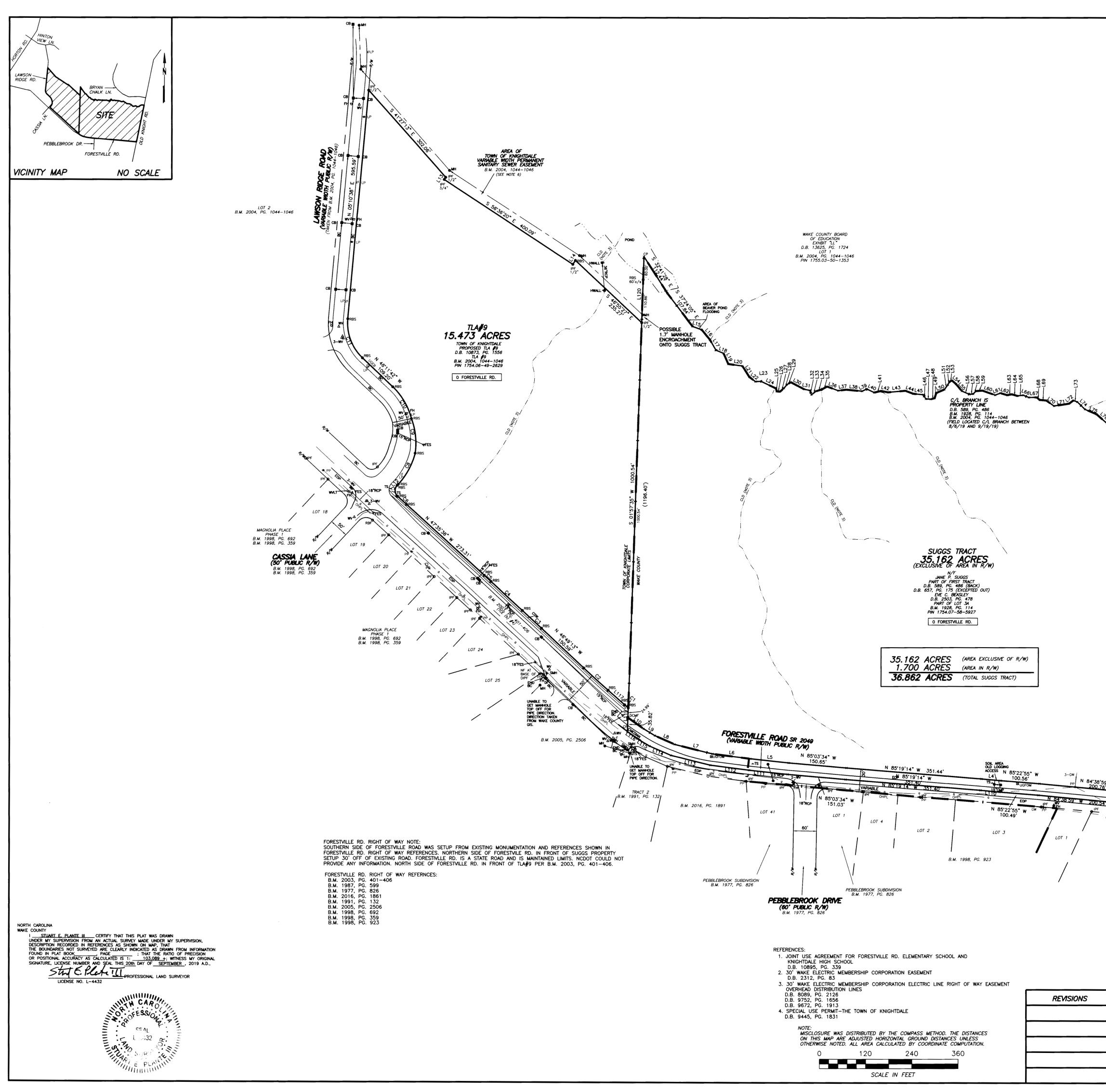
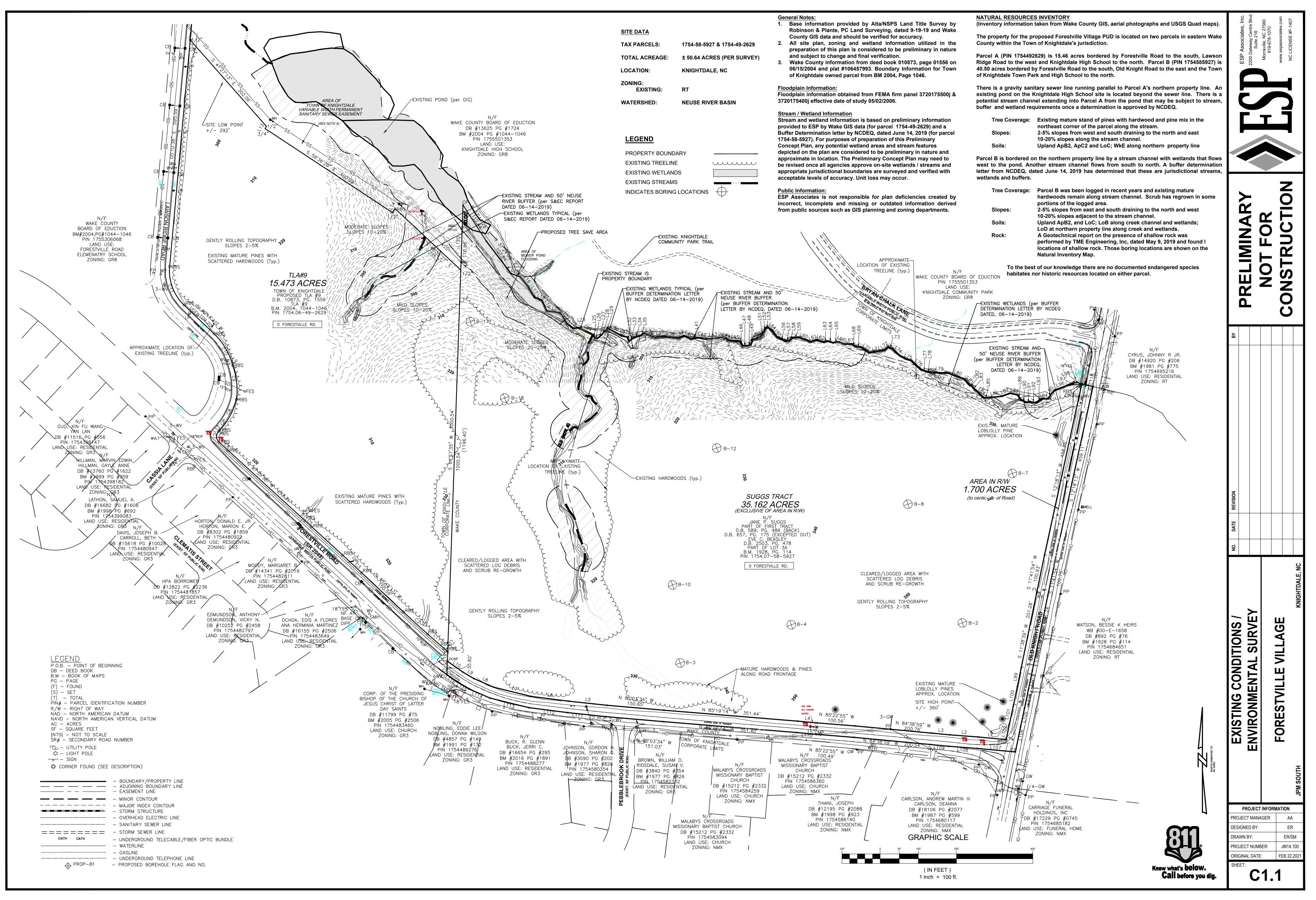


