

PUD MASTER PLAN

ATLAS STARK

KNIGHTDALE STATION

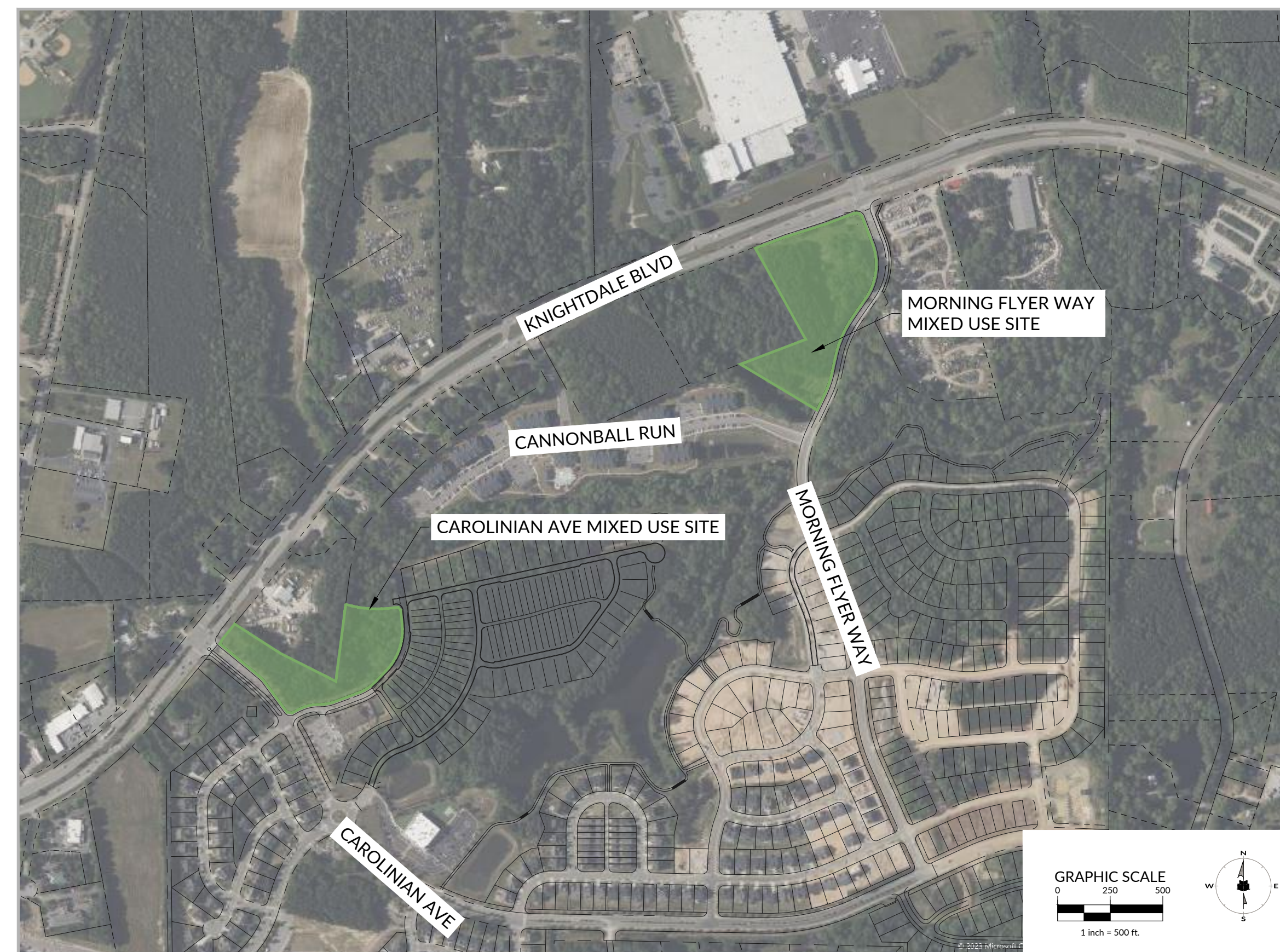
CAROLINIAN AVE. & MORNING FLYER WAY MIXED USE SITES

0 KNIGHTDALE BLVD & 7790 KNIGHTDALE BLVD | KNIGHTDALE, NC 27545 | ST. MATTHEWS TOWNSHIP | WAKE COUNTY

JULY 14, 2023

SITE DATA TABLE

	MORNING FLYER WAY MIXED USE SITE	CAROLINIAN AVE MIXED USE SITE
ADDRESS:	0 KNIGHTDALE BLVD	7790 KNIGHTDALE BLVD
PARCEL PIN NO.	1754988657	1754764820
TOTAL PROJECT AREA:	6.87 A.C.	4.39 A.C.
TOTAL PROPOSED BUILDING SF:	33,000 SF	21,500 SF
WATERSHED	MARKS CREEK	MARKS CREEK
EXISTING ZONING	RT	HB / UR 12
PROPOSED ZONING	NMX-PUD	NMX-PUD
OVERLAY DISTRICT	N/A	N/A
FEMA DATA	3720175400K EFFECTIVE 7/19/2022	
PLACE TYPE	MIXED-USE CENTER	MIXED-USE CENTER & MIXED DENSITY NEIGHBORHOOD
EXISTING USE	VACANT	VACANT
PROPOSED USE	MIXED USE	MIXED USE
PROPOSED BUILDING TYPE	MEDICAL OFFICE, PROFESSIONAL SERVICES, GENERAL RETAIL AND NEIGHBORHOOD RETAIL/RESTAURANT (UDO 6.9)	
SETBACKS:		
FRONT YARD SETBACK MAY EXCEED 10' WHERE CONFLICTS WITH EASEMENTS AND ENCROACHMENTS EXIST		
FRONT	0' MIN. - 10' MAX.	0' MIN. - 10' MAX.
SIDE	0' MIN. - 10' MAX.	0' MIN. - 10' MAX.
REAR	0' MIN.	0' MIN.
CORNER	N/A	N/A
TREE PROTECTION REQUIRED:	10% - 0.69 A.C.	10% - 0.44 A.C.
TREE PROTECTION PROPOSED:	12% - 0.82 A.C.	7.5% - 0.33 A.C.
PARKING CALCULATIONS:		
REQUIRED	87 SPACES MIN - 173 SPACES MAX	60 SPACES MIN - 118 SPACES MAX
PROPOSED	173 SPACES	118 SPACES
EV CHARGING STATIONS:		
REQUIRED	4 STATIONS	4 STATIONS
PROPOSED	4 STATIONS	4 STATIONS
BIKE PARKING SPACES:		
REQUIRED	17 SPACES	12 SPACES
PROPOSED	18 SPACES	12 SPACES
PUBLIC GATHERING SPACE: (1 SF PER 25 SF OF GROSS FLOOR AREA OR 500 SF, WHICHEVER IS LESS UDO 6.8)		
REQUIRED	500 SF	500 SF
PROPOSED	38,826 SF	4301 SF



CONDITIONS OF APPROVAL

- CONSTRUCTION DRAWINGS MUST BE APPROVED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT FOR ALL PUBLIC WATER, PUBLIC SEWER AND/OR PRIVATE SEWER EXTENSIONS PRIOR TO MAP RECORDATION.
- A PLAT MUST BE RECORDED AT THE WAKE COUNTY REGISTER OF DEEDS OFFICE FOR ALL UTILITY EASEMENT DEDICATIONS.

NOTES

- EXISTING UAA ADDRESSES THE WATER ALLOCATION POLICY AND TIA AND THE PROPOSED DEVELOPMENT REMAINS CONSISTENT WITH THAT PRIOR APPROVAL.

Sheet List Table

Sheet Number	Sheet Title
C0.00	COVER
C0.01	MORNING FLYER ILLUSTRATIVE SITE PLAN
C0.02	CAROLINIAN ILLUSTRATIVE SITE PLAN
C1.01	MORNING FLYER WAY EXISTING CONDITIONS
C1.02	CAROLINIAN AVE EXISTING CONDITIONS
C2.01	MORNING FLYER WAY SITE PLAN
C2.02	CAROLINIAN AVE SITE PLAN
C2.03	PHASING PLAN
C2.04	FIRE PROTECTION PLAN
C2.05	MORNING FLYER WAY SIGNAGE & PAVEMENT MARKING PLAN
C2.06	CAROLINIAN AVE SIGNAGE & PAVEMENT MARKING PLAN
C3.01	MORNING FLYER WAY UTILITY PLAN
C3.02	CAROLINIAN AVE UTILITY PLAN
L1.01	MORNING FLYER WAY LANDSCAPE PLAN
L1.02	CAROLINIAN WAY LANDSCAPE PLAN
L1.03	LANDSCAPE NOTES & SCHEDULE
SL1.01	MORNING FLYER WAY LIGHTING EXHIBIT
SL1.02	CAROLINIAN AVE LIGHTING EXHIBIT

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF KNIGHTDALE, CITY OF RALEIGH PUBLIC UTILITIES, AND NCDOT (WHERE APPLICABLE) ENGINEERING DESIGN AND CONSTRUCTION STANDARDS.

CONTACT LIST:

Project Engineer
Rob Caudle
WithersRavenel
137 S Wilmington Street, Suite 200
Raleigh, NC 27601
919-535-5200
rcaudle@withersravenel.com

Landscape Architect
Daniel Whalley
WithersRavenel
137 S Wilmington Street, Suite 200
Raleigh, NC 27601
919-535-5200
dwhalley@withersravenel.com



PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION



137 S Wilmington Street | Suite 200 | Raleigh, NC 27601
License #: F-1479 | t: 919.469.3340 | www.withersravenel.com

PREPARED BY:

DEVELOPER:
ATLAS STARK
2020 PROGRESS CT, SUITE 130A
RALEIGH, NC 27608
919-289-1138
info@atlasstark.com

OWNER:
KNIGHTDALE COMMERCIAL, LLC
PO BOX 6309
RALEIGH, NC 27628
919-289-1138



RICHARD D. SKILLEN
DB 7857, PG 333
PIN: 1754-98-3506
ZONING:RT

TRACT 5
JAMES ERVIN RIGSBEE
DB 3340, PG 445
BM 2016, PG 898
PIN: 1764-08-3695
ZONING:MI

TRACT MU-5
JAMES ERVIN RIGSBEE
DB 11728, PG 1830
BM 2021, PG 2099
PIN: 1764-08-1166
ZONING:MI

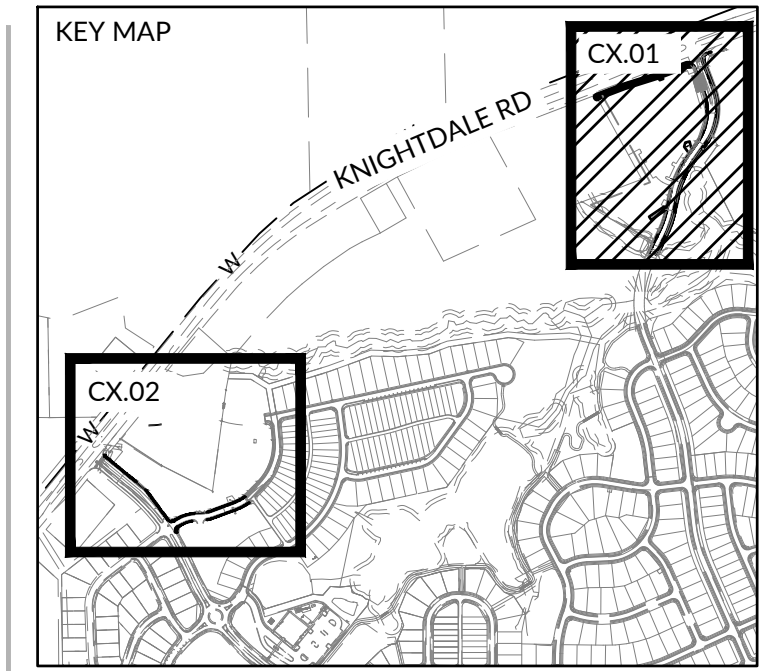
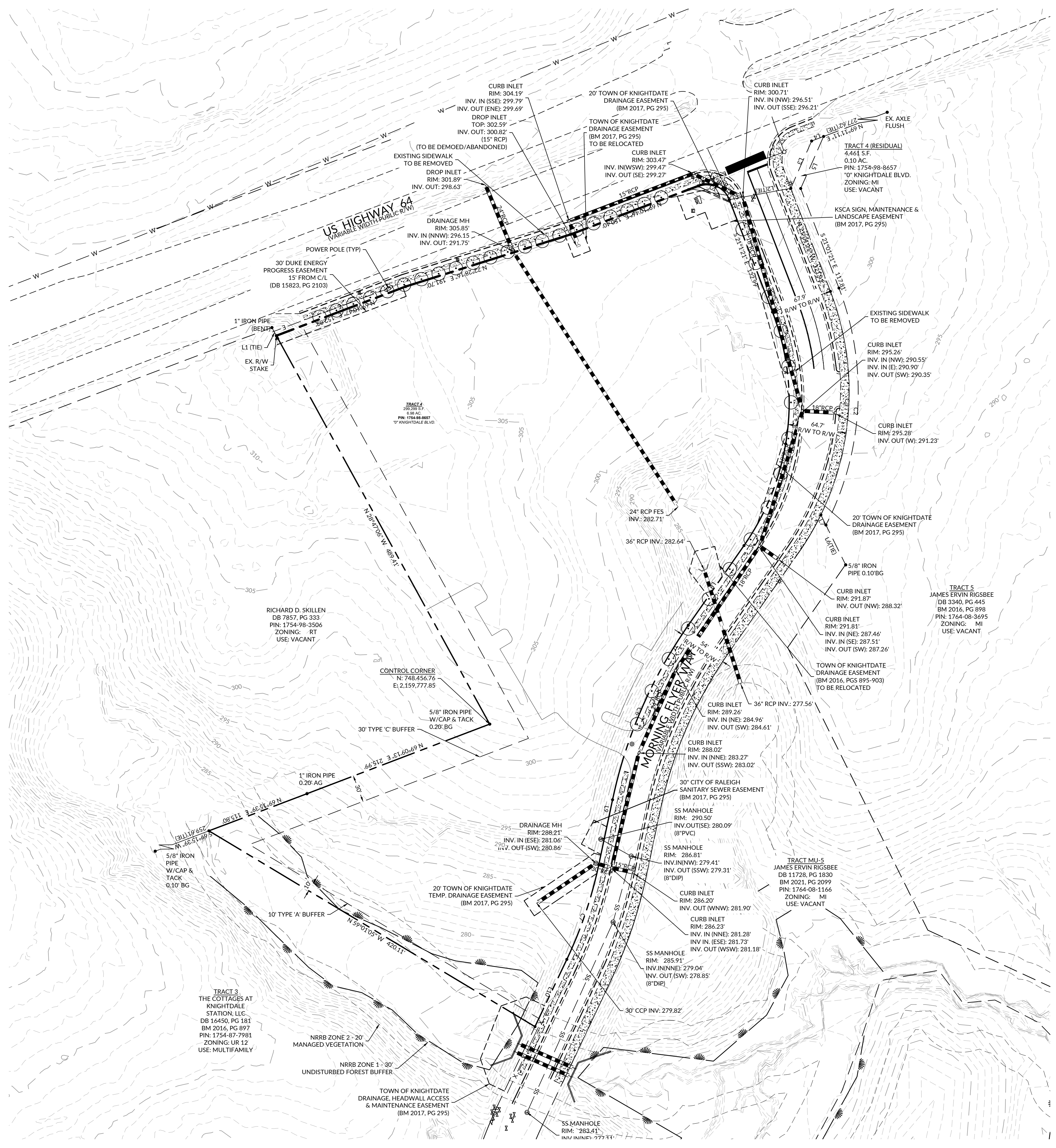
TRACT 3
THE COTTAGES AT
KNIGHTDALE STATION, LLC
DB 16450, PG 181
BM 2016, PG 897
PIN: 1754-87-7981
ZONING: UR 12



MORNING FLYER: Illustrative Site Plan

C0.01

ATLAS STARK KNIGHTDALE STATION



EXISTING CONDITIONS LEGEND

SYMBOLS

- EX IRON PIPE/ROD OR NAIL
- EX CONCRETE MONUMENT
- NEW IRON PIPE
- CALCULATED POINT
- CABLE PEDESTAL
- TELEPHONE PEDESTAL
- ELECTRIC PEDESTAL
- FIBER-OPTIC MARKER
- TRAFFIC SIGNAL BOX
- WATER METER
- FIRE HYDRANT
- VALVE (WATER OR GAS)
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- STORM CURB INLET
- DRAINAGE INLET (W/GRATE)
- STORM DRAIN MANHOLE
- UTILITY POLE
- LAMP POST
- SIGNAL POLE
- GUY WIRE
- SIGN POST

LINE TYPES

- X FENCE
- OU OVERHEAD UTILITY
- W WATER
- SS SANITARY SEWER
- SD STORM DRAIN

ABBREVIATIONS

- DB DEED BOOK
- PB or BM PLAT BOOK / BOOK OF MAPS
- N/F NOW OR FORMERLY
- PG PAGE
- SF SQUARE FEET
- Ac ACRES
- R/W RIGHT-OF-WAY
- NCSR NORTH CAROLINA STATE ROUTE
- NCDOT NORTH CAROLINA DEPT. OF TRANSPORTATION
- EX EXISTING
- RCP REINFORCED CONCRETE PIPE
- PVC POLYVINYL CHLORIDE PIPE
- (M) MEASURED
- AG ABOVE GROUND
- BG BELOW GROUND

ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH ALL CITY OF RALEIGH & TOWN OF KNIGHTDALE DESIGN STANDARDS, DETAILS AND SPECIFICATIONS

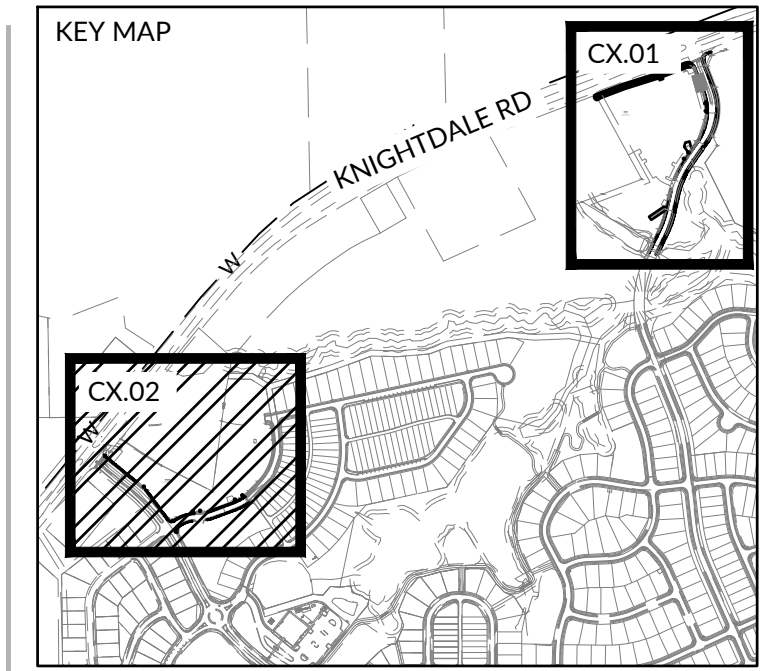
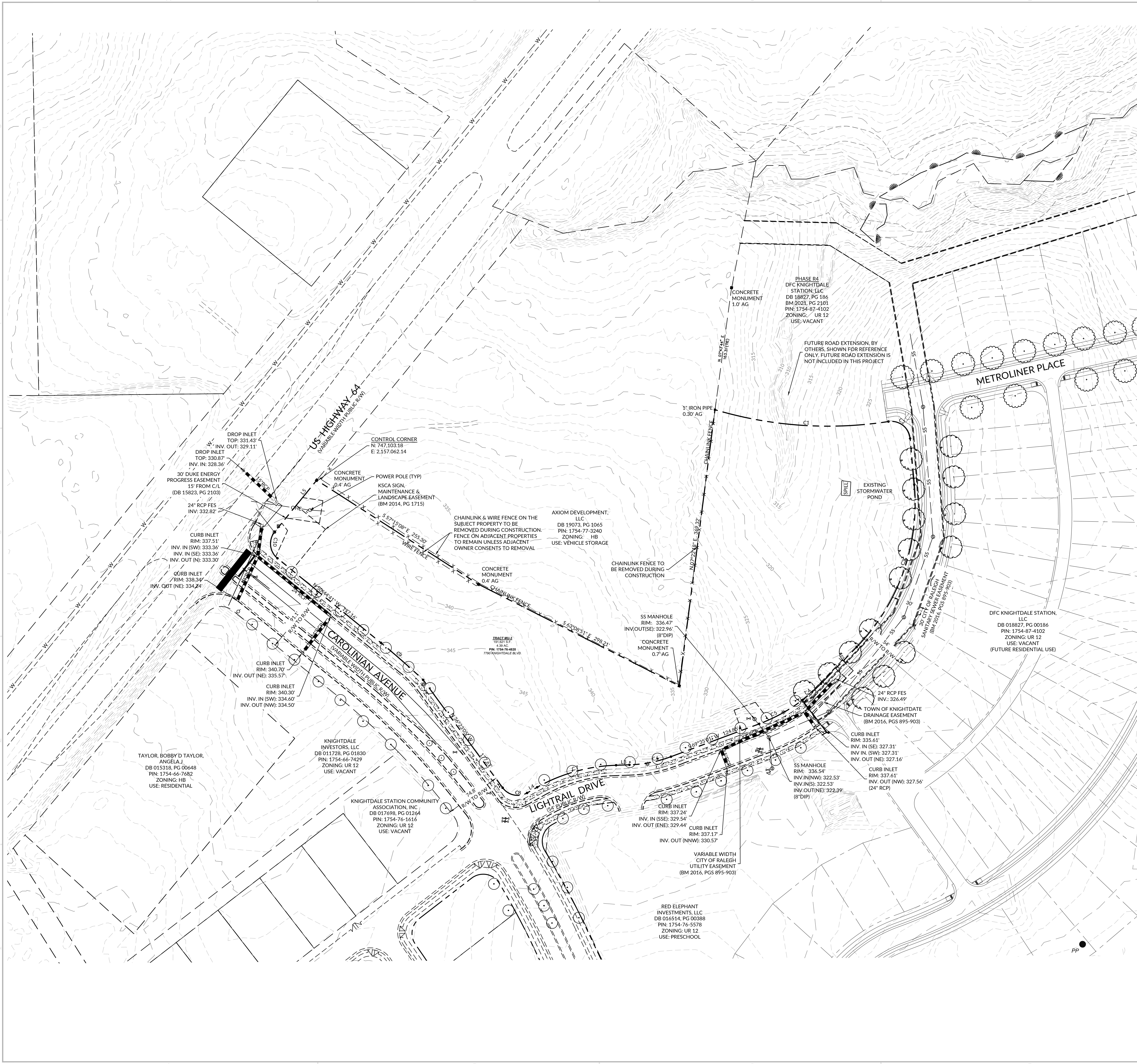
a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____
Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____
Administrator

u:\22\22-1100\221154-atlas-stark-knightdale-station\cadd\drawing\pud\mwp\c1.01.dwg - Friday, July 14, 2023 2:25:59 PM - LDF:RNC:SDR



- EXISTING CONDITIONS LEGEND**
- SYMBOLS**
- EX. IRON PIPE/ROD OR NAIL
 - EX. CONCRETE MONUMENT
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 - CABLE PEDESTAL
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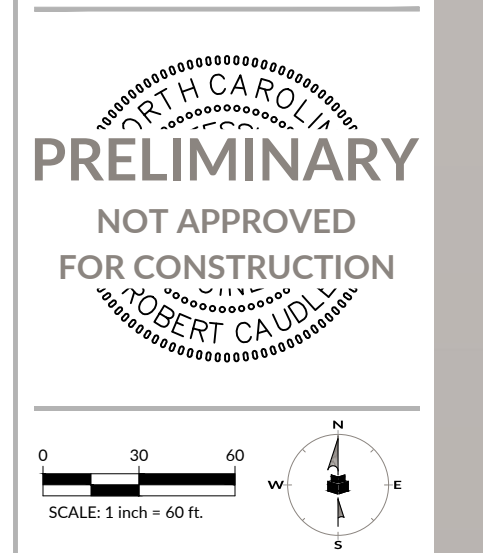
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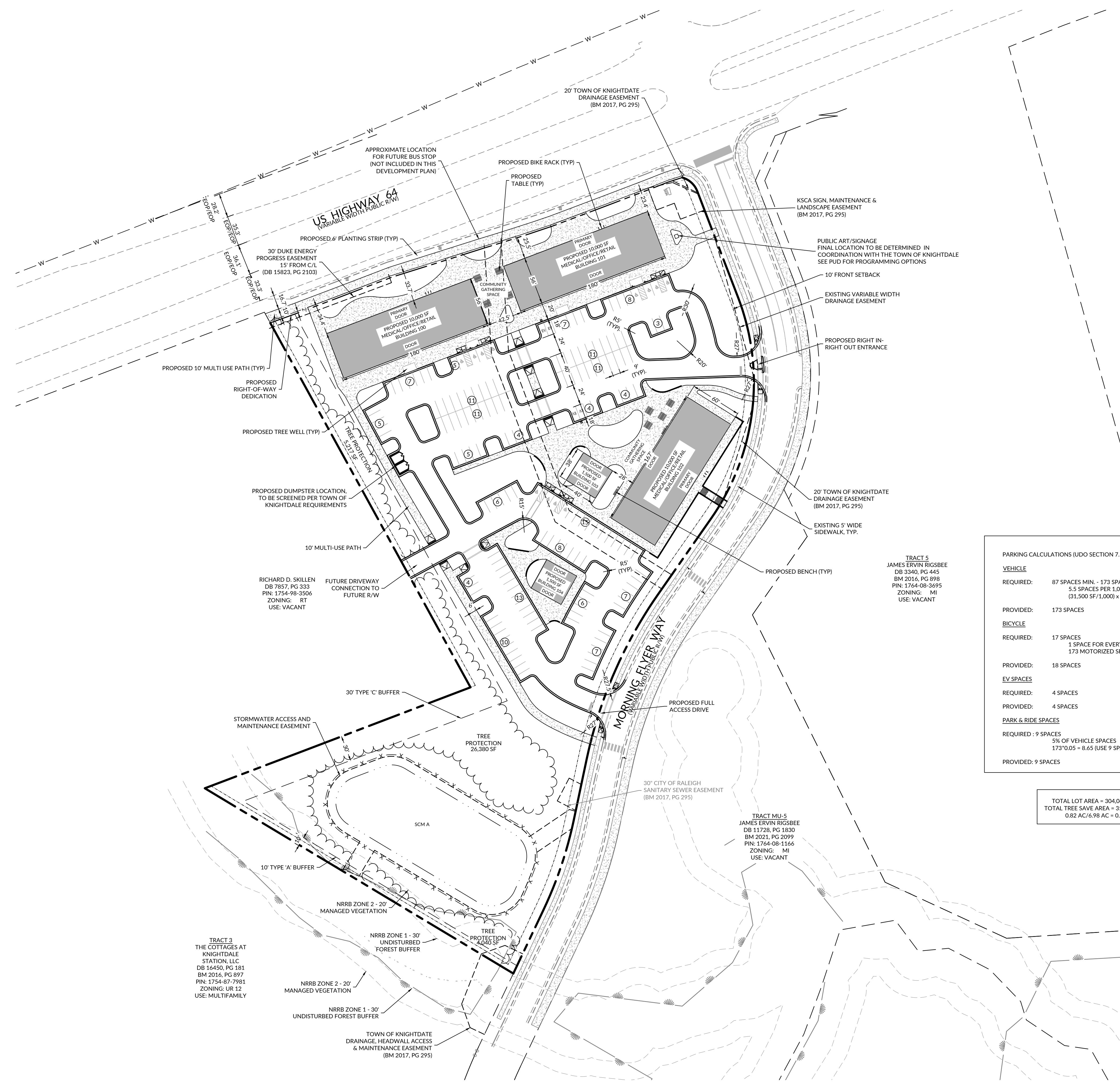
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INITIAL PLAN DATE: 07/14/2023
REVISIONS:

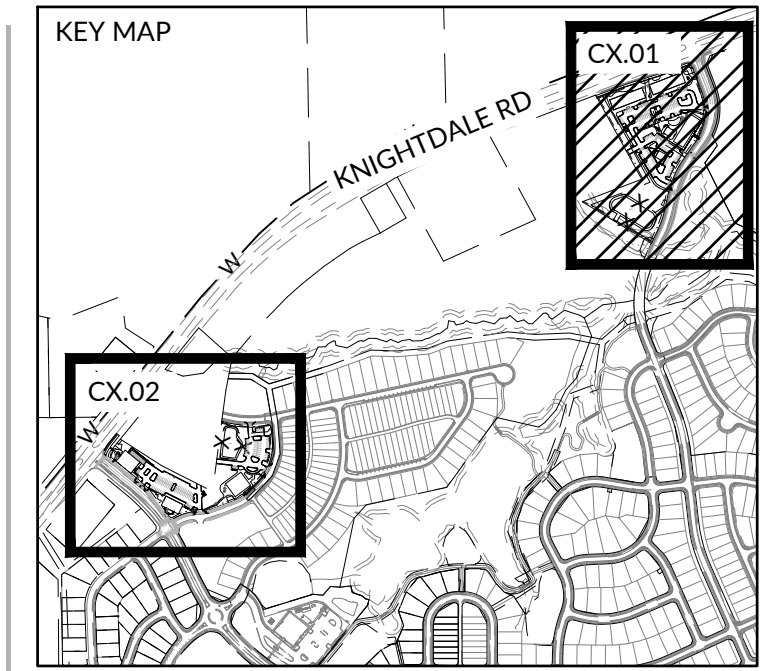
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PARKING CALCULATIONS (UDO SECTION 7.1.G.c.iii)

