Roseland Townhomes

GENERALIZED DEVELOPMENT PLAN

SITE DATA TABLE			
1 TAX MAP REFERENCE	/ OWNER / INSTRUMENT REFERENCE:	TAX MAP #	<u>OWNER</u>

1	TAX MAP REFERENCE / OWNER / INSTRUMENT REFERENCE:	TAX MAP #	<u>OWNER</u>	<u>INSTRUMENT#</u>
		24B-2-12-1	SPECTRUM PARTNER	170020134
		24B-2-12-2	INVESTMENTS, LLC	170020134
		24B-2-12-3	e e e e e e e e e e e e e e e e e e e	170020133
		24B-2-14-16	(SAME OWNER FOR	170020133
		24B-2-14-17	ALL PARCELS)	170020134
		24B-2-14-18		170020134
2	DROIECT AREA.	1.0124	ACDEC / 44 100 14	CO ET

- HUDGINS ROAD PROPOSED RIGHT-OF-WAY (R.O.W.) DEDICATION:	0.0344 ACRES /	1,500.00	SQ. FT.
NET PROJECT AREA:	0.9780 ACRES /	42,600.14	SQ. FT.
PROPOSED AREA OF DISTURBANCE (INCLUDES OFF-SITE):	0.9114 ACRES /	39,700	SQ. FT.
NOTE: PROPOSED AREA OF DISTURNACE IS PRELIMINARY AND SUBJECT TO	MINOR REVISION		

*	
CURRENT ZONING:	RESIDENTIAL 1 (R-1) DISTRICT
PROPOSED ZONING:	MIXED USE DISTRICT, RESIDENTIAL TOWNHOUSE SU
	DISTRICT (MU-2)

PROPOSED ZONING:			MIXED USE DISTRICT, RESIDENTIAL TOWNHOUSES			HOUSE SU	
				D	ISTRICT (MU-	-2)	. 1 1.
BY-RIGH	IT (R-1 DISTRICT) DEVE	LOPMENT TAB	SULATIONS:				
MAXIM	IIM PERMITTED RESIDE	NTIAL DENSIT	v.	1 D II DER 2 ACRE	· · ·	0.51	LIMIT

PROPOSED DEVELOPMENT / DENSITY:		
PROPOSED NUMBER OF LOTS:		

	PROPOSED NUMBER OF LOTS: PROPOSED DENSITY:	14 13.83	(20' x 34' TOWNHOMES) DU/ACRE (GROSS ACREAGE)
5	OVERLAY DISTRICTS:	HIGHWAY CORI	RIDOR OVERLAY DISTRICT (CORNER (

SQ. FT. / 26%

ACRES 15.5%

6	EXISTING USE:) SINGLE-FAMILY DWELLING TED INTO SIX (6) LOTS
	TYPES OF PROPOSED USE:	TOW	NHOMES	S (TYPE 3 BUILDING)
7	PROPOSED MAXIMUM HEIGHT:	38	FEET	
	MINIMUM YARDS:			
	PRIMARY STREET	5	FEET	
	SIDE	5	FEET	
	SIDE, COMMON LOT LINE	0/5	FEET	(5 FEET - CORNER LOT)
	REAR	15	FEET	
	MINIMUM LOT AREA:	NONE		
	MINIMUM LOT WIDTH:	NONE		
	BUILD-TO-ZONE:			
	PRIMARY STREET	5 / 25	FEET	(MIN / MAX)

SEE SHEET 3A FOR ADD'L INFORMATION % OF OPEN AREA ON THE LOT ON AVERAGE:

% OF BUILDING IN STREET BTZ:

8	TRIP GENERATION COMPUTATIONS: ITE LAND USE CODE:	230	
	ITE RATE: (WEEKDAY TOTAL): ESTIMATED VEHICLE TRIPS (WEEKDAY):	5.86 82.04	TRIPS PER DWELLING UNIT TRIPS PER DAY
	ITE RATE (AM PEAK): ESTIMATED VEHICLE TRIPS (AM PEAK):	0.44 6.16	TRIPS PER DWELLING UNIT TRIPS (AM PEAK)
	ITE RATE (PM PEAK): ESTIMATED VEHICLE TRIPS (PM PEAK):	0.52 7.28	TRIPS PER DWELLING UNIT TRIPS (PM PEAK)
)	HISTORIC BUILDINGS, ARCHAEOLOGICAL FEATURES OR HISTORIC DISTRI	ICTS:	NONE KNOWN
0	PLACES OF BURIAL:		NONE KNOWN
1	FLOODPLAINS, RPAS, WETLANDS, STEEP SLOPES, DAM BREAK INUNDATION	ZONES:	NONE PRESENT
2	PARKING: REQUIREMENT: 2 SPACES PER UNIT = PROVIDED:	28	SPACES
	2 SPACES PER UNIT (1 GARAGE SPACE & 1 DRIVEWAY SPACE) = GUEST SPACES	28	SPACES
	TOTAL PROVIDED PARKING:	10 38	SPACES SPACES

		·	
LOT COVERAGE & IMPERVIOUS AREA:			
MINIMUM % OF OPEN AREA ON THE LOT ON AVERAGE:	15%	PERCENT	
PROPOSED TOTAL ON-LOT OPEN AREA:	6,000.00	SQ. FT.	
AREA OF PROPOSED LOTS:	22,650.00	SQ. FT.	

NOTE: FINAL PROVIDED PARKING MAY BE REDUCED AT FINAL SITE PLAN SUBJECT TO MINIMUM REQUIREMENT

PROPOSED ON LOT OPEN AREA ON AVERAGE: PROPOSED COMMON OPEN SPACE NOTE: OPEN SPACE MAY VARY SUBJECT TO MINIMUM REQUIREMENT.

TOTAL GALLONS PER DAY (GPD)

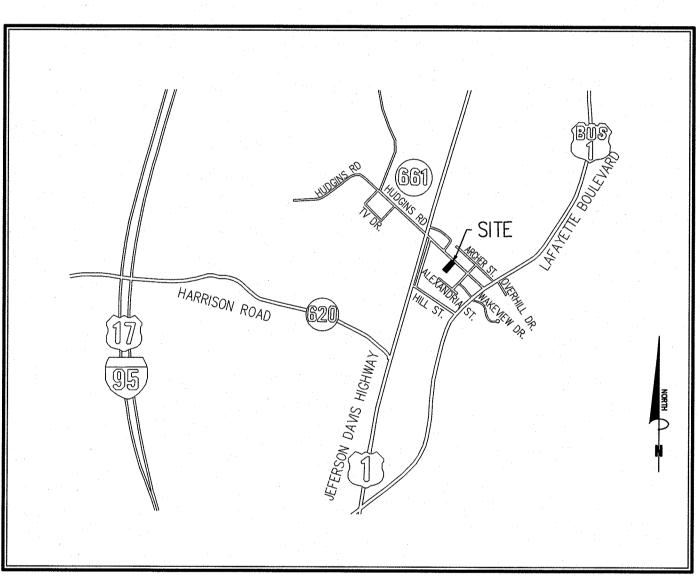
PROPOSED IMPERVIOUS AREAS (APPROXIMATE):		
BUILDINGS:	9,800	SQ. FT.
ROADS/PARKING:	10,100	SQ. FT.
DRIVEWAYS:	4,800	SQ. FT.
SIDEWALKS:	1,250	SQ. FT.
TOTAL IMPERVIOUS AREA:	25.950	SO. FT.

