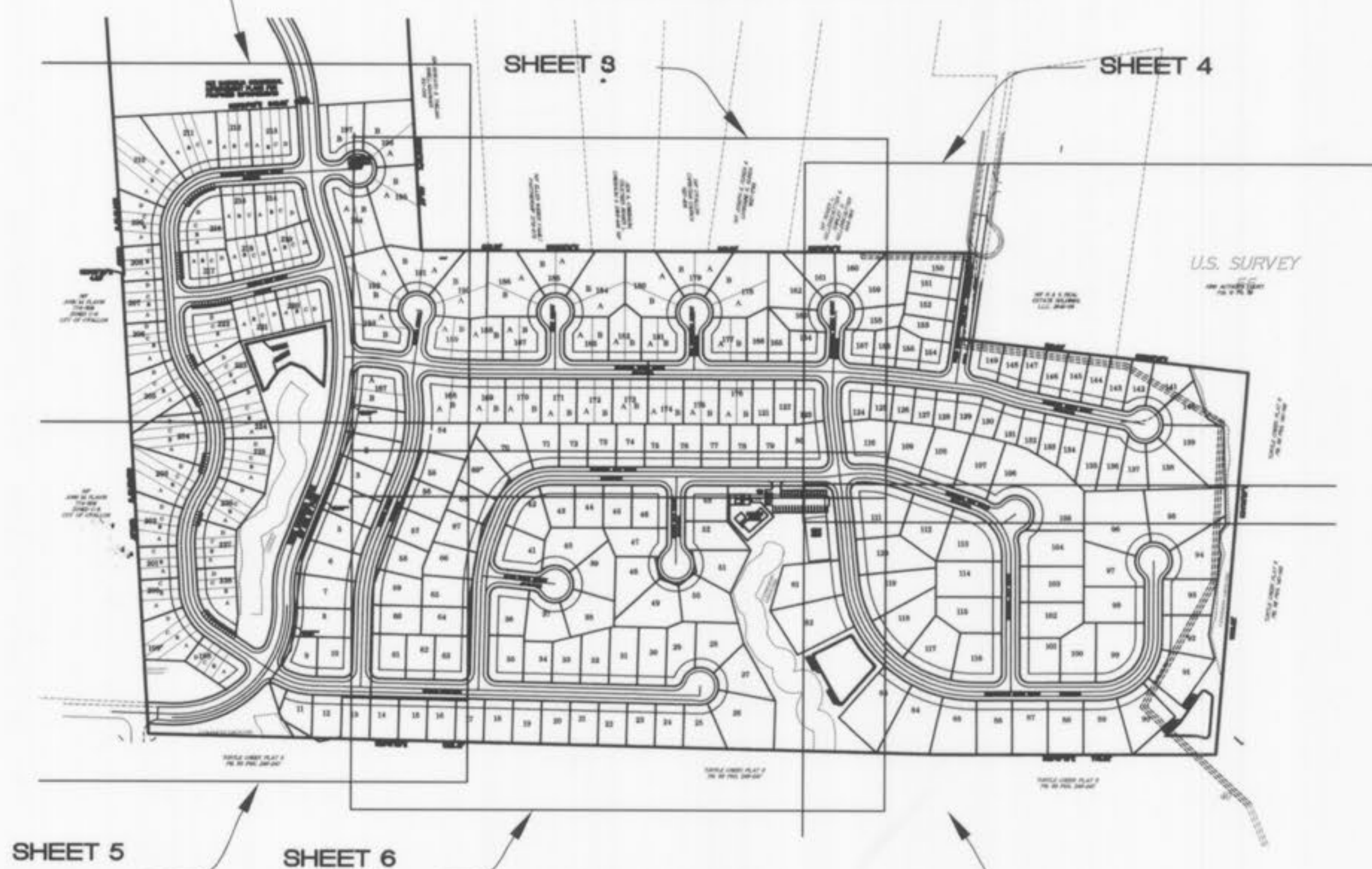


- GENERAL NOTES**
- Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor, 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, and ditches. 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 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 Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of lift density tests will be determined on each lift of fill. Interim reports showing fill quality will be made to the Owner at regular intervals. Developer must supply City Construction Inspectors with soils reports prior to or during site soil testing.
 - 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 3:3% slope (3:1) after grading.
 - 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 92% 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 a soils engineer concurrent with the 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 the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon.
 - 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 1 pound per 1000 square feet when seeded.
 - All existing trash and debris on-site must be removed and 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 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 prior to completion of the grading.
 - Earth quantities were obtained from aerial grid mapping with contours at two foot intervals, with a tolerance of plus or minus one foot or one-half (2) contour intervals.

