STORM SEWER NOTES:

- 1.) ALL MATERIALS AND METHODS OF CONSTRUCTION FOR STORM SEWERS TO MEET REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF O'FALLON.
- 2.) ALL TRENCHES UNDER AREAS TO BE PAVED AND UNDER EXISTING PAVING SHALL BE GRANULARLY FILLED WITH 3/4" MINUS CRUSHED LIMESTONE ONLY. BACKFILL SHALL BE PLACED IN ACCORDANCE WITH CITY OF O'FALLON
- 3.) ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III PIPES UNLESS OTHERWISE NOTED
- 4.) CONTRACTOR TO START LAYING PIPE AT DOWNSTREAM MANHOLE AND WORK
- 5.) BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES.
- 6.) PROVIDE 5/8" DIAMETER TRASH BAR FOR ALL INLETS.

SILTATION MAINTENANCE NOTES:

- 1. SILTATION CONTROL BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- 2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES OR FENCE.
- 3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES OR FENCE SHALL BE ACCOMPLISHED PROMPTLY.
- 4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REAHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- 5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER SILTATION CONTROL BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
- 6. ALL EXPOSED SLOPES WHETHER TEMPORARY OR PERMANENT SHALL BE SEEDED PER SPECIFICATIONS IMMEDIATELY UPON COMPLETION.
- 7. ALL FLOWLINES OF DIVERSION DITCHES AND SWALES SHALL BE PROTECTED AS NEEDED.
- 8. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION CONTROL OF THE PROJECT AREA. THE CONTRACTOR 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 SILTATION CONTROL DETAILED IN THE PLAN). CONTROL SHALL COMMENCE WITH THE GRADING AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR THE CITY OF O'FALLON AND/OR MoDOT. THE CONTRACTOR'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER AND/OR THE CITY OF O'FALLON AND/OR MODOT MAY AT THEIR OPTION DIRECT THE CONTRACTOR IN IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITING OF SILT OR MUD ON NEW OR EXISTING PAVEMENT OR IN NEW OR EXISTING SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE OWNER AND/OR THE CITY OF O'FALLON AND/OR MODOT.

VEGETATIVE ESTABLISHMENT FOR URBAN DEVELOPMENT SITES APPENDIX A

SEEDING RATES:

PERMANENT: TALL FESCUE - 30 lbs./ac. SMOOTH BROME - 20 lbs./ac.

COMBINED FESCUE @ 15 lbs./ac. AND BROME @ 10 lbs./ac. WHEAT OR RYE - 150 lbs./ac. (3.5 lbs. PER SQUARE FOOT)

- 120 lbs./ac. (2.75 lbs. PER SQUARE FOOT) SEEDING PERIODS: FESCUE OR BROME — MARCH 1 TO JUNE 1 AUGUST 1 TO OCTOBER 1

WHEAT OR RYE - MARCH 15 TO NOVEMBER 1 - MARCH 15 TO SEPTEMBER 15 MULCH RATES:

100 lbs. PER 1,000 sq.. FEET (4,356 lbs. PER ACRE) FERTILIZER RATES: NITROGEN 30 lbs./ac. PHOSPHATE 30 lbs./ac.

POTASSIUM 600 lbs./ac. ENM*

* ENM = EFFECTIVE NEUTRALIZING MATERIAL AS PER STATE EVALUATION OF QUARRIED ROCK.

DUCKETT CREEK SANITARY DISTRICT CONSTRUCTION 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 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 RECONSTRUCTION

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 THE MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPACTION TEST (ASTM D1557)" ALL TEST 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-YEILDING AND NON-PUMPING DURING PROOF ROLLING AND COMPACTION.

5. THE CONTRACTOR SHALL PREVENT ALL STORM, SURFACE WATER, MUD AND CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER

6. ALL SANITARY SEWER FLOWLINES AND TOPS BUILT WITHOUT ELEVATIONS FURNISHED BY THE ENGINEER WILL BE THE RESPONSIBILITY OF SEWER

7. EASEMENTS SHALL BE PROVIDED FOR ALL SANITARY SEWERS, STORM SEWERS AND ALL UTILITIES ON THE RECORD PLAT.

8. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CURRENT CONSTRUCTION STANDARDS OF THE DUCKETT CREEK SANITARY DISTRICT. 9. THE DUCKETT CREEK SANITARY DISTRICT SHALL BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION FOR COORDINATION INSPECTION.