SEWER USAGE ESTIMATE:	
GALLONS PER UNIT	350
TOTAL GALLONS PER DAY (GPD)	4,900
WATER USAGE ESTIMATE:	

GALLONS PER UNIT

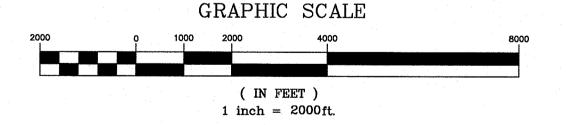
TAX MAP #24B-2-12-1 / 216 HUDGINS ROAD / INSTRUMENT# 170020134 TAX MAP #24B-2-12-2 / 214 HUDGINS ROAD / INSTRUMENT# 170020134 TAX MAP #24B-2-12-3 / 212 HUDGINS ROAD / INSTRUMENT# 170020133 TAX MAP #24B-2-14-16 / NO ADDRESS ASSIGNED / INSTRUMENT# 170020133 TAX MAP #24B-2-14-17 / NO ADDRESS ASSIGNED / INSTRUMENT# 170020134 TAX MAP #24B-2-14-18 / NO ADDRESS ASSIGNED / INSTRUMENT# 170020134

BATTLEFIELD VOTING DISTRICT SPOTSYLVANIA COUNTY, VIRGINIA REZONING #: R17-0013



 $\frac{\text{VICINITY MAP}}{1" = 2000'}$

MAJOR INTERSECTIONS WITHIN ONE-HALF MILE OF DEVELOPMENT: HUDGINS ROAD @ ROUTE 1 - 0.13 MILES TO THE NORTHWEST OF SITE HUDGINS ROAD @ LAFAYETTE BOULEVARD - 0.16 MILES TO THE SOUTHEAST OF THE SITE



OWNER / APPLICANT

SPECTRUM PARTNER INVESTMENTS, LLC FREDERICKSBURG, VA 22401 P: (540) 368-2688

LAND USE ATTORNEY

PLANNER / ENGINEER

BOWMAN CONSULTING GROUP 650A NELMS CIRCLE FREDERICKSBURG, VA 22406 P: (540) 371-0268 F: (540) 371-3479 CONTACT: MR. WILLIAM S. PYLE, P.E.

SHEET INDEX DESCRIPTION TITLE SHEET BOUNDARY PLAT GENERALIZED DEVELOPMENT PLAN-|BUILD-TO-ZONE (BTZ) EXHIBIT GENERALIZED LANDSCAPE PLAN SWM CONCEPT PLAN & SIGHT DISTANCE PROFILE

