__ See previous page for January 2007

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ALTERNATIVE RETAINED FOR DETAILED EVALUATION GREEN--- SPUR ALTERNATIVE





ENGINEERING / TRAFFIC / SAFETY / COMMUNITY

Advantages

- Low impact on existing and proposed communities (within 600 feet)
- Greater potential to minimize effects on adjacent communities since alternative passes under most local roads
- Lowest impacts on traffic during construction
- Improves safety by separating local from through traffic, including truck traffic
- Mid-range number of properties directly impacted
- Significant reduction in traffic on existing US 301, Boyds Corner Road, Cedar Lane Road, Choptank Road and SR 299
- Highest volume of traffic using new US 301
- Lower cost alternative
- Mid-range residential noise impacts
- Green South reduces indirect effects on the Airmont community (Scott Run Business Park would provide a buffer) and St. George's Vo-Tech High School

Disadvantage:

- Skewed (angled) crossing of Scott Run (environmental impacts) – South Option
- Proximity to new Appoquinimink High School (under construction) west of Middletown, and Cedar Lane Schools – South Option
- Potential indirect effect on the Ratledge Road residents,
 Airmont community and St. George's Vo-Tech High School
 North Option
- Direct impact on Wooleyhan Farm

Note: Visual earth berms would be provided between new US 301 and Southridge, Middletown Village, Springmill, Chesapeake Meadow, Ratledge Road, Airmont communities

Comparison of the Retained Alternatives - Engineering

NOVEMBER 2006 ALTERNATIVES IMPACT MATRIX	YELLOW RANGE OF IMPACTS	PURPLE + SPUR RANGE OF IMPACTS	BROWN NORTH RANGE OF IMPACTS	BROWN SOUTH RANGE OF IMPACTS	GREEN + SPUR NORTH RANGE OF IMPACTS	GREEN + SPUR SOUTH RANGE OF IMPACTS
General Considerations						
Preliminary Cost (\$ millions)	\$686-\$758	\$616 - \$680	\$550-\$608	\$499-\$551	\$534 - \$590	\$526 - \$582
ENGINEERING CONSIDERATIONS						
Total length of alternative (miles)	19.4	16.9	17.5	15.9	17.5	17.3
Total Area of Limit of Construction (acres)	870.5	901.9	895.9	894.3	897.4	876.3
Number of Properties Impacted	377	154	100	100	132	130
Interchange(s)						
Number	4	5	5	5	6	6
1 Location(s)	Levels Road/SR15	Levels Road/SR15	Levels Road/SR15	Levels Road/SR15	Levels Road/SR15	Levels Road/SR15
Type	Split Diamond	Diamond	Diamond	Diamond	Diamond	Diamond
2 Location(s)	North of Middletown	North of Middletown	SR896 at the base of Summit Bridge	North of Middletown	North of Middletown	North of Middletown
Type	Slip Ramps	Diamond	Partial Cloverleaf	Half Diamond	Diamond	Diamond
3 Location(s)	SR1 at Boyds Corner Road	SR1 at Boyds Corner Road	SR896 north of Summit Aviation	SR896 north of Summit Aviation	Jamison Corner Road	Jamisons Corner Road
Type	Directional	Directional	Partial Cloverleaf	Partial Cloverleaf	Diamond	Diamond
4 Location(s)	SR15/SR896/Choptank Road	SR15/SR896/Choptank Road	Jamison Corner Road	Jamison Corner Road	SR1 North of Toll Plaza	SR1 North of Toll Plaza
Type	Partial Cloverleaf	Directional	Diamond	Diamond	Directional	Directional
5 Location(s)		Bethel Church Road	SR1 North of Toll Plaza	SR1 North of Toll Plaza	SR15/SR896/Choptank Road	SR15/SR896/Choptank Road
Type		Partial Cloverleaf	Directional	Directional	Directional	Directional
6 Location(s)					Bethel Church Road	Bethel Church Road
Type					Partial Cloverleaf	Partial Cloverleaf
7 Location(s)						
Type						
Overpass(es)						
Number	11	11	8	8	9	9
1 Location(s)	Strawberry Lane	Strawberry Lane	Strawberry Lane	Strawberry Lane	Strawberry Lane	Strawberry Lane
2 Location(s)	Middletown Business & Technology Park	Bunker Hill Road	Bunker Hill Road	Bunker Hill Road	Bunker Hill Road	Bunker Hill Road
3 Location(s)	Bunker Hill Road	Bohemia Mill/Armstrong Corner Road	Bohemia Mill Road	Bohemia Mill Road	Bohemia Mill/Armstrong Corner Road	Bohemia Mill/Armstrong Corner Road
4 Location(s)	Broad Street	US 301 Local	Old School House Road	Old School House Road	US 301 Local	US 301 Local
5 Location(s)	Marl Pit Road	Norfolk-Southern Railroad	Churchtown Road	Churchtown Road	Norfolk-Southern Railroad	Norfolk-Southern Railroad
6 Location(s)	Existing US 301	SR 896	Norfolk-Southern Railroad	Norfolk-Southern Railroad	SR896	SR896
7 Location(s)	Norfolk-Southern Railroad	Jamison Corner Road	Ratledge Road	Ratledge Road	Hyetts Corner Road	Hyetts Corner Road
8 Location(s)	SR896	SR 896	Hyett's Corner Road	Hyett's Corner Road	Old Schoolhouse Road	Old Schoolhouse Road
9 Location(s)	Jamison Corner Road	Shallcross Lake Road			Churchtown Road	Churchtown Road
10 Location(s)	SR896	Old Schoolhouse Road				
11 Location(s)	Shallcross Lake Road	Churchtown Road				

