2. ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

3. ALL MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT STANDARDS AND SPECIFICATIONS AS REQUIRED BY ST. CHARLES COUNTY OR AS MODIFIED ON THESE PLANS.

4. ALL GRADED AREAS INDICATED SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES, SEEDING

AND MULCHING AS INDICATED. 5. INSTALL SILTATION CONTROL PRIOR TO STARTING THE GRADING PER SILTATION SPECIFICATIONS. ADDITIONAL

SILTATION CONTROL DEVICES MAY BE REQUIRED AS DIRECTED BY THE CITY OF O'FALLON.

6. ALL FILLS AND BACK FILLS SHALL BE MADE OF SELECTED EARTH MATERIALS, FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH, RUBBISH, ORGANIC MATERIAL AND DEBRIS.

GRADING CONTRACTOR SHALL KEEP EXISTING ROADWAYS CLEAN OF MUD AND DEBRIS AT ALL TIMES.

8. NO GRADE SHALL EXCEED 3:1 SLOPE, OR AS APPROVED BY THE SOILS ENGINEER.

9. ALL SLOPES TO BE STABILIZED IMMEDIATELY AFTER GRADING.

10. THE EROSION CONTROL PLAN SHOULD BE IMPLEMENTED BEFORE GRADING BEGINS.

11. EROSION CONTROL SHALL NOT BE LIMITED TO WHAT IS SHOWN ON THE PLAN.

12. WHATEVER MEANS NECESSARY SHALL BE TAKEN TO PREVENT SILTATION AND EROSION FROM ENTERING NATURAL STREAMS AND ADJACENT ROADWAYS, PROPERTIES, AND DITCHES.

13. TOPOGRAPHIC INFORMATION PROVIDED BY SURDEX & COLE & ASSOCIATES INC.

14. SEEDING SHOULD OCCUR AS SOON AS GRADING IS COMPLETE.

15. THE CITY OF O'FALLON RESERVES THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES IF THE PROPOSED MEASURES ARE DEEMED TO BE INADEQUATE OR NONEXISTENT.

16. TOPSOIL SHOULD BE STOCKPILED AND REUSED. PROPER EROSION CONTROL OF THESE STOCKPILES SHOULD INCLUDE SEEDING AND STRAWING AND OTHER MEANS OF SEDIMENT CONTROL SUCH AS SILTATION FENCE AND

17. THE SEDIMENT BASIN AND STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE 1 SEDIMENT HAS ACCUMULATED TO THE DESIGN DEPTH OF THE BASIN, REMOVED SEDIMENT SHALL BE DEPOSITED 2 IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

18. SEDIMENT BASIN CLEANOUT ELEVATION SHALL BE MARKED BY STAKES (MIN 3) PLACED IN THE BASIN MARKING THE CLEANOUT ELEVATION. STAKES SHALL BE REPLACED AS NEEDED TO BE INCLUDED IN SEDIMENT BASIN

19. FLOOD PLAIN IS SHOWN ON THE PLAN PER PICKETT, RAY & SILVER FLOOD STUDY DATED MARCH 10, 2006. (F.I.R.M. #29183C0880E AND #29183C0410), REVISED TO REFLECT LOWR EFFECTIVE DECEMBER 27, 2006.

20. CONTRACTOR MUST NOTIFY THE OFF-SITE PROPERTY OWNERS A MINIMUM OF 48 HOURS BEFORE COMMENCING CONSTRUCTION ON THEIR PROPERTIES. ANY DISTURBED OFF-SITE AREAS MUST BE RESTORED TO THEIR PRE-IMPROVED CONDITION.

21. TRAFFIC CONTROL IS TO BE PER MODOT OR MUTCD WHICHEVER IS MOST STRINGENT.

22. ALL PROPOSED EASEMENTS SHALL BE SHOWN ON RECORD PLAT.

23. RIP-RAP SHOWN AT FLARED ENDS WILL BE EVALUATED IN THE FIELD AFTER INSTALLATION FOR EFFECTIVENESS AND FIELD MODIFIED, IF NECESSARY, TO REDUCE EROSION ON AND OFF-SITE.

24. BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES.

25. ALL CONCRETE PIPES WILL BE INSTALLED WITH O-RING RUBBER TYPE GASKETS.

26. CONNECTIONS AT ALL STORM SEWER STRUCTURES TO BE MADE WITH A-LOK JOINT OR EQUAL.

28. ALL PAVING TO BE IN ACCORDANCE WITH ST. CHARLES COUNTY STANDARDS AND SPECIFICATIONS.

27. 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. LANDFILL TICKETS FOR SUCH DISPOSAL SHALL BE MAINTAINED ON FILE BY THE DEVELOPER. BURNING ON SITE SHALL BE ALLOWED ONLY BY PERMIT FROM THE LOCAL FIRE DISTRICT. IF A BURN PIT IS PROPOSED, THE LOCATION AND MITIGATION SHALL BE SHOWN ON THE GRADING PLANS AND DOCUMENTED BY THE SOILS ENGINEER.

30. SIDEWALKS, CURB RAMPS, RAMP AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG) ALONG WITH

29. ALL DRIVEWAY LOCATIONS SHALL NOT INTERFERE WITH THE SIDEWALK HANDICAP RAMPS.

THE REQUIRED GRADES, CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE, IF ANY CONFLICT OCCURS BETWEEN THE ABOVE INFORMATION AND THE PLANS, THE ADAAG SHALL TAKE PRECEDENCE AND THE CONTRACTOR PRIOR TO ANY CONSTRUCTION SHALL NOTIFY THE PROJECT ENGINEERS.

31. ALL PROPOSED FENCING REQUIRES A SEPARATE PERMIT FROM THE PLANNING AND DEVELOPMENT DEPARTMENT.

32. ALL SIGN POST, BACKS AND BRACKET ARMS SHALL BE PAINTED BLACK USING CARBOLINE RUSTBOND PENETRATING SEALER SG AND CARBOLINE 133 HB PAINT (OR EQUIVALENT AS APPROVED BY THE CITY OF

33. ANY PROPOSED PAYILIONS, PLAYGROUNDS OR POOL AREAS WILL NEED A SEPARATE PERMIT FROM THE BUILDING

34. ALL ENTRANCE MONUMENT OR SUBDIVISION DIRECTIONAL SIGNAGE MUST HAVE THE LOCATIONS AND SIZES APPROVED AND PERMITTED SEPARATELY THROUGH THE PLANNING AND DEVELOPMENT DEPARTMENT.

35. THE DEVELOPER MUST SUPPLY THE CITY OF O'FALLON CONSTRUCTION INSPECTORS WITH SOIL REPORTS PRIOR TO AND DURING SITE SOIL TESTING. THE SOIL REPORT WILL BE REQUIRED TO CONTAIN THE FOLLOWING INFORMATION ON SOIL TEST CURVES (PROCTOR REPORTS) FOR PROJECTS WITHIN THE CITY: \*MAXIMUM DRY DENSITY.

\*OPTIMUM MOISTURE CONTENT. \*MAXIMUM AND MINIMUM ALLOWABLE MOISTURE CONTENT. \*CURVE MUST BE PLOTTED TO SHOW DENSITY FROM A MINIMUM OF 90% COMPACTION AND ABOVE AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPACTION TEST" (A.S.T.M.-D-1157) OR FROM A MINIMUM OF 95% AS DETERMINED BY THE "STANDARD PROCTOR TEST AASHTO T-99, METHOD C" (A.S.T.M.-D698). PROCTOR TYPE MUST BE DESIGNATED ON DOCUMENT. \*CURVE MUST HAVE AT LEAST 5 DENSITY POINTS WITH MOISTURE CONTENT AND SAMPLE LOCATIONS LISTED ON DOCUMENT.

\*SPECIFIC GRAVITY. \*NATURAL MOISTURE CONTENT.

\*LIQUID LIMIT. \*PLASTIC LIMIT.

ZONING CODE.

36. CITY APPROVAL OF THE CONSTRUCTION PLANS DOES NOT MEAN THAT SINGLE FAMILY AND TWO FAMILY DWELLING UNITS CAN BE CONSTRUCTED ON THE LOTS WITHOUT MEETING THE BUILDING SETBACKS AS REQUIRED BY THE

37. ALL UTILITIES SHALL BE LOCATED UNDERGROUND.

38. CONSTRUCTION WORKING HOURS IS AS FOLLOWS:

WINTER MONTHS (OCTOBER-MAY) = 7 a.m. -6 p.m. DURING WEEK 8 a.m. - 6 p.m. DURING WEEKENDS SUMMER MONTHS (JUNE-SEPTEMBER) = 6 a.m. -6 p.m. DURING WEEK 7 a.m. - 6 p.m. DURING WEEKENDS SATURDAY, SUNDAY, AND HOLIDAY WORK REQUIRES PERMISSION FROM THE CITY ENGINEER

