PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
SPECIAL PERMIT ENVIRONMENTAL ASSESSMENT
AND FINDING OF NO SIGNIFICANT IMPACT

SP Requester:	**Empire Pipeline, Inc.**
	(Operator of the Empire State Pipeline)
PHMSA Docket No.:	**PHMSA-2008-0213**
Location:	**Niagara, Genesee, Monroe, and Wayne Counties, New York**

New Special Permit with new Special Permit Segment 6 – Pages 21 to 42
Date: January 19, 2017 – Updated page 21 through 42 for Special Permit Segment 6
Findings are on page 42 for Special Permit Segment 6
Contact: Steve Nanney, 713-628-7479, steve.nanney@dot.gov

Original Special Permit – Pages 1 through 20 for Special Permit Segments 1 to 5
Contact: Tewabe Asebe, 202-366-5523, tewabe.asebe@dot.gov

Date: April 27, 2010 for original Special Permit

I. Background

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), the President's Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), and DOT policy. To the extent PHMSA's grant or denial of the above referenced special permit (SP) request may constitute a Federal action under NEPA, in addition to analyzing any potential risks to public safety, PHMSA also analyzes any potential risks to the environment that could result from such grant or denial. As part of this analysis, PHMSA evaluates whether the special permit would significantly impact the likelihood of a pipeline leak or failure as compared to the environmental status quo in the absence of the special permit.

PHMSA places all special permit requests on its public docket and interested persons may comment on any aspect of the request including the requested special permit's possible environmental impacts, if any, during the comment period. As part of this process, PHMSA placed a Draft EA in the public docket. PHMSA received no public comments on this special permit or the Draft EA. PHMSA considered whether to grant the special permit request, grant the request with additional conditions, or deny the request. We developed this assessment to determine the effects of our decision, if any, on the environment. For the reasons described herein, we plan to grant the special permit with additional conditions.

II. Pipeline System Affected

Special Permit Segments and Special Permit Inspection Area:
This special permit request applies to the ***special permit segment(s)*** defined using the Empire State Pipeline (Empire Pipeline) survey stations (SS) and mile post (MP) references (See Attachments A through E on Pages 14 to 19) as follows:

- ***Special Permit Segment 1***, 24-inch Mainline - 730 feet., SS 3027 + 50 to SS 3034 + 80; (MP 57.33 to MP 57.49); located in the Town of Byron, Genesee County, New York, west of NY Route 237. (See Attachment B on Page 15).

- ***Special Permit Segment 2***, 24-inch Mainline – 1,715 feet., SS 4018 + 73 to SS 4035 + 88; (MP 76.09 to MP 76.42); located in the Town of Henrietta, Monroe County, New York, and 375 feet west of East River Road. (See Attachment C on Page 16).

- ***Special Permit Segment 3***, 24-inch Mainline – 1,650 feet., SS 4483 + 10 to SS 4499 + 60; (MP 84.88 to MP 85.19); located in the Town of Pittsford, Monroe County, New York, beginning approximately 200 feet west of West Bloomfield Road and continuing for approximately 3/10th of a mile to the west. (See Attachment D on Page 17).

- ***Special Permit Segment 4***, 24-inch Mainline – 2,675 feet., SS 1230 + 69 to SS 1257 + 44; (MP 23.30 to MP 23.81); located in the Town of Pendleton, Niagara County, New York, west of Transit Road (Route 78). (See Attachment E on Page 18).

- ***Special Permit Segment 5***, 24-inch Mainline – 1,760 feet., SS 1330 + 50 to SS 1348 + 10; (MP 25.19 to MP 25.54); located in the Town of Lockport, Niagara County, New York, east of Old Beattie Road. (See Attachment E on Page 18)

Special permit inspection area - the area that extends 220 yards on each side of the centerline along the entire length of the 24-inch Mainline pipeline from:

- 24-inch Mainline: Mile Post 0 (Canadian border) to Mile Post 157 (Phoenix). Attachment A on Page 14 shows the 24-inch pipeline ***special permit inspection area*** location through the state of New York.

The ***special permit inspection area*** is located in Niagara, Genesee, Monroe, Ontario, Wayne, Cayuga, Onondaga, and Oswego Counties, NY. The ***special permit inspection areas*** start downstream of the start of the pipeline located at the Canada-U.S. border and the Chippawa Channel of the Niagara River and ends at the end of the pipeline – Mile Post 0 to 157 - the entire length of the pipeline. This special permit allows Empire Pipeline to continue to operate each special permit segment at its current maximum allowable operating pressure (MAOP) of 1440 pounds per square inch gauge (psig) for the 24-inch pipeline. The Empire Pipeline has a MAOP of 1440 psig from Mile Post 0 to

90.8 in Ontario County, New York (Western Section), and a MAOP of 1000 psig from Mile Post 90.8 to the ending Mile Post 157 (Eastern Section).

III. Purpose and Need

Purpose and Need

On August 8, 2008, Pipeline and Hazardous Materials Safety Administration ("PHMSA") received a special permit petition from Empire Pipeline for relief from the requirements of 49 CFR § 192.611 for pipeline segments that experienced class location changes. The proposed special permit would apply to Empire Pipeline's 24-inch pipeline system which totals 155.4 miles through the state of New York.

Empire Pipeline has submitted a petition for a special permit waiving the requirements of 49 CFR § 192.611 class location change requirements for five (5) existing segments on Empire Pipeline's 24-inch pipeline system. The regulation requires Empire Pipeline to either perform a pressure reduction, pressure testing or pipe replacements to address class location changes when the pipeline specifications are not commensurate with the new class location.

Code Requirements

The following is the text of 49 CFR § 192.611.

§ 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 qualification 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.
(b) The maximum allowable operating pressure confirmed or revised in accordance with this section, may not exceed the maximum allowable operating pressure established before the confirmation or revision.
(c) Confirmation or revision of the maximum allowable operating pressure of a segment of pipeline in accordance with this section does not preclude the application of §§ 192.553 and 192.555.
(d) Confirmation or revision of the maximum allowable operating pressure that is required as a result of a study under § 192.609 must be completed within 24 months of the change in class location. Pressure reduction under paragraph (a) (1) or (2) of this section within the 24-month period does not preclude establishing a maximum allowable operating pressure under paragraph (a)(3) of this section at a later date.

The Natural Gas Transmission Pipeline Integrity Management Rule was promulgated on December 17, 2003, and became effective on December 17, 2004. One of the benefits recognized by PHMSA in the cost/benefit analysis was the concept of implementing integrity management to address class location changes in lieu of pressure reduction, hydrostatic testing or pipe replacements. To provide a basis for this concept, PHMSA, state regulators and members of the natural gas transmission industry worked together to develop criteria for a class location special permit pilot program. On June 29, 2004, PHMSA published "Criteria for Considering Class Location Waiver Requests" (69 FR 38948). In accordance with the PHMSA criteria, Empire Pipeline submitted a petition for a special permit for the five (5) segments in the state of New York.

Circumstances, Reasons & Benefits for a Special Permit as Presented by Empire Pipeline

In its request, Empire Pipeline stated that the implementation of the special permit conditions in lieu of pressure reduction, hydrostatic testing or pipe replacements provides

a superior level of safety than that offered by the requirements of 49 CFR § 192.611. In order to comply with those provisions, approximately 1.62 miles of pipe would require replacement to address these class location changes. This replacement pipe would provide additional protection for only 25 single family dwellings, no multiple occupancy buildings, and 2 outside places of assembly. However, by implementing the special permit conditions, including performing in-line inspections of the 24-inch Empire Pipeline system, an additional safety benefit would be provided to approximately 155.4 miles of pipeline which runs near more than 1542 single family dwellings and 54 gathering areas. Furthermore, adhering to 49 CFR Part 192, Subpart O requirements for re-assessment and implementing additional measures described in this special permit, such as close interval survey ("CIS") and more frequent aerial patrol will provide on-going safety benefits to these areas.

Empire Pipeline stated that in the absence of a special permit, the Company would incur significant costs to replace the pipe in the class location change areas without a commensurate benefit to safety. Through the special permit, Empire Pipeline would be required to inspect and provide enhanced integrity assessments (including ongoing and future work) for approximately 155.4 miles of its 24-inch pipeline. If the pipe in the special permit segments were to be replaced, additional protection would only be provided for 1.62 miles of pipeline.

Empire Pipeline also explained that this special permit would provide benefits to landowners and the environment through the elimination of right-of-way disturbance and the gas loss associated with pipe replacements. In addition, the special permit would eliminate the potential for service interruptions and supply shortages that could occur as a result of outages associated with pipe replacements.

IV. Site Description and Affected Environment

The following is a description of the right-of-way in the vicinity of the special permit segments.

1. **Location:** Attachment A, Page 14, is an overall pipeline system route map showing the locations of the five (5) ***special permit segments*** along the Empire 24-inch pipeline. ***Special permit segment 1*** is shown on Attachment B, Page 15. ***Special permit segment 2*** is shown on Attachment C, Page 16. ***Special permit segment 3*** is shown on Attachment D, Page 17. ***Special permit segments 4 & 5*** are shown on Attachment E, Page 18.

2. **Land Use:** There are 25 single family dwellings in the vicinity of the special permit segments. There are no multiple occupancy businesses and two (2) other outdoor places of assembly in the vicinity of the special permit segments.

3. **Surface Waters:** In total, the five (5) special permit segments cross one small, intermittent stream (Segment 5) and Segment 2 borders the edge of a wetland and

the Genesee River. Attachment F, Page 19, contains information relating to each of the five (5) ***special permit segments***.

- ***Special Permit Segment 1*** - No streams or wetlands are within the project. ***Special Permit Segment 2*** - The Genesee River and associated R2UBH wetland borders the west edge of the project area.
- ***Special Permit Segment 3*** - The project is west of a Tributary to the Canal way, with no impacts to streams or wetlands.
- ***Special Permit Segment 4*** - No streams or wetlands are within the project.
- ***Special Permit Segment 5*** - The project crosses a Tributary to Mud Creek.

4. **Aquifers:** There are no known drinking aquifers in the vicinity of the proposed special permit segments.

5. **Wildlife habitat and fisheries (in the vicinity):** The predominant land use for all of the segments is agricultural with most areas annually cultivated. In addition, there are some open fields and pasture. Secondary land use includes residential single-family homes, either scattered or in subdivisions. In addition, for ***special permit segments 1, 2 and 4*** there are some commercial and governmental uses as described above. Attachment F, Page 19, lists some county-listed threatened species. These are listed as general information. Empire Pipeline has no information to know that they exist in the vicinity of the ***special permit segments***. Due to the predominant agricultural use of the land in the vicinity of the ***special permit segments***, there is little significant wildlife habitat that would be affected. Areas that may contain sufficient habitat are limited to small isolated areas of native trees and grasses situated in between farming lands.

6. **Soils and Vegetation:** Vegetation in the vicinity of both segments is mainly agricultural farmland, as well as a mixture of native grasses and trees and lawns in the residential areas. Soils and vegetation at the ***special permit segments*** are listed below and on Attachment F, Page 19.

    - ***Special Permit Segment 1*** - NgA - Niagara silt loam 0-2% slope, Lmb - Lima silt loam 3-8% slope. Agricultural lands.
    - ***Special Permit Segment 2*** - OnD3 - Ontario loam 15-25% eroded slope, OnB - Ontario loam 3-8% slope, HIA - Hilton loam 0-3%, OdA - Odessa silt loam 0-2%. Open fields.
    - ***Special Permit Segment 3*** - HIB - Hilton loam 3-8% slope, OnB - Ontario loam 3-8%. Agricultural lands.
    - ***Special Permit Segment 4*** - OvA - Ovid silt loam 0-2% slope, HIA - Hilton silt loam 0-3% slope. Agricultural fields, inactive pasture.
    - ***Special Permit Segment 5*** - OvA - Ovid silt loam 0-2% slope, HIA - Hilton silt loam 0-3% slope, OdA - Odeessa silty clay loam 0-2% slope, Lc - Lakemont silty clay loam 0-3% slope. Open meadows, lawns.

7. **Land Usage:** The predominant land use for all of the segments is agricultural with most areas annually cultivated. In addition, there are some open fields and pasture. Secondary land use includes residential single-family homes, either scattered or in subdivisions. In addition, for ***special permit segments 1, 2 and 4*** there are some commercial and governmental uses. Attachment F, Page 19, lists some county –listed threatened species. These are listed as general information. Empire Pipeline has no information to know that they exist in the vicinity of the ***special permit segments***. Due to the predominant agricultural use of the land in the vicinity of the special permit segments, there is little significant wildlife habitat that would be affected. Areas that may contain sufficient habitat are limited to small isolated areas of native trees and grasses situated in between farming lands.

