## LEGEND

MH()	EXISTING SANITARY MANHOLE
FH 🖸	EXISTING FIRE HYDRANT
`e	EXISTING GUY WIRE
LP 🖸	EXISTING LIGHT POLE
	PROPOSED LIGHT POLE
$\bigcirc$	EXISTING TELEPHONE SERVICE
Ē	EXISTING ELECTRIC METER
G	EXISTING GAS METER
$\bigotimes$	EXISTING WATER METER
C	EXISTING CABLE BOX
Ε	EXISTING ELECTRIC TRANSFORM
Ε	PROPOSED ELECTRIC TRANSFOR
Τ	EXISTING TELEPHONE BOX
PP-()-	EXISTING UTILITY POLE
WVX	EXISTING WATER VALVE
	EXISTING STREET SIGN
PB	PLAT BOOK
BK	BOOK
PP	PAGE
0,000	SQUARE FEET
00.00 AC	ACRES
X	EXISTING FENCE
UE	EXISTING UNDERGROUND ELECT
UE	PROPOSED UNDERGROUND ELE
OE	EXISTING OVER-HEAD ELECTRIC
UT	EXISTING UNDERGROUND TELEP
OT	EXISTING OVER-HEAD TELEPHO
FO	EXISTING FIBER OPTIC CABLE
G	EXISTING GAS
S	EXISTING SANITARY
\$	PROPOSED SANITARY LATERAL
W	EXISTING WATER WAIN
W	PROPOSED WATER SERVICE
= $=$ $=$ $=$ $=$ $=$	EXISTING STORM SEWER
0	PROPOSED STORM SEWER
CATV	EXISTING CABLE TELEVISION
	EXISTING FLOWLINE OR WATER
— — — 700 — — —	EXISTING CONTOUR

# ANSFORMER RANSFORMER 3*0X* ELECTRIC UND ELECTRIC ELECTRIC TELEPHONE ELEPHONE CABLE ATERAL VICE ISION WATER EDGE

# STORMWATER MANAGEMENT A

THIS LOT IS SUBJECT TO THE CITY OF COLUMBIA STORMWATER ORDINANCE, CHAPTER 12A, WATER QUALITY AND DETENTION REQUIREMENTS. THIS PLAN IS CONCEPTUAL IN NATURE AND A FULL STORMWATER MANAGEMENT PLAN WITH BE PROVIDED WITH FUTURE CONSTRUCTION DOCUMENTS. FUTURE DETENTION SHALL BE DESIGNED TO LIMIT THE POST-DEVELOPMENT RELEASE RATES TO THE PRE-DEVELOPMENT FLOW RATES FOR THE 100-YEAR EVENT FOR LOTS 1–A & 1–B GRACE COVENANT CHURCH SUBDIVISION PLAT 1-A AND LOT 2, GRACE COVENANT CHURCH SUBDIVISION. WATER QUALITY FOR THESE LOTS SHALL TREAT NEW IMPERVIOUS AREAS TO A LEVEL OF SERVICE OF 3.

#### STREAM BUFFER STATEMENT

THIS TRACT IS REGULATED BY THE CITY OF COLUMBIA STREAM BUFFER ORDINANCE AS DETERMINED BY THE USGS MAP FOR COLUMBIA QUADRANGLE, BOONE COUNTY, MISSOURI AND ARTICLE X OF CHAPTER 12A OF THE CITY OF COLUMBIA CODE OF ORDINANCES. NO STREAM BUFFER EXISTS ON THIS SITE.

#### FLOOD PLAIN STATEMENT

A PORTION OF THIS TRACT IS LOCATED WITHIN A FLOOD HAZARD AREA AS DEFINED BY CITY OF COLUMBIA ORDINANCE 29-2.3 (d)(4), PER THE BOONE COUNTY FLOOD INSURANCE RATE MAP (FIRM) PANEL #29019C0280E, DATED APRIL 19, 2017.