VEHICLE	REQUIRED:	PROVIDED:
VEHICLE	87 SPACES MIN. - 173 SPACES MAX. 5.5 SPACES PER 1,000 GFA (31,500 SF/1,000) x 5.5 = 173.25 (USE 173 SPACES)	173 SPACES
BICYCLE	REQUIRED: 17 SPACES 1 SPACE FOR EVERY 10 MOTORIZED VEHICLE SPACES 173 MOTORIZED SPACES/10 = 17.3 (USE 18 SPACES)	PROVIDED: 18 SPACES
EV SPACES	REQUIRED: 4 SPACES	PROVIDED: 4 SPACES
PARK & RIDE SPACES	REQUIRED: 9 SPACES 5% OF VEHICLE SPACES 173 * 0.05 = 8.65 (USE 9 SPACES)	PROVIDED: 9 SPACES

TOTAL LOT AREA = 304,049 SF (6.98 AC)
 TOTAL TREE SAVE AREA = 35,636 SF (0.82 AC)
 0.82 AC/6.98 AC = 0.120 (12%)



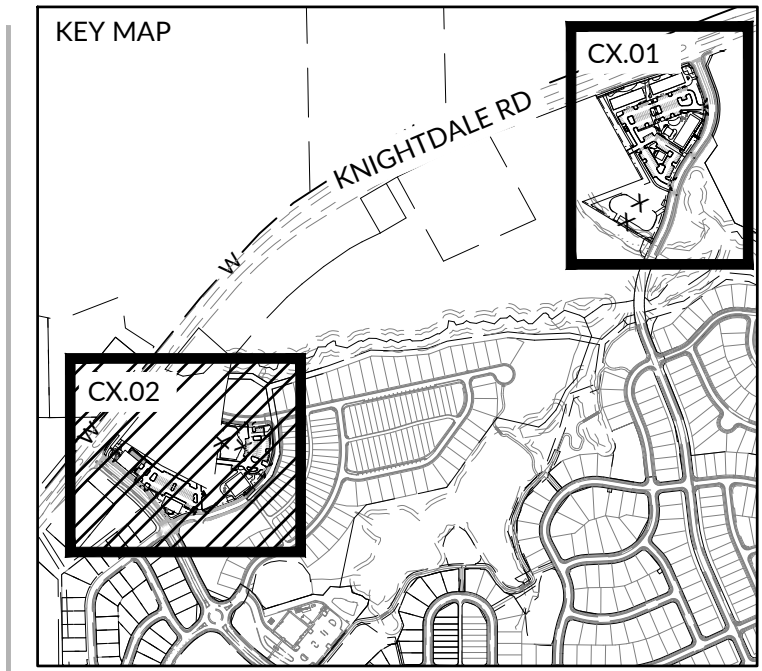
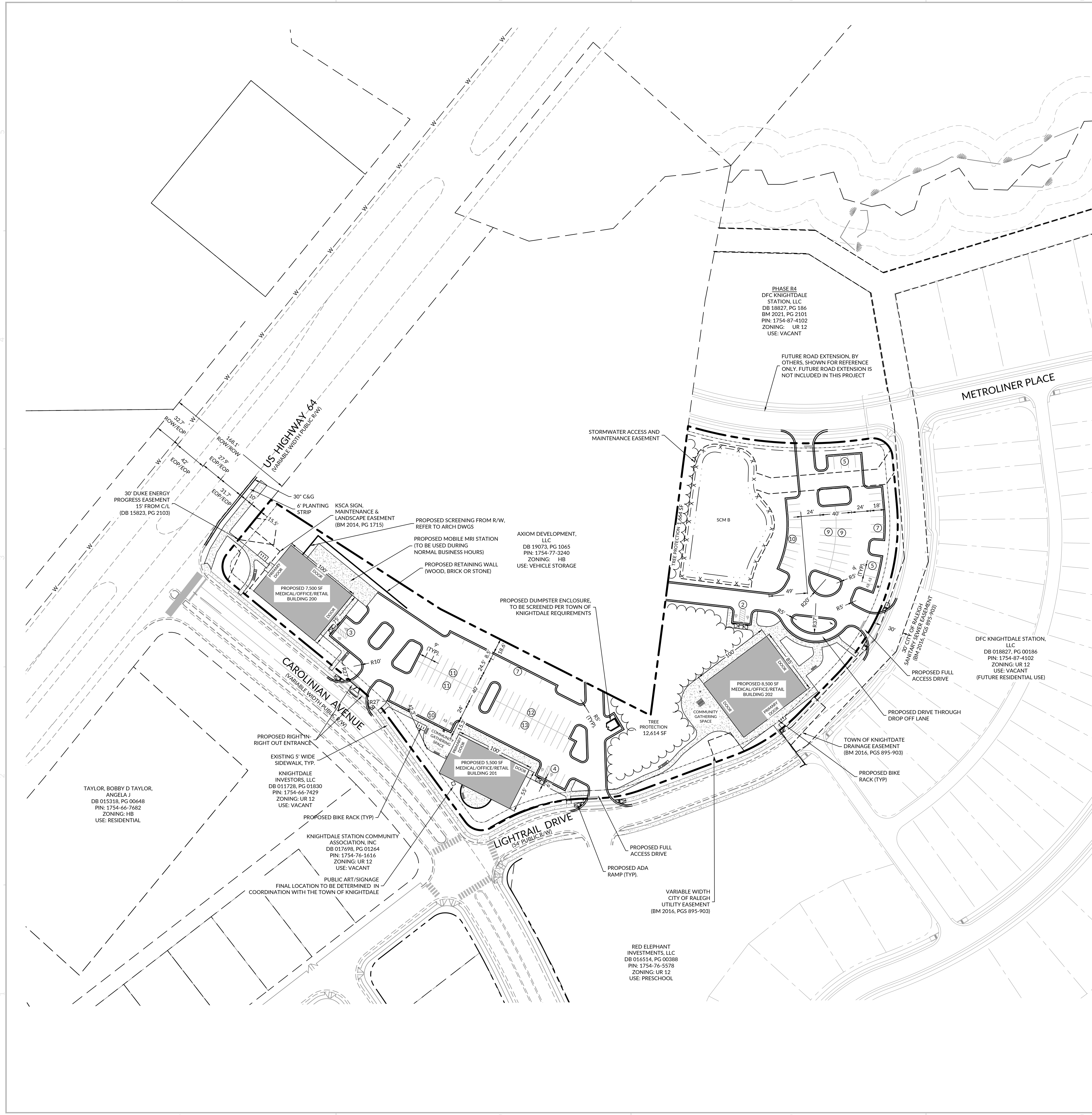
SITE LEGEND

SYMBOL	DESCRIPTION
—	BOUNDARY
- - -	BUFFER
- · - · -	CENTER LINE
— —	CURB & GUTTER
- · - · -	EASEMENT
- X - X - X	PROPOSED FENCING (CHAIN LINK FENCE NOT ALLOWED)
- · - · -	LIMIT OF DISTURBANCE
- · - · -	LOT LINE
- · - · -	PHASE LINE
- · - · -	RIGHT OF WAY
- · - · -	SETBACK
█	BUILDING

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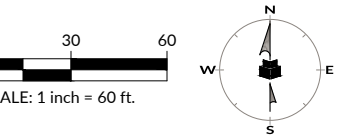
SITE LEGEND

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---	CENTER LINE
---	CURB & GUTTER
---	EASEMENT
-X-X-X-	PROPOSED FENCING (CHAIN LINK FENCE NOT ALLOWED)
---	LIMIT OF DISTURBANCE
---	LOT LINE
---	PHASE LINE
---	RIGHT OF WAY
---	SETBACK
█	BUILDING
█	CONCRETE PAVING
█	HEAVY DUTY ASPHALT PAVING
█	BENCH
█	BIKE RACK
█	TABLE
█	TREE WELL
█	WASTE RECEPTACLE

PARKING CALCULATIONS (UDO SECTION 7.1.G.c.xiii)

VEHICLE	REQUIRED	PROVIDED
60 SPACES MIN. - 118 SPACES MAX. 5.5 SPACES PER 1,000 GFA (21,500 SF/1,000) x 5.5 = 118.25 (USE 118 SPACES)	60 SPACES MIN. - 118 SPACES MAX. 5.5 SPACES PER 1,000 GFA (21,500 SF/1,000) x 5.5 = 118.25 (USE 118 SPACES)	118 SPACES
12 SPACES 1 SPACE FOR EVERY 10 MOTORIZED VEHICLE SPACES 118 MOTORIZED SPACES/10 = 11.8 (USE 12 SPACES)	12 SPACES 1 SPACE FOR EVERY 10 MOTORIZED VEHICLE SPACES 118 MOTORIZED SPACES/10 = 11.8 (USE 12 SPACES)	12 SPACES
4 SPACES	4 SPACES	4 SPACES
4 SPACES	4 SPACES	4 SPACES

TOTAL LOT AREA = 191,228 SF (4.39 AC)
 TOTAL TREE SAVE AREA = 14,248 SF (0.33 AC)
 0.33 AC/4.39 AC = 0.075 (7.5%)



INITIAL PLAN DATE: 07/14/2023
 REVISIONS:

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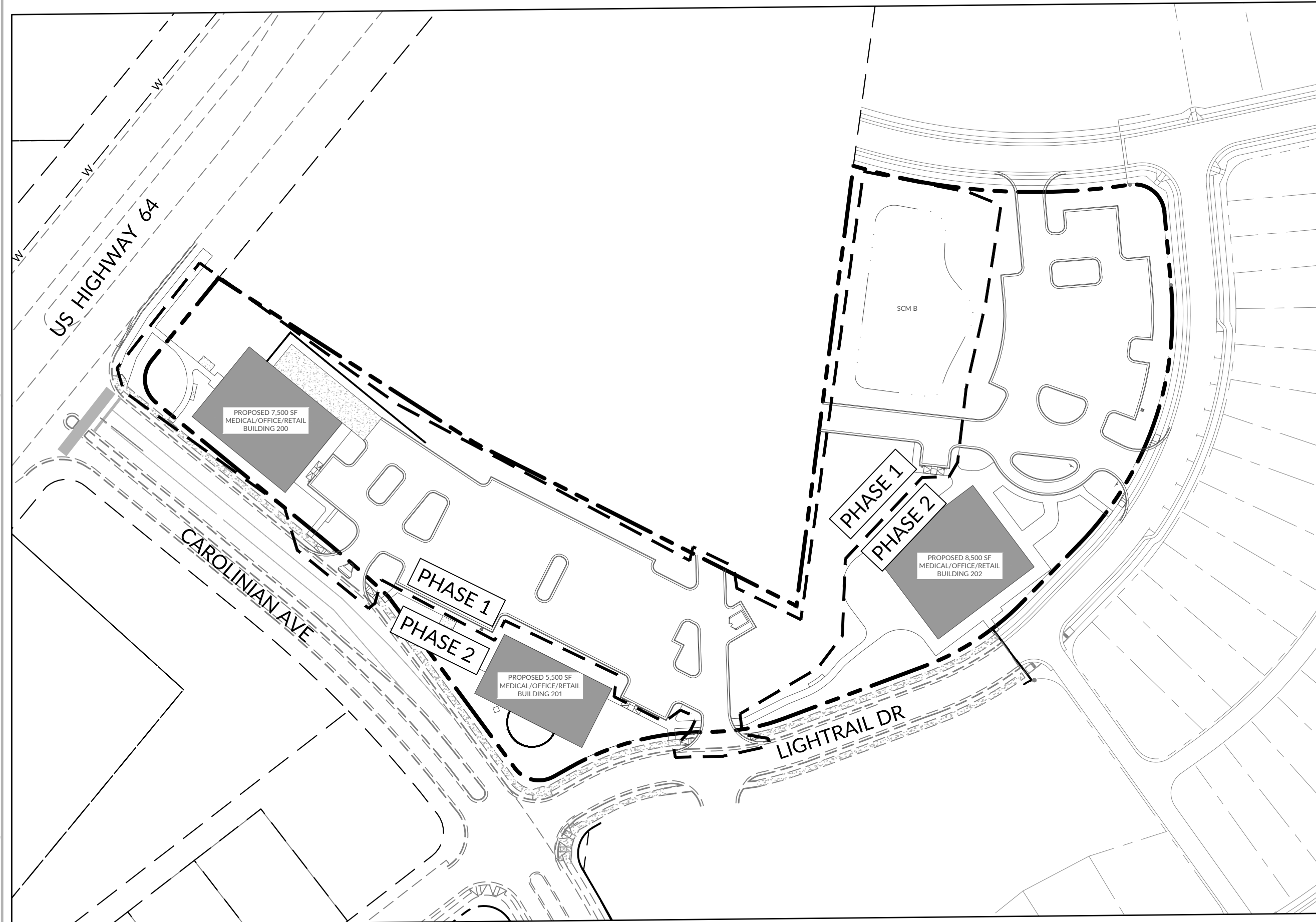
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WR JOB NUMBER 09221154
 DRN: WR DGN: WR CKD: WR

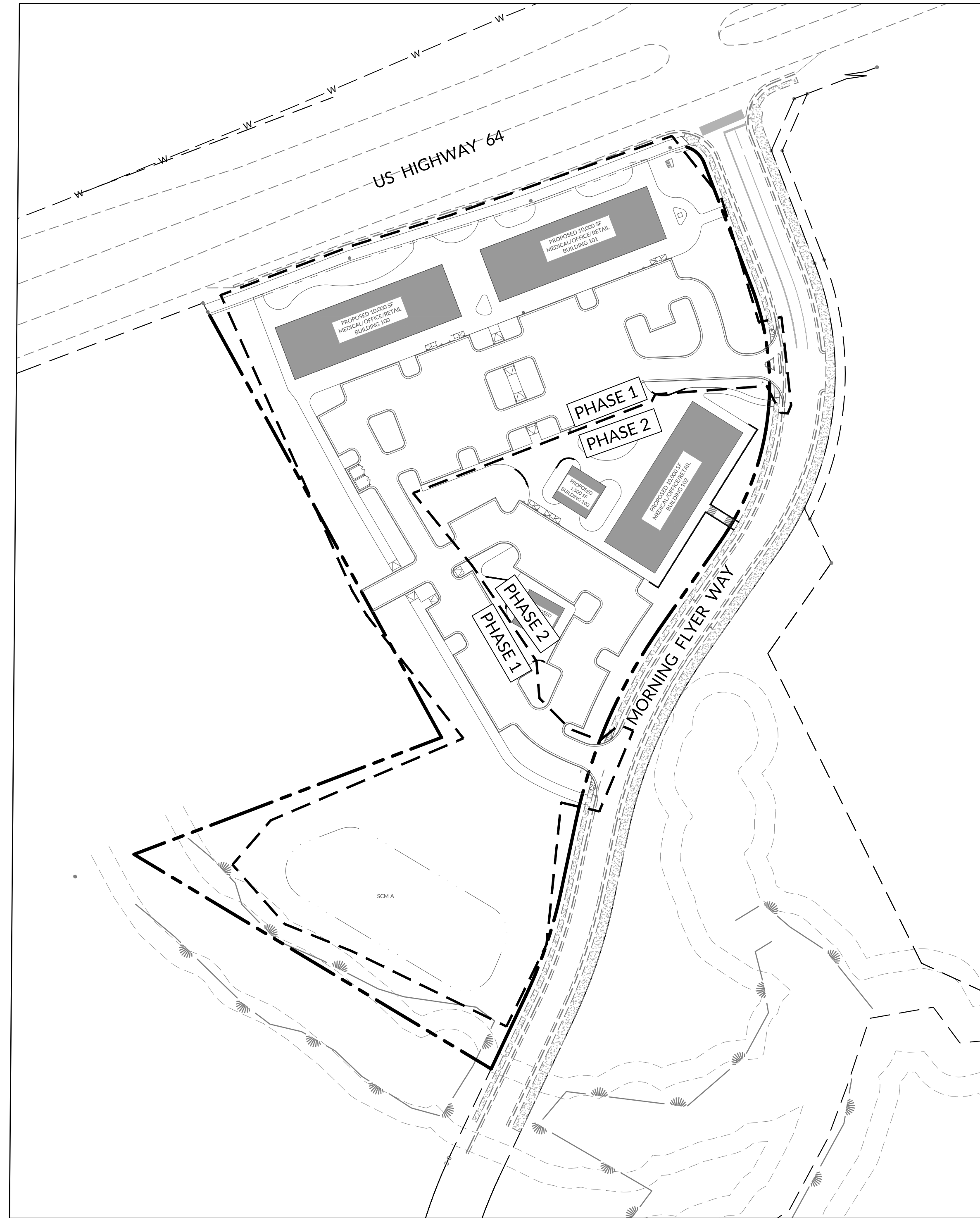
CAROLINIAN AVE SITE PLAN

C2.02

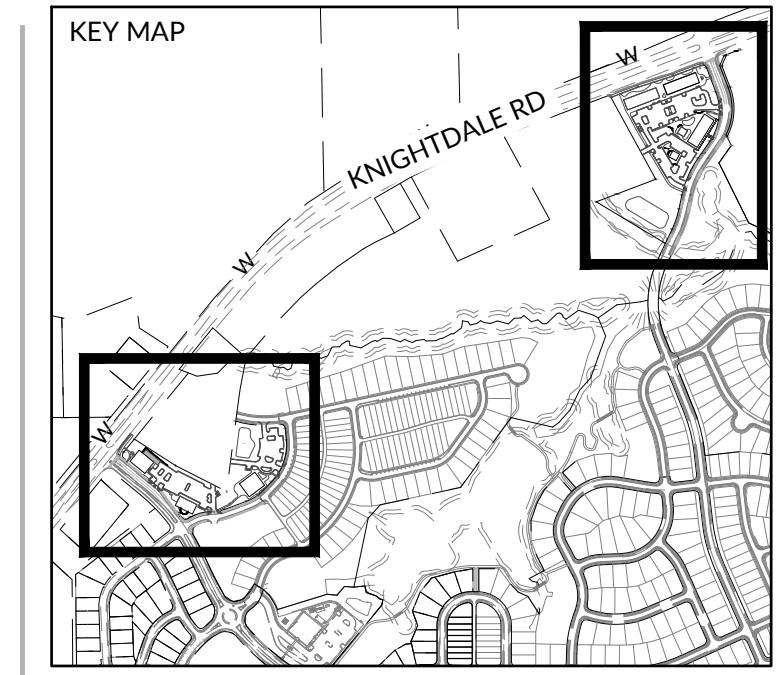
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CAROLINIAN AVE MIXED USE SITE

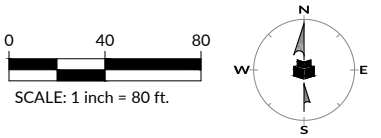


MORNING FLYER WAY MIXED USE SITE



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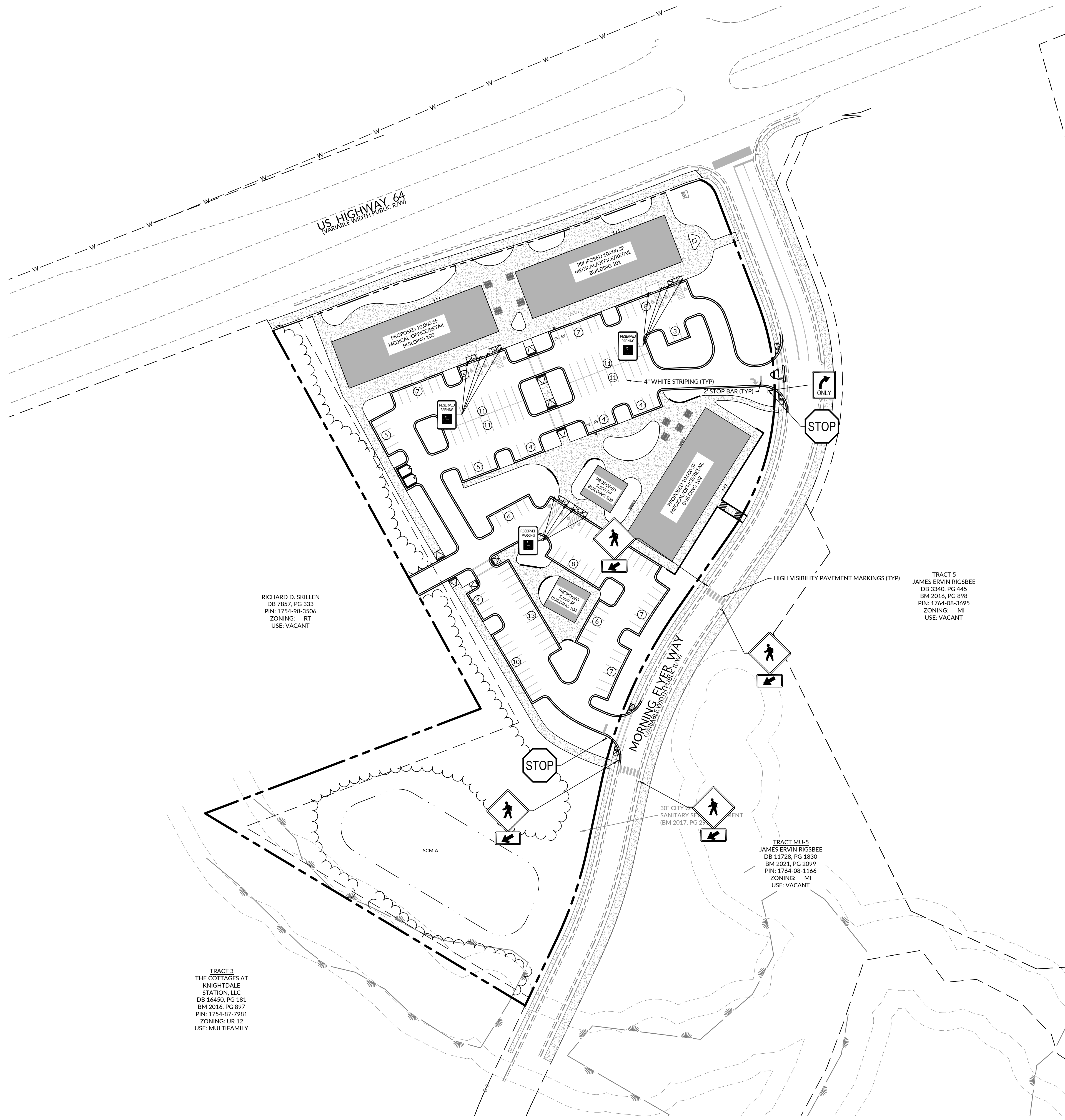
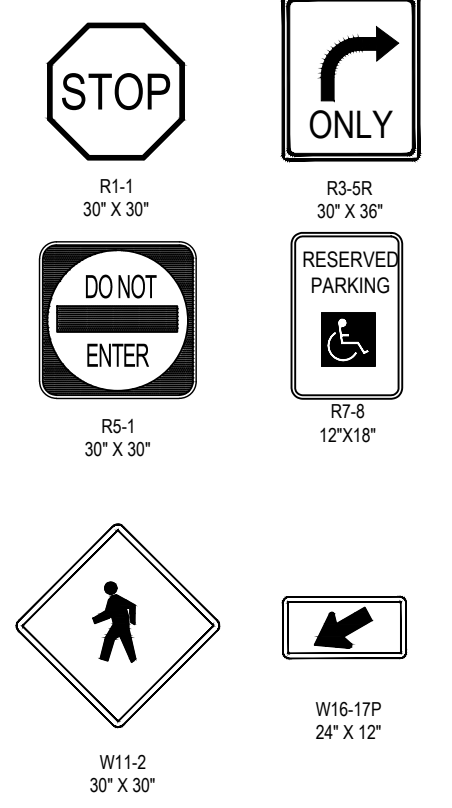
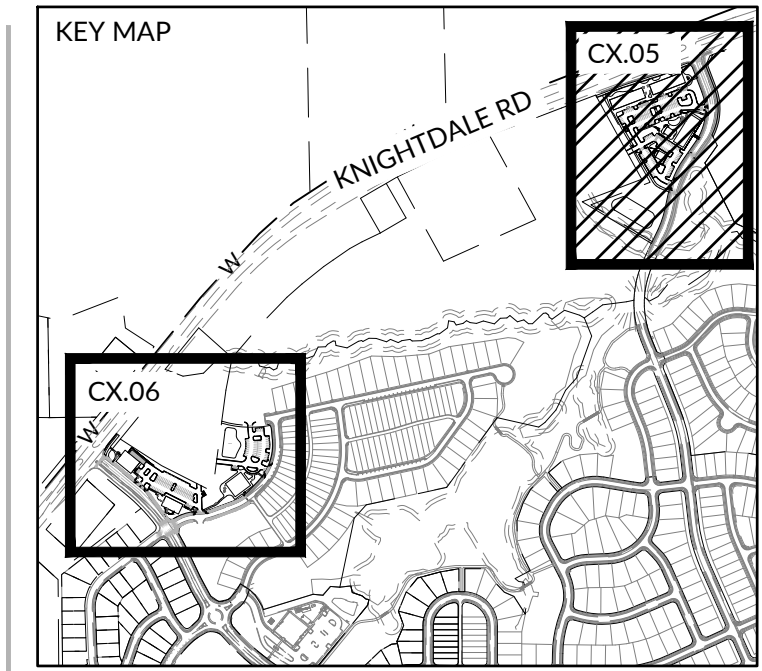


INITIAL PLAN DATE: 07/14/2023
 REVISIONS:

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STRIPING NOTES:

1. ALL MARKINGS AND SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH MUTCD STANDARDS, INCLUDING COLOR, LETTER HEIGHT, AND LETTER CASE OF THE STREET NAME SIGNS.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
3. ANY EXISTING PAVEMENT STRIPING THAT IS IN CONFLICT WITH THE PROPOSED STRIPING SHOWN ON THIS PLAN SHALL BE REMOVED.



