

GENERAL NOTES

- GN #1 DRIVEWAY LOCATIONS SHALL NOT INTERFERE WITH THE SIDEWALK HANDICAP RAMPS, OR CURB INLET SUMPS
GN #2 SIDEWALKS, CURB RAMPS, RAMPS AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG) ALONG WITH THE REQUIRED GRADES, CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE.
GN #3 TRUNCATED DORIES FOR CURB RAMPS LOCATED IN PUBLIC RIGHT OF WAY SHALL MEET ADA REQUIREMENTS AND SHALL BE CONSTRUCTED USING RED PRE CAST TRUNCATED DOMES PER PAVEMENT DETAILS.

EROSION CONTROL NOTES

- EN #1 THE PERMITTEE SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE PERMITTEE SHALL USE WHATEVER MEANS NECESSARY TO CONTROL EROSION AND SILTATION INCLUDING, BUT NOT LIMITED TO, STAKED STRAW BALES AND/OR SILTATION FABRIC FENCES (POSSIBLE METHODS OF CONTROL ARE DETAILED IN THE PLAN).
EN #2 ALL EROSION CONTROL SYSTEMS ARE TO BE INSPECTED AND CORRECTED WEEKLY, ESPECIALLY WITHIN 48 HOURS OF ANY RAIN STORM RESULTING IN ONE-HALF INCH OF RAIN OR MORE.
EN #3 EROSION CONTROL DEVICES (SILT FENCE, SEDIMENT BASIN, ETC.) SHALL BE IN ACCORDANCE WITH ST. CHARLES COUNTY SOIL AND WATER CONSERVATION DISTRICT EROSION AND SEDIMENT CONTROL GUIDELINES.

GRADING NOTES

- GRN #1 DEVELOPER MUST SUPPLY CITY CONSTRUCTION INSPECTORS WITH AN ENGINEER'S SOILS REPORT PRIOR TO AND DURING SITE GRADING. THE SOILS REPORT WILL BE REQUIRED TO CONTAIN THE FOLLOWING INFORMATION ON SOIL TEST CURVES (PROCTOR REPORTS) FOR PROJECTS WITHIN THE CITY:
1. MAXIMUM DRY DENSITY.
2. OPTIMUM MOISTURE CONTENT.
3. MAXIMUM AND MINIMUM ALLOWABLE MOISTURE CONTENT.
4. CURVE MUST BE PLOTTED TO SHOW DENSITY FROM A MINIMUM OF 90% COMPACTION AND ABOVE AS DETERMINED BY THE \*MODIFIED HASHTO T-180 COMPACTION TEST\*
GRN #2 ALL FILL PLACED IN AREAS OTHER THAN PROPOSED STORM SEWERS, SANITARY SEWERS, PROPOSED ROADS, AND PAVED AREAS SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP IN 8" LIFTS AND COMPACTED TO 90% MAXIMUM DENSITY AS DETERMINED BY MODIFIED HASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99.
GRN #3 THE SURFACE OF THE FILL SHALL BE FINISHED SO IT WILL NOT IMPOUND WATER. IF AT THE END OF A DAYS WORK IT WOULD APPEAR THAT THERE MAY BE RAIN PRIOR TO THE NEXT WORKING DAY, THE SURFACE SHALL BE FINISHED SMOOTH.
GRN #4 ALL SEDIMENT AND DETENTION BASINS ARE TO BE CONSTRUCTED DURING THE INITIAL PHASE OF THE GRADING OPERATION OR IN ACCORDANCE WITH THE APPROVED SWPPP.
GRN #5 WHEN GRADING OPERATIONS ARE COMPLETE OR SUSPENDED FOR MORE THAN 14 DAYS, PERMANENT GRASS MUST BE ESTABLISHED AT SUFFICIENT DENSITY TO PROVIDE EROSION CONTROL ON SITE.

