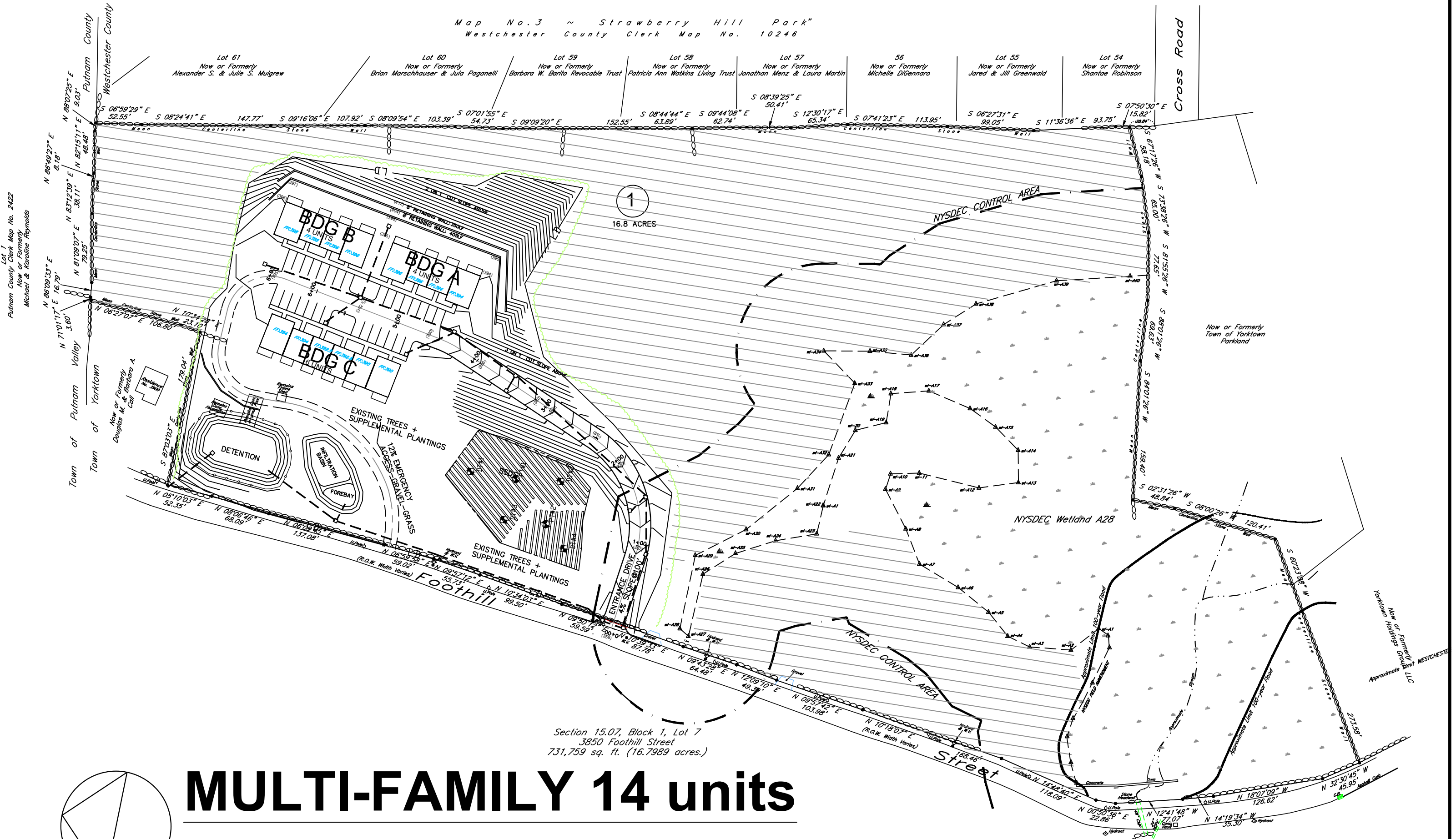




R1-40 RESIDENTIAL

PROJECT COMPARISON



MULTI-FAMILY 14 units

COMPARISON ANALYSIS

Total Acreage :16.80 acres

COMPONENTS	UNITS	R1-40	Multi-Family	Multi-Family	
Building Units	UNITS	7-4 Bedroom	20-2 Bedroom	14-2+ Bedroom	
Common Driveway Length	LF	650	660	650	
Impervious Cover					
Buildings & structures	SF	14,000	19,456	13,700	
Road Surface	SF	19,850	15,600	15,600	
Parking/Driveways	SF	14,820	9,725	6,400	
Sidewalks	SF	1,800	4,920	2,560	
Total Impervious	SF	50,470	49,700	38,260	
Coverage Building	PERCENT	1.9%	2.7%	1.9%	
Coverage Site	PERCENT	6.9%	6.8%	5.3%	
FAR	PERCENT	3.8%	5.4%	3.8%	
Disturbance	ACRES	5.62	5.07	4.43	
Wetland Area	ACRES	4.80	4.80	4.80	
Open Space	ACRES	2.70	6.82	7.60	
		includes 100' NYSDEC control area	includes 100' NYSDEC control area	includes 100' NYSDEC control area	
Lighting - Streets		Residential Lighting Only	Street Lights 12' Tall-Night Sky	Street Lights 12' Tall-Night Sky	
Cut & Fill	CF	cut 4,497 fill 2,859 (house foundation excluded)	cut 17265 fill 13,391 (unit construction included)	cut 17265 fill 13,391 (unit construction included)	
Septic System	UNITS	7-4 Bedroom	20-2 Bedroom	14-2 Bedroom	
GPD	GPD	3080 GPD	4400 GPD Sewer	3080 GPD Sewer	
Septic Pump System	UNITS	(2) Lots 6 & 7	One Pump System (Private)	One Pump System (Private)	
Water System	GPD	7(500) = 3500 GPD	5000 GPD	3500 GPD	
Town Liabilities		town road maintenance using sewer town pump system	none-HOA using sewer - private pump system	none-HOA using sewer - private pump system	
Setbacks					
Front	FT	50 (Lot 7)	92	155	
Side	FT	102 (Lot 1)	268	208	
Rear	FT	104 (Lot 7)	145	80	
Street Buffer - Trees		25' to Septic Areas	9,800 sf @ street 7,726 sf @ upper parking	10,600 sf @ street	
Stormwater Management					
Treatment Swale	LF	none	316 lf	None	
Detention Basin	SF	9,500 sf	9,200 sf	6,800 sf	
Off Line Infiltration	SF	none	8,637 sf	4,340 sf	
Off Line Bio-Retention	SF	4,347 sf	none	none	
Drainage Analysis	LABEL	R1-40 cfs	Multi-Family	Multi-Family	Pre-Development
Point A - storm discharge	CFS	1 Year 0.31	1 Year 0.58	1 Year 0.58	1 Year .075
	CFS	10 Year 6.52	10 Year 4.9	10 Year 4.9	10 Year 6.87
	CFS	100 Year 30.53	100 Year 29.6	100 Year 29.6	100 Year 30.55
Refer to drainage report for both systems					