RICHARD D. SKILLEN
DB 7857, PG 333
PIN: 1754-98-3506
ZONING: RT
USE: VACANT

TRACT 5
JAMES ERVIN RIGSBEE
DB 3340, PG 445
BM 2016, PG 898
PIN: 1764-08-3695
ZONING: MI
USE: VACANT

TRACT MU-5
JAMES ERVIN RIGSBEE
DB 11728, PG 1830
BM 2021, PG 2099
PIN: 1764-08-1166
ZONING: MI
USE: VACANT

TRACT 3
THE COTTAGES AT
KNIGHTDALE
STATION, LLC
DB 16450, PG 181
BM 2016, PG 897
PIN: 1754-87-7981
ZONING: UR 12
USE: MULTIFAMILY

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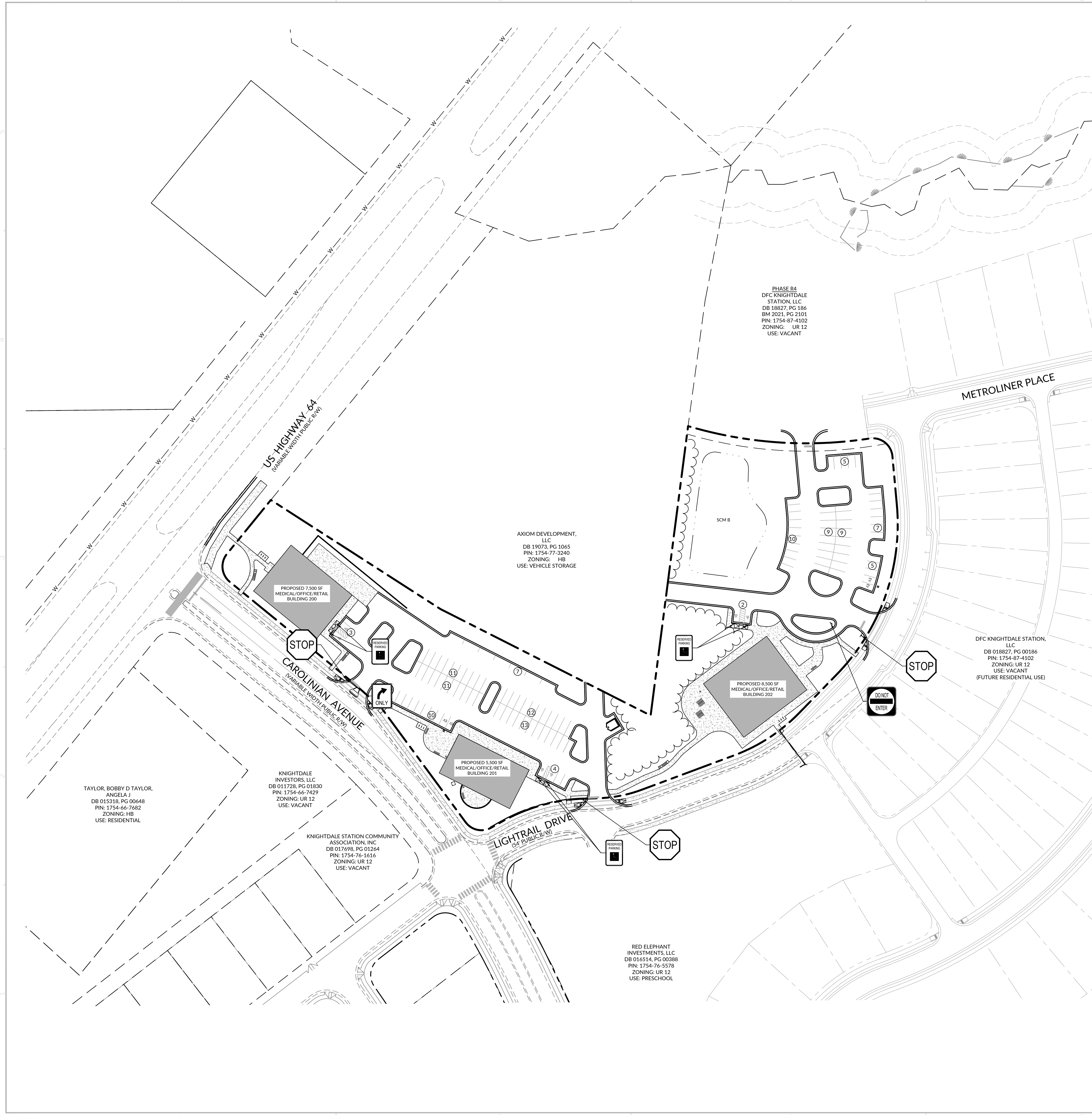
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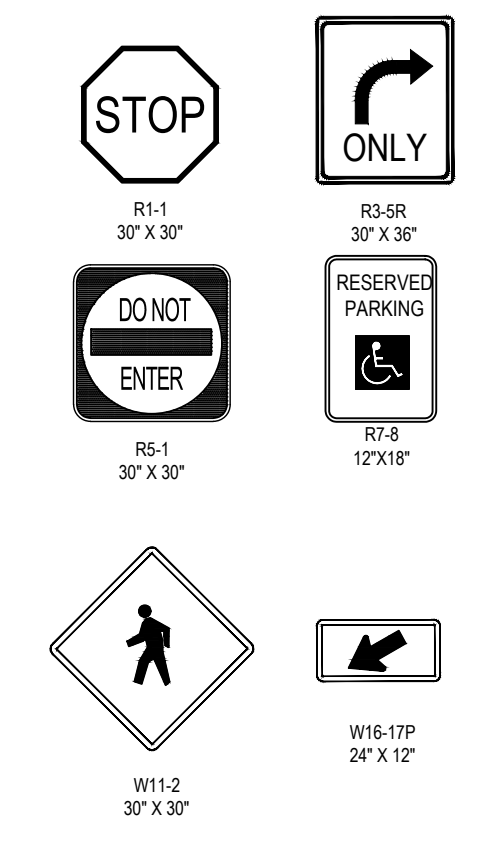
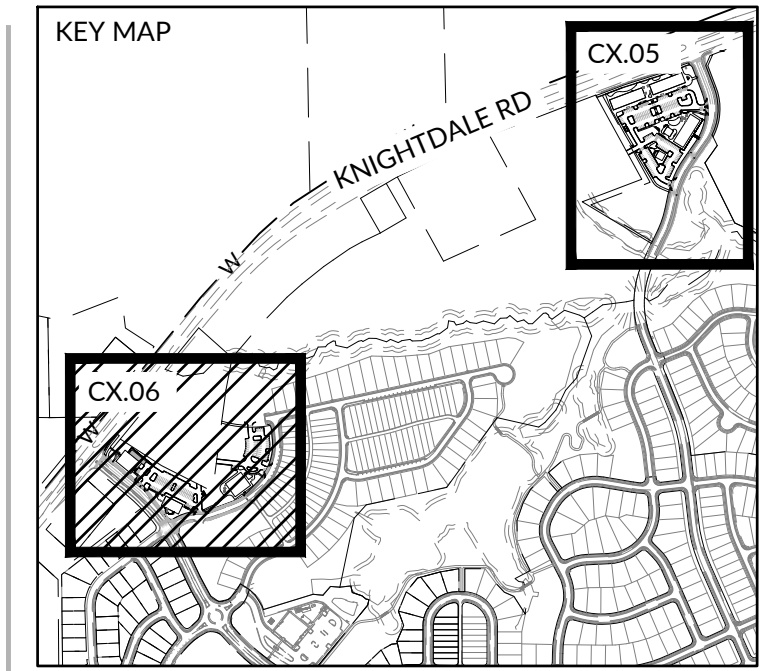
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STRIPING NOTES:

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PHASE R4
DFC KNIGHTDALE
STATION, LLC
DB 18827, PG 186
BM 2021, PG 2101
PIN: 1754-87-4102
ZONING: UR 12
USE: VACANT

AXIOM DEVELOPMENT,
LLC
DB 19073, PG 1065
PIN: 1754-77-3240
ZONING: HB
USE: VEHICLE STORAGE

DFC KNIGHTDALE STATION,
LLC
DB 018827, PG 00186
PIN: 1754-87-4102
ZONING: UR 12
USE: VACANT
(FUTURE RESIDENTIAL USE)

TAYLOR, BOBBY D TAYLOR,
ANGELA J
DB 015318, PG 00648
PIN: 1754-66-7682
ZONING: HB
USE: RESIDENTIAL

KNIGHTDALE
INVESTORS, LLC
DB 011728, PG 01830
PIN: 1754-66-7429
ZONING: UR 12
USE: VACANT

KNIGHTDALE STATION COMMUNITY
ASSOCIATION, INC
DB 017698, PG 01264
PIN: 1754-76-1616
ZONING: UR 12
USE: VACANT

RED ELEPHANT
INVESTMENTS, LLC
DB 016514, PG 00388
PIN: 1754-76-5578
ZONING: UR 12
USE: PRESCHOOL

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WithersRavenel
137 S. Wilmington Street | Suite 200 | Raleigh, NC 27601
License #: F-1479 | t: 919.469.3340 | www.withersravenel.com

ATLAS STARK
2020 PROGRESS CT, SUITE 130A
RALEIGH, NC 27608

our people • your success

PUD MASTER PLAN
**ATLAS STARK
KNIGHTDALE STATION**

7790 KNIGHTDALE BLVD | KNIGHTDALE, NC 27545 |
ST. MATTHEWS TOWNSHIP | WAKE COUNTY

PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION

0 20 40
SCALE: 1 inch = 40 ft.

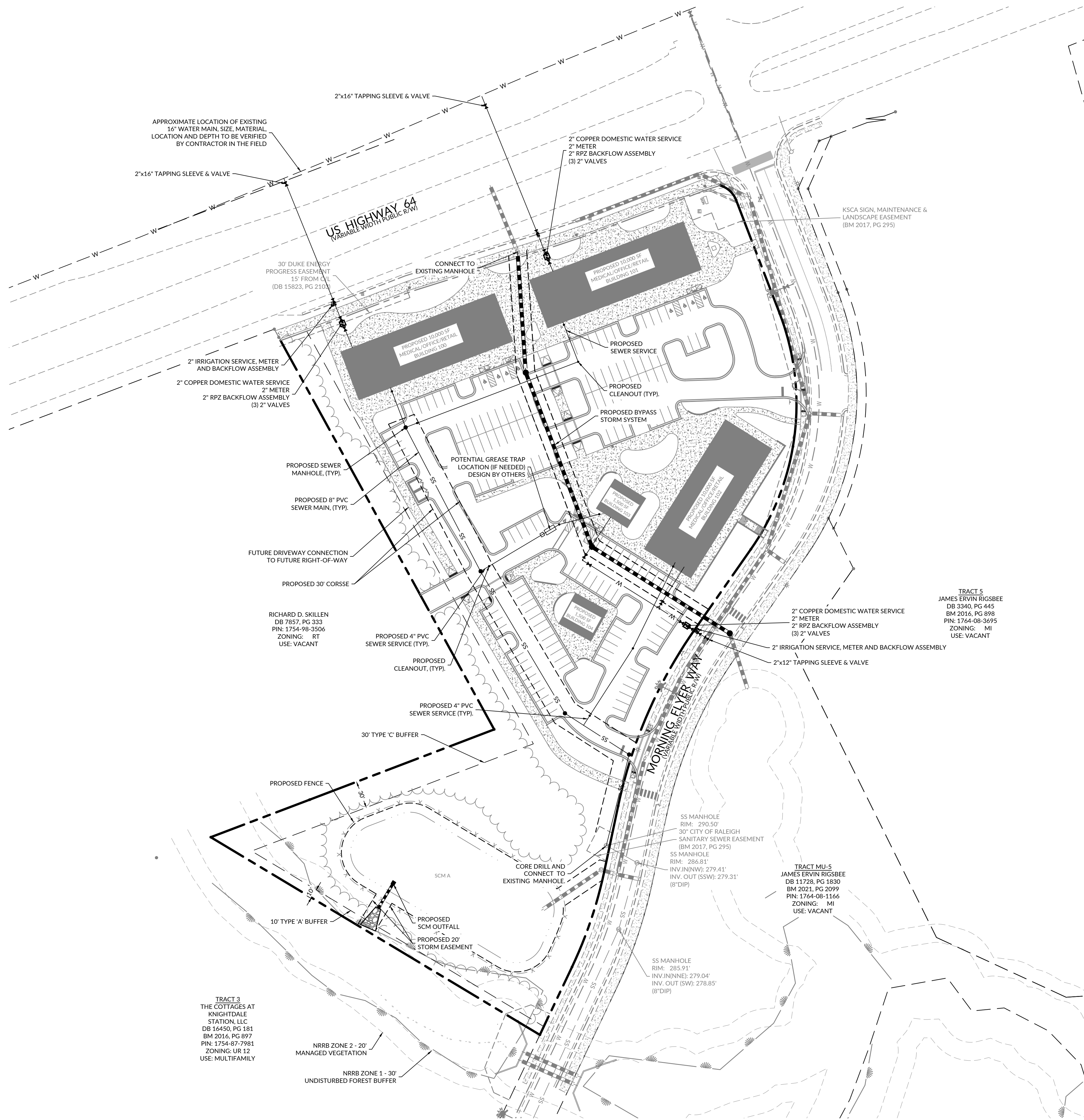
INITIAL PLAN DATE: 07/14/2023
REVISIONS:

WR JOB NUMBER: 09221154
DRN: WR DGN: WR CKD: WR

**CAROLINIAN AVE
SIGNAGE &
PAVEMENT
MARKING PLAN**

C2.06

EST. 1983



Preliminary SCM Design Calculations

Per NCDEQ Stormwater Design Manual Minimum Design Criteria C-3 Wet Pond (11.23.2020)

Table 1 Surface Area to Drainage Area Ratio for Permanent Pool Sizing
Piedmont and Mountain SA/DA Table (Adapted from Driscoll, 1986)

SA/DA Ratio	0.43	0.37	0.30	0.27	0.25
10	0.51	0.43	0.37	0.30	0.27
20	0.84	0.69	0.61	0.51	0.44
30	1.17	0.94	0.84	0.72	0.61
40	1.51	1.24	1.09	0.91	0.78
50	1.79	1.51	1.31	1.13	0.95
60	2.09	1.77	1.49	1.31	1.12
70	2.51	2.09	1.80	1.56	1.34
80	2.92	2.41	2.07	1.82	1.62
90	3.25	2.64	2.31	2.04	1.84
100	3.55	2.79	2.52	2.34	2.04

Source: NCDEQ Stormwater Design Manual Minimum Design Criteria C-3 Wet Pond (11.23.2020)

STORMWATER WET POND - Site A Preliminary SCM Sizing

SA/DA Ratio	6.87	60	4.12
SA/DA Ratio			0.00
SA/DA Ratio			0.00
Totals	6.87		4.12

Total % Impervious Surface Area = 60.00%

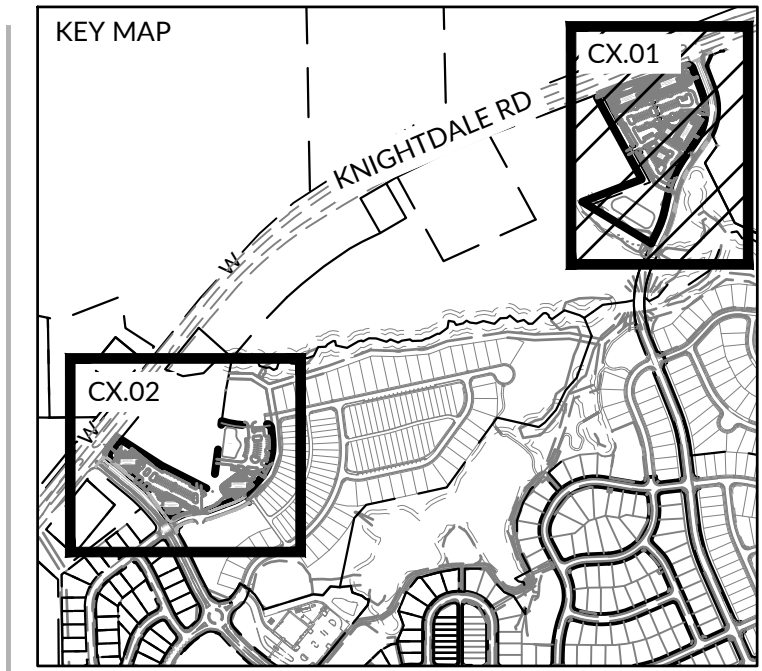
Surface Area of Normal Pool:
Average depth = 3.00 ft
SA/DA ratio = 2.09 Interpolated From Table 1

Minimum Normal Pool surface area (SA) = (DA * SA/DA ratio)/100
 SA = 0.144 acres
 Normal Pool Area Required = 6,254 sq. ft.
 Forebay Area Required = 1,251 sq. ft.
 Total Surface Area Required = 8,256 sq. ft.
 Normal pool elevation = 1.0 feet
 Surface area provided = 8,700 sq. ft.
 Surface area provided = 0.200 acres

Runoff Volume Calculation - FOR WETLANDS ONLY
 Design Storm Depth = 1 inch
 Using the runoff volume calculations in the "Simple Method" as described by Schueler (1987)
 $R_v = 0.05 + 0.9(I)$ where, R_v = Runoff coefficient, in./in.
 I = Percent impervious
 $R_v = 0.59$ in./in.

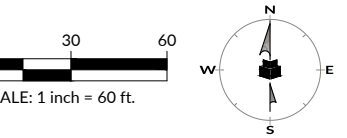
Total runoff volume
 Runoff volume, S = (Design rainfall) (R_v) (Drainage Area)
 S = 0.338 acre-ft
 Storage Volume Required = 14,713 cu. ft.
 10% Fluff Storage Volume = 16,185 cu. ft.
 Water quality pool elevation = 1.0 feet
 Overflow elevation = 3.0 feet
 Storage volume provided = 17,400 cu. ft.

NOTE: BUILDINGS WILL NOT BE EQUIPPED WITH SPRINKLERS



PROPOSED UTILITIES LEGEND

- SYMBOL DESCRIPTION
- FL FIRE LINE
- FM FORCEMAIN
- SS SANITARY SEWER PIPE
- W WATER MAIN
- R RECLAIMED WATER LINE
- Fire Lane
- Backflow Preventer
- Blow Off
- Fire Department Connection (FDC)
- Fire Hydrant Assembly
- Sewer Cleanout
- Sewer Manhole
- Water Meter
- Water Valve



INITIAL PLAN DATE: 07/14/2023
 REVISIONS:

ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH ALL CITY OF RALEIGH & TOWN OF KNIGHTDALE DESIGN STANDARDS, DETAILS AND SPECIFICATIONS

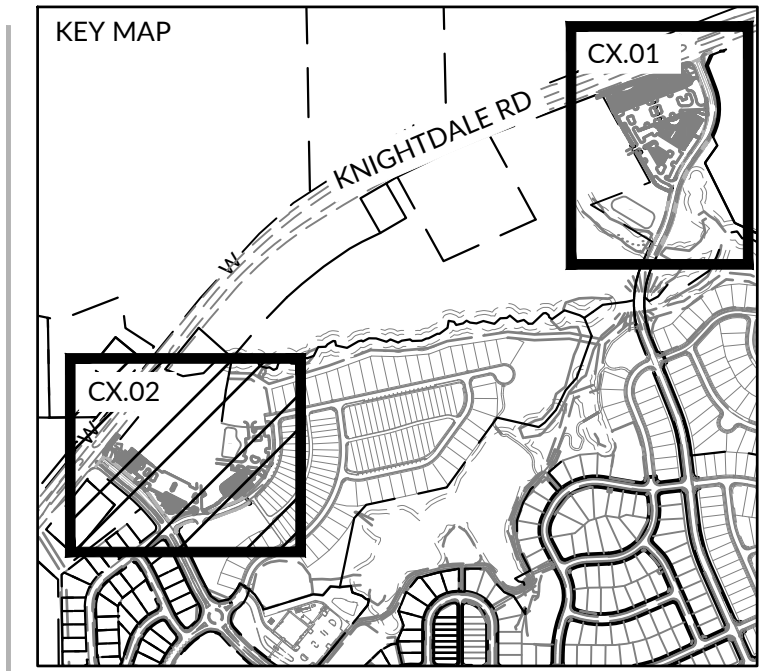
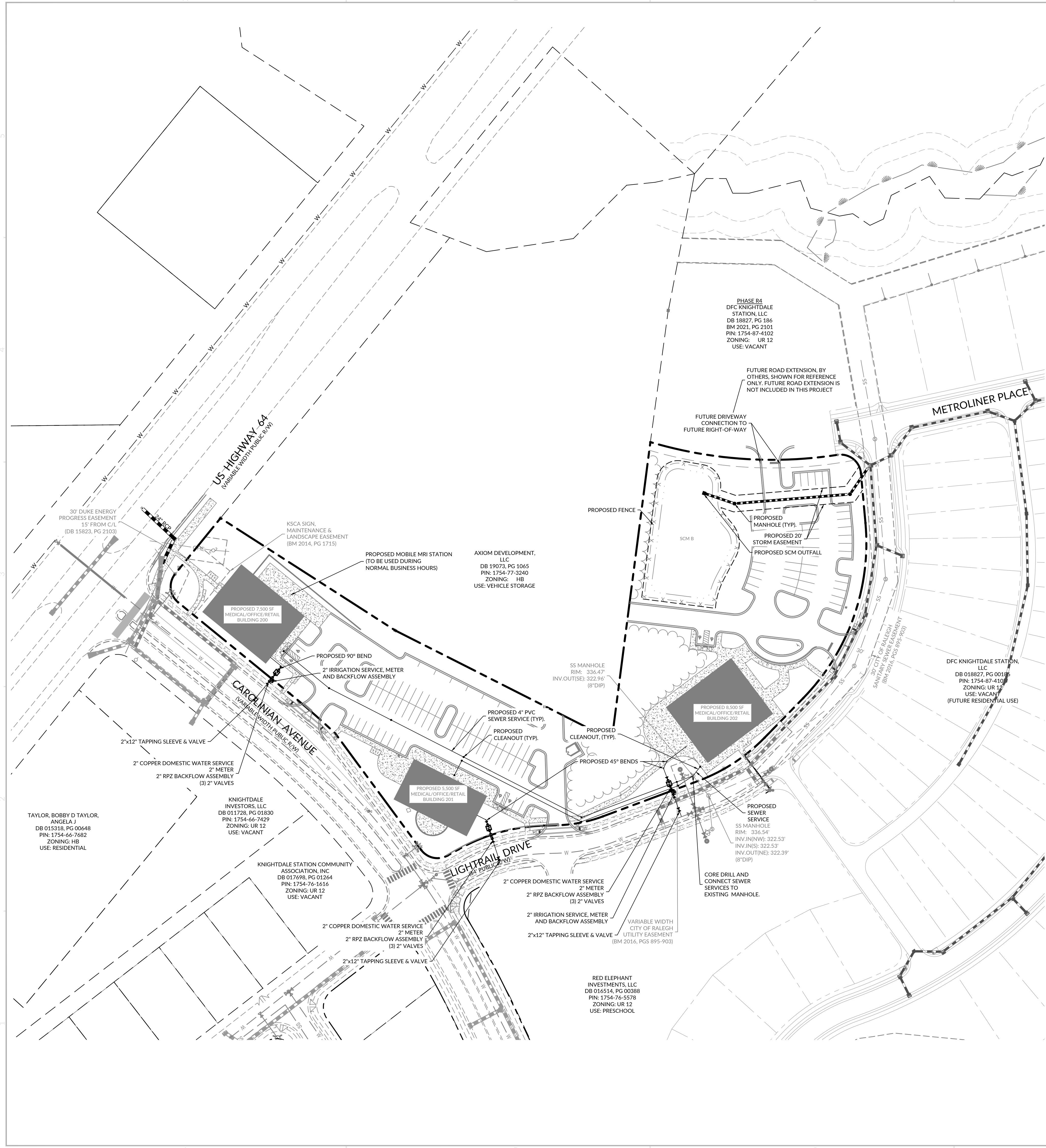
a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
 By: _____ Date: _____
 Town Engineer
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 By: _____ Date: _____
 Administrator

WR JOB NUMBER 09221154
 DRN: WR DGN: WR CKD: WR

MORNING FLYER WAY UTILITY PLAN

C3.01

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PROPOSED UTILITIES LEGEND

SYMBOL	DESCRIPTION
— FL —	FIRE LINE
— FM —	FORCEMAIN
— SS —	SANITARY SEWER PIPE
— W —	WATER MAIN
— R —	RECLAIMED WATER LINE
○	FIRE LANE
□	BACKFLOW PREVENTER
○	BLOW OFF
+	FIRE DEPARTMENT CONNECTION (FDC)
+	FIRE HYDRANT ASSEMBLY
○	SEWER CLEANOUT
○	SEWER MANHOLE
○	WATER METER
○	WATER VALVE

Preliminary SCM Design Calculations

Per NCDEQ Stormwater Design Manual Minimum Design Criteria C-3 Wet Pond (11.23.2020)

Table 1 Surface Area to Drainage Area Ratio for Permanent Pool Sizing
Piedmont and Mountain SA/DA Table (Adapted from Driscoll, 1986)

SA/DA	0.51	0.43	0.37	0.30	0.27	0.25
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20	0.84	0.69	0.61	0.51	0.44	0.40
30	1.17	0.94	0.84	0.72	0.61	0.56
40	1.51	1.24	1.09	0.91	0.78	0.71
50	1.79	1.51	1.31	1.13	0.95	0.87
60	2.09	1.77	1.49	1.31	1.12	1.03
70	2.51	2.09	1.80	1.56	1.34	1.17
80	2.92	2.41	2.07	1.82	1.62	1.40
90	3.25	2.64	2.31	2.04	1.84	1.59
100	3.55	2.79	2.52	2.34	2.04	1.75

Source: NCDEQ Stormwater Design Manual Minimum Design Criteria C-3 Wet Pond (11.23.2020)

STORMWATER WET POND - Site B Preliminary SCM Sizing

	4.39	57	2.50
			0.00
			0.00
Totals	4.39		2.50

Total % Impervious Surface Area = 57.00%

Surface Area of Normal Pool:

Average depth = 3.00 ft
SA/DA ratio = 2.00 Interpolated From Table 1

Minimum Normal Pool surface area (SA) = (DA * SA/DA ratio)/100

SA = 0.088 acres
Normal Pool Area Required = 3,825 sq. ft.
Forebay Area Required = 765 sq. ft.
Total Surface Area Required = 5,048 sq. ft.

Normal pool elevation = 1.0 feet
Surface area provided = 7,100 sq. ft.
Surface area provided = 0.163 acres

Runoff Volume Calculation - FOR WETLANDS ONLY

Design Storm Depth = 1 inch
Using the runoff volume calculations in the "Simple Method" as described by Schueler (1987)
 $R_v = 0.05 + 0.9(I)$ where, R_v = Runoff coefficient, in./in.
 I = Percent impervious

$R_v = 0.56$ in./in.

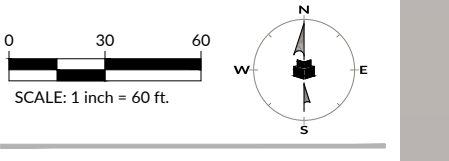
Total runoff volume
Runoff volume, $S = (\text{Design rainfall}) (R_v) (\text{Drainage Area})$
 $S = 0.206$ acre-ft
Storage Volume Required = 8,972 cu. ft.
10% Fluff Storage Volume = 9,869 cu. ft.

Water quality pool elevation = 1.0 feet
Overflow elevation = 3.0 feet
Storage volume provided = 14,200 cu. ft.

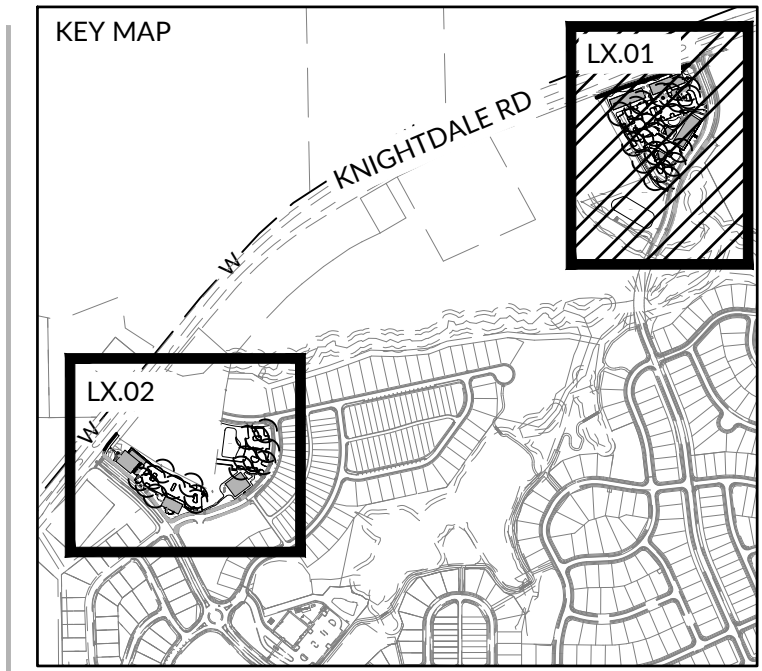
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INITIAL PLAN DATE: 07/14/2023
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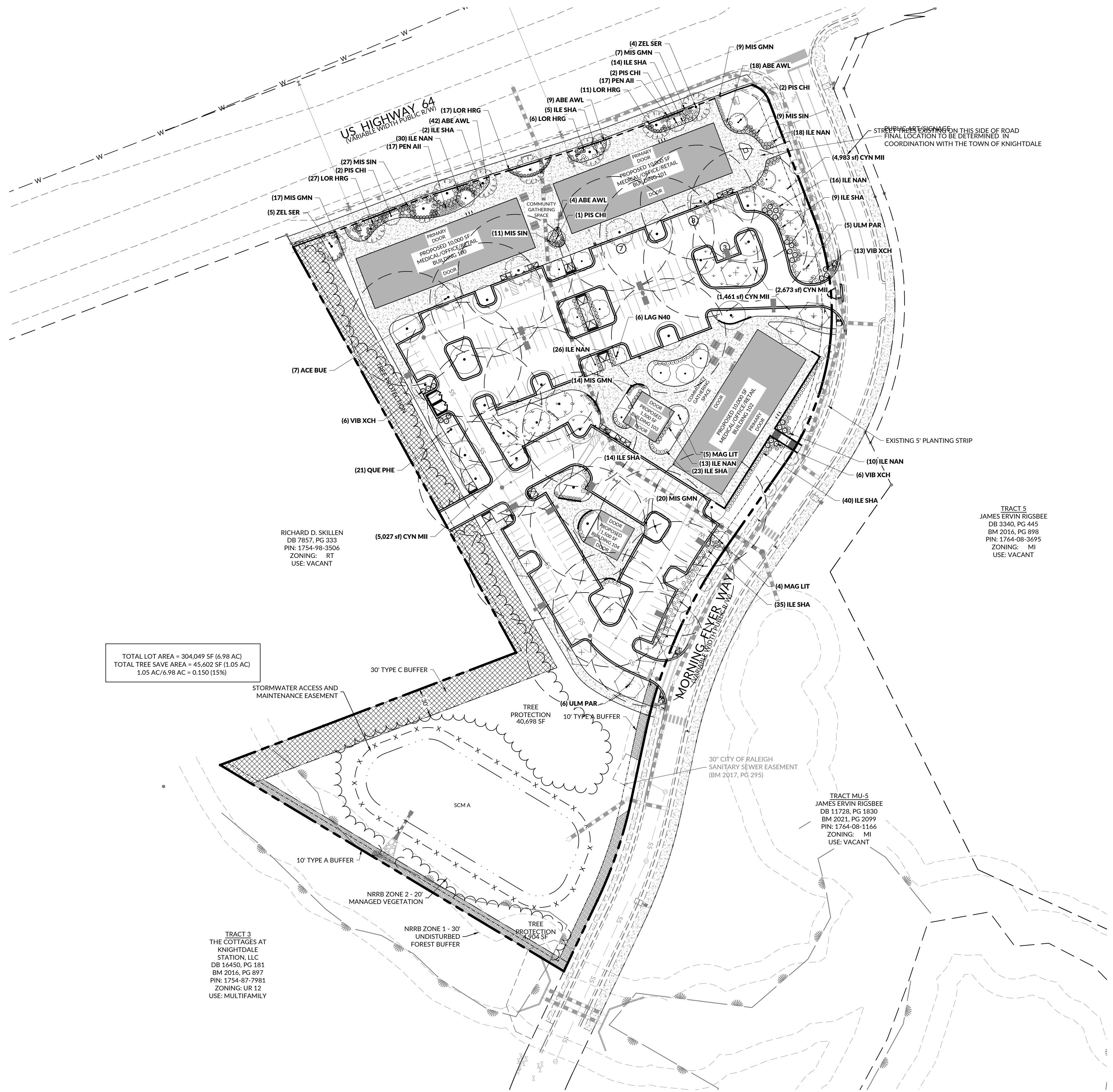


