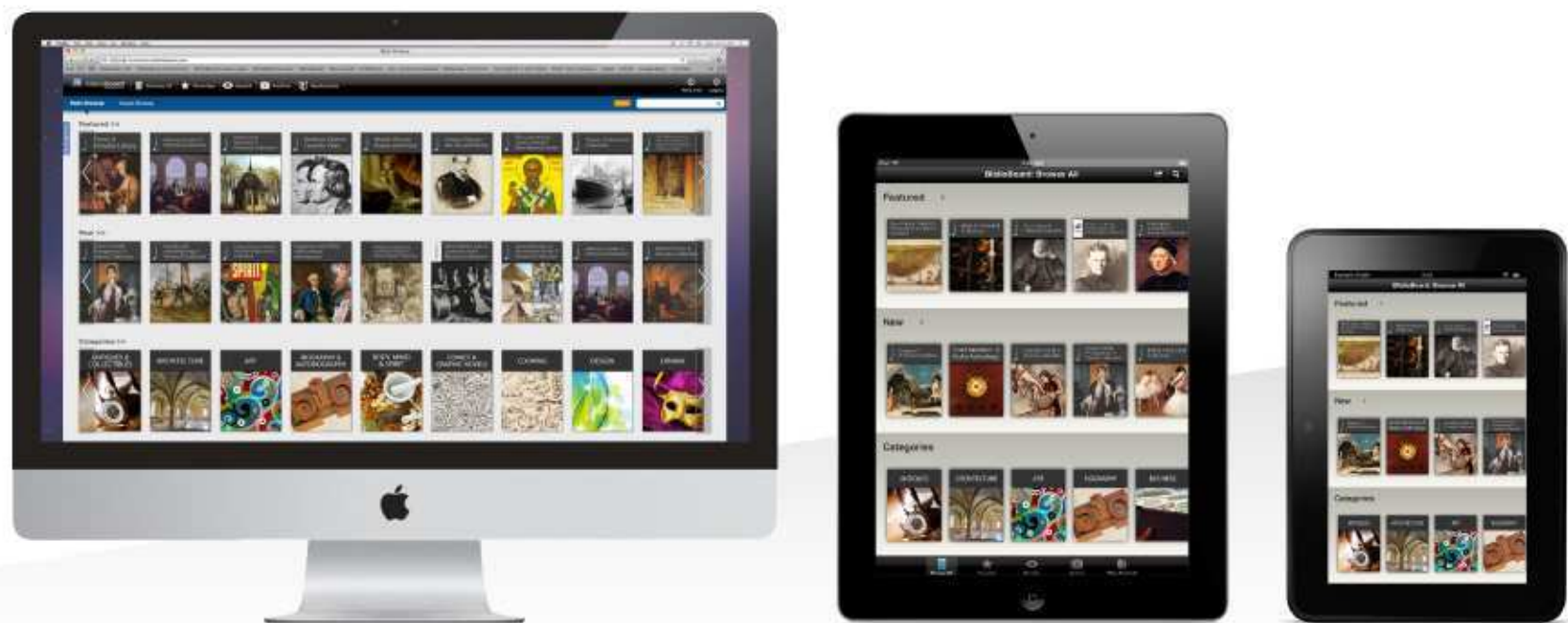




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2004

FourFront

ADA

Assessment



Don Barnett Arena A.D.A. Accessibility Improvements

This report's intent is to identify those accessibility components found within the confines of the Don Barnett Arena that are non-compliant in regards to the current handicapped accessibility regulations as they pertain to the Americans with Disabilities Act (ADA)

Review Guidelines

The guideline used as a basis of this report is the 2003 Edition of the American National Standard (ANS) - ICC/ANSI A117.1-2003; the ADAAG (Americans with Disabilities Act Accessibility Guide) and the Code of Federal Regulations 28 CFR Part 36.

Report Structure

This report has been broken down into various sections for ease of use, with each section identifying specific areas and their components which were found to be non-compliant. Only those items found to be non-compliant with the provisions of the ANS have been listed. Report sections are as follows:

General Components

Concourse Area Components

Concession Area Components

Restroom Area Components

Arena and Arena Seating Components

General Components:

This section focuses on components of the Don Barnett Arena that do not clearly fit into any of the following sections or are common to most all of the sections.

1. FLOOR SURFACES:

The ADA requires that all newly constructed or altered floor surfaces meet certain slip-resistance requirements. Technically the Arena does not fall within these requirements. In the interest of safety, however, this topic is addressed, and an estimated cost will be appropriated to it.

