

GENERAL NOTES:

1. TOPOGRAPHY AND SURVEY BY LAVENDER SMITH & ASSOCIATES
2. BLOCK MAP: 7-10-09-064.00, 064.02 AND 064.03.
3. THIS PROPERTY DOES NOT LIE WITHIN THE 100 YEAR FLOOD PLAIN ACCORDING TO FEMA PANEL NUMBER 45083C0276D.
4. THIS SITE IS PRESENTLY ZONED R6.
5. PROJECT ADDRESS: PERRIN DRIVE, SPARTANBURG, SC 29307
6. CONTACT: TERRY GILMER, SPARTANBURG COUNTY SCHOOL DISTRICT 7, 717 UNION STREET, SPARTANBURG, SC 29302, PHONE: 864-594-4500
7. ENGINEER: BLACKWOOD ASSOCIATES INC., P.O. BOX 366, SPARTANBURG, SOUTH CAROLINA 29304, (864)583-5432

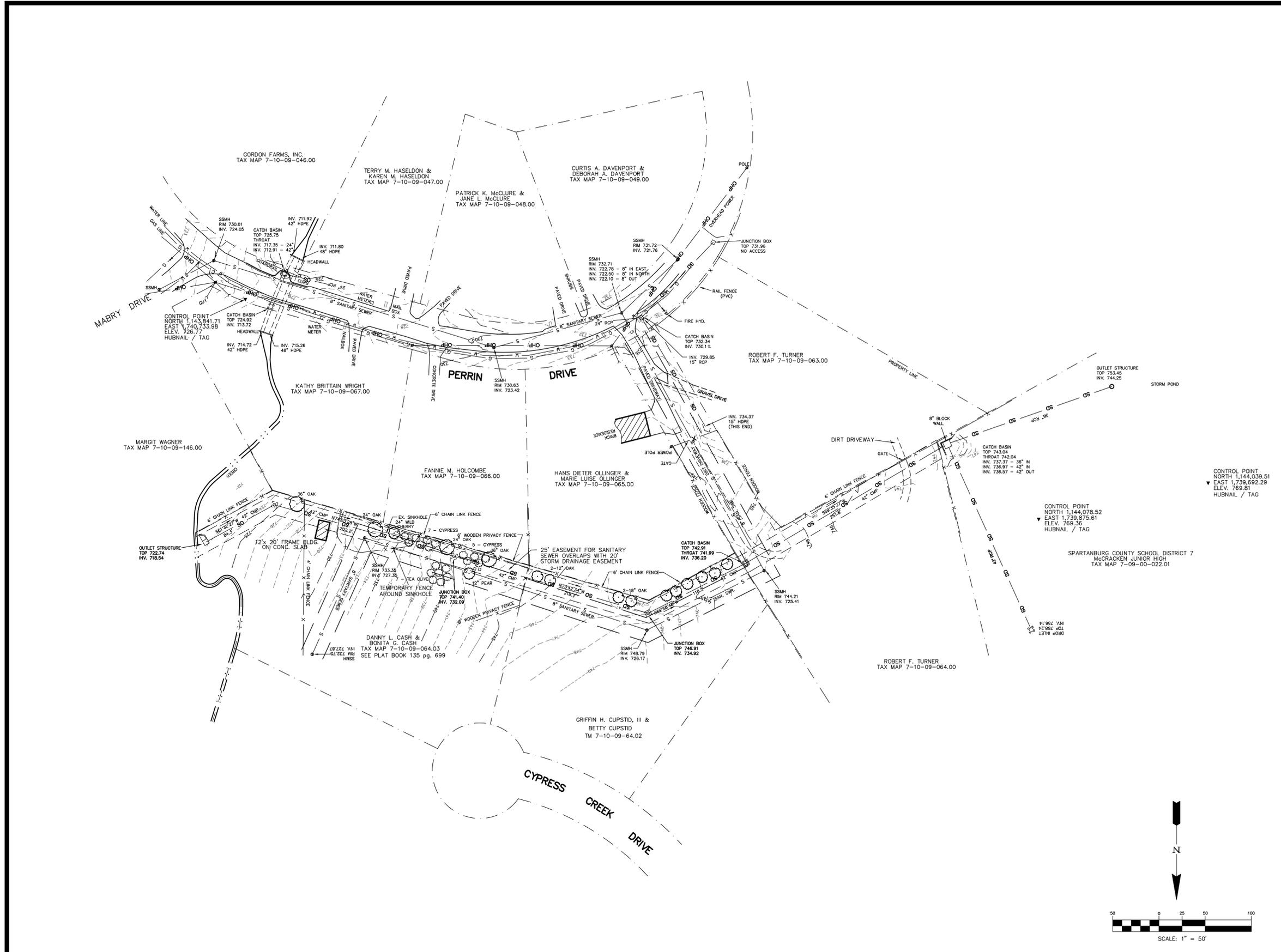
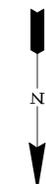
SEQUENCE OF CONSTRUCTION ACTIVITIES

1. RECEIVE STORMWATER APPROVAL FROM CITY OF SPARTANBURG.
2. HAVE MANDATORY PRE-CONSTRUCTION (CEPSC) CERTIFICATION MEETING WITH CITY OF SPARTANBURG STORMWATER MANAGER JAY SQUIRES AT 864-596-2089.
3. INSTALL PERIMETER CONTROLS.
4. PLACE INLET PROTECTION AROUND ALL CATCH BASINS.
5. BEGIN UNDERCUTTING AND STOCKPILE OF EXISTING MATERIAL.
6. ALL STOCKPILES SHALL BE BORDERED BY SILT FENCE OR INLET SOXX.
7. APPLY GRASSING / SPRIGGING IN ACCORDANCE WITH NOTES.
8. INSPECT AND MAINTAIN ALL EROSION CONTROL AS INDICATED IN GRADING NOTES.
9. PERMANENT GRASS SHALL BE INSTALLED FOR ALL AREAS AT FINAL GRADE AND IN SEASON INDICATED ON GRASS NOTES.
10. AFTER COMPLETION OF CONSTRUCTION AND THE SITE IS STABILIZED, (A) REMOVE ALL ACCUMULATED SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND SPREAD EVENLY ACROSS THE SITE. (B) REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY GRASSING PER GRASS NOTES/SPECIFICATIONS.
11. APPLY FOR NOTICE OF TERMINATION FROM CITY OF SPARTANBURG
12. RECORD (AS BUILT) DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR TO ENGINEER FOR CERTIFICATION.