GRADING NOTES CONTINUED

- GRN #10 ALL TRENCH BACK FILLS UNDER PAVED AREAS SHALL BE GRANULAR BACK FILL, AND COMPACTED MECHANICALLY. ALL OTHER TRENCH BACK FILLS MAY BE EARTH MATERIAL (FREE OF LARGE CLODS, OR STONES) AND COMPACTED USING EITHER MECHANICAL OR WATER JETTING. GRANULAR MATERIAL AND EARTH MATERIAL ASSOCIATED WITH NEW CONSTRUCTION OUTSIDE OF PAVEMENTS MAY BE JETTED, TAKING CARE TO AVOID DAMAGE TO NEWLY LAID SEWERS.
GRN #11 MATERIALS SUCH AS TREES, ORGANIC DEBRIS, RUBBLE, FOUNDATIONS, AND OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.
GRN #12 TWENTY-FOUR (24) HOURS PRIOR TO STARTING ANY OF THE WORK COVERED BY THE ABOVE PLANS AND AFTER APPROVAL THEREOF, THE DEVELOPER SHALL MAKE ARRANGEMENTS WITH THE CONSTRUCTION INSPECTION OFFICE TO PROVIDE FOR INSPECTION OF THE WORK, SUFFICIENT IN THE OPINION OF THE CITY ENGINEER, TO ASSURE COMPLIANCE WITH THE PLANS AND SPECIFICATIONS AS APPROVED.

WATER LINE NOTES

- 1.) ALL MATERIALS AND METHODS OF CONSTRUCTION FOR WATERMANS TO MEET REQUIREMENTS OF PUBLIC WATER SUPPLY DISTRICT NO. 2.
2.) WATERMAIN TRACER TAPE TO BE INSTALLED WITH ALL WATERMAIN AND SHALL CONSIST OF THREE INCH WIDE TAPE MADE OF BONDDED LAYER PLASTIC WITH A METALLIC FOIL CORE. TAPE SHALL BE "TERRA TAPE D" AS MANUFACTURED BY THE GRIFFOLYN COMPANY OF HOUSTON, TEXAS, OR APPROVED EQUAL.
3.) WATERMAIN LOCATOR WIRE SHALL BE INSTALLED WITH ALL WATERMAIN, FITTINGS, AND VALVE INSTALLATION AND SHALL CONSIST OF A STANDARD ELECTRIC SERVICE WIRE, A SINGLE NO. 12 U.L. APPROVED SOLID COPPER WIRE WITH INSULATION FOR 800 VOLTS, AND BLUE IN COLOR.
4.) VALVES 12" AND SMALLER SHALL BE GATE VALVES. ALL VALVES SHALL MEET THE SPECIFICATIONS OF THE PUBLIC WATER SUPPLY DISTRICT NO. 2.
5.) BURIED VALVES SHALL BE PROVIDED WITH A BUFFALO TYPE VALVE BOX, TYLER 562-S OR 564-S, OR APPROVED EQUIVALENT.
6.) FIRE HYDRANTS SHALL BE MUELLER FIGURE A-423, AMERICAN DARLING NO. B-84-B, OR KENNEDY KB1D.
7.) CONCRETE FOR THRUST BLOCKING AT BENDS, TEES, VALVES, HYDRANTS, ETC., SHALL BE 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
8.) BEFORE WATERMANS SHALL BE ACCEPTED AND PUT INTO SERVICE, THEY SHALL BE TESTED FOR TWO HOURS AT A PRESSURE OF 150 PSI. AFTER REACHING TEST PRESSURE, PIPING SHALL BE CLOSED FOR TWO HOURS. AT THE END OF THE TIME, THE PRESSURE DROP SHALL NOT EXCEED TWO PSI. WATERMANS SHALL ALSO HAVE PASSING TESTS FOR CHLORINATION AND BACTERIOLOGICAL TESTS BEFORE BEING ACCEPTED AND PUT INTO SERVICE.
9.) ALL WATERMANS AND SERVICE LINES SHALL HAVE A MINIMUM OF 42" OF COVERAGE AND A MAXIMUM COVERAGE OF 6'.
10.) ALL EXCAVATION WITHIN THE RIGHT OF WAY SHALL BE COVERED AND PROTECTED DURING AND AFTER THE WORKING DAY OPERATIONS.
