

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Duquesne Light Company :  
filed Pursuant to 52 Pa. Code Chapter 57, :  
Subchapter G, for Approval of the Siting and :           Docket No. A-2019-\_\_\_\_\_  
Construction of the 138 kV Transmission :  
Lines Associated with the **Brunot Island –** :  
**Crescent Project** in the City of Pittsburgh, :  
McKees Rocks Borough, Kennedy :  
Township, Robinson Township, Moon :  
Township, and Crescent Township, :  
Allegheny County, Pennsylvania :

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**APPLICATION OF DUQUESNE LIGHT COMPANY**

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**TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:**

Duquesne Light Company (“Duquesne Light” or the “Company”) hereby files, pursuant to 52 Pa. Code § 57.72, this Application requesting Pennsylvania Public Utility Commission (“Commission”) approval to site and construct approximately 14.5 miles of overhead double-circuit 138 kV transmission lines in the City of Pittsburgh, McKees Rocks Borough, Kennedy Township, Robinson Township, Moon Township, and Crescent Township, Allegheny County, Pennsylvania (Hereinafter called the “ Brunot Island – Crescent Project” or “BI-Crescent Project”). The proposed Project is required to replace aging transmission system infrastructure. The BI – Crescent corridor has some of Duquesne Light’s oldest in-service steel lattice towers. Structural evaluations have determined that the structures are approaching end of useful life. Based on current condition, structure deterioration, and Power Line Systems – Computer Aided Design and Drafting (“PLS-CADD”)<sup>1</sup> modeling at current design codes, all results indicate these

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<sup>1</sup> PLS-CADD is an industry-standard transmission line modeling software.

structures are beyond permanent repair and require replacement. Temporary repairs have been made to ensure reliable service until new replacement structures can be installed.<sup>2</sup>

The proposed Project involves the rebuild of the double-circuit BI – Crescent 138 kV Transmission Line that will extend approximately 14.5 miles between the Brunot Island Substation in the City of Pittsburgh and the Crescent Substation in Crescent Township, the line will tie into the Montour, Sewickley, and Neville Substations along its route.

Through this application, Duquesne Light seeks Commission approval of the siting and construction of the proposed Project. Subject to the Commission’s approval, the project has a scheduled construction start date of June 2020 to meet an in-service date of December 2023. In support of this Application, Duquesne Light states as follows:

**I. INTRODUCTION**

1. This Application is filed by Duquesne Light, a public utility that provides electric distribution, transmission, and provider of last resort services in Pennsylvania subject to the regulatory jurisdiction of the Commission.

2. Duquesne Light’s principal business address is:

Duquesne Light Company  
411 Seventh Avenue  
Pittsburgh, PA 15230

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<sup>2</sup> Separate but concurrently, the Company is submitting the *Petition of Duquesne Light Company for Waiver of Provisions of the Pennsylvania Public Utility Commission’s Regulations at 52 Pa. Code § 57.71 et seq., for the Siting and Construction of Six Structures on an Existing Transmission Line*. This waiver is being requested in order to allow Duquesne Light to replace six structures on an existing high voltage transmission line that were impacted by landslides in the spring of 2018. The six structures in question are part of the Brunot Island-Crescent double-circuit 138 kV Transmission Line between the Brunot Island Substation in the City of Pittsburgh and the Crescent Substation in Crescent Township (“BI-Crescent Line”). Replacement of these structures is necessary in order to maintain safe and reliable service to customers because these structures are in a landslide-prone area. The existing structures will be replaced with monopoles on concrete foundations that will be designed to withstand potential landslides. This waiver covers six structures totaling .58 miles that is inclusive of the total 14.5 miles route.

3. Duquesne Light's attorneys are:

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Duquesne Light's attorneys are authorized to receive all notices and communications regarding this Application.

4. Duquesne Light furnishes electric service to approximately 596,000 customers throughout its certificated service territory, which includes all or portions of Allegheny and Beaver Counties and encompasses approximately 800 square miles in western Pennsylvania. Duquesne Light is a "public utility" and an "electric distribution company" as defined in Sections 102 and 2803 of the Pennsylvania Public Utility Code, 66 Pa.C.S. §§ 102, 2803.

5. The proposed Project involves the siting and rebuild of the double-circuit BI – Crescent 138 kV Transmission Line that will extend approximately 14.5 miles between the Brunot Island Substation in the City of Pittsburgh and the Crescent Substation in Crescent Township. In anticipation of future increased capacity needs within the life span of the BI-Crescent transmission line, Duquesne Light is proposing to build one circuit to 345 kV standards during this project and raise the voltage when the need arises in the future. However, the line will be operated at 138 kV until additional capacity is needed. Duquesne Light seeks Commission approval of the siting and construction of the overhead 138 kV transmission line, as described herein, associated with the proposed Project.

6. Accompanying this Application is Statement No. 1, the direct testimony of Mr. Jason Harchick related to the need for the Project; Statement No. 2, the direct testimony of Ms. Aimee Kay related to the Siting Study; Statement No. 3, the direct testimony of Ms. Meenah Shyu related to design and safety, and Statement No. 4, the direct testimony of Ms. Lesley Gannon related to Right-of-Way acquisition of the Project. Additionally, the following Attachments are included that provide additional detailed information regarding the proposed Project:

- Attachment 1 – PUC Cross-Reference Matrix
- Attachment 2 – Need Statement
- Attachment 3 – Environmental Assessment and Line Route Siting Study
- Attachment 4 – Cross-Sectional Diagrams of Typical Structures for the BI-Crescent Project
- CONFIDENTIAL Attachment 5a – Map of Existing DLC Facilities
- CONFIDENTIAL Attachment 5b – Map of Proposed DLC Facilities
- Attachment 6 – One Light Diagrams of Existing and Proposed DLC Facilities
- Attachment 7 – Aerial Map of Alternatives Considered
- Attachment 8 – Topographical Map of the Alternatives and Preferred Route
- Attachment 9 – Map of Affected Parcels and Landowners
- Attachment 10 – Landowner Matrix
- Attachment 11 – Duquesne Light Company Design Criteria, Electromagnetic Field Policy and Application, and Safety Practices
- Attachment 12 – Duquesne Light’s Vegetation Management Practices
- Attachment 13 – Public Notices Required by 52 Pa. Code § 69.3102

7. CONFIDENTIAL Attachments 5a and 5b show critical energy infrastructure information regarding the bulk transmission system of Duquesne Light located within their certificated territory in Pennsylvania. Duquesne Light believes the transmission system data set forth in Attachments 5a and 5b include sensitive information about critical energy infrastructure

that should not be publically accessible. Accordingly, Duquesne Light is submitting CONFIDENTIAL versions of Attachments 5a and 5b.

8. This Application, including the accompanying Attachments and Statements, which are incorporated herein by reference, contains all of the information required by 52 Pa. Code §§ 57.72(c), 69.1101, 69.3102 – 69.3107.

## **II. NEED FOR THE PROJECT**

### **A. SYSTEM PLANNING**

9. System planning is the process which assures that transmission and distribution systems can supply electricity to all customer loads reliably and economically. The reliable and economical operation of transmission systems requires planning guidelines for system expansion and reinforcement.

10. PJM Interconnection, L.L.C. (“PJM”) is a Federal Energy Regulatory Commission (“FERC”) approved Regional Transmission Organization (“RTO”) charged with ensuring the reliability of the electric transmission system under its functional control and coordinating the movement of electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia. Duquesne Light, an owner of transmission facilities in Pennsylvania, is a member of PJM and actively participates in the PJM transmission planning process.

11. In order to ensure reliable transmission service, PJM prepares an annual Regional Transmission Expansion Plan (“RTEP”) to ensure power continues to flow reliably to customers. The North American Electric Reliability Corporation (“NERC”), PJM, and transmission owner reliability criteria are used by PJM and the transmission owners to analyze the system and

determine if specific transmission upgrade projects are needed to ensure long-term reliable electric service to customers.

12. Duquesne Light has adopted reliability and planning standards to ensure adequate levels of electric service to its customers consistent with good utility practice. The Duquesne Light Transmission Planning Criteria were developed from and are consistent with the NERC and PJM planning and reliability standards.<sup>3</sup>

13. In accordance with the Duquesne Light Transmission Planning Criteria, Duquesne Light's transmission system is planned so that it can be operated at all projected load levels and during normal scheduled outages to withstand specific unscheduled contingencies without exceeding the equipment capability, causing system instability or cascade tripping, or exceeding voltage tolerances. The transmission system is required to have adequate capability so that it can be operated normally and can withstand unscheduled contingencies and other system conditions.

**B. PLANNING AND RELIABILITY ISSUES**

14. Duquesne Light's transmission system primarily consists of 69 kV, 138 kV, and 345 kV facilities that currently form a loop around the City of Pittsburgh and its suburbs.

15. A map of the relevant portion of Duquesne Light's existing system is provided in CONFIDENTIAL Attachment 5a to this Application.

16. The BI – Crescent corridor has some of Duquesne Light's oldest in-service steel lattice towers. Duquesne Light has performed structural evaluations and determined that the structures are approaching end of useful life. Based on current condition, structure deterioration, and PLS-CADD modeling at current design codes, all results indicate these structures are beyond

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<sup>3</sup> Duquesne Light's reliability and planning standards are set forth in its Federal Energy Regulatory Commission Form No. 715 annual report.

permanent repair and require replacement. Temporary repairs have been made to certain facilities to ensure reliable service until new replacement structures can be installed.

17. While the primary driver for this project is to replace aging transmission system infrastructure, other benefits can be achieved by rebuilding this transmission corridor.

18. Transmission system studies have shown that during outages of various 345 kV circuits within the Duquesne Light service area, significant thermal and voltage concerns arise. Energizing one of the new BI – Crescent 138 kV circuits at 345 kV in the future would help to mitigate these issues.