8. **Geologic:** There are no known geologic hazards in the vicinity of the proposed project segments. There are no reported instances of subsidence, landslides or karsting in the area of the segments nor have any been reported by surveillance patrols of the pipeline. Seismic activity in the area is low both in frequency and magnitude. Since the mid 1970's (western NY) and the early 1980's (north-central NY), seismic monitoring has recorded low activities in both regions. Events with magnitudes ranging from 2.5 to 3.5.

9. **Cultural Resources**: This is an existing pipeline within a previously established right-of-way and the special permit does not involve any new construction. Therefore, there would be no impacts on cultural resources.

10. **Socioeconomic Impacts:** This is an existing pipeline within a previously established right-of-way and the special permit does not involve any new construction. Therefore, there would be no socioeconomic impacts on local revenues, transportation, taxes, housing, or employment or special impacts on Native Americans.

V. Empire Pipeline's Historical and Planned Integrity Activities

Empire Pipeline provided the following information and proposed the following alternative integrity management activities to mitigate the integrity threats applicable to these pipeline segments if a special permit were granted. Empire stated that these inspections and activities would not impact or defer any assessments or other activities required by Empire Pipeline's Integrity Management Program for HCAs, as required under 49 CFR Part 192, Subpart O.

1. In August 1994, the year after construction, the entire pipeline was internally inspected with a metal loss inspection tool to establish its baseline condition. No metal loss anomalies requiring repair were reported on either section of the line as a result of that inspection. In November 1993, an internal geometry tool was run through the entire line before it was placed in service. Two anomalies (dents)

associated with the construction activities were identified, cut out and replaced in the 1440 psig MAOP Western Section. This western section contains all five (5) of the segments that are subject to this Special Permit request. (Ten construction-related anomalies were cut out and replaced on the 1000 psig MAOP Eastern Section.)

Empire Pipeline performed a high-resolution MFL metal loss and caliper in-line inspection ("ILI") on the entire pipeline in 2004. Reported anomalies were ranked for immediate repair, scheduled repair, or monitored repair, as defined in 49 CFR § 192.933 (d). The ILI did not indicate any anomaly with criteria requiring immediate, scheduled, or monitored repairs. Subsequent re-inspections will be performed using in-line inspection at intervals as specified by 49 CFR Part 192, Subpart O reassessment intervals. Any anomalies detected during these in-line inspections will be remediated in accordance with 49 CFR Part 192, Subpart O, Empire Pipeline Integrity Management Program and the conditions of the special permit.

2. Empire conducted External Corrosion Direct Assessment (ECDA) for ***Special Permit Segments 1-3*** during 2004 and 2005 to complement the results of the in-line-inspection. Above ground surveys were performed to locate areas of potential corrosion activity. Review of the collected survey data revealed locations where corrosion activity had the potential to be occurring.

   Locations deemed to have the most likely corrosion activity were excavated. As expected from the aboveground survey data, the coating defects exposing metal to the environment were small in size. Typically, all coating defects were on the top portion of the pipeline, indicating backfill damage at the time of installation. Closer analysis of the coating defects revealed areas of poor adhesion directly around the holidays. Beneath the coating defects, minor pitting was discovered, but it was not a threat to the integrity of the pipeline. Measurements taken at the coating defects indicated the presence of adequate cathodic protection.

   Additional ECDA examinations in ***Special Permit Segments 4-5*** were completed on July 28, 2008. Six (6) excavations were performed, which included two more than required, as an extra measure of analysis. The pipeline's coating in these areas was generally found in good condition with no corrosion of any sort.

3. A CIS is scheduled to be performed on the entire Empire Pipeline during summer 2009 to ensure cathodic protection ("CP") is at acceptable levels along the pipeline. Areas of low CP potentials will be remediated in accordance with the special permit conditions.

4. The entire pipeline was constructed to meet or exceed 49 CFR Part 192 criteria for depth of cover with a 36-inch minimum depth of cover requirement, 48" minimum in agricultural lands, and exceeding Part 192 minimum depth requirements at road, railroad and stream crossings.

5. A pipeline segment must meet all five criteria in the American Society of Mechanical Engineers (ASME) B31.8S-2004 section A3.3 for stress corrosion cracking (SCC) to be considered a threat. The Empire Pipeline does not meet all the criteria associated with SCC, as such does not have SCC as a threat to the pipeline. A failure of the coating system is a primary factor in the initiation and propagation of SCC. SCC is most often associated with disbonded coatings, particularly pipe that has been coated with tape coatings. High temperatures (above 100 F) and high stress add to the growth rate. The Empire Pipeline (including all of its weld joints) is coated with modern fusion-bonded epoxy. Bell hole inspections have confirmed that, in general, the overall condition of the coating is intact, well bonded, and without systemic problems that could lead to SCC. In addition, Empire Pipeline's design and Operations & Maintenance (O & M) Procedures address conditions that could create additional stress. Initially, heavy-wall pipe was installed at intervals of approximately one mile to provide for the crossing of heavy equipment. In addition, at all road and railroad crossings, where external loads may be present, heavy-wall pipe was installed. All weld joints were 100% x-rayed, coated with fusion-bonded epoxy, and electrically inspected (jeeped) for any disbondment at installation. The pipe was hydrostatically tested to at least 125% of MAOP before it was placed into service. Load analysis is reviewed for any requested crossing of the line. There has been no incidence of SCC since it's commissioning in 1993.

6. Empire Pipeline will perform field excavation inspections on any immediate or scheduled conditions identified during the internal inspection. Repairs will be made for any condition listed in §§ 192.933 (d)(1) and (2) or meeting Empire Pipeline's repair criteria.

7. Empire Pipeline will continue to perform leak survey patrols annually and HCA aerial patrols quarterly for the entire pipeline. The frequency of Empire Pipeline's aerial patrols significantly exceeds the requirements of 49 CFR Part 192. Empire would continue to perform pipe to soil (P/S) surveys at test stations on an annual basis. Cathodic system anomalies would be investigated and remediated as appropriate.

Empire Pipeline proposes to implement the following specific alternative integrity management activities to address any integrity threats applicable to these pipeline segments. These inspections and activities will not impact or defer any assessments or other activities required under 49 CFR Part 192, Subpart O.

1. Caliper and high resolution MFL in-line inspections will be conducted on the Empire Pipeline from Mile Post 0 to Mile Post 157, the entire 24-inch pipeline. Subsequent re-inspections will be performed using in-line inspection at intervals as specified by 49 CFR Part 192, Subpart O reassessment intervals for the entire 24-inch pipeline. Empire Pipeline must complete ILI inspections on the 24-inch Empire Pipeline from Canada MP 0 to Mendon MP 86 by August 25, 2011 and

from Mendon MP 86 to Phoenix MP 157 by September 14, 2011, including deformation tool in accordance with Condition 20 (c).

2. Any anomalies detected during these in-line inspections will be remediated in accordance with 49 CFR Part 192, Subpart O, Empire Pipeline's Integrity Management Program and the conditions of the special permit.

3. A CIS will be performed on the Empire Pipeline within the proposed ***special permit inspection area*** in order to ensure cathodic protection ("CP") is at acceptable levels along the pipeline. Areas of low CP potentials will be remediated in accordance with the special permit conditions.

4. A depth of cover survey will be performed within the ***special permit segments*** utilizing electronic depth equipment, or equivalent. Remedial actions and/or additional preventive and mitigative measures will be implemented in any of the ***special permit segments*** that do not meet minimum cover criteria specified by § 192.327.

5. Stress corrosion cracking (SCC) direct assessment will be performed on the Empire Pipeline within the proposed ***special permit inspection area***.

6. Empire Pipeline proposes to perform aerial patrols, weather permitting, in the ***special permit inspection area*** containing the ***special permit segments*** as required in the special permit conditions on a monthly basis, not to exceed 45 days.

Special Permit Conditions

Operational Integrity Compliance: PHMSA has looked at this special permit request to ensure that integrity threats to the pipeline in the special permit segment and special permit area are addressed in the operator's operations and management plan (O &M Plan). The O&M plan must provide for a systematic program to review and remediate safety and environmental threats on the pipeline. PHMSA will require Empire Pipeline to conduct additional operational integrity review and remediation work under the special permit. These measures will require Empire Pipeline to have an ongoing program to locate and remediate threats to public and worker safety and the environment. Some of the potential threats to integrity, safety and the environment are related to the pipe coating quality, cathodic protection effectiveness, operations damage prevention program for third party damage, weld seam and girth weld integrity, anomalies in the pipe steel, and material and structures either along or near the pipeline that could cause the cathodic protection system to be ineffective. PHMSA carefully designed a comprehensive set of conditions that Empire State Pipeline would be required to meet, include conditions proposed by Empire Pipeline, in order for the special permit to be granted.

In summary, key conditions would require:

- A close interval survey to determine the effectiveness of the cathodic protection system must be performed within the ***special permit inspection area*** and all areas with inadequate cathodic protection must be remediated.

- A coating survey to determine the quality of the pipe coating must be conducted and in-effective coating areas must be required to be remediated.
- Stress corrosion cracking surveys on the pipeline will be required to ensure that the pipe steel is not cracking due to the effects of high and near neutral pH stress corrosion cracking (SCC).
- The latest methods of damage prevention must be incorporated by the operator, such as the best practices of the Common Ground Alliance (CGA) within the ***special permit inspection areas***.
- Interference currents from electric transmission lines and other interfering structures in the ***special permit inspection areas*** must be identified, controlled and mitigated by conducting surveys and installing grounding systems where required.
- An analysis of pipeline field coated girth welds that could have shielding coatings that could cause corrosion of the pipe steel must be undertaken in the ***special permit segments*** and in-line inspection logs that indicate 30% corrosion indications on shielding or unknown coatings must be exposed and evaluated.
- Anomalies and dents on the pipeline must be repaired based upon the special permit repair criteria.
- Girth welds in the ***special permit segments*** must have had a non destructive test plan during construction, or a quality review and remediation program must be implemented by the pipeline operator.
- All shorted casing at road crossings and railroad crossings in the ***special permit segments*** (either metallic or electrolytic) must be cleared to prevent corrosion.
- Pipeline longitudinal seams within the ***special permit inspection area*** must have an engineering analysis to determine if there are any threats and remediated if integrity threats are determined.
- Periodic close interval surveys and in-line inspection surveys (pipeline internal surveys to determine corrosion in the pipeline) must be performed on the ***special permit segments*** at the applicable reassessment intervals.

VI. Analysis and Investigation of Alternatives

Alternative 1: Grant Special Permit with Conditions.

Under this alternative, PHMSA would grant a special permit to Empire, with the above described conditions designed to reduce pipeline safety risks. Conditions would include those proposed by the Empire Pipeline and subsequently modified and supplemented by PHMSA. Special permit conditions are enforceable requirements of the PHMSA order granting the special permit.

The special permit would allow Empire Pipeline to continue to operate its pipeline at the current MAOP, despite a Class Location change. This special permit would cover

specific pipeline segments where the population density near the pipeline has increased, causing a change from a Class 1 location to a Class 3 location. The regulation requires an increased safety factor in Class 3 locations. The increased safety factor is intended to reduce the consequences of a pipeline rupture due to the increased population near the pipeline. If a permit were granted, Empire Pipeline would not have to reduce the pressure on its pipeline, re-hydrotest the line, or replace the sections of pipe with pipe constructed to a higher safety factor in the areas of changed Class location. Granting a class location special permit to Empire Pipeline, absent certain conditions, could increase the likelihood and consequences of a pipeline failure in the Special Permit Segments compared to denying the special permit because the additional safety factor would not be required at these locations.

However, any increase in the risk of a pipeline failure would be more than offset through the imposition of conditions on the special permit. The special permit conditions would require, among other things, increased inspections, more rigorous repair criteria, pipeline coating assessments, CIS, the remediation of low cathodic protection, and more frequent aerial patrol. These measures would not otherwise be required under existing regulations.

For example, the special permit conditions would require Empire to inspect and provide enhanced integrity assessments on 157 miles of pipeline. These measures would result in safety benefits to more than 1,540 single family dwellings and one multiple occupancy building along the pipeline. If the special permit was denied, and pressure reduced or sections of pipeline replaced, the benefit of the increased safety factor would inure only 25 homes in the vicinity of 1.62 miles of pipeline. In addition, if the permit was denied and Empire Pipeline chose to replace 1.62 miles of the pipeline, this would result in soil disturbance in the vicinity of the Special Permit Segment and other impacts related to the excavation of the pipeline. Impacts can result from excavation, including vegetation loss and soil disturbance. Both of these impacts can contribute to water quality degradation, habitat loss or degradation, and impacts to recreation.

The imposition of special permit conditions would increase the likelihood that any anomalies that could lead to a failure of the pipeline would be detected and remediated before a failure occurred. Therefore, the special permit with conditions is likely to increase the safety of the pipeline subject to the special permit, compared to denial of the permit.