11.) THE CONNECTIONS TO THE EXISTING MAIN ARE A CRITICAL PART OF THE PROJECT. ALL CONNECTIONS SHALL BE COMPLETED AT A TIME AGREEABLE TO THE DISTRICT. THE CONNECTIONS MUST BE COMPLETED IN THE MOST EFFICIENT MANNER AND MAYBE REQUIRED AT NIGHT AND/OR OTHERWISE OUTSIDE OF PEAK WATER DEMAND PERIODS.
12.) WATERMANS MUST BE PLOGGED WATER TIGHT AT THE END OF WORK EACH DAY.
13.) ALL WATERMAIN CONSTRUCTION INCLUDING VALVES, SLEEVES, METERS, HYDRANTS AND FITTINGS MUST CONFORM TO PUBLIC WATER SUPPLY DISTRICT NO. 2 DESIGN STANDARDS.
14.) WATERMANS THAT ARE PLACED UNDER ROADWAYS SHALL HAVE 1" CLEAN GRANULAR BACKFILL.
15.) CONTRACTOR SHALL HAVE A PRE CONSTRUCTION MEETING WITH PWSD NO. 2 TO REVIEW ALL CRITICAL CONNECTIONS OF THE WATERLINE BEFORE CONSTRUCTION CAN BEGIN.
16.) WHEN A STORM SEWER OR SANITARY SEWER LATERAL CROSSES OVER A WATER LINE, A MINIMUM VERTICAL CLEARANCE OF 18" SHALL BE PROVIDED.
17.) CAUTION SHALL BE USED WHEN WORKING IN THE AREA OF THE DISTRICT'S EXISTING WATER AND SANITARY FACILITIES. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING THE FACILITIES DURING CONSTRUCTION. ANY DAMAGE TO EXISTING FACILITIES MUST BE REPAIRED AT CONTRACTORS EXPENSE.
18.) CONTRACTOR SHALL FIELD VERIFY ALL PIPE SIZES AND LOCATIONS PRIOR TO CONSTRUCTION.
19.) THE CONTRACTOR IS REQUIRED TO USE RESTRAINED FITTINGS AND JOINTS ON ALL FIRE HYDRANT LINES.
20.) THE PAY WIDTH FOR THE PROJECT WILL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS AN ADDITIONAL 24". NO ADDITIONAL COMPENSATION WILL BE ALLOTTED FOR WIDER TRENCHES.
21.) WHEN RECONNECTING A RELOCATED WATERMAIN TO THE EXISTING PVC MAIN, THE CONTRACTOR SHALL USE A SOLID MJ SLEEVE WITH A SERIES 2000PV FOR THE EXISTING PVC RESTRAINED MAIN AND A SERIES 1100 MEGALUG FOR THE NEW DI RESTRAINED MAIN.
22.) USE WRAP AROUND END SEALS ON CASING PIPE.
23.) WHEN WATER MAINS ARE INSTALLED IN STEEL CASING PIPE, THE PIPE SHALL BE SUPPORTED BY "RACI" TYPE SPACERS. THE SPACERS SHALL BE PLACED AT 6' INTERVALS OR 3 SPACERS PER 20' OF PIPE LENGTH.
24.) INSTALLED WATERMANS SHALL BE SEALED WITH A WATER TIGHT CAP OR PLUG AT THE END OF EACH WORK DAY.
25.) THRUST BLOCKS AND CROSS BLOCKS SHALL BE PLACED BEHIND ALL BENDS, FITTINGS, PLUGS AND CAPS THAT ARE NOT RESTRAINED JOINTS. SEE DETAIL SHEET THRUST BLOCKING SIZES.
26.) THRUST BLOCKS AND CROSS BLOCKS SHALL BE PRE-POURED TO ALLOW TIME TO CURE BEFORE SHUTTING DOWN THE EXISTING WATERMAIN FOR PRESSURE TESTING AND RECONNECTION.
27.) EXCAVATE TOP OF EXISTING WATERMAIN TO CHECK FOR UNRESTRAINED BELLS OR FITTINGS AT ALL CROSS BLOCKS AND CONNECTION POINTS.

