

LANDSCAPE LEGEND

- QTY. (17) ~ INDICATES PROPOSED DECIDUOUS HARDWOOD TREE
Size: 3" min. caliper 1' above grade and 5' clear trunk
(ash, oaks, maples, birches, sweet gum)
- QTY. (13) ~ INDICATES PROPOSED EVERGREEN OR ORNAMENTAL SHRUB
(mugo pines, yews, junipers, hollies, boxwoods,
spruce, forsythia, barberries, privets, lilacs)

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

PRINCIPLES & STANDARDS:

- 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 there from, 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.
- 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 without being seeded and mulched. Core should be exercised to prevent soil from damaging adjacent property and silting up existing downstream storm drainage systems. All erosion control systems shall be inspected and necessary corrections made within 24 hours of any rain storm resulting in 1/2 inch of rain or more.
- 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 rollers shall be designed so as to avoid the creation of a layered fill without proper blending 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.
- All fill placed under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. All fill placed in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by soils engineer concurrent with grading and backfilling operations. Ensure the moisture content shall be determined using the same test that was used for compaction. Soil 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.

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 back filling operations.
- 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.
- 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.
- 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.
- Any existing trash and debris currently on this property must be removed and disposed of off-site.
- 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.
- 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.
- 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.
- 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.
- No slope shall be steeper than 3(Horizontal):1(Vertical). All slopes shall be sodded or seeded and mulched.
- Any contaminated soil encountered during excavation shall be hauled and placed as directed by the owners environmental engineering representative.
- Ensure graded areas that are to remain bare for over 2 weeks are seeded and mulched. (DNR Requirement).
- Ensure all erosion control systems are made and necessary corrections made within 24 hours of any rainstorm resulting in one-half inch of rain or more.

VEGETATIVE ESTABLISHMENT

For Urban Development Sites
APPENDIX A

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)
Oats - 120 lbs./ac. (2.75 lbs. per square foot)

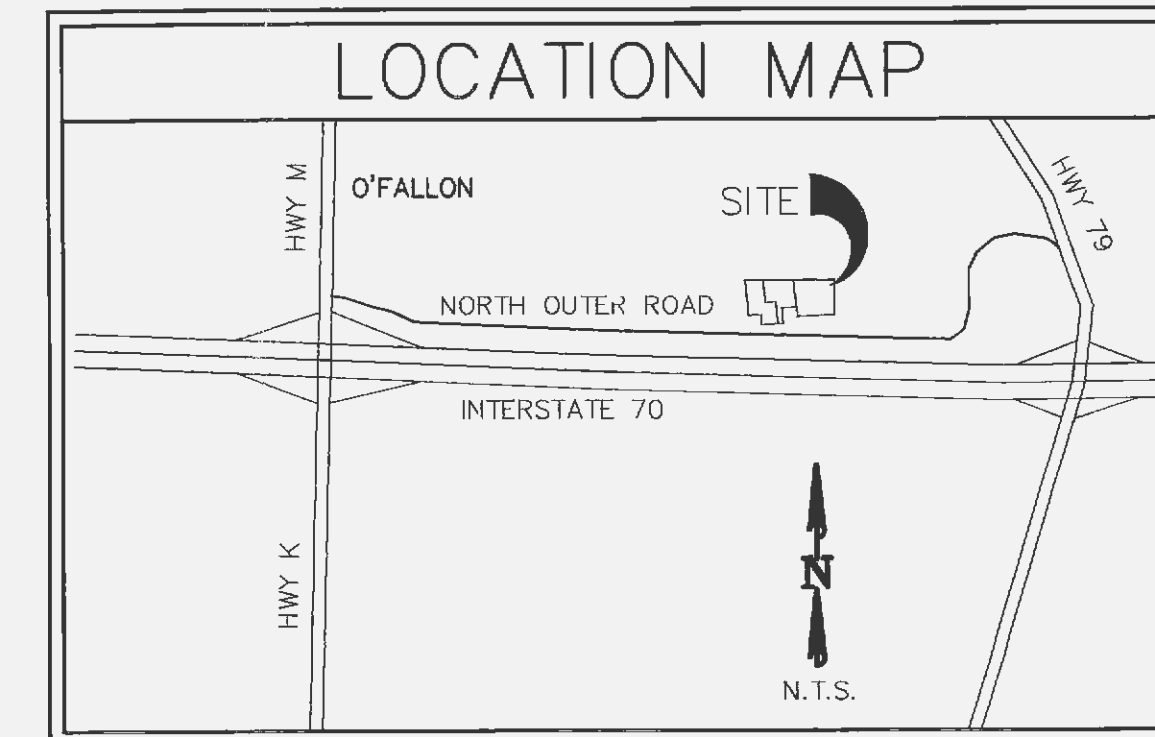
Fescue or Brome - March 1 to June 1
August 1 to October 1
Wheat or Rye - March 15 to November 1
Oats - March 15 to September 15

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.