SPECIAL FLOOD HAZARD AREA DEFINED AS ZONE X, HAVING 0.2% ANNUAL CHANCE FLOOD HAZARD, OR AREA OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE.

APPROVED BY THE CITY OF COLUMBIA PLANNING AND ZONING COMMISSION THIS \_\_\_\_\_ DAY OF

\_\_\_\_\_, 2020.

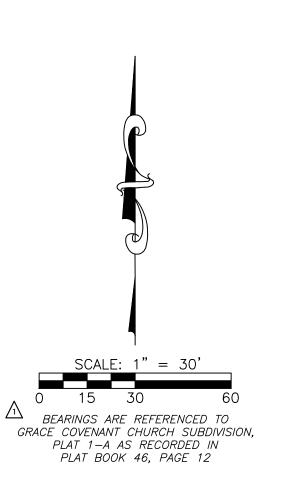
#### SARA LOE, CHAIRMAN

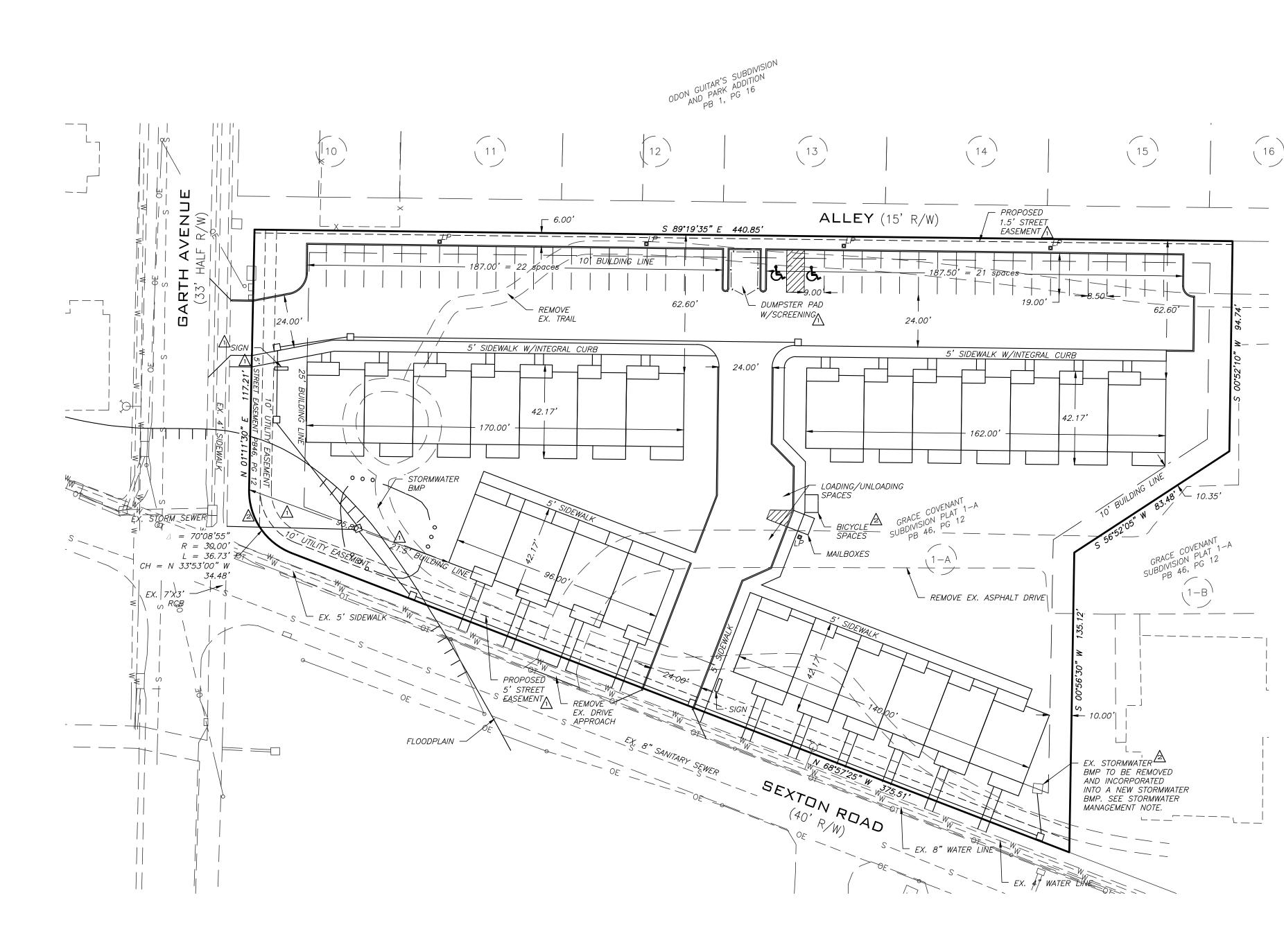
ACCEPTED BY ORDINANCE OF THE CITY COUNCIL OF COLUMBIA THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2020.

