

GRADING NOTES

- 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 backfilling operations. The developer shall also supply the City construction inspector with the soil report(s) prior to or during site soil testing.
- The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied therefrom, all in accordance with the plans and notes as interpreted by the Geotechnical Engineer.
- The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
- All areas shall be allowed to drain. All low points shall be provided with temporary ditches.
- All filled places, including trench backfills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90% of maximum density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test," (A.S.T.M.-D-1557), or 95% maximum density as determined by the Standard Proctor Test, A.A.S.H.T.O. T-99. ALL filled places in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations. Ensure the moisture content of the soil in fill areas is to correspond to the compactive effort as defined by the standard or modified proctor test. Optimum moisture content shall be determined using the same test that was used for compaction curves shall be submitted to the city of O'Fallon prior to the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon.
- Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be disposed of off-site.
- All trash and debris on site, either existing or from construction, must be removed and properly disposed of off-site.
- Soft soil in the bottom and banks of any existing or former pond sites or tributaries or on 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 locations.
- 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 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.
- Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory rollers, 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 bedding of successive fill layers.
- 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 intervals.
- 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 additional fill.
- All areas to receive fill shall be scarified 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.
- 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.
- Ensure graded areas that are to remain bare for over 2 weeks are seeded and mulched. (DNR Requirement).

LANDSCAPE LEGEND

QTY: 15 INDICATES PROPOSED HARDWOOD TREE (ashes, oaks, maples, birches, sweet gum) (Minimum 2" caliper)

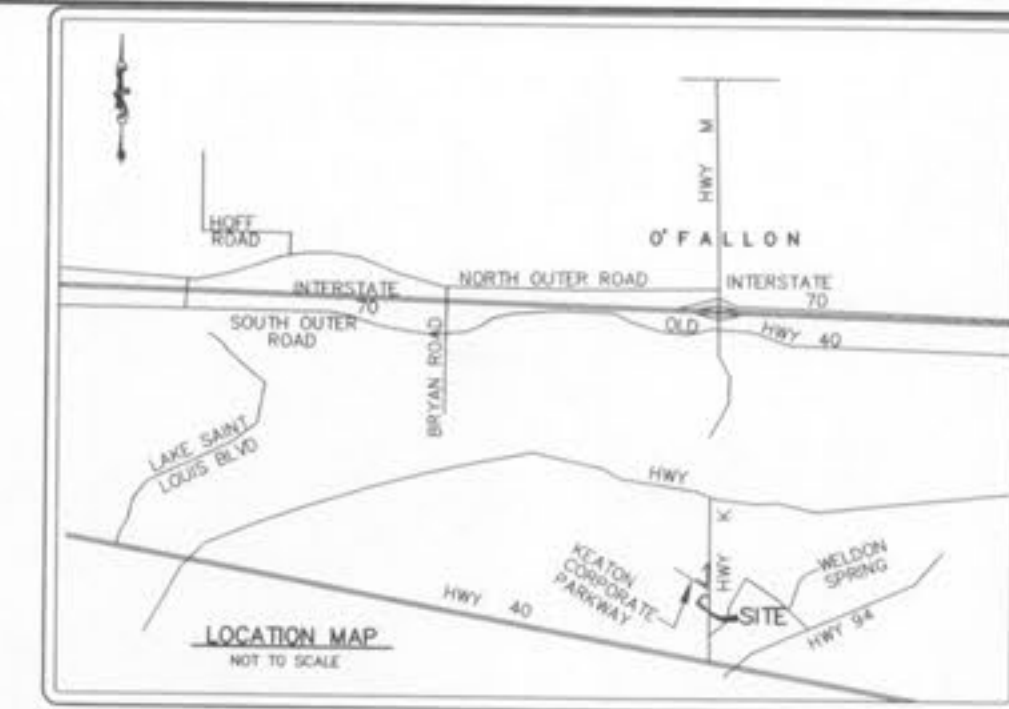
QTY: 20 INDICATES PROPOSED EVERGREEN SHRUB (mugo pines, yews, junipers, hollies, boxwoods) (Minimum 4' in height)

