PRINCIPLES & STANDARDS:

1. All excavations, grading, or filling shall have a finished grade not to exceed a 3:1 slope (33 %). Steeper grades may be approved by the designated official if the excavation is through rock or the excavation or the fill is adequately protected (a designed head wall or toe wall may be required). Retaining walls that exceed a height of four (4) feet shall require the construction of safety guards as identified in the appropriate section(s) of the adopted BOCA Codes and must be approved by the Building Department. Permanent safety guards will be constructed in accordance with the appropriate section(s) of the adopted BOCA Codes.

2. Sediment and erosion control plans for sites that exceed 20,000 square feet of grading shall provide for sediment or debris basins, silt traps or filters, staked straw bales or other approved measures to remove sediment from run-off waters. The design to be approved by the Designated Official. Temporary siltation control measures (structural) shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.

3. Where natural vegetation is removed during grading, vegetation shall be reestablished in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible during the next seeding period after grading has been completed.

4. When grading operations are completed or suspended for more than 30 days 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 City Engineer's recommendations. 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.

5. Provisions shall be made to accommodate the increased runoff caused by changed soils and surface conditions during and after grading. Unvegetated open channels shall be designed so that gradients result in velocities of 2 fps (feet per second) or less. Open channels with velocities more than 2 fps and less that 5 fps shall be established n permanent vegetation by use of commercial erosion control blankets or lined with rock rip rap or concrete or other suitable materials as approved by the City Engineer. Detention basins, diversions, or other appropriate structures shall be constructed to prevent velocities above 5 fps.

6. The adjoining ground to development sites (lots) shall be provided with protection from accelerated and increased surface water, silt from erosion, and any other consequence of erosion. Run-off water from developed areas (parking lots, paved sites and buildings) above the area to be developed shall be directed to diversions, detention basins, concrete gutters and/or underground outlet systems. Sufficiently anchored straw bales may be temporarily substituted with the approval of the City Engineer.

7. Development along natural watercourses shall have residential lot lines, commercial or industrial improvements, parking areas or driveways set back a minimum of 25 feet from the top of the existing stream bank. The watercourse shall be maintained and made the responsibility of the subdivision trustees or in the case of a site plan by the property owner. Permanent vegetation should be left intact. Variances will include designed stream bank erosion control measures and shall be approved by the City Engineer, FEMA and U.S. Army Corps of Engineers guidelines shall be followed where applicable regarding site development areas designated as flood plains and wetlands.

8. All lots shall be seeded and mulched at the minimum rates defined in Appendix A or sodded before an occupancy permit shall 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.

> 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) Oats

- March 1 to June 1 Fescue or Brome -August 1 to October 1 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

30 lbs./oc. Phosphate Potassium 30 lbs./oc. 600 lbs./ac. ENM* ENM = effective neutrolizing material as per State evaluation of quarried rock.

REFERENCE BENCHMARK

R.M. #45 - ELEV.=526.16 (U.S.G.S. DATUM) CHISELED SQUARE ON THE SOUTHEAST WINGWALL OF THE LAKE ST. LOUIS BOULEVARD BRIDGE OVER THE SPILLWAY OF LAKE ST. LOUIS.

SITE BENCHMARK

FIRE HYDRANT - ELEV.=520.30 FIRE HYDRANT 155.00 FEET FROM THE SOUTHEAST CORNER OF LOT 3

A SET OF AS-BUILT PLANS FOR PERUQUE CROSSING - LOT 3

TWO TRACTS OF LAND IN U.S. SURVEY 54,



TOWNSHIP 47 NORTH, RANGE 2 EAST CALL BEFORE OF THE FIFTH PRINCIPAL MERIDIAN YOU DIG! -800-DIG-RITE ST. CHARLES COUNTY, MISSOURI

GENERAL NOTES

1. Underground utilities have been plotted from available information and therefore their locations 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 the improvements.

2. All trench backfills under paved areas shall be granular backfill, and shall be compacted to 90% of the maximum density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test. (A.S.T.M.-D-1557). All other trench backfills may be earth material (free of large clods or stones). All trench backfills shall be water jetted.

3. All filled places under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 90% of the maximum density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test. or 95% of maximum density as determined by the standard Proctor Test A.A.S.H.T.O. T-99. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations.