# TREE PROTECTION NOTES

1. THE PROTECTION AREA AROUND TREES SHALL INCLUDE ALL LAND WITHIN THE CANOPY DRIP LINE. THIS AREA SHALL REMAIN FREE OF ALL GRADING AND

2. CONSTRUCTION SITE ACTIVITIES SUCH AS PARKING, MATERIAL STORAGE, SOIL STOCK PILING, AND CONCRETE WASHOUT SHALL NOT BE PERMITTED WITHIN TREE

3. TREE PROTECTION AREAS SHALL BE CLEARLY IDENTIFIED PRIOR TO ANY LAND DISTURBANCE. METHODS THAT MAY BE USED INCLUDE SNOW FENCE, POLYETHYLENE, CHAIN LINK FENCE, OR CONSTRUCTION STAKES. DESIGNATED AREAS SHALL REMAIN CLEARLY MARKED UNTIL THE PROTECTED AREA HAS

4. SIGNS SHALL BE USED TO DESIGNATE TREE PROTECTION AREAS, SIGNS ARE TO BE POSTED VISIBLY ON ALL SIDES OF THE PRESERVATION AREA. MINIMUM SIZE FOR THE SIGNS IS 24" X 36", PLACED 3' HIGH FROM GROUND TO BOTTOM OF SIGN AND SHOULD STATE THE FOLLOWING: TREE PROTECTION AREA-MACHINERY ACCESS AND DUMPING OR STORAGE OF MATERIALS AND EQUIPMENT

5. TREE PRESERVATION LIMITS AND SIGNAGE MUST BE INSPECTED AND APPROVED BY A CITY CONSTRUCTION INSPECTOR AT THE SITE, PRIOR TO PLAN APPROVAL AND THE COMMENCEMENT OF GRADING/CONSTRUCTION.

# **NON-SEDIMENT POLLUTION CONTROL NOTES**

1. HANDLING AND DISPOSAL OF HAZARDOUS MATERIALS

DO: PREVENT SPILLS USE PRODUCTS UP

FOLLOW LABEL DIRECTIONS FOR DISPOSAL REMOVE LIDS FROM EMPTY BOTTLES AND CANS WHEN DISPOSING IN TRASH RECYCLE WASTES WHENEVER POSSIBLE

DON'T: DON'T POUR WASTE INTO SEWERS OR WATERWAYS ON THE GROUND DON'T POUR WASTE DOWN THE SINK, FLOOR DRAIN OR SEPTIC TANKS DON'T BURY CHEMICALS OR CONTAINERS, OR DISPOSE OF THEM WITH CONSTRUCTION DEBRIS DON'T BURN CHEMICALS OR CONTAINERS DON'T MIX CHEMICALS TOGETHER

2. CONTAINERS SHALL BE PROVIDED FOR COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS TO BE USED ONSITE, ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT MATERIAL.

3. NO WASTE MATERIALS SHALL BE BURIED ON-SITE.

4. MIXING, PUMPING, TRANSFERRING OR OTHERWISE HANDLING CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE DRYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN AN AREA AWAY FROM ANY WATERCOURSE, DITCH OR STORM DRAIN.

5. EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC., SHALL BE PERFORMED ONLY IN AN AREA DESIGNATED FOR THAT PURPOSE. THE DESIGNATED AREA IS EQUIPPED FOR RECYCLING OIL AND CATCHING SPILLS.

CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW DIRECTLY TO STORM SEWERS, STREAMS, DITCHES, LAKES, ETC. WITHOUT BEING TREATED. A SUMP OR PIT SHALL BE CONSTRUCTED TO CONTAIN CONCRETE WASH WATER.

7. IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEAKED, OR RELEASED ONTO SOIL, THE SOIL SHALL BE DUG UP AND DISPOSED OF AT A LICENSED SANITARY LANDFILL (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL). SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST, KITTY LITTER OR PRODUCT DESIGNED FOR THAT PURPOSE AND DISPOSED OF AT A LICENSED SANITARY LANDFILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS GASOLINE, OIL-BASED PAINTS, ANDCEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING, THESE MATERIALS WILL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH MODNR REQUIREMENTS.