### **III. DESCRIPTION OF THE PROPOSED TRANSMISSION LINE**

#### **A. OVERVIEW OF THE PROPOSED PROJECT**

19. To address the identified reliability and planning issues described above, Duquesne Light proposes to rebuild the double-circuit BI – Crescent 138 kV Transmission Line. The proposed double-circuit BI – Crescent 138 kV Transmission Line will extend approximately 14.5 miles between the Brunot Island Substation in the City of Pittsburgh and the Crescent Substation in Crescent Township.

20. The entire Project will be located in Allegheny County. Approximately 2.0 miles of the project will be located within the City of Pittsburgh, approximately 2.6 miles will be located within Kennedy Township, approximately 3.1 miles will be located within Robinson Township, approximately 5.0 miles will be located within Moon Township, and approximately 1.8 miles will be located within Crescent Township.

21. An aerial photograph map showing the location of the proposed double-circuit Brunot Island – Crescent 138 kV Transmission Line is provided in CONFIDENTIAL Attachment 5b and Attachments 7 and 8 to this Application.

22. The proposed Project will replace aging transmission system infrastructure to meet safety and reliability standards. One circuit position on the transmission structures will be designed to 345 kV standards, but will be operated at 138 kV until load growth or system conditions require this voltage increase and necessary approvals are acquired. The other circuit position on the transmission structures will be designed to 138 kV standards and will be operated at 138 kV.

23. The proposed Project was reviewed by PJM stakeholders and included in PJM's RTEP as project s0320 and s0320.1.

#### **B. ENGINEERING DESCRIPTION**

24. The proposed new BI – Crescent 138 kV Transmission Line will be designed as a double-circuit 138 kV/345 kV transmission line, but initially will be operated as a double-circuit 138 kV transmission line until load growth or other system conditions makes it necessary to increase the voltage of the second circuit and necessary approvals are acquired. This proposed rebuild will also accommodate connections to Montour, Neville, and Sewickley Substations. The existing 138 kV circuits that are supported by the line structures are Crescent – Montour (Z-24), Brunot Island – Sewickley (Z-43), Brunot Island – Montour (Z-44) and Crescent – Sewickley (Z-143). The proposed 138 kV circuits that will be supported by the line structures are Montour – Sewickley (Z-24), Brunot Island – Montour (Z-43), Brunot Island – Crescent (Z-44) and Crescent – Sewickley (Z-143). A short portion of a 138 kV single circuit Findlay-Montour (Z-45) 138 kV line will also be rerouted to a new termination bay within the Montour Substation.<sup>4</sup>

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<sup>4</sup> Duquesne Light submitted a separate LON seeking approval for the work associated with this relocation. The LON was approved by the Commission on October 4, 2018 at docket number A-2018-3002896



25. Based on preliminary engineering, the new BI – Crescent transmission line will require approximately 108 new double-circuit support structures, which will consist of self-supporting weathering steel single poles on drilled concrete pier foundations.

26. The new steel structures will largely consist of tubular steel monopole structures that will range from 60 to 200 feet in height, with an average height of approximately 180 feet. The existing steel structures are primarily steel lattice towers ranging in height from 75 to 145 feet in height, with an average height of approximately 90 feet. All steel poles will be placed on drilled concrete shaft foundations. The average span between these structures will be approximately 900 feet. The longest span is approximately 2,500 feet across the Ohio River.

27. Cross-sectional diagrams showing the typical placement of the support structures are provided in Attachment 4 of this Application.

28. The overhead 138 kV circuit (designed as 345 kV) will utilize double bundle power conductor per phase for each of the three (3) phases in the circuit. The other overhead 138 kV circuit will utilize three (3) single conductors, one for each of three (3) phases. The power conductors utilized for this project will be 795 kcmil,<sup>5</sup> 20/7 ACSS-TW-HS<sup>6</sup> (Drake) conductors. The sole shield wire will primarily be fiber optic ground wire and will provide lightning protection and a communication path between the substations. This communication path could be used for communication between the protective relays at the station operate circuit breakers in order to remove the line from service should a fault in the line be detected.

29. Duquesne Light structure 6634, located in the City of Pittsburgh, is one of the structures which supports the transmission lines in the BI – Crescent transmission corridor. In

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<sup>5</sup> Kcmil stands for thousand circular mils. Kcmil wire size is the equivalent cross sectional area in thousands of circular mils. A circular mil is the area of a circle with a diameter of one thousandth (0.001) of an inch.

<sup>6</sup> ACSS-TW-HS stands for aluminum conductor steel supported, trapezoidal-shaped aluminum strands, high strength conductors

addition to supporting the present BI – Montour (Z-44) 138 kV transmission circuit and the present BI – Sewickley (Z-43) 138 kV transmission circuit, the structure also supports the existing BI – Collier (304) 345 kV transmission circuit and existing BI – Crescent (331) 345 kV transmission circuit. In order to safely perform maintenance on this structure, all four (4) of these transmission circuits must be removed from service. In an effort to improve Duquesne Light’s ability to safely perform maintenance and eliminate the contingency consideration for loss of all four (4) transmission circuits, Duquesne Light plans to replace this structure with two (2) new self-supporting monopoles. One monopole will support the proposed BI – Montour (Z-43) 138 kV transmission circuit and the proposed BI – Crescent (Z-44) 138 kV transmission circuit. The second monopole will support the existing BI – Collier (304) 345 kV transmission circuit and existing BI – Crescent (331) 345 kV transmission circuit.

30. The new BI – Crescent Transmission Line will be designed to meet, and generally exceed, the National Electrical Safety Code (“NESC”) minimum standards. This includes electrical clearance requirements to all existing structures and features.

31. The minimum conductor-to-ground clearance for the proposed BI – Crescent Transmission Line will be 30 feet where possible under maximum electrical load and operating temperature<sup>7</sup>.

#### **IV. SITING ANALYSIS**

##### **A. SUMMARY OF SITING ANALYSIS**

32. In accordance with the Commission’s regulations at 52 Pa. Code § 57.72(c), Duquesne Light conducted an extensive, multi-faceted analysis to determine the proposed route for the project. Duquesne Light contracted with GAI Consultants, Inc. to complete a

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<sup>7</sup> The maximum operating temperature is considered to be 392 degrees Fahrenheit.

comprehensive siting study. The results of the siting study are contained in the “Environmental Assessment and Line Route Study,” which is provided as Attachment 3 to this Application.

33. The goal of Duquesne Light’s siting analysis for the double-circuit BI – Crescent 138 kV Transmission Line was to determine the most suitable route to interconnect the proposed transmission line with the existing Brunot Island and Crescent Substations tying into the Montour, Neville, and Sewickley Substations along the route, while minimizing the impact to the natural and human environments, avoiding unreasonable and circuitous routes, and avoiding extreme costs.

34. Many sources of information were used to develop data for the Environmental Assessment and Line Route Study. These sources of information are summarized in Attachment 3 to this Application.

35. The route development process is inherently iterative with modifications made throughout the siting analysis as a result of the identification of new constraints, input from agencies, landowners, and other stakeholders, periodic re-assessment of routes, and adjustments to the overall route network to develop feasible alternative routes.

36. Once the alternative routes were identified, the siting team undertook an analysis of potential impacts of each alternative route to human/build environment, the natural environment, and engineering considerations. The alternative routes were reviewed in detail and compared using a combination of information collected in the field, Geographic Information System data sources, public and agency input, engineering and constructability considerations, and the collective knowledge and experience of the siting team.

37. Using the analysis described above, the siting team selected a proposed route that, on balance, best minimized the overall impacts of the Project. The rationale for selecting the

proposed route was derived from the accumulation of the siting decisions made throughout the process, the knowledge and experience of the siting team, comments from the public and regulatory agencies, and the comparative analysis of potential impacts of each alternative route.

38. A detailed description of the process used to select the proposed route for the project is provided in Attachment 3 to the Siting Application.

**B. SELECTION OF PROPOSED LINE**

39. Using the siting analysis described above, Duquesne Light identified three (3) alternative routes for the rebuild of the double-circuit BI – Crescent 138 kV Transmission Line: the Proposed Route, which extends approximately 14.5 miles and utilized existing Right-of-Way (“ROW”) over its entire length; Alternative 1, which extends approximately 15.1 miles and utilizes 2.3 miles of existing ROW; and Alternative 2 which extends approximately 16.1 miles and utilizes 1.2 miles of existing ROW.

40. Duquesne Light, in conjunction with its siting consultants, undertook a detailed comparison of each Alternative. A detailed explanation of the analysis and comparison of the Alternatives is provided in Attachment 3 to this Application.

41. Duquesne Light held three (3) public open houses in February and March of 2017 and invited impacted landowners along the proposed route, advertising in local newspapers the time and location of the open house as well as using targeted internet ads. During the open house events, multiple subject matter experts from Duquesne Light and its consultants were available to explain the scope of the project, its potential impact, and the proposed schedule.

42. The Alternatives were compared and the Proposed Route was selected based upon a detailed analysis and balance of potential impacts on the human/built environment, natural environmental, and engineering and constructability considerations.

43. The Proposed Route extends approximately 14.5 miles and is primarily located in existing ROW. A general description of the proposed route is provided below:

- The route begins at the Brunot Island Substation traveling west roughly paralleling Chartiers Creek for approximately two (2) miles in a highly developed area.
- Once out of the highly developed area the route continues approximately 3.8 miles in a northwest path along an existing ROW through several residential developments.
- The route then turns to the north for approximately 0.7 miles to enter the Montour Substation the route backtracks the same 0.7-mile alignment when exiting the Montour Substation.
- The route then continues in a relatively direct northwest course along an existing ROW for approximately eight (8) miles until it reaches the Crescent Substation.

