

STORM DRAINAGE REPAIRS PREPARED FOR UNIVERSITY OF SOUTH CAROLINA UPSTATE CAMPUS SPARTANBURG, SOUTH CAROLINA

- PROJECT SITE

LOCATION MAP

SCALE: 1" = 2,000'

SPARTANBURG COUNTY

INDEX SHEET SHEET NO. **COVER SHEET** GENERAL NOTES, LEGEND, SYMBOLS, & ABBREVIATIONS EXISTING CONDITIONS AND DEMO PLAN - VISUAL ARTS BUILDING EXISTING CONDITIONS AND DEMO PLAN - THE VILLAS EXISTING CONDITIONS AND DEMO PLAN - PARKING LOT 28 & PEACE PARK SITE IMPROVEMENT PLAN - VISUAL ARTS BUILDING SITE IMPROVEMENT PLAN - THE VILLAS SITE IMPROVEMENT PLAN - PARKING LOT 28 & PEACE PARK STORM DRAINAGE PROFILES AND SECTIONS SITE DETAILS SITE DETAILS

STATE PROJECT NO. H34-9546

BID DOCUMENTS THESE DOCUMENTS ARE FOR THE PURPOSE OF SOLICITATION OF BIDS AND

ARE NOT FOR USE FOR CONSTRUCTION

Storm Drainage Repairs University of South Carolina Upstate Campus Spartanburg, SC

University of South Carolina Upstate

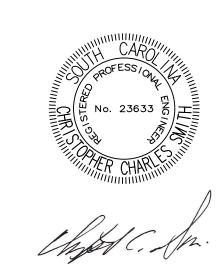
800 University Way Spartanburg, SC 29303

CONSULTANT

Columbia, SC 29203 803.254.4400 tel 803.771.6676 fa

REGISTRATION





155	SSUE/REVISION					
	2016-08-12	BID DRAWINGS				
I/R	DATE	DESCRIPTION				
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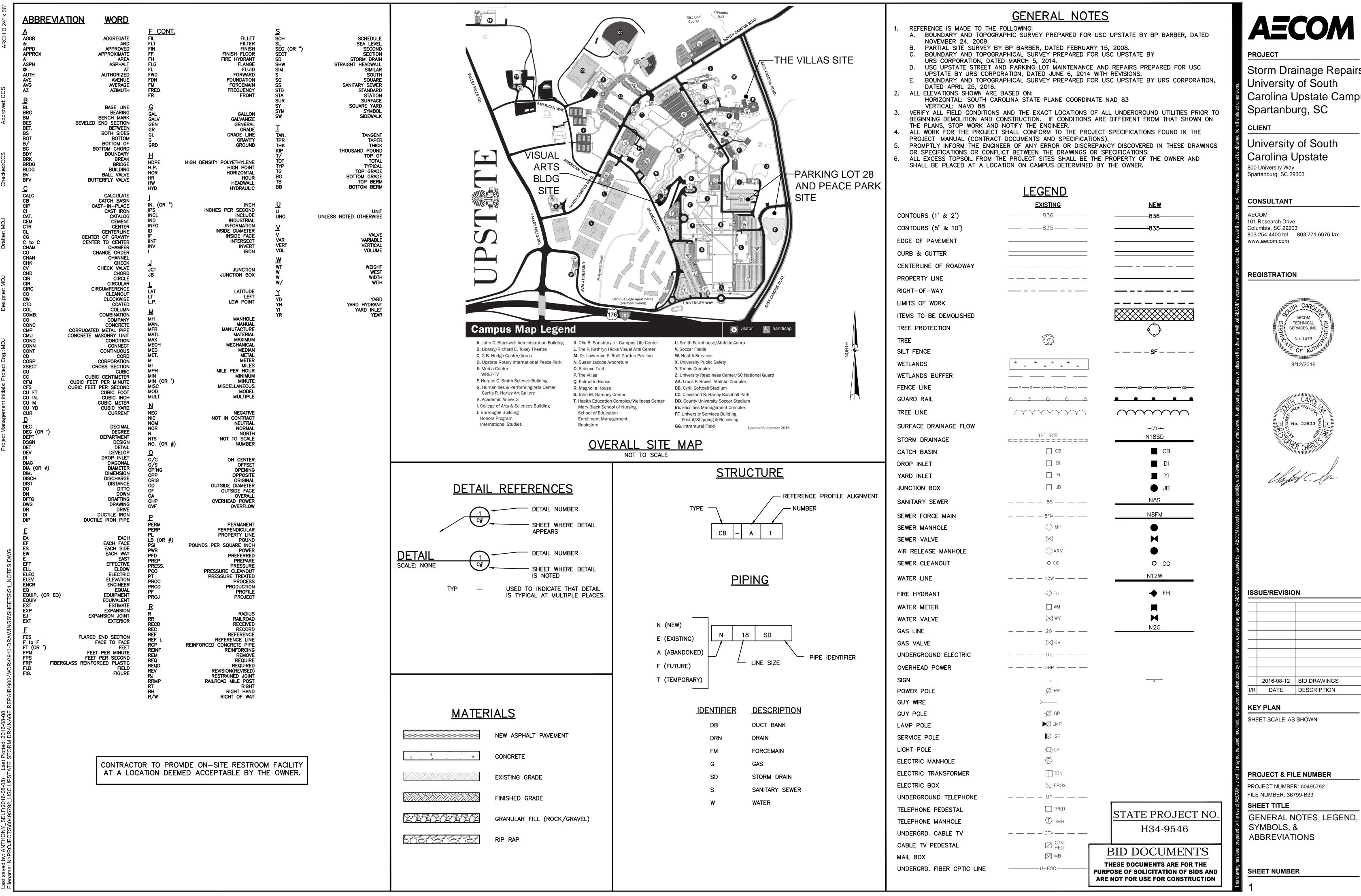
SHEET SCALE: AS SHOWN