TOTAL PAGES: 6

APPROVAL

AGENT, BOARD OF SUPERVISORS DATE

R17-0013 COUNTY PROJECT NUMBER

PLAN STATUS 1/17/17 1st SUBMISSION 01/19/18 | 2nd SUBMISSION 2/27/18 3rd SUBMISSION 04/09/18 | 4th SUBMISSION

DATE DESCRIPTION DESIGN DRAWN CHKD JOB No. 100022-01-001

DATE: NOVEMBER 2017 FILE No. 100022-D-ZP-001 OF 5

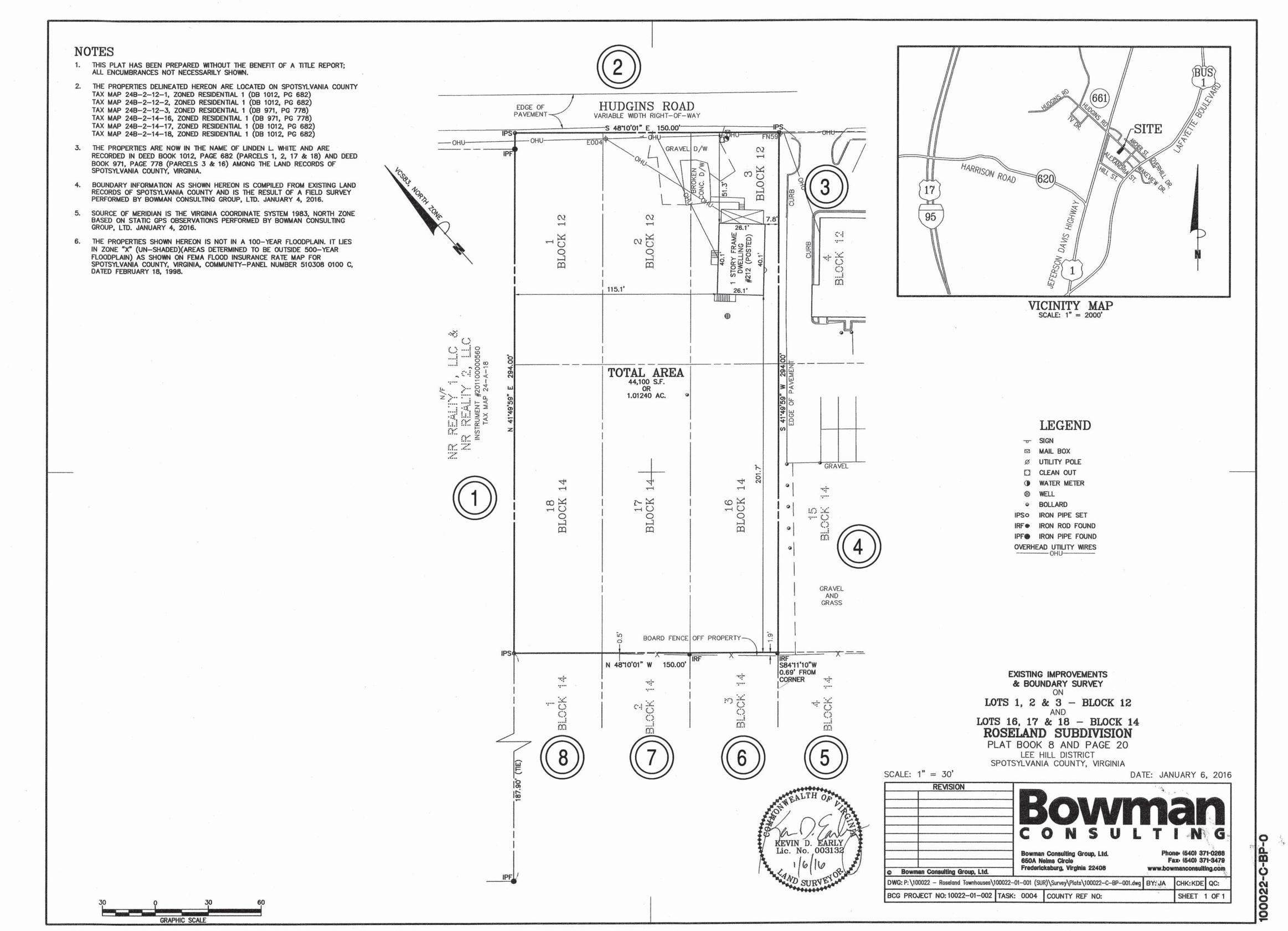
LIST OF CONTIGUOUS PROPERTY OWNERS

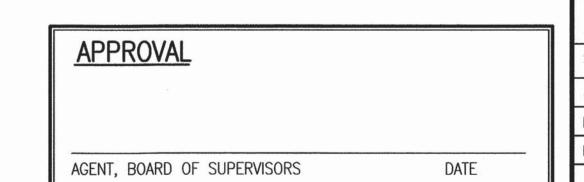
ID NO.	TAX MAP NO.	OWNER	ZONING	LAND USE	
1	24-A-18	24-A-18 NR REALTY 2 LLC		VEHICLE SALES	
2	24-A-16A	24-A-16A RADLEY MANAGEMENT LLC		VEHICLE PARKING	
3	24B-2-12-4	CENTRAL VIRGINIA HOUSING COALITION	0-1	OFFICE	
4	24B-2-14-15	CENTRAL VIRGINIA HOUSING COALITION	0-1	VACANT	
5	24B-2-14-4	MARTY W. COVINGTON	R-1	SINGLE-FAMILY RESIDENTIAL	
6	24B-2-14-3	BARRY OR DONNA SULLIVAN	R-1	SINGLE-FAMILY RESIDENTIAL	
7	24B-2-14-2	DEBBIE P. HAWKINS	R-1	SINGLE-FAMILY RESIDENTIAL	
8	24B-2-14-1	-7-14-1 R-1		SINGLE-FAMILY RESIDENTIAL	

UPDATE TO BOUNDARY SURVEY NOTE #3: SUBSEQUENT TO THE COMPLETION OF THE BOUNDARY SURVEY THE OWNERSHIP OF THE PARCELS WERE TRANSFERRED TO SPECTRUM PARTNER INVESTMENTS, LLC ON NOVEMBER 8, 2017 AS FOLLOWS:

- VIA INSTRUMENT #LR170020133 TO THE PARCELS IDENTIFIED AS TAX MAP #24B-2-12-3 (212 HUDGINS ROAD) & 24B-2-14-16 (NO ADDRESS ASSIGNED)
- VIA INSTRUMENT #LR170020134 TO THE PARCELS IDENTIFIED AS TAX MAP #24B-2-12-1 (216 HUDGINS ROAD), TAX MAP #24B-2-12-2 (214 HUDGINS ROAD), TAX MAP #24B-2-14-17 (NO ADDRESS ASSIGNED), AND TAX MAP #24B-2-14-18 (NO ADDRESS ASSIGNED)

THE TRANSFER OF OWNERSHIP APPLIES TO ALL PARCELS SUBJECT TO THIS APPLICATION.





TOWNHOMES

EVELOPMENT PLAN

CONTIGUOUS OWN

AND

ROSELAND GENERALIZED DE

R17-0013

COUNTY PROJECT NUMBER

PLAN STATUS /17/17 1st SUBMISSION 1/19/18 | 2nd SUBMISSION 02/27/18 3rd SUBMISSION 04/09/18 4th SUBMISSION

DATE DESCRIPTION DESIGN DRAWN JOB No. 100022-01-001

DATE: NOVEMBER 2017 FILE No. 100022-D-ZP-001

SHEET 2 OF 5

Cad file name: P:\100022 - Roseland Townhouses\100022-01-001 (PLN) - Roseland Townhomes\Planning\Rezoning\DWG\002-100022-D-ZP-001-BDY.dwg

TOWNHOMES VELOPMENT PLAN ND

ROSELAI GENERALIZE

R17-0013 COUNTY PROJECT NUMBER WEALTH OF

WILLIAM S. PYLE Lic. No.037555 04/09/18 SIONAL PLAN STATUS /17/17 | 1st SUBMISSION 01/19/18 | 2nd SUBMISSION 02/27/18 3rd SUBMISSION

