U.S. DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION FINAL ENVIRONMENTAL ASSESSMENT and FINDING OF NO SIGNIFICANT IMPACT

Special Permit Information:

Docket Number:	PHMSA-2020-0044
Requested By:	Florida Gas Transmission Company, LLC
Operator ID#:	5304
Original Date Requested:	February 21, 2020
Original Issuance Date:	March 30, 2022
Updated Request: 1	March 24, 2023
Effective Date:	July 28, 2023
Code Section(s):	49 CFR 192.611(a)(3)(iii)

I. Background

The National Environmental Policy Act (NEPA), 42 United States Code (USC) 4321 - 4375 et seq., Council on Environmental Quality Regulations, 40 Code of Federal Regulations (CFR) 1500-1508, and U.S. Department of Transportation (DOT) Order No. 5610.1C, requires the Pipeline and Hazardous Materials Safety Administration (PHMSA) Office of Pipeline Safety (OPS)² to analyze a proposed action to determine whether the action will have a significant impact on the human environment. PHMSA analyzes special permit requests for potential risks to public safety and the environment that could result from our decision to grant, grant with additional conditions, or deny the request. As part of this analysis, PHMSA evaluates whether a special permit will impact the

¹ The FEA and FONSI have been updated to account for the extension of *five (5) special permit segments 166347*, *166349, 166250, 166256, and 166129* as shown in Table 1 – Special Permit Segments. FGT's March 24, 2023, special permit application was public noticed on regulations.gov on docket PHMSA-2020-0044 from June 1 to June 30, 2023.

² Throughout this special permit the usage of "PHMSA" or "PHMSA OPS" means the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety.

likelihood or consequence of a pipeline failure as compared to the operation of the pipeline in full compliance with the Federal pipeline safety regulations. PHMSA's environmental review associated with the special permit application is limited to impacts that will result from granting or denying the special permit. PHMSA developed this assessment to determine what effects, if any, our decision will have on the environment.

On March 30, 2022, PHMSA granted a special permit to Florida Gas Transmission Company, LLC (FGT)³ to waive compliance with 49 CFR 192.611(a)(3)(iii) for Class 1 to Class 3 or Class 2 to Class 3 location changes of approximately 1.405 miles of the 18-inch diameter St. Petersburg Sarasota Connector, 30-inch diameter West Leg Station 26-27, and 36-inch diameter West Leg Loop Pipelines. The special permit (PHMSA-2020-0044) included thirteen (13) *special permit segments* totaling 7,418 feet (1.405 miles) and three (3) *special permit inspection areas* along the FGT natural gas transmission pipeline system in Florida.

A request for a special permit modification was submitted by FGT on March 24, 2023, for issuance of a special permit for five (5) additional *special permit segment extensions* pursuant to **Condition 17** of the special permit. The five (5) *special permit segment extensions* include a combined 10,219 feet (approximately 1.935 miles) from the 18-inch diameter St. Petersburg Sarasota Connector pipeline (i.e., *special permit segments 166347 extension (ext.) and 166349 ext.*), 30-inch diameter West Leg Station 26-27 (*special permit segments 166250 ext.*, *166256 ext.*), and 36-inch diameter West Leg Loop (*special permit segment 166129 ext.*) where a class location has changed from Class 2 to Class 3 located in Hillsborough County, Florida.

Pursuant to 49 USC 60118(c) and 49 CFR 190.341, PHMSA may only grant special permit requests that are not inconsistent with pipeline safety. PHMSA will impose conditions in the special permit that are necessary for safety, environmental protection, or are otherwise in the public interest. If PHMSA had determined that a special permit would be inconsistent with pipeline safety or is not justified, the application will be denied.

The purpose of this Final Environmental Assessment (FEA) is to comply with NEPA for the FGT special permit to waive compliance from 49 CFR 192.611(a)(3)(iii) for the *five (5) new special permit segment extensions* totaling approximately 1.935 miles. The original FEA (Docket No. PHMSA-2020-0044) has been updated to reflect the new *special permit segment extensions* and

³ Florida Gas Transmission Company, LLC is owned by Energy Transfer and Kinder Morgan, Inc.

includes the original *thirteen (13) special permit segments* and *three (3) special permit inspection areas* totaling approximately 3.340 miles along the FGT natural gas transmission pipeline system in Florida.

This FEA assesses the pipeline *special permit segment extension* request, in accordance with 49 CFR 190.341, and is intended to specifically analyze any environmental impact associated with the waiver of certain Federal pipeline safety regulations found in 49 CFR 192.611(a)(3)(iii). This permit requires FGT to implement additional conditions on the operations, maintenance, and integrity management (IM) of the 17,637 feet (approximately 3.340 miles)⁴ of the 18-inch diameter St. Petersburg Sarasota Connector, 30-inch diameter West Leg Station 26-27, and 36-inch diameter West Leg Loop Pipelines *special permit segments*) and approximately 169.7 miles of (*special permit inspection areas*) located in Citrus, Hernando, Hillsborough, and Pasco Counties, Florida.

II. Introduction

Pursuant to 49 USC 60118(b) and 49 CFR 190.341, FGT submitted a special permit extension application to PHMSA on March 24, 2023, requesting that PHMSA waive the requirements of 49 CFR 192.611(a)(3)(iii) to permit FGT to maintain the maximum allowable operating pressure (MAOP) for the *five (5) new special permit segment extensions* and the original *thirteen (13) special permit segments* where the class location has changed from Class 1 or Class 2 to Class 3 located in Citrus, Hernando, Hillsborough, and Pasco Counties, Florida. The additional *five (5) special permit segment extensions* include 10,219 feet (1.935 miles) of pipeline where a class location has changed from Class 2 to Class 3 located in Hillsborough County, Florida.

The Federal pipeline safety regulations in 49 CFR 192.611(a)(3)(iii) require natural gas pipeline operators to confirm or revise the MAOP of a pipeline segment after a change in class location.⁵

PHMSA grants this special permit to waive certain regulatory requirements where it is not inconsistent with pipeline safety. A special permit is typically conditioned on the performance of

⁴ The footage and mileage of *special permit segments* throughout this document has been updated to account for the extension of *special permit segments 166347*, *166349*, *166250*, *166256*, *and 166129* as shown in Table 1 – Special Permit Segments.

⁵ The Class 1 to 3 or Class 2 to 3 location changes on the FGT pipelines have pipe with design factors in accordance with 49 CFR 192.620(a)(1) for Alternative MAOP. The *special permit segments* utilize alternate design factors from 49 CFR 192.620 per existing special permit PHMSA-2008-0077.

additional measures beyond minimum Federal pipeline safety regulations, in accordance with 49 CFR 190.341.

III. Regulatory Background

PHMSA regulations at 49 CFR 192.611(a) require that an operator confirm or revise the MAOP of a pipe segment that is in satisfactory condition when the hoop stress of the segment is no longer commensurate with class location. Under 49 CFR 192.611(a), an operator may be required to reduce the operating pressure of a pipe segment, or alternatively, may have to replace the pipe in order to maintain the MAOP. Below is the relevant text of 49 CFR 192.611(a):

49 CFR 192.611 Change in class location: Confirmation or revision of maximum allowable operating pressure.

(a) If the hoop stress corresponding to the established maximum allowable operating pressure of a segment of pipeline is not commensurate with the present class location, and the segment is in satisfactory physical condition, the maximum allowable operating pressure of that segment of pipeline must be confirmed or revised according to one of the following requirements:

(1) If the segment involved has been previously tested in place for a period of not less than 8 hours:

(i) The maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations, 0.667 times the test pressure in Class 3 locations, or 0.555 times the test pressure in Class 4 locations. The corresponding hoop stress may not exceed 72 percent of the SMYS of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.

(ii) The alternative maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations and 0.667 times the test pressure in Class 3 locations. For pipelines operating at alternative maximum allowable pressure per §192.620, the corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations.

(2) The maximum allowable operating pressure of the segment involved must be reduced so that the corresponding hoop stress is not more than that allowed by this part for new segments of pipelines in the existing class location.

3) The segment involved must be tested in accordance with the applicable requirements of subpart J of this part, and its maximum allowable operating pressure must then be established according to the following criteria:

(*i*) The maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations, 0.667 times the test pressure for Class 3 locations, and 0.555 times the test pressure for Class 4 locations.

(ii) The corresponding hoop stress may not exceed 72 percent of the SMYS of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.

(iii) For pipeline operating at an alternative maximum allowable operating pressure per §192.620, the alternative maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations and 0.667 times the test pressure for Class 3 locations. The corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations.

IV. Purpose and Need

FGT requested a waiver from the requirements of 49 CFR 192.611(a)(3)(iii) for the eighteen (18) *special permit segments* consisting of approximately 3.340 miles of natural gas transmission pipeline listed below in **Table 1 – Special Permit Segments**. Without a special permit, the cited regulations require that FGT complete pipe replacement, hydrotest, and pressure reduction, based on population changes in the vicinity of the segments. On the condition that FGT complies with the terms and conditions set forth below, this special permit waives compliance from 49 CFR 192.611 (a)(3)(iii) for 17,637 feet (3.340 miles) of natural gas transmission pipelines, where the class location of the lines changed from Class 1 or Class 2 to a Class 3 location in Citrus, Hernando, Hillsborough, and Pasco Counties, Florida. This special permit allows FGT to maintain the current MAOP of either 1,322 pounds per square inch gauge (psig) or 1,333 psig on the Pipelines, where the *special permit segment* pressure test does not meet the 1.5 times MAOP requirements in 49 CFR 192.611(a)(3)(iii) for a change to a Class 3 location. The *special permit segments* were pressure tested between 1.42 to 1.46 times MAOP as shown in **Table 1 - Special Permit Segments**.

