New Jersey Natural Gas
Southern Reliability Link Project
(NJ Pinelands Section)

Application to the NJ Pinelands Commission for
Certificate of Filing (File #2014-0045.001)

Plumsted, Jackson & Manchester Townships
Ocean County, New Jersey

January 2015
Project No.: 20000600

Prepared For:
New Jersey Natural Gas
1415 Wyckoff Road
P.O Box 1468
Wall, NJ 07719

Prepared By:
URS Corporation, Philadelphia Office
625 West Ridge Pike, Suite E-100
Conshohocken, Pennsylvania 19428
Table of Contents

Table of Contents ........................................................................................................................................ i

NJ PINELANDS COMMISSION DEVELOPMENT APPLICATION FORM ....................................................... iv

1.0 INTRODUCTION .................................................................................................................................. 1

2.0 PROJECT DESCRIPTION ....................................................................................................................... 3

3.0 COMPLIANCE WITH SUBCHAPTER 5, PART III - MINIMUM STANDARDS FOR LAND USE DISTRIBUTION AND INTENSITIES .................................................................................. 5

3.1 Minimum standards governing the distribution and intensity of land use in Rural Development Areas (7:50-5.26) ................................................................................................................ 5

3.2 Minimum standards governing the distribution and intensity of development and land use in Regional Growth Areas (7:50-5.28) ............................................................................. 5

3.3 Minimum standards governing the distribution and intensity of development and land use in Military and Federal Installation Areas (7:50-5.29) ................................................................. 5

4.0 COMPLIANCE WITH SUBCHAPTER 6, MANAGEMENT PROGRAMS AND MINIMUM STANDARDS ... 9

4.1 WETLANDS .............................................................................................................................................. 9

4.1.1 Wetlands (7:50-6.3) .......................................................................................................................... 9

4.1.2 Development prohibited (7:50-6.6) .................................................................................................. 9

4.1.3 Significant adverse impact (7:50-6.7) ............................................................................................ 9

4.1.4 Linear improvements (7:50-6.13) ................................................................................................. 12

4.1.5 Wetland transition areas (7:50-6.14) .......................................................................................... 13

4.2 VEGETATION ........................................................................................................................................ 13

4.2.1 Clearing and soil disturbance (7:50-6.23) ..................................................................................... 13

4.2.3 Development prohibited in the vicinity of threatened or endangered plants (7:50-6.27) .......... 14

4.3 FISH AND WILDLIFE .......................................................................................................................... 14

4.3.1 Protection of threatened or endangered wildlife required (7:50-6.33) ........................................ 14

4.3.2 Protection of wildlife habitat (7:50-6.34) .................................................................................... 16

4.4 WATER QUALITY .................................................................................................................................. 17

4.4.1 Minimum standards necessary to protect and preserve water quality (7:50-6.83) .................... 17

4.5 AIR QUALITY ....................................................................................................................................... 17

4.5.1 General standard (7:50-6.93) ...................................................................................................... 17

4.6 SCENIC ................................................................................................................................................. 18

URS
Conshohocken, PA
New Jersey Natural Gas Southern Reliability Link Project

4.6.1 Scenic corridors (7.50-6.103) ................................................................. 18
4.6.2 Requirements for scenic corridors (7:50-6.104) ........................................ 18
4.6.3 Location of utilities (7:50-6.111) ............................................................ 19

4.7 HISTORIC, ARCHAEOLOGICAL, AND CULTURAL PRESERVATION .......... 19
4.7.1 Evaluation of development proposals (7:50-6.155) ............................. 19

5.0 LIST OF REQUIRED PERMITS .................................................................... 21

6.0 References .................................................................................................. 22
Tables
Table 1       Threatened & Endangered Wildlife Species Summary Table
Table 2       List of Anticipated Permits

Appendices
Appendix A    Wetland Delineation Report
Appendix B    Threatened and Endangered Species Habitat Assessment Report

Plans & Figures
USGS Site Location Map
Project Site Base Map
Soils Map
Slope Map
Resource Capability Map
Landscape Plan
NJ PINELANDS COMMISSION DEVELOPMENT APPLICATION FORM
(With Attachment A, Property Owner Information)
Each item number below corresponds with the item numbers on the attached Application Form.

1. Enter the names of the person or organization applying for the development and the appropriate contact information.

2. You may wish to have an agent (family member, realtor, attorney, consultant) act on your behalf regarding the application. Only the listed applicant and agent will receive copies of Commission letters.

3. Enter the names of all current property owners and their appropriate contact information. If there are different property owners for separate lots, please use the supplemental information section to identify the owners and appropriate contact information for each lot.

4. Identify all lots that comprise the property subject of the application. If necessary, please use the supplemental information section to identify each block/lot subject of the application.

5. Indicate whether there are any easements or deed restrictions affecting the property.

6. Identify the existing and proposed drinking water source.

7. Identify the existing and proposed wastewater treatment source.

8. Identify all existing uses (residential, agricultural, forestry, mining, commercial, etc.) and development (buildings, structures, parking areas, storage areas, etc.) on the property. If there is no development on the property, write “vacant.” For residential uses, please note the existing number of dwelling units and/or lots. For commercial/industrial uses, please note the square footage of existing buildings.

9. Describe all proposed uses and development on the property. For residential uses, please note the proposed number of dwelling units and/or lots. For commercial/industrial uses, please note the square footage of proposed buildings.

10. To determine the appropriate application fee, please check the appropriate application type and complete any information identified under “additional information.”

11. If applicable, to determine the appropriate application fee, please check whether any special circumstances apply to this application.

12. Identify the total application fee required. If applicable, please also submit a signed and sealed statement from a licensed architect/engineer or a sworn, notarized statement from a qualified individual as to the estimated construction costs for the proposed development.
Signature:

The applicant and all property owner(s) must sign the application or provide separate written authorization bearing their signature. If an individual signs the application form on the property owner's behalf, please provide a written explanation indicating how he/she is authorized to act on behalf of the property owner(s). Please also attach documentation demonstrating that he/she is authorized to act on behalf of the property owner.

Completed application forms should be signed & mailed to:

New Jersey Pinelands Commission
PO Box 359
15C Springfield Rd
New Lisbon, NJ 08064

Submission:

Alternatively, forms and information consisting of letter/legal sized documents and electronically signed forms may be emailed to ApplInfo@njpines.state.nj.us or faxed to 609-894-7331. Large reports, plans, checks, and items that have a manually applied seal must still be submitted as hard copies.

Additional Information:

Within 30 days of receipt of any information, the Commission will determine whether the application is complete or if additional information is required to complete the application. Most applications to the Commission typically require additional information besides that provided on the application form. Examples of such information include a site plan, soil boring and wetlands mapping. The Commission staff will advise you of any further information which will be required to complete an application.

A list of activities that do not require an application to the Commission can be viewed online at: http://www.nj.gov/pinelands/applj/tools/.

Additional information, including our regulations, can be viewed online at www.nj.gov/pinelands.

For assistance with completing the application form or determining the appropriate application fee, contact our Regulatory Programs staff at (609) 894-7300 or at helpline@njpines.state.nj.us
New Jersey Pinelands Commission
Development Application
Updated on 9/17/2014

1. Applicant Name(s)
   New Jersey Natural Gas, Attn: Keith Stum, Project Manager

   Mailing Address __________________________________________
   1415 Wyckoff Road P.O. Box 1468

   City __________________ Wall __________________ State NJ Zip ______07719____

   Telephone Number _______732-938-1225_____ Email Address __________KStum@NJNG.com________

2. I wish to authorize an agent to act on my behalf regarding this application: Yes ☐ No ☐

   Agent Name
   URS Corporation, Attn: Barry Baker, Environmental Services Department Manager

   Mailing Address __________________________________________
   625 West Ridge Pike Suite E-100

   City __________________ Conshohocken __________________ State PA Zip ______19428____

   Telephone Number _______610-832-3500_____ Email Address __________Barry.Baker@urs.com________

3. Property Owner Name(s)
   See Attachment A for property owner information

   Mailing Address __________________________________________

   City ______________________ State ______ Zip_________

   Telephone Number ______________ Email Address ______________

4. Property Subject of Development Application:
   Municipality See Attachment A for Parcel Information

   Block #______ Lot #______  Block #______ Lot #______

   Block #______ Lot #______  Block #______ Lot #______

   Block #______ Lot #______  Block #______ Lot #______

   Total Acreage of Property:

   Block #______ Lot #______  Block #______ Lot #______

   Block #______ Lot #______  Block #______ Lot #______
5. Are there any easements or deed restrictions affecting this property? Yes ☐ No ☐
   If yes, please attach a copy of the recorded deed restriction or property easement.