STATE LAW REQUIRES THE PARTY RESPONSIBLE FOR A PETROLEUM PRODUCT SPILL IN EXCESS OF 50 GALLONS TO REPORT THE SPILL TO MODNR (537-634-2436) AS SOON AS PRACTICAL AFTER DISCOVERY, FEDERAL LAW REQUIRES THE RESPONSIBLE PARTY TO REPORT ANY RELEASE OF OIL IF IT REACHES OR THREATENS A SEWER, LAKE, CREEK, STREAM, RIVER, GROUNDWATER, WETLAND, OR AREA, LIKE A ROAD DITCH, THAT DRAINS INTO ONE OF THE ABOVE

### **POLLUTION PREVENTION NOTES**

POLLUTION PREVENTION PROCEDURES 1. HANDLING AND DISPOSAL OF HAZARDOUS MATERIALS DO: PREVENT SPILLS

ACCORDANCE WITH MODNR REQUIREMENTS.

USE PRODUCTS UP

FOLLOW LABEL DIRECTIONS FOR DISPOSAL REMOVE LIDS FROM EMPTY BOTTLES AND CANS WHEN DISPOSING IN TRASH RECYCLE WASTES WHENEVER POSSIBLE DON'T: DON'T POUR WASTE INTO SEWERS OR WATERWAYS ON THE GROUND DON'T POUR WASTE DOWN THE SINK, FLOOR DRAIN OR SEPTIC TANKS

DON'T BURY CHEMICALS OR CONTAINERS, OR DISPOSE OF THEM WITH CONSTRUCTION DON'T BURN CHEMICALS OR CONTAINERS DON'T MIX CHEMICALS TOGETHER

2. CONTAINERS SHALL BE PROVIDED FOR COLLECTION OF ALL WASTER MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS TO BE USED ONSITE. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT

3. NO WASTE MATERIALS SHALL BE BURIED ON-SITE. 4. MIXING, PUMPING, TRANSFERRING OR OTHERWISE HANDLING CONSTRUCTION CHEMICALS SUCH AS

FERTILIZER, LIME, ASPHALT, CONCRETE DRYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN AN AREA AWAY FROM ANY WATERCOURSE, DITCH

5. EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC., SHALL BE PERFORMED ONLY IN AN AREA DESIGNATED FOR THE PURPOSE. THE DESIGNATED AREA IS EQUIPPED FOR RECYCLING OIL AND

CATCHING SPILLS. 6. CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW DIRECTLY TO STORM SEWERS, STREAMS, DITCHES, LAKES, ETC WITHOUT BEING TREATED. A SUMP OR PIT SHALL BE CONSTRUCTED TO

CONTAIN CONCRETE WASH WATER. 7. IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEAKED, OR RELEASED ONTO SOIL, THE SOIL SHALL BE DUG UP AND DISPOSED OF AT A LICENSED SANITARY LANDFILL (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL). SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST, KITTY LITTER OR PRODUCT DESIGNED FOR THAT PURPOSE AND DISPOSED OF AT A LICENSED SANITARY LANDFILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. THESE MATERIALS WILL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN

8. STATE LAW REQUIRES THE PARTY RESPONSIBLE FOR A PETROLEUM PRODUCT SPILL IN EXCESS OF 50 GALLONS TO REPORT THE SPILL TO MODNR (537-834-2436) AS SOON AS PRACTICAL AFTER DISCOVERY. FEDERAL LAW REQUIRES THE RESPONSIBLE PARTY TO REPORT ANY RELEASE OF OIL IF IT REACHES OR THREATENS A SEWER, LAKE, CREEK, STREAM, RIVER, GROUNDWATER, WETLAND, OR AREA, LIKE A ROAD DITCH, THAT DRAINS INTO ONE OF THE ABOVE.

### **EARTHWORK NOTES**

ESTIMATED GRADING QUANTITIES:

15% SHRINKAGE FACTOR INCLUDED CUT VOLUME - 1,800 CUBIC YDS

FILL VOLUME - 9,300 CUBIC YDS

7,500 CY SHORT (DIRT TO BE PROVIDED FROM PHASE 2/PHASE 3 SPOILS AND SEWER SPOILS FROM PHASE 4)

THE ENGINEER HAS CALCULATED THE ABOVE QUANTITIES OF EARTHWORK TO BE REGARDED AS AN ESTIMATE OF THE BULK MOVEMENT OR REDISTRIBUTION OF SOILS ON THIS PROJECT. AS AN ESTIMATE, THESE QUANTITIES ARE INTENDED FOR GENERAL USE, AND THE ENGINEER ASSUMES NO LIABILITY FOR COST OVERRUNS DUE TO EXCESS EXCAVATED MATERIALS OR SHORTAGES OF FILL.