44. The Proposed Route is the shortest route, and utilizes the existing ROW thereby minimizing overall impacts and having the least environmental impact as compared to the other viable alternatives. Details of these overall impacts can be found in Attachment 3 of this Application.

45. By utilizing existing ROW, the Proposed Route minimizes the extent of tree clearing, habitat fragmentation, land use conversion, and other impacts associated with constructing a new ROW. In addition, the presence of the existing transmission structures and cleared ROW minimizes the potential for additional visual impacts associated with the construction of the new line.

46. All work areas associated with the construction of the double-circuit BI – Crescent 138 kV Transmission Line will be studied for waterbody and wetland features prior to the start of any construction.

47. Duquesne Light will obtain all necessary permits from the United States Army Corps of Engineers or the Pennsylvania Department of Environmental Protection, and will comply with all of the terms and conditions placed on any permits required.

48. Further, Duquesne Light will acquire any required soil erosion and sedimentation control permits and will comply with any conditions placed on those permits. The final design, erosion and sedimentation control measures, and construction of the double-circuit BI – Crescent 138 kV Transmission Line will minimize impacts to waterbody and wetland features to the extent feasible.

49. Duquesne Light contacted the United States Fish and Wildlife Service (“USFWS”), Pennsylvania Fish and Boat Commission (“PFBC”), Pennsylvania Game Commission (“PGC”), and Pennsylvania Department of Conservation and Natural Resources (“PADCNR”) to review the proposed double-circuit BI – Crescent 138 kV Transmission Line for potential rare threatened or endangered species impacts. After reviewing the project USFWS, PGC, and PFBC reported that the project will not impact any threatened and endangered species, or special concern species and resources located within the project area. The PADCNR requested surveys for two (2) plant species, Short’s Sedge (*Carex shortiana*) and rock skullcap (*Scutellaria saxatilis*) along the Preferred Route. Surveys for the two (2) plant species and coordination with the PADCNR is ongoing. The final design and construction will minimize and avoid impacts to these plant to the extent feasible.

50. Architectural and archeological consultation with the Pennsylvania State Historic Preservation Office and surveys are ongoing. The final design and construction will minimize and avoid impacts to architectural and archeological resources to the extent feasible.

51. A list of the Local, State and Federal governmental agencies and their requirements in connection with the construction or maintenance of the proposed double-circuit Brunot Island – Crescent 138 kV Transmission Line is provided in Attachment 3 to this Application.

52. Duquesne Light determined that the cumulative environmental, human/built, engineering, and constructability impacts associated with the proposed route, the Existing Alternative, will be significantly less than the other alternatives. A detailed explanation of the selection of the preferred route is provided in Attachment 3 to this Application.

#### **V. RIGHTS-OF-WAY**

53. The ROW width is generally determined by the structure type, design tensions, span length, and conductor “blowout” (the distance the wires are moved by a crosswind).

54. The ROW for the proposed double-circuit BI – Crescent 138 kV Transmission Line will be variable in width. Duquesne Light will design and construct the line to fit within the ROW while maintaining all necessary clearances.

55. The names and addresses of all known persons, corporations and other entities of record owning property along the route selected for the proposed double-circuit Brunot Island – Crescent 138 kV Transmission Line are provided in Attachment 10 to this Application.

56. There are a total of 461 deeded properties along the Proposed Route, owned by a total of 391 property owners. The Company required additional easements from 122 property owners for this Project. One hundred and twenty (120) of these easements have been obtained. At the time of this filing, new ROWs and easements are needed from several property owners.

57. Although negotiations continue with all remaining property owners, Duquesne Light is separately filing one (1) condemnation application, pursuant to 15 Pa.C.S. §1511(c), for

a finding and determination that the service to be furnished through its proposed exercise of the power of eminent domain to acquire the tracts of land for the proposed Project is necessary or proper for the service, accommodation, convenience, or safety of the public. Duquesne Light is also proceeding with negotiations regarding the acquisition by tax sale of the property traversed by the one remaining ROW.

## **VI. HEALTH AND SAFETY**

58. The proposed Project will not create any unreasonable risk of danger to the public health or safety. The project will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable NESC minimum standards and all applicable legal requirements.

59. Descriptions of Duquesne Light's construction, operation, maintenance and safety standards and procedures for transmission and distribution lines are provided in Attachment 11 to this Application. These standards meet or exceed all relevant NESC standards and all standards of the Federal Occupational Safety and Health Administration.

60. The project is being completed within an existing transmission line corridor. Duquesne Light will apply the Wire Zone/Border Zone management technique, which is recognized as an industry best practice to manage vegetation and ensure the safe and reliable delivery of electricity. A further description of Duquesne Light's vegetation management practices are provided in Attachment 12 to this Application.

61. Duquesne Light performed an electromagnetic field study for the proposed transmission line. A further description of Duquesne Light's electromagnetic field practices and policies are provided in Attachment 11 to this Application.



62. Duquesne Light will not impact communication towers, and will work to minimize the impact to other utilities affected by the proposed Project.

63. Several major roadways, including Route 51 and Interstate I-79, will be spanned by the various segments of the project. Pennsylvania Department of Transportation Highway Occupancy Permits or equivalent type permits will be acquired by Duquesne Light for these major highways and all other state roads prior to construction.

64. Aviation coordination will be conducted through the Federal Aviation Association (“FAA”). Duquesne Light will assure that the pole locations and heights are properly submitted to the FAA. Duquesne Light will comply with any additional lighting or other visual aids that may be required by these agencies to assure aviation safety in the region.

65. A further description of the safety considerations which will be incorporated into the design, construction and maintenance of the proposed Project are provided in Attachment 11 to this Application.

## **VII. CONSTRUCTION COST AND IN-SERVICE DATE**

66. Duquesne Light will own, operate, and maintain the transmission lines associated with the proposed Project. The costs for the proposed Project will be paid for by Duquesne Light.<sup>8</sup>

67. The estimated cost to design and construct the proposed Project using the preferred route is approximately in the range of \$95 to \$115 million.

68. The estimated cost for the proposed Project is an order-of-magnitude estimate developed using averages of recent costs for similar projects and without an in-depth analysis or

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<sup>8</sup> The costs and cost recovery of this Project are subject to the regulatory jurisdiction of the Federal Energy Regulatory Commission.

field investigation. The estimated cost is subject to change as the constructability of the project, sequence of construction, and other factors that may affect cost are identified and analyzed as the project progresses.

69. The proposed Project has a scheduled construction start date of June 2020 to meet an in-service date of December 2023.

### **VIII. NOTICE AND SERVICE**

70. Duquesne Light has provided public notices in accordance with Section 69.3102 of the Commission's Interim Siting Guidelines, 52 Pa. Code § 69.3102. The public notices for this project are provided in Attachment 13 to this Application.

71. Copies of this Application and the Notice of Filing are being served in accordance with the provisions of Section 57.74 of the Commission's regulations, 52 Pa. Code § 57.74.

72. A copy of this Application is available for public examination during ordinary business hours at Duquesne Light Company, 411 Seventh Avenue, Pittsburgh, PA 15320-1930.

73. As soon as practicable after the filing of this Application, Duquesne Light will publish notice of the filing in two (2) newspapers of general circulation in the area of the Brunot Island – Crescent 138 kV Transmission Line. This notice will: (a) note the filing with the Commission; (b) provide brief description of the project and its location; (c) provide locations where the complete application may be reviewed by the public; and (d) provide any additional information as directed by the Commission.

74. Duquesne Light also requests that the Commission publish notice of this Application in the Pennsylvania Bulletin.

**IX. RELATED PROCEEDINGS**

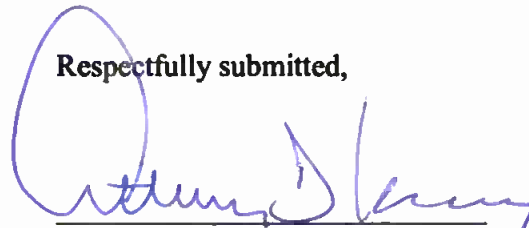
75. As noted above, simultaneous with the filing of this Siting Application, Duquesne Light is filing one (1) Condemnation Application pursuant to 15 Pa. C.S. § 1511(c) for a finding and determination by the Commission that the service to be furnished by the Duquesne Light through its proposed exercise of the power of eminent domain for the siting and construction of the 138 kV transmission lines associated with the BI – Crescent Project is necessary or proper for the service, accommodation, convenience or safety of the public. Issues relating to the need for the Condemnation Application are interrelated with this Application.

76. Pursuant to 52 Pa. Code § 57.75(i)(1), Duquesne Light requests that this related proceeding be consolidated for hearings, if necessary, and decision. Duquesne Light will file an appropriate motion to consolidate these proceedings once all docket numbers have been assigned.

**X. CONCLUSION**

WHEREFORE, Duquesne Light Company respectfully requests that the Pennsylvania Public Utility Commission approve the siting and constructing of the approximately 14.5 miles of overhead 138 kV transmission lines associated with the proposed Brunot Island – Crescent Project in the City of Pittsburgh, McKees Rocks Borough, Kennedy Township, Robinson Township, Moon Township, and Crescent Township, Allegheny County, Pennsylvania as explained above and in the Attachments and to this Application.