4. No area shall be cleared without the permission of the Project Engineer.

5. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.

All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match pre-construction conditions.

7. All construction and materials shall conform to the current construction standards of the City of O'Fallon.

8. Any permits, licenses, easements, or approvals required to work on public or private properties or roadways are the responsibility of the developer.

No slopes shall exceed 3(H): 1(V).

10. 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 siltaion 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 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 his methods as deemed fit to protect property and improvements. Any depositing of silts or mud on new or existing pavement or 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 and/or MODOT.

11. Erosion control systems shall not be limited to what is shown on the plan. Whatever means necessary shall be taken to prevent siltation and erosion from entering natural streams and adjacent roadways, properties and ditches.

12. Detention is provided on Common Ground of Perugue Crossing.

13. All building mounted lights shall be pointed downward and fully screened to prevent light from spilling over onto adjaent properties.

14. All ground hyac mechanical units to be screened from view.

14. Developer must supply City Construction Inspectors with soil reports prior to or during site soil testing.

15. All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.

16. All sidewalks, curb ramps, ramps and accessible parking spaces shall be constructed in accordance with the current approved "Americans with Disabilities Act Accessibility Guidelines" (ADAAG) along with the required grades, construction materials, specifications and signage. If any conflict accurs between the above information and the plans, the ADAAG guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer. Ensure at least one 8' wide handicap access aisle is provided and curb ramps do not project into handicap access aisles.

17. Brick shall not be used in the construction of storm or sanitary sewer structures.

18. The Contractor shall ensure all storm and sanitary sewer joint shall be gasketed O-Ring Type.

19. Lighting values will be reviewed on the site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with City standards.

20. All proposed fencing requires a seperate permit through the Planning Devision.

21. All sign locations and sizes must be approved separately through the Planning Division.

GENERAL NOTES

22. All sign post and 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 O'Fallon and MoDOT). Sign designating street names shall be on the opposite side of the street from traffic control

23. All new utility line shall be located underground.

24. All erosion control systems shall be inspected and necessary corrections shall be made within 24 hours of any rainstorm resulting in one-half inch of

25. All graded areas that are to remain bare for over 2 weeks shall be seeded and mulched per DNR requirements.

DEVELOPMENT NOTES

1. Area of Tract: Existing Zoning: Proposed Use:

Setbacks:

.506 of 19.15 Acres C-2 (City of O'Fallon) Office Building 25' Front 0' Side O' Rear

50' Maximum Building Height

5. Current Owner & Developer of Property: S.S. & D. PROPERTIES, L.L.C. 501 FIRST CAPITOL DR. ST. CHARLES, MO 63301 (636) 946-9753

6. Site is served by:

AmerenUE Lacclede Gas Company Public Water District No. 2 Verizon Telephone Company Wentzville School District Lake St. Louis Fire Protection District City of O'Fallon Sewers

7. No Flood Plain exists on this site per F.I.R.M. #29183 C 0220, dated Aug. 2, 1996.

8. Topographic information is per Walker and Associates on USGS

9. Boundary information is per Bax Engineering Survey during June

10. Parking Requirements: 1 space per 300 sq. ft. of floor area. $4.019 \text{ sq. ft.} / 300 = 13.4 \sim 14$ Spaces required = 14 Spaces provided = 22 (including 1 handicap space)

Landscape requirements: 1 tree per 40' of street frontage 98.18' / 40' = 2.45 trees required 3 trees provided

> Not less than 6% of the interior of the parking lot shall be landscaped. 22 spaces x 270 sq. ft. = 5,940 sq. ft. required Interior landscaping provided = 454.89 sq ft. Interior landscaping required = 6% x 5940 = 356 sq.ft.

12. Site Calculations: 22029.14 sq. ft. lot Building area: 4,019 sq. ft. Landscape area: 7,188.80 Pavement area: 10,821.34

GRADING NOTES:

1. A Geotechnical Engineer shall be employed by the owner and be on site during grading operations. All soils tests shall be verified by the Geotechnical Engineer concurrent with the grading and back filling operations.

2. The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied there from, all in accordance with the plans and notes as interpreted by the Geotechnical Engineer.