Note: Cost Estimate includes Right of Way costs and Relocation costs for displaced properties.

Note: The Secure disposable includes Right of Way costs and Relocation costs for displaced properties.

CULTURAL & NATURAL ENVIRONMENT

Advantages

- Mid-range wetland impacts
- Mid-range high quality wetlands impacts
- Mid-range Waters of the US impacts
- Low floodplain impacts
- Low forestland impacts
- Mid-range impacts to Species Habitat Areas (wildlife & plants)

Disadvantag

- High Agricultural District impacts
- South Option impacts of one of the last three operating dairy farms (Emerson Farm) in New Castle County.
 Difficulty in implementing Nutrient Management Plan with reduced acreage

Comparison of the Retained Alternatives - Cultural Resources

ALSO TO THE REAL PROPERTY OF THE PROPERTY OF T	PELLOW Boyds Corner Road Option 4 Spur Option 2		Boyds Corner Road Option 4 Armstrong Corner Road Option 2A Spur Option 3B		BROWN				GREEN with SPUR			
project development CULTURAL RESOURCES ALTERNATIVES IMPACT MATRIX NOVEMBER 2006					NORTH		SOUTH		NORTH Armstrong Corner Road Option 2A Spur Option 3B		SOUTH Armstrong Corner Road Option 2A Spur Option 3B	
Potential Impacts on Cultural Resources												
Historic Properties												
Count of Properties to be evaluated for Direct Effects ²	- 4		0		0						0	
Count of Properties to be evaluated for Visual and Audible Effects 1	15		17		11		11		13		15	
Count of Properties to be evaluated for this Alternative	17		17		11		11		13		15	
Total Area of Limit of Disturbance (acres)	876		916		911		909		910		891	
Predictive Model: Pre-Historic Sensitivity in the Limit of Disturbance												
High Sensitivity Area [scree % of total area]	16	1.0%	24	2.7%	26	2.5%	28	3.0%	26	2.0%	26	3.1%
Moderate Sensitivity Area (acres % of total area)	106	12.1%	212	23.1%	287	31.5%	272	29.9%	238	26.1%	292	32.8%
Low Sensitivity Area (acres % of total area)	528	60.3%		60.3%	496	54.4%	483	53.1%	558	61.3%	402	54.1%
NI Sensitivity Area [acres % of total area]	225	25.7%	128	14.0%	101	11.1%	127	14.0%	89	9.7%	88	9.9%
Predictive Model: Historic Sensitivity in the Limit of Disturbance												
High Sensitivity Area (acres % of total area)	91	10.4%	35	3.8%	30	3.3%	31	3.4%	34	3.7%	32	3.6%
Moderate Sensitivity Area (scree % of total area)	272	21.0%	107	20.4%	186	20.4%	182	20.0%	177	12.4%	177	19.8%
Low Sensitivity Area (acres % of total area)	513	50.0%	694	75.7%	694	76.2%	696	76.5%	700	76.8%	602	76.6%
Area of Potential Effects		*		_		•				•		
Number of Historic Properties ¹	17		17		11		11		13		15	
Number of Known Archeological Resources	0		- 1		- 1		- 1		- 1		1	
Potential Section 4(f) Properties												
Number of Historic Properties ⁴		4		0		0				0		
Date of Personal Programme Date of Remotive Design Update ON 122.00 Carbon of Personal Update ON 122.00		07/14/06 08/02/06		07/14/06 08/02/06		07/14/06 08/02/06		07/14/06 08/02/06		07/14/06 08/02/06		