O'Fallon File
Number 3603.01

AS-BUILT WATER PLAN MAGNOLIA

PART OF A TRACT OF LAND BEING PART OF SECTION 30
OF TOWNSHIP 47 NORTH; RANGE 3 EAST
CITY OF O'FALLON, MISSOURI



Drawing Index
Not to Scale

- 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 existing sanitary sewer system.
- The most stringent of the above requirements shall apply.
- Water for wash-off pad will be brought onto site by truck until such time that water can be provided through existing water lines.
- Coordination between the on-site grading of this project with any grading being done on the Magnolia Commercial Improvement Project is required.
- Each fire hydrant shall be provided with a control valve in the hydrant connection such that the hydrant can be removed from service without shutting off water supply to other fire hydrants.
- Each fire hydrant shall have not less than two 2-1/2 inch outlets and one 4-1/2 inch outlet, a 5-1/4 inch valve, a 6 inch barrel and shall be of the breakaway design, frost free chain, left hand open design and have National Standard Threads.
- Developer must supply City construction inspectors with soils reports prior to or during site soil testing.
- 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 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.)
- All sign and entrance monument locations and sizes must be approved separately through the Planning Division.
- All proposed utilities shall be located underground.
- 5/8" trash bar shall be included on all inlets.
- Rip rap shown on at flared ends will be evaluated in the field after installation for effectiveness and field modified if necessary to reduce erosion of the existing and new channels.
- Proposed pavilions or playground areas will need a separate permit from the Building Division.
- All proposed fencing requires a separate permit through the City's Planning Division.
- All sign location and sizes must be approved separately through the City's Planning Division.
- All storm and sanitary sewer that lie within the 1:1 shear plane of the road will be granular backfilled.
- All paving to be in accordance with St. Charles County Standards and specifications except as modified by the City of O'Fallon ordinances.
- All proposed recreation areas will need a separate permit from the Building Division.
- Off street parking is not to be maintained by the City of O'Fallon.
- Any area disturbed off-site where existing vegetation exists shall be sodded.

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46. Any area disturbed off-site where existing vegetation exists shall be sodded.

47. Unless otherwise noted on the plans all storm and sanitary structures are to be precast.
SUBDIVISION NOTES:
AREA OF PROJECT - 100.17 ACRES
NUMBER OF UNITS 347
FRONT YARD SETBACK 25'
SIDE YARD SETBACK 6', 0' BETWEEN ATTACHED UNITS
REAR YARD SETBACK 25'
Drive way locations shall not interfere with the sidewalk handicap ramps.
City approval of the construction Site plans does not mean that single family dwelling units can be constructed on the lots without meeting the building setbacks as required by the Zoning Code.
City approval of the construction site plans does not mean that single family and two family dwelling units can be constructed on the lots without meeting the building setbacks as required by the Zoning Code.
All street signs and traffic signals shall be colored black in accordance with the approved MoDOT specifications.
All sign posts and backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by the City and/or MoDOT)
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 control fences (possible methods of control are detailed on the grading plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the Owner and/or 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.
Commercial Lots will need review and approval of a separate Area Plan and Final Plan.
Recreational Amenities will require a Site plan Review and approval of the Planning and Zoning Commission. They are not part of this plan set.

DEVELOPER
Bryan Roads Properties, LLC
PO Box 1270
St. Peters, Missouri 63376
636-240-7789

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.	B.C.	BASE OF CURB
	D.C.I.	T.C.	TOP OF CURB
	G.I.	T.W.	TOP OF WALL
	A.I.	TYP.	TYPICAL
	D.A.I.	U.N.O.	UNLESS NOTED OTHERWISE
	F.E.	U.I.P.	USE IN PLACE
	E.P.	-572-	EXISTING CONTOUR
	E.D.	-578-	PROPOSED CONTOUR
	M.H.	-T- -	TREE LINE
	R.C.P.	-S- -	SAN. SEWER (EXISTING)
	C.M.P.	-C- -	SAN. SEWER (PROPOSED)
	C.I.P.	-D- -	STORM DRAIN (EXISTING)
	PVC	-E- -	STORM DRAIN (PROPOSED)
	V.C.P.	□	PHONE BOX
	GUY WIRE	○	IRON PIPE
	SIGN	-W- -	WATER LINE, SIZE
	POST	HYDRANT	HYDRANT
	WATER METER	CONCRETE PAVEMENT	CONCRETE PAVEMENT
	SILT FENCE	PLACED RIP-RAP W/UNDERLAIN FABRIC	PLACED RIP-RAP W/UNDERLAIN FABRIC
	DIVERSION SWALE PROVIDE DITCH CHECKS EVERY 150'		

INDEX

1
2-7
COVER SHEET
WATER ASBUILT FLAT PLAN

STORM AND SANITARY SEWER MEASUREMENTS

The existing sewer lengths, sizes, flowlines, depths of structures and locations with respect to existing or proposed easements have been measured. The results of those measurements are shown on this set of Final Measurement plans. Since the wye locations have been plotted from information provided by the sewer contractor or other sources, I disclaim any responsibility for that specific information.

All public sewers are located within designated existing or proposed easements except as follows: **NONE**

Michael Newell Meiners
Missouri Professional Engineer Number E-22483

ACCORDING TO FIRM FLOOD INSURANCE RATE MAP 29183C0240
E DATED AUGUST 2, 1996, THIS SITE IS IN ZONE X. THIS SITE
IS NOT WITHIN THE 100-YEAR FLOODPLAIN.

SITE BENCHMARK:
FEMA REFERENCE MARK 56, ELEVATION 487.05, CHISELED SQUARE ON
CENTERLINE OF SOUTH HEADWALL OF CUTTERBUSH ROAD BRIDGE OVER
TRIBUTARY NO. 9, AS SHOWN ON FIRM FLOOD INSURANCE RATE MAP
NUMBER 298183C0435 E, DATED REVISED AUGUST 2, 1996.

