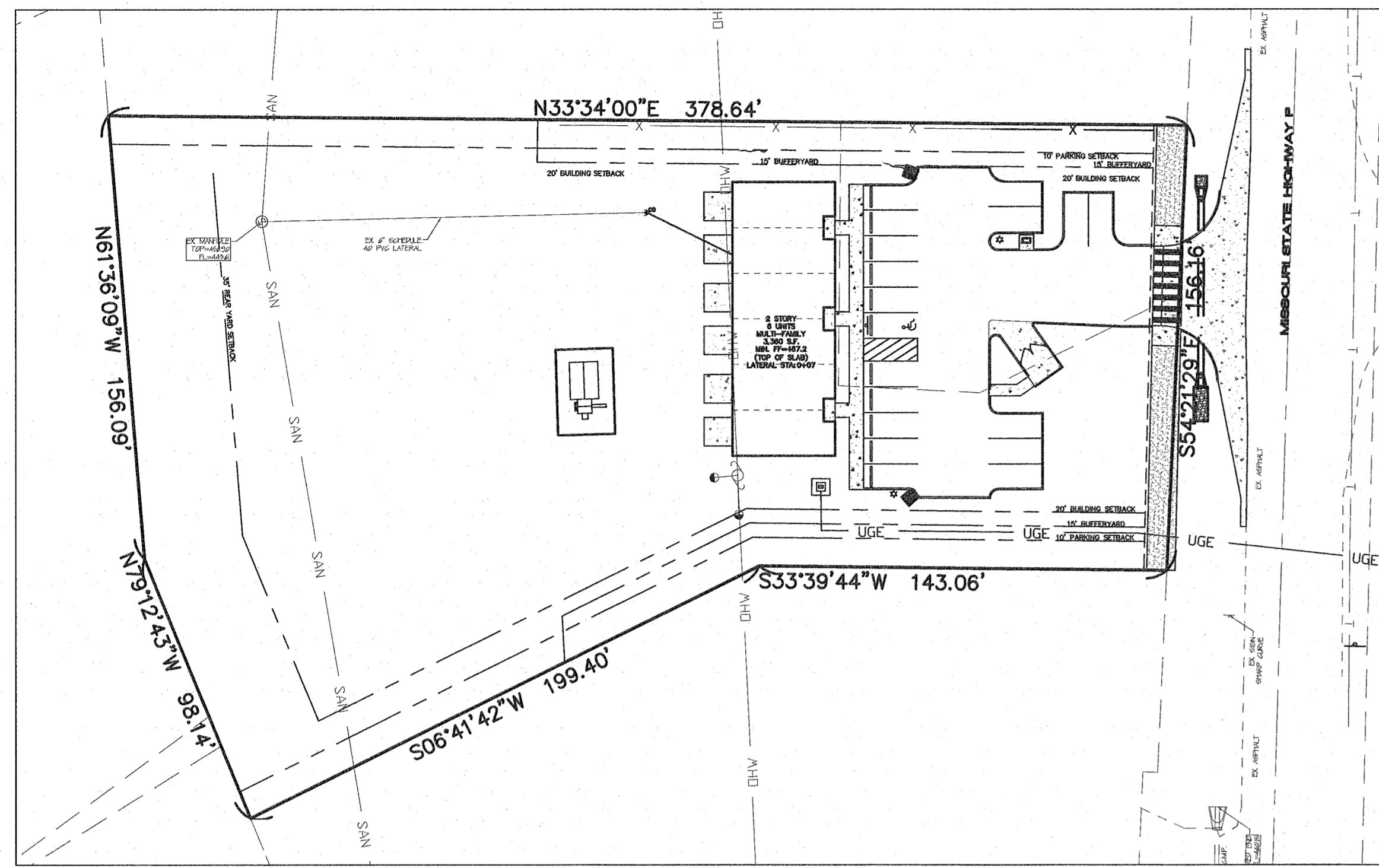
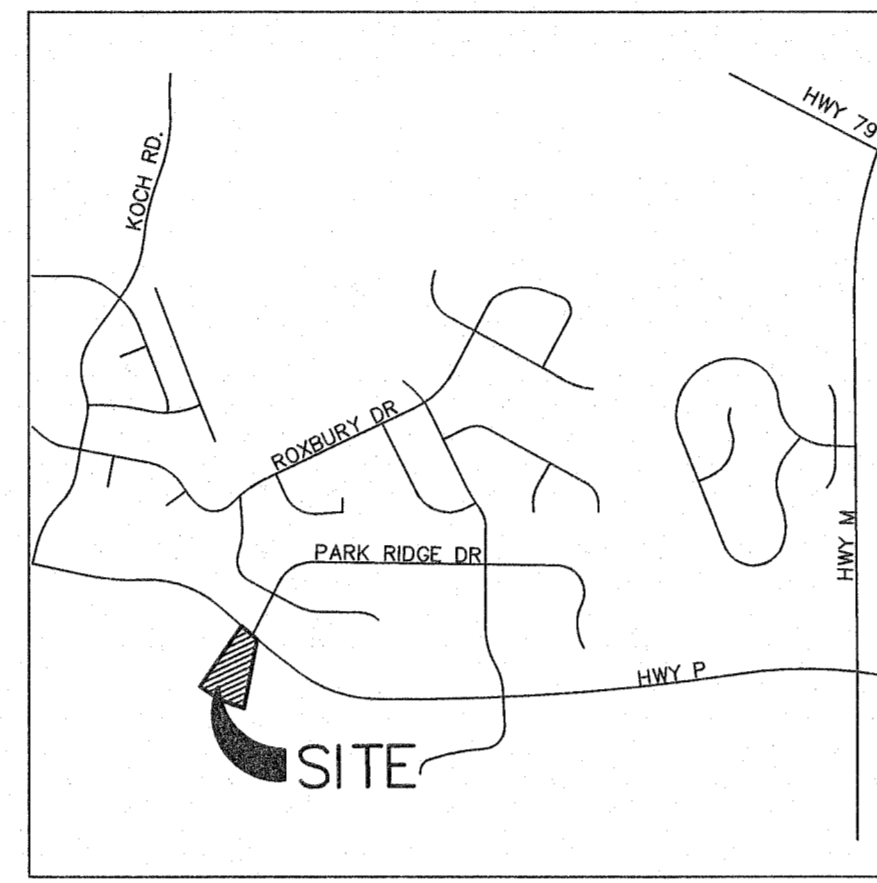