Respectfully submitted,



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Date: March 15, 2019

Attorneys for Duquesne Light Company

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Duquesne Light Company filed : Docket No.A-2019-\_\_\_\_\_

Pursuant to 52 Pa. Code Chapter 57, Subchapter G :

For Approval of the Siting and Construction of the :

138 kV Transmission Lines Associated with the :

Brunot Island –Crescent Project in the City of :

Pittsburgh, McKees Rocks Borough, Kennedy :

Township, Robinson Township, Moon Township :

And Crescent Township, Pennsylvania :

**VERIFICATION**

I, Meenah Shyu, being the Manager of Civil Transmission Line Engineering at Duquesne Light Company hereby state that the facts above set forth are true and correct to the best of my knowledge, information and belief, and that I expect Duquesne Light Company to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: March 15, 2019



Meenah Shyu  
Manager of Civil Transmission Line Engineering

# Attachment 1

**ATTACHMENT 1**  
**BI-CRESCENT PROJECT**  
**PUC REGULATION CROSS-REFERENCE MATRIX**

Administrative Code Section or Statute	PUC Regulation Requirement	Location In Filing
57.72	Form and content of application	
57.72(a)	Applications shall be in conformity with Section 1.31 (relating to form of documentary filings generally). Supporting exhibits such as maps, photographs and other engineering materials may be on paper not exceeding 28 inches by 40 inches.	Attachments 1 – 15  CONFIDENTIAL Attachment 5a – Map of Existing Facilities  CONFIDENTIAL Attachment 5b – Map of Proposed Facilities  Attachment 8 – Aerial Map of the Preferred Route and Alternatives Considered  Attachment 8 – Topographical Map of the Preferred Route and Alternatives Considered  Attachment 9 – Map of Affected Parcels and Landowners
57.72(b)	The application shall be signed by a person having authority with respect thereto and having knowledge of the matters herein set forth and shall be verified under oath.	Siting Application
57.72(c)	An application shall contain:	
57.72(c)(1)	The name of the applicant and the address of its principal business office	Siting Application
57.72(c)(2)	The name, title and business address of the attorney of the applicant and the person authorized to receive notice and communications with respect to the application if other than the attorney of the applicant.	Siting Application
57.72(c)(3)	A general description – not a legal or metes and bounds description – of the proposed route of the HV line, to include the number of route miles, the right-	Siting Application  Attachment 3 – Section

**DUQUESNE LIGHT COMPANY**  
**ATTACHMENT 1 – PUC Cross-Reference**

Administrative Code Section or Statute	PUC Regulation Requirement	Location In Filing
	of-way width and the location of the proposed HV line within each city, borough, town and township traversed.	3.4.1  Attachment 9  Duquesne Light Stmt. No. 2
57.72(c)(4)	The names and addresses of known persons, corporations and other entities of record owning property within the proposed right-of-way, together with an indication of HV line rights-of-way acquired by the applicant.	Attachment 9 – Map of Affected Parcels and Landowners  Attachment 10 – Landowner Matrix
57.72(c)(5)	A general statement of the need for the proposed HV line in meeting identified present and future demands for service, of how the proposed HV line will meet that need and of the engineering justifications for the proposed HV line.	Attachment 2
57.72(c)(6)	A statement of the safety considerations which will be incorporated into the design, construction and maintenance of the proposed HV line.	Attachment 11
57.72(c)(7)	A description of studies which had been made as to the projected environmental impact of the HV line as proposed and of the efforts which have been and which will be made to minimize the impact of the HV line upon the environmental and upon scenic and historic areas, including but not limited to impacts, where applicable, upon land use, soil and sedimentation, plant and wildlife habitats, terrain, hydrology and landscape.	Siting Application  Attachment 3
52.72(c)(8)	A description of the efforts of the applicant to locate and identify archaeologic, geologic, historic, scenic or wilderness areas of significance within 2 miles of the proposed right-of-way and the location and identity of the areas discovered by the applicant.	Attachment 3
57.72(c)(9)	The location and identity of airports within 2 miles of the nearest limit of the right-of-way of the proposed HV line.	Attachment 3 – Section 4.7
57.72(c)(10)	A general description of reasonable alternative routes to the proposed HV line, including a description of the corridor planning methodology, a comparison of the merit and detriments of each route, and a statement of	Attachment 3 – Sections 3.4.1-3.4.3 and 4



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	the reasons for selecting the proposed HV line route.	
57.72(c)(11)	A list of the local, State and Federal governmental agencies which have requirements which shall be met in connection with the construction or maintenance of the proposed HV line and a list of documents which have been or are required to be filed with those agencies in connection with the siting and construction of the proposed HV line.	Attachment 3 – Section 6.1
57.72(c)(12)	The estimated cost of construction of the proposed HV line, and the projected date for completion.	Siting Application Attachment 3 – Section 1.2 and 3.4.1
57.72(c)(13)	The following exhibits:	
57.72(c)(13)(i)	A depiction of the proposed route on aerial photographs and topographic maps of suitable detail.	Attachment 7 Attachment 8
57.72(c)(13)(ii)	A description of the proposed HV line, including the length of the line, the design voltage, the size, number and materials of conductors, the design of the supporting structures and their height, configuration and materials of construction, the average distance between supporting structures, the number of supporting structures, the line to structure clearances and the minimum conductor to ground clearances at mid-span under normal load and average weather conditions and under predicted extreme load and weather conditions.	Siting Application Attachment 11 Duquesne Light Stmt. No. 3
57.72(c)(13)(iii)	A simple drawing of a cross section of the proposed right-of-way of the HV line and any adjoining rights-of-way showing the placement of the supporting structures at typical locations, with the height and width of the structures, the width of the right-of-way and the lateral distance between the conductors and the edge of the right-of-way indicated	Attachment 4
57.72(c)(13)(iv)	A system map which shows in suitable detail the location and voltage of existing transmission lines and substations of the applicant and the location and voltage of the proposed HV line and associated substations.	CONFIDENTIAL Attachment 5a  CONFIDENTIAL Attachment 5b
57.72(c)(14)	A statement identifying litigation concluded or in progress which concerns property or matter relating to the proposed HV line, right-of-way route or	Siting Application

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	environmental matters.	
57.72(c)(15)	Additional information as the Commission may require.	
57.74(a)	(a) <i>Filing</i> . The applicant shall file with the Commission the original and six copies of the application. An affidavit of service showing the identity of those served under subsections (b) and (c) shall accompany the original and the copies of the application filed with the Commission.	Notice of Filing Certificate of Service
57.74(b)	(b) <i>Copies</i> . At the time of filing, the applicant shall serve a copy of the application by registered or certified mail, return receipt requested, upon the following: <ol style="list-style-type: none"> <li>(1) The chief executive officer, the governing body and the body charged with the duty of planning land use in each city, borough, town, township and county in which any portion of the HV line is proposed to be located.</li> <li>(2) The president of the public utility, other than the applicant, in whose service territory any portion of the HV line is proposed to be located.</li> <li>(3) The Department of Environmental Resources, Attention: Bureau of Environmental Planning; Post Office Box 2357, 101 S. Second Street, Harrisburg, Pennsylvania, 17120. (NOTE: now Department of Environmental Protection at different Harrisburg office).</li> </ol>	Certificate of Service
57.74(c)	(c) <i>Notice</i> . <ol style="list-style-type: none"> <li>(1) At the time of filing, the applicant shall serve a notice of filing and a map of suitable detail showing the proposed route of the proposed facility by registered or certified mail, return receipt requested, upon the following: <ol style="list-style-type: none"> <li>(i) The Secretary of the Department of Transportation, Room 1200 Transportation and Safety Building, Harrisburg, Pennsylvania 17120.</li> <li>(ii) The Chairman of the Historical and Museum Commission, Post Office Box 1026, Harrisburg, Pennsylvania 17120.</li> <li>(iii) Other local, State or Federal agencies designated in § 57.72 (c)(11)(relating to form and content of application).</li> <li>(iv) The persons, corporations, and other entities designated in § 57.72(c)(4), unless they are served with a copy of the application under § 57.75(i) (relating to hearing and notice).</li> </ol> </li> </ol>	Notice of Filing Attachment 10 Certificate of Service

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57.74(c)	(2) The notice of filing shall contain a statement identifying the filing, the date on which the filing was or is to be made, a description of the proposed line, the design voltage, the number of route miles, the right-of-way width and the location of the proposed HV line within each township traversed and a statement that a copy of the application is available for public examination as provided in subsection (d).	Notice of Filing Siting Application Attachment 9
57.74(d)	(d) <i>Examination.</i> On the day of filing of the application, the applicant shall make a copy of the application available for public examination during ordinary business hours at a convenient location within a county in which any part of the proposed HV will be located.	Siting Application Notice of Filing
57.74(e)	(e) <i>Additional notice.</i> The applicant shall provide an additional notice and shall serve such additional copies of the application without cost as the Commission may require.	N/A
69.1101	To further the State’s goal of making State agency actions consistent with sound land-use planning, and under the act of June 22, 2000 (P. L. 483, No. 67) and the act of June 23, 2000 (P. L. 495, No. 68), the Commission will consider the impact of its decisions upon local comprehensive plans and zoning ordinances. This will include reviewing applications for:  (1) Certificates of public convenience.  (2) Siting electric transmission lines.  (3) Siting a public utility “building” under section 619 of the Municipalities Planning Code (53 P. S. § 10619).  (4) Other Commission decisions.	Attachment 3 Duquesne Light Stmt. No. 2
69.3102(a)	(a) Applications for electric transmission siting authority should provide the following information with the initial application for siting approval demonstrating its efforts to fully notify landowners who are either owners of land that will be purchased for the transmission project or will be subject to right of way/easement requirements:  (1) A Code of Conduct/Internal Practices governing the manner in which public utility employees or their agents interact with landowners along proposed rights	Attachment 13

