

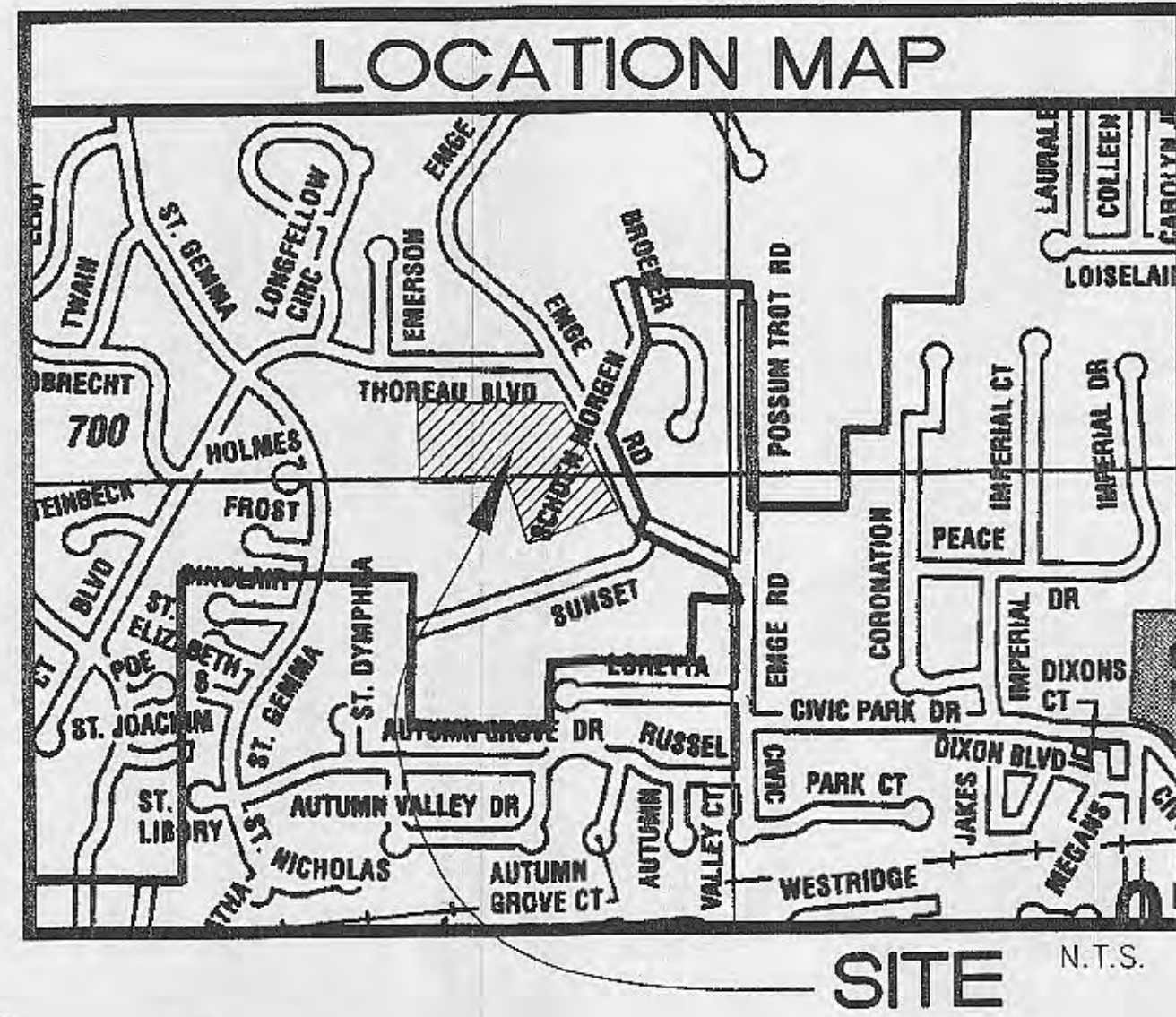
GENERAL NOTES

- 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 silted 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 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 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 8% 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 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) 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 test 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. Soil compaction curves shall be submitted to the City of O'Fallon prior to placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon. The compacted fill shall be free of rutting and shall be non-jacking and non-pumping during proof rolling and compaction.
- Fill placed within proposed street R.O.W. shall be compacted to 90% M.Q.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 locked at the rate of 100 pounds per 1000 square feet when seeded.
- All erosion control systems shall be inspected and necessary corrections made within 24 hours of any rainstorm 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.
- All graded areas to remain bare for over 2 weeks shall be seeded & mulched (MDNR requirement).
- All public roadways leading on and off site that accommodate construction traffic, shall be kept free of mud, silt, rock, or other debris and checked daily and after each rainfall.
- If new detention basin structures and pipes are to be used as temporary sediment basins, installation of detention structures and pipes shall be at the developers own risk.
- 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.
- 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.
- 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.
- The most stringent of the above requirements shall apply.