A SET OF CONSTRUCTION PLANS FOR SHANE ESTATES

A TRACT OF LAND BEING ALL OF LOTS 1 AND 2 OF "SHANE ESTATES" P.B. 36, PG. 169 AND PART OF U.S. SURVEY 2632 TOWNSHIP 47 NORTH, RANGE 3 EAST OF THE FIFTH PRINCIPAL MERIDIAN CITY OF O'FALLON ST. CHARLES COUNTY, MISSOURI



Plan View - 1"=40'



Locator Map

Drawing Index

- 1 COVER SHEET
- 2 NOTES
- 3 DEMOLITION PLAN
- 4 SITE PLAN
- 5 GRADING PLAN
- 6 WATER PLAN
- 7 SWPP PLAN
- 8 DRAINAGE AREA MAP
- 9-12 DETAILS

Benchmarks

Project BENCHMARK:

Cut square on the Northwest corner of the North headwall of a 4'x7' concrete box, Missouri State Highway P station 506+64 - 20.5' left. Elevation: 459.35 (USGS Datum)

Site BENCHMARK:

Old iron pipe at the Northeast corner of subject property. Elevation: 466.04

Utilities

Sanitary Sewer
City of O'Fallon
100 N. Main Street
O'Fallon, MO 63366
636-240-2000

Water
City of O'Fallon
100 N. Main Street
O'Fallon, MO 63366
636-240-2000

Electric
Ameren Missouri
200 Calhoun Road
Wentzville, MO 63385
636-639-8312

Gas
Spire Energy
6400 Graham Road
St. Louis, MO 63134
314-522-2297

Telephone
CenturyLink
1151 Century Tel Drive
Wentzville, MO 63385
636-332-7261

Fire Department
O'Fallon Fire Protection District
111 Laura K Drive
O'Fallon, MO 63366
636-272-3493

Storm Sewer
City of O'Fallon
100 N. Main Street
O'Fallon, MO 63366
636-240-2000



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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 OR CONSTRUCTION OF THE IMPROVEMENTS.