There are positive environmental impacts associated with approval of the special permit with conditions. The increased inspections and more rigorous repair requirements, among other things, will reduce the likelihood of a pipeline rupture or leak. If the special permit is granted, the environment in the vicinity of the pipeline subject to the special permit is less likely to be subject to a pipeline failure, and the release of gas and fires or explosions that are possible with any pipeline leak.

There are possible negative environmental impacts but they are speculative at this point. Under the special permit, it is possible that more excavations would be required because the implementation of the increased inspection and repair requirements may lead to more

repairs and excavations. However, whether such impacts could occur cannot be determined until Empire Pipeline performs the integrity assessments required by the permit. Empire Pipeline stated that it will comply with all laws and regulations when performing any of the activities required by the proposed special permit. These include consultations with appropriate environmental agencies, procuring all required environmental permits and implementing all appropriate environmental mitigation measures.

The special permit will apply to an existing pipeline. There will be no changes to the pipeline location or operating pressures and conditions. Thus the special permit is not expected to affect land use planning in the vicinity of Empire's pipeline.

Alternative 2: Deny the Special Permit Request.

Under this alternative, PHMSA would deny Empire's request. Empire would not be granted a waiver of compliance with § 192.611 and would continue to be required to comply with existing regulations. Under this alternative, Empire would either have to reduce the pressure in its line, re-hydrotest the line, or replace the affected segments with new pipeline.

If the permit request was denied Empire might instead choose to replace pipe in the class change segments. Environmental impacts would likely occur from a pipeline replacement due to excavation and post-construction soil compaction, the creation of additional workspace outside of the previously impacted right-of-way, temporary construction impacts to air quality, waterbodies and wetlands, and gas releases from the post-construction pipeline blow down.

Additionally, pipeline replacement offers fewer future life-cycle safety benefits than the special permit conditions. If the pipe is replaced, additional protection (through the use of heavier wall pipe) would be provided for only 25 homes and 1.62 miles of pipeline. Through the special permit, Empire Pipeline would be required to inspect and provide enhanced integrity assessments that would benefit more than 1,540 single family dwellings, one multiple occupancy building and 157 miles of 24-inch pipeline.

VII. Findings

PHMSA has analyzed the safety and environmental risks associated with the issuance of this special permit. PHMSA has imposed conditions in the special permit designed to protect the public, property, and the environment from the risk of a pipeline leak or failure. Accordingly, PHMSA finds that the issuance of this special permit to Empire Pipeline will have no significant impact on the quality of the human environment.

VIII. List of Preparers and Reviewers

Steve Nanney, PHMSA/DOT
Jim Curry, PHMSA/DOT
Tewabe Asebe, PHMSA/DOT

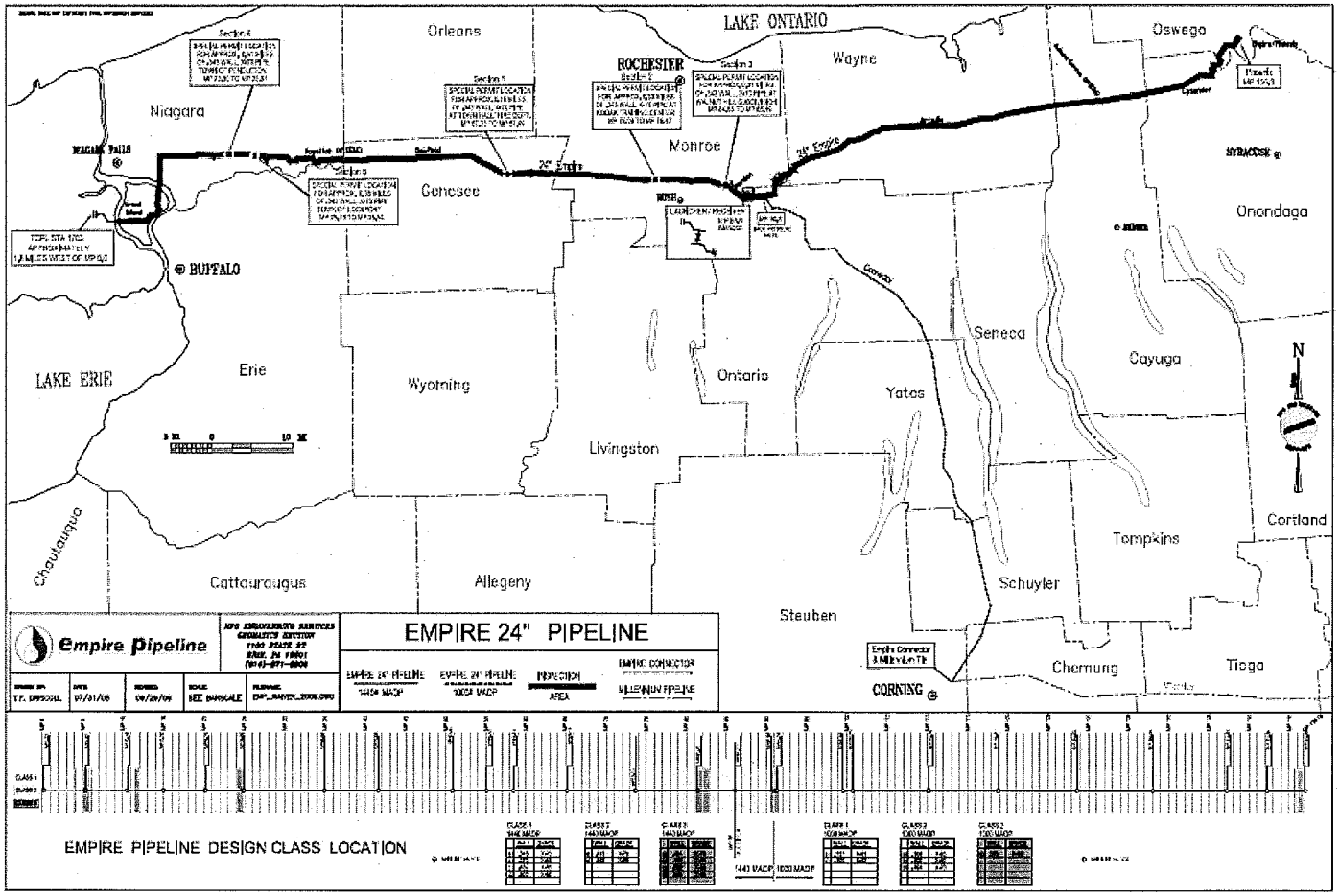
IX. Agencies and Persons Consulted

No outside agency contacted, but PHMSA considered environmental information submitted by Empire Pipeline.

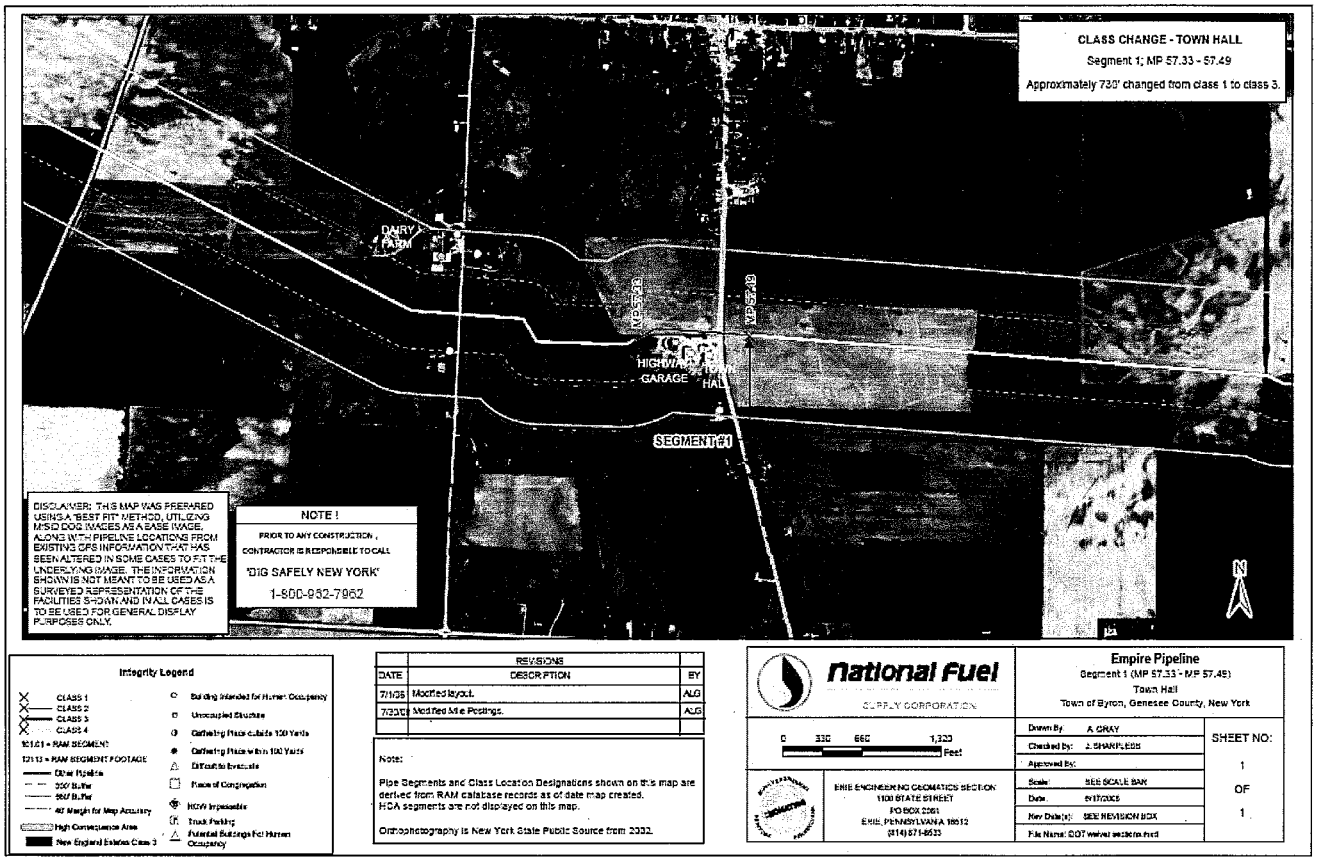
X. Attachments

A-E: Maps of Pipeline Segments Covered by the Special Permit

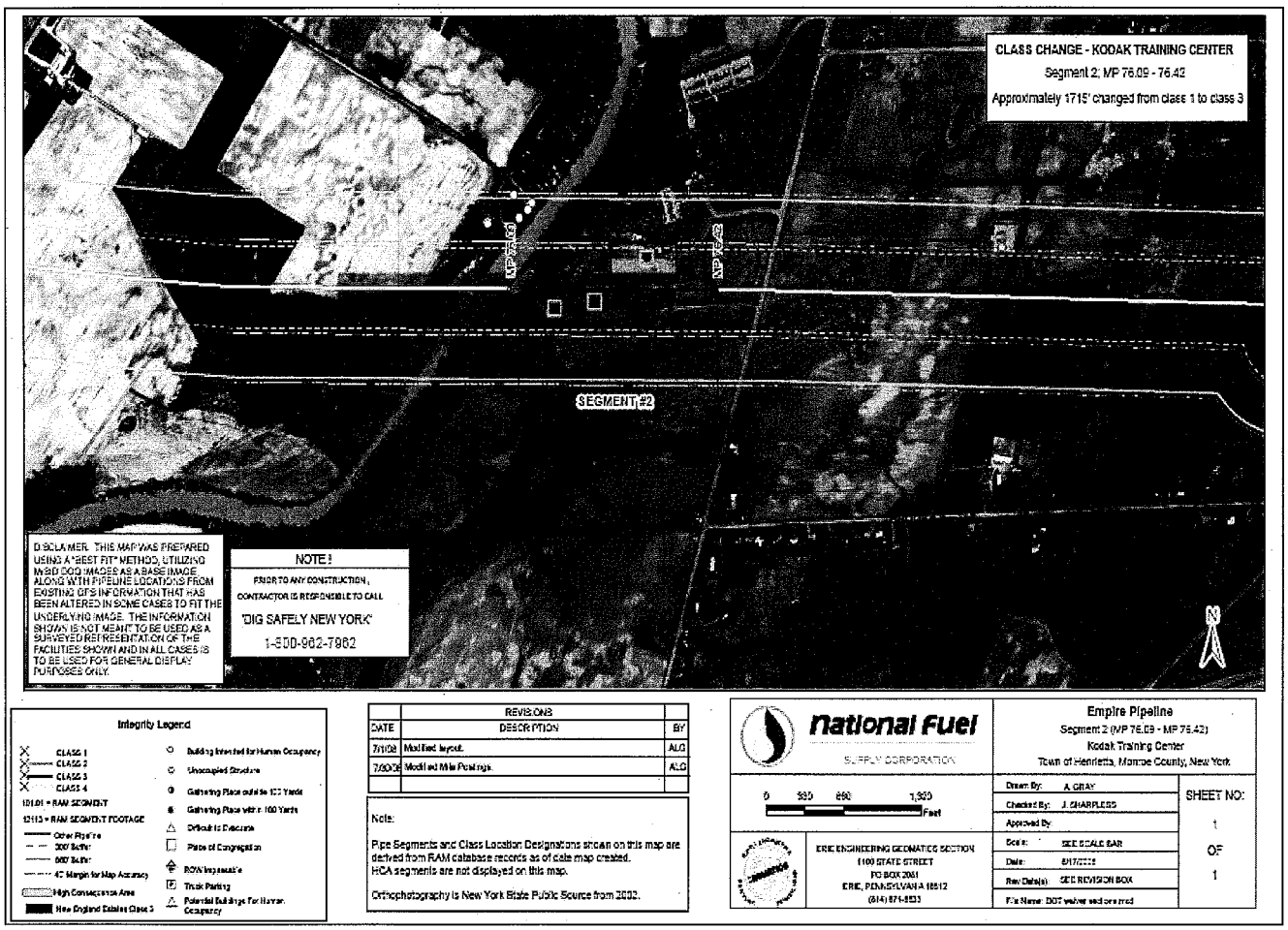
F: Summary Table of Environmental Features along the Special Permit Segments



