s and served as the major sports and entertainment venue for the Memphis region for many years. The Coliseum is a central asset of the Mid-South Fairgrounds complex, a sixty-acre parcel in Memphis "mid-town" area that also encompasses the Liberty Bowl, Tim McCarver Stadium, Memphis/Shelby County Children's Museum, Libertyland amusement park, Mid-South Fair buildings, and public recreational facilities. The Fairgrounds are currently the focus of a master planning effort by the City's Department of Parks and Recreation.

In the early 1980s, Mud Island Amphitheater opened in downtown Memphis taking some concert business from the Coliseum. In 1990, The Pyramid opened on the northern edge of downtown Memphis along the Mississippi River. The Pyramid is a 20,000-seat arena and home to the University of Memphis men's basketball team. The Pyramid does not have an ice sheet and thus cannot currently host ice hockey or other ice related events. However, The Pyramid is currently evaluating the advisability of installing an ice sheet.

Prior to the opening of The Pyramid, the Coliseum had an extremely active calendar of events and typically sent annual operating surpluses of $300,000 ± each year to the City after building up a cash reserve of two million dollars. After The Pyramid opened, the University of Memphis moved its men's basketball program from the Coliseum to The Pyramid and some other events moved as well.

Nonetheless, the Coliseum maintained a reasonable calendar of events thereafter including professional ice hockey. The River Kings of the Central Hockey League came to the Coliseum in 1995 and were well received, averaging around 3,700 fans per game in its initial two years. However, River Kings attendance fell off sharply in the last two years. This was a major contributor to operating losses for the Coliseum and the need to use some of the surplus that had been built over several years. That surplus is now down to approximately $400,000 and could be used up within the next year or so if the Coliseum's current performance continues.

### *Market Competition*

Meanwhile, in the southern portion of the Memphis metropolitan area, DeSoto County Mississippi, a new 8,000-seat arena will open this fall. The CHL River Kings will move into this new arena for the 2000-2001 season. The River Kings move, announced nearly two years ago, and ensuing legal proceedings with the Coliseum, are believed to be a major contributor to the dramatic decline in fan support at the Coliseum over the last two seasons. Poor quality of play and limited marketing efforts by the River Kings have also been cited as contributing factors.

Since this new arena has yet to open, it remains to be seen what the rest of its calendar of events will look like, particularly in terms of the number of concerts and family shows it can attract, and what competitive impact it will have on the Coliseum as well as on The Pyramid. Nevertheless, with three arenas in the marketplace there will be strong competition for events, especially the larger ticketed events such as music concerts and family shows.

Adding to the competitive mix is the emergence of the various casinos in nearby Tunica, Mississippi as venues for top entertainers. Although the casinos generally cannot accommodate crowds of more than 2,500, they are willing and able to pay highly competitive fees to many entertainers who might otherwise play at the Coliseum or even The Pyramid.

Although there has been moderate growth within the Memphis metropolitan area, the market is not large enough to support three mid-to-large sized arenas all aimed at more or less the same sports and entertainment market. Within this environment, it is concluded that the Coliseum will lose some of its current calendar of events to the arena in DeSoto County in addition to the CHL team.

The Pyramid may also be vulnerable to competition from DeSoto if that new arena is aggressive in offering favorable pricing to various music, entertainment, and family events although The Pyramid's size, location, and market focus protect it somewhat. It is also unclear at the moment how the market will receive the DeSoto arena. The following observations may be made, however:

- All three venues will experience strong competition from the others in trying to achieve their targeted calendars of events;

- DeSoto's newness and convenient access off Interstate 55 are advantages for that facility;
- DeSoto's agreement with the CHL River Kings gives it a good base of events. Although the usual "honeymoon" effect of a new building will be to the advantage of the River Kings, the team will have to overcome a poor market perception and performance from its last two years at the Coliseum; and
- The DeSoto arena's location in Mississippi is "off-center" from the region's population base even though DeSoto County has experienced rapid population growth.

At 11,500 seats, the Coliseum fits a niche between the 20,000-seat Pyramid and the 8,000 seat DeSoto Arena. However, the vast majority of events at the Coliseum are of a size that could be accommodated at DeSoto and many Pyramid events, from an attendance perspective, could be held at the Coliseum. Of perhaps more relevance is the Coliseum's ability to operate less expensively than The Pyramid and therefore offer more attractive rental terms to the small and mid-sized events. Rental terms for DeSoto are not known at this time, but it is assumed that they will be very competitive, especially in the first few years as that arena works to build market share.

### *Competitive Position of the Mid-South Coliseum*

*Physical Condition and Features of the Coliseum.* The Mid-South Coliseum appears to be in sound physical condition. While no evaluation of the building's structural or mechanical systems was made as part of this study, various knowledgeable parties reported that the building is in generally good condition though outdated in some respects. These parties included the arena's general manager, other representatives of the city and county, and representatives of certain prospective tenants of the building who have recently examined the arena.

Coliseum management has identified approximately $4.5 million of capital maintenance and improvement projects. These improvements will need to be completed over the next few years if the building is to effectively continue operations into the foreseeable future. The Coliseum Board and management have also been considering an addition to the building to provide another ice sheet, but this expansion is not included in the $4.5 million budget. Details on this budget are presented in the

appendix. Of this total $4.5 million, about $350,000 relates to professional ice hockey (principally new dasher boards and locker room improvements).

The Coliseum does not have many of the amenities common to mid-sized, "minor league" arenas built in the last several years such as luxury suites, club seats, interior restaurants or clubs, upscale and varied food & beverage service, high-tech sound and lighting systems, increased toilet facilities, and the like. These amenities are usually aimed at:

- broadening the market segments attracted to the building (e.g., the corporate entertainment market);
- enhancing the overall fan/spectator experience by making services more accessible, the entertainment more varied, and the building more comfortable; and
- increasing revenue potentials through higher concession revenues, seat prices, and advertising opportunities.

Depending on the prime tenant(s) of the Coliseum in the future and the overall calendar of events that can be achieved, these types of improvements in the Coliseum could produce substantial additional revenue.

*The Fairgrounds.* The Coliseum sits within the 60± acre Mid-South Fairgrounds in the southeast quadrant of the East Parkway and Central Avenue in the mid-town area of Memphis. The principal elements of the Fairgrounds are:

- the Liberty Bowl used by the University of Memphis football team, the annual Liberty Bowl game, and prospectively by a team in the newly established XFL;
- Tim McCarver Stadium, formerly used by class AA and class AAA professional baseball but now replaced by the new Auto Zone Park in downtown Memphis;
- the Memphis/Shelby County Children's Museum;
- Libertyland, a small-scale amusement park with a reportedly lackluster market performance;
- various structures and activity areas related to the Mid-South Fair buildings; and,

- public recreational facilities such as a swimming pool (currently closed and in need of repair) and playgrounds.

The Fairgrounds is generally in poor condition. The buildings are older and give an impression of being dated and somewhat run-down.. The interior road system is also in need of repair and the landscaping is marginal at best. Signage and lighting for the complex are inadequate. A comprehensive master planning effort for the Fairgrounds has been proposed by the City's Department of Parks and Recreation. The Fairgrounds could enhance the perception and performance of the Coliseum, but currently detract from it.

*Location, Access and Visibility.* Although the Fairgrounds and the Coliseum don't enjoy the benefit of direct interstate or major highway access, vehicular access to the Coliseum is good. Both East Parkway and Central Avenue are major city roadways providing good traffic capacity. The Coliseum is also a prominent structure and, within the Fairgrounds, has good visibility. Directional signage inside the Fairgrounds could be improved.

The Coliseum is well located in relation to the growing middle-income population base in the eastern portion of the metropolitan area. Given the regional road system, however, travel times to the Coliseum, The Pyramid, and the new DeSoto arena are not significantly different when coming from the east. Nonetheless, there is a perceptual closeness that gives the Coliseum an advantage in the marketplace.

## *Financial Performance of the Mid-South Coliseum*

*Recent Financial Results.* After many years of producing financial surpluses, the Mid-South Coliseum has posted consecutive losses over the last several years.

***Mid-South Coliseum***
***Recent Operating Results***
***(in Thousands of 2000 Dollars)***

| | 1999 | 1998 | 1997 |
|---|---|---|---|
| Revenues | $2,482.8 | $2,454.0 | $2,611.1 |
| Cash Expenses | (2,706.7) | (2,531.5) | (2,407.9) |
| Net Cash Flow from Operations | ($223.9) | ($77.5) | $203.3 |
| Depreciation | (347.4) | (341.2) | (327.0) |
| Net Income from Operations | ($571.3) | ($418.7) | ($123.7) |

Source: Mid-South Coliseum Audited Financial Statements.

- While rental revenues increased from 1997 to 1999 (up $85,000 or 24% over that period), food & beverage and merchandise sales decreased significantly (down $291,000 or 24% over that period).
- This decrease in concession type sales was, of course, largely a function of the dramatic fall-off in River Kings attendance (from 129,000 in 1997 to 70,000 in 1999 and even lower over the 1999-2000 season).
- Expenses related to these "concession" sales went down proportionately, but expenses went up dramatically in two categories:
  - Special services expenses increased by approximately $205,000 or 28% from 1997 to 1999, about half of which was recaptured by pass-throughs (special services revenue increased by $96,000) and half of which was not recouped under the terms of rental deals. Legal services of $56,000 for 1999 are in this category and had

previously been $0; and

- Building operations and G&A increased by approximately $171,000 or 16%. Some of t Kings dispute resolution and the balance to increased maintenance and utility costs.

Without the River Kings, who will move to the DeSoto Civic Center for the 2000-2001 season, . increasingly significant losses. A new "prime tenant" could reverse some of those losses. However, if t a minor league professional hockey team, it would be competing with the River Kings in their new buildin

***Public Benefit of the Coliseum***

*Youth Hockey.* The Coliseum currently provides one of the few ice sheets or rinks in the Memphis area and is a key asset in the area's youth ice hockey programs. Even though additional ice sheets are in the proposal stage in the eastern suburbs, there is evidence that the area's demand is currently under-served and the Coliseum's ice time would continue to hold demand even with these new ice sheets.

*Civic and Community Events.* The Coliseum annually hosts 35 to 40 civic and community events including high school and college graduations, jury selections, and gatherings of various community-based organizations. While many of these events could be accommodated in other facilities in the area, including the new theater at the convention center, the Coliseum hosts more of these events than any other facility in the area.

*Neighborhood Impact.* There are safety and crime issues, both real and perceived, in the area surrounding the Fairgrounds complex. This issue was frequently discussed in our interviews as a factor deterring attendance at Coliseum events. Yet events at the Coliseum, even in recent years, have drawn good crowds for the type of events offered. The River Kings became an exception to that in the last two years but for other reasons related to their announced move. In all likelihood, the incidents of crime and vandalism around the Coliseum are probably no different than they would be with any urban venue of this type. Improved lighting, signage, roadways, and landscaping for the Fairgrounds complex as a whole could dramatically change public perception.

At the same time, activities and crowds at the Coliseum can have a beneficial affect on the neighborhood in terms of creating people and traffic flow, public attention, and increased neighborhood business.

***Prospects for a New Prime Tenant at the Coliseum***

At present, the only viable and potentially available prime tenant for the Coliseum is a franchise in the East Coast Hockey League (ECHL). An existing franchise owner in the ECHL has been evaluating the Memphis market for many months and is very positive about the prospects for successfully operating here. This ECHL ownership group has considered both the Coliseum and The Pyramid as possible homes.

*The ECHL and the CHL in the Memphis Market.* It would be difficult for the ECHL and the CHL to both succeed in the long run in the Memphis market. While there are several examples of NHL teams and minor league teams operating successfully in the same market (e.g., the NHL's Chicago Blackhawks and the IHL's Chicago Viper, the NHL's Philadelphia Flyers and the AHL's Philadelphia Phantom) these situations tend to exist in larger markets. Further, the NHL is not in direct competition with minor league hockey primarily due to ticket price differentials. In fact, in various sports it has been the experience in many markets that "major league" teams and "minor league" teams in the same market can strengthen each other and fuel the demand for their product at different levels. However, there are almost no examples of two professional hockey teams at the minor league level successfully operating in the same market.

In the Cincinnati area, there are two minor league franchises:

- the Cincinnati Cyclone of the International Hockey League play in downtown Cincinnati in the recently renovated Crown, a 16,000 seat arena; and,

- the Cincinnati Mighty Ducks of the American Hockey League play in the older 10,000 seat Cincinnati Gardens in the suburbs.

These leagues are generally considered the highest levels of minor league hockey. The Cyclones of the IHL averaged 7,190 paid attendance per game for the 1999-2000 season, slightly above the league average of 7,032. The Mighty Ducks of the

AHL averaged 5,387 in attendance, just under the league average of 5,673. Thus, in terms of paid attendance, both teams have done reasonably well in the same market area. The two arenas are within 7 or 8 miles of each other.

The Cincinnati metropolitan area is nearly 50% larger than the Memphis metropolitan area and average household income is 22% higher. Estimated 1999 population was 1.62 million for the Cincinnati area and 1.10 million for the Memphis area. Estimated 1999 average household income was $68,805 for the Cincinnati area and $56,202 for the Memphis area.

If an ECHL team begins play at the Coliseum, with the River Kings playing at DeSoto Civic Center, it is our opinion that the ECHL team is more likely to succeed (maintain an attendance level necessary for financial stability) than the CHL team in DeSoto for the following reasons:

- It is generally agreed that the ECHL provides a higher level of play and is more likely to have NHL players coming through, thus offering a more attractive product;
- Although the CHL has been in the market for several years, the team clearly lost much of its fan base over the last two to three seasons and has left an opening for a new team. On the other hand, the River Kings may regain some of that market share in a new building, especially if the ECHL does not come into the market immediately;
- Seventy-nine percent of the metropolitan area's population is in Shelby County and 86% is within the metropolitan area's three Tennessee counties. Even though DeSoto County is growing rapidly, in absolute numbers, the three Tennessee counties are growing just as rapidly. The location of the Coliseum provides an advantage in this regard; and
- The particular ECHL ownership group that has been negotiating with the Coliseum brings experienced management. This group has also been evaluating the market for nearly a year and is prepared to make the required investment to bring a team and establish it in the marketplace.

*ECHL and The Pyramid.* Management at The Pyramid has presented a proposal to the ECHL ownership group considering Memphis. The Pyramid does not currently have an ice sheet, but one could be installed in time for the 2001-2002 season. While it is judged that an ECHL team could operate successfully in The Pyramid, there are several potential drawbacks:

- An investment of approximately $3.25 million would be required to prepare The Pyramid for ECHL play. Of that total, however, approximately $1.1 million is for new seat risers that management indicates will be needed in the next three years whether or not there is an ice sheet installed;

- The University of Memphis, by virtue of its initial capital contribution to The Pyramid, has control over all suites in the building and this potential revenue advantage of The Pyramid is effectively not available for professional hockey. Further, the University has the right of first refusal to all dates during the basketball season (including post-season play), thus presenting a possible obstacle in accommodating prime dates needed by a hockey franchise;

- With approximately 20,000 seats, The Pyramid is over-sized for an ECHL team. The drawbacks here relate to cost of operations of a larger building and the perception of an "empty house" with average-sized crowds for an ECHL game of 5,000 or so. The steep slope of the upper bowl lessens this effect to some extent, though, and a curtain system could be devised to block off the upper bowl. A curtaining system is in place now to divide the house vertically for smaller concerts, but not horizontally as would be needed for hockey.

There is also some debate over The Pyramid's location as being further from the critical eastern suburban markets and perhaps viewed by the public as "less safe". In reality, travel times to The Pyramid, the Coliseum, and even DeSoto Civic Center from the eastern suburbs of Shelby County are not measurably different one from another.

Although a rejuvenated Coliseum is judged the preferable venue for an ECHL franchise, The Pyramid is also considered a viable alternative.

### *Options for the Mid-South Coliseum*

Options available to the City and County with regard to the Coliseum may be broadly defined as follows:

1) Continue to operate the Coliseum and pursue the same general market niche:
   (a) with a prime tenant; or

(b) without a prime tenant;

2) Cease operations and close the Coliseum; or

3) Identify and pursue a new market niche compatible with the marketing and operating strategy of the other City/County owned arena, The Pyramid, and less in direct competition with the new DeSoto Civic Center.

*Operating Scenarios.* Four different potential operating scenarios were set up and tested as part of this analysis with regard to likely financial outcomes. It should be noted that these financial analyses are illustrative in nature. While we believe they are generally indicative of probable financial outcomes, they are intended as "order of magnitude" estimates not detailed projections. These four scenarios are:

**Scenario I:** *No Hockey in Memphis/Reduced Calendar at Coliseum.* Assumes no professional ice hockey is played at either the Coliseum or The Pyramid. Also assumes that the other calendar of events at the Coliseum will be reduced somewhat from historical levels as a result of increased competition in the marketplace. No change at The Pyramid.

**Scenario II:** *ECHL Hockey at Coliseum/Reduced Calendar at Coliseum.* Assumes that ECHL hockey is played at the Coliseum, but that the other calendar of events at the Coliseum will be reduced somewhat from historical levels as a result of increased competition in the marketplace. No change at The Pyramid.

**Scenario III:** *ECHL Hockey at Pyramid/Reduced Calendar at Coliseum.* Assumes that ECHL hockey is played at The Pyramid. The Coliseum continues operations in the same general market vein, but there is no professional ice hockey there and the other calendar of events is reduced from historical levels.

**Scenario IV:** *ECHL Hockey at Pyramid/ Coliseum Closed.* Assumes that the Coliseum ceases operations and that ECHL hockey is played at The Pyramid. It is also assumed here that The Pyramid's other calendar of events increases as a result of the Coliseum's closure.

*Principal Assumptions.* Capital improvements will be required at both the Coliseum and The Pyramid whether or not ECHL is hosted in either venue. Estimates provided by management of each facility are presented below.

| | ***With ECHL*** | ***Without ECHL*** |
|---|---|---|
| Coliseum | $4.54 million | $4.19 million |
| Pyramid | $5.00 million | $2.85 million |

In this analysis, a 10% cost of capital is assumed (for example, debt at 7.5% interest over a 20 year term would carry an annual payment for principal and interest of 9.8%) to account for these capital expenditures.

The calendars of events assumed under each scenario are set forth below. Average attendance figures are assumed to stay at the same levels as in 1999 for each event type.

***Assumed Calendars of Events***
***Illustrative Operating Scenarios***
***The Mid-South Coliseum and The Pyramid***

| | Scenario I | | Scenario II | | Scenario III | | Scenario IV | |
|---|---|---|---|---|---|---|---|---|
| | Coliseum | Pyramid | Coliseum | Pyramid | Coliseum | Pyramid | Coliseum | Pyramid |
| Hockey | - | - | 35 | - | - | 35 | - | 35 |
| University Basketball | - | 18 | - | 18 | - | 18 | - | 18 |
| Circus | 11 | - | 11 | - | 11 | - | - | 6 |
| Civic Events | 21 | - | 21 | - | 21 | - | - | - |
| Concerts | 7 | 15 | 7 | 15 | 7 | 15 | - | 18 |
| Family Shows | 6 | 13 | 6 | 13 | 6 | 13 | - | 13 |
| Ice Shows | 2 | - | 2 | - | 2 | - | - | 2 |
| Moto Sports | 3 | - | 3 | - | 3 | - | - | - |
| Other Events | 20 | 32 | 20 | 32 | 20 | 32 | - | 32 |
| Religious Events | 10 | - | 10 | - | 10 | - | - | - |
| Rodeo | 9 | - | 9 | - | 9 | - | - | - |
| Other Sports | - | 4 | - | 4 | - | 4 | - | 4 |
| Wrestling | 1 | - | 1 | - | 1 | - | - | - |
| | | | | | | | - | - |
| Total | 90 | 82 | 125 | 82 | 90 | 117 | - | 128 |

*Financial Results.* Net income from operations is shown for each of these scenarios as well as actual 1999 results in the table below. Also displayed is the estimated impact of additional capital expenditures assumed under each scenario.

***Financial Results***
***Illustrative Operating Scenarios***
***The Mid-South Coliseum and The Pyramid***
***(in Thousands of 2000 Dollars)***

| | Current | Scenario I | Scenario II | Scenario III | Scenario IV |
|---|---|---|---|---|---|
| *The Coliseum* | | | | | |
| Net Operating Income | ($571.4) | ($977.1) | ($566.8) | ($977.1) | ($100.0) |
| Incremental Debt Service | - | (419.0) | (454.0) | (419.0) | - |
| Net Income after Debt Service | ($571.4) | ($1,396.1) | ($1,020.8) | ($1,396.1) | ($100.0) |
| *The Pyramid* | | | | | |
| Net Operating Income | $287.3 | $287.3 | $287.3 | $572.7 | $908.0 |
| Incremental Debt Service | - | (285.0) | (285.0) | (500.0) | (500.0) |
| Net Income after Debt Service | $287.3 | $2.3 | $2.3 | $72.7 | $408.0 |
| Combined Net Income | ($284.0) | ($1,393.8) | ($1,018.5) | ($1,323.5) | $308.0 |
| *New Capital Investment* | | | | | |
| Coliseum | - | $4,190.0 | $4,540.0 | $4,190.0 | - |
| Pyramid | - | $2,850.0 | $2,850.0 | $5,000.0 | $5,000.0 |
| Total New Investment | - | $7,040.0 | $7,390.0 | $9,190.0 | $5,000.0 |

*Scenario I:* Without a major tenant, and anticipating that increased competition in the marketplace will reduce the Coliseum's share of other events, the Coliseum's losses are likely to mount, perhaps approaching a negative one million per year. Further, if the Coliseum is to continue into the foreseeable future, even without a professional hockey team, capital improvements of $4 million or more will have to be made. Taking into account an estimated annual debt service, the annual losses would likely be well in excess of $1 million.

Assuming The Pyramid maintains its current calendar of events, it will still need approximately $2.85 million in capital improvements. After debt service on this new investment, The Pyramid will be at a break-even level. Together, the two arenas could be running at a combined operating loss of approximately $1.4 million per year.

*Scenario II:* If a minor league hockey team operates successfully in the Coliseum, then it will produce significant new revenue for the building. However, it is not likely, in and of itself, to make the building profitable. In fact, it will probably bring the building's net operating income about equal to current levels. Although the River Kings drew very poorly this past season, they did produce net revenue for the Coliseum. A new team operating more successfully would definitely improve those numbers, but that marginal gain would be offset by an eroding base of other events. Thus, with a new professional hockey franchise, the Coliseum is still likely to incur annual losses of about $500,000. Plus, an investment of about $4.5 million will be needed over the next few years to keep the building competitive. The annual net loss after debt service would approximate $1 million.

*Scenario III:* Bringing a minor league hockey team into The Pyramid while still operating the Coliseum does not improve the City and County's financial position. In fact, after debt service, it is roughly equivalent to having no hockey in either arena. While the operating performance of The Pyramid would clearly improve, the Coliseum would be in the same position as Scenario I, above. To accomplish this, however, an additional $2.15 million will be needed to install ice in The Pyramid and perform other minor improvements required by a hockey franchise. Thus, the incremental debt service offsets 75% of this net income gain and the two arenas could be running at a combined operating loss of approximately $1.3 million per year.

*Scenario IV:* Closing the Coliseum and focusing efforts on improving the operating performance of The Pyramid could have a very beneficial financial impact for the City and County. Under this scenario, it is assumed that: an ice sheet is installed at The Pyramid and an ECHL franchise brought in; the Coliseum is closed; and The Pyramid succeeds in hosting a number events currently at the Coliseum (specifically, several circus dates, a few concerts, and a couple of ice show dates). Under this scenario, the new capital investment is the lowest, and there is a strong likelihood of achieving operating profits even assuming there is an on-going annual cost related to the Coliseum (a $100,000 allowance is assumed here for insurance, security, and the like).

### *New Strategy Option*

Based strictly on financial operating results of the two City/County owned arenas and required new capital investment, closing the Coliseum and fostering an improved calendar of events at The Pyramid would be the preferred strategy. However, there are other considerations to be taken into account:

- The total number of events hosted in the City drops from around 200 (Scenario II) to maybe 125 to 130 (Scenario IV). While many of these events (such as graduations) can be accommodated elsewhere, the City's and County's overall venue capacity is diminished. The ancillary benefits related to hosting community events, attracting visitors to the area, indirect economic benefits, and the like are not taken into account in this analysis but are nonetheless real.

- Having both The Pyramid and the Coliseum operating would allow Memphis and Shelby County to market to a broader range of event promoters and users.

- Closing the Coliseum could very well have a negative impact on the mid-town neighborhood. Unless there is a compelling and short-term alternative land use for the Coliseum site, then closing the Coliseum adds to the deterioration (real and perceived) of the Fairgrounds complex with a possible negative affect on property values, inviting vandalism, and reducing potential commercial traffic in the area.

- Closing the Coliseum would be detrimental to the area's youth hockey program that uses the Coliseum's ice extensively (committed to 600 hours of ice time this year at $200 per hour) and has few other options.

- The Coliseum is a critical element in the potential rejuvenation of the Fairgrounds complex. This 60-acre parcel is a very important asset to the City and the County, but one that is in poor condition and very under-utilized.

Some people and organizations in the community have begun to promote the concept of an amateur sports complex in the City of Memphis. There is already the beginning of an organizational infrastructure in place including the Memphis and Shelby County Sports Authority, Memphis Youth Hockey, and the Memphis Park Commission.

While it is judged that the Coliseum cannot be financially viable as an older conventional arena competing more or less head-to-head with The Pyramid and DeSoto Civic Center, it can be a viable home for an ECHL hockey franchise and a cornerstone for an amateur sports complex within a re-developed Fairgrounds.

It is not within the scope of this analysis to specifically assess the market and economic feasibility of such a complex. However, it is believed likely that there would be more demand from amateur sports organizations than could be accommodated solely at the Coliseum. The key to the feasibility of such a project will be financial: generating sufficient revenues to cover operating expenses and debt service; and, putting together a capital financing structure that maximizes equity and grants and minimizes project debt.

This approach would:

- take advantage of the Coliseum as an asset with a continued useful life;
- reorient the Coliseum in the marketplace to be complimentary to The Pyramid and pursue new market segments;
- expand the types of events drawn to the City and to the County; and
- provide a cornerstone for the redevelopment of the Fairgrounds.

### *Management Options*

Although the City and County jointly own both the Coliseum and The Pyramid, these two arenas are under separate management. Currently, the Coliseum is operated by "in-house" management. That is, the Coliseum's general manager and staff are hired by and report to the Coliseum's Board of Directors. The Pyramid, on the other hand, has been under private management since its opening. Under contract to the City and County, LMI managed The Pyramid until LMI was acquired by SMG. Now, SMG manages The Pyramid (essentially with the same LMI staff that had been in place) as well as the Memphis Cook Convention Center. The Pyramid operates without a Board of Directors. Management reports directly to City and County officials.

It is our understanding that this operating structure has evolved over time and the two arenas were not intentionally set up under different management. Interestingly, in late 1998, the Coliseum Board and management recommended to the City and the County that private management be considered for the Coliseum. Although formal proposals were not solicited, initial presentations were made by both SMG and LMI.

While separate management may provide some slight advantage to the public in terms of competitive rental rates, this is more likely an advantage to event promoters rather than the public at large. With single management, promoters will still be interested in the Memphis market. Management will still need to negotiate fair deals in the face of competition from DeSoto and Tunica while aggressively seeking events.

Single management of the two facilities would certainly provide for some operating cost efficiencies and would provide for a more coordinated event scheduling and marketing effort.

If the Coliseum continues operations, joint management of the Coliseum and The Pyramid is strongly recommended.

**Memphis Metropolitan Area**
**Population Trends and Projections**

| | 1980 | 1990 | Percentage Change 1980 to 1990 | Estimated 1999 | Percentage Change 1990 to 1999 | Projected 2004 | Percentage Change 1999 to 2004 |
|---|---|---|---|---|---|---|---|
| Shelby County, TN | 777,114 | 826,330 | 6.3% | 870,786 | 5.4% | 888,915 | 2.1% |
| Tipton County, TN | 32,930 | 37,568 | 14.1% | 48,284 | 28.5% | 54,344 | 12.6% |
| Fayette County, TN | 25,305 | 25,559 | 1.0% | 31,183 | 22.0% | 35,128 | 12.7% |
| DeSoto County, MS | 53,930 | 67,910 | 25.9% | 100,026 | 47.3% | 119,629 | 19.6% |
| Crittenden County, AR | 49,498 | 49,939 | 0.9% | 49,951 | 0.0% | 49,810 | -0.3% |
| Total Metropolitan Area | 938,777 | 1,007,306 | 7.3% | 1,100,230 | 9.2% | 1,147,826 | 4.3% |

Source: Claritas, Inc.; Arthur Andersen LLP.

- DeSoto County, as well as the suburban counties in Tennessee, has shown dramatic relative growth in the last 10 to 20 years (e.g., nearly 50% growth in DeSoto during the 1990s).
- However, Shelby County represents 79% of the metropolitan area's total population, down somewhat from 83% in 1980 and 82% in 1990. The three Tennessee counties combined represent just over 86% of the metropolitan area.
- Over the next 5 years, DeSoto County is expected to add approximately 3,900 persons annually to its population while Shelby County is expected to add some 3,600 persons annually. The three Tennessee counties combined will add approximately 5,600 persons per year.

**Memphis Metropolitan Area**
**Income Measures 1999**

| | Aggregate Income (in millions) | Per Capita Income | Average Household Income | Median Household Income |
|---|---|---|---|---|
| Shelby County, TN | $18,838 | $21,634 | $57,892 | $40,312 |
| Tipton County, TN | $724 | $14,999 | $42,842 | $32,488 |
| Fayette County, TN | $543 | $17,442 | $49,878 | $34,529 |
| DeSoto County, MS | $1,989 | $19,887 | $55,235 | $44,541 |
| Crittenden County, AR | $771 | $15,448 | $43,867 | $30,745 |
| Total Metropolitan Area | $22,867 | $20,784 | $56,202 | $39,831 |

Source: Claritas, Inc.; Arthur Andersen LLP.

- Shelby County accounts for 82% of the metropolitan area's aggregate income because it holds 79% of the area's population and because it has the highest per capita income and household income levels of the metropolitan area's five counties.

- DeSoto County's income levels are close to those of Shelby County (and well above the other three counties in the metropolitan area), but its aggregate income is just under 9% of the metropolitan area's total.