CONTROL POINT
NORTH 1,144,039.51
EAST 1,739,692.29
ELEV. 769.81
HUBNAIL / TAG

CONTROL POINT
NORTH 1,144,078.52
EAST 1,739,875.61
ELEV. 769.36
HUBNAIL / TAG

SPARTANBURG COUNTY SCHOOL DISTRICT 7
MCCRACKEN JUNIOR HIGH
TAX MAP 7-09-00-022.01



NO.	DATE	REVISION	BY

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BLACKWOOD ASSOCIATES INC.
 CONSULTING ENGINEERS
 PO BOX 366 • SPARTANBURG, SC 29304 • (864) 583-5432 • (FAX) 583-5434

SPARTANBURG COUNTY SCHOOL DISTRICT 7
 CYPRESS CREEK STORM DRAIN
 EXISTING CONDITIONS
 PERRIN DRIVE
 SPARTANBURG, S.C

DRAWN: ELO	DRAWING NUMBER	REVISION NUMBER
CHECKED: WAB	1	
APPROVED: WAB	1 OF 4	REVISION DATE
DATE: JUNE 8, 2020		
JOB NO. 1834		

SPECIFICATIONS/NOTES

- CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND LINES AND UTILITIES BEFORE EXCAVATION. ADVISE ENGINEER IMMEDIATELY OF ANY VARIATIONS. ALL EXCAVATIONS NEAR THESE LINES SHALL BE WITH CAUTION. CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF EXISTING CONSTRUCTION WHICH AFFECTS NEW CONSTRUCTION. CONTRACTOR RESPONSIBLE FOR ANY DAMAGE DURING CONSTRUCTION AND/OR RELOCATION AS NECESSARY AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL VERIFY ALL WORK PRIOR TO CONSTRUCTION. DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. DISCONTINUE WORK IN ALL AFFECTED AREAS UNTIL RESOLVED BY ENGINEER.
- EARTHWORK SHALL BE TO THE LINES AND GRADES SHOWN. THE CONTRACTOR SHALL PROOF-ROLL THE CONSTRUCTION AREA WITH HEAVY-PNEUMATIC EQUIPMENT. ALL SOFT SPOTS SHALL BE UNDERCUT AND RECOMPACTED WITH SUITABLE STRUCTURAL FILL MATERIAL. ALL FILL COMPACTION SHALL BE 95% OF MAXIMUM PER ASTM D-698 (STANDARD PROCTOR). ALL MATERIAL WITHIN 18 INCHES OF PAVEMENT AND BUILDING SUBGRADE SHALL BE COMPACTED TO 98% OF MAXIMUM. FILL MATERIAL SHALL NOT CONTAIN ORGANIC MATERIAL, DEBRIS OR ROCKS. WHERE FILL IS TO BE PLACED, ALL EXISTING VEGETATION, ROOTS AND OTHER ORGANIC MATTER DOWN TO 12 INCHES BELOW EXISTING GRADE SHALL BE STRIPPED AND DISPOSED OF AS DIRECTED. FILL SHALL BE PLACED IN SUCCESSIVE LAYERS OF NOT MORE THAN 8 INCHES LOOSE THICKNESS. EACH LAYER SHALL BE SPREAD EVENLY AND COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED.
- THE CONTRACTOR SHALL REMOVE ALL DEBRIS INCLUDING PAVEMENT, CONCRETE, AND UNSUITABLE MATERIAL FROM THE SITE. ALL AREAS UNDER EXISTING PAVEMENT SHALL BE SCARIFIED BEFORE PLACING STRUCTURAL FILL MATERIAL.
- CONCRETE SHALL BE 4,000 PSI CONCRETE MINIMUM STEEL REINFORCEMENT SHALL BE ASTM A615, GRADE 60.
- CATCH BASINS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND SCOTD STANDARD DRAWINGS FOR ROAD CONSTRUCTION.
- STORM SEWER SHALL BE LAID ON A MINIMUM TYPE "C" BEDDING FOR DEPTHS UP TO 21', FOR DEPTHS GREATER THAN 21' USE TYPE "B" BEDDING. PLACE BELL OR BED GROOVE END UP GRADE WITH THE SPIGOT OR TONGUE FULLY INSERTED. EACH JOINT SHALL BE CHECKED FOR ALIGNMENT AND GRADE AS THE WORK PROCEEDS. APPROVED BACKFILL MATERIAL SHALL BE PLACED CAREFULLY ALONG THE PIPE AND COMPACTED UNDER HAUNCHES. MATERIAL SHALL BE BROUGHT UP EVENLY IN LAYERS ON BOTH SIDES OF THE PIPE AND TO ONE FOOT ABOVE THE TOP OF THE PIPE. MATERIAL SHALL BE PLACED IN A MANNER SO AS NOT TO DISPLACE OR DAMAGE THE INSTALLED PIPE. BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS AS SPECIFIED.
- REINFORCED CONCRETE PIPE (RCP) SHALL BE: CLASS III - DEPTHS 0'-14" CLASS "C" BEDDING. CLASS IV - DEPTHS 14.1'-21" CLASS "C" BEDDING. CLASS V - DEPTHS 21.1'-27" CLASS "B" BEDDING. CLASS VI - DEPTHS 27.1'-41" CLASS "B" BEDDING. ALL RCP SHALL HAVE BUTYL RUBBER GASKET SEALANT UNLESS OTHERWISE SPECIFIED. JOINTS AND FITTINGS ACCESSORIES SHALL BE COMPATIBLE WITH PIPE. SEE BEDDING DETAILS.
- HDPE STORM SEWER LINES SHALL BE ASTM 3350 WITH SMOOTH INTERIOR DOUBLE WALLS. JOINTS SHALL BE GASKETED WITH MINIMUM SOIL TIGHT CONNECTIONS. BEDDING AND BACKFILL SHALL BE A MINIMUM CLASS IV-A (ASTM D2321).
- ASPHALT PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS AND THE SOUTH CAROLINA D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL REQUIRED STRIPING AND SIGNAGE FOR WORK ON SITE AND S.C.D.O.T. RIGHT OF WAY. ALL SITE STRIPING TO COMPLY WITH SCOTD STANDARD PAINT REQUIREMENTS. THERMOPLASTIC PAINT REQUIRED IN SCOTD RIGHT OF WAY.
- PRIOR TO PAVING, PROVIDE AS-BUILT ELEVATIONS FOR ALL CATCH BASIN THROATS AND INVERTS; AND ALL CRITICAL RADIUS AND LOW POINT ELEVATIONS AT GUTTER.