10. 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.

11. ALL SANITARY SEWER MANHOLES SHALL BE WATERPROOFED ON THE EXTERIOR IN ACCORDANCE WITH MISSOURI DEPT. OF NATURAL RESOURCES SPECIFICATION 10 CRS-8.120(7)(E).

12. 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" TO 1" GRANULAR STONE BEDDING UNIFORMLY GRADED. THIS BEDDING SHALL EXTEND FROM 4 INCHES BELOW THE PIPE TO THE SPRINGLINE OF PIPE. IMMEDIATE BACKFILL OVER THE PIPE SHALL CONSIST OF SAME SIZE "CLEAN" OR "MINUS" STONE FROM SPRINGLINE OF PIPE TO 6 INCHED ABOVE THE TOP OF PIPE.

13. ALL SANITARY AND STORM SEWER TRENCH BACKFILLS SHALL BE WATER JETTED. GRANULAR BACKFILL WILL BE USED UNDER PAVEMENT AREAS. 14. ALL PIPES SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLES. NO

15. ALL CREEK CROSSINGS SHALL BE GROUTED RIP-RAP AS DIRECTED BY THE DISTRICT INSPECTORS. (ALL GROUT SHALL BE HIGH SLUMP READY-MIX

CONCRETE). 16. BRICK SHALL NOT BE USED ON SANITARY SEWER MANHOLES.

FLAT INVERT STRUCTURES ARE ALLOWED.

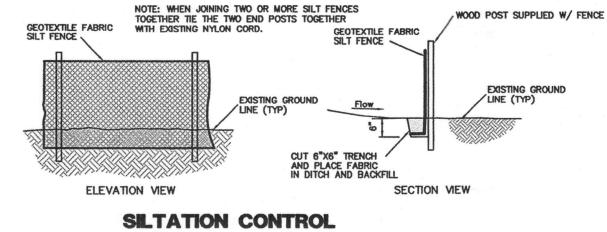
17. EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED

18. MAINTAIN ACCESS TO EXISTING RESIDENTIAL DRIVEWAYS AND STREETS. 19. PRE-MANUFACTURED ADAPTERS SHALL BE USED AT ALL PVC TO DIP CONNECTIONS. RUBBER BOOT/ MISSION-TYPE COUPLINGS WILL NOT BE

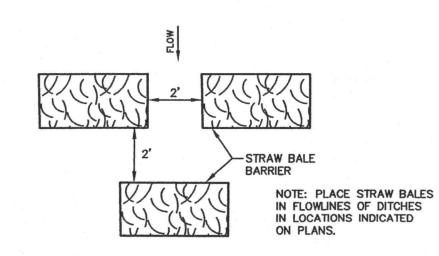
20. ANY PERMITS, LICENSES, EASEMENTS, OR APPROVALS REQUIRED TO WORK ON PUBLIC OR PRIVATE PROPERTIES OR ROADWAY ARE THE RESPONSIBILITY OF THE DEVELOPER.

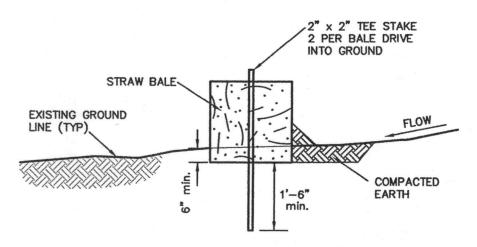
BE USED WHERE LOCK-TYPE COVERS ARE REQUIRED.

21. 'TYPE N' LOCK-TYPE COVER AND LOCKING DEVICE (LOCK-LUG) SHALL



SILTFENCE DETAIL

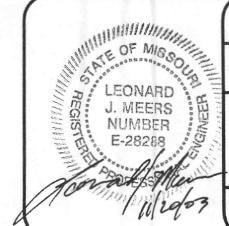




SILTATION CONTROL STAW BALE DETAIL

PLANNING & ZONING #: 4703

1 11/20/03 PER CITY COMMENTS



CONSULTING ENGINEERS, INC.

BANK MIDWEST

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10/28/03 LJM 10/28/03