The special permit establishes enhanced IM procedures to maintain pipe integrity and protect both the public and the environment for the class location units in which the *special permit segments* are located for the length of pipeline covered by the special permit. All of the *special permit segments* must be treated as high consequence areas (HCA) with the implementation of IM procedures. In addition, FGT must comply with conditions as provided in the terms of the special permit for all the impacted *special permit segments* and the designated "*special permit inspection area*" in the special permit.

The conditions, as prescribed in the special permit, provide an additional level of safety without the impacts of excavation to remove existing pipe, install the replacement pipe, and conduct pressure testing of the existing pipe.

PHMSA has issued various special permits with nearly identical conditions and the conditions will provide, at minimum, a level of safety that is equivalent to the existing regulations. In this age of enhanced pipeline safety tools, such as inline inspection (ILI), and IM processes, it is wasteful and unnecessary to require wholesale replacement of pipe when the population near the pipeline increases. The special permit conditions are designed to identify and mitigate integrity issues that could threaten the pipeline segments and cause failure. The effect of the enhanced monitoring and maintenance requirements will ensure integrity of the pipe and protection of the population living near the pipeline segment to a similar degree as replacing with heavier walled or high-grade pipe without the enhanced IM activities.

Granting FGT a special permit waiving the requirements of 49 CFR 192.611(a)(3)(iii) benefits the public and FGT in several ways. As PHMSA recognized in its 2004 Notice, implementing additional preventative and mitigative measures enables a pipeline to improve its knowledge and understanding of the pipeline's integrity, accelerate the identification and repair of actionable anomalies, and better manage and mitigate threats to the public and environment. Implementing enhanced inspection and assessment practices throughout the *special permit inspection areas*, in lieu of replacing the small sections of pipe experiencing the class location changes, extends pipeline safety benefits to a much greater area. In addition, avoiding pipe excavation, replacement and pressure testing minimizes costs to the operator, avoid delivery interruptions and supply shortages, and avert environmental disturbance.

Further, grant of the special permit will allow FGT to avoid unnecessary extensive impact to vegetation, soils and potentially adjacent waterways due to approximately 3.340 miles of

excavation to replace and hydrostatically pressure test pipe. FGT will avoid disturbing the rightof-way (ROW) of property owners except for the additional inspections that may be required to satisfy the conditions of the special permit such as those related to the integrity management program for HCAs, additional stress corrosion cracking verification digs, and potential anomaly evaluations/repairs.

FGT requested a waiver from the requirements of 49 CFR 192.611(a)(3)(iii) for the *special permit segments* consisting of 17,637 feet (approximately 3.340 miles) of natural gas transmission pipeline listed below in **Table 1 – Special Permit Segments**.

PHMSA is granting a special permit waiving the pressure test factor of 49 CFR 192.611(a)(3)(iii) for *five* (5) *special permit segment extensions* totaling 17,637 feet (approximately 3.340 miles).

V. Site Description

The eighteen (18) *special permit segments (thirteen (13) existing special permit segments* and *five (5) special permit segment extensions*) consist of 17,637 feet (approximately 3.340 miles) of the 18-inch diameter St. Petersburg Sarasota Connector, 30-inch diameter West Leg Station 26-27, and 36-inch diameter West Leg Loop Pipelines located in Citrus, Hernando, Hillsborough, and Pasco Counties, Florida. The extent of each *special permit segment* is provided in **Table 1 - Special Permit Segments**.

The *special permit inspection areas* extend approximately 169.7 miles of the pipeline and are detailed in **Table 2 – Special Permit Inspection Areas**.

VI. Special Permit Segments and Special Permit Inspection Areas

Special Permit Segments:

This special permit applies to the *special permit segments* identified in **Table 1 – Special Permit Segments** and are identified using the FGT survey station (SS) references. The *eighteen (18) special permit segments* consist of 17,637 feet (approximately 3.340 miles) of pipeline. *Three (3) special permit segments*, totaling 1,603 feet (approximately 0.304 miles) of pipeline along the FGT system, have undergone a class change from Class 1 to Class 3. *Fifteen (15) special permit segments*, totaling 16,034 feet (3.037 miles) of pipeline along the FGT system, have undergone a class change from Class 2 to Class 3. <u>The *special permit segments* utilize alternate design factors from 49 CFR 192.620 per existing special permit PHMSA-2008-0077.</u>

	Table 1 – Special Permit Segments										
Special Permit Segment Number	Outside Diameter (inches)	Line Name/ (Diameter, wall thickness, Grade)	Length (feet)	Start Survey Station (SS)	End Survey Station (SS)	County, State	Class Summary	Year Installed	Seam and Coating Type	MAOP (psig)	Design/ Pressure Test Factor
166334	18	St. Petersburg Sarasota Connector/ (18", 0.258", X70)	1,156	54+60	66+16	Hillsborough, FL	1 to 3	1992	HF-ERW/ FBE	1,333	0.67 / 1.42
166338	18	St. Petersburg Sarasota Connector/ (18", 0.309", X70)	315	206+51	209+66	Hillsborough, FL	1 to 3	1992	HF-ERW/ FBE	1,333	0.56 / 1.42
166340	18	St. Petersburg Sarasota Connector/ (18", 0.309", X70)	132	406+43	407+75	Hillsborough, FL	1 to 3	1992	HF-ERW/ FBE	1,333	0.56 / 1.42
166347 ext.	18	St. Petersburg Sarasota Connector (18", 0.258", X70)	269	901+98	904+67	Hillsborough, FL	2 to 3	1992	HF-ERW/ FBE	1,333	0.67 / 1.42
166347	18	St. Petersburg Sarasota Connector (18", 0.258", X70)	532	904+67	909+99	Hillsborough, FL	2 to 3	1992	HF-ERW/ FBE	1,333	0.67 / 1.42
166349	18	St. Petersburg Sarasota Connector (18", 0.309", X70)	456	1014+01	1018+57	Hillsborough, FL	2 to 3	1992	HF-ERW/ FBE	1,333	0.56 / 1.42
166349 ext.	18	St. Petersburg Sarasota Connector (18", 0.309", X70)	3,537	1018+57	1053+94	Hillsborough, FL	2 to 3	1992	HF-ERW/ FBE	1,333	0.56 / 1.42
166350	18	St. Petersburg Sarasota Connector (18", 0.309", X70)	474	1079+72	1084+46	Hillsborough, FL	2 to 3	1992	HF-ERW/ FBE	1,333	0.56 / 1.42
166352	18	St. Petersburg Sarasota Connector (18", 0.309", X70)	259	1212+12	1214+71	Hillsborough, FL	2 to 3	1992	HF-ERW/ FBE	1,333	0.56 / 1.42
166250 ext.	30	West Leg Station 26- 27 MP 160.2 (30", 0.430", X70)	5,799	992+75	1050+74	Hernando, FL	2 to 3	1994	DSAW/ FBE	1,322	0.67 / 1.45
166250	30	West Leg Station 26- 27 MP 160.2 (30", 0.430", X70)	1,004	1050+74	1060+78	Hernando, FL	2 to 3	1994	DSAW/ FBE	1,322	0.67 / 1.45
166256 ext.	30	West Leg Station 26- 27 MP 160.2 (30", 0.430", X70)	404	1863+70	1867+74	Pasco, FL	2 to 3	1994	DSAW/ FBE	1,322	0.67 / 1.45
166256	30	West Leg Station 26- 27 MP 160.2 (30", 0.430", X70)	318	1867+74	1870+92	Pasco, FL	2 to 3	1994	DSAW/ FBE	1,322	0.67 / 1.45
166257	30	West Leg Station 26- 27 MP 160.2 (30", 0.430", X70)	165	1870+92	1872+57	Pasco, FL	2 to 3	1994	DSAW/ FBE	1,322	0.67 / 1.45
166267	30	West Leg Station 26- 27 MP 160.2 (30", 0.515", X70)	861	3488+40	3497+01	Hillsborough, FL	2 to 3	1994	SAW/ FBE	1,322	0.56 / 1.44
166114	36	West Leg Loop (36", 0.515", X70)	1,252	104+57	117+09	Citrus, FL	2 to 3	2003	DSAW/ FBE	1,322	0.67 / 1.42
166129 ext.	36	West Leg Loop (36", 0.515", X70)	210	991+72	993+82	Hernando, FL	2 to 3	2007	DSAW/ FBE	1,322	0.67 / 1.46
166129	36	West Leg Loop (36", 0.515", X70)	494	993+82	998+76	Hernando, FL	2 to 3	2007	DSAW/ FBE	1,322	0.67 / 1.46

Notes:

- 1) HF-ERW is high frequency electric resistance welded seam type pipe.
- 2) DSAW is double submerged arc welded seam type pipe.
- 3) SAW is submerged arc welded seam type pipe.
- 4) FBE is fusion bonded epoxy external pipe coating.

The *special permit segments* in **Table 1 – Special Permit Segments** have a pipe design factor of 0.67 or less that meets 49 CFR 192.611(a)(1)(ii) for a Class location change to a Class 3 location. The minimum hydrostatic test pressure of these *special permit segments* does not meet the requirements of 49 CFR 192.611(a)(3)(iii). For a Class location change from a Class 1 or 2 to a Class 3 location to meet 49 CFR 192.611(a)(3)(iii), the MAOP must be based upon the minimum hydrostatic test pressure times 0.667. These special permit segments do not meet this minimum hydrostatic test pressure requirement and thus requires a special permit.

