

**TABLE 3-1 (Sheet 2 of 3)  
ROUTE U.S. 1 PENNS NECK AREA IMPROVEMENTS  
ALTERNATIVE IMPROVEMENT SCHEMES - SUMMARY MATRIX**

	Alignment Scheme					
Impact						
Parameter	D-1	D-1.1	D-1.1A	D-1.1B	D-1.1C	D-1.1D
Meets Project Need/Objectives						
1. Route U.S. 1 LOS (Project Need)	Yes	Yes	Yes	Yes	Yes	Yes
2. Maintain Traffic Distribution	Yes	Yes	Yes	Yes	Yes	No
3. Meet Planning Initiatives	Yes	Yes	Yes	Yes	Yes	Yes
4. Avoid/Minimize Human Impacts	No	No	Yes	Yes	Yes	Yes
5. Avoid/Minimize Environmental Impacts	No	Yes	Yes	Yes	Yes	Yes
Natural Environment						
Land Use and Zoning Impacts	Front yard impacts to Sarnoff	Front yard impacts to Sarnoff	Front yard impacts to Sarnoff	Front yard impacts to Sarnoff	Front yard impacts to Sarnoff	Front yard impacts to Sarnoff
	and University properties at	and University properties at	and University properties at	and University properties at	and University properties at	and University properties at
	Route 1; linear ROW takes on	Route 1; linear ROW takes on	Route 1; linear ROW takes on	Route 1; linear ROW takes on	Route 1; linear ROW takes on	Route 1; linear ROW takes on
	Sarnoff and University properties.	Sarnoff and University properties.	Sarnoff and University properties.	Sarnoff and University properties;	Sarnoff and University properties;	Sarnoff and University properties;
			PSE&G property takes (relocation cost).	Eden Institute and PSE&G property	Property takes on Logan Drive	Property takes on Logan Drive
				takes.	including Eden Institute, Sunoco	including Eden Institute, Sunoco
					Station and residences.	Station and residences.

	ROW Acquisition Area (Permanent)	66 Acres	63.20 Acres	50.44 Acres	50.44 Acres	50.44 Acres	44 Acres
	Prime Farmland Soils Impacts (Acres)	27.9	28	26.42	26.42	26.42	20
	100 Year Floodplain Impacts (LF)						
	Little Bear Brook	2,000	1,200	1,200	1,200	1,200	1,200
	Millstone River	1,100	500	700	700	700	700
	Floodway Impacts (LF)	1,000	150	150	150	150	150
	Wetlands Impacts (Acres)	3.81	1.1	1.1	1.1	1.1	1.1
	Visually Sensitive Site Impacts	Impacts to private viewshed on					
		Sarnoff property; new public					
		views on Sarnoff and University					
		properties.	properties.	properties.	properties.	properties.	properties.
				Southerly views from Logan Drive			
				obstructed by overpass.			
	Section 4(f) Parkland Impacts	Minor D&R property acquisition near					
		Washington Rd and Harrison St.	Harrison St.				
	Adverse Effects to						

Historical/Archaeological						
Sites/4(f) (Site Numbers keyed to Fig 4-9)	1, 8, 9, 10, 16, 19, 20	1, 8, 9, 10, 16, 19, 20	1, 8, 9, 10, 15, 16, 19, 20	1, 8, 9, 10, 15, 16, 19, 20	1, 8, 9, 10, 15, 16, 19, 20	1, 8, 9, 10, 15, 16, 18, 20

	Sensitive Air/Noise Receptors						
	Min. Distance (Linear Feet)	420	420	20	50	50	50
	Location	Residences on Logan Drive.	Residences on Logan Drive.	Residences on Logan Drive.	Residences on Logan Drive.	Residences on Logan Drive.	Residences on Logan Drive.
	D&R Canal Park Proximity - Min. Dist. (Ft)	550	350	350	350	350	N/A
	Known/Potential Hazardous						
	Waste Sites	Alignment traverses dump site	Alignment traverses dump site	Alignment traverses dump site	Alignment traverses dump site	Alignment traverses dump site	Alignment traverses dump site
		on Sarnoff property near	on Sarnoff property near	on Sarnoff property near	on Sarnoff property near	on Sarnoff property near	on Sarnoff property near
		Little Bear Brook. Leaking USTs	Little Bear Brook. Leaking USTs	Little Bear Brook. Leaking USTs	Little Bear Brook. Leaking USTs	Little Bear Brook. Leaking USTs	Little Bear Brook. Leaking USTs
		at Exxon Station.	at Exxon Station.	at Exxon Station.	at Exxon Station.	at Exxon and Sunoco Stations.	at Sunoco and Exxon Stations.
	Traffic and Engineering						
	Considerations	1 grade-separated interchange	1 grade-separated interchange	1 grade-separated interchange;	1 grade-separated interchange;	1 grade-separated interchange;	1 grade-separated interchange;
		located south of PSE&G substation;	located south of PSE&G substation.	overpass between Logan and	overpass between Sunoco and	overpass between Sunoco and	overpass between Sunoco and
		maintains traffic distribution; not all	Maintains traffic distribution.	PSE&G; maintains traffic distribution.	Logan; maintains traffic distribution.	Eden; maintains traffic distribution.	Eden; maintains traffic distribution.
		turning movements are provided at	3 traffic signals on Rel. Rt 571; Harrison	4 traffic signals on Rel. Rt 571; Harrison St	4 traffic signals on Rel. Rt 571	4 traffic signals on Rel. Rt 571.	3 traffic signals on Rel. Rt 571.

		the interchange; uses Harrison St to	St would be left open for WB turns from SB	cul de sac.	Harrison St. cul de sac.	Harrison St. cul de sac.	Harrison St. cul de sac.
		access WB 571 from SB Rt 1; 3	Rt 1, though interchange would				
		traffic signals on Rel. Rt 571.	provide same movement (undesirable).				