WQV (Disturbed area) only	CF	1 yr storm: 15,500 cf	1 yr storm: 18,120 cf	1 yr storm: 18,120 cf	1 yr storm: 2,044 cf
WQV Treatment-RRv reduction	CF	5,582 cf	16,683 cf	16,683 cf	

GENERAL FINDINGS

THE COMPARISON TO THE SINGLE FAMILY DEVELOPMENT REVEALS THAT THE 14 UNIT OPTION CREATES SIGNIFICANTLY LESS IMPERVIOUS AREAS AND IDENTICAL ROADWAY LENGTH. THE DISTURBANCE FOR THE RESIDENTIAL PROJECT IS 1.2 ACRES GREATER DUE TO THE REQUIREMENT TO PLACE SSDS ON SLOPES LESS THAN 15% WHICH REQUIRES 15% ACCESS WAYS TO THE SSDS SITE ON THE UPPER PORTION OF THE LOT.

THE MULTI-FAMILY PROJECT CREATES MORE OPEN SPACE(+4.9 ACRES, 200% INCREASE), LARGER BUFFER AREAS AND AREAS FOR STORM WATER BMPS BASED UPON SEWER SERVICE.

THE MULTI-FAMILY PROJECT USES AN INFILTRATION BASIN WHICH IS MORE EFFICIENT FOR TREATMENT, RESULTING IN ADDITIONAL RRv. REDUCTION OF 150% OR 11,500 CF PER 1 YEAR STORM EVENT. THE STORM WATER ATTENUATION IS SIMILAR AND MEETS THE NYSDEC REQUIREMENTS.

TRIP GENERATION- DAILY
SINGLE FAMILY: 9.5 TRIPS/DU = 9.5(7)= 66.5 TRIPS/DAY
APARTMENTS: 6.5 TRIPS/DU = 6.5(14) = 91 TRIPS/DAY
THE INCREASE IS 24.5 TRIPS /DAY, INSIGNIFICANT

LIGHTING: STREET LIGHTS AND VEHICULAR HEAD LIGHTS
THE RESIDENTIAL CONTAINS NO STREET LIGHTS, JUST RESIDENTIAL LAWN AND HOUSE SPOT LIGHTS. RESIDENTIAL TRAFFIC ON THE ROAD IS VISIBLE ACROSS THE ROAD AS IT CLIMBS UP 40 FEET TO THE CUL-DE-SAC.

THE MULTI-FAMILY PROJECT INCLUDES 12' NIGHT SKY COMPLIANT LIGHT POLES AT 200' STAGGERED ON THE ROAD. THE LIGHT POLES AT THE UNITS FACE AWAY FROM THE FRONTAGE OR TOWARDS A BUILDING. THE LIGHTS FROM PARKED CARS FACE THE BUILDINGS OR A TREE BUFFER WHICH SHIELDS THE VEHICULAR LIGHTING.

THESE DRAWINGS ARE THE SOLE PROPERTY OF P.W. SCOTT ENGINEERING AND ARCHITECTS, P.C. AND WILL NOT BE REPRODUCED BY ANY MEANS AND BE GIVEN TO ANY OTHER TRADES/PERSONS WITHOUT THE EXPRESS PERMISSION OF P.W. SCOTT ENGINEERING AND ARCHITECTS, P.C.

NOTE: DO NOT SCALE DRAWINGS
DIMENSIONS SUPERCEDE SCALE

P. W. SCOTT		Revisions		Dwg. Title		COMPARATIVE ANALYSIS			Dwg. No. SY2
	ENGINEERING & ARCHITECTURE, P.C.	No.	Date	Description	Project Title				
	3871 ROUTE 6	A	02/24/25	ADDED FULL GRADING/CUT&FILL	FOOTHILL STREET SUBDIVISION				
	BREWSTER, NY 10509 845-278-2110				Proj. No. 23-165		Drawn by PWS		
					Date 1/10/24		Scale 1" = 50'		