To properly assess the floor condition, a static coefficient of friction test should be completed. It is uncertain, but likely, that certain areas of the existing floors do not meet this criteria. The floor areas observed are as follows:

- a. Floor areas including the ground level activities area (main arena), east and west lobbies, north service lobby, east and west men's and women's restrooms; and the mezzanine level south bleacher platform, seating aisles and stairs appear to be within the limits of the required slip resistance. Testing should be considered to ascertain if these floors meet the slip requirements. No cost allocations are given for modifying the floor finish in these areas.
- b. Floor areas at the Mezzanine Level in the east and west concourses are most likely the areas that would not meet the slip-resistant requirements. Testing should be considered in order to ascertain if these floors meet the required slip resistance. Costs have been allocated for modifying these floor finishes.
- c. Ramp areas are of primary concern for providing slip-resistant floors. The two ramps at the southeast and southwest areas of the Arena Mezzanine Level should be considered for modification of the floor finish. Testing should be considered to ascertain if these floors meet the required slip resistance. Costs have been allocated for modifying these floor finishes.

NOTE: Review of this topic is done pending a test and outcome of the static coefficient of friction values of the existing floors. Assumptions of the slip resistance for these floors areas have been made. Floors are required to meet a static value of .6 while ramps are required to meet a value of .8. Tests could run about \$350 per test and can be done by local testing firms. The prices outlined in the Opinion of Probable Construction Costs are to have the existing flooring mechanically abraded. Costs to provide slip-resistant paint finishes are slightly higher but require reapplication over time; while sheet vinyl and carpeting costs are most likely cheaper, they present added costs in maintenance and reduced life span.

2. CONCRETE STAIR ASSEMBLIES

- a. Stair riser and tread dimensions vary throughout the Arena. In a few locations, some were found as dimensionally non-compliant (in some cases riser heights were found to be dimensionally inconsistent within the same stair run – Section 504.2). Due to the costs and feasibility involved in replacement of the concrete stairs, it would be impractical to replace them.
- b. Stair tread surfaces may not meet the slip resistance requirements of the ADA (reference Item 1 above). Testing should be done to ascertain if these finishes meet the required slip resistance. No cost allocations are given for these areas.
- c. Stair and seating handrails throughout are non-compliant, these need replacement.

3. Provide lever handles at latching doors with public access (8 doors estimated).

4. Public telephones are not provided currently in the Arena and, therefore, not addressed under this report.

5. Required ADA signage throughout the building is non-compliant.
 - a. Some compliant signs have been installed at the mezzanine handicapped restrooms but have been located incorrectly.
6. An existing Assistive Listening system (FM) is currently available at the Arena and is not part of this report.
7. The existing fire alarm system is an automatic Simplex audible system and is very old and non-compliant with the ADA. Replacement of this system is described in the "Required Upgrades – Ranked Mechanical and Electrical" narrative of this report. Costs of replacement/upgrade could vary considerably depending on condition and availability of parts.
8. Exterior Egress Lighting is also described and priced in the "Required Upgrades – Ranked Mechanical and Electrical" narrative of this report.
9. Emergency and Exit Lighting of common areas is also described and priced in the "Required Upgrades – Ranked Mechanical and Electrical" narrative of this report.
10. Available A.D.A. parking appears to be adequate at this time. Once the seating upgrades are settled, a further study can be done to determine the required number of spaces needed.
11. Accessibility from the parking lots to the Arena appear adequate.

Concourse Area Components:

This section focuses on the components found within the upper and lower concourses of the Don Barnett Arena.

1. The existing elevator at the southeast concourse needs to be updated to be compliant.
2. The west mezzanine level concourse accessibility is eliminated during an event when the south bleachers are extended.
 - a. Construction of a new pathway between the east and west mezzanine levels (underneath the upper south mezzanine seating structure) is proposed. The construction of this concourse will include the following:
 - i. Demolition of the existing bleacher system.
 - ii. Demolition of the existing south stair to the south bleacher platform.
 - iii. Construction of 10'0" wide south concourse connecting the east and west concourses. This would include a north side wall and ceiling structure.
 - iv. Installation of a new bleacher assembly.
 - b. As an addition or possible alternate, an additional elevator serving the southwest area is proposed, which will also benefit operational tasks.
3. The north bleacher platform is inaccessible at this time. Since this area is not used for several events, it does not appear practical to make this area accessible at this time as it would take the installation of a lift assembly.

Concession Area Components:

This section focuses on the concession areas of the upper level (east and west sides) and the components that are auxiliary to them.

1. Condiment tables:
 - a. Condiment tables at the lower level concessions are provided by rolling carts. These do not appear to be compliant and should be replaced with new carts.
 - b. Lower one counter at each of the east and west side concessions at the upper levels.
2. Concession service counters:
 - a. At each of the four concession counters, ground and mezzanine level, half of one section of the counter would be removed and modified to accommodate accessibility. Proper signage would be included.
 - b. It is assumed that accessibility for handicapped employees of the Civic Center will not be accommodated behind the concession counters due to the current lack of maneuvering space and intricacy of design with built-in equipment. If a handicapped concessions employee is hired, the area that would most easily accommodate a remodel is the mezzanine concession areas (storage space would be compromised). No costs have been allocated for this other than for accommodation of patrons.