ELK RIDGE

GRADING PLAN/EROSION AND SEDIMENT CONTROL

SEVERAL TRACTS OF LAND BEING PART OF O'FALLON GARDENS AS RECORDED IN PLAT BOOK 5 PAGE 8 BEING PART OF SECTION 20, TOWNSHIP 47 NORTH, RANGE 3 EAST



GENERAL NOTES

- Area of site: 14.16 Acres
- Proposed Zoning R-1
- Proposed R-1 lot information:
Minimum lot width: 80 feet
Front yard: 25 feet
Side yard: 6 feet
Rear yard: 25 feet
- Developer/Owner: Nelco Development
45 B Golden Eagle Drive
Golden Eagle, IL 62036
- Topographic information is per aerial topography Dec. 3 2005.
- Soil information will be addressed in the Improvement Plans.
- FEMA Reference Mark 68, Elevation 458.14, Chiseled "L" on concrete hub rail at southwest corner of State Highway 79 bridge over Perquee Creek.
- SITE BENCHMARK:
USGS REFERENCE MARK F 149, ELEVATION 542.80
BRASS VERTICAL MARK DISK STAMPED "F149 1935" SET IN A 6-INCH SQUARE CONCRETE MONUMENT,
PROJECTING ABOUT 2.5 INCHES ABOVE THE GROUND SURFACE.
- ACCORDING TO FIRM FLOOD INSURANCE RATE MAP 29183C0230 F DATED MARCH 17, 2003, THIS IS IN ZONE X.
- THIS PROPERTY IS SERVICED BY THE FOLLOWING UTILITY COMPANIES:
City of O'Fallon Sanitary District
Ameren UE
St. Charles Gas Company
City of O'Fallon Water District
CenturyTel Telephone Company
Fort Zumwalt School District
O'Fallon Fire Protection District

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- IG-2 INTERIM GRADING PLAN-
EROSION / SEDIMENT
CONTROL PLAN
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- IG-4 TREE PRESERVATION PLAN
- IG-5 DRAINAGE AREA MAP

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
	C.I. CURB INLET		B.C. BASE OF CURB
	D.C.I. DOUBLE CURB INLET		T.C. TOP OF CURB
	G.I. GRATE INLET (EXISTING)		T.W. TOP OF WALL
	A.I. AREA INLET (EXISTING)		TYP. TYPICAL
	D.A.I. DOUBLE AREA INLET		U.N.O. UNLESS NOTED OTHERWISE
	F.E. FLARED END SECTION		U.I.P. USE IN PLACE
	E.P. END PIPE		—572— EXISTING CONTOUR
	E.D. ENERGY DISSIPATOR		—578— PROPOSED CONTOUR
	M.H. MANHOLE		— — — TREE LINE
	R.C.P. REINFORCED CONCRETE PIPE		— 8" PVC — SAN. SEWER (EXISTING)
	C.M.P. CORRUGATED METAL PIPE		— ● — SAN. SEWER (PROPOSED)
	C.I.P. CAST IRON PIPE		— 12" PVC — STORM DRAIN (EXISTING)
	PVC POLYVINYL CHLORIDE		— ■ — STORM DRAIN (PROPOSED)
	V.C.P. VITRIFIED CLAY PIPE		□ PHONE BOX
	GUY WIRE		— IP — IRON PIPE
	SIGN		— W — WATER LINE, SIZE
	POST		— H — HYDRANT
	WATER METER		— ■ — CONCRETE PAVEMENT
	SILT FENCE		— ■ — PLACED RIP-RAP W/UNDERLAIN FABRIC
	DIVERSION SWALE		
	DITCH CHECK		

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 silt 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.



RECEIVED
APR 14 2005
ENGINEERING DEPARTMENT

5/25/05
File Guy
APPROVED
ABK

DEVELOPER

NELCO DEVELOPMENT
45 B Golden Eagle Drive
Golden Eagle, IL 62036
1-800-443-7470

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.

ORDER NO.
040488
DATE
02/01/05
IG-1

THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE OR NONEXISTENCE, SIZE, TYPE, NUMBER OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SAID UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMo.



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

ELK RIDGE
TITLE SHEET
INTERIM GRADING PLAN
EROSION / SEDIMENT CONTROL PLAN

3/02/05 REV PER CITY COMMENT