



SPORTS AUTHORITY FIELD AT MILE HIGH **2012-13 OFFSEASON STADIUM IMPROVEMENTS**

I. TOTAL STADIUM IMPROVEMENTS: \$ 32,064,889

II. GENERAL INFORMATION:

- Planning for upgrades started in October, 2011.
- Construction started the day after the final game of the 2012 season.
- Significant technology focus to off-season improvements.

III. SCOREBOARD CONTROL ROOM

- New control room designed by Sony.
- Crew of 35 staff the scoreboard control room on game days.
- Required full conversion of control room to current high-definition technology.
- Increased Instant Replay capabilities providing 4x the number of possible camera angles / broadcast feeds. New NFL policy requires stadiums to show instant replay of every play so this upgrade will allow us to provide fans in the stadium with the largest number of views and best view options.
- New IPTV control center providing the ability for independent control of every in-stadium television monitor. Utilization of IPTV is a key strategy in improvement of on-concourse atmosphere.

IV. IN BOWL AUDIO VISUAL IMPROVEMENTS

1. HIGH-DEFINITION LED VIDEO DISPLAYS

- Manufactured by Daktronics out of Brookings, South Dakota
- Latest in Discreet LED Display Technology
- Same manufacturer for both video displays & new LED ribbon board providing fully integrated in-bowl components.

SOUTH LED DISPLAY

- 222' L x 40' H. (8,880 Sq. Ft.) 3X larger than original (96' L x 27' H - 2,592 sq.ft).
- 3rd Largest Display in NFL. (Reliant Stadium: 14,542 sq.ft. Cowboys: 11,520 sq.ft. Broncos: 8,880 sq.ft. Nashville: 8,478 sq.ft)
- 13 HD resolution (mm).
- Removal of all permanent, static advertising signage. Any advertising will be digitally produced going forward.
- Very unique, concave design to video display. Addition of angled "wings" providing additional space to provide constant display of game stats, fantasy football statistics, league-wide scoring updates, etc.

N/E & N/W VIDEO DISPLAYS

- 62' L x 30' H. 60% larger than original.
- 15 HD resolution (mm)
- Reduced by 1/2, size of permanent tri-vision advertising panels.

2. LED RIBBON BOARD REPLACEMENT

- 1,424' linear feet of LED ribbon board manufactured by Daktronics (less than 800 linear feet originally installed)
- Half foot taller than original ribbon board.
- Two 50' long LED ribbon boards for game statistics at the 50 yard line on Level 5.

3. SOUND SYSTEM IMPROVEMENTS

- Replacement of all in-bowl speakers with high powered JBL system.
- Replacement of all sound amplifiers and sound processing technology.
- Refurbished speakers removed from seating bowl and installed throughout public concourse areas. Will be utilized to broadcast radio play-by-play and to enhance on-concourse atmosphere.

4. CELLULAR SERVICE & WI-FI

- Cellular Distributed Antenna System (DAS) installed by Verizon last year and this offseason added antennas and expanded strength of service throughout the stadium and in the exterior parking lot areas.
- AT&T in the process of installing DAS network for their subscribers. Completion anticipated mid-November.
- Current cellular providers with on-site systems include Verizon, T-Mobile, Sprint and once complete in November, AT&T.
- Free on-site Wi-Fi for Verizon subscribers currently. We continue to work with other providers and hope for additional participation in the future.

V. CONCOURSE IMPROVEMENTS

- All concourses have received improvements however Main Concourse received most significant at this time.
- Cisco Stadium Vision IPTV system installation.
- (1000) 55" Flat Screen HD Monitors installed on all public concourses (Level 1, 3 and 5). (Replaced (550) 20" analog monitors originally installed in entire stadium).
- New lighting increasing brightness of concourse by 40% and creates a stronger visible plane to conceal unsightly pipes & ceiling systems.
- Note new speakers relocated from seating bowl and installed above lighting.
- New wayfinding signage will be installed.
- New signage above portals to seating area will be installed.
- Replacement of concessions signage. New, internally illuminated, canopy like structures being installed with concession stand names.
- Installation of digital menu board system in concession stands. Consists of (200) 46" Flat Screen Monitors.
- New on-concourse paint in Broncos colors. All concourses levels repainted.

Significant Concourse Improvements on Main Concourse

East 50 Yard Line:

- Expansion of public concourse adding a total of 2,300 sq. ft. of new space.
- Creation of a new, sports bar / technology zone area for fans to gather. Bar will be called "Colorado Craft" and will highlight locally made Colorado craft beers along and will also include a full-service-service bar featuring a wide selection of beverages. Areas will include extensive audio visual enhancements, television monitors, video walls and other improvements.
- Creation of a display honoring Colorado High School Football. High School Helmet Wall will ultimately display football helmets from every single one of the state's 287 high school football programs. Will have approximately 200 of the 287 helmets initially. Remainder to be added after the season.

West 50 Yard Line

- Stadium Food and Beverage concessionaire contributed \$ 750,000 towards completion of this project.
- Creation of a 950 sq.ft. full-service sports bar (50-Yard Bar West) with a full selection of beverages, extensive audio visual enhancements and spaces for fans to gather and watch the game.
- Build out of a 950 sq.ft. on-concourse, walk-in merchandise store.

VI. PROJECT CONTRACTORS

<u>ARCHITECTS & CONSULTANTS</u>	<u>CONTROL ROOM</u>	<u>VIDEO & LED BOARDS</u>	<u>SUITE WINDOWS</u>
Project Architect: HNTB	Sony	Daktronics	Tepco
AV Consultant: WJHW	Beck	Berg Electric	
Mechanical Consultant: ME Engineers	Kiewit Building Group	Schlosser Signs	

<u>LOWER CONCOURSE</u>	<u>TELEVISIONS</u>	<u>OTHER</u>
Kiewit Building Group	Sony	Change Electric
	AT&T	Gigaspan
	Cisco	