APPENDIX E

CASE 10-T-0189

REVISED DEVIATION ZONE JUSTIFICATION SEGMENT 3 - PACKAGE 1C



Appendix E Case 10-T-0139 JUSTIFICATION FOR DEVIATION ZONE EXCURSIONS SEGMENT 3-PACKAGE 1C

1.0 INTRODUCTION

Champlain Hudson Power Express (now CHPE LLC and CHPE Properties, Inc.) (collectively the "Certificate Holders" or "CHPE") hold a Certificate of Environmental Compatibility and Public Need ("Certificate") issued April 18, 2013 by the New York State Public Service Commission ("PSC") pursuant to Article VII of the New York Public Service Law (PSL) to construct and operate the transmission project known as the Champlain Hudson Power Express Project (the "Facility") (PSC Case 10-T-0139). In the April 2013 Order approving the Certificate, and in amendments approved between August 2020 and February 2022, the PSC approved a Facility route, as depicted on a series of maps included as Appendix B of a Joint Proposal reached among the parties to case 10-T-0139 (and as amended). The Facility route, as depicted on a series of maps included as Appendix B of the Joint Proposal and as amended, consists of a nominal centerline (the "Centerline") and an Allowed Deviation Zone ("ADZ"). Those portions of the ADZ that are ultimately determined to be actually affected by construction of the Facility, as well as certain areas outside the ADZ that are needed temporarily for site investigation, access, and construction, are referred to as the "Construction Zone." When the Facility is completed, the Certificate Holders will have either control of-via fee, easement, or other appropriate interest-or rights granted by a governmental authority to use such authority's permanent right of way (ROW), and certain adjacent areas as defined in Certificate Condition #5, which states:

The portions of the Allowed Deviation Zone to be occupied by the Facility once construction is complete are referred to herein as the Facility ROW. The Certificate Holder shall also acquire and maintain the continuing right to enter onto and use certain additional lands immediately adjacent to the Facility ROW needed for repair and maintenance purposes, including preclusion of vegetative encroachment, on terms prohibiting the owners of such land from taking any action on that land that would interfere with such repair and maintenance activities.

The Certificate Conditions require that, should cable installation work be proposed outside of the ADZ, an explanation for the proposed deviations must be provided pursuant to Certificate Condition 157. Provided that criteria are met, Condition 157 of the Certificate confers discretion



on the Public Service Commission to approve Environmental Management Construction Plan ("EM&CP") filings which include "deviations from the design depth, height, and location of facilities or structures." Specifically, Condition 157 states that deviations "shall be allowed for appropriate environmental or engineering reasons without modification to [the] Certificate, except where a conflict with a specific provision of this Certificate would be created." The purpose of this memorandum is to demonstrate the appropriate environmental and engineering reasons for the proposed modification to the Allowed Deviation Zone in Segment 3-Package 1C, and to show that the deviation creates no conflict with the other Certificate Conditions.

As part of the EM&CP filing of Segment 3, the Certificate Holders are proposing minor shifts in the proposed conduit outside of the ADZ as described in Table 1.3 of the EM&CP and in Table 1 below. This memorandum provides the required supporting materials necessary for DPS staff to review and approve this minor deviation as part of the EM&CP process. Specifically, this includes:

- 1. A detailed description of and justification for each of the ADZ Excursion areas based upon appropriate environmental and engineering reasons, including a demonstration that the exceedance is limited to the minimum extent necessary (i.e. the smallest deviation zone exceedance area plausible based on design and construction constraints).
- 2. Confirmation that Certificate Holders have either (1) obtained or are in the process of obtaining rights to occupy and use the land(s) associated with any such ADZ excursions (ADZ Excursions) and the consent of any and all landowners owning any part of the ADZ Excursion area to the occupancy and use of their land(s) for Facility purposes and are in the process of recording those rights with the appropriate County office, where required, (see Easement Table 4.4 in EM&CP), and/or (2) have provided notice to any and all landowners owning any part of the ADZ Excursions with a written offer to such landowner for such rights to occupy and use their land(s) for Project purposes as would be needed for Certificate Holders under Section 11 of the Transportation Corporations Law.
- 3. A demonstration that any net incremental environmental impacts arising as a result of the construction, operation, and maintenance of the Facility in the ADZ Excursion areas are not material.
- 4. A demonstration that installation of the Facility cables in the ADZ Excursion areas will not substantially change the overall character of the Facility or otherwise conflict with the other Certificate Conditions.



2.0 DEVIATION ZONE EXCURSIONS SUMMARY

The ADZ in Segment 3-Package 1C is located predominately adjacent to existing CP Rail ROWs. The Certificate Holders have endeavored to keep the Facility located within the currently approved ADZ; however, certain physical limitations and obstacles have resulted in necessary shifts in the Facility location. Excursions from the ADZ have been identified at 7 unique locations along the Segment 3-Package 1C Project Corridor. Table 1 identifies each excursion, their location on the Plan and Profile Drawings (Appendix C of the EM&CP), a justification for the excursion, and if there is any change in environmental impact (see also Table 1.3 of the EM&CP). It is worth noting that some of these excursions consists mainly of construction via trenchless technologies (e.g., horizontal directional drill [HDD]) such that additional earth disturbance of adverse impacts can be avoided. Overall, these changes do not substantially change the overall character of the Facility or the proposed route, which still generally runs parallel to the CP Rail ROW as approved in the Certificated Route.



Deviation Zone Excursion Number	Parcel ID	Sheet Number	(Approxin Dray for D	ntion mate – see vings etails)	Justification for Revision	Change in Environmental Impact
	60.05 4.10	G 102	Start	Stop		N
Excursion	60.05-4-18	C-103	15032+20	15032+83	Avoid Bridge Abutment at Poultney Street and design	None – no resources present
S3-P1C #1	60.09-2-8.6 60.09-2-8.6		15034+55	15040+05	requirements associated with Splice Location 031	
Excursion S3-P1C#2	60.09-2-8.6	C-104	15045+18	15054+62	Avoid existing utilities and steep slope adjacent to railroad tracks	None – no resources present
Excursion	692-11	C-112	15169+48	15179+84	Steep slopes on the west side of the rail were not	Wetland G-R-U/G-R-V is
S3-P1C#3	691-1	C-112, C-113	15179+89	15188+63	constructible; the alignment crosses to the East side of rail ROW. The conduit was not able to be constructed immediately adjacent to the rail because of the slope and Railroad requirements (zone of influence). The ROW is narrow in this location resulting in a DZ excursions.	impacted by alignment outside the DZ, the old Champlain Canal and surrounding wetlands and agricultural areas are avoided by crossing to the east side of the tracks.
Excursion S3-P1C#4	691-1	C-114, C-115	15196+49	15219+20		Wetland G-R-W is impacted by alignment outside the DZ, the old Champlain Canal and surrounding wetlands areas are avoided by crossing to the east side of the tracks.
Excursion S3-P1C#5	771-4.1	C-115 to C-117	15222+65	15252+45	HDD#6, Splice 38; steep slope adjacent to railroad.	Wetland G-R-X
Excursion	771-4.1	C-118	15255+50	15257+88	HDD#7 work area utilities and steep slope adjacent to	Wetland G-R-X
S3-P1C#6	861-5	C-118	15257+88	15263+84	railroad.	
		C-118 to				
	861-2.1	C-119	15263+84	15273+56		
	861-6	C-119	15273+56	15281+05		
	861-18.1	C-119	15281+33	15283+04		
Excursion S3-P1C#7	691-1	C-121	15301+73	15304+55	HDD#8 work area	None

Table 1 - Deviation Zone Excursions in Segment 3 – Package 1C



2.1 EXCURSION S3-P1C #1

2.1.1 Description of the Excursion

The alignment exits the railroad ROW on the west side of the ROW at station 15032+20, crosses under the Poultney Street Bridge, remains outside the ROW for splice location 031, and then enters the ROW again at approximately 15040+61. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S3-P1C#1 and ultimate Facility ROW is included in the attached figure set.