KEY PLAN

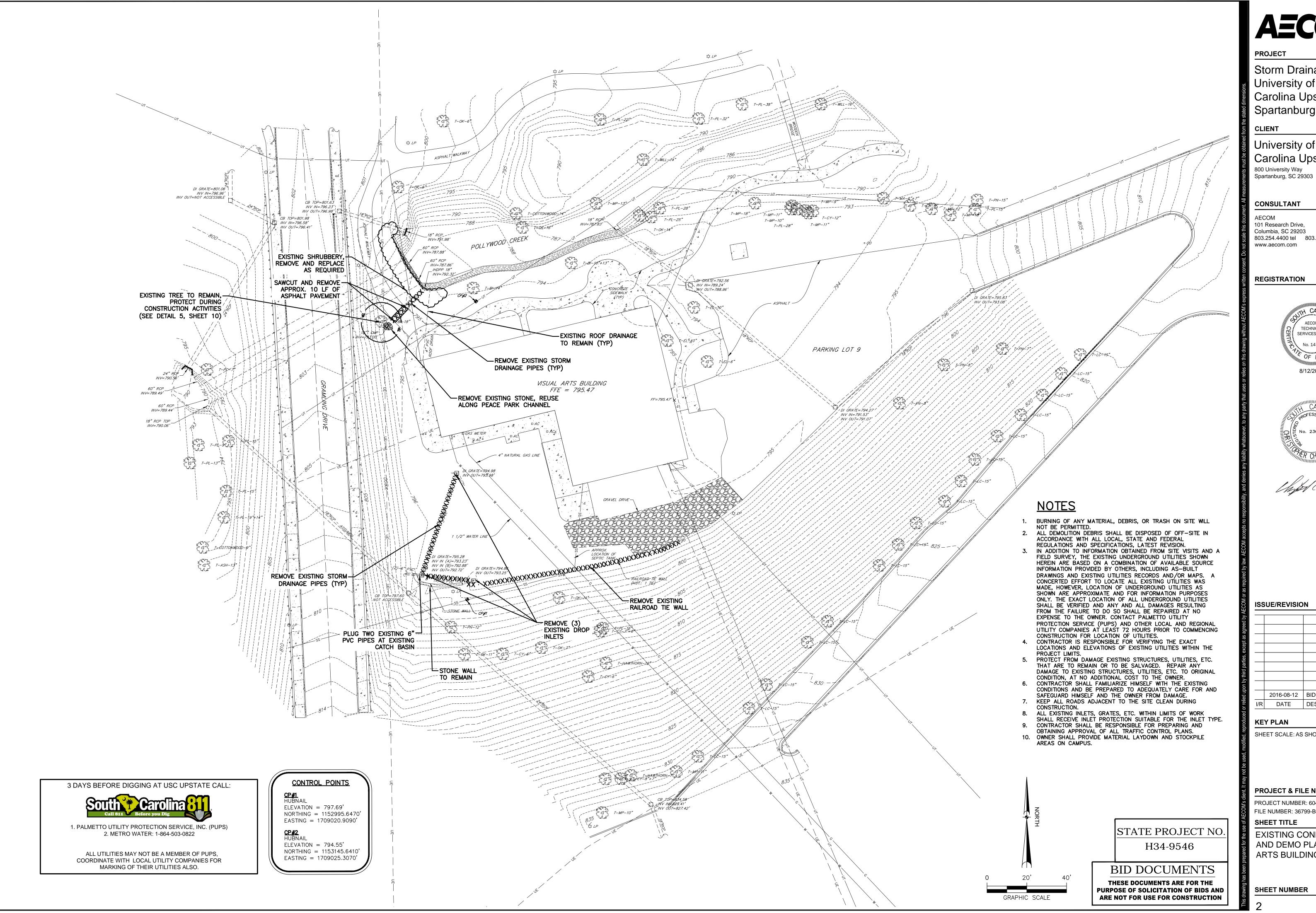
PROJECT & FILE NUMBER

PROJECT NUMBER: 60495792 FILE NUMBER: 36799-B93 **SHEET TITLE COVER SHEET**

SHEET NUMBER



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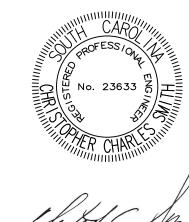
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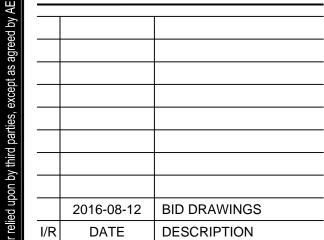
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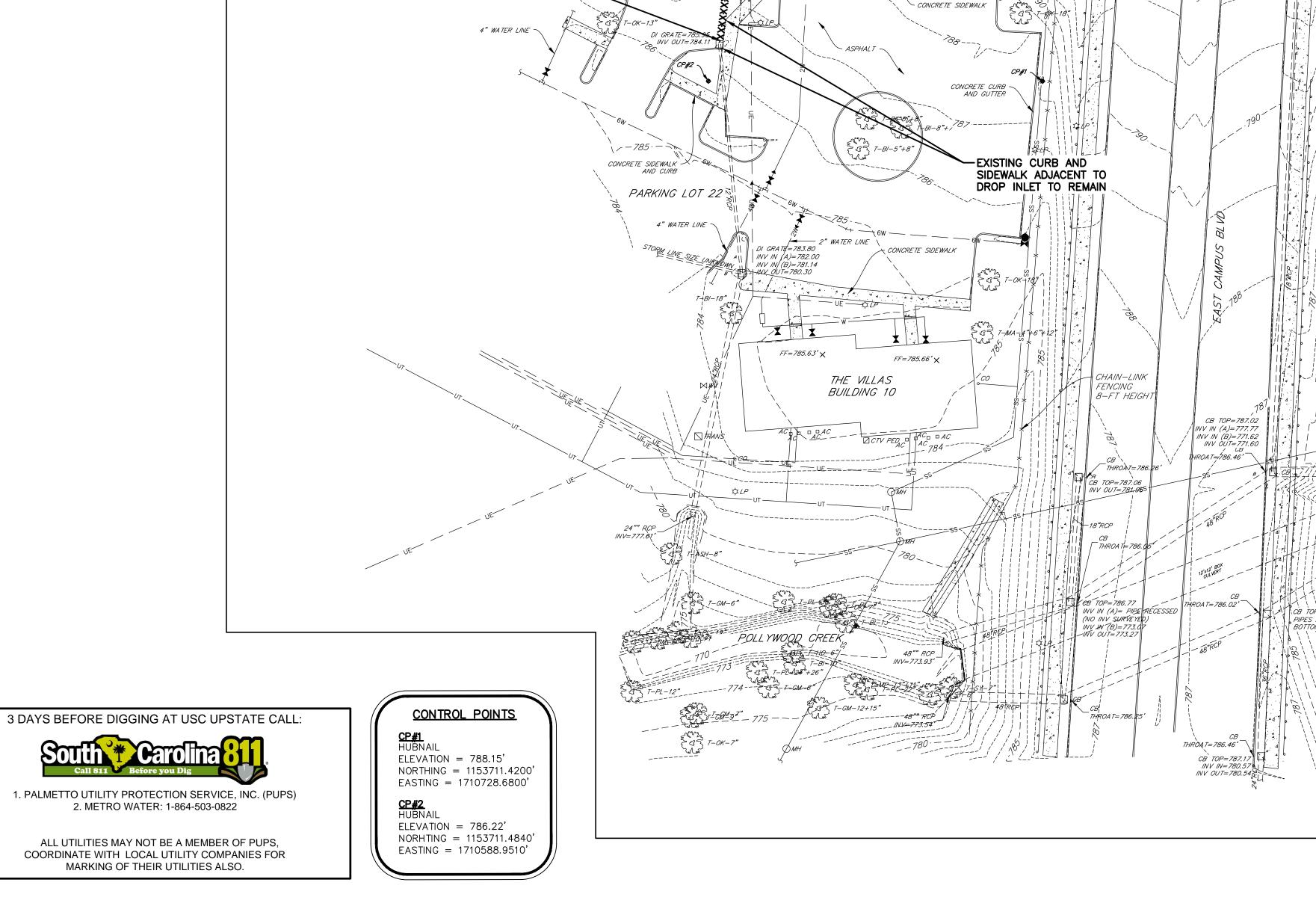
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EXISTING CONDITIONS AND DEMO PLAN - VISUAL ARTS BUILDING

1. PALMETTO UTILITY PROTECTION SERVICE, INC. (PUPS) 2. METRO WATER: 1-864-503-0822 ALL UTILITIES MAY NOT BE A MEMBER OF PUPS, COORDINATE WITH LOCAL UTILITY COMPANIES FOR MARKING OF THEIR UTILITIES ALSO.



<u>NOTES</u>

- BURNING OF ANY MATERIAL, DEBRIS, OR TRASH ON SITE WILL
- NOT BE PERMITTED.

 2. ALL DEMOLITION DEBRIS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS AND SPECIFICATIONS, LATEST REVISION.

 3. 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.
- 4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES WITHIN THE PROJECT LIMITS.
- 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.

 6. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING
- CONDITIONS AND BE PREPARED TO ADEQUATELY CARE FOR AND SAFEGUARD HIMSELF AND THE OWNER FROM DAMAGE. 7. KEEP ALL ROADS ADJACENT TO THE SITE CLEAN DURING
- 8. ALL EXISTING INLETS, GRATES, ETC. WITHIN LIMITS OF WORK SHALL RECEIVE INLET PROTECTION SUITABLE FOR THE INLET TYPE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND OBTAINING APPROVAL OF ALL TRAFFIC CONTROL PLANS. 10. OWNER SHALL PROVIDE MATERIAL LAYDOWN AND STOCKPILE

AREAS ON CAMPUS.