No. 7 Properties for marked the Confederation Section Section

Comparison of the Retained Alternatives - Natural Resources

	YELLOW	DUDDI EIAL CELLE	BROWN		GREEN with SPUR		
_	YELLOW		BRC	WN			
سے بکی			NORTH	SOUTH	NORTH	SOUTH	NOVEMBER 2006
CU - CU							
	Boyd's Corner Road						ALTERNATIVES
_5 \	Option 4					Armstrong Corner Road	
	Spur				Option 2A	Option 2A	ENVIRONMENTAL IMPACT
	Option 2				Spur	Spur	
project development	Option 2				Option 3B	Option 3B	MATRIX
7.0/2000							
Total Length of Alternative (miles)						17.3	Total Length of Alternative (miles)
Total Area of Limit of Construction (scree)	12.4 870.5	95.9 901.9	17.5 895.9	55.9 894.3	17.5 897.4	17.3 876.3	Total Area of Limit of Construction (scree)
Total Area of Potential ACOE Wetlands' (acres)	50.5	24.9	23.9	10.5	26.2	28.3	Total Area of Potential ACOE Wedlands' (acres)
High Quality Polyotion Econolod	14	7.6	11.5	9.9	9.0	9.6	High Quality Palustrian Ecreated
Palustian Emergent	3.0	2.9	4.4	2.7	2.9	2.9	Palustrian Emergent
Palustian Shrub-Scrub	0	0	0	0	0	0	Palustrian Shrub-Scrub
Palustrian Mixed	4.2	1.0	1.6	1.0 7.3	1.5	2.7 13.6	Palustrian Mixed
Medium Quality Pakutian Forested	30.6 10	3.9	1.9	5.0	41	3.6	Medium Quality Palustrian Forested
	1.5	7.6	0.0	0.0	7.6	7.6	
Palustran Shrub-Scrub		0	0				Palustrian Shrub-Scrub
Palustran Mored	10.7	1.7	1.5	1.5	1.5	2.2	Palustrian Mixed
Low Quality Palution Forested	11.2 0.5	42 13	8.2 0.9	1.3	4.0 1.3	5.1 1.3	Low Quality Palustrian Forested
Palustan Forested Palustan Emercant	56	1.3 2.8	7.3	0.7	1.3	1.3	Palutrian Foressed Palutrian Emergent
Palustrian Shrub-Scrub	0	0	6		6	0	Palustrian Shrub-Scrub
Palustian Moed	5.2	0					Palustrian Mixed
Other Wetlands Type and/or quality undeterminded to date							Other Wetlands Type and/or quality undeterminded to date
Type and/or quality undeterminded to date Number of Wetlands Impacted	33	45	39	35	ů,	40	Type and/or quality undeterminded to date Number of Wellands Impacted
Number of Wetland Crossings	4	9	10	ű	ï		
Number of Wetlands with Complete Fragmentation	7	6	3	4	6	7	Number of Wetlands with Complete Fragmentation
Naters of the US (non-wetland)*	20,766	16,257	15,158	14,278	15,515	16,326	Waters of the US (non-wetland) ²
Streams (linear feet)	215	260 45.997	921	1,895	327 45 488	521 15.885	Streams (linear feet)
Diches (inear feet) Coen Waters (conds. SWM) (acres)	20.492	15.997	14.237	12,383	15.188	15.805	Oteches (linear feet) Open Waters (ponds, SWM) (acres)
INDEC Sub-Assessed Lands (linear fact)	7.167	6.461	7.005	8.232	8 162	0.401	CNOCC Sub-Answers Lands (Sour Seet)
Area of DNREC State of Delaware Tidal Wetlands' (acres)	0.4	0.4	0.4	0.4	0.4	0.4	Area of DNRDC State of Delaware Tidal Wetlands' (acres)
Recharge Areas (acres) Div Dilinhas (linear fast)	614	563 1,511	424	486 192	406	501	Recharge Areas (acres) Tay Ditribus (linear fact)
Tax Ditches (linear feet) Tax Ditch Watershed area (scree)	81	1,511	20	192	1,511	1,511	Tax Ditches (linear feet) Tax Ditch Watershed area (acres)
lax Disch Wateranied area (acrea) Area of Nydric Sollis (acrea)	150	147	112	115	146	145	Area of Hydric Soils (acres)
ential Floodplain Impacts - FEMA							Potential Floodolain Impacts - FEMA