**Memphis Metropolitan Area**
**Average Household Income - Trends and Projections**

| | 1979 (Census) | 1989 (Census) | Percentage Change 1979 to 1989 | Estimated 1999 | Percentage Change 1989 to 1999 | Projected 2004 | Percentage Change 1999 to 2004 |
|---|---|---|---|---|---|---|---|
| Shelby County, TN | $19,062 | $35,858 | 88.1% | $57,892 | 61.4% | $73,728 | 27.4% |
| Tipton County, TN | $16,255 | $28,083 | 72.8% | $42,842 | 52.6% | $52,834 | 23.3% |
| Fayette County, TN | $14,602 | $29,013 | 98.7% | $49,878 | 71.9% | $66,419 | 33.2% |
| DeSoto County, MS | $19,377 | $36,409 | 87.9% | $55,235 | 51.7% | $68,140 | 23.4% |
| Crittenden County, AR | $15,529 | $27,172 | 75.0% | $43,867 | 61.4% | $55,921 | 27.5% |
| Total Metropolitan Area | $18,706 | $35,051 | 87.4% | $56,202 | 60.3% | $71,248 | 26.8% |

Source: Claritas, Inc.; Arthur Andersen LLP.

- Shelby County has the area's highest average household income and that is expected to continue over the next five years.
- Shelby County has also exhibited the area's highest growth rate in average household income since 1979 except for Fayette County, which has been catching up from below average levels.

**Mid-South Coliseum**
**Trends in Calendar of Events**

| | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|
| ***Event Days*** | | | | | |
| CHL Hockey | 33 | 32 | 41 | 37 | 37 |
| Circus | 11 | 11 | 11 | 11 | 11 |
| Civic Events | 28 | 30 | 38 | 34 | 41 |
| Concert | 3 | 15 | 16 | 13 | 11 |
| Family Show | - | 7 | 7 | 7 | 12 |
| Ice Show | 7 | 1 | 1 | 1 | 5 |
| Moto Sports | 3 | 3 | 3 | 1 | 3 |
| Religious | 10 | 11 | 9 | 10 | 10 |
| Rodeo | 13 | 7 | 6 | 9 | 9 |
| Other Sports | 14 | 1 | 1 | 3 | - |
| Wrestling | 50 | 17 | 3 | 6 | 1 |
| Total | 172 | 135 | 136 | 132 | 140 |

Source: Mid-South Coliseum management.

- The number of events at the Coliseum has been steady over the last five years. The notable changes have been:
  - A good increase in the number of family shows (e.g., Sesame Street Live)
  - A near elimination of "other sports" which has generally involved amateur hockey and basketball tournaments/camps, in part due to the cost of using the facility for these events;
  - A gradual increase in Civic Events (such as graduations, jury selections, fundraisers, and events for other community organizations); and
  - A large reduction in wrestling events although the vast majority of those events drew very small crowds.

**Mid-South Coliseum**
**Event Attendance Trends**

| | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|
| ***Attendance*** | | | | | |
| CHL Hockey | 120,675 | 119,690 | 129,343 | 106,902 | 70,483 |
| Circus | 34,746 | 69,660 | 68,352 | 70,370 | 67,414 |
| Civic Events | 103,350 | 111,350 | 117,800 | 129,415 | 152,600 |
| Concert | 12,644 | 94,500 | 86,449 | 61,869 | 44,366 |
| Family Show | - | 14,068 | 13,923 | 14,833 | 32,068 |
| Ice Show | 16,152 | 8,233 | 6,572 | 9,264 | 16,360 |
| Motor Sports | 12,644 | 6,216 | 5,393 | 8,816 | 5,442 |
| Religious | 53,000 | 74,900 | 45,000 | 47,486 | 69,253 |
| Rodeo | 52,372 | 36,818 | 31,608 | 38,091 | 37,069 |
| Other Sports | 7,231 | 3,500 | 4,499 | 5,790 | - |
| Wrestling | 75,219 | 28,605 | 24,855 | 30,429 | 7,956 |
| Total | 488,726 | 567,540 | 533,794 | 523,265 | 503,011 |

Source: Mid-South Coliseum management.

- The above figures represent "turnstile attendance" or people actually in the building for an event as opposed to "paid attendance" representing the number of tickets sold (the difference between the two is a function of "no-shows" and complimentary tickets). Generally, for ticketed events, turnstile attendance (or "drop") will be less than paid attendance. In the case of River Kings hockey turnstile attendance was dramatically below paid attendance especially in the last few years (for example, paid attendance reported by the team was 127,181 whereas the turnstile attendance reported by the Coliseum was 70,483). Turnstile attendance is of particular importance to the Coliseum because of the impact on concession sales.

- For the higher-priced ticketed events, the Coliseum usually receives a higher rent and will achieve higher per capita concession sales:
  - Family shows and ice shows demonstrated good gains in attendance (doubling in 1999 from earlier years);
  - Concert attendance was down markedly while circus attendance stayed level.

## Mid-South Coliseum
## Recent Operating Income

| | 1999 | Percent of Revenues | 1998 | Percent of Revenues | 199 | Percent of Revenues |
|---|---|---|---|---|---|---|
| ***Operating Revenues*** | | | | | | |
| Coliseum Rentals | $438,171 | 17.6% | $374,328 | 15.3% | $353,028 | 13.5% |
| Concession Sales | $625,340 | 25.2% | $642,674 | 26.2% | $705,148 | 27.0% |
| Beer and Liquor Sales | $220,480 | 8.9% | $259,074 | 10.6% | $335,543 | 12.9% |
| Novelties Commissions | $70,255 | 2.8% | $120,414 | 4.9% | $165,159 | 6.3% |
| Special Services | $514,752 | 20.7% | $460,656 | 18.8% | $420,595 | 16.1% |
| Parking Revenues | $200,648 | 8.1% | $186,128 | 7.6% | $230,675 | 8.8% |
| Ticket Operations Revenue | $98,098 | 4.0% | $118,385 | 4.8% | $127,869 | 4.9% |
| Marketing Revenue | $16,261 | 0.7% | $22,064 | 0.9% | $29,752 | 1.1% |
| Ice Rental | $100,173 | 4.0% | $123,905 | 5.0% | $77,811 | 3.0% |
| Other Operating Income | $198,594 | 8.0% | $146,422 | 6.0% | $165,526 | 6.3% |
| **Total Revenues** | **$2,482,772** | **100.0%** | **$2,454,050** | **100.0%** | **$2,611,106** | **100.0%** |
| ***Operating Expenses*** | | | | | | |
| Concessions | $319,152 | 10.4% | $314,936 | 11.0% | $349,387 | 12.8% |
| Beer & Liquor | $69,623 | 2.3% | $96,929 | 3.4% | $121,227 | 4.4% |
| Special Services | $927,274 | 30.4% | $731,441 | 25.5% | $722,567 | 26.4% |
| Ticket Operations | $103,284 | 3.4% | $106,761 | 3.7% | $107,552 | 3.9% |
| Marketing | $1,952 | 0.1% | $1,640 | 0.1% | $3,986 | 0.1% |
| Ice Rental | $20,933 | 0.7% | $23,315 | 0.8% | $10,192 | 0.4% |
| Building Operations and G & A | $1,264,504 | 41.4% | $1,256,493 | 43.7% | $1,093,019 | 40.0% |
| Depreciation | $347,434 | 11.4% | $341,215 | 11.9% | $326,976 | 12.0% |
| **Total Expenses** | **$3,054,156** | **100.0%** | **$2,872,730** | **100.0%** | **$2,734,906** | **100.0%** |
| ***Net Operating Income*** | *($571,384)* | | *($418,680)* | | *($123,800)* | |

Source: Mid-South Coliseum audited financial statements.

## Mid-South Coliseum
## Capital Improvement Budget

| | | |
|---|---|---|
| Priority 1 | | |
| Central Box Location | $350,000 | |
| New Concession Stands | 300,000 | |
| New Condiment Counters | 10,000 | |
| Replace Dasher Boards | 200,000 | |
| New Sound System | 150,000 | |
| Backlot Security Gates | 2,000 | |
| New Ceiling Tiles/Insulation | 900,000 | |
| Dressing Room Upgrades | 150,000 | $2,062,000 |
| Priority 2 | | |
| Electrical Power Upgrade | $25,000 | |
| Boiler Replacement | 300,000 | |
| New Arena Lighting | 250,000 | |
| Spotlight Replacement | 88,000 | |
| Elevators | 150,000 | |
| Handicapped Seating/Ramps | 150,000 | |
| Parking Lot Expansion | 80,000 | $1,043,000 |
| Priority 3 | | |
| Card Entry System | $125,000 | |
| New Parking Lot Lighting | 250,000 | |
| Kitchen Equipment | 30,000 | |
| Office Chillers | 125,000 | |
| New Air Conditioning | 900,000 | $1,430,000 |
| | | |
| Total | | $4,535,000 |

Source: Mid-South Coliseum management.

**The Pyramid**
**Capital Improvement Budget**

| | Approved/In Progress | Budgeted 2001-2002 | Budgeted 2002-2003 | Budgeted 2003-2004 | BOH Proposal | Total |
|---|---|---|---|---|---|---|
| Show Catering Kitchen | $45,000 | - | - | - | - | $45,000 |
| Cupholders | 25,000 | - | - | - | - | 25,000 |
| Disabled Seating - Plaza | 40,000 | - | - | - | - | 40,000 |
| Freight Elevator Upgrade | 50,000 | - | - | - | - | 50,000 |
| Chiller Retrofit | 87,000 | - | - | - | - | 87,000 |
| Matrix Boards Computer | 14,000 | - | - | - | - | 14,000 |
| Dressing Room Upgrades | 75,000 | - | - | - | $150,000 | 225,000 |
| Outdoor Marquee | - | $275,000 | - | - | - | 275,000 |
| New Seat Risers | - | - | $1,100,000 | - | - | 1,100,000 |
| Basketball Floor | - | - | 135,000 | - | - | 135,000 |
| Sound System Upgrade | - | - | - | $1,000,000 | - | 1,000,000 |
| Ice Sheet Installation | - | - | - | - | 2,000,000 | 2,000,000 |
| Total | $336,000 | $275,000 | $1,235,000 | $1,000,000 | $2,150,000 | $4,996,000 |

Source: SMG management.

**List of Individuals and Organizations Interviewed**

Lois Stockton, Chair, Coliseum Board of Directors
Dr. John Bakke, Coliseum Board of Directors
Tommie Pardue, Coliseum Board of Directors
Frank Banks, Coliseum Board of Directors
Angelo Lucchesi, Coliseum Board of Directors
Bobby Lanier, Coliseum Board of Directors
Beth Wade, Managing Director, Mid-South Coliseum
Steve Fox, Assistant Director, Mid-South Coliseum
Margie Watson, Controller, Mid-South Coliseum
Alan Freeman, Vice President/General Manager, The Pyramid
Thomas L. Connors, Senior Vice President/Convention Centers, SMG
John D. Moore, Director of Operations, The Pyramid
Rick Masson, Chief Administrative Officer, City of Memphis
Tom Jones, Shelby County
Wayne S. Boyer, Director, Memphis Park Commission
Charlie Ryan, General Manager, TicketMaster
Kevin Kane, President & CEO, Memphis Convention & Visitors Bureau
Alan Herbert, Memphis Youth Hockey
David LeFevre, Beacon Sports Capital
Tiffany Brown, Executive Director, Memphis and Shelby County Sports Authority
Morris Jeffries, Consultant
Ross Bartow, former Director, Memphis and Shelby County Sports Authority

# Tab 5

# ADA Compliance Report

# Mid South Coliseum

# By

# Department of Justice

# Date

# Unknow

D. Ramp to animal drop-off entrance door

1) The ramp is inaccessible because the handrails are not on both sides of the ramp, do not have 12 inch extensions at the top and bottom of the ramp, and do not return to a wall, ground or post and are not rounded. Provide a ramp that is at least 36 inches wide with a slope not exceeding 1:12 and a cross slope not exceeding 1:50; with level landings at least as wide as the ramp and 60 inches long at the top and bottom of the ramp; and with edge protection at least 2 inches high at the drop off sides. Provide handrails that are between 1¼ inches and 1½ inches in diameter with a continuous gripping surface along both sides of the ramp, extending at least 12 inches beyond the top and bottom of the ramp parallel with the ground surface. Ensure that handrails are mounted between 34 inches and 38 inches above the ramp surface and 1½ inches from the wall, with ends rounded or returned smoothly to the floor, wall, or post, and that they do not rotate within their fittings. Ensure that the ramp and approaches are designed so that water will not accumulate on walking surfaces. Standards §§ 4.3.8, 4.8.

43. Within 2 years of the effective date of this Agreement, the City will complete the following modifications to **Mid-South Coliseum**, located at 996 Early Maxwell Boulevard, Memphis, TN:

A. Accessible Route throughout Facility: The routes to the wheelchair seating areas and other common areas are inaccessible due to ramps with slopes that exceed 1:12 (or 1:8 - 1:10 where applicable), metallic "tracks" over stairways that interfere with the use of platform lifts, temporary metallic ramps that do not comply with the Standards, a ramp near Concession C-9 with a slope of 20.6%, two ramps near C-10 with a slope of 23%, a ramp near column 14 with a slope of 12.3%, a route near columns 14 and 15 with a slope of 40.5%, other changes in level, and other deficiencies. Provide at least one accessible route within the boundary of the site connecting all wheelchair seating areas to entrances, food vending areas, toilet rooms, performance / gaming areas, and other public use areas that, to the maximum extent feasible, coincides with the route for the general public. The accessible route must have a minimum clear width of 36 inches, or a minimum clear width of 42 inches if there is a turn around an obstruction less than 48 inches wide; have passing spaces at least 60 inches by 60 inches at least every 200 feet; have a minimum clear headroom of 80 inches; have a surface that is firm, stable, and slip resistant; have, in the absence of a curb ramp, ramp, elevator, or platform lift, no level changes in excess of ½ inch

vertically; and have a running slope of less than 1:20 (5%) (or have been constructed as a fully accessible ramp) and a cross slope of less than 1:50 (2%). Standards §§ 4.3, 4.5, Fig. 7. [CITY: LET'S DISCUSS ALTERNATIVES, i.e., ALTERNATIVE ROUTE, PLACEMENT OF WHEELCHAIR SEATING]

B. Venue accessibility:

1) There are a total of 9,081 fixed seats. There is a wheelchair seating area measuring 92" by 317" with no fixed companion seats available. Provide 92 wheelchair seating areas, each with a minimum clear ground or floor space of 66 inches wide by 48 inches deep for forward or rear access, or 66 inches wide by 60 inches deep for side access. Ensure that the ground or floor at all wheelchair locations is level, firm, stable, and slip resistant; that wheelchair seating areas are an integral part of the fixed seating plan and are located so as to provide people with physical disabilities a choice of admission prices and lines of sight comparable to those available for members of the general public; that wheelchair seating areas adjoin an accessible route that also serves as a means of egress in case of emergency; and that at least one fixed companion seat is provided next to each wheelchair seating area. Standards §§ 4.1.3(19)(a), 4.5, 4.33.

2) The Mid South Coliseum is inaccessible to people with hearing impairments because although there are 50 or more fixed seats, there is no assistive listening system. Provide a permanently installed assistive listening system serving the fixed seating. Ensure that the seating served by the system is located within a 50 foot viewing distance of the stage or playing area and has a complete view of the stage or playing area. Provide 364 receivers for use by the general public and signage indicating their availability. 28 C.F.R. § 35.160; Standards §§ 4.30, 4.33.

C. Offices and Counters

1) South Entrance

a) The Counter at the South Entrance is inaccessible because it is mounted at 42.5 inches above the finished floor. Provide a counter on an accessible route such that a portion of the counter is at least 36 inches wide and no more than 36 inches above the finished floor, or provide an auxiliary counter with a maximum height of 36 inches in close proximity to the main counter, or provide equivalent facilitation. Equivalent facilitation may be provided in the form of a folding shelf attached to the main counter, an

auxiliary table nearby, a clip board made available to the public, or other means. Standards §§ 7.2(2), 4.3.

2) First Aid

a) The door to the First Aid Area is inaccessible because knob hardware is used. Provide a door with hardware that is easy to grasp with one hand and that does not require tight grasping, pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

b) The door to the First Aid Station is inaccessible because it has an opening width of only 28 inches. Provide a door with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

3) Meeting Rooms D, E, F, and G

a) The doors to these Meeting Rooms are inaccessible because knob hardware is used. Provide a door to each Meeting Room with hardware that is easy to grasp with one hand and that does not require tight grasping, pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

b) The doors to these Meeting Rooms are inaccessible because they have an opening width of only 28 inches. Provide a door to each Meeting Room with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

4) Walnut Room

a) The door to the Walnut Room is inaccessible because the hardware requires tight grasping and twisting to operate. Provide a door with hardware that is easy to grasp with one hand and that does not require tight grasping, pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

5) All Concession Areas (including C 1-10 and Pizza Hut)

a) These areas are inaccessible because their counters are mounted higher than 36 inches above the finished floor. Provide a counter on an accessible route such that a portion of the counter is at least 36 inches wide and no more than 36 inches above the finished floor. Standards §§ 7.2(1), 4.3.

6) Memphis Room/Board Room

a) The Memphis Room is inaccessible because knob hardware is used. Provide a door with hardware that is easy to grasp with one hand and that does not require tight grasping, pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

b) The route to the Memphis Room/Board Room is inaccessible because the Brothermail.com sign is a protruding object. Provide an accessible route at this location such that no objects with their bottom leading edges measuring between 27 inches and 80 inches above the finished floor protrude more than 4 inches into walks, halls, corridors, passageways, or aisles. Free-standing objects mounted on posts or pylons may overhang 12 inches maximum from 27 inches to 80 inches above the ground or finished floor. Standards § 4.4.

D. Toilet Rooms

1) Women's Toilet Room at Column 11

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The entranceway to the Women's Toilet Room is inaccessible because it is 31 inches wide. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured

between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) The route throughout the toilet room is inaccessible because it is only 35 inches wide. Provide an accessible route throughout the toilet room with a minimum clear width of 36 inches. Standards § 4.3.3.

d) No accessible mirror has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

e) The lavatory is inaccessible because the apron is 26.5 inches high. Provide a lavatory with the top of its rim or counter 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

f) The paper towel dispenser is inaccessible because the controls are mounted at 53 inches above the finished floor and require a forward approach. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

g) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

h) There is no accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall-mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

i) Designated accessible ambulatory stall:

(1) The ambulatory stall is inaccessible because the door is not self closing. Provide at least one stall that is exactly 36 inches wide with a toilet 18 inches from each wall or partition, an outward swinging, self-closing door, and parallel grab bars complying with Fig 30(d). Standards §§ 4.22.4, Fig. 30(d).

(2) The ambulatory toilet is inaccessible because the top of the seat is 16 inches above the finished floor. Provide a toilet with a seat that measures 17 to 19 inches above the finished floor. Standards §§ 4.16.3, 4.17.2, Fig. 30(d).

(3) No accessible coat hook has been provided. Provide a coat hook at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(4) The toilet paper dispenser is inaccessible because it is mounted above the grab bar in the alternate stall. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

(5) The grab bars at the toilet are inaccessible because they are mounted at varying heights. Provide grab bars that are mounted between 33 and 36 inches above the finished floor. Standards § 4.17.6, Fig. 30.

2) Men's Toilet Rooms at Columns 6 and 7

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The entranceway to the Men's Toilet Room is inaccessible because it is 31 inches wide. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) No accessible mirror has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

d) The lavatory is inaccessible because the apron is mounted 27 inches high. Provide a lavatory with the top of its rim or counter 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

e) The paper towel dispenser is inaccessible because the controls are mounted at 53 inches above the finished floor and require a forward approach. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

f) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) The designated accessible stall is incorrectly configured as an ambulatory stall, and there is no standard accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall-mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

h) No accessible coat hook has been provided. Provide a coat hook at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a

forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

3) Women's Toilet Rooms at Columns 2 and 3

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The entranceway to the Women's Toilet Room is inaccessible because it has an opening width of 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) The route throughout the toilet room is inaccessible because it is only 35 inches wide. Provide an accessible route throughout the toilet room with a minimum clear width of 36 inches. Standards § 4.3.3.

d) The lavatory is inaccessible because the apron is only 26.5 inches high. Provide a lavatory with the top of its rim or counter 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

e) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

f) The paper towel dispenser is inaccessible because the controls are mounted at 53 inches above the finished floor and require a forward approach. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair.

Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

g) There is no accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall-mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

h) Designated accessible ambulatory toilet stall:

(1) The ambulatory stall toilet is inaccessible because the top of the seat is 16 inches above the finished floor. Provide a toilet with a seat that measures 17 to 19 inches above the finished floor. Standards §§ 4.16.3, 4.17.2, Fig. 30(d).

(2) No accessible coat hook has been provided. Provide a coat hook at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(3) The toilet paper dispenser is inaccessible because it is mounted above the grab bar. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

(4) The side grab bars at the toilet are inaccessible because they are mounted at varying heights. Provide side grab bars that are mounted between 33 and 36 inches above the finished floor. Standards § 4.17.6, Fig. 30.

4) Men's Toilet Rooms at Columns 30 and 31

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches

above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The doorway to the Men's Toilet Room is inaccessible because it has an opening width of 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) No accessible mirror has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

d) The lavatory is inaccessible because the bottom edge of the apron is mounted 27 inches high. Provide a lavatory with the top of its rim or counter 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

e) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

f) The paper towel dispenser is inaccessible because the controls are mounted at 53 inches above the finished floor and require a forward approach. Provide a (*identify amenity) with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

g) The designated accessible stall is incorrectly configured as an ambulatory stall, and there is no standard accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall-mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe

clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

h) No accessible coat hook has been provided. Provide a coat hook at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

5) Women's Toilet Room, North Lobby near column 26 (stalls)

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The doorway to the toilet room is inaccessible because it has an opening width of only 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) No accessible mirror has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

d) The paper towel dispenser is inaccessible because the controls are mounted at 55 inches above the finished floor over a 21 inch obstruction. Provide a paper towel dispenser such that the controls comply with Fig. 5 for a forward reach or with Fig. 6 for a side reach and such that it is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach, respectively, by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

e) The lavatory is inaccessible because the apron is 27 inches high. Provide a lavatory with the top of its rim or counter 34 inches or less above the finished floor; the bottom edge of the apron at least

29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

f) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) There is no accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall-mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

h) Designated accessible ambulatory stall:

(1) The ambulatory stall is inaccessible because the partitions are 39 inches apart, the toilet is not centered, and the door is not outward swinging or self closing. Provide at least one stall that is exactly 36 inches wide with a toilet 18 inches from each wall or partition, an outward swinging, self-closing door, and parallel grab bars complying with Fig 30(d). Standards §§ 4.22.4, Fig. 30(d).

(2) The toilet is inaccessible because the top of the seat is 16 inches above the finished floor. Provide a toilet with a seat that measures 17 to 19 inches above the finished floor. Standards §§ 4.16.3, 4.17.2, Fig. 30(d).

(3) The toilet is inaccessible because the flush control is too high and obstructs the grab bar. Provide a flush control mounted on the "open" side of the toilet's clear floor space; 44 inches or less above the finished floor; and requiring a maximum of 5 pounds of force to operate; or provide an automatic flush device. Standards §§ 4.16.5, 4.17.2, 4.27.4.

(4) No accessible coat hook has been provided. Provide a coat hook at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side

approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(5) The toilet paper dispenser is inaccessible because it is mounted under the grab bar and is on the wrong wall. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

(6) The side grab bars at the toilet are inaccessible because they are mounted at 31 inches high. Provide grab bars that are mounted between 33 and 36 inches above the finished floor. Standards § 4.17.6, Fig. 30.

6) Men's Toilet Room near column 28 (stalls)

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The doorway to the toilet room is inaccessible because it has an opening width of only 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) No accessible mirror has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

d) The paper towel dispenser is inaccessible because the controls are mounted at 55 inches above the finished floor over a 21 inch obstruction. Provide a paper towel dispenser such that the controls comply with Fig. 5 for a forward reach or with Fig. 6 for a side reach and such that it is accompanied by clear floor space of 30 by

48 inches that allows a forward or parallel approach, respectively, by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

e) The lavatory is inaccessible because the apron is mounted at 27 inches high. Provide a lavatory with the top of its rim or counter 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

f) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) The urinal is inaccessible because the rim is 24.5 inches high. Provide a urinal with an elongated rim mounted 17 inches or less above the finished floor, a clear floor space of at least 30 inches wide and 48 inches deep centered on the urinal, and a flush control height of 44 inches or less above the finished floor. Standards §§ 4.18.2, 4.18.3, 4.18.4.

h) Designated accessible standard stall:

(1) The toilet is inaccessible because the flush control is on the closed side. Provide a flush control mounted on the "open" side of the toilet's clear floor space; 44 inches or less above the finished floor; and requiring a maximum of 5 pounds of force to operate; or provide an automatic flush device. Standards §§ 4.16.5, 4.17.2, 4.27.4.

(2) No accessible coat hook has been provided. Provide a coat hook at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(3) The toilet paper dispenser is inaccessible because it is not mounted under the grab bar. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches

under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

i) Although there are 6 stalls, there is no ambulatory stall provided. Provide at least one stall that is exactly 36 inches wide with a toilet 18 inches from each wall or partition, an outward swinging, self-closing door, and parallel grab bars complying with Fig 30(d). Standards §§ 4.22.4, Fig. 30(d).

7) Men's Toilet Room near column 4 (stalls)

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The doorway to the toilet room is inaccessible because it has an opening width of only 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) The paper towel dispenser is inaccessible because the controls are mounted at 55 inches above the finished floor over a 21 inch obstruction. Provide a paper towel dispenser such that the controls comply with Fig. 5 for a forward reach or with Fig. 6 for a side reach and such that it is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach, respectively, by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

d) The lavatory is inaccessible because the apron is mounted at 27 inches above the finished floor. Provide a lavatory with the top of its rim or counter 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

e) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

f) Designated accessible standard toilet stall:

(1) The toilet is inaccessible because the flush control is on the closed side. Provide a flush control mounted on the "open" side of the toilet's clear floor space; 44 inches or less above the finished floor; and requiring a maximum of 5 pounds of force to operate; or provide an automatic flush device. Standards §§ 4.16.5, 4.17.2, 4.27.4.

(2) No accessible coat hook has been provided. Provide a coat hook at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(3) The toilet paper dispenser is inaccessible because it is not mounted under the grab bar and is mounted on the wrong wall. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

8) Women's Toilet Room near column 4 (stalls)

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The doorway to the toilet room is inaccessible because it has an opening width of only 31 inches. Provide a doorway with a clear

opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) No accessible mirror has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

d) The paper towel dispenser is inaccessible because the controls are mounted at 55 inches above the finished floor over a 21 inch obstruction. Provide a paper towel dispenser such that the controls comply with Fig. 5 for a forward reach or with Fig. 6 for a side reach and such that it is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach, respectively, by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

e) The lavatory is inaccessible because the apron is mounted at a height of 27 inches. Provide a lavatory with the top of its rim or counter 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

f) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) Designated accessible standard toilet stall:

(1) No accessible coat hook has been provided. Provide a coat hook at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(2) The toilet paper dispenser is inaccessible because it is not mounted under the grab bar. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches

under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

(3) The rear grab bar at the toilet is inaccessible because it is only 30 inches long. Provide a rear grab bar that is at least 36 inches in overall length with the closer end no more than 6 inches from the side wall. Standards § 4.17.6, Fig. 30.

h) Although there are 6 stalls, there is no ambulatory stall provided. Provide at least one stall that is exactly 36 inches wide with a toilet 18 inches from each wall or partition, an outward swinging, self-closing door, and parallel grab bars complying with Fig 30(d). Standards §§ 4.22.4, Fig. 30(d).

9) Women's Toilet Room near columns 26 and 27 (stalls)

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The doorway to the toilet room is inaccessible because it has an opening width of only 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) The route through the toilet room is inaccessible because the path of travel is only 35 inches wide. Provide an accessible route through the toilet room with a minimum clear width of 36 inches. Standards § 4.3.3.

d) No accessible mirror has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

e) The paper towel dispenser is inaccessible because the controls are mounted at 59 inches above the finished floor. Provide a paper

towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

f) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) The designated accessible stall is incorrectly configured as an ambulatory stall, and there is no standard accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall-mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

10) Men's Toilet Room near columns 22 and 23 (stalls)

a) The toilet room sign is inaccessible. Provide a toilet room sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The doorway to the toilet room is inaccessible because it has an opening width of only 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) The paper towel dispenser is inaccessible because the controls are mounted at 58 inches above the finished floor. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person

using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

d) No accessible mirror has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

e) The lavatory is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

f) The urinal is inaccessible because the rim is 24 inches high. Provide a urinal with an elongated rim mounted 17 inches or less above the finished floor, a clear floor space of at least 30 inches wide and 48 inches deep centered on the urinal, and a flush control height of 44 inches or less above the finished floor. Standards §§ 4.18.2, 4.18.3, 4.18.4.

g) The designated accessible stall is incorrectly configured as an ambulatory stall, and there is no standard accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall-mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

E. Dressing Rooms: There are several unisex Dressing Rooms throughout the facility (i.e., North / South, Grey, Red). Each of these Dressing Rooms have a number of inaccessible features, including signage, inaccessible toilet rooms, and inaccessible shower stalls. Provide at least one accessible unisex Dressing Room per cluster, including the following:

1) Provide accessible directional signage with the International Symbol of Accessibility at inaccessible dressing rooms indicating the location of the nearest accessible toilet room, and provide accessible signage with the International Symbol of Accessibility at all accessible dressing rooms. Standards §§ 4.1.2(7)(d), 4.1.6(3)(e)(iii), 4.30.1, 4.30.2, 4.30.3, 4.30.5, 4.30.7.

2) Provide a door with hardware that is easy to grasp with one hand and that does not require tight grasping, pinching, or twisting of the wrist to

operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

3) If mirrors are provided in dressing rooms of the same use, provide one full-length mirror in the accessible unisex dressing room(s). The mirror should measure at least 18 inches wide by 54 inches high, and be mounted in a position affording a view to a person seated on the bench as well as to a person in a standing position. Standards §§ 4.35, 4.30, 4.26.3, 4.2, 4.3, Fig. 3.

4) There is no accessible fixed bench in the dressing room. Provide a 24 inch by 48 inch bench fixed to the wall along the bench's longer dimension. Ensure that the bench has sufficient structural strength and is mounted with its surface between 17 inches and 19 inches above the finished floor. Provide clear floor space alongside the bench to allow a person using a wheelchair to make a parallel transfer onto the bench. Standards §§ 4.35.4, 4.26.3.

5) Provide an accessible toilet room such that all of the room's elements, including signage, door, door hardware, clear floor space, water closet, stall size and arrangement, stall door, urinal (if provided), grab bars, lavatory, mirror, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.18, 4.19, 4.26, 4.27, 4.30, Fig. 30.

6) Provide a shower in this room that is exactly 36 inches wide and 36 inches deep with a 48 inch long and 36 inch wide clear floor space alongside the shower opening, and an L-shaped shower seat mounted on the wall opposite the controls and extending the full depth of the stall; OR a shower that is at least 30 inches deep and 60 inches wide with no curb or threshold and with a 36 inch deep and 60 inch wide clear floor space at the shower opening. Ensure that the shower has grab bars, controls, a shower spray unit, and a seat, curb, and enclosure, if provided, that comply fully with the Standards and with Figs. 35, 36, and 37, as applicable. Standards § 4.21, Figs. 35, 36, 37.