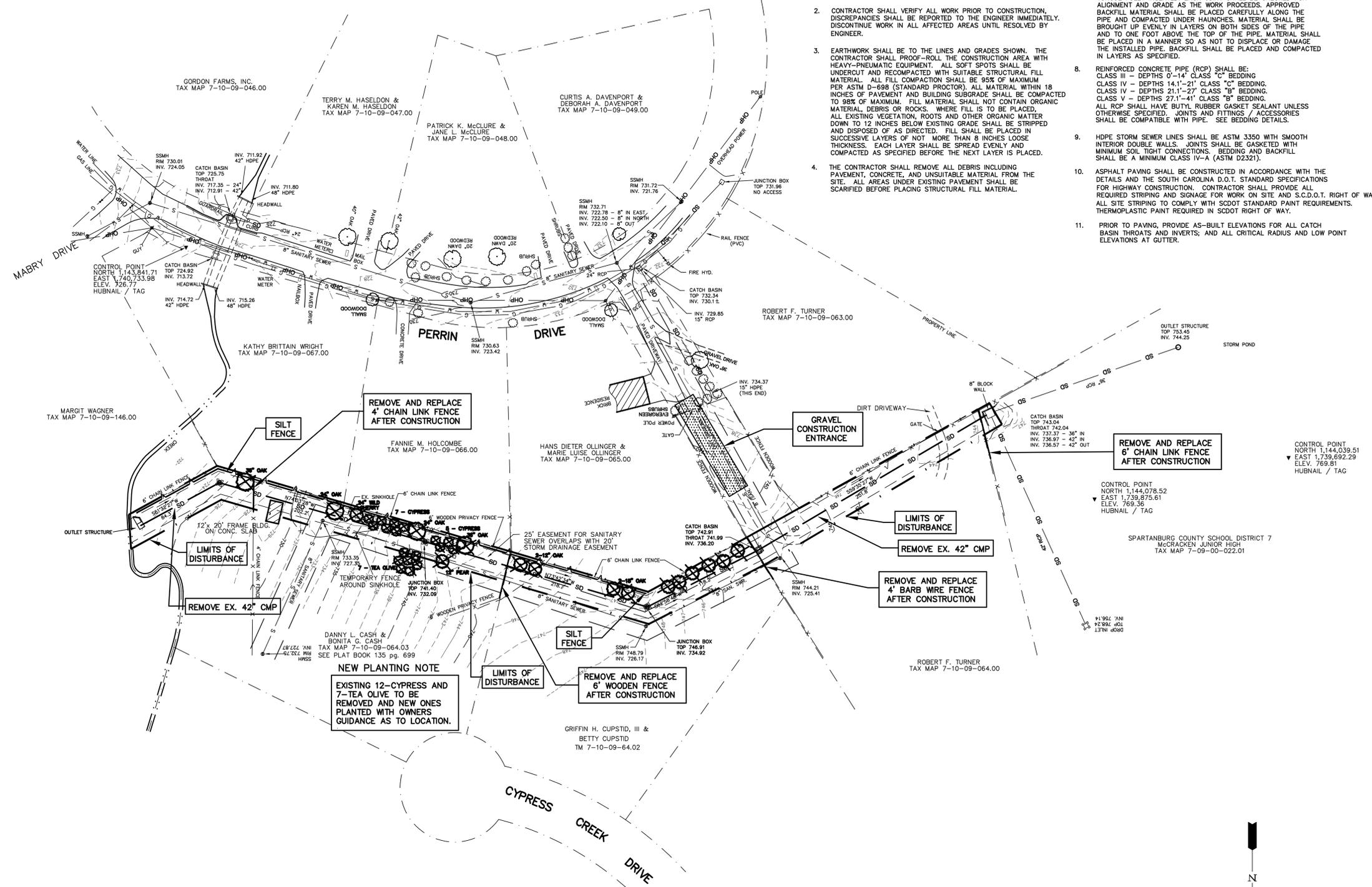
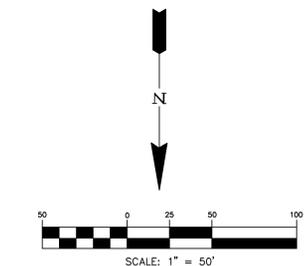
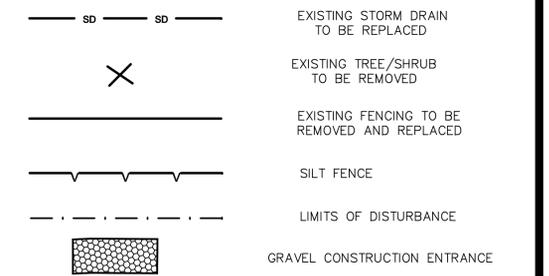
GRADING PERMIT NOTES

- SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET OR STEEPER THAN 3:1 SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDRO SEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- 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 STATED BELOW.
 - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
 - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN (7) DAYS. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED, AS NECESSARY.
- 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.
- 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. 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.
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- 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.
- 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.
- LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.

CITY PERMIT NOTES

- BEFORE ANY LAND DISTURBING ACTIVITY TAKES PLACE, CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF SPARTANBURG STORMWATER MANAGER (JAY SQUIRES AT 596-2099)
- PERMIT OWNER SHALL COMPLETE A NOTICE OF TERMINATION (EPA FORM 3517-7) BEFORE A CERTIFICATE OF OCCUPANCY WILL BE GRANTED.
- THE SITE CONTRACTOR SHALL PROVIDE A PORTABLE TOILET IN AN AREA THAT IS NOT ADJACENT TO A WATERWAY OR STORM DRAINAGE.
- THE CONTRACTOR SHALL PROVIDE A PLACE FOR CONCRETE TRUCKS TO WASHOUT AND THE WASHOUT IS TO BE BURIED ONSITE UNTIL CONSTRUCTION IS COMPLETE. WHEN CONSTRUCTION IS COMPLETED, THE WASTE SHALL BE HAILED OFF TO A LANDFILL.
- THE CONTRACTOR SHALL ENSURE ALL SOIL STOCKPILES ARE BOUND BY A ROW OF SILT FENCE PLACED AT ALL DOWNHILL LOCATIONS.