FORESTVILLE VILLAGE **PUD Master Plan**



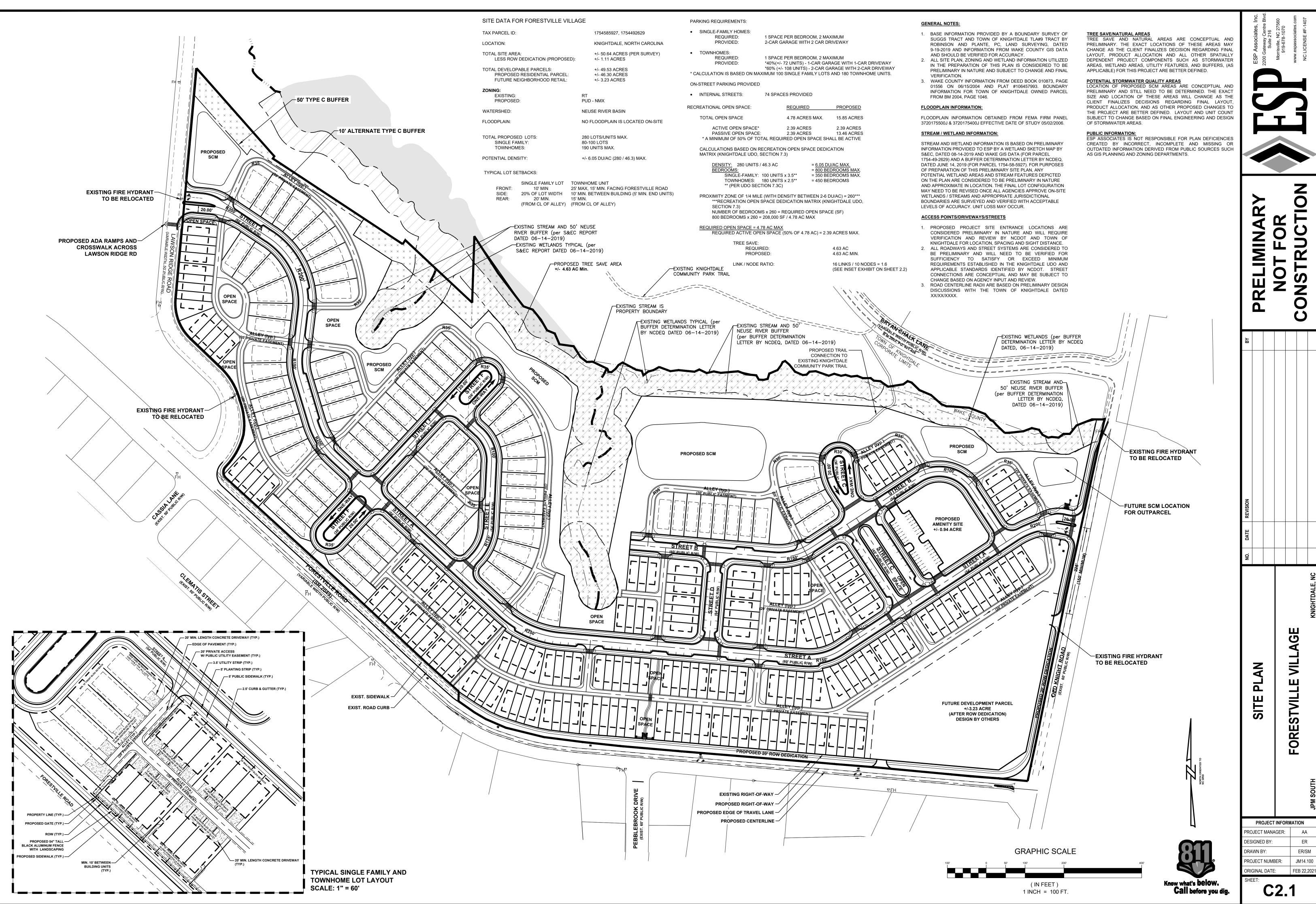


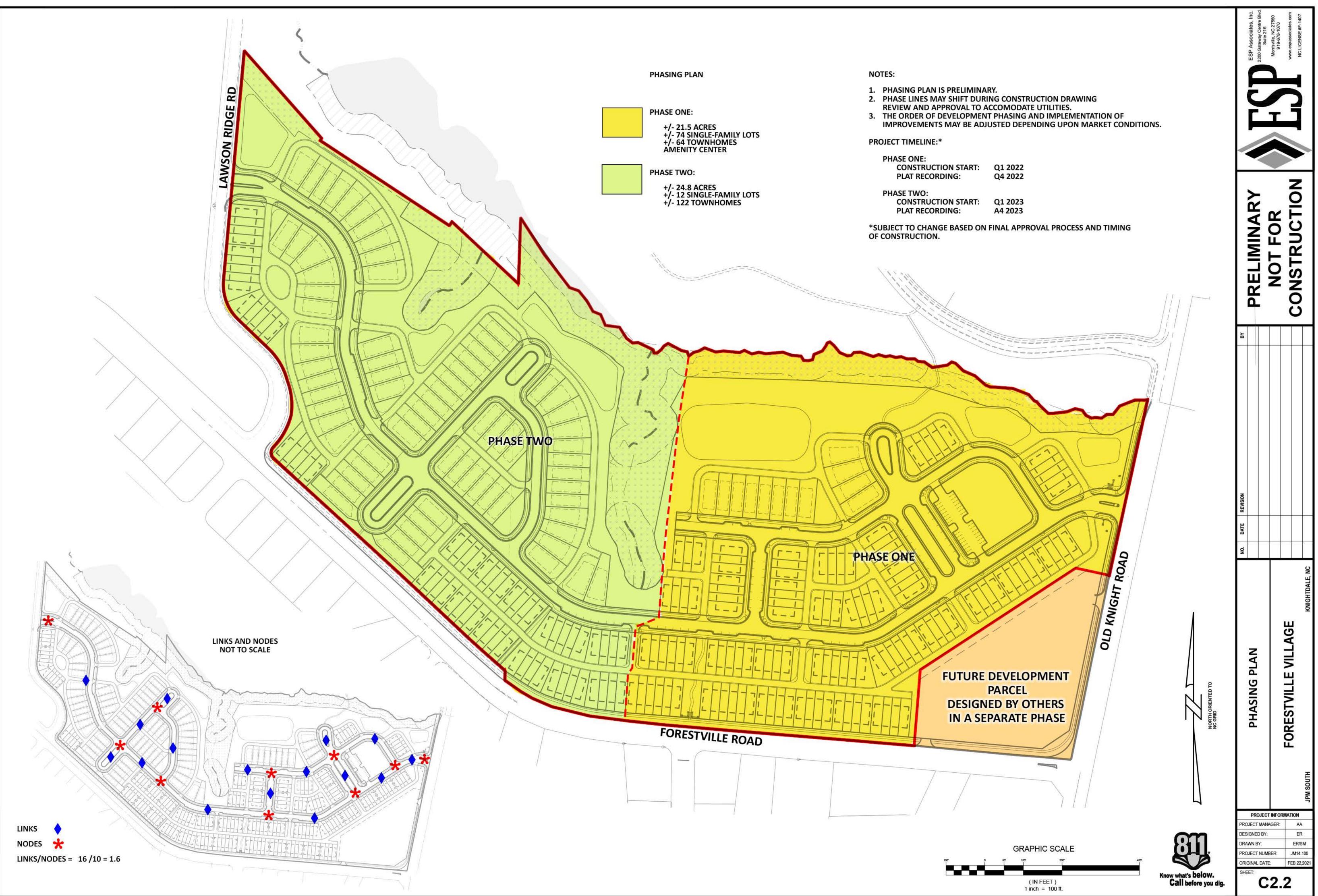
					DIOTANOE
	NOTES:		L1 N	EARING 84°45'40" W	DISTANCE 73.40'
	1. THE PROPERTY IS IN ZONE X, NOT IN THE 100 YR. FLOOD, PER FEMA FIRM MAP NO. 3720175400J PANEL 1754 AND FEMA FIRM MAP NO 3720175500J PANEL 1755, EFFECTIVE DATE 5/2/2006.		L3 N	85°39'18" W 84°32'44" W	75.03' 48.29'
	2. PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD 3. NO EVALUATION OF RIPARIAN, DRAINAGEWAY, OR WATERSHED BUFFERS HAV		L5 N	84*54'47" W 83*53'07" W	50.27' 100.23'
	PROVIDED FOR THE SUBJECT PROPERTY SURVEYED. ON-SITE PONDS AND WHERE CROSSING THE EXTERNAL PROJECT BOUNDARY, WERE FIELD LOCAT THE COURSE OF THE SURVEY. ADDITIONAL STREAMS TAKEN FROM	STREAMS,	L7 N	82*44'28" W 76*07'56" W	99.46' 100.86'
	WAKE COUNTY GIS. RIPARIAN BUFFERS MAY APPLY. 4. UNDERGROUND UTILITIES SHOWN WERE PAINTED/FLAGGED BY NC ONE CAL		L9 N	66°39'01" W 59°26'47" W	55.83' 34.06'
	AND FIELD LOCATED BY ROBINSON & PLANTE, PC DURING THE COURSE NO PAINTMARKS OR FLAGS WERE FOUND ALONG LAWSON RIDGE ROAD. P SKETCH FROM CITY OF RALEIGH WATER SHOWS A WATERLINE RUNS ALON	ER PROVIDED	L11 N	54*55'23" W 01*57'35" E	49.92' 60.74'
	SIDE SHOULDER OF FORESTVILLE RD. AND IN THE PAVED ROAD OF LAWS ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.	ON RIDGE RD.	L13 S	42.51'23" E 33.33'50" W	<u>4.14'</u> <u>6.81'</u>
	 SUGGS PROPERTY IS IN WAKE COUNTY AND FALLS UNDER THE TOWN OF PLANNING JURISDICTION. TLA#9 IS IN THE TOWN OF KNIGHTDALE CORPOR TOWN OF KNIGHTDALE VARIABLE WIDTH PERMANENT SANITARY SEWER EASI 	RATE LIMITS.	L15 S	33°23'56" E 70°25'25" E	12.28' 25.42'
	ON B.M. 2004, PG. 1044-1046 IS NOT TIED DOWN AND NO DIMENSION RECORDED MAP SHOWS THE EASEMENT RUNNING ALONG THE NORTHERN TLA#9 IN THE AREA OF THE EXISTING SEWER MANHOLES.	S ARE SHOWN.	L17 S	38*58'06" E 30*04'05" E	<u>33.44'</u> <u>31.36'</u>
	RECORDED MAP REFERENCES UNRECORDED MCKIM AND CREED MAP DAT ROBINSON & PLANTE, PC HAS REQUESTED THE UNRECORDED MAP FROM	MCKIM & CREED.	L19 S	67*33'35" E 23*30'57" E	21.48' 30.28'
	ROBINSON & PLANTE, PC HAS NOT RECEIVED THE MAP FROM MCKIM AN 7. TOWN OF KNIGHTDALE CORPORATE LIMIT LINE TAKEN FROM WAKE COUNT		L21 S	82°06'48" E 32°15'29" E	37.03' 33.52'
			L23 N	52'31'43" E 87'09'33" E	<u>19.82'</u> 14.98'
			L25 S	64°23'05" E 12°14'52" E	42.89' 7.87'
			L27 N	85°08'23" E 50°25'52" E	<u>8.31'</u> 13.72'
			L29 N	37°44'40" E 58°20'27" E	<u>12.13'</u> 12.27'
			L31 S	61*53'46" E 78*42'41" E	<u>39.25'</u> 15.12'
			L33 N	19'30'48" E 52'14'17" E	<u>12.07'</u> 15.42'
			L35 N	74°02'38" E 61°18'27" E	<u>14.77'</u> <u>16.40'</u>
	\$ 5 *		L37 N	69'31'02" E 82'41'42" E	30.61' 20.89'
			L39 N	84°25'02" E 65°18'56" E	<u>41.56'</u> 13.48'
			L41 N	64°31'56" E 77°22'35" E	21.14' 18.70'
		1	L43 N	78°41'27" E 85°01'50" E	18.30' 44.92'
	BRYAN CHALK LANE		L45 S	69°28'01" E 84°27'42" E	21.95' 26.16'
	B.M. 2003, PG. 401-406	T	L47 S	30°25'49" E 87°20'37" E	12.84' 12.74'
2		Ń	L49 N	76°27′50″ E 16°44′27″ E	10.52' 14.22'
1	POSSIBLE TO THE POSSIBLE	IN IN	L50 N L51 N	66°57'48" E 36°03'28" E	23.11' 15.36'
	3.3' SIDEWALK ENCROACHMENT ONTO SUGGS TRACT CSW 6 D.B. 14920, PG. 206 B.M. 1981, PG. 775 PIN 1754.07-69-5216	(2001) NETWORK FACTOR	L52 N L53 N	25°51'39" E 66°41'14" E	8.97' 7.14'
		GRID GRID	<u>L54</u> S L55 S	49°04'00" E 39°16'01" E	14.21' 23.42'
	198 PIN 1754.07-69-5216	NORTH NA BY GPS (VI 5 BASE STA 2/17/18 COMBINED		66°19'06" E 83°39'29" E	21.56' 9.95'
	L86 L87 L88 L94 DHS IN PH AR	TIE BY NO TIE BY NO CORS BY 12/17 908 COM	L58 N	43°54'54" E 85°58'50" E	10.43' 16.56'
	SULEWALK ON THE SULEWALK ON THE SULEWALK ON THE SULEWALK	N.C. GRID I GRID TIE BY N.C. CORS DATED 12/ 0.999908 C	L60 S	70*55'03" E 69*54'10" E	<u>35.31'</u> 14.68'
	► PP	•	L62 S	73°42'31" E 78°33'14" E	18.65' 11.55'
			L64 S	73*43'32" E 83*19'38" E	15.17' 15.26'
	20 E		L66 S	68°27'55" E 89°30'23" E	15.83' 20.22'
	3 1 4 A		L68 S	50°32'55" E 85°35'08" E	10.48' 16.58'
	AREA IN R/W		L70 S	54°56'31" E 81°08'54" E	<u>24.81'</u> 39.49'
	AREA IN R/W 1.700 ACRES		L72 N	53°19'08" E 70°26'06" E	<u>13.72'</u> 11.02'
			L74 S	46°02'19" E 66°50'35" E	<u>27.77'</u> 32.52'
			L76 S	48°45'22" E 68°17'05" E	<u>36.14'</u> 13.69'
	La Ho		L78 S	88*29'53" E 85*52'51" E	<u> </u>
			L80 S	68 * 43'36" E	43.92'
			L82 S	41'33'47" E 65'00'47" E	<u>21.02'</u> 7.78'
			L84 S	40°27'30" E 46°30'41" E 89°41'53" E	11.52' 30.33' 10.80'
	BESSIE K. WATSON HEIRS W.B. 00-E-1658		L86 N	83°35'26" E	37.59'
	D.B. 892, PG. 76 B.M. 1928, PG. 114 PIN 1754.07-68-4651 LEGE	ND	L88 S	69°20'59" E 76°24'10" E 34°58'31" E	23.02' 19.12'
	D.B. 892, PG. 76 B.M. 1928, PG. 114 PIN 1754.07-68-4651 (X)-CALCULATED (GTS)-GAS TEST (TOB)-TOP OF (FOP)-FDGE OF	STATION	L90 S	63°22'49" E	<u>15.70'</u> <u>16.14'</u> 9.67'
	(TOB)-TOP OF (EOP)-EDGE OF (FES)-FLARED E	PAVEMENT END SECTION	L92 S	79'00'59" E 84'04'46" E 53'18'58" E	9.67' 17.40' 15.94'
	S S S S S S S S S S S S S S S S S S S	DX IGN	L94 N	53'18'58" E 89'55'41" E 38'15'27" E	15.94 16.21' 27.79'
		RIVE	L96 N	38°15'27" E 68°45'38" E 89°41'32" E	42.76'
	(RCP)-REINFORC	AD POWER LINE CED CONCRETE PIPE RGROUND FIBER OPTIC MAR TED METAL PIPE		77°18'38" E	<u>26.98'</u> <u>5.52'</u> 50.06'
	FIL FIRE HYDE	ANT	L100 S	11°31'40" W 11°56'53" W 12°06'03" W	50.06 50.04' 50.47'
	CLD)-CENTERLI (UGPB)-UNDERC	LVE NE DITCH GROUND PHONE BOX	L102 S	<u>12'06'03" W</u> <u>11'36'43" W</u> <u>11'31'40" W</u>	50.47 40.34' 50.14'
	(MH)-MANHOLE (BC)-BACK OF (SMH)-STORM N	ANHOLE	L104 S	11°31'40" W 11°56'53" W 12°06'03" W	50.14 50.19' 50.38'
3'59" W 76'	GRASS ISLAND W BROKEN L3 L2 ASPHALT CURB L3 L2 ASPHALT CURB L3 L2 ASPHALT CURB L3 L2 ASPHALT CURB L3 L2 ASPHALT CURB N.C. GRID COORDS. (NF)-NAIL FOUN N.C. GRID COORDS. (CSW)-CONCRET	ID T	L106 S	11°36'43" W 84°45'40" W	<u> </u>
54 1	-TS TS_UGPB_RBSC = (CSW)=CONCRET N=748,360.49 (IPF)-IRON PIPE E2,156,240.39 (RBS)-REBAR S	E FOUND ET	L108 N	84 45 40 W 85'39'18" W 84'32'44" W	75.08' 48.55'
OHPL	S 77-58'31" E (CMEDIAN)-CON	ED POINT CRETE MEDIAN	L110 N	84*54'47" W 83*53'07" W	<u>48.33</u> 50.28' 100.83'
	OHON PP GW (ST GOOL (GROUND) C (HWALL)-HEADW UGPB (GROUND) C (HWALL)-HEADW (CB)-CATCH BA (O/S)-OFFSET	ALL	L112 N	83 53 07 W 82*44'28" W 76*07'56" W	100.83 101.49' 105.08'
	LOT 1 UCCAS AND THE A-GW (DHS)-DRILL HO	DLE SET	L114 N	66°39'01" W 59°26'47" W	60.21' 37.14'
В.М. 1	UGPB G (DCMF)-DISTURE UGPB G (TCE)-TITLE COI -W-UNDERGROU	BED CONCRETE MONUMENT MMITMENT EXCEPTION JND WATERLINE	L116 N	54*55'23" W 48*35'57" W	<u>31.53'</u> 57.25'
	$ \mathbf{u} / \mathbf{u} _{\mathbf{u}}$	IND GASLINE IND CABLE LINE	L118 S	78'28'29" E 01'57'35" E	<u>30.00'</u> 60.81'
		IND TELEPHONE LINE	L120 N	01°57'35" E	170.86'
		CURVE TABL		NGENT CHOR	D BRG
	C1 1.38'35" 43	5.57' 12.49' 1 2	2.49' 6.2	25' N 49	18'12" W '39'05" W
	C3 0.38'29" 60	050.00' 67.74' 67		.87' N 47	<u>08'27" W</u> 27'42" W
	C5 0°07'56" 10	050.00 23.21' 23	.21' 11.	61' N 47	31'40" W 28'22" W
		0.00' 31.50' 28	. 34' 20.	08' N 02	<u>14'39" W</u> 34'24" E
	<u>C9</u> 28*59'41" 17 C10 31*48'45" 17	'9.04' 90.60' 89	.64' 46.	29' N 06	15'19" W 17'19" W
	◆PP C11 51*22'20" 12	5.00' 112.08' 10	8.36' 60.	12' N 20	·30'32" W
	BOUNDARY SURVEY	ROBINSC	AND SUP	PLANTE,	<i>P.C.</i>
	SUGGS TRACT AND		AND SURV C-268 70 TRINITY	ROAD	
	TOWN OF KNIGHTDALE TLA#9 TRACT	RAL PHONE: (919) 85	EIGH. NC	27607	859-6032
	TOWNSHIP: ST. MATTHEWS COUNTY: WAKE	SURVEY DATE: 9-		SURVEYED	
	STATE: NORTH CAROLINA	SCALE: 1"=120'		DRAWN BY	
-+					
	ZONING: RT PIN: SEE ABOVE	CHECKED & CLOSURE BY: SEF	2	FILE: OKR	EC C-1.0
					∩