F. Drinking Fountains:

1) At Upper Level Women's Toilets, near columns 10 and 11

a) The circulation path near the hi-lo drinking fountain near columns 10 and 11 is inaccessible because the high fountain is not detectable to a blind person using a cane. Provide a high drinking

fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although 2 drinking fountains are provided, there is no accessible drinking fountain because the spout is mounted at 42 inches, and the controls require 8 pounds of force. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

2) At Upper Level Men's Toilets, near columns 6 and 7

a) The circulation path near the hi-lo drinking fountain near columns 6 and 7 is inaccessible because the high fountain is not detectable to a blind person using a cane. Provide a high drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although 2 drinking fountains are provided, there is no accessible drinking fountain because the controls require 8 pounds of force. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the

unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

3) At Upper Level, near columns 2 and 3

a) The circulation path near the hi-lo drinking fountain near columns 2 and 3 is inaccessible because the high fountain is not detectable to a blind person using a cane. Provide a high drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although 2 drinking fountains are provided, there is no accessible drinking fountain because the controls require 8 pounds of force. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for

those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

4) At Upper Level, near columns 30 and 31

a) The circulation path near the hi-lo drinking fountain near columns 30 and 31 is inaccessible because the high fountain is not detectable to a blind person using a cane. Provide a high drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although 2 drinking fountains are provided, there is no accessible drinking fountain because the water height is less than 4 inches, and the controls require 7 pounds of force to operate. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

5) At Lower Level between Meeting Rooms F and G

a) The circulation path near the drinking fountain is inaccessible because the fountain is not detectable to a blind person using a cane. Provide a drinking fountain at this location such that its

bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) The drinking fountain is inaccessible because the controls require 8 pounds of force to operate, and its spout height is 42 inches above the finished floor. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

6) At South Dressing Room (Red)

a) The circulation path near the drinking fountain is inaccessible because the fountain is not detectable to a blind person using a cane. Provide a drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although a drinking fountain is provided, there is no accessible drinking fountain because the water flow height is not at least 4 inches, the flow is not within 3 inches of the front of the fountain, and the controls require 14 pounds of pressure to operate. Provide at least one drinking fountain with a spout height no higher than 36

inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

7) At Lower Level between Meeting Rooms D and E

a) The circulation path near the drinking fountain is inaccessible because the fountain is not detectable to a blind person using a cane. Provide a drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) The drinking fountain is inaccessible because the controls require 8 pounds of force to operate, and its spout height is 42 inches above the finished floor. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the

use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

8) At Women's Toilets in North Lobby, near columns 27

a) The circulation path near the hi-lo drinking fountain near column 27 is inaccessible because the high fountain is not detectable to a blind person using a cane. Provide a high drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although 2 drinking fountains are provided, there is no accessible drinking fountain because the water height is less than 4 inches, and the controls require 7 pounds of force. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

9) At Lower Level, near column 29

a) Although 2 drinking fountains are provided, there is no accessible drinking fountain because the water height is less than 4 inches, and the controls require 7 pounds of force. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

10) At Lower Level, near column 5

a) Although 2 drinking fountains are provided, there is no accessible drinking fountain because the water height is less than 4 inches, and the controls require 7 pounds of force. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use

wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

11) At Lower Level, near column 4

a) Although 2 drinking fountains are provided, there is no accessible drinking fountain because the water height is less than 4 inches, and the controls require 7 pounds of force. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

44. Within 2 years of the effective date of this Agreement, the City will complete the following modifications to **Charles E. Powell Community Center**, located at 810 Western Park Drive, Memphis, TN:

A. Parking: Although the parking lot has a total of approximately 50 parking spaces, an inadequate number are designated as reserved for people with disabilities. On the shortest accessible route to the accessible entrance, provide 1 van accessible space and the appropriate number of standard space(s) designated as reserved for people with disabilities. See chart at Standards § 4.1.2(8). Standard accessible spaces shall be a minimum of 96 inches wide and served by access aisles at least 60 inches wide. Van accessible spaces shall be a minimum of 96 inches wide and served by access aisles at least 96 inches wide. All spaces designated as reserved for people with disabilities shall have vertical signs with the International Symbol

# Tab 6

# ADA Compliance report

# Mid South Coliseum

# By

# ADC, Inc

# Date

# Unknown

# Mid-South Coliseum

**Mid-South Coliseum**, located at 996 Early Maxwell Boulevard, Memphis, TN.

## A. Accessible Route throughout Facility:

The routes to the wheelchair seating areas and other common areas are inaccessible due to ramps with slopes that exceed 1:12 (or 1:8 - 1:10 where applicable), metallic "tracks" over stairways that interfere with the use of platform lifts, temporary metallic ramps that do not comply with the Standards, a ramp near Concession C-9 with a slope of 20.6%, two ramps near C-10 with a slope of 23%, a ramp near column 14 with a slope of 12.3%, a route near columns 14 and 15 with a slope of 40.5%, other changes in level, and other deficiencies. Provide at least one accessible route within the boundary of the site connecting all wheelchair seating areas to entrances, food vending areas, toilet rooms, performance areas, and other public use areas that, to the maximum extent feasible, coincides with the route for the general public. The accessible route must have a minimum clear width of 36 inches, or a minimum clear width of 42 inches if there is a turn around an obstruction less than 48 inches wide; have a minimum clear headroom of 80 inches; have a surface that is firm, stable, and slip resistant; have, in the absence of a curb ramp, ramp, elevator, or platform lift, no level changes in excess of ½ inch vertically; and have a running slope of less than 1:20 (5%) (or have been constructed as a fully accessible ramp) and a cross slope of less than 1:50 (2%). Standards §§ 4.3, 4.5, Fig. 7.

## B. Venue accessibility:

1) There are a total of **9,081 fixed seats.** There is a wheelchair seating area measuring 92" by 317" with no fixed companion seats. (**DOJ Note**: Provide 92 wheelchair seating areas, each with a minimum clear ground or floor space of 66 inches wide by 48 inches deep for forward or rear access, or 66 inches wide by 60 inches deep for side access; that wheelchair seating areas are an integral part of the fixed seating plan and are located so as to provide people with physical disabilities a choice of admission prices and lines of sight comparable to those available for members of the general public; that wheelchair seating areas adjoin an accessible route that also serves as a means of egress in case of emergency; and that at least one fixed companion seat is provided next to each wheelchair seating area. Standards §§ 4.1.3(19)(a), 4.5, 4.33.)

2) The Mid South Coliseum needs an **assistive listening system and assistive listening devices.** Provide a permanently installed assistive listening system serving the fixed seating. Ensure that the seating served by the system is located within a 50 foot viewing distance of the stage or playing area and has a complete view of the stage or playing area. Provide 364 receivers for use by the general public and signage indicating their availability. 28 C.F.R. § 35.160, Standards §§ 4.30, 4.33.

## C. Offices and Counters

### 1) South, North and West Entrances

a) **The Ticket Counters** at the South, North and West Entrances are mounted at 42.5 inches above the finished floor. Provide a counter on an accessible route such that a portion of the counter is at least 36 inches wide and no more than 36 inches above the finished floor, or provide an auxiliary counter with a maximum height of 36 inches in close proximity to the main counter, or provide equivalent facilitation. Equivalent facilitation may be provided in the form of a folding shelf attached to the main counter, an auxiliary table nearby, a clip board made available to the public, or other means. Standards §§ 7.2(2), 4.3.

**Note:** The South and North entrances are not wheelchair accessible from outside or inside.

**Note:** The West entrance is the designated accessible entrance, but has no accessible features such as a lift or ramp to the lower or upper concourses. The V.I.P. entrance could be an alternate accessible entrance.

## D. Lower Concourse

**Note:** There are no compliant handrails within the facility that are 1 ½ inches or less in diameter.

1) The **West entrance is located between columns 31 and 2** and 6 feet above the Lower Concourse floor. Two stairways provide access to the Lower Concourse. A pair of toothed rails remains from an earlier chair lift. The electrical controls have been disabled and torn up.

2) **The doors between columns 1 and 2** need to have proper hardware and no more than 5 pounds of force to open. This note applies to all doors in this facility.

   a) Beyond the doors is a ramp up to the arena floor that has a running slope greater than 8.3 percent.

3) **The Concession area** between columns 2 and 3 has a counter surface higher than 36 inches.

4) **The doors between columns 3 and 4** need to have proper hardware and no more than 5 pounds of force to open.

   a) **Beyond the doors is a ramp** up to the arena floor that has a running slope greater than 8.3 percent.

**5) Men's Toilet Room between Columns 4 and 5** has five stalls including the ambulatory stall and 6 urinals.

a) Provide **a toilet room sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **doorway** to the toilet room has an opening width of 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) The **paper towel dispenser controls** are mounted at 56 inches above the finished floor over a 21 inch obstruction. Provide a paper towel dispenser such that the controls comply with Fig. 5 for a forward reach or with Fig. 6 for a side reach and such that it is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach, respectively, by a person using a wheelchair.Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

d) The **lavatory apron** is mounted at 26 3/8 inches above the finished floor. Provide a lavatory with the top of its rim 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

e) The **lavatory hot water pipes** are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

f) **Designated accessible standard toilet stall:**

(1) The **toilet flush control** is on the closed side. Provide a flush control mounted on the "open" side of the toilet's clear floor space; 44 inches or less above the finished floor; and requiring a maximum of 5 pounds of force to operate; or provide an automatic flush device. Standards §§ 4.16.5, 4.17.2, 4.27.4.

(2) Provide **a coat hook** at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(3) The **toilet paper dispenser** is mounted more than 40 inches above the floor and is mounted on the wrong wall. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

**6) Women's Toilet Room near columns 6 and 7 has seven stalls including the ambulatory stall.**

a) Provide a **toilet room sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **doorway** to the toilet room has an opening width of 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) Provide a **mirror** with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

d) The **paper towel dispenser controls** are mounted at 55 inches above the finished floor over a 21 inch obstruction. Provide a paper towel dispenser such that the controls comply with Fig. 5 for a forward reach or with Fig. 6 for a side reach and such that it is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach, respectively, by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

e) The **lavatory apron** is mounted at a height of 27 inches. Provide a lavatory with the top of its rim 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

f) The **lavatory hot water pipes** are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) **Designated accessible standard toilet stall:**

(1) Provide a **coat hook** at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3,

4.2.4, 4.2.5, 4.2.6.

(2) The **toilet paper dispenser** is mounted more than 40 inches above the floor. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

(3) The **rear grab bar** is only 30 inches long. Provide a rear grab bar that is at least 36 inches in overall length with the closer end no more than 6 inches from the side wall. Standards § 4.17.6, Fig. 30.

h) Although there are **6 stalls**, there is no ambulatory stall provided. Provide at least one stall that is exactly 36 inches wide with a toilet 18 inches from each wall or partition, an outward swinging, self closing door, and parallel grab bars complying with Fig 30(d). Standards §§ 4.22.4, Fig. 30(d).

7) **Office Door, located between columns 7** and 8

a) The **Office door** has an **opening width** of only 31 inches. Provide a door with a clear opening of 32 inches with the door open 90 degrees, as measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

b) Provide **door hardware** that has Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

8) **Office Door, located between columns 9 and 10**

a) The Office **door** has an **opening width** of only 31 inches. Provide a door with a clear opening of 32 inches with the door open 90 degrees, as measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

b) Provide **door hardware** that has Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

9) **Office Door, located at** columns 11

a) The Office **door** has an **opening width** of only 31 inches. Provide a door with a clear opening of 32 inches with the door open 90 degrees, as measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

b) Provide **door hardware** that has Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

10) **First Aid, door located at column 12.**

a) The **door** to the First Aid Station has an **opening width** of only 28 inches . Provide a door with a clear opening of 32 inches with the door open 90 degrees, as measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

b) Provide **door hardware** that has Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

11) **Meeting Rooms D, E, F, and G**

a) The **doors** to these Meeting Rooms have knob **hardware.** Provide door hardware that has Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

b) The **doors** to these Meeting Rooms have an **opening width** of 28 inches per leaf. Provide a door to each Meeting Room with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

12) **The Walnut Room** needs **Lever-operated mechanisms**, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

All Concession Areas have counters mounted higher than 36 inches (40 ½) above the finished floor. Provide a counter on an accessible route such that a portion of the counter is at least 36 inches wide and no more than 36 inches above the finished floor. Standards §§ 7.2(1), 4.3.

**Note:** Concession counters are located between Columns 12, 13; 30, 31; 2 & 3.

13) **Memphis Room/Board Room**: Knob **hardware** is used. Provide Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

a) The **route** to the Memphis Room/Board Room has the Brothermail.com **protruding sign**. The bottom leading edges measuring between 27 inches and 80 inches above the finished floor protrude more than 4 inches into walks, halls, corridors, passageways, or aisles. Free-standing objects mounted on posts or pylons may overhang 12 inches maximum from 27 inches to 80 inches above the ground or finished floor. Standards § 4.4.

14) At **column 14,** there is a **ramp** with a running slope greater than 8.3 percent. **Between columns 14 and 15,** there is a **ramp up** to the Arena floor that has a running slope greater than 9.5 percent. Both of these ramps should have a running slope no greater than 8.3 percent. Also, the V.I.P. Entrance is located between columns 14 and 15 as well as one of two service entrances. This entrance can easily be made accessible for wheelchair use. The parking spaces outside this entrance can be made accessible.

15) **Blue/Green Dressing Rooms at Column 16**: There are several unisex Dressing Rooms off the main corridor. Each of these Dressing Rooms has a number of inaccessible features, including signage, inaccessible toilet rooms, and inaccessible shower stalls. Provide at least one accessible unisex Dressing Room per cluster, including the following:

a) Provide accessible **directional signage** with the International Symbol of Accessibility at inaccessible dressing rooms indicating the location of the nearest accessible toilet room, and provide accessible signage with the International Symbol of Accessibility at all accessible dressing rooms. Standards §§ 4.1.2(7)(d), 4.1.6(3)(e)(iii), 4.30.1, 4.30.2, 4.30.3, 4.30.5, 4.30.7.

b) Provide a **door** with **Lever-operated mechanisms**, push-type mechanisms, and U shaped handles are acceptable designs. Standards § 4.13.9.

c) If **mirrors** are provided in dressing rooms of the same use, provide one full-length mirror in the accessible unisex dressing room(s). The mirror should measure at least 18 inches wide by 54 inches high, and be mounted in a position affording a view to a person seated on the bench as well as to a person in a standing position. Standards §§ 4.35, 4.30, 4.26.3, 4.2, 4.3, Fig. 3.

d) In the **dressing rooms**, provide a 24 inch by 48 inch **bench** fixed to the wall along the bench's longer dimension. Ensure that the bench has sufficient structural strength and is mounted with its surface between 17 inches and 19 inches above the finished floor. Provide clear floor space alongside the bench to allow a person using a wheelchair to make a parallel transfer onto the bench. Standards §§ 4.35.4, 4.26.3.

e) Provide an **accessible toilet room** such that all of the room's elements, including signage, door, door hardware, clear floor space, water closet, stall size and arrangement, stall door, urinal (if provided), grab bars, lavatory, mirror, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.18, 4.19, 4.26, 4.27, 4.30, Fig. 30.

f) Provide a **shower** in this room that is exactly 36 inches wide and 36 inches deep with a 48 inch long and 36 inch wide clear floor space alongside the shower opening, and an L-shaped shower seat mounted on the wall opposite the controls

and extending the full depth of the stall; OR a shower that is at least 30 inches deep and 60 inches wide with no curb or threshold and with a 36 inch deep and 60 inch wide clear floor space at the shower opening. Ensure that the shower has grab bars, controls, a shower spray unit, and a seat, curb, and enclosure, if provided, that comply fully with the Standards and with Figs. 35, 36, and 37, as applicable. Standards §§ 4.21, Figs. 35, 36, 37.

16) **Women's Single user toilet room at Column 16:**

a) There are **no compliant features** in this room.

b) The room is **not large enough to provide accessible features**

c) **Provide a sign to direct persons to the nearest accessible toilet room.** Provide a sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

17) **Men's Single user toilet room near Column 17:**

a) There are **no compliant features** in this room.

b) The **room is not large enough to provide accessible features**

c) **Provide a sign to direct persons to the nearest accessible toilet room.** Provide a sign with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

18) **Red/Grey Dressing Rooms at Column 17:** There are four unisex Dressing Rooms off the main corridor. Each of these Dressing Rooms has a number of inaccessible features, including signage, inaccessible toilet rooms, and inaccessible shower stalls. Provide at least one accessible unisex Dressing Room per cluster, including the following:

a) Provide **accessible directional signage** with the International Symbol of Accessibility at inaccessible dressing rooms indicating the location of the nearest accessible toilet room, and provide accessible signage with the International Symbol of Accessibility at all accessible dressing rooms. Standards §§ 4.1.2(7)(d), 4.1.6(3)(e)(iii), 4.30.1, 4.30.2, 4.30.3, 4.30.5, 4.30.7.

b) Provide a **door** with **Lever-operated mechanisms**, push-type mechanisms, and U shaped handles are acceptable designs. Standards § 4.13.9.

c) If **mirrors a**re provided in dressing rooms of the same use, provide one full-length mirror in the accessible unisex dressing room(s). The mirror should measure at least 18 inches wide by 54 inches high, and be mounted in a position affording a view to a person seated on the bench as well as to a person in a standing position. Standards §§ 4.35, 4.30, 4.26.3, 4.2, 4.3,

d) In the **dressing rooms**, provide a 24 inch by 48 inch **bench** fixed to the wall along the bench's longer dimension. Ensure that the bench has sufficient structural strength and is mounted with its surface between 17 inches and 19 inches above the finished floor. Provide clear floor space alongside the bench to allow a person using a wheelchair to make a parallel transfer onto the bench . Standards §§ 4.35.4, 4.26.3.

e) Provide an **accessible toilet room** such that all of the room's elements, including signage, door, door hardware, clear floor space, water closet, stall size and arrangement, stall door, urinal (if provided), grab bars, lavatory, mirror, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.18, 4.19, 4.26, 4.27, 4.30, Fig. 30.

f) Provide a **shower** in this room that is exactly 36 inches wide and 36 inches deep with a 48 inch long and 36 inch wide clear floor space alongside the shower opening, and an L-shaped shower seat mounted on the wall opposite the controls and extending the full depth of the stall; OR a shower that is at least 30 inches deep and 60 inches wide with no curb or threshold and with a 36 inch deep and 60 inch wide clear floor space at the shower opening. Ensure that the shower has grab bars, controls, a shower spray unit, and a seat, curb, and enclosure, if provided, that comply fully with the Standards and with Figs. 35, 36, and 37, as applicable. Standards §§ 4.21, Figs. 35, 36, 37.

19) **Office doors between Columns 23 and 26:**

a) The Office **door** has an **opening width** of only 31 inches. Provide a door with a clear opening of 32 inches with the door open 90 degrees, as measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

b) Provide **door hardware** that has Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. Standards § 4.13.9.

c) Provide a room **sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

20) **Women's Toilet Room near columns 26 and 27**

a) Provide a toilet room **sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **doorway** to the toilet room has an **opening width** of only 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) The **path of travel** is only 35 inches wide through the toilet. Provide an accessible route through the toilet room with a minimum clear width of 36 inches. Standards § 4.3.3.

d) Provide a **mirror** with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

e) The **paper towel controls** are mounted at 59 inches above the finished floor. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

f) The **lavatory hot water pipes** are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) The **designated accessible stall** is incorrectly configured as an ambulatory stall, and there is no standard accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab

bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

21) **Men's Toilet Room between columns 28 and 29:**

a) Provide a toilet room **sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **doorway** to the toilet room has an opening width of 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards §§ 4.13.5, Fig. 24.

c) Provide a **mirror** with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards §§ 4.19.6.

d) The **paper towel dispenser controls** are mounted at 55 inches above the finished floor over a 21 inch obstruction. Provide a paper towel dispenser such that the controls comply with Fig. 5 for a forward reach or with Fig. 6 for a side reach and such that it is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach, respectively, by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

e) The **lavatory apron** is mounted at 27 inches high. Provide a lavatory with the top of its rim 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

f) The **lavatory hot water pipes** are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) The **urinal rim** is 24 1/2 inches high. Provide a urinal with an elongated rim mounted 17 inches or less above the finished floor, a clear floor space of at least 30 inches wide and 48 inches deep centered on the urinal, and a flush control height of 44 inches or less above the finished floor. Standards §§ 4.18.2, 4.18.3, 4.18.4.

h) **Designated accessible standard stall:**

(1) The **toilet flush control** is on the **closed side**. Provide a flush control mounted on the "open" side of the toilet's clear floor space; 44 inches or less above the finished floor; and requiring a maximum of 5 pounds of force to operate; or provide an automatic flush device. Standards §§ 4.16.5, 4.17.2, 4.27.4.

(2) Provide a **coat hook** at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach y a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(3) **The toilet paper dispenser** is mounted 42 inches above the floor. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

i) Although there are **6 stalls,** there is **no ambulatory stall provided**. Provide at least one stall that is exactly 36 inches wide with a toilet 18 inches from each wall or partition, an outward swinging, self closing door, and parallel grab bars complying with Fig 30(d). Standards §§ 4.22.4, Fig. 30(d).

j) Provide a **baby changing station** that is accessible by those with mobility constraints.

22) The **doors between columns 29 and 32** need to have proper hardware and no more than 5 pounds of force to open.

a) Beyond the doors is a **ramp** up to the arena floor that has a running slope greater than 8.3 percent.

**End of Lower Concourse**

**Upper Concourse**

**Note**: All Concession Areas (including C 1-10 and Pizza Hut) have counters mounted higher than 36 inches above the finished floor. Provide a counter on an accessible route such that a portion of the counter is at least 36 inches wide and no more than 36 inches above the finished floor. Standards §§ 7.2(1), 4.3.

22) The **doors between columns 1 and 2** need to have proper hardware and no more than 5 pounds of force to open.

a) **Beyond the doors is a stair** up to a landing.

b) Provide a **alphabetical section sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

23) **Between columns 1 and 2, there are two sets of stairs** leading down to the main or West entrance.

24) **Between columns 1 and 2, there are doors to the arena**.

a) There is a **stair leading up to a landing.**

25) **Women's Toilet Rooms at Columns 2 and 3**

a) Provide a **toilet room sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **entranceway to the Women's Toilet Room** has an **opening width** of 31 inches. Provide a doorway with a clear opening of 32 inches between the door jamb faces. Standards § 4.13.5, Fig. 24.

c) The **route** throughout the toilet room is **35 inches wide**. Provide an accessible route throughout the toilet room with a minimum clear width of 36 inches. Standards § 4.3.3.

d) The **lavatory** is inaccessible because the apron is only 26 1/2 inches high. Provide a lavatory with the top of its rim 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

e) The **lavatory** needs to have the hot water pipes insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

f) The **paper towel dispenser controls** are mounted at 53 inches above the finished floor and require a forward approach. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach and accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

g) Provide **a "standard" accessible toilet stall** at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall-mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

h) **Designated accessible ambulatory toilet stall:**

(1) The ambulatory stall toilet seat is 16 inches above the finished floor. Provide a toilet with a seat that measures 17 to 19 inches above the finished floor. Standards §§ 4.16.3, 4.17.2, Fig. 30(d).

(2) Provide a **coat hook** at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(3) The **toilet paper dispenser** is mounted above the grab bar. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

(4) The **side grab bars** at the toilet are mounted at varying heights. Provide side grab bars that are mounted between 33 and 36 inches above the finished floor on both walls Standards § 4.17.6, Fig. 30.

25) **Between columns 3 and 4, there are doors to the arena.**

a) There is a **stair leading up to a landing.**

26) **Concession Area between Columns 4 and 5.**

26) **Between Columns 5 and 6, there are doors to the arena.**

a) There is a **stair leading up to a landing.**

27) **Men's Toilet Rooms at Columns 6 and 7**

a) Provide a **toilet room sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **entranceway** to the Men's Toilet Room is inaccessible because it is **31 inches wide.** Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) No accessible **mirror** has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

d) The **lavatory** is inaccessible because the apron is mounted 27 inches high. Provide a lavatory with the top of its rim or counter 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

e) **The paper towel dispenser** is inaccessible because the controls are mounted at 53 inches above the finished floor and require a forward approach. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

f) The **lavatory** is inaccessible because the hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) The **designated accessible stall** is configured as an ambulatory stall, and there is no standard accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

h) Provide a **coat hook** at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6

27) **Women's Toilet Room between Columns 10 and 11, six stalls including the ambulatory stall.**

a) Provide a toilet room **sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **entranceway** to the Women's Toilet Room is 31 inches wide. Provide a doorway with a clear opening of 32 inches. Standards § 4.13.5, Fig. 24.

c) The **route** throughout the toilet room is only **35 inches wide.** Provide an accessible route with a minimum clear width of 36 inches. Standards § 4.3.3.

d) No accessible **mirror** has been provided. Provide a mirror with the bottom edge of its reflecting surface no more than 40 inches above the finished floor . Standards § 4.19.6.

e) The **lavatory apron** is 26 7/8 inches high. The lavatory top of rim height is 31 7/8 inches above the floor. Provide a lavatory with the top of its rim or counter height 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

f) **The paper towel controls** are mounted at 53 3/8 inches above the finished floor and require a forward approach. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

g) The **lavatory** hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

h) Provide a **"standard" accessible toilet stall** at least 60 inches wide and at least 59 inches deep such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

(1) The **ambulatory stall is 36 ½ inches wide**. The stall door is not self closing. Provide at least one stall that is exactly 36 inches wide with a toilet 18 inches from each wall or partition, an outward swinging, self-closing door, and parallel grab bars complying with Fig 30(d). Standards §§ 4.22.4, Fig. 30(d).

(2) The **top of the toilet seat** is 16 ½ inches above the finished floor. Provide a toilet with a seat that measures 17 to 19 inches above the finished floor. Standards §§ 4.16.3, 4.17.2, Fig. 30(d).

(3) Provide a **coat hook** at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(4) The **toilet paper dispenser** is mounted 40 ½ inches above the floor. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

(5) The **grab bars** are mounted at varying heights between 29 5/8 inches on the right and 25 7/8 inches on the left. Provide grab bars that are mounted between 33 and 36 inches above the finished floor. Standards § 4.17.6, Fig. 30.

28) **Between Columns 7 and 8, there are doors to the arena.**

a) There is a **stair leading up to a landing.**

29) **Concession Area between Columns 8 and 9.**

30) **Between Columns 9 and 10, there are doors to the arena.**

a) There is a **stair leading up to a landing**

31) **Between Columns 9 and 10, there are stairs leading down to the South Entrance Lobby.**

32) **Women's Toilet Room near columns 10 and 11, six stalls**

a) Provide a toilet room **sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **doorway** to the toilet room has an **opening width** of only 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) The **path of travel** is only 35 inches wide through the toilet. Provide an accessible route through the toilet room with a minimum clear width of 36 inches. Standards § 4.3.3.

d) Provide a **mirror** with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

e) The **paper towel controls** are mounted at 59 inches above the finished floor. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

f) The **lavatory** hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) The **designated accessible stall** is incorrectly configured as an ambulatory stall, and there is no standard accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

33) **Between Columns 11 and 12, there are stairs leading down to the South Entrance.**

34) **Between Columns 11 and 12, there are doors to the arena.**

a) There is a **stair leading up to a landing**.

35) **Concession Area between Columns 12 and 13.**

36) **Between Columns 12 and 13, there is a ramp with a slope greater than 14 percent leading up to a landing.**

37) **Between Columns 13 and 14, there is another ramp leading up to the raised Concourse.**

38) **Stairs running full width of the Concourse block wheelchair access near Columns 14.**

39) **Between Columns 13 and 14, there are doors to the arena.**

a) There is a **stair leading up to a landing.**

40) **Men's Toilet Rooms at Column 15, three stalls and three urinals.**

a) There are **no accessible fixtures** in this toilet room.

(1) **Since there are steep ramps leading up to this level, it may be necessary to provide a lift or ramps that provide access to the toilet rooms.**

41) **Between Columns 15 and 16, there are doors to the arena.**

a) There is a **stair leading up to a landing.**

42) **Women's Toilet Rooms near Column 17, six stalls**

a) There **are no accessible fixtures** in this toilet room

43) **Between Columns 17 and 18, there are doors to the arena.**

a) There is a full width **stair leading up to a landing.**

44) **At Column 19, there are stairs running full width of the Concourse.**

45) **Between Columns 19 and 20, there is a ramp with a slope greater than 14 percent leading down to a landing.**

46) **Between Columns 19and 20, there are doors to the arena.**

a) There is a **stair leading up to a landing.**

47) **At Column 20, there are stairs running full width of the Concourse.**

48) **Between Columns 20 and 21, there is another ramp with a slope greater than 14 percent leading down to the Upper Concourse.**

49) **Between Columns 20 and 21, Concessions.**

50) **Between Columns 21 and 22, there are doors to the arena.**

a) There is a full width **stair leading up to a landing.**

51) **Between Columns 21 and 22, there are stairs leading down to the North Entrance Lobby.**

52) **Men's Toilet Room near columns 22 and 23**

a) Provide a toilet room **sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **doorway** to the toilet room has an **opening width** of only 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) The **paper towel dispenser controls** are mounted at 58 inches above the finished floor. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair . Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

d) Provide a **mirror** with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

e) The **lavatory** hot water pipes are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

f) **The urinal rim** is 24 inches high. Provide a urinal with an elongated rim mounted 17 inches or less above the finished floor, a clear floor space of at least 30 inches wide and 48 inches deep centered on the urinal, and a flush control height of 44 inches or less above the finished floor. Standards §§ 4.18.2, 4.18.3, 4.18.4.

g) The **designated accessible stall is incorrectly configured**. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

53) **Between Columns 23 and 24, there are stairs leading down to the North Entrance Lobby.**

54) **Between Columns 23 and 24, there are doors to the** arena.

a) There is a full width **stair leading up to a landing.**

55) **On Column 24, there are the rails for a chair lift. There is no lift carriage. The electrical controls have been destroyed.**

a) There are **aluminum ramps** for wheelchair access. These ramps are too steep for access in a wheelchair.

56) **Between Columns 24 and 25, Concessions.**

57) Between **Columns 25 and 26, there are doors to the arena.**

a) There is a full width stair leading up to a landing.