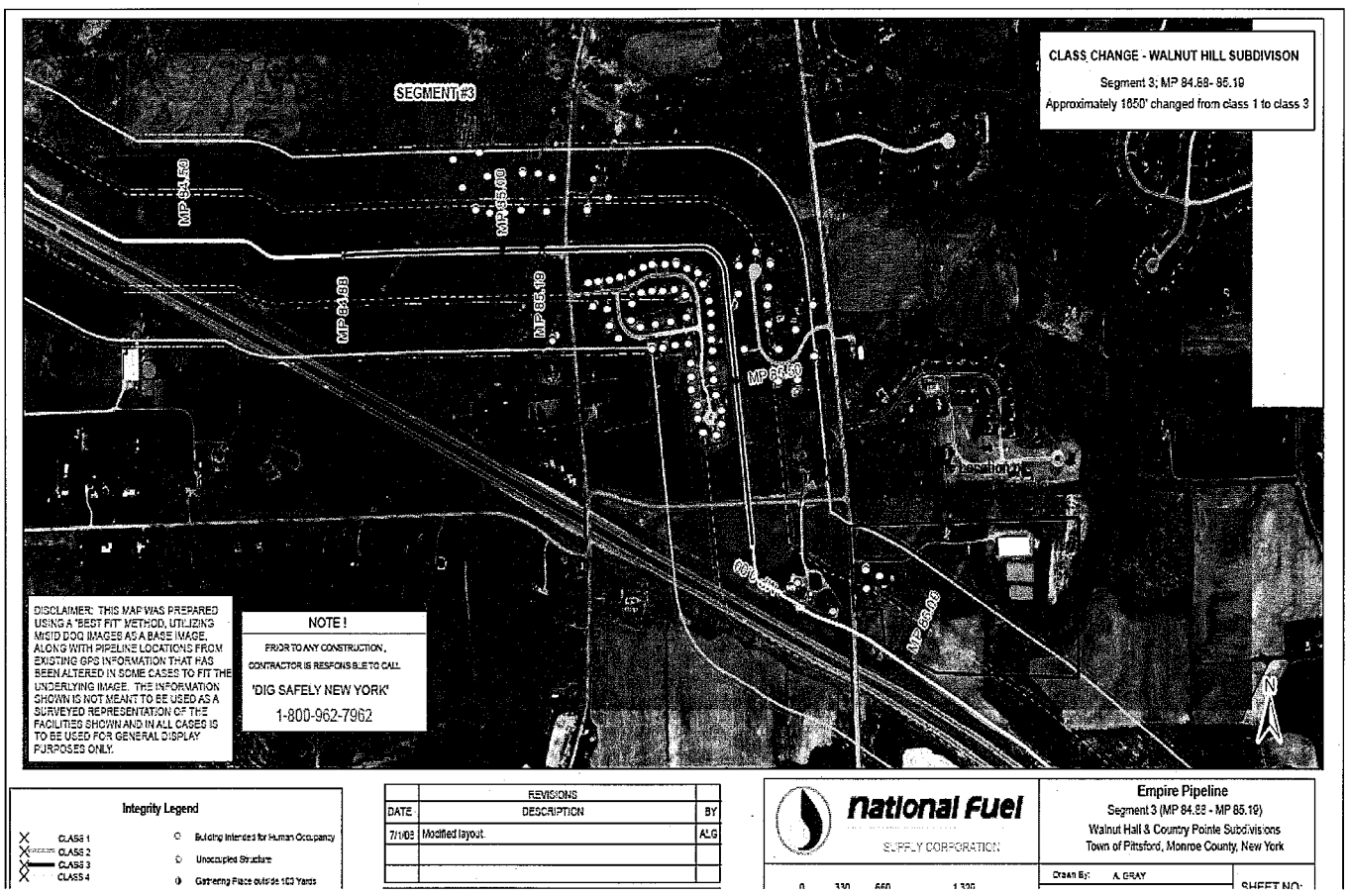
Attachment A – Empire Pipeline – route map of ***special permit segments*** and ***special permit inspection area*** from the pipeline starting point at Mile Post 0 (Station 0+0) in the middle of the Chippawa Canal of the Niagara River to Mile Post 157. The entire 157 miles of pipeline and special permit inspection area is located in the state of New York.



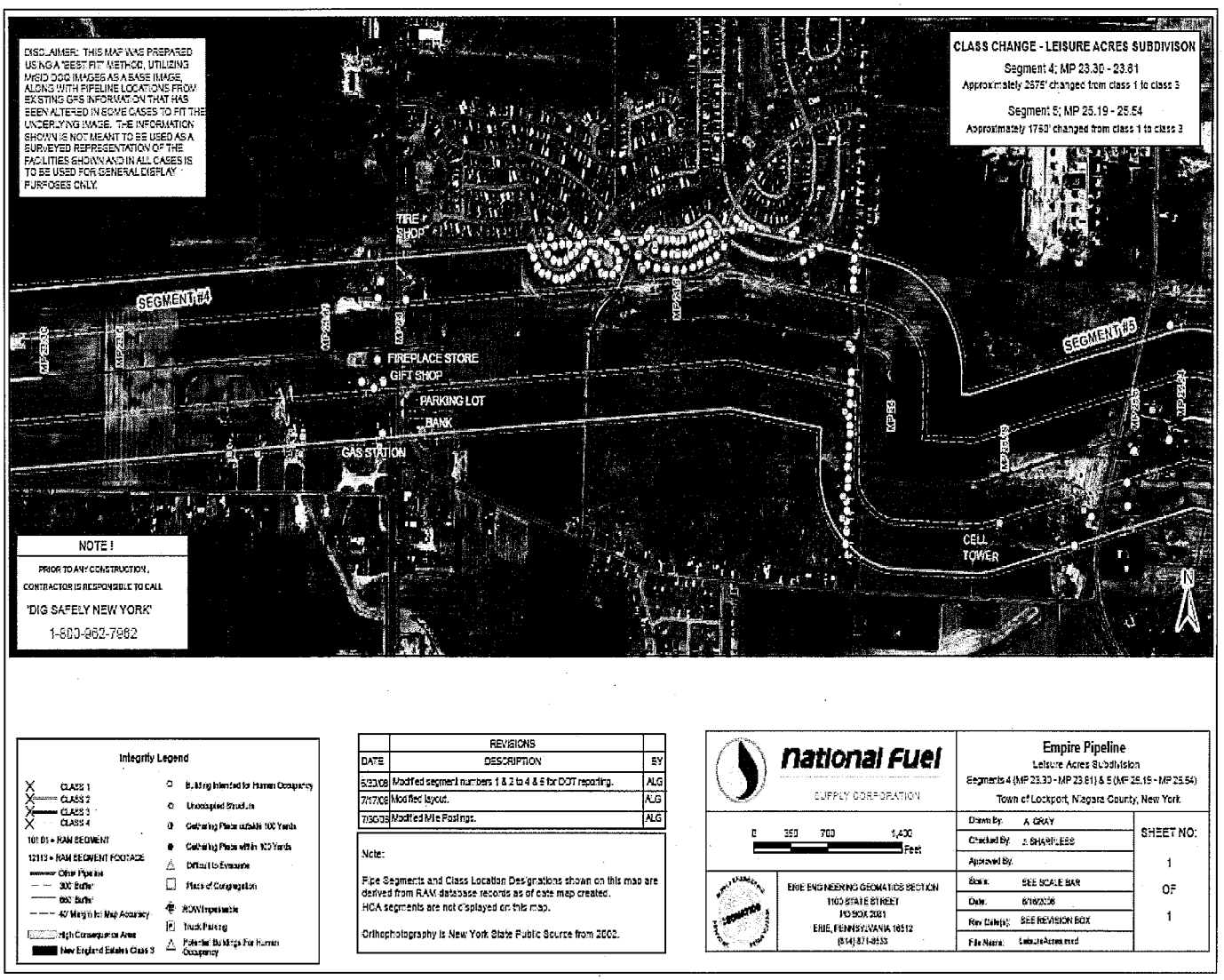
Attachment B – Special Permit Segment 1, Town of Byron, Genesee County, New York, west of NY Route 237



Attachment C – Special Permit Segment 2, Town of Henrietta, Monroe County, New York, and 375 feet west of East River Road



Attachment D – Special Permit Segment 3, Town of Pittsford, Monroe County, New York, beginning approximately 200 feet west of West Bloomfield Road



Attachment E – Special Permit Segments 4 and 5, Town of Pendleton, Niagara County, New York, west of Transit Road (Route 78) and Town of Lockport, Niagara County, New York, east of Old Beattie Road

Segment	Stationing And Length	Subject	Town Of	County
1	3027+50 - 3034+80 = 730'	Town Hall	Byron	Genesee
2	4018+73 - 4035+88 = 1,715'	Kodak Training Center	Henrietta	Monroe
3	4483+10 - 4499+90 = 1,650'	Walnut Hill Subdivision	Pittsford	Monroe
4	1230+69 - 1257+44 = 2,675'	Leisure Acres Subdivision	Lockport	Niagara
5	1330+50 - 1348+10 = 1,760'	Leisure Acres Subdivision	Lockport	Niagara

Segment	Surface Water Includes Wetlands	Drinking Water Aquifers	Soils And Vegetation	Wildlife Habitats Including Fisheries
1	No streams or wetlands are within the project area	The physiographic province underlining this segment is the Central lowland (12a Eastern lake section) - Fine grained and unstratified glacial deposits - Glacial deposits locally thin or missing - The Carbonate-rock (New and New England) aquifer dominates the area	NgA - Niagara silt loam 0-2% slope, Lmb - Lima silt loam 3-8% slope Agicultural lands	Great Lakes Ecoregion is characterized by gently rolling, low level landscapes and flat lake plains. The region's climate is influenced by the Great Lakes and has a high level of biodiversity and unique habitats. The Bog turtle, Eastern prairie fringed orchid, & Houghton goldenrod are a county threatened species No fisheries are impacted.
2	The Genesee River and associated R2UBH wetland borders the west edge of the project area	The physiographic province underlining this segment is the Central lowland (12a Eastern lake section) - Coarse grained, stratified outwash and ice contact deposits - The Carbonate-rock (New and New England) aquifer dominates the area	OnD3 - Ontario loam 15-25% eroded slope, OnB - Ontario loam 3-8% slope, HIA - Hilton loam 0-3%, OdA - Odessa silt loam 0-2% Open fields	Great Lakes Ecoregion is characterized by gently rolling, low level landscapes and flat lake plains. The region's climate is influenced by the Great Lakes and has a high level of biodiversity and unique habitats. The Bog turtle a county threatened species No fisheries are impacted because the construction will not impact the river.
3	The project is west of a Tributary to the Canalway, no impacts to streams or wetlands	The physiographic province underlining this segment is the Central lowland (12a Eastern lake section) - Coarse grained, stratified outwash and ice contact deposits - The Carbonate-rock (New and New England) aquifer dominates the area	HIB - Hilton loam 3-8% slope, OnB - Ontario loam 3-8% Agricultural lands	Great Lakes Ecoregion is characterized by gently rolling, low level landscapes and flat lake plains. The region's climate is influenced by the Great Lakes and has a high level of biodiversity and unique habitats. The Bog turtle a county threatened species. No fisheries are impacted because the intermittent stream has only seasonal flows.
4	No streams or wetlands are within the project area	The physiographic province underlining this segment is the Central lowland (12a Eastern lake section) - Fine grained and unstratified glacial deposits - Glacial deposits locally thin or missing - No principal aquifers are identified	OvA - Ovid silt loam 0-2% slope, HIA - Hilton silt loam 0-3% slope Agricultural fields, inactive pasture	Great Lakes Ecoregion is characterized by gently rolling, low level landscapes and flat lake plains. The region's climate is influenced by the Great Lakes and has a high level of biodiversity and unique habitats. The Eastern prairie fringed orchid is a county threatened species No fisheries are impacted.
5	The project crosses a Tributary to Mud Creek.	The physiographic province underlining this segment is the Central lowland (12a Eastern lake section) - Fine grained and unstratified glacial deposits - Glacial deposits locally thin or missing - No principal aquifers are identified	OvA - Ovid silt loam 0-2% slope, HIA - Hilton silt loam 0-3% slope, OdA - Odeessa silty clay loam 0-2% slope, Lc - Lakemont silty clay loam 0-3% slope Open meadows, lawns	Great Lakes Ecoregion is characterized by gently rolling, low level landscapes and flat lake plains. The region's climate is influenced by the Great Lakes and has a high level of biodiversity and unique habitats. The Eastern prairie fringed orchid is a county threatened species No fisheries are impacted because the intermittent stream has only seasonal flows.