THE QUANTITIES ESTIMATED FOR EACH OF THE IMPROVEMENT ITEMS LISTED ABOVE ARE BASED UPON THE HORIZONTAL AND VERTICAL LOCATION OF THE IMPROVEMENTS AS PROPOSED ON THE SITE ENGINEERING PLANS PREPARED BY COLE AND ASSOCIATES CONSULTING ENGINEERS.

THE ENGINEER'S EARTHWORK ESTIMATE DOES NOT INCLUDE ANY OF THE FOLLOWING ITEMS REQUIRING EARTHWORK THAT MAY BE NECESSARY FOR COMPLETION OF THE PROJECT: MISCELLANEOUS UNDERGROUND CONDUITS, INCLUDING SEWER LINES AND WATER MAINS LESS THAN TWENTY-FOUR INCHES IN DIAMETER, STANDARD MANHOLES; PROCESS OR TRANSFER PIPING; ELECTRICAL OR TELEPHONE CONDUITS; BASES FOR LIGHT STANDARDS; BUILDING FOOTINGS AND FOUNDATIONS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACTUAL SIZE OF THE FIELD EXCAVATIONS MADE FOR THE INSTALLATION OF UNDERGROUND STRUCTURES, AND AS SUCH, THE ACTUAL QUANTITIES OF EARTHWORK FROM SUCH ITEMS MAY VARY FROM THE ESTIMATE SHOWN ABOVE.

THE ENGINEER ASSUMES NO RESPONSIBILITY FOR COSTS INCURRED DUE TO REMOVAL OF UNSUITABLE MATERIAL FROM SITE.

THE ABOVE QUANTITIES ARE AN ESTIMATE AND SHOULD BE CONSIDERED AS SUCH. IT IS THE GRADING CONTRACTOR'S RESPONSIBILITY TO PREPARE A QUANTITY TAKEOFF AND NOTE ANY DISCREPANCIES TO THE ENGINEER.

#### **SILTATION**

# **CONTROL SPECIFICATIONS**

SILT FENCE SPECIFICATIONS

SPACED ON 5' CENTERS WITH WE X WE/10 X 10 GAGE WELDED WIRE

3. FABRIC SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE

EXCAVATED A MINIMUM OF 8 INCHES DEEP FOR THE LENGTH OF THE

FENCE HEIGHT SHALL BE A MINIMUM OF 4 FEET IN HEIGHT, WITH THE FABRIC INSTALLED ON THE FENCE ON THE UPSTREAM SIDE.

MAINTENANCE

SILT FENCE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH

CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES

5. SILT FENCES SHALL BE USED ONLY ON SHEET FLOW CONDITIONS.

6. SILT FENCES SHALL BE INSTALLED AROUND ALL STORM SEWER

RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE

1. SILT FENCE TO BE WOVEN GEOTEXTILE FABRIC MIRAFI 100X OR EQUAL

2. FABRIC TO BE SUPPORTED BY METAL TEE POST WITH SPADE BASE

FENCE. THE EXCAVATED SOIL SHALL FENCE. SEE DETAIL SHEET C10.10.

STRUCTURES.

ACCOMPLISHED PROMPTLY.

SILTATION CONTROL GENERAL NOTES

INSTALLATION OF ALL PERIMETER SEDIMENT CONTROL SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN (7) DAYS OF GRUBBING THE SITE.

INSPECTION OF SILTATION CONTROL DEVICES SHALL TAKE PLACE ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS OF ANY 0.5"/24 HOUR RAIN EVENT. ANY SILTATION CONTROL IN NEED OF REPAIR SHALL OCCUR

 ALL SLOPES OR DRAINAGE CHANNELS, ONCE CONSTRUCTED TO FINAL GRADE, SHALL BE SEEDED AND MULCHED PER SPECIFICATIONS WITHIN SEVEN (7) DAYS.