LANDSCAPING AS DEPICTED IS SUBJECT TO FINAL DESIGN BY A QUALIFIED LANDSCAPE DESIGNER

PRINCIPALS & STANDARDS

- 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 City Building Department. Permanent safety guards will be constructed in accordance with the appropriate section(s) of the adopted BOCA Codes.
- 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. Temporary siltation control measures shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.
- Where natural vegetation is removed during grading, vegetation shall be re-established 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.
- When grading operations are completed or suspended for more than 14 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.
- 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 needed.
- 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 than 5 fps shall be established in permanent vegetation by use of commercial erosion control blankets or lined with rock riprap or concrete or other suitable materials. Detention basins, diversions or any other appropriate structures shall be constructed to prevent velocities above 5 fps.
- 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.
- 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 trustee or in the case of a site plan by the property owner. Permanent vegetation should be left intact. Variations will include designed stream bank erosion control measures. FEMA and U.S. Army Corps of Engineers guidelines shall be followed where applicable regarding site development areas designated as flood plains and wetlands.
- All lots shall be seeded and mulched or sodded before an occupancy permit shall be issued except that a temporary occupancy permit may be issued by the Building Department in case of undue hardship because of unfavorable ground conditions.

**A SET OF CONSTRUCTION PLANS FOR
CULPEPPER'S BAR & GRILL**
A TRACT OF LAND BEING ALL OF LOT 3
OF KEATON COOPERATE PARK, PLAT TWO IN U.S. SURVEY 1669,
TOWNSHIP 46 NORTH, RANGE 3 EAST OF THE FIFTH
PRINCIPAL MERIDIAN, ST. CHARLES COUNTY, MISSOURI



GENERAL NOTES

- 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.
- NO AREA SHALL BE CLEARED WITHOUT THE PERMISSION OF THE PROJECT ENGINEER.
- ALL GRADES SHALL BE WITHIN 0.2 FEET OF THOSE SHOWN ON THE GRADING PLAN.
- NO SLOPE SHALL BE STEEPER THAN 3:1. ALL SLOPES SHALL BE SODDED OR SEEDED AND MULCHED.
- ALL CONSTRUCTION AND MATERIALS USED SHALL CONFORM TO CURRENT CITY OF O'FALLON STANDARDS.
- ALL UTILITIES SHOWN ARE EXISTING UNLESS OTHERWISE NOTED. ALL NEW UTILITIES SHALL BE LOCATED UNDERGROUND.
- ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
- THE DEVELOPER SHALL COMPLY WITH CURRENT ARTICLE 13 PERFORMANCE STANDARDS.
- ONE LANE OF ROADWAY SHALL REMAIN OPEN AT ALL TIMES AND TRAFFIC CONTROL SHALL MEET MISSOURI DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
- ALL CONSTRUCTION METHODS AND PRACTICES TO CONFORM WITH OSHA STANDARDS.
- THE DEVELOPER SHALL COMPLY WITH CURRENT TREE PRESERVATION ORDINANCE NUMBER 1689 AND PROVIDE LANDSCAPING AS SET FORTH IN ARTICLE 23 OF THE CITY OF O'FALLON ZONING ORDINANCES.
- THE DEVELOPER MUST SUPPLY CITY CONSTRUCTION INSPECTORS WITH SOIL REPORTS PRIOR TO OR DURING SITE SOIL TESTING.
- 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 AND/OR MoDOT. THE CONTRACTOR'S RESPONSIBILITIES 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.
- ALL SIGN LOCATIONS AND SIZES MUST BE APPROVED SEPARATELY THROUGH THE PLANNING DIVISION. SIGN LOCATIONS NOT KNOWN AT THIS TIME.
- ALL SIGN POST AND BACKS AND BRACKET ARMS SHALL BE PAINTED BLACK USING CARBOLINE RUSTBOND PENETRATING SEALER 56 AND CARBOLINE 133 PAINT (OR EQUIVALENT AS APPROVED BY CITY AND MoDOT). SIGNS DESIGNATING STREET NAME SHALL BE ON THE OPPOSITE SIDE OF THE STREET FROM TRAFFIC CONTROL SIGNS.
- LIGHTING VALUES WILL BE REVIEWED ON SITE PRIOR TO FINAL OCCUPANCY INSPECTION. CORRECTIONS WILL NEED TO BE MADE IF NOT IN COMPLIANCE WITH CITY STANDARDS.
- ALL STORM AND SANITARY STRUCTURES SHALL NOT BE CONSTRUCTED WITH BRICK. ALL STORM SEWER JOINTS SHALL BE GASKETED O-RING TYPE.
- ALL PAVING TO BE IN ACCORDANCE WITH ST. CHARLES COUNTY STANDARDS AND SPECIFICATIONS EXCEPT AS MODIFIED BY THE CITY OF O'FALLON ORDINANCE.
- 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 REQUIRED GRADES, CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE. IF ANY CONFLICT OCCURS BETWEEN THE ABOVE INFORMATION AND THE PLAN, THE ADAAG GUIDELINES SHALL TAKE PRECEDENCE AND THE CONTRACTOR PRIOR TO ANY CONSTRUCTION SHALL NOTIFY THE PROJECT ENGINEER. (ENSURE AT LEAST AN 8' WIDE HANDICAP ACCESS ISLE IS PROVIDED AND CURB RAMPS DO NOT PROJECT INTO HANDICAP ACCESS ISLE).
- BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES.