Attachment F – Environmental Information Table

Updated Information for *Special Permit Segment 6* – January 19, 2017

II. Pipeline System Affected

Special Permit Segments and Special Permit Inspection Area:

Niagara, Genesee, Monroe, Ontario, Wayne, Cayuga, Onondaga, and Oswego Counties, New York

This special permit request asks PHMSA to waive compliance from 49 CFR § 192.611(a) for six (6) natural gas transmission pipeline segments on the 24-inch Empire State Pipeline, where a change has occurred from a Class 1 Location to a Class 3 Location in Niagara, Genesee, Monroe, and Wayne Counties, New York.

This special permit applies to the six (6) ***special permit segments*** defined as follows using the Empire State Pipeline survey stations (SS) and mile post (MP) references as follows:

- ***Special Permit Segment 1*** - 24-inch Empire State Pipeline mainline, approximately 730 feet in length, located in Genesee County, NY from Survey Station 3027 + 50 to Survey Station 3034 + 80; (MP 57.33 to MP 57.49)

- ***Special Permit Segment 2*** - 24-inch Empire State Pipeline mainline, approximately 1,715 feet in length, located in Monroe County, NY from Survey Station 4018 + 73 to Survey Station 4035 + 88; (MP 76.09 to MP 76.42)

- ***Special Permit Segment 3*** - 24-inch Empire State Pipeline mainline, approximately 1,650 feet in length, located in Monroe County, NY from Survey Station 4483 + 10 to Survey Station 4499 + 60; (MP 84.88 to MP 85.19)

- ***Special Permit Segment 4*** - 24-inch Empire State Pipeline mainline, approximately 2,675 feet in length, located in Niagara County, NY from Survey Station 1230 + 69 to Survey Station 1257 + 44; (MP 23.30 to MP 23.81)

- ***Special Permit Segment 5*** - 24-inch Empire State Pipeline mainline, approximately, 2,650 feet in length, located in Niagara County, NY from Survey Station 1330 + 50 to Survey Station 1357 + 00; (MP 25.19 to MP 25.70[1])

- ***Special Permit Segment 6*** - 24-inch Empire State Pipeline mainline, approximately, 1,055 feet in length, located in Wayne County, NY from Survey Station 5234+21 to Survey Station 5244+76; (MP 99.13 to MP 99.33[2])

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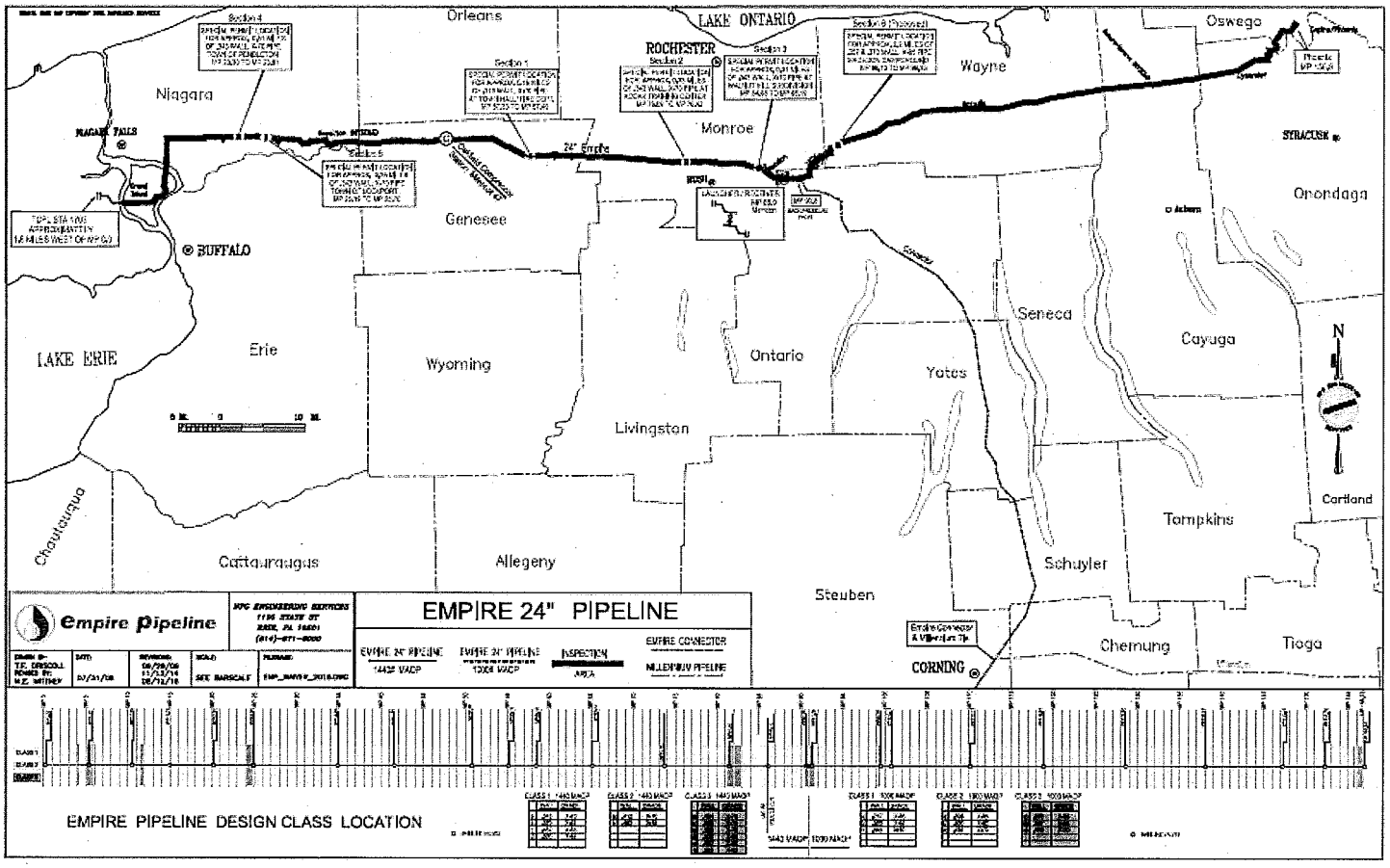
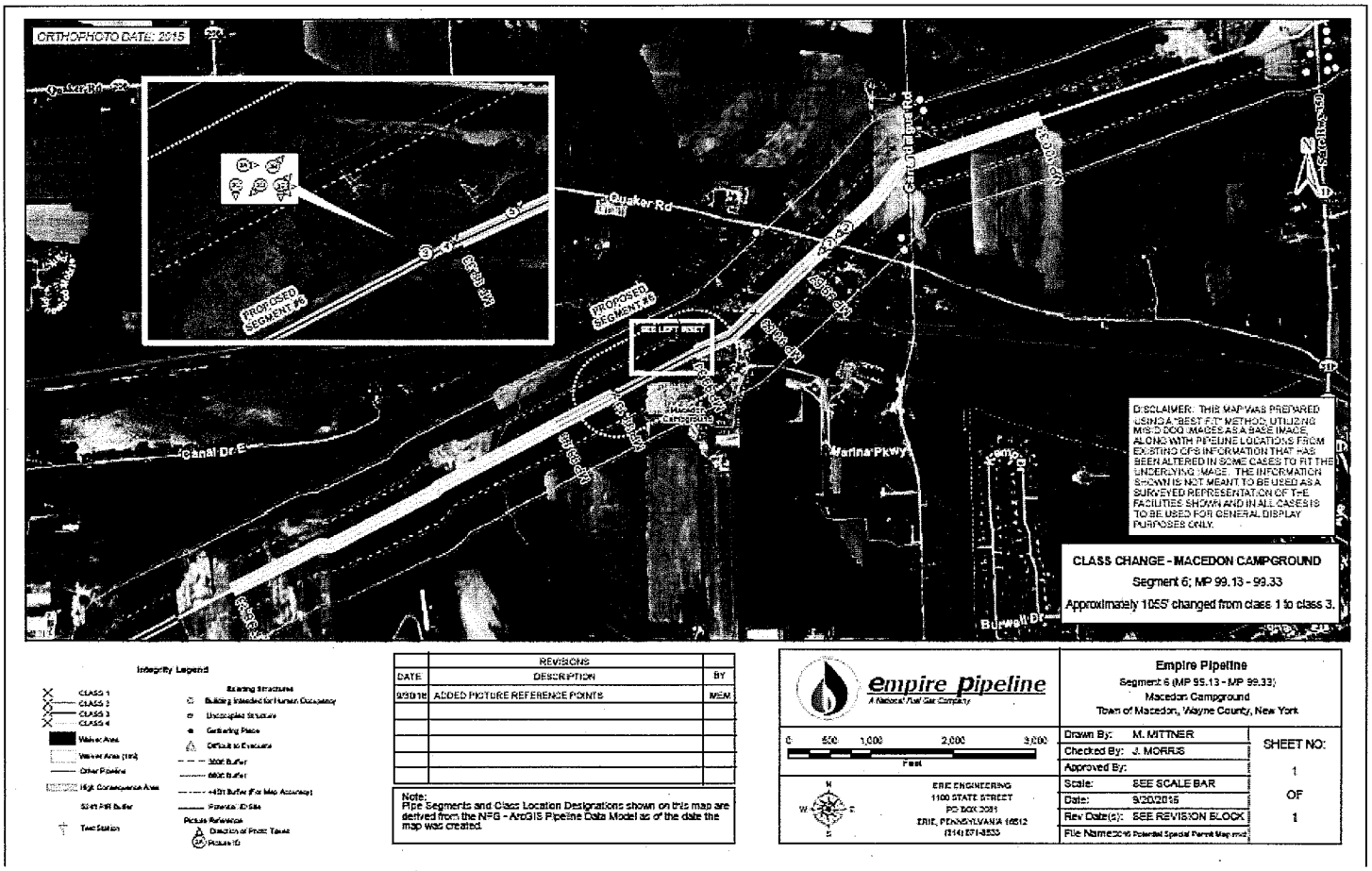
[1] On November 20, 2014, Empire requested a ***special permit segment 5*** extension from Station 1348+ 10 to 1357+00 (MP 25.54 to MP 25.70) of 890 feet. ***Special permit segment 5*** is located in the Town of Lockport, Niagara County, New York, east of Old Beattie Road.

[2] On August 19, 2016, Empire requested a new ***special permit segment 6*** from Station 5234+21 to 5244+76 (MP 99.13 to MP 99.33) of 1,055 feet. ***Special permit segment 6*** is located in the in the Town of Macedon, Wayne County, New York and approximately 1,190 feet west of the Erie Canal crossing.

