

MAGNOLIA SUBDIVISION AMENITIES PACKAGE IMPROVEMENT PLANS

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 and/or construction of improvements.
- Erosion control shall not be limited to what is shown on the plans. The contractor shall take whatever means necessary to prevent siltation from entering adjacent roadways, properties, ditches and silting up all storm drainage systems on site and in receiving channels. Such control might include channeling runoff into sediment basins, channeling runoff into areas where an extra row of straw bales are used. A silt fence might be considered, if necessary.
- No area shall be cleared without permission of the developer.
- Owner/Developer assumes full responsibility as to the performance of the grading operation and assurance that all properties and City/County and State roads will be adequately protected.
- Soil preparation and re-vegetation shall be performed according to Appendix A of the Model Sediment and Erosion Control Regulations for Urban Development.
- 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 or during the next seeding period after grading has been completed. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations.
- 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 disking 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 developer must supply the City construction inspectors with soil reports prior to or during soil testing.
- 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 rejections 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 to at least 85 percent of the maximum density as determined by the Modified AASHTO T-180 Compaction Test (ASTM-D1557). 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 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 6% above the optimum moisture content.
- 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 cut and fill slopes should be a maximum of 33% slope (3:1) after grading.
- All fill including filled places under proposed storm and sanitary sewer lines and paved areas including trench backfills within and off the road right-of-way shall be compacted to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test (ASTM D1557). All tests shall be verified by a Soils Engineer concurrent with grading and backfilling operations. The compacted fill shall be free of rutting and shall be non-yielding and non-pumping during proof rolling and compaction.
- Fill placed within proposed street R.O.W. shall be compacted to 90% M.O.D. Proctor and be no more than 3% above optimum moisture content. Soils compaction to be verified to be within these limits within this grading area.
- Soft soil in the bottom and banks of any existing or former pond site 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.
- Temporary siltation control measures (structural) shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.
- If straw bales or silt fences are destroyed by heavy rains, vandalism, etc., they are to be replaced immediately by contractor.
- When grading operations are completed or suspended for more than thirty (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 Designated Official's recommendation. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations. All finished grades (areas not to be disturbed by improvement) in excess of 20% slopes (5:1) shall be mulched and tacked at the rate of 100 pounds per 1000 square feet when seeded.
- All existing trash and debris on-site must be removed and disposed of off-site.
- All erosion control systems shall be inspected and necessary corrections made within 24 hours of any re-instorm resulting in one-half 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.
- The total yardage of this project is based on a 15% ± shrinkage factor.
- The shrinkage factor is subject to change, due to soil conditions (types and moisture content), weather conditions, and the percentage of compaction actually achieved at the time of the year grading is performed. As a result, adjustments in final grade may be required. If adjustments need to be made, the contractor shall contact St. Charles Engineering and Surveying, Inc. prior to completion of the grading.
- The vertical grading tolerance shall be plus or minus 0.2 feet for all rough grading.
- The Contractor shall prevent all storm/surface water, mud or construction debris from entering the sanitary sewer system.
- All low places shall be graded to provide drainage with temporary ditches.
- The most stringent of the above requirements shall apply.

ADDITIONAL GRADING NOTES

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.

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 90 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.

All filled places in proposed and existing St. Charles County roads (highways) shall be compacted from the bottom of the fill up to 90 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 the Soils Engineer concurrent with grading operations.

Any wells and/or springs which may exist on this property shall be located and sealed in a manner acceptable to the City of O'Fallon Engineering Department.

All trash and debris on-site, either existing or from construction, must be removed and properly disposed of off-site.

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.

Soft soils in the bottom and banks 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.

- All excavations, grading, or filling shall have a finished grade not to exceed a 3:1 slope (33%).
- Temporary siltation control measures (structural) shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.
- Upon completion of storm sewers, siltation control shall be provided around all open sewer inlets and shall remain until the disturbed drainage areas have been properly stabilized.
- Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion.
- 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 1 pound per 1,000 square feet when seeded.