Special Permit Inspection Areas:

Special permit inspection areas are defined to mean the area that extends 220 yards on each side of the centerline. The *special permit segments* are located in a total of three (3) *special permit inspection areas* totaling 896,016 feet (169.7 miles). A summary of *special permit inspection areas* is included in **Table 2 – Special Permit Inspection Areas**.

	Table 2 – Special Permit Inspection Areas									
Special Permit Inspection Area Name	Special Permit Segment Number(s)	Outside Diameter (inches)	Line Name	Start Survey Station (Mile Post)	End Survey Station (Mile Post)	Length ⁶ (miles)				
FLMEF-26	166114, 166129, 166129 extension	36	West Leg Loop	90.6	153.8	63.2				
FLMEE-26-27	166250, 166250 extension, 166267, 166256, 166256 extension, 166257	30	West Leg Station 26-27 MP 160.2	90.6	160.2	69.6				
FLBVW	166334, 166338, 166340, 166347, 166347 extension, 166349, 166349 extension, 166350, 166352	18	St. Petersburg/ Sarasota Connector	0.0	36.9	36.9				

The *special permit inspection areas* are located in Citrus, Hernando, Hillsborough, and Pasco Counties, Florida.⁷ Attachments B1 - B3 are general map that includes the pipeline route map showing the *special permit segments* and *special permit inspection areas*.

⁶ If the *special permit inspection area* footage does not extent from launcher to receiver, then the *special permit inspection area* will need to be extended.

⁷ The *special permit inspection areas* include the *special permit segments*.

VII. Alternatives

Alternative 1: "No Action" Alternative

The "No Action" Alternative or denial of the special permit would entail full compliance with existing regulations, specifically 49 CFR 192.611(a)(3)(iii). This provision requires: 1) pipeline pressure reduction (i.e., a lower operating pressure or MAOP); 2) new pipeline pressure testing; or 3) pipe replacement (with a heavier walled or higher-grade pipe) of all the pipeline segments associated with this special permit modification request, which includes approximately 3.340 miles of pipeline to address class location changes.

Because FGT's contractual obligations do not allow the operating pressure of the pipe to be lowered, pipeline pressure reduction is not a feasible option. Thus, denial of the special permit would require excavation to remove existing pipe, acquiring environmental permits where necessary, and pressure testing the replacement pipeline segments. This action would require the replacement and pressure testing of all the pipeline segments associated with this special permit request, which includes approximately 3.340 miles of pipeline construction-related impacts to upland and wetland vegetation, soils, and adjacent waterbodies. Furthermore, the "No Action" Alternative would result in construction-related inconveniences for businesses and residences located near the affected area and service disruptions from taking the line out of service during pipe replacement construction and pressure testing activities. Lastly, denial of the special permit would mean the existing special permit (PHMSA-2020-0044) would be rescinded and enhanced IM portions of the special permit conditions would not be implemented.

Alternative 2: "Granted" Alternative

FGT requested a special permit, allowing the pipe to operate at its desired MAOP in the Class 2 and Class 3 areas without replacing or pressure testing pipe. The current MAOP of the pipeline will be maintained in this alternative and the pipelines will be subject to additional safety inspections and criteria. Therefore, the special permit will avoid:

- 1. Construction related impacts along the pipeline ROW;
- 2. Construction-related inconveniences for businesses and residences located near the affected area;
- 3. Service disruptions that could result from taking the line out of service during pipe replacement and pressure testing activities; and
- 4. The venting of the natural gas to atmosphere will be avoided.

All segments of pipe in the special permit will be treated as HCAs under an integrity management program (IMP) (49 CFR Part 192, Subpart O) as a requirement of the special permit.

VIII. Overview of Special Permit Conditions

To provide an equivalent level of safety in the absence of either lowering the pipeline operating pressure or upgrading the pipe, this special permit has additional operations and maintenance requirements (conditions) which are intended to decrease the likelihood of a release of gas. PHMSA believes that these additional measures designed to prevent leaks and ruptures will ensure that the special permit is not inconsistent with pipeline safety.

- FGT specific technical requirements and the special permit conditions granted, Letter of Decision (LOD), special permit analysis and findings (SPAF), FEA and finding of no significant impact (FONSI), and Attachment A – Segment Integrity Information for Docket No. PHMSA-202-0044 can be found the Federal Docket Management System (FDMS) located on the internet at <u>www.regulations.gov</u>.
- The LOD, Special Permit, SPAF, FEA and FONSI can be found on the PHMSA website for special permits issued at <u>https://www.phmsa.dot.gov/pipeline/special-permits-state-waivers/special-permits-issued.</u>

The below section provides an overview of the special permit conditions.

1) <u>Current Status of Pipe in the Ground</u>

To ensure that key characteristics of the pipe currently installed in each *special permit segment* is known, records that confirm pipe specifications, successful pressure tests, and girth weld non-destructive tests are required. Should records be unavailable or unacceptable, additional activities as detailed in the special permit must be completed. If these additional activities are not completed or should pipe be discovered that does not meet specific requirements of eligibility, the *special permit segment* must be replaced.

2) **Operating Conditions**

If allowed by the special permit, each *special permit inspection areas* must continue to be operated at or below the existing MAOP until a restoration or uprating plan has been approved, if allowed by the special permit. To ensure compliance with special permit conditions, the operator's Operations and Maintenance Manual (O&M), IM Program, and Damage Prevention (DP) program must be modified to implement the special permit

conditions. In addition, PHMSA must approve any long-term flow reversals that would impact each *special permit segment*.

3) Threat Management

Threats are factors that can lead to the failure of a pipeline. Activities are required to identify, assess, remediate, and monitor threats to the pipeline.

- a) **General activities.** FGT must perform annual data integration and identification of threats to which the *special permit inspection area* is susceptible. These activities must include integrity assessments with specific inline inspection tools, strict anomaly repair criteria, and appropriate environmental assessment and permitting. Additional integrity assessment methodologies may be used if allowed by the special permit. Integrity assessments must then be conducted periodically at an interval determined in the special permit for each threat identified.
- b) External corrosion control requirements. The special permit requires additional activities to monitor and mitigate external corrosion. These activities include installation and annual monitoring of cathodic protection (CP) test stations, periodic close interval surveys (CIS), and clearing or remediating shorted casings that may impede CP effectiveness. These activities ensure the appropriate level of CP is reaching the pipeline in areas where coating loss or damage has occurred in order to prevent or mitigate external corrosion. In addition, the permittee is required to develop and implement a plan that identifies and remediates interference from alternating or direct current (AC/DC) sources (such as high-voltage powerlines) that could adversely impact the effectiveness of CP.
- c) **Internal corrosion control requirements.** The special permit includes gas quality specifications to mitigate internal corrosion because internal corrosion is highly dependent on the quality of the gas transported within the pipeline.
- d) Stress corrosion cracking (SCC) requirements. To ensure that SCC is discovered and remediated, any time a pipe segment is exposed during an excavation the FGT must examine coating to determine type and condition. If the coating is in poor condition, FGT must conduct additional SCC analysis. If SCC is confirmed, FGT must implement additional special permit defined remediation and mitigation.

- e) **Pipe seam requirements.** FGT must perform an engineering integrity analysis to determine susceptibility to seam threats. FGT must re-pressure test any *special permit segments* with an identified seam to ensure the issue is not systemic in nature.
- f) External pipe stress requirements. Upon identification of any source of external stress on the pipeline (such as soil movement), the FGT must develop procedures to evaluate and periodically monitor these stresses.
- g) Third-party specific requirements. To assist in identifying the pipeline location and minimizing the chance of accidental pipeline strikes, FGT must install and maintain lineof-site markers for the pipeline. The FGT must perform mitigation activities for any location where a depth-of-cover survey shows insufficient soil cover.

4) Consequence Mitigation

To ensure quick response and decreased adverse outcome in the event of a failure, each side (upstream and downstream) of the *special permit segment* must have and maintain operable automatic shutdown valves (ASV) or remote-controlled valves (RCV). The FGT must monitor valves through a control room with a supervisory control and data acquisition (SCADA) system. In addition to the mainline valves, should a crossover or lateral connect between the valve locations, additional isolation valves may be required.

5) Post Leak or Failure

If the *special permit inspection area* experiences an in-service or pressure test leak/failure, FGT must conduct a root cause analysis to determine the cause. If the cause is determined to be systemic in nature, FGT must implement a remediation plan or the *special permit segment* must be replaced, as determined by the special permit specific conditions.

6) Class Location Study and Potential Extension of Special permit segment

FGT must conduct a class location study at an interval specified in the special permit. This allows FGT to quickly identify extended locations that must comply with the *special permit segment* requirements. FGT may extend the *special permit segments* with proper notification, update of the Final Environmental Assessment, and implementation of all requirements in the special permit.

7) PHMSA Oversite and Management

PHMSA maintains oversight and management of each special permit. This includes annual meetings with executive level officers on special permit implementation status, written

certification of the special permit, special permit required notification of planned activities, notification of root cause analysis results, and notification prior to certain excavation activities so that PHMSA may observe.

