AECOM
(formerly URS)

101 Research Drive
Columbia, SC 29203
Phone: (803) 254-4400
Fax: (803) 771-6676

Posted to USC Website

RE: USC Tennis Erosion Control Repair
For the University of South Carolina
USC Project No. CP00423791
AECOM/URS Project No. 46423775

ADDENDUM NO. 1 – June 26, 2015

TO: ALL HOLDERS OF RECORD OF CONTRACT DOCUMENTS

Acknowledge receipt of this addendum by inserting its number and date in the Bid Form. Failure to do so may subject bidder to disqualification. This addendum forms a part of the Contract Documents. It modifies them as follows:

GENERAL / CLARIFICATIONS

1. This is the final addendum.
2. A non-mandatory pre-bid meeting was held on 6/24/15. A list of attendees is attached.
3. Deadline for questions is Thursday, 6/25/15 at 5 PM. All questions should be directed in writing to the Engineer, AECOM (formerly URS) at bryan.thomas@aecom.com.

PLANS/DRAWINGS

1. **Erosion Control Plan (Sheet 1 of 1):** Please delete this Plan Sheet in its entirety and replace with the attached revised Plan Sheet, signed 6-26-15.

ATTACHMENTS

1. Pre-bid sign-in attendance sheet
2. Erosion Control Plan (Sheet 1 of 1)

END OF ADDENDUM NO. 1

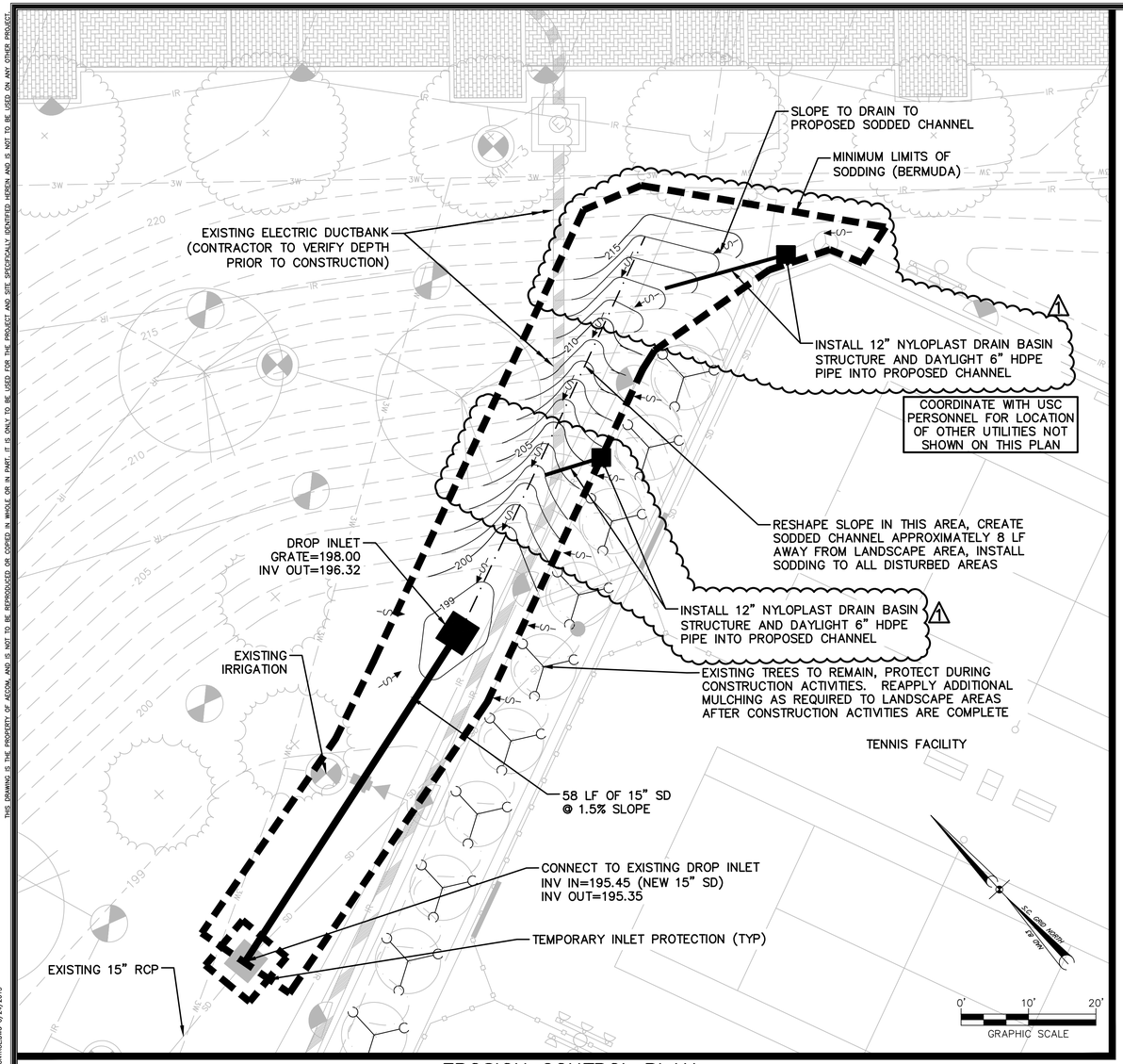
University of South Carolina
Pre Bid Sign In Sheet
Columbia, South Carolina