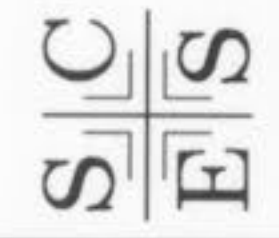
THIS PROPERTY IS SERVICED BY THE FOLLOWING UTILITY COMPANIES:
CITY OF O'FALLON SANITARY DISTRICT 636-281-2200
AMEREN UE 636-925-3216
ST. CHARLES GAS COMPANY 636-978-263
CITY OF O'FALLON WATER DISTRICT
CENTURYTEL TELEPHONE COMPANY 636-332-7705

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.

OCCUPANCY PERMIT NOTE:
NO OCCUPANCY PERMITS SHALL BE GRANTED ON ANY HOME UNTIL THE SEWER MAIN THAT RUNS THROUGH "THE FALLS GOLF COURSE" IS IMPROVED AS PER CITY REQUIREMENTS.

**MAGNOLIA
WATER AS-BUILTS
BRYAN ROAD PROPERTIES, LLC**

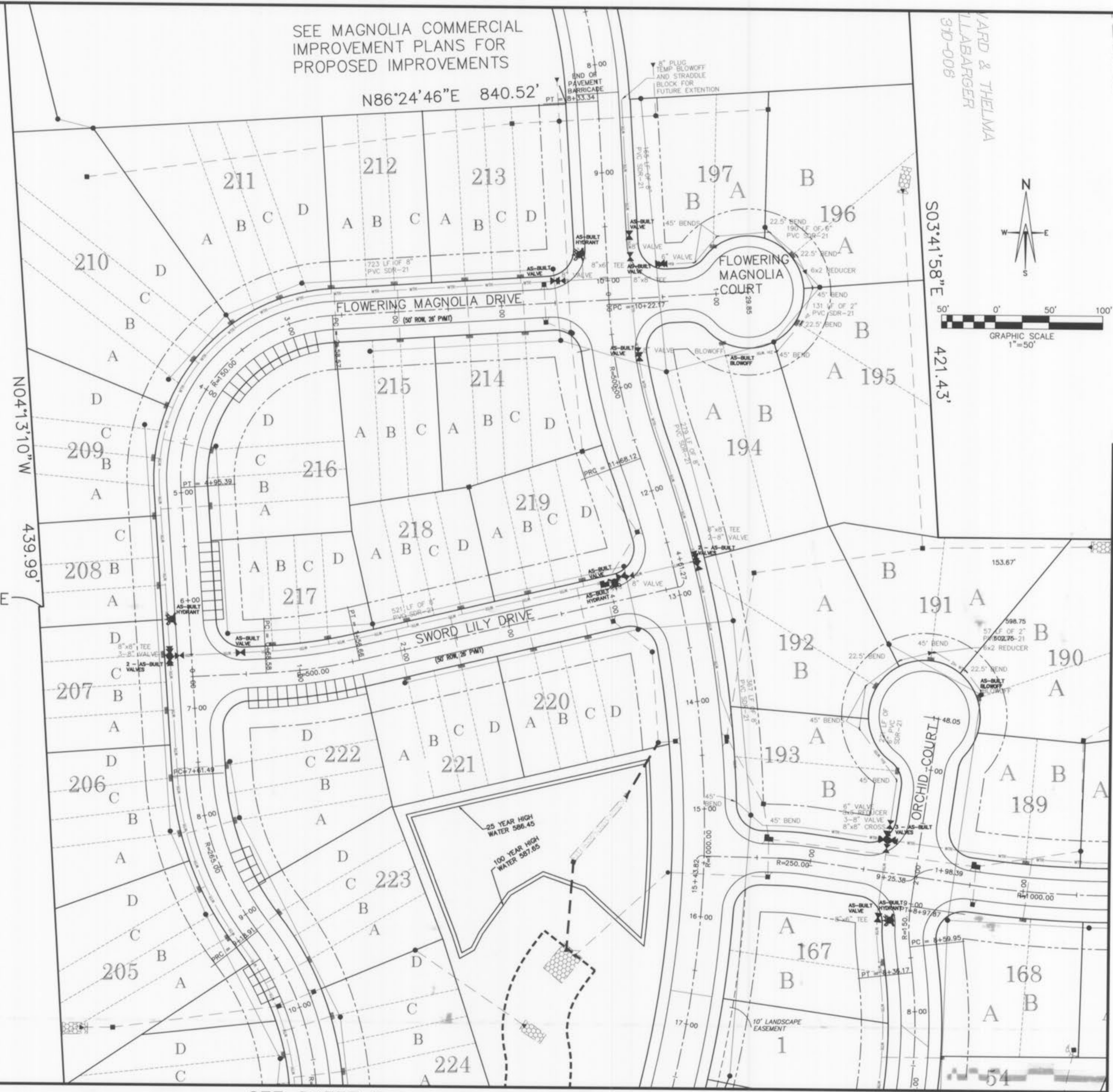
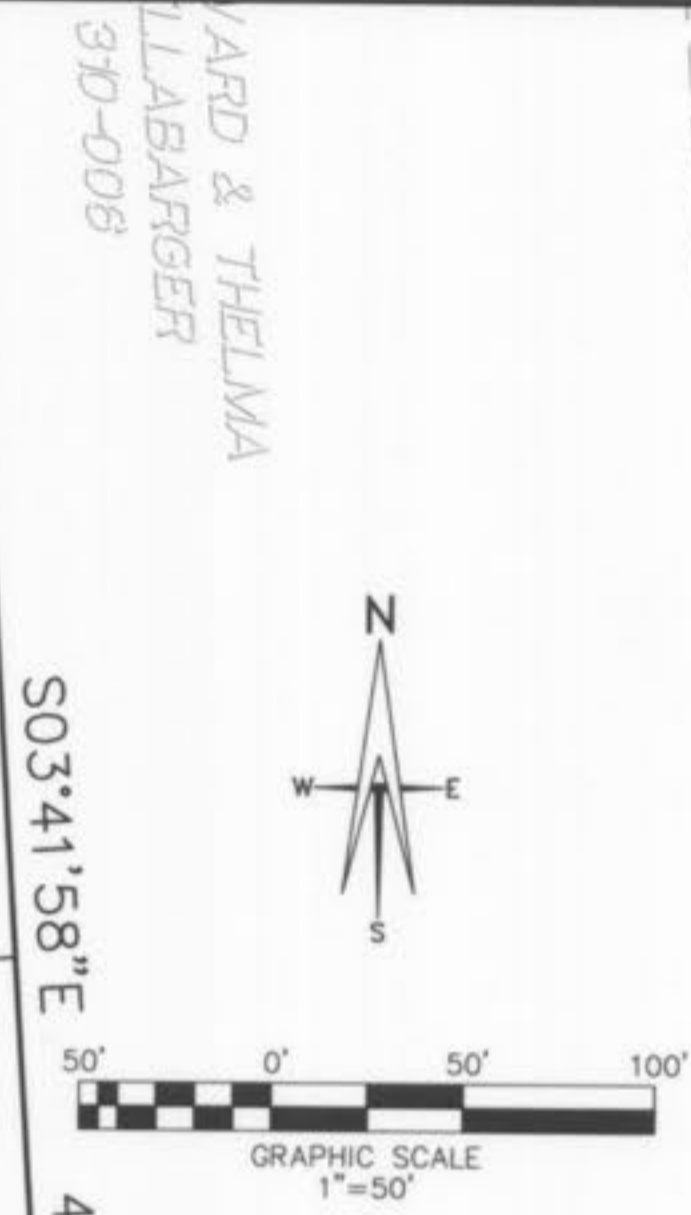
ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448