8) Gas Leakage Surveys and Remediation

The *special permit segment* and *special permit inspection area* have requirements in the special permit to conduct leakage surveys more frequently than is presently required in 49 CFR 192.706. Gas leakage surveys using instrumented gas leakage detection equipment must be conducted along each *special permit segment* and at all valves, flanges, pipeline tie-ins with valves and flanges, ILI launcher, and ILI receiver facilities in each *special permit inspection area* at least twice each calendar year, not to exceed 7½ months. The type of leak detection equipment used, survey findings, and remediation of all instrumented gas leakage surveys must be documented by operator. The special permit will require a three-step grading process with a time interval for remediation based upon the type of leak.

9) **Documentation**

FGT must maintain documentation that supports compliance with special permit conditions for the life of the pipeline.

IX. Affected Resources and Environmental Consequences

A. Affected Resources and Environmental Consequences of the Granted Action and the No Action Alternatives

FGT is granted a special permit that waives compliance with 49 CFR 192.611(a)(3)(iii) for the *special permit segments* totaling 17,637 feet (approximately 3.340 miles) located within three (3) *special permit inspection areas* totaling 169.7 miles. FGT must comply with the special permit conditions within the *special permit segments*.

Implementation of the special permit conditions, including enhanced IM Procedures, provides an additional level of safety without the impacts of excavation to remove existing pipe, install the replacement pipe, and conduct pressure testing of the existing pipe. Thus, FGT will avoid disturbing approximately 3.340 miles of the pipeline ROW, with the exception of additional inspections that may be required to satisfy the conditions of the special permit such as those related to the IM protocols that may require verification digs and potential anomaly evaluations/repairs.

Implementing additional preventative and mitigative measures enables a pipeline to improve its knowledge and understanding of the pipeline's integrity, accelerate the identification and repair of

actionable anomalies, and better manage and mitigate threats to the public and environment. Therefore, implementing enhanced inspection and assessment practices within the *special permit inspection areas*, in lieu of replacing and pressure testing the small sections of pipe experiencing the class location changes, extends pipeline safety benefits to a much greater area and avoids environmental disturbances.

An analysis of environmental resources and potential environmental consequences in the vicinity of the *special permit segments* are provided in the following sections.

Aesthetics: The visual character of the *special permit segments* and the *special permit inspection areas* will not be changed by the approval of this special permit request, except for a requirement to place line of sight markers, the potential addition or upgrade of valves, and possibility of increased maintenance and repair activity due to increased IM requirements. The granting of the special permit will avoid construction or ground disturbances in the pipeline ROW that would be necessitated if the special permit was not granted. Therefore, the issuance of the special permit will not result in aesthetic impacts to the affected *special permit segments* or *special permit inspection areas*.

Denial of the special permit request would require the replacement and pressure testing of all the *special permit segments* associated with this special permit request. Pipe replacement would require removal of the existing pipe and installation of a new pipe. This would result in the use of heavy equipment and ground disturbance. Furthermore, pressure testing would also require disturbances along the pipeline ROW.

Agricultural Resources: This special permit request will not impact agricultural resources in the pipeline ROW where the *special permit segments* or the *special permit inspection areas* are located as there are none in adjacent areas.

Air Quality: Air Quality Control Regions (AQCRs) are areas for which implementation plans describe how ambient air quality standards will be achieved and maintained. AQCRs are defined by the U.S. Environmental Protection Area (EPA) and State agencies in accordance with the Clean Air Act of 1970 (CAA). The 1977 CAA Amendments in Section 107 require EPA and States to identify by category those AQCRs meeting and not meeting the U.S. National Ambient Air Quality Standards (NAAQS) which are standards for harmful pollutants. Areas meeting the NAAQS are designated "attainment areas," and areas not meeting the NAAQS are designated

"nonattainment areas." The designation of an area is made on a pollutant-by-pollutant basis. All *special permit segments* occur in areas that are designated attainment areas for all pollutants.

This special permit will not affect the air quality of the *special permit segments* or the *special permit inspection areas*. The granting of the special permit will avoid construction or ground disturbances in the pipeline ROW that would be necessitated if the special permit was not granted.

If the special permit request was not granted pipe replacement would be required, which would necessitate blowing down the pipeline releasing natural gas, a known greenhouse gas. Furthermore, pipe replacement and pressure testing would be required which would require the temporary use of heavy equipment, which would result in temporary construction emissions.

Biological Resources: This special permit request will not impact vegetation (including wetlands), wildlife (including threatened and endangered species), or fishery resources in the pipeline ROW where the *special permit segments* or the *special permit inspection areas* are located. Avoiding pipe replacement will preserve vegetation and habitat along the ROW. However, increased maintenance and IM activities required under the special permit could result in more frequent, though isolated, and temporary impacts due to excavations.

The low-growing herbaceous cover within the pipeline ROW may provide sources of food and nesting sites for various birds, as well as cover for mammals, invertebrates, reptiles, and amphibians. The area has been disturbed previously during the construction of the existing pipeline. Furthermore, the pipeline ROW is maintained in an herbaceous state by routine mowing and clearing activities using mechanical equipment. Therefore, the wildlife found in the vicinity of the *special permit segments* will most likely be tolerant of human disturbance.

The U. S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC) was utilized to identify the Federally and State listed threatened and endangered species that could potentially inhabit or traverse the *special permit segments* (USFWS, 2019). **Table 3** provides a list of the Federal and State listed threatened and endangered species potentially occurring in the *special permit segments*. A total of 14 listed species (six (6) birds, five (4) reptiles, one (1) insect, and two (2) plants) were identified as potentially occurring in the *special permit segments*.

The objective of the special permit is to avoid construction or ground disturbance in the pipeline ROW. Therefore, by granting the special permit, wildlife habitat will not be disturbed resulting in *"No effect"* to listed species. However, if the special permit request was not granted, then pipe

replacement and pressure testing would be required, which would require FGT to disturb vegetation and wildlife habitat in order to comply with 49 CFR 192, which could potentially disturb potential listed species such as Eastern indigo snake in the *special permit segments*.

Any inspection activities related to the *special permit segments* will be conducted within the boundaries of the previously disturbed pipeline ROW. FGT has received a categorical exclusion blanket clearance from the USFWS for minor pipeline construction and maintenance projects within FGT's existing ROW. The Florida USFWS field offices have determined in its categorical exclusion blanket clearances that work within FGT's existing ROW is unlikely to adversely impact Federally listed species and their habitats.

Table 3 - Federally and State Listed Threatened and Endangered Species Potentially Occurring Within the Special Permit Segments								
Species	Federal Status	State Status	County, State	Segment CID No.	Habitat Description	Determination of Effect / Rationale		
	_	_	-	Birds				
Audubon's Crested Caracara (Polyborus plancus audubonii)	Т	Τ	Hillsborough Pasco, FL	166267 166334 166338 166340 166347 166347 extension (ext.) 166349 166349 ext. 166350 166352 166256	Occurs in dry or wet prairie areas with scattered cabbage palms (Sabal palmetto). It may also be found in lightly wooded areas.	No effect / No suitable habitat is present in the special permit project areas (maintained pipeline ROW).		
				166256 ext 166257		N. 60 - () Y		
Eastern Black Rail (Laterallus jamaicensis ssp. Jamaicensis)	Т	Т	Citrus, FL Hernando, FL	166114 166125 166129 166129 ext. 166250 166250 ext.	Typically found in salt and brackish marshes with dense cover.	No effect / No suitable habitat is present in the <i>special permit</i> <i>segments</i> (maintained		
		Hillsborough, FL	166267 166334 166338 166340 166347 166347 ext. 166349 166349 ext. 166350 166352		pipeline ROW).			
			Pasco, FL	166256 166256 ext.				

Table 3 - Federally and State Listed Threatened and Endangered Species Potentially Occurring Within the Special Permit Segments								
Species	Federal Status	State Status	County, State	Segment CID No.	Habitat Description	Determination of Effect / Rationale		
				166257				
Florida Grasshopper Sparrow (Ammodramus savannarum floridanus)	E	Е	Hillsborough	166267 166334 166338 166340 166347 166349	Requires large areas of frequently burned dry prairie habitat, with patchy open areas sufficient for foraging.	No effect / No suitable habitat is present in the special permit project areas (maintained		
				166350 166352		pipeline ROW).		
Florida Scrub Jay (Aphelocoma coerulescens)	Т	Т	Citrus Hernando, FL	166114 166125 166129 166129 ext. 166250	Optimal habitat includes sand pine scrub, xeric oak scrub, scrubby flatwoods, and scrubby coastal strand habitats.	No effect / No suitable habitat is present in the <i>special permit</i> <i>segments</i> (maintained pipeline ROW).		
			Hillsborough	166250 ext. 166267 166334 166338				
				166340 166347 166347 ext. 166349 166349 ext.				
				166350 166352				
			Pasco, FL	166256 166256 ext. 166257				
Red-Cockaded	Е	Е	Citrus	166114	Mature 80-120-year-old	No effect / No		
Woodpecker (Picoides borealis)			Hernando, FL	166125 166129 166129 ext.	longleaf or loblolly pine forest.	mature 80-120- year-old longleaf or loblolly pine		
			Pasco, FL	166250 166256 166256 ext. 166257		forest present is in the <i>special permit</i> <i>segments</i> (maintained pipeline ROW).		
Wood Stork (Mycteria Americana)	T T	Her FL	Citrus Hernando, FL	166114 166125 166129 166129 ext. 166250	Inhabits emergent wetland, mixed hardwood swamps, sloughs, mangroves, and cypress domes. Nesting trees range from low shrubs to cypress.	No effect / No preferred suitable nesting habitat present is in the <i>special permit</i> <i>segments</i> (maintained pipeline ROW).		
			Hillsborough	166250 ext. 166267 166334 166338 166340 166347				
				166347 ext. 166349 166349 ext. 166350				