BRIAN TREECE, MAYOR

SHEELA AMIN, CITY CLERK

ORDINANCE # \_\_\_\_\_







LOCATION MAP NOT TO SCALE

SITE DATA ACREAGE: 1.96 ACRES SEC.-TWNSHP.-RNG.: NW 1/4 12-48-13 EXISTING ZONING: PD PROPOSED ZONING: PD

# OWNER

THE HOUSING AUTHORITY OF THE CITY OF COLUMBIA, MISSOURI 201 SWITZLER STREET COLUMBIA, MO 65203

# LEGAL DESCRIPTION

A TRACT OF LAND LOCATED IN THE NORTHWEST QUARTER (NW 1/4) OF SECTION 12, TOWNSHIP 48 NORTH, RANGE 13 WEST, CITY OF COLUMBIA, BOONE COUNTY, MISSOURI, BEING ALL OF LOT 1-A OF GRACE COVENANT CHURCH SUBDIVISION, PLAT 1-A AS RECORDED IN PLAT BOOK 46, PAGE 12, RECORDS OF BOONE COUNTY, MISSOURI.

### GENERAL NOTES

- 1. BUILDING SIZE AND DIMENSIONS ARE APPROXIMATE. 2. ALL PROPOSED UTILITIES ARE SHOWN FOR GENERAL LOCATION PURPOSES ONLY AND MAY BE REFINED ON FINAL CONSTRUCTION DOCUMENTS.
- 3. THIS DEVELOPMENT MAY BE BUILT IN MULTIPLE PHASES.
- 4. 1 MONUMENT SIGN EACH PROPOSED ALONG BOTH GARTH AVENUE AND SEXTON ROAD BEING A MAXIMUM OF 16 SQUARE FEET IN AREA AND 6' HEIGHT. ALL SIGNAGE TO BE COMPLIANT WITH SECTION 29-4.8 OF THE CITY OF COLUMBIA CODE OF ORDINANCES.
- 5. ALL LIGHTING SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBIA LIGHTING ORDINANCE. ALL LIGHTING SHALL BE SHIELDED AND DIRECTED INWARD AND DOWNWARD AWAY FROM RESIDENCES. NEIGHBORING PROPERTIES, PUBLIC STREETS, AND OTHER PUBLIC ARES.

# DENSITY

TOTAL LOT AREA = 1.96 AC. PROPOSED # OF UNITS = 16 PROPOSED DENSITY = 12.25 UNITS/AC.