PLANT SCHEDULE

TREES	CODE	BOTANICA
	CER FOR	CERCIS CA
	MAG LIT	MAGNOLI
	PIS CHI	PISTACIA C
	QUE PHE	QUERCUS
	ULM PAR	ULMUS PA
	ZEL SER	ZELKOVA :
UNDERSTORY TREES	CODE	BOTANICA
	ACE BUE	ACER BUEI
	LAG N40	LAGERSTRI
SHRUBS	CODE	BOTANICA
	ABE AWL	ABELIA X C
	ILE SHA	ILEX GLABI
	ILE NAN	ILEX VOMI

LEGEND:

	TYPE A BUFFER YARD
	TYPE C BUFFER YARD



TOTAL LOT AREA = 304,049 SF (6.98 AC)
 TOTAL TREE SAVE AREA = 45,602 SF (1.05 AC)
 1.05 AC/6.98 AC = 0.150 (15%)

RICHARD D. SKILLEN
 DB 7857, PG 333
 PIN: 1754-98-3506
 ZONING: RT
 USE: VACANT

TRACT 5
 JAMES ERVIN RIGSBEE
 DB 3340, PG 445
 BM 2016, PG 598
 PIN: 1764-08-3695
 ZONING: MI
 USE: VACANT

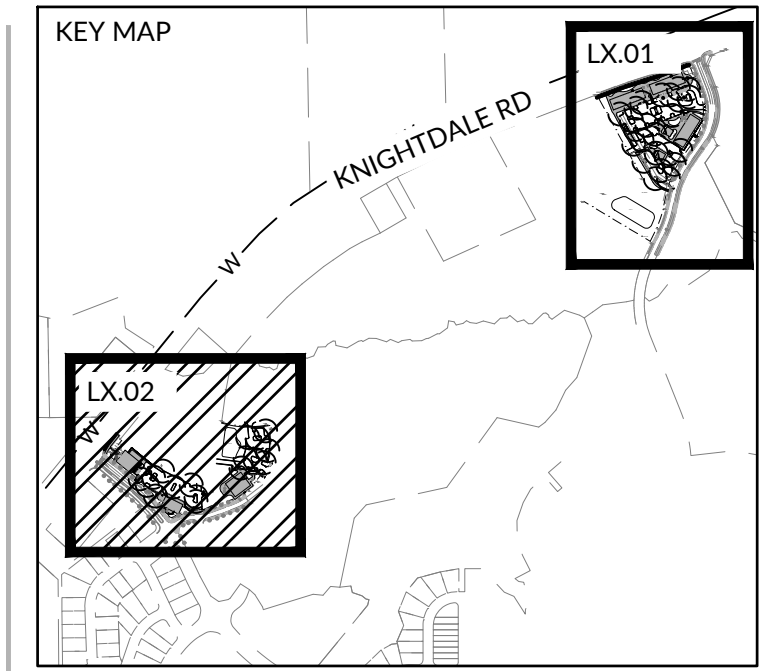
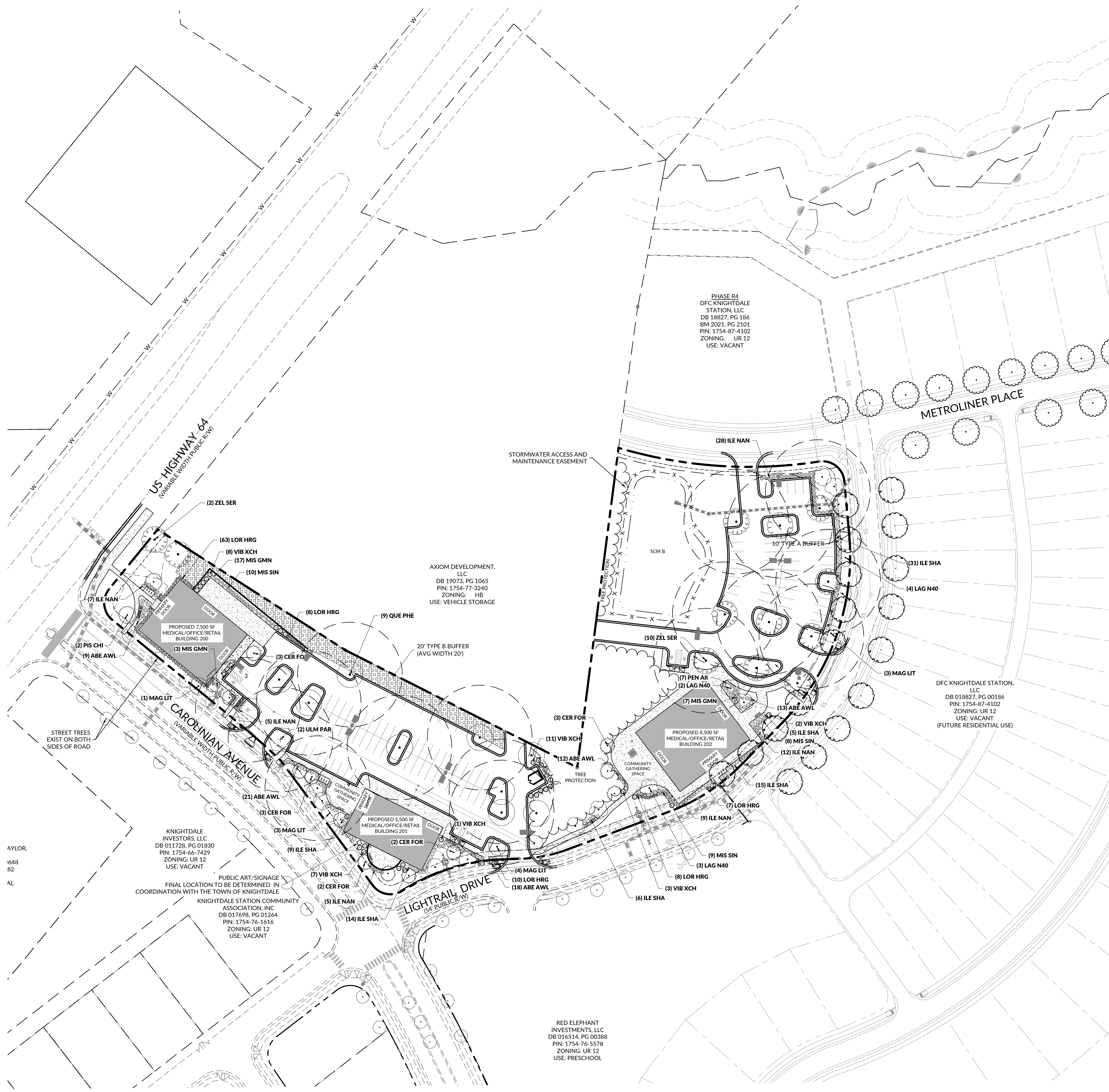
TRACT MU-5
 JAMES ERVIN RIGSBEE
 DB 11728, PG 1630
 BM 2021, PG 2099
 PIN: 1764-08-1166
 ZONING: MI
 USE: VACANT

TRACT 3
 THE COTTAGES AT
 KNIGHTDALE
 STATION, LLC
 DB 16450, PG 181
 BM 2016, PG 897
 PIN: 1754-97-7981
 ZONING: UR 12
 USE: MULTIFAMILY

ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH ALL CITY OF RALEIGH & TOWN OF KNIGHTDALE DESIGN STANDARDS, DETAILS AND SPECIFICATIONS

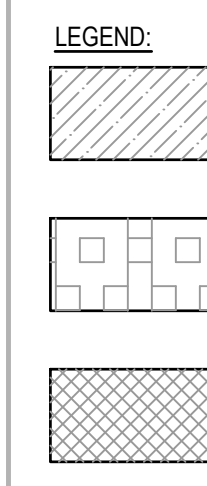
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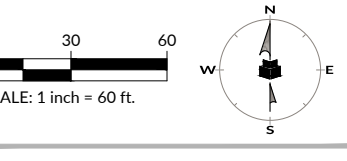


PLANT SCHEDULE

TREES	CODE	BOTANICA
	CER FOR	CERCIS CA
	MAG LIT	MAGNOLI
	PIS CHI	PISTACIA C
	QUE PHE	QUERCUS
	ULM PAR	ULMUS PA
	ZEL SER	ZELKOVA S
UNDERSTORY TREES	CODE	BOTANICA
	ACE BUE	ACER BUEI
	LAG N40	LAGERSTR
SHRUBS	CODE	BOTANICA
	ABE AWL	ABELIA X C
	ILE SHA	ILEX GLABI
	ILE NAN	ILEX VOMI



PRELIMINARY
 NOT APPROVED
 FOR CONSTRUCTION



INITIAL PLAN DATE: 07/14/2023
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WR JOB NUMBER 09221154
 DRN: WR DGN: WR CKD: WR
**CAROLINIAN WAY
 LANDSCAPE PLAN**

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GENERAL LANDSCAPE NOTES

- LANDSCAPED AREAS SHALL NOT CONTAIN ANY DEVELOPMENT, IMPERVIOUS SURFACES OR SITE FEATURES THAT DO NOT FUNCTION TO MEET THE APPLICABLE STANDARDS FOR THAT AREA OR THAT REQUIRE REMOVAL OF EXISTING SIGNIFICANT VEGETATION.
- ALL VEGETATION AND SILLS TO REMAIN UNDISTURBED WITHIN REQUIRED BUFFER YARDS UNLESS OTHERWISE APPROVED BY THE LAND USE ADMINISTRATOR.
- NO GRADING, DEVELOPMENT OR LAND-DISTURBING ACTIVITIES SHALL OCCUR WITHIN AREA BUFFER YARDS IF FOREST CANOPY, SPECIMEN TREES OR SIGNIFICANT VEGETATION EXISTS WITHIN THESE AREAS, UNLESS APPROVED BY THE ADMINISTRATOR. IF GRADING WITHIN A BUFFER YARD IS PROPOSED, SLOPES 3:1 OR LESS ARE ENCOURAGED TO ENSURE PROPER TRANSITION OF GRADES TO THE ADJACENT PROPERTY AND TO FACILITATE LANDSCAPING AND MAINTENANCE.
- PERMANENT OFF-SITE LANDSCAPE EASEMENTS MAY BE USED TO MEET REQUIRED BUFFER YARDS PROVIDED THAT THE SIZE OR SHAPE OF THE PARCEL SIGNIFICANTLY RESTRICTS THE ABILITY TO REASONABLY USE THE PROPERTY AND MEET THE BUFFER YARD REQUIREMENTS. THESE EASEMENTS MUST BE RECORDED PRIOR TO OR IN CONJUNCTION WITH THE APPROVAL OF THE SITE OR SUBDIVISION PLAN.
- NEW PLANT MATERIAL SHOULD COMPLEMENT EXISTING VEGETATION NATIVE TO THE SITE. THE USE OF DROUGHT TOLERANT, INDIGENOUS, NATIVE AND/OR REGIONALLY GROWN SPECIES OF TREES, SHRUBS AND GROUNDCOVERS ARE ENCOURAGED IN ORDER TO MAKE PLANTED AREAS COMPATIBLE WITH EXISTING NATIVE HABITATS AND TO REDUCE DEPENDENCY ON IRRIGATION.
- ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH TOWN OF KNIGHTDALE STANDARD SPECIFICATIONS & DETAIL MANUAL.
- LANDSCAPING SHALL BE OF SUFFICIENT SIZE SO THAT MATURE APPEARANCE WILL BE ACHIEVED WITHIN (3) YEARS OF INSTALLATION FOR SHRUBS AND WITHIN (5) YEARS OF INSTALLATION FOR TREES, WHERE THE MINIMUM SIZE REQUIREMENTS OVERLAP. THE HIGHER STANDARD SHALL PREVAIL.
- EACH CANOPY TREE SHALL BE PROVIDED WITH A MINIMUM PERVIOUS GROUND AREA OF 300 SF FOR ROOT GROWTH (EXCEPTION: STREET TREES) AND SHOULD BE PLANTED ON SLOPES NOT TO EXCEED 1:4 VERTICAL TO HORIZONTAL DISTANCE.
- GROUND COVER MUST BE PLANTED WITH ON-CENTER SPACING EQUIVALENT TO THE AVERAGE MATURE SPREAD FOR EACH PARTICULAR SPECIES.
- ALL NEW PLANT MATERIAL SHALL BE OF GOOD QUALITY, FREE FROM DISEASE, INSTALLED IN SOUND MANNER, MULCHED (3-4" LAYER) AND MEET STANDARDS SET FORTH IN THE AMERICAN STANDARD FOR NURSERY STOCK BY AMERICAN NURSERY & LANDSCAPE ASSOCIATION (ANLA). THE SELECTION OF PLANTS, PLANTING METHODS, MINIMUM HEIGHT, ROOT BALL AND CONTAINER SIZE, NUMBER OF BRANCHES AND WIDTH, SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE ANLA FOR THAT TYPE OF TREE OR SHRUB AT THE TIME OF INSTALLATION.
- ALL NEW TREES SHALL ALSO BE PROPERLY GUYED AND STAKED AT THE TIME OF PLANTING.
- ADAPTED DRAINAGE AND MULCHING SHALL BE PROVIDED IN ALL CASES, PARTICULARLY FOR MEDIANS AND ISLANDS.
- INSTALLATION PRACTICES SHALL BE UTILIZED WHICH PRESERVE AND REPLACE EXISTING TOPSOIL OR AMEND THE SOIL TO REDUCE COMPACTION.
- ALL PORTIONS OF A LANDSCAPED AREA NOT PLANTED WITH SHRUBS AND TREES OR COVERED BY A WALL OR OTHER SCREENING DEVICE SHALL BE PLANTED WITH GROUND COVER AND/OR GRASS, OR COVERED WITH NATURAL MULCH WITH A MINIMUM DEPTH OF 2".
- WHERE A CANOPY TREE IS REQUIRED AND OVERHEAD UTILITY LINES EXIST (2) UNDERSTORY TREES SHALL BE SUBSTITUTED WITH THE APPROVAL OF THE ADMINISTRATOR.
- NOTHING SHALL BE PLANTED OR INSTALLED WITHIN AN UNDERGROUND OR OVERHEAD UTILITY EASEMENT OR DRAINAGE EASEMENT WITHOUT THE CONSENT OF THE TOWN AND THE EASEMENT HOLDER AT THE TIME OF MASTER PLAN APPROVAL.
- CONTRACTOR SHALL WARRANT ALL NEW PLANT MATERIAL FOR (1) YEAR FROM TIME OF INSTALLATION.
- ALL LANDSCAPING, MULCHING AND SEEDING SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED SITE PLAN AND THE STANDARDS OF THIS CHAPTER PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. REQUESTS FOR A DELAY IN COMPLYING WITH THIS REQUIREMENT WILL BE CONSIDERED FOLLOWING A WRITTEN REQUEST DIRECTED TO THE ADMINISTRATOR. SUCH REQUEST FOR A DELAY SHALL NOTE THE TIMELINE DURING WHICH THE PLANTING SHALL BE COMPLETED. CERTIFICATES OF OCCUPANCY WILL BE ISSUED WITH THE APPROVAL OF A REQUEST FOR PLANTING DELAY REASONABLE.
- THE TOWN MAY ISSUE A TEMPORARY CERTIFICATE OF OCCUPANCY FOR A PERIOD OF 30-180 DAYS, RELATIVE TO THE NEXT PLANTING SEASON; WHILE THE TOWN OF KNIGHTDALE MAY ALSO ISSUE A TEMPORARY CERTIFICATE OF OCCUPANCY FOR A PERIOD NOT TO EXCEED 90 DAYS.
- WHERE SIGHT TRIANGLES FOR DRIVES OR STREETS FOR OVERLAP SCREENING, GROUND COVER VEGETATION SHALL BE USED EXCLUSIVELY (EXCEPTION: SINGLE-FAMILY DWELLINGS & DUPLEXES).
- ALL SIDES OF PARKING LOTS SHALL BE SCREENED WITH A TYPE 'A' BUFFER YARD, SIDES ADJACENT TO AN ARTERIAL SHALL BE SCREENED WITH A TYPE 'B' BUFFER YARD. OTHER VEHICLE ACCOMMODATION AREAS SHALL BE SCREENED FROM OFF-SITE VIEW WITH A TYPE 'B' BUFFER YARD.
- ABOVE GROUND UTILITIES AND ENCLOSED CONTAINMENT AREAS FOR TRASH AND RECYCLABLES SHALL BE SCREENED BY ELEMENTS OF A TYPE 'B' BUFFER YARD THAT PERTAIN TO SEMI-OPAQUE SCREENS UP TO 4" IN HEIGHT. EXISTING UTILITY OR ENCLOSURE, WHICHEVER IS LESS.
- ELECTRIC TRANSFORMER WILL REQUIRE LANDSCAPE SCREENING.

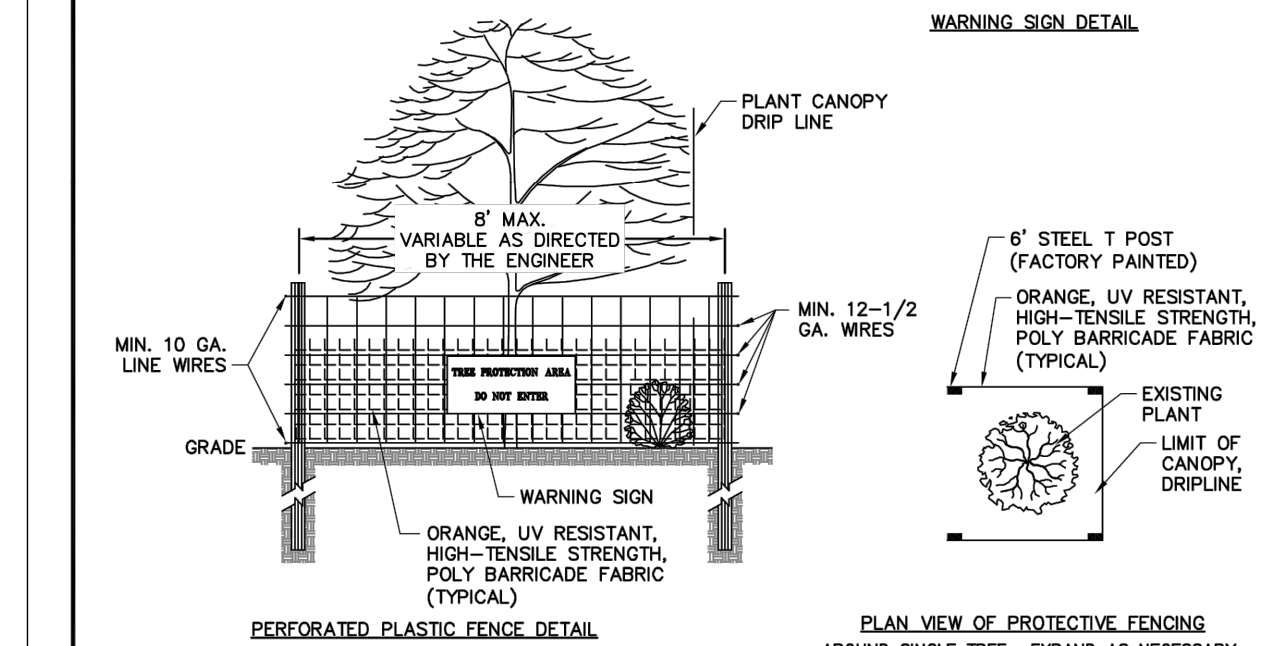
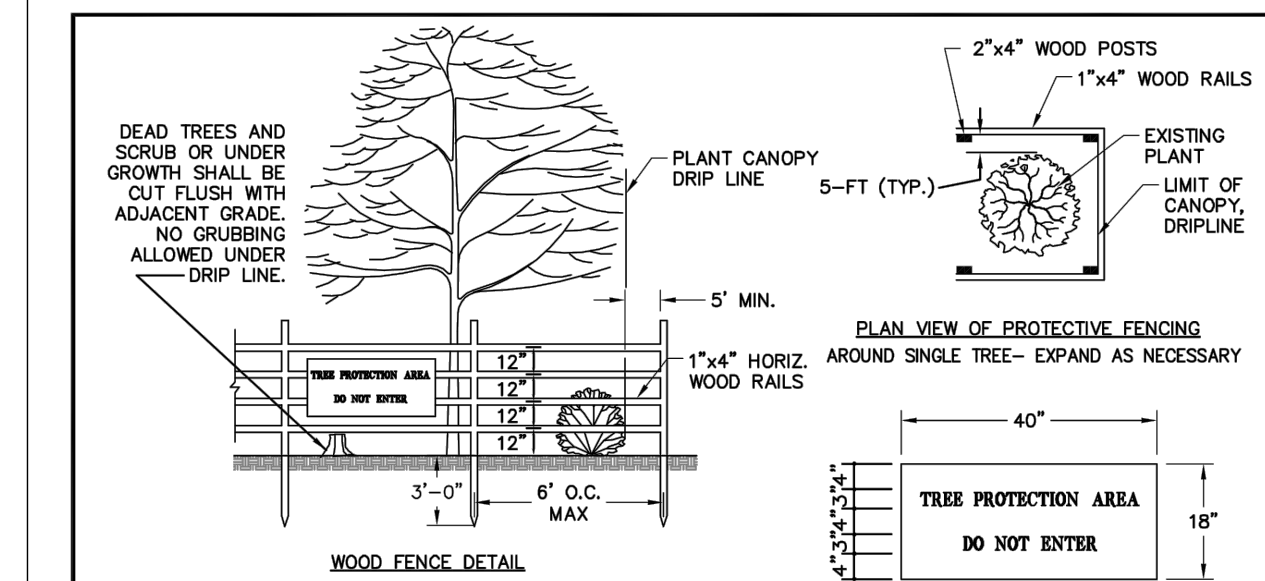
MAINTENANCE:

- THE OWNER(S) OF THE PROPERTY SHALL BE RESPONSIBLE FOR ALL NATURAL AND PHYSICAL FEATURES REQUIRED BY THE LANDSCAPE SECTION OF THE UDO AND SHALL PRESERVE AND MAINTAIN THESE FEATURES IN HEALTHY GROWING CONDITIONS, REPLACE THEM WHEN NECESSARY, AND KEEP THE AREAS AROUND THEM FREE OF REFUSE AND DEBRIS IN A MANNER THAT PREVENTS RELEASE AND DEBRIS FROM WASHING ONTO PUBLIC RIGHTS-OF-WAY.
- THE USE OF IRRIGATION IS PERMITTED IN ALL REQUIRED LANDSCAPING AREAS AS REQUIRED BY THE LANDSCAPING SECTION OF THE UDO AND MAY CONNECT TO THE PUBLIC WATER SYSTEM SUBJECT TO THE REQUIREMENTS OF THE TOWN'S STANDARDS SPECIFICATIONS AND DETAILS MANUAL AND OTHER APPLICABLE TOWN ORDINANCES OR POLICIES. THE USE OF MOISTURE METERING DEVICES AND AUTOMATIC TIMERS WITH ANY IRRIGATION SYSTEM IS REQUIRED. THE USE OF XERISCAPE PRACTICES AND DRIP IRRIGATION IS ALSO ENCOURAGED, UNLESS OTHERWISE REQUIRED.
- ALL VEGETATION SHOULD BE ALLOWED TO REACH AND BE MAINTAINED AT ITS MATURE SIZE.
- TREE TOPPING (THE REMOVAL OF MORE THAN 25% OF A TREE'S CANOPY) IS CONSIDERED TO BE DAMAGE AND MIS-CONFUREMENT AND SHALL BE PROHIBITED ON ALL TREES ON PUBLIC PROPERTY. PUBLIC RIGHTS-OF-WAY, REQUIRED TREE SAVE AREAS AND PARKING LOT LANDSCAPING AREAS UNLESS OTHERWISE APPROVED BY THE LAND USE REVIEW BOARD (LURB). TREES LOCATED WHERE PROPER PRUNING PRACTICES ARE IMPRACTICAL MAY BE EXEMPTED FROM THIS ARTICLE AT THE DETERMINATION OF THE ADMINISTRATOR.
- THE OWNER OF ANY TREE OR SHRUB ON PRIVATE PROPERTY THAT OVERHANGS ANY PUBLIC RIGHT-OF-WAY WITHIN THE TOWN SHALL PRUNE THE BRANCHES SO THAT SUCH BRANCHES SHALL NOT OBSTRUCT THE LIGHT FROM ANY STREET LAMP OR OBSTRUCT THE VIEW OF ANY STREET INTERSECTION AND SO THAT THERE SHALL BE A CLEAR SPACE OF 8' ABOVE THE SURFACE OF THE STREET OR SIDEWALK.
- THE TOWN OF KNIGHTDALE PUBLIC WORKS DIRECTOR IS AUTHORIZED TO PRUNE TREES AND SHRUBS FROM PUBLIC PROPERTIES AND PUBLIC RIGHTS-OF-WAY.
- THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) IS AUTHORIZED TO PRUNE TREES AND SHRUBS IN THE PUBLIC RIGHTS-OF-WAY OWNED BY THE STATE OF NORTH CAROLINA.
- THE REMOVAL BY ANY ENTITY OF A TREE OR SHRUB THAT IS DEAD, INFECTED BY DISEASE, OR DETERMINED TO BE A HAZARD TO PUBLIC SAFETY AND WELFARE AND SUBSEQUENT REPLACEMENT MAY BE APPROVED BY THE ADMINISTRATOR. TREES REMOVED MUST BE REPLACED IN ACCORDANCE WITH THE REPLACEMENT PROVISIONS OF THE UDO.
- OWNERS SHALL REMOVE ALL DEAD, DISEASED OR HAZARDOUS TREES AND SHRUBS AS WELL AS ANY BROKEN OR DECAYED LIMBS WHICH CONSTITUTE A MENACE TO THE SAFETY OF THE PUBLIC. THE TOWN SHALL HAVE THE RIGHT TO CAUSE THE REMOVAL OF ANY DEAD OR DISEASED TREES AND SHRUBS ON PRIVATE PROPERTY WHEN SUCH TREE OR SHRUB CONSTITUTES A HAZARD TO LIFE AND PROPERTY, OR HARBOR INSECTS OR DISEASE WHICH CONSTITUTES A POTENTIAL THREAT TO OTHER VEGETATION IN THE TOWN. THE ADMINISTRATOR WILL NOTIFY PROPERTY OWNER(S) OF THE REQUIREMENT TO REMOVE SUCH TREES, SHRUBS OR LIMBS. REMOVAL SHALL BE DONE AT THE OWNER(S) EXPENSE WITHIN 60 DAYS AFTER THE DATE OF SERVICE OF THE WRITTEN NOTICE. FAILURE TO COMPLY WITH SUCH PROVISIONS SHALL CONSTITUTE A VIOLATION OF THE TOWN OF KNIGHTDALE ORDINANCE AND SHALL BE SUBJECT TO THE APPLICABLE PROCEDURES AND PENALTIES.
- WHEN REMOVING TREES AND SHRUBS, STUMPS SHALL BE REMOVED OR GROUND TO A MINIMUM DEPTH OF 4".
- IN THE EVENT THAT ANY REQUIRED VEGETATION IS SEVERELY DAMAGED DUE TO AN UNUSUAL WEATHER OCCURRENCE OR NATURAL DISASTER, THE OWNER SHALL HAVE (1) GROWING SEASON TO REPLACE OR REPLANT FOLLOWING THE EVENT OR FOLLOWING THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR ANY EVENT-RELATED SITE RECONSTRUCTION, WHICHEVER IS LATER.
- VEGETATION WITHIN A REQUIRED TREE PROTECTION OR LANDSCAPED AREA THAT DIES WITHIN (1) YEAR OF CONSTRUCTION COMPLETION SHALL BE REMOVED AND REPLACED WITH NEW VEGETATION OF EQUAL OR GREATER SIZE BY THE CONTRACTOR PROVIDING THE WARRANT. SHOULD ANY VEGETATION REQUIRED IN A TREE PROTECTION OR LANDSCAPED AREA DIE AFTER THE EXPIRATION OF THE WARRANTY, THE PROPERTY OWNER SHALL REPLACE IT WITHIN 180 DAYS WITH VEGETATION OF EQUAL OR GREATER SIZE.
- A PLAN DENOTING THE PROPOSED LOCATION AND SPECIES OF REPLACEMENTS SHALL BE SUBMITTED TO THE TOWN OF KNIGHTDALE FOR APPROVAL. THE ADMINISTRATOR MAY ELECT TO PRESENT THE PLAN TO THE LURB FOR FINAL APPROVAL.
- ALL VEGETATION SHALL BE MAINTAINED IN A MANNER THAT SATISFIES THE APPLICABLE TYPE, AMOUNT AND PERFORMANCE CRITERIA REQUIRED BY THE TOWN OF KNIGHTDALE UDO.
- THE ADMINISTRATOR MAY INSPECT THE SITE ONCE A YEAR AFTER THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY IN ORDER TO ENSURE COMPLIANCE WITH THE APPROVED SITE PLAN AND TO ENSURE THAT THE VEGETATION AND LANDSCAPING IS PROPERLY MAINTAINED. THE ADMINISTRATOR MAY ISSUE A NOTICE OF VIOLATION TO COMPLY WITH THE PROVISIONS OF THE KNIGHTDALE ORDINANCE IF WARRANTED UPON AN INSPECTION.