58) **Women's Toilet Room, North Lobby between columns 26 and 27**

a) Provide a toilet room **sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **doorway** to the toilet room has an **opening width** of only 31 inches. Provide a doorway with a clear opening of 32 inches with the door open 90 degrees, measured between the face of the door and the opposite stop. Standards § 4.13.5, Fig. 24.

c) Provide a **mirror** with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

d) The **paper towel dispenser controls** are mounted at 55 inches above the finished floor over a 21 inch obstruction. Provide a paper towel dispenser such that the controls comply with Fig. 5 for a forward reach or with Fig. 6 for a side reach and such that it is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach, respectively, by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

e) The **lavatory apron** is 27 inches above the floor. Provide a lavatory with the top of its rim 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2, Fig. 31.

f) The **lavatory hot water pipes** are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

g) Provide a **"standard" accessible toilet stall** at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall-mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

h) **Designated accessible ambulatory stall:**

(1) The **ambulatory stall partitions** are 39 inches apart, the toilet is not centered, and the door is not outward swinging or self closing. Provide at least one stall that is exactly 36 inches wide with a toilet 18 inches from each wall or partition, an outward swinging, self closing door, and parallel grab bars complying with Fig 30(d). Standards §§ 4.22.4, Fig. 30(d).

(2) The **toilet seat** is 16 inches above the finished floor. Provide a toilet with a seat that measures 17 to 19 inches above the finished floor. Standards §§ 4.16.3, 4.17.2, Fig. 30(d).

3) The **flush control** is too high and obstructs the grab bar. Provide a flush control mounted on the "open" side of the toilet's clear floor space; 44 inches or less above the finished floor; and requiring a maximum of 5 pounds of force to operate; or provide an automatic flush device. Standards §§ 4.16.5, 4.17.2, 4.27.4.

(4) Provide a **coat hook** at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

(5) The **toilet paper dispenser** is mounted under the grab bar and is on the wrong wall. Provide a toilet paper dispenser that is mounted with its top at least 1½ inches under the side grab bar and 36 inches or less from the rear wall and is centered at least 19 inches above the finished floor. Standards § 4.17.3, Fig. 30(d).

(6) The **side grab bars** are mounted at 31 inches high. Provide grab bars that are mounted between 33 and 36 inches above the finished floor. Standards § 4.17.6, Fig. 30.

59) **Between Columns 27 and 28, there are doors to the arena.**

a) There is a full width **stair leading up to a landing.**

60) **Between Columns 28 and 29, Concessions.**

61) **Between Columns 29 and 30, there are doors to the arena.**

a) There is a full width **stair leading up to a landing.**

62) **Men's Toilet Rooms at Columns 30 and 31**

a) Provide a toilet room **sign** with raised and Braille characters mounted on the wall adjacent to the latch side of the door with the centerline of the sign 60 inches above the finished floor and situated such that a person can approach within 3 inches of the sign without encountering an obstruction or standing within a door swing. Standards §§ 4.1.2(7)(d), 4.30.1, 4.30.4, 4.30.5, 4.30.6.

b) The **doorway** to the Men's Toilet Room has an **opening width** of 31 inches. Provide a doorway with a clear opening of 32 inches. Standards § 4.13.5, Fig. 24.

c) Provide a **mirror** with the bottom edge of its reflecting surface no more than 40 inches above the finished floor. Standards § 4.19.6.

d) The bottom edge of **the lavatory apron** is mounted 27 inches high. Provide a lavatory with the top of its rim 34 inches or less above the finished floor; the bottom edge of the apron at least 29 inches above the finished floor; and knee and toe clearances that comply with Fig. 31. Standards § 4.19.2

e) The **hot water pipes** are not insulated or otherwise configured to protect against contact. Provide hot water and drain pipes that are insulated or otherwise configured to protect against contact. Standards § 4.19.4.

f) The **paper towel dispenser controls** are mounted at 53 inches above the finished floor and require a forward approach. Provide a paper towel dispenser with the controls a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.27.2, 4.27.3, 4.2.4, 4.2.5, 4.2.6.

g) The **designated accessible stall is configured as an ambulatory stall**, and there is no standard accessible stall provided. Provide a "standard" accessible toilet stall at least 60 inches wide and at least 59 inches deep (or at least 56 inches deep with a wall mounted toilet) such that all of the stall's elements, including stall door, stall door hardware, water closet, size and arrangement, toe clearances, grab bars, controls, and dispensers, comply with the Standards. Standards §§ 4.13, 4.16, 4.17, 4.26, 4.27, Fig. 30.

h) Provide a **coat hook** at a maximum height above the finished floor of 48 inches for a forward approach or 54 inches for a side approach and that is accompanied by clear floor space of 30 by 48 inches that allows a forward or parallel approach by a person using a wheelchair. Standards §§ 4.25.2, 4.25.3, 4.2.4, 4.2.5, 4.2.6.

63) **Between Columns 31 and 32 there are doors to the arena.**

a) There is a full width **stair leading up to a landing.**

64) **Between Columns 31 and 32, there are stairs leading down to the West Entrance Lobby.**

**D. Drinking Fountains:**

1) **At Upper Level, near columns 2 and 3**

a) The **circulation path** near the drinking fountains near columns 2 and 3 is **not detectable to a blind person using a cane.** Provide a high drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although **2 drinking fountains** are provided, there is no accessible drinking fountain because the controls require **8 pounds of force.** Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27

2) **At Upper Level Men's Toilets, near columns 6 and 7**

a) Provide **a high drinking fountain** at this location such that its **bottom leading edges measure no more than 27 inches above the finished floor** or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although **2 drinking fountains** are provided, there is no accessible drinking fountain because the controls require **8 pounds of force**. Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

3) **At Upper Level Women's Toilets, near columns 10 and 11**

a) Provide a **high drinking fountain** at this location such that its bottom **leading edges measure no more than 27 inches above the finished floor** or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although **2 drinking fountains** are provided, there is no accessible drinking fountain because the spout is mounted at 42 inches, and the controls require **8 pounds of force.** Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

4) **At Upper Level, near columns 30 and 31**

a) The **circulation paths** near the drinking fountains are **not detectable to a blind person using a cane.** Provide a high drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although **2 drinking fountains** are provided, there is no accessible drinking fountain because the water height is less than 4 inches, and the controls require **7 pounds of force to operate.** Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping , pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use

of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

5) **At Lower Level between Meeting Rooms F and G**

a) The **circulation path** near the drinking fountain is inaccessible because the fountain is **not detectable to a blind person using a cane**. Provide a drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) The **drinking fountain** is inaccessible because the controls require 8 **pounds of force to operate, and its spout height is 42 inches above the finished floor.** Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible to people who use wheelchairs and a cup dispenser; or by such other means as would achieve the required accessibility for each group of people. Standards §§ 4.15, 4.27.4, Fig. 27.

6) **At South Dressing Room (Red) Lower Concourse**

a) The **circulation path** near the drinking fountain is **not detectable to a blind person using a cane.** Provide a drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although a **drinking fountain** is provided, the **water flow height is not at least 4 inches, the flow is not within 3 inches of the front of the fountain, and the controls require 14 pounds of pressure to operate.** Provide at least one drinking fountain with a spout height no higher than 36 inches, as measured from the finished floor surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Standards §§ 4.15, 4.27.4, Fig. 27.

7) **At Lower Level between Meeting Rooms D and E**

a) Provide a **drinking fountain at this location** such that its **bottom leading edges measure no more than 27 inches above the finished floor** or protrude no more than 4 inches into the walkway, or provide a cane-detectable barrier to alert blind people to this feature. Standards § 4.4.

b) The **drinking fountain controls** require **8 pounds of force to operate, and its spout height is 42 inches above the finished floor.** Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. Standards §§ 4.15, 4.27.4, Fig. 27.

8) **At Women's Toilets in North Lobby, near columns 27**

a) The **drinking fountain** near column 27 is **not detectable to a blind person using a cane.** Provide a high drinking fountain at this location such that its bottom leading edges measure no more than 27 inches above the finished floor or protrude no more than 4 inches into the walkway, or provide a cane detectable barrier to alert blind people to this feature. Standards § 4.4.

b) Although **2 drinking fountains** are provided, there is no accessible drinking fountain because **the water height is less than 4 inches, and the controls require 7 pounds of force.** Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor surface to

the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. Standards §§ 4.15, 4.27.4, Fig. 27.

9) **At Lower Level, near column 29**

a) Although **2 drinking fountains** are provided, the **water height is less than 4 inches, and the controls require 7 pounds of force.** Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. Standards §§ 4.15, 4.27.4, Fig. 27.

10) **At Lower Level, near column 5**

a) Although **2 drinking fountains** are provided, the **water height is less than 4 inches, and the controls require 7 pounds of force.** Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. Standards §§ 4.15, 4.27.4, Fig. 27.

11) **At Lower Level, near column 4**

a) Although **2 drinking fountains** are provided, the **water height is less than 4 inches, and the controls require 7 pounds of force.** Provide at least one drinking fountain with a spout height no higher than 36 inches, measured from the finished floor or ground surface to the spout outlet; and a spout

located at the front of the unit that directs the water flow in a trajectory that is nearly parallel to the front of the unit and is positioned so the flow of water is within 3 inches of the front edge of the fountain and at least 4 inches high. Ensure that fountain controls are operable with one hand, require 5 lbf or less to operate without tight grasping, pinching, or twisting of the wrist; and are front mounted or side mounted near the front edge. Additionally, provide a drinking fountain that is accessible to people who have difficulty bending or stooping. Standards §§ 4.15, 4.27.4, Fig. 27.

# Tab 7

# Rough Order of Magnitude Cost

# Mid South Coliseum

# By

# O.T Marshall Architects

# Dated

# October 30, 2009

# Rough Order of Magnitude Cost

# Mid South Coliseum

October 30th 2009

| Item | Division | Upgrades to the Mid South Coliseum | Cost |
|---|---|---|---|
| 1 | General Contractor General Conditions | Project overhead, Profit, Superintendant, General Foreman, Office Supplies, Job Site Trailer, Containers, Insurance, Etc. for the Construction of all Warm Lit Shell items. | $1,678,900.00 |
| 2 | Earth Work | Grading for ADA Accessible Entrances, Ramps, Curb Cuts, Etc. | $95,000.00 |
| 3 | Demolition | Demolition of existing seating, doors, plumbing fixtures, stairs, landings, misc. | $386,750.00 |
| 4 | Site Concrete | New ADA Ramps, Curb Cuts, Etc. | $165,700.00 |
| 5 | Asphalt Pavement | ADA Pavement Markings, and patch work | $115,000.00 |
| 6 | Interior Concrete | Plumbing trenching, ADA seating areas, Interior Ramps, Stairs | $247,700.00 |
| 7 | Metal Fabrications | Handrails, Guardrails, Misc. Metals | $254,600.00 |
| 8 | Rough Carpentry | Toilet Accessories, and Kitchen Equipment | $165,700.00 |
| 9 | Caulking / Waterproofing | Caulking Exterior of Building | $176,540.00 |
| 10 | Doors / Frames / Hardware | ADA Accessible Doors | $226,575.00 |
| 11 | Glass & Glazing | Replace broken glass, doors, and misc. storefront | $286,750.00 |
| 12 | Drywall | Patch work, and new ADA restrooms, Misc | $375,600.00 |
| 13 | Ceilings | New Ceiling thru out entire interior | $756,430.00 |
| 14 | Painting & New Floor Finishes | Painting Interior & Exterior, and New floor finishes | $2,450,500.00 |
| 15 | Specialties | Toilet Accessories, and Partitions, Misc. | $178,650.00 |
| 16 | Kitchen Equipment | Kitchen Equipment | $1,475,600.00 |
| 17 | Elevators | Checking and Upgrading Existing Elevators | $265,780.00 |
| 18 | Fire Protection | New Fire Sprinkler System | $1,022,815.00 |
| 19 | General Plumbing | Replace all Toilet Fixtures, Lavatories, and redo existing restrooms | $2,063,254.00 |
| 20 | HVAC | New Mechanical Systems, and Exhaust Systems | $2,847,800.00 |
| 21 | Electrical | New Lighting, and Updated Electrical System, and Sound System | $3,675,600.00 |
| 22 | Asbestos Abatement | Asbestos Abatement per the Ensafe Report | $1,212,450.00 |
| 23 | Roof Replacement | New Exterior Roofs | $1,876,500.00 |
| 24 | Life Safety, New Code Updates, ADA Issues | Fire Alarm, Egress Issues, ADA Issues | $4,765,800.00 |
| 25 | Architectural / Engineering | A&E Fees, Bidding, Management, Testing, Surveying | $2,194,880.00 |
| 26 | Contingency | 2% | $576,476.00 |
| | | | |
| | | **Total Cost** | **$29,537,350.00** |

# Tab 8

# Non-Compete Provision

# Hoops Agreement

# Dated

# July 21, 2001

Assignment to S.A. (Kaul)

# MEMPHIS ARENA USE AND OPERATING AGREEMENT

by and among

THE CITY OF MEMPHIS
AND SHELBY COUNTY, TENNESSEE

AND

HOOPS, L.P.

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# MEMPHIS ARENA USE AND OPERATING AGREEMENT

THIS MEMPHIS ARENA USE AND OPERATING AGREEMENT (this "***Operating Agreement***") is entered into as of this 29th day of June, 2001 by and among **THE CITY OF MEMPHIS AND SHELBY COUNTY, TENNESSEE** ("***CITY/COUNTY***") and **HOOPS, L.P.**, a Delaware limited partnership, the owner of the Franchise (as hereafter defined), ("***HOOPS***"). CITY/COUNTY and HOOPS being hereinafter referred to individually as a "***Party***" and collectively as the "***Parties***".

## RECITALS

A. CITY/COUNTY has determined that the elimination of urban blight and decay, and the modernization and general improvement of the City of Memphis downtown area, is necessary to promote the public health, safety and welfare of the citizens of CITY/COUNTY.

B. CITY/COUNTY has determined that the development of sports complexes, stadiums, arenas and other recreational facilities will provide a means to eliminate urban blight and decay, and to accomplish the modernization and general improvement of the City of Memphis downtown area, and will otherwise promote the public health, safety and welfare of the citizens of CITY/COUNTY.

C. CITY/COUNTY has determined that there is an immediate need to promote and further develop recreational opportunities in Tennessee by facilitating and equipping the acquisition, construction and rehabilitation of sports complexes, stadiums, arenas and other recreational facilities for the holding of professional and amateur athletic events.

D. CITY/COUNTY has determined that development of sports complexes, stadiums, arenas and other recreational facilities will provide a means to attract and locate major professional team franchises in Tennessee, including the Franchise, will enhance Tennessee's image as a sports center, and will further serve a public purpose by fostering economic development and prosperity.

E. In order to foster the foregoing public purposes, CITY/COUNTY intends to establish a New Memphis Arena Public Building Authority for the County of Shelby, and the City of Memphis, Tennessee ("***PBA***"), which entity will acquire and become the owner in fee simple, by virtue of a deed from CITY/COUNTY, of one of the two (2) sections of real estate situated in the City of Memphis, Shelby County, Tennessee depicted on Exhibit "A" attached hereto and made a part hereof, which two (2) parcels are identified thereon as Arena Site A and Arena Site B, the exact location of which shall be agreed upon by CITY/COUNTY and HOOPS as soon as reasonably practicable after the date hereof (the "***Site***").

F. CITY/COUNTY has determined that it is in the best interest and serves the public purposes of CITY/COUNTY to support the construction on the Site of a new, state of the art multipurpose sports and entertainment public assembly facility designed primarily for basketball (the "***Arena***"), together with the Parking Facilities and CITY/COUNTY's Portion of the FF&E Package (each as hereafter defined, and collectively with the Arena, the "***Arena Complex***").

G. PBA will lease, prior to the Commencement Date, the Site and the rest of the Arena Complex to CITY/COUNTY pursuant to that certain lease agreement between PBA, as lessor, and CITY/COUNTY, as lessee (the "***PBA Lease Agreement***").

H. CITY/COUNTY and HOOPS shall enter into a Memphis Arena Project Agreement (such agreement, as amended and in effect from time to time, the "***Project Agreement***") pertaining to the development and construction of the Arena Complex.

I. It is the intention of CITY/COUNTY that the Arena Complex be constructed and operated (1) to serve the public purposes set forth in the foregoing recitals, (2) to maximize the utilization of the Arena Complex by and for the benefit of the citizens of the City of Memphis and Shelby County, and (3) in such a manner that the citizens of the City of Memphis and Shelby County will benefit from athletic contests and other types of entertainment, performances and events that contribute to the educational, recreational, economic and cultural development of the community (all of the foregoing, collectively, the "***Municipal Purposes***").

J. To facilitate CITY/COUNTY's accomplishment of the Municipal Purposes, CITY/COUNTY is granting to HOOPS the right, authority, license and privilege to use, possess, occupy and operate the Arena Complex subject to and in accordance with the terms and conditions set forth herein.

K. HOOPS desires to obtain the right, authority, license and privilege to use, possess, occupy and operate the Arena Complex subject to and in accordance with the terms and conditions set forth herein, and, pursuant to this Operating Agreement, HOOPS shall retain a competent and qualified operator for the Arena.

NOW, THEREFORE, in consideration of the premises and the mutual obligations of the Parties hereunder, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, CITY/COUNTY and HOOPS covenant and agree as follows:

SECTION 1. DEFINITIONS.

"***AAA***" shall have the meaning set forth in Section 34 of this Operating Agreement.

"***Acceptable Offer***" shall have the meaning set forth in Section 29 of this Operating Agreement.

"***Acquisition Date***" shall have the meaning set forth in Section 14(a) of this Operating Agreement.

"***ADA***" means the Americans with Disabilities Act.

"***Affiliate***" shall mean, with respect to any person, any person that, directly or indirectly, controls, is controlled by, or is under common control with, such person. The term "control" (including the terms "controlled by" and "under common control with") as used in the preceding sentence means the possession, directly or indirectly, of the power to direct or cause the direction of management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise.

"*Approved Alteration Amount*" means Five Hundred Thousand Dollars ($500,000.00) at the Commencement Date, but shall be adjusted annually by the CPI Percentage Adjustment.

"*Arbitrator*" means the person selected to decide a dispute pursuant to the Arbitration Procedure.

"*Arena*" shall have the meaning set forth in Recital F of this Operating Agreement.

"*Arena Complex*" shall have the meaning set forth in the Recital F of this Operating Agreement.

"*Arena Documents*" shall mean this Operating Agreement, the Project Agreement and The Pyramid License Agreement.

"*Arena Events*" shall mean all sporting, entertainment, exhibition, performance and other events occurring at the Arena, including but not limited to Home Basketball Games.

"*Bonds*" shall have the meaning set forth in Section 32 of this Operating Agreement.

"*Budget*" shall have the meaning set forth in the Project Agreement.

"*Capital Improvement Reserve Fund*" means the reserve fund intended to be established by CITY/COUNTY as part of the Budget in order to fund the expenses of Capital Repairs.

"*Capital Repairs*" shall mean those repairs or replacements to the Arena Complex set forth on Exhibit "B" attached hereto and made a part hereof, and shall not include Minor Repairs or purely cosmetic replacements, unless required by the express terms of Section 8(a) of this Operating Agreement and/or Exhibit "B" hereto.

"*Casualty*" shall have the meaning set forth in Section 9(a)(i) of this Operating Agreement.

"*CITY/COUNTY*" shall have the meaning set forth in the Preamble to this Operating Agreement.

"*CITY/COUNTY Affiliate*" means: (a) the board members, officers, employees, consultants or agents of CITY/COUNTY; (b) PBA and any Sports Authority created by CITY/COUNTY, PBA or any CITY/COUNTY Affiliate in connection with the transactions contemplated by the Arena Documents; and (c) any limited liability company, partnership, corporation or other entity in which CITY/COUNTY, a wholly-owned or partially-owned but controlled subsidiary or agency of CITY/COUNTY, any of the board members, officers, employees, consultants or agents of CITY/COUNTY, members of the families of CITY/COUNTY board members, officers, employees, consultants or agents, or a trustee for the benefit of any of them, or some, any or all of them, directly or indirectly, who own an interest, either singly or in the aggregate, sufficient to effectively control such entity.

"*CITY/COUNTY Maintenance Notice*" shall have the meaning set forth in Section 8(f) of this Operating Agreement.

"*CITY/COUNTY's Portion of the FF&E Package*" shall have the meaning set forth in the Project Agreement, the costs of which are intended to be included in the Budget.

"*Club Season Ticket*" means a ticket that entitles the purchaser thereof to a seat and the associated amenities in the club level for each of the Home Basketball Games to be played in the Arena during a given NBA Regular Season.

"*Club Seat Shortfall*" means, for any NBA Regular Season, 2,500 minus the number of Club Season Tickets sold in the preceding NBA Regular Season, but not more than 2,500 minus the number of Club Season Tickets that shall have been sold as of the Shortfall Determination Date.

"*Codes*" shall mean all local, state and federal codes, laws, ordinances, regulations or rulings applicable to the design, construction, maintenance or operation of the Arena Complex or any portion thereof, including the ADA.

"*Coliseum*" means the Mid-South Coliseum located in Memphis, Tennessee.

"*Commencement Date*" shall have the meaning set forth in Section 3 of this Operating Agreement.

"*Conflict Events*" means those National Events or Local Community Events that are unable to be held in the Arena Complex, in the reasonable determination of HOOPS, due to the unavailability of one or more suitable dates in the Arena Complex.

"*Consumer Price Index*" means the Consumer Price Index for All Urban Consumers (CPI-U) for the U.S. City Average for All Items, 1982-84 equals 100, published by the Bureau of Labor Statistics of the United States Department of Labor, or a similar index agreed to by the Parties if such index no longer is available.

"*CPI Percentage Adjustment*" means the percentage increase or decrease, as applicable, between the Consumer Price Index for the calendar month immediately preceding the calendar month in which the determination is being made, and the Consumer Price Index for the last calendar month of the first full fiscal year of HOOPS after the Commencement Date.

"*Cure*" shall have the meaning set forth in Section 31(a) of this Operating Agreement.

"*Cure Period*" shall have the meaning set forth in Section 31(a) of this Operating Agreement.

"*Dispute Resolution Procedure*" means the procedure for resolving disputes set forth in Section 34 of this Operating Agreement.

"*Early Termination Notice*" shall have the meaning set forth in Section 31(a) of this Operating Agreement.

"*Early Termination Right*" shall have the meaning set forth in Section 31(a) of this Operating Agreement.

"*Earnest Money Payment*" shall have the meaning set forth in Section 29 of this Operating Agreement.

"*Employed Affiliate*" shall have the meaning set forth in the definition of HOOPS Affiliate in Section 1 of this Operating Agreement.

"*Environmental Activity or Condition*" means the presence, use, generation, manufacture, production, processing, storage, release, threatened release, discharge, disposal, treatment or transportation of any Hazardous Material on, onto, in, under, over or from the Site or the violation of Environmental Laws because of such condition of, or activity on, the Site.

"*Environmental Law*" means any federal, state or local law, common law decision, court decision or administrative decision, ordinance, regulation, rule, court order or decree, or administrative order, policy or guideline concerning action levels of a governmental authority relating to the environment, public health, any Hazardous Material or any Environmental Activity or Condition on, under or about the Site, in effect from time to time, including, but not limited to (i) the federal Water Pollution Control Act, as amended (33 U.S.C. § 1251 et seq.); (ii) the Resource Conservation and Recovery Act, as amended (42 U.S.C. § 6901 et seq.); (iii) the Comprehensive Environmental Response, Compensation and Liability Act, as amended (42 U.S.C. § 9601 et seq.); or (iv) the federal Clean Air Act, as amended (42 U.S.C. § 7401 et seq.).

"*Event of Default by CITY/COUNTY*" shall have the meaning set forth in Section 13(c) of this Operating Agreement.

"*Event of Default by HOOPS*" shall have the meaning set forth in Section 13(a) of this Operating Agreement.

"*Excluded Events*" shall mean (i) all varsity and junior-varsity intercollegiate athletic events that include the University of Memphis or require sponsorship of a Tennessee-based NCAA institution, (ii) all other University of Memphis events that produce less than $5,000 of revenue (which $5,000 shall be adjusted annually by the CPI Percentage Adjustment), (iii) all "flat floor" events and other events that require simultaneous space in an arena ancillary to an event at the Convention Center, (iv) all "Wonders" events, and (v) all events that are part of each of the Mid-South Fair and the Church of God in Christ Convention, each to be held over a period of not more than fifteen (15) days in each calendar year.

"*Extended Term*" shall have the meaning set forth in Section 3 of this Operating Agreement.

"*FedEx*" means FedEx Corporation.

"*FF&E Package*" means those certain furnishings, fixtures and equipment to be installed in or attached to, used at or used in connection with the Arena Complex.

"*First-Class Arena Facilities*" shall mean multi-purpose fieldhouses or arenas in which NBA franchises play their home basketball games, consisting of not more than six (6) facilities that are not in the ten (10) largest metropolitan markets in which an NBA franchise is located, agreed upon by the Parties (with each Party submitting not more than three (3) facilities) within

thirty (30) days after the date hereof, the list of which shall be updated by the Parties on or about the fifth anniversary of the Commencement Date, and every five (5) years thereafter during the Term.

"*Force Majeure*" means any delay or failure by any Party to this Operating Agreement in the performance of any non-monetary obligations due to causes beyond its control (other than lack of funds), including but not limited to, acts of God or of the public enemy, legal proceedings brought by a non-party to this Operating Agreement with respect to the subject matter thereof, fires, floods, epidemics, quarantine, restrictions, strikes, material shortages, dissolution of the NBA, suspension of NBA league play for all NBA franchises, freight embargoes, unusually severe weather impacting or preventing the conduct of an Arena Event, or the delay by the other Party thereto in the performance of its obligations under this Operating Agreement that cause another Party delay in the performance of its obligations. In the event of any Force Majeure, the time for performance of said obligations shall be extended for the period of the Force Majeure event. As to an Arena Event, including without limitation a Home Basketball Game, the term means that those circumstances exist such that there is no other safe and reasonable option except to postpone such event or game, provided that such event or game shall be rescheduled as soon as reasonably possible after the cessation of those circumstances and provided further, that all decisions on postponement or rescheduling shall be subject, if as to a Home Basketball Game, to the rules, regulations and determinations of the NBA. The Party seeking the benefit of this Force Majeure provision shall, within ten (10) business days after such Party becomes aware that it has been adversely affected by any Force Majeure event, notify the other Party in writing of the causes thereof and request an extension of the affected act or event for the period of the Force Majeure event.

"***Franchise***" means the NBA franchised team (currently known as the Grizzlies) owned and operated by HOOPS, or its successors and/or assigns.

"***Franchise Events***" shall mean all Franchise or NBA sporting, entertainment, exhibition and performance events occurring at the Arena Complex, including but not limited to Home Basketball Games.

"***General Partner***" means Heisley Member, Inc., a Nevada corporation.

"***Hazardous Material***" means any hazardous or toxic material, substance, pollutant, contaminate or waste, or similar terms defined by or regulated as such under any Environmental Laws, petroleum, gasoline and their constituent parts, polychlorinated biphenyls, asbestos and related chemicals, heavy metals and radioactive material, provided that if any such material may legally be present at the Site below certain concentrations in the soil or the groundwater as established by any Environmental Laws without the requirement for remediation, then such material shall not be considered a Hazardous Material if it is present in the soil or groundwater only at concentrations below such levels.

"***Home Basketball Games***" shall mean those NBA pre-season, regular season and playoff games of the Franchise that are scheduled by the NBA to be played on the Franchise's home court.

"*HOOPS Affiliate*" means (a) any entity or person holding any direct or indirect equity, ownership, or beneficial interest in HOOPS, or any entity controlling, controlled by, or under common control with HOOPS (the "*Primary Affiliate*"); (b) any entity or person holding any direct or indirect equity, ownership, or beneficial interest in a Primary Affiliate, or any entity controlling, controlled by, or under common control with a Primary Affiliate (the "*Secondary Affiliate*"); (c) any director, shareholder, principal, or employee of such Party or of any Primary Affiliate or Secondary Affiliate (the "*Employed Affiliate*"); or (d) any spouse, parent, child, or other relative by blood, adoption, or marriage of any Primary Affiliate, Secondary Affiliate or Employed Affiliate. The terms "control", "controlling" or "controlled" with respect to any entity or party, means exclusive possession, directly or indirectly, of the power to direct or to cause the direction of the management and policies of such entity or party, whether through the ownership of voting securities or partnership interests, or by contract or otherwise.

"*HOOPS Repair Notice*" shall have the meaning set forth in Section 8(e) of this Operating Agreement.

"*HOOPS Representative*" means an individual designated by HOOPS from time to time that has been authorized by HOOPS to communicate with CITY/COUNTY on HOOPS's behalf.

"*HOOPS's Portion of the FF&E Package*" shall mean all equipment, personal and trade fixtures brought upon, used at or used in connection with, the Arena Complex, by HOOPS.

"*Initial Term*" shall have the meaning set forth in Section 3 of this Operating Agreement.

"*Interest Rate*" shall mean an interest rate of fifteen percent (15%) per annum.

"*Local Community Events*" means events involving athletes residing in the State of Tennessee, and/or public or civic events or meetings that produce less than $5,000 of revenue (which $5,000 shall be adjusted annually by the CPI Percentage Adjustment).

"*Market Professionals*" mean the persons or parties mutually selected by HOOPS and CITY/COUNTY (or selected by the Dispute Resolution Procedure if the parties cannot agree) to make certain determinations and resolve certain controversies arising under this Operating Agreement, which persons must be qualified and experienced architects, general contractors or other construction professionals mutually agreed to by CITY/COUNTY and HOOPS.

"*Minor Repairs*" means those repairs and replacements that are not Capital Repairs.

"*Municipal Events*" means public or civic events or meetings that are not Local Community Events.

"*Municipal Purposes*" shall have the meaning set forth in Recital I of this Operating Agreement.

"*Naming Rights and License Agreement*" shall mean that certain agreement to be entered into among the CITY/COUNTY, HOOPS, and FedEx.

"*National Events*" means events scheduled to be televised live on a national over-the-air or national cable network and/or those events playing two (2) or more markets outside of the State of Tennessee as part of a tour or series of events.

"*NBA*" means the National Basketball Association or any successor professional basketball league.

"*NBA Full Season*" means, for any given year, the period commencing on the date of the first pre-season game of the Franchise and ending on the date of the last regular season or playoff game of the Franchise, whichever is later.

"*NBA Regular Season*" means, for any given year, the full NBA regular season during which the Franchise plays that number of NBA basketball games as prescribed by the governing body of the NBA in the Arena.

"*Normal and Routine Maintenance*" means routine and preventive maintenance of all portions of the Arena Complex, including (i) inspections and scheduled maintenance to maintain all warranties on equipment, components or systems, and (ii) regularly scheduled preventive maintenance programs. By way of example and not limitation, the term includes painting; floor buffing; carpet cleaning; replacement of the carpet in specific areas due to wear and tear or damage, subject, however, to the provisions of Exhibit "B"; and isolated bulb replacement.

"*Paid Arena Event*" means an Arena Event for which an admission price must be paid in order to attend such event.

"*Parking Facilities*" means the structured parking garage containing approximately one thousand eight hundred (1800) spaces, adjacent to the Arena, as finally determined and constructed pursuant to the Project Agreement.

"*PBA*" shall have the meaning set forth in Recital E of this Operating Agreement.