LEGEND



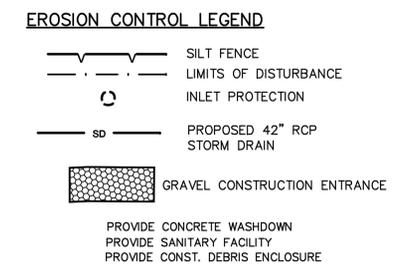
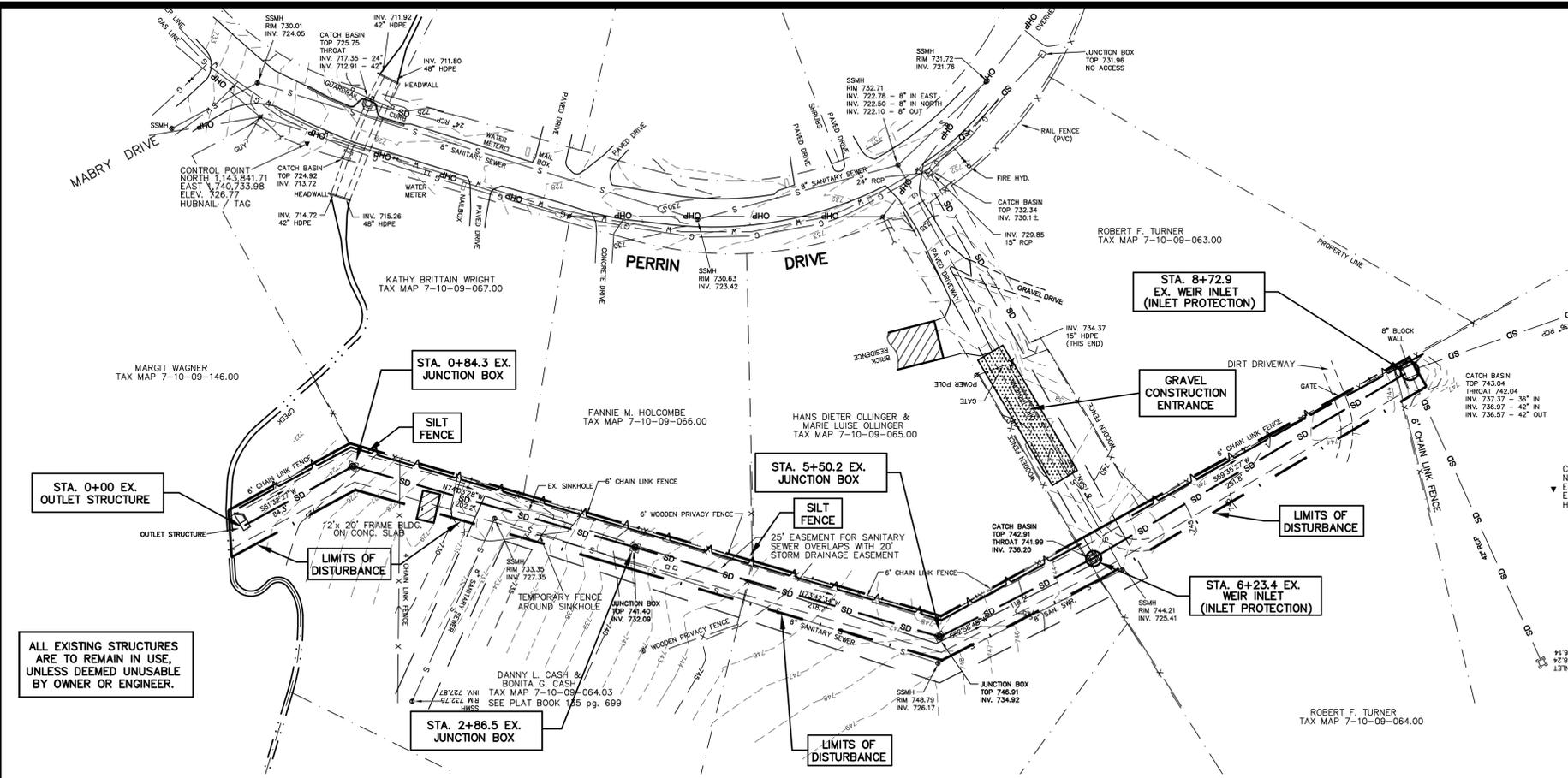
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SPARTANBURG COUNTY SCHOOL DISTRICT 7
 CYPRESS CREEK STORM DRAIN
 DEMOLITION PLAN
 PERRIN DRIVE
 SPARTANBURG, S.C.

DRAWN: ELO	DRAWING NUMBER: 2	REVISION NUMBER: 2
CHECKED: WAB	APPROVED: WAB	DATE: JUNE 8, 2020
DATE: JUNE 8, 2020	JOB NO. 1834	REVISION DATE: 2 OF 4



STABILIZATION NOTE:
ALL DISTURBED AREAS SHALL BE STABILIZED WITH PERMANENT STABILIZATION MEASURES (GRASS, LANDSCAPING, OR IMPERVIOUS COVER)

IMPORT/EXPORT NOTE:
CONTRACTOR RESPONSIBLE FOR HAULING IN OR OFF SOIL TO PROVIDE FINISH GRADES SHOWN. THIS INCLUDES REMOVAL OF EXCESS TOPSOIL AND IMPORT OF NEEDED STRUCTURAL FILL. ALL SOURCES OR DESTINATIONS OF SOIL MUST BE FROM A PERMITTED SITE UNDER THE CCP.

