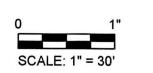
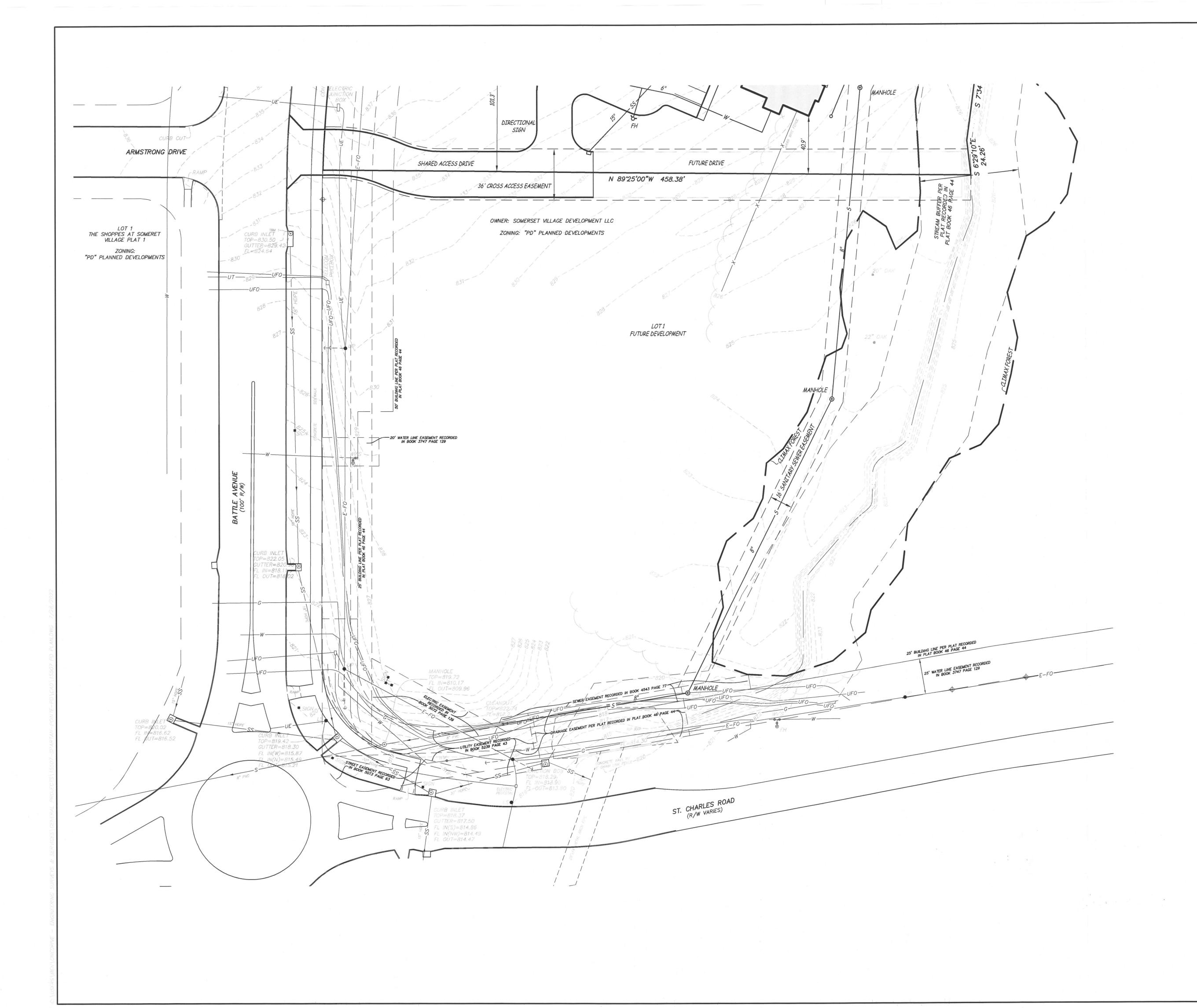


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1113 Fay Street, Columbia, MO 65201 802 El Dorado Drive, Jefferson City, MO 65101 1775 West Main Street, Sedalia, MO 65301



7/28/2022





1113 Fay Street, Columbia, MO 65201 573 - 449 - 2646 802 El Dorado Drive, Jefferson City, MO 6510 573-636-3303

1775 West Main Street, Sedalia, MO 65301 660-826-8618 www.ess-inc.com MO Engineering Corp. # 2004005018



SCALE: 1" = 30'