 SILT FENCES SHALL BE INSTALLED IMMEDIATELY AROUND EACH STORM SEWER STRUCTURE ONCE FINAL CONSTRUCTION OF EACH INDIVIDUAL ALL SILTATION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL

SILTATION CONTROL SCHEDULE IMPLEMENTATION

UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

PERIMETER SILTATION CONTROL AND CONSTRUCTION ENTRANCES TO

BEGIN PLACING AGGREGATE BASE IN PARKING AREAS ONCE AREA HAS REACHED FINAL GRADE TO PREVENT EROSION. 3. PLACE SILT FENCE AROUND EACH STORM SEMER STRUCTURE AS

IMMEDIATELY SEED AREAS UPON REACHING FINAL GRADE THAT ARE TO BE PERMANENTLY SEEDED.

TEMPORARY ACCESS ROADS AND PARKING AREAS SPECIFICATIONS

1. TEMPORARY ROADS SHALL FOLLOW THE CONTOUR OF THE NATURAL TERRAIN TO THE EXTENT POSSIBLE. SLOPES SHOULD NOT EXCEED TO PERCENT.

2. GRADES SHOULD BE SUFFICIENT TO PROVIDE DRAINAGE, BUT SHOULD

3. ROADBEDS SHALL BE AT LEAST 20 FEET WIDE,

4. ALL CUTS AND FILLS SHALL BE 3:1 OR FLATTER TO THE EXTENT POSSIBLE

5. DRAINAGE DITCHES SHALL BE PROVIDED AS NEEDED.

6. THE ROADBED OR PARKING SURFACE SHALL BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

 AN 6-INCH COURSE OF 2" MINUS AGGREGATE SHALL BE APPLIED IMMEDIATELY AFTER GRADING OR THE COMPLETION OF UTILITY INSTALLATION WITHIN THE RIGHT-OF-WAY. FILTER FABRIC (MIRAFI 500X) MAY BE APPLIED TO THE ROADBED FOR ADDITIONAL STABILITY IN ACCORDANCE WITH FABRIC MANUFACTURER'S SPECIFICATIONS.

#### **VEGETATION**

OFFSITE AREAS: ALL ROADSIDE DITCHES, CUTS, FILLS AND DISTURBED AREAS ADJACENT TO PARKING AREAS AND ROADS SHALL BE STABILIZED WITH APPROPRIATE TEMPORARY OR PERMANENT VEGETATION ACCORDING TO THE APPLICABLE STANDARDS AND SPECIFICATIONS.

REFER TO DRAWINGS FOR AREAS WHICH SHALL BE STABILIZED WITH APPROPRIATE TEMPORARY OR PERMANENT VEGETATION ACCORDING TO THE APPLICABLE STANDARDS AND SPECIFICATIONS. SEEDING RATES

TALL FESCUE - 80 LBS./AC SMOOTH BROME - 100 LBS./AC COMBINED: FESCUE @ 40 LBS./AC. AND BROME @ 50 LBS./AC.

WHEAT OR RYE - 150 LBS./AC. (3.5 LBS. PER 1,000 SQUARE FOOT)

SEEDING PERIODS: FESCUE OR BROME - MARCH 1 TO JUNE 1 AUGUST 1 TO OCTOBER WHEAT OR RYE - MARCH 15 TO NOVEMBER

MULCH RATES: 100 LBS. PER 1,000 SQ. FEET (4,356 LBS. PER ACRE)

- 120 LBS./AC. (2.75 LBS. PER 1,000 SQUARE FOOT)

FERTILIZER RATES: NITROGEN 30 LBS. /AC PHOSPHATE 30 LBS. /AC POTASSIUM 30 LBS./AC. LIME 600 LBS./AC. ENM

MTH SILT OR OTHER DEBRIS.

BE MADE PROMPTLY AS NEEDED.

TEMPORARY:

STATE EVALUATION OF QUARRIED ROCK. MAINTENANCE SEEDED AREAS ADJACENT TO THE ROADS AND PARKING AREAS SHOULD BE CHECKED PERIODICALLY TO ENSURE THAT A VIGOROUS STAND OF VEGETATION IS MAINTAINED. ROADSIDE DITCHES AND OTHER DRAINAGE STRUCTURES SHOULD

CHECKED REGULARLY TO ENSURE THAT THEY DO NOT BECOME CLOGGED

SHEET FLOW APPLICATIONS:

BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH BOTH ENDS OF ADJACENT BALES TIGHTLY ABUTTING

. ENM - EFFECTIVE NUETRALIZING MATERIAL AS PER

 ALL BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED. STRAW BALES SHALL BE INSTALLED SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. (IN ORDER TO PREVENT DETERIORATION OF THE BINDINGS).