Irea of 100-Year Floodplain (acres)	1.5	1.5	1.0	1.0	1.0	1.0	Area of 100-Year Floodplain (scree)
ential Agricultural Impacts							Potential Agricultural Impacts
Agricultural Districts - Ten-Year (number) Area (scree)	14.1	32.6	32.6	32.6	22.6	32.6	Agricultural Districts - Ten-Year (number) Area (acres)
Number of Agricultural Districts within 3 miles of Alternative	9	7	6	6		6	Number of Agricultural Districts within 3 miles of Alternative
Agricultural Preservation Easements - Permanent (number)	0	1	1	1	i	1	Agricultural Preservation Easements - Permanent (number)
Area (acres)	0	6.0	9.4	12.4	6.0	6.0	Area (acres)
Number of Agricultural Essements within 3 miles of Alternative	3	3	2	2	2	2	Number of Agricultural Essements within 3 miles of Alternative
Agricultural Suitability (Land Evaluation Site Assessment Model)							Agricultural Suitability (Land Evaluation Site Assessment Model)
Total LESA Model (score) LESA Model without existing and planned development (score)	192	203 215	198	202	210	204	Total LESA Model (score) LESA Model without existing and planned development (score)
Prime Farmland Soil Area (acres)	203	415	412	424	437	390	Prime Farmland Soil Area (acres)
Ratio of prime farmland to total prime farmland in New Castle County (percent) (74.454 acres total)	0.27	0.56	0.55	0.57	0.59	0.53	Ratio of prime farmland to total prime farmland in New Castle County (perce
ential Hazardous Waste Impacts							Potential Hazardous Waste Impacts
Number of EPA Sites	0	0					Number of EPA Sites
exmitter of Sites identified as potential sources of contamination exmitter of NPDES Locations	9	9			6		Number of Sites identified as potential sources of contamination Number of NPDES Locations
eumber of NPUES Cocations ential Natural Resource Impacts				-			Number of NPDES Locations Potential Natural Resource Impacts
Satural Areas Inventory (acres)	0.3	0.3	0		0	0	Natural Areas Inventory (acres)
State Resource Areas*	0.0	23	2	- 1	2	2	State Resource Areas*
Protected (acres)	0.0	2.3	1.9	1,2	2.0	2.0	Protected (acres) Grean (efrestructure (acres)
Green Infrastructure (acres)	35.9	99.9	0 17.4	51.0	341	V. 4	Green Infrastructure (scree) Engastiand: 2002 Land Use
Deciduous (acres)	21.4	31.2	35.0	46.6	33.4	36.1	Deciduous (scres)
Evergreen (scree)	9.2	0	1.0	3.7	0	0	Evergreen (acres)
Mixed (acres)	6.3	0.7	0.7	0.7	0.7	0.7	Mixed (acres) State Forest Lands
							State Forest Lands State Forest Properties (acres)
State Forest Lands State Changed State Encest Deceating (pross)		ů .	ů	i i		i	Conservation Easement Properties (acres)
State-Owned State Forest Properties (acres) Conservation Easement Properties (acres)	0		th/	thd	tod	tbd	Potential Rare, Threatened and Endangered Species Areas*
State-Owned State Forest Properties (acres) Conservation Easement Properties (acres)	thd	tbd				49.4	Habitat Areas (Rare and Common Species) (acres) ⁵
State-Owned State Forest Properties (acres) Conservation Essement Properties (acres) tonestial Rare, Threatened and Endangered Species Areas* biblist Areas (Widlife & Flant (acres)*		tbd 54.9	67.5	57.6	54.6		