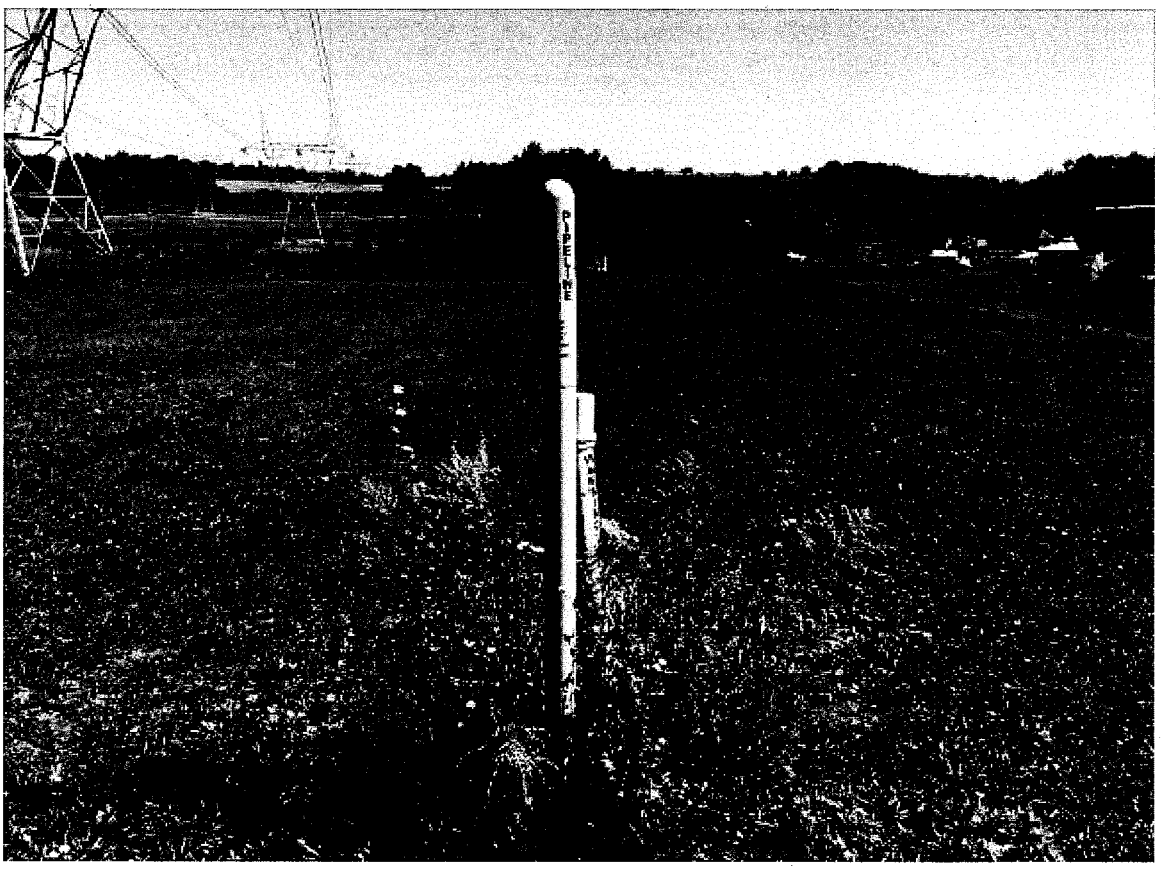


Attachment G – Empire Pipeline – route map of ***special permit segments*** and ***special permit inspection area*** from the pipeline starting point at Mile Post 0 (Station 0+0) in the middle of the Chippawa Canal of the Niagara River to Mile Post 157. The entire 157 miles of pipeline and special permit inspection area is located in the state of New York. The map shows the location of all six (6) special permit segments.



Attachment H – Special Permit Segment 6, Town of Macedon, Wayne County, New York and approximately 1,190 feet west of the Erie Canal crossing. New special permit (SP) segment 6 consists of 1,055 feet of 24-inch pipeline from Milepost 99.13 to 99.33.

Attachment I – A: Photgraph of the area surrounding ***Special Permit Segment 6***.



Attachment I – B: Photgraph of the area surrounding ***Special Permit Segment 6***.

ENVIRONMENTAL ASSESSMENT (EA) TABLE
EMPIRE PIPELINE, INC.

SEGMENT	STATIONING and LENGTH	SUBJECT	TOWN of	COUNTY
1	3027+50 - 3034+80 = 730'	Town Hall	Byron	Genesee
2	4018+73 - 4035+88 = 1,715'	Kodak Training Center	Henrietta	Monroe
3	4483+10 - 4499+90 = 1,650'	Walnut Hill Subdivision	Pittsford	Monroe
4	1230+69 - 1257+44 = 2,675'	Leisure Acres Subdivision	Lockport	Niagara
5	1330+50 - 1356+60 = 2,610'	Leisure Acres Subdivision	Lockport	Niagara
6	5234+06 - 5244+61 = 1,055'	Twilight on the Erie RV Resort	Macedon	Wayne

Revised: 19 August 2016

SEGMENT	SURFACE WATER includes WETLANDS	DRINKING WATER AQUIFERS	SOILS and VEGETATION	WILDLIFE HABITATS including FISHERIES	GEOLOGIC HAZARDS	SOCIOECONOMICS IMPACTS and on NATIVE AMERICANS
1	No streams or wetlands are within the project area	The physiographic province underlining this segment is the Central lowland [12a Eastern lake section] - Fine grained and unstratified glacial deposits - Glacial deposits locally thin or missing - The Carbonate-rock [New and New England] aquifer dominates the area	NgA - Niagara silt loam 0-2% slope, LmB - Lima silt loam 3-8% slope Agricultural lands	Great Lakes Ecoregion is characterized by gently rolling, low level landscapes and flat lake plains. The region's climate is influenced by the Great Lakes and has a high level of biodiversity and unique habitats. The Bog turtle, Eastern prairie fringed orchid, & Houghton goldenrod are a county threatened species No fisheries are impacted.	Since the mid 1970's [western NY] and the early 1980's [north-central NY], seismic monitoring has recorded low activities in both regions. Events with magnitudes ranging from 2.5 to 3.5	Same trench construction will have very limited impacts on local revenues, transportation, taxes, housing, or employment
2	The Genesee River and associated R2UBH wetland borders the west edge of the project area	The physiographic province underlining this segment is the Central lowland [12a Eastern lake section] - Coarse grained, stratified outwash and ice contact deposits - The Carbonate-rock (New and New England) aquifer dominates the area	OnD3 - Ontario loam 15-25% eroded slope, OnB - Ontario loam 3-8% slope, HlA - Hilton loam 0-3%, OdA - Odessa silt loam 0-2% Open fields	Great Lakes Ecoregion is characterized by gently rolling, low level landscapes and flat lake plains. The region's climate is influenced by the Great Lakes and has a high level of biodiversity and unique habitats. The Bog turtle a county threatened species No fisheries are impacted because the construction will not impact the river.	Since the mid 1970's [western NY] and the early 1980's [north-central NY], seismic monitoring has recorded low activities in both regions. Events with magnitudes ranging from 2.5 to 3.5	Same trench construction will have very limited impacts on local revenues, transportation, taxes, housing, or employment
3	The project is west of a Tributary to the Ceneasee, no impacts to streams or wetlands	The physiographic province underlining this segment is the Central lowland [12a Eastern lake section] - Coarse grained, stratified outwash and ice contact deposits - The Carbonate-rock (New and New England) aquifer dominates the area	HlB - Hilton loam 3-8% slope, OnB - Ontario loam 3-8% Agricultural lands	Great Lakes Ecoregion is characterized by gently rolling, low level landscapes and flat lake plains. The region's climate is influenced by the Great Lakes and has a high level of biodiversity and unique habitats. The Bog turtle a county threatened species. No fisheries are impacted because the intermittent stream has only seasonal flows.	Since the mid 1970's [western NY] and the early 1980's [north-central NY], seismic monitoring has recorded low activities in both regions. Events with magnitudes ranging from 2.5 to 3.5	Same trench construction will have very limited impacts on local revenues, transportation, taxes, housing, or employment
4	No streams or wetlands are within the project area	The physiographic province underlining this segment is the Central lowland [12a Eastern lake section] - Fine grained and unstratified glacial deposits - Glacial deposits locally thin or missing - No principal aquifers are identified	OvA - Ovid silt loam 0-2% slope, HlA - Hilton silt loam 0-3% slope Agricultural fields, inactive pasture	Great Lakes Ecoregion is characterized by gently rolling, low level landscapes and flat lake plains. The region's climate is influenced by the Great Lakes and has a high level of biodiversity and unique habitats. The Eastern prairie fringed orchid is a county threatened species No fisheries are impacted.	Since the mid 1970's [western NY] and the early 1980's [north-central NY], seismic monitoring has recorded low activities in both regions. Events with magnitudes ranging from 2.5 to 3.5	Same trench construction will have very limited impacts on local revenues, transportation, taxes, housing, or employment

Attachment J – Environmental Information Table – Updated for Special Permit Segment 6

Attachment K – Environmental Information - Prepared by Empire Pipeline for Special Permit Segment 6

Guidance for Special Permit Applicants on Providing Environmental Information

Special Permit Requester: Empire Pipeline, Inc.
Docket No: PHMSA-2008-0213

Date Information Provided: 9/30/2016

The processing of a special permit application involves the preparation of an Environmental Assessment (EA) in accordance with DOT Order 5610.1C, the National Environmental Policy Act (NEPA), 42 USC §§ 4321 – 4375, and the Council on Environmental Quality regulations,
40 CFR §§ 1500-1508. NEPA requires that federal agencies analyze a proposed federal 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 or deny the request. As part of this analysis, PHMSA looks at whether a special permit would impact the likelihood and consequences of a pipeline failure as compared to the status quo in the absence of the special permit. PHMSA may grant the special permit request, grant the request with additional conditions, or deny the request. PHMSA performs this assessment to determine the effects of our decision, if any, on the environment.
The purpose of this form is to provide guidance to the applicant on what information should be provided with the application materials. Once the Draft EA is received from the applicant, PHMSA will place it in the public docket of this proceeding and request public comments on the contents. Therefore, any information submitted by the applicant may be made public. Before making a decision on the special permit application, PHMSA will use the findings of the submitted draft EA and public comments received, to determine whether to include a finding of no significant impact (FONSI) or take other action in accordance with NEPA.

Submittal notes:

- Please submit the completed EA questionnaire (EAQ) in Microsoft Word format via
  e-mail to john.gale@dot.gov and kay.mciver@dot.gov or mailed in a CD in Microsoft Word formal. Your special permit application will not be considered complete until all the environmental information in this document is provided and reviewed by PHMSA.

- NEPA requires that all documents be written in plain language for easy understanding by the public. Please keep this in mind when submitting documents.

- Maps and photos must be included with the EAQ.

- This EAQ will be used for issue identification. PHMSA may request further detailed information from the applicant.

- If you use acronyms please provide a list for easy reference and inclusion into the EA.

- If a resource area will not be impacted by your project (i.e. there are no surface waters in your special permit inspection area), **DO NOT write "N/A."** Affirmatively state that this resource will not be impacted by your project.

- Impacts can be negative (detrimental) OR positive (beneficial). Describe any change from the current operations.

- If you use a book, website or document to obtain information, please provide the citation.

A. Site Description

1. Describe the environment in the vicinity of the portions of pipeline that would be subject to the special permit. Photos are extremely helpful.

   Attachment EAQ2 shows the requested special permit segment (Segment 6) overlaid onto aerial photography, for reference. In addition, photographs of the site were taken from ground level and labeled as Attachment EAQ3-1 through EAQ3-5. For additional reference, labels were added to the Attachment EAQ2 map showing the location and direction of each photograph. Attachment 9 of the original request of Empire Pipeline Inc. (Empire), submitted to PHMSA on August 19, 2016, contained an additional description of the environment in special permit segments 1-5 as well as the requested Segment 6. The attachment's title has been revised to EAQ4 and is resubmitted as part of the current package. Generally speaking, Segment 6 has an agricultural field to the west, a recreational vehicle (RV) campground to the south, the Erie Canal to the north and east, and this segment of the Empire Pipeline runs parallel to high voltage transmission lines located to its north.

2. Describe the pipeline, the materials currently transported in the pipeline, and specify the counties and states where the affected segments of the pipeline are or would be located.

The pipeline is a 24-inch O.D., carbon-steel pipeline of approximate 157-mile length, manufactured according to API 5LX standards, and transports high-pressure natural gas. The pipeline contains various wall thicknesses and API 5LX grades along its length. The requested special permit segment is a 24-inch O.D. section of 0.257-inch wall and 0.370-inch wall, Grade X-65, carbon-steel pipeline manufactured according to API 5LX standards and is located within Wayne County, New York state.

3. Provide the mile markers and pipeline stationing for segments of the pipeline for which you are seeking the special permit.

   As stated in Empire's original request, the Segment 6 location is an approximately 1,055 ft. length of the Empire Pipeline from mile post 99.13 to 99.33, station 5234+21 to 5244+76.

4. Provide general and specific map(s) of the pipeline location and show the following on the map(s): dwellings (human) in the class unit (660 feet) and potential impact radius (PIR) of the pipeline in the special permit segment for 1-mile on either side of the ***special permit segment***. No EA will be drafted without appropriate maps.

   Attachment 1 to Empire's original request included a general site map of the Empire pipeline system, including all five (5) existing ***special permit segments*** *and the location of the requested Segment 6. Attachment 1 is resubmitted as Attachment EAQ1 as part of the current package. Attachment EAQ2 is a map showing the pipeline overlaid onto aerial photography and includes dwellings and gathering sites within the class unit, pipeline potential impact radius (PIR), and 1-mile extensions to the west and east of the requested special permit segment. Photographs EAQ3-1 to EAQ3-5 are also noted on Attachment EAQ2.*

5. Describe the nature of the population in the vicinity. Describe the nearby population density and places of public assembly such as schools, playgrounds, parks, theatres, types of businesses and residences, etc. Photos are extremely helpful.

