



South Jersey Gas

BL ENGLAND & RELIABILITY PIPELINE PROJECT

September 27, 2013

PRESENTATION OUTLINE

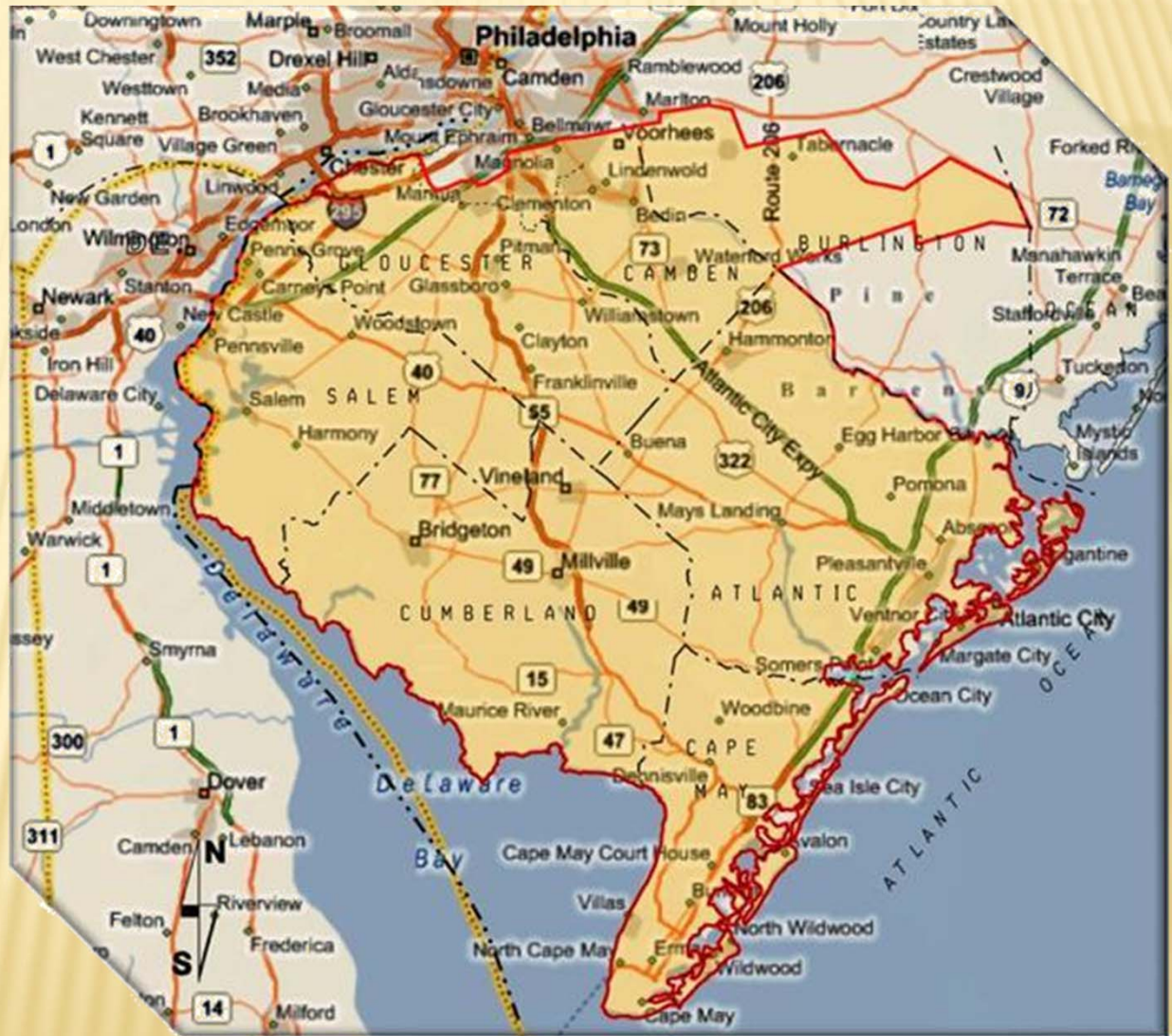
- Utility Service in New Jersey
- South Jersey Gas overview
- Project background
- Existing system infrastructure
- Reliability considerations
- Horizontal directional drilling
- Environmental impact studies
- Safety and maintenance

UTILITY SERVICE IN NEW JERSEY

- New Jersey Board of Public Utilities has the responsibility to ensure safe, adequate and proper utility service for residents
- BPU implements this responsibility by overseeing the actions of the State's various public utilities
- Public utilities are granted exclusive franchise rights to provide these services subject to the BPU's jurisdiction
- The BPU regulates most of the company's operations, including but not limited to service cost and quality, customer service, safety, and construction specifications