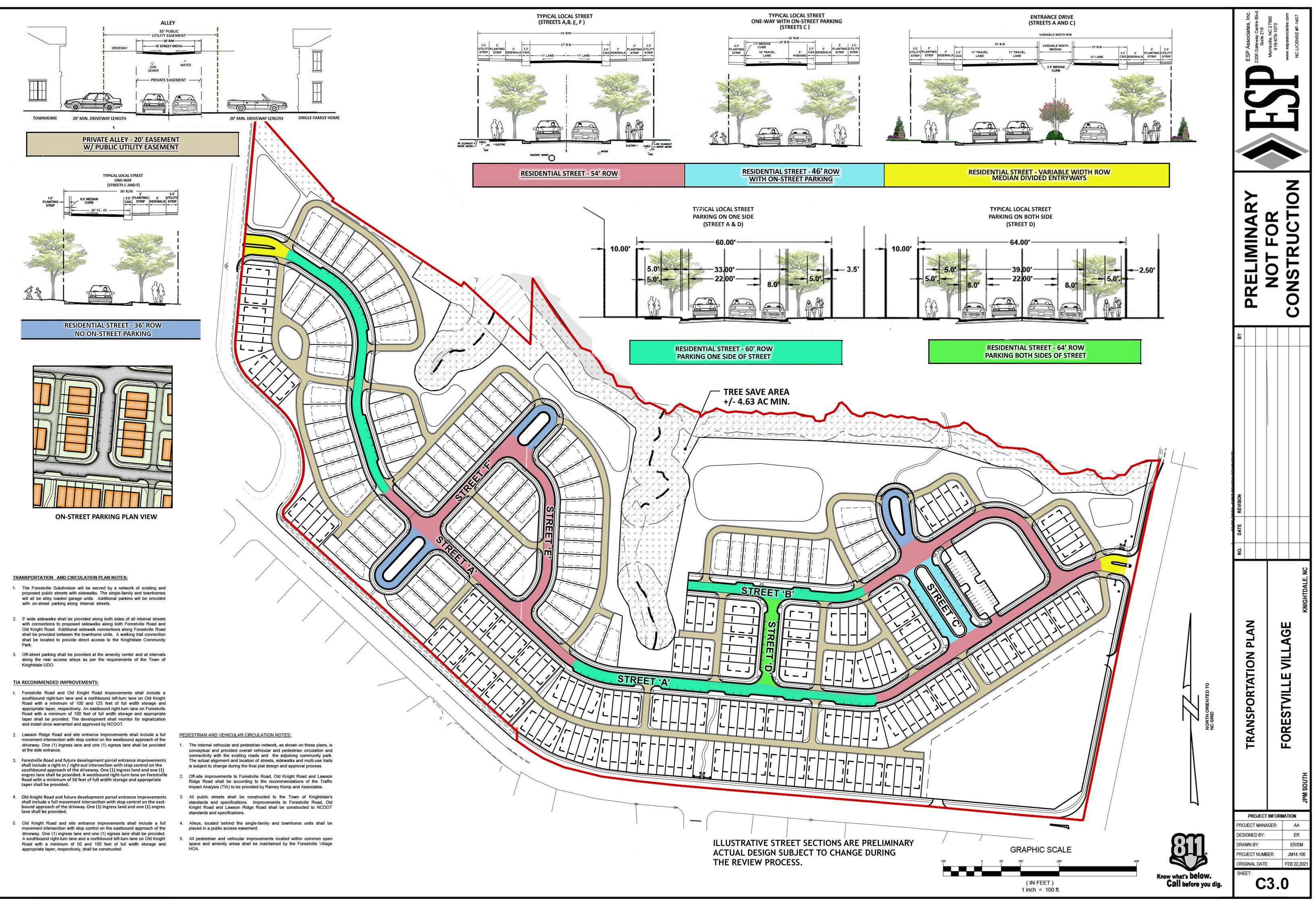
S:\RP1/2021 Projects (J)\JM14.100 - Forestville Village (JPM South)_JM14\Sheets\PUD_Master Plan\JM14-ENV.SURVEY.dwg, C1.1, sma