NOTE: CAROLINIAN AVE, MORNING FLYER WAY AND LIGHTRAIL DRIVE HAVE EXISTING STREET TREES

PLANT SCHEDULE

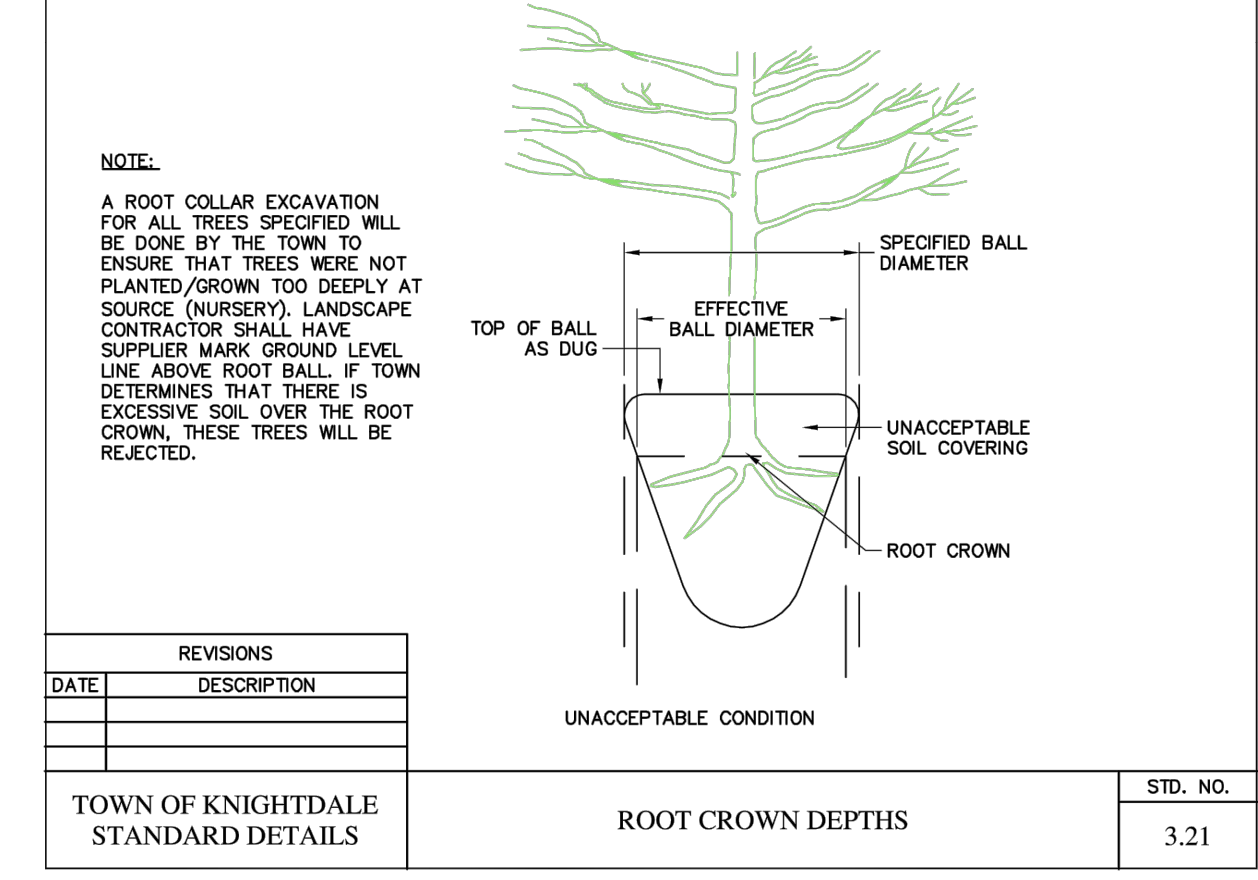
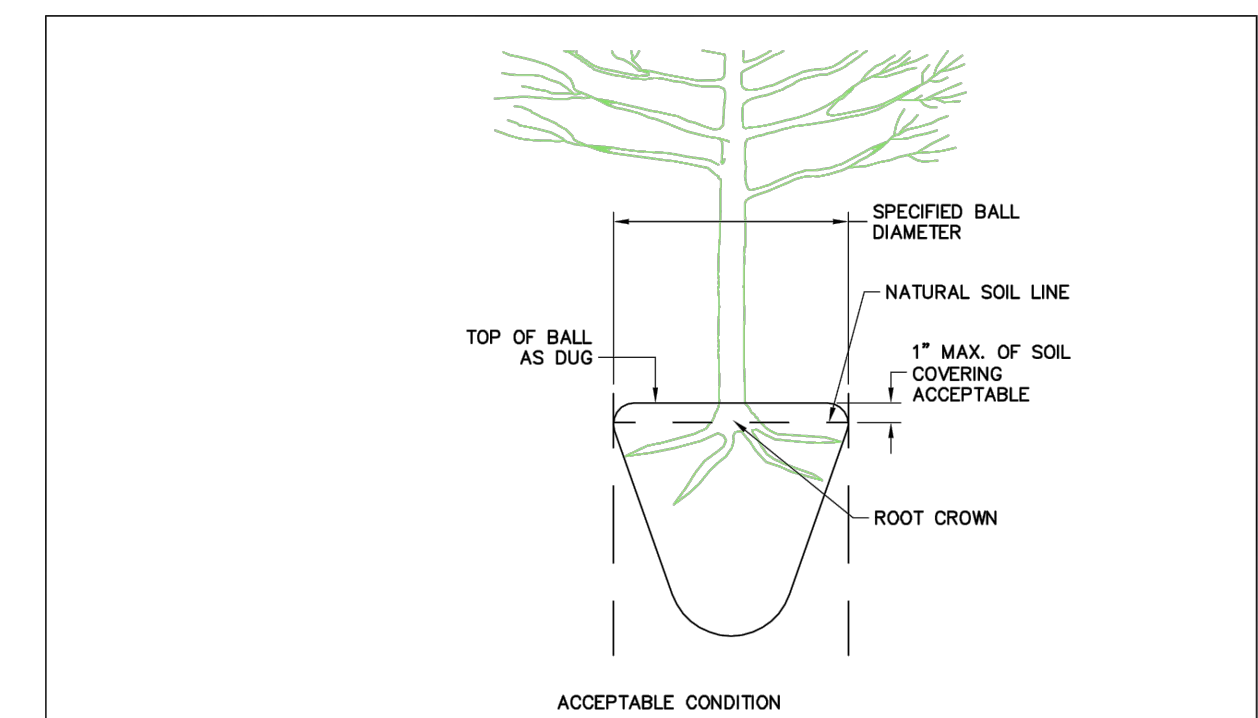
CANOPY TREES	CODE	QTY	BOTANICAL / COMMON NAME	HEIGHT	SIZE	CONTAINER	APPROVED LOCATIONS
	CER FOR	13	<i>Cercis canadensis</i> / Forest Pansy / Forest Pansy Eastern Redbud	8' Ht.	2" CAL. MIN.	B&B	PARKING LOT PERMETER & BUFFERS
	MAG LIT	21	<i>Magnolia grandiflora</i> Little Gem / Little Gem Dwarf Southern Magnolia	1' Cal.		B&B	STREET TREE, PARKING LOT PERMETER & BUFFERS
	PIS CHI	9	<i>Pistacia chinensis</i> / Chinese Pistache	8' Ht.	2" CAL. MIN.	B&B	IRRIGATED TREE WELLS, STREET TREES, PARKING LOT, RESIDENTIAL YARD & BUFFER
	QUE PHE	30	<i>Quercus phellos</i> / Willow Oak	8' Ht.	2" CAL. MIN.	B&B	PARKING LOT, RESIDENTIAL YARD & BUFFER
	ULM PAR	14	<i>Ulmus parvifolia</i> / Lacebark Elm	8' Ht.	2" CAL. MIN.	B&B	IRRIGATED TREE WELLS, STREET TREES, PERMETER PLANTING STRIP, RESIDENTIAL YARD & BUFFER
	ZEL SER	21	<i>Zelkova serrata</i> / Japanese Zelkova	8' Ht.	2" CAL. MIN.	B&B	IRRIGATED TREE WELLS, STREET TREES, PARKING LOT, RESIDENTIAL YARD & BUFFER
UNDERSTORY TREES	CODE	QTY	BOTANICAL / COMMON NAME	HEIGHT	CONTAINER	REMARKS	
	ACE BUE	7	<i>Acer buergerianum</i> / Trident Maple	6' Ht.	1.25" CAL. MIN.	B&B	IRRIGATED TREE WELLS, STREET TREES, PARKING LOT, RESIDENTIAL YARD & BUFFER
	LAG N40	15	<i>Lagerstroemia indica</i> x <i>fauriei</i> 'Natchez' / Natchez Crape Myrtle (Multi-stemmed)	8' Ht.	1.25" CAL. MIN.	B&B	IRRIGATED TREE WELLS & STREET TREES
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	HEIGHT	CONTAINER	REMARKS
	ABE AWL	147	<i>Abelia x grandiflora</i> 'Confetti' / Dwarf 'Confetti' Abelia	3 gal.	18" MIN.	Pot	18" MIN.
	ILE SHA	222	<i>Ilex glabra</i> 'Shamrock' / Shamrock Inkberry Holly	3 gal.	18" MIN.	Pot	18" MIN.
	ILE NAN	180	<i>Ilex vomitoria</i> 'Nana' / Dwarf Yaupon Holly	3 gal.	18" MIN.	Pot	18" MIN.
	LOR HRG	157	<i>Loropetalum chinense rubrum</i> 'Bobz Red' / Bobz Red Dwarf Fringe Flower	3 gal.	18" MIN.	Pot	
	MIS SIN	74	<i>Miscanthus sinensis</i> 'Adagio' / Adagio Eulalia Grass	1 gal.	18" MIN.	Pot	
	MIS GMN	94	<i>Miscanthus sinensis</i> 'Gracillimus Nana' / Dwarf Eulalia Grass	1 gal.	18" MIN.	Pot	
	PEN AI	42	<i>Pennisetum alopecuroides</i> 'Cassian' / Cassian Fountain Grass	1 gal.	18" MIN.	Pot	
	VIB XCH	57	<i>Viburnum x Chindo</i> / Chindo Viburnum	4" Ht.	18" MIN.	Pot	Full to Ground.
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	REMARKS	
	CYN MII	14,144 sf	<i>Cynodon dactylon</i> 'Tiftuf' / Tiftuf Bermudagrass	seed			



TOWN OF KNIGHTDALE STANDARD DETAILS

REVISIONS	DATE	DESCRIPTION	STD. NO.
1.		REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.	
2.		LANDSCAPING PLANS SHALL SHOW LOCATIONS OF ALL TREE PROTECTION FENCES.	
3.		ALL PLANTS TO BE SAVED SHALL BE PROTECTED BY FENCING AS SHOWN IN THIS DETAIL.	
4.		CONTRACTOR SHALL INSTALL FENCING PRIOR TO BEGINNING ANY CONSTRUCTION OR GRADING ACTIVITY.	
5.		CONTRACTOR SHALL CALL FOR INSPECTION AND APPROVAL OF PROTECTIVE FENCING PRIOR TO BEGINNING ANY CONSTRUCTION OR GRADING.	
6.		PROTECTIVE FENCING SHALL BE LOCATED 5' OUTSIDE DRIFLINE OF TREES AND 1' MINIMUM OUTSIDE SHRUBS OR OTHER PLANTS.	

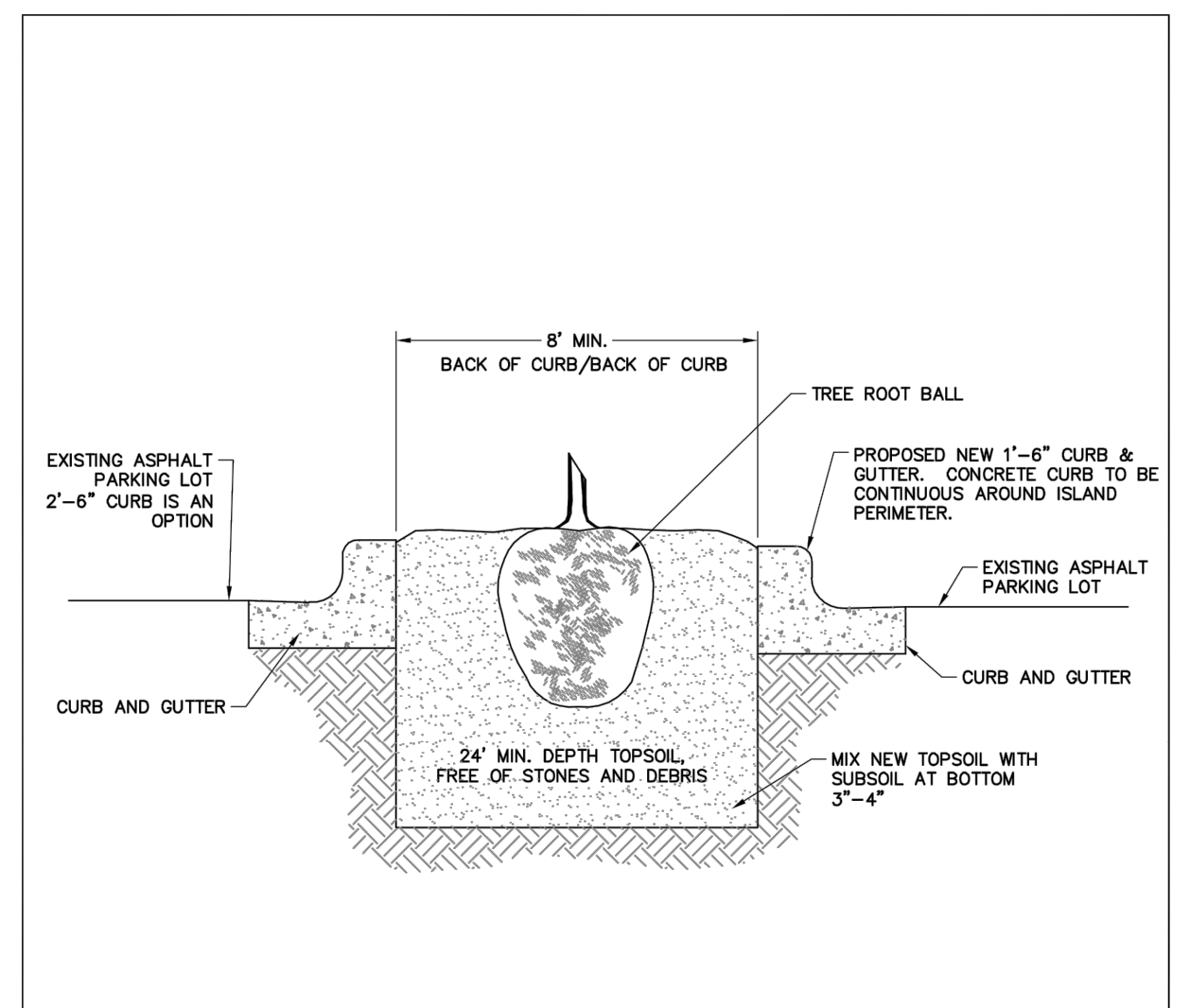
PLANT PROTECTIVE FENCING **STD. NO. 2.10**



TOWN OF KNIGHTDALE STANDARD DETAILS

REVISIONS	DATE	DESCRIPTION	STD. NO.
1.		IF TREES SETTLE OR ARE BLOWN OUT OF PLUMB POSITION, THEY SHOULD BE STRAIGHTENED BY MAKING ADJUSTMENTS TO THE POSITION OF THE ROOT BALL - NOT BY PUSHING ON THE TRUNK AND/OR TIGHTENING THE GUY WIRE. TREES SHALL BE STRAIGHTENED DURING THE LIFE OF THE PROJECT AS THEY GET OUT OF PLUMB, NOT JUST AT THE END OF THE PROJECT.	
2.		BALL DEPTHS ON SOME TREES IN A SINGLE GROUP MAY VARY. IN GENERAL, THE BALL SHOULD BE ABOVE GRADE. IF DEPTHS VARY, ALL TREES IN A GROUP SHOULD BE SET SO THAT THE BASE OF THE TRUNK WILL APPEAR TO BE AT THE SAME RELATIVE ELEVATION ABOVE GRADE.	
3.		NO DECIDUOUS OR EVERGREEN TREES WILL BE ACCEPTED IF THERE IS MORE THAN ONE LEADER. UNLESS OTHERWISE SPECIFIED	
4.		CONTRACTOR TO VERIFY THAT ADEQUATE DRAINAGE EXISTS PRIOR TO PLANTING.	
5.		STAKE AND GUY TREES 3\"/>	

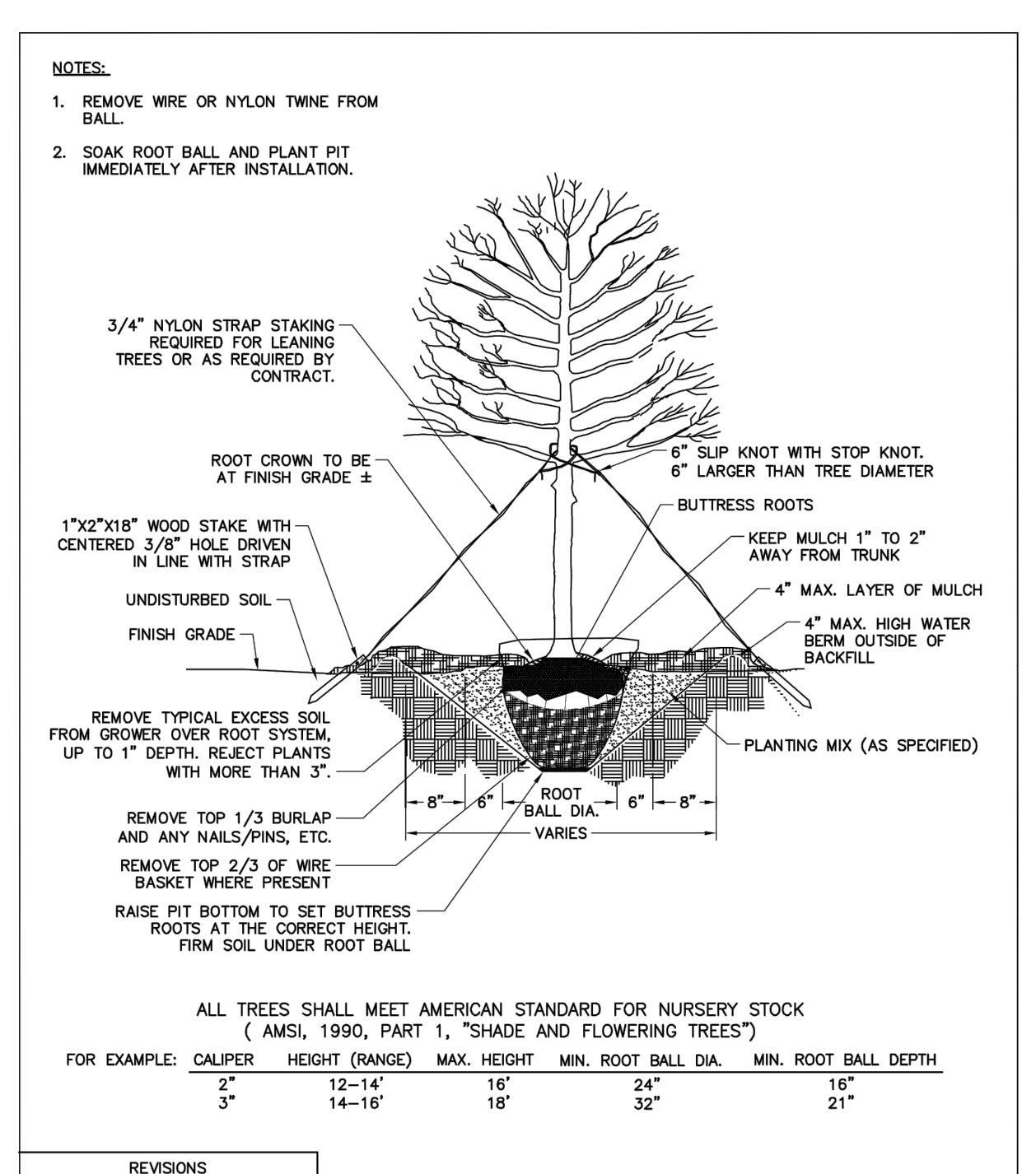
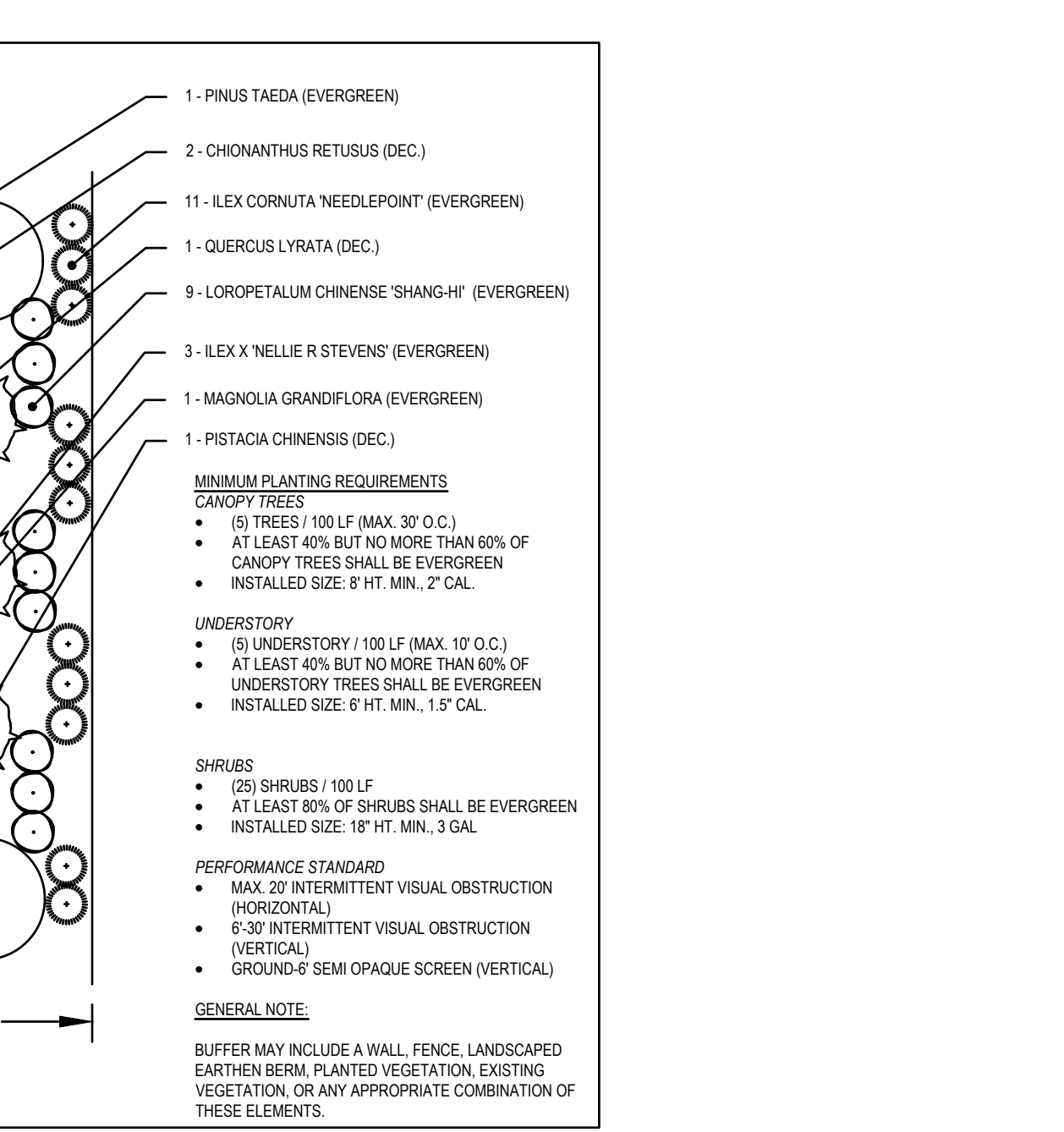
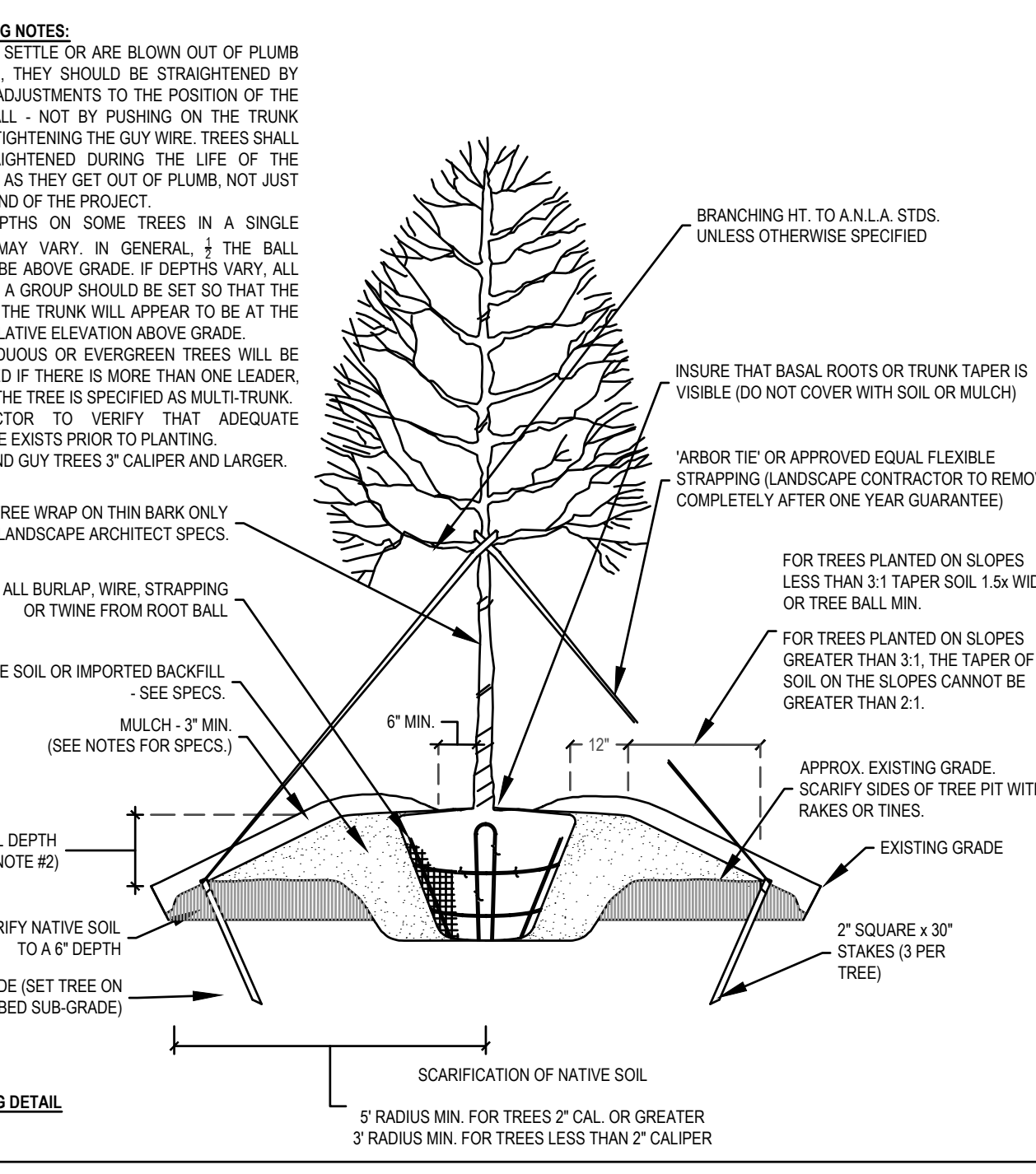
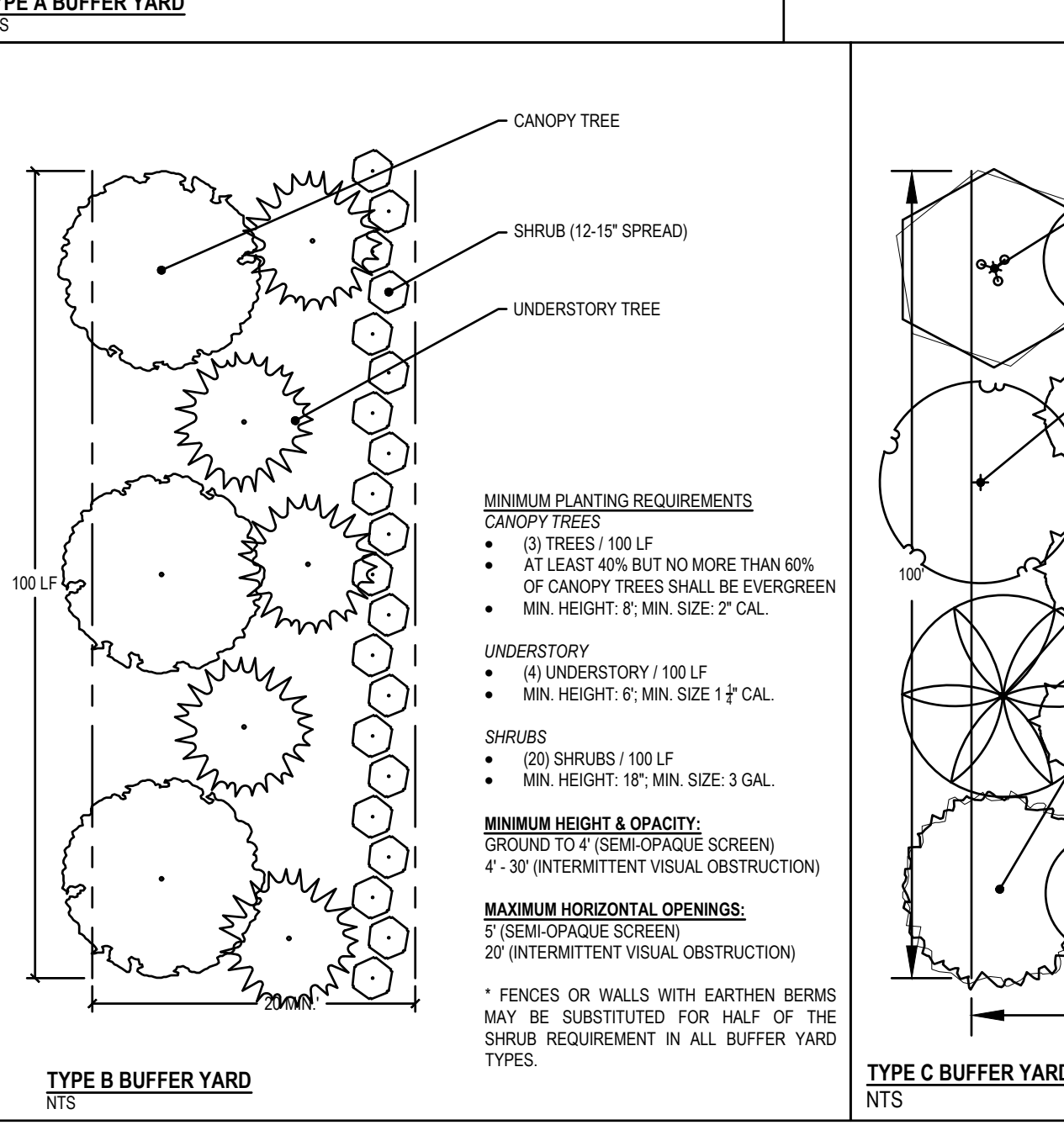
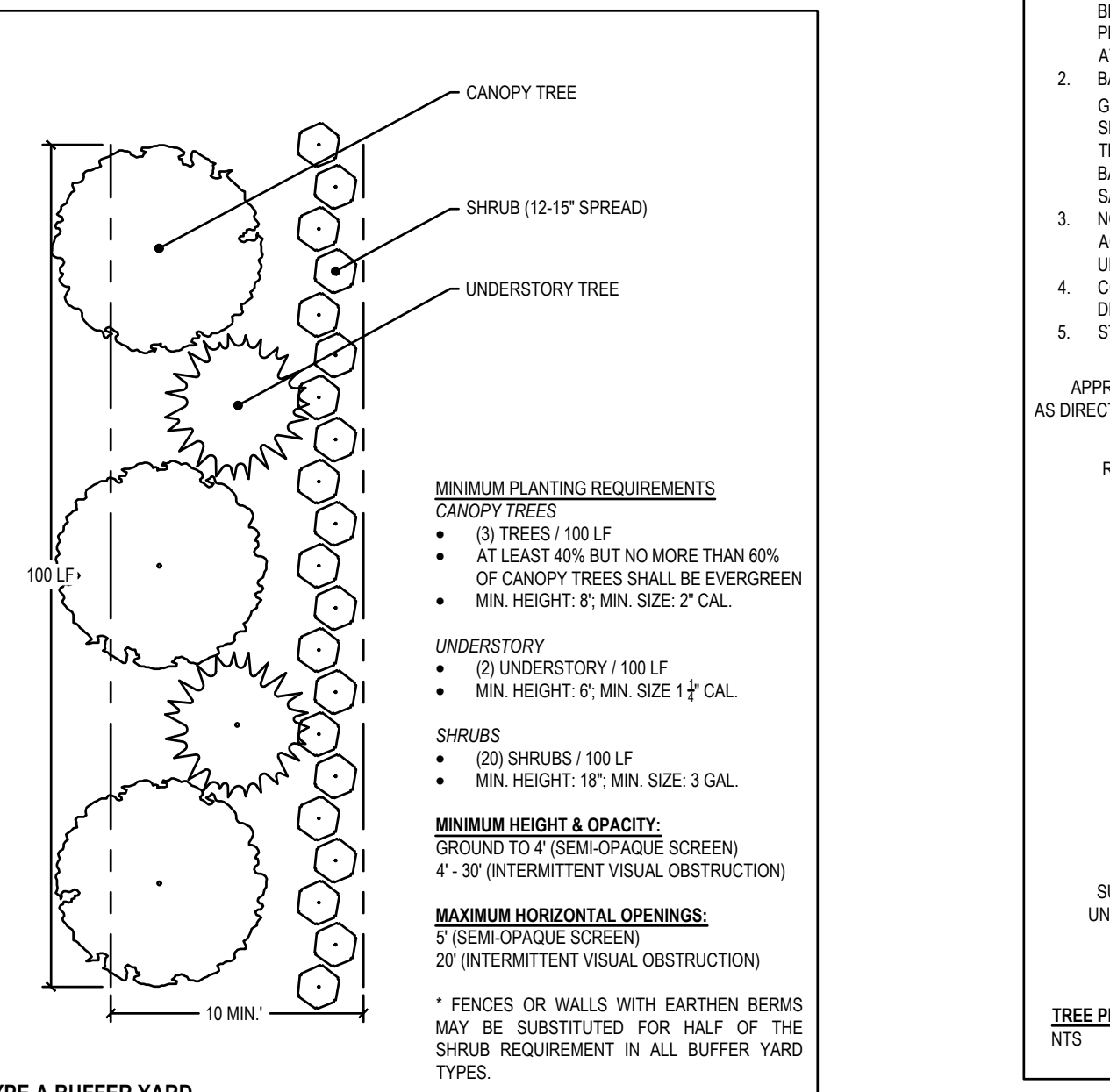
ROOT CROWN DEPTHS **STD. NO. 3.21**