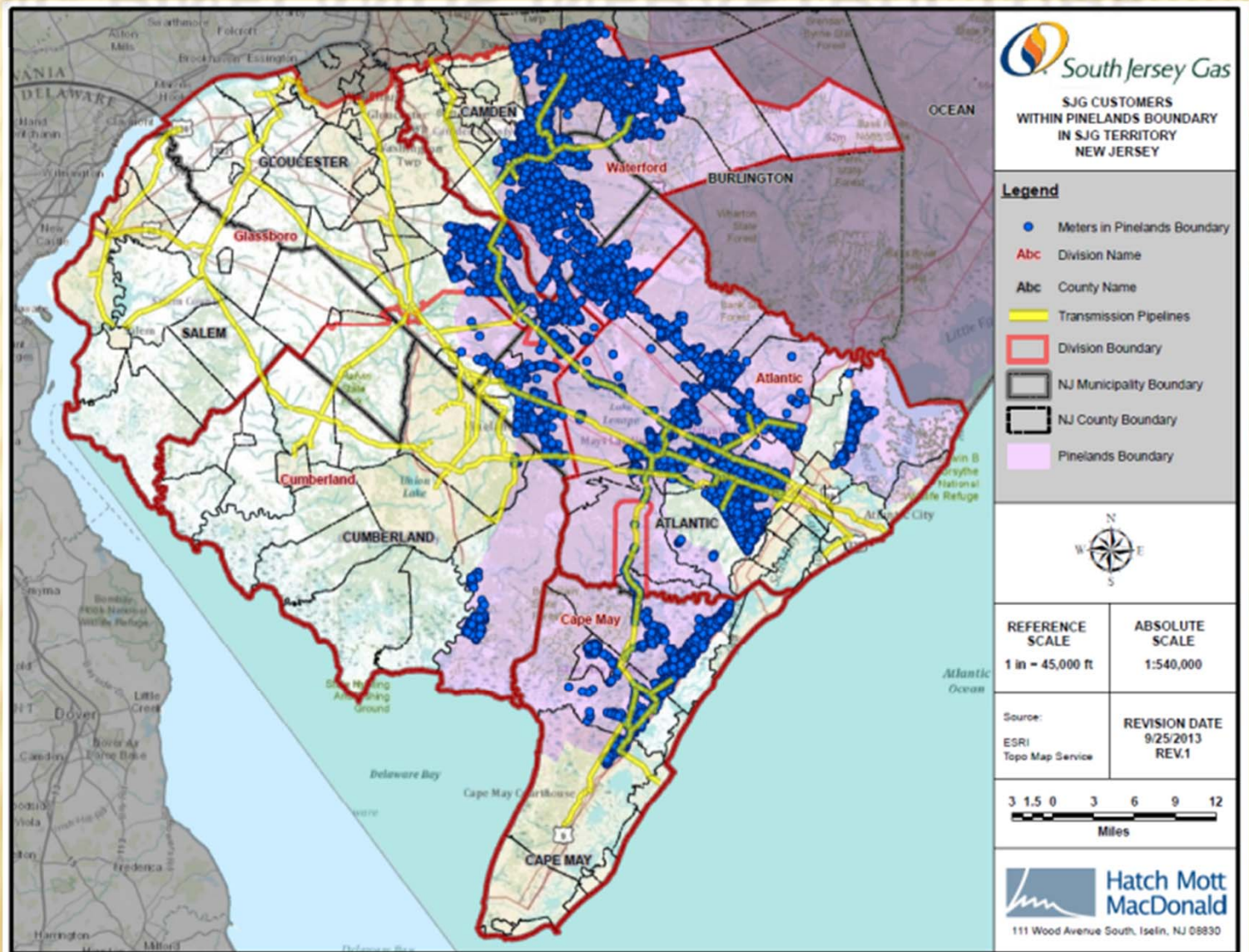
ABOUT SOUTH JERSEY GAS

- Approximately 360,000 customers
- 6,100 miles of distribution pipeline
- Serves seven southern counties
- 122 miles of transmission pipeline

