Distributed Antenna System
Kenan Stadium, UNC at Chapel Hill
BI-WEEKLY PROGRESS MEETING
August 6, 2014

The bi-weekly progress meeting for the above referenced project was held on Wednesday, August 6, 2014 at 9:30 AM. The following representatives were present at the meeting:

- Corley Redfoot Architects Inc. Ken Smith
- CTS David C. Ramer
- University of North Carolina Dana Leeson, Richie Grimsley
  Nate Hilton, James Spurling
  Clint Gwaltney
- Bass Nixon and Kennedy Larry Nixon, Amanda Andrassy

1. Exceptions to Minutes of Last Meeting

   There were no exceptions to the minutes of the previous meeting.

2. CTS Discussion & Comment

   - A listing of the individual task names from the CTS Master Schedule is attached to these minutes for reference.
   - All fiber has now been spliced and tested.
   - All remotes will be powered by August 20.
   - On August 13, CTS will start the CW aiming of the antennas, i.e., optimization.
   - The schedule sequence has now been changed to do commissioning and optimization all at the same time.
   - Part of the commissioning and optimization process is to detect and correct any remotes that fail to power up and locate and correct any crossed splitters; any issues detected should be corrected within the next week.
   - The head in is now complete and OK and spares are on hand.
   - Dave Ramer confirmed that CTS will have teams in the stadium monitoring the DAS performance during the first home game; they will be checking the signal and checking the channels; someone will be stationed at the head in.
• Dave noted that the carriers will also be looking at the BTS … statistics … dropped calls, coverage, etc; the carriers have to ability to tell whether a call was dropped or the sender failed to press send on his phone.

• Dave said that CTS will have people in the stadium for the first 3 or 4 games and noted that the system will perform differently when loaded with people.

• Dave noted that ITS would leave any tools at ITS Manning so they would be close by in the event any repairs are needed during the game.

• Dave advised that all construction should be complete by August 15.

• Dave said that to the best of his knowledge there were no showstoppers at this time that would affect the DAS being on line for the first game.

3. UNC Discussion & Comment

• Clint Gwaltney said that he have reviewed parts of the installation including the stealth enclosures and that everything looked good. He said he felt that everyone will have better cell service in the stadium. He also added that he did not expect it to be perfect for the first game but anything will be a definite improvement. He is pleased overall and wants to update everyone on the performance after the first game.

• Clint agreed to provide two parking passes and tickets to CTS for the first 3 games. He will provide tickets for 6 people for the first game and tickets for 4 people for the next 2 games per Dave Ramer’s request.

• Clint said that he noticed there were no exterior antennas at Level 5 of Loudermilk; he was advised that there are exterior speakers at Level 3 because of the larger size of the outdoor seating area but Levels 5 and 6 cover the outdoor seating area from interior ceiling mounted antennas.

• Richie Grimsley said it would be nice to have a performance report after the first game so athletics could share the information. He said both good and bad information should be shared, i.e., be on the offensive by noting that the performance had increased from 72 to 93 because of the new DAS and would getting even better with subsequent games.

• Richie asked if the Owner should consider putting warning signs on the stealth enclosures at the vomitories; everyone thought this was a good idea even though the enclosures have cross supports built into the top of the fiberglass. The enclosures may be used as cup supports but under no circumstances should anyone be allowed out onto the cover.
• Richie said that as long as Nate and James were satisfied with the conditions he has no issues.

• Richie noted that there were some areas on the stealth enclosures that would require some touchup; he also reminded CTS of the brick pavers that have to be replaced at the plaza at Loudermilk where the heavy lift was brought in; Richie said he expected things to come together the closer we get to game time.

• Nate Hilton advised that everything was OK in Loudermilk.

• James Spurling said that CTS needed to be out of the Letterman’s Lounge area no later than August 15 and preferably by August 12th.

• James noted that the new padding for the west end zone has come in and been installed for the most part; the vendor is tweaking a couple of pieces that will be finished on August 6.

• James noted that the protective bollards still need to be installed around the power plant on the south concourse.

• James said that the concourse area needs to be cleaned out so the work can be completed on the windscreen; James advised that all pods should be gone by August 20.

• James noted that no CTS employees should be in certain areas on game day, i.e., the Chancellor’s Box, the locker area, etc.

• Dana Leeson asked the status of the SCO Final Inspection by Stanley Frazier; CTS will get with PowerWorks and contact Stanley to see if he will also be looking at the DC work or if it will be just for the AC.

• Dana also asked that Rob Stevenson make a final pass through to look at all the platforms once the gate swing is corrected, all welding is complete, and all painting is complete. Dana reminded CTS that the panels on the platform should all be locked on game day.

• Dana said that anything remaining in the stadium that will affect final cleaning should be removed as soon as possible.

4. BNK Discussion & Comment

• Larry Nixon said that he wasn’t sure if Stanley Frazier would want to review the DC power components but PowerWorks should certainly ask that question before Stanley comes to the site for the AC final inspection.
• Larry Nixon and Amanda Andrassy left the meeting with the intention of reviewing all conduit and panelboard installation throughout the project for generation of the Designer’s electrical punchlist.

5. CRA Discussion & Comment

• Ken Smith suggested that CTS prepare a press release for Clint’s use in handling any complaints that come in after the game, i.e., in layman’s terms what has been done in the stadium for the DAS, the goals that have been achieved, the performance that will include to improve with each game as the systems are tweaked.

6. General Discussion & Comment

• CTS noted that they were talking with Ron Parks about the painting for all the conduit and platforms and tarmac. James Spurling said that he understood CTS planned to prepare a mockup on the spot painting of the trenches in the tarmac and this needed to be done as soon as possible so there will be plenty of time to paint the entire tarmac if the touchup painting is not acceptable.
• James Spurling asked Dave Ramer to call Walter Davis and explain to him that the 2-way radios in the stadium would not be affected by the DAS. Dave did this immediately after the meeting.

Ken Smith thanked the attendees for their time and advised everyone that the next monthly progress meeting is scheduled for Wednesday, August 6, 2014 at 9:30 AM.

The above items are the Designer’s summary of the discussions that took place during the meeting. Should any recipient of a copy of these Minutes disagree with or have a comment concerning any of the items, please respond in writing to the Designer within five (5) days of receipt of the Minutes. Otherwise, these Minutes will stand as correct and as an accurate record of the project status.

Respectfully submitted,

[Signature]

Ken Smith
KES/kes

Cc: Kenan DAS Team Members