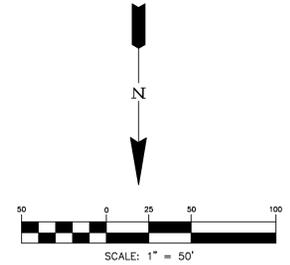
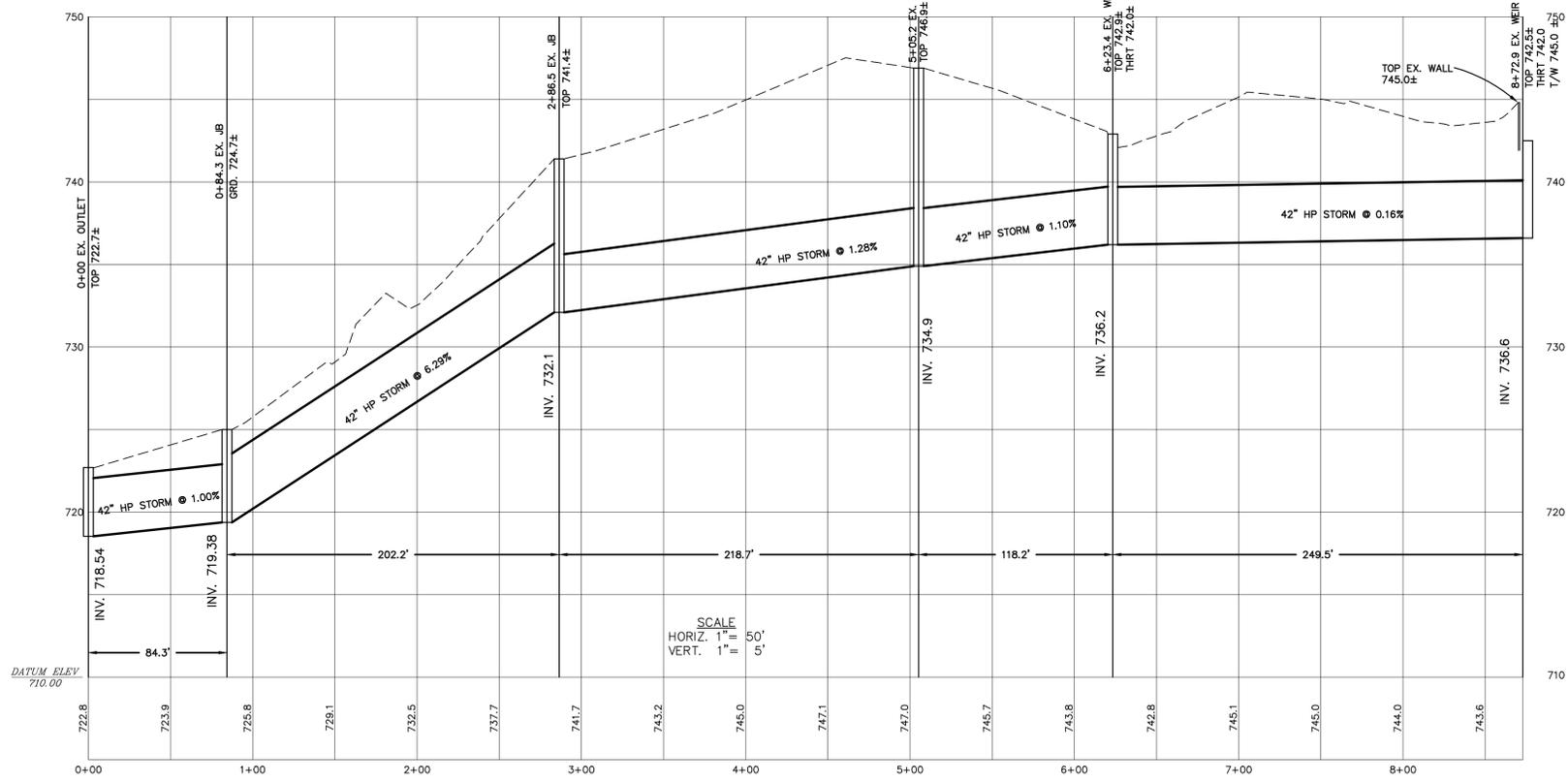
CONSTRUCTION ENTRANCE NOTE:
CONTRACTOR SHALL INSTALL A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE AT ALL LOCATIONS THAT EQUIPMENT TRAVELS FROM DISTURBED AREAS TO PAVEMENT. A MINIMUM OF ONE IS REQUIRED.

MISCELLANEOUS NOTES

- ANY TEMPORARY SANITARY FACILITIES SHALL BE LOCATED ON A FLAT SURFACE AWAY FROM DRAINAGE FACILITIES, CATCH BASINS, WATERCOURSES AND TRAFFIC CIRCULATION. UPON DISCOVERY, ANY SPILLED MATERIAL SHALL BE CLEANED UP IMMEDIATELY. ALL COLLECTED MATERIAL, CONTAMINATED RAGS AND ABSORBENT MATERIALS SHALL BE DISPOSED OF APPROPRIATELY. LIME SHALL BE SPREAD ON THE CONTAMINATED AREA.
- CONTRACTOR TO STOCKPILE 4" OF EXISTING TOPSOIL MATERIAL AND RESPREAD FOR ALL GRASS SEED BED APPLICATION.
- PERIMETER SILT FENCE, SEDIMENT PONDS, AND TEMPORARY SWALES TO PONDS SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING.
- ON ANY PORTION OF THE SITE WHERE CONSTRUCTION HAS OR PERMANENTLY CEASED, APPLY GRASS PER GRASSING NOTES.
- GRASS SHALL BE PROVIDED FOR ALL DISTURBED AREAS EXCEPT WHERE ASPHALT PAVEMENT AND CONCRETE ARE INDICATED.

SCDHEC STANDARD NOTES

- 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.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES WERE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
* WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
* WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE CALENDAR EVERY WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- 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 AND 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.
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- 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 SCRC100000.
- 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.
- 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.
- LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND 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.
- INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASINS, FILTER BAG, ETC.).
- THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
 - WASHWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL.
 - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
 - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
 - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO 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 BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- 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.



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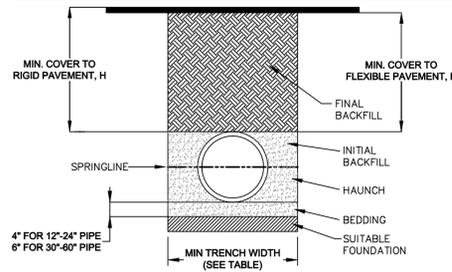
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SPARTANBURG COUNTY SCHOOL DISTRICT 7
CYPRESS CREEK STORM DRAIN
PROPOSED CONDITIONS
PERRIN DRIVE
SPARTANBURG, S.C.

DRAWN: ELO	DRAWING NUMBER: 3	REVISION NUMBER:
CHECKED: WAB	APPROVED: WAB	REVISION DATE:
DATE: JUNE 8, 2020	JOB NO. 1834	

1834 060820

HP STORM TRENCH INSTALLATION DETAIL



NOTES:

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION, WITH THE EXCEPTION THAT THE INITIAL BACKFILL MAY EXTEND TO THE CROWN OF THE PIPE. SOIL CLASSIFICATIONS ARE PER THE LATEST VERSION OF ASTM D2321. CLASS IV MATERIALS (WH, CH) AS DEFINED IN PREVIOUS VERSIONS OF ASTM D2321 ARE NOT APPROPRIATE BACKFILL MATERIALS.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II, III, OR IV. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 12"-24" (300mm-600mm) DIAMETER PIPE, 6" (150mm) FOR 30"-60" (750mm-1500mm) DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF A SOIL EXPERT.
- INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II, III, OR IV IN THE PIPE ZONE EXTENDING TO THE CROWN OF THE PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF A SOIL EXPERT.
- MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" (300mm) FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, CLASS I OR II MATERIAL COMPACTED TO 90% SPD AND CLASS III COMPACTED TO 95% SPD IS REQUIRED. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" (300mm) UP TO 48" (1200mm) DIAMETER PIPE AND 24" (600mm) OF COVER FOR 60" (1500mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
- FOR ADDITIONAL INFORMATION SEE TECHNICAL NOTE 2.04.