Project Name: Carolina Tennis Center erosion Repairs
Project Number: CP00423791
Pre Bid Date & Time: June 24, 2015 at 11:00 am

SWMBE Contractor?	Name	Company Name	Address	Phone #	Email
S W M B E	Tyler Meyer	First Class Const.	1815 Gervais Cola, SC	803 309-0341	tmeyer@fccon.com
S W M B E	CARBRA Construction Design Betty Pria		2204 Academy St Columbia SC 29203	803-765-2775	betty@carbradesign.com
S W M B E	CarBra Construction Derrick Conner, C		2204 Academy St Cola. SC 29203	803 678 8987	Cornelius derrick@yahoo.com
S W M B E	Matt Jennings	AECOM	101 Research Drive Columbia, SC 2920	803-254-4400	matt.jennings@aecom.com
S W M B E	Bryan Thomas	"	"	"	bryan.thomas@aecom.com
S W M B E	JEFF DAVIS	ATHLETICS	1304 Hayward St. Columbia, SC	803 777-0459	jeffd@mailbox.sc.edu
S W M B E	Juaquana Brookins	USC	743 Greene St Cola SC	777. 3596	jbrookin@fmc.sc.edu
S W M B E	ann Derrick	USC	" "	777.	aderrick@fmc.sc.edu
S W M B E					

****By signing this sheet you agree to receive information electronically.

THIS DRAWING IS THE PROPERTY OF AECOM, AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS ONLY TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN AND IS NOT TO BE USED ON ANY OTHER PROJECT.



EROSION CONTROL PLAN
SCALE: 1"=10'

NOTES:

1. REFERENCE IS MADE TO THE FOLLOWING:
   A. BOUNDARY, TOPOGRAPHIC, & UTILITY SURVEYS PREPARED FOR THE UNIVERSITY OF SOUTH CAROLINA BY BP BARBER & ASSOCIATES, DATED MAY 16, 2007 THROUGH OCTOBER 4, 2007.
   B. CONSTRUCTION PLANS FOR THE USC ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION PROJECT PREPARED BY BP BARBER & ASSOCIATES, DATED JANUARY 20, 2010, WITH REVISIONS (BP BARBER PROJECT NUMBER 07578).
   C. CONSTRUCTION PLANS FOR THE USC SOFTBALL STADIUM CONSTRUCTION PROJECT PREPARED BY URS CORPORATION, DATED MARCH 16, 2012, WITH REVISIONS (URS PROJECT NUMBER 46422193).
   D. CONSTRUCTION PLANS FOR THE USC ATHLETIC VILLAGE SAND VOLLEYBALL COURT CONSTRUCTION PROJECT PREPARED BY URS CORPORATION, DATED MAY 30, 2013, WITH REVISIONS (URS PROJECT NUMBER 46422848).
2. ALL ELEVATIONS SHOWN ARE BASED ON:
   HORIZONTAL: SOUTH CAROLINA STATE PLANE COORDINATE NAD 83
   VERTICAL: NAVD 88
3. VERIFY ALL FIELD CONDITIONS AND THE EXACT LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING DEMOLITION AND CONSTRUCTION. IF CONDITIONS ARE DIFFERENT FROM THAT SHOWN ON THE PLANS, STOP WORK AND NOTIFY THE ENGINEER.
4. ALL WORK FOR THE PROJECT SHALL CONFORM TO THE PROJECT SPECIFICATIONS FOUND IN THE PROJECT MANUAL (CONTRACT DOCUMENTS AND SPECIFICATIONS).
5. PROMPTLY INFORM THE ENGINEER OF ANY DISCREPANCY DISCOVERED IN THESE DRAWINGS OR SPECIFICATIONS OR CONFLICT BETWEEN THE DRAWINGS OR SPECIFICATIONS.
6. THESE CIVIL/SITE PLANS ARE PART OF THE OVERALL PROJECT PLAN SET. REVIEW PLANS OF ALL TRADES FOR CONSTRUCTION COORDINATION AND NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
7. BURNING OF ANY MATERIAL, DEBRIS, OR TRASH ON SITE WILL NOT BE PERMITTED.
8. ALL DEMOLITION DEBRIS TO BE REMOVED SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS AND SPECIFICATIONS, LATEST REVISION.
9. IN ADDITION TO INFORMATION OBTAINED FROM SITE VISITS AND A FIELD SURVEY, THE EXISTING UNDERGROUND UTILITIES SHOWN HEREIN ARE BASED ON A COMBINATION OF AVAILABLE SOURCE INFORMATION PROVIDED BY OTHERS, INCLUDING AS-BUILT DRAWINGS AND EXISTING UTILITIES RECORDS AND/OR MAPS. A CONCERTED EFFORT TO LOCATE ALL EXISTING UTILITIES WAS MADE, HOWEVER, LOCATION OF UNDERGROUND UTILITIES AS SHOWN ARE APPROXIMATE AND FOR INFORMATION PURPOSES ONLY. THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED AND ANY AND ALL DAMAGES RESULTING FROM THE FAILURE TO DO SO SHALL BE REPAIRED AT NO EXPENSE TO THE OWNER. CONTACT PALMETTO UTILITY PROTECTION SERVICE (PUPS) AND OTHER LOCAL AND REGIONAL UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION FOR LOCATION OF UTILITIES.
10. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES WITHIN THE PROJECT LIMITS PRIOR TO CONSTRUCTION.
11. PROTECT FROM DAMAGE EXISTING STRUCTURES, UTILITIES, ETC. THAT ARE TO REMAIN OR TO BE SALVAGED. REPAIR ANY DAMAGE TO EXISTING STRUCTURES, UTILITIES, ETC. TO ORIGINAL CONDITION, AT NO ADDITIONAL COST TO THE OWNER.
12. CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND BE PREPARED TO ADEQUATELY CARE FOR AND SAFEGUARD HIMSELF AND THE OWNER FROM DAMAGE.
13. KEEP ALL ROADS ADJACENT TO THE SITE CLEAN DURING CONSTRUCTION.
14. CONTRACTOR SHALL, FOR ALL GRASSED AREAS, BE RESPONSIBLE FOR REPLACING ERODED SOIL AND GRASS SEED UNTIL AN APPROVED STAND OF GRASS IS ESTABLISHED.
15. ALL WORK AND MATERIALS MUST CONFIRM WITH CITY OF COLUMBIA AND SCDHEC REGULATIONS AND SPECIFICATIONS, LATEST REVISIONS AT THE BEGINNING OF CONSTRUCTION.
16. ALL AREAS WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE SEEDED AT NO ADDITIONAL EXPENSE TO THE OWNER.
17. INSTALL PERMANENT VEGETATIVE COVER AND THE LONG-TERM EROSION PROTECTION MEASURES OR STRUCTURES AS SOON AS PRACTICAL IN THE DEVELOPMENT PROCESS.
18. ALL WORK AND MATERIALS MUST CONFIRM WITH CITY OF COLUMBIA AND SCDHEC REGULATIONS AND SPECIFICATIONS, LATEST REVISIONS AT THE BEGINNING OF CONSTRUCTION.
19. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES AS MAY BE REQUIRED TO CONTROL SOIL EROSION DURING OFF SITE UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION.
20. ALL AREAS WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE SEEDED AT NO ADDITIONAL EXPENSE TO THE OWNER.
21. INSTALL PERMANENT VEGETATIVE COVER AND THE LONG-TERM EROSION PROTECTION MEASURES OR STRUCTURES AS SOON AS PRACTICAL IN THE DEVELOPMENT PROCESS.
22. 13. PROVIDE FOR HANDLING OF THE INCREASED RUNOFF CAUSED BY CHANGED SOIL AND SURFACE CONDITIONS. USE EFFECTIVE MEANS TO CONSERVE EXISTING ON-SITE SOIL INCLUDING THE USE OF DIVERSION DITCHES, GRASSED WATERWAYS AND STORM SEWERS.
23. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION TO CONTROL EROSION AND/OR OFF SITE SEDIMENTATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STABILITY OF ALL GRADED AND/OR CLEARED AREAS UNTIL PERMANENT GROUND COVER IS ESTABLISHED. ANY AREAS DAMAGED BY EROSION SHALL BE REPAIRED TO ITS ORIGINAL CONDITION AND PROTECTED FROM FURTHER EROSION AT NO ADDITIONAL COST TO THE OWNER.
24. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETED AND THE SITE STABILIZED.