State-Owned State Forest Poperties (acres) Conseavation Exement Properties (acres) Potential Rines, Threatened and Endangered Species Areas* tablets Areas (WitClife & Plant) (acres)* tablets Areas (WitClife & State) (acres)* tablets Areas (acres)	95d 42.3	51.9		57.6			Potential Section 4(f) Properties
State Connel State Forse Properties (some) Consenvator Exement Properties (some) Consenvator Exement Properties (some) Voterfield Rev., Threatened and Endangered Species Areas* bibital Areas (Vittilia & Plant) (some) initial Section (R) Properties settle Section (R) Sec	fbd 42.3 0	54.9		57.6	0		Potential Section 4(f) Properties Number of Dublinks Daniel Parks and Recreation Assault
State Connel State Found Properties (come) Commerciate Exempt Properties (come) Commerciate Exempt Properties (come) Venterial Revo. Threatment and Exchangered Speciale Areas* Sobolar Areas Welder & Rating (posses) Sobolar Areas Welder & Rating (posses) Sobolar Areas Welder & Rating (posses) Sobolar & State (posses) Sob	85d 42.3 0 0	54.9 0 0	67.5 0		0		Rotantial Section 4(f) Properties Number of Publichy-Owned Parks and Recreation Areas Acres of Publichy-Owned Parks and Recreation Areas
State-Owned State Forset Properties (Dores) Conservation Exament Properties (Dores) Conservation Exament Properties (Dores) Voterbill River, Travelated and Endangered Species Areas* biblish Areas (Wildland & Plant) (pores) statish Secrition 4(3) Properties st	fbd 42.3 0	54.9		57.6 0 0 0	0		Potential Section 4(f) Properties Number of Dublinks Daniel Parks and Recreation Assault
State Control State Forum Prospectic (prices) Consensation Examinary Prospection (prices) Violentical Revi. Prospection (prices) Violentical Revi. Prices (prices) Violentical Prices (prices) Violentical Prices (prices) Violentical Prices (prices) Violentical Revi. Prices (prices) Violent	0 0 0	549 0 0	67.5 0		0 0 0	0 0	Potential Section 4() Properties Number of Pholicy-Cowned Parks and Recreation Areas Acres of Publicly-Cowned Parks and Recreation Areas Federally Owned State Cowned Courth Owned Courth Owned
Consensation Exement Progenties (carcia) Whorling Rour, Threshad and Endeagened Species Areas* Wholias Areas (Widthin & Parin) (poses*) Wholias Areas (Widthin & Parin) (poses*) Wholias Areas (Socialis) (Progression) and Recrusion Areas Foreign (Product) (Product) Foreign (85d 423 0 0 0 0 0	0 0 0 0 0 0 0	67.5 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0 0	Polestali Section 4(I) Proparitie Number of Publich-Owned Parks and Recreation Areas Acres of Publich-Owned Parks and Recreation Areas Federally-Owned Stein Cented Minispel Owned Minispel Owned
State Current State Force Properties (pores). Conservation Exament Properties (pores) Violential Rev., Threatenest and Debatogenest Specials Areas* Violential Rev., Threatenest Areas (Particular Areas) Violential Rev., Threatenest Rev., Thr	0 0 0 0 0	54.9 0 0 0 0	67.5 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	Potential Section 4() Properties Number of Pholicy-Cowned Parks and Recreation Areas Acres of Publicly-Cowned Parks and Recreation Areas Federally Owned State Cowned Courth Owned Courth Owned

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