"*PBA Lease Agreement*" shall have the meaning set forth in Recital G of this Operating Agreement.

"*Permitted Encumbrances*" means those matters listed on Exhibit "C", attached hereto and incorporated by reference.

"*Prevailing Rate Payment*" means the price for the purchase or hiring of labor, services, goods, supplies, materials, or equipment resulting from arm's length transactions with qualified vendors who provide or furnish such labor, services, goods, supplies, materials, or equipment.

"*Primary Affiliates*" shall have the meaning set forth in the definition of HOOPS Affiliates in Section 1 of this Operating Agreement.

"*Project Agreement*" shall have the meaning set forth in Recital H of this Operating Agreement.

"***Public Meeting Rooms***" shall mean the public meeting rooms in the Arena Complex, intended to be constructed as part of the Arena Complex pursuant to the Project Agreement.

"***Purchase Agreement***" shall have the meaning set forth in Section 29 of this Operating Agreement.

"***Regular Seat Shortfall***", for any NBA Regular Season, means 14,900 minus (i) the average paid attendance for Home Basketball Games in the Arena in the preceding NBA Regular Season, minus (ii) the sum of the number of seats in the Suite Shortfall plus the number of seats in the Club Seat Shortfall.

"***Reserved Areas***" shall mean the dressing room, the coaches' and training room space, the laundry room, the Franchise offices, storage space, the areas in the Arena Complex reserved for players and their families, employees and staff of HOOPS, as well as the media and persons designated by HOOPS, and such other non-public areas in the Arena Complex as are reasonably determined by HOOPS.

"***Right of First Refusal***" shall have the meaning set forth in Section 29 of this Operating Agreement.

"***Secondary Affiliates***" shall have the meaning set forth in the definition of HOOPS Affiliates set forth in Section 1 of this Operating Agreement.

"***Shortfall Determination Date***" means the day that is thirty (30) days prior to the first game of any given NBA Regular Season.

"***Shortfall Season***" means any NBA Regular Season, after the eighth NBA Full Season, in which the (i) average paid attendance for Home Basketball Games in the Arena is less than 14,900, or (ii) 70 largest Suites available for public sale are not sold in full, or (iii) the number of Club Season Tickets sold is less than 2,500.

"***Shortfall Season Notice***" shall have the meaning set forth in Section 31(a) of this Operating Agreement.

"***Shortfall Seat Notice***" shall have the meaning set forth in Section 31(a) of this Operating Agreement.

"***Site***" shall have the meaning set forth in Recital E of this Operating Agreement.

"***Sponsor***" means a person or entity that enters into an agreement with HOOPS to be a sponsor for any element of the Arena or HOOPS's business at the Arena, such as a naming rights sponsor, building partner sponsor, or official product provider, purchaser of advertising media or any related agreement.

"***Suite***" means the right to use of a suite in the Arena including a ticket that entitles the purchaser thereof to a seat and the associated amenities in a suite for each of the NBA Regular Season Home Basketball Games to be played in the Arena.

"*Suite Shortfall*", for any NBA Regular Season, means the number of seats in the largest seventy (70) Suites available for public sale minus the number of seats in such Suites that were sold in the preceding NBA Regular Season, but not more than the number of seats in such Suites that remain unsold as of the Shortfall Determination Date.

"*Term*" means the Initial Term, together with all Extended Terms, if any.

"*Termination Effective Date*" shall have the meaning set forth in Section 31(a)(iii) of this Operating Agreement.

"*Termination Fee*" shall have the meaning set forth in Section 32 of this Operating Agreement.

"*The Pyramid*" means The Pyramid sports arena located at One Auction Avenue in downtown Memphis, Tennessee, which arena shall be renovated in accordance with the terms and conditions of the Project Agreement.

"*The Pyramid License Agreement*" means that certain agreement dated of even date herewith among CITY/COUNTY and HOOPS pertaining to HOOPS' right to use The Pyramid for the purpose of playing Home Basketball Games pending the Substantial Completion (as defined in the Project Agreement) of the Arena Complex.

"*Ticket Guaranty Agreements*" shall have the meaning set forth in Section 31(a) of this Operating Agreement.

"*University*" means the University of Memphis.

SECTION 2. GRANT OF RIGHTS.

(a) Rights to Arena Complex. Subject to the terms and conditions set forth herein, CITY/COUNTY hereby grants to HOOPS, for the period of the Term, the right, authority, license and privilege to use, possess, occupy, conduct business from, lease space in and operate the Arena Complex for all permitted uses as set forth in this Operating Agreement, and HOOPS hereby accepts such grant from CITY/COUNTY, subject to, and conditioned upon, the rights, duties, conditions and limitations set forth herein.

(b) NBA All Star Game. CITY/COUNTY and HOOPS acknowledge that CITY/COUNTY would receive significant benefits from hosting an NBA All Star game and related events. CITY/COUNTY and HOOPS shall use good faith efforts to attract the NBA All Star game and related events to Memphis. Subject to scheduling conflicts for existing bookings at the time of a request, CITY/COUNTY shall make available to HOOPS or the NBA, not more frequently than once every four years, space in The Pyramid sufficient to accommodate events related to the NBA All Star game that cannot be accommodated at the Arena. CITY/COUNTY shall make such space available to HOOPS or the NBA at no cost if the NBA specifies that such space shall be made available at no cost (and otherwise at actual cost), it being agreed that such event would constitute a significant benefit for the City of Memphis. CITY/COUNTY agrees to work with HOOPS and the NBA to accommodate the NBA's requirements for the NBA All Star

Game and related events, provided that CITY/COUNTY shall not be obligated to breach any existing contractual arrangements.

SECTION 3. TERM OF AGREEMENT.

The initial term of this Operating Agreement shall be a period of twenty-five (25) NBA Full Seasons, commencing on the date of Substantial Completion (as defined in the Project Agreement) of the Arena and the Parking Facilities in accordance with the Project Agreement (the "***Commencement Date***"), and continuing, unless sooner terminated, through the conclusion of the twenty-fifth (25th) NBA Full Season thereafter (the "***Initial Term***"); provided, however, in the event the date of Substantial Completion occurs during an NBA Full Season (a) during or subsequent to the NBA All-Star Break, such season shall not be considered an NBA Full Season for purposes of this Section 3, or (b) prior to the NBA All-Star Break, such season shall be considered an NBA Full Season for purposes of this Section 3. HOOPS shall have the right to extend the term of this Operating Agreement for five (5) consecutive periods of five (5) years each, upon the same terms and conditions (with the exception of the term) set forth herein (each, an "***Extended Term***", and collectively, the "***Extended Terms***"). HOOPS shall exercise its right to extend the Initial Term and/or any Extended Term by delivering to CITY/COUNTY a written notice of such exercise on or before the date which is one (1) year prior to the expiration of the Initial Term or any Extended Term, as applicable. HOOPS's failure to deliver timely notice of such exercise as provided herein shall terminate all of HOOPS's rights to extend the Initial Term and/or any Extended Term, as applicable.

SECTION 4. USES AND LIMITATIONS.

(a) Permitted Uses by HOOPS. Consistent with the Municipal Purposes and subject to the terms and conditions otherwise set forth in this Operating Agreement, HOOPS may use the Arena Complex for any lawful purpose. HOOPS shall, by way of example and not limitation, have the right to:

(i) Enter into contracts or otherwise exercise authority over all aspects of the operation of the Arena Complex consistent with the Municipal Purposes;

(ii) Use, occupy and possess the Arena Complex or permit the Arena Complex to be used, occupied or possessed by way of license, concession, lease or other arrangement;

(iii) Prepare and sell food, beverages, programs, merchandise, souvenirs and other wares and services and permit others to do so by way of license, concession, lease or other arrangement;

(iv) Erect, control or license advertising promotions, signs and displays in, on or about the Arena Complex, subject to compliance with all applicable Codes and of the type conducted or displayed in First-Class Arena Facilities;

(v) Advertise or promote the Arena Complex and any and all events that take place in the Arena Complex;

(vi) Televise, broadcast or otherwise communicate Arena Events by and through any and every broadcasting medium or method now in existence or hereafter developed, or permit others to do so;

(vii) Sell and distribute tickets and other admissions for Arena Events or grant third parties the right, authority, license or privilege to sell and distribute such tickets and admissions;

(viii) Grant naming or sponsorship rights for the Arena Complex, or any component or portion thereof, and retain the remuneration therefor, subject to the provisions of Section 4(c) hereof and the Naming Rights and License Agreement;

(ix) Grant naming or sponsorship rights for any lawful product or service used in or at the Arena Complex and retain the remuneration therefor;

(x) Contract for the right of others to use Suites, club seats, premium seats, season tickets, ticket packages or other admission rights with respect to the Arena Complex;

(xi) License or otherwise allow the use of the Arena Complex for any lawful event at rates it determines in its discretion to any person or entity, including but not limited to for-profit entities and not-for-profit entities or charitable, educational or civic groups in the discretion of HOOPS;

(xii) Contract with other sports franchisees to play one or more games in the Arena;

(xiii) Contract with entertainers, promoters, sponsors or others to hold Arena Events; and

(xiv) Subject to the provisions of Section 4(c) of this Operating Agreement and the Naming Rights and License Agreement, use in a manner consistent with the Municipal Purposes and have a license from CITY/COUNTY, on a non-exclusive basis, of all of CITY/COUNTY's intellectual property rights in the Arena Complex, including but not limited to images, likenesses, service marks, trade names or trademarks. HOOPS shall have the right to sub-license the rights granted to it hereunder and retain the remuneration therefor. CITY/COUNTY agrees not to use the name of the Franchise or any insignia or trademark of the Franchise, the NBA or HOOPS without the consent of HOOPS and/or the NBA.

No party shall be required to inquire into the authority of HOOPS to enter into any of the aforesaid agreements or to exercise any of the aforesaid rights.

(b) Municipal Events and Public Meeting Rooms. CITY/COUNTY shall have the right, on dates and terms to be mutually agreed upon by the Parties, to use the Arena Complex for Municipal Events, and to use the Public Meeting Rooms in the Arena Complex, upon the further terms and conditions set forth below:

(i) CITY/COUNTY must deliver to HOOPS at least forty-five (45) days' but no more than one hundred eighty (180) days' prior written notice (or such shorter period reasonably acceptable to HOOPS) of any Municipal Event proposed to be conducted at the Arena Complex, which notice shall set forth the requested date for the Municipal Event and shall identify in all material respects to the extent then known the nature of the event, the sponsor, the areas of the facilities to be utilized, the terms (including ticket prices) of admission, the expected attendance, any special security or other arrangements, and any other relevant information reasonably necessary for the manager of the Arena Complex to perform its duties. CITY/COUNTY shall update the content of such notice from time to time promptly upon becoming aware of any changes in the information previously given and any additional relevant information of the type described above.

(ii) In no event shall any Municipal Event be scheduled on any date on which or immediately preceding the date on which any other Arena Event is scheduled. If the NBA shall change the date for a Home Basketball Game to a date on which a Municipal Event is scheduled, HOOPS shall notify CITY/COUNTY of such change, and the Municipal Event shall be rescheduled to a date that is not already reserved or is not prohibited by the terms of this Section 4(b). Unless consented to by HOOPS, in no event shall a Municipal Event be a basketball game or other game requiring use of the playing floor. It shall be deemed reasonable for HOOPS to withhold its consent to the scheduling of a Municipal Event in the Arena Complex, and it shall be permissible for HOOPS to revoke its consent (whereupon such consent shall be deemed not to have been given), pursuant to the preceding sentence if, in HOOPS's sole judgment and discretion, HOOPS believes that the playing floor will be damaged or otherwise rendered unsuitable for purposes of Franchise Events or that the use of the Arena Complex on the date requested for such Municipal Event is likely to conflict with the use of the Arena Complex for any other Arena Event. Notwithstanding anything to the contrary contained herein, if CITY/COUNTY requests to stage more than two (2) Municipal Events in the Arena Complex during any calendar year of the Term, HOOPS shall be entitled to cause CITY/COUNTY to reschedule the third or any additional Municipal Event (even if at the time CITY/COUNTY notified HOOPS of such third or additional Municipal Event there was no scheduling conflict with any other Arena Event) if HOOPS determines that the date for such third or additional Municipal Event will conflict with or is likely to conflict with any other Arena Event that HOOPS has scheduled or is attempting to schedule at the Arena Complex. If CITY/COUNTY gives notice to HOOPS hereunder if its desire to schedule three or more Municipal Events during a calendar year, CITY/COUNTY may elect to prioritize such events.

(iii) CITY/COUNTY shall be responsible to reimburse HOOPS (within ten (10) days after receipt of an invoice therefor) for any incremental increase in operations costs associated with CITY/COUNTY's use of the Arena Complex for Municipal Events and CITY/COUNTY's use of the Public Meeting Rooms,

together with all out-of-pocket verified expenses incurred by HOOPS in connection therewith.

(iv) CITY/COUNTY shall promptly repair or cause to be repaired any damage caused to the Arena Complex at a Municipal Event or by use of any Public Meeting Room.

(v) Use of Suites and related areas in the Arena Complex during Municipal Events shall be subject to such rules and regulations as determined by HOOPS. Neither CITY/COUNTY, nor any CITY/COUNTY Affiliate or licensee shall have the right, without the express prior written consent of HOOPS, to possess or use any of the Reserved Areas during any Municipal Event. HOOPS shall have the exclusive right to possess and use at all times (even during a Municipal Event) the Reserved Areas and all other non-public areas of the Arena Complex, the use of which by HOOPS does not materially interfere with any Municipal Event.

For purposes of this Section 4(b), CITY/COUNTY's use of solely the Public Meeting Rooms shall not be considered Municipal Events. The Parties agree that CITY/COUNTY shall have the use of two (2) suites for all Arena Events, including the tickets that entitle the holders thereof to seats therein. Any amenities associated with such suites shall be provided to CITY/COUNTY on terms consistent with those provided to other purchasers of Suites.

(c) Limitation on Uses by HOOPS. HOOPS: (i) shall use, possess, occupy and operate the Arena Complex in accordance with all applicable Codes, including but not limited to those relating to OSHA, EEOC, nondiscrimination and other employment laws, and, subject to CITY/COUNTY's obligations hereunder and the requirements of all insurers (unless HOOPS obtains alternate coverage which is acceptable in all respects to CITY/COUNTY); (ii) shall otherwise possess and occupy or operate the Arena Complex in a commercially reasonable manner according to standard industry practices so as to avoid an increase or expansion of CITY/COUNTY's Capital Repair obligations as set forth in Section 8(a) hereof; and (iii) in granting naming or sponsorship rights for the Arena Complex, agrees that the name given to the Arena Complex shall not include any reference to any proper geographic name, unless such reference (A) is to "Memphis", the "City of Memphis" or "Shelby County", or (B) is part of the proper name of an entity selected as a sponsor pursuant to this Section 4(c). If any sponsor selected by HOOPS is not (x) one of the 100 largest companies headquartered in the Memphis metropolitan area (based on annual gross revenues), (y) included in the list of "Fortune 500" companies published by Fortune Magazine, or (z) FedEx, HOOPS's selection of such sponsor shall be subject to the prior consent of CITY/COUNTY, which consent, if granted, shall be granted without economic compensation to CITY/COUNTY or any other conditions. The rights conferred by CITY/COUNTY upon HOOPS pursuant to this Operating Agreement and the Naming Rights and License Agreement, if any, to grant naming or sponsorship rights for the Arena Complex shall terminate upon any termination of this Operating Agreement.

(d) Use Prior to Commencement Date. While HOOPS's basic rights of possession and use of the Arena Complex relate to the Term, the Parties recognize that certain portions of the Arena Complex may be completed prior to the Commencement Date (including, without

limitation, the practice and training facilities, certain parking areas and certain offices), and HOOPS shall be permitted to possess and use such portions of the Arena Complex as soon as the same are ready for occupancy in accordance with applicable Codes. HOOPS shall not be required to make any additional payments to CITY/COUNTY in connection with such accelerated possession and use; provided, however, that HOOPS shall be responsible for the payment of all costs and expenses related thereto.

SECTION 5. OPERATING COVENANTS.

In consideration of, and as a condition to, the rights granted to HOOPS in Section 2(a) hereof, HOOPS makes the following covenants in favor of CITY/COUNTY:

(a) Franchise Games. Subject to the Early Termination Right, during the entire Term, so long as the NBA or any successor or replacement professional basketball league exists and the Franchise or any successor professional basketball team remain a member of such league, HOOPS shall: (i) subject to NBA scheduling and regulations in effect from time to time applicable to HOOPS and the owners of all other teams in the NBA, and subject to the right of HOOPS to cause the Franchise to play up to three (3) pre-season Home Basketball Games per NBA Full Season in another venue other than the Arena, cause the Franchise to play (A) all of the Franchise's pre-season and regular season Home Basketball Games in the Arena (such Home Basketball Games to include at least one-half (1/2) of the Franchise's regular season basketball games), (B) all of the Franchise's playoff series Home Basketball Games in the Arena (such Home Basketball Games to include at least one-third (1/3) of any best of three (3) series, at least two-fifths (2/5) of any best of five (5) series, at least three-sevenths (3/7) of any best of seven (7) series and at least one-half (1/2) of any other playoff series basketball games); and (ii) operate, promote and administrate the Franchise in a manner consistent with the operation, promotion and administration of other professional basketball teams which are franchise members in good standing of the NBA, or any successor or replacement professional basketball league; provided that, with respect to the above, if, in any NBA Full Season there are an uneven number of home and away basketball games, HOOPS shall not be deemed to be in violation of this Section 5(a) if the Franchise plays one more away basketball game than Home Basketball Game. Subject to the Early Termination Right, HOOPS shall not seek to move the venue of Home Basketball Games under Article 8 of the Constitution and By-Laws of the NBA during the Term.

(b) Compliance with NBA Constitution and Franchise Agreement. HOOPS shall maintain its NBA franchise in good standing, including payment of all franchise and related fees and material compliance with the NBA Constitution, as amended from time to time, and any and all NBA franchise codes, rules, regulations, requirements and standards, and compliance with its franchise agreement.

(c) NBA Notice. HOOPS shall provide to CITY/COUNTY written evidence, reasonably satisfactory to CITY/COUNTY, that HOOPS has requested and diligently sought the NBA to provide to CITY/COUNTY (at the addresses set forth in Section 18 hereof) (i) copies of any notices sent to HOOPS regarding HOOPS's failure to comply with NBA franchise codes, rules, regulations, requirements or standards, or to comply with HOOPS's franchise agreement (whether or not the applicable cure period has lapsed) or (ii) copies of any demand, request statement of intent or desire to terminate, limit, modify or amend HOOPS's NBA franchise or

franchise agreement, where the result of the communications in (i) or (ii) above, if determined adversely to HOOPS would have a material effect on HOOPS or result in a suspension, revocation or loss of HOOPS's NBA franchise.

(d) Designation of Operator. In accordance with Section 4(a) hereof, HOOPS shall have the right to designate the operator(s) of the Arena and/or the Parking Facilities (which operator(s) may be HOOPS Affiliates), subject to the approval of the CITY/COUNTY. In the event CITY/COUNTY determines that operator of the Arena and/or the Parking Facilities is not maintaining the Arena in a manner consistent with First-Class Arena Facilities, CITY/COUNTY shall have the right to notify HOOPS in writing, which notice shall specifically set forth the manner in which the operator has failed to fulfill such obligations. If HOOPS does not commence to cure any such failure set forth in such notice on or before thirty (30) days after HOOPS's receipt thereof and diligently pursue such cure until completed, CITY/COUNTY shall have the right to require HOOPS to cause the operator to replace the individual that serves as general manager for the Arena and/or Parking Facilities (but not the removal of the designated operator(s)).

(e) Vending and Concessions. HOOPS shall maintain and operate vending and concession operations at all Home Basketball Games in the Arena and other Arena Events in a manner consistent with First-Class Arena Facilities. HOOPS agrees that, upon terms and conditions mutually agreed upon by HOOPS and the University, the University shall have the right to sell University-related novelties, souvenirs and similar merchandise from the Franchise gift shop or other area of the Arena Complex mutually agreed upon by HOOPS and the University. HOOPS shall have the right and the responsibility to apply for and renew when necessary all beer and liquor licenses necessary or appropriate to operate the Arena Complex in a manner consistent with the operation of First-Class Arena Facilities.

## SECTION 6. FEES PAID BY HOOPS.

HOOPS shall pay to CITY/COUNTY, in consideration for the right, authority, license and privilege to use, occupy, and operate the Arena Complex in the manner provided hereunder, a $1.15 per seat rental fee, which fee shall be imposed and collected by HOOPS on all public Paid Arena Events and paid on a monthly basis as rent to CITY/COUNTY during the Term hereof. CITY/COUNTY shall have the right to have an independent (in that it receives no significant revenue from HOOPS or CITY/COUNTY or either of their respective Affiliates) certified public accounting firm reasonably acceptable to HOOPS review HOOPS's books and records during normal business hours to the extent necessary in order to verify the amount of seat rental fees paid by HOOPS pursuant to this Section 6, which review shall occur no more than one time per calendar year during the Term hereof.

## SECTION 7. OPERATING REVENUES AND OPERATING EXPENSES.

(a) Operating Revenues. All income, revenue, deposits, undisbursed refunds and any other cash or debits to HOOPS's accounts derived from HOOPS's use, occupancy and possession of the Arena Complex in the manner described in Section 4(a) hereof shall be the sole and exclusive property of HOOPS.

(b) Operating Expenses. In addition to the rent required to be paid by HOOPS pursuant to Section 6, subject to CITY/COUNTY's express obligations under the Arena Documents, HOOPS shall be responsible during the entire Term for all costs and expenses of every kind and nature related to the use, occupancy, possession and operation of the Arena Complex, including without limitation all operating losses. In addition, HOOPS shall be obligated to reimburse CITY/COUNTY in the amount of any deductible related to insurance coverage maintained by CITY/COUNTY in accordance with Section 9(a)(i) hereof.

SECTION 8. ARENA REPAIRS AND MAINTENANCE.

(a) Capital Repair Obligations of CITY/COUNTY. During the Term, CITY/COUNTY shall be responsible for and, at its cost shall make all Capital Repairs. The Parties agree that Capital Repairs may be funded out of the Capital Improvement Reserve Fund, if any, upon the terms and conditions set forth in the Project Agreement. Except for item (11) as set forth on Exhibit "B", HOOPS, rather than CITY/COUNTY, shall be responsible for the foregoing obligations to the extent the need therefor is caused by HOOPS's failure to perform Normal and Routine Maintenance or any of its other obligations under Section 8(b) hereof on any system or component or part. CITY/COUNTY shall replace an item for which it is required to make Capital Repairs if CITY/COUNTY and HOOPS reasonably determine that it is:

(i) substantially worn out;

(ii) has reached the end of its useful life and is either obsolete or uneconomical to maintain and fails to perform to original specifications;

(iii) not functioning and cannot be repaired or cannot be economically repaired and operated;

(iv) no longer in compliance with Codes and not entitled to "grandfather" status; or

(v) no longer deemed safe

If CITY/COUNTY would otherwise be required to replace an item of computer hardware or software due to lack of a manufacturer's support, CITY/COUNTY may, in lieu thereof, pay the cost required by such manufacturer to reinstitute support, provided that such hardware or software remains compatible with other hardware or software utilized by HOOPS. Replacements shall be of a quality and functionality consistent with the original design and intent of the parties and shall be reasonably acceptable to HOOPS as to design, performance and aesthetics. HOOPS shall maintain detailed records relating to all maintenance and replacement issues which are the subject of this Section 8, and the same shall be made available on one (1) business day's notice to CITY/COUNTY for its review at HOOPS's offices. CITY/COUNTY shall perform all Capital Repairs for which it has responsibility under this Section 8(a) in a manner and in a time frame consistent with the performance of same in First-Class Arena Facilities. CITY/COUNTY shall have no liability to HOOPS for any inconvenience, annoyance, interruption or injury to HOOPS's business arising from undertaking, in a reasonable manner, any maintenance, repairs or replacements required or permitted hereunder or required by law; provided that CITY/COUNTY shall (i) undertake such maintenance, repairs and replacements

with reasonable diligence and (ii) perform such work at times and in a manner which, to the extent reasonable, under the circumstances, minimizes interference with HOOPS's use, occupancy and possession of the Arena Complex. With respect to CITY/COUNTY's obligations under this Section 8(a), in the event of any emergency or any urgent situation (including situations whereby all or any portions or components of the Arena Complex are in a condition that dictates that the Arena Complex could not be usable for or there would be a material impairment of any Arena Event or the comfort or enjoyment of the patrons of any Arena Event would be materially affected), HOOPS shall notify CITY/COUNTY of such emergency or urgent situation and, if CITY/COUNTY is not able to respond within a reasonable time period consistent with the nature of the situation (and, in all events, within a time period necessary to render the Arena usable without material impairment for any Arena Event), then HOOPS shall have the right to remedy such situation, and CITY/COUNTY will be responsible for the reasonable costs and expenses thereof. HOOPS shall notify CITY/COUNTY of any other condition or situation that would require CITY/COUNTY to perform Capital Repairs under this Section 8(a) within a reasonable time after becoming aware of such condition or situation; provided, however, so long as HOOPS's failure to notify CITY/COUNTY of such condition or situation is not willful or does not constitute a default by HOOPS under Section 8(b) of this Operating Agreement, such failure to notify shall not affect CITY/COUNTY's obligations under this Section 8(a).

(b) Maintenance Obligations of HOOPS. During the Term, HOOPS shall be responsible for, and shall:

(i) make all Minor Repairs;

(ii) undertake all Normal and Routine Maintenance;

(iii) provide adequately trained janitorial, maintenance and support staff and keep the Arena in a safe, uncluttered, clean, sanitary and sightly condition consistent with First-Class Arena Facilities; and

(iv) provide security for the Arena Complex twenty-four (24) hours per day, three hundred sixty-five (365) days per year.

CITY/COUNTY, rather than HOOPS, shall be responsible for the foregoing obligations to the extent the need therefor is caused by CITY/COUNTY's unlawful or unreasonable interference with HOOPS's operations and ability to undertake its obligations hereunder. HOOPS shall keep and maintain all items in the Arena for which it has responsibility under this Section 8(b) in good condition and repair, and shall perform such obligations in a manner and in a time frame consistent with the performance of same in First-Class Arena Facilities.

(c) HOOPS Maintenance Schedule for the Arena Complex. Prior to or within a reasonable time following the Commencement Date, HOOPS shall obtain (whether by license or purchase) a maintenance computer program reasonably acceptable to CITY/COUNTY that will enable HOOPS to develop, maintain and utilize a maintenance schedule for the Arena Complex and the major items of the FF&E Package based upon the manufacturer's maintenance schedule corresponding to each such item. Such computer program will (i) provide for the creation of an equipment record for each such item of the FF&E Package that contains a description of each

such item and the manufacturer's specifications therefor, (ii) develop work orders for the maintenance to be undertaken at the Arena Complex, and (iii) provide for the inputting of information following the completion of each work order in order to develop a history of the maintenance conducted at the Arena Complex. HOOPS shall perform or cause to be performed the maintenance services required under each work order produced by the computer maintenance program contemplated hereby and shall (to the same extent as being done so in First-Class Arena Facilities) maintain, or cause to be maintained, each item of the FF&E Package in accordance with the manufacturer's specifications therefor.

(d) CITY/COUNTY Inspection Rights. HOOPS and CITY/COUNTY recognize that CITY/COUNTY has a substantial interest in the manner in which the Arena Complex is operated and maintained and has a responsibility to the public to ensure that the Arena Complex is operated and maintained in a manner consistent with First-Class Arena Facilities. In furtherance of the foregoing, CITY/COUNTY and its agents and representatives shall have upon reasonable prior notice to HOOPS the right during usual business hours or at any other time in case of an emergency (if immediate access is required) to enter into and upon any and all parts of the Arena Complex for the purpose of inspecting the same and to inspect at the Arena Complex maintenance and repair records maintained by HOOPS with respect to all or any portions of the Arena Complex.

(e) Failure of CITY/COUNTY to Perform Repair Obligations. If CITY/COUNTY fails to fulfill any of its obligations under Section 8(a) hereof, HOOPS shall have the right to notify CITY/COUNTY in writing, which notice shall specifically set forth the manner in which CITY/COUNTY has failed to fulfill such obligations (the "***HOOPS Repair Notice***"). With the exception of emergency or urgent situations which are governed by the terms of Section 8(a) hereof, if CITY/COUNTY does not commence to cure any such failure set forth in the HOOPS Repair Notice on or before thirty (30) days after CITY/COUNTY's receipt of the HOOPS Repair Notice and diligently pursue such cure until completed, HOOPS may (but is not obligated to) undertake responsibility for such uncured obligation, and CITY/COUNTY shall be responsible to reimburse HOOPS for all costs and expenses associated with HOOPS's undertaking of such obligations, together with interest at the Interest Rate on all such amounts from the date incurred by HOOPS until the date reimbursed. In addition to the above-described cure rights of HOOPS, if CITY/COUNTY fails to fulfill the same (or substantially similar) obligation under Section 8(a) hereof twice in any one (1) year period, then HOOPS may undertake such obligation for the remainder of the Term at CITY/COUNTY's expense, together with interest at the Interest Rate on all amounts paid by HOOPS in connection therewith from the date incurred until the date reimbursed; provided that, at any subsequent time, HOOPS may elect to cease undertaking such obligation and require CITY/COUNTY to satisfy the obligation in accordance with Section 8(a) hereof. All disputes respecting CITY/COUNTY's performance of its obligations under Section 8(a) or the determination of issues relating thereto shall be resolved pursuant to the Dispute Resolution Procedure. In addition to all other rights of HOOPS in this Section 8(e), HOOPS shall have the right to specifically enforce CITY/COUNTY's obligations under this Section 8.

(f) Failure of HOOPS to Perform Maintenance Obligations. If HOOPS fails to fulfill any of its obligations under Section 8(b) hereof, CITY/COUNTY shall have the right to notify HOOPS in writing, which notice shall specifically set forth the manner in which HOOPS has failed to fulfill such obligations (the "***CITY/COUNTY Maintenance Notice***"). If HOOPS does

not commence to cure any such failure set forth in the CITY/COUNTY Maintenance Notice on or before thirty (30) days after HOOPS's receipt of the CITY/COUNTY Maintenance Notice and diligently pursue such cure until completed. CITY/COUNTY may (but is not obligated to) undertake such uncured obligation, in which event, HOOPS shall be responsible to reimburse CITY/COUNTY for all costs and expenses associated with CITY/COUNTY's undertaking of such obligations, together with interest at the Interest Rate on all such amounts from the date incurred by CITY/COUNTY until the date reimbursed. In addition to the above-described cure rights of CITY/COUNTY, if HOOPS fails to fulfill the same (or substantially similar) obligation under Section 8(b) hereof twice in any one (1) year period, then CITY/COUNTY may notify HOOPS in writing that it is undertaking such obligation for the remainder of the Term at HOOPS's expense, together with interest at the Interest Rate on all amounts paid by CITY/COUNTY in connection therewith from the date incurred until the date reimbursed; provided that, at any subsequent time, CITY/COUNTY may elect to cease undertaking such obligation and require HOOPS to satisfy the obligation in accordance with Section 8(b) hereof. If CITY/COUNTY undertakes any such HOOPS obligations, then so long as it uses reasonable care, CITY/COUNTY shall have no liability to HOOPS for any inconvenience, annoyance, interruption or injury to HOOPS's business or property resulting from performance of such obligations. All disputes regarding HOOPS's performance of its obligations under Section 8(b) or the determination of issues relating thereto shall be resolved pursuant to the Dispute Resolution Procedure. In addition to all other rights of CITY/COUNTY in this Section 8(f), CITY/COUNTY shall have the right to specifically enforce HOOPS's obligations under this Section 8.