**A SET OF CONSTRUCTION PLANS FOR
VATTEROTT COLLEGE
PARKING ADDITION
A TRACT OF LAND IN THE
EAST HALF OF THE NORTHEAST QUARTER
OF FRACTIONAL SECTION 28,
TOWNSHIP 47 NORTH, RANGE 3 EAST
OF THE FIFTH PRINCIPAL MERIDIAN,
ST. CHARLES COUNTY, MISSOURI**



GENERAL NOTES:

- Underground utilities have been plotted from available information and there-fore locations shall be considered approximate only. The verifications 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 improvements.
- Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary and storm sewers, including building laterals.
- All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match pre construction conditions.
- All fill, including places under proposed storm and sanitary sewer lines and paved areas within and off the road right-of-way shall be compacted to 90% of maximum density as determined by the "Standard Proctor Test (ASTM-D-698). All tests shall be verified by a Soils Engineer concurrent with grading and back filling operations. The compacted fill shall be free of rutting and shall be non-yielding and non-pumping during proof rolling and compaction. All trench backfills in paved areas shall be granular fill.
- The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system.
- All sanitary sewer flowlines and taps built without elevations furnished by the engineer will be the responsibility of the sewer contractor.
- Easements shall be provided for all public sanitary sewers, storm sewers and utilities on the record plat. See record plat (if required) for location and size of easement.
- All construction and materials shall conform to the current construction standards of the City of O'Fallon.
- The City of O'Fallon shall be notified at least 48 hours prior to start of construction for coordination and inspection.
- All sanitary sewer building connections have been designed so that the minimum vertical distances from the low point of the basement to the flowline of a sanitary sewer at the corresponding building connection is not less than the diameter of the pipe plus the vertical distance of 2-1/2 feet, (unless otherwise noted).
- All sanitary sewer manholes shall be waterproofed on the exterior in accordance Missouri Dept. Of Natural Resources specifications 10 CSR-8.120(7)(E).
- All PVC sanitary sewer pipe is to be SDR-35 or equal with "clean" 1/2 inch to 1 inch granular stone bedding uniformly graded. This bedding shall extend from 4 inches below the pipe to springline of pipe. Immediate back fill over pipe shall consist of same size "clean" or "minus" stone from springline of pipe to 6 inches above the top pipe. (Note: All P.V.C. Force Main shall be C-900, Class 200 P.V.C.)
- All sanitary and storm sewer trench backfills shall be water jetted. Granular back fill will be used under pavement areas.
- All pipes shall have positive drainage through manholes. No flat base structures are allowed.
- Brick shall not be used on sanitary sewer manholes.
- All PVC sanitary sewer pipe shall meet the following standards. A.S.T.M. D-3034 SDR-35 with wall thickness compression joint A.S.T.M. D-3212. An appropriate rubber seal waterstop as approved by the sewer district shall be installed between P.V.C. pipe and masonry structures. (Note: All P.V.C. Force Main shall be C-900, Class 200 P.V.C.)
- All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- Storm sewers 18 inch diameter and smaller shall be A.S.T.M. C-14 unless otherwise shown on the plans.
- Storm sewers 21 inch diameter and larger shall be A.S.T.M. C-76, Class II minimum, unless otherwise shown on the plans.
- All storm sewer pipe in the right-of-way shall be reinforced concrete pipe (A.S.T.M. C-76, Class III minimum).
- All storm sewer pipe shall be "O-ring" pipe.
- All water lines shall be laid at least 10 feet horizontally from any sanitary sewer, or manhole. Whenever water lines must cross sanitary sewers, laterals or storm drains the water line shall be laid at such an elevation that the bottom of the water line is 18 inches above the top of the drain or sewer. A full length of water pipe shall be centered over the sewer line to be crossed so that the joints will be equally distant from the sewer and as remote therefrom as possible. This vertical separation shall be maintained for that portion of the water line located within 10 feet, horizontally, of any sewer or drain it crosses.
- All water lines shall be C-900 Class 200 P.V.C.
- The grading yardage shown on these drawings is an approximation only, and not for bidding purposes. The contractor shall verify quantities prior to construction.
- All sanitary sewer laterals shall be a minimum of 6 inches in diameter.
- All sewer construction and materials to be in accordance with the Metropolitan St. Louis Sewer District Standard Construction Specifications for Sewers and Drainage Facilities, 2000.
- 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.
- The Developer must supply City Construction Inspectors with Soil Reports prior to or during site soil testing.
- All construction methods and practices to conform with current OSHA Standards.