ORDER NO.
030498
DATE
1-26-04
1

SEE MAGNOLIA COMMERCIAL
IMPROVEMENT PLANS FOR
PROPOSED IMPROVEMENTS

N86°24'46"E 840.52'



S89°57'39"E
4.23'

N/F
JONH M. FLAVIN
774-1108
ZONED C-3
CITY OF O'FALLON

MAGNOLIA
FLAT PLAN
WATER AS-BUILTS

SEE SHEET 3

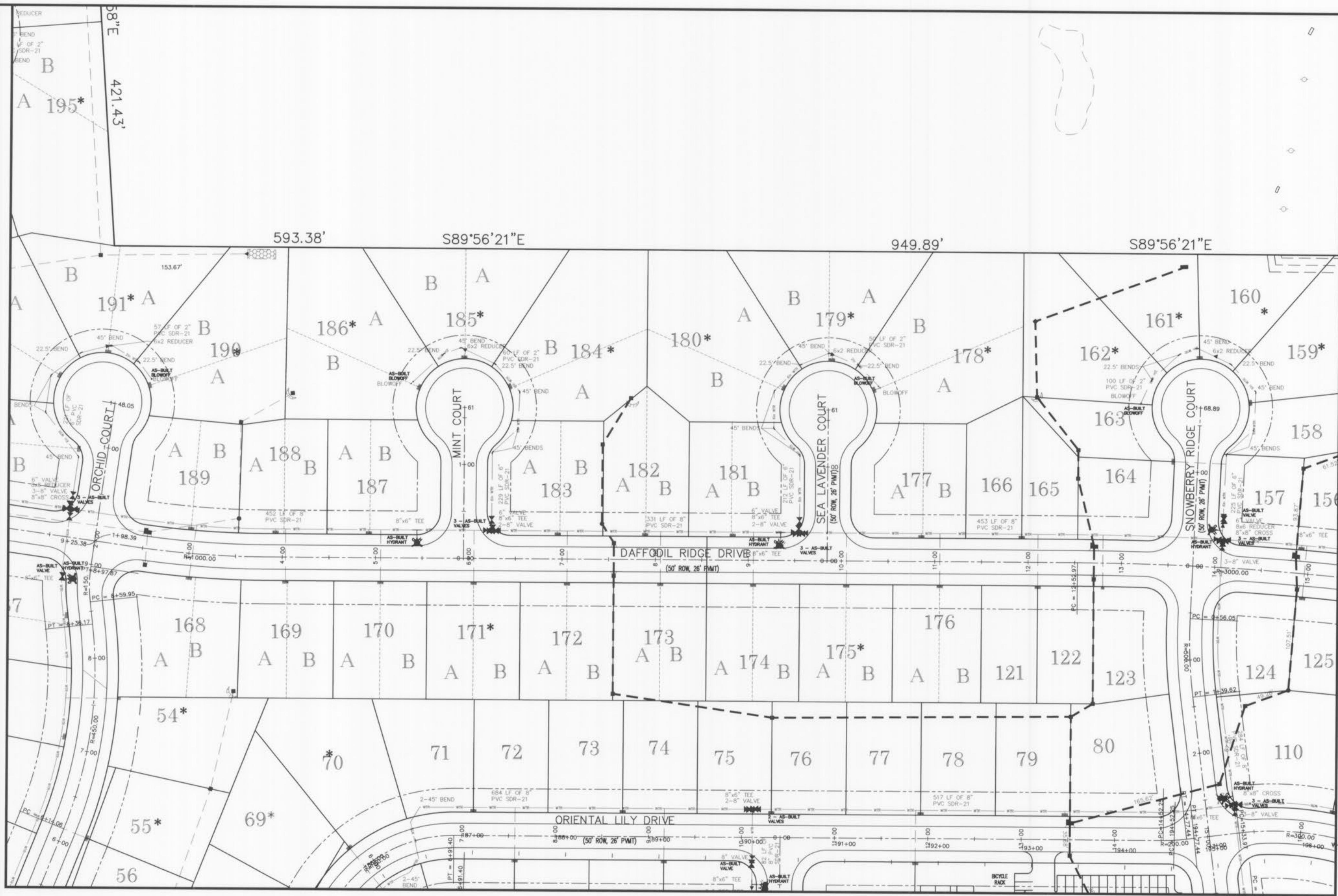
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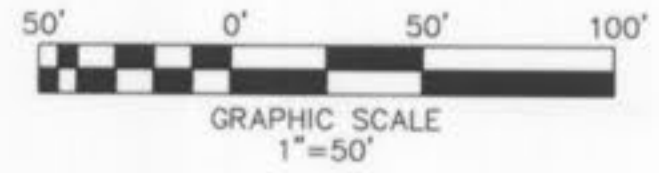
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SEE SHEET 4