DEVELOPMENT NOTES

- Owner: BRYAN ROAD PROPERTIES
PO Box 1270
St. Peters, MO 63376
- Developer: BRYAN ROAD PROPERTIES
PO Box 1270
St. Peters, MO 63376
- Area of Tract: 3.78 Acres
- Present Zoning: R1-PUD Planned Development.
- Parking Requirements: 35 Total Parking Spaces Provided.
1 Space required for every ten (10) units
(347 units / 10 units per space = 35 spaces req.)
- Building Setbacks: 25' Front Yard
6' Side Yard
25' Rear Yard
- Storm Water Detention is located within Magnolia Subdivision.
- Proposed development will be served by the following:
Water - City of O'Fallon
Sewer - City of O'Fallon
Telephone - Century Tel
Electric - Ameren UE
Gas - Union Electric Company
O'Fallon Fire Protection District
- Site Coverage:
Sport Court - 3,650 s.f.
Buildings - 3,923 s.f.
Concrete - 8,828 s.f.
Parking - 11,077 s.f.
- All proposed utilities must be located underground.
- According to the Flood Insurance Rate Map for St. Charles County (dated August 2, 1996) Map Number 29183C0240E this property is not in the 100 year floodplain.
- Any sidewalks installed, shall be installed per City Ordinances.
- Storm, Sanitary, and Water locations and sizes to be shown on the improvement plans in accordance with the City of O'Fallon Standards.
- Boundary information was taken from the preliminary Record Plat of Magnolia.
- Topographic and utility information was taken from improvement plans of Magnolia.
- Landscaping shall be in accordance with City of O'Fallon Standards.
- Sport Court Striped for Basketball and Tennis.
- Bicycle Rack shall have parking for at least five (5) bicycles.
- Tennis court net and basketball goals will be removable.
- Tennis court net and basketball goals will be stored in the pool house.
- There shall be a gate at the entrance to the pool house along Oriental Dr. No gates will directly access the pool deck.

INDEX

- C-1 TITLE SHEET
- C-2 FLAT PLAN
- C-3 GRADING PLAN
- C-4 DRAINAGE AREA MAP
- C-5 DETAILS
- C-6 LANDSCAPING

LEGEND

	SANITARY STRUCTURE	C.O.	CLEAN OUT
	STORM STRUCTURE	T.B.R.	TO BE REMOVED
	TEST HOLE	T.B.R.&R.	TO BE REMOVED & RELOCATED
	POWER POLE	T.B.P.	TO BE PROTECTED
	LIGHT STANDARD	T.B.A.	TO BE ABANDONED
	CURB INLET	B.C.	BASE OF CURB
	DOUBLE CURB INLET	T.C.	TOP OF CURB
	GRATE INLET (EXISTING)	T.W.	TOP OF WALL
	AREA INLET (EXISTING)	TYP.	TYPICAL
	DOUBLE AREA INLET	U.N.O.	UNLESS NOTED OTHERWISE
	FLARED END SECTION	U.I.P.	USE IN PLACE
	END PIPE		EXISTING CONTOUR
	ENERGY DISSIPATOR		PROPOSED CONTOUR
	MANHOLE		TREE LINE
	REINFORCED CONCRETE PIPE		SAN. SEWER (EXISTING)
	CORRUGATED METAL PIPE		SAN. SEWER (PROPOSED)
	CAST IRON PIPE		STORM DRAIN (EXISTING)
	POLYVINYL CHLORIDE		STORM DRAIN (PROPOSED)
	VITRIFIED CLAY PIPE		PHONE BOX
	GUY WIRE		IRON PIPE
	SIGN		WATER LINE, SIZE
	POST		HYDRANT
	WATER METER		CONCRETE PAVEMENT
	SILT FENCE		PLACED RIP-RAP UNDERLAIN FABRIC
	DIVERSION SWALE		
	DITCH CHECK		

12/7/04
File Copy
APPROVED
A. J. [Signature]

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 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.

SITE BENCHMARK:
FEMA REFERENCE MARK 56, ELEVATION 487.05, CHISELED SQUARE ON CENTERLINE OF SOUTH HEADWALL OF GUTTERMUTH ROAD BRIDGE OVER TRIBUTARY NO. 9. AS SHOWN ON FIRM FLOOD INSURANCE RATE MAP NUMBER 298183C0435 E, DATED REVISED AUGUST 2, 1998.

RECEIVED
DEC 03 2004
ENGINEERING DEPARTMENT

DEVELOPER

BRYAN ROAD PROPERTIES
PO Box 1270
St. Peters, Missouri 63376

ENGINEERS AUTHENTICATION

The responsibility for the professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in the project and specifically excludes revisions after this date unless reauthenticated.

**MAGNOLIA SUBDIVISION
AMENITIES PACKAGE
COVER SHEET**

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448

S E S

ORDER NO.
08-0498
DATE
09/01/04
1

11-01-04 REVISED AS PER CITY COMMENTS