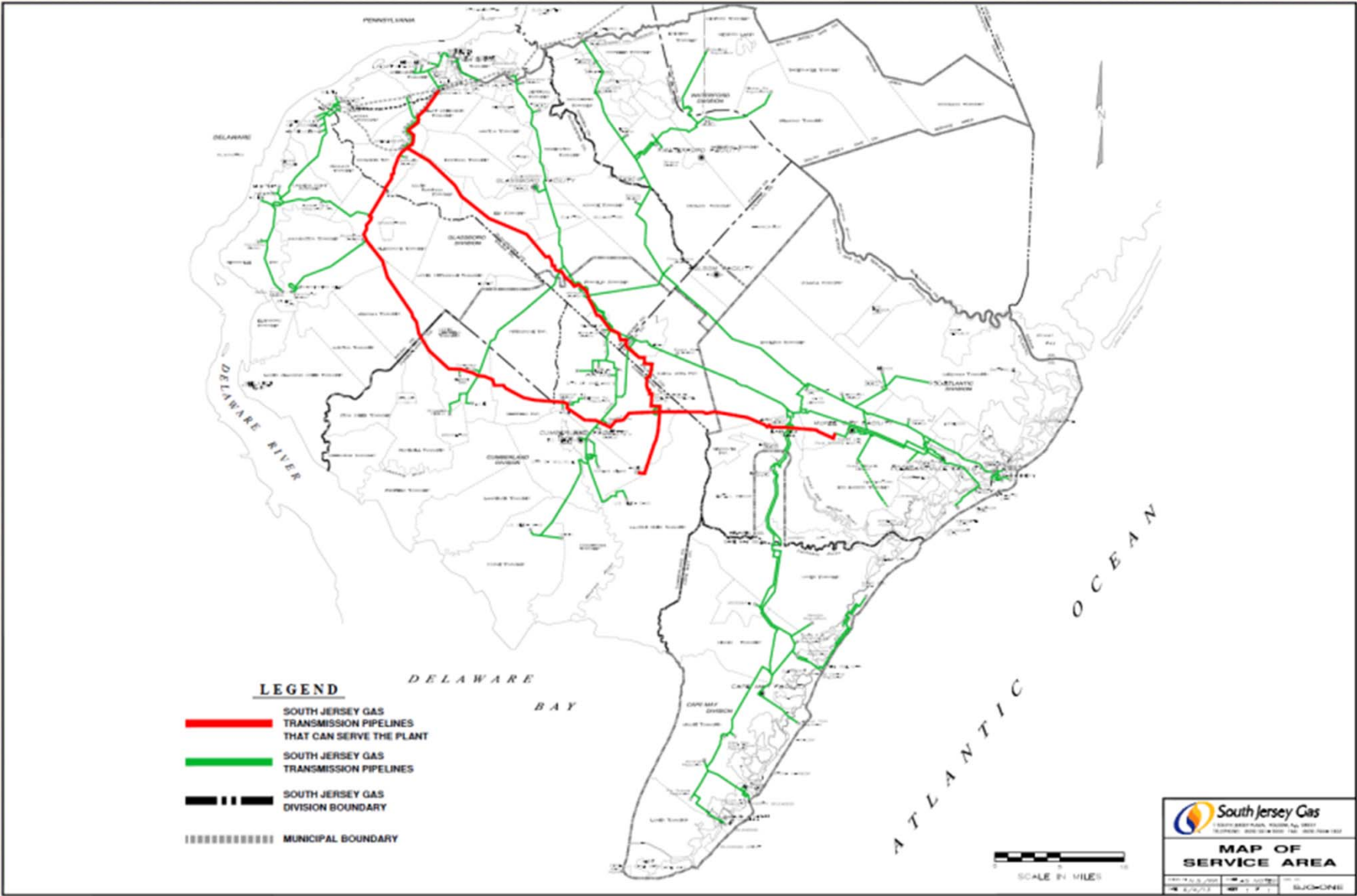


EXISTING PINELANDS INFRASTRUCTURE

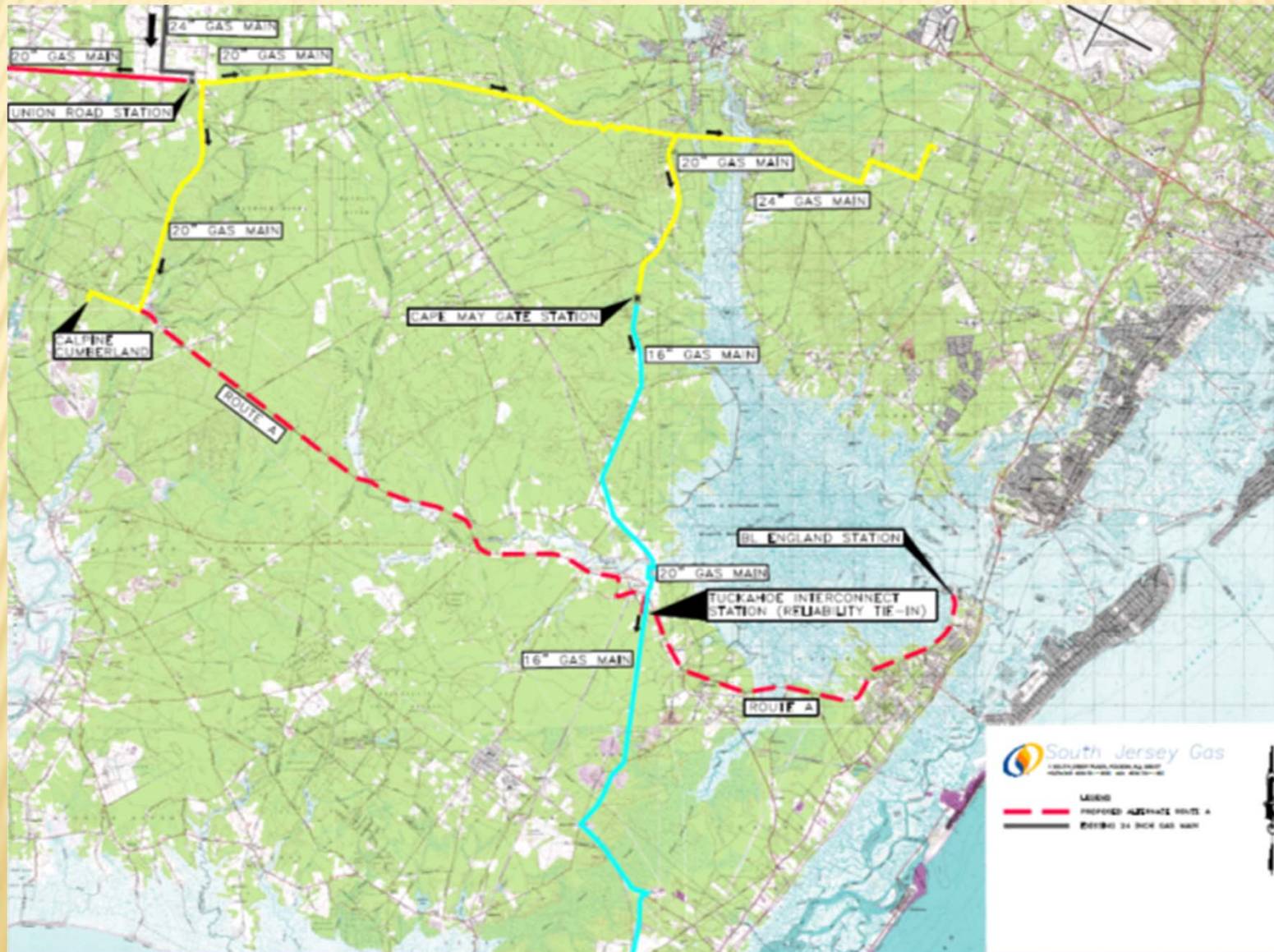
63,000
Customers
currently
residing
within the
Pinelands