2.1.2 Justification

The slight excursion is required in order to avoid the bridge abutment and the work area for splice location 031. The splice work area must be placed perpendicular to the alignment and therefore there is not enough space for the splice work area between the tracks and the alignment at this location. Due to this spatial requirement, the alignment leading up to and out of the splice, and the splice itself will be placed outside and parallel to the ADZ for a total of approximately 613 linear feet. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

2.1.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the area Excursion S3-P1C#1.

2.2 EXCURSION S3-P1C #2

2.2.1 Description of the Excursion

For Excursion area S3-1C#2, the alignment leaves the railroad ROW on the west side from approximately 15045+14 to 15054+62 for approximately 1,048 linear feet. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S3-P1C#2 and ultimate Facility ROW is included in the attached figure set.



2.2.2 Justification

The narrow area adjacent to the railroad tracks within the ROW already has several utilities that the alignment needed to avoid. To the west of the utilities is a steep slope and the edge of ROW is at the bottom of that slope, so the alignment needed to deviate from the ROW slightly for 948 linear feet to be able to construct the project. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation while avoiding conflicts with existing utilities and railroad operations.

2.2.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the area Excursion S3-P1C#2.

2.3 EXCURSIONS S3-P1C #3 AND S3-P1C#4

2.3.1 Description of the Excursion Areas

For Excursion S3-P1C#3, the alignment shifts onto the east side of CP Rail at approximately Station 15169+45 utilizing HDD (HDD#4A). The ROW narrows as the rail crosses over the canal and the slope on the west side of the tracks is too steep to construct the conduit. The area adjacent to the toe of the slope on the west side and adjacent to the old Canal is too wet for construction as well. After 1,905 linear feet outside the ADZ, the alignment shifts back into the railroad ROW at approximately 15188+50 but remains on the east side of the tracks. The alignment shifts outside of the railroad ROW for Excursion S3-P1C#4 for approximately 2,211 linear feet at approximately 15197+75 until 15218+86 where it crosses the tracks utilizing HDD (HDD#6). Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area and ultimate Facility ROW is included in attached figure set.

2.3.2 Justification

The Certificate Holders have endeavored to keep the Facility located within the currently approved ADZ; however, certain physical limitations and obstacles, including the historic Canal Crossing and wetland areas, have resulted in Excursion S3-P1C#3 and S3-P1C#4 between HDD#4A and HDD#6. The alternative to this exceedance is to impact the historical canal channel and surrounding wet areas. Additionally, a review of the slope on the east and west sides of the railroad ROW at this location determined that the slope was too steep to construct the alignment on either side of the track. The toe of the slope on the west side is adjacent to the historical canal channels



and with very poor drainage. The east side of the tracks was chosen for the alignment. This ADZ Excursion request is grounded in environmental and engineering reasons and is the minimum necessary to feasibly achieve the installation while avoiding impacts to historic/cultural resources, wetlands and conflicts with railroad infrastructure and operations.

2.3.3 Environmental Impacts

Excursions S3-P1C#3 and S3-P1C#4 constitute a minor change that will minimize environmental impacts while maintaining the overall character of the Facility. As detailed in the sections below, the exceedance areas are not located within agricultural lands, contain no identified archaeological resources, and have limited habitat for state and federally listed rare, threatened, and endangered (RTE) species. While there are some anticipated wetland impacts as a result of the shifted alignment, the Certificate Holders have determined that these impacts are unavoidable in order to avoid the wet area adjacent to the old Canal described above. Moreover, it is unlikely that the Certificated Route could have been constructed at this location without resulting in wetland impacts; these ADZ Excursions do not substantially increase impacts to wetland or cultural resources as compared with the Certificated Route.

2.3.3.1 Agricultural Resources

The Excursions areas S3-P1C#3 and S3-P1C#4 are not located within agricultural lands. Therefore, additional adverse impacts to agricultural resources will not occur from these changes.

2.3.3.2 Archaeological Resources

The Excursions areas S3-P1C#3 and S3-P1C#4 have no known archaeological sites. On the west side of the tracks (for the originally planned alignment) the old historical canal is adjacent to the rail ROW and is considered a historical resource.

The Cultural Resources Management Plan provided in EM&CP Appendix O recommends that this area (Excursion areas S3-P1C#3 and S3-P1C#4) be monitored for archaeological resources during construction due to the small area of impact.

2.3.3.3 Threatened and Endangered Species

Excursion areas S3-P1C#3 and S3-P1C#4 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat. The land is currently



wooded without any active uses. The potential habitat of concern within this general area includes trees that may support roosting bats during the summer and potential foraging area for the timber rattlesnake. Although the alignment will shift outside of the railroad ROW which is considered previously disturbed habitat, no significant impacts to federally listed or state-listed species or habitat are expected based on the implementation of best management practices. These best management practices include conducting tree clearing and tree trimming activities during bat hibernation periods (November 1 to March 31) to the maximum extent practicable and avoidance of aquatic habitat. Additional information regarding the best management practices that will be implemented to minimize and or avoid impacts to species and habitat are provided in Table 9.3 in Chapter 9 of the Segment 3-Package 1C/2 EM&CP. Habitat descriptions are provided in Appendix T.

2.3.3.4 Wetlands and Streams

The change to excursion areas S3-P1C#3 and S3-P1C#4 is necessary to avoid impact to the historical canal channels on the west side of the tracks and their adjacent low-lying, poorly drained wet areas. Locating the work along the east side of the tracks does result in wetland impacts that the Certificate Holders were unable to avoid including wetlands IDs G-R-U (PFO), G-R-V (PFO), and G-R-W (PSS, PFO) as described in Table 9.2 of the EM&CP. These impacts include 8,467 square feet of permanent ROW impacts.