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC TO THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEET OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

TABLE 1, RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	38" (966mm)
24" (600mm)	48" (1219mm)
30" (750mm)	64" (1626mm)
36" (900mm)	80" (2032mm)
42" (1050mm)	96" (2438mm)
48" (1200mm)	112" (2844mm)

TABLE 2, MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48" (300mm - 1200mm)	12" (305mm)	12" (305mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

TABLE 3, MAXIMUM COVER FOR ADS HP STORM PIPE, ft

PIPE DIA	CLASS I	CLASS II	CLASS III	CLASS IV				
					COMPACTED	95%	90%	85%
12"	41	28	21	16	20	16	16	16
15"	42	29	21	16	21	16	16	16
18"	44	30	21	16	22	17	16	16
24"	37	26	19	14	19	14	14	14
30"	39	27	19	14	19	15	14	14
36"	28	20	14	10	14	11	10	10
42"	30	21	14	10	15	11	10	10
48"	29	20	14	9	14	10	10	10
60"	20	14	9	14	10	9	9	9
1200mm	(8.8m)	(6.1m)	(4.3m)	(3.0m)	(4.3m)	(3.0m)	(3.0m)	(3.0m)
1500mm	(8.8m)	(6.1m)	(4.3m)	(2.7m)	(4.3m)	(3.0m)	(2.7m)	(2.7m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE
UNIT WEIGHT OF SOIL (γ_s) = 120 PCF

REV.	DESCRIPTION	BY	DATE	CHKD	NOTE
6	REV. MAXIMUM COVER HEIGHTS	RWD	01/11/17		NOTE: ALL DIMENSIONS ARE ± 1/2 FOOT.

DIA. DET/RET SYSTEM: TRENCH INSTALLATION DETAIL (HP STORM)
DRAWING NUMBER: STD-101D
ADVANCED DRAINAGE SYSTEMS, INC. 4640 TRUMAN BLVD HELLAND, OHIO 43026

DETAIL 4A

GRASS NOTES:

- ON ANY PORTION OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED, ALL DISTURBED AREAS SHALL BE STABILIZED WITH GRASS AS SOON AS PRACTICAL, BUT NOT EXCEEDING FOURTEEN (14) DAYS AFTER WORK HAS CEASED. TEMPORARY GRASS SHALL BE APPLIED IN AREAS WHERE FUTURE CONSTRUCTION WILL RE-DISTURB THIS AREA, OTHERWISE, PERMANENT GRASS SHALL BE APPLIED.
- IN ANY AREA IN WHICH TEMPORARY GRASS HAS BEEN APPLIED, THE GRASS SHALL BE MOWED AND THE SEED BED RE-SCARIFIED BEFORE PERMANENT GRASS APPLICATION.
- BEFORE PERMANENT GRASS SEEDING IS PERFORMED, THE ENGINEER/OWNER SHALL BE NOTIFIED FOR AN ON SITE INSPECTION OF THE PREPARED SEED BED AND FOR AN INSPECTION OF THE QUANTITIES OF MATERIAL TO BE APPLIED. CALL (864) 583-5432 TO SCHEDULE AN INSPECTION.
- THE CONTRACTOR SHALL PROVIDE A CERTIFIED LETTER INDICATING THE QUANTITIES OF MATERIAL APPLIED PER ACRE.
- BEFORE ACCEPTANCE OF THE SEEDING PERFORMED FOR THE ESTABLISHMENT OF PERMANENT VEGETATION, THE CONTRACTOR WILL BE REQUIRED TO PRODUCE A UNIFORM VEGETATIVE COVER WITH A DENSITY OF 80% OF THE SEED AREA.
- GRASSING SHALL BE PROVIDED FOR ALL DISTURBED AREAS WITH THE FOLLOWING CRITERIA:
 - LIME SHALL BE AGRICULTURAL GRADE GROUND LIMESTONE CONTAINING LEAST 34% MAGNESIUM CARBONATE.
 - SEED SHALL BE A MINIMUM 80% PURITY AND 80% GERMINATION.
 - AREAS TO HAVE GRASS APPLIED SHALL BE SCARIFIED CULTIVATED TO A DEPTH OF 3 INCHES, WITH ALL CLODS OR CLUMPS GREATER THAN 3" BROKEN UP AND FOREIGN MATERIAL INCLUDING ROCK, ROOTS, AND MISC. DEBRIS REMOVED.
 - FERTILIZER AND LIME SHALL BE THOROUGHLY WORKED INTO THE SOIL, AND THE SURFACE RAKED SMOOTH BEFORE APPLYING SEED.
 - SEED SHALL BE APPLIED EVENLY AT THE MINIMUM RATE AND RAKED IN LIGHTLY WITH APPROXIMATELY 1/4" TOPSOIL COVER. SEEDING AREAS SHALL BE DRESSED SMOOTH, THEN MULCH (STRAW) SHALL BE APPLIED MECHANICALLY.
 - AREAS SHALL BE SPRAYED IMMEDIATELY WITH AN EMULSION TO BIND SEED AND MULCH.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ALL MAINTENANCE NECESSARY TO KEEP SEEDING AREAS IN SATISFACTORY CONDITION UNTIL THE WORK IS ACCEPTED. THIS INCLUDES MOWING, IRRIGATING, REPAIRING OF EROSION WASHES, AND ADDITIONAL SEED, FERTILIZER AND MULCH APPLIED TO AREAS WHERE A SATISFACTORY STAND OF GRASS HAS NOT BEEN ACHIEVED. ALL COSTS INCLUDING IRRIGATING AND MOWING TO BE INCLUDED IN BASE BID PRICE.
- PAYMENT TO THE CONTRACTOR SHALL NOT EXCEED 75% OF THE CONTRACT PRICE FOR GRASS UNTIL A SATISFACTORY STAND OF PERMANENT GRASS HAS BEEN OBTAINED.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING A STAND OF GRASS WITH A ROOT SYSTEM THAT HAS DEVELOPED SUFFICIENTLY TO SURVIVE DRY PERIODS AND WINTER WEATHER AND BE CAPABLE OF RE-ESTABLISHMENT IN THE SPRING. THE CONTRACTOR SHALL WARRANT ALL GRASS FOR A PERIOD OF 1 YEAR BEGINNING FROM THE DATE OF ACCEPTANCE BY THE OWNER/ENGINEER.
- ALL COSTS FOR PROVIDING AN ACCEPTABLE STAND OF GRASS (PERMANENT & TEMPORARY SEEDINGS) SHALL BE INCLUDED IN BASE BID. NO ADDITIONAL CHARGES WILL BE HONORED FOR REPAIRS DUE TO WEATHER OR OTHER REASONS. THE CONTRACTOR SHALL ACCEPT RESPONSIBILITY AND COSTS FOR PROVIDING AN ACCEPTABLE STAND OF GRASS.