TOWN OF KNIGHTDALE STANDARD DETAILS

REVISIONS	DATE	DESCRIPTION	STD. NO.
1.		300 SF MIN. TOTAL REQUIRED AREA PER TREE.	
2.		FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL, SUB-BASE AND CONSTRUCTION DEBRIS BEFORE PREPARING SOIL AND PLANTING TREES.	
3.		REMOVE COMPACTED SOIL AND ADD 24\"/>	

TREE PLANTING ISLAND IN PARKING LOTS **STD. NO. 3.23**



TOWN OF KNIGHTDALE STANDARD DETAILS

REVISIONS	DATE	DESCRIPTION	STD. NO.
1.		ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (AMS), 1990, PART 1, 'SHADE AND FLOWERING TREES'.	
		FOR EXAMPLE: CALIPER HEIGHT (RANGE) MAX. HEIGHT MIN. ROOT BALL DIA. MIN. ROOT BALL DEPTH	
		2\"/>	
		3\"/>	

TREE PLANTING (FOR SINGLE AND MULTI-STEM TREES) **STD. NO. 3.25**

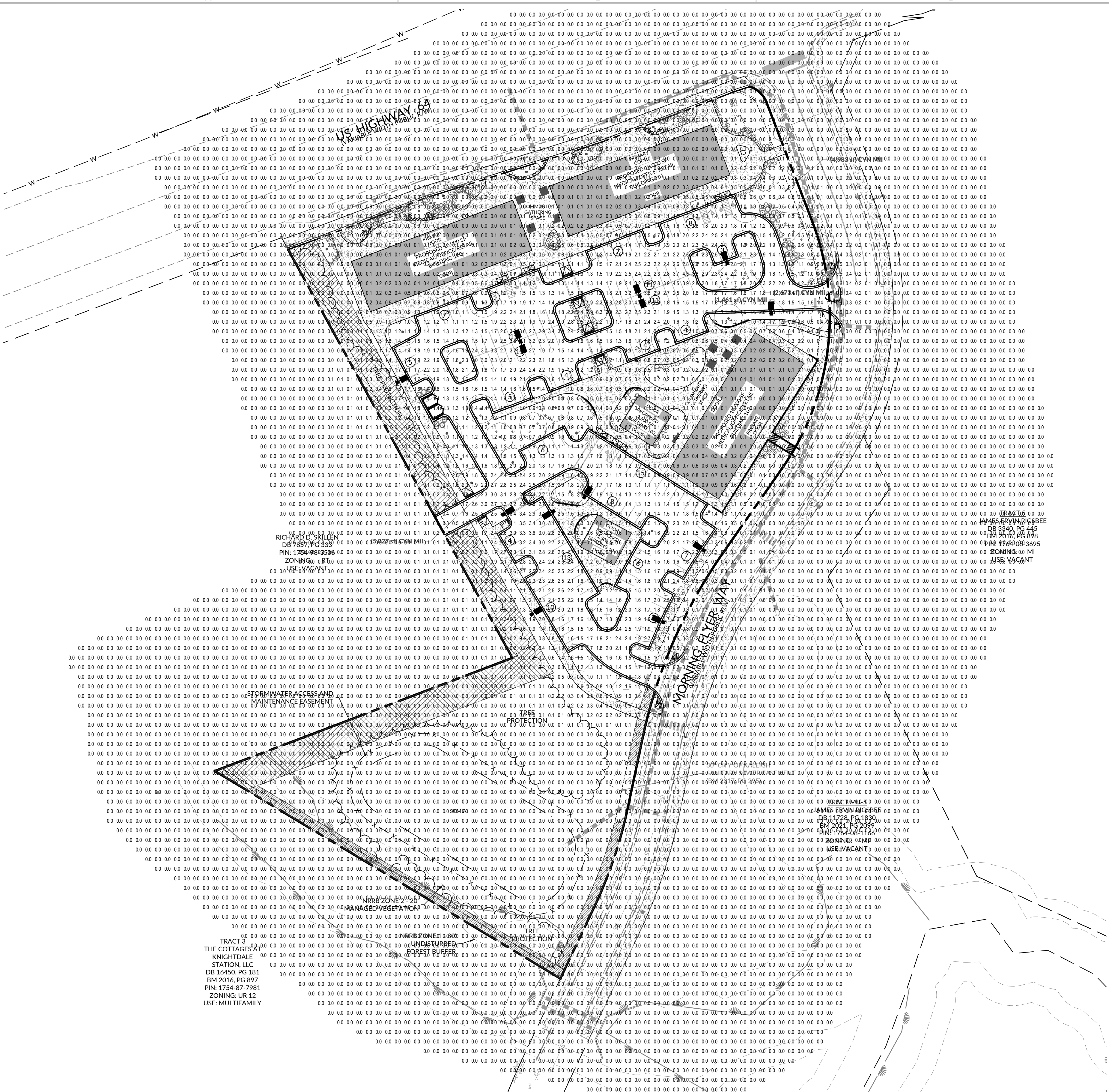
ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH ALL CITY OF RALEIGH & TOWN OF KNIGHTDALE DESIGN STANDARDS, DETAILS AND SPECIFICATIONS

a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____
Town Engineer

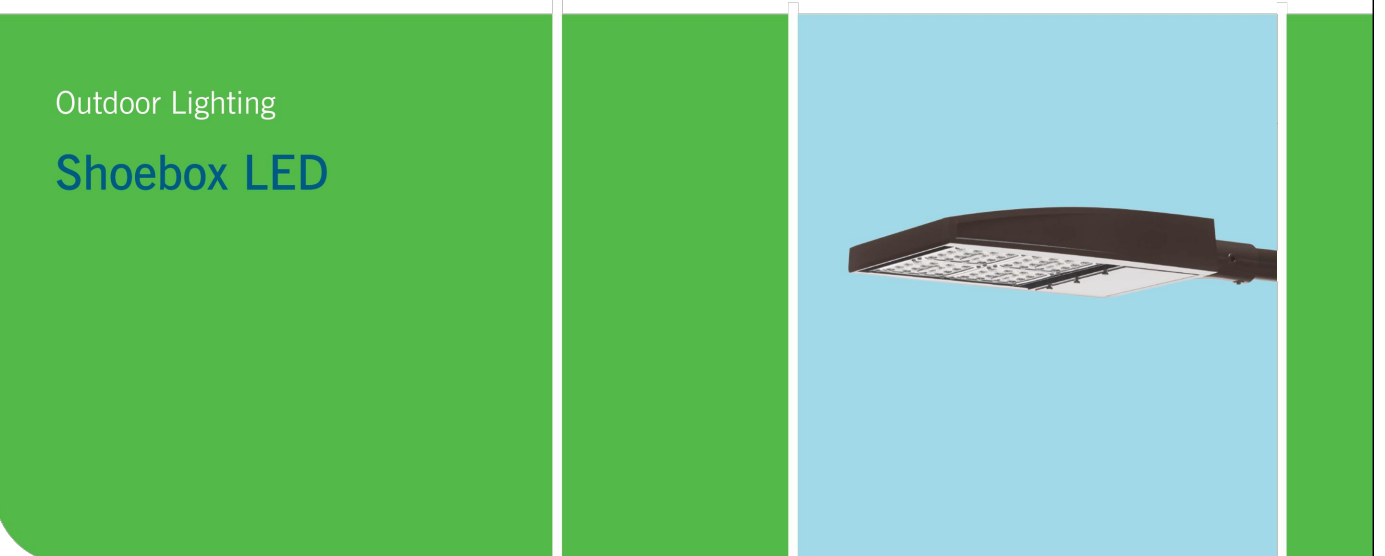
These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____
Administrator



SITE PARKING AREA	
AVERAGE FOOT-CANDLES	1.83
MAXIMUM FOOT-CANDLES	4.6
MINIMUM FOOT-CANDLES	0.5
MINIMUM TO MAXIMUM FC RATIO	0.10
MAXIMUM TO MINIMUM FC RATIO	9.78
AVERAGE TO MINIMUM FC RATIO	3.91

LUMINAIRE SCHEDULE									
CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	QUANTITY	
SHBX		(64) 205W	GALLEON LED AREA AND ROADWAY LUMINAIRE(4) 70 CRI, 4000K, 1A LIGHTSQUARES WITH 16 LEDES EACH AND TYPE IV WIDE OPTICS	ELECTRONIC	30' POLE	COOPER LIGHTING - STREETWORKS, GAN-AE-04-LED-U-T4W	120V 1P 2W	25	



Outdoor Lighting
Shoebox LED

The energy-efficient Shoebox LED combines a decorative, contemporary style with versatility and ample lighting effect that is perfect for streets, parking lots, commercial buildings and residential communities. The Shoebox LED provides excellent color rendition along with a controlled light pattern that reduces glare and keeps the light directed only where you want it. Available in black, dark bronze, gray or white with one to four fixtures per pole.

LED 205, 420, 530 watts
(Light Emitting Diode)

Mounting heights 30', 35'

Colors Black, Bronze, Gray, White

Poles Fiberglass (205W only, 1 or 2 fixtures per pole), Decorative tapered metal, Decorative square metal

Note: 35' pole available in black or bronze only.

For additional information, visit us at duke-energy.com/OutdoorLighting or call us toll free at 866.769.6417.

Outdoor Lighting
Shoebox LED

Light source: LED (white)
Replacement for* LED Wattage 205 - up to 400-watt metal halide; LED Wattage 420; LED Wattage 530 - 1,000-watt metal halide
Warm-up and restrike time: Instant on (no warm-up or restrike time)

Wattage	BUG Rating	Light Pattern	Lumens	Color Temp
LED 205	B3-U0-G3	IESNA Type V (circular)	21,803	
LED 205	B3-U0-G4	IESNA Type IV (forward throw)	20,555	
LED 205	B2-U0-G4	IESNA Type III (oval)	21,164	
LED 420	B5-U0-G5	IESNA Type V (circular)	43,317	4,000K
LED 420	B3-U0-G5	IESNA Type IV (forward throw)	39,078	
LED 530	B5-U0-G5	IESNA Type V (circular)	53,498	
LED 530	B3-U0-G5	IESNA Type IV (forward throw)	48,262	

* These are approximate replacement suggestions, actual conditions could be different.

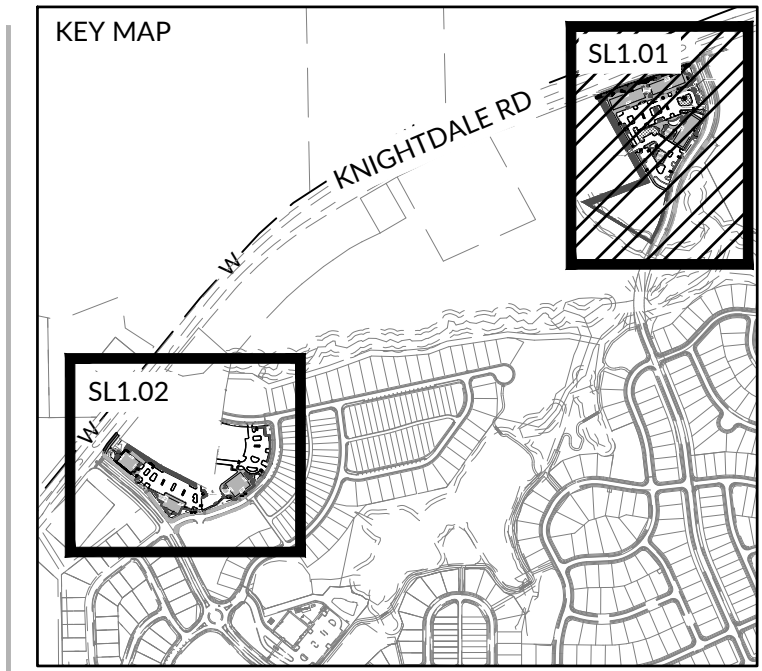
Poles available:

Name	Mounting height	Color
Round tapered decorative metal*	35'	Black, Bronze
Decorative square metal*	30'	Black, Bronze, Gray, White
Fiberglass	30'	Black (205W only, 1 or 2 fixtures per pole), Gray (205W only, 1 or 2 fixtures per pole)

Features	Benefits
Little or no installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service
Backed by over 40 years of experience	A name you can trust today ... and tomorrow

*2" raised foundation available when required on metal poles only.

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Town Engineer

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By: _____ Date: _____
Administrator

WithersRavenel
137 S. Wilmington Street, Suite 200 | Raleigh, NC 27601
License #: F-1479 | T-919-469-3340 | www.withersravenel.com

ATLAS STARK
2020 PROGRESS CT, SUITE 130A
RALEIGH, NC 27608

PUD MASTER PLAN
ATLAS STARK
KNIGHTDALE STATION

7790 KNIGHTDALE BLVD | KNIGHTDALE, NC 27545 | 1ST.
MATTHEWS TOWNSHIP | WAKE COUNTY

PRELIMINARY
NOT APPROVED FOR CONSTRUCTION

SCALE: 1 inch = 60 ft.

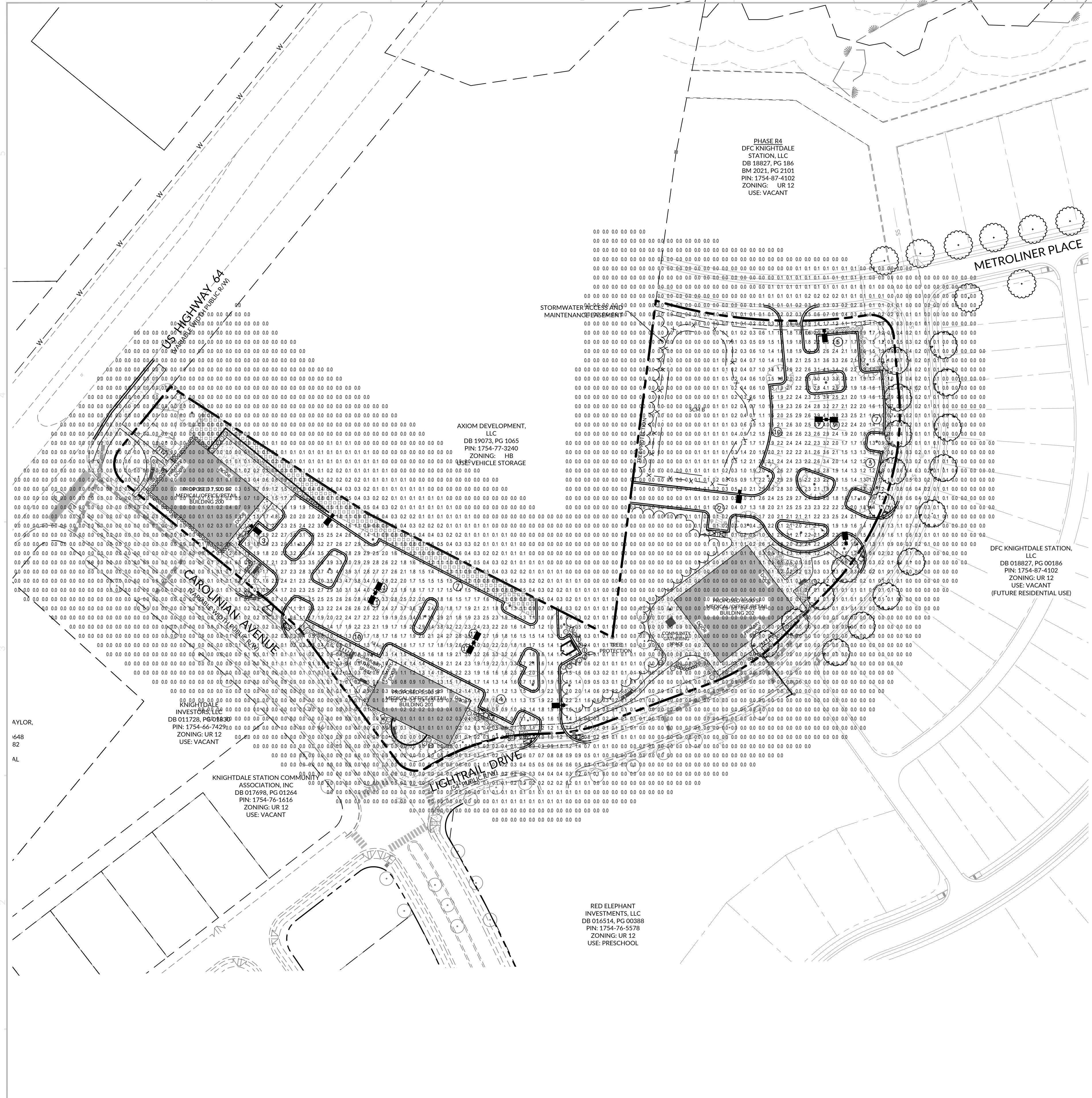
INITIAL PLAN DATE: 07/14/2023
REVISIONS:

WR JOB NUMBER 09221154
DRN: WR DGN: WR CKD: WR

MORNING FLYER WAY LIGHTING EXHIBIT

SL1.01

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PHASE B4
DFC KNIGHTDALE
STATION, LLC
DB 18827, PG 186
BM 2021, PG 2101
PIN: 1754-87-4102
ZONING: UR 12
USE: VACANT

AXIOM DEVELOPMENT,
LLC
DB 19078, PG 1045
PIN: 1754-77-3240
ZONING: HB
VEHICLE STORAGE

DFC KNIGHTDALE STATION,
LLC
DB 018827, PG 00186
PIN: 1754-87-4102
ZONING: UR 12
USE: VACANT
(FUTURE RESIDENTIAL USE)

KNIGHTDALE
INVESTORS LLC
DB 011726, PG 01130
PIN: 1754-66-7427
ZONING: UR 12
USE: VACANT

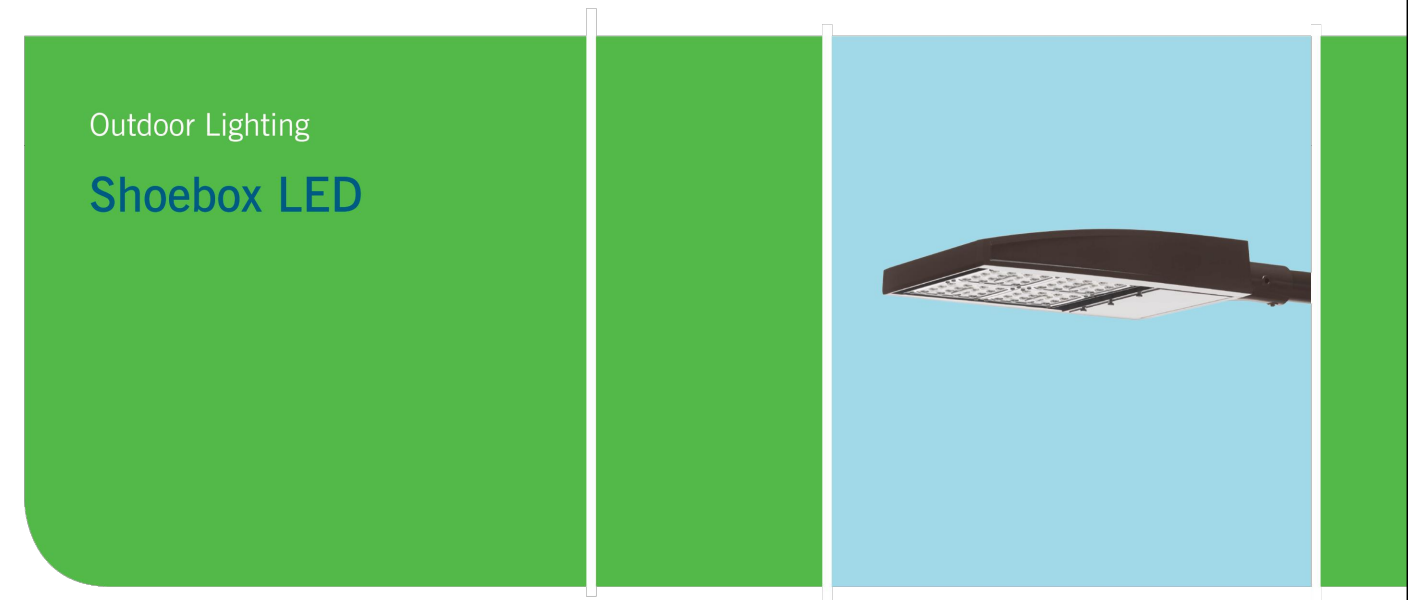
KNIGHTDALE STATION COMMUNITY
ASSOCIATION, INC
DB 017690, PG 01264
PIN: 1754-76-1616
ZONING: UR 12
USE: VACANT

RED ELEPHANT
INVESTMENTS, LLC
DB 016514, PG 00388
PIN: 1754-76-5578
ZONING: UR 12
USE: PRESCHOOL

CAROLINIAN AVE PARKING AREA			
AVERAGE FOOT-CANDLES	1.8" MIN	2.15	Pot
MAXIMUM FOOT-CANDLES		4.9	
MINIMUM FOOT-CANDLES		0.6	
MINIMUM TO MAXIMUM FC RATIO	1.8" MIN	0.12	Pot
MAXIMUM TO MINIMUM FC RATIO		8.61	
AVERAGE TO MINIMUM FC RATIO		3.77	

LIGHTRAIL DRIVE PARKING AREA			
AVERAGE FOOT-CANDLES		2.18	CONTAINER F
MAXIMUM FOOT-CANDLES		4.2	
MINIMUM FOOT-CANDLES		1.0	
MINIMUM TO MAXIMUM FC RATIO		0.24	
MAXIMUM TO MINIMUM FC RATIO		4.25	
AVERAGE TO MINIMUM FC RATIO		2.21	

LUMINAIRE SCHEDULE									
CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	QUANTITY	
SHBX		(64) 205W	GALLEON LED AREA AND ROADWAY LUMINAIRE(4) 70 CRI, 4000K, 1A LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS	ELECTRONIC	30' POLE	COOPER LIGHTING - STREETWORKS, GAN-AE-04-LED-U-T4W	120V 1P 2W	25	



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Shoebox LED

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LED (Light Emitting Diode)	205 420, 530 watts
Mounting heights	30', 35'
Colors	Black Bronze Gray White
Poles	Fiberglass (205W only, 1 or 2 fixtures per pole) Decorative tapered metal Decorative square metal

Note: 35' pole available in black or bronze only.

For additional information, visit us at duke-energy.com/OutdoorLighting or call us toll free at 866.769.6417.

Outdoor Lighting
Shoebox LED

Light source: LED (white)
Replacement for* LED Wattage 205 – up to 400-watt metal halide; LED Wattage 420; LED Wattage 530 – 1,000-watt metal halide
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LED 530	B3-U0-G5	IESNA Type IV (forward throw)	48,262	

* These are approximate replacement suggestions, actual conditions could be different.