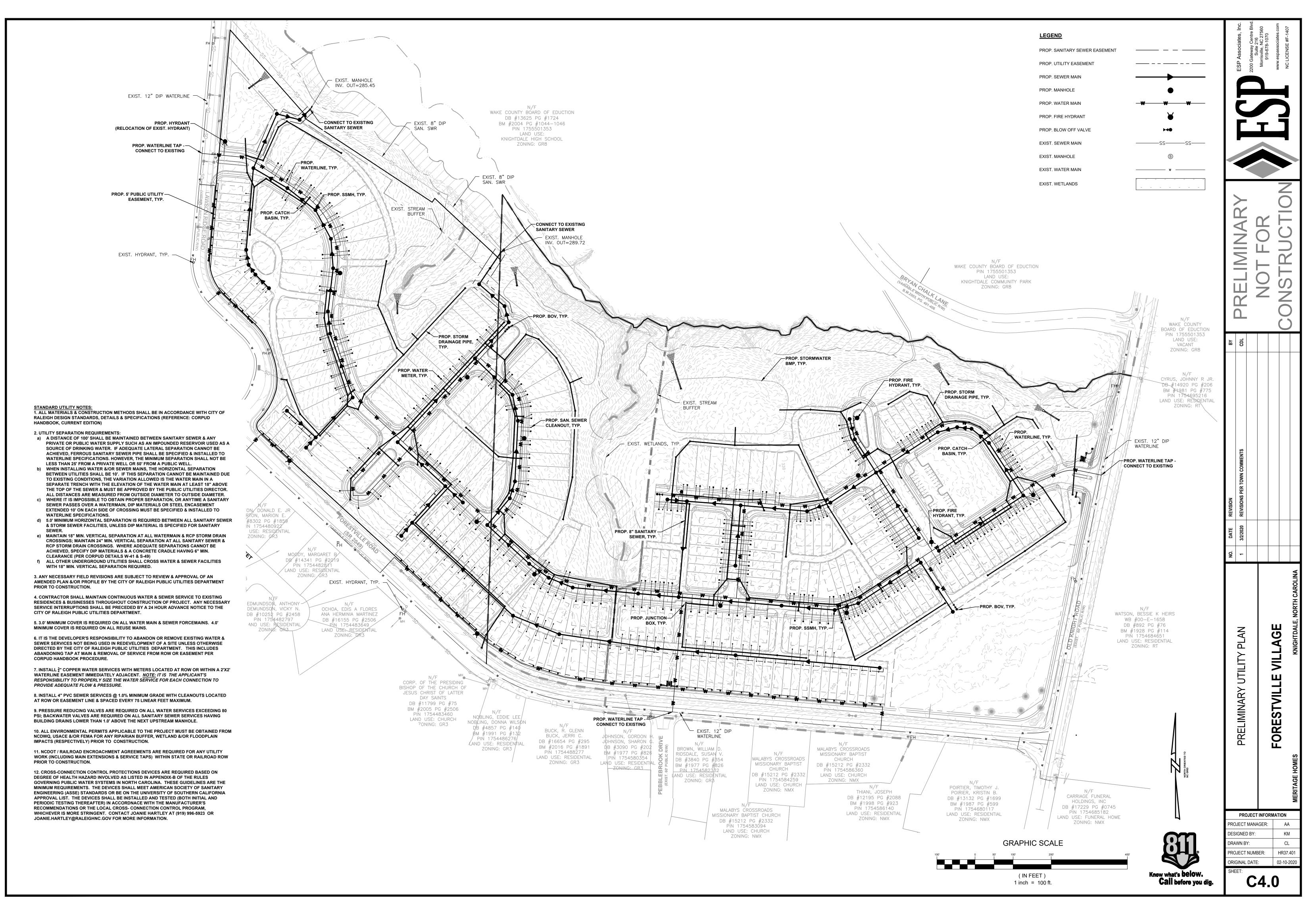


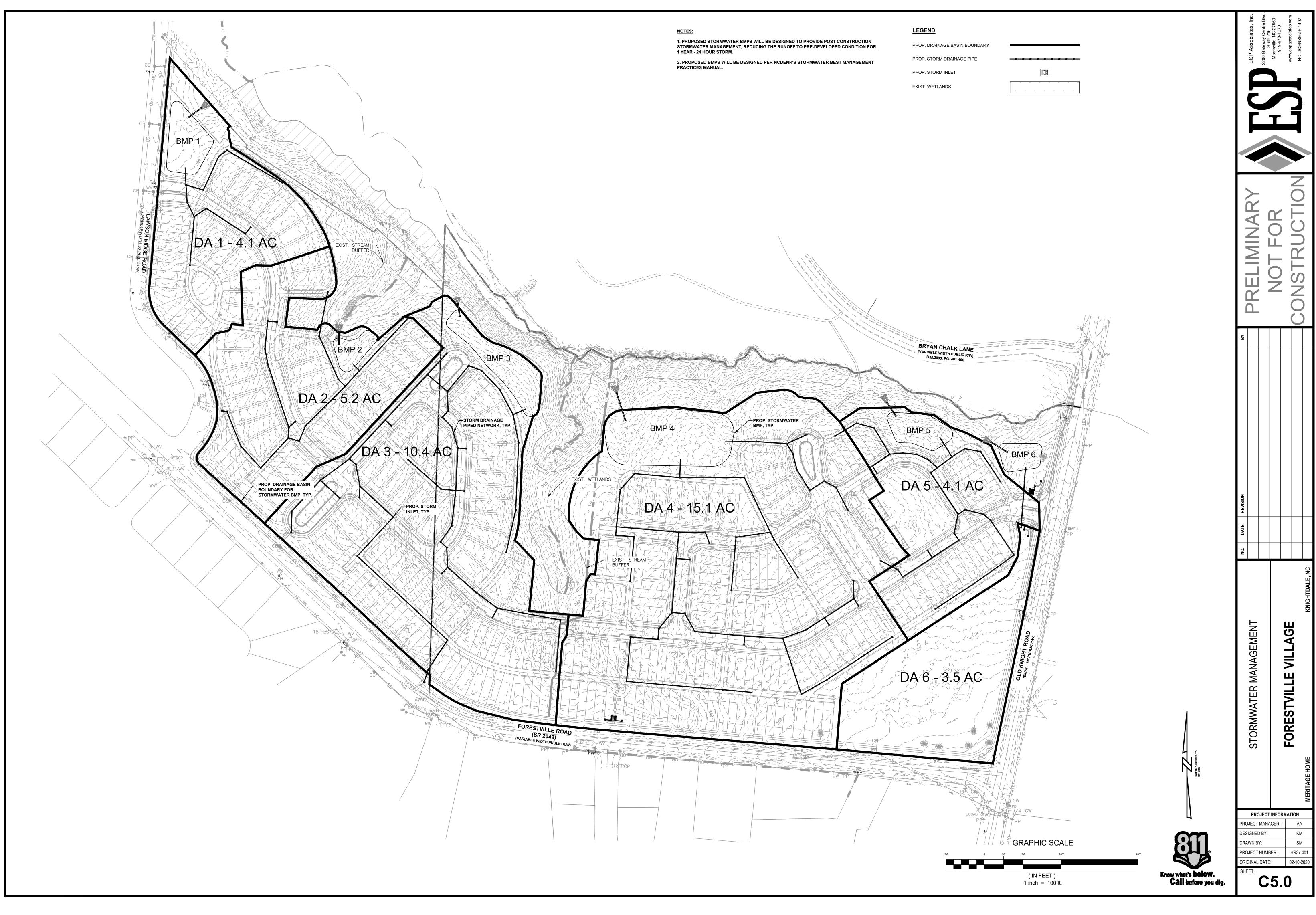
ONE:	
NSTRUCTION START:	Q1 2022
AT RECORDING:	Q4 2022
TWO:	
NISTRUCTION START	01 2022





RP 1/2021 Projects (J)\UM14.100 - Forestville Village (JPM South)_JM14/Sheets\PUD_Master Plan\UM14-MASTER PLAN-C2.0.dwg, C2.0, sma







S: RP 1/2021 Projects (J),JM14.100 - Forestville Village (JPM South), JM14/Sheets/PUD_Master Plan/JM14-MASTER PLAN-C2.0.dwg, C2.0, sma

LANDSCAPE NOTES:

- GENERAL LANDSCAPE NOTES:
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF KNIGHTDALE AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS. 2. ALL LANDSCAPE WORK SHALL BE PROVIDED BY OR UNDER THE SUPERVISION OF A LICENSED NC
- LANDSCAPE CONTRACTOR. 3. CONTRACTOR RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS PRIOR TO START OF
- WORK
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO INSTALLATION AND NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF FIELD CONDITIONS WARRANT ADJUSTMENT OF PLANT MATERIALS. CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING APPROPRIATE PARTIES AND ASSURING THAT ALL UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION. ALL UTILITY LINES SHALL BE PROTECTED DURING THE CONSTRUCTION TO AVOID DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY AND ALL UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. DAMAGED DURING CONSTRUCTION OR INSTALLATION OF PLANT MATERIAL AT CONTRACTOR'S EXPENSE.
- 5. COORDINATE LANDSCAPE INSTALLATION WITH ANY LIGHTING / IRRIGATION CONSTRUCTION. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL SPECIFICATIONS AND INSTALLATION REQUIREMENTS OF IRRIGATION, LIGHTING, AND FENCING TO ENSURE THAT PRODUCTS ARE INSTALLED PROPERLY AND PER MANUFACTURER REQUIREMENTS AND LOCAL AGENCY CODES & RESTRICTIONS.
- ESP ASSOCIATES, INC. IS NOT RESPONSIBLE FOR INSTALLATION OR DESIGN OF LIGHTING, FENCING, OR IRRIGATION. THE INSTALLATION REQUIREMENTS AND DESIGN IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES, USING FLAG MEN, AND MAINTENANCE OF TRAFFIC AS NECESSARY TO ENSURE PUBLIC SAFETY
- 9. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
- 10. THE LANDSCAPE CONTRACTOR SHALL FURNISH AND INSTALL ALL PLANT MATERIALS, LABOR AND OTHER MATERIALS NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS AND DETAILS.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN IN THE PLANT SCHEDULE MATCH QUANTITIES ON THE PLANS AND PRIOR TO PRICING WORK. SHOULD DISCREPANCIES OCCUR. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED PRIOR TO BIDDING.
- 12. PLANT MATERIAL SUBSTITUTIONS TO BE APPROVED BY OWNER OR LANDSCAPE ARCHITECT PRIOR TO ORDERING PLANT MATERIAL. SUBSTITUTIONS OF PLANT MATERIAL NOT APPROVED BY OWNER OR LANDSCAPE ARCHITECT MAY BE REJECTED.
- 13. ALL PLANT MATERIAL SHALL MEET MINIMUM SIZE STANDARDS, INCLUDING THE MINIMUM HEIGHT, WIDTH, ROOT BALL SIZE AND NUMBER OF BRANCHES, SET FORTH IN THE LATEST EDITION OF THE "AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) FOR THE TYPE OF TREE OR SHRUB AT THE TIME OF INSTALLATION.
- 14. ALL SHADE/CANOPY/STREET TREES SHALL BE GRADE 'A' SPECIMENS WITH A STRAIGHT MAIN LEADER AND FULL HEAD.
- 15. ALL PLANTS SHALL BE NURSERY GROWN UNDER THE SAME CLIMATE CONDITIONS AS THE LOCATION OF THE PROJECT FOR AT LEAST TWO YEARS BEFORE PLANTING. ALL PLANTS SHALL BE IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, HEALTHY, VIGOROUS, AND FREE OF INSECTS, EGGS, LARVE, DISEASES AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS OR DISFIGUREMENT. PLANT MATERIAL COLLECTED FROM NATURALIZED AREAS SHALL BE REJECTED.
- 16. CALIPER, HEIGHT AND WIDTH SPECIFICATIONS INDICATED ON THE PLANT SCHEDULE SHALL TAKE PRECEDENCE OVER CONTAINER SIZE.
- 17. ALL TREES OF THE SAME VARIETY SHALL MATCH IN SHAPE AND SIZE WHEN INSTALLED AS GROUPS, ROWS OR STREET TREES.
- 18. PLANT SIZES SHOWN IN THE PLANT SCHEDULE ARE THE MINIMUM SIZES BEFORE PRUNING. ANY NECESSARY PRUNING SHALL BE PERFORMED AT THE TIME OF PLANTING. TREES AND SHRUBS OF LARGER SIZE MAY BE INSTALLED IF SIZES OF THE ROOTS OR BALLS ARE INCREASED PROPORTIONATELY
- 19. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING PLANTS TO MEET THE MINIMUM SIZE AND SPACING FOR CODE COMPLIANCE. FAILURE TO INSTALL THE PLANT MATERIAL PER THE PLAN AND PLANT SCHEDULE MAY JEOPARDIZE ISSUANCE OF FINAL CERTIFICATE OF OCCUPANCY. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING INSPECTIONS OF PLANT MATERIAL.
- 20. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS INDICATED IN THE PLANT SCHEDULE.
- 21. ALL PLANTS SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE. DURING AND AFTER INSTALLATION FOR COMPLIANCE WITH REQUIREMENTS FOR NAME, VARIETY, SIZE, QUALITY AND INSTALLATION.
- 22. AREAS DAMAGED BY ACTIVITIES OF THE LANDSCAPE CONTRACTOR SHALL BE RE-SEEDED/RE-PLANTED AND REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
- 23. CONTRACTOR SHALL PROVIDE TREE PROTECTION FENCING PER THE PLANS AND TREE PROTECTION FENCE DETAIL TO PROTECT ANY EXISTING TREES. SHRUBBERY AND PLANTING BEDS IN THE PLANTING AREA.
- 24. CONTRACTOR SHALL OBTAIN AUTHORIZATION PRIOR TO ANY CHANGES OF PLANT LOCATIONS DUE TO UTILITIES OR OTHER CONFLICTS. 25. NO WORK SHALL BE PERFORMED IN THE PUBLIC RIGHT-OF-WAY UNLESS ALL REQUIRED PERMITS
- ARE OBTAINED. 26. ALL EQUIPMENT AND TOOLS SHALL BE PLACED SO AS NOT TO INTERFERE OR HINDER PEDESTRIAN
- 27. CONTRACTOR SHALL COORDINATE ANY PLANTING OR IRRIGATION IN ANY RIGHT-OF-WAY WITH TOWN OF KNIGHTDALE. WAKE COUNTY, NCDOT, AND ANY OTHER APPLICABLE LOCAL TRANSPORTATION DEPARTMENTS AND REGULATORY AGENCIES AND ESP IF CONDITIONS WARRANT ADJUSTMENTS TO PLANT MATERIAL AND LOCATIONS.



PLANT_SCHEDULE

	CANOPY	STREET	TREES
--	--------	--------	-------

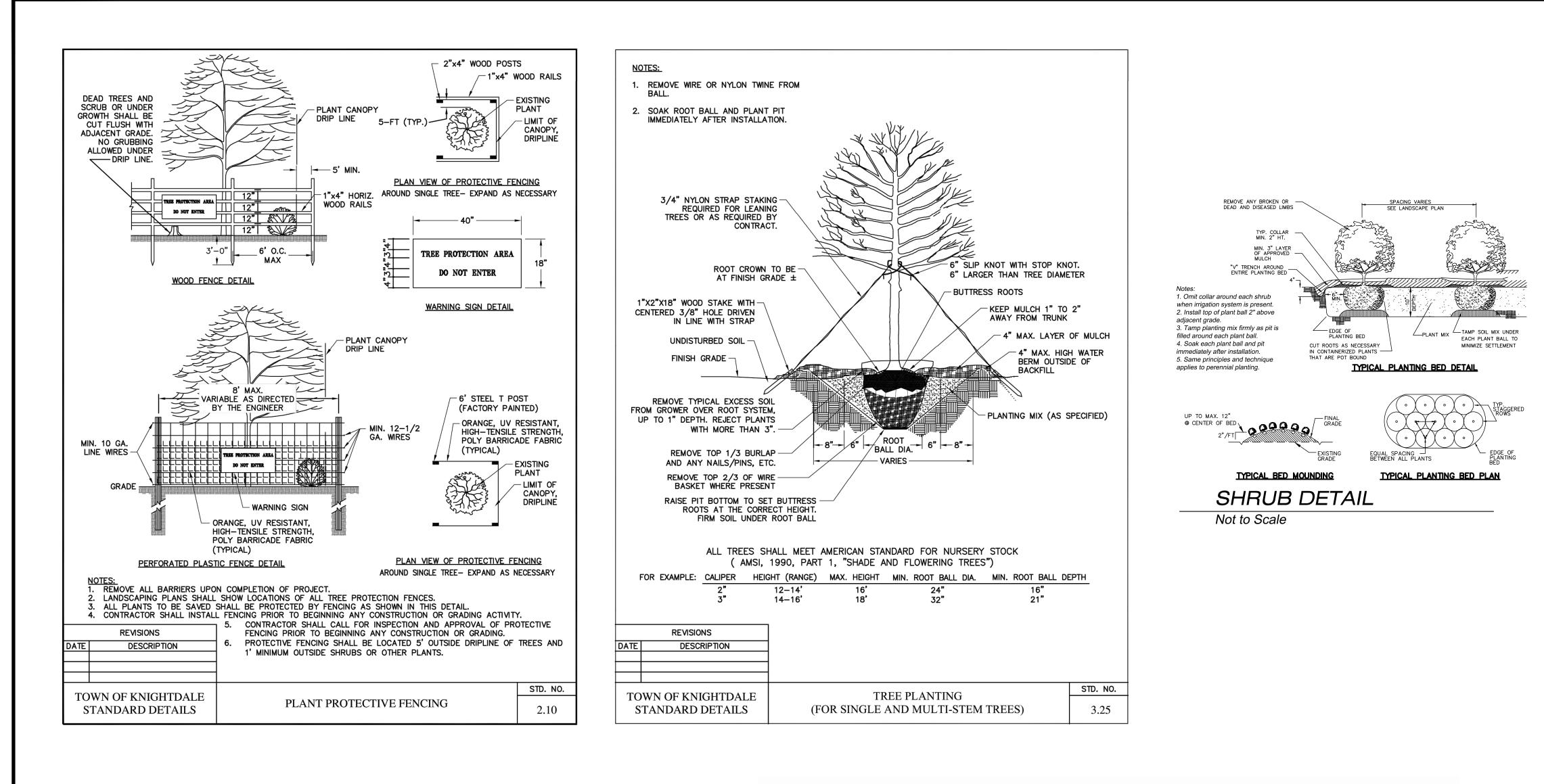
OR VEHICULAR TRAFFIC FLOW.

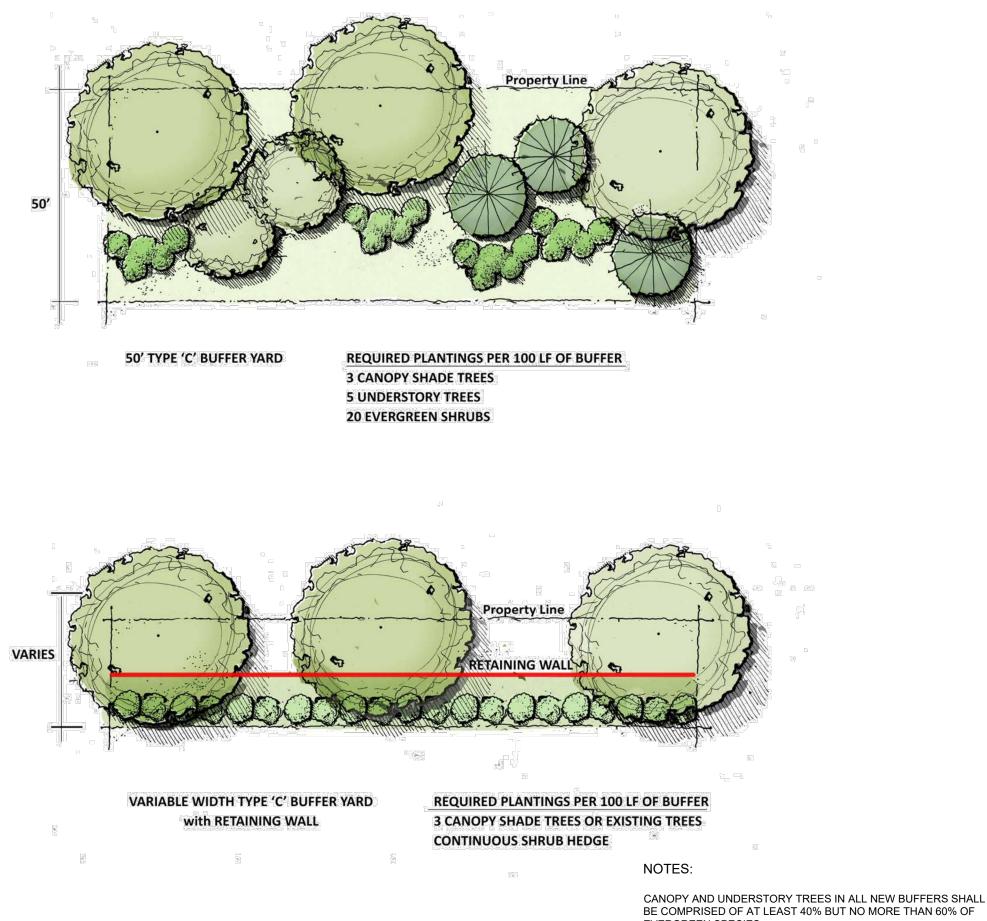
CANOPY S	STRE	ET TREES						
		CODE	<u>QTY</u>	BOTANICAL NAME / COMMON NAME	<u>ROOT</u>	CAL	SIZE	NOTES
((\cdot)	ARFL	32	Acer floridanum / Southern Sugar Maple	B & B	2"Cal	8' HT.	MATCH
(\odot	ARSA	36	Acer saccharum / Sugar Maple	B & B	2"Cal	8' HT.	MATCHI
(\bigcirc	PICH	46	Pistacia chinensis / Pistachio	B & B	2"Cal	8' HT.	MATCHI
(\odot	QUAC	69	Quercus acutissima / Sawtooth Oak	B & B	2"Cal	8' HT.	MATCH
(\bigotimes	ULPA	86	Ulmus parvifolia / Laceback Elm	B & B	2"Cal	8' HT.	MATCH
(\odot	ZEVG	68	Zelkova serrata `Village Green` / Sawleaf Zelkova	B & B	2" Cal	8' HT.	MATCH
UNDERST	ORY	STREET T	REES					
		CODE	<u>QTY</u>	BOTANICAL NAME / COMMON NAME	ROOT	CAL	SIZE	<u>NOTES</u>
(٢	LIMU	96	Lagerstoemia indica 'Muskogee' / Muskogee Crape Myrtel	B & B	1 1/4"Cal	6' HT.	3-4 Sten

1 INCH = 100 FT.

Know what's below. Call before you dig.