2.4 EXCURSIONS S3-P1C#5 AND S3-P1C#6

2.4.1 Description of the Excursion Areas

For Excursion S3-P1C#5, the alignment shifts onto the west side of CP Rail at approximately Station 15222+65 in HDD#6. The alignment is within HDD (no surface impact) until the exit pit for HDD#6 at approximately 15232+38. The trench then follows the west side of the ROW until the ROW widens at approximately 15252+45. The railroad ROW at this area of the alignment is narrow and the length of the excursion is approximately 2,980 feet. Pursuant to Condition 138, a detailed map showing the location and boundary of the Excursion S3-P1C#5 and ultimate Facility ROW is included in the attached figure set.

For Excursion S3-P1C#6, the alignment shifts out of the ROW to the west starting at the work area for HDD#7 entry pit at approximately 15255+50 and continues along the western edge of the ROW until the south side of Ryder Road at approximately 15283+04. Pursuant to Condition 138, a detailed map showing the location of the approximately 2,754 linear feet of the excursion, boundary of the Excursion S3-P1C#6 and ultimate Facility ROW is included in the attached figure set.



2.4.2 Justification

The alignment in the Excursion S3-P1C#5 and S3-P1C#6 is narrow and the work area adjacent to the tracks is not wide enough to accommodate the railroad's separation requirements from the track centerline and existing utilities, so the alignment had to be moved to the bottom of the slope. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation while avoiding conflicts with railroad infrastructure and operations.

2.4.3 Environmental Impacts

Excursions S3-P1C#5 and S3-P1C#6 constitute a minor change that will minimize environmental impacts while maintaining the overall character of the Facility. As detailed in the sections below, the exceedance area is not located within agricultural lands, contains no identified archaeological resources, and has limited habitat for state and federally listed rare, threatened, and endangered (RTE) species. While there are anticipated wetland impacts as a result of the shifted alignment, the Certificate Holders have determined that these impacts are unavoidable under both the Certificated Route and in the proposed ADZ Excursion. These ADZ Excursions do not substantially increase impacts to wetland or cultural resources as compared with the Certificated Route.

2.4.3.1 Agricultural Resources

The agricultural lands within the vicinity of the Excursions area S3-P1C#5 and S3-P1C#6 are not expected to be adversely impacted by the installation of the alignment as the majority of construction will take place utilizing HDD. Therefore, additional adverse impacts to agricultural resources will not occur from this change.

2.4.3.2 Archaeological Resources

The Excursions areas S3-P1C#5 and S3-P1C#6 have no known archaeological sites and monitoring is not required.

2.4.3.3 Threatened and Endangered Species

Excursion areas S3-P1C#5 and S3-P1C#6 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitats. The land is currently wooded without any active uses. The potential habitat of concern within this general area



includes trees that may support roosting bats during the summer and potential foraging area for the timber rattlesnake. Although the alignment will shift outside of the railroad ROW which is considered previously disturbed habitat, no significant impacts to federally listed or state-listed species or habitat are expected based on the implementation of best management practices. These best management practices include conducting tree clearing and tree trimming activities during bat hibernation periods (November 1 to March 31) to the maximum extent practicable and avoidance of aquatic habitat. Additional information regarding the best management practices that will be implemented to minimize and or avoid impacts to species and habitat are provided in Table 9.3 in Chapter 9 of the Segment 3-Package 1C/2 EM&CP. Habitat descriptions are provided in Appendix T.

2.4.3.4 Wetlands and Streams

The change to excursion areas S3-P1C#5 and S3-P1C#6 is necessary to due to the narrow ROW, steep slope and existing utilities adjacent to the tracks. The excursion area includes HDD6 to avoid impacting the waterbody G-R-S-M (State Designation 830-469 C/C) and some of wetland G-R-X. HDD7 (within S3-P1C#6) avoids impacting parts of wetland G-R-X.

However, some of wetland G-R-X was unable to be avoided as described in Table 9.2 of the EM&CP.

2.5 EXCURSION S3-P1C #7

2.5.1.1 Description of the Excursion Area

For Excursion area S3-1C#7, the alignment leaves the railroad ROW for the transition between the CP Rail ROW in Package 1C at 15301+73 and the ROW for Route 4 at 15304+55 which is approximately 282 linear feet. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S3-P1C#7 and ultimate Facility ROW is included as in attached figure set.

2.5.1.2 Justification

The narrow area adjacent to the railroad tracks within the ROW already has several utilities that the alignment needed to avoid. To the east of the utilities is a steep slope and the edge of ROW is at the bottom of that slope, so the alignment needed to deviate from the ROW slightly to be able to construct the project. This ADZ Excursion request is grounded in engineering reasons and is the



minimum necessary to feasibly achieve the installation while avoiding conflicts with existing utilities and railroad operations.

2.5.1.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the area Excursion S3-PC#7.

3.0 CONCLUSION

The adjusted route at the various excursions in Segment 3-Package 1C presented above do not significantly increase adverse environmental impacts. Impacts associated with this work have been minimized and mitigated and can be addressed by the Certificate Conditions and Best Management Practices already approved by the Commission for the Facility. The deviations requested are necessary for appropriate engineering and environmental reasons and do not conflict with the other Certificate Conditions. The Certificate Holders have kept the proposed excursions to the minimum area necessary to ensure construction of the Facility is feasible, while attempting to reduce impacts and stay within the approved ADZ to the extent practicable.