Poles available:

Name	Mounting height	Color
Round tapered decorative metal*	35'	Black Bronze
Decorative square metal*	30'	Black Bronze White
Fiberglass	30'	Black (205W only, 1 or 2 fixtures per pole) Gray (205W only, 1 or 2 fixtures per pole)

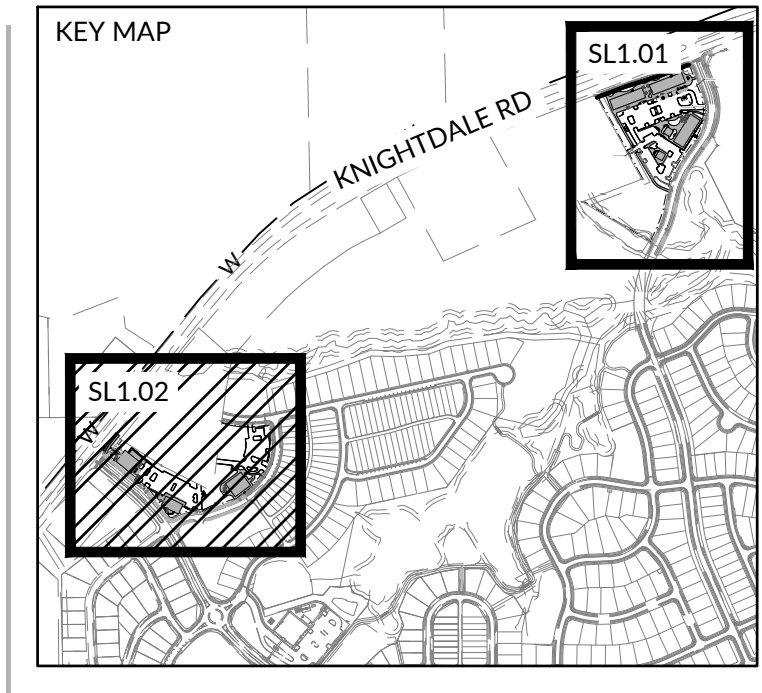
Features	Benefits
Little or no installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service
Backed by over 40 years of experience	A name you can trust today ... and tomorrow

*2" raised foundation available when required on metal poles only.

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a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
By: _____ Date: _____
Town Engineer
These plans are approved by the Town of Knightdale and serve as construction plans for this project.
By: _____ Date: _____
Administrator

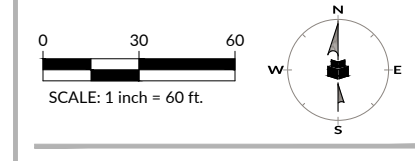


WithersRavenel
137 S. Wilmington Street | Suite 200 | Raleigh, NC 27601
License #: F-1479 | t: 919.469.3340 | www.withersravenel.com

ATLAS STARK
2020 PROGRESS CT, SUITE 130A
RALEIGH, NC 27608

PUD MASTER PLAN
ATLAS STARK
KNIGHTDALE STATION
7790 KNIGHTDALE BLVD | KNIGHTDALE, NC 27545 | 1ST.
MATTHEWS TOWNSHIP | WAKE COUNTY

PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION
WEL B. WHITT



INITIAL PLAN DATE: 07/14/2023
REVISIONS:

WR JOB NUMBER 09221154
DRN: WR DGN: WR CKD: WR

CAROLINIAN AVE LIGHTING EXHIBIT

SL1.02

our people • your success

EST. 1983



Knightdale Station: Morning Fyler Way Parcel
Knightdale, NC July 14, 2023

Conceptual View 1





Knightdale Station:
Knightdale, NC

Morning Fyler Way Parcel
July 14, 2023

Conceptual View 2





Knightdale Station:
Knightdale, NC

Morning Fyler Way Parcel
July 14, 2023

Conceptual View 3





Knightdale Station:
Knightdale, NC

Morning Fyler Way Parcel
July 14, 2023

Conceptual View 4





Knightdale Station:
Knightdale, NC

Morning Fyler Way Parcel
July 14, 2023

Conceptual View 5





Knightdale Station:
Knightdale, NC

Carolinian Avenue Parcel
July 14, 2023

Conceptual View 6





Knightdale Station:
Knightdale, NC

Carolinian Avenue Parcel
July 14, 2023

Conceptual View 7





Knightdale Station:

Carolinian Avenue Parcel

Knightdale, NC

July 14, 2023

Conceptual View 8

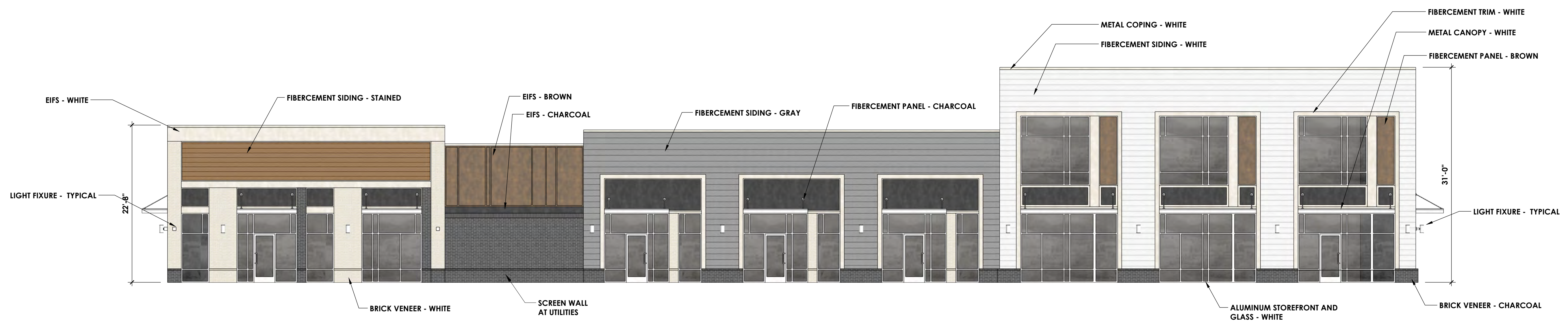




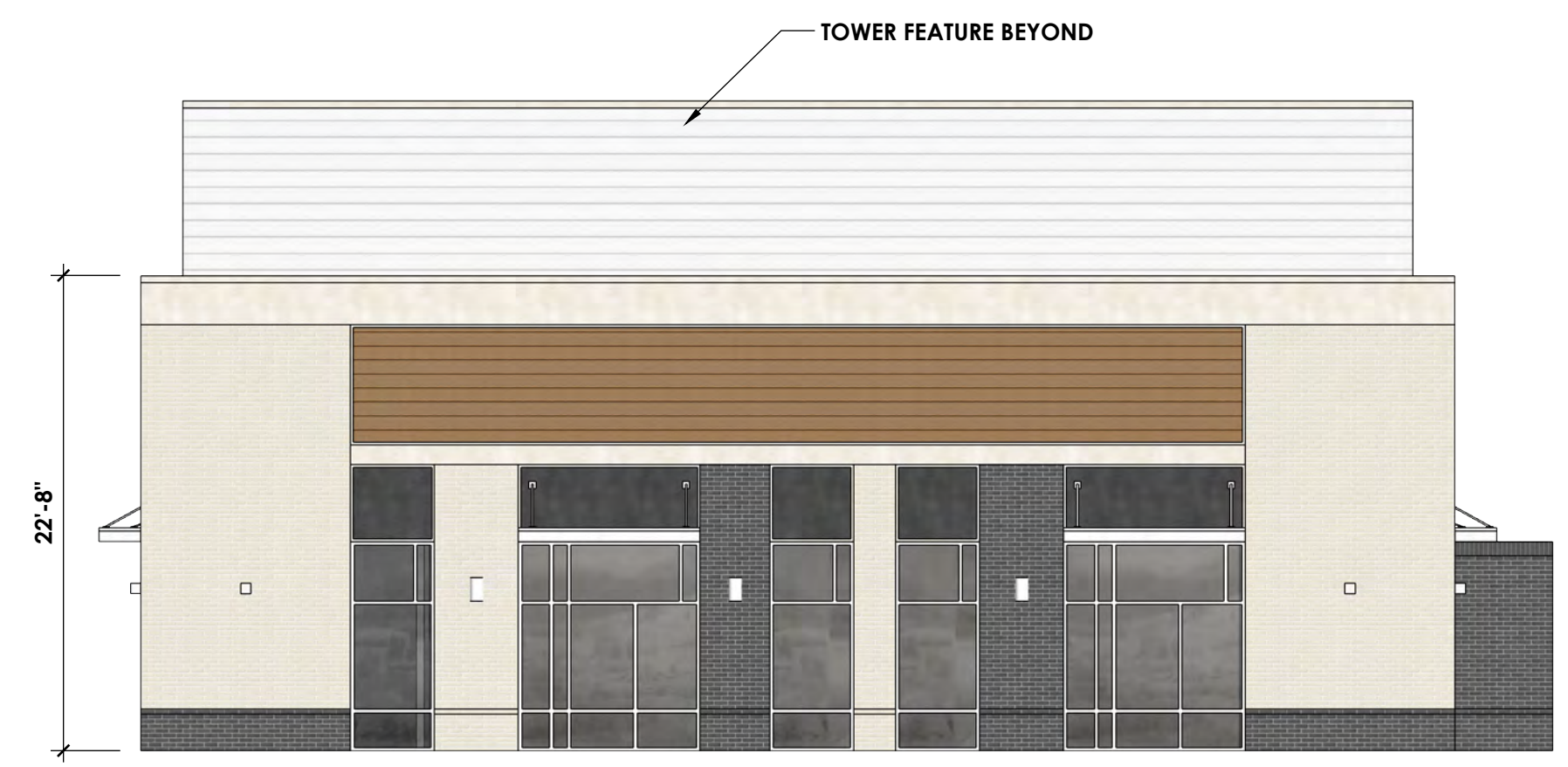
Finley Design PA
 7806 NC Hwy 751
 Suite 110
 Durham, NC 27713
 919-493-8200

FINLEYDESIGNARCH.COM

**SITE PLAN
 SUBMITTAL**



3 FRONT ELEVATION - NORTH
 1/8" = 1'-0"



4 LEFT ELEVATION - EAST
 1/8" = 1'-0"



2 RIGHT ELEVATION - WEST
 1/8" = 1'-0"



1 BACK ELEVATION - SOUTH
 1/8" = 1'-0"

NOTE: ALL ROOFTOP HVAC EQUIPMENT TO BE SCREENED BY BUILDING PARAPETS FOR ALL SIDES OF BUILDING

KNIGHTDALE STATION
 KNIGHTDALE, NC

REVISIONS

Project: 2263
 Date: 7/14/23
 Building Elevations:
 Building 100

A3.0



Finley Design PA
 7806 NC Hwy 751
 Suite 110
 Durham, NC 27713
 919-493-8200

FINLEYDESIGNARCH.COM

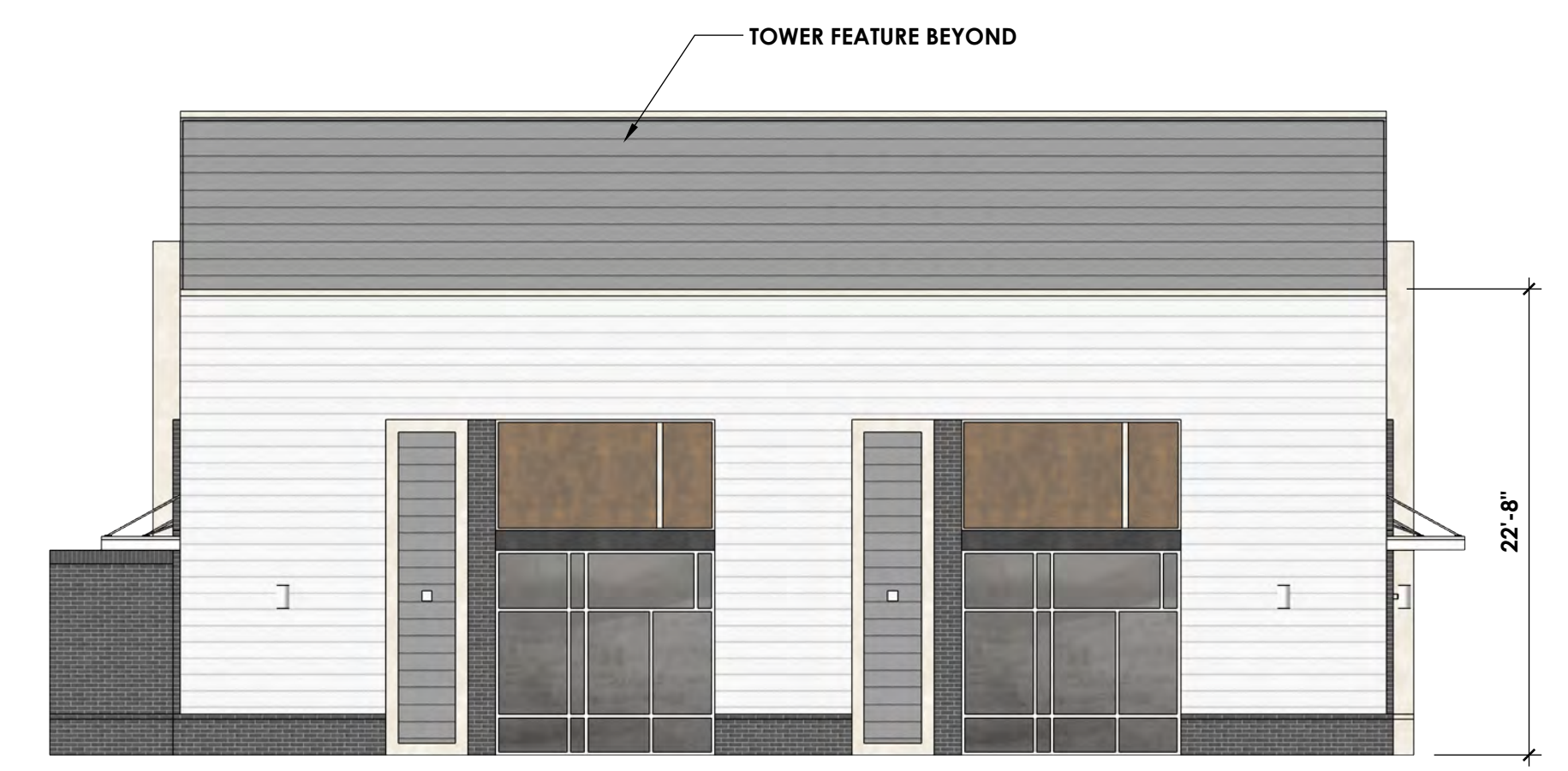
SITE PLAN
 SUBMITTAL



3 FRONT ELEVATION - NORTH
 1/8" = 1'-0"



4 LEFT ELEVATION - EAST
 1/8" = 1'-0"



2 RIGHT ELEVATION - WEST
 1/8" = 1'-0"



1 BACK ELEVATION - SOUTH
 1/8" = 1'-0"

NOTE: ALL ROOFTOP HVAC EQUIPMENT TO BE SCREENED BY BUILDING PARAPETS FOR ALL SIDES OF BUILDING

KNIGHTDALE STATION
 KNIGHTDALE, NC

REVISIONS

Project: 2263
 Date: 7/14/23
 Building Elevations:
 Building 101

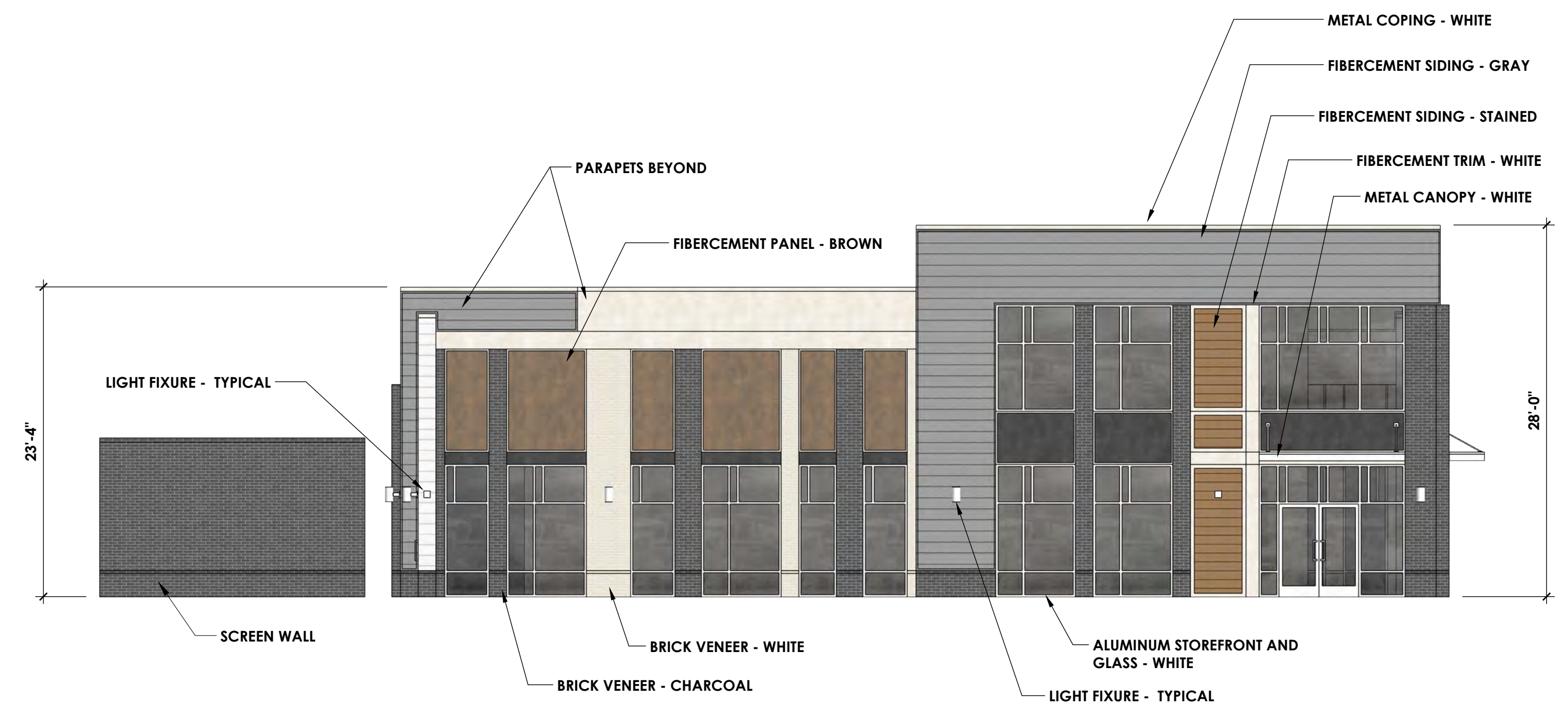
A3.1



Finley Design PA
 7806 NC Hwy 751
 Suite 110
 Durham, NC 27713
 919-493-8200

FINLEYDESIGNARCH.COM

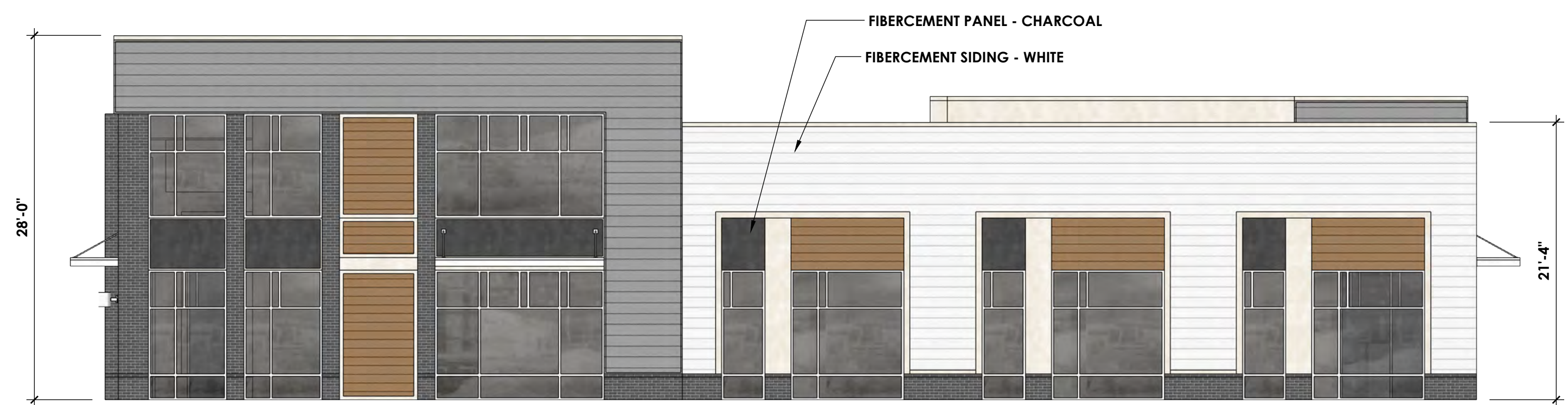
SITE PLAN
 SUBMITTAL



3 FRONT ELEVATION - NORTHWEST
 1/8" = 1'-0"



4 LEFT ELEVATION - NORTHEAST
 1/8" = 1'-0"



2 RIGHT ELEVATION - SOUTHWEST
 1/8" = 1'-0"



1 BACK ELEVATION - SOUTHEAST
 1/8" = 1'-0"

NOTE: ALL ROOFTOP HVAC EQUIPMENT TO BE SCREENED BY BUILDING PARAPETS FOR ALL SIDES OF BUILDING

KNIGHTDALE STATION
 KNIGHTDALE, NC

REVISIONS

Project: 2263
 Date: 7/14/23
 Building Elevations:
 Building 200



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 7806 NC Hwy 751
 Suite 110
 Durham, NC 27713
 919-493-8200

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**SITE PLAN
 SUBMITTAL**

**KNIGHTDALE STATION
 KNIGHTDALE, NC**

REVISIONS

Project: 2263
 Date: 7/14/23
 Material
 Selections
A5.0



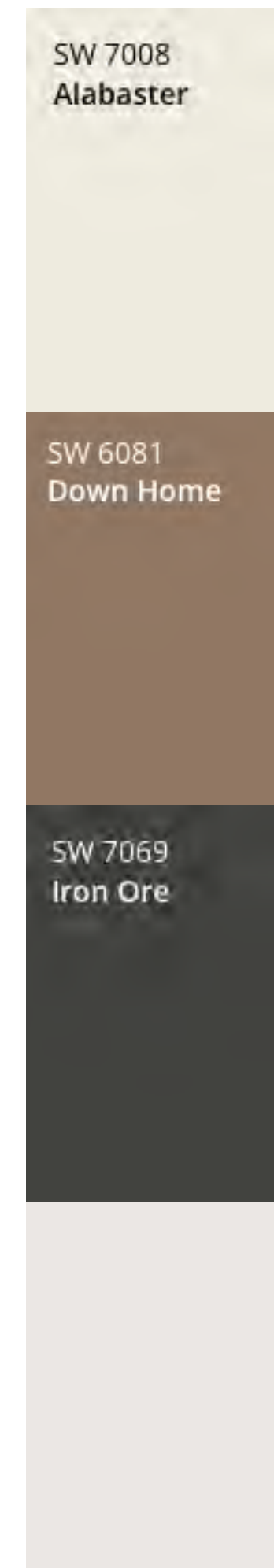
BRICK VENEER: WHITE
 PALMETTO BRICK
 "WHITESTONE WIRECUT"



BRICK VENEER: CHARCOAL
 PALMETTO BRICK
 "BLACKSTONE WIRECUT"



FIBERCEMENT SIDING: STAINED
 CAROLINA COLORTONES
 "CHESTNUT"



FIBERCEMENT: WHITE
EIFS: WHITE
 SHERWIN WILLIAMS
 SW7008
 "ALABASTER"

FIBERCEMENT: BROWN
EIFS: BROWN
 SHERWIN WILLIAMS
 SW6081
 "DOWN HOME"

FIBERCEMENT: CHARCOAL
EIFS: CHARCOAL
 SHERWIN WILLIAMS
 SW7069
 "IRON ORE"

ALUMINUM STOREFRONT
 KYNAR "BONE WHITE"

1 MATERIAL SELECTIONS
 NOT TO SCALE



ATLAS STARK



Knightdale Station Commercial

NMX-PUD



Knightsdale Station Commercial Carolinian & Morning Flyer Way

NMX-PUD

Developer

Atlas Stark



Project Team

WithersRavenel



Architect

Finley Design



July 14, 2023

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08 | Design Guidelines

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10 | Neighborhood Meeting

01

Vision + Intent

Vision Statement

The Town of Knightdale is considered a promoter of design which favors the pedestrian to create a sense of place. Through prioritizing the pedestrian and social experience, the development team has kept community and walkability at the forefront throughout the design process by incorporating unique yet harmonious design approaches.



Vision + Intent

In accordance with Section 12.2.G.3.g.ii, “approval of a development through a Planned Unit Development Overlay District rezoning, including modifications to the requirements of this UDO, is a privilege and will be considered by the Town only in the direct response to the accrual of tangible benefits from the planned unit development to the Town of the neighborhood in which it would be located.”

KSC Carolinian & Morning Flyer Way shall conform to the following evaluative criteria for the Planned Unit Development Overlay District as outlined below:

Comprehensive Plan

KSC will exemplify the intent of the Mixed Use Center place type through multi-story building design and an emphasis on walkability and interconnectivity.

Public Welfare

Through environmental preservation and compact design, the development of KSC will not create adverse effects to the public welfare nor result in light pollution, loss in air quality, or bring any increase to public safety.

Impact on Other Property

By creating and enhancing amenities for the surrounding community, KSC will bring a walkable project with ample public gathering space for existing and future residents within Knightdale Station. The development will also strategically include interconnectivity to accommodate for existing and future development.

Impact on Public Facilities and Resources

Water and Wastewater coordination will take place with the City of Raleigh’s Public Utilities Department to ensure compliance regarding proposed connection and easement recordation.

Archaeological, Historical, or Cultural Impact

KSC intends to preserve more natural vegetation than required under the Knightdale Unified Development Ordinance and will not result in adverse effects to any Archaeological, Historical or Cultural significance that may exist across either site.

Parking and Traffic

In order to emphasize the importance of the pedestrian experience and place making, KSC will only utilize the permissible amount of parking as outlined in Section 7.1.G.2 of the Knightdale UDO.

Adequate Buffering

Landscaping across both sites will go above the intent of Section 7.4.M.2 of the Knightdale UDO as further detailed in the proposed landscape plan.



02

KnightdaleNext 2035

Consistency

KSC has the opportunity to transform two vacant tracts of land located within Priority Investment Areas as shown on the KnightdaleNext Growth Framework map into mixed use commercial developments that will provide needed services to accommodate surrounding residential growth. To further the playbook outlined in KnightdaleNext 2035, KSC will bring a compact and walkable commercial center with a variety of services and amenities for residents and visitors of Knightdale to enjoy.



Unique Activity Centers

KSC will provide new options to work and visit that vary in scale and intensity while emphasizing the importance of social interaction through multi-modal transportation components.

Natural Environment

Preserving existing vegetation within KSC will not only enhance the character of but allow residents and visitors the opportunity to experience a sense of place alongside nature.

Parks and Recreation

The developments are in close proximity to Knightsdale Station Park and the Knightsdale Station YMCA, as well as Knightsdale Station Pre-school. By increasing a network of connected sidewalks and pedestrian linkages to these nearby facilities, the overall pedestrian experience will be enhanced and build upon Knightsdale's growing reputation as a recreational community.

Transportation

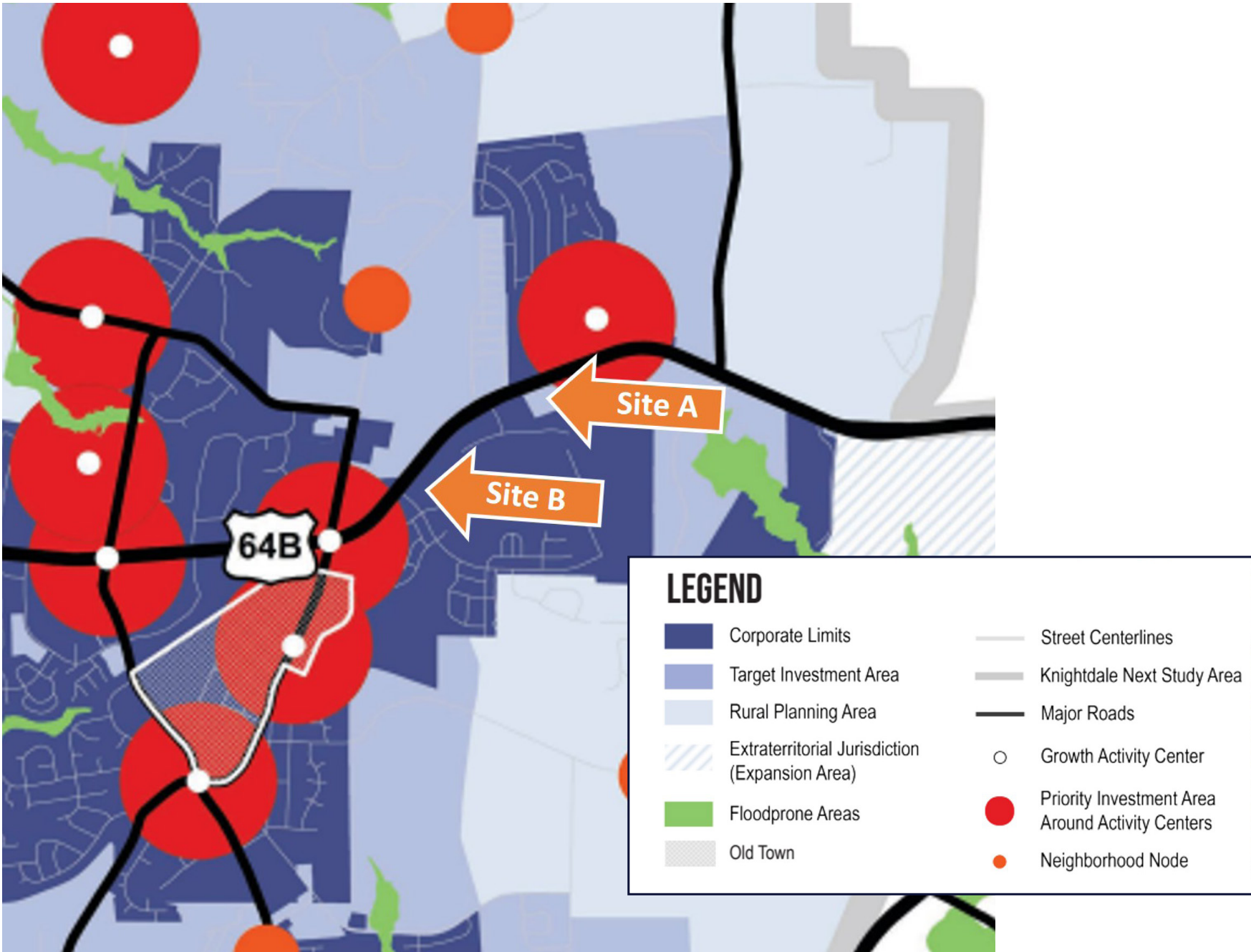
Infrastructure improvements stemming from KSC will provide a network of pedestrian and vehicle movement that incorporates the surrounding development pattern while providing a safe and efficient system for moving people and transportation modalities.