SECTION 9. INSURANCE OBLIGATIONS.

(a) Insurance Coverages. During the Term, HOOPS and CITY/COUNTY shall obtain and maintain insurance in accordance with the following provisions:

(i) CITY/COUNTY shall keep the Arena Complex insured against loss caused by fire and other perils normally covered by "All Risk" policies of insurance (any of the foregoing, a "***Casualty***") for an amount not less than the full replacement cost, with a deductible of no greater than Twenty Five Thousand Dollars ($25,000.00), which deductible amount may be increased no more often than once every five (5) years by the CPI Percentage Adjustment.

(ii) HOOPS shall procure and maintain policies insurance in accordance with the requirements of Exhibit "D" attached hereto and made a part hereof.

(iii) CITY/COUNTY shall procure and maintain (or cause third parties other than HOOPS to procure and maintain, in the case of construction, design and alteration) public liability insurance against claims resulting from injury to, or death of, persons, and damage to, or loss of, property, in any way resulting from or arising out of the actions of CITY/COUNTY, any CITY/COUNTY Affiliate or their respective agents, employees, contractors or licensees with respect to (A) the construction, design, alteration, maintenance, repair and replacement of components of the Arena Complex, unless caused by the gross negligence or

willful misconduct of HOOPS or any party acting by, through or under HOOPS. Such insurance policy shall contain contractual liability insurance covering this Operating Agreement and related coverages normally found in a "Broadened Liability Coverage Endorsement" liability coverage, and shall be in an amount not less than Twenty-Five Million Dollars ($25,000,000) combined single limit, increased every five (5) years by the CPI Percentage Adjustment.

(iv) Either CITY/COUNTY or HOOPS, at its option, may (A) procure and maintain such other insurance or expanded coverages, as either deems appropriate or (B) satisfy its obligation under this Section 9 by procuring and maintaining blanket insurance policies with appropriate endorsements specifying coverage which comply with the respective requirements set forth in this Section 9.

(v) Any insurance required to be procured and maintained under this Section shall be procured from, and maintained with, a company (or companies) with at least a Best's A-X Rating which are licensed by the State of Tennessee to write policies of the nature required hereunder.

(vi) Each Party shall furnish to the other, on or before the Commencement Date, certificates issued by insurance companies to the effect that the insurance required of each Party hereunder is in full force and effect. If either Party fails to procure and maintain such insurance, the other Party may (A) procure and maintain the insurance and (B) recover from such failing Party the cost thereof, together with interest at the Interest Rate on all amounts paid in connection therewith from the date incurred until the date reimbursed.

(vii) Each Party waives for itself and its respective insurers, as against the other Party, all rights of subrogation under any policies of insurance which may now or hereafter be in effect with respect to any and every claim which arises, or may arise, during the Term for any and all damage to, or loss of, any of its property located within or upon, or constituting a part, of the Arena Complex, to the extent coverage is provided by the types of insurance policies required under this Section 9.

(viii) The insurance policies required under this Section 9 to be maintained by CITY/COUNTY shall designate HOOPS and any Sponsor identified by HOOPS to CITY/COUNTY as additional insureds, to the extent of CITY/COUNTY's obligations set forth in this Operating Agreement.

(ix) All insurance policies maintained in accordance with this Section 9 shall contain a provision stating that such policy and coverage may not be modified or canceled without notice to both parties to this Operating Agreement delivered at least thirty (30) days prior to such modification or cancellation.

(b) Indemnity of CITY/COUNTY. Commencing on the date hereof, HOOPS agrees to indemnify, defend and hold harmless CITY/COUNTY, any CITY/COUNTY Affiliate and any of their attorneys, consultants, representatives, agents, employees, mortgagees, successors and

assigns, and their respective partners, directors, shareholders, members, officers, agents and employees from and against any and all losses, costs, damages, expenses, actions, causes of action, demands and claims of any nature whatsoever (including, reasonable attorneys', experts' and consultants' fees) in any way arising out of, or related to HOOPS's relocation from Vancouver, British Columbia, Canada.

SECTION 10. TAXES.

Because title to the Arena Complex and the fixtures, equipment and other personal property and improvements owned by CITY/COUNTY or PBA is (or will be prior to the Commencement Date) and shall remain in CITY/COUNTY or PBA, as the case may be, and because of the Municipal Purposes served by the operation of the Arena Complex, it is expected that there will be no real or personal property taxes imposed with respect to the Arena Complex or such fixtures, equipment and other personal property and improvements owned by CITY/COUNTY or PBA. If any real or personal property taxes, or special or other assessments for fiscal improvements, are imposed during the Term against the Arena Complex or this Operating Agreement, HOOPS's interest in any of the foregoing or in such fixtures, equipment and other personal property as are used in connection with the Arena Complex, then CITY/COUNTY shall be responsible for the payment of such taxes, with the exception of HOOPS's Portion of the FF&E Package; provided that, notwithstanding the foregoing, during the Term, HOOPS shall be responsible for the payment of all personal property taxes relating to all trade fixtures, equipment and personal property located in the Arena Complex not owned by CITY/COUNTY; and, provided further, that, as between CITY/COUNTY and HOOPS, HOOPS shall be responsible for any real estate taxes that may be assessed against the leasehold interests of any of HOOPS's tenants in the Arena Complex. In no event shall HOOPS be responsible for any real estate or personal property taxes assessed against any leasehold interest or other interest relating to the right of HOOPS or others claiming by or through HOOPS to occupy a portion of the Arena Complex or use the CITY/COUNTY's Portion of the FF&E Package.

SECTION 11. EMINENT DOMAIN, DAMAGE AND DESTRUCTION.

(a) Eminent Domain.

(i) So long as there is no Event of Default by HOOPS hereunder, CITY/COUNTY hereby agrees that it will not, for themselves or any other unit of local government, exercise the right of eminent domain to acquire the Arena Complex or any part thereof or any interest therein or the Franchise. Additionally, if, as a result of the exercise of eminent domain, HOOPS, in its reasonable judgment, determines that it cannot generate sufficient revenues to allow adequate returns on investment, then each of the Arena Documents shall terminate on the day possession is taken.

(ii) If this Operating Agreement is terminated pursuant to this Section 11(a), then all payments required to be made by either Party hereunder shall be prorated to the date of such termination.

(iii) If the Arena Documents are not terminated as a result of an act of eminent domain, then CITY/COUNTY shall use any proceeds received from the

condemnation to restore promptly the Arena Complex as nearly as possible to the condition existing immediately prior to such taking (in accordance with the same procedures as are applicable with respect to the construction of the Arena Complex under the Memphis Arena Project Agreement), and this Operating Agreement shall continue in full force and effect and shall not be terminated by reason of such taking. If the proceeds are insufficient to pay all costs of such restoration work, CITY/COUNTY shall be responsible for the shortfall.

(iv) Any award made in eminent domain proceedings for a taking of the entire Arena Complex, or any portion thereof, that is not used for restoration as required in clause (iii) above, shall be paid to CITY/COUNTY; provided, however, notwithstanding anything to the contrary contained herein, any compensation specifically and independently awarded to HOOPS for loss of business or goodwill, moving expenses, or for its personal property (including with limitation HOOPS's Portion of the FF&E Package), shall be the property of HOOPS.

(b) Destruction or Damage. If the Arena Complex, or any portion thereof, is destroyed or damaged by any Casualty, and the repair or replacement necessitated by such destruction or damage exceeds the scope of the obligations of HOOPS under Section 8(b) hereof to perform repair and replacement, then CITY/COUNTY, as soon as is reasonably possible, shall rebuild, repair and restore the Arena Complex as nearly as possible to the condition which existed immediately prior to such destruction or damage, and, so long as CITY/COUNTY makes available to HOOPS (i) The Pyramid for its Home Basketball Games, including the right to use of club seats (if any), suites, parking in amount and proximity comparable to that available for the Arena, and the right to receive all revenues for advertising, signage and concessions, or (ii) some other location acceptable to HOOPS on terms comparable to this Operating Agreement, then this Operating Agreement shall remain in full force and effect, otherwise it and the other Arena Documents shall terminate and HOOPS shall not be obligated to pay any cost, fee, premium or penalty. Notwithstanding the foregoing, if, (i) for any reason, it takes CITY/COUNTY (or is reasonably projected in writing by the Market Professional(s) to take CITY/COUNTY) longer than twenty-four (24) months from the date of the destruction or damage to repair or restore the Arena Complex, and such destruction or damage was not due to the negligence or willful misconduct of HOOPS, or its agents, employees, contractors, tenants or licensees, then HOOPS shall have the right to terminate this Operating Agreement by delivering written notice to CITY/COUNTY within thirty (30) days after (A) the expiration of such twenty-four (24) month period, or (B) HOOPS and CITY/COUNTY are notified in writing by the Market Professional(s) of its decision, as applicable; or (ii) for any reason, it takes CITY/COUNTY (or is reasonably projected in writing by the Market Professional(s) to take CITY/COUNTY) longer than thirty-six (36) months from the date of the destruction or damage to repair or restore the Arena Complex, and such destruction or damage was not due to the willful misconduct of HOOPS, or its agents, employees, contractors, tenants or licensees, then HOOPS shall have the right to terminate this Operating Agreement by delivering written notice to CITY/COUNTY within thirty (30) days after (A) the expiration of such thirty-six (36) month period, or (B) HOOPS and CITY/COUNTY are notified in writing by the Market Professional(s) of its decision, as applicable; or (ii) during the last ten (10) years of the Initial Term, the Market Professional(s) reasonably determine that it would take CITY/COUNTY longer than one (1) year

from the date of such destruction or damage to repair or restore the Arena Complex, then HOOPS shall have the right to terminate this Operating Agreement and the other Arena Documents by delivering written notice to CITY/COUNTY within thirty (30) days after the Market Professional(s)' determination. In the event of a termination of the Arena Documents under the terms of the preceding sentence, HOOPS shall not be obligated to pay any cost, fee, premium or penalty. In no event shall CITY/COUNTY be responsible to repair, restore or replace any damage to or destruction of HOOPS's trade fixtures, personal property or equipment (including with limitation HOOPS's Portion of the FF&E Package). In all events, HOOPS shall remain responsible to perform any repairs and replacements necessitated by damage or destruction, if the repair or replacement is within the scope of the obligations of HOOPS under Section 8(b) hereof to perform repair and replacement. To the extent that HOOPS is required to repair or replace all or any portion of the Arena Complex in accordance with this Section 11, HOOPS shall have access to casualty insurance proceeds necessary to meet such obligations.

## SECTION 12. ALTERATIONS AND INSPECTIONS.

(a) Arena Complex Alterations. HOOPS shall not have the right to make material additions, improvements, changes and alterations to the Arena Complex, without the prior written consent of CITY/COUNTY. CITY/COUNTY shall have thirty (30) days after receipt of HOOPS's written request for approval of additions, improvements, changes and alterations, together with plans and specifications therefor, to approve or deny HOOPS's request. If CITY/COUNTY fails to respond to HOOPS's request within such thirty (30) day period, HOOPS's request shall be deemed approved by CITY/COUNTY. For the purposes of this Section 12, additions, improvements and alterations to the Arena Complex shall be deemed material to the extent that any such addition, improvement or alteration (i) will cost, in the aggregate, an amount greater than, or equal to the Approved Alteration Amount, (ii) will affect the structural elements or alter the exterior appearance of the Arena Complex, or (iii) will materially increase or expand CITY/COUNTY's Capital Repair obligations as set forth in Section 8(a) hereof, or CITY/COUNTY's maintenance obligations, if any, as set forth in Section 8(b) hereof, or the cost or difficulty of satisfying such obligations. With respect to any addition, improvement, change or alteration to the Arena Complex that is permitted in accordance with this Section 12, CITY/COUNTY shall cooperate with HOOPS in a reasonable manner (at no cost or expense to CITY/COUNTY) in applying for and obtaining required permits, approvals and covenants. HOOPS shall complete all such additions, improvements, changes or alterations in a good, safe and workmanlike manner, and in compliance with all applicable local, state and federal codes, ordinances, statutes, laws, rules and regulations. HOOPS shall be responsible for obtaining any and all permits, consents and approvals required prior to commencing any such work on additions, improvements, changes or alterations. Additionally, all contracts for additions, improvements and alterations to the Arena Complex shall comply with all applicable laws. All work relating to such material additions, improvements or alterations shall be undertaken and completed in accordance with plans and specifications approved by CITY/COUNTY. Reasonably promptly after the completion of the alteration, HOOPS shall provide as-built drawings to CITY/COUNTY showing the alterations.

(b) Mechanic's and Other Liens. HOOPS shall not suffer or permit any mechanic's lien or other lien to be filed against the Arena Complex or any portions thereof, by reason of work, labor, skill, services, equipment or materials supplied or claimed to have been supplied

thereto at the request of HOOPS or anyone claiming by, through or under HOOPS. If any such mechanic's lien or other lien shall at any time be filed against the Arena Complex or any portion thereof, HOOPS, subject to the provisions of the next sentence, shall cause the same to be discharged of record within thirty (30) days after receipt of notice of the filing. However, in the event HOOPS desires to contest the validity of any such mechanic's lien, HOOPS, within thirty (30) days after receipt of notice of the filing, shall notify CITY/COUNTY, in writing, that HOOPS intends to contest the same. If HOOPS continues, in good faith, to contest the validity of such lien by appropriate legal proceedings that operate to prevent the collection thereof and the sale or forfeiture of the Arena Complex or any portion thereof, HOOPS shall be under no obligation to pay such lien until such time as the same has been decreed, by court order, to be a valid lien on all or any other part of the Arena Complex; provided, however, in the event HOOPS shall not comply with the provisions of this Section 12(b), CITY/COUNTY may, upon thirty (30) days' prior written notice to HOOPS discharge such lien and HOOPS shall be responsible to reimburse CITY/COUNTY for all costs and expenses associated with CITY/COUNTY's undertaking of such obligations, together with interest at the Interest Rate on all such amounts from the date incurred by CITY/COUNTY until the date reimbursed.

(c) CITY/COUNTY's Inspection of the Arena Complex. During the Term, CITY/COUNTY shall have the right, at any time, and from time to time, upon notice to the HOOPS Representative, to inspect all or any portion of the Arena Complex. Notwithstanding the foregoing, CITY/COUNTY shall not be required to provide notice before entering the Arena Complex for inspection purposes if CITY/COUNTY, in its reasonable discretion, determines that any emergency exists which requires immediate attention.

SECTION 13. EVENTS OF DEFAULT.

Each of the following shall be an event of default hereunder:

(a) Events of Default by HOOPS. It shall be an "***Event of Default by HOOPS***" hereunder if:

(i) HOOPS fails to pay any amount required to be paid pursuant to the terms of this Operating Agreement when due and such failure is not cured within thirty (30) days after written notice of such failure from CITY/COUNTY to HOOPS;

(ii) HOOPS fails to perform or observe any other of its covenants, agreements, terms or conditions hereunder within thirty (30) days after it receives written notice from CITY/COUNTY setting forth in reasonable detail the nature and extent of such failure and identifying the applicable provisions of this Operating Agreement, or, if such failure is not susceptible of cure within such time, then failure to commence such cure within such thirty (30) day period and to diligently prosecute such cure to completion;

(iii) HOOPS files a voluntary petition in bankruptcy; any involuntary petition is filed in bankruptcy, and the petition is not dismissed within sixty (60) days after the filing; any final adjudication is made that HOOPS is a bankrupt; HOOPS requests or consents to the appointment of a receiver or trustee for the

business or assets of HOOPS; a receiver or trustee for the business or assets of HOOPS is appointed and the appointment is not set aside within sixty (60) days after being made; or the making by HOOPS of a general assignment for the benefit of creditors;

(iv) An Event of Default (as defined in the applicable Arena Document) by HOOPS occurs under any of the other Arena Documents.

(b) Remedies of CITY/COUNTY. Upon an Event of Default by HOOPS of the nature described in Section 13(a)(i), Section 13(a)(ii) or Section 13(a)(iv) above, CITY/COUNTY shall have the right, without any further notice or demand whatsoever, (i) to terminate and cancel this Operating Agreement (in which event all of the Arena Documents shall terminate, with the exception of any remedies which are applicable as a result of the event causing such termination); or (ii) (A) to perform such acts as are necessary to cure such Event of Default by HOOPS and to recover the reasonable cost of so doing, and/or (B) specifically enforce any of CITY/COUNTY's rights or HOOPS's obligations hereunder, and/or (C) obtain injunctive relief or any other remedy in law or equity, other than the right to receive special, consequential, punitive or incidental damages. The rights and remedies set forth in this Section, together with CITY/COUNTY's rights and remedies as set forth in the other Arena Documents, shall be the sole remedies of CITY/COUNTY for any Event of Default by HOOPS hereunder. HOOPS shall be responsible to CITY/COUNTY for all costs and expenses incurred by CITY/COUNTY in enforcing its rights or HOOPS's obligations hereunder, including all reasonable attorneys' fees, together with interest at the Interest Rate from the date incurred to the date paid.

(c) Events of Default by CITY/COUNTY. Each of the following shall be an "*Event of Default by CITY/COUNTY*" hereunder if:

(i) CITY/COUNTY fails to pay any amount required to be paid pursuant to the terms of this Operating Agreement when due and such failure is not cured within thirty (30) days after written notice of such failure from HOOPS;

(ii) CITY/COUNTY fails to perform or observe any other of its covenants, agreements, terms or conditions hereunder within thirty (30) days after it receives written notice from HOOPS setting forth in reasonable detail the nature and extent of such failure and identifying the applicable provisions of this Operating Agreement, or, if such failure is not susceptible of cure within such time, then failure to commence such cure within such thirty (30) day period and diligently prosecute such cure to completion;

(iii) CITY/COUNTY files a voluntary petition in bankruptcy; any involuntary petition is filed in bankruptcy, and the petition is not dismissed within sixty (60) days after the filing; any final adjudication is made that CITY/COUNTY is a bankrupt; CITY/COUNTY requests or consents to the appointment of a receiver or trustee for the business or assets of CITY/COUNTY; a receiver or trustee for the business or assets of CITY/COUNTY is appointed and the appointment is not set aside within sixty (60) days after being made; or

the making by CITY/COUNTY of a general assignment for the benefit of creditors;

(iv) An Event of Default (as defined in the applicable Arena Document) by CITY/COUNTY occurs under any of the other Arena Documents.

(d) Remedies of HOOPS. Upon an Event of Default by CITY/COUNTY above, HOOPS shall have the right to offset the amount which CITY/COUNTY fails to pay against the sums due from HOOPS to CITY/COUNTY, from time to time, under this Operating Agreement. Upon an Event of Default by CITY/COUNTY under Section 13(c)(i), Section 13(c)(ii) or Section 13(c)(iv) above, HOOPS shall also have the right, without any further notice or demand whatsoever, to (i) perform such acts as are necessary to cure the Event of Default by CITY/COUNTY, (ii) to recover the reasonable costs of so curing, and/or (iii) specifically enforce any of HOOPS's rights or CITY/COUNTY's obligations hereunder, and/or (iv) obtain injunctive relief or any other remedy in law or equity, other than the right to receive special, consequential, punitive or incidental damages. The rights and remedies set forth in this Section, together with HOOPS's rights and remedies as set forth in the other Arena Documents, shall be the sole remedies of HOOPS for any Event of Default by CITY/COUNTY hereunder. CITY/COUNTY shall be responsible to HOOPS for all costs and expenses incurred by HOOPS in enforcing its rights or CITY/COUNTY's obligations hereunder, including but not limited to, all reasonable attorneys' fees, together with interest at the Interest Rate from the date incurred to the date paid.

SECTION 14. COVENANT OF QUIET ENJOYMENT, TITLE AND NON-DISTURBANCE.

(a) Covenant of Quiet Enjoyment. CITY/COUNTY represents, warrants and covenants that no later than October 1, 2001 (the "***Acquisition Date***"), and at all times throughout the Term: (i) PBA shall be the fee simple owner of the Site, (ii) the Site shall be free of all liens and encumbrances, except for the Permitted Encumbrances, (iii) CITY/COUNTY will own or have the right to possession of all of CITY/COUNTY's Portion of the FF&E Package free and clear of all liens and encumbrances, and (iv) HOOPS shall have the quiet and peaceable exclusive right, authority, license and privilege to possess, occupy and operate the Arena Complex as provided hereunder, without interruption by any party. If there is a material breach of any of the foregoing covenants that cannot be cured within the earlier of (x) thirty (30) days after written notice to CITY/COUNTY, or (y) the Commencement Date, then HOOPS, at its option, may terminate this Operating Agreement and the other Arena Documents without payment of any cost, fee, premium or penalty.

(b) Title to Property. Title to the Arena Complex, including all fixtures, equipment and other personal property or improvements located therein or attached thereto, from time to time, by, at the request of, or as a result of a contract with, CITY/COUNTY or PBA, shall be and remain in CITY/COUNTY or PBA, including all fixtures, equipment and other personal property or improvements located therein or attached thereto in the satisfaction by CITY/COUNTY of its obligations under the Arena Documents. Title to trade fixtures, equipment and other personal property, the costs of which are not intended to be included in the Budget, and heretofore or hereafter placed in, or attached to, the Arena Complex by HOOPS (including without limitation HOOPS's Portion of the FF&E Package) or HOOPS's tenants, licensees or concessionaires shall

not rest in CITY/COUNTY and shall, as applicable, be controlled by HOOPS's agreement with any such licensee or concessionaire. HOOPS and such tenants, licensees and concessionaires of HOOPS shall be permitted to remove their respective fixtures, equipment and other personal property in accordance with their respective agreements with HOOPS, as applicable; provided that, as between CITY/COUNTY and HOOPS, HOOPS shall be responsible for all damage and/or injury caused by such removal. If HOOPS does not so remove any trade fixtures, equipment and other personal property or improvements owned by it prior to the date that is ninety (90) days after the expiration or earlier termination of the Term, then CITY/COUNTY, upon termination of this Operating Agreement may, at its option, (i) treat any such item as having been abandoned, in which event it shall become the property of CITY/COUNTY to be retained or disposed of at CITY/COUNTY's cost in such manner as CITY/COUNTY may deem appropriate or (ii) require HOOPS to remove any such item.

(c) Disposal of Property. HOOPS, in its reasonable business judgment, and in compliance with all applicable Codes, including without limitation, in accordance with all procedures established by and upon obtaining any required approvals of CITY/COUNTY and/or any CITY/COUNTY Affiliate, may sell or dispose of any portion of the CITY/COUNTY's Portion of the FF&E Package or other fixtures, equipment and other personal property or improvements belonging to CITY/COUNTY and used in connection with the operation of the Arena Complex, that is outmoded, inefficient, has outlived its useful life or is obsolete with respect to the operation of the Arena Complex, provided that in the case of any item that has material value and can be sold or traded, the proceeds resulting from such sale or trade are used to acquire additional items in the name of CITY/COUNTY for the operation of the Arena Complex. HOOPS shall not sell or dispose of any item owned by CITY/COUNTY to HOOPS or a HOOPS Affiliate in a transaction that yields below a Prevailing Rate Payment. HOOPS and CITY/COUNTY shall adhere to the following procedure, pursuant to which CITY/COUNTY shall have the right to monitor, tag and trace all aspects of the CITY/COUNTY's Portion of the FF&E Package, and other fixtures, equipment and personal property at the Arena Complex belonging to CITY/COUNTY:

(i) CITY/COUNTY shall have access to the Arena Complex for the purposes of marking and/or tagging all aspects of the CITY/COUNTY's Portion of the FF&E Package, which access shall be provided between 9:00 a.m. to 5:00 p.m., Monday through Friday upon the request of the CITY/COUNTY, provided such process will be performed with HOOPS personnel and at a time and in a manner so as not to materially interfere with the operation of the Arena Complex.

(ii) CITY/COUNTY shall have the right to conduct an annual audit of the Arena Complex, using CITY/COUNTY employees or other agents (provided that any third party auditor shall be an independent (in that it receives no significant revenue from HOOPS or CITY/COUNTY or either of their respective Affiliates) certified public accounting firm having not less than ten (10) years experience in performing the type of audit to be performed hereunder) in order to confirm that all aspects of the CITY/COUNTY's Portion of the FF&E Package are located within the Arena Complex, which audit shall be at a mutually agreed upon time and with HOOPS personnel.

(iii) If, as a result of the annual audit of the Arena Complex, it is determined that certain aspects of the CITY/COUNTY's Portion of the FF&E Package are not located within the Arena Complex and such items or aspects were not disposed of by HOOPS in the manner provided in this Section 14(c), then HOOPS promptly shall replace such missing or unlocatable items upon the written direction of CITY/COUNTY, which replacement shall be at the expense of HOOPS to the extent not covered by the insurance required to be carried by CITY/COUNTY under Section 9(a)(i) and HOOPS shall be responsible for any deductible.

(iv) Any dispute relating to this procedure, the results of the audit or the responsibility for the replacement of any item shall be subject to the Dispute Resolution Procedure.

(d) Non-Disturbance. It is a condition of HOOPS's obligations hereunder that PBA or any CITY/COUNTY Affiliate that becomes the fee simple titleholder of the Arena Complex, and the holder of any mortgage on, or ground or underlying lessor of, the Arena Complex provide HOOPS with an agreement in form and substance reasonably satisfactory to HOOPS that, in the event of a foreclosure of such mortgage, the appointment of a receiver for the benefit of such mortgagee or the enforcement of any remedy by such mortgagee or ground or underlying lessor affecting occupancy by HOOPS of the Arena Complex or in any way impairing the rights of HOOPS hereunder, entitling HOOPS, at its election, (i) to terminate this Operating Agreement and the other Arena Documents without payment of any cost, fee premium or penalty, or (ii) to non-disturbance by PBA or the applicable CITY/COUNTY Affiliate and such mortgagee or ground lessor of HOOPS and its rights hereunder so long as there is no Event of Default by HOOPS.

## SECTION 15. AUTHORIZATION AND EXECUTION BY CITY/COUNTY.

CITY/COUNTY represents and warrants that: (a) it has performed and complied with all applicable codes, ordinances, statutes, laws, rules and regulations, necessary or requisite to CITY/COUNTY's entering into and carrying out the terms of this Operating Agreement; (b) this Operating Agreement is the valid and binding obligation of CITY/COUNTY, enforceable against it in accordance with its terms; and (c) CITY/COUNTY has full power and authority to enter into and to perform this Operating Agreement.

## SECTION 16. AUTHORIZATION AND EXECUTION BY HOOPS.

HOOPS represents and warrants that: (a) it has been duly organized, and is validly existing and in good standing, under the laws of the State of Delaware, and it is or will be as soon as reasonably practicable after the date hereof qualified to do business in the State of Tennessee; (b) it has performed and complied with all applicable laws, ordinances, rules and regulations, compliance as are necessary or requisite to HOOPS's entering into of this Operating Agreement; (c) HOOPS has the full power and authority to enter into and perform this Operating Agreement; and (d) this Operating Agreement is the valid and binding obligation of HOOPS.

SECTION 17. ENVIRONMENTAL MATTERS.

(a) CITY/COUNTY represents, warrants and covenants that as of the Commencement Date:

(i) There are no Hazardous Materials at, on or under the Arena Complex and there are no violations of any Environmental Laws with respect to the Arena Complex or the Site.

(ii) No Environmental Conditions exist, and there are no underground storage tanks at the Arena Complex or the Site.

(iii) To the extent that there were Hazardous Materials present at, on or under the Arena Complex or the Site or any violation of Environmental Laws at the time CITY/COUNTY took title or during the course of excavation of the Site or development or construction of the Arena Complex, the same have been or will have been remedied by or on behalf of CITY/COUNTY to the extent that no violations of Environmental Laws will exist as of the Commencement Date. CITY/COUNTY agrees that it shall be responsible for all costs and expenses associated with (A) the breach of the foregoing representation by CITY/COUNTY, and (B) the existence of Environmental Conditions at, on or under the Arena Complex and the violation of Environmental Laws due to the acts or omissions of CITY/COUNTY, any CITY/COUNTY Affiliate or their respective agents, employees, contractors or licensees.

(b) HOOPS agrees that it shall be responsible for all costs and expenses associated with the existence of Environmental Conditions at, on or under the Arena Complex due to the acts or omissions after the Commencement Date of HOOPS, its agents, employees, contractors or licensees.

SECTION 18. NOTICES.

Any notices required or permitted to be given under the terms of this Operating Agreement shall be effective only if in writing and delivered either in person to the other Party's authorized agent, or by prepaid overnight courier service or facsimile transmission, to the addresses set forth below, or to such other person or address as either Party may designate in writing and deliver as herein provided:

HOOPS: HOOPS, L.P.
c/o Heico Acquisitions Inc.
70 West Madison Street, Suite 5600
Chicago, IL 60602
Attention: Stanley H. Meadows
Facsimile: 312-419-9417

With a copy to: McDermott, Will & Emery
227 West Monroe Street
Chicago, Illinois 60606
Attention: Stanley H. Meadows, P.C.
Facsimile: 312-984-7700

City of Memphis: City Chief Administrative Officer
125 North Main Street, Room 308
Memphis, Tennessee 38103
Attention: Rick Masson, CAO
Facsimile: 901-576-6555

With a copy to: City Attorney
125 North Main Street, Room 314
Memphis, Tennessee 38103
Attention: Robert L.J. Spence, Jr., City Attorney
Facsimile: 901-576-6531

Shelby County: Chief Administrative Officer
160 North Main Street, Suite 850
Memphis, Tennessee 38103
Attention: Jim Kelly
Facsimile: 901-545-3490

Shelby County Board of Commissioners
160 North Main Street, Suite 619
Memphis, Tennessee 38103
Attention: Honorable James Ford, Chairman
Facsimile: 901-545-4283

With a copy to: Shelby County Attorney
160 North Main Street, Suite 660
Memphis, Tennessee 38103
Attention: Donnie E. Wilson, County Attorney
Facsimile: 901-545-4687

All notices sent in accordance with this Section shall be deemed given and effective on the date delivered if made in person, on the date deposited if sent via overnight courier service or the date transmitted if sent via facsimile.

SECTION 19. HOOPS EXCULPATION.