6. Source of Water Supply:

   Existing: Well ☐ Public Water System ☐ N/A ☐
   Proposed: Well ☐ Public Water System ☐ N/A ☐

7. Source of Wastewater Treatment:

   Existing: Onsite Septic ☐ Public Sewer ☐ N/A ☐
   Proposed: Existing Onsite Septic ☐ Proposed Onsite Septic ☐ Public Sewer ☐ N/A ☐

8. Description of Existing uses/development on property (uses, # of dwelling units/lots, type(s) of
   commercial use(s), square footage of commercial buildings, etc.):

   Please refer to Project Description in attached application.

9. Description of all Proposed Uses/Development (uses, # of dwelling units/lots, square footage of
   commercial buildings/additions/parking improvements, etc.) on Property:

   Please refer to Project Description in attached application.
10. Please choose the appropriate Application Type and provide the required additional information:

<table>
<thead>
<tr>
<th>Application Type</th>
<th>Required Fee</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ New Dwelling Units or Lots or Resubdivisions</td>
<td>1-4 dwelling units or lots $200 per dwelling unit or lot</td>
<td>Total # of proposed units/lots =</td>
</tr>
<tr>
<td></td>
<td>5-50 units or lots $800 + $225 per dwelling unit or lot for units 5-50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>51-150 units or lots $11,150 + $125 per dwelling unit or lot for units 51-150</td>
<td></td>
</tr>
<tr>
<td></td>
<td>151 and more $23,650 + $100 per dwelling unit or lot for units 151 +</td>
<td></td>
</tr>
<tr>
<td>□ Demolition of Single Family Dwelling (50 Years Old or Older) ¹</td>
<td>$200</td>
<td>Year Dwelling Built:</td>
</tr>
<tr>
<td>□ Change of Use and No Further Development (Not served by public sewers)</td>
<td>$200</td>
<td>N/A</td>
</tr>
<tr>
<td>□ Commercial/Institutional/Nonresidential Development or Mixed Residential/Commercial ²</td>
<td>Construction Costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fee Formula</td>
<td>Total Construction Costs=</td>
</tr>
<tr>
<td>$0-$500,00</td>
<td>1% of construction cost or $200 minimum</td>
<td></td>
</tr>
<tr>
<td>$500,001 - $1,000,000</td>
<td>3% of cost (+ $5,000 for first $500,000)</td>
<td></td>
</tr>
<tr>
<td>$1,000,001 and more</td>
<td>3% of cost (+ $8,750 for first $1,000,000)</td>
<td></td>
</tr>
<tr>
<td>□ Demolition of Structure other than Single Family Dwelling (50 Years Old or Older) and No Further Development ¹ ²</td>
<td>Demolition Costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fee Formula</td>
<td>Total Demolition Costs =</td>
</tr>
<tr>
<td>$0-$500,00</td>
<td>1% of construction cost or $200 minimum</td>
<td></td>
</tr>
<tr>
<td>$500,001 - $1,000,000</td>
<td>3% of cost (+ $5,000 for first $500,000)</td>
<td></td>
</tr>
<tr>
<td>$1,000,001 and more</td>
<td>3% of cost (+ $8,750 for first $1,000,000)</td>
<td></td>
</tr>
<tr>
<td>□ Linear Development (Roads, Utilities, etc.)</td>
<td>$150 per acre of all land included in the right of way (ROW) plus $150 per acre of all land outside of the ROW to be disturbed as part of the development</td>
<td>Acres to be disturbed: 64.39</td>
</tr>
<tr>
<td>□ Forestry</td>
<td>$5 per acre subject of forestry activities</td>
<td>Acres subject of forestry:</td>
</tr>
<tr>
<td>□ Golf Courses</td>
<td>$150 per acre devoted to golf course facility</td>
<td>Golf Course Acres:</td>
</tr>
<tr>
<td>□ Resource Extraction/Mining</td>
<td>$1,500 plus $30 per acre to be mined within each permit period</td>
<td>Acres to be mined:</td>
</tr>
<tr>
<td>□ Non-PDC Letter of Interpretation</td>
<td>$200</td>
<td>N/A</td>
</tr>
</tbody>
</table>

¹ If available, please attach pictures of the structure to be demolished.
² For these application types (shaded above), attach a signed/sealed statement from a licensed architect/engineer or a sworn, notarized statement from a qualified individual as to the estimated construction costs for the proposed development.
11. Please identify whether any of the following special circumstances apply to this application:

<table>
<thead>
<tr>
<th>Special Circumstance</th>
<th>Required Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Public Development (Development Proposed by a Public Agency)</td>
<td>50% of the fee calculated using the above chart (item #10) with a minimum fee of $200 and a maximum fee of $25,000</td>
</tr>
<tr>
<td>□ Religious Association or Corporation or Non-Profit Organization which is exempt from Federal Income Taxation under Sections 501(c)(3) or (d) of the Internal Revenue Code. (This does not apply to organizations which are solely exempt from State Taxation.)</td>
<td>$500 or the amount calculated in accordance with the above chart, whichever is less</td>
</tr>
<tr>
<td>□ Review of Any Study/Survey (cultural, threatened/endangered species, etc.) prior to Submission of Development Application</td>
<td>1/3 of the estimated application fee calculated in accordance with the above chart</td>
</tr>
<tr>
<td>□ Nonresidential development using an alternate design septic system</td>
<td>$2,500 + fee calculated above</td>
</tr>
</tbody>
</table>

12. Total Fee Required (Minimum Fee: $200) = $9,658.50
I hereby authorize the staff of the Pinelands Commission to conduct such onsite inspections of the parcel as are necessary to review this application and ensure compliance with the requirements of the Pinelands Comprehensive Management Plan. I also acknowledge that if my application involves extraordinary or complex issue(s) that necessitate the retention of consultants with expertise in such matters, I will be advised of that need and the amount of money that must be placed in escrow to retain the consultants and that review of my application will not proceed until I provide the required escrow amount.

I hereby certify that the information furnished on this application form and all supplemental materials is true.

Signatures of Applicant(s):

Signature                                  Date

Signature                                  Date

Name (Print) KEITH STURN

Signatures of Property Owner(s)\(^3\):

Signature                                  Date

Signature                                  Date

Name (Print) ____________________________

Name (Print) ____________________________

---

\(^3\)If an individual has signed the application form on the property owner’s behalf, please provide a written explanation indicating how he/she is authorized to act on behalf of the property owner(s). Please also attach documentation demonstrating that he/she is authorized to act on behalf of the property owner.
I hereby authorize the staff of the Pinelands Commission to conduct such onsite inspections of the parcel as are necessary to review this application and ensure compliance with the requirements of the Pinelands Comprehensive Management Plan. I also acknowledge that if my application involves extraordinary or complex issue(s) that necessitate the retention of consultants with expertise in such matters, I will be advised of that need and the amount of money that must be placed in escrow to retain the consultants and that review of my application will not proceed until I provide the required escrow amount.

I hereby certify that the information furnished on this application form and all supplemental materials is true.

Signatures of Applicant(s):

Signature ___________________________ Date ____________

Name (Print) ___________________________

Signature ___________________________ Date ____________

Name (Print) ___________________________

Signatures of Property Owner(s)³:

Signature ___________________________ Date ____________

Name (Print) ___________________________

Signature ___________________________ Date ____________

Name (Print) ___________________________

³If an individual has signed the application form on the property owner’s behalf, please provide a written explanation indicating how he/she is authorized to act on behalf of the property owner(s). Please also attach documentation demonstrating that he/she is authorized to act on behalf of the property owner.
I hereby authorize the staff of the Pinelands Commission to conduct such onsite inspections of the parcel as are necessary to review this application and ensure compliance with the requirements of the Pinelands Comprehensive Management Plan. I also acknowledge that if my application involves extraordinary or complex issue(s) that necessitate the retention of consultants with expertise in such matters, I will be advised of that need and the amount of money that must be placed in escrow to retain the consultants and that review of my application will not proceed until I provide the required escrow amount.