Table 3 - Federally and State Listed Threatened and Endangered Species Potentially Occurring Within the Special Permit Segments							
Species	Federal Status	State Status	County, State	Segment CID No.	Habitat Description	Determination of Effect / Rationale	
				166352			
			Pasco, FL	166256			
			Tasco, TL	166256 ext.			
			<u> </u>	166257 Reptiles			
American Crocodile (Crocodylus acutus)	Т	Т	Hillsborough	166267 166334 166338 166340	Inhabits primarily in mangrove swamps and mangrove lined bays creeks, and inland	No effect / No preferred suitable habitat in the special permit	
ucuus)				166347 166347 ext. 166349 166349 ext. 166350	swamps with access to deep water. Species habitats use shifts seasonally. Nesting occurs on sandy	project areas (maintained pipeline ROW).	
				166352	shorelines or raised creek banks near deep water.		
Eastern Indigo	Т	Т	Citrus	166114	Species prefers xeric	No effect /	
Snake (Drymarchon couperi)			FL	Hernando, FL	166125 166129 166129 ext. 166250 166250 ext.	longleaf pine sandhills with gopher tortoise burrows and requires very large tracts of land. FGT will adhere to	Although suitable habitat is present within the pipeline ROW, the special permit
			Hillsborough	166250 ext. 166267 166334 166338	USFWS Standard Protection Measures for the Eastern Indigo	allows FGT to avoid construction in the pipeline	
				166340 166347	Snake if excavations are required in an area	ROW avoiding impacts to this	
				166347 ext. 166349	containing burrows.	species.	
				166349 ext. 166350			
				166352			
			Pasco, FL	166256 166256 ext. 166257			
Hawksbill Sea	Е	Е	Hillsborough	166267	Primarily found in	No effect / No	
Turtle (<i>Eretmochelys</i>				166334 166338	tropical coral reefs. Nesting occurs on	coastal habitat is present in the	
imbricata)				166340	undisturbed deep-sand	special permit	
,				166347	beaches in the tropics.	project areas.	
				166347 ext.		- •	
				166349			
				166349 ext. 166350 166352			

Table 3	3 - Federa				d Endangered Species I rmit Segments	Potentially
Species	Federal Status	State Status	County, State	Segment CID No.	Habitat Description	Determination of Effect / Rationale
Leatherback Sea Turtle (Dermochelys coriacea)	E	E	Hillsborough	166267 166334 166338 166340 166347 166347 ext. 166349 166349 ext. 166350 166352	Found primarily in the ocean. Requires sandy nesting beaches backed with vegetation for nesting.	No effect / No coastal habitat is present in the <i>special permit</i> <i>segments</i> .
Loggerhead Sea	Т	Т	Citrus	166114	Florida's sandy Atlantic	No effect / No
Turtle (<i>Caretta caretta</i>)			Hernando, FL	166125 166129 166129 ext. 166250 166250 ext.	and Gulf of Mexico beaches are preferred habitat for nesting.	coastal habitat is present in the <i>special permit</i> <i>segments</i> (maintained
		Hillsbord	Hillsborough	166267 166334 166338 166340 166347 166347 ext. 166349 166349 ext. 166350 166352		pipeline ROW).
			Pasco, FL	166256 166256 ext.	-	
				166257		
Monarch	С		Citrus	Insects 166114	Found in open fields	Possible /
Monarch Butterfly (<i>Danaus</i> periplus)			Hernando, FL	166125 166129 166129 ext. 166250 166250 ext.	and meadows with milkweed.	Possibility for species to be present in non- forested areas during spring and
			Hillsborough	166267 166334 166338 166340 166347 166347 ext. 166349 166349 ext. 166350 166352		summer months.
			Pasco, FL	166256 166256 ext. 166257		
	·		Flow	ering Plants	·	·
Florida Golden (Aster	E	Е	Hillsborough	166267 166334	Inhabits sand pine- evergreen oak scrub	No effect / Preferred suitable

Table 3 - Federally and State Listed Threatened and Endangered Species Potentially Occurring Within the Special Permit Segments									
Species	Federal Status	State Status	County, State	Segment CID No.	Habitat Description	Determination of Effect / Rationale			
Chrysopsis floridana)				166338 166340 166347 166347 ext. 166349 166349 ext. 166350 166352	vegetation on excessively-drained fine white sand.	habitat is not present in the <i>special permit</i> <i>segments</i> (maintained pipeline ROW).			
Pygmy Fringe- tree (Chionanthus pygmaeus)	E	E	Hillsborough	166332 166267 166334 166338 166340 166347 166347 ext. 166349 166349 ext. 166350 166352	Inhabits scrub, sandhill, and xeric hammock, primarily on the Lake Wales Ridge. May form thickets with evergreen scrub oaks and shrubs.	No effect / Preferred suitable habitat is not present in the <i>special permit</i> <i>segments</i> (maintained pipeline ROW).			
	Г - Threater				ed Threatened SAT - Trea				

in attempting to differentiate between the listed and unlisted species. *Conservation Land*: The Florida Natural Areas Inventory (FNAI) maintains an inventory of the State's conservation land holdings (FNAI, 2023). *One (1) special permit segment* crosses sensitive habitat (e.g., conservation land holdings). *Special permit segment No. 166114* in Citrus County is located on the eastern boundary of Withlacoochee State Forest which is managed by the

Florida Department of Agriculture and Consumer Services, Florida Forest Service. Withlacoochee State Forest is currently the third largest State Forest in Florida and is divided into eight distinct tracts of land. The land is managed by the Florida Forest Service for multiple use of the forest resources which includes timber management, wildlife management, ecological restoration, and outdoor recreation.

The pipeline ROW already exists along the boundaries of these conservation lands. In addition, granting the special permit will avoid or minimize construction or ground disturbance in the pipeline ROW. Therefore, no impacts to sensitive lands will result by granting the special permit request. However, if the special permit request was not granted then pipe replacement and/or pressure testing would be required, which would disturb vegetation and wildlife habitat in the segment located within State conservation land.

Climate Change: The scope and duration of any activities associated with the *special permit segments* will have no impact on climate change. The granting of the special permit will avoid construction or ground disturbances in the pipeline ROW. If the special permit was not granted, pipe replacement would be required, which would necessitate the use of heavy equipment during construction and blowing down the pipeline releasing natural gas, a known greenhouse gas. Pipeline operators can and should mitigate blowdowns through pressure reductions and capture and storage of natural gas during pipeline work. The special permit requires increased maintenance and repair activities, which would result in greenhouse emissions, but the extent of those emissions is likely less than the emissions that would result from a blowdown.

Cultural Resources: There are no cultural, archaeological, or paleontological resources that will be impacted by this special permit request. The objective of the special permit is to avoid construction in the ROW

Any inspection activities associated with the *special permit segments* and *special permit inspection areas* will be conducted within the boundaries of FGT's existing aboveground facilities (i.e., compressor station and regulator stations) and maintained pipeline ROW. FGT was granted a categorical exclusion blanket clearance certificate from the Florida Division of Historical Resources for activities to be undertaken within its existing, previously disturbed ROW to ensure compliance with the National Historic Preservation Act of 1966, as amended (NHPA). The Florida State Historic Preservation Office (SHPO) concurred with its categorical exclusion for work within existing ROW and stated that "no known historic properties will be affected by this undertaking."

Environmental Justice: As shown in Table 6 - Demographic Information for Special Permit Segment – Using EPA EJScreen, this special permit will not impact any predominantly (>50%) minority, linguistically isolated, or low-income populations where the *special permit segments* are located. The total population within a 0.5-mile radius of each of the *special permit segments* ranges from <45 to 970. The minority population in the *special permit segments* range from 16 percent in Pasco County to 43 percent in Hillsborough County. The low-income population in the *special permit segments* ranges from 7 percent in to 43 percent in Hillsborough County. The linguistically isolated population in the *special permit segments* ranges from 0 percent in Hernando and Hillsborough Counties to 9 percent in Hillsborough County. The special permit modification will not have a disparate impact any minority, non-English language, or impoverished populations. In any event, the activities of the special permit are intended to maintain safety along all of the *special permit segments*, reduce environmental impacts, and increase the level of the safety along the *special permit inspection areas* and will not have a disparate impact on any minority, low income, or limited English proficiency populations.

A pipeline failure may take the form of a leak or a rupture. The consequences would be similar in both cases, but typically would be more serious in the event of a rupture. If a rupture occurs and the released gas ignites, the thermal radiation from the fire is a hazard to people outdoors, potentially causing serious injury or death depending on distance from the rupture. The thermal radiation may also result in spontaneous or piloted ignition of houses and other structures, or of nearby vegetation. A flammable mixture of natural gas and air will not explode unless confined, for example by walls or densely packed obstructions. An energetic ignition source is usually also needed to generate significant overpressures. Natural gas explosions resulting from pipeline releases are therefore rare. An unignited release from a pipeline typically does not result in injury to people. Natural gas is not toxic but a simple asphyxiant. However, an unignited release will have environmental consequences because natural gas (unburned) is a powerful GHG.