DEVELOPMENT PLAN FOR

2 - SPARTAN POINTE

STREET ADDRESS

4BIA, BOONE COUNTY, MISSOURI

7/28/2021 ROSS NUMBER

BENJAMIN A. ROSS REGISTERED PROFESSIONAL ENGINEER E-30054

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

JUNE 10, 2022

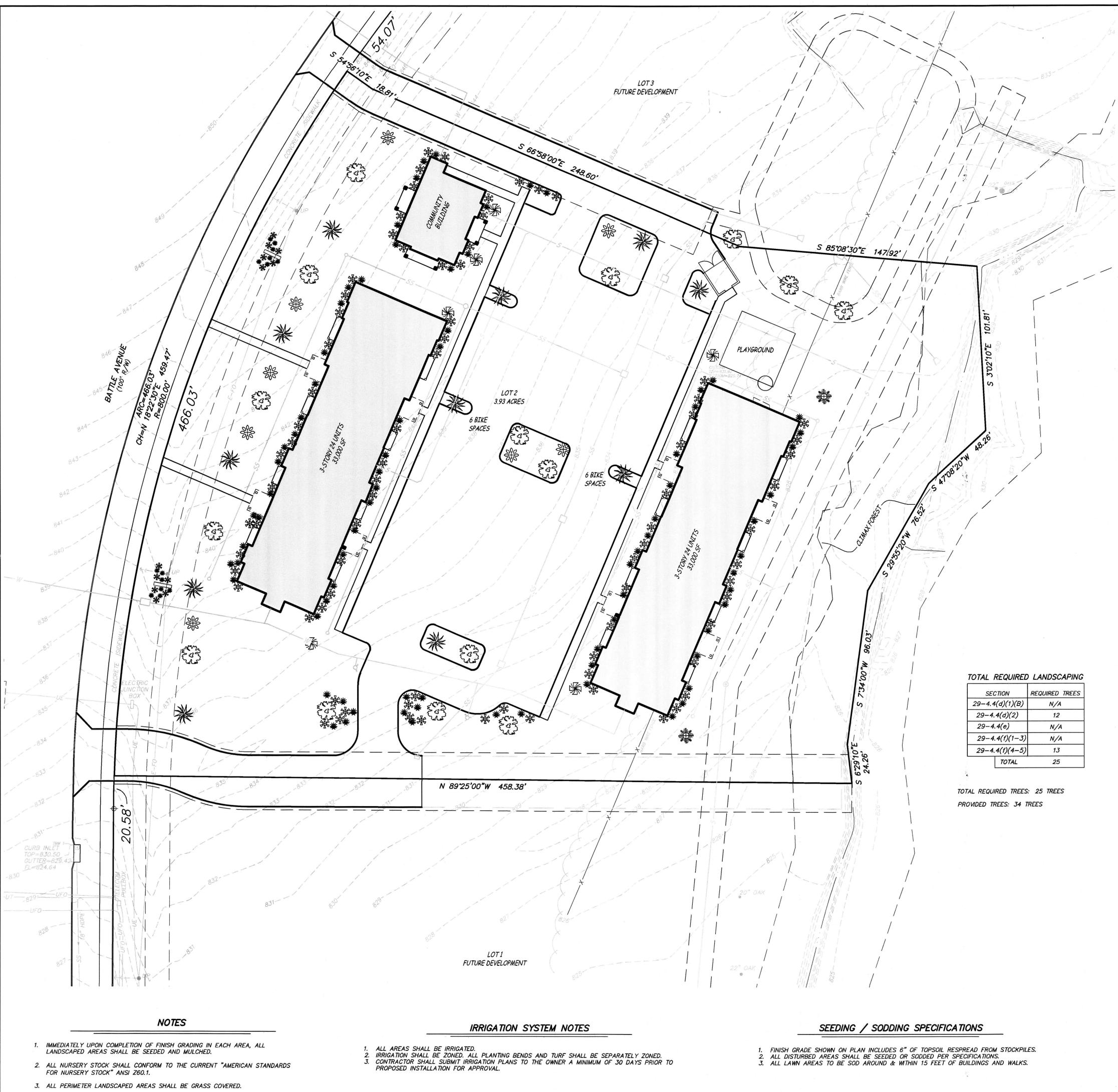
Revised JUNE 23, 2022 JULY 28, 2022

Design: BAR Drawn: CGH OFF SITE SANITARY

SEWER PLAN

C1.02

ES&S PROJECT NO. 15507



LANDSCAPE LEGEND

SYMBOL	DESCRIPTION NO.	PROVIDED
543 543	LARGE DECIDUOUS TREE (2" CALIPER)	15 ①
*	MEDIUM DECIDUOUS TREE (2" CALIPER)	11
	SMALL DECIDUOUS TREE (2" CALIPER)	8 Û
紧	ORNAMENTAL DECIDUOUS TREE (2" CALIPER)	6
	EVERGREEN TREE (6' TALL)	2
*	DECIDUOUS SHRUBS	90
*	PERENNIAL FLOWER	94
	TOTAL =	223