DEVELOPMENT NOTES:

- Area of tract: 4,746 Acres
- Current Zoning: I-1 LIGHT INDUSTRIAL
- Existing Use: OFFICE/WAREHOUSE
Proposed Use: TECHNICAL COLLEGE
- Existing Buildings: 29,844 sq. ft.
- Required building & parking setbacks:
Front yard.....30 feet
Side yard.....20 feet
Rear yard.....35 feet
Parking.....10 feet along lot perimeter
- Parking Provisions: One space per three students, plus one space per two faculty members.
38 faculty & 350 daytime & 350 evening students
Existing Parking: 110 spaces including 2 handicap spaces
Required Parking: 38/2 = 19 spaces & 350/3 = 116.66 spaces
Proposed Parking after restriping and construction: 259 spaces including 7 handicap
- Landscape requirement:
1 tree for every 4,000 s.f. of green space
63831.98 sq. ft. of green space
Total trees required: 15.95 trees Total trees provided: 17 trees
- This property is served by the following utilities:
City of O'Fallon Water = (636) 281-2858
Ameren UE = (636) 925-3237
Verizon Telephone = (636) 332-3011
O'Fallon Fire Protection District = (636) 272-3493
St. Charles Gas Company = (636) 946-8937
City of O'Fallon Sewer = (636) 272-6818
- Flood Note:
Per F.I.R.M. floor insurance rate map no. 29183C0241E effective date August 2, 1996 this tract lies with in zone "X". Zone "X" is defined as an area outside of 500 year flood plain, an area of minimum hazard.
- The developer will comply with current O'Fallon ordinances and standards pertaining to site improvements
- All handicap ramps shall be per ADA requirements.
- Drainage and Detention findings are in Detention Report dated 11/05/03 by Box Engineering.
- Proposed fencing requires a separate Permit through the Planning Division.
- All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.
- 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 the required grades, construction materials, specifications and signage. If any conflict occurs 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 aisle.
- Brick shall not be used in the construction of storm sewer structures.
- All sign locations and sizes must be approved separately through the Planning Division. Ensure sign locations are shown on the plans.
- All New utilities shall be located underground.
- A photometric lighting plan has been reviewed and approved by Community Development. Illumination attributable to exterior lighting, as measured at the property line, shall not exceed 0.5 foot-candles. Lighting values will be reviewed and corrections will need to be made if not in compliance with City Standards.
- Trash enclosure details are per SGA Architects Drawing #0339 dated 12-05-03. This drawing has been included in this drawing set.

4-1-04
APPROVED

REFERENCE BENCHMARK - RM 64 ELEVATION 478.31
FEET-CHISEL SQUARE IN SOUTHEAST CORNER ON THE UPSTREAM
SIDE OF EASTBOUND INTERSTATE 70 BRIDGE OVER BELLEAU
CREEK (REMOVED BY NEW INTERCHANGE CONSTRUCTION).

SITE BENCHMARK - ELEVATION 522.29 FEET - OLD IRON PIPE AT THE
NORTHEAST CORNER OF THE HOFFMAN TRUST PROPERTY AT 923 EAST
TERRA LANE.

SHEET INDEX:

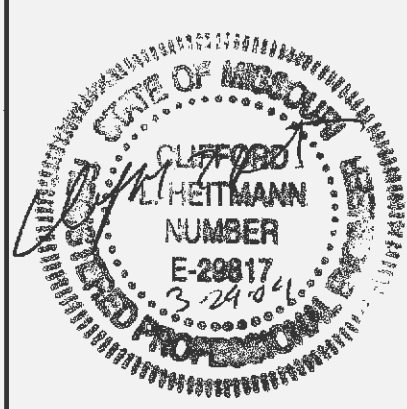
- SHEET 1: COVER SHEET
- SHEET 2: DEMOLITION PLAN
- SHEET 3: SITE PLAN
- SHEET 4: GRADING PLAN
- SHEET 5: DRAINAGE AREA MAP
- SHEET 6: PROFILES & CONSTRUCTION DETAILS
- SHEET A1: SGA DRAWING #0339 (12-05-03)



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YOU DIG!
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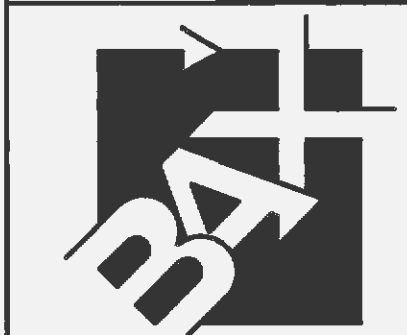
**PREPARED FOR: DANIEL F. CONWAY
3943 WEST PINE
ST. LOUIS, MO 63108
(314) 534-6500**

DISCLAIMER OF RESPONSIBILITY
I hereby certify that the documents intended to be authorized by my seal are limited to the sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or work.



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REVISIONS		
01-14-04	Per City Comments	
03-24-04	Per Client Changes	



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

12-08-03
DATE
95-6411E
PROJECT NUMBER
1 OF 5
SHEET OF
6411ECON.DWG
FILE NAME
LJCT
DRAWN
KTK CLH
DESIGNED CHECKED

Contractor