DEVELOPMENT NOTES

- Area of Tract: 1.588 Acres
- Existing Zoning: C-2 General Business
- Proposed Use: Restaurant
- Area of Building: 5,040 sq.ft.
- The required height and building setbacks are as follows:
Minimum Front Yard: 25 feet
Minimum Side Yard: None
Minimum Rear Yard: None
Front Yard Parking Setback: 10 feet
- Site is served by:
Duckett Creek Sanitary Sewer District- 636-441-1244
Ameren UE- 636-639-8312
Laclede Gas Company- 314-658-5417
Public Water District #2- 636-561-3737
SBC Telephone Company- 636-949-1321
Cottleville Fire- 636-441-8799
MoDOT- 314-540-4100
- According to the Flood Insurance Rate Map of the City of O'Fallon, (Community Panel number 290316 0430 E dated August 2, 1996) this property lies within Zone X. Zone X is defined as an area of minimal flood hazard.
- Parking Required:
Total building area = 5,040 sq.ft.
20 spaces plus 1 per 100 sq. ft. of floor area
20 + (5,040 / 100) = 70.4 ~ 70 spaces required
Total Parking Provided: 127 spaces (including 5 handicap spaces)
- Landscape Required:
Interior Landscape Requirements:
126 (sq.ft.) x 270 = 34,020 S.F.
34,020 sq. ft. x 6% = 2,041 S.F.
Total Interior Landscape Required: 2,041 S.F.
Total Interior Landscape Provided: 3,854 S.F.
Street Tree Requirements:
1 tree every 40' of frontage = 451.43 / 40 = 11.28
Street Trees Required: 11 Trees
Open Space Landscape Requirements:
11,050 S.F. / 3,000 S.F. = 3.68
Total Open Landscape Required: 4 Trees
- Site Coverage Calculations:
Building = 5,040 sq.ft. = 7%
Pavement = 53,446 sq.ft. = 77%
Green Space = 10,675 sq.ft. = 16%
- Existing detention basin provided for all of Keaton Corporate Park.
- Final Grading shall coordinate with the construction of Keaton Crossing Blvd.
- A photometric lighting plan shall be provided for review and approval by the Planning Division. Illumination attributable to exterior lighting, as measured at the property line, shall not exceed 0.5 foot-candles. Lighting values will be reviewed on site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with City Standards.
- All rooftop mounted HVAC and mechanical units shall be screened by a parapet wall that extends around the entire perimeter of the building, and has a minimum height that is at least as tall as the tallest unit mounted on the roof. Any ground mounted units shall be screened with materials and/or landscaping.
- No slope shall be steeper than 3:1. All slopes shall be sodded or seeded and mulched.
- Parking lot lighting will be provided per City Standards during Construction Plans.
- Property Owner:
Culpeppers
312 S. Kirkwood Road
St. Louis, Missouri 63122
- All construction methods and practices to conform with OSHA Standards.
- A photometric lighting plan shall be provided for review and approval by the Planning Division. Illumination attributable to exterior lighting, as measured at the property line, shall not exceed 0.5 foot-candles.