LANDSCAPING NOTES

CLIMAX FOREST PRESERVATION NOTE (PER 29 - 4.4(c)(1)) EXISTING CLIMAX FOREST = 13,212 SF

LANDSCAPED AREA NOTE (PER 29-4.4(c)(2)) LANDSCAPED AREA REQUIRED = 25,679 (15% OF TOTAL AREA) LANDSCAPED AREA PROVIDED = 76,644 (44.8% OF TOTAL AREA)

LANDSCAPING NOTES

- 1. ALL PLANT MATERIAL SHALL BE (PER 29-4.4(c)(3 & 4)): a. HARDY TO CENTRAL MISSOURI (USDA HARDINESS ZONE 5B)
- b. FREE OF DISEASE AND INSECTS
- c. CONFORMING TO AMERICAN STANDARD FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF NURSERYMEN. 2. ALL NON-PAVED AREAS SHALL RECEIVE THE FOLLOWING:
- a. PERIMETER LANDSCAPED AREAS: MIN 8" OF TOPSOIL. b. INTERIOR LANDSCAPED ISLANDS: MIN. 15" OF TOPSOIL.
- 3. NO LESS THAN 50% OF LANDSCAPED AREA MUST BE COVERED WITH LIVE PLANTS, NOT MULCH, BARK, GRAVEL, ETC
- (PER 29-4.4(C)(4)).

c. THE SITE CONTRACTORS SHALL BE RESPONSIBLE TO PROVIDE FINISHED GRADE TO THIS SUBGRADE.

- 4. PLANTING MATERIALS SHALL BE OF THE FOLLOWING MINIMUM SIZE (PER 29-4.4(C)(4)): a. LARGE DECIDUOUS SHADE TREES (MATURE HEIGHT >45') = 2" CALIPER
- b. MEDIUM DECIDUOUS SHADE TREES (MATURE HEIGHT 30'-45') = 2" CALIPER
- c. SMALL DECIDUOUS SHADE TREES (MATURE HEIGHT 20'-30') = 4' IN HEIGHT
- d. ORNAMENTAL TREE (MATURE HEIGHT <20') = 4' IN HEIGHT
- e. CONIFER = 6' IN HEIGHT f. SHRUBS = 5-GAL CONTAINER
- g. GROUND COVER = APPROPRIATE FOR 50% COVERAGE WITHIN 2 GROWING SEASONS . GRASS, SEED, SOD = >80% PURE LIVE SEED, 99% WEED FREE
- 5. PLANTINGS SHALL NOT BE PLACED CLOSER THAN 4' FROM THE FENCE OR PROPERTY LINE, UNLESS NOTED OTHERWISE ON THE PLANS (PER 29-4.4(C)(7))
- 6. SNOW STORAGE SHALL NOT OCCUR IN BUFFER AREAS (PER 29-4.4(C)(8))
- 7. OUTDOOR SCREENING PER 29-4.4(C)(9)): NOT APPLICABLE
- 8. ROOFTOP MECHANICAL UNIT SCREENING (PER 29-4.4(C)(10)): NOT APPLICABLE 9. SIGHT TRIANGLE (PER 29-4.4(C)(11)): NO PLANTINGS WITH MATURE HEIGHTS TALLER THAN 18 INCHES SHALL BE PLACED WITHIN THE DEFINED SIGHT TRIANGLE AS SHOWN ON THE PLAN. 10. ALL TREES PLANTED IN THE RIGHT OF WAY SHALL COMPLY WITH CHAPTER 24 ARTICLE V OF THE CITY OF COLUMBIA
- CODE OF ORDINANCES (PER 29-4.4(C)(12)). 11. PLANTING SHALL BE COMPLETED WITHIN ONE PLANTING SEASON (SPRING TO FALL) OF THE COMPLETION OF EXTERIOR IMPROVEMENTS, OR WITHIN ONE YEAR OF THE ISSUANCE OF THE LAND DISTURBANCE PERMIT, WHICHEVER OCCURS LATER (PER 29-4.4(C)(13)). THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A PERFORMANCE BOND,
- ESCROW, LETTER OF CREDIT, OR OTHER INSTRUMENT ACCEPTABLE TO THE CITY OF COLUMBIA, TO THE CITY OF COLUMBIA AND OWNER, FOR ANY WORK NOT COMPLETED OR ACCEPTED WITHIN THIS TIME FRAME. 12. TREE PROTECTION SHALL BE REQUIRED PRIOR TO AND DURING CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES. 13. NO ACTIVITY WITH THE POTENTIAL OF CAUSING DAMAGE TO THE ROOT SYSTEM OF TREES SHALL BE ALLOWED WITHIN
- 20 FEET OF THE OUTSIDE OF PRESERVED, PROTECTED, OR PLANTED TREE DRIP LINE (PER 29-4.4(G)(4)). a. ORANGE CONSTRUCTION FENCE, WITH A SIGN STATING "TREE PROTECTION — KEEP OUT" EVERY 100 FEET, SHALL BE INSTALLED ALONG THE PERIMETER OF THE TREE PROTECTION AREA BEFORE AND THROUGHOUT
- CONSTRUCTION. b. IF SITE GRADING OCCURS WITHIN 20' OF THE TREE PRESERVATION, THE PERIMETER OF THE AREA MUST BE
- TRENCHED TO A MINIMUM WIDTH AND DEPTH OF 2', AND ROOT PRUNED. c. NO CONSTRUCTION, GRADING, EQUIPMENT, MATERIAL STORAGE, OR OTHER ASSOCIATED ACTIVITY SHALL BE ALLOWED WITHIN THE FENCED AREA.
- d. ALL TREE AND VEGETATION PROTECTION MEASURES SHALL BE INSPECTED AND APPROVED BY CITY STAFF PRIOR TO THE STAFF OF ANY LAND DISTURBING ACTIVITIES
- 14. ANY FAILURE OF THE CONTRACTOR TO FOLLOWING THESE REQUIREMENTS SHALL BE REMEDIED, AT THE CONTRACTOR'S SOLE EXPENSE, BY ONE OF THE FOLLOWING, AS FOUND ACCEPTABLE TO THE CITY OF COLUMBIA AND
- a. PAYMENT OF \$750 TO THE CITY OF COLUMBIA RIGHT OF WAY LANDSCAPING BUDGET PER NEW TREE REQUIRED TO REPLACE IMPACTED TREE. b. REPLACEMENT OF DAMAGED TREES PER 29-4.4(G)(3)(ii).