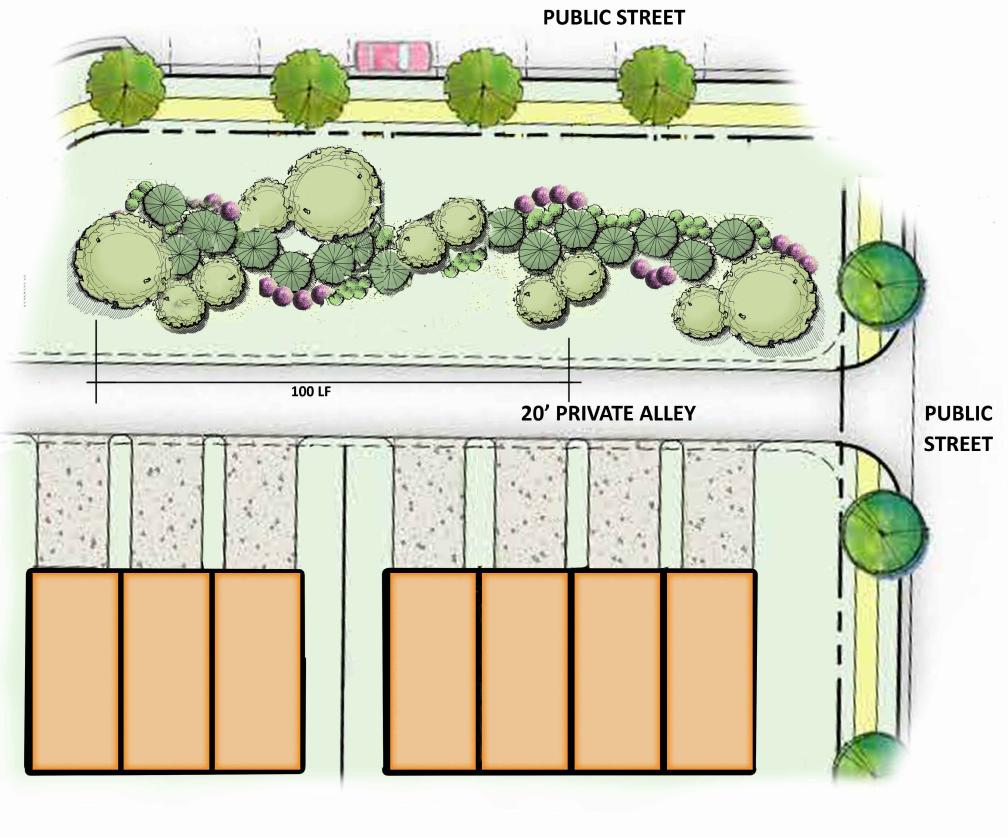
L1.0





BE COMPRISED OF AT LEAST 40% BUT NO MORE THAN 60% OF EVERGREEN SPECIES.

SHRUBS SHALL BE A MINIMUM OF 80% EVERGREEN SPECIES.



TOWNHOME SCREENING BUFFER

SCREENING BUFFER PLANTINGS/ 100 LF:

TWO (2) DECIDUOUS SHADE TREES, MIN. 10' TALL TWLEVE (12) DECIDUOUS AND EVERGREEN UNDERSTORY TREES, MIN. 6' TALL THIRTY (30) MIX OF EVERGREEN AND FLOWERING SHRUBS, MIN.18" TALL



Roadway LED



The Roadway LED is a green solution and great fit for streets, roads, long, narrow areas and parking lots. This energy-efficient luminaire delivers the light where it is needed while increasing visibility and reducing spill light to adjoining properties. Choose low to medium light output on wood or fiberglass poles (or mount on an existing pole). Available with one to four fixtures per pole, depending on the fixture/pole combination selected.

LED (Light Emitting Diode)

50 | 75 | 105 | 150 | 215 | 280 watts

Mounting heights 25', 30', 35'

Color

Poles

A	Disale	
Gra	y, Black	

Fiberglass Metal (special conditions) Wood

For additional information, visit us at duke-energy.com/OutdoorLighting or call us toll free at 966.769.6417.



Roadway LED

light source: L		
Wattage	- 25,050 (fixture dependent) Light Pattern	IESNA Backlight-Uplight - Glare (BUG) Rating
LED 50	IESNA Type III (medium oval)	B1-U0-G1
LED 75	IESNA Type II (long oval)	B1-U0-G2
LED 105	IESNA Type II (Iong oval)	82-U0-G3
LED 150	IESNA Type III (medium oval)	82-U0-G2
LED 215	IESNA Type III (medium ovai)	B3-U0-G3
LED 280	IESNA Type III (medium oval)	83-U0-G4



Color temperature: 4,000K Warm-up and restrike time: Instant on (no warm-up or restrike time)

Poles available:			
Name	Mountingheight	Calor	
Fiberglass	25', 30', 35'	Gray	
Fiberglass	25', 30', 35'	Black (additional cost)	
Wood	25', 30', 35'	Standard	
Metal (special conditions)*	25', 30', 35'	Gray	
Features		Benefits	
Little or no installation cost		Frees up capital for other projects	
Design services by lighting professional	ls included	Meets industry standards and lighting ordinance	
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 l	bill	Convenience and savings for you	
Turnkey operation		Provides hassle-free installation and service	
Backed by over 40 years of experience	0	A name you can trust to day and tomorrow	

*2' raised foundation available when required.

©2015 Duke Energy Corporation 151807 7/15

Lighting requirements:

-250' max average spacing -4,800 lumen min; B1, U1, G1 max on local street

-12,500 lumen min; B2, U2, G2 max on collector street - Lighting should be placed in a manner to minimize the casting of shadows on sidewalks.

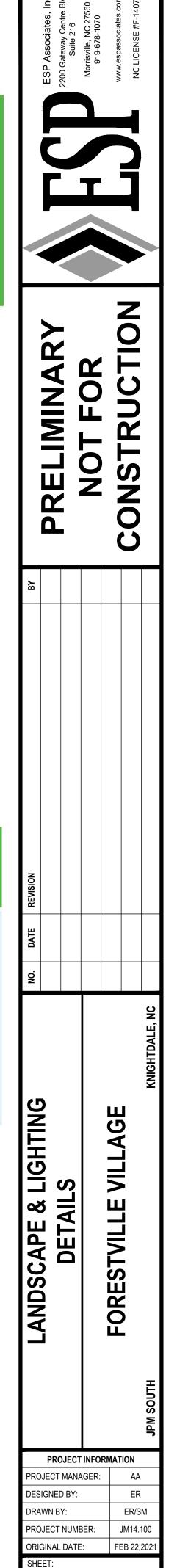
-Lighting shall be placed as far from street trees as the landscaping plan will allow.

-Lights on newly constructed streets shall be alternately staggered on each side of the street wherever

-Lighting shall be placed at all street intersections, in street curves and at the end of any street or cul-de-sac. -Fiberglass poles

-Costs for upgrades paid by developer

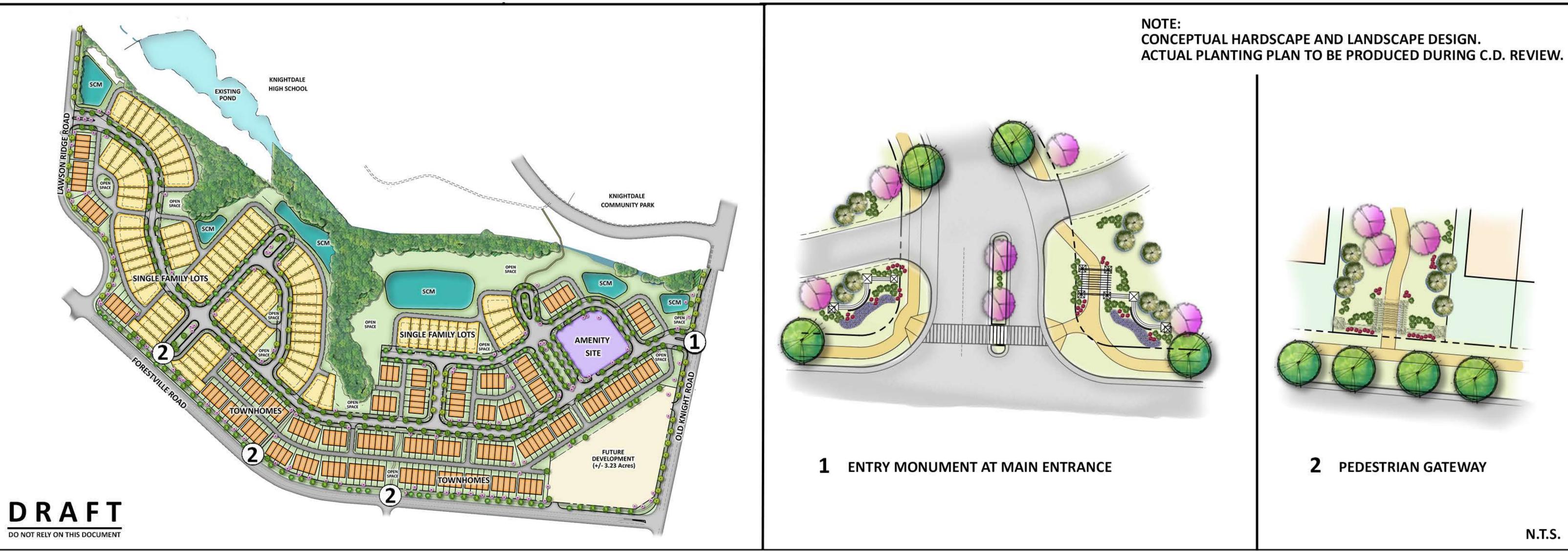




L1.1



ENTRY MONUMENT AT MAIN ENTRANCE





ESP Associates, Inc. 200 Gateway Centre Blvd., Suite 216 Morrisville, NC 27560 919.678.1070 www.espassociates.com