BID ALTERNATE #1

ISSUE/REVISION 2016-08-12 | BID DRAWINGS I/R DATE DESCRIPTION

AECOM

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TECHNICAL

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Spartanburg, SC 29303

PROJECT

CLIENT

KEY PLAN

SHEET SCALE: AS SHOWN

PROJECT & FILE NUMBER

PROJECT NUMBER: 60495792 FILE NUMBER: 36799-B93 SHEET TITLE

EXISTING CONDITIONS AND DEMO PLAN - THE VILLAS

SHEET NUMBER

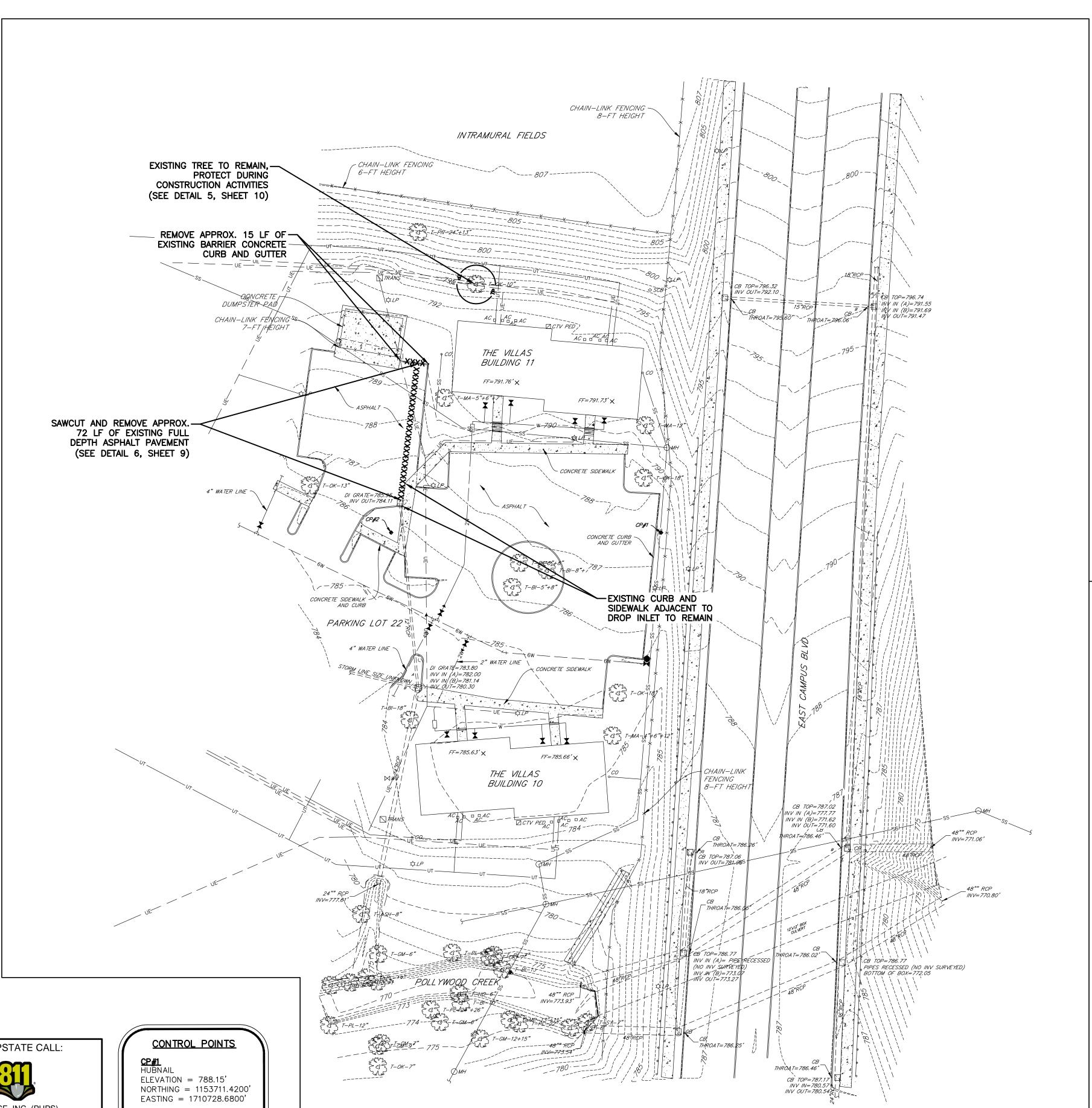
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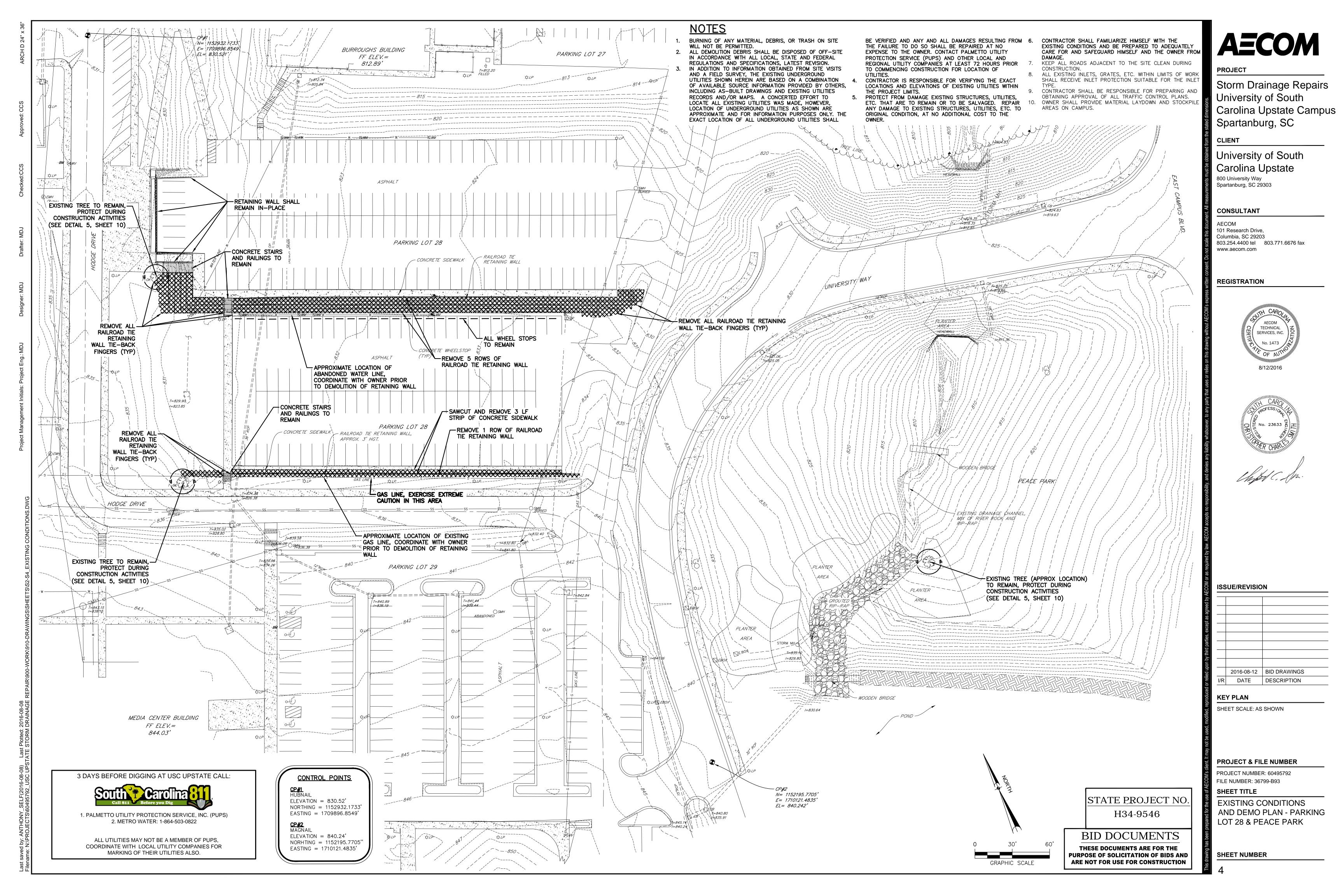
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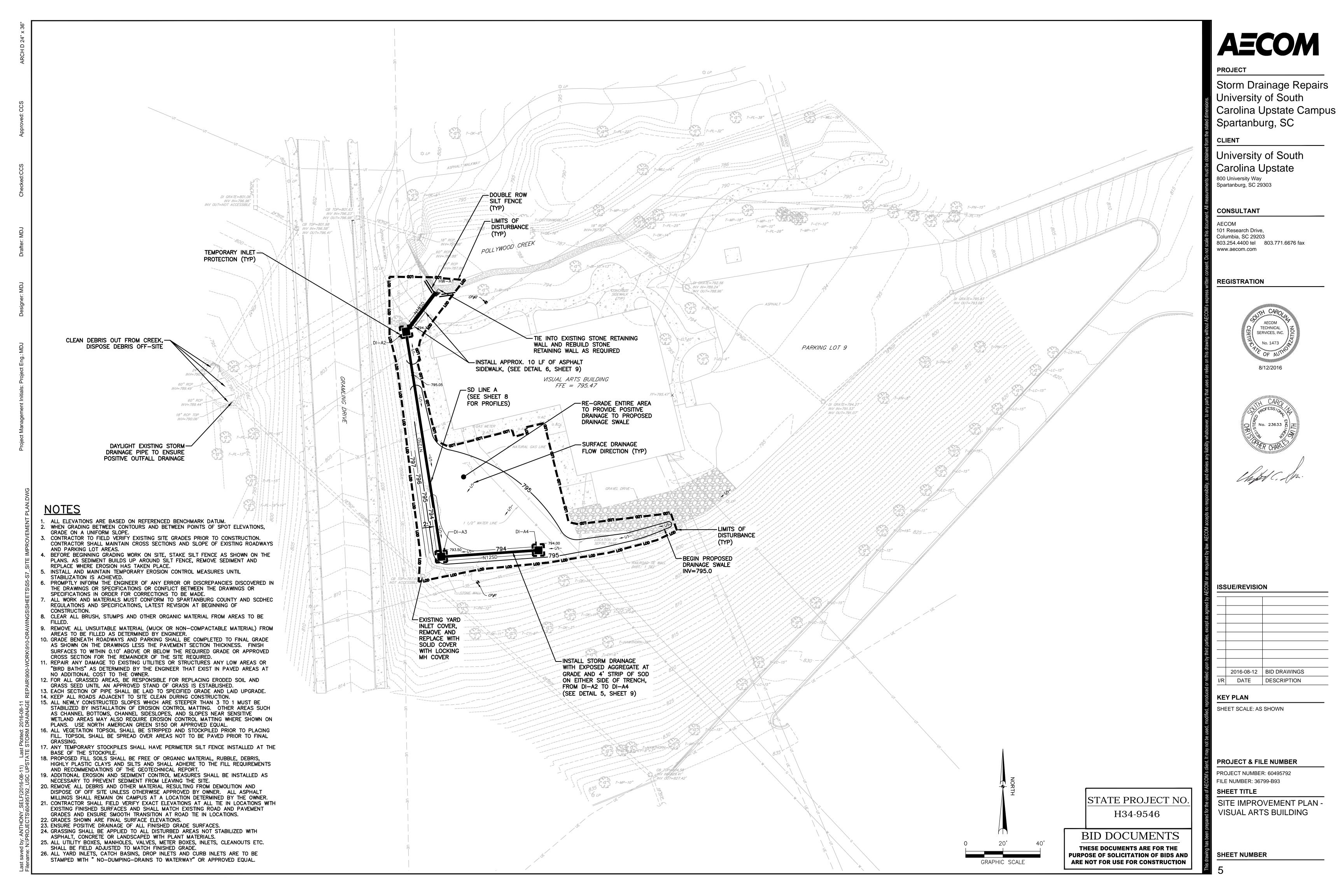
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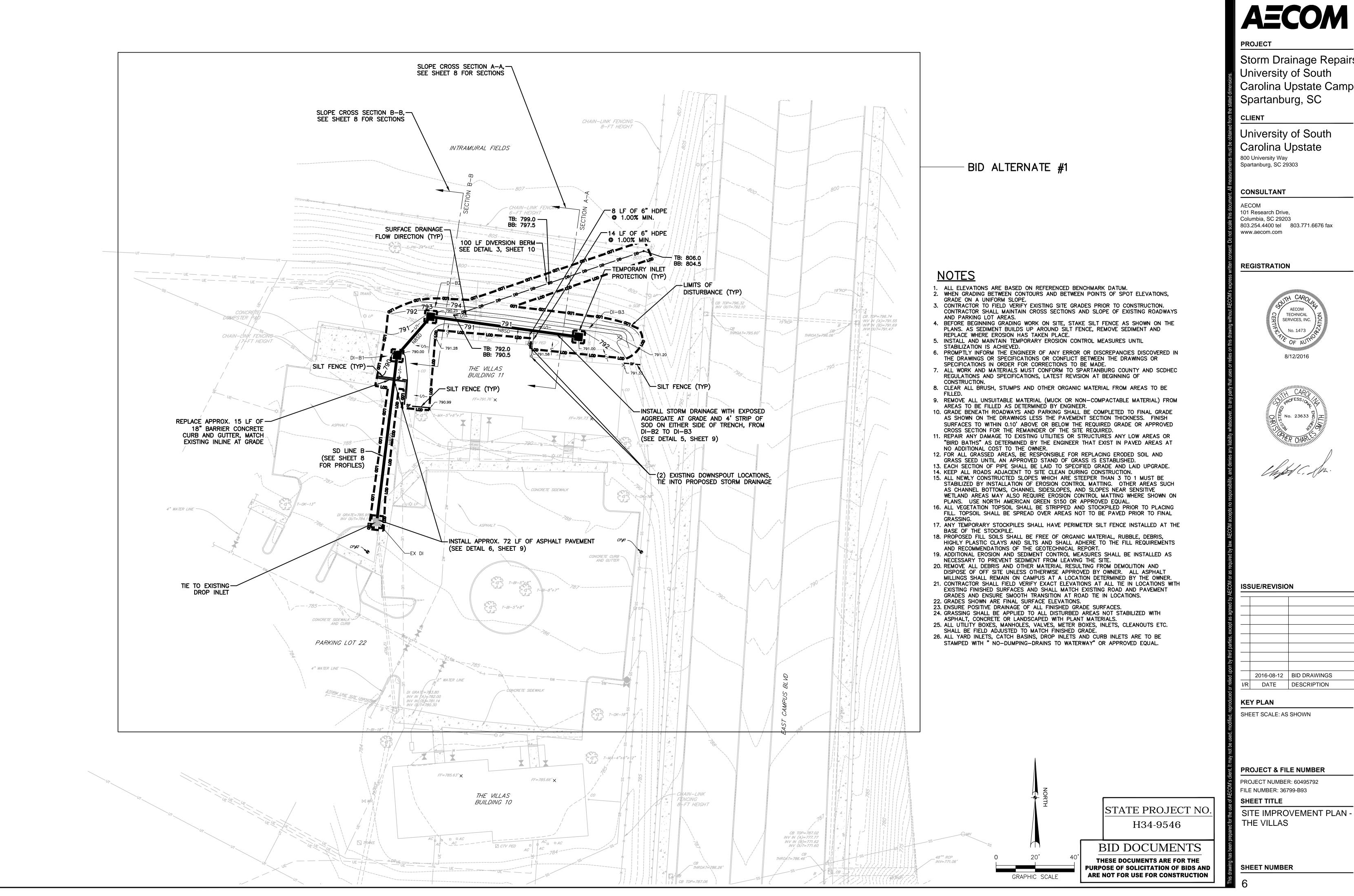
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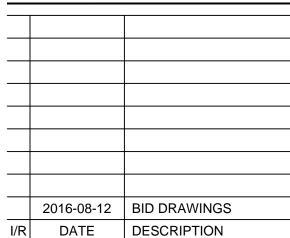