LANDSCAPING STRIP NOTE (PER 20-4 4(d))

LANDSCAPING STRIP	NOIL (PER 29-4.4(d))		
	REQUIRED	<u>PROVIDED</u>	
STREET TREES:	1/40 LF*466 LF = 12	<i>15</i>	
MEDIUM:	30% OF TOTAL = 4	5	
LARGE:	30% OF TOTAL = 4	5	
<u>SPECIES</u>	2	3	
TOTAL TREES	12	15	

PROPERTY EDGE BUFFERING NOTE (PER 29-4.4(E)):

UBJECT PROPERTY:	PD	MULTI-FAMILY	_	_	_	
DJACENT PROPERTIES:						
NORTH	PD	SHARED DRIVEWAY	0	0	0	
SOUTH	PD	SHARED DRIVEWAY	0	0	0	
EAST	PD	STREAM BUFFER	0	0	0	
WEST	R/W	N/A				_
TOTAL	•	,			0	

<u>PROVIDED</u> N/A PLANTING CATEGORIES: COVERAGE OF STRIP: OPACITY (1' TO 5' ABOVE GRADE) >80%

PARKING LOT LANDSCAPING NOTE (PER 29-4.4(F)):

PARKING LOT AREA = 41,936 SQ. FT. 10% LANDSCAPE = N/A

10% LANDSCALE - N/A		
PROVIDED = N/A		
	<u>REQUIRED</u>	PROVIDED
INTERIOR LANDSCAPED ISLANDS:	>100 STALLS	3
INTERIOR ISLAND WIDTH:	8'	8'
SEPARATION ISLANDS:	>150 STALLS	3
INTERIOR TREES (1/4,000 SF PAVEMENT)	N/A	14
MEDIUM (30% OF TOTAL)	N/A	8
LARGE (40% OF TOTAL)	N/A	6
SEPARATION ISLAND TREES (40' SPACE)	N/A	6
TOTAL TREES:	13	14

SIGNIFICANT TREES NOTE (PER 29-4.4(G)):

1. CREDIT FOR PRESERVING EXISTING MATURE/SIGNIFICANT TREES: N/A THERE ARE NO EXISTING TREES AT THE SITE OUTSIDE THE STREAM BUFFER.

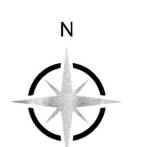
2. SIGNIFICANT TREES: N/A, THERE ARE NO SIGNIFICANT TREES AT THE SITE OUTSIDE THE STREAM BUFFER.

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1775 West Main Street, Sedalia, MO 6530

MO Engineering Corp. # 2004005018





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7/28/2022 OF MIS BENJAMIN A. ROSS NUMBER E-30054

lengamin a. Ross BENJAMIN A. ROSS REGISTERED

PROFESSIONAL ENGINEER E-30054 AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

JUNE 10, 2022

Revised JUNE 21, 2022 JULY 28, 2022

Design: BAR Drawn: CGH

CONCEPTUAL LANDSCAPE PLAN

Sheet

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