Forestville Village Entry Monument Exhibits

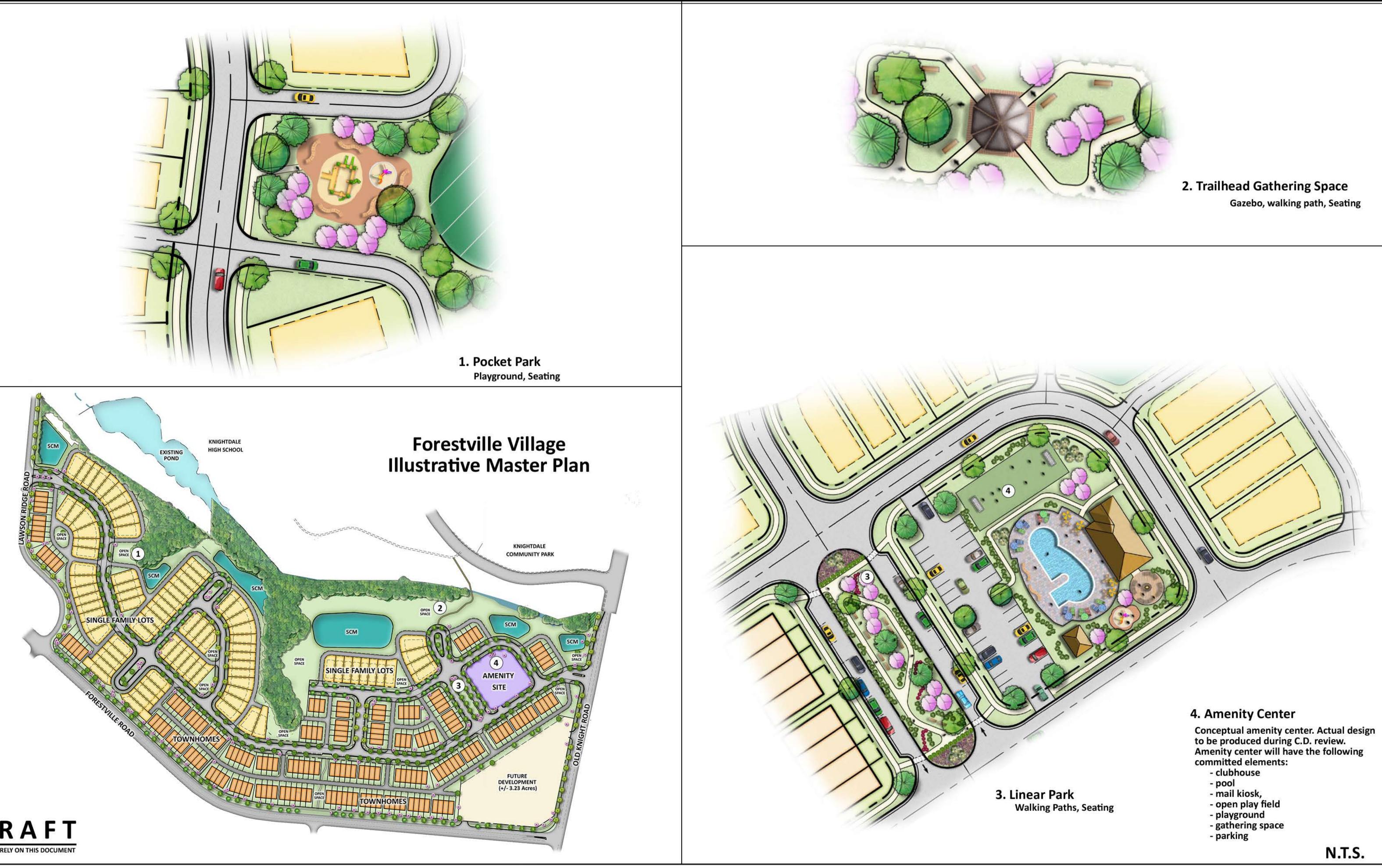
Illustrative renderings are conceptual Actual design, location and features subject to change.

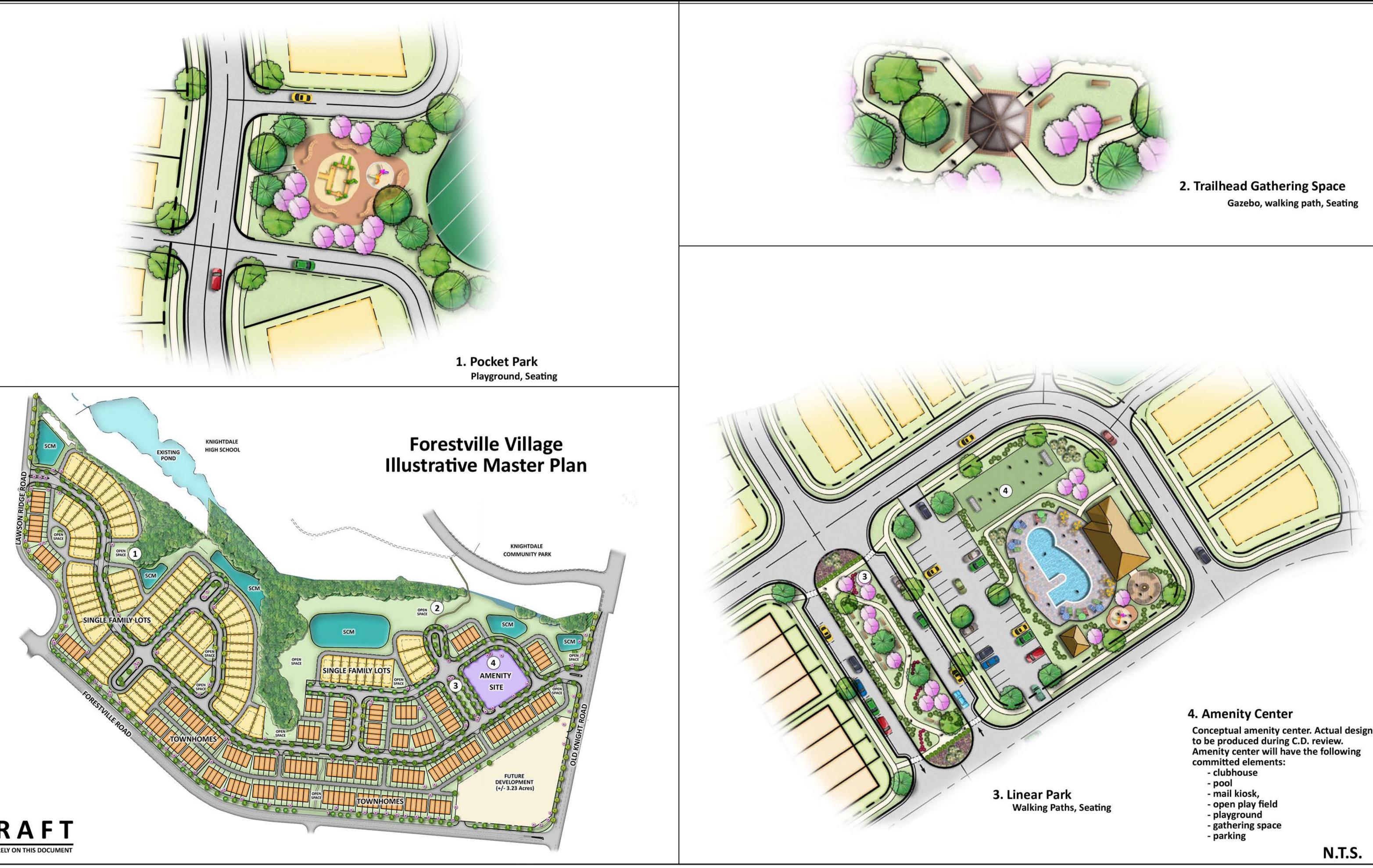
ESP Job JM14

February 22, 2021

JPM South **Development LLC.**

EX-1









ESP Associates, Inc. 2200 Gateway Centre Blvd., Suite 216 Morrisville, NC 27560 919.678.1070 www.espassociates.com



Forestville Village Open Space Exhibits

Illustrative renderings are conceptual. Actual design, location and features are subject to change.

ESP Job #JM14

February 22, 2021



JPM South **Development LLC.**

EX-2

FORESTVILLE VILLAGE

Planned Unit Development

Statement of Consistency and Design Guidelines For Planned Development District: PUD-NMX

JPM South Development



Vision Statement

JPM South Development is pleased to present the Forestville Village Planned Unit Development to the Town of Knightdale for consideration of rezoning for a Planned Development District from the current RT zoning to a Planned Unit Development with the underlying zoning designation of Neighborhood Mixed Use (PUD-NMX). Forestville Village is envisioned to be a compact, pedestrian friendly and unique subdivision located at the corner of Forestville Road and Old Knight Road. The new neighborhood will be part of an Activity Center/Neighborhood Node, as identified in the KnightdaleNext 2035 Comprehensive Plan, and will provide housing choices of single-family detached residential units and townhomes, a future development parcel at the corner of Forestville and Old Knight Roads, active and passive recreational open space, preservation of natural drainage features, and pedestrian/bike connections to adjoining schools and community parks.

Statement of Consistency: Comprehensive Plan

The Guiding Principles of the KnightdaleNext 2035 Comprehensive Plan (adopted August, 2018) provide the framework for the proposed zoning map amendment. The area encompassed by the proposed Forestville Village Planned Development District will further the goals of this APA-NC award winning plan by providing a compact, pedestrian friendly mixed-use development anchored by a Neighborhood Node parcel for future development, together with a compact and efficient development pattern of single-family attached and detached residential homes, walkable streets and a mix of uses to support anticipated town growth. The project furthers the initiatives and hierarchy of the growth and conservation priorities outlined in the Growth Framework, and will create an effective transition between existing lower density residential developments to the south and the municipal/institutional uses to the north.

Thoughtful consideration for the **natural environment** on-site is reflected in the Master Plan, allowing residents to **experience the natural settings** through the preservation of trees and undisturbed areas along existing streams, considerable set-asides for neighborhood parks, open spaces and amenities, and streetscape buffers along perimeter roadways. Multiple locations of both active and passive open space are located throughout the neighborhood and a pedestrian trail connection to the adjacent Knightdale Community Park and High School, together with a sidewalk connection to Forestville Road Elementary school will provide residents diverse **Park and Recreational** opportunities.

Planned roadway improvements to the existing Forestville Rd. and Old Knight Rd. along the project frontages will further the Town of Knightdale's **Transportation Plan.** These improvements will require coordination between the Town of Knightdale, NCDOT and the Developer. The internal sidewalk and roadway circulation system will allow residents the opportunity to walk/bike throughout the community and provide ease of access to the various recreational and community opportunities in close proximity to the neighborhood.

Forestville Village, with its planned mix of single-family and townhomes, will be a Great Neighborhood, promoting a distinct, safe and vibrant lifestyle community. The Community Design offers a distinct brand and sense of place, providing the Town of Knightdale residents Expanded Home Choices that will increase the Economic Vitality of the Town by providing an expanded residential and commercial tax base, while allowing the work force an opportunity to live in close proximity to businesses and employment opportunity areas in Knightdale.