I hereby certify that the information furnished on this application form and all supplemental materials is true.

Signatures of Applicant(s):

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

Name (Print) __________________________

Signatures of Property Owner(s)

James C. Hodges, Colonel, USAF
Commander, Joint Base McGuire-Dix-Lakehurst

Date 3/2/15

If an individual has signed the application form on the property owner's behalf, please provide a written explanation indicating how he/she is authorized to act on behalf of the property owner(s). Please also attach documentation demonstrating that he/she is authorized to act on behalf of the property owner.
I hereby authorize the staff of the Pinelands Commission to conduct such onsite inspections of the parcel as are necessary to review this application and ensure compliance with the requirements of the Pinelands Comprehensive Management Plan. I also acknowledge that if my application involves extraordinary or complex issue(s) that necessitate the retention of consultants with expertise in such matters, I will be advised of that need and the amount of money that must be placed in escrow to retain the consultants and that review of my application will not proceed until I provide the required escrow amount.

I hereby certify that the information furnished on this application form and all supplemental materials is true.

Signatures of Applicant(s):

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

Name (Print) __________________________________________

Signatures of Property Owner(s)²:

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

Name (Print) __________________________

²If an individual has signed the application form on the property owner's behalf, please provide a written explanation indicating how he/she is authorized to act on behalf of the property owner(s). Please also attach documentation demonstrating that he/she is authorized to act on behalf of the property owner.
Supplemental Information

The following supplemental information is attached:

☒ Application Fee (Item #12) Amount Enclosed $ 9658.50

Checks and money orders should be made payable to the NJ Pinelands Commission.

NA If applicable, a signed and sealed statement from a licensed architect/engineer or a sworn, notarized statement from a qualified individual, if an architect or engineer has not been retained, as to the estimated construction costs for the proposed development used to calculate the appropriate application fee. (Item #12)

NA If applicable, pictures of the dwelling/structure to be demolished (Items 10 & 11)

NA If applicable, a recorded deed restriction or property easement (Item #5)

NA If applicable, please submit documentation demonstrating that the individual(s) who signed the application form on behalf of the property owner is authorized to act on the property owner's behalf.

☐ Additional Information:
**ATTACHMENT A**

NJNG Southern Reliability Link Project

List of Properties and Owners

**Property Owner:**
U.S. Government - Joint Base McGuire-Dix-Lakehurst
Col. James C. Hodges, Commander
2901 Falcon Lane
JB MDL, NJ 08841
(609) 754-0871
Email: james.hodges@us.af.mil

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Block</th>
<th>Lot</th>
<th>Property Location</th>
<th>Acres (Property)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jackson</td>
<td>23601</td>
<td>1</td>
<td>1 PINEHURST RD AKA RT539</td>
<td>6464.43 AC</td>
</tr>
<tr>
<td>Manchester</td>
<td>73</td>
<td>42</td>
<td>CENTRAL AVE</td>
<td>5.172AC</td>
</tr>
<tr>
<td>Manchester</td>
<td>71</td>
<td>13</td>
<td>HWY 547</td>
<td>0.28 AC</td>
</tr>
<tr>
<td>Manchester</td>
<td>70</td>
<td>18</td>
<td>2501 HWY 547</td>
<td>1065.5AC</td>
</tr>
<tr>
<td>Plumsted</td>
<td>91</td>
<td>1</td>
<td>PINEHURST RD</td>
<td>761AC</td>
</tr>
<tr>
<td>Plumsted</td>
<td>92</td>
<td>1</td>
<td>PINEHURST RD</td>
<td>10888AC</td>
</tr>
</tbody>
</table>

**Property Owner:**
Plumbik, LLC
20 Phillips Mills Dr.
N Middletown, NJ 07748

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Block</th>
<th>Lot</th>
<th>Property Location</th>
<th>Acres (Property)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manchester</td>
<td>72.01</td>
<td>14.03</td>
<td>2400 RIDGEWAY BLVD</td>
<td>5.3975 AC</td>
</tr>
</tbody>
</table>

1 This list includes properties within the Pinelands Preservation Area that intersect the Project area.
2 Acres provided are for each property in its entirety. The Project intersects a portion of each of these properties.
1.0 INTRODUCTION

This application represents an initial filing with the New Jersey Pinelands Commission (NJPC) on behalf of New Jersey Natural Gas (NJNG) for the proposed Southern Reliability Link Project. Coordination meetings and pre-application conferences were held with the NJPC for this project on October 14, 2014 and December 2, 2014. As discussed at those meetings, detailed engineering design as well as multiple technical studies for this project are still underway. The information and plans provided here reflect the level of design and associated impacts identified as of the date of this submittal. The technical data to be provided to the NJPC in supplemental submissions as design progresses includes, but is not limited to, the following:

- Threatened/endangered Species – Targeted Species/Critical Habitat Survey Report(s)
- Phase I Cultural Resources Survey
- Plans & Compliance Statements for additional workspace areas identified as engineering design is finalized.

NJNG is a public utility that supplies natural gas to more than 500,000 customers in Monmouth and Ocean Counties, as well as portions of Burlington, Middlesex and Morris Counties. In recent years, increases in customer demand and extreme weather events have led NJNG to evaluate their system. These evaluations have identified system vulnerabilities, especially in its Ocean County area, which includes the Pinelands region. In response to the increased need for reliable and safe service, NJNG is proposing a secondary natural gas feed into the southern region of New Jersey. This new feed will require the construction of a new 30-inch natural gas transmission pipeline between specific supply and connection points in Burlington County and Ocean County, which includes areas within the NJ Pinelands.

As part of the planning for the pipeline route, NJNG has coordinated closely with personnel from the Joint Base McGuire-Dix-Lakehurst (JB MDL). This coordination allowed for NJNG to locate portions of the proposed pipeline within the Pinelands on JB MDL property while also providing the infrastructure to support a critical need for natural gas service to areas of the Joint Base. The JB MDL has identified a significant need for natural gas service to the Joint Base to remedy their current position of susceptibility to service outages. The proposed project will provide JB MDL with the reliability which is critical for their operations, especially in emergency and crisis situations when the base is required to support communities in the region and the around the country. This new natural gas service will also serve future base projects which will require adequate service that is not currently in place.

The NJ Pinelands Commission Comprehensive Management Plan (CMP) (N.J.A.C. 7:50) regulates these proposed activities. The proposed project alignment and new service on the JB MDL property will cross through approximately 10.66 miles of the following Pinelands Management Areas within the Pinelands Area:

- Federal/Military Installation Areas (7:50-5.29) – approximately 10.45 miles
- Regional Growth (7:50-5.28) – approximately 0.21 miles
Additionally, the project alignment follows approximately 1.42 miles of County Route 539 along the Pinelands Area boundary where it is bordered to the northeast by Rural Development Area (7:50-5:26).

Each of these Management Areas allows the development of public service infrastructure projects; therefore NJNG, with support from the JB MDL, is providing this application which documents project compliance with the CMP.

In order to authorize construction of the proposed pipeline, NJNG filed a request for approval with the New Jersey Board of Public Utilities (NJBPU) in March, 2015. All pipeline safety regulations administered by the NJBPU (Reliability and Security Division; Pipeline Safety Department) will be adhered to.
2.0 PROJECT DESCRIPTION

The proposed project consists of the construction of a new 30-inch natural gas pipeline between specific supply and connection points in Burlington County and Ocean County, which includes areas within the Pinelands. The pipeline will be primarily located underground, with the exception of three proposed valve stations (exact locations to be determined). The alignment is co-located within existing, paved roadways including County Route 539, active roadways and taxiways within JB MDL, and crosses County Route 547 as it exits JB MDL. The pipeline will include a tie-in to JB MDL at the National Guard facility located along County Route 539 (exact location currently in design). Construction activities for the project will include temporary disturbances to existing pavement and maintained/cleared, compacted roadway edge. In addition, the project will require a small area of permanent disturbance, including, 0.22 acre of upland tree clearing, and minor roadside tree trimming to accommodate construction vehicle access. Construction is anticipated to commence in October, 2015 and conclude in December, 2016.