SANITARY SEWER NOTES

- 1. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE LOCATION SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF IMPROVEMENTS.
2. GAS, WATER AND OTHER UNDERGROUND UTILITIES SHALL NOT CONFLICT WITH THE DEPTH OR HORIZONTAL LOCATION OF EXISTING OR PROPOSED SANITARY AND STORM SEWERS, INCLUDING HOUSE LATERALS.
3. ALL EXISTING SITE IMPROVEMENTS DISTURBED, DAMAGED OR DESTROYED SHALL BE REPAIRED OR REPLACED TO CLOSELY MATCH PRECONSTRUCTION CONDITIONS.
4. ALL FILL INCLUDING PLACES UNDER PROPOSED STORM AND SANITARY SEWER LINES AND PAVED AREAS INCLUDING TRENCH BACKFILLS WITHIN AND OFF THE ROAD RIGHT-OF-WAY SHALL BE COMPACTED TO 90 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED HASHTO T-180 COMPACTION TEST (ASTM D1557)". ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS. THE COMPACTED FILL SHALL BE FREE OF RUTTING AND SHALL BE NON-YIELDING AND NON-PUMPING DURING PROOFROLLING AND OMPACTION.
5. THE CONTRACTOR SHALL PREVENT ALL STORM, SURFACE WATER, MUD AND CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER SYSTEM.
6. ALL SANITARY SEWER FLOWLINES AND TOPS BUILT WITHOUT ELEVATIONS FURNISHED BY THE ENGINEER WILL BE THE RESPONSIBILITY OF THE SEWER CONTRACTOR.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST ALL SANITARY SEWER MANHOLES (THAT ARE AFFECTED BY THE DEVELOPMENT) TO FINISH GRADE.
8. EASEMENTS SHALL BE PROVIDED FOR ALL SANITARY SEWERS, STORM SEWERS AND ALL UTILITIES ON THE RECORD PLAT.
9. ALL SANITARY SEWER CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CURRENT CONSTRUCTION STANDARDS OF THE DUCKETT CREEK SANITARY DISTRICT.
10. THE DUCKETT CREEK SANITARY DISTRICT SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION FOR COORDINATION OF INSPECTION.
11. ALL SANITARY SEWER BUILDING CONNECTIONS SHALL BE DESIGNED SO THAT THE MINIMUM VERTICAL DISTANCE FROM THE LOW POINT OF THE BASEMENT TO THE FLOWLINE OF A SANITARY SEWER AT THE CORRESPONDING BUILDING CONNECTION SHALL NOT BE LESS THAN THE DIAMETER OF THE PIPE PLUS THE VERTICAL DISTANCE OF 2 1/2 FEET.
12. ALL SANITARY SEWER MANHOLES SHALL BE WATERPROOFED ON THE EXTERIOR IN ACCORDANCE WITH MISSOURI DEPT. OF NATURAL RESOURCES SPECIFICATION 10 CSR-8-120(7)(E).
13. ALL PVC SANITARY SEWER PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-3034 STANDARD SPECIFICATION FOR PSM POLYVINYL CHLORIDE SEWER PIPE, SDR-35 OR EQUAL, WITH "CLEAN" 1/2 INCH TO 1 INCH GRANULAR STONE BEDDING UNIFORMLY GRADED. THIS BEDDING SHALL EXTEND FROM 4 INCHES BELOW THE PIPE TO SPRINGLINE OF PIPE. IMMEDIATE BACKFILL OVER PIPE SHALL CONSIST OF SAME SIZE "CLEAN" OR "MINUS" STONE FROM SPRINGLINE OF PIPE TO 6 INCHES ABOVE THE TOP OF PIPE.
14. ALL SANITARY AND STORM SEWER TRENCH BACKFILLS SHALL BE WATER JETTED. GRANULAR BACKFILL WILL BE USED UNDER PAVEMENT AREAS.
15. ALL PIPES SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLES. FLAT INVERT STRUCTURES WILL NOT ALLOWED.
16. EPOXY COATING SHALL BE USED ON ALL SANITARY SEWER MANHOLES THAT RECEIVE PRESSURIZED MAINS.
17. ALL CREEK CROSSINGS SHALL BE LINED WITH RIP-RAP AS DIRECTED BY DISTRICT INSPECTORS.
18. BRICK SHALL NOT BE USED ON SANITARY SEWER MANHOLES.
19. EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
20. MAINTAIN ACCESS TO EXISTING RESIDENTIAL DRIVEWAYS AND STREETS.
21. PRE-MANUFACTURED ADAPTERS SHALL BE USED AT ALL PVC TO DIP CONNECTIONS. RUBBER BOOT / MISSION-TYPE COUPLINGS WILL NOT BE ALLOWED.