### IMPERVIOUS AREAS

TOTAL LOT AREA = 1.96 AC. EX. IMPERVIOUS AREA CIRCA 1992 = 0.29 AC. (14.8%) EX. IMPERVIOUS AREA CIRCA 2020 = 0.23 ACA. (11.7%) PROPOSED IMPERVIOUS AREA = 1.13 AC. (57.7%) PROPOSED PERVIOUS (LANDSCAPE) AREA = 0.83 AC. (42.3%)

# PARKING DATA

<u>REQUIRED:</u>

10 4-BEDROOM UNITS @ 2.5 SPACES/UNIT = 25 SPACES  $6 \ 3-BEDROOM \ UNITS @ 2.5 \ SPACES/UNIT = 15 \ SPACES$ 8 2-BEDROOM UNITS @ 2 SPACES/UNIT = 16 SPACES

TOTAL REQUIRED = 56 SPACES

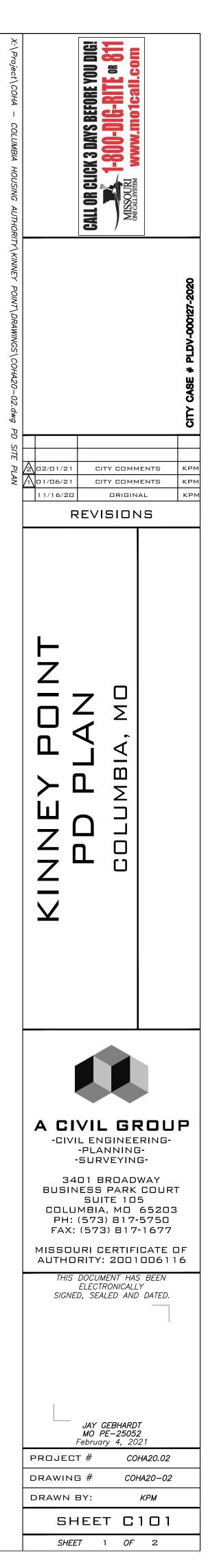
56 SPACES (3 OF WHICH ARE REQUIRED TO BE ADA ACCESSÌBLE SPACES, WITH 1 BEING VAN ACCESSIBLE);

4 REQUIRED BICYCLE SPACES, (MAY BE COUNTED TOWARDS TOTAL REQUIRED SPACES)

<u>PROVIDED:</u>

41 REGULAR SPACES 2 ADA ACCESSIBLE SPACES (BOTH VAN ACCESSIBLE) 4 BICYCLE SPACES

TOTAL PROVIDED = 47 SPACES = 1.96 SPACES/UNIT(24)



#### LANDSCAPING NOTES

- <u>PROPOSED AREAS</u>: TOTAL AREA OF SITE= 1.96 AC. = 85,226 SQ.FT. 1. EX. SIDEWALK/DRIVEWAY PAVEMENT= 11,035 SQ.FT. (12.9%) EX. LANDSCAPING AREA= 75,206 SQ.FT. (87.1%) PROP. NEW BUILDING AREA= 21,804 SQ.FT. PROP. NEW PARKING LOT PAVEMENT= 22.622 SQ.FT. PROP. NEW SIDEWALK PAVEMENT= 4,670 SQ.FT. TOTAL PROP. IMPERVIOUS AREA= 49,096 SQ.FT. (57.6%) TOTAL PROP. LANDSCAPING AREA= 36,130 SQ.FT. (42.4%)
- 2. <u>TREE PRESERVATION:</u> NO CLIMAX FOREST OR SIGNIFICANT TREES EXISTS ON SITE. THERE ARE 10 EXISTING SIGNIFICANT TREES (20"+ DBH) ON THE SITE OF WHICH 25% OR 3, SHALL BE PRESERVED DURING DEVELOPMENT. IF A PRESERVED SIGNIFICANT TREE MUST BE REMOVED, IT SHALL BE REPLACED BY 3 MEDIUM TO LARGE DECIDUOUS TREES OF 2" CALIPER OR 2 CONIFEROUS TREES AT 8-FEET IN HEIGHT.
- 3. <u>STREET FRONTAGE LANDSCAPING:</u> A. IN ACCORDANCE WITH SECTION 29-4.4(D)(1) ALL PARKING PAVED AREAS MORE THAN 40 FEET IN LENGTH WITHIN 25 FEET OF STREET RIGHT-OF-WAY SHALL BE IMPROVED WITH A LANDSCAPING BUFFER STRIP SIX-FOOT WIDE IN ACCORDANCE WITH PROVISIONS OF SECTION 4.4(E)(2). SEE NOTE 5 BELOW FOR COMPLIANCE WITH THIS REQUÌRÉMÉNT.
  - B. IN ACCORDANCE WITH SECTION 29-4.4(D)(2) STREET TREE LANDSCAPING SHALL BE INSTALLED AS FOLLOWS:
  - PROVIDENCE ROAD FRONTAGE = 42.5 L.F. 1 TREE/ 40 FT = 42.5/40 = 1.06 OR 2 TOTAL TREES *30% LARGE TREES = 1 TREE* 30% MEDIUM TREES = 1 TREE REMAINING TREE VARIETIES = 0 TREE
- <u>PROPERTY EDGE BUFFERING:</u> THE SITE IS ZONED M—OF AND ADJACENT PROPERTIES ARE ZONED 4. R-MF THEREFORE A LEVEL 2 BUFFER IS REQUIRED ON SUBJECT SITE.