The pipeline will be installed utilizing open trench construction techniques, including stove-pipe and drag-section methods (or a combination thereof), within a limited workspace while minimizing impacts to the surrounding landscape. To the maximum extent possible, the alignment of the proposed pipeline was developed to avoid wetland and stream crossings. In areas where the route alignment cannot avoid these crossings, Horizontal Directional Drill (HDD) techniques will be utilized to install the pipeline below the resources and thus avoid disturbances to these sensitive areas. A description of the proposed construction methodologies is provided below:

Stove-Pipe Method
This method involves installing one joint (typically 40-foot lengths) of pipe at a time. The extent of open trench is limited to the amount of pipe to be installed in any given workday. All welding and coating activities, along with associated inspection, are performed near or within the open trench. At the end of each workday, the trench is backfilled and/or covered with steel plate(s).

Drag-Section Method
The drag-section method is similar to the stove-pipe method except that prefabricated section(s) of pipe containing several 40-foot long pipe joints are placed into the trench during any given workday. At the end of each workday, the trench is backfilled and/or covered with steel plate(s).

In both methods, to provide the contractor with a starting point for the following workday, a short section of trench is not backfilled, but is covered with steel plate(s).

The use of these two methods enables the width of required workspace to be kept to a minimum.

Horizontal Directional Drill (HDD)
HDD involves the use of specialized equipment to advance a steerable cutting head to drill a small pilot hole along a designed profile between defined entry and exit points. The pilot hole is gradually enlarged to the desired diameter with multiple passes of progressively larger reaming/cutting tools. The pipe string is then pulled through the hole that has been reamed to the appropriate diameter. A viscous drilling fluid, which typically consists of water and bentonite, is continuously pumped to the cutting head to facilitate the removal of cuttings, stabilize the drilled hole, cool the cutting head, and lubricate carrier pipe during the pullback process. The drilling fluid is continuously processed through the drilling fluid cleaning system to remove cuttings and is then recycled. The drilling fluid that cannot be recycled
because of the excessive build-up of ultrafine particles is to be transported offsite, to an approved location, for disposal.

During the design of an HDD plan and profile, existing conditions are assessed in order to determine the optimum location of the entry and exit locations. Factors considered include constructability, proposed permanent and temporary easements, work space and access, surface features, subsurface geology and environmental constraints. These and other site-specific constraints will be further refined during detailed design as key additional site data are collected. This data includes items such as water body depth and geotechnical profiles along the alignment. Design factors are then considered holistically in the selection of a final pipe depth and alignment that provide the required performance parameters.
3.0 COMPLIANCE WITH SUBCHAPTER 5, PART III - MINIMUM STANDARDS FOR LAND USE DISTRIBUTION AND INTENSITIES

The following sections provide a written statement addressing each of the standards or guidelines set forth in Subchapter 5 of the CMP. A specific explanation of how the proposed project meets each such standard or guideline is provided.

3.1 Minimum standards governing the distribution and intensity of land use in Rural Development Areas (7:50-5.26)

The project alignment follows County Route 539 along approximately 1.42 miles of the Pinelands Area boundary where it is bordered to the northeast by Rural Development Area. The alignment is situated to the west side of County Route 539, and the Pinelands Area boundary.

In the Rural Development Area, public service infrastructure is permitted and there is no express requirement that the development needs to complement other compatible uses or serve the needs of the Pinelands. N.J.A.C. 7:50-5.26(b)(10). Thus, a gas pipeline is permitted in the Rural Development Area.

3.2 Minimum standards governing the distribution and intensity of development and land use in Regional Growth Areas (7:50-5.28)

The project alignment includes approximately 0.21 miles through Regional Growth Area. Any use not otherwise limited pursuant to N.J.A.C. 7:50-6 is permitted in a Regional Growth Area (provided residential density standards are met for residential projects).

The proposed project is a permitted use since it is a public service infrastructure project.

3.3 Minimum standards governing the distribution and intensity of development and land use in Military and Federal Installation Areas (7:50-5.29)

The project alignment includes approximately 10.45 miles through Military and Federal Installation Areas.

Any use associated with the function of the Federal installation may be permitted in a Military and Federal Installation Area:

The Southern Reliability Link (SRL) is a proposed natural gas pipeline that will connect the southern end of New Jersey Natural Gas’ (NJNG) distribution system to the interstate pipeline system. A section of the SRL is planned to go through the Joint Base McGuire-Dix-Lakehurst, in portions of Plumsted Township and Jackson Township, New Jersey.
The Pinelands Comprehensive Management Plan, (NJAC 7:50-5.29(a)) states, “Any use associated with the function of the Federal Installation may be permitted in a Military and Federal Management Area...” The SRL is consistent with this standard as it is directly “associated with the function” of the Joint Base and is important to its future as well.

The proposed SRL pipeline will increase the reliability and resiliency of the natural gas system that supports the Joint Base’s critical mission by providing a redundant supply. Currently, NJNG’s natural gas system receives 85 to 90 percent of its natural gas from one supplier located on the northern end of its system. Recent weather events, such as Hurricane Katrina and Superstorm Sandy, have shown that damage to critical sections of a single-feed system could cause widespread interruption of service. NJNG’s present system has one primary supplier, Texas Eastern. Any issue with that gate station (supply point) or NJNG’s transmission system, which transports the gas to the Monmouth/Ocean/Burlington County distribution system, could result in a major outage. This is especially significant to the Joint Base since it is located at the far southern end of NJNG’s transmission system, away from this major supply of natural gas. In the event this transmission feed is disrupted or the system is compromised, the Joint Base would therefore be one of the first facilities affected. A shutdown of the Joint Base system would directly compromise its military mission, as well as hamper any effort to provide statewide support during, and following, catastrophic events. The proposed SRL addresses the single feed issue by creating a second supply line from a second major interstate natural gas supplier located at the opposite end of NJNG’s transmission system.

The new pipeline will also increase the reliability of NJNG’s system that supplies the Joint Base. Now more than ever, natural gas is the fuel of choice in new housing, electric generation, and other development throughout the country. While natural gas demand has increased, and continues to do so, the interstate pipeline system’s capacity has not kept pace. Extreme cold weather, such as the polar vortex experienced last winter, puts a strain on these systems, which can cause their equipment to break down, as well as negatively impact available supply. The result is lower delivery pressures to the local distribution companies such as NJNG. This issue arose during the 2013/2014 winter heating season when two compressor stations on Texas Eastern’s system failed, and NJNG’s supply was curtailed. Without adequate inlet pressure from the interstate supplier, the pressures in NJNG’s southern distribution systems were critically low. The SRL pipeline will alleviate this potential risk for the Joint Base, as well as for Pinelands residents, which are a significant segment of NJNG’s southern distribution system customers. The problems experienced by Texas Eastern were not experienced by Transco, the proposed supplier for the SRL. The proposed pipeline will help ensure reliability and resiliency to the Joint Base and NJNG customers in the southern end of its system.

The proposed SRL will also create opportunities for the Joint Base to build future facilities that require large volumes of natural gas. Any infrastructure system installed to handle base-wide systems (heating, electric, CNG vehicle stations, etc.) will require large volumes of gas at elevated pressures. Presently, the cost to install a pipeline of this magnitude for base operations is prohibitive. The SRL will allow for the installation of these types of facilities without the need for the Joint Base to finance a major pipeline. These types of facilities will allow the Joint Base to operate more independently and exist with minimal connections to public infrastructure.

In addition, the Joint Base has existing facilities and planned construction in underused areas where existing natural gas facilities do not currently exist. Under existing utility tariff regulations, supplying natural gas to those locations would not be possible, absent major investment by the Joint Base, due to the distance between the facilities and existing natural gas systems. The SRL will allow the Joint Base to access natural gas in locations closer to the facilities, thereby making it more economical. This creates
opportunities for the Joint Base to install equipment that is more efficient and reduce operating expenses with low-cost natural gas. High-efficiency natural gas equipment is also much more environmentally friendly than the fuel oil systems currently being used by the Joint Base. The SRL will also connect to the Base’s existing distribution system as a back-up feed within the Base itself.