TEMPORARY GRASS

JAN 1 - MAY 1	110 LB/ACRE
RYE (GRAIN)	30 LB/ACRE
ANNUAL LESPEDEZA	4000 LB/ACRE
MULCH (STRAW)	2000 LB/ACRE
AGRICULTURAL LIMESTONE	500 LB/ACRE
FERTILIZER 10-10-10	10-10-10
(EARTH FRIENDLY - SLOW NITROGEN RELEASE)	

MAY 1 - AUG 15	50 LB/ACRE
GERMAN MILLET	4000 LB/ACRE
MULCH (STRAW)	2000 LB/ACRE
AGRICULTURAL LIMESTONE	500 LB/ACRE
FERTILIZER 10-10-10	10-10-10
(EARTH FRIENDLY - SLOW NITROGEN RELEASE)	

AUG 15 - DEC 30	110 LB/ACRE
RYE (GRAIN)	4000 LB/ACRE
MULCH (STRAW)	3000 LB/ACRE
AGRICULTURAL LIMESTONE	500 LB/ACRE
FERTILIZER 10-10-10	10-10-10
(EARTH FRIENDLY - SLOW NITROGEN RELEASE)	

PERMANENT GRASS

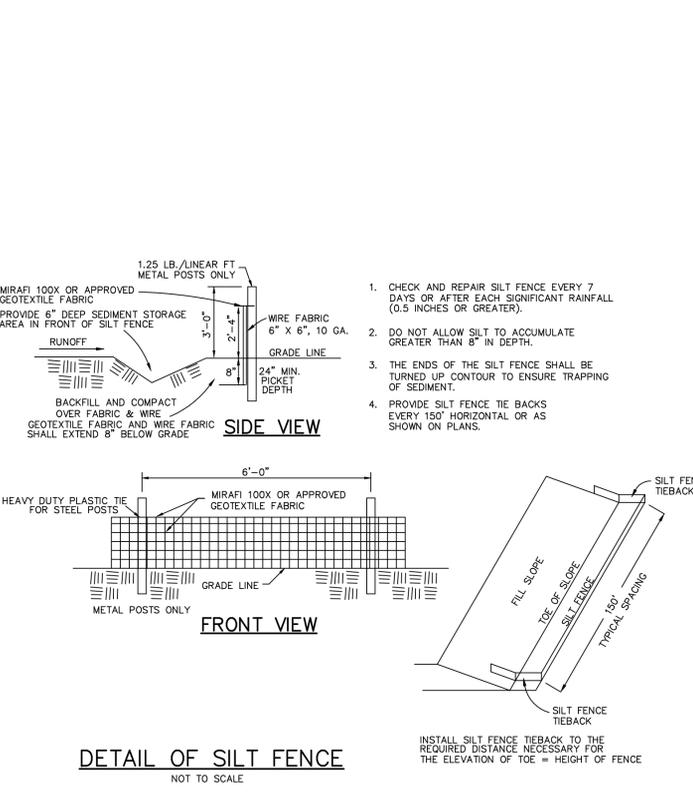
MAY 1 - AUGUST 31	75 LB/ACRE
BERMUDA (WITHOUT HULLS)	10 LB/ACRE
BROWN TOP MILLET	25 LB/ACRE
FERTILIZER 10-10-10	1000 LB/ACRE
(EARTH FRIENDLY - SLOW NITROGEN RELEASE)	
AGRICULTURAL LIMESTONE	3000 LB/ACRE
MULCH (STRAW)	4000 LB/ACRE

SEPTEMBER 1 - APRIL 30	150 LB/ACRE
FESCUE	50 LB/ACRE
BERMUDA (WITH HULLS)	25 LB/ACRE
RYE GRAIN	1000 LB/ACRE
FERTILIZER 10-10-10	1000 LB/ACRE
(EARTH FRIENDLY - SLOW NITROGEN RELEASE)	
AGRICULTURAL LIMESTONE	3000 LB/ACRE
MULCH (STRAW)	4000 LB/ACRE

SLOPES (2.5:1 AND STEEPER)

WEEDING LOVEGRASS	25 LB/ACRE
FERTILIZER 10-10-10	1000 LB/ACRE
(EARTH FRIENDLY - SLOW NITROGEN RELEASE)	
AGRICULTURAL LIMESTONE	3000 LB/ACRE
MULCH (STRAW)	4000 LB/ACRE