Notwithstanding anything in this Operating Agreement to the contrary, CITY/COUNTY agrees that, no partner (other than the General Partner), officer, employee, director or shareholder in or of HOOPS, or of any successor or assignee of HOOPS, shall have any personal liability whatsoever hereunder, or for or with respect to any claim, judgment, decree, court order or otherwise against HOOPS, in any capacity whatsoever, for the payment of any sum or sums

due or to become due hereunder, or for the performance of any obligations or things to be performed hereunder, and, if legal proceedings are instituted to enforce any of the obligations created hereunder, or for the performance of any other acts or obligations required hereunder, then any order, judgment or decree rendered shall not be enforceable against any such person or entity described above; provided that nothing in this Section 19 shall relieve any person or entity for liability or damages from fraud.

SECTION 20. CITY/COUNTY EXCULPATION.

Notwithstanding anything in this Operating Agreement to the contrary, HOOPS agrees that, no partner, officer, director, employee or shareholder in or of CITY/COUNTY, or of any successor or assignee of CITY/COUNTY, shall have any personal liability whatsoever hereunder, or for or with respect to any claim, judgment, decree, court order or otherwise against CITY/COUNTY, in any capacity whatsoever, for the payment of any sum or sums due or to become due hereunder, or for the performance of any obligations or things to be performed hereunder, and, if legal proceedings are instituted to enforce any of the obligations created hereunder, or for the performance of any other acts or obligations required hereunder, then any order, judgment or decree rendered shall not be enforceable against any such person or entity described above; provided that nothing in this Section 20 shall relieve any person or entity for liability or damages from fraud.

SECTION 21. COOPERATION.

CITY/COUNTY and HOOPS recognize that it is in the best interests of each of them, and of the citizens of Memphis and of Shelby County, Tennessee, to strive to maximize the number of events conducted at, and the amount of revenues realized from, the Arena Complex. CITY/COUNTY or a CITY/COUNTY Affiliate, in addition to owning the Arena Complex, owns and operates The Pyramid, consisting of facilities that could be used for many of the events that have been, or could be conducted in the Arena Complex. While CITY/COUNTY and HOOPS each acknowledge that certain events that could be conducted in either facility may be better suited to one facility or the other for a variety of reasons, CITY/COUNTY recognizes that substantial economic detriment could accrue to the Arena Complex and HOOPS if CITY/COUNTY sought to attract to The Pyramid events that could be staged at the Arena Complex with as favorable an effect on the community. CITY/COUNTY agrees that: (a) it will not attempt to induce any event to be booked into The Pyramid instead of into the Arena Complex by providing reduced rates or rents or alternate dates; and (b) it will conduct the operation of The Pyramid in such a fashion as is reasonably possible, to contribute to the success of both the Arena Complex and The Pyramid. This agreement by CITY/COUNTY shall not be construed to mean that CITY/COUNTY will not make The Pyramid available for events at the request of the promoter of the event according to its normal procedures for events in The Pyramid, but rather only that it will not modify its customary procedures in a way that is economically beneficial to the promoter to cause the event to be staged in The Pyramid rather than in the Arena Complex. CITY/COUNTY and HOOPS shall meet regularly to discuss the promotion activities of each facility and prospective events for each facility. All efforts shall be made to determine in good faith the proper venue for each prospective event and to develop cooperative advertising and solicitation with a view to maximizing the events to be held in the Arena Complex.

SECTION 22. SUCCESSORS AND ASSIGNS; ASSIGNMENT.

(a) This Operating Agreement is binding upon, and shall inure to the benefit of, the parties hereto, and to their respective successors and assigns (including any governmental entity that by law, is charged with the obligations of CITY/COUNTY hereunder, it being understood that CITY/COUNTY shall continue to be bound).

(b) HOOPS shall not assign its interests in this Operating Agreement without the consent of CITY/COUNTY, except that no consent shall be required if all of the following applicable requirements are met: (i) the assignee is a HOOPS Affiliate; (ii) such assignment shall be made in connection with the assignment of the Franchise, as permitted by this Operating Agreement; and (iii) the assignee must assume the obligations of its assignor under this Operating Agreement, and, if all such requirements are met, HOOPS shall be relieved from all liabilities and obligations under this Operating Agreement.

(c) CITY/COUNTY shall not assign this Operating Agreement or sublease its rights herein or delegate any of its duties hereunder to any other person without the consent of HOOPS; provided that, HOOPS shall consent to any assignment or delegation by CITY/COUNTY arising by reason of a reorganization of responsibilities between CITY/COUNTY, on the one hand, and other public or quasi-public entities, on the other hand, so long as (i) the obligations of CITY/COUNTY under this Operating Agreement are expressly assumed by one or more assignees or delegees, each of which is a public or quasi-public entity that, in the reasonable judgment of HOOPS, is at least as financially responsible as such assigning Party, and (ii) in the reasonable judgment of HOOPS, such reorganization would not impair the realization by HOOPS of the expected benefits from the rights granted to it under this Operating Agreement; provided further, that, no consent shall be required in connection with the assignment of this Operating Agreement, the sublease of rights herein or the delegation of duties hereunder by CITY/COUNTY to the Memphis and Shelby County Sports Authority, which may become a party to this Operating Agreement after the date hereof.

SECTION 23. TIME IS OF THE ESSENCE.

The times for performance provided in this Operating Agreement are essential due to the obligations and expenditures of the parties. If a time is not specified, performance shall be required promptly and with due regard to the conditions of performance of other parties in reliance thereon.

SECTION 24. APPROVALS AND CONSENTS.

Unless expressly set forth herein to the contrary, approvals and consents required by any Party shall not be unreasonably withheld, conditioned or delayed.

SECTION 25. GENERAL PROVISIONS.

(a) Binding Effect. This Operating Agreement shall inure to the benefit of, and shall be binding upon, CITY/COUNTY, HOOPS and their respective successors and assigns.

(b) Severability. If any covenant, condition, provision, term or agreement of this Operating Agreement shall, to any extent, be held invalid or unenforceable, the remaining covenants, conditions, provisions, terms and agreements of this Operating Agreement shall not be affected thereby, but each covenant, condition, provision, term or agreement of this Operating Agreement shall be valid and in force to the fullest extent permitted by law.

(c) Effectiveness. This Operating Agreement shall not become effective until the full execution and delivery of the other Arena Documents.

(d) Governing Law. This Operating Agreement shall be construed in accordance with and governed for all purposes by the laws of the State of Tennessee applicable to contracts executed and to be wholly performed with such State.

(e) Venue and Jurisdiction. Subject to the provisions of Section 34 hereof, the parties to this Operating Agreement agree that any suit, action or proceeding arising out of, or with respect to, this Operating Agreement or any judgment entered by any court in respect thereof shall be brought in the Shelby County courts of the State of Tennessee or in the U.S. District Court for the Western District of Tennessee, and the Parties hereby irrevocably accept the exclusive personal jurisdiction of those courts for the purpose of any suit, action or proceeding. In addition, the Parties hereby irrevocably waive, to the fullest extent permitted by law, any objection which it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Operating Agreement or any judgment entered by any Shelby County court or the U.S. District Court for the Western District of Tennessee in respect thereof and hereby further irrevocably waive any claim that any suit, action or proceedings brought in any such court has been brought in an inconvenient forum. The Parties further consent to the jurisdiction of any state and federal court located within a district which encompasses assets of a Party against which a judgment has been rendered, either through arbitration or through litigation, for the enforcement of such judgment or award against the assets of such Party.

(f) Nondiscrimination. HOOPS hereby agrees that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Operating Agreement by HOOPS on the grounds of handicap, disability, age, race, color, religion, national origin, or any other classification protected by federal, Tennessee State constitutional, or statutory law.

(g) Minority Business Enterprise Participation. HOOPS hereby agrees to exercise reasonable best efforts to promote occasions for minority- and women-owned business enterprises to participate in contract opportunities for products and services required by HOOPS in connection with the operation of the Arena Complex.

(h) Relationship. Nothing contained in this Operating Agreement shall be deemed or construed to create the relationship of principal and agent or partnership or joint venture.

(i) No Waiver. No waiver of any term, condition, default or breach of this Operating Agreement shall be effective unless in writing and executed by the party granting such waiver, and no such waiver shall operate as a waiver of such term, condition, default or breach on any other occasion. No delay or failure to enforce any provision in this Operating Agreement shall

operate as a waiver of such provision or any other provision herein or in any document related hereto.

(j) Captions. The caption of each Section and clause of this Operating Agreement is for convenience of reference only, and in no way defines, limits or describes the scope or intent of such Section or clause of this Operating Agreement.

SECTION 26. ENTIRE AGREEMENT.

This Operating Agreement supersedes all prior correspondence, negotiations and agreements and constitutes the entire agreement between the parties with respect to the subject matter hereof.

SECTION 27. INTENTIONALLY OMITTED

SECTION 28. FORCE MAJEURE. Only those obligations of each of the parties hereto that are directly affected by an event of Force Majeure shall be subject to Force Majeure.

SECTION 29. RIGHT OF FIRST REFUSAL.

If HOOPS shall enter into meaningful negotiations with a third party to sell the Franchise in whole that includes relocating the Franchise from the Arena, then HOOPS shall deliver to CITY/COUNTY written notice advising CITY/COUNTY that such negotiations have commenced and identifying the party with whom HOOPS is negotiating. If HOOPS has notified CITY/COUNTY of meaningful negotiations and is prepared to accept an offer (the "***Acceptable Offer***") to sell the Franchise to an identified third party, then HOOPS shall deliver to CITY/COUNTY written notice of the Acceptable Offer and shall provide to CITY/COUNTY a copy of the Acceptable Offer. CITY/COUNTY shall have the right to notify HOOPS in writing that it will acquire the Franchise pursuant to the Acceptable Offer on the terms and conditions set forth in the Acceptable Offer (the "***Right of First Refusal***"); provided that CITY/COUNTY must exercise such right within the longer of: (a) forty-five (45) days after CITY/COUNTY receives a copy of the Acceptable Offer; and (b) one hundred five (105) days after CITY/COUNTY receives notice that meaningful negotiations have commenced. If CITY/COUNTY timely exercises its right in writing, CITY/COUNTY and HOOPS promptly (but in any event within forty-five (45) days) shall enter into a purchase agreement memorializing such terms and conditions of the Acceptable Offer (the "***Purchase Agreement***"). Upon the written exercise of its Right of First Refusal, CITY/COUNTY shall deposit with HOOPS an amount equal to ten percent (10%) of the purchase price for the Franchise (the "***Earnest Money Payment***"), and CITY/COUNTY shall be committed to close the sale in accordance with the terms and conditions of the Purchase Agreement and procedures of the NBA or the successor league. After exercising its Right of First Refusal, CITY/COUNTY shall have the right to designate a nominee to complete the acquisition of the Franchise; provided that (x) such nominee commits to cause the Franchise to continue to play all of its regular season and playoff Home Basketball Games in the Arena Complex for the remainder of the Term; (y) CITY/COUNTY shall remain liable to fulfill all obligations set forth in the Purchase Agreement and any other purchase agreements, and (z) such nominee is acceptable to the NBA. If approval of the acquisition of the Franchise by CITY/COUNTY (or its nominee) is required by the NBA or any successor league, then HOOPS and CITY/COUNTY (or its nominee) shall submit a request for such approval in a

timely manner, and HOOPS agrees to use commercially reasonable efforts to assist CITY/COUNTY (or its nominee) in securing such approval. The closing of the sale of the Franchise to CITY/COUNTY (or its nominee) shall take place within sixty (60) days after approval by the NBA or by any successor league (or such earlier date as agreed upon by the parties). If approval of the acquisition of the Franchise by CITY/COUNTY, or its nominee, is not required by the NBA or by any successor league, then the closing shall take place within ninety (90) days after receipt by HOOPS of CITY/COUNTY's notice of its intention to exercise its Right of First Refusal. If NBA approval is required and the NBA does not approve the acquisition by CITY/COUNTY (or its nominee) of the Franchise, HOOPS promptly shall return the entire Earnest Money Payment to CITY/COUNTY and HOOPS shall be entitled to consummate the sale pursuant to the terms of the Acceptable Offer.

SECTION 30. COVENANTS OF HOOPS AND CITY/COUNTY.

(a) Relocation Covenant of HOOPS. During the first ten (10) NBA Full Seasons of the Initial Term, HOOPS shall: (i) not relocate the Franchise from the City of Memphis, (ii) not apply to the NBA to transfer the Franchise to another location outside of the City of Memphis, (iii) have no right to terminate this Operating Agreement or cease using the Arena Complex for playing its Home Basketball Games, so long as the NBA or a successor league is still in existence and HOOPS is still a member of the NBA or any successor league. HOOPS expressly agrees that HOOPS's covenants set forth in this Section 30(a), and in particular its covenant set forth in Section 30(a)(i), are unique and absolutely necessary to protect the business and good will of CITY/COUNTY, and that a breach of such covenants will absolutely, irreparably and continually harm CITY/COUNTY, for which money damages may not be adequate or determinable. HOOPS further agrees that CITY/COUNTY shall, in addition to any other remedies available at law or in equity (including specific performance), have the right to injunctive relief to enforce the covenants set forth in this Section 30(a) and to protect and preserve the rights of CITY/COUNTY hereunder. Furthermore, HOOPS agrees that in the event it breaches any of the covenants set forth in this Section 30(a), CITY/COUNTY shall be entitled to a temporary, preliminary or permanent injunction in order to prevent continuation of such harm.

(b) Non-Competition Covenant. CITY/COUNTY and HOOPS acknowledge and agree that an important element of the success of the Arena Complex is to limit direct competition from The Pyramid and the Coliseum in the booking of events that could take place in the Arena Complex. In furtherance of the foregoing, CITY/COUNTY and HOOPS acknowledge and agree that all prospective Arena Events shall be classified into the following four (4) categories (the "***Event Categories***"): (i) Franchise Events, (ii) National Events, (iii) Local Community Events, and (iv) Excluded Events. Such prospective events shall be held as follows:

(i) Franchise Events and National Events shall be held in the Arena Complex, but may also be held in The Pyramid or the Coliseum upon the prior written mutual consent of HOOPS and either the manager of The Pyramid, or the Coliseum, as the case may be. National Events shall not be pursued by the manager of The Pyramid or the Coliseum without the prior written consent of HOOPS.

(ii) Local Community Events may be held in the Arena Complex, The Pyramid or the Coliseum, as determined by the promoter of such Local Community Event; provided, however, that CITY/COUNTY shall cause each agreement that schedules a Local Community Event to be held in either The Pyramid or the Coliseum to contain a covenant allowing the manager of the Arena Complex, within five (5) business days of receiving notice of the scheduling of the applicable Local Community Event, to match the terms of such agreement in all material respects, in which event the applicable Local Community Event shall be held in the Arena Complex.

(iii) Excluded Events shall be held in the Arena Complex, The Pyramid or the Coliseum, as determined by the promoter of such Excluded Event.

(iv) If a prospective event could reasonably be characterized as included within more than one Event Category, such event shall be deemed to be included within the first applicable Event Category, considered in the following order: (A) Franchise Events, (B) Excluded Events, (C) National Events, and (D) Local Community Events. In the event a prospective event is a Conflict Event, such event shall be referred by the manager of the Arena Complex to the manager of The Pyramid and the manager of the Coliseum.

(v) With respect to any prospective event that is not a Franchise Event, a National Event, an Excluded Event or a Local Community Event, HOOPS or its designated operator, the manager of The Pyramid and the manager of the Coliseum, shall, in a manner consistent with Section 21 of this Operating Agreement, confer for the purpose of determining what is the appropriate venue for staging such prospective event, taking into account the following factors (in addition to other reasonable factors): the anticipated date for the event, the estimated number of spectators, the ticket price, and whether such event is of a nature that is suitable for the Arena Complex. It is the understanding of the Parties that, to the extent possible, if such event is suitable for the Arena Complex and meets the other criteria referred to herein, then such event should be staged in the Arena Complex.

(c) Non-Participation. During the Term, neither CITY/COUNTY nor any CITY/COUNTY Affiliate shall, without the prior written consent of HOOPS, design, develop, construct or otherwise fund, provide economic or tax benefits or incentives to, or materially participate in the design, development, construction or financing of (any of the foregoing activities, a "***Contribution***"), any new indoor or covered sports or entertainment arena, indoor or covered performance facility or other indoor or covered facility that (i) could compete with the Arena Complex for the booking of any event, or (ii) seats or will seat more than 5,000 persons and fewer than 50,000 persons; provided, however, the foregoing provisions shall not apply to any hotel ballrooms, movie theaters or convention and hotel facilities that are not designed or constructed to be able to accommodate or be used as venues for concerts, theatrical shows, public assemblies or sporting events, provided further, however, the foregoing provisions shall not be interpreted to prohibit transactions and activities normally and/or routinely engaged in by the (x) planning, building, permitting and engineering departments of CITY/COUNTY in the

ordinary course of reviewing and/or approving projects submitted by private developers, or (y) CITY/COUNTY Industrial Development Corporations and/or other CITY/COUNTY Affiliates, the general purpose of which is to encourage private development, in the ordinary course of establishing tax freeze programs, tax incentive programs, PILOT programs and other similar economic programs aimed at encouraging private development. In event HOOPS consents to CITY/COUNTY's Contribution to any such facility, such facility will be subject to the non-competition provisions of Section 30(b). Notwithstanding anything to the contrary contained herein, no provision or term of this Operating Agreement shall be construed or interpreted as prohibiting or restricting CITY/COUNTY from carrying out its lawful purposes, functions and activities, and/or approving any resolution, ordinance, rule and/or regulation in its ordinary course of business, which CITY/COUNTY believes to be in the best interests of CITY/COUNTY and its citizens, provided such actions by CITY/COUNTY are not exercised in a discriminatory manner as applied to the Franchise, the Arena Complex, HOOPS or any HOOPS Affiliate.

SECTION 31. EARLY TERMINATION RELATING TO SHORTFALLS.

(a) Early Termination Right. Beginning with the tenth (10th) NBA Full Season of the Initial Term, HOOPS shall, in addition to any other rights expressly granted herein, have the right, but not the obligation, provided there is no existing Event of Default by HOOPS hereunder, to terminate this Operating Agreement and the other Arena Documents (the "***Early Termination Right***"), on the terms and conditions set forth in this Section 31.

(i) In the event of a Shortfall Season, HOOPS shall notify CITY/COUNTY of the occurrence of same within thirty (30) days after the last day of any Shortfall Season (the "***Shortfall Season Notice***"). If, as of any Shortfall Determination Date, the following conditions exist: (A) the previous NBA Regular Season was a Shortfall Season, and (B) there is a Regular Seat Shortfall, a Suite Shortfall or a Club Seat Shortfall, then HOOPS shall notify CITY/COUNTY in writing within thirty (30) days after such Shortfall Determination Date (the "***Shortfall Seat Notice***") of its determination that condition (B) above exists, including a statement of the amount of the applicable shortfall. CITY/COUNTY shall have the right to have an independent (in that it receives no significant revenue from HOOPS or CITY/COUNTY or either of their respective Affiliates) certified public accounting firm reasonably acceptable to HOOPS review HOOPS's books and records during normal business hours to the extent necessary in order to verify the information set forth in the Shortfall Season Notice and/or the Shortfall Seat Notice, such review to be completed within thirty (30) days after the date of receipt of the applicable notice. All disputes respecting the shortfall calculation shall be resolved pursuant to the Dispute Resolution Procedure.

(ii) CITY/COUNTY, the public sector and/or the community of Memphis and Shelby County shall have the right, within sixty (60) days after CITY/COUNTY's receipt of the Shortfall Seat Notice (the "***Cure Period***"), to purchase, or cause to be purchased, the required number of Suites and/or season tickets to cure the Regular Seat Shortfall, the Suite Shortfall and/or the Club Seat

Shortfall, as applicable (such purchase(s), hereafter called the "*Cure*"), and if the Cure is effected within the Cure Period, HOOPS shall have no right to terminate this Operating Agreement and the other Arena Documents pursuant to Section 31(a)(iii), but only as such right was triggered as a result of the previous NBA Regular Season constituting a Shortfall Season. Notwithstanding the foregoing, the Cure may also be effected by the satisfaction in full of all obligations under those certain ticket guaranty agreements in a form acceptable to HOOPS executed by members of the public sector and/or the community of Memphis and Shelby County (the "***Ticket Guaranty Agreements***"), which Ticket Guaranty Agreements shall be delivered to HOOPS. Upon execution and delivery to HOOPS of the Ticket Guaranty Agreements, HOOPS shall acknowledge receipt of same and deliver such acknowledgement to CITY/COUNTY. HOOPS shall use its good faith reasonable efforts to enforce the Ticket Guaranty Agreements in accordance with their terms.

(iii) If, however, the Cure is not effected prior to the end of the Cure Period, and the owners of HOOPS intend to sell the Franchise in whole to an unaffiliated third party, and HOOPS complies with all terms and conditions of Section 29 and Section 32 hereof, HOOPS shall have the right, but not the obligation, to exercise the Early Termination Right, by sending written notice of such termination to CITY/COUNTY within thirty (30) days after the expiration of the Cure Period (the "***Early Termination Notice***"), effective as of the end of the NBA Full Season stated in the Early Termination Notice (the "***Termination Effective Date***").

(iv) The Early Termination Right shall remain in full force and effect for every NBA Full Season after the tenth (10th) NBA Full Season of the Initial Term, whether or not exercised by HOOPS, and whether or not a Cure has previously been effected.

(b) Sale of HOOPS. Upon any sale of HOOPS which does not result in an early termination, (i) all of the terms and conditions of this Operating Agreement and the other Arena Documents shall remain in full force and effect after the sale, the Arena Documents shall be assigned to the purchaser thereof, and such assignee shall assume the obligations of HOOPS thereunder, and (ii) there shall be no Termination Fee payable by HOOPS to CITY/COUNTY under Section 32 with respect to the sale, and (iii) Section 29 shall not apply. If HOOPS intends to sell the Franchise, and has properly delivered the Early Termination Notice, but the sale is not consummated, then this Operating Agreement and the other Arena Documents (aa) may not be terminated, and (bb) shall remain in full force and effect until subsequently terminated in accordance with the terms and conditions of this Section 31.

(c) Remedies of CITY/COUNTY. HOOPS expressly agrees that the provisions governing the exercise of HOOPS's Early Termination Right as set forth in this Section 31 are unique and absolutely necessary to protect the business and good will of CITY/COUNTY, and that a material breach of such provisions will absolutely, irreparably and continually harm CITY/COUNTY, for which money damages may not be adequate or determinable. HOOPS further agrees that CITY/COUNTY shall, in addition to any other remedies available at law or in

equity (including specific performance), have the right to injunctive relief to enforce the provisions set forth in this Section 31 and to protect and preserve the rights of CITY/COUNTY. Furthermore, HOOPS agrees that in the event it materially breaches any of the provisions set forth in this Section 31, CITY/COUNTY shall be entitled to a temporary, preliminary or permanent injunction in order to prevent continuation of such harm.

SECTION 32. TERMINATION PAYMENT.

Subject to the provisions of Section 31, if HOOPS properly exercises its Early Termination Right, then HOOPS shall pay to CITY/COUNTY, in one lump sum payment within sixty (60) days after the Effective Date, a termination fee (the "***Termination Fee***"), equal to the following:

The amount required to defease the remaining scheduled principal payments (based on the original twenty-five (25) year amortization expected to be substantially similar to Exhibit "E" attached hereto and made a part hereof) of the following bonds (the "***Bonds***"):

(a) 100% of the $68.63 million (original principal amount) supported by the sales tax rebate;

(b) 73.3% of the $16.485 million (original principal amount) supported by the seat fee or impost;

(c) 33.3% of the $33.755 million (original principal amount) supported by the "TDZ" (hotel/motel tax freed up by sales tax rebates from a Tourist Development Zone); and

(d) 100% of the $24 million (original principal amount) of CITY/COUNTY contribution from CITY/COUNTY bond proceeds.

The parties understand that, in addition to the Termination Fee, CITY/COUNTY may receive from third parties certain naming rights revenues following the termination, including without limitation, pursuant to the Naming Rights and License Agreement.

SECTION 33. OTHER TERMINATION RIGHTS.

The Parties acknowledge and agree that, pursuant to applicable Codes, the registered voters of CITY/COUNTY may protest the execution and delivery by CITY/COUNTY of the Arena Documents by filing a petition with the Shelby County Clerk (the "***Petition***"). In the event the Petition is lawfully filed, HOOPS shall have the right, but not the obligation, to terminate this Operating Agreement and the other Arena Documents, by delivering written notice of such termination to CITY/COUNTY within thirty (30) days after receiving notice that the Petition has been lawfully filed. In the event the Petition is filed, and the outcome of the referendum held thereafter is such that the protest of the execution and delivery by CITY/COUNTY of the Arena Documents is upheld, then either HOOPS or CITY/COUNTY shall have the right, but not the obligation, to terminate this Operating Agreement and the other Arena Documents, by delivering written notice to the other Party within thirty (30) days after the results of the referendum are publicly announced.

SECTION 34. DISPUTE RESOLUTION. In the event that CITY/COUNTY and HOOPS have a dispute as to any matter relating to this Operating Agreement, including with respect to the interpretation of any provision of this Operating Agreement and with respect to the performance hereunder by HOOPS or CITY/COUNTY, such dispute shall be resolved as provided in this Section 34 (the "***Dispute Resolution Procedure***").

(a) Informal Dispute Resolution. Subject to Section 34(b), prior to the initiation of formal dispute resolution procedures, the Parties shall first attempt to resolve their dispute informally, as follows:

(i) Upon the written request of a Party, each Party shall appoint a designated representative who does not devote substantially all of his or her time to performance under this Operating Agreement, whose task it will be to meet for the purpose of endeavoring to resolve such dispute.

(ii) The designated representatives shall meet as often as the Parties reasonably deem necessary in order to gather and furnish to the other all information with respect to the matter in issue which the Parties believe to be appropriate and germane in connection with its resolution. The representatives shall discuss the problem and attempt to resolve the dispute without the necessity of any formal proceeding.

(iii) During the course of discussion, all reasonable requests made by one Party to another for non-privileged information, reasonably related to this Operating Agreement, shall be honored in order that each of the Parties may be fully advised of the other's position.

(iv) The specific format for the discussions shall be left to the discretion of the designated representatives.

(v) If the designated representatives are unable to resolve the dispute within twenty (20) calendar days after the initial written request to appoint a designated representative pursuant to Section 34(a)(i) above (this period shall be deemed to run notwithstanding any claim that the process described in this Section 34(a) was not followed or completed), the Chief Administrative Officer of each of the City of Memphis and Shelby County and the Chief Executive Officer of HOOPS or his designee shall meet for the purpose of endeavoring to resolve such dispute. The foregoing provisions of this Section 34(a) shall apply to such representatives and such meetings for purposes of this clause (v).

(vi) Formal proceedings for the resolution of a dispute may not be commenced until the earlier of:

(A) the designated representatives described in Section 34(a)(ii) conclude in good faith that amicable resolution through continued negotiation of the matter does not appear likely; or

(B) thirty (30) days after the initial written request to appoint a designated representative pursuant to Section 34(a)(i) above (this period shall be deemed to run notwithstanding any claim that the process described in this Section 34(a) was not followed or completed).

(vii) All meetings between the representatives described in this Section 34 shall take place in Memphis, Tennessee.

(b) Exception. Neither Section 34(a) nor Section 34(c) shall be construed to prevent:

(i) a Party from instituting, and a Party is authorized to institute, formal proceedings earlier to avoid the expiration of any applicable limitations period; or

(ii) a Party from seeking injunctive relief where a Party makes a good faith determination that a breach of the terms of this Operating Agreement by the other Party is such that a temporary restraining order or other injunctive relief is the only appropriate and adequate remedy.

If a Party files a pleading with a court seeking immediate injunctive relief pursuant to Section 34(b)(ii), such pleading is challenged by the other Party, and the injunctive relief sought is not awarded in substantial part, the Party filing the pleading seeking immediate injunctive relief shall pay all of the costs and attorneys' fees of the Party successfully challenging the pleading.

(c) Arbitration. Subject to Section 34(b), if the Parties are unable to resolve any dispute as contemplated by Section 34(a), the Parties may agree to submit such dispute to non-binding arbitration pursuant to the American Arbitration Association ("*AAA*") and otherwise as set forth herein. In such event, the AAA shall provide the parties with a panel of potential arbitrators consisting of at least seven (7) persons who are independent of the parties and who have experience in the construction industry. The Party not seeking arbitration shall have the first opportunity to strike names from the panel of potential arbitrators and the parties shall strike names alternately until a single arbitrator remains. If the arbitrator selected cannot serve, the AAA shall provide another panel and the same striking procedure shall be utilized. The Arbitrator shall be requested to set a hearing as soon as possible in Memphis. The AAA's commercial arbitration rules shall apply, except that discovery shall be available under the Federal Rules of Civil Procedure for the Western District of Tennessee. The parties shall share equally in the cost of arbitration, provided that the Arbitrator may award Arbitrator's fees and attorneys' fees to either Party as the Arbitrator deems appropriate. The scope of the Arbitrator's award shall be limited as expressly set forth elsewhere herein or, if not limited elsewhere, shall be limited to the matter in dispute and to counterclaims relating directly to the dispute. The Arbitrator shall be instructed to use commercially reasonable efforts to make a decision within twenty (20) days of the date of hearing, but otherwise as soon as possible. Either Party may appeal a decision of the Arbitrator for a mistake of law or fact unless the matter in dispute is less than Twenty Five Thousand Dollars ($25,000.00). The Arbitrator shall, at the request of either Party, include in the award findings of fact and conclusions of law of the type which would be required under Rule 52 of the Federal Rules of Civil Procedure. The Arbitrator shall not be

empowered to award equitable relief or damages (other than as expressly stated with respect to Arbitrator's fees and attorneys' fees). Until the parties resort to litigation as allowed hereunder, the parties shall keep the dispute and the arbitration private and confidential to the extent reasonably practicable and allowable by law.

(d) Litigation. Subject to Section 34(b), if the Parties are unable to resolve any dispute as contemplated by Section 34(a) and do not mutually agree to submit such dispute to non-binding arbitration as provided in Section 34(c), then such dispute shall be resolved by litigation.

(e) Continued Performance. Each Party agrees to continue performing its obligations under this Operating Agreement while any dispute is being resolved except to the extent the issue in dispute precludes performance (dispute over payment shall not be deemed to preclude performance).

(f) Speedy Resolution. Each Party shall use best commercial efforts to obtain a speedy resolution of any dispute as soon as possible without compromising such Party's rights or remedies. Following commencement of litigation as set forth in Section 34(d), such efforts may include conducting discovery in an expeditious manner, or as mutually agreed upon by the Parties, the filing of a joint motion requesting that the court place the dispute on the fastest track possible for resolution (*e.g.*, by entering a scheduling or similar order in which a trial would be held within nine (9) months after the filing of the litigation.