Furthermore, the Base Realignment and Closure (BRAC) Commission periodically reviews existing military bases to determine their current viability, as well as future sustainability to accomplish the military’s mission. Natural gas is a cost effective infrastructure to underpin the current operations of the Joint Base. The SRL would be a favorable infrastructure foundation to allow the Joint Base to grow. A transmission line within a military base is a unique feature, which provides the basis to support growth for future operations. It creates opportunity for greater efficiencies over traditional and non-traditional energy choices (electric, oil, propane, etc.), as well as opportunities for large-volume gas facilities.

Finally, the proposed SRL may also serve as a source of income for the Joint Base, both directly from the easement agreement fees, as well as indirectly from potential cost savings from third-party energy suppliers. Presently, the military purchases their natural gas from third-party suppliers. The new pipeline will offer these third parties an alternate delivery point with a second supplier, which could offer pipeline transportation savings to deliver natural gas to the Joint Base.

The proposed SRL is a direct benefit to the Joint Base McGuire-Dix-Lakehurst and its operations and associated functions. It will afford the Joint Base greater resiliency, reliability, and redundancy of natural gas supply, minimize the risk of service interruption, provide opportunities for growth and strengthen its bottom line during future BRAC review. For these reasons, this project benefits the Joint Base, enhances its critical mission and is in the best interest of its future.

1. Where feasible, development shall be located in that portion of the installation located within the Pinelands Protection Area;

   The proposed alignment is predominantly co-located within existing roadways which traverse JB MDL, but could not feasibly be located only within that portion of the installation located within the Pinelands Protection Area.

2. The use shall not require any development, including public service infrastructure, in in the Preservation Area District or in a Forest Area;

   The proposed alignment does not traverse the Preservation Area District or Forest Area.

3. No hazardous waste facility, landfill or incinerator shall be permitted, except as expressly authorized in N.J.A.C. 7:50-6.75 or 6.78; and

   The proposed project does not propose a hazardous waste facility, landfill, or incinerator.

4. All development undertaken by the Federal government substantially meets the standards of N.J.A.C. 7:50-6 of this Plan or an intergovernmental agreement entered into pursuant to N.J.A.C. 7:50-4, Part IV.

   The proposed pipeline will tie into JB MDL at the National Guard facility located along County Route 539 to meet the needs of JB MDL as described earlier in this application. Alternatives for
the exact tie-in point are currently being evaluated by NJNG and the engineering design team. As proposed, the project meets the standards of N.J.A.C. 7:50-6 as described in Section 4.0 of this application. No development is proposed to be undertaken by the Federal government.
4.0 COMPLIANCE WITH SUBCHAPTER 6, MANAGEMENT PROGRAMS AND MINIMUM STANDARDS

The following compliance statement addresses each of the standards or guidelines set forth in Subchapter 6 of the CMP, and explains specifically how the proposed development meets each such standard or guideline.

4.1 WETLANDS

4.1.1 Wetlands (7:50-6.3)

Wetlands are those lands which are inundated or saturated by water at a magnitude, duration and frequency sufficient to support the growth of hydrophytes. Wetlands include lands with poorly drained or very poorly drained soils as designated by the National Cooperative Soils Survey of the Soil Conservation Service of the United States Department of Agriculture. Wetlands include coastal wetlands and inland wetlands, including submerged lands. The "New Jersey Pinelands Commission Manual for Identifying and Delineating Pinelands Area Wetlands - a Pinelands Supplement to the Federal Manual for Identifying and Delineating Jurisdictional Wetlands," dated January, 1991, as amended, may be utilized in delineating the extent of wetlands based on the definitions of wetlands and wetlands soils contained in this section, N.J.A.C. 7:50-2.11, 6.4 and 6.5.

The project alignment is bounded by inland wetlands which were delineated by URS in November, 2014. The wetland delineation report documenting the locations of these wetlands is included in Appendix A. As project design progresses, additional areas which may require wetland delineation will be identified, and subsequent field investigations will be performed as necessary.

4.1.2 Development prohibited (7:50-6.6)

Development shall be prohibited in all wetlands and wetlands transition areas established pursuant to N.J.A.C. 7:50-6.14 in the Pinelands except as specifically authorized in this Part. Only activities permitted in wetlands pursuant to this Part shall be permitted in wetlands transition areas pursuant to N.J.A.C. 7:50-6.14.

The proposed project is permitted in wetlands, since it is a utility transmission line consistent with the linear improvements described at N.J.A.C. 7:50-6.7; however, the alignment of the proposed pipeline was developed to avoid wetlands to the maximum extent practical. In areas where the route alignment cannot avoid crossing wetlands, Horizontal Directional Drill (HDD) techniques will be utilized to install the pipeline below the wetland and thus avoid disturbances.

4.1.3 Significant adverse impact (7:50-6.7)

(a) A significant adverse impact shall be deemed to exist where it is determined that one or more of the following modifications of a wetland will have an irreversible effect on the ecological integrity of the wetland and its biotic components including, but not limited to, threatened or endangered species of plants or animals:

1. An increase in surface water runoff discharging into a wetland;
The proposed project is an underground pipeline that will not result in a change in land use or land cover. No increase in surface water discharge to wetlands will result from the proposed project.

2. A change in the normal seasonal flow patterns in the wetland;

The project does not propose any impoundments, structures, or contour changes that would affect normal seasonal flow patterns within wetlands.

3. An alteration of the water table in the wetland;

The proposed project consists of an underground pipeline that will not alter existing wetland water tables.

4. An increase in erosion resulting in increased sedimentation in the wetland;

The following techniques will be employed during construction to minimize the potential for soil erosion and sediment migration:

- Erosion and sediment control BMP measures will be installed prior to commencement of earthwork and will not be removed until after the up-gradient areas are stabilized.
- The New Jersey One Call System (811) will be notified at least three days prior to the commencement of construction activities to perform utility mark-out services.
- Stabilized construction entrances will be installed along points of access to the pipeline alignment to mitigate the potential for construction vehicles to transport sediment onto public roadways.
- Silt Fence will be installed along the down-gradient perimeter of the work areas and along the perimeter of sensitive resources areas (wetlands, habitat areas, etc.)
- Diversion terraces will be installed to mitigate the potential for stormwater to erode soils on steep slopes by diverting water away from the pipeline alignment. Diversion terraces will dischage to a well vegetated area, or an outlet structure to limit the potential for sediment-laden water to flow down-gradient from the terrace.
- Trench plugs will be installed intermittently within the pipeline trench to control and allow for managing the flow of sediment-laden stormwater within the trench. Stormwater pooling within the excavation behind a trench plug will be removed and discharged through a pumped water filter bag over stable, undisturbed earth.
- Removal of the erosion and sediment control BMP measures will occur only after the disturbed areas have been stabilized by uniform perennial vegetative coverage (density) of seventy percent (70%) or greater, or by other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements.
- Diligent maintenance of the erosion and sediment control BMP measures will be conducted throughout the duration of the project.

5. A change in the natural chemistry of the ground or surface water in the wetland;
The proposed project is an underground pipeline carrying natural gas. Once constructed, the pipeline itself will not discharge any chemicals or compounds with the potential to alter ground or surface water chemistry.

During HDD installation, a viscous drilling fluid, which typically consists of water and bentonite, is continuously pumped to the cutting head. The drilling fluid is continuously processed through the drilling fluid cleaning system to remove cuttings and is then recycled. The drilling fluid that cannot be recycled because of the excessive build-up of ultrafine particles is to be transported offsite, to an approved location, for disposal. Prior to the initiation of any HDD activities crossing streams or wetlands, a plan describing the proposed contingencies in case of inadvertent fluid return will be submitted to NJPC.

6. A loss of wetland habitat;

The proposed project will not result in a significant loss of wetland habitat. The alignment of the proposed pipeline was developed to avoid wetlands to the maximum extent practical. In areas where the route alignment cannot avoid crossing wetlands, Horizontal Directional Drill (HDD) techniques will be utilized install the pipeline below the wetland and thus avoid disturbances.

7. A reduction in wetland habitat diversity;

The proposed project will not result in a change in wetland habitat diversity, since wetland disturbances have been avoided where possible, and HDD installation techniques will be utilized where crossings cannot be avoided.