   Photos EAQ3-1 to EAQ3-5 show the nature of the population in the immediate vicinity of the requested special permit segment. The area to the west of the segment contains an agricultural field. The area to the east of the segment, from west to east, contains the Erie Canal, a railroad crossing, and Quaker Road, followed by agricultural fields. The identified site resulting in new Class 3 segment and request for additional special permit segment is to the south of the segment, and is depicted in photo EAQ3-3A. It is a recently constructed RV campground known as "Twilight on the Erie RV Resort."

6. Is the affected pipeline or pipeline segment in or does it affect a high consequence area (HCA)? If yes, indicate PIR footage and show the PIR in Item A.4 above?

The affected pipeline segment is within an HCA. The PIR footage for this 24-inch O.D., 1,000 psig MAOP segment is 524 feet, as shown in the Attachment EAQ2 site map.

B. Purpose and Need

1. Are there any completed projects or permits which provide context or important information for this request (i.e. background)?

On May 20, 2010, Empire Pipeline, Inc. received a special permit waiving the requirements of 49 C.F.R. §192.611 class location change for five (5) existing segments on the Empire State Pipeline. As part of the special permit application process, Empire submitted a document titled, "Class Location Special Permit Application – Environmental Information," which provided much of the information currently requested by the PHMSA. The special permit was renewed by PHMSA effective May 20, 2015, at which time ***Segment 5*** *was extended by approximately 890 feet to the east, from mile post (MP) 25.54 to 25.70. To comply with the various conditions required by Empire's existing special permit, Empire performs maintenance and inspection activities additional to those required under existing regulations. The conditions of Empire's Special Permit were set forth by the PHMSA with the goal of ensuring an equal or greater level of safety compared to existing Pipeline Safety Regulations.*

2. Describe the purpose of the requested special permit. What will it allow the operator to do that it could not do under the existing regulations?

Under 49 C.F.R. §192.611, pressure reduction, pressure testing or pipe replacement is required to address class location changes when the pipeline is not commensurate with the new class location. Under the special permit Empire may continue operating ***Special Permit Segment 6****, which has recently had a class location change from Class 1 to Class 3, at its current MAOP of 1,000 psig. Empire would be required to comply with all conditions of its existing special permit pertaining to special permit segments for the Segment 6 area. Without a special permit for this segment, Empire would need to replace the segment in order to maintain the current MAOP in compliance with 49 C.F.R. §192.611.*

3. List the pipeline safety regulation(s) for which the operator seeks relief from.

*As with the existing five (5) **special permit segments** under Empire's current special permit, Empire seeks relief from 49 C.F.R. §192.611 for the requested **Special Permit Segment 6** in order to maintain the current MAOP of 1,000 psig for the segment.*

4. Describe the need for the requested special permit. Why can't the applicant operate the pipeline under existing regulations? How would a special permit benefit the operator? Would a special permit benefit the public? If so, please explain how.

In order to comply with the requirements of 49 C.F.R. §192.611, approximately 0.20 miles of pipe would require replacement to address the class location change. This pipe replacement would provide additional protection for one outdoor place of assembly, no single-family dwellings, and no multiple occupancy buildings. Given past integrity management-related maintenance and inspection activities performed on the pipe segment in question such as in-line inspection (ILI) and close interval survey (CIS) results, pipe replacement would provide a minimal safety benefit over the existing segment. In addition, pipe replacement would impact the landowners on whose property the pipe is situated.

*The public would also benefit from a decision granting Segment 6 as an additional Special Permit Segment. By extending provisions of the Special Permit to the requested **Special Permit Segment 6**, this segment would benefit from such integrity management activities as a CIS every seven (7) years; a coating condition survey including a minimum of two (2) excavations of survey indications; the segment's inclusion in an annual report to PHMSA stating an updated number of residences, other structures intended for human occupancy, and public gathering areas built within one (1) mile on either end of the special permit segment; confirmation that girth weld coating within the special permit segment is non-shielding to cathodic protection (CP); stricter response time requirements for investigation of ILI anomalies as well as stricter criteria for ILI anomalies that would require investigation and repair; confirmation that all girth welds within the special permit segment met Federal pipeline safety regulations at the time of construction; identification of all shorted casings within six (6) months after grant of the special permit, stricter time requirements to remediate shorted casings, quarterly monitoring for four (4) consecutive quarters following the repair of any shorted casing, and following the discovery of any shorted casing in the segment, a requirement to monitor all casings within the segment annually going forward; a depth of cover survey including PHMSA-approved remedial measures for any pipe not meeting the requirements of 49 C.F.R. §192.327(a); data integration shown annually on an alignment sheet including features such as pipe diameter, wall thickness, grade, seam type, pipe coating including girth weld coating, MAOP, class location, aerial photography, HCA boundaries, hydrostatic test pressure, ILI results, CIS results, depth of cover*

survey results, rectifier readings, cathodic protection test point survey readings, interference survey results, pipe coating survey results, results of pipe coating and anomaly evaluations from pipe excavations, and the locations of any encroachments; verification that the segment has received a valid Subpart J hydrostatic test for eight (8) continuous hours at a minimum pressure of 1.25xMAOP; and certified mill test reports (CMTR's) showing that the pipe meets wall thickness, yield strength, tensile strength, and chemical composition requirements of the specified API 5LX grade. Note that all of the above safety benefits apply only to special permit segments, and that Empire's Special Permit also includes additional safety measures above and beyond current pipeline safety regulations that apply to the entire 157-mile pipeline. These benefits are not listed here because the requested Special Permit Segment 6 would continue to benefit from these safety benefits regardless of its status as a special permit segment. If the PHMSA were to revoke the Empire Special Permit in its entirety, Empire would maintain compliance with current Pipeline Safety Regulations and the additional safety benefits provided to the public as a result of the Special Permit would likely be discontinued. In addition, the special permit would eliminate the potential for service interruptions, supply shortages and pipeline blowdown emissions that could occur as a result of outages associated with replacing the segment.

5. Indicate whether this is an existing or proposed pipeline.

   The Empire Pipeline is an existing pipeline.

6. Are there any existing or reasonably foreseeable requests which are connected to this action? If no, please make an affirmative statement.

   Empire has no additional requests connected to this action at this time, and does not foresee that this action will necessitate any future requests.

Alternatives

In this section, you must describe potential alternatives for agency action. You must use *plain language*.

- **Alternative 1: "Do Nothing/No Action" Alternative**
  - **Describe Alternative:** Describe what would happen if the special permit application was denied, and the applicant was required to comply with existing regulations. This should include a description of any reasonably foreseeable direct, indirect, or cumulative impacts.

If PHMSA were to deny Empire's request, Empire would need to replace the approximately 0.20-mile pipeline segment to comply with 49 C.F.R. §192.611. The replacement would involve a system outage, a significant volume of gas lost to atmosphere, a disruption to landowner properties on which the relevant pipe segment is situated as well as disruption to the landowner property on which the access route to the pipeline is situated, and a significant cost to Empire would be incurred. The cost is currently estimated at $1,050,500, as detailed in Attachment EAQ5. The answer to above question B.4 of this document goes into further detail regarding safety benefits provided by Empire's compliance with the Special Permit. If the request were to be denied, the segment would not benefit from the additional integrity management-related maintenance and inspection activities beyond those of existing Pipeline Safety Regulations that are required within special permit segments.

- **Alternative 2: Applicant's Preferred Alternative**
  - **Describe Alternative:** Describe what the special permit would allow the operator to do.

    Extending Empire's special permit to include Segment 6 would allow Empire to continue operating this pipeline segment at its current MAOP of 1,000 psig.

  - Describe any additional environmental or safety measures you propose to implement in lieu of compliance with the regulations. You may reference information already provided in your special permit request, as relevant.
    - *CIS every seven (7) years;*
    - *coating condition survey including a minimum of two (2) excavations of survey indications;*
    - *inclusion of the segment in Empire's annual report to PHMSA stating an updated number of residences, other structures intended for human occupancy, and public gathering areas built within one (1) mile on either end of the special permit segment;*
    - *confirmation that girth weld coating within the special permit segment is non-shielding to CP;*
    - *stricter response time requirements for investigation of ILI anomalies;*
    - *stricter criteria for determining which ILI anomalies would require investigation and repair;*
    - *confirmation that all girth welds within the special permit segment met Federal pipeline safety regulations at the time of construction;*
    - *identification of all shorted casings within six (6) months after grant of the special permit;*
    - *stricter time requirements to remediate shorted casings;*

- *quarterly monitoring for four (4) consecutive quarters following the repair of any shorted casing;*
- *following the discovery of any shorted casing in the segment, a requirement to monitor all casings within the segment annually going forward;*
- *depth of cover survey including PHMSA-approved remedial measures for any pipe not meeting the requirements of 49 C.F.R. §192.327(a);*
- *data integration shown annually on an alignment sheet including features such as pipe diameter, wall thickness, grade, seam type, pipe coating including girth weld coating, MAOP, class location, aerial photography, HCA boundaries, hydrostatic test pressure, ILI results, CIS results, depth of cover survey results, rectifier readings, cathodic protection test point survey readings, interference survey results, pipe coating survey results, results of pipe coating and anomaly evaluations from pipe excavations, and the locations of any encroachments;*
- *verification that the segment has received a valid Subpart J hydrostatic test for eight (8) continuous hours at a minimum pressure of 1.25xMAOP;*
- *and certified mill test reports (CMTR's) showing that the pipe meets wall thickness, yield strength, tensile strength, and chemical composition requirements of the specified API 5LX grade.*

- **Alternative 3: Modified Preferred Alternative**

  Alternatives Considered but Eliminated: If you considered but rejected any alternative requests, please list them here, and explain why it was rejected.

  - *Under 49 C.F.R. §192.611(a)(1), the segment could continue to operate with a MAOP reduced to the lower of 0.667 times the test pressure, or 60 percent of SMYS. Since the segment in question was hydrotested to a pressure of 1,262 psig, 0.667 times the test pressure would result in a revised MAOP of 841.8 psig. The segment in question has an O.D. of 24-inches, a pipe grade of X-65 (yield strength 65,000 psi), and two (2) wall thicknesses: one section of wall thickness 0.257-inch, and another section of 0.370-inch. The thinner wall section of 0.257-inch is the governing section for design pressure determination. Inputting these parameters into Barlow's Formula (2*S*t/D) results in a design pressure of 1,392 psig. Multiplying the design pressure times 0.6 for its Class 3 location would result in a revised MAOP of 835.2 psig. Applying 49 C.F.R. §192.611(a)(1) to the requested segment thus results in a permanent reduction in MAOP from its current 1,000 psig to 835.2 psig, as it is the lower of 841.8 psig and 835.2 psig. This MAOP reduction would limit line pack and reduce the operational flexibility that is utilized by Empire to serve its customers tied to this portion of mainline. For these reasons, Empire has ruled out reducing MAOP under 49 CFR §192.611(a)(1).*

- *No additional alternative requests to PHMSA were considered by Empire. Empire believes that by complying with Condition 26 of its existing Special Permit pertaining to the addition of new special permit segments, both the goals of increased pipeline safety versus current regulations and efficiency of operation are achieved.*

C. Affected Resources and Environmental Consequences

The environmental resources and issues listed here will be analyzed to evaluate the potential for significant effect. These resources are required to be analyzed by federal laws, regulations, executive orders, and departmental policy. If a resource area will not be impacted by your project (i.e. there are no surface waters in your special permit inspection area), DO NOT write "N/A." Affirmatively state that this resource will not be impacted by your project. Many resource areas will be outside the scope of your request, however, italicized categories must be addressed. You should consider any direct, indirect, or cumulative impacts.
[For above ground already existing pipelines, a statement can be included to explain that the proposed action will have no impact to the highlighted resources, since the above ground pipelines already exist and are in operation. For the non bolded, non-highlighted resources (Air quality, Noise, and Safety), please briefly explain how the permit could both positively and negatively impact these.]

1. **Aesthetics:** Will this request change the visual character of the special permit segment or the special permit inspection area?

   The request will not change the visual character of the special permit segment, since the request results in continued operation of the pipeline with no earth disturbance.

2. **Agricultural Resources**: Will this request impact any agricultural resources?

   This request will not impact agricultural resources. If the request were to be denied by PHMSA, Empire would likely elect to replace the Class 3 segment resulting in impacts to agricultural resources.

3. **Air Quality:** Describe the air quality of the special permit inspection area. Will this request improve or worsen the air quality of the special permit inspection area? Will there be construction associated with this request?