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	<p>of way.</p> <p>(2) Copies of information provided to landowners by the public utility of any publicly disseminated notices advising landowners to contact the Commission or the Office of Consumer Advocate (OCA) in the event of improper land agent practices.</p> <p>(3) Copies of all notices sent under § 57.91 (relating to disclosure of eminent domain power of electric utilities).</p>	
69.3102(b)	<p>(b) Applicants for transmission siting authority should serve a copy of the Code of Conduct on all landowners along the proposed route whose property is to be purchased, subject to easement rights or borders the transmission corridor. The Code of Conduct should also be available on the applicant's website.</p>	Attachment 13
69.3102(c)	<p>(c) Applicants for transmission siting authority should provide prior notice to the Commission's Office of Communications of informational presentations to community groups by the public utility scheduled after the filing of the transmission siting application so that the Commission, OCA and other interested parties can attend meetings or obtain copies of information being disseminated at the presentations.</p>	N/A
69.3103	<p>Applicants for eminent domain authority should follow the following requirements and provide the following information as part of the application:</p> <p>(1) Applicants for transmission siting authority should file applications for all known eminent domain authority as separate filings, but simultaneously with the associated transmission siting applications. Testimonial evidence in support of an eminent domain application should be filed with the application. Subsequent eminent domain authority applications should be filed as soon as reasonably known during the course of the transmission siting application.</p> <p>(2) As part of an eminent domain application, the public utility applicant should present, for those properties subject to condemnation at the time the transmission siting application is filed or later in the siting proceeding, the reason for the exercise of condemnation power for each property and the precise location of the affected property. Supporting maps or</p>	Condemnation Applications

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	<p>legal descriptions of the property to be condemned should be supplied to the extent feasible. Submission of information pursuant to this guideline should be consistent with the filing requirements for the exercise of eminent domain powers under 26 Pa.C.S. § 302(b)(5) (relating to declaration of taking).</p> <p>(3) A public utility transmission siting application should include a summary status report for those properties along the proposed transmission route where negotiations for either property acquisition or rights of way/easements may be ongoing. This information should be supplemented as requested by the administrative law judge or the parties during the course of the transmission siting proceeding.</p>	
69.3104	<p>Applications for exemption from municipal zoning requirements should provide the following information with the application:</p> <p>(1) Copies of comprehensive land use plans, zoning ordinances and other documentation relevant to the buildings affected by the exemption request. This information may be filed in either hard copy or electronic format.</p> <p>(2) Provision of metes and bounds or site maps of building sites.</p> <p>(3) A procedure for providing notice to affected municipalities of the request for exemption.</p>	N/A
69.3105(1)	<p>Applications for the siting of electric transmission lines should provide the following information as part of the § 57.72(c) (relating to form and content of application) requirements:</p> <p>(1) Transmission applicants should utilize a combination of transmission route evaluation procedures including high-level GIS data, traditional mapping (including United States Geological Survey data and compilation), aerial maps and analysis of physical site specific constraints raised by affected landowners.</p>	<p>Attachment 3</p> <p>Attachment 7</p> <p>Attachment 8</p> <p>Attachment 9</p>
69.3105(2)	<p>Applications for the siting of electric transmission lines should provide the following information as part of the § 57.72(c) (relating to form and content of application) requirements:</p>	Siting Application

**DUQUESNE LIGHT COMPANY**  
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	(2) Transmission applicants should summarize the status of property acquisitions (including fee simple acquisitions and rights of way/easements) as part of the application. The applicant should provide the current status and continuing updates on property acquisition litigation or settlements during the course of the siting proceeding.	
69.3105(3)	<p>Applications for the siting of electric transmission lines should provide the following information as part of the § 57.72(c) (relating to form and content of application) requirements:</p> <p>(3) In providing information regarding the reasonable alternative routes, the utility actively considered in its final phase of the route selection process, and the relative merits of each, in accordance with § 57.72(c)(10), the applicant should include the following information:</p> <ul style="list-style-type: none"> <li>(i) The environmental, historical, cultural and aesthetic considerations of each route.</li> <li>(ii) The proximity of these alternative routes to residential and nonresidential structures.</li> <li>(iii) The applicant’s consideration of relevant existing rights of way.</li> <li>(iv) The comparative construction costs associated with each route.</li> </ul>	<p>Attachment 3</p> <p>Duquesne Light Stmt. No. 2</p>
69.3106	Applications for siting of electric transmission lines should include as part of the filing requirement under § 57.72(e)(7) the following information: A matrix or list showing all expected Federal, state and local government regulatory permitting or licensing approvals that may be required for the project at the time the application is filed, the issuing agency, approximate timeline for approval and current status. The applicant should provide an update on the status of the regulatory permitting/licensing approvals as the case progresses.	Attachment 3 – Section 6.1
69.3107(a)	(a) <i>Interim guidelines for the use of herbicides and</i>	Attachment 12

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	<p><i>pesticides</i>. Applicants for transmission line siting authority should provide a detailed vegetation management plan that includes the following components:</p> <p>(1) A general description of the utility’s vegetation management plan.</p> <p>(2) Factors that dictate when each method, including aerial spraying, is utilized.</p> <p>(3) Vegetation management practices near aquatic and other sensitive locations.</p> <p>(4) Notice procedures to affected landowners regarding vegetation management practices.</p> <p>(5) Provision of a copy of a landowner maintenance agreement that describes the duties and responsibilities of landowners and the utility for vegetation management to the extent utilized.</p>	
69.3107(b)	<p>(b) <i>Interim guidelines for Electromagnetic Field (EMF) impacts</i>. Transmission siting applications should include the following: A description of the EMF mitigation procedures that the utility proposes to utilize along the transmission line route. This description should include a statement of policy approach for evaluating design and siting alternatives and a description of the proposed measures for mitigating EMF impacts.</p>	Attachment 11

# Attachment 2



ATTACHMENT 2  
BRUNOT ISLAND-CRESCENT PROJECT  
NECESSITY STATEMENT

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**1. Introduction**

Duquesne Light Company (“Duquesne Light” or the “Company”) proposes to site and rebuild the Brunot Island – Crescent 138 kV Transmission Corridor in City of Pittsburgh, McKees Rocks Borough, Kennedy Township, Robinson Township, Moon Township, and Crescent Township, Allegheny County, Pennsylvania; (collectively, the “Project”). The Brunot Island – Crescent 138 kV Transmission Corridor is presently comprised of double-circuit lattice towers operating at 138 kV. There are four (4) distinct 138 kV circuits located within this corridor: Crescent – Montour (Z-24), Brunot Island – Sewickley (Z-43), Brunot Island – Montour (Z-44) and Crescent – Sewickley (Z-143). Additional details of the present and proposed configurations can be found in Attachment 6 to the Siting Application. The Project involves the reconstruction of approximately 14.5 miles of 138 kV transmission line between the Brunot Island Substation located in the City of Pittsburgh and the Crescent Substation located in Crescent Township. The transmission line will be reconstructed as a double-circuit transmission line with one circuit designed to 138 kV standards and the other circuit designed to 345 kV standards. For additional explanation of the 345 kV design refer to the Direct Testimony of Jason A. Harchick (Duquesne Light Statement No. 1) and Meenah Shyu (Duquesne Light Statement No. 3).

The Project is required to replace transmission equipment which is approaching end of life and located in areas prone to landslides in order to maintain reliable electric service

of the Bulk Electric System and for approximately 64,500 customers which receive electric service directly from the substations connected by the Project. On March 31, 2018, a landslide occurred along the tower line and resulted in damage to four (4) transmission structures, including one collapse, and an interruption to the Crescent-Montour (Z-24) and Brunot Island-Sewickley (Z-43) transmission circuits. The Project will also allow for an increase in the capacity of the transmission system and position the transmission system for additional load growth.

The estimated cost to site, design, and construct the Project is in the range of \$95 – \$115 million. Subject to the Commission's approval, construction is scheduled to begin in June 2020, to support the Project's scheduled in-service date of December 31, 2023.

## **2. Asset Management Process**

Duquesne Light's Asset Management process includes maintenance programs associated with inspection and replacement of its assets, including transmission lines. These maintenance programs ensure prudent repair and replacement of assets to maintain the reliability of the Duquesne Light system by proactively preventing equipment failures. Duquesne Light performs ground and aerial inspections of its transmission lines each on a five (5) year rotation. In 2012, Duquesne Light contracted an independent structural engineering consultant to perform a below grade inspection to determine grillage foundation member adequacy on this particular line.

### **3. System Planning Process**

System planning is the process which assures that transmission and distribution systems can supply electricity to all customer loads reliably and economically. The reliable and economical operation of transmission and distribution systems requires planning guidelines for system expansion and reinforcement.

As a transmission owner operating in Pennsylvania, Duquesne Light is a member of PJM Interconnection, L.L.C. (“PJM”). PJM is a Federal Energy Regulatory Commission (“FERC”) approved Regional Transmission Organization (“RTO”) charged with ensuring the reliable and efficient operation of the electric transmission system under its functional control, and coordinating the transmission of electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia. In order to ensure reliable transmission service, PJM prepares an annual Regional Transmission Expansion Plan (“RTEP”). The North American Electric Reliability Corporation (“NERC”), PJM, and transmission owner reliability criteria are used by PJM and the transmission owners to analyze the system and determine if specific transmission upgrade projects are needed to ensure long-term reliable electric service to customers.

PJM’s RTEP process is currently set forth in Schedule 6 of PJM’s Amended and Restated Operating Agreement (“Schedule 6”). The RTEP is an annual planning process that encompasses a comprehensive series of detailed analyses to ensure electric power continues to flow reliably to customers under stringent reliability planning criteria. PJM Manual 14B outlines the RTEP process and reliability criteria used for this reliability

process. The Company implements PJM's reliability and planning mandates in part through the Duquesne Light Company Transmission Planning Criteria document ("Planning Criteria"), which was developed to ensure adequate and appropriate levels of electric service to its customers consistent with good utility practice. Duquesne Light's reliability and planning standards are set forth in its FERC Form No. 715 annual report.