City approval of any construction site plan does not mean that any building can be constructed on the lots without meeting the building setbacks as required by the zoning codes.

All installations and construction shall conform to the approved engineering drawings. However, if the developer chooses to make minor modifications in design and/or specifications during construction, they shall make such changes at their own risk, without any assurance that the City Engineer will approve the completed installation or construction. It shall be the responsibility of the developer to notify the City Engineer of any changes from the approved drawings. The developer may be required to correct the installed improvements so as to conform to the approved engineering drawings. The developer may request a letter from the Construction Inspection Division regarding any field changes approved by the City Inspector.

Conditions of Approval From Planning and Zoning

(18-000613) - APPROVED ON APRIL 5, 2018 WITH THE FOLLOWING CONDITIONS:

1. ACCORDING TO THE LETTER PROVIDED BY THE SCHOOL DISTRICT, BUS SERVICE WILL NOT BE PROVIDED WITHIN THE APARTMENT COMPLEX. PROVIDE THE SIGNAGE REQUESTED IN THE LETTER FOR SERVICE AT THE HIGHWAY P ENTRANCE.
2. DEMONSTRATE HOW THE TRASH ENCLOSURE WILL BE ACCESSED AND THE SITE EXITED BY A TRASH TRUCK WITHOUT USING HIGHWAY P AS REVIEWED AND APPROVED ON THE CONSTRUCTION SITE PLANS.
3. THE DEVELOPER SHALL REVIEW OPTIONS TO MAKE THE SCHOOL BUS STOP AHEAD SIGN AS VISIBLE AS POSSIBLE AND POTENTIALLY MODIFIED TO INCLUDE AN ILLUMINATED OR FLASHING FEATURE SUBJECT TO MODOT APPROVAL THAT COULD BE ACTIVATED ONLY DURING PICK-UP.
4. THE CONSTRUCTION PLANS SHALL ADDRESS THE MUNICIPAL CODE REQUIREMENTS LISTED.

THE APPROVAL IS ALSO CONDITIONAL UPON THE FOLLOWING MUNICIPAL CODE REQUIREMENTS BEING PROVIDED:

1. WATER METERS ARE TO BE IN THE EASEMENT JUST BEHIND THE RIGHT OF WAY. THE WATER LINE FROM THE CONNECTION TO THE METER IS MAINTAINED BY THE CITY.
2. ALL ACCESSIBILITY REMPS ARE TO BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE.
3. DETENTION AND WATER QUALITY ARE REQUIRED PER CITY CODE 405.240 & 405.247. USE THE 100 YEAR PI FACTORS FOR THE DIFFERENTIAL RUNOFF CALCULATIONS. WATER QUALITY SHALL BE PROVIDED PER THE CODE, THERE IS NO EXCEPTION.
4. NOTE ON THE PLAN THAT THE SANITARY LATERALS ARE TO BE 6" SCHEDULE 40 PVC AT A MINIMUM OF 2% SLOPE.
5. THE LOWEST FLOOR ELEVATION FOR THE BUILDING WILL NEED TO BE 466.0 TO MEET THE REQUIREMENTS OF CITY CODE 415. NOTE ON THE PLAN THAT ELEVATION CERTIFICATES WILL BE REQUIRED.

Legend

600.00	EXISTING LABELS	EXIST. SINGLE CURB INLET
600.00	PROPOSED LABELS	EXIST. AREA INLET
CI	SINGLE CURB INLET	PROPOSED SINGLE CURB INLET
DCI	DOUBLE CURB INLET	PROPOSED AREA INLET
AI	AREA INLET	PROPOSED GRATE INLET
DAI	DOUBLE AREA INLET	EXIST. SANITARY MANHOLE
GI	GRATE INLET	EXIST. STORM MANHOLE
DGI	DOUBLE GRATE INLET	PROPOSED MANHOLE
MH	MANHOLE	POWER POLE
FE	FLARED END SECTION	GUY WIRE
EP	END PIPE	LIGHT STANDARD
CP	CONCRETE PIPE	FIRE HYDRANT
RCP	REINFORCED CONCRETE PIPE	WATER METER
CMP	CORRUGATED METAL PIPE	WATER VALVE
OPP	CORRUGATED PLASTIC PIPE	GAS VALVE
PVC	POLY VINYL CHLORIDE (PLASTIC)	TELEPHONE PEDESTAL
CO	CLEAN OUT	SIGN
	SLOPE LIMITS	TREE
—	DRAINAGE SWALE	BENCHMARK
—	EXISTING STORM SEWER	MAILBOX
—	EXISTING SANITARY SEWER	FOUND PIPE
—	EXISTING WATER LINE	SET PIPE
—	EXISTING FIBER OPTIC LINE	
—	EXISTING GAS LINE	
—	EXISTING UNDERGROUND ELECTRIC	
—	EXISTING OVERHEAD ELECTRIC	
—	EXISTING CABLE TV LINE	
—	EXISTING TELEPHONE LINE	
—	PROPOSED STORM SEWER	
—	PROPOSED SANITARY SEWER	
-x-x-	FENCE LINE	
—	SAWCUT LINE	
■	CONCRETE PAVEMENT	