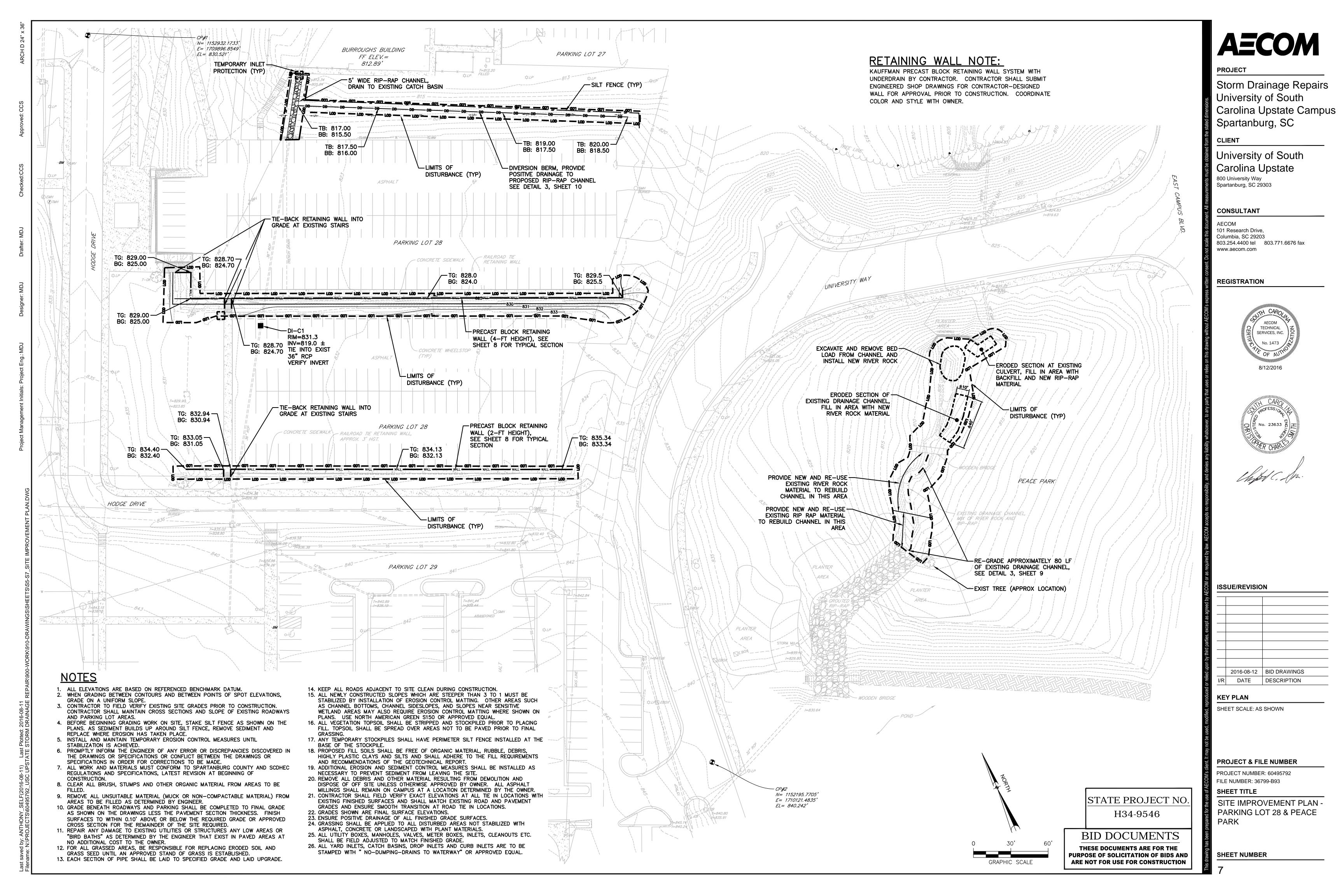


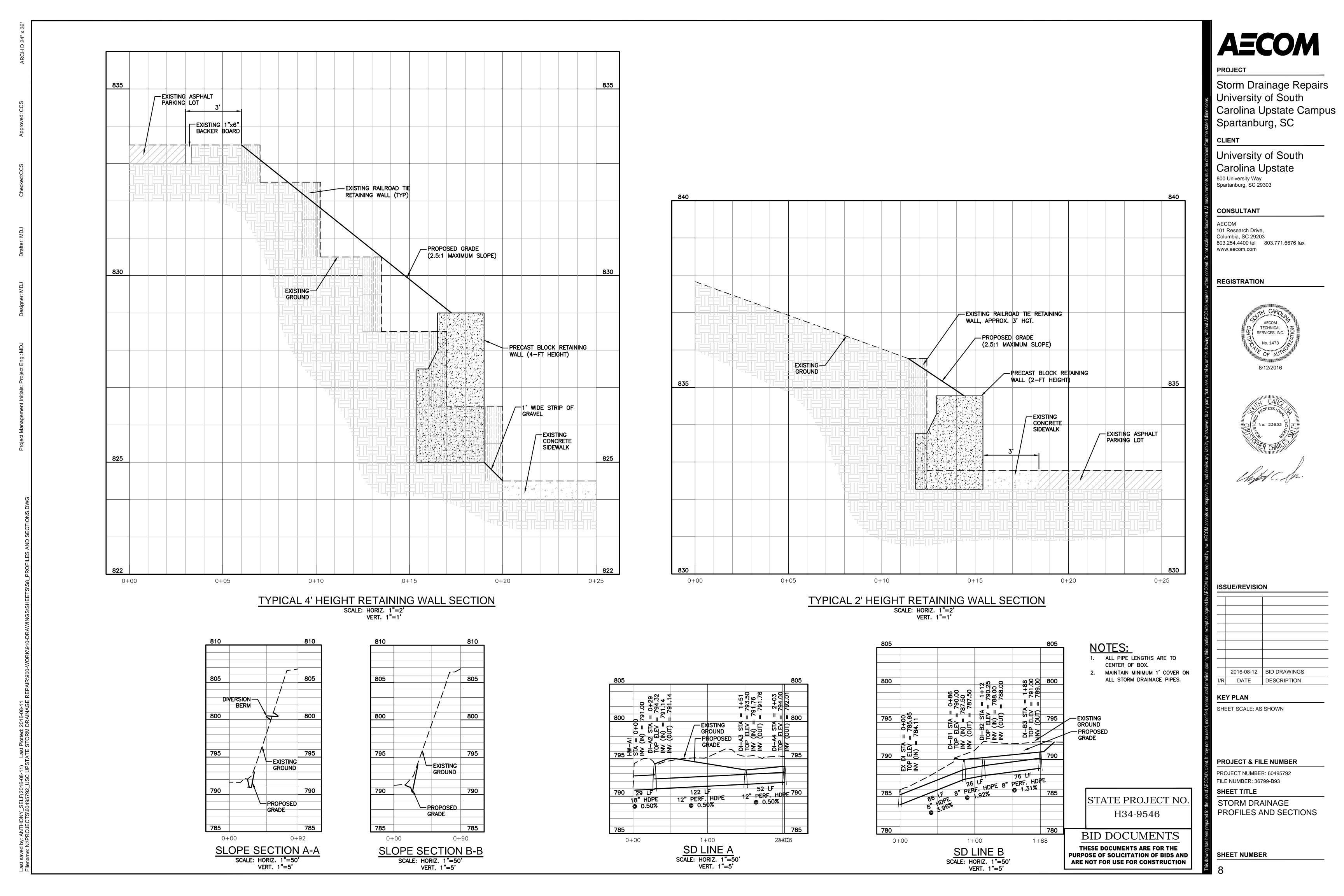


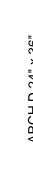


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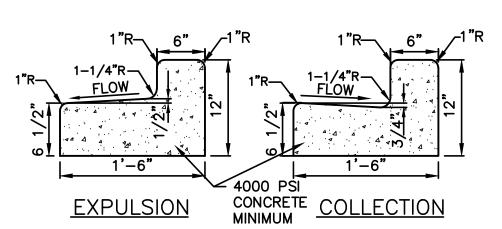








GRATE AND FRAME. EAST JORDAN — IRON WORKS, INC. MODEL V-5360 OR APPROVED EQUAL. TOP ELEV. -3'-0" <u>PLAN</u> DROP INLET (DI) **DETAIL** SCALE: NONE