LANDSCAPING BUFFER A. LANDSCAPE BUFFER SHALL BE DESIGNED SO THAT AT LEAST 80% OPACITY IS ACHIEVED, VIEWED HORIZONTALLY, IN THE SPACE BETWEEN ONE FOOT AND FIVE FEET ABOVE GRADE AT THE TIME OF INSTALLATION.

B. THE LANDSCAPE BUFFER SHALL INCLUDE THE FOLLOWING PLANT MIX:

B.a. 4 CATEGORIES CONTAINED IN SECTION 29–4.4(C)(6). 4 CATEGORIES ARE GRASS, SHRUBS, CONIFERS, AND MEDIUM SHÁDE TREE.

B.a.A. 1 TREE, 10' HEIGHT, 2" CALIPER AT TIME OF INSTALLATION REQUIRED FOR EVERY 200 SQ. FT. OF BUFFER AREA. TOTAL BUFFER AREA =  $206' \times 4' = 824/200 = 4.12$ = 5 TREES (CONIFERS)

B.a.B. SHRUBS AND FLOWERING PLANTS THAT COVER A MINIMUM OF 50% OF THE REMAINING AREA WITH A MINIMUM OF 25% OF THAT PLANT MATERIAL BEING IN FLOWERING SHRUBS.

50% AREA = 824\*0.5 = 412 S.F. AREA IN SHRUBS AT 1 SHRUB/25 S.F. = 412/25 = 17 SHRUBS 25% AREA = 412\*0.25 = 103 S.F. FLOWERING SHRUBS AT 1 SHRUB/25 S.F. = 103/25 = 5 SHRUBS

B.b <u>SCREENING</u> THERE ARE EXISTING SCREENING FENCES ON THE NORTH AND WEST SIDES OF THE SITE. SCREEN ON SOUTH SIDE TO BE 6' WOOD FENCE (OR APPROVED EQUAL, VERIFY WITH ARCHITECT AND OWNER, SEPARATE APPROVAL BY ARBORIST REQUIRED FOR DIFFERENT DESIGN).

5. <u>RIGHT-OF-WAY\_BUFFERING:</u>

IN ACCORDANCE WITH SECTIONS 29–4.4(D)(1) AND 29–4.4(E)(2) A SIX-FOOT WIDE LANDSCAPE BUFFER STRIP HAS BEEN PROVIDED ON THIS SITE. EACH BUFFER STRIP SHALL PROVIDE AT LEAST 80% OPACITY, VIEWED HORIZONTALLY, IN THE SPACE BETWEEN ONE FOOT AND FIVE FEET ABOVE GRADE AT THE SCREEN LINE, AT THE TIME OF INSTALLATION, AND SHALL CONTAIN A MINIMUM FOUR CATEGORIES OF PLANTING MATERIAL AS CONTAINED IN SECTION 29-4.4(C)(6). BUFFER STRIP SPECIFICATIONS DETAILS FOLLOW:

<u>RIGHTI-OF-WAY BUFFER ZONE (42.5 L.F.):</u> 42.5' LENGTH \* 6' WIDTH = 255 S.F. BUFFER AREA

CATEGORY 1: 255 S.F./200 S.F. = 1.3 TREES. 2 TREES PROVIDED

- CATEGORY 2: DECIDUOUS FLOWERING SHRUB VARIETY 1 = 5 SHRUBS
- CATEGORY 3: DECIDUOUS/EVERGREEN SHRUB VARIETY 2 = 4SHRUBS
- CATEGORY 4: TURF GRASS- MIN. 50% AREA COVERAGE = 128 S.F. (80% OPACITY ACHIEVED WITH 1 SHRUB/ 5 LINEAR FEET. 42.5 L.F./5 = 8.5 = 9 SHRUBS TOTAL REQUIRED, SEE CATEGORY
- <u>PERCENTAGE TREES IN BUFFER:</u> TOTAL TREES IN BUFFER = 2 NEW TREES

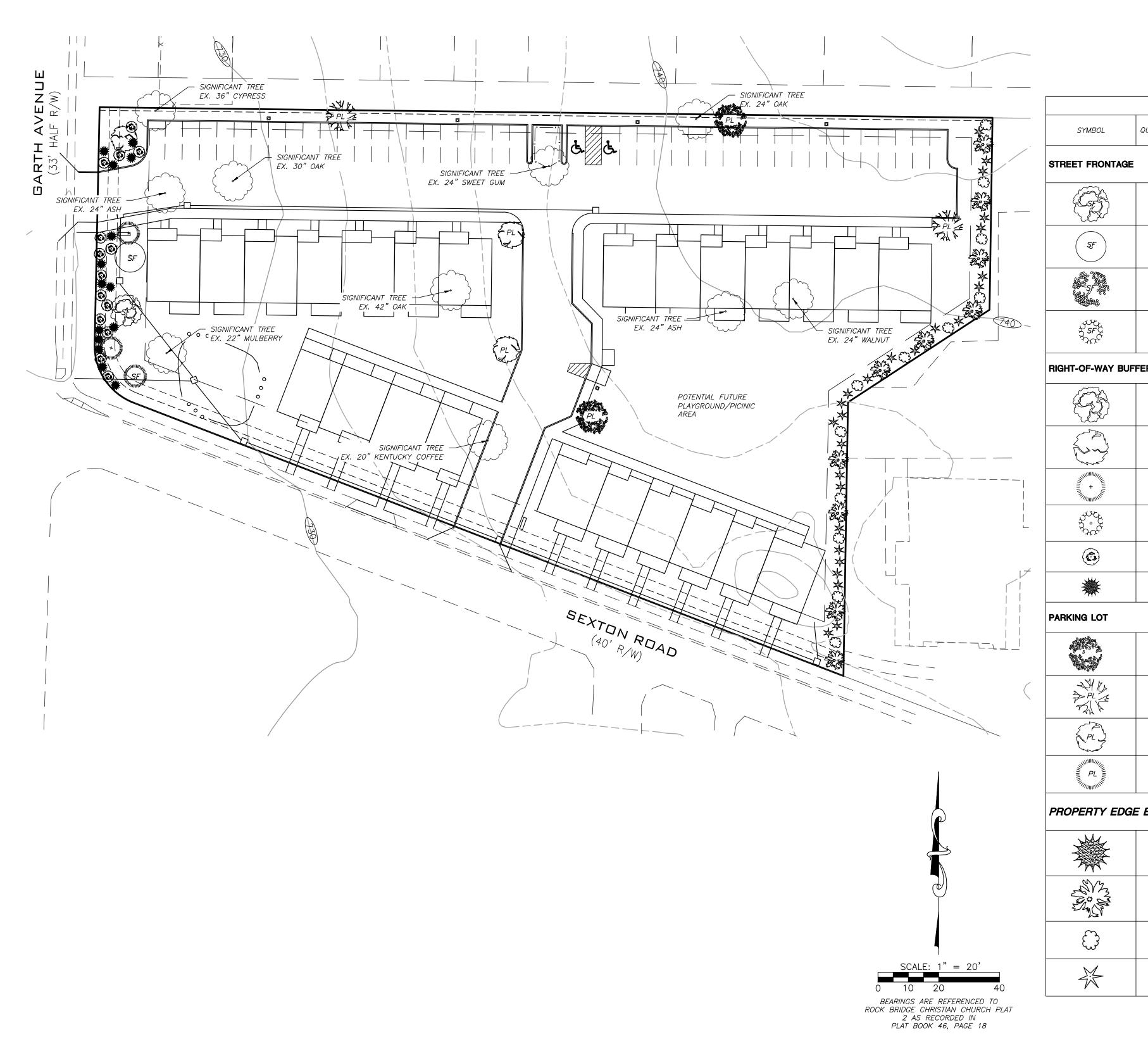
2 TREES x 0.3 MED/LARGE TREES = MIN. 1 MEDIUM TREE 2 TREES X 0.3 ONE SPECIES = MAX. 1 TREE PER SPECIES (2) SPECIES SHOWN)