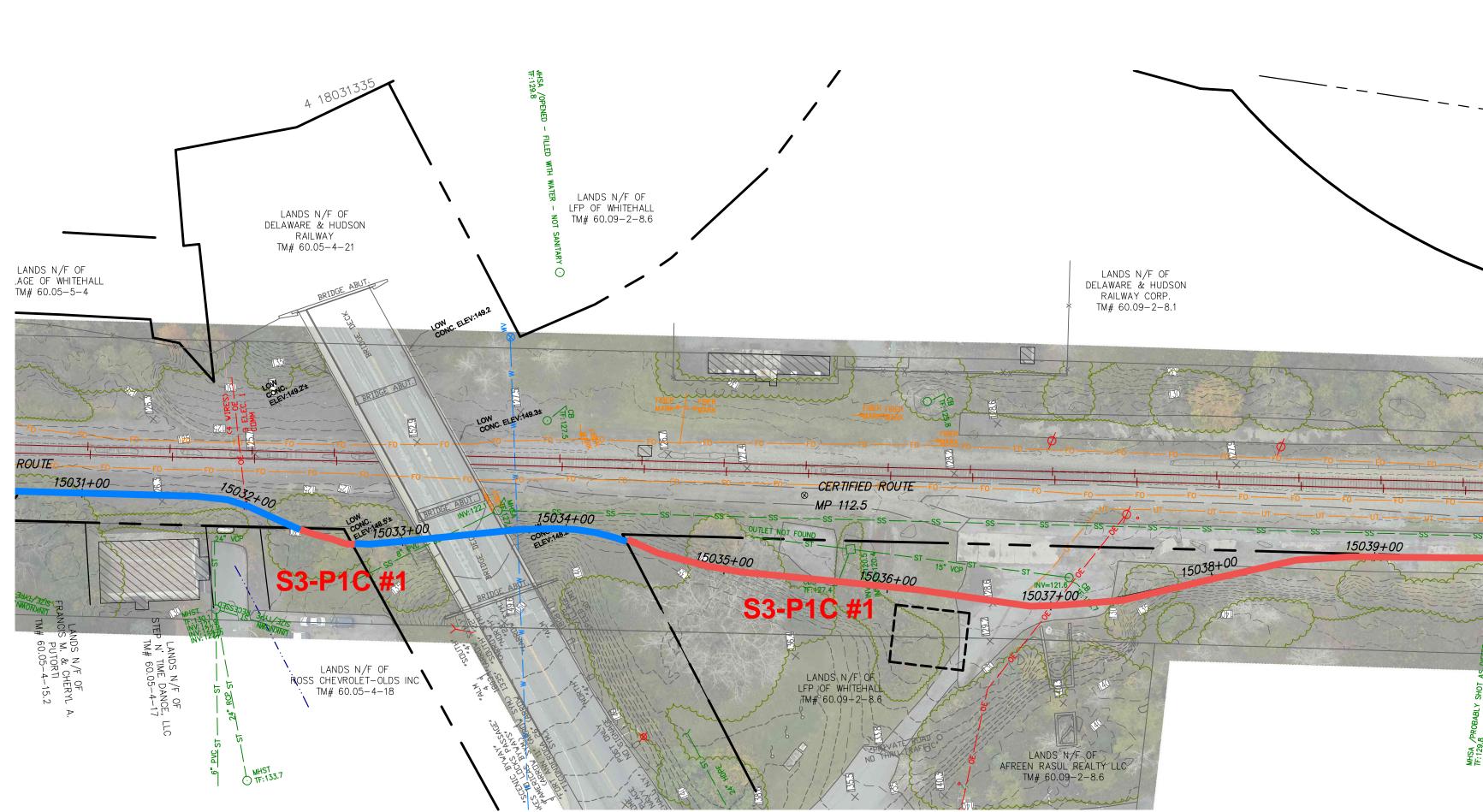
On that basis, the Certificate Holders respectfully request that DPS Staff approve these deviations from the ADZ with the Segment 3-Package 1C EM&CP without modification to the Certificate.

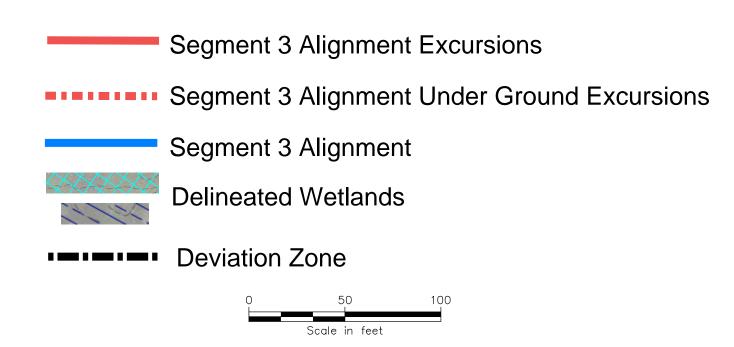
In the alternative, should DPS Staff determine that a Certificate amendment is required to effectuate any of these changes to the ADZ, Certificate Holders respectfully request that the PSC consider this submission in lieu of a separate petition for an amendment, given that this EM&CP submission materially adheres to the same general procedural and substantive requirements which would otherwise be required for such an amendment (such as the dissemination of legal notices to affected landowners, notice to the public and host communities, and a robust justification for the changes requested). The ADZ changes will not result in any material increase in environmental impacts from the Facility—and, in fact, are intended to decrease environmental impacts at certain locations—and do not substantially change the location of the Facility for the reasons described in this memorandum. While the Certificate Holders do not believe that the adjustments outline in this memorandum constitute an amendment to the Certificate, should an amendment be necessary, Certificate Holders submit that a hearing is not required or warranted in accordance with PSL Section 123(2).

