

GENERAL NOTES:

- 1. Applicant/Owner Highland Homes 6311 Bartmer Industrial Drive St. Louis, MO 63130 Adam Glosier (314) 863-2845 (P) (314) 863-1160 (F)
2. Site is located in and served by: Electric: Ameren UE Gas: LoCade Gas Company Sanitary: City of O'Fallon Telephone: Century Tel Water: City of O'Fallon School District: Fort Zumwalt Fire District: O'Fallon
3. Present Zoning/ Proposed Zoning R-3 Garden Apartment District C-2 General Business District
4. Zoning Requirements R-3 Garden Apartment District, Multi-family dwelling Site Area: Minimum Lot Area: one (1) acre Lot Area: Two thousand five hundred (2,500) square feet per dwelling unit. In no case shall the total number of units per acre exceed fifteen (15). Lot width (measured at building line): Seventy (70) feet Lot Coverage: Maximum forty (40%) percent Setbacks: Front Yard: Thirty (30) feet Side Yard: Twenty (20) feet Rear Yard: Thirty-five (35) feet Accessory structures shall meet the same yard requirements.
5. Sidewalk, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "Americans with Disabilities Act Accessible 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 Project Engineer shall be notified by the contractor prior to any construction.

SITE NOTES

- 1. Number of units 16,125 Acres \* 15 units per acre = 241.8 Units Allowed 228 Units Proposed
2. Residential site coverage Total Area: 16,125 Acres Building: 1,965 Acres (12.2%) Pool: 0.208 Acres (1.3%) Sidewalk: 0.711 Acres (4.4%) Parking: 4.544 Acres (28.2%) Street: 0.838 Acres (5.2%) Green Space: 7,859 Acres (48.7%)
3. Parking Requirements: Residential Lot: Off street parking: One and one-half (1.5) spaces required per one bedroom dwelling unit, plus one (1) additional space for each additional bedroom. One (1) parking space per dwelling unit is required to be covered. One (1) space required per 10 units for pool amenity. Parking Required: 24 One Bedroom Units = 24 \* 1.5 = 36 204 Two Bedroom Units = 204 \* 2.5 = 510 546 Total Parking Spaces Required including 228 Units Proposed to be covered. 273 Parking Spaces Required including 549 Parking Spaces Provided including 276 Covered Parking Spaces Provided 228 Units / 10 = 23 parking spaces required 23 parking spaces provided
Commercial Lots: Parking Required: Office Space: 1 parking space per 300 Sqft Speculative Retail: 5.5 Parking spaces per 1,000 Sqft. 25,000 / 300 + 25,000 \* 5.5/1000 = 220 spaces Parking Provided: 220 spaces
4. Tree Removal Ordinance Total number of trees on-site: 208 Total Number to be removed: 140 Percentage of trees retained: 33%
5. Amenities provided: Pool and Pool House Sidewalks Throughout Development
6. Bicycle parking requirement: One (1) Bicycle Space per every 15 Car Parking Spaces Three (3) story building - 82 Car Parking Spaces required 86 / 15 = 5.7 - 6 Bicycle Spaces Provided Two (2) story Buildings - 56 Car Parking Spaces required 58 / 15 = 3.9 - 4 Bicycle Spaces Provided Pool - 8 Bicycle Parking Spaces Provided

SITE BENCHMARK: ELEV.=624.62 EXISTING FIRE HYDRANT LOCATED 61 FEET EAST OF NORTH WEST CORNER OF SITE USGS BENCHMARK: SC-54; ELEV.=558.07 THE STATION IS A MISSOURI DNR GRS ALUMINUM DISK STAMPED "SC-54 2000", AND IS SET IN A 12 INCH DIAMETER CONCRETE MONUMENT FLUSH WITH THE GROUND. THE STATION IS LOCATED ABOUT 3 MILES WEST OF O'FALLON ON THE SOUTH SIDE OF WEST TERRA ROAD AT AN AMEREN UE SUBSTATION. IT IS 21 FEET EAST OF THE GRAVEL ENTRANCE TO THE SUBSTATION AND 4.0 FEET EAST OF A CARSONITE WITNESS POST.