The fundamental purpose of the Planning Criteria is to provide Duquesne Light planning engineers with a comprehensive set of planning criteria that enable them to plan for a reliable system for Duquesne Light's customers. Duquesne Light's Planning Criteria are consistent with good utility practices and with the reliability criteria and standards used by similarly situated distribution and transmission utilities. For example, the PJM and Duquesne Light Planning Criteria generally provide that the Transmission System should be designed so that:

- (i) Normal operation of the system will not load any electric facility beyond its normal continuous rating.
- (ii) The loss of any single transmission line, generating unit, power transformer, substation bus, circuit breaker, or double-circuit line due to the outage of a single tower or pole, does not result in any system electric facility being operated beyond its applicable emergency rating.
- (iii) The loss of any single facility should not result in a voltage drop of more than 5% on the transmission system.
- (iv) The Duquesne Light transmission system relies on underground cables to supply the City of Pittsburgh. Underground cable outages could be long in duration and therefore, the remainder of the system should continue to

operate reliably and within its normal rating limits following such events.

Duquesne Light plans transmission solutions so that no loss of load occurs following an N-2 contingency supporting the City of Pittsburgh.

- (v) Once a bulk power substation exceeds or is projected to exceed 100 MVA the station will require three (3) transmission sources.

Using the Planning Criteria, Duquesne Light's transmission system is planned so that it can be operated at all projected load levels and during normal scheduled outages. The system is also planned to withstand specific unscheduled contingencies without exceeding the equipment capability, causing system instability or cascade tripping, exceeding voltage tolerances, or causing large-scale, long term or frequent interruptions to customers. The planning process begins with the development of a computer model of the future system. Once the system model is complete, comprehensive power flow simulations and contingency analyses are performed to determine the ability of the system to comply with the Duquesne Light transmission planning and reliability criteria set forth in the Planning Criteria. All conditions where the system is not in conformance with the Planning Criteria are identified, and system reinforcement alternatives are added to bring the system into compliance. Also identified are estimated costs and lead times to implement the reinforcements under consideration. Computer simulations of the system with the identified reinforcement alternatives are completed to identify the best overall reinforcement that will meet the needs of the area in a reliable and economical manner. Finally, all reinforcements are reviewed with stakeholders at either PJM's Transmission

Expansion Advisory Committee (“TEAC”) or Sub-Regional Transmission Expansion Plan (“SRRTEP”) meetings.

#### **4. Definition of the Problem**

Structures associated with the Project were originally constructed in 1914. Duquesne Light has performed structural evaluations and determined that the structures are approaching end of useful life. These structural evaluations were performed by an engineering consultant with experience in transmission line design, modeling, and structural analysis. Based on current condition, below grade section losses, and Power Line Systems – Computer Aided Design and Drafting (“PLS-CADD”) modeling at current design codes, all results indicate these structures are beyond permanent repair and require replacement. Temporary repairs have been made to certain facilities to ensure reliable service until new replacement structures can be installed.

On March 31, 2018, a landslide occurred along the tower line and resulted in one transmission structure to collapse, damage to adjacent transmission structures, and an interruption to the Crescent-Montour (Z-24) and Brunot Island-Sewickley (Z-43) transmission circuits. As a result, four transmission structures were replaced with temporary emergency structures in the spring of 2018, each consisting of two directly embedded galvanized steel monopoles to reenergize these transmission circuits. The Project will install permanent transmission structures in place of the temporary emergency transmission structures.

## 5. System Planning Studies

While the primary driver for this project is to replace aging transmission system infrastructure, other benefits can be achieved by reconstructing as a double-circuit transmission line with one circuit designed to 138 kV standards and the other circuit designed to 345 kV standards.

Transmission system studies have shown that certain contingency situations involving various 345 kV circuits within the Duquesne Light service area, result in transmission facilities to approach their thermal and voltage limits. Specifically, contingencies involving Duquesne Light 345 kV circuits produce high voltage across portions of the transmission system which would be reduced if the new Brunot Island – Crescent 138 kV circuit were energized to 345 kV.

Duquesne Light has also performed sensitivity studies to analysis the impact to the transmission system from higher than forecasted load growth and unavailability of generation which identify contingency situations that result in transmission facilities exceeding their thermal and voltage tolerances. These sensitivity studies are beyond the criteria defined within NERC reliability standard TPL-001, PJM Planning Criteria, and Duquesne Light Planning Criteria. The thermal and voltage issues identified across portions of the transmission system which would be mitigated if the new Brunot Island – Crescent 138 kV circuit were energized to 345 kV.

## 6. Proposed Solution

Duquesne Light proposed to address the issues illustrated above by reconstructing approximately 14.5 miles of 138 kV transmission line between the Brunot Island Substation and the Crescent Substation. The transmission line will be reconstructed as a double-circuit transmission line with one circuit designed to 138 kV standards and the other circuit designed to 345 kV standards. While one circuit will be designed for 345 kV standards, Duquesne Light is proposing to operate both circuits at 138 kV until load growth or other system conditions makes it necessary to increase the voltage of the second circuit and necessary approvals are acquired. Maps of Duquesne Light's existing and proposed transmission facilities are included as CONFIDENTIAL Attachments 5a and 5b, respectively, to the Siting Application. One line diagrams of Duquesne Light's existing and proposed transmission facilities are included as Attachment 6 to the Siting Application.

The proposed Project involves the replacement of some of Duquesne Light's oldest in-service steel lattice towers which are approaching end of useful life. The proposed Project will support reliable electric service of the Bulk Electric System, increase the capacity of the transmission system, and position the transmission system for additional load growth.

This Project was reviewed by PJM stakeholders and included in PJM's Regional Transmission Expansion Plan with the project designation s0320 and s0320.1.



# Attachment 3

**Environmental Assessment and  
Line Route Siting Study**

**Duquesne Light Company  
Brunot Island - Crescent 138 kV Transmission Line Rebuild  
Allegheny County, Pennsylvania**

**GAI Project Number: C120473.13, Task 003  
June 2018**



Prepared by: GAI Consultants, Inc.  
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Environmental Assessment and Line Route Siting Study

Duquesne Light Company  
Brunot Island - Crescent 138 kV Transmission Line Rebuild  
Allegheny County, Pennsylvania

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## **1.0 Introduction**

### **1.1 Project Overview**

Duquesne Light Company (Duquesne Light or the Company Duquesne Light) proposes to rebuild and reconductor an existing double-circuit 138 kilovolt (kV) transmission line located in City of Pittsburgh, McKees Rocks Borough, Robinson Township, Moon Township, and Crescent Townships, Allegheny County, Pennsylvania (PA). The Brunot Island - Crescent 138 kV Transmission Line (Project) connects the existing Brunot Island Substation in the City of Pittsburgh (Pittsburgh) and the existing Crescent Substation in Crescent Township, approximately 14.5 miles to the northwest. In addition, the Brunot Island - Crescent 138 kV Transmission Line will tie into the existing Montour Substation along its route. The Project is designed with a typical right-of-way (ROW) of 150 feet wide, centered on the transmission line. The need for the proposed Project is further explained in Attachment 2 to the application filed with the PA Public Utility Commission (PAPUC or Commission).

### **1.2 Project Timeline and Overview of Regulatory Approvals**

Duquesne Light initiated the transmission line siting process in 2015. Three initial potential routes were developed. Public workshops were held on February 21, 2017, February 28, 2017, and March 2, 2017 to present the three alternative routes to the public and encourage public comments. Based on this siting study, the Proposed Route was selected. Construction of the Project is scheduled to begin in June 2020 with an in service date of December 31, 2023.

The PAPUC has jurisdiction over high voltage electric transmission lines and must approve the siting of the proposed Project (52 Pa. code Chapter 57). Regulatory requirements

pertaining to the selection of a route for a new high voltage transmission line were incorporated into the study. Chapter 57, Subchapter G contains the PAPUC requirements for documenting the siting and environmental studies which must be conducted to determine potential Project impacts. This Environmental Assessment and Line Route Siting Study is being provided in compliance with section 57.72 (c) (7 through 10) of the PAPUC regulations. Specifically, this report includes a description of the corridor planning and selection methodology, and discusses the reasonable alternatives that were investigated for the selection of the Proposed Route required by the PAPUC regulations.

### 1.3 Goal of the Siting Study

The goal of the siting study was to select a 150-foot-wide Proposed Route between the Brunot Island Substation and the Crescent Substation that tied into the Montour Substation along the route. Furthermore, the goal was to establish alternative routes for evaluation that are environmentally sound, feasible from an engineering and economic perspective, and compliant with applicable regulations. Environmental soundness includes minimizing environmental impacts while maximizing siting opportunities (ex. paralleling an existing right-of-way). Engineering and economic feasibility includes minimizing engineering constraints, cost, and distance of the route. The analysis also sought to minimize the alternative route overlap to adhere to the PAPUC regulations (52 PA Code 57.1) that define an alternative route as “*a reasonable right-of-way which includes not more than 25 percent of the right-of-way of the applicant’s proposed route.*”

To meet the goal of the siting study, the Project study area was examined for constraints and opportunities in order to develop alternative routes, analyze impacts associated with the alternative routes, and select a preferred alternative. The Proposed Route is the route that, when considering all the constraints and opportunities, best minimized the overall impacts of the Project. This report describes the alternative route identification, analysis, and selection process for the proposed Project.