SJG TRANSMISSION INFRASTRUCTURE



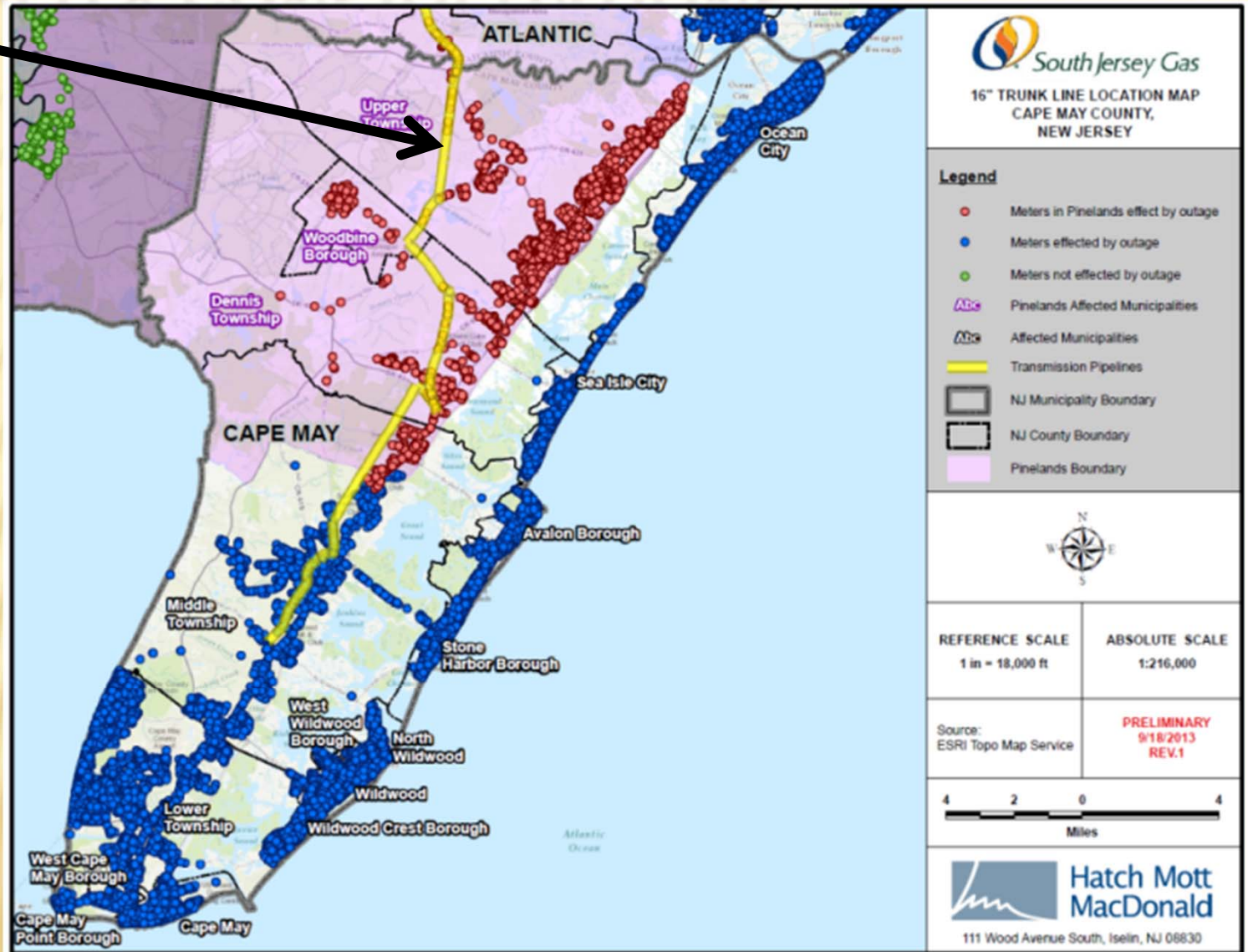
PROJECT OVERVIEW



RELIABILITY CONSIDERATIONS

Total number of customers impacted by service disruption = 60,000

Number of customers within the Pinelands = 3,300

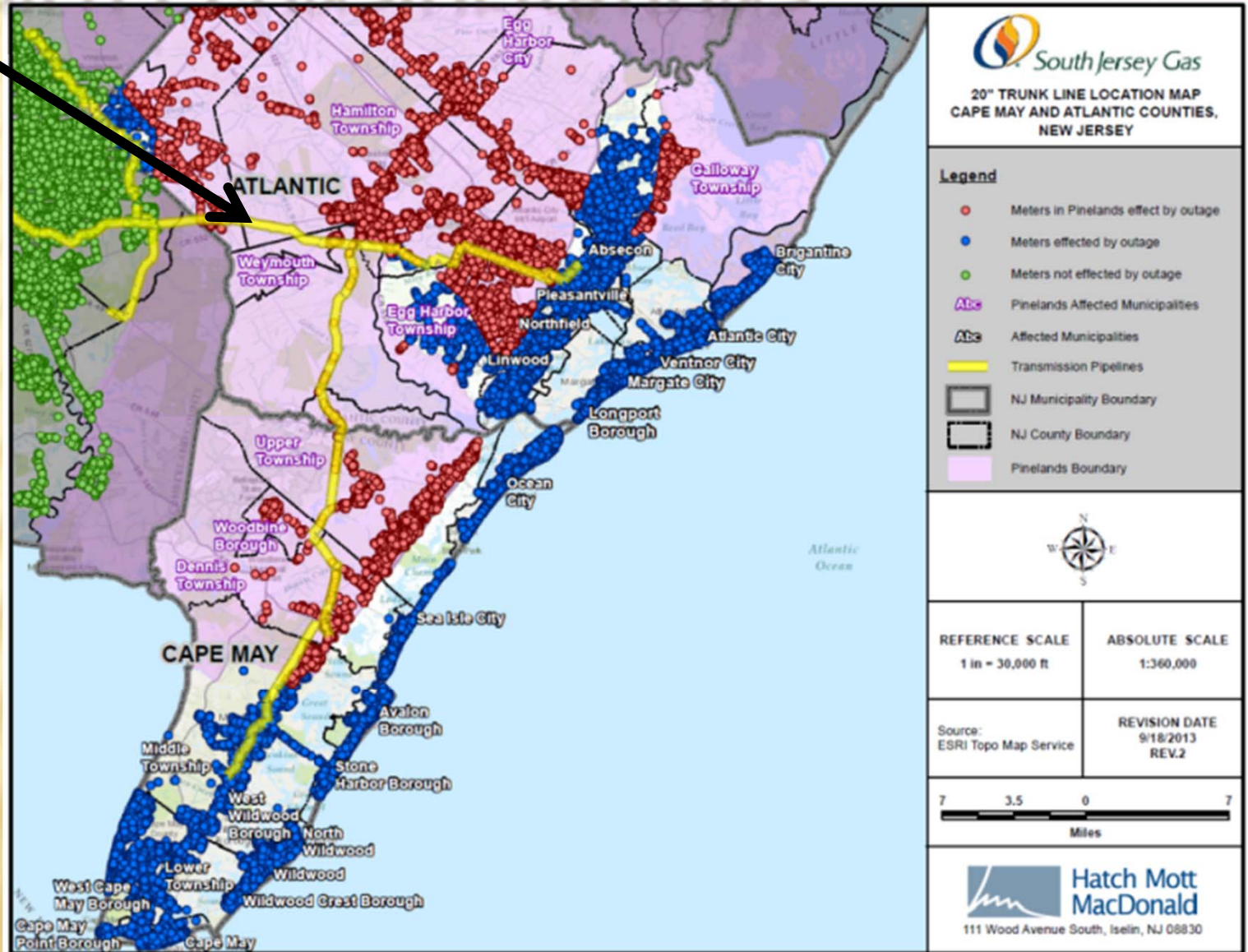