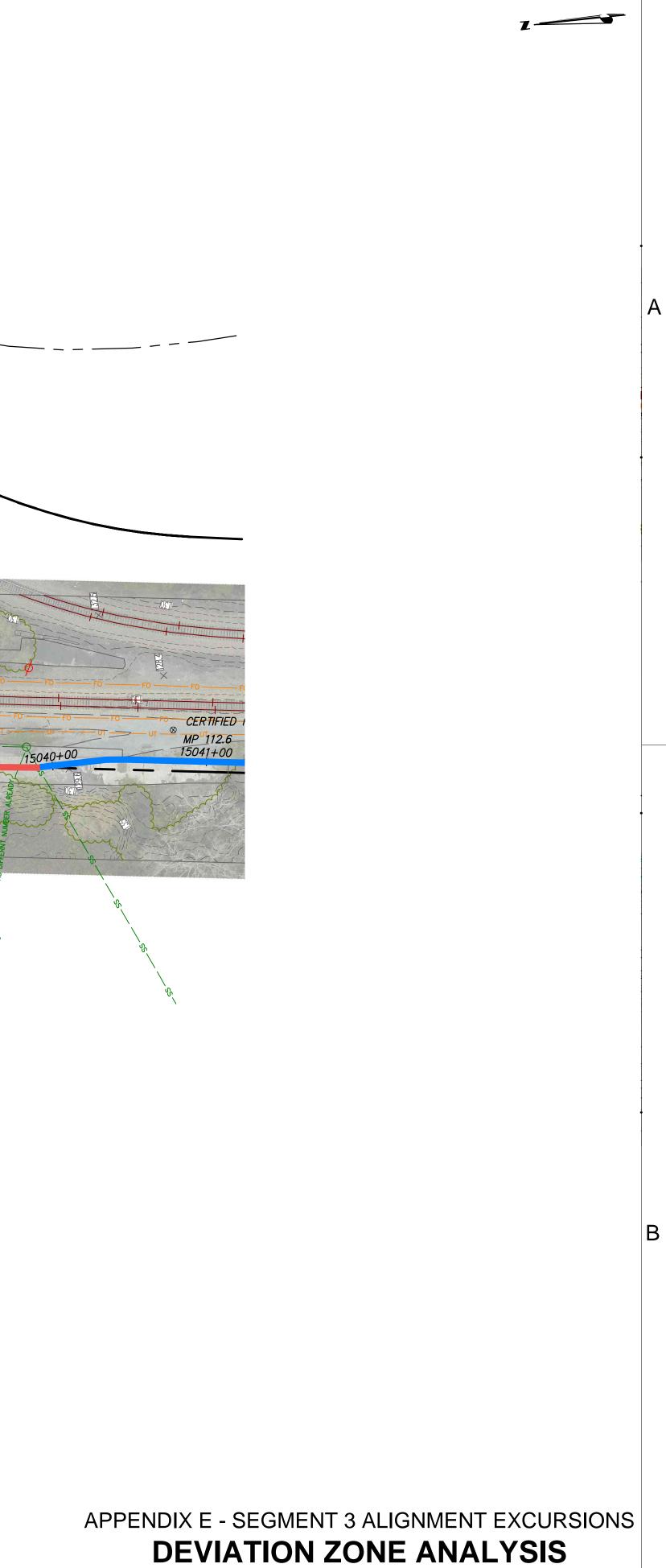




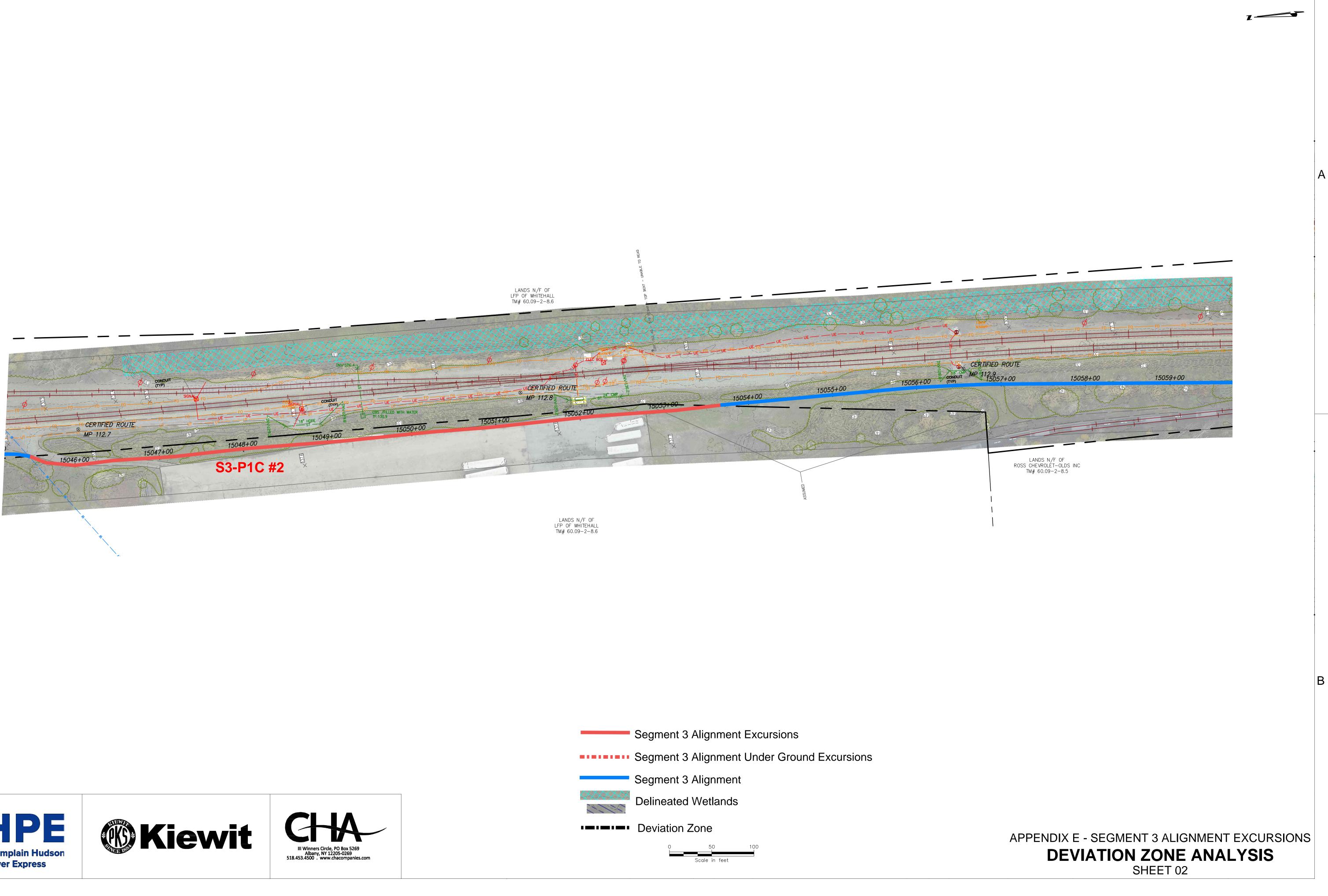








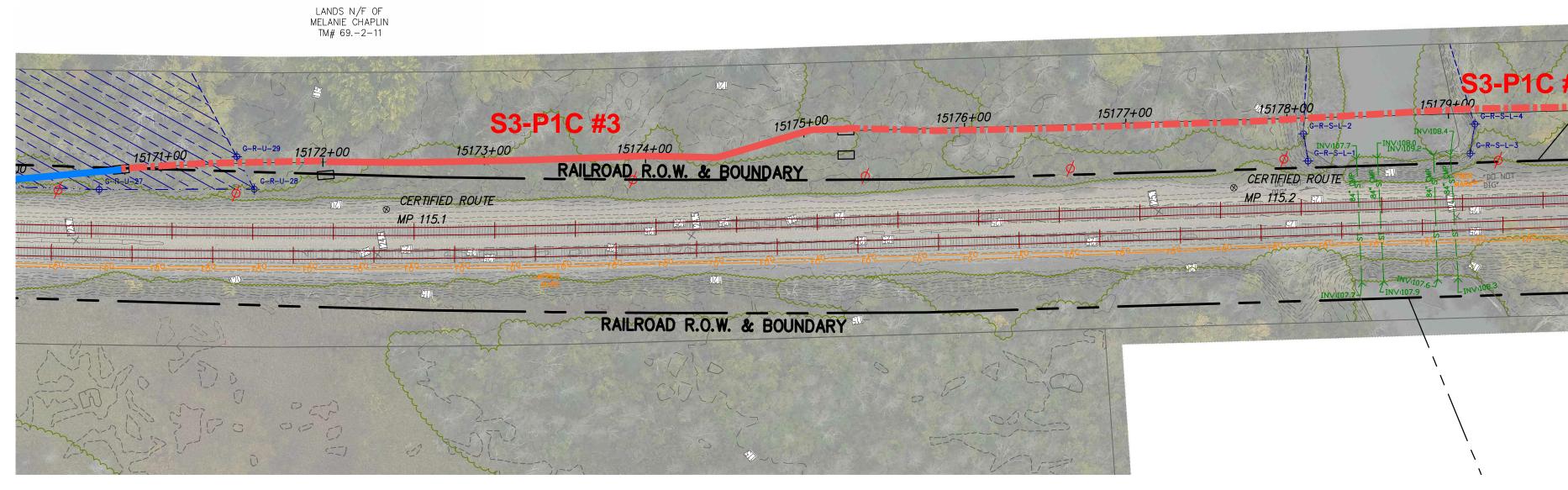