6. <u>PARKING AREA LANDSCAPING:</u>

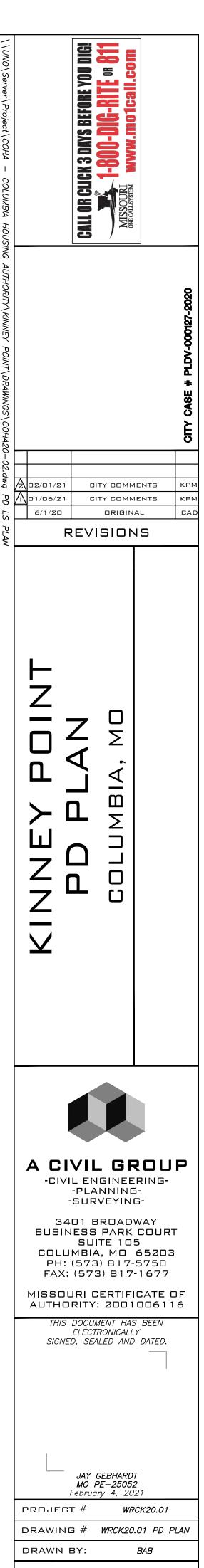
2 & 3)

- A. IN ACCORDANCE WITH SECTION 4.4(F)(4), 1 TREE REQUIRED PER EVERY 4,000 SQ. FT. OF PARKING PAVED AREA. PARKING PAVED AREA = 5,054 SQ. FT. / 4,000= 1.3 = 2 TREES REQUIRED. B. IN ACCORDANCE WITH SECTION 4.4(F)(5), OF THE 2 TREES
- REQUIRED ABOVE, A MINIMUM OF 30% SHALL BE MEDIUM SHADE TREES, AND A MINIMUM OF 40% SHALL BE LARGE SHADE TREES. *30% MEDIUM TREES = 1 MEDIUM TREE* 40% LARGE TREES = 1 LARGE SHADE TREE REMAINING TREE VARIETIES = 0

7. LANDSCAPING CONTRACTOR MAY SUBMIT TO CITY ARBORIST ALTERNATE PLANTING LAYOUTS, TREE, SHRUB AND FLOWER MATERIALS OR SPECIES FOR APPROVAL PRIOR TO INSTALLATION, PROVIDED ANY REVISIONS COMPLY WITH THE CURRENT LANDSCAPING REQUIREMENTS.