RELIABILITY CONSIDERATIONS

Total number of customers impacted by service disruption = 140,000

Number of customers within the Pinelands = 28,700

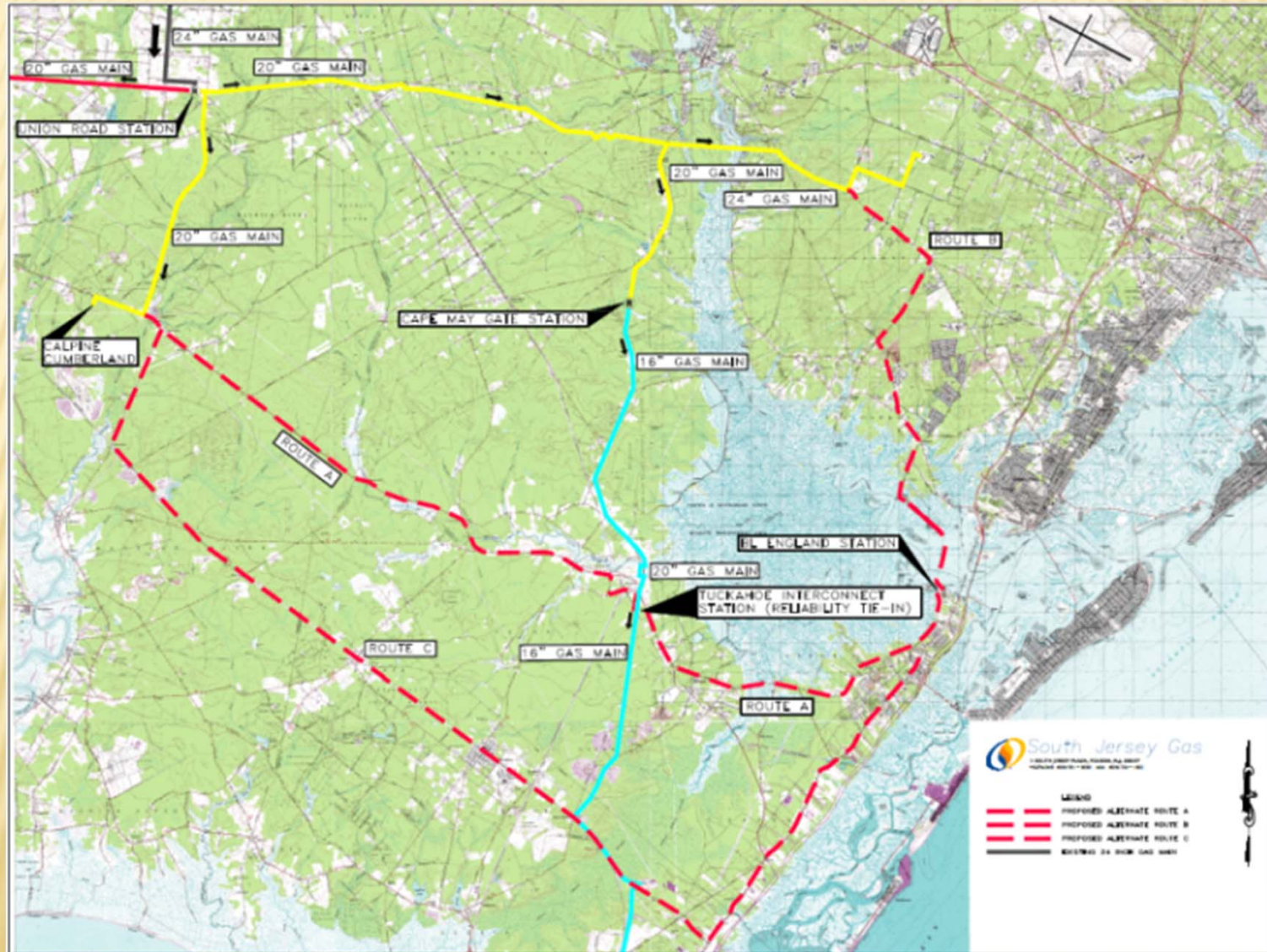
Number of Customers within the Pinelands in Atlantic County = 25,400