_8" CONCRETE

-MANHOLE STEPS **@** 12" OC

COLLAR

SECTION

NOTES:

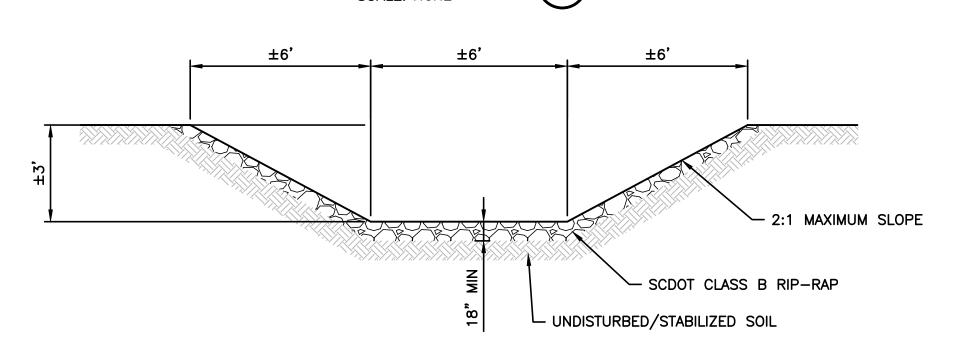
1. FOR PIPES OVER 24" I.D.

2. NYLOPLAST 30" DIA. DRAIN BASIN W/30" STANDARD H-20 GRATE IS AN ACCEPTABLE ALTERNATIVE

EACH SIDE.

MAKE LENGTH & WIDTH OF DI = O.D. OF PIPE + 6"

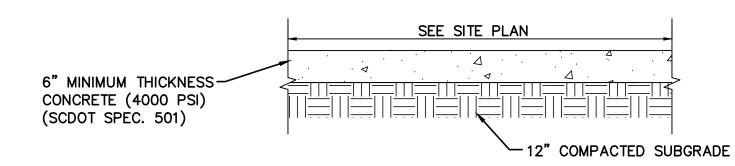
BARRIER CURB AND GUTTER DETAIL SCALE: NONE



RIP-RAP CHANNEL

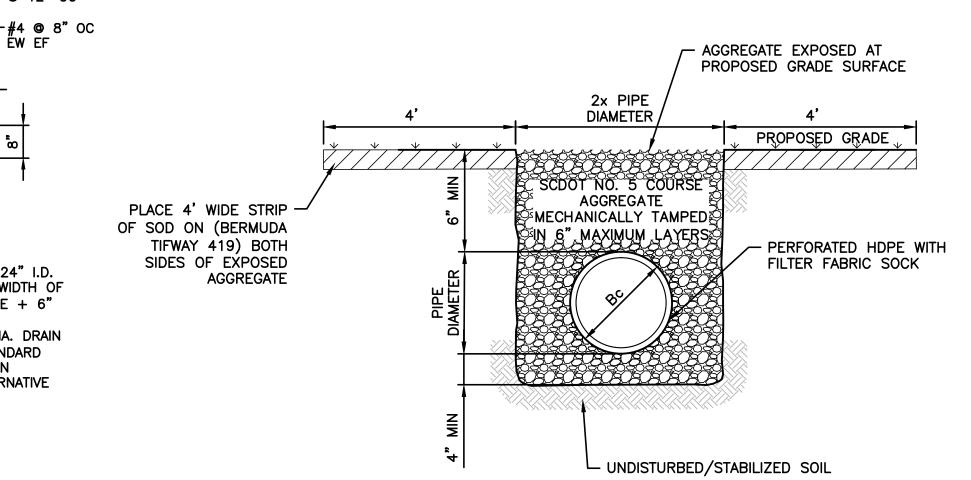


NOTE: THIS DETAIL APPLIES TO THE RIP RAP SWALE REPLACEMENT LOCATED IN THE PEACE PARK AREA ONLY. CROSS SECTION IS APPROXIMATE. FOLLOW EXISTING CHANNEL DIMENSIONS AS CLOSELY AS POSSIBLE TO RETAIN EXISTING CHARACTER



TYPICAL SIDEWALK

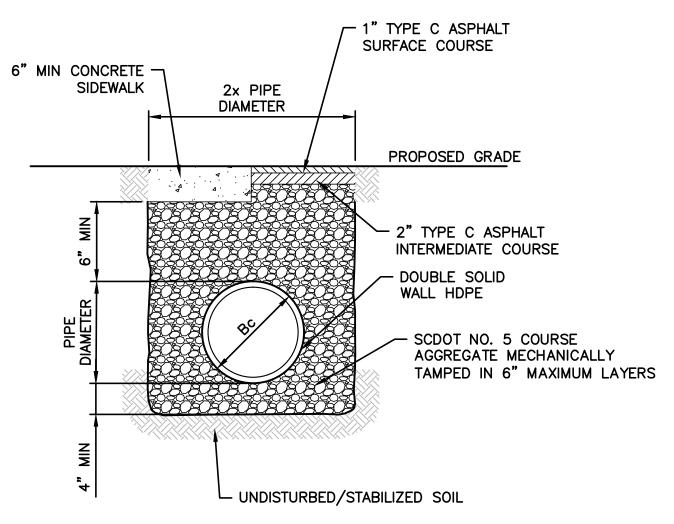
DETAIL SCALE: NONE



1. HAND SHAPED BOTTOM - SHAPE BELL HOLES FOR USE IN DRY EARTH TRENCHES ONLY. APPLICABLE TO BOTH EARTH AND ROCK TRENCHES. 2. INSTALL 4' STRIP OF BERMUDA SOD (COORDINATE WITH OWNER) ALONG PIPE TRENCH AT THE OUTER BOUNDARY OF THE EXPOSED AGGREGATE.

STORM DRAINAGE BEDDING (GRASS AREA ONLY)

DETAIL SCALE: NONE



NOTES:

1. HAND SHAPED BOTTOM — SHAPE BELL HOLES FOR USE IN DRY EARTH TRENCHES ONLY. APPLICABLE TO BOTH EARTH AND ROCK TRENCHES.

STORM DRAINAGE BEDDING (PAVEMENT AREA ONLY)

DETAIL

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PROJECT

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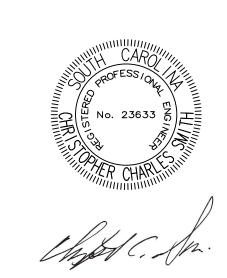
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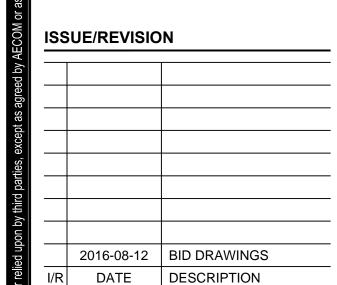
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REGISTRATION







KEY PLAN

SHEET SCALE: AS SHOWN

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SHEET NUMBER

GENERAL NOTES

ALL ELEVATIONS ARE BASED ON MEAN SEA LEVEL DATUM.