SEE SHEET 6

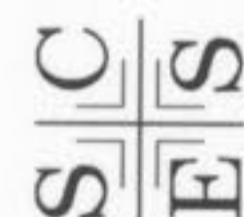


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Number 3603.01

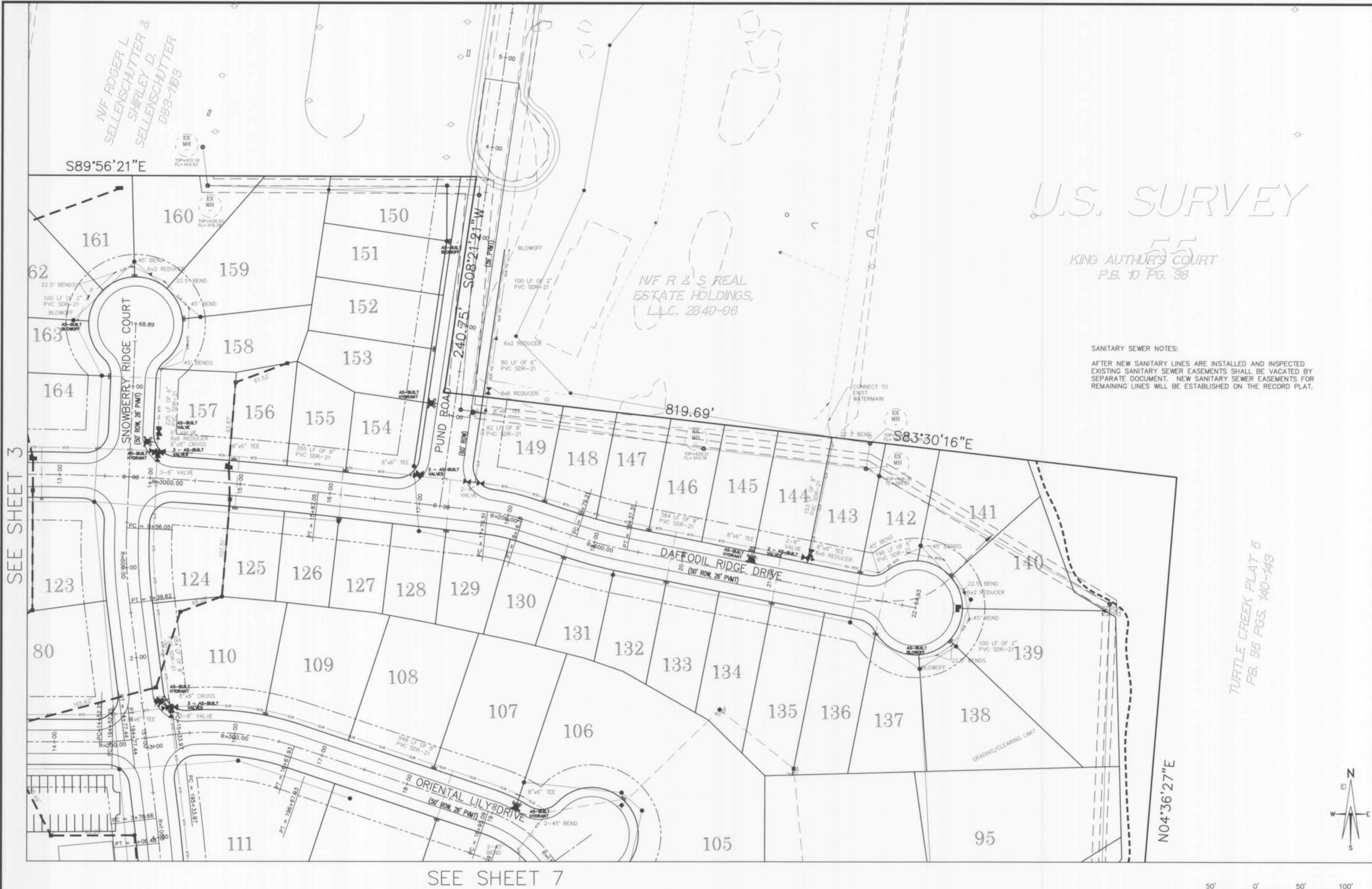


**MAGNOLIA
FLAT PLAN
WATER AS-BUILTS**

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ORDER NO.	030498
DATE	1-26-04
	3