22. ANY PERMITS, LICENSES, EASEMENTS, OR APPROVALS REQUIRED TO WORK ON PUBLIC OR PRIVATE PROPERTIES OR ROADWAYS ARE THE RESPONSIBILITY OF THE DEVELOPER.
23. "TYPE" LOCK-TYPE COVER AND LOCKING DEVICE (LOCK-LUG) SHALL BE USED WHERE LOCK-TYPE COVERS ARE REQUIRED.
24. ALL SANITARY SEWER SYSTEM WORK SHALL BE CONDUCTED UNDER THE INSPECTION OF A REPRESENTATIVE OF THE DISTRICT. ALL WORK MAY NOT REQUIRE INSPECTION BUT THE DISTRICT'S REPRESENTATIVE MAY DESIGNATE SPECIFIC AREAS THAT MUST BE INSPECTED BEFORE THE WORK IS BACKFILLED. ALL TESTING MUST BE WITNESSED BY THE DISTRICT'S INSPECTOR AND THE CONTRACTOR SHALL FURNISH ALL TESTING EQUIPMENT AS APPROVED BY THE DISTRICT. TESTING SHALL INCLUDE:
A MANDREL TEST OF ALL GRAVITY SEWERS USING A MANDREL WITH A DIAMETER THAT HAS A DIAMETER 95% OF THE INSIDE PIPE DIAMETER. IF THE MANDREL TEST FALLS ON ANY SECTION OF PIPE, THAT SECTION OF PIPE SHALL BE UNCOVERED AND REPLACED. NO EXPANSION DEVICES WILL BE ALLOWED TO BE USED TO "FORCE" THE PIPE THAT IS DEFORMED BACK INTO ROUN. ANY STRING LINES USED IN MANDREL TESTING SHALL BE REMOVED AFTER TESTING IS COMPLETED.
AN AIR PRESSURE TEST OF ALL GRAVITY SEWERS TO A PRESSURE OF 5 PSI WITH NO OBSERVED DROP IN PRESSURE DURING A TEST PERIOD OF 5 MINUTES.
A VACUUM TEST OF ALL MANHOLES FOR A PERIOD OF 1 MINUTE AND THE VACUUM SHALL BE 10" OF MERCURY AND MAY NOT DROP BELOW 9" OF MERCURY AT THE END OF THE 1 MINUTE TEST.
25. JETTING: GRANULAR MATERIAL AND EARTH MATERIAL ASSOCIATED WITH NEW CONSTRUCTION OUTSIDE OF PAVEMENTS MAY BE JETTED, TAKING CARE TO AVOID DAMAGE TO NEWLY LAID SEWERS. THE JETTING SHALL BE PERFORMED WITH A PROBE ROUTE ON NOT GREATER THAN 7.5-FOOT CENTERS WITH THE JETTING PROBE CENTERED OVER AND PARALLEL WITH THE DIRECTION OF THE PIPE. TRENCH WIDTHS GREATER THAN 10-FEET WILL REQUIRE MULTIPLE PROBES EVERY 7.5-FOOT CENTERS.
a. DEPTH: TRENCH BACKFILL LESS THAN 8- FEET IN DEPTH SHALL BE PROBEO TO A DEPTH EXTENDING TO HALF THE DEPTH OF THE TRENCH BACKFILL BUT NOT LESS THAN 3- FEET. TRENCH BACKFILL GREATER THAN 8- FEET IN DEPTH SHALL BE PROBEO TO HALF THE DEPTH OF THE TRENCH BACKFILL BUT NOT GREATER THAN 8- FEET.
b. EQUIPMENT: THE JETTING PROBE SHALL BE A METAL PIPE WITH AN EXTERIOR DIAMETER OF 1.5 TO 2-INCHES.
c. METHOD: JETTING SHALL BE PERFORMED FROM THE LOW SURFACE TOPOGRAPHIC POINT AND PROCEED TOWARD THE HIGH POINT, AND FROM THE BOTTOM OF THE TRENCH BACKFILL TOWARDS THE SURFACE. THE FLOODING OF EACH JETTING PROBE SHALL BE STARTED SLOWLY ALLOWING SLOW SATURATION OF THE SOIL. WATER IS NOT ALLOWED TO FLOW AWAY FROM THE DITCH WITHOUT FIRST SATURATION THE TRENCH.
d. SURFACE BRIDGING: THE CONTRACTOR SHALL IDENTIFY THE LOCATIONS OF THE SURFACE BRIDGING (THE TENDENCY FOR THE UPPER SURFACE TO CRUST AND ARCH OVER THE TRENCH RATHER THAN COLLAPSE AND CONSOLIDATE DURING THE JETTING PROCESS), THE CONTRACTOR SHALL BREAKDOWN THE BRIDGED AREAS USING AN APPROPRIATE METHOD SUCH AS WHEELS OR BUCKET OF A BACKHOE. WHEN THE SURFACE CRUST IS COLLAPSED, THE VOID SHALL BE BACKFILLED WITH THE SAME MATERIAL USED AS TRENCH BACKFILL AND RE-JETTED. COMPACTION OF THE MATERIALS WITHIN THE SUNKEN/JETTED AREA SHALL BE COMPACTED SUCH THAT NO FURTHER SURFACE SUBSIDENCE OCCURS.
26. ALL SANITARY LATERALS CROSSING UNDER PAVEMENT MUST HAVE PROPER ROCK BACKFILL AND REQUIRED COMPACTION.