3. The Contractor shall notify the Solls Engineer at least two days in advance of the start of the grading operation.

4. All areas shall be allowed to drain. All low points shall be provided with temporary

5. A sediment control plan that includes monitored and maintained sediment control basins and/or straw bales should be implemented as soon as possible. No graded area is to be allowed to remain bare over the winter without being seeded and mulched. Care should be exercised to prevent soil from damaging adjacent property and silting up existing downstream storm drainage system.

6. Any existing trash and debris currently on this property must be removed and

Soft soil in the bottom and banks of any existing or former pond sites or tributaries should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on storm sewer locations.

B. Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds; the grubbing and removal of roots and other surface obstructions from the site; and the demolition and removal of any man-made structures. The unsuitable material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly disced prior to the placement of any fill. The Soils Engineer shall approve the discing operation.

9. Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory roller, or high speed impact type drum rollers acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.

10. The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill, Interim reports showing fill quality will be made to the Owner at regular

11. The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of

12. All areas to receive fill shall be scarlfied to a depth of not less than 6 inches and then compacted in accordance with the specifications given below. Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal benches, cut into the slopes before the placement of any fill. The width and height to be determined by the Soils Engineer. The fill shall be loosely placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.

13. The sequence of operation in the fill areas will be fill, compact, verify acceptable soil density, and repetition of the sequence. The acceptable moisture contents during the filling operation are those at which satisfactory dry densities can be obtained. The acceptable moisture contents during the filling operation in the remaining areas are from 2 to 8 percent above the optimum moisture control.

14 The surface of the fill shall be finished so that 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. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze.

15. All sitation control devices shall be inspected by the contractor after any rain of 1/2" or more with any appreciable accumulation of mud to be removed and siltation measures repaired where necessary.

16. No slope shall be steeper than 3(Horizontal):1(Vertical). All slopes shall be sodded or seeded and mulched.

17. Fill and back fill shall be compacted to the criteria specified in the following table: PERCENT COMPACTION % Fill in building areas below footings

Fill under slabs, walks, and pavement Fill other than building areas Natural sub grade Pavement sub grade Pavement base course

90 % 90 % Measured as a percent of the maximum dry density as determined by Standard

Proctor Test (ASTM-D-698). Moisture content must be within 2 percent below or 4 percent above optimum moisture content if fill is deeper than 10 feet.

18. Any contaminated soil encountered during excavation shall be hauled and placed as directed by the owners environmental engineering representative.

GRADING QUANTITIES:

905 C.Y. CUT (INCLUDES SUBGRADES) 905 C.Y. FILL (INCLUDES 15% SHRINKAGE) BALANCED

THE ABOVE GRADING QUANTITY IS APPROXIMATE ONLY, NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL VERIFY QUANTITIES PRIOR TO CONSTRUCTION.

THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS.

ALI PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

SEWER MEASUREMENTS



LIGHT POLE SANITARY SEWER & MANHOLE ------STORM SEWER & INLET MAILBOX ELECTRIC LINE -E-GAS LINE —G— WATER LINE ---w---__T_ TELEPHONE LINE CABLE TV LINE -CATV-OVERHEAD WIRE - OHW-CD UTILITY POLE (D)UTILITY POLE W/ DOWN GUY FIRE HYDRANT WATER VALVE ⊗ WM WATER METER GAS VALVE ROAD SIGN -0-TEL. PED. TELEPHONE PEDESTAL

STANDARD SYMBOLS & ABBREVIATIONS

0

TREE OR BUSH

SHEET INDEX

1 - COVER SHEET 2 - SITE PLAN/PROFILES

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DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intende to be authenticated by my seal are limited to this sheet, and I hereby disclaim any respon-sibility for all other Drawings. Specifications, Estimates, Reports or other documents or instruments relating to or intended to be use for any part or parts of the architectural or engineering project or survey

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REVISIONS 07/16/10 ADDED SITE BM



ENGINEERING PLANNING SURVEYING

1052 South Cloverleaf Drive St. Peters, MO. 63376-6445 636-928-5552 FAX 928-1718

00-11282D PROJECT NUMBER SHEET OF 11282D-ASB.DWG FILE NAME DRAWN

DESIGNED CHECKED

Planning and Zoning File # 2001.02