RESTORING NATURAL GAS SERVICE

- Restoring natural gas service is a lengthy, tedious process
- Each gas meter needs to be turned off as the pipeline problem is repaired
- Once gas is re-introduced to the system, each meter needs to be turned on and appliances relit for each home and business
- Restoring service to all of Cape May County could take 3 months or longer
- Events like Hurricane Sandy have demonstrated that this type of outage is possible (ex. Long Beach Island)
- Utilities have been asked by the BPU to propose actions that will 'harden' their systems

POTENTIAL PIPELINE ROUTES



ROUTE C

- Why was the route eliminated?

- ◆ Railroad corridor reforested
- ◆ Large habitat for endangered species
- ◆ Required significant clearing and disturbance of wetlands
- ◆ Regulatory agencies discouraged route option

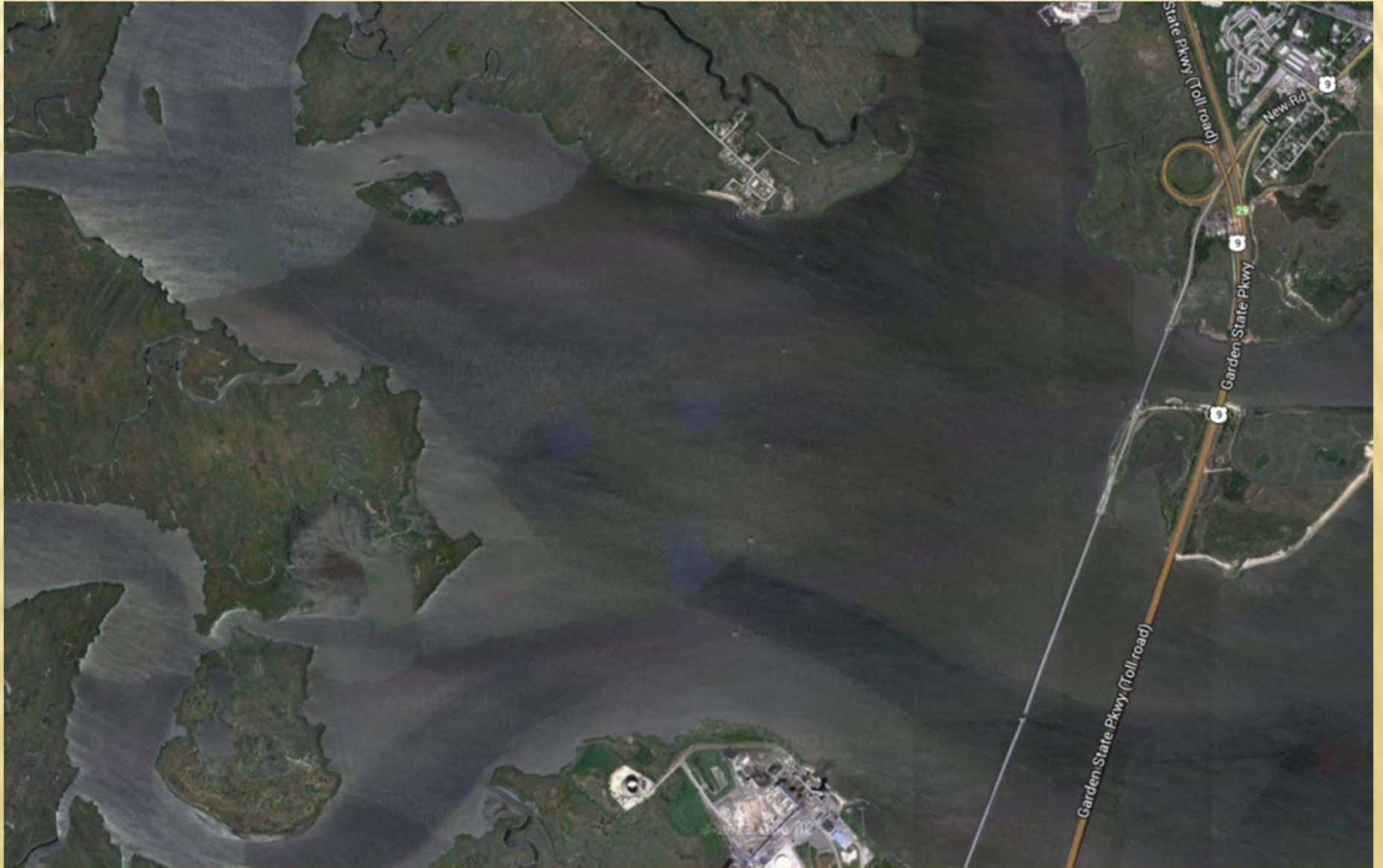


ROUTE B

- Why was the route eliminated?
 - ◆ Environmental impact – significant wetland mitigation required
 - ◆ Required relocation of residents
 - ◆ Restricted access to emergency services
 - ◆ Lack of available area for HDD construction
 - ◆ Limits of current drilling technology
 - ◆ Diminished reliability benefit