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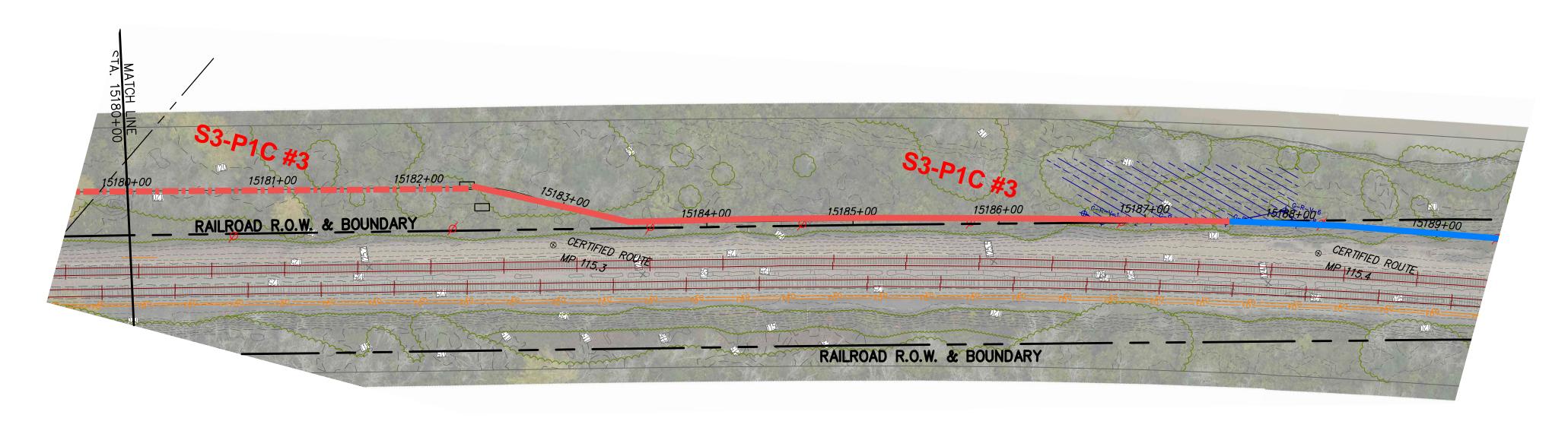