**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.

Temporary:
Wheat or Rye - 150 lbs./ac. (3.5 lbs. per square foot)
Oats - 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
Oats - 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 30 lbs./ac.
Lime 600 lbs./ac. ENM*

* ENM = effective neutralizing material as per State evaluation of quarried rock.

LEGEND

C.I.	CURB INLET	⊙	STREET LIGHT
D.C.I.	DOUBLE CURB INLET	⊙	EXISTING CONTOUR
A.I.	AREA INLET	582	PROPOSED CONTOUR
M.H.	MANHOLE	(582)	
F.E.	FLARED END SECTION		
E.P.	END PIPE	WV	WATER VALVE
C.P.	CONCRETE PIPE	WV	
R.C.P.	REINFORCED CONCRETE PIPE		
C.M.P.	CORRUGATED METAL PIPE		FLOWLINE ELEVATION OF HOUSE CONNECTION
C.I.P.	CAST IRON PIPE		
P.V.C.	POLY VINYL CHLORIDE (PLASTIC)		FLOWLINE ELEVATION OF SEWER MAIN
C.O.	CLEAN OUT		
	FIRE HYDRANT	⊙	
	STORM SEWER	⊙	
	SANITARY SEWER	⊙	

BENCHMARKS:

REFERENCE BENCHMARK - RMS7 ELEV. 548.01 "CHISELED SQUARE" ON THE SOUTHWEST END OF THE SOUTH HEADRAIL (RAMP) AT THE JUNCTION OF U.S. HIGHWAY 40 AND MISSOURI STATE HIGHWAY K. FEMA MAP29183C0430 E.

SITE BENCHMARK - ELEV. 550.81 "0" IN OPEN ON FIRE HYDRANT AT THE NORTHEAST CORNER OF SUBJECT PROPERTY.

SHEET INDEX

- COVER SHEET
- SITE PLAN
- GRADING PLAN
- DRAINAGE AREA MAP
- PROFILES AND DETAILS
- TRAFFIC CONTROL

3-10-04
APPROVED

O'FALLON FILE NUMBER 3302.07

PREPARED FOR:
CULPEPPERS
312 S. KIRKWOOD ROAD
ST. LOUIS, MISSOURI 63122
(314) 821-7553

DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be indicated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments related or intended to be used for any part or parts of the architectural or engineering project or survey.



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REVISIONS

01-23-04	Per City Comments
02-06-04	Per City Comments
02-17-04	Water Service Loc.
02-17-04	MoDOT Comments
02-18-04	Storm Sewer
03-08-04	Per Bldg. Dept.



**ENGINEERING
PLANNING
SURVEYING**

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

12-22-03	DATE
02-12221E	PROJECT NUMBER
12221ECON.dwg	FILE NAME
KLW	KLW
DRAWN	DRAWN
KTK	DESIGNED
CLH	CHECKED

Bldg. Inspector



CALL BEFORE
YOU DIG!
1-800-DIG-RITE

MoDOT WILL NEED TO BE CONTACTED DIRECTLY AT (314) 340-4100 FOR FIBER OPTIC LOCATIONS