## **2.0 Route Development and Siting Process**

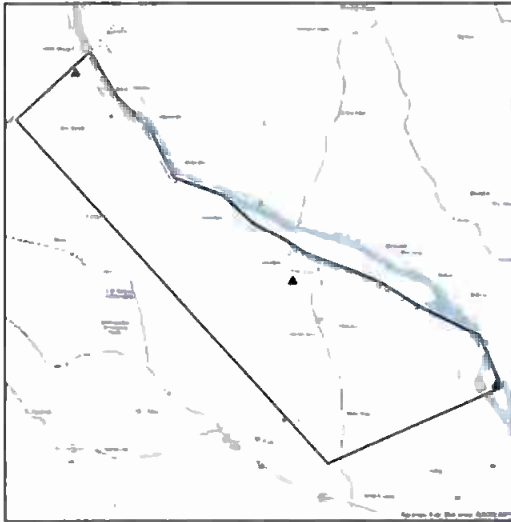
### **2.1 Route Development Process Summary/Methodology**

The initial step in route development is to define a Study Area which includes the Project end points (the existing Brunot Island Substation and the existing Crescent Substation), the mid route tie in (the existing Montour Substation), and a large enough area to develop alternative routes. The next step is to utilize publically available data to identify large area constraints (e.g., parks, urban areas) and opportunities (e.g., existing ROWs). The routing team then identifies, at a high level, possible alignments within the study area to develop the Preliminary Routes. The routing team then collects information to review the Preliminary Routes for viability, and modifies or eliminates Preliminary Routes until only the most suitable routes remain. These suitable routes are then compared as the Alternative Routes. The potential impacts of the Alternative Routes to land use, environmental and cultural resources, and engineering concerns are then evaluated and compared among the Alternative Routes. The Alternative Route that, on balance, best avoids or minimizes overall impacts to environmental and human/built resources and minimizes unreasonable design criteria and cost is then selected

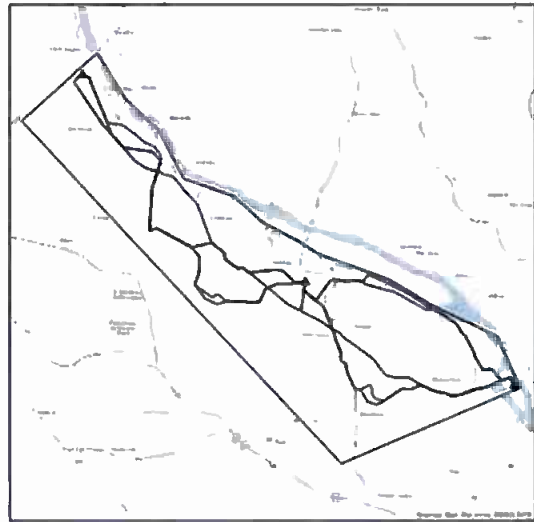


as the Preferred Alternative. The routing steps are illustrated in Figure 1.

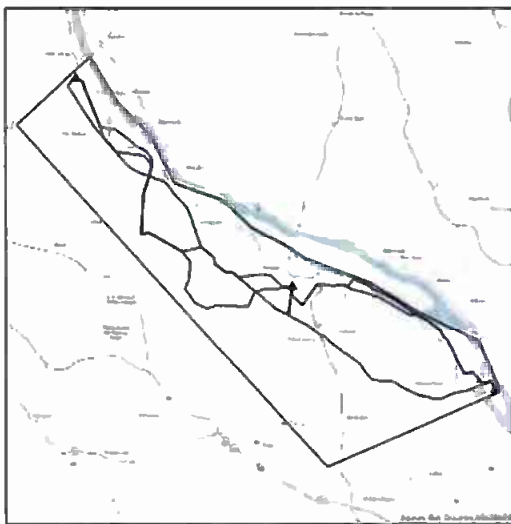
**Figure 1**  
**Routing Steps**



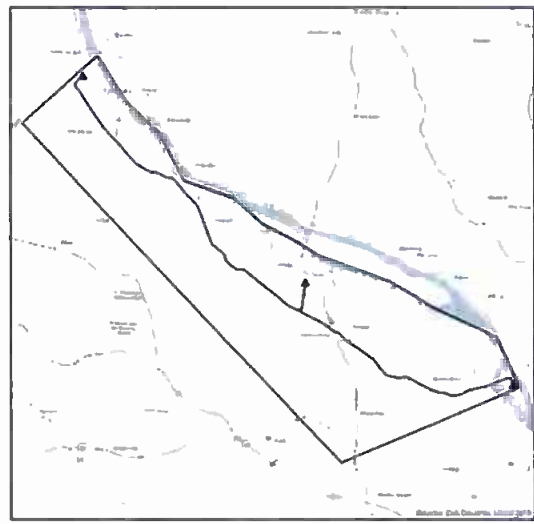
**Step 1: Define Study Area**



**Step 2: Preliminary Routes**



**Step 3: Alternative Routes**



**Step 4: Preferred Alternative**

2.2 Data Collection

2.2.1 Geographic Information System Data Collection

The route development and siting process relies heavily on publically available Geographic Information System (GIS) data from federal state and local government agencies. GIS information is an effective way to develop and inventory environmental information and characterize landscape level constraints and opportunities that can then be used to evaluate and compare the routes. A list of the GIS sources used in the route development and siting process is provided in the table below.

**Table 2.2-1**  
**GIS Data Sources**

Category	Data Source
<b>Aerial Imagery</b>	
Aerial Imagery	Imagery was utilized from the following sources ESRI World Imagery, NAIP, 2015, Accessed 02/2017 and Google Earth.
<b>Hydrology</b>	
Rivers and Lakes	The National Hydrography Dataset (NHD) is a comprehensive set of digital spatial data prepared by the United States Geological Survey (USGS) and United States Environmental Protection Agency that contains information about surface water features such as lakes, ponds, streams, and rivers.
Water Quality Designations	CH 93 Designated Use, PA Department of Environmental Protection, Penn State Institutes Of The Environment, Research Triangle Institute, 2016. This information was used to evaluate exceptional value and high quality streams.

**Table 2.2.1 (Continued)**

Category	Data Source
<b>Hydrology (Continued)</b>	
Wetlands	National Wetland Inventory (NWI), United States Fish and Wildlife Service (USFWS), 2016. The NWI produces information on the characteristics, and extent of the Nation's wetlands and deep-water habitats, this information is used to review general wetland distributions.
100 Year floodplain	Data was obtained from National Flood Hazard Layer, Federal Emergency Management Agency, PA, 2016.
<b>Conservation and Recreational Lands</b>	
Recreational Areas	Data was digitized from ESRI Aerial Imagery and Google Earth Imagery.
State Parks, Forests, and Game Lands	Data for State parks and state forests were obtained from PA Department of Conservation and Natural Resources (PADCNR) (2015) and data for state game land was obtained from PA Game Commission (PGC) (2016).
Hiking and Biking Trails	Data was obtained from, Explore PA Trails, PADCNR, (2016).
Easements	Data was obtained from National Conservation Easement Database, United States Department of Agriculture/Natural Resource Conservation Service, 2015.
Land Trust Protected Areas	Data was obtained from Allegheny County GIS Department, 2010.
<b>Human Environment</b>	
Institutional structures	Hospitals, Schools, and Churches, were obtained from ESRI & Tomtom, Obtained Through ESRI ARCGIS Online, Accessed 02/2017.
Residential and commercial Buildings	Data was digitized from aerial imagery and field observations.
Parcel Boundaries and Ownership	Obtained from Allegheny County Parcel Data, Allegheny County GIS Department, 2016.

**Table 2.2-1 (Continued)**

Category	Data Source
<b>Human Environment (Continued)</b>	
Cemeteries	Data was digitized from aerial imagery and field observations.
Airfields and Heliports	Obtained Through ESRI ARCGIS Online, Accessed 02/2017.
Transportation	Obtained from World Transportation, ESRI, Delorme, Here, Mapmyindia, Tomtom, © Openstreetmap Contributors, And The GIS User Community, Obtained Through ESRI ARC GIS Online, Accessed 02/2017.
Existing Transmission Lines and Substations	Existing Transmission Line and Substation information provided by Duquesne Light and digitized based on aerial imagery.
<b>Cultural Resources</b>	
Architectural, Historical, and Archeological Sites and Districts	Obtained from the Cultural Resources Geographic Information System map-based inventory of the historic and archaeological sites and surveys stored in the files of the PA State Historic Preservation Office, Accessed 05/2015.
<b>Land Use</b>	
Land Use and Cover	Data was digitized from aerial imagery and field observations
<b>Sensitive Species</b>	
Rare, Threatened, and Endangered Habitat	Digitized From The PA Natural Heritage Program, Conservation Explorer Web Map, Accessed 2016.
<b>Geology</b>	
Steep slope	Steep slope was calculated in GIS using Digital Elevation Modeling downloaded from PA State Data Access 2016
Landslide Prone area	Obtained from Allegheny County GIS Department, 2016.

### 2.2.2 Field Reviews

Routing team members conducted field reconnaissance in May and June of 2015 to update data available for resources in the vicinity of each of the Alternative Routes. The field reconnaissance was limited to publicly accessible areas such as road crossings and public lands. Once the Proposed Route was selected, a detailed field review was conducted in 2016 and 2017 and included stream and wetland delineation, cultural resources study, constructability review, rare threatened and endangered species review, and coordination with property owners.

### 2.2.3 Federal, State and Local Government Coordination

The routing team contacted various federal, state, and local agencies to inform them of the Project and requested information to be used during the route development and siting process.

The PA Historical and Museum Commission's (PHMC) [also referred to as the PA State Historic Preservation Office (SHPO)] Cultural Resources Geographic Information System (CRGIS) database was reviewed for previously recorded cultural resources, including National Register of Historic Places (NRHP)-listed historic properties, previously recorded archaeological sites, and previously recorded architectural and historical resources mapped within two miles of the Project area. Furthermore, the PHMC was contacted in December 2015, and asked to review the Proposed Route for impacts to known historic and/or archeological resources. PHMC responded that the potential routes had the potential to impact archaeological and

historical resources and requested a Phase 1 archaeological survey and preliminary review of historic buildings, structures, and districts before the project was finalized.