If the proposed special permit is granted, the pipeline in the *special permit inspection area* will receive additional inspection and monitoring to provide more information about the condition of the pipe so that any integrity issues can be remediated to avoid risk. The "No Action" Alternative would require compliance with Federal regulation 49 CFR 192.611(a). This would require the replacement of the existing pipeline in the special permit segment with new pipe that meets the requirements of 49 CFR 192. However, the additional inspection and monitoring conditions associated with the special permit will not be applicable if the special permit were denied because those conditions are not mandated by the regulations. Accordingly, both alternatives are expected to lead to a similar safety result.

TABLE 6 - Demographic Information for Special Permit Segments – Using EPA EJScreen									
County	Special Permit Segment Number	Total Population (Along Special Permit Segment) ^a	Minority*/People of Color** Population	Low Income Population	Linguistically Isolated				
Citrus	166114	-	-	-	-				
	166129	160	20%	33%	0%				
Hamanda	166129 ext.	160	20%	33%	0%				
Hernando	166250	258	17%	33%	0%				
	166250 ext.	445	19%	33%	0%				
Pasco	166256	111	16%	34%	1%				

TABLE 6 - Demographic Information for Special Permit Segments – Using EPA EJScreen								
County	Special Permit Segment Number	Total Population (Along Special Permit Segment) ^a	Minority*/People of Color** Population	Low Income Population	Linguistically Isolated			
	166256 ext.	47	16%	34%	1%			
	166257	111	16%	34%	1%			
	166267	442	45%	62%	9%			
	166334	452	23%	26%	0%			
	166338	204	37%	37%	4%			
	166340	735	35%	33%	7%			
Hillsborough	166347	970	32%	7%	2%			
Thisborough	166347 ext.	970	32%	7%	2%			
	166349	45	32%	7%	2%			
	166349 ext.	-	-	-	-			
	166350	198	32%	43%	6%			
	166352	-	-	-	-			

Source: U.S. EPA, 2023. EJScreen : Environmental Justice Screening and Mapping Tool (0.5-Mile Radius). Available online at: <u>https://ejscreen.epa.gov/mapper/</u>.

Notes:

Minority*: The term minority is used in the currently active DOT Environmental Justice Order 5610.2(a), available at: https://www.transportation.gov/transportation-policy/environmental-justice/department-transportation-order-56102a

People of Color**: The term people of color is used in the EPA's Environmental Justice Screening and mapping tool (EJSCREEN). An overview of demographic indicators through EJSCREEN is available at: https://www.epa.gov/ejscreen/overview-demographic-indicators-ejscreen

Segments with "-" depicts areas that are too small or sparsely populated, or these data are not available in the national dataset. Cannot generate an EJScreen chart or report.

Geology and Soils: The general characteristics of the *special permit segments* consist of relatively flat terrain and gently sloping highlands, with few natural geologic exposures. The *special permit segments* are located in the Atlantic Plain physiographic region of the U.S. In the western Panhandle area of Florida, the *special permit segments* will traverse the Western Highlands physiographic region. Most of the *special permit segments* located in peninsular Florida will traverse the Gulf Coastal Lowlands.

Major Land Resource Areas (MLRAs) are geographically associated land resource units, usually encompassing several thousand acres, characterized by a particular pattern of soils, geology, climate, water resources, and land uses. The *special permit segments* and *special permit inspection areas* cross the following MLRAs:

• South-Central Florida Ridge (Citrus, Hernando, Hillsborough, and Pasco County); In the South-Central Florida Ridge MLRA, the soils are generally very deep, excessively drained to somewhat poorly drained, and loamy or sandy. The special permit grant will avoid construction or ground disturbances in the pipeline ROW that would be necessitated if the special permit was not granted. Therefore, the issuance of the requested special permit will not result in soils impacts to the affected *special permit segments* or *special permit inspection areas*. Furthermore, no changes to geologic conditions will occur.

Denial of the special permit request would have required the replacement and pressure testing of all the *special permit segments* associated with this special permit request. Pipe replacement would have required vegetation clearing, removal of the existing pipe and installation of a new pipe. The removal of the vegetative cover and ground disturbance exposes soils to the effects of wind and water which increases the potential for soil erosion and the transport of sediment to sensitive resource areas. Furthermore, pressure testing would also expose the soil to water which increases the potential for sole erosion and transport of sediment to sensitive areas along the pipeline ROW.

Mineral Resources: Florida's mineral commodities include limestone, sand, gravel, clay, heavy minerals, phosphate, and peat. The *special permit segments* are located along FGT's existing pipeline system and do not cross any areas mined for mineral resources.

Seismic Hazards: Seismic hazards include earthquakes, surface faulting, and soil liquefaction. The U.S. Geological Survey's (USGS's) National Earthquake Hazard Program has developed a series of maps that depict the estimated probability for seismic hazards. The Program's National Seismic Hazard Maps are derived from seismic hazard curves calculated on a grid of sites across the U.S. that describe the annual frequency of exceeding a set of ground motions. Based on the latest long-term model, 2014, the *special permit inspection areas* are characterized as falling into the category of the lowest hazard potential (USGS, 2019a). The USGS has also produced a 2018 one-year (short-term) probabilistic seismic hazard forecast for the central and eastern U.S. from induced and natural earthquakes. Again, the *special permit inspection areas* fall within the category of lowest potential with a less than 1-percent chance of potentially minor-damage ground shaking in 2018 (USGS, 2019b). The low seismic risk in the *special permit segments* and *special permit inspection areas* is also a limiting factor for liquefaction to occur. As a result, the likelihood of soil liquefaction to occur in the *special permit inspection areas* is low.

Subsidence: Ground subsidence is the local downward movement of surface material with little or no horizontal movement. Karst is a landscape formed by the dissolution of soluble bedrock that is conducive to land subsidence that exists in many areas in Florida. The Florida Department of

Environmental Protection (FDEP) Map Direct database includes a public mapping spatial data library with locational information on known subsidence incidents. Review of FDEP's subsidence database indicates no karst features are located within 500 feet of the *special permit segments* (FDEP, 2023).

Indian Trust Assets: Any work associated with the *special permit segments* will have no impact on Native Americans or any land owned or otherwise administered by Native American tribes. The scope and duration of this special permit will have little to no effect or impact on the socioeconomics in the vicinity of the *special permit segments*. No tribal land exists along the *special permit segments* thus tribal coordination is not required.

Land Use: Land use within the *special permit segments* consists of maintained pipeline ROW. Land use adjacent to the ROW in the vicinity of the *special permit segments* includes forest, agriculture, open space, wetland and waterbodies, and residential/industrial land.

As discussed in the Conservation Land section, one (1) *special permit segment* crosses conservation State lands. *Special permit segment 166114* in Citrus County is located on the eastern boundary of Withlacoochee State Forest.

The objective of the special permit is to avoid or minimize construction or ground disturbances in the pipeline ROW that would be necessitated if the special permit was not granted. Therefore, this special permit grant will not impact land use or planning. Further, FGT will avoid disturbing the adjacent property owners to the pipeline ROW.

Any inspection activities associated with the *special permit segments* and *special permit inspection areas* will be conducted within the boundaries of FGT's existing aboveground facilities (i.e., compressor station and regulator stations) and maintained pipeline ROW. Therefore, this special permit will not require land disturbance above and beyond what is required for normal pipeline operation and maintenance activities. However, if the special permit request was not granted, pipe replacement and pressure testing would be required, which would disturb land uses adjacent to the *special permit segments*.

Noise: Noise levels will not change in the *special permit segments* or the *special permit inspection areas* as a result of the approval of this special permit request. Therefore, the scope and duration of any activities associated with the *special permit segments* will have little to no impact on noise levels in the vicinity of the pipeline. However, if the special permit request is not granted then pipe replacement and pressure testing would be required, which would result in temporary

increases in noise during construction of these activities. Maintenance activities associated with the special permit conditions may result in minimal and temporary noise impacts. However, it is anticipated that these noise impacts will be much less than the replacement of the affected pipeline segments.

Recreation: As discussed in the Conservation Land section, one (1) *special permit segment* crosses conservation State lands. *Special permit segment 166114* in Citrus County is located on the eastern boundary of Withlacoochee State Forest. Recreational activities within these State lands include hiking, biking, horseback riding, picnicking, hunting, and fishing.

The special permit will not impact any recreational resources in the *special permit segments* and the *special permit inspection areas*.

Safety: Class locations are based upon the population (dwellings for human occupancy) within a "class location unit", which is defined as an onshore area that extends 220 yards on either side of the centerline of any continuous 1-mile of pipeline. These locations are determined by surveying the pipeline for population growth. The more conservative safety factors are required as the number of dwellings for human occupancy (population growth) increase near the pipeline. Pipeline operators must conduct surveys and document population growth within 220 yards on either side of the pipeline. A higher population along the pipeline may trigger any of the following for the pipeline segment with the higher population: A reduced MAOP, a new pressure test at a higher pressure, or new pipe with either or both heavier walled or higher-grade pipe.

The special permit conditions are designed to identify and mitigate integrity issues that could threaten the *special permit segment* and cause pipeline failure. The effect of the monitoring and maintenance requirements in the special permit conditions will ensure the integrity of the pipe and protection of the population living near the *special permit segment* to a similar degree of a lower MAOP, new pressure test, or a thicker walled or higher-grade pipe without the enhanced IM protections.

The safety risk with respect to this request for a special permit focuses on maintaining the integrity of the pipeline and on the risk, it poses to the increased population to mitigate a failure of this pipeline. Granting this special permit does not increase the potential impact radius (PIR) which is defined in 49 CFR 192.903 as the radius of a circle within which the potential failure of a pipeline could have significant impact on people or property of the pipeline. However, the risk from the

increased human population around the pipeline will be mitigated through implementation of the special permit conditions by FGT.