Development Notes

1. Site Area: 1.54 Acres
2. Existing Zoning: "R-3", Garden Apartment District
3. Proposed Use: 6 Attached Units
4. Owner: Michael V. Schneider & Joseph & Paula Dames
428 N. Main Street O'Fallon, MO 63366 2101 Flatwoods Road O'Fallon, MO 63366
5. Flood Plain Note: According to the Flood Insurance Rate Map of St. Charles, Missouri, Unincorporated Areas (Community - Panel Number 29183C0230G, dated January 20, 2016), this tract lies partially in Zone X (Areas determined to be outside the 0.2% annual chance floodplain.) and partially within Zone AE (Special flood hazard areas with base flood elevations determined).
6. Topographic & boundary information is per survey as compiled by Bax Engineering.
7. All existing creeks, streams, and drainage swales will have an associated storm water easement that will be provided on the Record Plat.
8. All new lighting shall be downcast lights consistent with City of O'Fallon standards and specifications. A photometric plan shall be submitted with construction documents for review and approval.
9. 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 or construction of the improvements.
10. All new utilities are to be located underground.
11. All grades shall be within 0.2 feet of those shown on the grading plan.
12. No slope shall be steeper than 3:1. All slopes shall be sodded or seeded and mulched.
13. All construction and materials used shall conform to current City of O'Fallon standards.
14. Traffic control is to be per MoDOT or MUTCD, whichever is more stringent.
15. All proposed fencing requires a separate permit from the Planning & Development division.
16. Site Coverage Calculations:
Total Site = 1.54 Acres
Buildings = 0.077 Acres (5%)
Pavement = 0.245 Acres (15.9%)
Greenspace = 1.218 Acres (79.1%)
17. Parking Calculations:
One and one-half (1.5) spaces for efficiency and one (1) bedroom unit, plus one (1) additional space for each additional bedroom 6 Units x 2.5 spaces = 15 spaces required 18 spaces proposed (including 1 accessible space)
18. Landscape Requirements:
Not less than 6% of the interior parking lot shall be landscaped
15 spaces x 270 s.f. = 4,050 s.f.
4,050 x 6% = 243 s.f. Required
Provided = 454 s.f.
19. Landscape Bufferyard Requirements:
Along perimeter, a 15' wide Bufferyard with 6' Vinyl Slight-Proof Fence With a total of 1.5 plant units per every 100 feet of frontage Western property line = 216.16 l.f. / 100 = 2.16 x 1.5 = 3.24 plant units required
3.24 units x 30 points = 97.2 points Required 12 Trees @ 10 points each = 120 points
Proposed Eastern property line = 211.29 l.f. / 100 = 2.11 x 1.5 = 3.165 plant units required 3.165 units x 30 points = 94.95 points required
10 Trees @ 10 points each = 100 points Proposed
20. Differential Runoff Calculations:
Site Area: 67,197.22 S.F. (1.54 Acres)
Existing:
Ex. Building & Pavement: 0.0706 Acres @ 3.85 = 0.271
Ex. Grass: 1.47 Acres @ 1.87 = 2.749
Existing Total = 3.02cfs
Existing 100yr:
Ex. Building & Pavement: 0.0706 Acres @ 6.08 = 0.429
Ex. Grass: 1.47 Acres @ 2.95 = 4.336
Existing Total = 4.765cfs
Proposed:
Building & Pavement: 0.322 Acres @ 3.85 = 1.239
Grass: 1.218 Acres @ 1.87 = 2.277
Proposed Total = 3.516cfs
Proposed 100yr:
Building & Pavement: 0.322 Acres @ 6.08 = 1.957
Grass: 1.218 Acres @ 2.95 = 3.593
Proposed Total = 5.55cfs
Total Differential: 3.516cfs - 3.02cfs = 0.496cfs Increase in Runoff
Total Differential 100yr: 4.765cfs - 5.55cfs = 0.785 Increase in Runoff
(No Detention Required)