U.S. SURVEY

KING AUTHORITY'S COURT
P.B. 10 PG. 38

N/F R & S REAL ESTATE HOLDINGS,
L.L.C. 2840-08

SANITARY SEWER NOTES:
AFTER NEW SANITARY LINES ARE INSTALLED AND INSPECTED EXISTING SANITARY SEWER EASEMENTS SHALL BE VACATED BY SEPARATE DOCUMENT. NEW SANITARY SEWER EASEMENTS FOR REMAINING LINES WILL BE ESTABLISHED ON THE RECORD PLAT.

MAGNOLIA
FLAT PLAN
WATER AS-BUILTS

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



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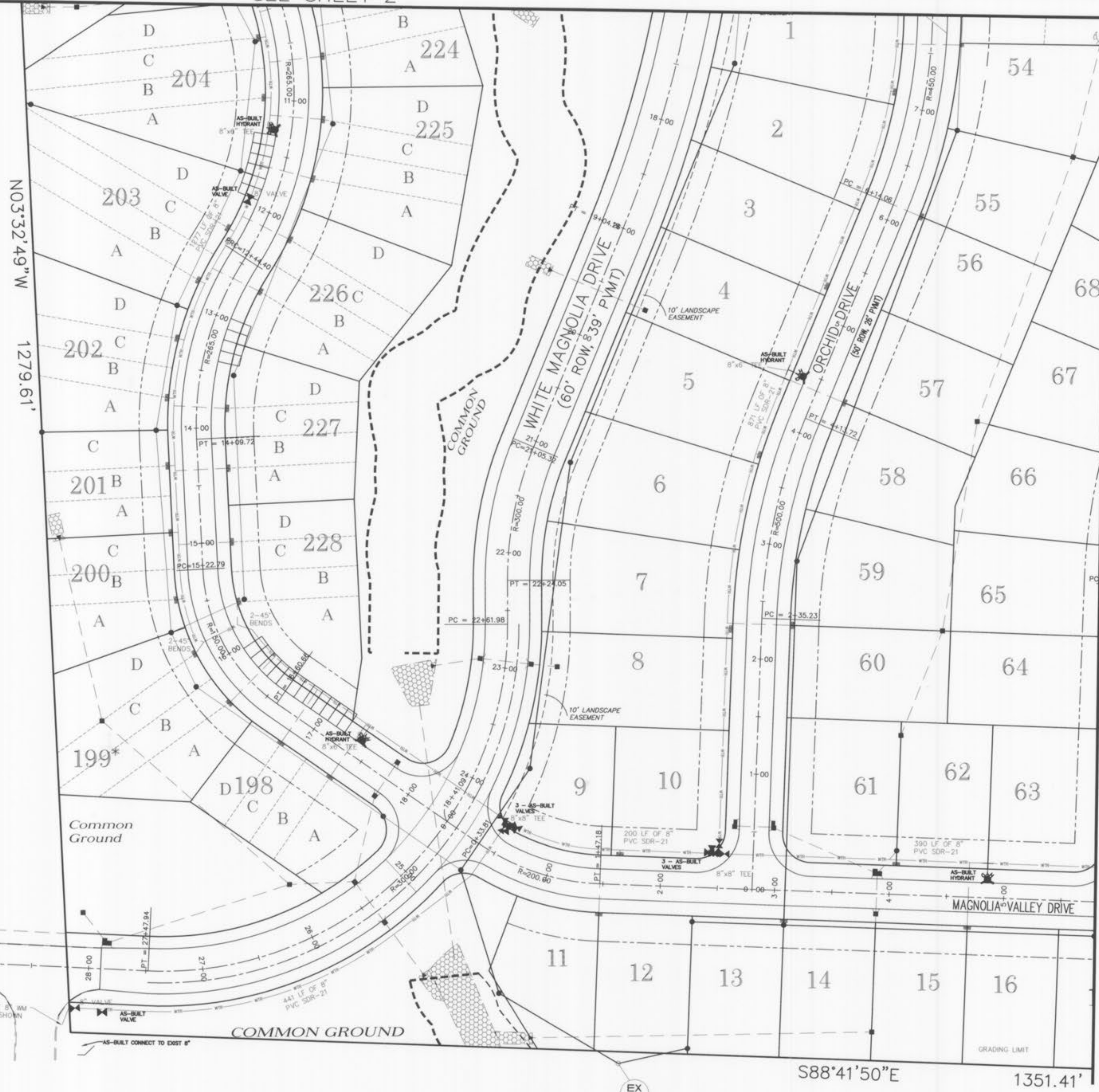
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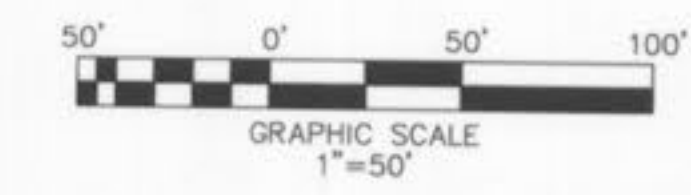
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DATE	1-26-04
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N/F
 JONH M. FLAVIN
 774-1108
 ZONED C-3
 CITY OF O'FALLON

SEE SHEET 2

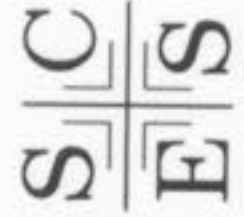


SEE SHEET 6



MAGNOLIA
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 ST. CHARLES, MO 63301
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ORDER NO.