***[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]***

IN WITNESS WHEREOF, the parties hereto have caused this Operating Agreement to be duly executed as of the date first written.

**CITY/COUNTY:**

CITY OF MEMPHIS

By: _____
Name: WILLIE W. HERENTON
Its: CITY OF MEMPHIS MAYOR

Approved as to Form and Legality:

_____
City Attorney

SHELBY COUNTY, TENNESSEE

By: _____
Name: JIM ROUT
Its: SHELBY COUNTY MAYOR

Approved as to Form and Legality:

_____
County Attorney

**HOOPS:**

HOOPS, L.P.

By: HEISLEY MEMBER, INC., a Nevada corporation, its general partner

By: _____
Name: Stanley H. Meadows
Its: Assistant Secretary

EXHIBIT "A"

# Downtown Area Context Map

## DEFINITELY DOWNTOWN: THE HEART & SOUL OF MEMPHIS

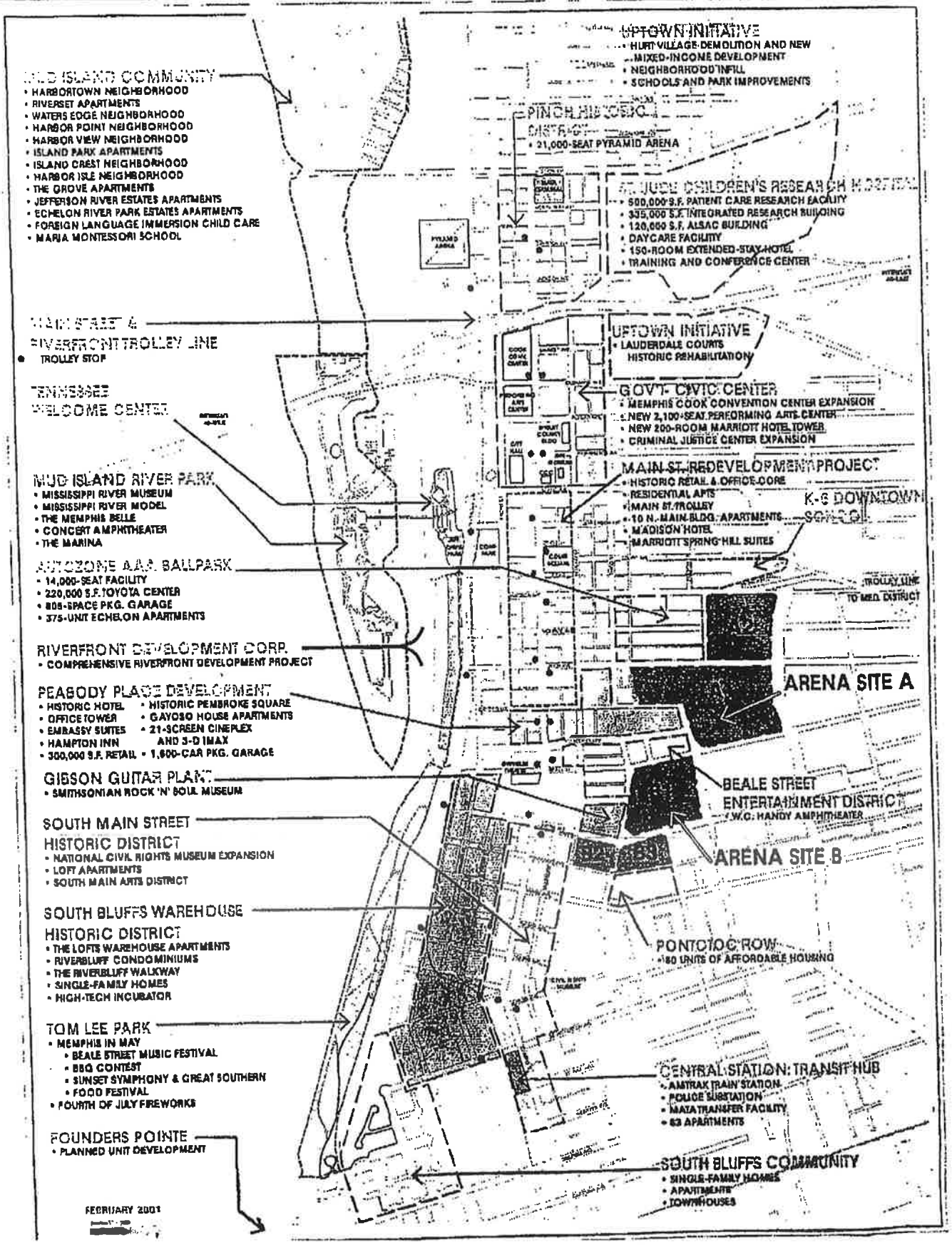

*EXHIBIT "B"*

*CAPITAL REPAIRS*

A. Capital Repairs shall be defined as follows:

Those items listed below which individually cost more than $35,000 (which amount shall be adjusted every five (5) years by the CPI Percentage Adjustment) or which in the aggregate cost more than $75,000 (which amount shall be adjusted every five (5) years by the CPI Percentage Adjustment) during any consecutive twelve (12) month period.

1. Repairs or replacement to structural and roof components.

2. Repairs or replacement of components of the HVAC system, domestic hot and cold water system, ice making system, sanitary or storm drainage, de-icing systems, sprinkler system, steam, gas and water delivery systems.

3. Repairs or replacement of components of the electrical supply and distribution systems, emergency power system, fire alarm and life safety system including, but not limited to, transformers, switch gears, meters, switches, conduits, feeders, wires and bus duct.

4. Repairs or replacement of elevator, escalator, and vertical lift components.

5. Repairs or replacement of all or a portion of the basketball floor, the event floor, practice basketball court or the dasher boards and spectator shielding.

6. Repair of replacement of concrete, precast concrete, tile, terazzo, epoxy flooring and all other types of flooring.

7. Repair or replacement of seats, whether portable, movable or stationary, retractable seating platforms, portable seating platforms and replacement of seat standards or the concrete into which the seats are affixed.

8. Necessary changes or improvements required by television stations, radio stations, "superstations," cable operators, video program distributors or syndications having contracts with the NBA and to the extent such changes or improvements are required of all teams in the NBA.

9. Changes or improvements required by the NBA, which requirements are set forth in the published rules and regulations of the NBA and which changes or improvements are binding upon and applicable to all NBA teams.

10. Changes or improvements required by laws, ordinances, orders, or regulations or requirements of any governmental authority.

11. Replacement of carpet once every ten (10) years.

12. Replacement of scoreboard, video replay and display equipment, broadcast equipment, exterior video or message boards, reader boards, advertising boards or panels, fixtures, dimmers, shutters, or controls for event illumination including spotlights, sportslights, house lights, theatrical or event presentation lights which have reached the end of their functional life and no longer meet the required minimum performance levels or temperature requirements; provided, however, that such replacement shall not be required prior to the fourth year of the Initial Term, and may not require funding by CITY/COUNTY in excess of (x) the number of elapsed years in the Initial Term after the third year, multiplied by (y) $500,000, minus (ii) the cumulative amount expended for replacements described in this category 12.

*EXHIBIT "C"*

*PERMITTED ENCUMBRANCES*

To be completed by HOOPS within twenty (20) business days after receiving the later of a commitment issued by a title company reasonably acceptable to HOOPS for the issuance of an ALTA Owner's Policy of Title Insurance for the Site, including all recorded documents disclosed therein, and an ALTA Survey of the Site, which survey shall be prepared in accordance with the Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA, ACSM and NSPS in 1999, and including all Table A Items, and pursuant to the Accuracy Standards (as adopted by ALTA, NSPS and ACSM and in effect on the date of certification) such that the survey measurements are made in accordance with the Minimum Angle, Distance and Closure Requirements for Survey Measurements Which Control Land Boundaries for ALTA/ACSM Land Title Surveys.

*EXHIBIT "D"*

*INSURANCE REQUIREMENTS*

HOOPS shall provide at its own cost and expense the following insurance to CITY/COUNTY in insurance companies reasonably acceptable to CITY/COUNTY and licensed in the state of Tennessee, which insurance shall be evidenced by certificates and/or policies as determined by CITY/COUNTY. If any of the following insurance requirements are not complied with by their respective renewal dates, payment to HOOPS may be withheld until those requirements have been met, or at the option of CITY/COUNTY, CITY/COUNTY may pay the renewal premiums and withhold such payments from any monies due HOOPS. Each insurance policy required to be maintained by HOOPS pursuant to this Operating Agreement shall contain the following clause:

"Thirty (30) days prior to cancellation or material change in the policy, notice thereof shall be given to the City of Memphis by registered mail, return receipt requested to the following address: City of Memphis, Attn: Risk Manager, 125 N. Main Street, Room 1B25, Memphis, TX 38103."

"It is agreed that coverage under this policy shall be primary to, and not contribute with, any insurance or self-insurance maintained by the City of Memphis or Shelby County, Tennessee."

Each insurance policy required by this Operating Agreement, excepting policies for workers' compensation, shall contain the following clauses:

"The City of Memphis and Shelby County, Tennessee, its elected and appointed officials, agents, employees, and representatives are added as Additional Insureds as respects operations, activities, acts, or omissions of, or on behalf of, the Named Insured, performed under an agreement with the City of Memphis and Shelby County, Tennessee."

HOOPS shall deliver to CITY/COUNTY insurance certificates confirming the existence of the insurance required by this Operating Agreement and including the applicable clauses referenced above. HOOPS is required to provide copies of insurance policies, required under this Operating Agreement, upon request.

Workers' Compensation: HOOPS shall maintain in force Workers' Compensation coverage in accordance with the statutory requirements and limits of the State of Tennessee and shall require all subcontractors to do likewise.

| | | |
|---|---|---|
| Employer's Liability: | $100,000 | Each Accident |
| | $500,000 | Disease - Policy Limit |
| | $100,000 | Disease - Each Employee |

Commercial General Liability: Including coverage for Premises and Operations, Contractual Liability, Personal Injury Liability, Products/Completed Operations Liability, Broad-

Form Property Damage (if applicable) and Independent Contractor's Liability (if applicable), in an amount of not less than Five Million Dollars $5,000,000) per occurrence, written on an occurrence basis.

Commercial Automobile Liability: Including owned, non-owned and hired autos (as applicable), in an amount of not less than One Million Dollars ($1,000,000) per occurrence, combined single limit, written on an occurrence basis.

Property Insurance: HOOPS shall be responsible for maintaining any and all property insurance on its own personal property and equipment and shall require all subcontractors to do likewise.

# EXHIBIT "E"

## BOND AMORTIZATION SCHEDULE

| | Sports Authority Debt | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sales Tax Rebate Prin. Paymt. | Sales Tax Rebate Prin. Outstand. | County-Wide Hotel/Motel Tax | County-Wide Hotel/Motel Tax | Taxable Seat Use Fee Prin. Paymt. | Taxable Seat Use Fee Prin. Outstand. | City/County Principal Payments | City/County Principal Outstanding | Termination Fee | |
| | | 72,305,000 | | 43,100,000 | | 14,930,000 | | 24,000,000 | | 11/1/02 |
| 11/1/02 | | 72,305,000 | | 43,100,000 | | 14,930,000 | | 24,000,000 | 121,600,990 | 11/1/03 |
| 11/1/03 | | 72,305,000 | | 43,100,000 | | 14,930,000 | 695,675 | 23,304,325 | 120,905,315 | 11/1/04 |
| 11/1/04 | 85,000 | 72,220,000 | | 43,100,000 | 215,000 | 14,715,000 | 733,241 | 22,571,084 | 119,929,479 | 11/1/05 |
| 11/1/05 | 195,000 | 72,025,000 | | 43,100,000 | 230,000 | 14,485,000 | 772,836 | 21,798,248 | 118,793,053 | 11/1/06 |
| 11/1/06 | 315,000 | 71,710,000 | 80,000 | 43,020,000 | 240,000 | 14,245,000 | 814,569 | 20,983,679 | 117,460,924 | 11/1/07 |
| 11/1/07 | 440,000 | 71,270,000 | 160,000 | 42,860,000 | 255,000 | 13,990,000 | 858,556 | 20,125,123 | 115,922,173 | 11/1/08 |
| 11/1/08 | 580,000 | 70,690,000 | 245,000 | 42,615,000 | 275,000 | 13,715,000 | 904,918 | 19,220,205 | 114,154,095 | 11/1/09 |
| 11/1/09 | 725,000 | 69,965,000 | 335,000 | 42,280,000 | 290,000 | 13,425,000 | 953,784 | 18,266,421 | 112,151,186 | 11/1/10 |
| 11/1/10 | 875,000 | 69,090,000 | 435,000 | 41,845,000 | 310,000 | 13,115,000 | 1,005,288 | 17,261,133 | 109,898,813 | 11/1/11 |
| 11/1/11 | 1,050,000 | 68,040,000 | 545,000 | 41,300,000 | 335,000 | 12,780,000 | 1,059,573 | 16,201,560 | 107,362,200 | 11/1/12 |
| 11/1/12 | 1,235,000 | 66,805,000 | 655,000 | 40,645,000 | 355,000 | 12,425,000 | 1,116,790 | 15,084,770 | 104,532,080 | 11/1/13 |
| 11/1/13 | 1,430,000 | 65,375,000 | 785,000 | 39,860,000 | 380,000 | 12,045,000 | 1,177,097 | 13,907,672 | 101,385,037 | 11/1/14 |
| 11/1/14 | 1,640,000 | 63,735,000 | 915,000 | 38,945,000 | 405,000 | 11,640,000 | 1,240,660 | 12,667,012 | 97,902,817 | 11/1/15 |
| 11/1/15 | 1,865,000 | 61,870,000 | 1,065,000 | 37,880,000 | 435,000 | 11,205,000 | 1,307,656 | 11,359,356 | 94,056,661 | 11/1/16 |
| 11/1/16 | 2,115,000 | 59,755,000 | 1,220,000 | 36,660,000 | 465,000 | 10,740,000 | 1,378,269 | 9,981,087 | 89,816,287 | 11/1/17 |
| 11/1/17 | 2,375,000 | 57,380,000 | 1,390,000 | 35,270,000 | 500,000 | 10,240,000 | 1,452,696 | 8,528,391 | 85,159,221 | 11/1/18 |
| 11/1/18 | 2,660,000 | 54,720,000 | 1,575,000 | 33,695,000 | 540,000 | 9,700,000 | 1,531,142 | 6,997,249 | 80,047,784 | 11/1/19 |
| 11/1/19 | 2,965,000 | 51,755,000 | 1,775,000 | 31,920,000 | 580,000 | 9,120,000 | 1,613,823 | 5,383,426 | 74,452,746 | 11/1/20 |
| 11/1/20 | 3,290,000 | 48,465,000 | 1,990,000 | 29,930,000 | 620,000 | 8,500,000 | 1,700,970 | 3,682,456 | 68,344,646 | 11/1/21 |
| 11/1/21 | 3,645,000 | 44,820,000 | 2,220,000 | 27,710,000 | 670,000 | 7,830,000 | 1,792,822 | 1,889,634 | 61,676,454 | 11/1/22 |
| 11/1/22 | 4,020,000 | 40,800,000 | 2,465,000 | 25,245,000 | 720,000 | 7,110,000 | 1,889,634 | (0) | 54,418,215 | 11/1/23 |
| 11/1/23 | 4,425,000 | 36,375,000 | 2,730,000 | 22,515,000 | 775,000 | 6,335,000 | | (0) | 48,516,050 | 11/1/24 |
| 11/1/24 | 4,855,000 | 31,520,000 | 3,015,000 | 19,500,000 | 830,000 | 5,505,000 | | (0) | 42,048,665 | 11/1/25 |
| 11/1/25 | 5,315,000 | 26,205,000 | 3,320,000 | 16,180,000 | 895,000 | 4,610,000 | | (0) | 34,972,070 | 11/1/26 |
| 11/1/26 | 5,795,000 | 20,410,000 | 3,650,000 | 12,530,000 | 965,000 | 3,645,000 | | (0) | 27,254,275 | 11/1/27 |
| 11/1/27 | 6,335,000 | 14,075,000 | 4,000,000 | 8,530,000 | 1,035,000 | 2,610,000 | | (0) | 18,828,620 | 11/1/28 |
| 11/1/28 | 14,075,000 | - | 8,530,000 | - | 2,610,000 | - | | (0) | (0) | 11/1/29 |
| 11/1/29 | | - | | - | | - | | (0) | (0) | 11/1/30 |
| 11/1/30 | | - | | - | | - | | (0) | (0) | 11/1/31 |
| 11/1/31 | | - | | - | | - | | (0) | (0) | |
| | | - | | - | | - | | (0) | (0) | |
| Total | 72,305,000 | | 43,100,000 | | 14,930,000 | | 24,000,000 | | | |

# FIRST AMENDMENT TO MEMPHIS ARENA USE AND OPERATING AGREEMENT

THIS FIRST AMENDMENT TO MEMPHIS ARENA USE AND OPERATING AGREEMENT (this *"Amendment"*) is entered into as of the 15 day of May, 2002, by and among THE CITY OF MEMPHIS AND SHELBY COUNTY, TENNESSEE (*"CITY/COUNTY"*) and HOOPS, L.P., a Delaware limited partnership (*"HOOPS"*).

RECITALS

A. CITY/COUNTY and HOOPS have entered into that certain Memphis Arena Use and Operating Agreement (the *"Agreement"*), dated as of June 29, 2001, pursuant to which CITY/COUNTY has granted to HOOPS the right, authority, license and privilege to use, possess, occupy, conduct business from, lease space in and operate a sports and entertainment arena complex to be build in Memphis, Tennessee and identified in the Agreement as the *"Arena Complex"*.

B. CITY/COUNTY and HOOPS have agreed to amend the Agreement as more fully described herein.

NOW, THEREFORE, in consideration of the premises and the mutual obligations of the parties hereunder, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, CITY/COUNTY and HOOPS covenant and agree as follows:

1. Definitions. All capitalized terms used herein without definition shall have the respective meanings set forth in the Agreement.

2. Amendments to the Agreement.

(a) Amendment to *"Definitions"* Section. The definitions of "Shortfall Season" and "Suite Shortfall" are hereby deleted in their entirety and the following provisions substituted therefor:

> "***Shortfall Season***" means any NBA Regular Season, after the fifteenth (15th) NBA Full Season, in which the (i) average paid attendance (i.e., tickets sold) for Home Basketball Games in the Arena is less than fourteen thousand, nine hundred (14,900), or (ii) sixty-four (64) largest Suites available for public sale are not sold in full, or (iii) the number of Club Season tickets sold is less than twenty-five hundred (2,500).
>
> "***Suite Shortfall***", for any NBA Regular Season, means the number of seats in the largest sixty-four (64) Suites available for public sale minus the number of seats in such Suites that were sold in the preceding NBA Regular Season, but not more than the number of seats in such Suites that remain unsold as of the Shortfall Determination Date.

(b) Amendment to *"Relocation Covenant of HOOPS"* Section. Section 30(a) of the Agreement is hereby deleted in its entirety and the following provision substituted therefor:

> "(a) Relocation Covenant of Hoops. During the first seventeen (17) NBA Full Seasons of the Initial Term, HOOPS shall: (i) not relocate the Franchise from the City of Memphis, (ii) not apply to the NBA to transfer the Franchise to another location outside of the City of Memphis, (iii) have no right to terminate this Operating Agreement or cease using the Arena Complex for playing its Home Basketball Games, so long as the NBA or a successor league is still in existence and HOOPS is still a member of the NBA or a successor league. HOOPS expressly agrees that HOOPS' covenants set forth in this Section 30(a), and in particular its covenant set forth in Section 30(a)(i), are unique and absolutely necessary to protect the business and good will of CITY/COUNTY, and that a breach of such covenants will absolutely, irreparably and continually harm CITY/COUNTY, for which money damages may not be adequate or determinable. HOOPS further agrees that CITY/COUNTY shall, in addition to any other remedies available at law or in equity (including specific performance), have the right to injunctive relief to enforce the covenants set forth in this Section 30(a) and to protect and preserve the rights of CITY/COUNTY hereunder. Furthermore, HOOPS agrees that in the event it breaches any of the covenants set forth in this Section 30(a), CITY/COUNTY shall be entitled to a temporary, preliminary or permanent injunction in order to prevent continuation of such harm."

(c) Amendment to *"Early Termination Right"* Section.

(i) The first sentence of Section 31(a) of the Agreement is hereby deleted in its entirety and the following provision substituted therefor:

> "(a) Early Termination Right. Beginning with the seventeenth (17th) NBA Full Season of the Initial Term, HOOPS shall, in addition to any other rights expressly granted herein, have the right, but not the obligation, provided there is no existing Event of Default by HOOPS hereunder, to terminate this Operating Agreement and the other Arena Documents (the ***"Early Termination Right"***), on the terms and conditions set forth in this Section 31."

(ii) Section 31(a)(iv) of the Agreement is hereby deleted in its entirety and the following provision substituted therefor:

> "(iv) The Early Termination Right shall remain in full force and effect for every NBA Full Season after the seventeenth (17th) NBA Full Season of the Initial Term, whether or not exercised by HOOPS, and whether or not a Cure has previously been effected."

(d) Amendment to *"Termination Payment"* Section.

"SECTION 32 TERMINATION PAYMENT.

Subject to the provisions of Section 31, if HOOPS exercises its Early Termination Right, then HOOPS shall pay to CITY/COUNTY, in one lump sum payment within sixty (60) days after the Effective Date, a termination fee (the "***Termination Fee***"), equal to the termination payment set forth in Exhibit E hereto for the period in which the last NBA Full Season stated in the Early Termination Notice occurs, such amounts being based on the scheduled principal payments for the Authority's Revenue Bonds, 2002 Series A (Memphis Arena Project) in the original principal amount of $114,605,195.

The parties understand that, in addition to the Termination Fee, CITY/COUNTY may receive from third parties certain naming rights revenues following the termination, including without limitation, pursuant to the Naming Rights and License Agreement."

(ii) Exhibit E to the Agreement is hereby deleted in its entirety and replaced with Exhibit E hereto.

3. General Provisions.

(a) Ratification of Agreement. Except as amended hereby, the Agreement shall remain in full force and effect and is hereby ratified and confirmed in all respects.

(b) Binding Effect. This Amendment shall inure to the benefit of, and shall be binding upon, CITY/COUNTY, HOOPS and their respective successors and assigns.

(c) Governing Law. This Amendment shall be construed in accordance with and governed for all purposes by the laws of the State of Tennessee applicable to contracts executed and to be wholly performed within such State.

[ END OF TEXT ]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be fully executed as of the date first written.

**CITY/COUNTY:**

CITY OF MEMPHIS

By: _____
Name: _____
Its: MAYOR

Approved as to Form and Legality:

_____
City Attorney

SHELBY COUNTY, TENNESSEE

By: _____
Name: Jim Rout
Its: Mayor

Approved as to Form and Legality:

_____
County Attorney

**HOOPS:**

HOOPS, L.P.

By: HEISLEY MEMBER, INC., a Nevada corporation, its general partner

By: _____
Name: Stanley H. Meadows
Its: Assistant Secretary

EXHIBIT E

Memphis Shelby County NBA
Termination Payment Schedule

| Period Beginning | Period Ending | Termination Payment |
|---|---|---|
| 11/01/2002 | 10/31/2003 | 114,605,195 |
| 11/01/2003 | 10/31/2004 | 114,395,195 |
| 11/01/2004 | 10/31/2005 | 113,658,353 |
| 11/01/2005 | 10/31/2006 | 112,369,464 |
| 11/01/2006 | 10/31/2007 | 110,912,949 |
| 11/01/2007 | 10/31/2008 | 109,292,239 |
| 11/01/2008 | 10/31/2009 | 107,482,847 |
| 11/01/2009 | 10/31/2010 | 105,481,706 |
| 11/01/2010 | 10/31/2011 | 103,255,532 |
| 11/01/2011 | 10/31/2012 | 100,795,995 |
| 11/01/2012 | 10/31/2013 | 98,091,140 |
| 11/01/2013 | 10/31/2014 | 95,103,851 |
| 11/01/2014 | 10/31/2015 | 91,854,198 |
| 11/01/2015 | 10/31/2016 | 88,308,425 |
| 11/01/2016 | 10/31/2017 | 84,492,746 |
| 11/01/2017 | 10/31/2018 | 79,788,644 |
| 11/01/2018 | 10/31/2019 | 74,679,827 |
| 11/01/2019 | 10/31/2020 | 69,154,961 |
| 11/01/2020 | 10/31/2021 | 63,199,696 |
| 11/01/2021 | 10/31/2022 | 56,780,092 |
| 11/01/2022 | 10/31/2023 | 49,864,402 |
| 11/01/2023 | 10/31/2024 | 42,717,697 |
| 11/01/2024 | 10/31/2025 | 35,068,623 |
| 11/01/2025 | 10/31/2026 | 26,833,123 |
| 11/01/2026 | 10/31/2027 | 17,969,329 |
| 11/01/2027 | 10/31/2028 | 8,445,781 |

## ASSIGNMENT OF MEMPHIS ARENA USE AND OPERATING AGREEMENT

This Assignment Agreement (the "Agreement") is made and entered into as of the 20th day of May, 2002 (the "Effective Date") between the City of Memphis and Shelby County, Tennessee, Assignor, (hereinafter collectively referred to as "CITY/COUNTY") and the Memphis and Shelby County Sports Authority, Inc., Assignee, (hereinafter referred to as "SPORTS AUTHORITY").

### RECITALS:

The parties recite and declare:

A. CITY/COUNTY by a Master Lease Agreement ("Master Lease") dated 20th day of May, 2002, **Exhibit A**, attached hereto, leased from Lessor a state of the art multipurpose sports and entertainment and public assembly facility designed primarily for basketball on a site of real estate more particularly described in **Exhibit B**, attached hereto and incorporated herein by reference.

B. CITY/COUNTY by a Sublease Agreement ("Sublease") dated 20th day of May, 2002, **Exhibit C**, attached hereto, subleased to the SPORTS AUTHORITY the premises described in paragraph "A" above.

C. The CITY/COUNTY and HOOPS, L.P. have entered into that certain Memphis Arena Use and Operating Agreement dated June 29, 2001, and amended on the 15th day of May, 2002, **Exhibit D**, which is attached hereto and incorporated herein by reference, pursuant to which the CITY/COUNTY acquired certain rights and responsibilities regarding the use, possession and operation of a new multipurpose sports and entertainment public assembly facility designed primarily for basketball.

D. The SPORTS AUTHORITY, is a non-profit corporation created for the purpose of furthering the public good by establishing, owning, leasing, acquiring, and operating stadiums, arenas and similar sports facilities which engage in providing venues for sporting events and other facilities necessary to carry out its principal purpose of providing sports facilities in Memphis and Shelby County, Tennessee.

E. CITY/COUNTY desires to assign some but not all of the rights and responsibilities it acquired pursuant to the Memphis Arena Use and Operating Agreement, as amended.

In consideration of the mutual covenants contained in this Agreement, the parties agree as follows:

1. Except as otherwise expressly set forth herein, CITY/COUNTY hereby assigns to SPORTS AUTHORITY all of CITY/COUNTY's rights and responsibilities acquired pursuant to the Memphis Arena Use and Operating Agreement, as amended, accruing from and after the Effective Date. SPORTS AUTHORITY, for the benefit of CITY/COUNTY, hereby assumes all rights and responsibilities of CITY/COUNTY except those expressly set forth herein.

2. CITY/COUNTY does not assign the rights and responsibilities set forth in the following sections of the Memphis Arena Use and Operating Agreement, as amended, and in the case of subsections (f) and (j) through (m) below retains such rights and responsibilities along with SPORTS AUTHORITY:

(a) Section 4b

(b) Section 5 (a) – (d)

(c) Section 8(d), (f)

(d) Section 9(b)

(e) Section 12(a), (b)

(f) Section 13

(g) Section 14(b), (c)

(h) Section 20

(i) Section 29

(j) Section 30

(k) Section 31

(l) Section 32

(m) Section 33

3. SPORTS AUTHORITY shall perform all responsibilities set forth in the Memphis Arena Use and Operating Agreement, as amended, except for those responsibilities set forth in the above sections.

4. Neither the assigning of CITY/COUNTY's rights and obligations under the Memphis Arena Use and Operating Agreement, as amended, to SPORTS AUTHORITY nor anything contained in this Agreement shall release CITY/COUNTY from the obligation to perform and be bound by all the covenants and conditions in the Memphis Arena Use and Operating Agreement, as amended.

5. Anything in this Agreement to the contrary, notwithstanding neither the full faith and credit nor taxing power of the CITY/COUNTY, is pledged to secure the obligations of the CITY/COUNTY hereunder or under the Memphis Arena Use and Operating Agreement, as amended.

6. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of CITY/COUNTY and their respective successors in interest and assigns.

7. Severability. If any covenant, condition, provision, term or agreement of this Agreement shall, to any extent, be held invalid or unenforceable, the remaining covenants, conditions, provisions, terms and agreements of this Agreement shall not be affected thereby, but shall be valid and in force to the fullest extent permitted by law.

8. Governing Law. This Agreement shall be construed in accordance with and governed for all purposes by the laws of the State of Tennessee applicable to contracts executed and to be wholly performed with such State.

9. Venue and Jurisdiction. Any suit, action or proceeding arising out of, or with respect to, this Agreement or any judgment entered by any court in respect thereof shall be brought in a state or federal court of competent jurisdiction in Memphis and Shelby County, Tennessee, and CITY/COUNTY and SPORTS AUTHORITY hereby irrevocably accept the exclusive personal jurisdiction of such court for the purpose of any suit, action or proceeding. In addition, CITY/COUNTY and SPORTS AUTHORITY hereby irrevocably waive, to the fullest extent permitted by law, any objection which either may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement or any judgment entered by any state or federal court of competent jurisdiction in Memphis and Shelby County, Tennessee and hereby further irrevocably waive any claim that any suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

10. No Waiver. No waiver of any term, condition, default or breach of this Agreement shall be effective unless in writing and executed by the party granting such waiver, and no such waiver shall operate as a waiver of such term, condition, default or breach on any other occasion. No delay or failure to enforce any provision in this Agreement shall operate as a waiver of such provision or any other provision herein or in any document related hereto.

11. Captions. The caption of each Section is for convenience of reference only, and in no way defines, limits or describes the scope or intent of such Section or clause of this Agreement.

12. Entire Agreement. This Agreement supersedes all prior correspondence, negotiations and agreements and constitutes the entire agreement between the parties with respect to the subject matter hereof.

[END OF TEXT]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

SHELBY COUNTY, TENNESSEE

JIM ROUT, MAYOR

APPROVED AS TO FORM

COUNTY ATTORNEY

CITY OF MEMPHIS

W.W. HERENTON, MAYOR

APPROVED AS TO FORM

CITY ATTORNEY

MEMPHIS AND SHELBY COUNTY SPORTS AUTHORITY, INC.

BY: _____

TITLE: Chairman