STORM SEWER NOTES

- STM #1 ALL STORM SEWER INSTALLATION IS TO BE IN ACCORDANCE WITH M.S.D. 2007 STANDARDS AND SPECIFICATIONS EXCEPT AS MODIFIED BY THE CITY OF O'FALLON ORDINANCES.
STM #2 BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES. PRE CAST CONCRETE STRUCTURES ARE TO BE USED UNLESS OTHERWISE APPROVED BY THE CITY OF O'FALLON.
STM #3 A 5/8" TRASH BAR SHALL BE INSTALLED HORIZONTALLY IN THE CENTER OF THE OPENING(S) IN ALL CURB INLETS AND AREA INLETS.
STM #4 HDPE PIPE IS TO BE N-12MIT OR EQUAL AND TO MEET ASTM F1417 WATER TIGHT FIELD TEST.
STM #5 ENCASE WITH CONCRETE BOTH SANITARY AND STORM SEWER AT CROSSING WHEN STORM SEWER IS WITHIN 18 INCHES ABOVE SANITARY SEWER. ADD CONCRETE CRADLE TO ONLY RCP STORM SEWER AND ENCASE HDPE STORM SEWER WHEN IT IS MORE THAN 18 INCHES ABOVE SANITARY LINE. SHOW ON PROFILE SHEET.
STM #6 THE STORM SEWERS SHOULD RUN DIAGONALLY THROUGH THE SIDE YARDS TO MINIMIZE ANY ADDITIONAL UTILITY EASEMENTS REQUIRED.
STM #7 ALL CONCRETE PIPES WILL BE INSTALLED WITH O-RING RUBBER TYPE GASKETS.
STM #8 CONNECTIONS AT ALL STORM STRUCTURES ARE TO BE MADE WITH A-LOCK JOINT OR EQUAL.
STM #9 PRE CAST CONCRETE INLET COVERS ARE NOT TO BE USED.
STM #10 THE SWALE IN THE DETENTION BASINS SHALL HAVE A MINIMUM 1% LONGITUDINAL SLOPE AND BE LINED WITH A PERMANENT EROSION CONTROL BLANKET THAT WILL ALLOW INFILTRATION OF STORM WATER.
STM #11 ALL STORM SEWER SHALL BE REINFORCED CONCRETE PIPE OR H.D.P.E. PIPE. ALL STRUCTURES AND FLARED END SECTIONS MUST BE CONCRETE. MANUFACTURING SPECIFICATIONS MUST BE FOLLOWED AND DETAILS PROVIDED FOR THE INSTALLATION OF H.D.P.E. PIPE. H.D.P.E. PIPE WILL NOT BE ALLOWED FOR DETENTION BASIN OUTFLOWS, FINAL PIPE RUN TO DETENTION BASINS, CREEK DISCHARGE OR OTHER APPROVED MEANS.
STM #12 THE DISCHARGE POINT OF ALL FLARED END SECTIONS SHALL BE PROTECTED BY RIP RAP OR OTHER APPROVED MEANS.
STM #13 RIP RAP SHOWN AT FLARED END SECTIONS WILL BE EVALUATED IN THE FIELD BY THE ENGINEER, CONTRACTOR, AND CITY INSPECTORS AFTER INSTALLATION FOR EFFECTIVENESS AND FIELD MODIFIED, IF NECESSARY TO REDUCE EROSION ON AND OFF SITE.
STM #14 ADD 1" MINUS ROCK BACK FILL TO ALL STORM SEWER THAT LIE WITHIN THE 1:1 SHEAR PLANE OF THE ROAD.
STM #15 ALL STORM SEWER INLETS SHALL BE INSTALLED WITH A MARKER, BELOW IS THE RECOMMENDATIONS:

THE CITY WILL ALLOW THE FOLLOWING MARKERS AND ADHESIVE PROCEDURES ONLY AS SHOWN IN THE TABLE BELOW OR AN APPROVED EQUAL. 'PEEL AND STICK' ADHESIVE PADS WILL NOT BE ALLOWED.

Table with 5 columns: MANUFACTURER, SIZE, ADHESIVE, STYLE, MESSAGE (PART #), WEBSITE. Rows include ACP INTERNATIONAL and DAS MANUFACTURING, INC.

Vertical sidebar containing project information: DEVELOPER/OWNER: FULTE GROUP, 16640 CHESTERFIELD GROVE, STE 200, CHESTERFIELD, MO 63005. Includes professional seals for JOHN E. HARSHAER and JOHN A. COLE, and project specifications.