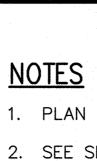
04/09/18 4th SUBMISSION

DATE DESCRIPTION SG SG WSP DESIGN DRAWN CHKD

H: 1"=20' SCALE JOB No. 100022-01-001 DATE: NOVEMBER 2017 FILE No. 100022-D-ZP-001

SHEET 3 OF 5

DATE

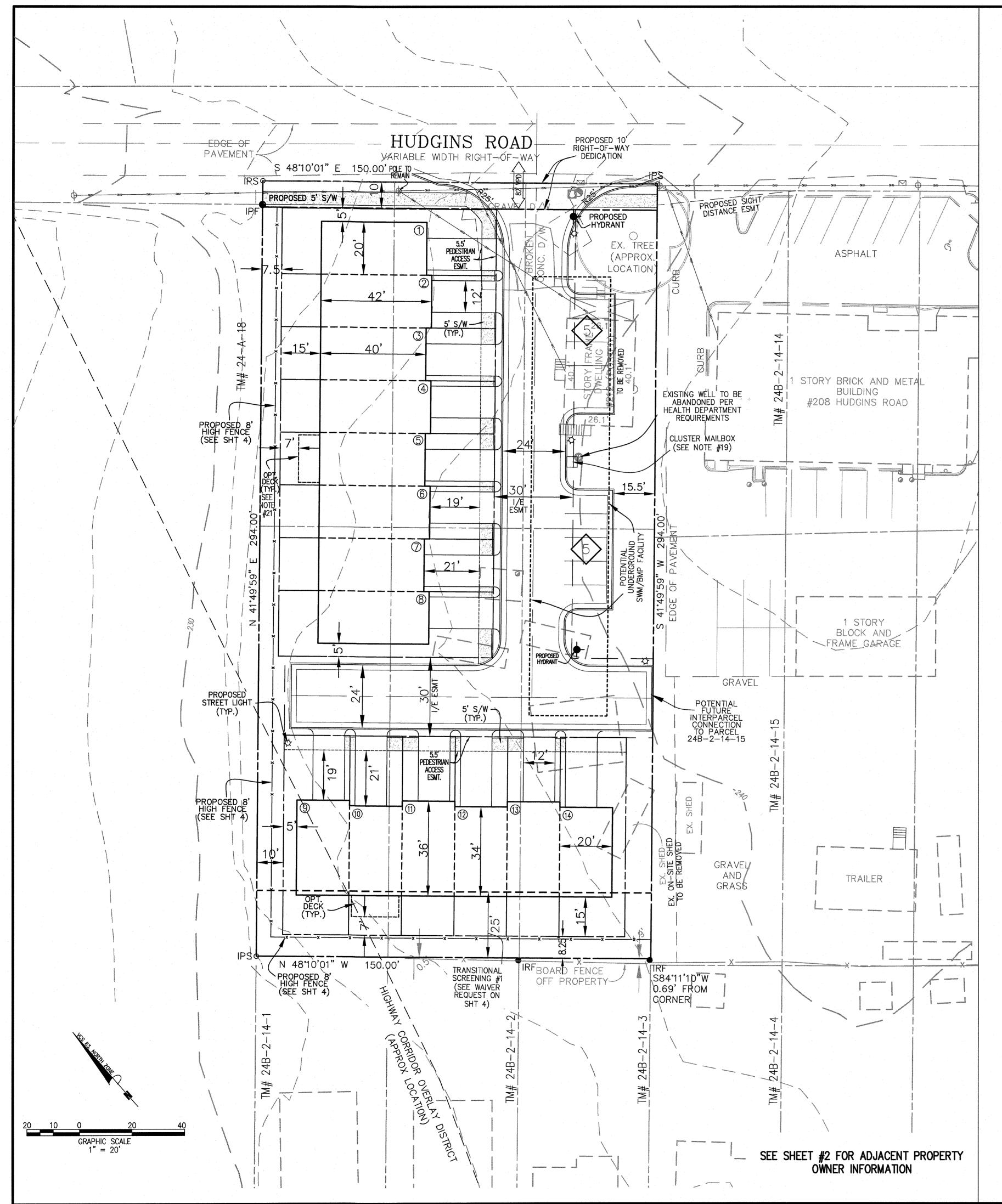


- 1. PLAN IS SUBJECT TO MINOR REVISION WITH FINAL ENGINEERING.
- 2. SEE SHEET #1 FOR ADDITIONAL NOTES CONCERNING PROPOSED DEVELOPMENT.
- 3. SEE SHEET #2 FOR ADJACENT PROPERTY OWNER INFORMATION
- 4. BOTH PUBLIC WATER AND SEWER ARE AVAILABLE AND WILL BE USED TO SERVE THE PROPOSED DEVELOPMENT.
- 5. BOUNDARY INFORMATION AS SHOWN HEREON IS COMPILED FROM EXISTING LAND RECORDS OF SPOTSYLVANIA COUNTY AND IS THE RESULT OF A FIELD SURVEY PERFORMED BY BOWMAN CONSULTING GROUP, LTD. JANUARY 4, 2016.
- 6. SOURCE OF MERIDIAN IS THE VIRGINIA COORDINATE SYSTEM 1983, NORTH ZONE BASED ON STATIC GPS OBSERVATIONS PERFORMED BY BOWMAN CONSULTING GROUP, LTD. JANUARY 4, 2016.
- THE PROPERTIES SHOWN HEREON IS NOT IN A 100-YEAR FLOODPLAIN. IT LIES IN ZONE "X" (UN-SHADED)(AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN) AS SHOWN ON FEMA FLOOD INSURANCE RÂTE MAP FOR SPOTSYLVANIA COUNTY, VIRGINIA, COMMUNITY-PANEL NUMBER 510308 0100 C, DATED FEBRUARY 18, 1998.
- 8. TOPOGRAPHY SHOWN IN THIS PLAN WAS OBTAINED FROM SPOTSYLVANIA COUNTY. THE CONTOUR INTERVAL IS 2'.
- 9. PER THE SPOTSYLVANIA COUNTY GIS THERE ARE NO WETLANDS AND/OR RESOURCE PROTECTION AREAS (RPA) LOCATED ON THE SUBJECT PROPERTIES.
- 10. THERE ARE NO KNOWN CEMETERIES OR HISTORIC BUILDINGS ON THIS SITE.
- 11. THE PROPOSED SITE WILL CONTAIN PRIVATE ROADS MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
- 12. ALL OPEN SPACE AREAS AND COMMON AREAS SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
- 13. THE STREETS SHALL BE DESIGNED IN ACCORDANCE WITH THE 2011 APPENDIX B(1) SUBDIVISION STREET DESIGN GUIDE (SSAR) OF THE VDÓT ROAD DESIGN MANUAL INCLUDING A MINIMUM 5' CONCRETE PEDESTRIAN SIDEWALK IN FRONT OF ALL PROPOSED RESIDENTIAL UNITS.
- 14. STREET LIGHTING WILL BE PROVIDED IN CONFORMANCE WITH ARTICLE 5-7.2.A.1 AND 23-6.28.7 OF THE DSM.
- 15. EROSION CONTROL FOR THIS SITE WILL BE PROVIDED THROUGH ONSITE MEASURES IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENTATION CONTROL HANDBOOK.
- 16. STORMWATER SHALL BE CONTROLLED THROUGH AN ON-SITE STORM DRAINAGE SYSTEM IN ACCORDANCE WITH THE VASWMH.
- 17. FIRE AND RESCUE STATION NO. 4 IS LOCATED APPROXIMATELY ONE MILE OF THIS SITE.
- 18. THE PROJECT SHALL BE DEVELOPED IN ONE (1) PHASE.
- 19. CLUSTER BOX UNIT (CBU) TO BE INSTALLED IN COMPLIANCE WITH UNITED STATES POSTAL SERVICE (USPS) REQUIREMENTS.
- 20. SOLID WASTE AND RECYCLING SHALL BE HANDLED THROUGH THE USE OF INDIVIDUAL HOUSEHOLD CONTAINERS FOR EACH HOUSING UNIT. COLLECTION OF SOLID WASTE AND RECYCLING SHALL BE VIA A PRIVATE REFUSE COLLECTION COMPANY LICENSED TO PERFORM SUCH SERVICES. DISPOSAL SHALL BE AT A COUNTY APPROVAL DISPOSAL SITE.
- 21. PROPOSED DECKS SHALL ONLY BE CONSTRUCTED FROM THE FIRST FLOOR OF THE PROPOSED TOWNHOUSE UNITS.