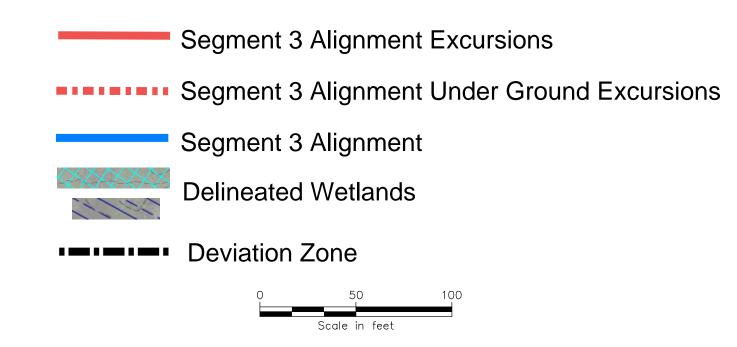


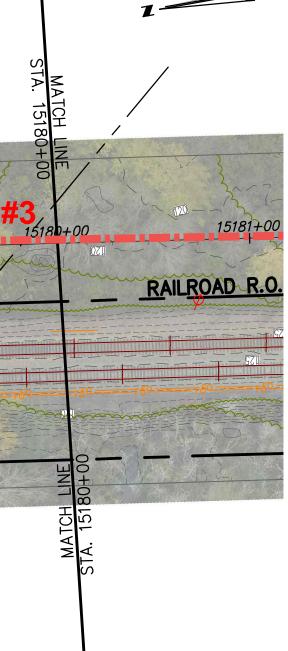








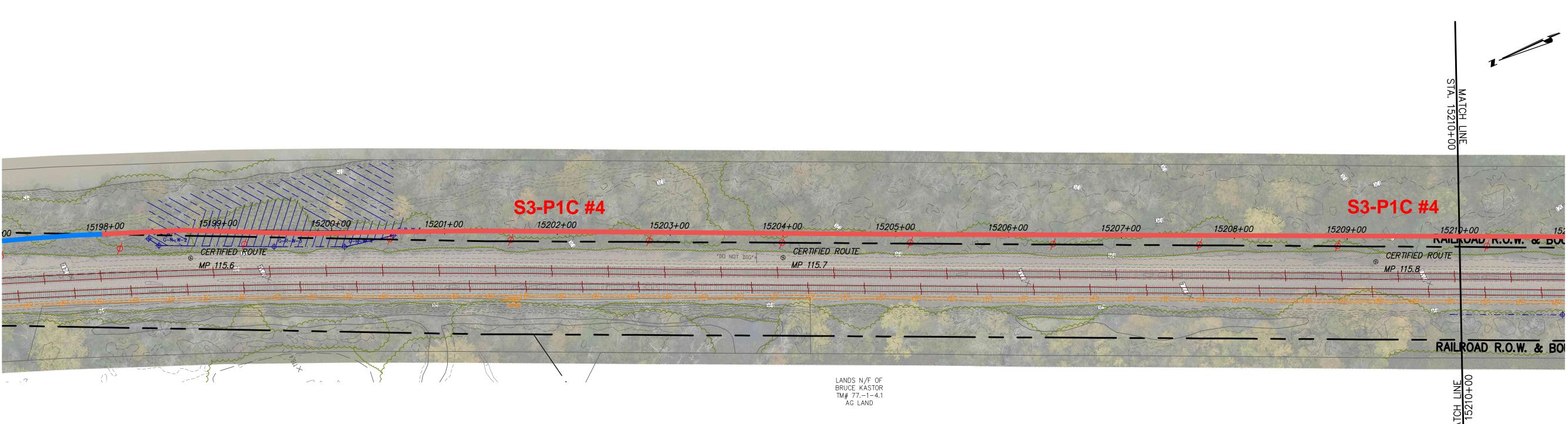


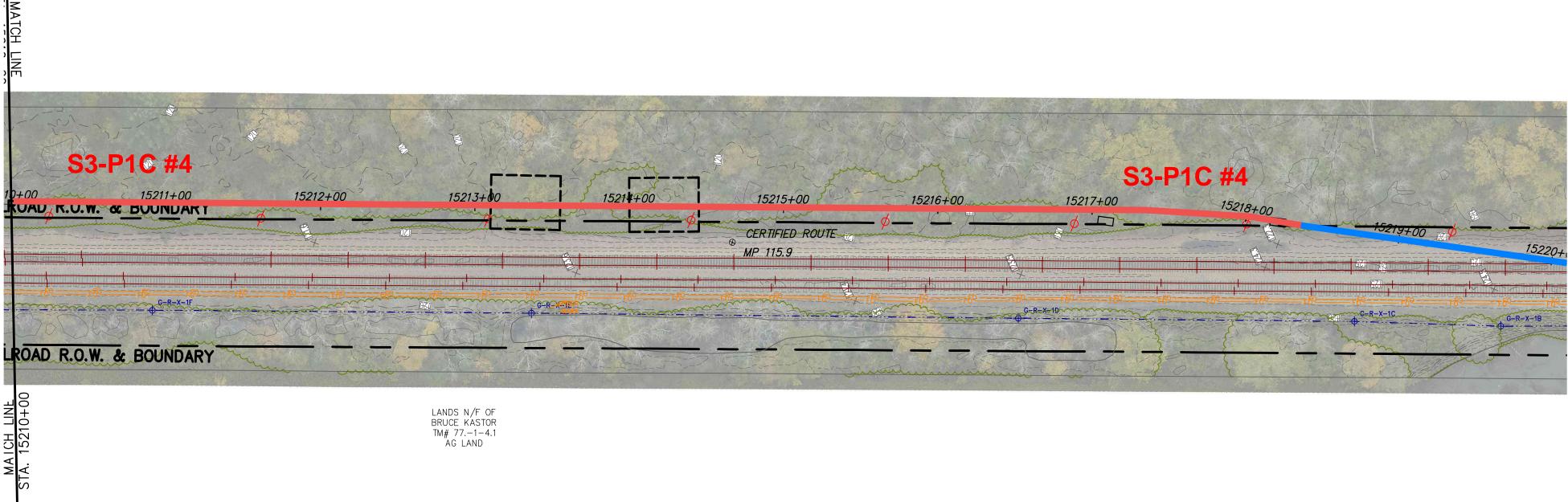


APPENDIX E - SEGMENT 3 ALIGNMENT EXCURSIONS
DEVIATION ZONE ANALYSIS

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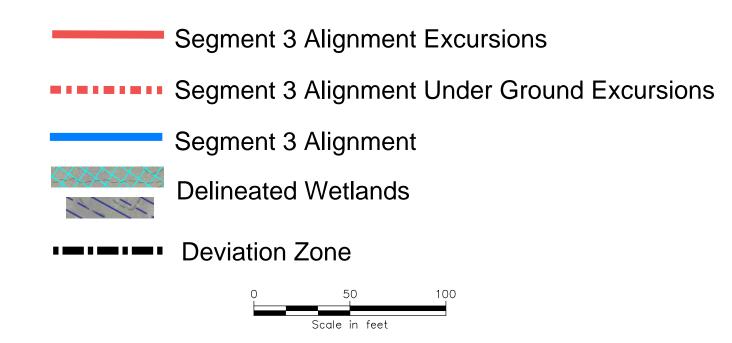








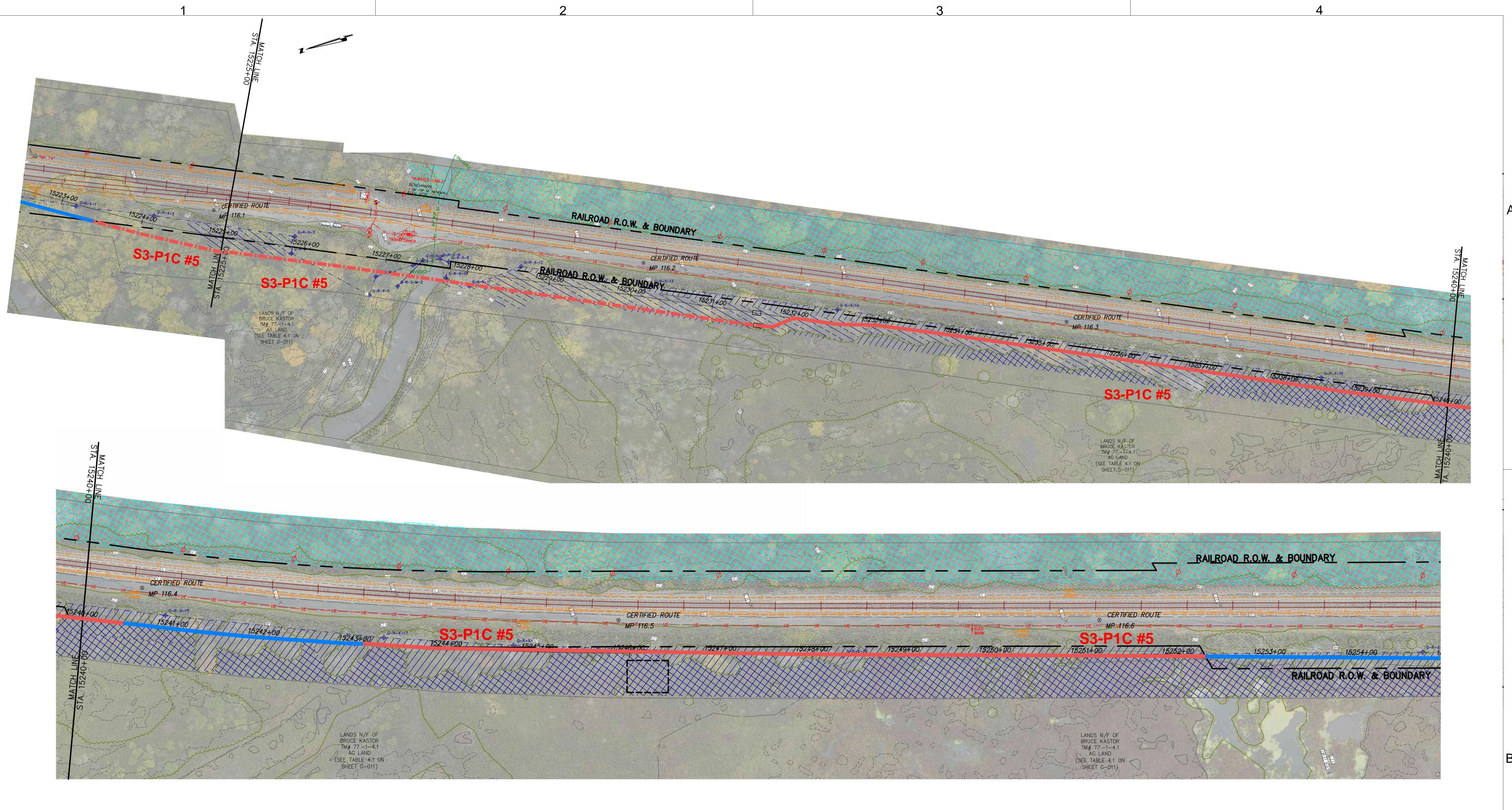




APPENDIX E - SEGMENT 3 ALIGNMENT EXCURSIONS **DEVIATION ZONE ANALYSIS**

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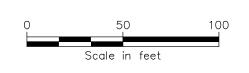