DETAIL OF SILT FENCE

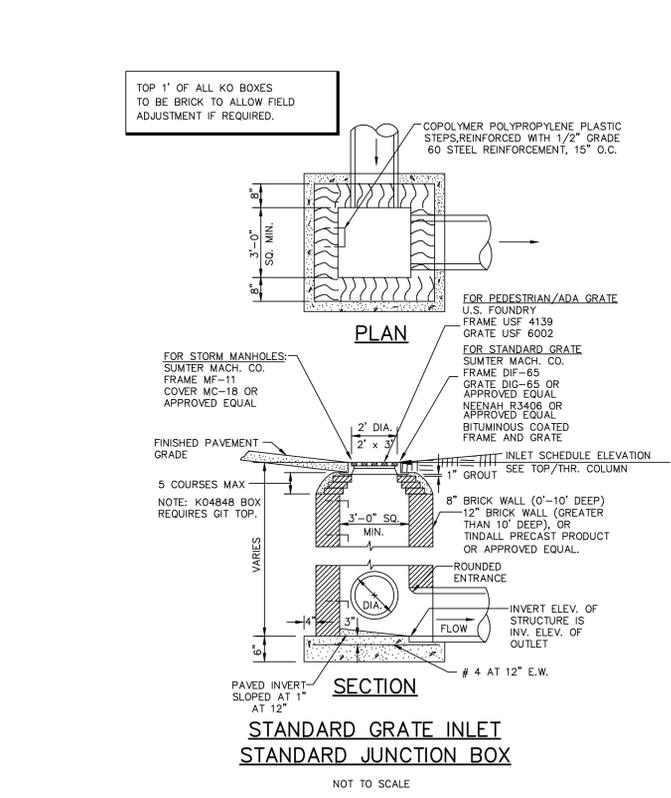


DETAIL 4D

NOT TO SCALE

DETAIL 4E

NOT TO SCALE



STANDARD GRADE INLET

STANDARD JUNCTION BOX

NOT TO SCALE

SCHEDULE OF GOVERNING DIMENSIONS FOR KO BOXES NOT EXCEEDING 7 FT. BURIAL DEPTH

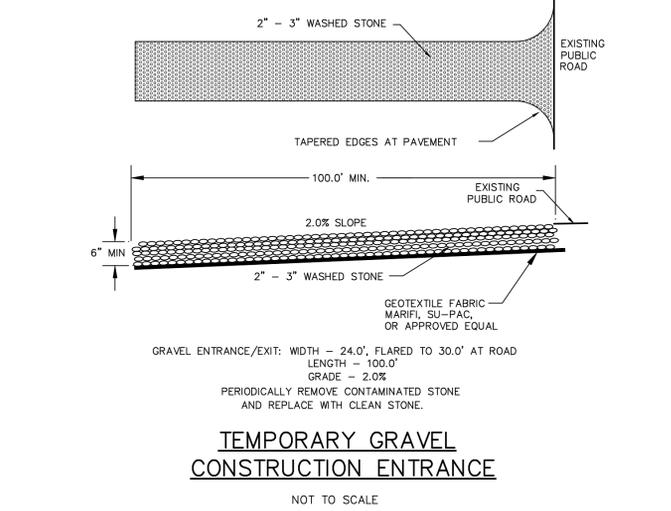
KO BOX SIZE	MAXIMUM PIPE O.D. SHORT WALL	MAXIMUM PIPE O.D. LONG WALL
KO3446	33"	45"
KO4848 WITH KO4848 GIT TOP	47"	47"

SCHEDULE OF GOVERNING DIMENSIONS FOR PIPE OVER 7 FT. DEPTH AND ROUND STRUCTURES

MANHOLE Ø	MAXIMUM PIPE O.D. FOR 0° DEFLECTION	MAXIMUM PIPE O.D. FOR 90° DEFLECTION
4'	34"	28"
5'	46"	37"
6'	55"	45"
7'	70"	54"
8'	82"	62"
10'	88"	79"

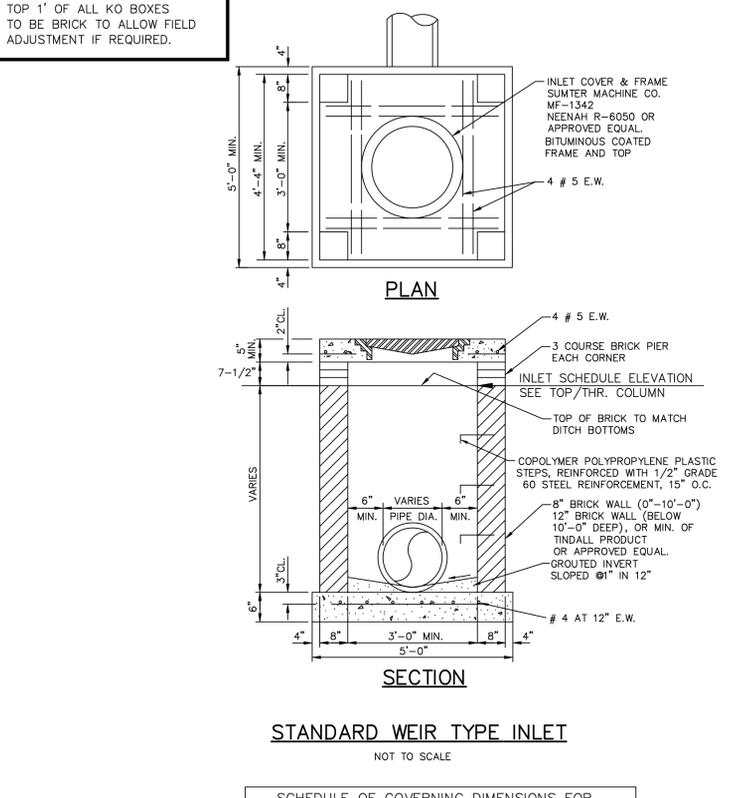
DETAIL 4B

NOT TO SCALE



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

NOT TO SCALE



STANDARD WEIR TYPE INLET

NOT TO SCALE

SCHEDULE OF GOVERNING DIMENSIONS FOR KO BOXES NOT EXCEEDING 7 FT. BURIAL DEPTH

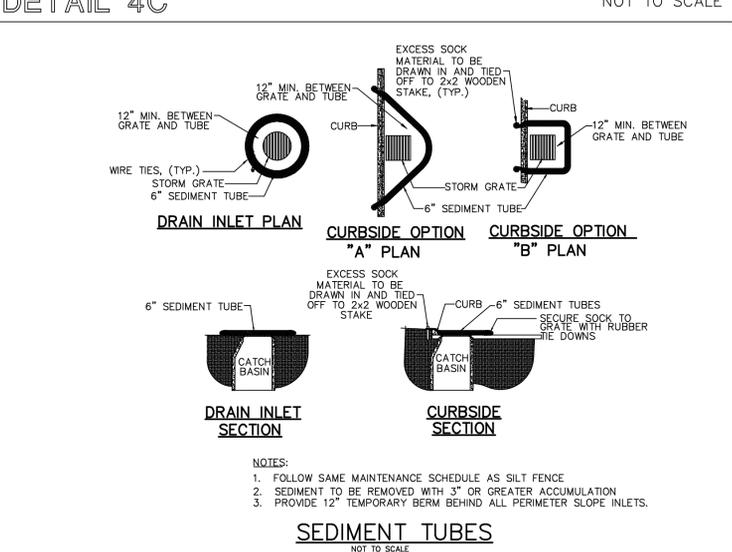
KO BOX SIZE	MAXIMUM PIPE O.D. SHORT WALL	MAXIMUM PIPE O.D. LONG WALL
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SCHEDULE OF GOVERNING DIMENSIONS FOR PIPE OVER 7 FT. DEPTH AND ROUND STRUCTURES

MANHOLE Ø	MAXIMUM PIPE O.D. FOR 0° DEFLECTION	MAXIMUM PIPE O.D. FOR 90° DEFLECTION
4'	34"	28"
5'	46"	37"
6'	55"	45"
7'	70"	54"
8'	82"	62"
10'	88"	79"

DETAIL 4C

NOT TO SCALE



SEDIMENT TUBES

NOT TO SCALE

NO.	DATE	REVISION	BY

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CONSULTING ENGINEERS
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SPARTANBURG COUNTY SCHOOL DISTRICT 7
CYPRESS CREEK STORM DRAIN
SITE DETAILS
PERRIN DRIVE
SPARTANBURG, S.C.

DRAWN: ELO	DRAWING NUMBER: 4	REVISION NUMBER: 4
CHECKED: WAB	APPROVED: WAB	DATE: JUNE 8, 2020
JOB NO. 1834	DATE: JUNE 8, 2020	REVISION DATE: 4

1834-DET 068020	NOT TO SCALE
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