JUSTIFICATION STATEMENT

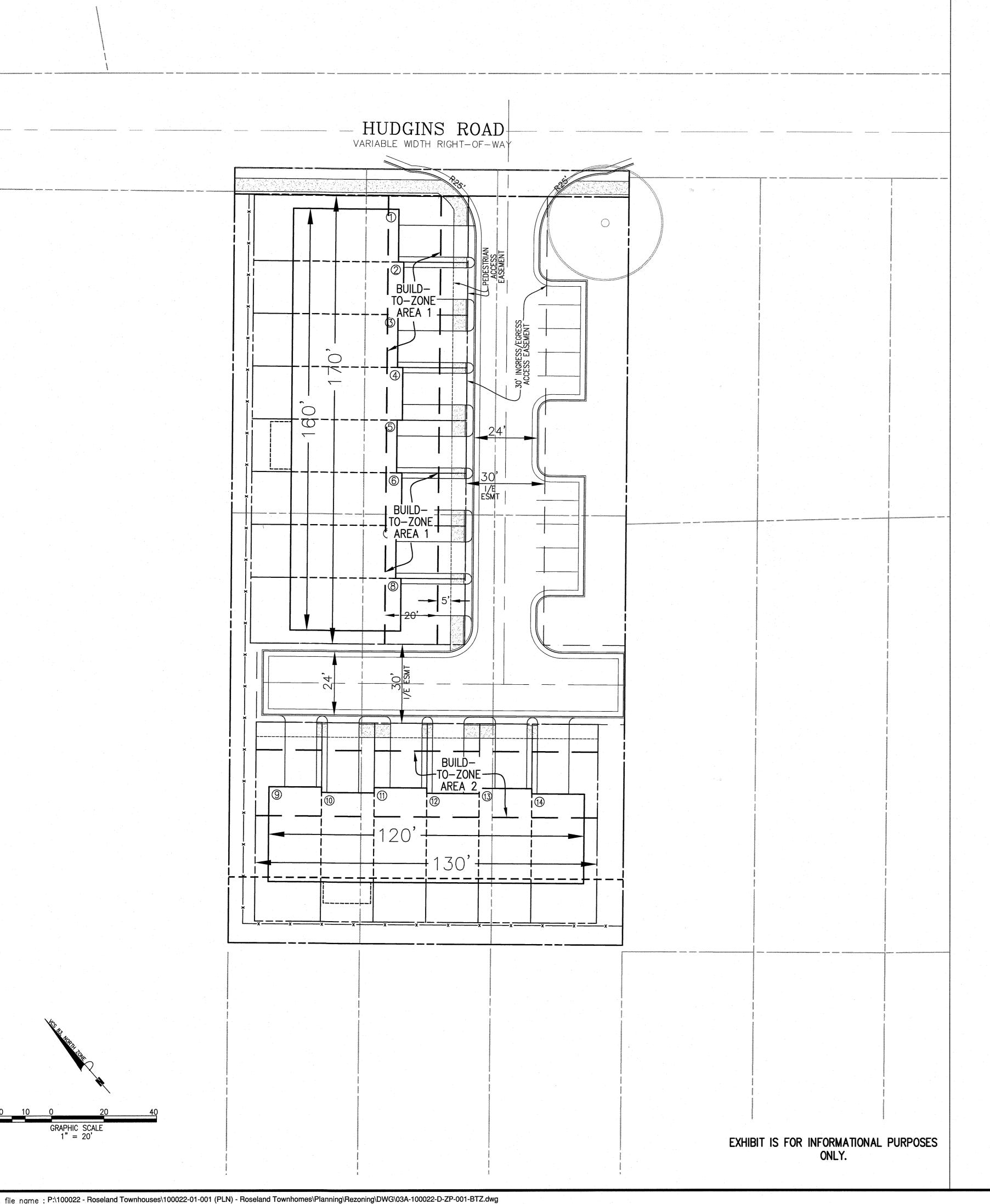
THE ROSELAND TOWNHOMES PROJECT SUPPORTS SPOTSYLVANIA'S MIXED USE RECLASSIFICATION CRITERIA AND STANDARDS AS IT CREATES A FLEXIBLE APPROACH TO INFILL REDEVELOPMENT AND IS MIXED IN WITH A VARIETY OF INTERRELATED AND COMPATIBLE COMMERCIAL, OFFICE, AND RESIDENTIAL USES. THE PROJECT IS ALSO PEDESTRIAN-ORIENTED IN THE FOLLOWING WAYS:

- 1. CONNECTIVITY OF ROAD NETWORKS;
- 2. CONNECTED PEDESTRIAN NETWORKS AND PEDESTRIAN-FRIENDLY ROAD DESIGN;
- 3. REDUCED FRONT AND SIDE YARD BUILDING SETBACKS;
- 4. INCORPORATES A NEW MIX OF HOUSING TYPES; AND
- 5. MAINTAINS THE GENERAL CHARACTER OF ADJACENT PROPERTIES AND SURROUNDING NEIGHBORHOODS.



AGENT, BOARD OF SUPERVISORS

Cad file name: P:\100022 - Roseland Townhouses\100022-01-001 (PLN) - Roseland Townhomes\Planning\Rezoning\DWG\003-100022-D-ZP-001-GDP.dwg



NOTES

- 1. PLAN IS SUBJECT TO MINOR REVISION WITH FINAL ENGINEERING.
- 2. THE APPLICANT IS PROVIDING A 5.5' WIDE PEDESTRIAN ACCESS EASEMENT OUTSIDE OF THE PROPOSED 30' WIDE INGRESS/EGRESS EASEMENT. THE APPLICANT PROPOSES THAT THE BUILD-TO-ZONE REQUIREMENTS BE MEASURED/CALCULATED FROM PEDESTRIAN ACCESS EASEMENT.

BUILD-TO-ZONE CALCULATIONS

BUILD-TO-ZONE AREA 1

BUILDING LENGTH = 160' BLOCK LENGTH = 170'

% IN B-T-Z $= \pm 94\%$

BUILD-TO-ZONE AREA 2

BUILDING LENGTH = 120' BLOCK LENGTH = 130'