Restroom Components:

This section focuses on the large public restroom components of the Don Barnett Arena. The smaller restrooms off dressing rooms and offices are discussed under the "Arena and Arena Seating" section. Actual fixture counts of the required number of toilets, sinks, etc., required by the plumbing code, have not been done and are not part of the scope of this report.

Lower Level

1. Men's and Women's restrooms--west side:
 - a. Per conversations with Arena staff, these restrooms are set up to be non-handicapped (the handicapped restrooms being on the east side). It is conceivable, though, that accessibility to these restrooms could be difficult, depending on the function. Therefore, a cost to upgrade these restrooms will be included in the attached breakdown of costs.
2. Men's restroom on the east side will need to be upgraded (relocate the lavatory, update grab bars, accessories and the toilet enclosure).
3. Women's restroom on the east side will need to be upgraded. (Update grab bars, accessories and the toilet enclosure).

Upper Level

4. Handicapped restrooms are provided at the mezzanine level on both sides of the arena. These restrooms have some minor modifications needed to bring them into compliance.

Arena and Arena Seating Components:

This section focuses on the main arena floor, its adjacent dressing rooms and auxiliary spaces and the mezzanine seating areas.

Lower Level

1. Drinking fountains – none are found to be compliant.
2. Dressing rooms--west and east side.
 - a. These areas are not compliant. Due to their arrangement they would be very difficult and very expensive to modify. These dressing rooms will not be upgraded for this report other than some minor revisions to improve accessibility.
 - b. The existing northern dressing room on the east side could be modified into two separate dressing rooms to accommodate handicapped people of both sexes.
3. Referee dressing room--west side:
 - a. These areas are not compliant. Due to the nature of the referees' position and the arrangement of the space, it would be very difficult and very expensive to modify. These dressing rooms will not be upgraded for this report, other than some minor revisions to improve accessibility.
4. Restroom of the custodial office and lobby space (southeast area) is not ADA compliant. Due to the nature of the custodians' position, this area is not identified under this report to be updated. It is conceivable that hiring an individual requiring accessibility in the future could require an upgrade of this area. Estimated costs to upgrade could be approximately \$15,000.
5. The main entrance doors to the Arena appear to meet ADA requirements. It is assumed that most doors at the entrance to and within the Arena are stopped in the open position or are manned, as in the event of ticketing. No cost allocations have been made for this.

Mezzanine Level

6. Reconstruct the two open riser stairs at the north bleacher platform--open riser stairs are non-compliant.
7. Most drinking fountains are found as non-compliant, however, accessible drinking fountains are provided near the handicapped restrooms on both sides. No cost appropriated.
8. Seating aisle lighting is also described in the "Required Upgrades – Ranked Mechanical and Electrical" narrative of this report.
9. Seating requirements for ADA will require modifications to the existing facility.
 - a. Required seating for ADA per ADAAG Manual; Assembly Areas 4.33.
 - i. Eleven wheelchair-accessible spaces and 10 accessible aisle seats are required for the first 1,000 seats.
 1. Provide one additional wheelchair space and an accessory aisle seat per seats over 1,000.
 2. At minimum each wheelchair seating space will require a companion seat.
 - ii. Existing upper bowl seating capacity is 6,908.
 - iii. Required wheelchair space seating:
 1. $11 + (6908 - 1000).01 = 70$ wheelchair spaces.
 - iv. Required accessible aisle seating:
 1. $10 + (6908 - 1000).01 = 69$ accessible aisle seating.
 - b. Seating options identified:

Note: The solutions listed below for seating reconfigurations are conceptual in nature and would require further study and design to develop the idea. Each wheelchair space could be claimed, if not sold to a handicapped individual, by installing portable seats. Each solution can also be modified or possibly combined with other solutions.