THIS PROPERTY IS SERVICED BY THE FOLLOWING UTILITIES COMPANIES: CITY OF O'FALLON WATER & SEWER 636-281-2858 AMEREN UE 1-800-552-7583 ST. CHARLES GAS COMPANY 1-800-887-4173 CENTURYTEL TELEPHONE COMPANY 1-800-201-4099 CITY OF O'FALLON FIRE PROTECTION DISTRICT 636-272-3493 FORT ZUMWALT SCHOOL DISTRICT 636-272-6620

TREE PRESERVATION CALCULATIONS Total number of trees on site 208 Total number of trees to be removed 140 Percentage of trees remaining 33%

LEGEND table with symbols and descriptions: SANITARY STRUCTURE, STORM STRUCTURE, TEST HOLE, POWER POLE, LIGHT STANDARD, CURB INLET, DOUBLE CURB INLET, GRATE INLET (EXISTING), AREA INLET (EXISTING), DOUBLE AREA INLET, FLARED END SECTION, END OF PIPE, ENERGY DISSIPATOR, MANHOLE, REINFORCED CONCRETE PIPE, CORRUGATED METAL PIPE, CAST IRON PIPE, POLYVINYL CHLORIDE PIPE, VITRIFIED CLAY PIPE, GUY WIRE, SIGN, POST, WATER METER, WATER VALVE, WATER SHUT OFF, GAS VALVE, OVERHEAD ELECTRIC LINE, CLEARING LIMITS, EDGE OF ASPHALT, DUCTILE IRON PIPE, ADJUST TO GRADE, FINISHED GRADE, CLEAN OUT, TO BE REMOVED, TO BE REMOVED & RELOCATED, TO BE PROTECTED, TO BE ABANDONED, BASE OF CURB, TOP OF CURB, TOP OF WALL, TYPICAL, UNLESS NOTED OTHERWISE, USE IN PLACE, EXISTING CONTOUR, PROPOSED CONTOUR, TREE LINE, SAN. SEWER (EXISTING), SAN. SEWER (PROPOSED), STORM DRAIN (EXISTING), STORM DRAIN (PROPOSED), PHONE BOX, IRON PIPE, WATER LINE, HYDRANT, CONCRETE PAVEMENT, PLACED RIP-RAP W/UNDERLAIN FABRIC, GENERAL SURFACE DRAINAGE, NOT TO SCALE, RIGHT-OF-WAY, TOP BACK CURB, DUCTILE IRON PIPE, DO NOT DISTURB, TOP OF PAVEMENT

IMPROVEMENT PLANS FOR KING ARTHUR'S HIGHLAND TERRACE A TRACT OF LAND BEING PART OF U.S. SURVEY 55, TOWNSHIP 47 NORTH, RANGE 3 EAST CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI



- OFALLON NOTES: 1. Rip rap shown at flared ends will be evaluated in the field after installation for effectiveness and field modified if necessary to reduce erosion on and off site. 2. All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances. 3. Provide a marking on all storm sewer inlets. The City will allow the following markers and adhesive procedures only as shown in the table below or an approved equal by ametek industries. "Peel and stick" adhesive pads will not be allowed.

Table with columns: MANUFACTURER, SIZE, ADHESIVE, STYLE, MESSAGE (PART), WEBSITE. Includes entries for ACP INTERNATIONAL and DAS MANUFACTURING, Inc.

- 4. All pipe joints shall be gasketed O-ring type. 5. Connections at all sanitary and storm structures to be made with A-lock joint or equal. 6. All inlets shall have a 5/8" dia. trash bar. 7. 0.20' drop is required in all storm sewer and sanitary sewer structures. 8. All sanitary laterals shall be a minimum of 6" PVC. 8. Brick shall not be used in the construction of sanitary or storm sewer structures. Precast concrete structures are to be used unless otherwise approved by the City. 9. All sanitary laterals and sanitary mains crossing under pavement must have the proper rock backfill and required compaction. 10. HDPE pipe is to be N-12WT or equal and to meet ASTM F1417 water tight field test. 11. Lighting valves will be reviewed on site prior to final occupancy inspection. Corrections will need to be made if not in compliance with City Standards. 12. All proposed fencing requires a separate permit through the Planning Division. 13. All sign locations and sizes must be approved separately through the Planning Division. 14. All sign post and backs and bracket arms shall be painted black using Corboline Rustbond Penetrating Sealer SG and Corboline 133 HB paint (or equivalent as approved by the City and MoDOT). Signs designating Street Names shall be on the opposite sides of the street from traffic control signs. 15. All utilities will be located underground. 16. Trees, organic debris, rubble, foundations and other deleterious material shall be removed from the site and disposed in compliance with all applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district. If a burn pit is proposed the location and mitigation shall be shown on the grading plan and documented by the soils engineer. 17. All public utilities shall be installed within easements, either existing or to be established on a future record plat. 18. All sidewalks, curb ramps, ramp and accessible parking shall be constructed in accordance with current approved "American With Disabilities Act Accessible Guidelines" (ADAAG) along with the required grades, construction material, 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. (note that at least one 8' wide handicap access aisle is provided and curb ramps do not project into handicap access aisle.) 19. Truncated Domes for curb ramps shall meet ADA requirements and shall be constructed using red pre cast truncated domes such as those manufactured by JMar Tile or approved equal. 20. All curbs shall be six (6") inch vertical concrete curbs. 21. Grades at entrances shall not exceed 2% for walks, 4% from street and 10% overall. Typically 2% from back of curb through the right of way is desired. 22. All water mains shall adhere to the City of O'Fallon Specifications. 23. Waterline to Condos shall be 4" lines from water main. 24. Backflow preventers shall be located inside of each building.