 $= \pm 92\%$ % IN B-T-Z

<u>APPROVAL</u>

DATE AGENT, BOARD OF SUPERVISORS

TOWNHOMES

DEVELOPMENT PLAN

ZONE (BTZ) EXHIBIT

BUILD-TO-

ROSELAND GENERALIZED DE

R17-0013

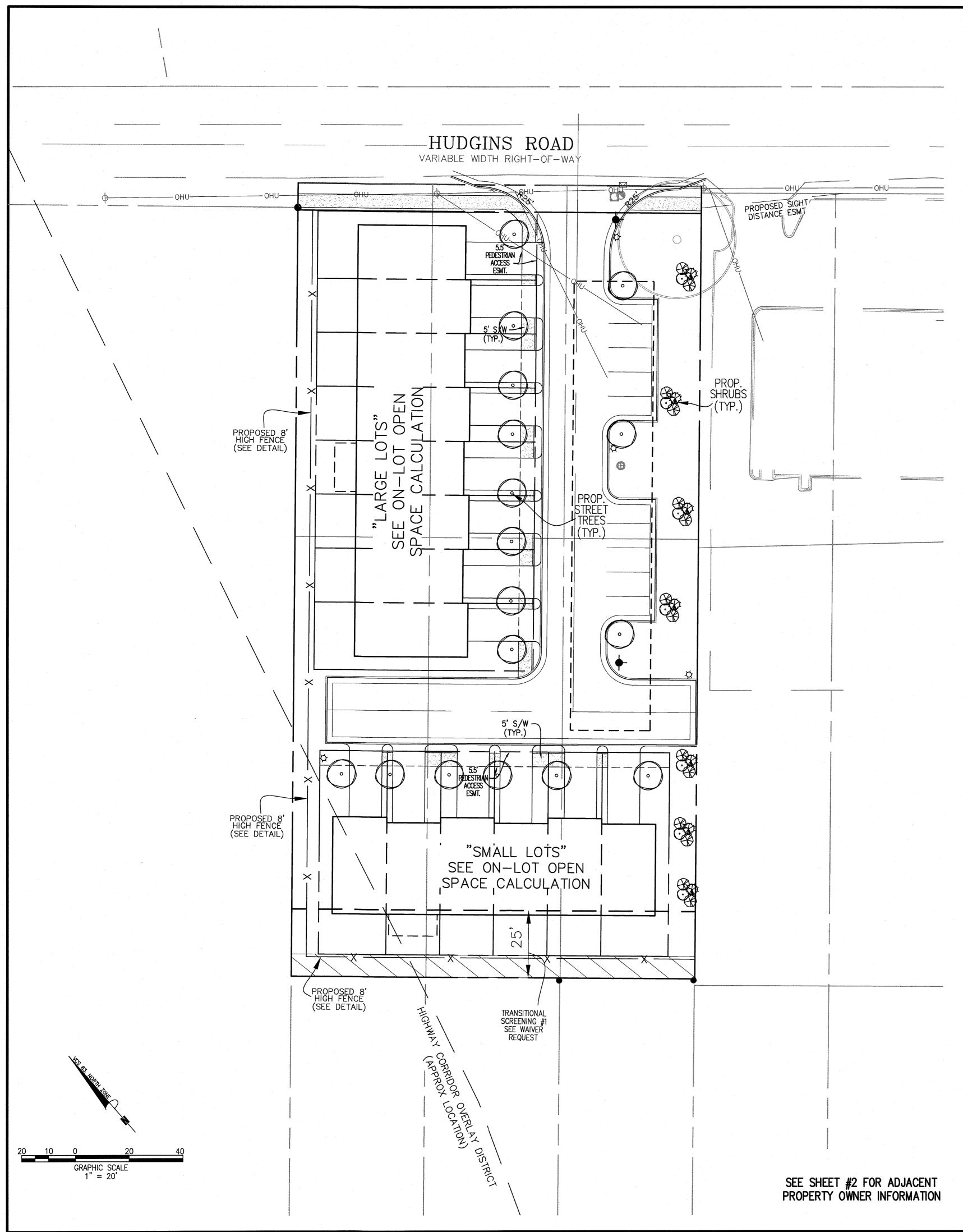
COUNTY PROJECT NUMBER

PLAN STATUS 11/17/17 1st SUBMISSION 01/19/18 2nd SUBMISSION 02/27/18 3rd SUBMISSION 04/09/18 4th SUBMISSION

DATE DESCRIPTION SG WSP DESIGN DRAWN CHKD

JOB No. 100022-01-001 DATE: NOVEMBER 2017 FILE No. 100022-D-ZP-001

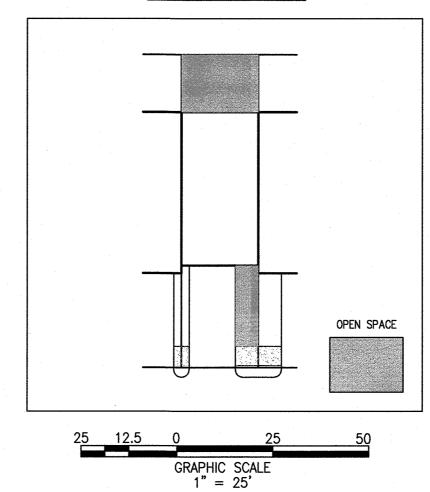
SHEET 3A OF 5



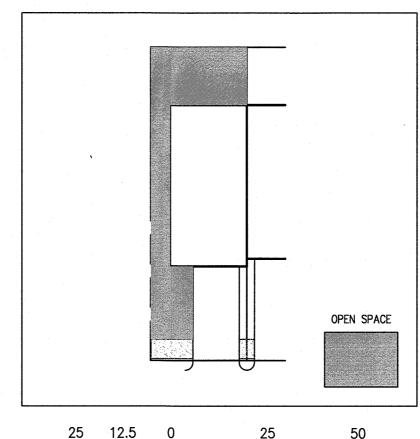
NOTES

- 1. PLAN IS SUBJECT TO MINOR REVISION WITH FINAL ENGINEERING.
- 2. ALL LANDSCAPING SHALL BE INSTALLED IN ACCORDANCE WITH THE SPOTSYLVANIA COUNTY DESIGN STANDARDS MANUAL (DSM); UNLESS WAIVED OR MODIFIED.
- 3. LANDSCAPING AS SHOWN IS CONCEPTUAL AND SUBJECT TO REVISION AT TIME OF FINAL SITE PLAN.
- 4. THE PLANT MATERIAL IN THE BUFFER SHALL BE PERPETUALLY MAINTAINED IN A HEALTHY STATE BY THE HOMEOWNER'S ASSOCIATION OF THIS DEVELOPMENT.
- 5. PER DSM SECTION 6-6 (PARKING LOT LANDSCAPING) NO PARKING LOT LANDSCAPING IS REQUIRED AS THE NUMBER OF PROPOSED GUEST PARKING SPACES IS LESS THAN 20 SPACES.
- 6. PER DSM SECTION 6-8 (STREET BUFFERS) NO STREET BUFFER IS REQUIRED AS HUDGINS ROAD IS CLASSIFIED AS A LOCAL ROAD.
- 7. STREET TREES (MEDIUM DECIDUOUS) SHALL BE PROVIDED ALONG THE INTERNAL ROAD PER DSM SECTION 8-2.4.C.

TYPICAL OPEN SPACE INTERIOR LOT



TYPICAL OPEN SPACE CORNER LOT



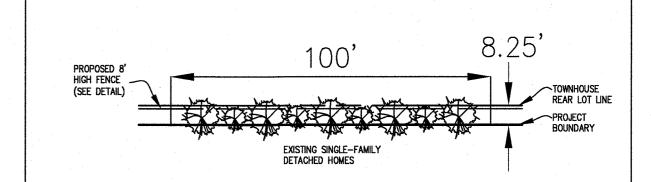
ON-LOT OPEN SPACE CALCULATIONS

GRAPHIC SCALE 1" = 25'

LOT TYPE	INTERIOR LARGE	INTERIOR SMALL	CORNER LARGE	CORNER SMALL
LOT LENGTH (LF)	81.50	75.50	81.50	75.50
LOT WIDTH (LF)	20.00	20.00	25.00	25.00
LOT AREA (SF)	1,630.00	1,510.00	2,037.50	1,887.50
-				-
REQUIRED OPEN SPACE (%)	15%	15%	15%	15%
REQUIRED OPEN SPACE (SF)	244.50	226.50	305.63	283.13
			-	
PROVIDED OPEN SPACE (%)	24.5%	25.5%	27.0%	26.5%
PROVIDED OPEN SPACE (SF)	400	385	550	500

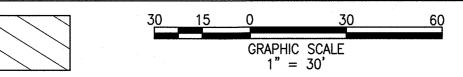
NOTE: CALCULATIONS ARE APPROXIMATE AND SUBJECT TO MINOR CHANGE WITH FINAL ENGINEERING.

TRANSITIONAL SCREENING #1 (25 FEET) MODIFICATION REQUEST

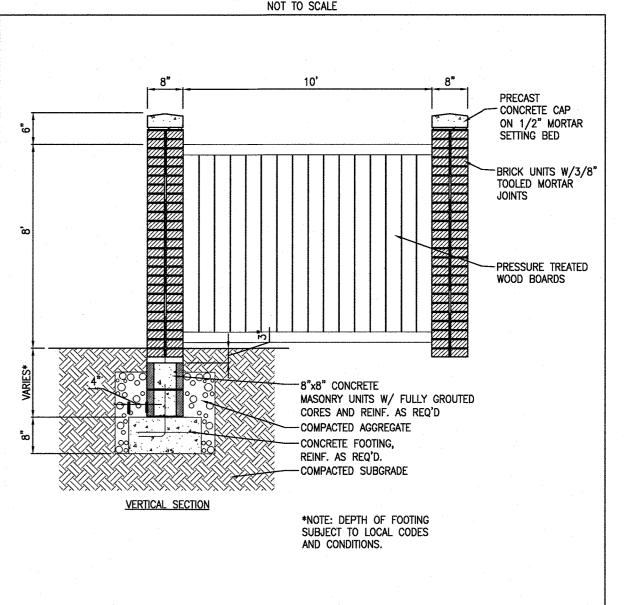


MINIMUM PLANTINGS TO BE GENERALLY AS DEPICTED ABOVE WITH ONE LARGE EVERGREEN TREE AND ONE MEDIUM EVERGREEN TREE EVERY 20 FEET. SEE PLATE 6-18 OF THE DESIGN STANDARDS MANUAL FOR MINIMUM TREE SIZES.

