

Pipeline Specialist Diesel and Natural Gas Pipeline

Project Overview

Project seeks to install one (1) 12" carbon steel dry natural gas pipeline and one (1) 8" carbon steel diesel pipeline. Pipeline will extend from Clifton Pier terminal to Blue Hills Bahamas Power and Light Station, New Providence. The estimated length of the pipeline is 13.5 miles.

The Project is expected to take one (1) year to complete.

Existing Physical Environment

- Topography:
 - Relatively flat.
 - Has pit caves, solution holes, and an eolian ridge Soil Type
 - Limestone Substrate.
- National Parks
 - Not within a national park.
 - North of the Primeval Forest National Park (PFNP) and south of the Harold and Wilson Ponds National Park (HWPNP).

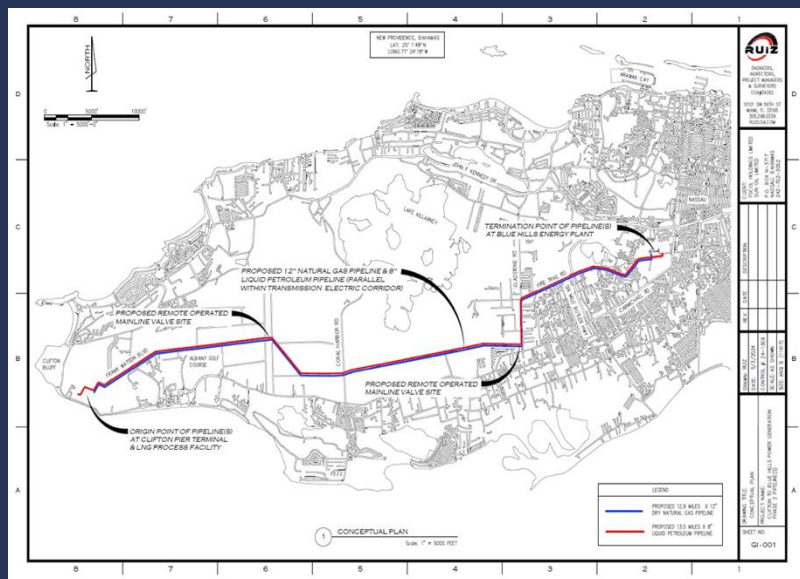
All questions and comments can be submitted to:

- ❖ inquires@depp.gov.bs
- ❖ info@jssconsultants.com

All comments will be **CLOSED** at **11:59PM** on **December 19th 2024**

JUSTIFICATION

Allows for a redundant energy source for the entire island, increasing overall reliability and sustainability of energy, and improving overall quality of life.



Existing Biological Environment



Botanical Assessment

- One (1) major terrestrial ecosystem - Interior Upland.
- Two (2) vegetation classes - Inland Freshwater Wetland and Human Altered Environment.
- One hundred and ten (110) species recorded on the site.
 - nineteen (19) protected species.
 - Twelve (12) invasive species.



Avian Survey

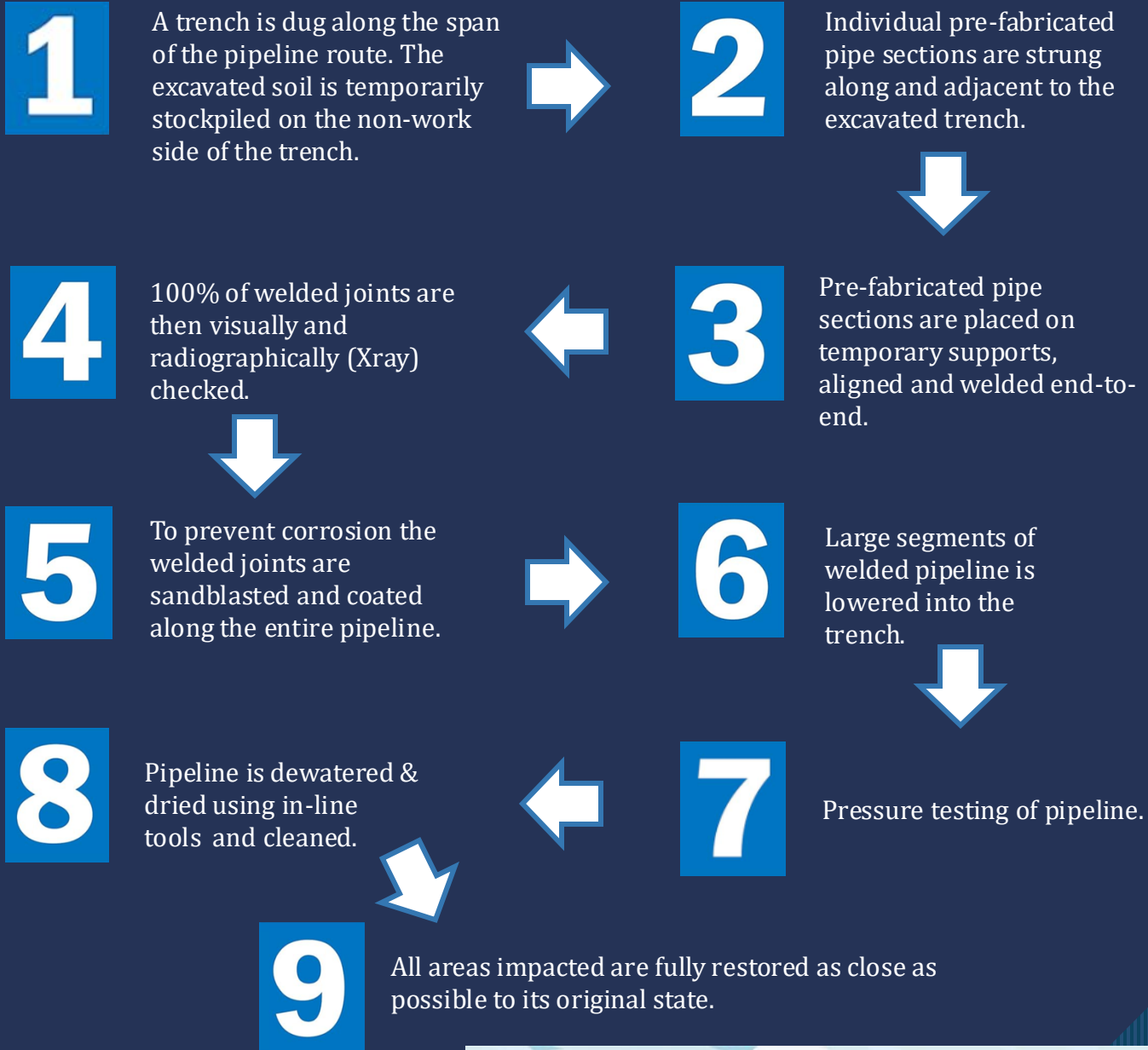
- Twenty (20) avian species recorded.
- Seventeen (17) are permanent resident breeding (PBR).
- Four (4) PBR species are endemic subspecies and two (2) are introduced species.
- One (1) winter resident non-breeding.
- Two (2) summer resident breeding.
- No endangered species.
- All Species protected by law.