Community Design

KSC's distinctiveness comes from street-scapes and architecture, both of which are proposed for these developments. Both sites are located along the existing State maintained arterial street, Knightsdale Boulevard and Town maintained collectors, Carolinian Avenue and Morning Flyer Way. This connection to a major transportation corridor connects businesses to public transit and provides an ideal location that enhances the opportunities for small businesses and job creators.

As further outlined throughout this document, KSC demonstrates through design the Guiding Principles set forth by the community during the creation of Knightsdale Next.





03

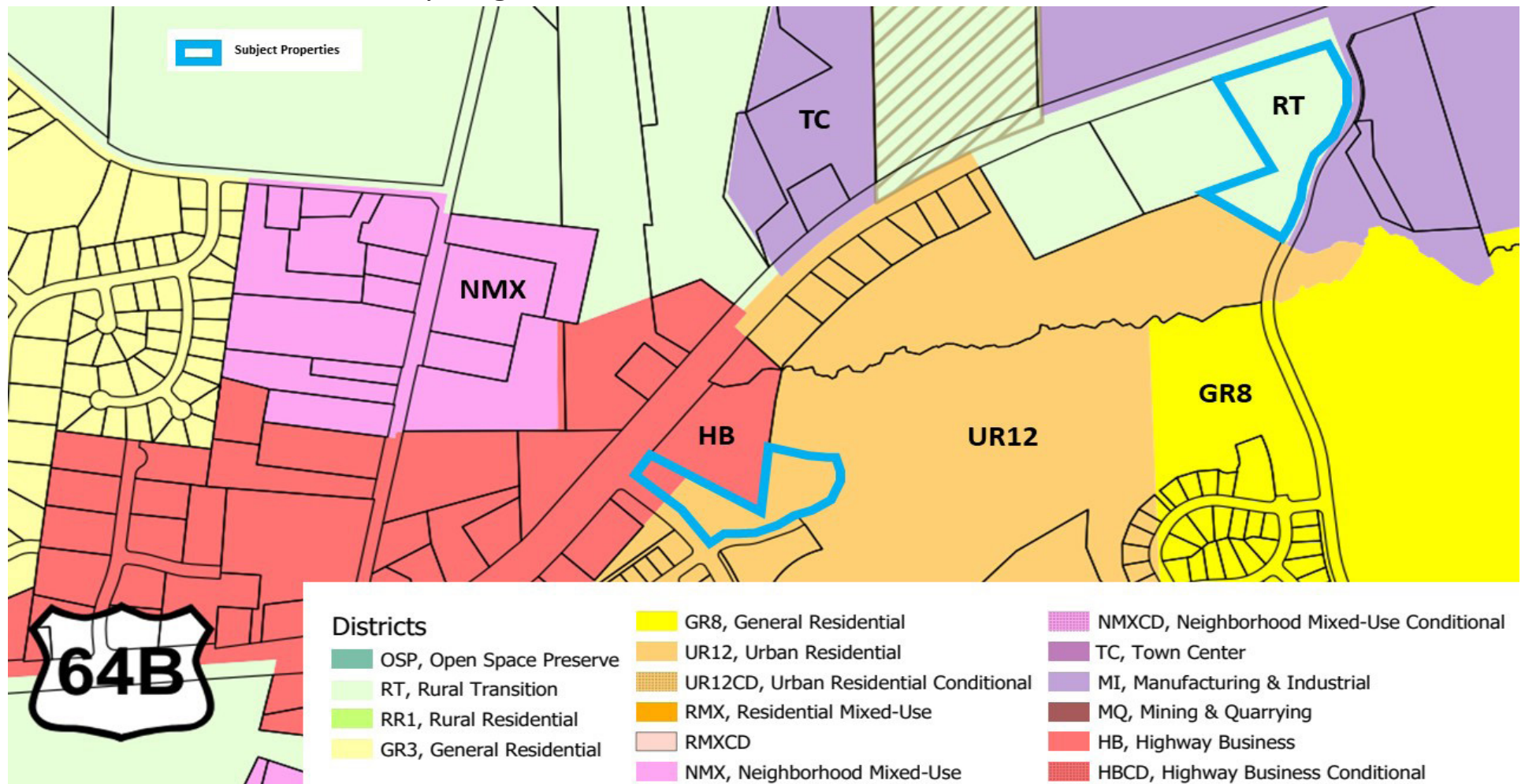
Existing Conditions

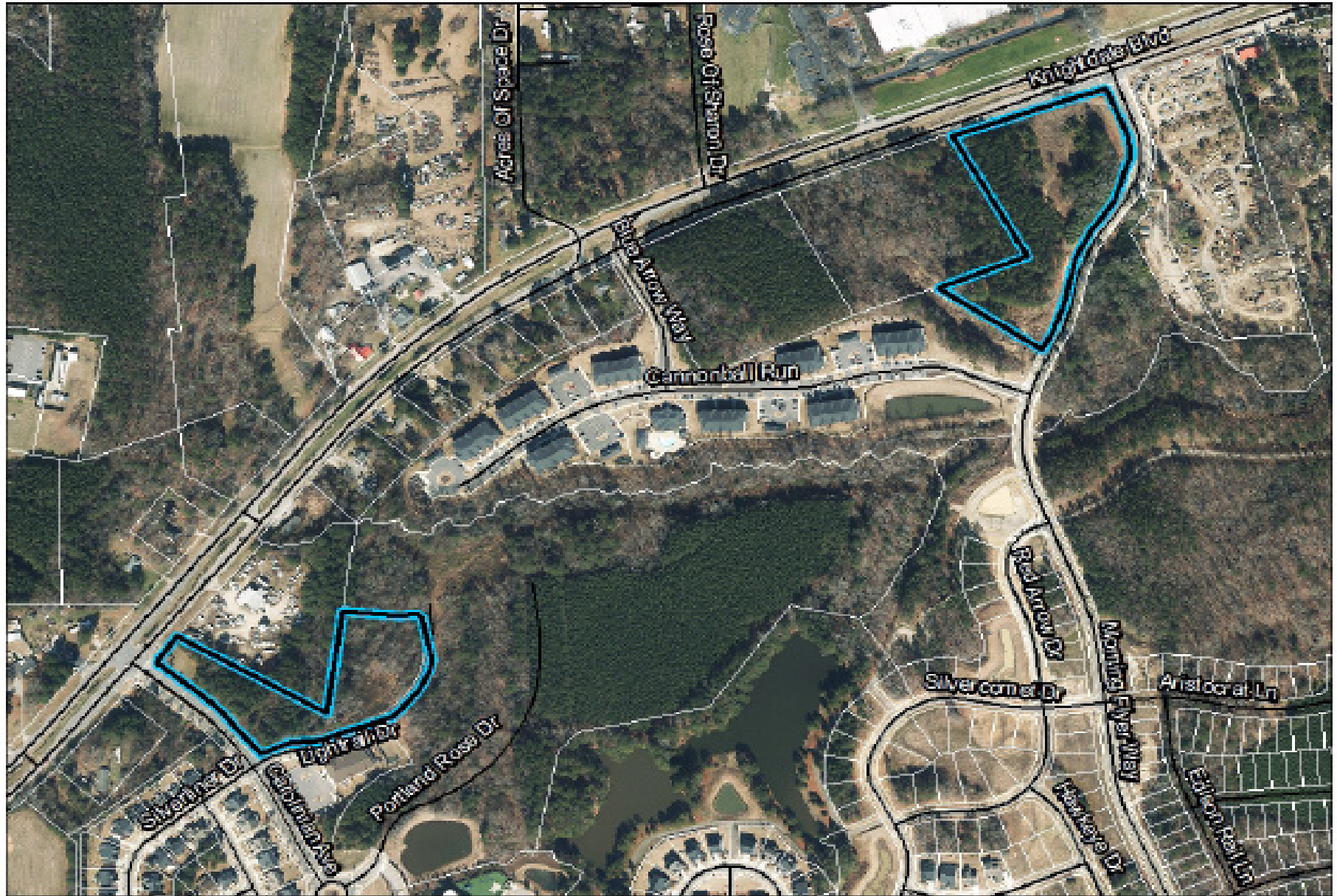
Originally intended to serve as commercial outparcels to within the Knightdale Station Master Plan, KSC will be able to fulfill that original intent and provide a mix of needed commercial uses to accommodate the existing and ongoing conventional single-family, multi-family, institutional, and recreational development within Knightdale Station. Both sites that make up KSC will provide ample interconnectivity for the surrounding residents and community while furthering the pedestrian network that currently exists within Knightdale Station. KSC intends to contribute to the vision of Knightdale Station being a “Live Work Play” community.



Existing Conditions

Knightdale Station - Morning Flyer Way is currently zoned Rural Transition (RT) and is designated in Knightdale Next 2035 and on the Growth Framework Map, which is comprised of areas organized into place types which are building blocks for identifying complete neighborhoods, activity centers and business corridors, as Mixed-Use Center and Knightdale Station – Carolinian is currently zoned Urban Residential District 12 (UR 12) as well as Highway Business (HB) along Knightdale Boulevard and is designated in Knightdale Next 2035 as Mixed-Use Center as well as Mixed Density Neighborhood.





04

Project Overview + Master Plan

KSC is to consist of two (2) tracts of land totaling approximately 11.37 acres and are located within the corporate limits of Knightdale and within the Knightdale Station Master Plan. Both subject tracts may be further identified by Wake County PIN 1754988657 (6.98 acres), with a physical address of 0 Knightdale Boulevard and Wake County PIN 1754764820 (4.39 acres), with a physical address of 7790 Knightdale Boulevard. PIN: 1754988657 lies to the east and is hereby referred to as Knightdale Station – Morning Flyer Way and PIN: 1754764820 lies to the west and is hereby referred to as Knightdale Station – Carolinian.



Project Overview + Master Plan



MORNING FLYER: Illustrative Site Plan

C0.01

ATLAS STARK KNIGHTDALE STATION



Project Overview + Master Plan



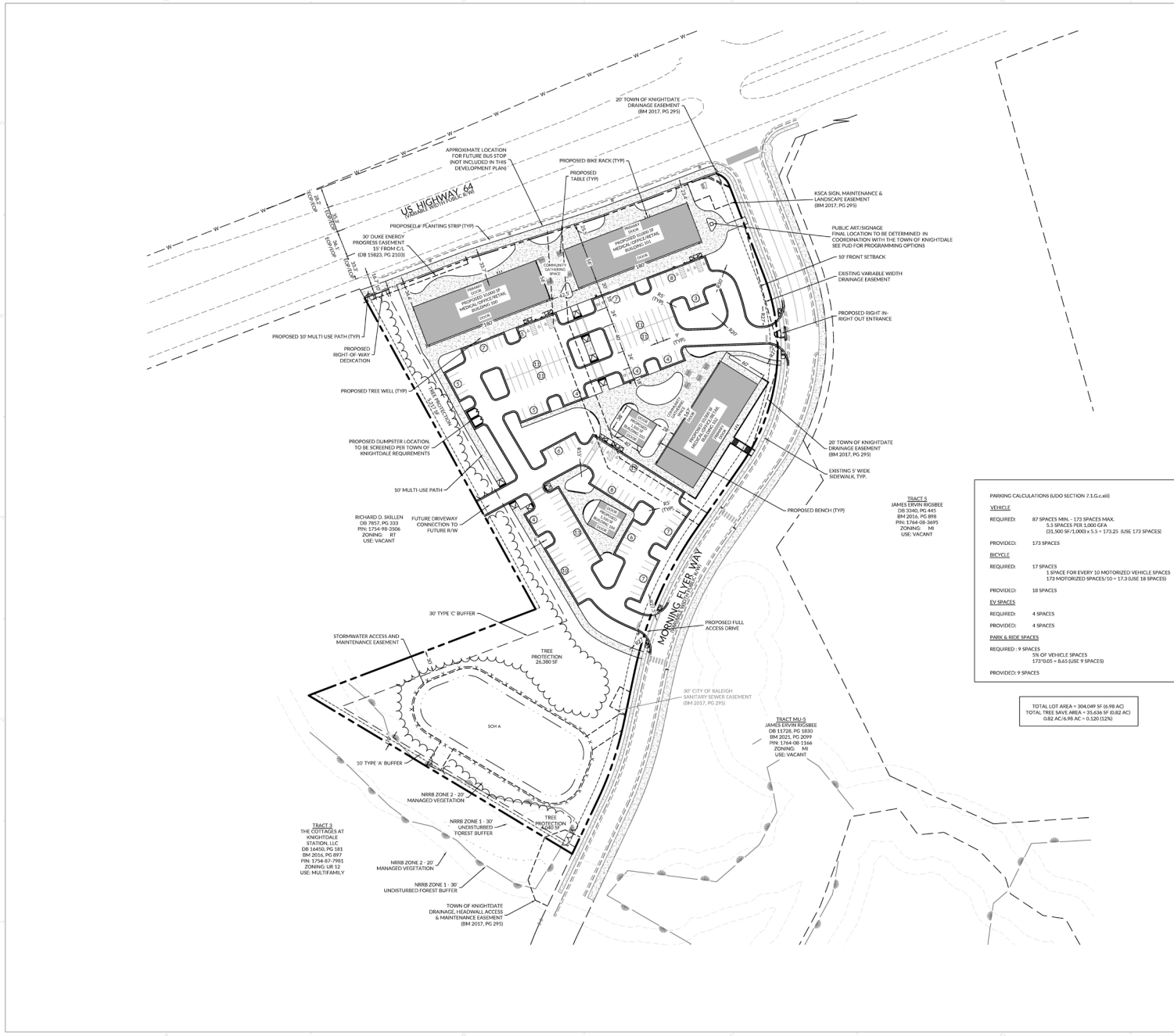
CAROLINIAN: Illustrative Site Plan

C0.02

ATLAS STARK KNIGHTDALE STATION



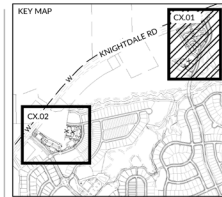
Project Overview + Master Plan



PARKING CALCULATIONS (BDD SECTION 7.1.6.c.ii)

VEHICLE	REQUIRED	PROVIDED
87 SPACES MIN. - 172 SPACES MAX. 5.3 SPACES PER 1,000 GFA (5,300 SF / 1,000 x 5.3 = 173.2) (USE 173 SPACES)	87 SPACES	173 SPACES
BIKE	REQUIRED	PROVIDED
17 SPACES 1 SPACE FOR EVERY 10 MOTORIZED VEHICLE SPACES 173 MOTORIZED SPACES / 10 = 17.3 (USE 18 SPACES)	17 SPACES	18 SPACES
EV SPACES	REQUIRED	PROVIDED
4 SPACES	4 SPACES	4 SPACES
PARK & RIDE SPACES	REQUIRED	PROVIDED
19 SPACES 5% OF VEHICLE SPACES 173 * 0.05 = 8.65 (USE 9 SPACES)	19 SPACES	9 SPACES

TOTAL LOT AREA = 304,097 SF (6.98 AC)
 TOTAL TREE SAVE AREA = 25,436 SF (0.62 AC)
 0.82 AC (16.98 AC - 0.120 (12%)



SITE LEGEND

SYMBOL	DESCRIPTION
(Solid line)	BOUNDARY
(Dashed line)	BUFFER
(Dotted line)	CENTER LINE
(Line with triangles)	CURB & GUTTER
(Line with circles)	EASEMENT
(Line with 'X' marks)	PROPOSED FENCING (CHAIN LINK FENCE NOT ALLOWED)
(Line with 'X' marks)	LIMIT OF DISTURBANCE
(Dashed line)	LOT LINE
(Dashed line)	PHASE LINE
(Dashed line)	RIGHT OF WAY
(Dashed line)	SETBACK
(Solid grey fill)	BUILDING

ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH ALL CITY OF RALEIGH & TOWN OF KNIGHTDALE DESIGN STANDARDS, DETAILS AND SPECIFICATIONS

Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____
 Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____
 Administrator



PURWATERBANK
**ATLAS STARK
 KNIGHTDALE STATION**
 7790 KNIGHTDALE BLVD | KNIGHTDALE, NC 27545 | ST. MATTHEWS TOWNSHIP | WAKE COUNTY



SCALE: 1"=60'-0"

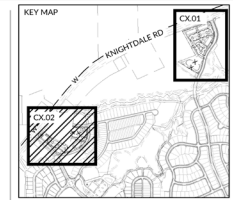
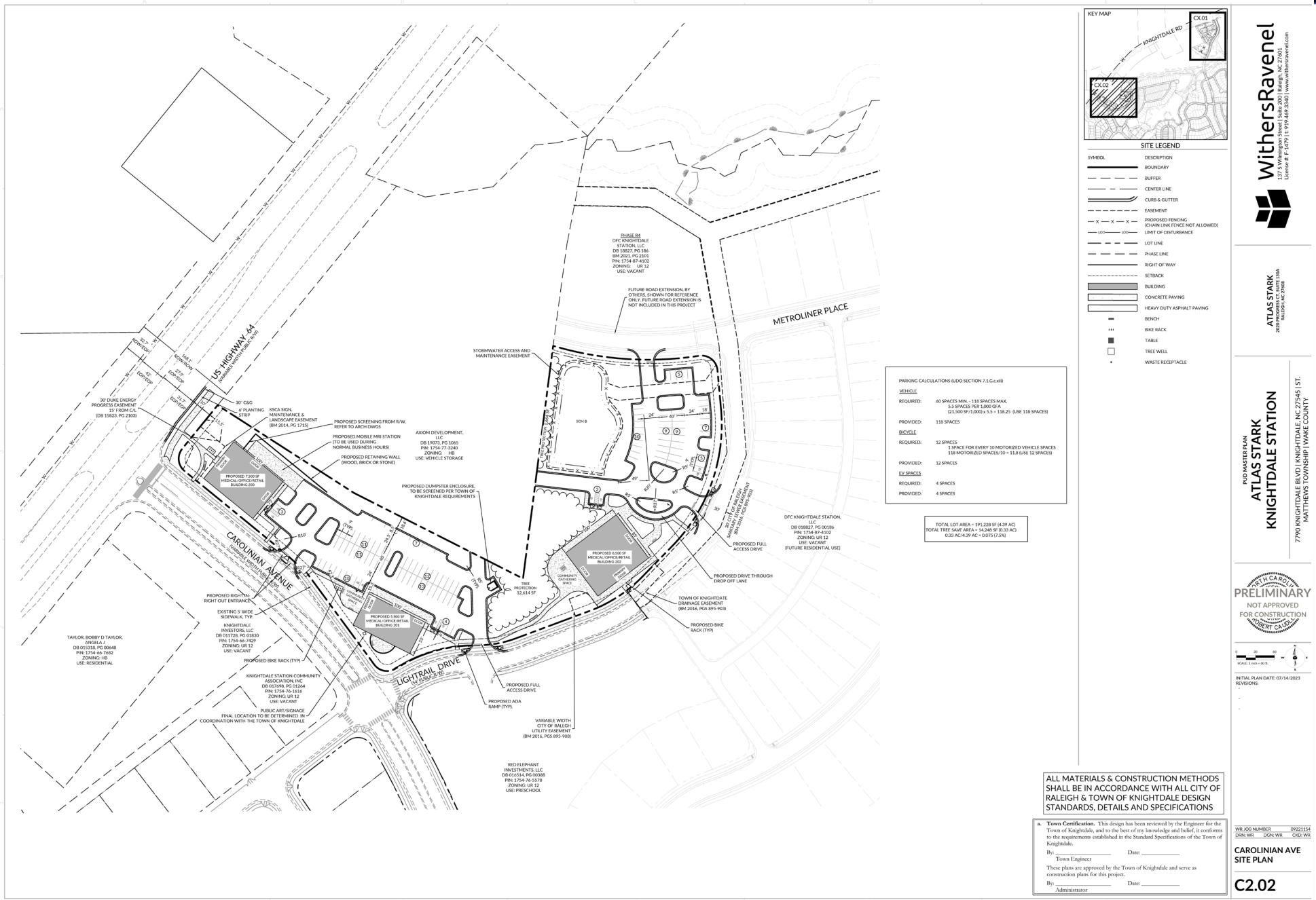
INITIAL PLAN DATE: 07/14/2023
 REVISIONS:

WORK NUMBER: 09221154
 DRN: WR DGN: WR CKD: WR

**MORNING FLYER
 WAY SITE PLAN**

C2.01

Project Overview + Master Plan



SITE LEGEND

SYMBOL	DESCRIPTION
—	BOUNDARY
---	BUFFER
---	CENTER LINE
---	CURB & GUTTER
---	EASEMENT
— X — X — X	PROPOSED FENCING (CHAIN LINK FENCE NOT ALLOWED)
---	LIMIT OF DISTURBANCE
---	LOT LINE
---	PHASE LINE
---	RIGHT OF WAY
---	SETBACK
---	BUILDING
---	CONCRETE PAVING
---	HEAVY DUTY ASPHALT PAVING
---	BENCH
---	BIKE RACK
---	TABLE
---	TREE WELL
---	WASTE RECEPTACLE

PARKING CALCULATIONS (BUDO SECTION 7.1.G.c.48)

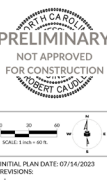
VEHICLE	REQUIRED	PROVIDED
60 SPACES MIN. - 118 SPACES MAX. 5.5 SPACES PER 1,000 GFA (21,500 SF / 1,000 x 5.5 = 118.25 (USE 118 SPACES))	118 SPACES	118 SPACES
BICYCLE	REQUIRED	PROVIDED
12 SPACES 5 SPACE FOR EVERY 10 MOTORVEHICLE SPACES 118 MOTORVEHICLE SPACES / 10 = 11.8 (USE 12 SPACES)	12 SPACES	12 SPACES
TABLES	REQUIRED	PROVIDED
4 SPACES	4 SPACES	4 SPACES

TOTAL LOT AREA = 191,228 SF (4.39 AC)
TOTAL TREE SAVE AREA = 14,246 SF (0.33 AC)
6.33 AC @ 29,400 SF/AC = 187,000 SF

WithersRavenel
137 S. Wilmington Street | Suite 200 | Raleigh, NC 27603
License # F-1479 | T: 919.489.2340 | www.withersravenel.com

ATLAS STARK
2020 PROGRESS CT, SUITE 200A
RALEIGH, NC 27608

PRELIMINARY MASTER PLAN
ATLAS STARK
KNIGHTDALE STATION
7790 KNIGHTDALE BLVD (KNIGHTDALE, NC 27545) ST.
MATTHEWS TOWNSHIP / WAKE COUNTY



INITIAL PLAN DATE: 07/14/2023
REVISIONS:

ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH ALL CITY OF RALEIGH & TOWN OF KNIGHTDALE DESIGN STANDARDS, DETAILS AND SPECIFICATIONS

Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____
Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____
Administrator

WR JOB NUMBER: 09221554
DRN: WR DGN: WR CKD: WR

CAROLINIAN AVE
SITE PLAN

C2.02

05

Infrastructure

Pedestrian linkages will be provided across each site, allowing visitors to maneuver efficiently when traveling to and from nearby developments.

Sidewalk and Pedestrian Network

- Width: 6', 10' at Building Foundations
- Sidewalk Length: Site A = 2,889'
- Sidewalk Length Site B = 1,522'
- Pedestrian Plaza and Gathering Area: Site A = 38,826 square feet (0.89ac)
- Pedestrian Plaza and Gathering Area Site B = 4,301 square feet (0.10ac)

Knightdale Station UAA, 6th Amendment

- Remain compliant with phasing schedule that implies a rezoning shall be filed no later than December 31, 2025.
- UAA states that on or before December 31, 2025, an approved Master Plan or Building Permit or Certificate of Occupancy shall be issued for a minimum of forty thousand (40,000) square feet of commercial floor space.



06

Public Gathering Space

Public Gathering Space

- Although recreational open space is not required per Section 11.2, the development offers a total of 43,127 square feet (0.99 acres) of public gathering space.
- The amount of public gathering space provided across the development will be well in excess of the required 500 square feet for each site, as outlined in Section 6.8, Public Gathering Space, of the Knightdale UDO.



07

Landscaping + Tree Protection

- Site A – Morning flyer Way will provide 10% tree protection area.
- Site B – Carolinian will provide 7.5% tree protection area.
- Site A – Morning flyer Way has a base zoning district of NMX. Where Site A abuts the adjacent RT base district a TYPE C Buffer will be provided and where Site A abuts the adjacent UR12 base district a TYPE A Buffer will be provided.
- Site B – Carolinian has a base zoning district of NMX. Where Site B abuts the adjacent UR12 base district a TYPE A Buffer will be provided.
- Site A - Morning flyer Way will provide a pedestrian plaza along Knightdale Boulevard. Street trees will be provided along Morning Flyer Way.
- Site B – Carolinian will provide a pedestrian plaza along Knightdale Boulevard. Street trees will be provided along Carolinian Avenue.
- Landscaping will be provided along vehicular use areas (parking) to screen vehicles from street views and to provide shade. The plantings will be the intent of the UDO by providing adequate screening for parking.



08

Design Guidelines

Building Materials:

- EIFS (White, Brown, Charcoal)
- Brick Veneer (White, Charcoal)
- Fibercement Panel & Siding (Gray, Charcoal, White, Brown)



Knightdale Station: Morning Fyler Way Parcel
Knightdale, NC July 14, 2023

Conceptual View 5



Knightdale Station: Carolinian Avenue Parcel
Knightdale, NC July 14, 2023

Conceptual View 7



Knightdale Station: Carolinian Avenue Parcel
Knightdale, NC July 14, 2023

Conceptual View 6



Knightdale Station: Carolinian Avenue Parcel
Knightdale, NC July 14, 2023

Conceptual View 8



09

Site Development Allowances

As outlined in Section 2.4.6 of the Town of Knightdale Unified Development Ordinance, “the Planned Unit Development Overlay District process encourages creativity and innovation in the design of developments through a master planning process that allows for flexibility from underlying zoning as approved by the Town Council.”

The following site development allowances will result in greater levels of creativity and place making, while not straying from the overall intent of the Knightdale Unified Development Ordinance.

1. In order to accommodate the proposed pedestrian along Knightdale Boulevard on **Site A**, the development team is requesting a site development allowance for an increased front setback of 35’ feet for the two structures fronting Knightdale Boulevard, located on **Site A**.
2. To further the goal of creating a sense of place through interconnected design, the proposed 1,500 square foot structures located on **Site A** will require an increased setback.
3. The proposed 8,500 square foot structure located on **Site B** will require an increased front setback from 10’ to 15’ in order to incorporate the required 10’ sidewalk around the building foundation.
4. The proposed 10,000 square foot building located along Morning Flyer Way on **Site A** will require an increased front yard setback to 20’ in order to incorporate the required 10’ sidewalk around the building foundation.
5. Landscaping will be provided along vehicle accommodation areas (parking) to screen vehicles from public street views. The plantings will meet the intent of UDO Section 7.5.B by providing adequate screening for parking without the installation of a Type A or Type B buffer.
6. Along Knightdale Boulevard, existing street trees will be removed to accommodate a 10’ Side Path [VB1] , a Bus Stop, and a Pedestrian Plaza. Street trees will be replaced 40 feet on center [VB2] along the frontage of Knightdale Boulevard and integrated with other plantings.
7. Tree protection on Site B will equate to 7.5% due to the ample pedestrian network and gathering areas provided on site. Furthermore, Tree protection for the site was previously accounted for in the overall Knightdale Station UAA.

10

Neighborhood Meeting

Meeting Information

A neighborhood meeting was held on May 11, 2023 at 5:00 pm at the Northside Community Church in Knightdale. See figure for a map of the meeting location. No members of the community chose to attend the meeting. Four members of the project team were present, Trey Adams, Hunter Diefes, Daniel Meyer and Brendie Vega. Two members of the Town were present, Gideon Smith and Jason Brown.

- Date of meeting: Thursday May 11, 2023
- Time of meeting: 5:00 pm EST
- Meeting address: Northside Community Church 621 N. First Avenue
Knightdale, NC 27545

As there were no attendees at the meeting, no items were discussed. No calls were received by the project team regarding this project, either. During the community meeting, consultants and Knightdale Planning staff were able to discuss details of the project revolving around the community and regarding the Town's vision for the project.

- Developer: Atlas Stark Holdings
- Design Consultant: WithersRavenel
- Town of Knightdale Contact: Gideon Smith