2. CONTRACTOR SHALL, FOR ALL GRASSED AREAS, BE RESPONSIBLE FOR REPLACING ERODED

SEDIMENT AND

EROSION CONTROL NOTES

- SOIL AND GRASS SEED UNTIL AN APPROVED STAND OF GRASS IS ESTABLISHED. 3. CONTRACTOR SHALL, BEFORE BEGINNING GRADING WORK ON SITE, STAKE SILT FENCE AND INSTALL ALL PERIMETER CONTROLS AS SHOWN ON THIS PLAN. 4. CONTRACTOR SHALL BE AWARE OF EXISTING UTILITY LINES DURING PIPE LINE INSTALLATION.
- CONTRACTOR SHALL NOTIFY UTILITY COMPANIES SUCH AS THE LOCAL ELECTRIC COMPANY, AT&T, ETC. FOR LOCATION OF OTHER UTILITIES NOT SHOWN ON PLAN. CALL PALMETTO UTILITIES PROTECTION SERVICES (888-721-7877) FOR UNDERGROUND UTILITY LINES LOCATION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
- 5. PROMPTLY INFORM THE ENGINEER OF ANY ERROR OR DISCREPANCIES DISCOVERED IN THE DRAWINGS OR SPECIFICATIONS OR CONFLICTS BETWEEN THE DRAWING AND SPECIFICATIONS IN ORDER FOR CORRECTIONS TO BE MADE.
- 6. ALL WORK AND MATERIALS MUST CONFIRM WITH SPARTANBURG COUNTY REGULATIONS AND SPECIFICATIONS, LATEST REVISIONS AT THE BEGINNING OF CONSTRUCTION.
- 7. ALL NEWLY CONSTRUCTED SLOPES WHICH ARE STEEPER THAN 2.5 TO 1 MUST BE STABILIZED BY INSTALLATION OF EROSION CONTROL MATTING. OTHER AREAS SUCH AS CHANNEL BOTTOMS, CHANNEL SIDESLOPES, AND SLOPES NEAR SENSITIVE WETLAND AREAS MAY ALSO REQUIRE EROSION CONTROL MATTING WHERE SHOWN ON PLANS. USE NORTH AMERICAN GREEN S150 OR APPROVED EQUAL. EQUAL PRODUCTS MUST BE APPROVED BY
- THE ENGINEER PRIOR TO INSTALLATION. 8. PROVIDE A TEMPORARY STONE SPLASH PAD AT ALL FIRE HYDRANTS OR OTHER POINTS OF DISCHARGE DURING TESTING OF THE WATER DISTRIBUTION SYSTEM
- 9. 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.
- 10. ALL AREAS WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE SEEDED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 11. INSTALL PERMANENT VEGETATIVE COVER AND THE LONG-TERM EROSION PROTECTION MEASURES OR STRUCTURES AS SOON AS PRACTICAL IN THE DEVELOPMENT PROCESS
- 12. 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.
- 13. PLACE SILT FENCE BARRIERS AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. SILT BARRIERS SHALL BE MAINTAINED IN PLACE AND IN GOOD CONDITION UNTIL GROUND COVER IS ESTABLISHED. SILT FENCE SHALL BE CLEANED OR REPLACED WHEN SILT ACCUMULATION REACHES 1/3 THE HEIGHT OF THE FENCE. SEDIMENT SHALL BE RESPREAD ONSITE
- 14. ALL DISTURBED AREAS NOT PAVED SHALL BE GRASSED OR LANDSCAPED. USE TEMPORARY PLANT COVER, MULCHING, AND/OR STRUCTURES TO CONTROL RUNOFF AND PROTECT AREA SUBJECT TO EROSION DURING CONSTRUCTION.
- 15. ALL SEDIMENT AND EROSION CONTROLS ARE TO BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24-HOUR PERIOD. MAINTENANCE OF SEDIMENT TRAPPING SHALL BE PERFORMED AS NECESSARY PER THESE INSPECTIONS. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED, AS NECESSARY
- 16. 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.
- 17. 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

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.
- 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
•	NAIL A	NAIL D
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

COORDINATE SEEDING/GRASSING REQUIREMENTS WITH USC UPSTATE PRIOR TO STABILIZATION DURING CONSTRUCTION

STANDARD NOTES:

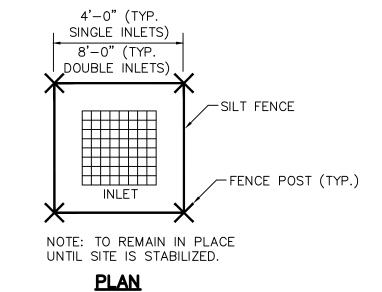
- 1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY
- BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE. 2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED. EXCEPT AS
 - A. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS
- B. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, & EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE
- 3. ALL SEDIMENT & EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- 4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES & ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- 6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS & THE GENERATION OF DUST. THE
- CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED. 7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 ET. SEQ. AND SCR100000
- TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- 9. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE
- LAST ROW OF SILT FENCE AND ALL WOS. 10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, & BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) & CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED
- FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES. 11. A COPY OF THE SWPPP, INSPECTION RECORDS & RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- 12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, & WILL
- NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS. 13. MINIMIZE SOIL COMPACTION &, UNLESS INFEASIBLE, PRESERVE TOPSOIL 14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT & VEHICLE WASHING, WHEEL
- WASH WATER & OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE 15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES & EXCAVATED
- AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.) THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
- WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY APPROPRIATE
- B. WASTEWATER FROM WASHOUT/CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS & OTHER CONSTRUCTION MATERIALS;
- C. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE & EQUIPMENT OPERATION & MAINTENANCE;
- 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK & MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE. 18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO

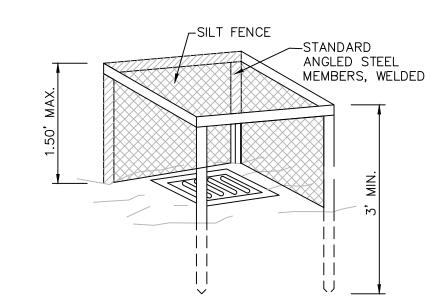
D. SOAPS OR SOLVENTS USED IN VEHICLE & EQUIPMENT WASHING

- COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY
- 19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.
- 20. CONTRACTORS ARE REQUIRED TO HAVE RAIN GAUGES AT THE CONSTRUCTION SITE AND THE RAIN TOTALS DOCUMENTED FOR REVIEW BY SPARTANBURG COUNTY AND SCDHEC.
- 21. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD WITH SPARTANBURG COUNTY AT LEAST 48 HOURS PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES. THE OWNER, DESIGN ENGINEER AND CONTRACTOR MUST BE PRESENT AND HAVE OBTAINED THE STORMWATER PERMIT, STAMPED APPROVED PLANS AND THE NOI APPROVAL LETTER FROM SCDHEC BEFORE CALLING SPARTANBURG COUNTY AT 864-595-5320 TO SCHEDULE THIS MEETING.