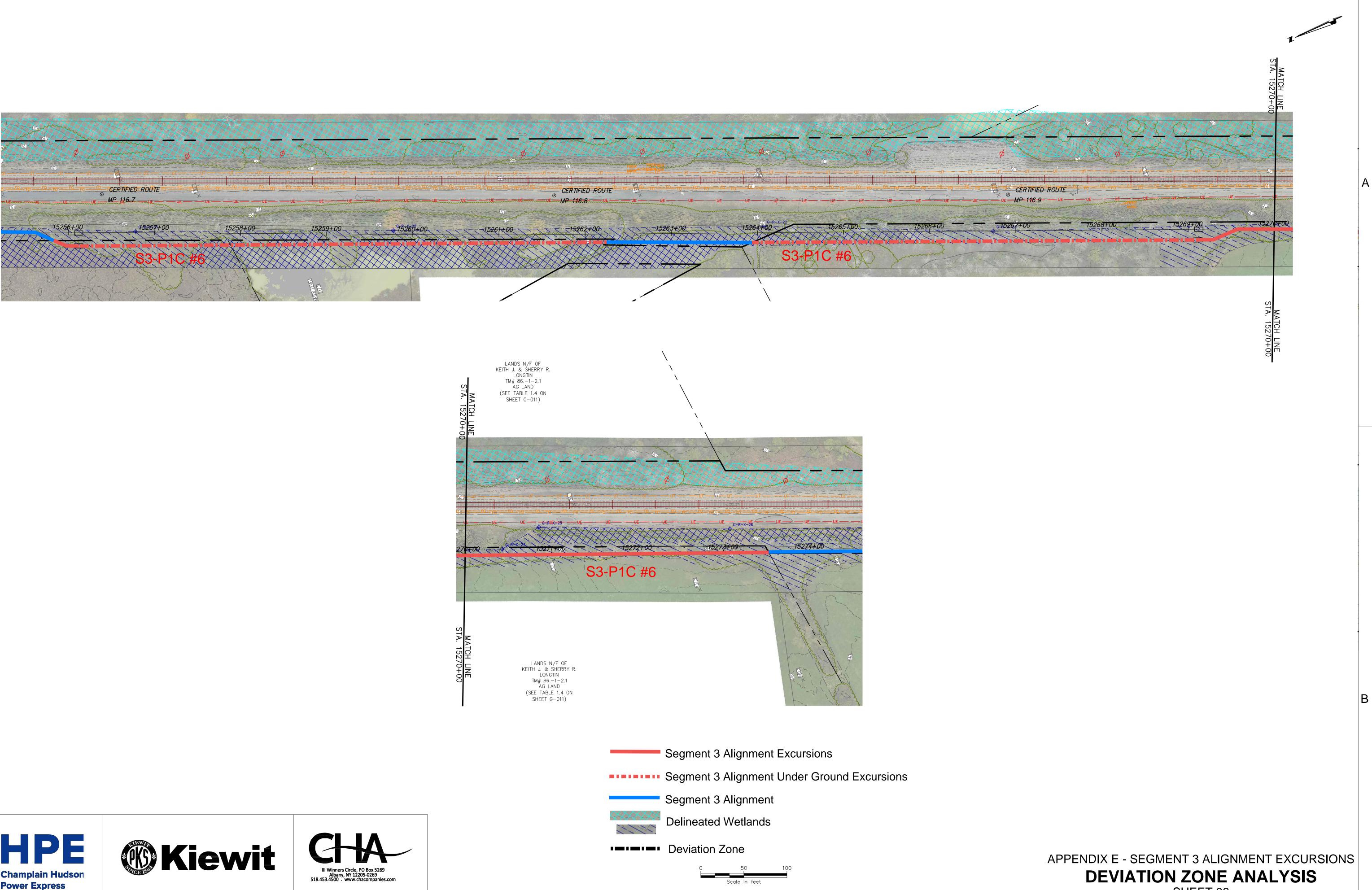


- Segment 3 Alignment Excursions
- Segment 3 Alignment Under Ground Excursions
 - Segment 3 Alignment
- **Delineated Wetlands** 1-1-2
- Deviation Zone



APPENDIX E - SEGMENT 3 ALIGNMENT EXCURSIONS **DEVIATION ZONE ANALYSIS**

SHEET 05







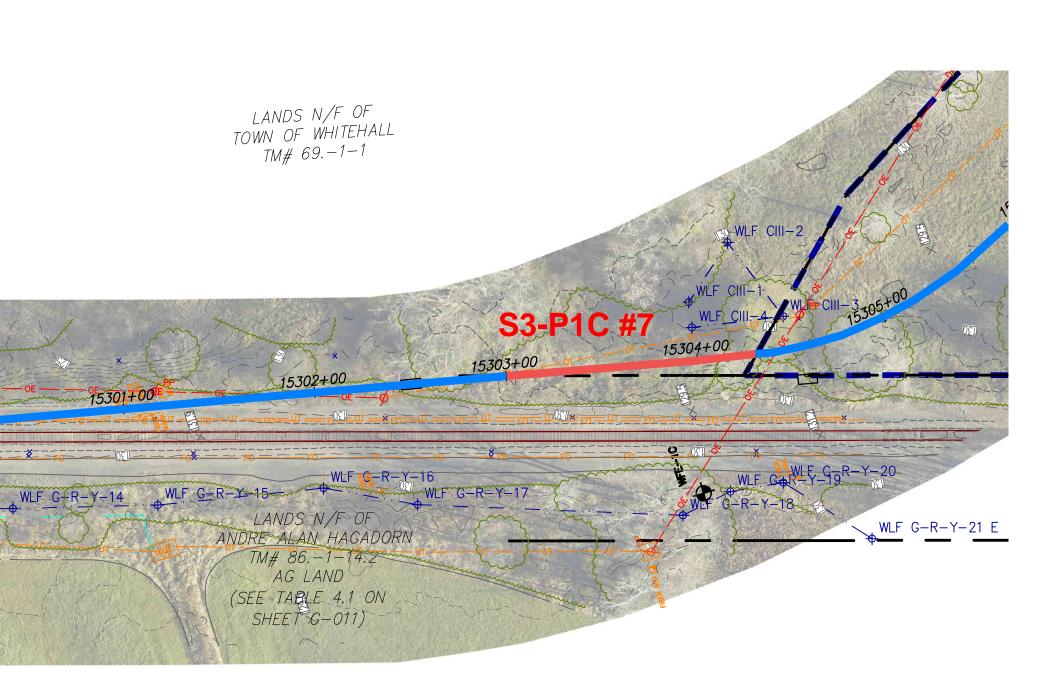


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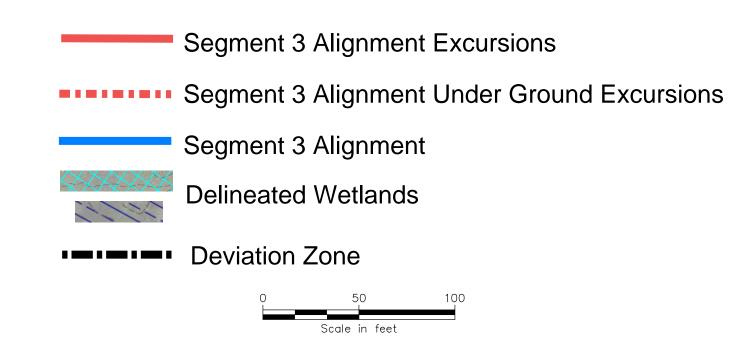








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APPENDIX E - SEGMENT 3 ALIGNMENT EXCURSIONS DEVIATION ZONE ANALYSIS

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