

GENERAL NOTES

- 1. ALL UTILITIES SHOWN HAVE BEEN LOCATED BY OTHERS FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED.
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 THE CITY OF O'FALLON OR AS MODIFIED ON THESE PLANS.

TREE PROTECTION NOTES

- 1. THE PROTECTION AREA AROUND TREES SHALL INCLUDE ALL LAND WITHIN THE CANOPY DROP LINE. THIS AREA SHALL REMAIN FREE OF ALL GRADING AND FILLING ACTIVITIES.
2. CONSTRUCTION SITE ACTIVITIES SUCH AS PARKING, MATERIAL STORAGE, SOIL STOCK PILING, AND CONCRETE WASHOUT SHALL NOT BE PERMITTED WITHIN TREE PROTECTION AREAS.

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

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EARTHWORK NOTES

ESTIMATED GRADING QUANTITIES:

15% SHRINKAGE FACTOR INCLUDED
CUT VOLUME - 8,600 CUBIC YDS
FILL VOLUME - 20,700 CUBIC YDS

12,100 CY SHORT (REFER TO MASS GRADING PLANS FOR HAUL ROUTE)
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

- SILTATION CONTROL GENERAL NOTES
1. INSTALLATION OF ALL PERIMETER SEDIMENT CONTROL SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN (7) DAYS OF GRUBBING THE SITE.
2. INSPECTION OF SILTATION CONTROL DEVICES SHALL TAKE PLACE EVERY SEVEN DAYS AND WITHIN 24 HOURS OF ANY 2.5"/24 HOUR RAIN EVEN ANY SILTATION CONTROL IN NEED OF REPAIR SHALL OCCUR IMMEDIATELY.

- 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 10 PERCENT.
2. GRADES SHOULD BE SUFFICIENT TO PROVIDE DRAINAGE, BUT SHOULD NOT EXCEED 4 PERCENT.

- 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.
ON-SITE:
REFER TO DRAWINGS FOR AREAS WHICH SHALL BE STABILIZED WITH APPROPRIATE TEMPORARY OR PERMANENT VEGETATION ACCORDING TO THE APPLICABLE STANDARDS AND SPECIFICATIONS.

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

- TEMPORARY:
WHEAT OR RYE - 150 LBS./AC. (2.5 LBS. PER 1,000 SQUARE FOOT)
OATS - 120 LBS./AC. (2.75 LBS. PER 1,000 SQUARE FOOT)

- SEEDING PERIODS:
FESCUE OR BROME - MARCH 1 TO JUNE 1
WHEAT OR RYE - MARCH 15 TO OCTOBER 1
OATS - MARCH 15 TO SEPTEMBER 15

- MULCH RATES: 100 LBS. PER 1,000 SQ. FEET (4,306 LBS. PER ACRE)

- FERTILIZER RATES:
NITROGEN 30 LBS./AC.
PHOSPHATE 30 LBS./AC.
POTASSIUM 30 LBS./AC.
LIME 800 LBS./AC. ENH\*

- \* ENH = EFFECTIVE NEUTRALIZING MATERIAL AS PER STATE EVALUATION OF QUARRIED ROCK.

- MAINTENANCE
SEDED 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 BE CHECKED REGULARLY TO ENSURE THAT THEY DO NOT BECOME CLOGGED WITH SILT OR OTHER DEBRIS.

- SHEET FLOW APPLICATIONS:
1. BALES SHALL BE PLACED IN A SINGLE ROW LENGTHWISE ON THE CONTOUR, WITH BOTH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

- CHANNEL FLOW APPLICATIONS:
1. BALES SHALL BE PLACED IN A SINGLE ROW LENGTHWISE, ORIENTED PERPENDICULAR TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

- MAINTENANCE
1. STRAW BALE 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 FENCE, END RIMS AND UNDERCUTTING BENEATH FENCE.

- 3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF SILT FENCE SHALL BE ACCOMPLISHED PROMPTLY.

- 4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIERS.

- 5. 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.

- SILT FENCE SPECIFICATIONS
1. SILT FENCE TO BE WOVEN GEOTEXTILE FABRIC MIMAT 100K OR EQUAL.
2. FABRIC TO BE SUPPORTED BY METAL TEE POST WITH SPADE BASE SPACED ON 8' CENTERS WITH 4" X 4" X 1/2" X 10' TO GAGE WELDED WIRE FENCE.
3. FABRIC SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED A MINIMUM OF 6" INCHES DEEP FOR THE LENGTH OF THE FENCE. THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE FENCE. SEE DETAIL SHEET C10.10.

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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 DRAINAGEWAYS.
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" (ASTM-D-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, 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 ENGINEER.

- 11. TEMPORARY SILTATION CONTROL MEASURES (STRUCTURAL) SHALL BE MAINTAINED UNTIL VEGETATIVE COVER IS ESTABLISHED AT A SUFFICIENT DENSITY TO PROVIDE EROSION CONTROL ON THE SITE.

- 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.

- 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 SOODED, 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 CONDITIONS.

- 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 GRADING 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 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.

Table with columns: REVISIONS, DATE, BY, FOR, COMMENTS

DEVELOPER/OWNER: THE VILLAGE AT PARK PLACE, LLC. 1001 BOARDWALK SPRINGS PL. OFALLON, MO 63366 PHONE: (636) 561-9323

SEAL: CITY OF O'FALLON, MISSOURI. MATHIEW R. KESTER, ENGINEER. NUMBER: 0000000000. EXPIRES: 12/31/2008.

PLANNING AND DEVELOPMENT DEPARTMENT FILE #9831.57 (AREA PLAN-APPROVED MAY 24TH, ORDINANCE #1878) - 9831.57.01 (FINAL PLAN)

PARK AVENUE VILLAGE IMPROVEMENT PLANS

COLE and ASSOCIATES INCORPORATED

10777 sunset office drive saint louis, missouri 63127 p: 314 984 9887 f: 314 984 0587

DESIGNED BY: CJB, DRAWN BY: KDK, CHECKED BY: JFH

DATE: 11/6/07, Job Number: 07-075, Sheet Number: C2.0

planning • engineering • surveying • landscape architecture

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