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	LAN	DSCAPING -	TABLE			
QUANTITY	COMMON NAME	SCIENTIFIC NAME	CONTAINER/SIZE	SPACING	CATAGORY	
						PLAN
1	KENTUCKY COFFEETREE ESPRESSO	GYMNOCLADUS DIOICA	2" CAL – B&B	15' CENTERS	LARGE DECIDUOUS SHADE TREE – MATURE HEIGHT >45'	
1	FRONTIER ELM	ULMUS FRONTIER	2" CAL — B&B	15' CENTERS	LARGE DECIDUOUS SHADE TREE – MATURE HEIGHT >45'	
_	EUROPEAN HORNBEAM	CARPINUS BETULUS	2" CAL — B&B	15' CENTERS	MEDIUM DECIDUOUS SHADE TREE – MATURE HEIGHT 30'–45'	
_	SUGAR TYME CRABAPPLE	MALUS SUTYZAM	4' HEIGHT	15' CENTERS	ORNAMENTAL TREE – MATURE HEIGHT < 20'	
ERING						
_	KENTUCKY COFFEETREE ESPRESSO	GYMNOCLADUS DIOICA	2" CAL – B&B	15' CENTERS	LARGE DECIDUOUS SHADE TREE – MATURE HEIGHT >45'	
1	DURA–HEAT RIVER BIRCH	BETULA NIGRA	2" CAL — B&B	15' CENTERS	MEDIUM DECIDUOUS SHADE TREE – MATURE HEIGHT 30'–45'	
2	OKLAHOMA REDBUD	CERCIS CANADENSIS	2" CAL – B&B	15' CENTERS	ORNAMENTAL TREE – MATURE HEIGHT < 20'	
_	SUGAR TYME CRABAPPLE	MALUS SUTYZAM	4' HEIGHT	15' CENTERS	ORNAMENTAL TREE – MATURE HEIGHT < 20'	
14	SPICE BUSH	LINDERA BENZOIN	5 GAL	5' CENTERS	DECIDUOUS FLOWERING SHRUB VARIETY 1	
14	TOR BIRCHLEAF SPIREA	SPIRAEA BETULIFOLIA	5 GAL	5' CENTERS	DECIDUOUS/EVERG REEN SHRUB VARIETY 2	
2	RED MAPLE "SUN VALLEY"	ACER RUBRUM	2" CAL — B&B	15' CENTERS	LARGE DECIDUOUS SHADE TREE – MATURE HEIGHT >45'	
2	EMER II – ALLEE ELM	ULMUS PARVIFOLIA – EMER II	2" CAL — B&B	15' CENTERS	LARGE DECIDUOUS SHADE TREE – MATURE HEIGHT >45'	
2	DURA–HEAT RIVER BIRCH	BETULA NIGRA	2" CAL — B&B	15' CENTERS	MEDIUM DECIDUOUS SHADE TREE – MATURE HEIGHT 30'–45'	
_	OKLAHOMA REDBUD	CERCIS CANADENSIS	4' HEIGHT	15' CENTERS	ORNAMENTAL TREE – MATURE HEIGHT < 20'	
BUFFE	RING					
_	EMERALD GREEN ARBORVITAE (THUJA OCCIDENTALIS)	2" CAL – B&B 10' HEIGHT	15' CENTERS	CONIFER OR UPRIGHT EVERGREEN TREE – MATURE HEIGHT >10'		A
10	AMERICAN HOLLY (LLEX OPACA 'CROONENBURG')	2" CAL – B&B 10' HEIGHT	15' CENTERS	CONIFER OR UPRIGHT EVERGREEN TREE – MATURE HEIGHT >10'		
12	NINEBARK (PHYSOCARPUS OPULIFOLIUS)	24"	5' CENTERS	DECIDUOUS FLOWERING SHRUB VARIETY 1		
26	SPICE BUSH (LINDERA BENZOIN)	5 GAL	5' CENTERS	DECIDUOUS/EVER GREEN SHRUB VARIETY 2		



SHEET C2O1

SHEET 2 OF 2