Anticipated Environmental Impacts and Mitigations Construction Phase

Significant Aspect	Potential Impact	Mitigations
Groundwater Quality	<ul style="list-style-type: none"> ✓ Contamination of groundwater and adjacent wetlands and national parks due to fuel, oil, chemical and hazardous waste spills. 	<ul style="list-style-type: none"> ✓ Fuel Spill Prevention Plan . ✓ Proper hazardous waste storage and disposal. ✓ Horizontal Directional Drilling (HDD) trenchless methods to minimize disturbances.
Erosion and Sedimentation	<ul style="list-style-type: none"> ✓ Groundwater contamination. ✓ Negatively impact surrounding vegetation and wildlife. 	<ul style="list-style-type: none"> ✓ Implement a sediment control plan. ✓ Clearing only permitted for the footprint of works.
Flooding	<ul style="list-style-type: none"> ✓ Increase standing water around site. ✓ increase the risk of flooding during significant rains/extreme. 	<ul style="list-style-type: none"> ✓ Dewatered effluent directed into temporary retention basins or exfiltration trenches. ✓ Excess water into deep wells.
Noise and Light Pollution	<ul style="list-style-type: none"> ✓ May cause discomfort to neighboring communities and businesses. ✓ Negatively affect surrounding wildlife. 	<ul style="list-style-type: none"> ✓ Restrict work to daylight hours (7am-7pm). ✓ Maintain machinery. ✓ Light placement away from residential areas or greenspaces. ✓ Restrict glare and tilt lights downwards.
Air and Dust Pollution	<ul style="list-style-type: none"> ✓ Eye irritation, respiratory issues and other human health issues. ✓ Can coat surrounding tree leaves and produce. 	<ul style="list-style-type: none"> ✓ Water used as a dust retardant. ✓ No accumulation or burning of waste. ✓ Dump trucks will require tarpaulins. ✓ Clearing limited to the pipeline footprint. ✓ Maintain machinery.
Sewage and Refuse	<ul style="list-style-type: none"> ✓ Groundwater contamination. 	<ul style="list-style-type: none"> ✓ Portable toilets maintained and secured.
Terrestrial Ecosystem and Biodiversity	<ul style="list-style-type: none"> ✓ Habitat loss – one hundred and ten (110) plant species identified. One (1) major ecosystem identified. ✓ Loss of species inhabiting the area. ✓ Bushfires. 	<ul style="list-style-type: none"> ✓ Invasive Species Management Plan. ✓ Protected and native plants species relocated. ✓ Pre-construction survey. ✓ Wildlife Management Plan. ✓ Horizontal Directional Drilling (HDD) trenchless methods to minimize disturbances.
Solid Waste	<ul style="list-style-type: none"> ✓ Increase of solid waste accumulation. 	<ul style="list-style-type: none"> ✓ Ample wastebins around site. ✓ Waste removed regularly and disposed of at NPEP. ✓ Excavated material will be reused, ✓ Waste reused/recycled where feasible.

An Operations EMP will be developed detailing impacts and impacts and mitigations.

Diesel and Natural Gas Pipeline Process



Horizontal Directional Drilling (HDD)

- Drilling beneath waterway or other roadways and driveways.
- Planned for all road crossings and for sensitive areas.
- Reduce aboveground disruption.