SHEET INDEX

- 1. TITLE SHEET 2. FLAT PLAN 3. GRADING PLAN 4. STREET PROFILE 5. WARPINGS 6. SANITARY PROFILE 7-8. STORM PROFILES 9. DETENTION 10. POST DRAINAGE AREA MAP 11. PRE DRAINAGE AREA MAP 12-16 MoDOT ENTRANCE PLANS 17. LANDSCAPING PLAN D1-D9 DETAILS

GRADING 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 and/or construction of improvements. 2. 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 fence (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 shall be removed immediately. Any depositing of silt or mud in new or existing storm sewers 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. Erosion control shall not be limited to what is shown on the plans. 3. No area shall be cleared without permission of the developer. 4. 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. 5. Soil preparation and re-vegetation shall be performed according to Appendix A of the Model Sediment and Erosion Control Regulations for Urban Development. 6. 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. 7. 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. 8. Compaction equipment shall consist of tampering 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. 9. The developer must supply the City construction inspectors with soil reports prior to or during soil testing. The soil report will be required to contain the following information on soil test curves (Proctor Reports) for projects within the City. • Maximum dry density • Optimum moisture content • Maximum and minimum allowable moisture content • Curve must be plotted to show density from a minimum of 90% Compaction and above as determined by the "Modified AASHTO T-180 Compaction Test"(A.S.T.M.-D-1157) or from a minimum of 95% as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M.-D698). Proctor type must be designated on document. • Curve must have at least 5 density points with moisture content and sample locations listed. • Specific Gravity • Natural Moisture Content • Liquid Limit • Plastic Limit Be advised that if this information is not provided to the City's Construction Inspector the City will not allow grading or construction activities to proceed on any project site. 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 intervals. 11. 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. 12. All Areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted to at least 90 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. 13. Traffic control is to be per MoDOT or MUTCD whichever is most stringent. 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 cut and fill slopes should be a maximum of 3:1 after grading. 16. 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 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 a soils engineer concurrent with grading and backfilling operations. Note that 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 the compaction. Soil composition 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. 17. 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. 18. Temporary siltation control measures (structural) shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site. 19. If straw bales or silt fences are destroyed by heavy rains, vandalism, etc., they are to be replaced immediately by contractor. 20. When grading operations are completed or suspended for more than fourteen (14) days, permanent grass shall 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. 21. 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. 22. 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. 23. The total yardage of this project is based on a 15% +/- shrinkage factor. 24. 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. 25. The vertical grading tolerance shall be plus or minus 0.2 feet for all rough grading. 26. The Contractor shall prevent all storm/surface water, mud or construction debris from entering the sanitary sewer system. 27. All low places shall be graded to provide drainage with temporary ditches. 28. The most stringent of the above requirements shall apply.

COVER SHEET KING ARTHUR'S HIGHLAND TERRACE IMPROVEMENT PLANS

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

ORDER NO. 07-0059-01 DATE 07/03/07 O'FALLON P-Z NO. 3606.02 1/070059 - Highland Terrace.dwg\070059-CIVIL.dwg 01/29/08-3:26pm

Call BEFORE you DIG TOLL FREE 1-800-344-7483 MISSOURI ONE-CALL SYSTEM, INC. MoDOT UTILITIES (314) 340-4100

DEVELOPER HIGHLAND HOMES 6311 BARTMER INDUSTRIAL DR St. LOUIS, MO 63130 314-863-2845

ENGINEERS AUTHENTICATION KATHY ANTHONY SCHUBNER PE-2003015039 PROFESSIONAL ENGINEER

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.