   This request will neither improve nor worsen the air quality of the special permit inspection area, because no construction is associated with this request. If the request were to be denied by PHMSA, a temporary reduction in air quality would result from the gas loss and construction activity associated with Empire's replacement of the Class 3 segment.

4. **Biological Resources:** Describe what wildlife (including fisheries) and vegetation exist in the surrounding area. Are there any known threatened, proposed threatened or endangered species in the area?

   No known threatened, proposed threatened or endangered species exist in this area. Please refer to Attachment EAQ4 for a description of any surface water, wetlands, drinking water aquifers, soils and vegetation, wildlife habitats and fisheries.

5. **Climate Change:** Will this project contribute to global climate change?

   There is no project associated with Empire's request for an additional special permit segment. If the request were to be denied by PHMSA, gas loss would result from Empire's replacement of the Class 3 segment.

6. **Cultural Resources:** Describe any cultural (>50 years), archaeological, or paleontological resources that will be impacted by this project. Will ground disturbing activities occur because of this request?

   There is no project associated with Empire's request for an additional special permit segment. As a result, no ground disturbing activities are anticipated to occur due to the request. No cultural, archaeological, or paleontological resources would occur due to the request.

7. **Environmental Justice:** Describe the population in the affected area. Will this project be situated in or disproportionately impact, any predominantly minority or non-English language populations?

   The pipeline is situated in a rural setting, and no minority or non-English language populations will be affected by the request. No project is associated with the request.

8. **Geology, Soils, and Mineral Resources:** Describe the soils, geology, and mineral resources of the area. Include an assessment of seismic activity in the special permit inspection area.

   Please refer to Attachment EAQ4, which includes a description of soils, geology, mineral resources, and an assessment of seismic activity in the area of request as well as the five (5) existing special permit segments.

9. **Indian Trust Assets:** Are there Indian Trust Assets in the area? Does this project impact a federally-recognized Tribal Reservation? Has Tribal coordination occurred?

There is no project associated with Empire's request for an additional special permit segment, and the segment is not situated within a Tribal Reservation. Neither Indian Trust Assets nor Tribal Reservations would be affected by Empire's request.

10. **Land Use:** Describe the surrounding land use. Will this request impact land use or planning? Is there a land use plan implemented by a local government? Will the request, if granted, require permits from the local government?

Because there is no project associated with the request, no permits will be required from the local government. PHMSA's grant of the request would not impact land use or planning. The Town of Macedon does have Code pertaining to land use, in Chapter 75 of the Town of Macedon Code located online at the following website: http://ecode360.com/11034870. Surrounding the area of request, the land to the west is an agricultural field, the land to the south is an RV campground, and the land to the east and north contains the Erie Canal. Also to the north of the segment and running parallel to the segment, is a high voltage electrical transmission line.

11. **Noise:** Describe current noise levels at the special permit inspection area. Will noise levels change because of the request? Are there any state or county noise ordinances applicable to the special permit inspection area?

Noise is not currently detectable in the area of request, as the pipeline is buried throughout the area. The request would not impact noise levels, as no project is associated with the request. The Town of Macedon does have a noise ordinance, which can be viewed on the Town of Macedon's website at http://ecode360.com/11035833, and which would need to be followed in the event that PHMSA would deny Empire's request which would result in Empire replacing the section. Town Code Section §80-8(B) limits noise levels from a construction site to 80 dBA when measured at a distance of 400 feet from the construction site between the hours of 7:00am-6:00pm prevailing time, and Section §80-8(C) limits noise levels to 70 dBA during the hours of 6:00pm-7:00am at a distance of 400 feet from the construction site.

12. **Recreation:** Describe any recreational resources in the special permit inspection area. Will they be impacted by the request?

An RV campground has been constructed to the south of the requested special permit segment, resulting in a class location change from Class 1 to Class 3 and Empire's request for additional special permit segment. Minor impacts are anticipated due to surface inspection activities associated with various Special Permit conditions.

13. **Safety:** Describe safety concerns with operation of this pipeline.
    a. Would operation under a special permit change the risk of rupture or failure?

    Empire's alternative risk control activities as a result of the Special Permit provide a margin of safety and environmental protection that equals or exceeds that provided by the measures required under 49 C.F.R. §192.611. Accordingly, revising the Special Permit to include Segment 6 will not increase the risk of rupture or failure.

    b. If a failure occurred, would consequences and spill or release volumes be different if PHMSA granted the permit? Would granting this permit increase, decrease, or have no change on the risk of failure?

    The consequence of a failure would not be affected by granting an additional Special Permit segment. Volume of gas released would not differ based on whether the request is granted or denied.

    c. Would the Potential Impact Radius (PIR) of a rupture change under the special permit? Please calculate and provide the PIR data, if applicable. Would more people be affected by a failure if PHMSA granted the permit?

    The PIR of this 24-inch O.D., 1,000 psig MAOP section is calculated to be approximately 524 feet, and would not change based on whether PHMSA grants the request to include the section as a special permit segment.

    d. Would operation under the special permit have an effect on pipeline longevity or reliability? Would there be any life cycle or maintenance issues?

Due to the increased integrity management-related inspection and maintenance activities detailed in the answers to Question B.4 and Alternative 2, operation under the special permit would not be a detriment to pipeline longevity or reliability. No life cycle or maintenance issues are anticipated as a result of grant of the request.

14. **Socioeconomics:** In economic terms, describe the population in the affected area. Will this project be situated in, or disproportionately impact, any predominantly low income populations?

No construction project is associated with the request. The pipe segment in the area of request crosses two (2) properties. One property is the newly constructed RV campground, and the other property is an agricultural field. Any future construction that may occur is anticipated to have limited impacts on local revenues, transportation taxes, housing or employment. The pipeline segment is not situated in a predominantly low income population, and would not disproportionately impact predominantly low income populations. The immediate surrounding area does not contain a predominantly low income population.

15. **Topography:** Describe the topography of the affected area. Will it be impacted by your request (i.e. will there be construction or other ground disturbing activities)?

The area contains slopes at approximately 15% maximum along the requested Special Permit segment. Existing topography will not be impacted by the request. Construction or ground disturbing activities may occur in the event the request in denied, after which the surface would be restored to pre-existing conditions.

16. **Transportation:** How will the special permit segments be accessed? Will your request increase traffic or require additional roads to be constructed or more frequently maintained?

Minor impacts related to the increased inspection and maintenance activities associated with special permit conditions are expected, and would likely be accessed via the RV Park access road. These impacts are not expected to increase traffic or require additional roads to be constructed or more frequently maintained.

17. ***Water Resources***: Describe any surface waters, wetlands (including seasonal or ephemeral), or drinking water aquifers in the special permit inspection area.

Attachment EAQ4 includes a discussion of surface waters, wetlands and drinking water aquifers in the requested ***special permit segment 6*** *as well as the five (5) existing special permit segments. Please refer to Attachment EAQ4.*

D. Comparative Environmental Impacts of Alternatives

18. Explain how the proposed conditions will ensure pipeline safety and integrity to at least the same extent that full compliance with the Pipeline Safety Regulations would.

The relevant segment of pipeline was constructed in 1993 and underwent a post-construction in-line inspection (ILI) utilizing a caliper geometry tool. A subsequent magnetic flux leakage (MFL) ILI in 1994 revealed no metal loss anomalies (reportable >20% wall loss) in the area of request. Another ILI run in 2004 utilized caliper and HRMFL technology and revealed no reportable anomalies in the area of request. Finally, a fourth ILI was conducted in 2011 utilizing MFL technology, which again revealed no anomalies in the area of request. A close interval survey (CIS) of the requested segment was conducted in 2009, with no "off" readings under 0.850-V observed along the area of request.

Full compliance with Pipeline Safety Regulations would require Empire to replace this segment to maintain the current MAOP, however the extensive inspection history of the segment and the lack of anomalies discovered through those inspections suggests that replacing the section would not provide a significantly higher level of safety over that of the current segment.

Further, the increased level of integrity management-related inspection and maintenance activities detailed in the answers to Question B.4 and Alternative 2 show that both the type and frequency of inspections for the segment of request would result in an increased level of safety over current Pipeline Safety Regulations.

19. Explain how or whether a pipeline failure would differ under the proposed special permit? How would human safety be impacted? How would the natural environment be impacted?

Given that Empire would maintain the current MAOP of 1,000 psig if the request is granted, and that if the request is not granted Empire would replace the section with another section of pipe of like diameter that would allow the line to maintain the 1,000 psig MAOP, the PIR of the section is expected to remain the same regardless of whether the request is granted. Given the identical PIR, the effects of a pipeline failure are not anticipated to change based on whether the request is granted. Likewise, no impacts to human safety are anticipated as a result of the request. If PHMSA were to deny the request, minor impacts to the natural environment are expected to result from replacing the segment and restoring the landscape to its previously existing condition.

Consultation and Coordination

- Please list the name, title and company of any person involved in the preparation of this document.

  - *Jim Bogdan, Integrity Manager, National Fuel Gas Supply Corporation*
  - *Bruce Clark, Senior Environmental Compliance Manager, National Fuel Gas Supply Corporation*
  - *Andrew Emhof, Engineer II, National Fuel Gas Supply Corporation*
  - *Randy Goodman, Senior District Manager, National Fuel Gas Supply Corporation*
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  - *Ronald Kraemer, President, Empire Pipeline, Inc.*
  - *Mike Mittner, Senior GIS Analyst, National Fuel Gas Supply Corporation*
  - *Jeff Morris, Senior Engineer II, National Fuel Gas Supply Corporation*
  - *Jim Morris, Engineer II, National Fuel Gas Supply Corporation*
  - *Dave Reitz, Deputy General Counsel, National Fuel Gas Supply Corporation*
  - *Tom Robitaille, CPESC, Haley & Aldrich, Inc.*

- Please provide names and contact information for any person or entity you know will be impacted by the special permit. PHMSA may perform appropriate public scoping. The applicant's assistance in identifying these parties will speed the process considerably.

  - *Twilight on the Erie RV Resort*
    1100 Marina Parkway
    Macedon, NY 14502
    Attn: Kevin Heald
    Phone: 315-986-7337

- If you have engaged in any stakeholder or public communication regarding this request, please include information regarding this contact.

  Landowner of Twilight on the Erie RV Resort was contacted to verify the site is an active HCA. Empire has not conducted any further communications, since the nature of the request does not involve further earth disturbance activities.

Bibliography

- If you've consulted a book, website, or other document to answer the question, please provide a citation. It does not need to be formal, just enough information that PHMSA could find the document if necessary.

  - *Empire Special Permit Renewal – May 20, 2015 through May 20, 2020*
    - *Docket No. PHMSA-2008-0213*
  - *Empire's Request to PHMSA for an additional Special Permit Segment – August 19, 2016*
    - *Docket No. PHMSA-2008-0213*
  - *Indian Reservations in the Continental United States – PDF map*
    - *https://www.nps.gov/nagpra/DOCUMENTS/RESERV.PDF*
  - *Town of Macedon Code, Chapter 75: Land Use and Public Works*
    - *http://ecode360.com/11034870*
  - *Town of Macedon Code, Chapter 80: Noise*
    - *http://ecode360.com/11035833, §80-8 Construction Activities*
  - *United States Census Bureau – Town of Macedon demographic information page*
    - *http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_DP05&src=pt*

Acronym List

- API 5LX – American Petroleum Institute Specification for Line Pipe
- CFR – Code of Federal Regulations
- CIS – Close Interval Survey
- CMTR – Certified Mill Test Report
- CP – Cathodic Protection
- D – Pipe Outside Diameter (from Barlow's formula)
- dBA – A-Weighted Decibels
- EAQ – Environmental Assessment Questionnaire
- HCA – High Consequence Area
- HRMFL – High-Resolution Magnetic Flux Leakage
- ILI – In-Line Inspection
- MAOP – Maximum Allowable Operating Pressure
- MFL – Magnetic Flux Leakage
- MP – Mile Post

- OD – Outside Diameter
- PHMSA – Pipeline and Hazardous Materials Safety Administration
- PIR – Potential Impact Radius
- PSIG – Pounds per Square Inch Gauge
- RV – Recreational vehicle
- SMYS – Specified Minimum Yield Strength (from Barlow's formula)
- t – Wall Thickness (from Barlow's formula)

Attachment L – Finding for Special Permit Segment 6

Findings - Special Permit Segment 6

PHMSA has analyzed the safety and environmental risks associated with the issuance of this special permit adding **special permit segment 6**. PHMSA has imposed conditions in the special permit designed to protect the public, property, and the environment from the risk of a pipeline leak or failure. Accordingly, PHMSA finds that the issuance of this special permit to Empire Pipeline will have no significant impact on the quality of the human environment.

List of Preparers and Reviewers - Special Permit Segment 6

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