Site Notes

- * City of O'Fallon Construction work hours per Code Ordinance 3429 as shown in Section 500.420 of the Municipal Code of the City of O'Fallon are as follows:
October 1 through May 31
7:00 A.M. To 7:00 P.M. Monday Through Sunday
June 1 Through September 30
6:00 A.M. To 8:00 P.M. Monday Through Friday
7:00 A.M. To 8:00 P.M. Saturday and Sunday

- * The area of this phase of development is 68,796 s.f. (1.579 Ac.)
The area of land disturbance is 0.68 Ac.
Number of proposed lots is 1
Building setback information for R-3 (Garden Apartment District)
Front: 30'
Side: 20'
Rear: 35'

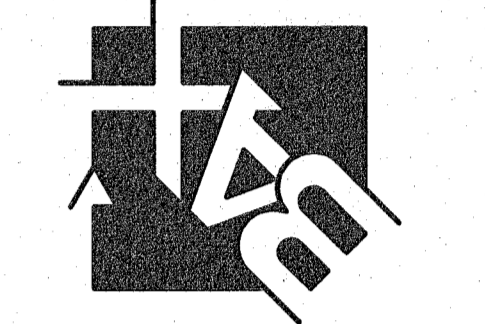
- * The estimated sanitary flow in gallons per day is: 2,220 gpd

- * Tree Preservation Calculations:
Existing Trees = 0.646 Acres
1.579 Acres / 15 trees per acres = 0.105 Acres
0.646 x 20% = 0.129 Acres
0.129 > 0.105 = 0.129 Acres to be preserved
0.00 Acres To Be Removed
0.646 Acres Preserved

VEGETATION ESTABLISHMENT For Urban Development Sites	
APPENDIX A	
SEEDING RATES:	
PERMANENT:	
Tall Fescue - 150 lbs./ac.	
Smooth Bromo - 100 lbs./ac.	
Combined - Fescue @ 75 lbs./ac. AND Bromo @ 50 lbs./ac.	
TEMPORARY:	
Wheat or Rye - 150 lbs./ac. (3.5 lbs. per 1,000 s.f.)	
Oats - 120 lbs./ac. (2.75 lbs. per 1,000 s.f.)	
SEEDING PERIODS:	
Fescue or Bromo - 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 1000 sq. ft. (4,356 lbs. per ac.)	
FERTILIZER RATES:	
Nitrogen 30 lbs./ac.	
Phosphorus 30 lbs./ac.	
Potassium 30 lbs./ac.	
Lime 600 lbs./ac. ENM*	
* ENM = effective neutralizing material as per State evaluation of quarried rock.	

PROJECT TITLE:
SHANE ESTATES

ENGINEERING
PLANNING
SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
636-928-6552
FAX 636-1718



DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authenticated by my seal are limited to this 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 survey.

Clifford L. Heitmann
Civil Engineer
E29817
Bax Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655

REVISIONS	
07/05/18	CITY COMMENTS
07/17/18	CITY COMMENTS
08/31/18	MODOT COMMENTS
09/12/18	MODOT COMMENTS
12/10/18	CLIENT COMMENTS
01/09/19	CITY COMMENTS

Developer / Owner:
ELLA REAL PROPERTY HOLDINGS, L.L.C.
428 NORTH MAIN STREET
O'FALLON, MO 63366
(636) 577-2458

COVER SHEET

CITY OF O'FALLON
COMMUNITY DEVELOPMENT DEPARTMENT
ACCEPTED FOR CONSTRUCTION
BY: Jamie Danks DATE: 01/14/2019
PROFESSIONAL ENGINEER'S SEAL
INDICATES RESPONSIBILITY FOR DESIGN



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P+Z No. 18-000613
Approval Date: 04/05/2018
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