3. THE BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED AND CHINKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHALL CONFORM TO THE GROUND LEVEL ON THE DOWNHILL AND SHALL BE BUILT UP TO 4 INCHES AGAINST THE UPHILL SIDE OF THE BARRIER (SEE DETAIL

4. EACH BALE SHALL BE SECURELY ANCHORED BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES OR REBARS SHALL BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES.

THE GAPS BETWEEN BALES SHALL BE CHINKED (FILLED BY WEDGING) WITH STRAW TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES. (LOOSE STRAW SCATTERED OVER THE AREA IMMEDIATELY UPHILL FROM A STRAW BALE BARRIER TENDS TO INCREASE BARRIER EFFICIENCY). INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL.

STRAW BALE BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED. CHANNEL FLOW APPLICATIONS:

PERPENDICALAR TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. THE REMAINING STEPS FOR INSTALLING A STRAW BALE BARRIER FOR SHEET FLOW APPLICATIONS APPLY HERE, WITH THE FOLLOWING

BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE,

3. THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE TO ASSURE THAT SEDIMENT-LADEN RUNOFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT

MAINTENANCE

I. STRAW BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED FENCE, END RUNS AND UNDERCUTTING BENEATH FENCE.

NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF SILT FENCE SHALL BE ACCOMPLISHED PROMPTLY. 4. SEDMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE—HALF THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

### **GRADING/SEDIMENT & EROSION CONTROL NOTES**

1. SEDIMENT AND EROSION CONTROL SHALL NOT BE LIMITED TO THE MEASURES SHOWN ON THE PLANS. THE CONTRACTOR, WITH THE APPROVAL OF THE CITY INSPECTOR, SHALL UTILIZE BEST MANAGEMENT PRACTICES TO PREVENT SEDIMENT FROM ENTERING ADJACENT PROPERTIES, ROADWAYS, STORM SEWERS, AND DRAINAGE WAYS.

2. ALL FILLED PLACES UNDER PROPOSED STORM AND SANITARY SEWER LINES AND/OR PAVED AREAS INCLUDING TRENCH BACKFILLS WITHIN AND OFF THE ROAD RIGHT-OF-WAY SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPACTION TEST" ( ASTM D-1557). ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.

3. ALL FILLED PLACES IN PROPOSED ROADS (HIGHWAYS) SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP TO 95 PERCENT MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPACTION TEST" (ASTMD-1557). PAVED AREAS IN CUTS SHALL MEET THE SAME COMPACTION REQUIREMENTS, ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING OPERATIONS.

4. ANY WELLS AND/OR SPRINGS WHICH MAY EXIST ON THIS PROPERTY SHOULD BE LOCATED AND SEALED IN A MANNER ACCEPTABLE TO CITY OF O'FALLON CONSTRUCTION INSPECTION DEPARTMENT.

5. ALL TRASH AND DEBRIS ON-SITE, EITHER EXISTING CONSTRUCTION. MUST BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE.

6. DEBRIS AND FOUNDATION MATERIAL FROM ANY EXISTING ON-SITE BUILDING OR STRUCTURE WHICH IS SCHEDULED TO BE RAZED FOR THIS DEVELOPMENT MUST BE PROPERLY DISPOSED OF OFF-SITE.

7. SOFT SOILS IN THE BOTTOM AND BANKS OF ANY EXISTING OR FORMER POND SITES OR TRIBUTARIES OR ANY SEDIMENT BASINS OR TRAPS SHOULD BE REMOVED, SPREAD OUT AND PERMITTED TO DRY SUFFICIENTLY TO BE USED AS FILL. NONE OF THIS MATERIAL SHOULD BE PLACED IN PROPOSED PUBLIC RIGHT-OF-WAY LOCATIONS OR ON ANY STORM SEWER LOCATION.