8. A change in wetlands species composition; or

The proposed project will not result in a change in wetland species composition, since wetland disturbances have been avoided where possible, and HDD installation techniques will be utilized where crossings cannot be avoided.

9. A significant disturbance of areas used by indigenous and migratory wildlife for breeding, nesting, or feeding.

The proposed project will not result in significant disturbance to wetland wildlife areas, since wetland disturbances have been avoided where possible, and HDD installation techniques will be utilized where crossings cannot be avoided.

(b) Determinations under (a) above shall consider the cumulative modifications of the wetland due to the development being proposed and any other existing or potential development which may affect the wetland.

The proposed project will not result in a significant loss of wetland habitat, since wetland disturbances have been avoided where possible, and HDD installation techniques will be utilized where crossings cannot be avoided.
(c) The "Buffer Delineation Model for New Jersey Pinelands Wetlands" dated May, 1985, as amended, (Division of Pinelands Research, Center for Coastal and Environmental Studies, Rutgers - the State University of New Jersey, New Brunswick, New Jersey 08903) may be utilized as a guide in determining the extent of the wetlands transition area necessary so that no significant adverse impact will be deemed to exist pursuant to (a) above.

As a linear improvement, wetland buffers do not apply to the pipeline alignment; however, three above ground valve settings are proposed. All valve settings will be sited at least 300 ft. from wetland boundaries to maintain the appropriate buffers.

4.1.4 Linear improvements (7:50-6.13)
(a) Bridges, roads, trails and utility transmission and distribution facilities and other similar linear facilities shall be permitted in wetlands provided that:

1. There is no feasible alternative route for the facility that does not involve development in a wetland or, if none, that another feasible route which results in less significant adverse impacts on wetlands does not exist;

The proposed alignment has been selected to maximize placement of the pipeline within paved roadways and other previously disturbed areas to the maximum extent practicable. The preferred alignment minimizes impacts to wetlands.

2. The need for the proposed linear improvement cannot be met by existing facilities or modification thereof;

The proposed project provides a second, redundant, supply of natural gas to JB MDL and the NJNG service territory. Existing facilities do not exist to serve this requirement.

3. The use represents a need which overrides the importance of protecting the wetland;

The proposed project will provide a second, redundant supply of natural gas to JB MDL and the NJNG service territory. The alignment of the proposed pipeline was developed to avoid wetlands to the maximum extent practical. In areas where the route alignment cannot avoid crossing wetlands, Horizontal Directional Drill (HDD) techniques will be utilized install the pipeline below the wetland and thus avoid disturbances.

4. Development of the facility will include all practical measures to mitigate the adverse impact on the wetland; and

No adverse impacts to wetlands are anticipated based on the project's avoidance of wetland disturbances.

5. The resources of the Pinelands will not be substantially impaired as a result of the facility and its development as determined exclusively based on the existence of special and unusual circumstances.

The proposed project will not result in substantial impairment of Pineland's wetlands, or any other resources, since wetland disturbances will be avoided.
4.1.5 Wetland transition areas (7:50-6.14)
No development, except for those uses which are specifically authorized in this subchapter, shall be carried out within 300 feet of any wetland, unless the applicant has demonstrated that the proposed development will not result in a significant adverse impact on the wetland, as set forth in N.J.A.C. 7:50-6.7.

As a linear improvement, wetland transition areas do not apply to the pipe alignment; however, three above ground valve settings are proposed within the Pinelands. All valve settings will be sited at least 300 ft. from wetland boundaries to maintain the appropriate wetland transition areas.

4.2 VEGETATION

4.2.1 Clearing and soil disturbance (7:50-6.23)
(a) All clearing and soil disturbance activities, whether or not an application for development is required pursuant to N.J.A.C. 7:50-4, shall be limited to that which is necessary to accommodate an activity, use or structure which is permitted by this Plan.

Vegetation disturbances have been avoided and minimized to the maximum extent practicable. Along the paved/maintained portions of the alignment, the temporary workspace does not extend beyond the surveyed trunk line, and as currently designed does not propose tree clearing; however, some trimming of limbs is expected to facilitate access by construction equipment. As the pipeline exits JB MDL to the east, permanent tree clearing of 0.22 acres will be required to maintain a 10’ wide ROW directly above the pipeline. In order to minimize tree clearing, temporary construction impacts in this forested area will be avoided using HDD installation.

(b) Where practical, all clearing and soil disturbance activities associated with an activity, use or structure other than agriculture, forestry and resource extraction, shall:

1. Avoid wooded areas, including New Jersey’s Record Trees as published by the New Jersey Department of Environmental Protection in 1991 and periodically updated; and
2. Revegetate or landscape areas temporarily cleared or disturbed during development activities.

Although HDD will be used to install the pipeline through an upland forest area as it exits JB MDL, a permanently cleared 10’ wide ROW will need to be maintained directly above the pipeline. This will result in the permanent clearing of 0.22 acre of upland trees, primarily pitch pine (see Landscape Plan). This section is already somewhat fragmented, since it is bounded by JB MDL to the north and west, as well as commercial development and County Route 547 to the east. The proposed clearing is therefore not anticipated to exacerbate fragmentation or edge effects. Based on the availability of remaining surrounding forest land to the south, this loss of this 10’ wide tree section is not considered to be significant.

If additional tree clearing areas are identified as project design progresses, appropriate revisions to the Landscaping Plan will be provided for NJPC review and approval.

All temporarily disturbed areas will be re-vegetated with Ernst Native Upland Wildlife Forage and Cover Meadow Mix (ERNMX-123) or equivalent.
4.2.3 Development prohibited in the vicinity of threatened or endangered plants (7:50-6.27)

No development shall be carried out by any person unless it is designed to avoid irreversible adverse impacts on the survival of any local populations of those plants designated by the Department of Environmental Protection as endangered plant species pursuant to N.J.A.C 7:5C-5.1 as well as the following plants, which are hereby found and declared to be threatened or endangered plants of the Pinelands....

As of the date of this filing, targeted surveys have been conducted along the alignment for the following NJ and Pinelands listed endangered plant species:

- sickle-leaved golden aster
- slender rattlesnake root
- Pine Barrens boneset

The surveys were conducted by DuBois Environmental Consultants in the Fall of 2014. Sickle-leaved golden aster was the only endangered plant species identified within the proposed alignment/temporary workspace. Most of the areas where plants were found consisted of isolated pockets with limited numbers of individuals. The survey results propose to avoid impacts to this plant population through the implementation of the following practices:

- No earthwork/ground disturbance will occur in this area.
- Ground will be protected through the use of composite/timber matting.
- A timing restriction corresponding to the growing season will be implemented in this area from April 1 through November 1; all activities will be conducted in the non-growing season.
- Any equipment/disturbance in this area will be limited to that which is directly necessary for the HDD installation.
- All equipment/matting will be removed immediately following HDD installation of this portion of the pipeline.

It is anticipated that the implementation of the above measures will protect the most highly concentrated area of sickle-leaved golden aster identified along the alignment. Installation of the pipeline will not jeopardize the continued existence of sickle-leaved golden aster.

Targeted surveys for narrow leaf vervain and Long’s woolgrass are proposed to be conducted by DuBois Environmental Consultants for the appropriate blooming periods in 2015. Survey results will be provided for NJPC review and concurrence. If populations of these species are identified, the project workspace limits will be re-evaluated to avoid these populations to the greatest extent practical, and the appropriate BMPs will be implemented to protect the continued existence of endangered plant populations. All survey results and and proposed BMPs will be submitted for NJPC review and concurrence.

4.3 FISH AND WILDLIFE

4.3.1 Protection of threatened or endangered wildlife required (7:50-6.33)

No development shall be carried out unless it is designed to avoid irreversible adverse impacts on habitats that are critical to the survival of any local populations of those threatened or endangered
animal species designated by the Department of Environmental Protection pursuant to N.J.S.A. 23:2A-1 et seq.

A threatened and endangered species habitat assessment was conducted by URS, and is provided in Appendix B. Table 1 provides a summary of the threatened or endangered wildlife and or suitable habitat for such wildlife potentially present within the alignment, the status of surveys planned and/or conducted for those species, as well as the strategy for avoiding impacts to those species.