GRASSING NOTES

NOTE:
THESE SCHEDULES ARE FOR TEMPORARY SEEDING ONLY. PROVIDE BERMUDA SODDING AS PERMANENT VEGETATIVE COVER

GRASSING NOTES

1. SEED THESE AREAS IMMEDIATELY UPON COMPLETION OF GRADING OR CONSTRUCTION AND CLEAN-UP OPERATIONS.
   A. SLOPES GREATER THAN FOUR HORIZONTAL TO ONE VERTICAL.
   B. UTILITY RIGHTS-OF-WAY ADJACENT TO STREAM BANKS.
2. AREAS READY FOR PLANTING BETWEEN AUGUST 16 AND FEBRUARY 28 SHALL BE PLANTED WITH A TEMPORARY COVER OF SCHEDULE NO. 2. AT THE ACCEPTABLE SEASONS FOR PLANTING SCHEDULE NO. 1, THE TURF SHALL BE DESTROYED BY REWORKING THE SOIL, AND SCHEDULE NO. 1 SEEDING ESTABLISHED AS SPECIFIED HEREIN.
3. USE RATE A LBS. PER 1000 SQ. FT. ON SLOPES OVER 5' HORIZONTAL TO 1' VERTICAL IN HEIGHT AND USE RATE B LBS. PER 1000 SQ. FT. ON SLOPES LESS THAN 5' HORIZONTAL TO 1' VERTICAL.
4. SEE GRASSING SPECIFICATIONS (SECTION 02930) FOR ADDITIONAL REQUIREMENTS.

GRASSING SCHEDULES:
GRASSING SCHEDULE NO. 1 – PLANTING DATES MARCH 1 TO AUGUST 15:

COMMON NAME OF SEED	RATE A	RATE B
RYE GRAIN	1	1
COMMON BERMUDA (HULLED)	0	1.5
SERICEA LESPEDEZA (CLAY SOILS)	1	0
WEEPING LOVE GRASS (SANDY SOILS)	1	0
CENTIPEDE	0.5	0.5
FERTILIZER	18–25	18–25

GRASSING SCHEDULE NO. 2 – PLANTING DATES AUGUST 16 – FEBRUARY 28:

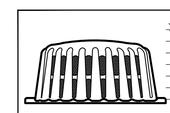
COMMON NAME OF SEED	RATE A	RATE B
RYE GRAIN	0	1
COMMON BERMUDA (HULLED)	0	1.5
BROWN TOP MILLET	5	0
COMMON BERMUDA (UNHULLED)	0	2.0
FERTILIZER	18–25	18–25

FILTER OPTIONS
FILTER HAT IS AVAILABLE IN THREE OPTIONS:
1) ALL HIGH-FLOW MATERIAL
2) ALL HIGH-EFFICIENCY MATERIAL
3) HIGH-FLOW MATERIAL ON TOP HALF OF HAT, HIGH-EFFICIENCY MATERIAL ON BOTTOM HALF (THIS FILTER COVER IS RECOMMENDED FOR ALL ROADWAY PROJECTS.)
IT IS THE PURCHASERS RESPONSIBILITY TO PURCHASE APPROPRIATE FILTER HAT. PURCHASER SHALL PROVIDE ROCK FOR FILTER POCKETS.

FILTER HAT INSTALLATION
FILTER HAT SLIDES DIRECTLY OVER FILTER FRAME. TO KEEP FILTER FRAME IN PLACE OVER STORM STRUCTURE, ROCK POCKETS ARE SEWN DIRECTLY INTO FILTER HAT MATERIAL. EVERY FILTER HAT COMES IN ONE PIECE FOR EASY INSTALLATION.

MAINTENANCE
ALL TEMPORARY EROSION, SEDIMENTATION, & POLLUTION CONTROL PRACTICES SHOULD BE INSPECTED DAILY. CONTRACTOR SHALL REMOVE SEDIMENT AND DISPOSE OF IN A PROPER MANNER. INSPECT S-200A DAILY FOR CUTS, ABRASIONS, AND PROPER INSTALLATION. REPLACE OR REPOSITION AS NECESSARY.

SPECIFICATIONS
FILTER FABRIC SILT-SAVER HAT SHALL BE BASED ON DESIGN PROFESSIONAL'S SPECIFICATIONS.



FRAME & FILTER DISCHARGE ANALYSIS

HEAD (FT)	EQUATION USED	OPENING AREA (SF)	FRAME FLOW (CFS)	FILTER AREA (SF)	FILTERED FLOW (CFS)
0.5	O	2.1	7	6	2
1.0	O	3.9	19	12	3
1.5	O	7.0	41	18	5
2.0	O	8.0	54	24	7
2.5	O	9.2	70	30	9
3.0	O	9.2	77	—	77

DUE TO NARROW SLOT, A TRANSITION WILL OCCUR BETWEEN WEIR AND ORIFICE CONDITIONS. ORIFICE FLOW WILL PROVIDE A MORE CONSERVATIVE ESTIMATE OF FLOW, THEREFORE THE LESSER OF THE ORIFICE AND WEIR FLOWS WILL BE USED FOR EACH STAGE CALCULATION.

FILTER MATERIAL ALLOWS 129 gpm/SF OR 0.29cfs/SF
ORIFICE EQUATION (O) = Q=0.6A(2gh)^0.5
P = FEET PERIMETER
h = HEAD IN FEET
Q = CAPACITY IN cfs
A = FREE OPEN AREA OF FRAME
g = 32.2 FEET-PER-SECOND/SECOND