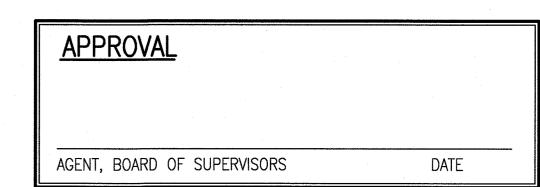
PER DSM SECTION 6-7.4.D. THE APPLICANT REQUESTS A 2/3 REDUCTION IN THE REQUIRED SCREENING. APPLICANT SHALL INSTALL AN 8 FOOT TALL FENCE (DEPICTED BELOW) TO MITIGATE ANY IMPACT ON ADJACENT PROPERTY OWNERS.



FENCE DETAIL NOT TO SCALE



NOTE: FINAL FENCE DETAIL SUBJECT TO MINOR CHANGE WITH FINAL SITE PLAN.



Phone: (540) 371-0268 Fax: (540) 371-3479 www.bowmanconsulting.com

OWNHOMES
VELOPMENT PLAN

GENERALIZED LANDSCA ROSELAND TOWN GENERALIZED DEVELOPM

R17-0013

R17-0013
COUNTY PROJECT NUMBER

WILLIAM S. PYLE
Lic. No.037555

V9 /09 /4

PLAN STATUS

11/17/17 1st SUBMISSION

01/19/18 2nd SUBMISSION

02/27/18 3rd SUBMISSION

04/09/18 4th SUBMISSION

DATE DESCRIPTION

SG SG WSP
DESIGN DRAWN CHKD

SCALE H: 1"=20'
V:

JOB No. 100022-01-001

DATE: NOVEMBER 2017

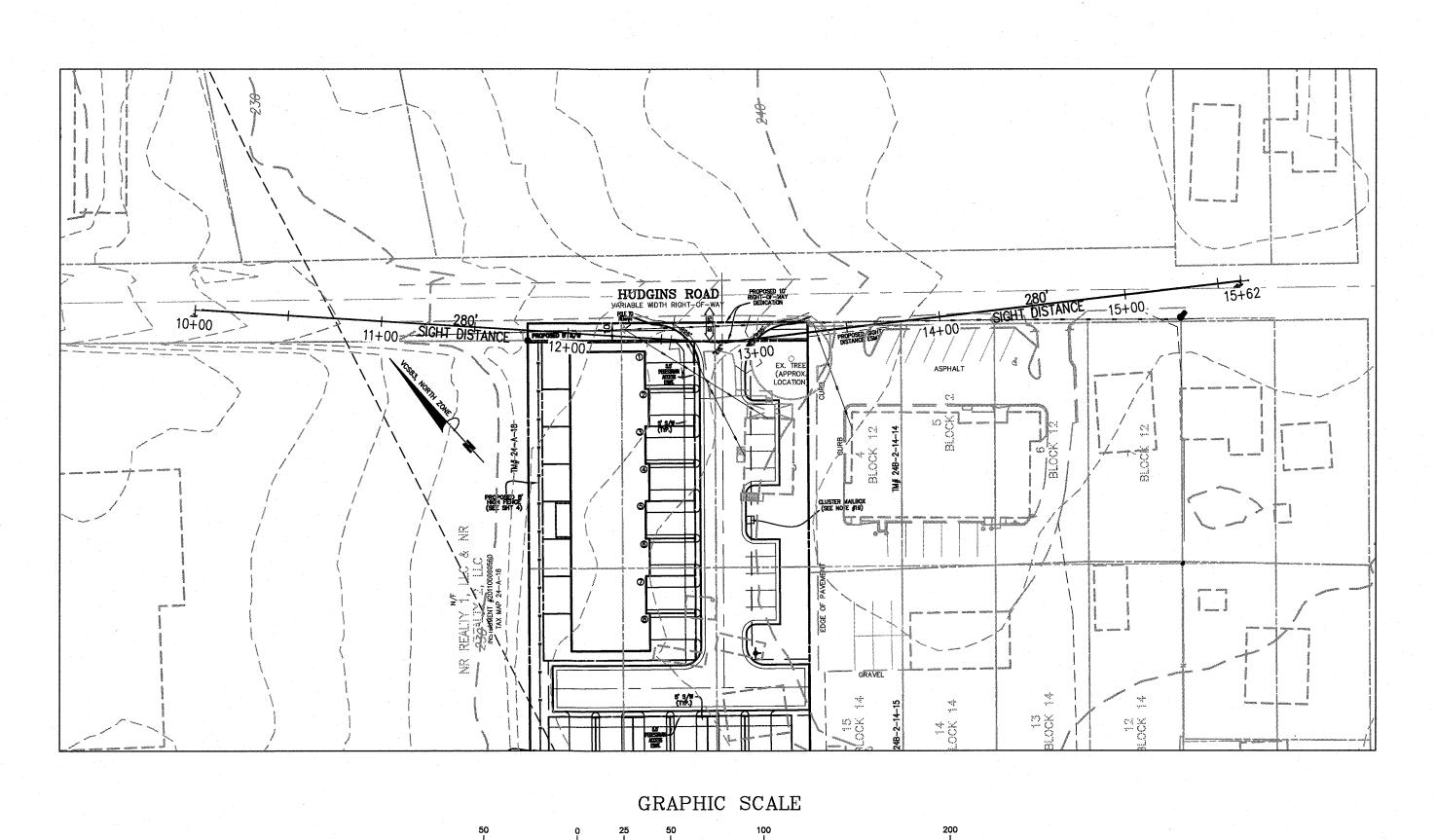
FILE No. 100022-D-ZP-001

SHEET 4 OF 5

(IN FEET)

1 inch = 5 ft.

PRELIMINARY SIGHT DISTANCE ANALYSIS



(IN FEET)
1 inch = 50 ft.

PRELIMINARY SWM CALCULATIONS

THESE CALCULATIONS ARE APPROXIMATE IN NATURE AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. FINAL SWM AND BMP CALCULATIONS WILL BE PROVIDED WITH THE SITE PLAN FOR THE DEVELOPMENT.