- i. South bleacher platform (34 existing wheelchair spaces at the lower platform).
 - 1. This option could provide approximately an additional 16 wheelchair spaces (companion seating would need to be provided by moveable chairs; which could count toward accessible aisle seating) and up to 6 accessible aisle seats (approximately 18 overall seats would be lost).
 - a. A lift would be installed where the old south stair tower is, which is eliminated from the construction of the new south mezzanine concourse.
- ii. North bleacher platform:
 - 1. This option is not practical as it is the least used area. During certain concert venues it is closed off to the public.
- iii. Modification of the mezzanine front row --east and west sides:
 - 1. This option could provide approximately 28 wheelchair spaces and 28 accessible aisle seats (approximately 252 overall seats would be lost).
 - a. The first row of mezzanine seats would have to be removed, and the first row walk path would be filled with concrete level with the second tier, creating a walk path and access to handicapped seating. Sight lines may be compromised a little because of a higher guardrail due to the new concrete casting. This option could also be modified to include lesser area; currently this proposal runs the entire length of front row on both east and west sides. Modification could reduce the impact of this proposal, which would also lessen the lost seat impact.
- iv. Attachment of additional "box seat" row (4 locations):
 - 1. This option could provide approximately 8 wheelchairs spaces and 4 accessible aisle seats (no seating would be lost)
 - a. A mezzanine "extension" would be added at the four corners of the mezzanine and would include an independent ramp access, and relocation of the existing stair. This option would allow for the continued operation of the existing floor bleachers and could be sold out as premium seats.
- v. Seating bowl reconfiguration:
 - 1. This option would provide for up to 12 wheelchair spaces and 4 accessible aisle seats (approximately 64 overall seats would be lost) per location (6 locations would potentially be realized).
 - a. This option is probably the most radical; it will provide for the demolition and reconstruction of a section of the seating bowl and the addition of a lift from the mezzanine level. This option would require the most construction time and impact on the arena function until completed.
- vi. In summary, approximately 90 wheelchair spaces and 46 accessible aisle seats could be realized (option vs. used 1 location), with an approximate loss of 332 overall seats. With further scrutiny some additional accessible aisle seats could be realized.

- 10. Seating bowl aisle lighting is also described in the "Required Upgrades – Ranked Mechanical and Electrical" narrative of this report.

End of Report

Internal Staff ADA Assessment

- 1) Foremost is Lack of ADA Compliance
 - a) ADA accessible seating
 - 1) 70 – 75 ADA accessible seats + 70 - 75 companion seats distributed throughout the facility in all seating options / sight lines.
 - 2) Additional participant ADA accessible locations on benches, boxes or team locations
 - b) Building code issues associated to ADA
 - 1) Irregular stair height and isle width and lack of railing in all aisles in seating bowl.
 - 2) Irregular tread depths in seating bowl.
 - 3) Lack of correct size and location of handrails at stairwells. All existing handrails are too big in diameter.
 - 4) Lack of compliant seating on isles in bowl that have swing up armrests
 - c) No ADA compliant elevators
 - 1) Need Elevators to each type of seating location and option
 - 2) Need enough elevators to handle the 5,000 – 7,000 patrons in the Bowls seating (3-5)
 - d) No TRUE ADA restrooms on main floor
 - 1) We have created our own ADA restroom stalls that do not meet all the codes for turn radius and widths, door savings, mirror height, vanity height, operable height of hand dryers, as well as knee and toe clearance.
 - 2) Lacking the sheer numbers of restrooms needed for the number of patrons we have, especially female restrooms
 - e) No ADA accessibility to concession for patrons or merchandise stands 36" high by 48' long counter for parallel approach at all stands.
 - 1) No ADA accessibility for employee's or workers. Some existing stands are physically incapable of making reasonable accommodation (see stand 1 lower west).
 - f) No ADA ingress/egress doors to the Barnett Arena with required access rail
 - 1) Existing doors do not meet minimum width requirement.
 - 2) Existing doors are not mechanically operable and/or do not meet 5lb. operable weight requirements.
 - g) No ADA accessible locker rooms, shower stalls, lockers and benches. Controls within the locker rooms are non-complaint.
 - h) No ADA accessibility to the backstage, star dressing rooms.
 - 1) Star dressing rooms are non-compliant from restrooms to living space.

- i) No elevators for access to the Star Dressing Rooms
- j) Roof does not comply with modern snow load requirements
 - 1) Cannot handle larger concerts as the roof trussing load requirements and location of
 - 2) Current grid system cannot handle events using the full arena (Walking with Dinosaurs)
- k) Even after two electrical upgrades – lacking show power and electrical amperage needed for larger shows
- l) Insufficient lighting & blackout capability for sporting events and larger family shows
- m) Insufficient sound coverage for larger national speakers and presenters
- n) Technology that predates the 1st IBM PC computer, such as 1,000 pair of Cat 1 telecommunication wires that cannot be used for any modern phones, internet or electronic communications
- o) Lack of voice evacuation system for fire alarm system / not tied into remainder of building.
- p) Lack of emergency egress isles for current ADA improvised section.
- q) Approach and entrance is non-compliant on west-side of complex.
 - 1) Curb slopes and cross slopes exceed maximum allowable grade.
 - 2) Numerous concrete sidewalks exceed ½" change in level maximum
 - 3) Lack of tactile bumps at approaches to traffic lanes at sidewalk curbs
 - 4) Asphalt overlays have created slope/cross slope issues on all west accessible routes.
 - 5) West-side ADA parking requires major re-works to provide for accessible path adjacent to accessible parking.
 - 6) All signage on west-side does not meet height requirements