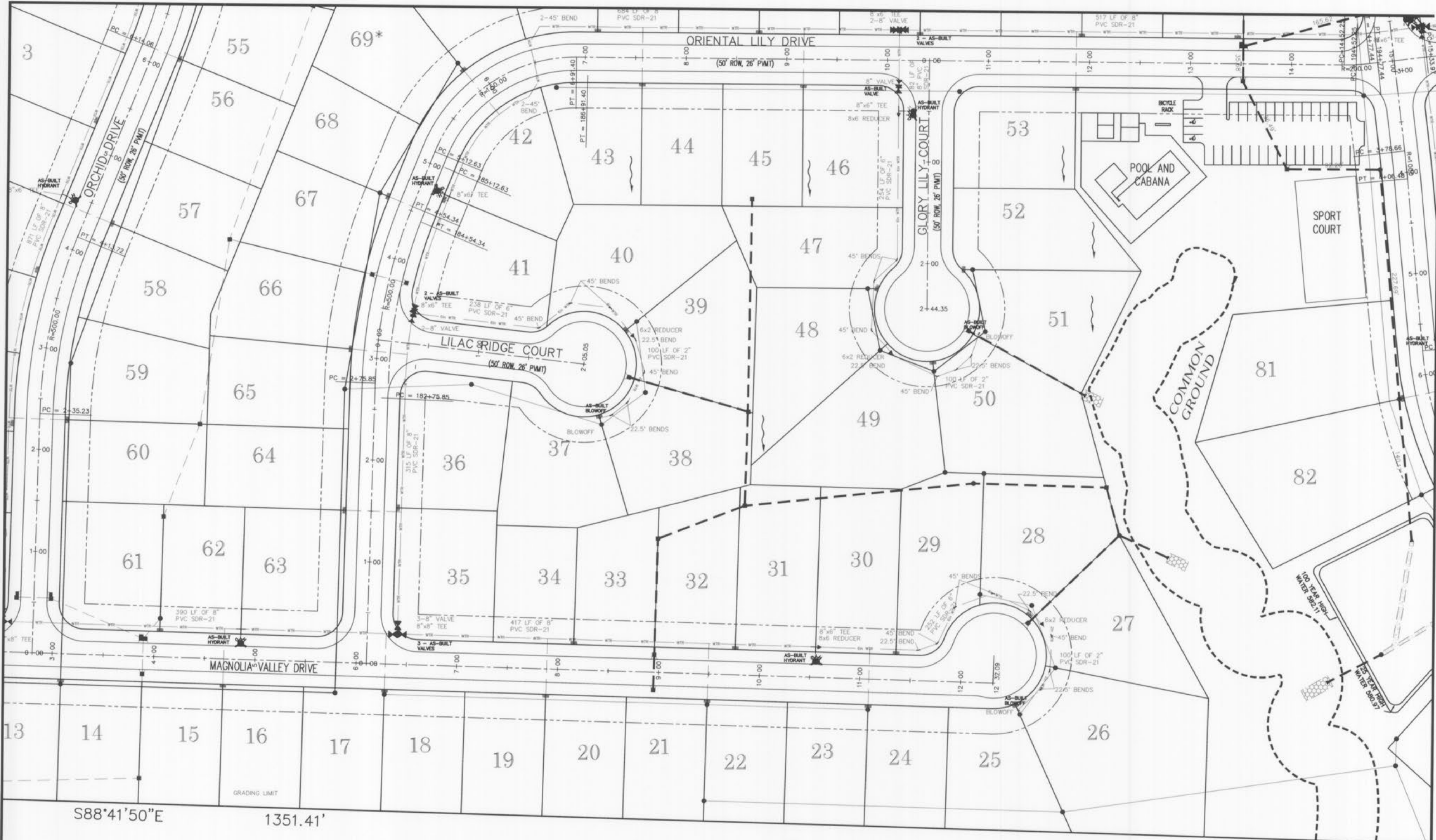
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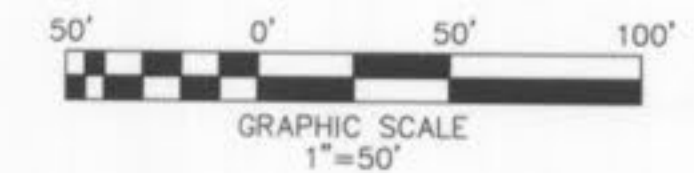
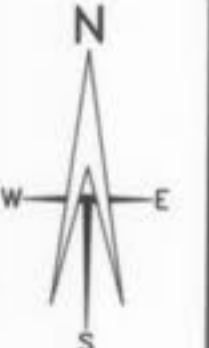