DEVELOPMENT.	SIL FEAR FOR THE							
Project Name: Roseland Townhom	es							
Date: 02/23/2016								
	data input cells	/						
	calculation cells							
	constant values							
Post-Popovolonment Project	2 Land Cova	r Information	TatalDia	4	1,01			
Post-ReDevelopment Project	& Land Cove	Imormation	Iotai Dis	turbed Acreage	1,01			
Constants								
Annual Rainfall (inches)	43							
Target Rainfall Event (inches)	43			**************************************				
Phosphorus EMC (mg/L)	0.26			Nitrogen EMC (mg/L)	1.86			
Target Phosphorus Target Load (lb/acre/yr) Pj	0.41							

Pre-ReDevelopment Land Cover (acres)		56.11		5.0.11				
Forest/Open Space (acres) undisturbed,	A soils	B Soils	C Soils	D Soils	Totals			
protected forest/open space or reforested land	0.00	0.00	0.54	0.00	0.54			
Managed Turf (acres) – disturbed, graded for yards or other turf to be mowed/managed	0.00	0.00	0.36	0.00	0.36			Nacional Contraction of the Cont
mpervious Cover (acres)	0.00	0.00	0.11	0.00	0.11			
				Total	1.01			
Post-ReDevelopment Land Cover (acres)						_		
	A soils	B Soils	C Soils	D Soils	Totals			
Forest/Open Space (acres) undisturbed, protected forest/open space or reforested land	0.00	0.00	0.00	0.00	0.00			
Managed Turf (acres) disturbed, graded for	0.00	0,00	0.00	0.00	0.00			
yards or other turf to be mowed/managed	0.00	0.00	0.43	0.00	0.43			
Impervious Cover (acres)	0.00	0.00	0.58	0.00 Total	0.58 1,01			
Area Check	Okay	Okay	Okay	Okay	1503			
Dr. Coofficients								
Rv Coefficients	A soils	B Soils	C Soils	D Soils				
Forest/Open Space	0.02	0.03	0.04	0.05				
Managed Turf Impervious Cover	0.15 0.95	0.20	0.22 0.95	0.25 0.95				
impervious cover								
Land Cover Summary Pre-ReDevelopment	Listed	Adjusted ¹		Land Cover Summer Post-ReDevelopm	Management and the control of the co		Land Cover Summary Post-ReDevelopment New Imperv	/ious
				Forest/Open			The state of the s	
Forest/Open Space Cover (acres)	0.54	0.07		Space Cover	0.00			
Composite Rv(forest)	0.04	0.04		Composite Rv(forest)	0.00			000000000000000000000000000000000000000
% Forest	53%	13%		% Forest	0%			
Managed Turf Cover (acres)	0.36	0.36		Managed Turf Cover (acres)	0.43			
Composite Rv(turf)	0.30	0.30		Composite Rv(turf)	0.43	2		
% Managed Turf	36%	67%		% Managed Turf	80%		-	
Impervious Cover (acres)	0.11	0.11	4 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -	ReDev. Impervious Cover (acres)	0.11		New Impervious Cover (acres)	0.4
Rv(impervious)	0.95	0.95		Rv(impervious)	0.95		Rv(impervious)	0.98
% Impervious	11%	20%	-	% Impervious	20%		% Impervious	100%
Total Site Area (acres)	1.01	0.54		Total ReDev. Site Area (acres)	0.54		Total New Dev. Site Area (acres)	0.4
Site Rv	0.20	0.35		ReDev. Site Rv	0.37	*******************************	New Dev. Site Rv	
				Post-				
				ReDevelopment				
				Treatment Volume			Post-Development Treatment	
Pre-Development Treatment Volume (acre-ft)	0.0171	0,0155		(acre-ft)	0.0166		Volume (acre-ft)	0.037
				ReDevelopment				
Pre-Development Treatment Volume (cubic eet)	745	677		Treatment Volume (cubic feet)	723		Post-Development Treatment Volume (cubic feet)	
	140	017		Post-	123		Volume (cubic leet)	1,62
				ReDevelopment				
Pre-Development Load (TP) (lb/yr)	0.47	0.43		Load (TP) (lb/yr)	0.45		Post-Development Load (TP) (lb/yr)	1.0
Adjusted Land Cover Summary reflects the	pre redevelopment		Maximum % Reduc	tion Required Below				
and cover minus the pervious land cover (forest	open space or		1	ReDevelopment Load				
nanaged turf) acreage proposed for new imperv adjusted total acreage is consistent with the Po								
acreage (minus the acreage of new impervious	cover). The load			iction Required for			TP Load Reduction Required for	
eduction requriement for the new impervious codevelopment load limit is computed in Column			Kedev	eloped Area (lb/yr)	0.11		New Impervious Area (Ib/yr)	0.8
reversionment to action is complified in Colling.	I.			\$				

PRELIMINARY SWM & ADEQUATE OUTFALL NARRATIVE THE PROPOSED DEVELOPMENT WILL CONSIST OF 14 TOWNHOUSE LOTS ALONG WITH THE ASSOCIATED

INFRASTRUCTURE TO SERVE THEM. A POTENTIAL UNDERGROUND SWM/BMP FACILITY HAS BEEN PROPOSED TO PROVIDE SWM CONTROL.

THIS SITE IS ENTIRELY COMPOSED OF HYDRAULIC SOIL GROUP C SOILS. THE PROPOSED LAND USE COVER WAS INPUT INTO THE VIRGINIA RUNOFF REDUCTION METHOD SPREAD SHEET FOR REDEVELOPMENT. AS SHOWN IN THE VRRM SPREADSHEET ON THIS SHEET, THE SITE PRODUCES A TOTAL PHOSPHOROUS LOAD OF 1.47 LB/YR. THIS LOAD WILL NEED TO BE REDUCED BY 0.94 LB/YR. ADDITIONAL BMP DEVICES OR OFFSITE COMPLIANCE OPTIONS, SUCH AS NUTRIENT CREDIT PURCHASE, MAY BE NECESSARY TO ACHIEVE THE MINIMUM LOAD REDUCTION. THE CALCULATIONS SHOWN IN THE VRRM SPREADSHEET ARE APPROXIMATE IN NATURE AND ARE SUBJECT TO CHANGE WITH FINAL ENGINEERING. DURING THIS STAGE, THE SITE WILL BE DESIGNED TO MEET THE CRITERIA FOR BOTH WATER QUALITY AND QUANTITY AS SET FORTH IN THE CURRENT VSMP REGULATIONS.

STORMWATER DISCHARGES FROM THIS SITE VIA SHEET FLOW ALONG THE EASTERN BOUNDARY. THE STORMWATER RUNOFF RESULTING FROM THE PROPOSED DEVELOPMENT WILL BE COLLECTED WITHIN THE POTENTIAL UNDERGROUND SWM FACILITY OR ANOTHER BMP DEVICE TO DETAIN THE PEAK FLOWRATES FROM THE 1—YEAR AND 10—YEAR STORMS TO A POINT THAT SATISFIES THE CHANNEL AND FLOOD PROTECTION REQUIREMENTS OF THE VSMP REGULATIONS.

APPROVAL	
AGENT, BOARD OF SUPERVISORS	DATE

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TOWNHOMES

SEVELOPMENT PLAN

SWM CONCEPT PLAN & SIGHTON STORM ROSELAND TOW GENERALIZED DEVELOR

R17-0013

COUNTY PROJECT NUMBER

ALTH OF LICE NO.037555

CY (0)/16

PLAN STATUS

11/17/17 1st SUBMISSION

01/19/18 2nd SUBMISSION

02/27/18 3rd SUBMISSION

04/09/18 4th SUBMISSION

DATE DESCRIPTION

SG SG WSP

DESIGN DRAWN CHKD

SCALE H: 1"=50'

V: 1"=5'

JOB No. 100022-01-001

DATE: NOVEMBER 2017

FILE No. 100022-D-ZP-001

SHEET 5 OF 5

(IN FEET)
1 inch = 50 ft.