The special permit requires IM inspections for *special permit inspection areas* adjacent to the *special permit segments*, which will lower the risk in areas beyond the *special permit segments*. FGT will implement the special permit conditions in *special permit inspection areas* for the duration of the special permit, and PHMSA will oversee compliance.

Performance of the conditions in the special permit provides an equivalent or greater level of safety for the public and environment; and imposes no additional safety risks as a result of the waived regulation. As already noted, all the *special permit segments* included under the special permit will be treated as HCAs with the additional risk analysis and remedial activities associated with this designation. The special permit also includes several conditions that address potential safety risks. Among these are incorporation of these segments into the FGT Integrity Management Program, close interval corrosion surveys, implementation of a CP reliability improvement plan, an ILI program with intervals not to exceed seven (7) years, anomaly evaluation and repair meeting more stringent criteria, additional testing and remediation of interference currents caused by induced alternating current sources, pipe seam evaluations, criteria for the identification of pipe properties, installation of line-of-sight markers and the integration of all inspection and remediation data.

The consequences of a natural gas release will not be impacted as a result of the special permit and the potential for such an event is expected to be less likely with the added safety programs noted above. However, if PHMSA denied the special permit request and FGT opted to lower the pressure, the PIR would be smaller in the event of a pipeline failure. FGT notes its contractual obligations would not allow for a lowering of pressure and FGT would need to replace the existing pipeline. As compared to current operation, the PIR as calculated in accordance with 49 CFR 192.903 will not change under the special permit since maximum operating pressure and pipe diameter will not change, thus there will be no additional impact on the public.

Operation under the special permit conditions that provide an additional level of safety is expected to have a positive impact on pipeline longevity and reliability.

Socioeconomics: This special permit request will not be situated in, or disproportionately impact, any predominantly low-income populations. The demographic information for the *special permit segments* using EPA EJScreen (2023) is shown in **Table 6**. The total population within a 0.5-mile

radius of each of the *special permit segments* ranges from <45 to 970. The low-income population within a 0.5-mile radius of each of the *special permit segments* ranges from 7 percent in to 43 percent in Hillsborough County. The objective of the special permit is to avoid construction or ground disturbances in the pipeline ROW that will be necessitated if the special permit was not granted. As described in the special permit, FGT must apply alternative risk control measures to the *special permit segments* to provide an acceptable margin of safety and environmental protection to meet the requirements of 49 CFR 192.611 as outlined in the special permit conditions. Implementing enhanced inspection and assessment practices throughout the *special permit inspection areas*, in lieu of replacing the small sections of pipe experiencing the class location changes, extends pipeline safety benefits to a much greater area and thus will not have an adverse impact on the local population. In addition, avoiding pipe excavation, replacement, and pressure testing will minimize costs to the operator, will avoid delivery interruptions and supply shortages, and avert environmental disturbance. Thus, the increased safety measures associated with the special permit will benefit local populations.

Topography: The topography of the area surrounding the requested *special permit segment* is flat, open land. The general characteristics of the *special permit segments* project areas consist of relatively flat terrain and gently sloping highlands.

The topography of the *special permit segments* and the *special permit inspection areas* will not be changed by the approval of this special permit request. The granting of the special permit will avoid construction or ground disturbances in the pipeline ROW that would be necessitated if the special permit was not granted.

Denial of the special permit request would require the replacement and pressure testing of all the pipeline segments associated with this special permit request. Pipe replacement would require removal of the existing pipe and installation of a new pipe. Effects from construction could include disturbance of the natural topography along the pipeline ROW due to trenching and grading activities. Furthermore, pressure testing would also require disturbances along the pipeline ROW. However, following construction, all areas would be restored as close as practicable to their preconstruction contours.

Transportation: If the *special permit segments* need to be accessed in order to perform required tasked under the special permit, existing ROW access points will be used. The special permit will not increase traffic or require additional roads to be constructed or more frequently maintained.

The objective of the special permit is to avoid construction or ground disturbances in the pipeline ROW that would be necessitated if the special permit was not granted.

Wetlands and Waterbodies: According to USFWS National Wetland Inventory (NWI) mapping data, no *special permit segment* crosses a palustrine emergent wetlands (PEM)/palustrine scrubshrub (PSS) wetland (USFWS, 2019b). No waterbodies will be crossed by the *special permit segments*.

The objective of the special permit is to avoid or minimize construction or ground disturbance in the pipeline ROW. Therefore, wetlands will not be disturbed by granting the special permit.

Drinking Water Aquifers: The *special permit segments* are underlain by the Floridan aquifer system and the surficial aquifer system. The Floridan aquifer system is one of the most productive aquifers in the world and overlies the entire State of Florida. The Floridan aquifer is a multipleuse aquifer system and is the principal source of water supply in Florida. A thick sequence of carbonate rocks (limestone and dolomite) of Tertiary age comprise the system which generally thickens seaward from a thin edge near its northern limit.

The surficial aquifer overlies the Floridan aquifer system in the *special permit segments*. The surficial aquifer system is generally under unconfined, or water-table conditions, and is made up of mostly unconsolidated sand, shelly sand, and shell. The approximate depth of the surficial aquifer water table in the *special permit segments* is approximately 20 to 30 feet (FDEP, 2023). The aquifer thickness is typically less than 50 feet. Groundwater in the surficial aquifer generally flows from areas of higher elevation towards the coast or streams where it can discharge as baseflow. The principal uses for the surficial aquifer in the *special permit segments* are irrigation, limited domestic use, and dewatering projects for mining and infrastructure installation.

Wellhead protection areas have been established by the FDEP to protect drinking water supplies. FGT searched FDEP Map Direct to identify Protected Source Waters. No State-designated wellhead protection areas are crossed by the *special permit segments* (FDEP, 2019).

The EPA defines a sole source aquifer as one where the aquifer supplies at least 50 percent of the drinking water for its service area; and there are no reasonably available alternative drinking water sources should the aquifer become contaminated. There are no EPA sole source aquifers located within the vicinity of the *special permit segments*.

Aquifers will not be disturbed if the special permit is granted. However, if the special permit request is not granted then pipe replacement and pressure testing will be required, which could temporarily disturb the surficial aquifer system during construction.

B. Comparative Environmental Impacts of Alternatives

The special permit requires FGT to increase IM inspections within the special permit inspection areas, which will lower the risk in areas beyond the special permit segments. FGT must conduct IM type procedures (conditions in the special permit) on the *special permit inspection areas* as defined in the special permit. FGT will implement the conditions in *special permit inspection areas* for the duration of the special permit.

As PHMSA recognized in its June 29, 2004, Federal Register Notice (69 FR 38948), implementing additional preventative and mitigative measures enables a pipeline operator to improve its knowledge and understanding of the pipeline's integrity, accelerate the identification and repair of actionable anomalies, and better manage and mitigate threats to the public and environment. Implementing enhanced inspection and assessment practices throughout the *special permit segments* and *special permit inspection areas*, in lieu of replacing small segments of pipe experiencing the class location change, extends pipeline safety benefits to a much greater area along the pipeline.

While the special permit will avoid the full replacement of affected pipe, the special permit conditions require monitoring and maintenance that could lead to minor excavations and repair or replacement of some pipe. The effect of the monitoring and maintenance requirements in the special permit conditions will ensure the integrity of the pipe and protection of the population living near the pipeline segment to a similar or greater degree of a lower MAOP, new pressure test, or a thicker walled or higher-grade pipe without the enhanced IM protections.

Performance of the conditions in the special permit should provide an equivalent or greater level of safety for the public and environment; and imposes no additional safety risks as a result of the waived regulation. As already noted, all of the *special permit segments* included under the special permit will be treated as HCAs with the additional risk analysis and remedial activities associated with this designation. The special permit also includes several conditions that address potential safety risks.

In the event that PHMSA denied the special permit, it would have no authority to decide whether FGT achieved full compliance with 49 CFR Part 192 through pressure reduction or pipeline

segment replacement. Nonetheless, FGT reports that its contractual obligations would not allow the operating pressure of the pipe to be lowered. Thus, the potential impact radius of a pipeline failure will be the same whether the pipe operates under a special permit, is replaced, or pressure tested. Likewise, human safety as a result of pipeline failure would not be affected differently under either the granted special permit or "no-action" alternatives. Furthermore, the special permit enhanced IM conditions are designed to identify and mitigate integrity issues that could threaten the *special permit segments* and cause failure.

FGT will evaluate the potential environmental consequences and affected resources of land disturbances and adjacent waterbody impacts caused by construction activities (including adding, modifying, replacing or removing any facility) associated with any FGT activity. These activities are regulated by the Federal Energy Regulatory Commission (FERC) under Section 7 of the Natural Gas Act (NGA) and are subject to Federal, State, and local environmental authorizations and require a review by FGT Environmental Services staff prior to the start of work, incorporation of environmental requirements into the special permit implementation, and ensuring outstanding (environmental) requirements are incorporated into facility operation.

Approval of the special permit will have a positive impact to landowners and negligible, if any, environmental impact for the *special pipeline segments* that do not require pressure testing or replacement. FGT will avoid disturbing the ROW of property owners except for the additional inspections that may be required to satisfy the conditions of the special permit such as those related to the IM Program for HCAs, and potential anomaly evaluations/repairs. If the special permit is not granted, 49 CFR 192.611(a)(3)(iii) would require pipe replacement and pressure testing. This would result in temporary disturbances to the natural environment along and adjacent to the *special permit segments*. The consequences of any spill or release will not be changed as a result of the special permit and the potential for such an event is expected to be less likely with the added safety programs noted above.