Statement of Consistency: Unified Development Ordinance

Forestville Village Planned Unit Development will comply with the Town of Knightdale's UDO, standards and specifications for the design and construction of the proposed development. The following are the Specific Design Guidelines for Forestville Village:

Design Guidelines

Planned Development District-PUD-NMX: Planned Unit Developments-Neighborhood Mixed Use

Forestville Village Proposed Uses and Maximum Densities

•	Residential Uses: Single Family Detached Homes		Maximum Density: 280 Units		
	Single Family	(30'-40' x 100' min. Lots)	80-100 units		
	Townhomes	(20'-26' x 80'- 100' interior lots) (25'-31' x 80'- 100' end lots)	Up to 190 units		

Future Development Parcel

Up to 10,000 SF / acre

In addition to conditions of use listed in the Town of Knightdale's UDO the following uses are permitted and subject to the listed conditions:

- Amusements (5,000 SF or less)
- Animal Services

1. No outdoor boarding or outdoor Doggie Day Care shall be permitted.

- Banks
- Child/Adult Day Care Center
- Civic
- Community Support Organizations
- Cultural Facility
- General Retail (under 10,000 SF per single user)
- Government Services
- Institutional
- Medical Services (Doctor, Dentist, Vision)
 - 1. No after-hour urgent care
- Office
- Personal Services (Hair, Nail)
- Professional Services (Tutoring, Therapy, CPA)
- Public Safety Facility
- Studio Services (Music, Dance, Martial Arts)
- Neighborhood Retail/Restaurants (2,000 SF or less)

Restricted Uses:

The following uses, although allowed under the zoning district NMX in the Town of Knightdale UDO, are hereby prohibited by condition of approval for the Forestville Village Planned Development District: PUD-NMX:

- Apartments
- Bed and Breakfasts
- Rooming or Boarding House
- Residential uses

- Hotel/Motel or Inn
- Pet Daycare with outdoor play and/or boarding facility
- Business requiring Drive-Thru (Banks permitted)
- Neighborhood Shopping Center
- Auto Part Sales
- Indoor Amusements, greater than 5,000 sf
- Meeting Facilities
- Indoor or Outdoor Recreation Facilities
- Crematoriums/Funeral Homes
- Vehicle Services Maintenance/Body Work/Repair
- Bar/Tavern/Night Club
- Gas Stations/Convenience Store
- Big Box Retail
- Outdoor Amusements
- Theater, Live and/or Movie
- Manufacturing

Forestville Village Development Standards

Single Family:

с .	Dimensional Standards	
Minimum Lot Size:	30' x 100'	
Setbacks:		
Front:	10' min.	
Side:	20% of lot width	
Rear:	20' min. from alley centerline	
Minimum Driveway Length:	$20^{\prime}/1$ car length min.	
 Alley-loaded with 2-car garage 		
Townhomes:		
 Minimum Lot Size: 		
End Lots:	25' x 80'	
Internal Lots:	20' x 80'	

- Setbacks:
 - Front: Side:
- Rear:
- Minimum Driveway Length:
- Alley-loaded with 1 or 2-car garage
- Building Height:

2-3-Stories, Max. 45'

20'/ 1 car length min.

15' min. facing Forestville Rd, 25' max. typ. all lots

5' min. end units, 10' min. between bldgs.

15' min. from alley centerline

Street Standards

All streets within the Forestville Village PUD-NMX Planned unit Development shall conform to the street sections as attached. There shall be five (5) street sections:

Residential Street (Streets A, B, E & F)
Residential Street (Street C)
Residential Street (Streets C & F)
Residential Street (Streets A & B)
Residential Street (Street D
Street (Street D)
Street (Street D
Street (Street D)
Street (S

- Residential Entrance (Street A & C)
- Residential Alley

Variable ROW, Entrance with Median, 20' Face to Face Min. 20' Private Easement, 18' Pavement, Public Utility Easement.

Principle Street:	"A" shall have a minimum centerline radius of 150'.
Minor Streets:	"B" & "E" shall have a minimum centerline radius of 100'.
Loop Streets:	"C" & "F" shall meet minimum outside radius of 37.5"
	consistent with Town of Knightdale standard cul-de-sac.
Private Alleys:	Shall have a minimum centerline radius of 35'.

Private Alleys:

*Where minimum standards deviate from Town of Knightdale Ordinance, streets shall accommodate turning movements for fire safety apparatus (Quantum 105).

Landscape Standards:

The following Landscape Standards shall apply:

Perimeter Buffers:

- A fifty (50) foot Type 'C' Buffer shall be provided along the northern property line adjoining with the • Town of Knightdale Town Park and a portion of Knightdale High School. The buffer may incorporate portions of existing wetlands and stream buffers and existing vegetation shall be counted toward the Type 'C' Buffer requirements.
- A Variable Width (Minimum 10') Modified Buffer shall be provided along a portion of the northern • property line adjoining the Town of Knightdale High School as noted on PUD plan set.
- No buffer shall be required at utility crossings and cross-access pedestrian connections. •
- Disturbed areas within the buffer shall be planted with a minimum of:
- Three (3) canopy shade trees,
- Five (5) understory trees and •
- Twenty (20) evergreen shrubs per 100 LF of buffer. •
- The Modified Buffer shall provide a minimum of:
 - Six (6) foot fence or wall or retaining wall with grade change.
 - Three (3) canopy shade trees.
 - Continuous evergreen hedge. •

Screening Buffers:

The rear of all townhome units that are visible from a public right-of-way shall be screened with the following minimum standards:

- Two (2) deciduous shade trees, min. 10' tall per 100 LF.
- Twelve (12) deciduous and evergreen understory trees, min. 6' tall per 100 LF.
- Thirty (30) deciduous and evergreen shrubs, min. 18" tall per 100 LF.

Enhanced Landscape Areas:

Open Space areas throughout the Forestville Village development shall be landscaped with a combination of hardscape materials and landscape plantings to enhance the visual and functional values of these areas. Areas include, but are not limited to:

- Entrance drives at Old Knight Road and Lawson Ridge Road.
- Pedestrian Entry points along Forestville Road.
- Locations where townhomes back onto open space along public rights-of-way.
- Center islands between two internal streets (village greens).

- Location between residential units and the outparcel.
- Amenity Center and Mail Kiosk
- Public gathering locations.



-All Enhanced Landscape Areas shall be maintained by the HOA for Forestville Village. -Plantings may include Screening Buffers.

-All landscape plantings and hardscape elements and details shall be designed and reviewed during the construction drawing review process.

Architectural Elevations:

The streetscapes at Forestville Village are designed to promote a sense of community, security and connectedness. All homes shall be alley-loaded allowing structures to be placed closer to the fronting street with garages and driveways in the rear thereby de-emphasizing the vehicle. A strong emphasis on front porches and covered entries, each with a lead walk extending out to the public sidewalk fronting each lot shall encourage interaction amongst the residents of Forestville Village as well as providing walkways to the many open spaces within Forestville Village. Architectural controls for the homes to be constructed at Forestville Village will be an integral part of the vision for the community. Creating stimulating streetscapes that balance functionality with aesthetics is an important component of the lifestyle to be created at Forestville Village. While final elevations to be constructed will available in the future, the plans shall include the following elements to ensure consistency and quality throughout the community and the following architectural conditions shall apply:

Single-Family Houses

- Two story homes shall include a minimum of 1,800 heated square footage.
- Single story or 1.5 story homes shall include a minimum of 1,500 heated square footage
- All Single-Family houses shall have a 2-car garage
- All front entrances shall be raised from the finished grade (at the frontage line) a minimum of 18 inches in height and be wrapped in brick or stone on all fronts and on the sides of end units visible from the street. Sides and rears not visible from the street may be parged and painted to match the trim.
- Foundations shall be raised slabs, stem wall, or crawls 18" in height and wrapped in brick or stone on all fronts and on the sides of end units visible from the street. Sides and rears not visible from the street may be parged and painted to match the trim.
- Usable porches and stoops shall be a minimum of six (6) feet deep and extend more than 50% of the façade.
- Wall materials shall be limited to a combination of wood clapboard, cementitious fiber board, shingle/shake, drop siding, primed board, wood board and batten, brick and/or stone.
- Front facades shall be comprised of a minimum of two (2) of the listed wall materials, on a minimum of 50% of front facades one of the elements shall be brick or stone.
- Roof Materials may be comprised of the following...standing seam metal, asphalt shingles, copper or wood shingles
- No vinyl siding shall be permitted. Vinyl trim and soffit are permitted.
- Principle roofs shall have a pitch between 6:12 and 12:12
- Eaves shall project 8-12".

Townhomes

Townhome buildings shall be carefully planned to ensure that each building has vertical and horizontal steps as well as thoughtfully coordinated façades, roof elements, and color packages in order to create interesting and varied streetscapes. The following committed conditions shall help insure diversity and quality:

- Townhomes shall include a minimum of 1,400 heated square footage.
- Townhome units may vary in width from 20' 26' wide. A minimum of 60% of Townhome units shall be 22' wide or wider.
- Townhomes less than 22' in width may have a 1 car garage and all Townhomes 22' or wider shall have a 2-car garage.
- Townhomes may be 2 story or 3 story buildings. Up to a maximum of 40% of the townhome units may be 2 story.
- Townhouse Buildings shall have doors, stoops, balconies, terraces and/or windows on any façade clearly visible from a public right-of-way.
- To provide privacy, all front entrances shall be raised from the finished grade (at the frontage line) a minimum of 18 inches.
- Foundations shall be raised slabs, stem walls or crawls and clad in brick or stone on front and sides with parging (painted to match trim) on rear.
- Wall materials shall be limited to a combination of wood clapboard, cementitious fiber board, shingle/shake, drop siding, primed board, wood board and batten, brick and/or stone.
- Roof Materials may be comprised of the following...standing seam metal, asphalt shingles, copper or wood shingles
- Front facades shall be comprised of a minimum of two (2) of the listed wall materials, on a minimum of 50% of front facades one of the elements shall be brick or stone.
- No vinyl siding shall be permitted. Vinyl trim and soffit are permitted.
- Principle roofs shall have a pitch between 6:12 and 12:12.

- Eaves shall project 8-12".
- All front entry doors shall have window inserts.
- All townhomes shall provide detailed design along all facades visible from a public right-of-way. A minimum of one (1) architectural feature from three (3) of the four (4) categories shall be utilized.

A. Entrance

- Recessed Entry with 6" min. width door trim
- Covered stoop (5'x5' min)
- Usable porch a minimum of 5' deep and extending more than 50% of the façade
- B. Building Off-Set (Min. of 2 per building cluster)
 - Façade Off-set (12" min.).
 - Roof Line off-set (12" min.).
- C. Façade
 - Bay Window.
 - Balcony.
 - Window Trim (4" min. width).
 - Patterned Finish (Scales, Shakes, Wainscoting, etc.)
- D. Roof
 - Dormer
 - Gable
 - Cupola/Tower/Chimney