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SEE SHEET 7

**MAGNOLIA
FLAT PLAN
WATER AS-BUILTS**

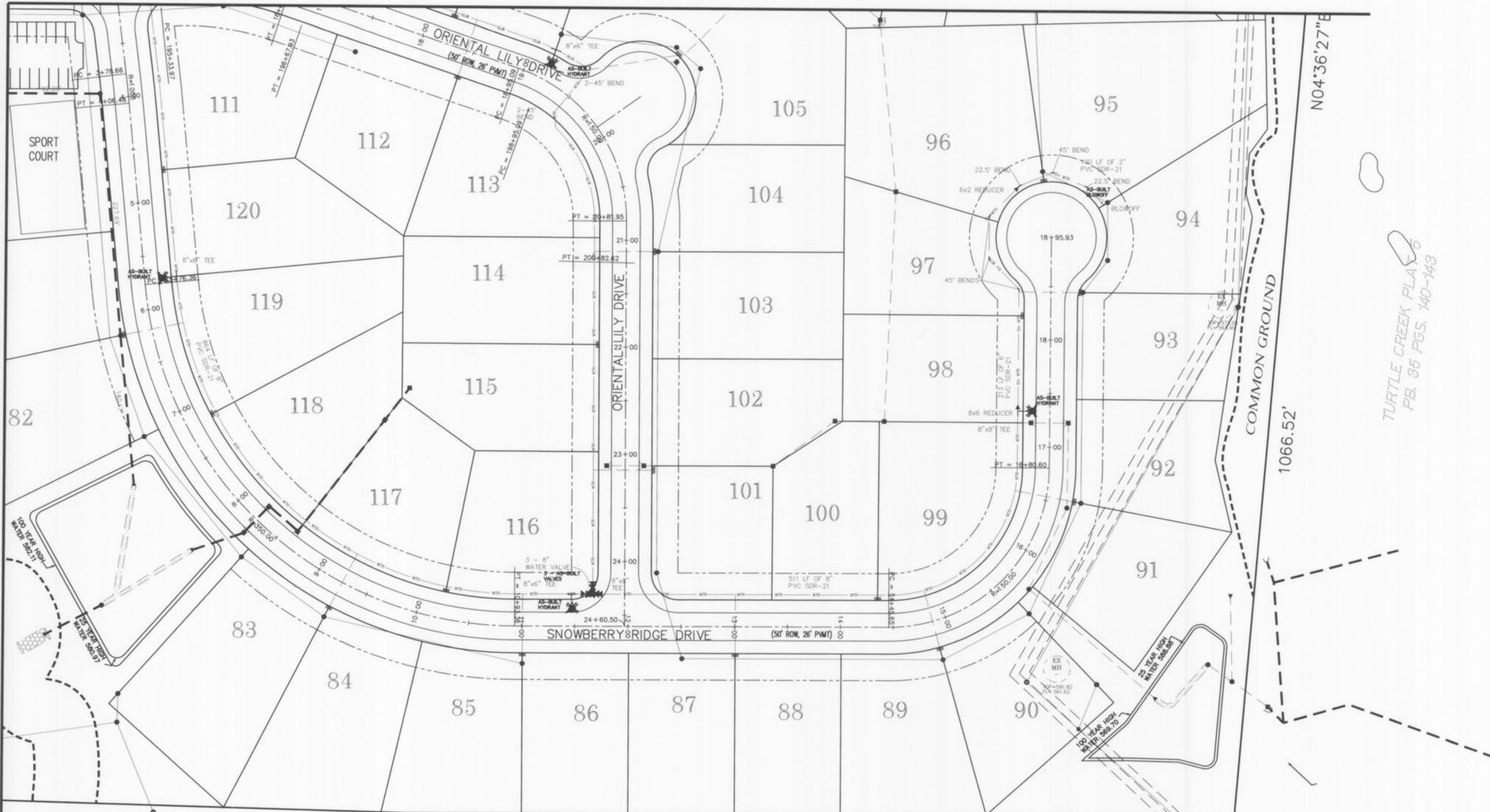
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TURTLE CREEK PLAT 3
PB. 33 PGS. 243-247

ORDER NO. 030498
DATE 1-26-04
6

SEE SHEET 4



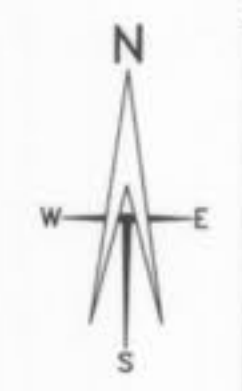
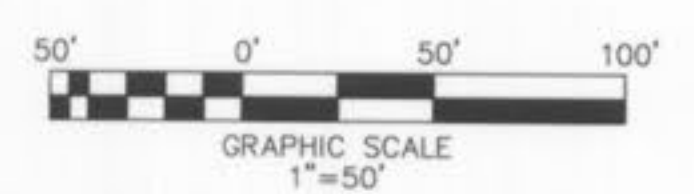
SEE SHEET 6

N89°47'19"E 775.52'

TURTLE CREEK PLAT 3
PB. 33 PGS. 243-247

AS-BUILT NOTES:
BUBBLE AREA DENOTES AS-BUILTS AT THIS TIME

SANITARY SEWER NOTES:
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MAGNOLIA
FLAT PLAN
WATER AS-BUILTS

S | C
E | S
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