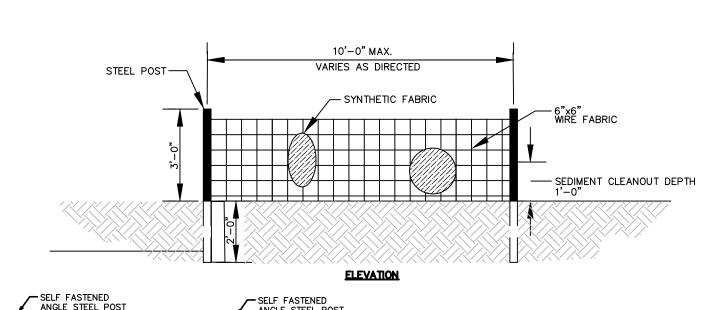
CONSTRUCTION AND EROSION AND SEDIMENT CONTROL SEQUENCE

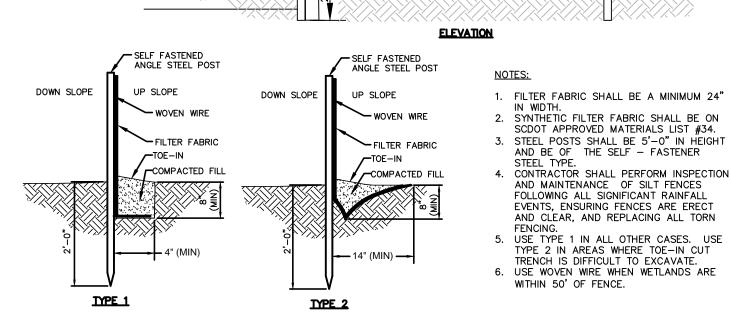
- 1. RECEIVE NOTIFICATION OF NPDES COVERAGE FROM SPARTANBURG COUNTY AND SCDHEC. COORDINATE PRE-CONSTRUCTION MEETING ON-SITE AND NOTIFY SPARTANBURG COUNTY OFFICE AT LEAST 48 HOURS IN ADVANCE OF LAND DISTURBING ACTIVITIES.
- 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, RAIN GAUGE AND PERIMETER SOIL EROSION CONTROL MEASURES. BEGIN PERFORMING WEEKLY SCDHEC SWPPP INSPECTIONS UNTIL SITE IS PERMANENTLY STABILIZED.
- 3. PERFORM DEMOLITION OPERATIONS AS SHOWN ON THE PLANS AND CLEAR AND GRUB SITE IN THE AREAS TO BE DEVELOPED. REMOVE AND DISPOSE OF ITEMS OFFSITE AS APPROPRIATE. 4. STRIP AND STOCKPILE TOPSOIL AND STABILIZE STOCKPILES AS NOTED IN THE PLANS AND
- SPECIFICATIONS. 5. PERFORM GRADING OPERATIONS ON THE SITE. INSTALL STORM DRAINAGE IN CONJUNCTION WITH
- GRADING. 6. INSTALL EROSION CONTROL DEVICES AS REQUIRED OR NEEDED AS STORM DRAINAGE STRUCTURES
- AND THE SITE ARE EXTENDED TO FINISHED GRADE. 7. STOCKPILE UNUSED MATERIAL AND STABILIZE AS NOTED ON THE PLANS AS CONSTRUCTION
- 8. CONSTRUCT REMAINDER OF THE SITE IMPROVEMENTS. 9. APPLY TOPSOIL AND INITIATE PERMANENT VEGETATIVE STABILIZATION MEASURES AS FINAL GRADE IS REACHED IN AREAS TO REMAIN UNDEVELOPED.
- 10. INSPECT AND MAINTAIN ALL STORMWATER CONTROLS AND SEDIMENT AND EROSION CONTROL MEASURES UNTIL THE SITE IS COMPLETELY STABILIZED. 11. UPON COMPLETE STABILIZATION OF SITE, REMOVE ALL TEMPORARY SEDIMENT AND EROSION
- CONTROL MEASURES AND REMOVE SEDIMENT BUILDUP FROM THE STORMWATER SYSTEM. 12. SUBMIT TO THE ENGINEER AN AS-BUILT FIELD SURVEY OF ALL STORMWATER IMPROVEMENTS INCLUDING BUT NOT LIMITED TO PIPES, STRUCTURE LOCATIONS, INVERTS, RIM/GRATE ELEVATIONS, DETENTION/RETENTION PONDS, EMERGENCY SPILLWAYS AND OUTLET STRUCTURES.
- 13. SUBMIT NOTICE OF TERMINATION (NOT) TO SCDHEC AS APPROPRIATE (BY ENGINEER)



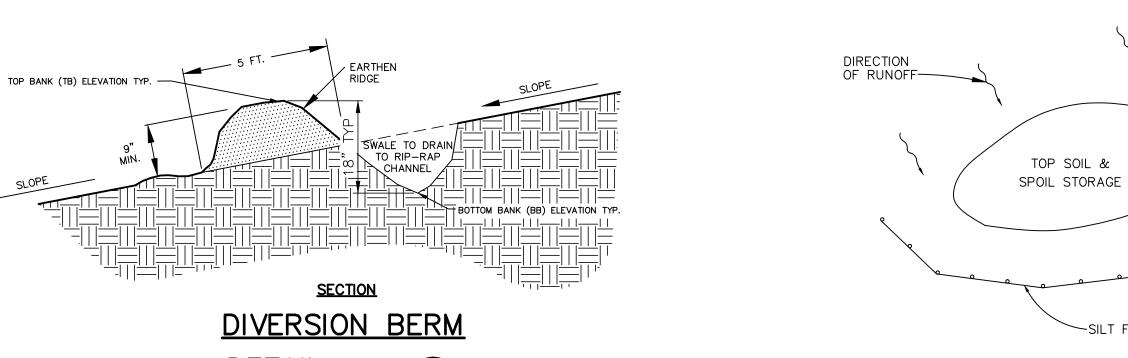


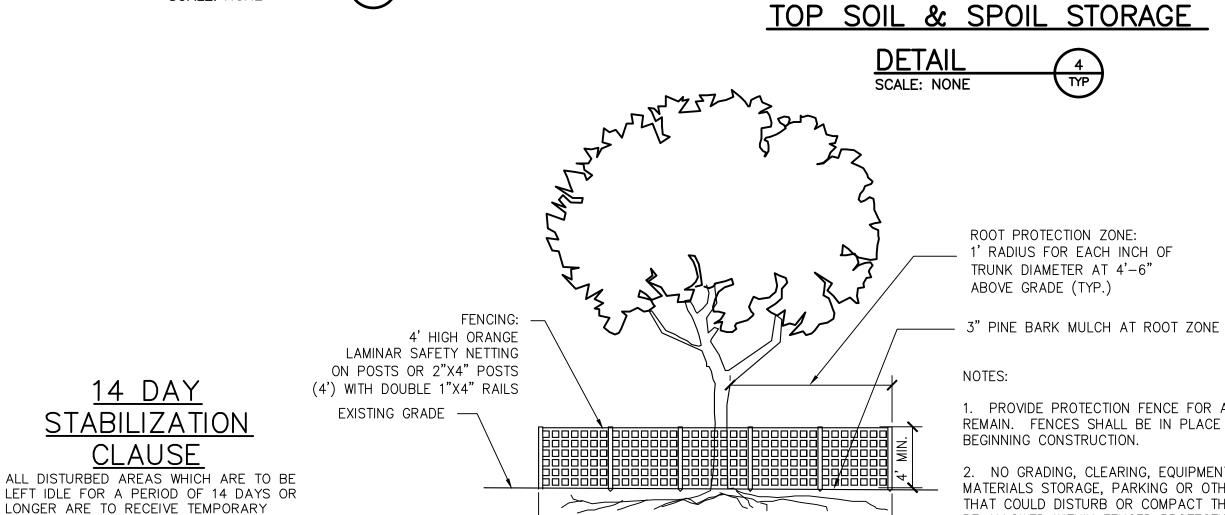
TEMPORARY INLET PROTECTION -FILTER FABRIC





SILT FENCE WITH WIRE FABRIC





EROSION CONTROL MAINTENANCE SCHEDULE

VEGETATION OR MULCH.

ALL SEDIMENT AND EROSION CONTROLS ARE TO BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS. CONTRACTOR TO DOCUMENT WITH SCDHEC APPROVED INSPECTION REPORTS AND LOGGED IN THE PROJECT SWPPP.

TREE PROTECTION FENCING DETAIL

ROOT PROTECTION ZONE:

2' DIAMETER

PER EACH INCH OF TRUNK DIAMETER

AT 4'-6" ABOVE GRADE

AS SHOWN ON PLAN

PROVIDE PROTECTION FENCE FOR ALL TREES TO REMAIN. FENCES SHALL BE IN PLACE PRIOR TO 2. NO GRADING, CLEARING, EQUIPMENT OR

-SILT FENCE

MATERIALS STORAGE, PARKING OR OTHER ACTIVITIES THAT COULD DISTURB OR COMPACT THE SOIL SHALL BE ALLOWED WITHIN FENCED PROTECTION AREA.

3. REFER TO PROJECT MANUAL FOR ADDITIONAL TREE PROTECTION REQUIREMENTS RELATING TO DEMOLITION, EXCAVATION, UTILITY WORK, ROOT CONFLICTS, ETC.

> STATE PROJECT NO H34-9546

BID DOCUMENTS

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

AECOM

Storm Drainage Repairs University of South Carolina Upstate Campus Spartanburg, SC

CLIENT

University of South Carolina Upstate

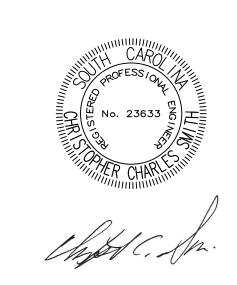
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REGISTRATION

www.aecom.com





ISSUE/REVISION 2016-08-12 | BID DRAWINGS

DATE DESCRIPTION **KEY PLAN** SHEET SCALE: AS SHOWN

PROJECT & FILE NUMBER PROJECT NUMBER: 60495792 FILE NUMBER: 36799-B93 **SHEET TITLE**

SITE DETAILS

SHEET NUMBER