X. Consultation and Coordination

The following FGT employees were consulted in the preparation of this document:

- Eric Amundsen, Senior VP Operations
- Chris Lason, VP of Asset Integrity
- Dave Shellhouse, VP of Operation
- Mike Teal, Director of Technical Operations

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- Robert Fleming, Senior Manager, Engineering and Construction
- Bob Bouchard, Staff Engineer, Pipeline Integrity
- Eric Hildebrand, Senior Engineer, Pipeline Integrity
- Eric Williams, Senior Engineer, Engineering and Construction
- Kristin Benbow, Environmental Scientist

PHMSA personnel involved in preparation of this document:

- Amelia Samaras, PHMSA, US DOT
- Steve Nanney, PHMSA, US DOT

XI. Response to Public Comments Placed on Docket PHMSA-2020-0044

PHMSA published the original special permit request in the Federal Register (85 FR 33789) for a 30-day public comment period from June 2, 2020, through July 2, 2020. PHMSA received no relevant comments in Docket No. PHMSA-2020-0044 at: <u>www.regulations.gov</u> on this special permit application during the comment period for the original *thirteen (13) special permit segments*.

This special permit request for additional *five (5) special permit segment extensions* was published in the Federal Register (88 FR 34926) from June 1, 2023, through June 30, 2023. The special permit application from FGT, draft environmental assessment, draft special permit conditions, and **Attachment A – Segment Integrity Information** were available in Docket No. PHMSA-2020-0044 at: <u>www.regulations.gov</u> for public review. PHMSA received one (1) **Anonymous Comment** on this special permit application during the comment period. The **Anonymous Comment** recommended "the permit to not be issued to better protect against leaks, spills, and toxic exposure to people and the environment." PHMSA has conducted a review of the special permit for the natural gas pipeline segments. PHMSA has determined that implementation of the special permit conditions by FGT will protect the public and will not harm the environment.

XII. Finding of No Significant Impact

In consideration of the analysis and special permit conditions explained above, PHMSA finds that no significant negative impact will result from the issuance and full implementation of the above-described special permit to waive the requirements of 49 CFR 192.611(a)(3)(iii) for the *special*

permit segments, which consists of approximately 3.340 miles of 18-inch, 30-inch, and 36-inch diameter pipelines located in Citrus, Hernando, Hillsborough, and Pasco Counties in Florida. This special permit will require FGT to implement the special conditions that apply to the operations, maintenance, and IM on the *special permit segments* and *special permit inspection areas*.

PHMSA received one (1) public comment on the *special permit segment extensions* from the Federal Register notice to Docket PHMSA-2020-0044 from June 1 through June 30, 2023. The **Anonymous Comment** recommended the special permit not to be issued due to better protect against leaks, spills, and toxic exposure to people and the environment.

PHMSA has developed a special permit that will require FGT to conduct period leakage surveys and remediation above the current 49 CFR Part 192 requirements. Also, the special permit will require FGT to conduct periodic integrity assessments with ILI tools and anomaly remediation with defined criterion based upon a safety factor above the pipeline maximum allowable operating pressure (MAOP) for both the special permit segments and special permit inspection areas. **Section VIII - Overview of Special Permit Conditions** outlines the integrity requirements of the special permit.

XIII. Bibliography

Florida Department of Environmental Protection (FDEP). 2023. Florida Map Direct. Available online at:

https://ca.dep.state.fl.us/mapdirect/#Division%20of%20Water%20Restoration%20Assistance %20(DWRA). Accessed January 2023.

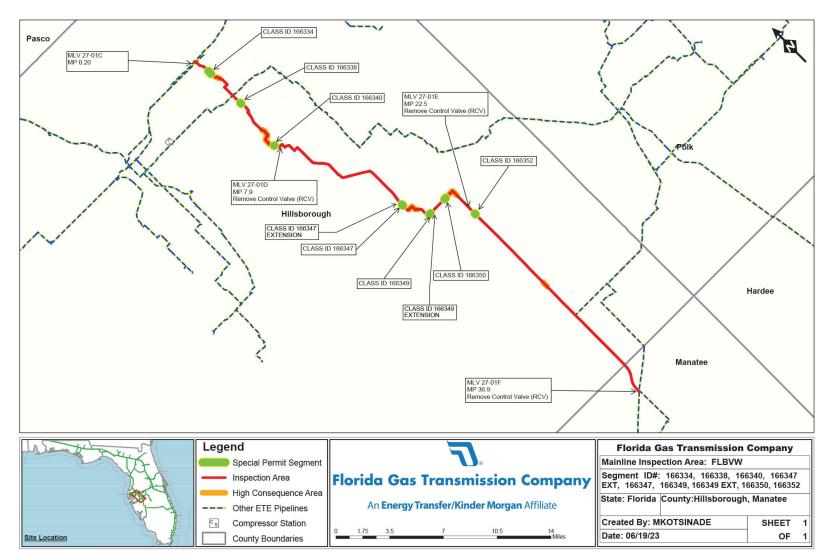
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- USGS. 2019b. Short-term Induced Seismicity Models, 2018 One-Year Model. Available online at: <u>https://earthquake.usgs.gov/hazards/induced/index.php#2018</u>. Accessed January 2023.

The special permit with conditions granted to FGT, LOD, SPAF, FEA and FONSI, and **Attachment A – Segment Integrity Information** for Docket No. PHMSA-2020-0044 can be found the FDMS located on the internet at <u>www.regulations.gov</u>.

The LOD, Special Permit, SPAF, FEA and FONSI can be found on the PHMSA website for special permits issued at <u>https://www.phmsa.dot.gov/pipeline/special-permits-state-waivers/special-permits-issued.</u>

Completed by PHMSA in Washington, DC on: July 28, 2023

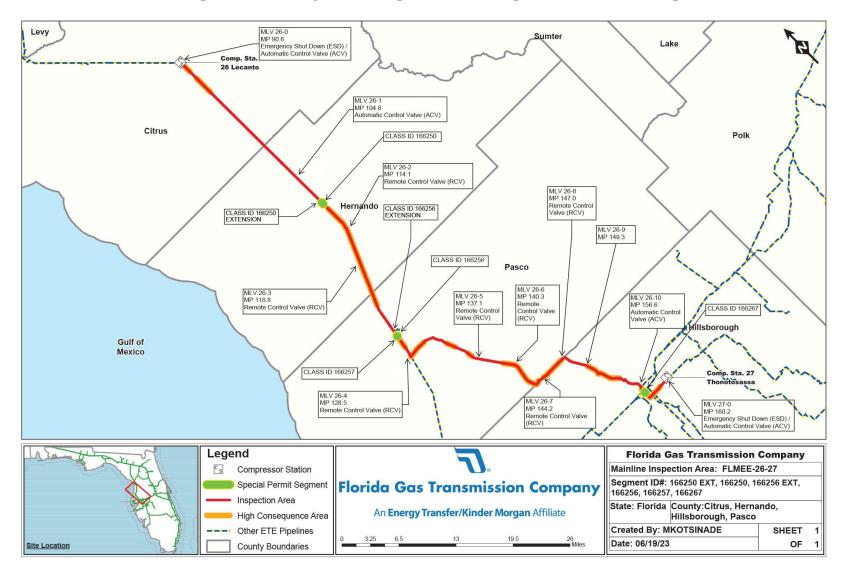


Attachment B-1 - St. Petersburg Sarasota Connector Pipeline Route Map

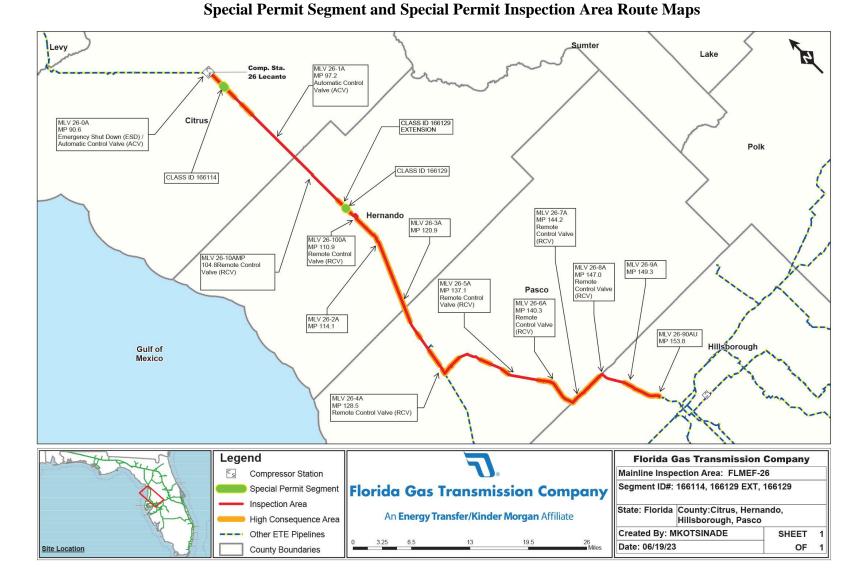
Special Permit Segment and Inspection Area Route Maps

Attachment B-2 – West Leg Station 26-27 Pipeline Route Map

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Special Permit Segment and Special Permit Inspection Area Route Maps



Attachment B-3 – West Leg Loop Station 26-27 Pipeline Route Map

LAST PAGE OF FEA AND FONSI

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