**Table 1. Threatened & Endangered Wildlife Species Summary Table**

<table>
<thead>
<tr>
<th>Species</th>
<th>Status</th>
<th>Potential Habitat Present</th>
<th>Additional Species Survey Strategy</th>
<th>Construction Monitoring Needed</th>
<th>Avoidance/Minimization Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barred Owl</td>
<td>State Threatened</td>
<td>YES</td>
<td>Critical habitat survey to be performed in areas of proposed tree clearing</td>
<td>NO</td>
<td>If critical habitat is identified: Timing restriction on tree clearing from March 1 – April 30</td>
</tr>
<tr>
<td>Upland Sandpiper</td>
<td>State Endangered</td>
<td>NO</td>
<td>None; critical habitat not present</td>
<td>NO</td>
<td>N/A</td>
</tr>
<tr>
<td>Northern Pine Snake</td>
<td>State Threatened</td>
<td>YES</td>
<td>Critical habitat survey to be performed in 2015</td>
<td>YES</td>
<td>Adjust alignment/workspace to avoid critical habitat if identified; install exclusion fencing; comply with conditions for onsite biological monitoring</td>
</tr>
<tr>
<td>Pine Barrens Treefrog</td>
<td>State Threatened</td>
<td>YES</td>
<td>NO (assumed present)</td>
<td>NO</td>
<td>Avoid suitable wetland habitat or observe timing restriction for wetland disturbance from May 1 through September 1</td>
</tr>
<tr>
<td>Northern Long-Eared Bat</td>
<td>Federally Proposed Endangered</td>
<td>YES</td>
<td>Critical habitat survey to be performed in areas of proposed tree clearing</td>
<td>NO</td>
<td>If critical habitat is identified: Timing restriction on tree clearing from April 1 – October 30</td>
</tr>
<tr>
<td>Timber Rattlesnake</td>
<td>State Endangered</td>
<td>YES</td>
<td>Critical habitat survey to be performed in 2015</td>
<td>YES</td>
<td>Adjust alignment/workspace to avoid critical habitat if identified; install exclusion fencing; comply with conditions for onsite biological monitoring</td>
</tr>
<tr>
<td>Red-headed Woodpecker</td>
<td>State Threatened</td>
<td>YES</td>
<td>Critical habitat survey to be performed in areas of proposed tree clearing</td>
<td>NO</td>
<td>If critical habitat is identified: Timing restriction on tree clearing from March 1 – April 30</td>
</tr>
<tr>
<td>Species</td>
<td>Status</td>
<td>Potential Habitat Present</td>
<td>Additional Species Survey Strategy</td>
<td>Construction Monitoring Needed</td>
<td>Avoidance/Minimization Measures</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------</td>
<td>---------------------------</td>
<td>-------------------------------------------------</td>
<td>--------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Bog Turtle</td>
<td>State Endangered</td>
<td>YES</td>
<td>Phase 1 Habitat Assessment conducted 2014</td>
<td>NO</td>
<td>Avoid suitable bog turtle wetland habitat</td>
</tr>
<tr>
<td></td>
<td>Federally Threatened</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A majority of the proposed pipeline alignment will be confined to existing, maintained roadway edges, and therefore will not result in disturbances to threatened or endangered wildlife habitat. Areas which propose off-pavement disturbances will be evaluated further, in accordance with the results of the Habitat Assessment Report and the strategies identified in Table 2. Specifically, DuBois Environmental Consultants will perform the following investigations during the appropriate 2015 survey seasons:

- Critical habitat surveys for timber rattlesnake and northern pine snake in proposed off-pavement disturbance areas; and
- Critical habitat surveys for red-headed woodpecker, barred owl, and northern long-eared bat in areas of proposed tree clearing.

The results of these investigations will be submitted to NJPC for review and concurrence, along with any resultant project alignment adjustments.

Additionally, the following BMPs are proposed to avoid potential adverse impacts to threatened and endangered wildlife species:

- Silt fence installed along the Limit of Disturbance (LOD) boundary where suitable habitats are identified will serve as exclusion fencing to prevent threatened and endangered wildlife from entering the construction area from adjacent habitat areas.
- All permit conditions pertaining to onsite threatened/endangered species monitoring during construction will be adhered to.
- All applicable timing restrictions will be observed.

4.3.2 Protection of wildlife habitat (7:50-6.34)

All development or other authorized activity shall be carried out in a manner which avoids disturbance of fish and wildlife habitats that are essential to the continued nesting, resting, breeding and feeding of significant populations of fish and wildlife in the Pinelands.

Although HDD will be used to install the pipeline through an upland forest area as it exits JB MDL, a permanently cleared 10’ wide ROW will be maintained directly above the pipeline. This will result in the clearing of 0.22 acre of upland trees, primarily pitch pine (see Landscape Plan).

As described in Section 4.3.1 above, critical habitat surveys for several threatened and/or endangered species are planned for 2015. All applicable timing restrictions resulting from these surveys will be adhered to.
Based on the availability of remaining surrounding forest land, the habitat loss resulting from this clearing is not considered to be significant. This section of trees is already somewhat fragmented and bisected from adjacent areas by an existing chain link fence. It is bounded by JB MDL to the north and west, as well as commercial development and County Route 547 to the east. The proposed clearing is therefore not anticipated to exacerbate fragmentation or edge effects. If additional tree clearing areas are identified as project design progresses, appropriate revisions to the Landscaping Plan will be provided for NJPC review and approval.

4.4 WATER QUALITY

4.4.1 Minimum standards necessary to protect and preserve water quality (7:50-6.83)
(a) All development permitted under this Plan, or under a certified county or municipal master plan or land use ordinance, shall be designed and carried out so that the quality of surface and ground water will be protected and maintained. For the purpose of this Part, agricultural use shall not be considered development.

(b) Except as specifically authorized in this Part, no development which degrades surface or ground water quality or which establishes new point sources of pollution shall be permitted.

With the exception of three valve settings, the project is located entirely underground. The project will not establish new point sources of pollution.

(c) No development shall be permitted which does not meet the minimum water quality and potable water standards of the State of New Jersey or the United States.

The proposed project is for an underground pipe carrying natural gas. Once constructed, the pipeline itself will not discharge any chemicals or compounds with the potential to diminish water quality. A Soil Erosion and Sediment Control (SESC) Plan will be prepared and implemented to minimize the potential for sediment laden runoff to affect water quality during construction activities. Furthermore, prior to the initiation of any HDD activities crossing streams or wetlands, a plan describing the proposed contingencies in case of inadvertent return of fluids will be submitted to NJPC.

A 5G3 Construction Activity Stormwater Permit authorizing surface water discharges during construction will be obtained following certification of the SESC Plan. All water discharged to overland flow shall have been properly filtered to remove suspended sediments before it is released.

4.5 AIR QUALITY

4.5.1 General standard (7:50-6.93)
All development shall adhere to the relevant air quality standards of N.J.A.C. 7:27 et seq. Adherence to the standards of this Part shall be determined by means of an air quality simulation model approved by the New Jersey Department of Environmental Protection pursuant to N.J.A.C. 7:27-18.3.

Since the proposed project consists of an underground transmission line, no long term air quality concerns are anticipated. Analysis of temporary equipment emissions associated with construction is currently ongoing. Construction activities will adhere to the relevant air quality standards of N.J.A.C. 7:27.
4.6 SCENIC

4.6.1 Scenic corridors (7.50-6.103)

(a) Except for those roads which provide for internal circulation within residentially developed areas, all public, paved roads in the Preservation Area District, the Rural Development and Forest Areas shall be considered scenic corridors.

The project alignment follows County Route 539 along the Pinelands Area boundary where it is bordered to the northeast by Rural Development Area. However, with the exception of three valve settings, the project is located entirely underground. The project will not affect any existing scenic corridors.

(b) Those rivers designated in N.J.A.C. 7:50-6.105 shall be considered as special scenic corridors in any part of the Pinelands.

The project alignment does not include the rivers designated at N.J.A.C. 7:50-6.105 as special scenic corridors.

4.6.2 Requirements for scenic corridors (7:50-6.104)

(a) Except as provided in this section, no permit shall be issued for development other than for agricultural commercial establishments unless the applicant demonstrates that all buildings are set back at least 200 feet from the center line of the scenic corridor.