ROUTE B

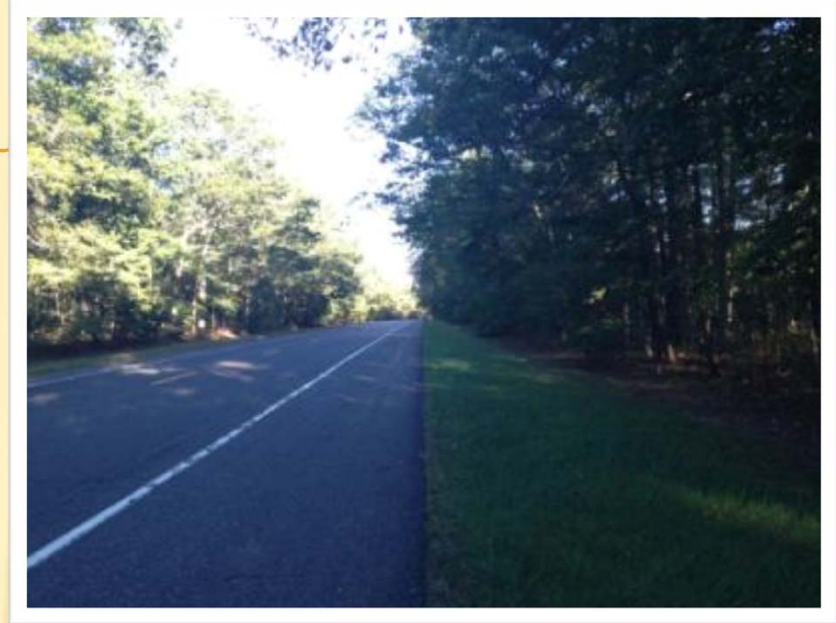


ROUTE B

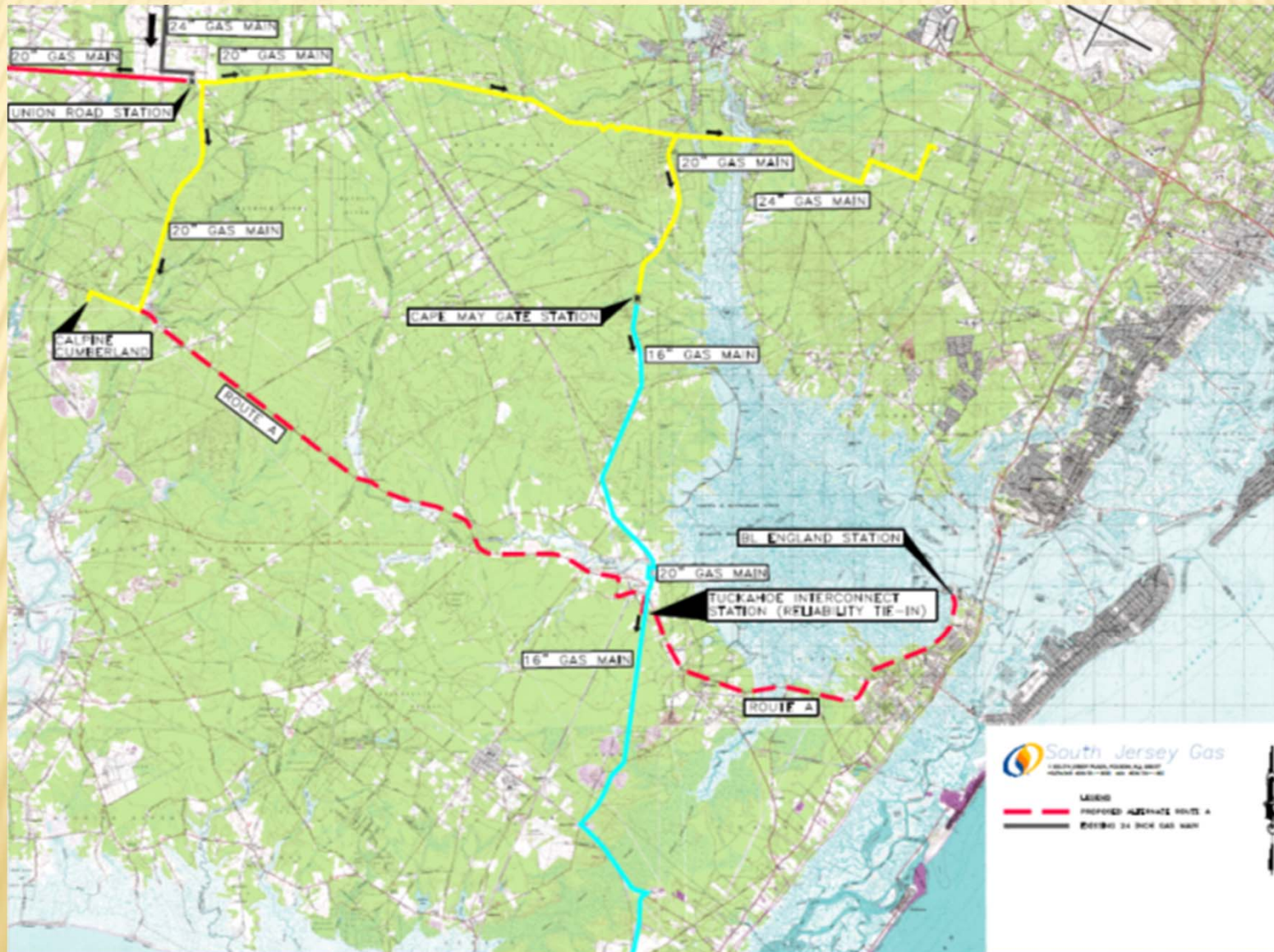


ROUTE A

- Why was this route chosen?
 - ◆ Minimal environmental impact
 - ◆ Limited residential impacts
 - ◆ Provides significant reliability benefit
 - ◆ Use of previously established right-of-way corridor



DESIGN ROUTE

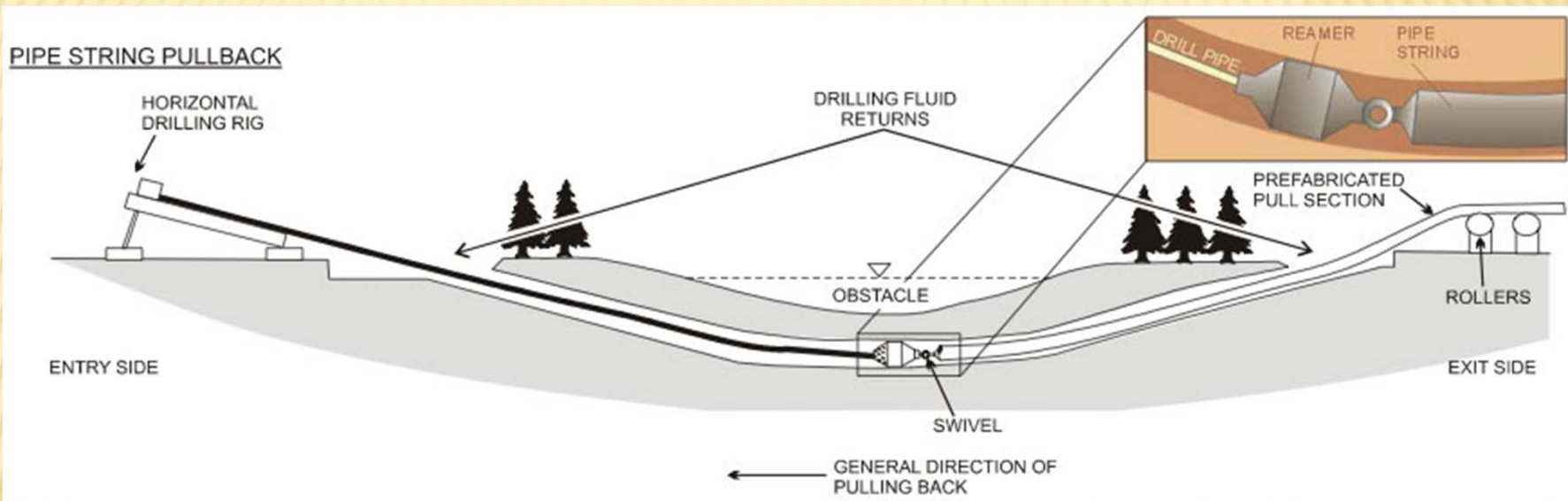


HORIZONTAL DIRECTIONAL DRILLING

Horizontal Directional Drills - SJG - Pinelands Area

Crossing Name	Structure to be drilled under	Total length of drill	Maximum depth of drill	Distance from Water Bottom to Pipe
Cumberland Pond on Rte 49	Bridge and Dam Piles	2410'	62'	37'
Tuckahoe River @ 1st Ave on Rte 49	Headwalls of bridge	2290'	56'	44'
Tuckahoe River @ Head of River Rd on Rte 40	Headwalls of bridge	1150'	61'	49'
Mill Creek on Rte 49	Headwalls of bridge	2120'	58'	46'

ENSURING SAFETY OF THE HDD PROCESS



- Identify potential environmental risks
- Require emergency response plans in the event of a problem
- Install sediment controls and containment areas around drilling operations
- Constantly track the exact path of the drill during the process
- Continually assess site practices and environmental controls
- Rehabilitate all disturbed areas as soon as possible and stabilize exposed soils

ENVIRONMENTAL IMPACT STUDIES

- Three Threatened & Endangered Species Surveys Were Prepared for Pinelands
 - ◆ Concluded that the proposed alignment avoids threatened and endangered species habitats
 - ◆ Recommended Best Management Practices that will be followed during construction
- Cultural Resource Studies
 - ◆ Phase 1A and 1B/II studies were completed
 - ◆ Concluded that archaeological resources will not be impacted by the pipeline

SAFETY AND MAINTENANCE

- Pipeline design exceeds federal requirements
- Continuous pressure monitoring
- Monthly patrols for erosion, excavation, illegal dumping, etc. for anything that may impact the pipeline
- Annual leak survey
- Periodic integrity assessments



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South Jersey Gas