8. A PRE-CONSTRUCTION CONFERENCE MUST BE SCHEDULED WITH THE CONSTRUCTION INSPECTION MANAGER PRIOR TO THE START OF EACH CONSTRUCTION PHASE OF LAND DISTURBANCE ACTIVITY. THE PERMITEE WILL BE RESPONSIBLE FOR NOTIFYING ALL CONTRACTORS, UTILITY CREWS, THE STORM WATER MANAGEMENT COORDINATOR FROM THE CITY OF O'FALLON, AND OTHER ENTITIES THAT WILL PERFORM WORK AT THE SITE TO BE IN ATTENDANCE.

9. PLEASE NOTIFY THE CONSTRUCTION INSPECTION DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CLEARING, GRADING, AND/OR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR AN INSPECTION OF THE SITE.

10. ALL EXCAVATIONS, GRADING OR FILLING SHALL HAVE FINISHED GRADE NOT TO EXCEED A 3:1 SLOPE, OR AS APPROVED BY THE SOILS

11. TEMPORARY SILTATION CONTROL MEASURES (STRUCTURAL) SHALL BE

MAINTAINED UNTIL VEGETATIVE COVER IS ESTABLISHED AT A SUFFICIENT

12. UPON COMPLETION OF STORM SEWERS, SILTATION CONTROL SHALL BE PROVIDED AROUND ALL OPEN SEWER INLETS AND SHALL REMAIN UNTIL THE DISTRIBUTED DRAINAGE AREAS HAVE BEEN PROPERLY STABILIZED.

DENSITY TO PROVIDE EROSION CONTROL ON THE SITE

13. WHERE NATURAL VEGETATION IS REMOVED DURING GRADING, VEGETATION, SHALL BE REESTABLISHED IN SUCH A DENSITY AS TO PREVENT EROSION.

14. WHEN MECHANIZED LAND CLEARING ACTIVITIES ARE COMPLETED OR SUSPENDED FOR MORE THAN 2 WEEKS, EITHER TEMPORARY VEGETATION MUST BE ESTABLISHED OR TEMPORARY SILTATION CONTROL MEASURES MUST BE PUT IN PLACE WITH THE REVIEW AND APPROVAL OF THE CONSTRUCTION INSPECTION DEPARTMENT.

15. WHEN GRADING OPERATIONS ARE COMPLETED OR SUSPENDED FOR MORE THAN 2 WEEKS, PERMANENT GRASS MUST BE ESTABLISHED AT SUFFICIENT DENSITY TO PROVIDE EROSION CONTROL ON THE SITE. BETWEEN PERMANENT GRASS SEEDING PERIODS, TEMPORARY COVER SHALL BE PROVIDED ACCORDING TO THE RECOMMENDATION OF THE CONSTRUCTION INSPECTION DEPARTMENT.

16. ALL FINISHED GRADES (AREAS NOT TO BE DISTURBED BY FUTURE IMPROVEMENT) IN EXCESS OF 20% SLOPES (5:1) SHALL BE MULCHED AND TACKED AT THE RATE OF 100 POUNDS PER 1,000 SQUARE FEET WHEN SEEDED.

17. ALL LOTS SHALL BE SEEDED AND MULCHED AT THE MINIMUM RATES DEFINED IN THE ST. CHARLES COUNTY SOIL AND WATER CONSERVATION DISTRICT GUIDELINES, OR SODDED, BEFORE AN OCCUPANCY PERMIT MAY BE ISSUED, EXCEPT THAT A TEMPORARY OCCUPANCY PERMIT MAY BE ISSUED BY THE BUILDING DEPARTMENT IN CASES OF UNDUE HARDSHIP BECAUSE OF UNFAVORABLE GROUND

18. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION 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 CONTROL ARE DETAILED IN THE PLAN.) CONTROL SHALL COMMENCE WITH THE CLEARING OPERATIONS AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR THE CITY OF O'FALLON. 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 MAY AT THEIR OPTION DIRECT THE CONTRACTOR IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITING OF SILT OR MUD ON NEW OR EXISTING PAVEMENT SHALL BE REMOVED IMMEDIATELY. ANY DEPOSITING OF SILTS OR MUD IN NEW OR EXISTING STORM 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.

19. ALL EROSION CONTROL SYSTEMS ARE INSPECTED AND NECESSARY CORRECTIONS MADE WITHIN 24 HOURS OF ANY RAINSTORM RESULTING IN ONE-HALF INCH OF RAIN OR MORE.

20. GRADING CONTRACTOR SHALL PROVIDE A WATER TRUCK AS NEEDED TO KEEP THE DUST CONTROL TO A MINIMUM.

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