The proposed project does not include the construction of buildings. With the exception of three valve settings, the project is located entirely underground. The project will not affect any existing scenic corridors.

(b) If compliance with the 200-foot setback is constrained by environmental or other physical considerations, such as wetland, or active agricultural operation, the building shall be set back as close to 200 feet as practical and the site shall be landscaped in accordance with the provisions of Part II of this subchapter so as to provide screening from the corridor.

The proposed project does not include the construction of buildings. With the exception of three valve settings, the project is located entirely underground. The project will not affect any existing scenic corridors.

(c) If an applicant for development approval demonstrates that existing development patterns of the corridor are such that buildings are setback less than 200 feet within 1,000 feet of the site proposed for development, then a setback shall be set for the proposed development which is consistent with the established development pattern, provided that the site is landscaped in accordance with the provisions of Part II of this subchapter so as to provide screening between the building and the corridor.

The proposed project does not include the construction of buildings. With the exception of three valve settings, the project is located entirely underground. The project will not affect any existing scenic corridors.
4.6.3 Location of utilities (7:50-6.111)

(a) New utility distribution lines to locations not presently served by utilities shall be placed underground, except for those lines which are located on or adjacent to active agricultural operations.

With the exception of three valve settings, the proposed pipeline line is located entirely underground.

(b) All electric transmission lines shall be located on existing towers or underground to the maximum extent practical.

Electric transmission lines are not proposed as a part of the project.

(c) Above-ground generating facilities, switching complexes, pumping stations, and substations shall be screened with vegetation from adjacent uses in accordance with N.J.A.C. 7:50-6, Part II.

With the exception of three valve settings, the project is located entirely underground. The project will not affect any existing scenic corridors.

4.7 HISTORIC, ARCHAEOLOGICAL, AND CULTURAL PRESERVATION

4.7.1 Evaluation of development proposals (7:50-6.155)

(a) Identification of Resources:

1. A cultural resource survey shall accompany all applications for development in a Pinelands Village or Town and applications for major development in other Pinelands Management Areas in order to determine whether any significant historic resources exist on the property. Guidelines for this survey are contained in Appendix B of the "Cultural Resource Management Plan," dated April 1991, as amended. In general, the survey shall include: a statement as to the presence of any properties listed on the National and State Registers of Historic Places on the site or within the area of the project's potential environmental impacts; a thorough search of state, local and any other pertinent inventories to identify sites of potential significance; a review of the literature and consultation with professional and a vocational archaeologists knowledgeable about the area; thorough pedestrian and natural resource surveys; archaeological testing as necessary to provide reasonable evidence of the presence or absence of historic resources of significance; adequate recording of the information gained and methodologies and sources used; and a list of personnel involved and qualifications of the person(s) performing the survey.

URS is preparing a Phase I Cultural Resources Survey Report for the Southern Reliability Link Project proposed by New Jersey Natural Gas to meet the requirements of the New Jersey Pinelands Comprehensive Management Plan (N.J.A.C. 7:50-6.155). URS senior archaeologists met with Dr. Barry Brady, Pinelands' cultural resources specialist on November 20, 2014 to review the proposed project. Dr. Brady indicated that a cultural resources survey would be required for the project by the New Jersey Pinelands Commission and provided information about the survey guidelines. The cultural resources report will include background research (environmental, archaeological, and historical), an assessment of archaeological sensitivity, visual inspection of the project corridor, subsurface archaeological testing if necessary, and an assessment of effects on historic properties, if any, eligible for listing on National Register of Historic Places, State Register of Historic Places and/or Pinelands Designation.

The Phase I Cultural Resources Survey has been initiated for the project. Background research has been conducted at the New Jersey State Museum, New Jersey Historic Preservation Office, and New Jersey...
Pinelands Commission. An examination of background research material indicates that no registered archaeological sites are located in the project corridor. Above-ground historic properties in the vicinity of the project area include Hangar No. 1 (National Historic Landmark), the Lighter-Than-Air Historic District (NR-eligible), and the BOMARC Missile Site (NR-eligible). The Cathedral of the Air, a contributing resource to the Lighter-Than-Air Historic District, is located in the vicinity of the proposed pipeline location.

Several cultural resources surveys have been completed within and adjacent to the project corridor. A Phase I archaeological survey was conducted along South Boundary Road within the project corridor and archaeological testing did not identify archaeological resources (Leary and Rudolph 2009). Two cultural resources surveys were conducted for the Lakehurst portion of the Joint Base McGuire-Dix-Lakehurst which developed sensitivity models for prehistoric and historic archaeological resources (Baystate Environmental Consultants 1994; Sebestyen and Brann 2014). A review of nineteenth century historic maps indicates that historic development was limited near the project corridor (Beers 1872, Cook 1888). A railroad and roads were present near the project corridor by the second half of the nineteenth century (Beers 1872). A cranberry bog was located south of the project corridor in the late nineteenth century (Cook 1888). Liggett and Wilson (1980) identified the historic cross-roads settlement of Pinehurst near the western end of the project corridor. The assessment of archaeological sensitivity within the project corridor is in the process of being finalized.

The approach for the archaeological portion of the Phase I cultural resource survey is to complete a visual reconnaissance of the project corridor and conduct subsurface archaeological testing as required by the Pinelands Commission Guidelines. Archaeological testing will not be conducted along portions of the project corridor along South Boundary Road where previous archaeological investigations did not identify archaeological resources (Leary and Rudolph 2009). If necessary, the archaeological testing will be conducted in 2015. Secretary of the Interior-qualified Archaeologists will direct the archaeological survey.

The approach for the historic structures portion of the Phase I cultural resource survey will consist of a reconnaissance survey to determine if any resources are eligible for Pinelands designation. If any such resources are determined to be potentially impacted by the undertaking, URS will recommend means to eliminate or mitigate the potential impact. If necessary, URS will prepare Phase II level of documentation (eligibility determination). URS will limit the Area of Potential Effect (APE) to the parcels that will be intersected by the proposed pipeline. Where new above-ground facilities are proposed, the visual APE will be a one quarter-mile. Secretary of the Interior-qualified Architectural Historians will conduct the architectural history survey.

The Phase I cultural resources report will be submitted to the Pinelands Commission in February 2015 or sooner, and will adhere to Pinelands Commission format. A separate cultural resources survey report for the portion of the project located outside of the New Jersey Pinelands Commission jurisdiction will be submitted to the New Jersey Department of Environmental Protection to comply with the requirements of the New Jersey Freshwater Wetlands Protection Act.
5.0 LIST OF REQUIRED PERMITS

Table 2 provides a list of all permits that may be required for the proposed development from county, municipal, state and federal agencies.

Table 2. List of Anticipated Permits

<table>
<thead>
<tr>
<th>Agency</th>
<th>Primary Regulated Areas</th>
<th>Permit/Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJDEP- DLUR/NJ Pinelands Commission</td>
<td>Freshwater wetlands, Wetland Transition Areas and State open waters in Project area.</td>
<td>Freshwater Wetlands General Permit 2 (Underground Utilities) (if &gt; 0.5 acre of disturbance) or Freshwater Wetlands Individual Permit</td>
</tr>
<tr>
<td>Freshwater Wetlands N.J.A.C. 7:7A</td>
<td></td>
<td>Section 401 Water Quality Certification</td>
</tr>
<tr>
<td>NJDEP-DLUR Flood Hazard Area Protection Act</td>
<td>Alignment crosses regulated waters, flood hazard areas, and riparian zones.</td>
<td>Flood hazard area permit-by-rule or Individual Permit</td>
</tr>
<tr>
<td>N.J.A.C. 7:13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NJDEP-DWQM</td>
<td>Construction discharge of stormwater</td>
<td>5G3 - Construction Activity Stormwater Permit</td>
</tr>
<tr>
<td>Ocean County SCD</td>
<td>Earth disturbance &gt;5,000 sq. ft.</td>
<td>Soil Erosion Sediment Control Plan Certification</td>
</tr>
</tbody>
</table>
6.0 References

Baystate Environmental Consultants

Beers, F.W.

Cook, George Hammell

Leary, Susan and Teresa Rudolph

Liggett, Barbara and Budd Wilson

Sebestyen, Kimberly and Steven W. Brann
APPENDIX A
WETLAND DELINEATION REPORT