REPLACEMENT FILTERS: MODEL # S-240

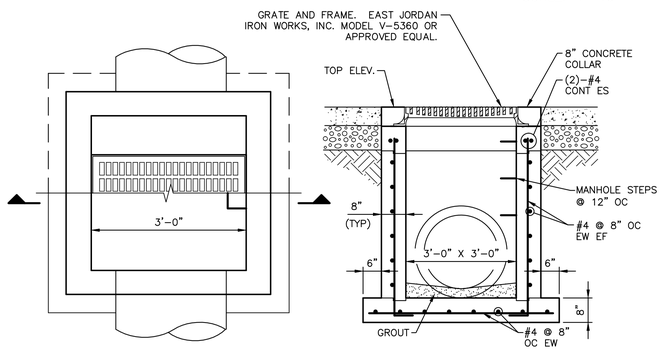
SILT-SAVER
Sediment Control Products

SQUARE FRAME & FILTER ASSEMBLY
Model # S-200A

FRAME MATERIAL: BLACK 0.25" HMWPE
FILTER FABRIC MATERIAL: REFER TO SPEC
SCALE: NOT TO SCALE
LAST UPDATED: APRIL 2010

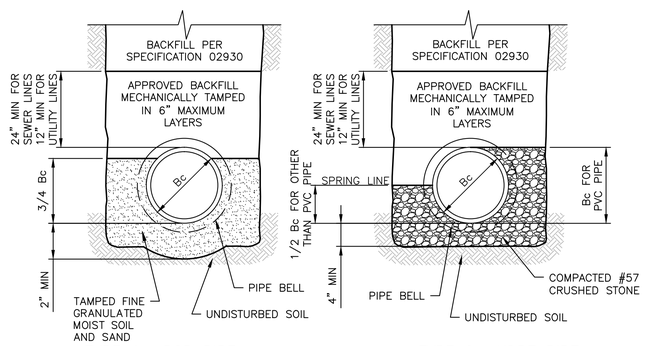
SILT-SAVER, INC. 1094 CULPEPPER DRIVE, CONYERS, GA 30094 PHONE: (770) 388-7818 FAX: (770) 388-7640 TOLL FREE: 1-888-382-SILT (7458) www.siltsaver.com

TEMPORARY INLET PROTECTION
DETAIL 3 TYP
SCALE: NONE



DROP INLET (DI)
DETAIL 1 TYP
SCALE: NONE

NOTES:
FOR PIPES OVER 24" I.D. MAKE LENGTH & WIDTH OF DI = O.D. OF PIPE + 6" EACH SIDE.



NOTES:
1. 1/4 Bc HAND SHAPED BOTTOM – SHAPE BELL HOLES FOR USE IN DRY EARTH TRENCHES ONLY. APPLICABLE TO BOTH EARTH AND ROCK TRENCHES.

CLASS "B" BEDDING
DETAIL 2 TYP
SCALE: NONE

3 DAYS BEFORE DIGGING IN SOUTH CAROLINA
South Carolina 811 Call 811 Before you Dig
PALMETTO UTILITY PROTECTION SERVICE, INC. (PUPS)
ALL UTILITIES MAY NOT BE A MEMBER OF PUPS. COORDINATE WITH LOCAL UTILITY COMPANIES FOR MARKING OF THEIR UTILITIES ALSO.

BID DOCUMENTS
THESE DOCUMENTS ARE FOR THE PURPOSE OF SOLICITATION OF BIDS AND ARE NOT FOR USE FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	DATE	BY
1	ADDENDUM 1	6/26/15	MDJ

APPROVALS

PROJECT ENG:	BET
DESIGNED BY:	MDJ
DRAWN BY:	MDJ
CHECKED BY:	BET
APPROVED:	BET

SOUTH CAROLINA AUTHORIZATION CERTIFICATE OF — URS CORPORATION No. C00934 — 6-26-15 DATE

PROFESSIONAL ENGINEER — No. 26138 — SOUTH CAROLINA — BRYANT E. TILLIS — SIGNATURE

URS
an AECOM company
101 Research Drive
Columbia, South Carolina 29203
Telephone (803) 254-4400 : Fax (803) 771-6676
www.aecom.com

SHEET TITLE: EROSION CONTROL PLAN
SCALE: AS SHOWN
DATE: JUNE 9, 2015

PROJECT
USC TENNIS
EROSION CONTROL REPAIR
PREPARED FOR
THE UNIVERSITY OF SOUTH CAROLINA
CITY OF COLUMBIA SOUTH CAROLINA

.DWG NAME	
N.B. NO.	
REF.	
PROJECT NO.	46423775
SHEET	1
OF	1

FILE NO. 36,531–B91

N:\PROJECTS\46423775 & 46423776_USC_TENNIS CENTER EROSION CONTROL REPAIR\DRAWINGS\BASE DWGS\46423775–USC TENNIS EROSION CONTROL.DWG 6/24/2015 2:28:45 PM