The Online PA Natural Diversity Index (PNDI) Online Map Explorer was used to review the USFWS, PADCNR, PGC, and PA Fish and Boat Commission (PFBC) databases for potential impacts to RTE species. Consultation letters were sent to USFWS, PADCNR, PGC, and PFBC in October of 2015 for review of the Proposed Route. The PADCNR requested surveys for two plant species, Short's Sedge (*Carex shortiana*) and rock skullcap (*Scutellaria saxatilis*) along the Proposed Route. USFWS requested evaluation of the impact of the Proposed Route on a known bald eagle nest site.

Meetings and coordination with local municipalities were conducted by Duquesne Light during the route siting process.

### 2.3 Siting Guidelines

The siting guidelines were developed based upon the Commission regulations, public input, the resource agency permitting requirements, engineering requirements and economic feasibility. The siting guidelines include both siting opportunities and siting constraints. Siting opportunities are locations representing land use and environmental resources, which are compatible with the safe, economical, and reliable construction and operation of a 138 kV transmission line. Constraint areas represent locations where a 138 kV transmission line might have a potential adverse impact on sensitive resources or locations where conditions might affect reliable and safe operation or economical construction of the line. The siting guidelines

are presented in Table 2.3-1. The siting guidelines are reflected in the resource criteria used to compare alternative routes, which are described in more detail in Section 4.

**Table 2.3-1**  
**Siting Opportunities and Constraints**

Siting Opportunities	Siting Constraints
<ul style="list-style-type: none"> <li>• Parallels existing electric transmission line ROW</li> <li>• Parallel pipeline ROW</li> <li>• Parallel railroad ROW</li> <li>• Open, uninhabited privately owned terrain, including farmland</li> <li>• Short, direct routes</li> </ul>	<ul style="list-style-type: none"> <li>• High density population areas, including commercial, residential, and institutional areas</li> <li>• Recreational lands including: State Parks, Local recreational Areas, and Hiking and Biking Trails</li> <li>• Conservation Areas including: State Forest, State Game Land, National Natural Landmarks, Designated Natural Areas, Wilderness Areas, Core Rare, Threatened, and Endangered (RTE) Habitats, Land Trust Protected Areas, and Unique Geological Resources</li> <li>• Sensitive Natural Areas including: Designated Scenic Areas, National Wild and Scenic Rivers, Exceptional Value Stream, State Scenic Rivers, Streams, and Wetlands</li> <li>• Cultural Resources including: Historic Sites, Cemeteries, and Archaeological Sites</li> <li>• Engineering constraints including: highway, railroad and road crossings, steep terrain, and landslide-prone areas</li> <li>• Airports</li> <li>• Forest land</li> </ul>

**2.4 Public Involvement in Siting Process**

Three public workshops were held to present the three alternative routes to the public and encourage public comments. An advertisement was run in the Post Gazette and letters

were mailed to the property owners that could be affected by the routes and to local government officials of communities where the Project is located. The public workshops were held on February 21, 2017, February 28, 2017, and March 2, 2017 and attendees were encouraged to fill out comment cards. The public workshops received a total of 36 attendees, and 15 comments were received at the public workshops. Most comments were in regards to alignment changes to minimize the impact to those individual's property; one comment card was received at the workshop with concerns for the effect of the transmission line on the resale value of their home and health effects. In addition to the public workshop notification, the newspaper add encouraged those that could not attend to contact DLC via email or mail with comments or concerns regarding the Project. A website was also set up with Project information and targeted internet ads were used to notify individuals potentially impacted by the project. On the website, the public was also encouraged to provide comments or concerns regarding the Project. DLC received comments from the website, largely regarding vegetation management practices and property use during construction.

Furthermore, during the siting process Duquesne Light has worked with individual property owners to accommodate the property owners' requests to the extent practical.

### **3.0 Alternative Route Identification**

#### **3.1 Project Study Area Description**

The initial step in the route development process involved the identification of a study area boundary. This was established to include the existing substations, existing Duquesne Light transmission line corridors to allow for opportunities to parallel existing ROWs, and the



intervening areas. The northern limits of this study area were defined to avoid the Ohio River. The southern limits of the study area were defined to avoid close proximity to the Pittsburgh International Airport. The eastern limit and western limit of the study area were defined based on the location of the existing Brunot Island Substation and existing Crescent Substation, respectively. This study area, as shown on Figure 2, incorporates an approximately 34.1-square-mile area in Allegheny County, PA.

### 3.2 Constraints and Opportunities

Resource Evaluation Criteria were developed in order to compare the suitability of the alternative routes. These criteria consist of 30 resource categories. The resource categories were chosen based on federal and state requirements, their sensitivity to impact by electric transmission lines, and sources of data available.

The resource categories were evaluated at multiple distances from the alternative route centerlines depending on the level of sensitivity. Evaluations include the proposed alternative ROW; the area adjacent to the proposed ROW (including sensitive resources that are in view); and a four-mile-wide corridor including the area two miles on either side of the centerline of each ROW. The four-mile corridor was used to evaluate potential impacts on archaeological and historic resources, scenic areas, unique geologic areas, wilderness areas and airports. GAI examined 30 environmental and human/built resource criteria to determine impacts for the three alternatives. The 30 resource criteria were based on PAPUC regulations as well as traditional environmental impact assessment criteria. The 30 resource criteria used in the evaluation to select the preferred alternative are briefly described as follows:

- **State Park.** These areas are multiple-use lands owned and maintained by the PADCNR.
- **State Forests.** These areas offer recreational opportunities and are protected by the PADCNR.
- **State Game Lands.** These areas are set aside for public hunting and game propagation and are protected by the PGC.
- **Other Recreational Areas.** These areas include county and local parks, as well as golf courses, playgrounds, and athletic fields that were not associated with a school or other institutional complex that could be identified from Google Earth, USGS maps, and aerial photography.
- **National Natural Landmarks.** These areas are listed on the National Registry of Natural Landmarks maintained by the National Park Service and represent outstanding natural areas or geologic features.
- **Designated Natural Areas/Wilderness Areas.** Designated Natural Areas are areas recognized for their special natural features and are identified and/or protected by the PADCNR or by non-profit conservation organizations. Wilderness areas are federal lands protected by the Wilderness Act.
- **Core RTE Habitat.** These areas, identified by the PADCNR, are most closely associated with the habitat of a species of concern. These areas can support little disturbance without adversely affecting the habitat of the species of concern. Species of concern include those species listed as endangered,

threatened, candidate, and extirpated.

- **Land Trust Protected.** These areas are set aside for conservation and protected by a conservation easement.
- **Unique Geologic Resources.** These features offer outstanding scenic, educational, or scientific resources and are identified in several publications of the PADCNR and by the PA Natural Heritage Inventory.
- **Historic Sites.** These sites include previously recorded National Register of Historic Places (NRHP)-listed, eligible, and unevaluated architectural resources identified through review of the PA State Historic Preservation Office's online cultural resources GIS system.
- **Cemeteries.** These areas were identified from Google Earth and aerial photography.
- **Designated Scenic Areas.** Although not necessarily protected, these areas have scenic and natural significance, and are listed in a variety of publications. Some areas are located in state parks.
- **National Wild and Scenic Rivers/Exceptional Value Stream.** National Wild and Scenic Rivers have received national recognition as components of the National Wild and Scenic Rivers System for their recreational and scenic value. Exceptional Value Streams have elevated water quality protection criteria due to the excellent water quality found within them. These streams have additional permitting or construction conditions for activities conducted in these locations.

- **State Scenic Rivers.** These streams are components of the PA Scenic Rivers Program administered by the PADCNR.
- **Exceptional Value Streams.** These streams have elevated water quality protection criteria due to the excellent water quality found within them. These streams typically have additional permitting or construction conditions for activities conducted in these locations.
- **Hiking and Biking Trails.** Includes trails officially recognized by federal, state, or local government agencies, or recognized in published guidebooks. Although these are linear resources that can easily be spanned by the transmission line, they also have scenic value.
- **Airports.** Electric transmission lines can potentially present physical obstructions; the safety zone depends upon terrain and runway configuration. The Federal Aviation Administration protects airports.
- **Steep Terrain.** These areas were identified from USGS topographic mapping. Steep terrain was defined as slopes greater than 20 percent.
- **Landslide-Prone Areas.** As designated by the Allegheny County Planning Department based on slope stability, slope steepness and sources of water.
- **Streams.** Only crossings of perennial streams were used in the evaluation. Perennial streams were identified from USGS National Hydrography Dataset.
- **Archaeological Sites.** These areas include previously recorded archaeological

sites identified in the CR-GIS database maintained by the PA SHPO.

- **Commercial/Industrial Areas.** These areas are defined by industrial or commercial development, and were identified from aerial photography.
- **Residential Areas.** These areas are characterized by suburban and scattered residential development and were identified from aerial photography.
  - Houses (within 100 feet of Alternative Centerlines)
  - Apartments (within 100 feet of Alternative Centerlines)
- **Highway, Railroad, and Road Crossings.** These were identified from highway mapping and aerial photography.
- **Institutional Complexes.** These areas include schools, churches, nursing homes, municipal building, hospitals, or other places of public gathering.
- **Agricultural Land.** This represents areas that are actively being used for agriculture. Agricultural Land was identified from aerial photography.
- **Forested Land Cleared.** This represents areas that are presently tree covered that will be cleared for construction and maintained as rangeland. Forest land includes plant and wildlife habitat that is valuable for food and cover, and is a habitat type that is generally declining in the study area. Forested land was identified from aerial photography.
- **Wetland Impacts.** Wetlands are vital components of the ecosystem. This parameter assesses forested wetland areas that would be cleared for construction and maintained as emergent wetland.

- **Non-Existing ROW.** These include all undisturbed land required for transmission line construction and operation that does not follow or parallel an existing electrical transmission line ROW.
- **ROW length.** This includes the total length of the ROW in which the transmission line would be constructed.

Figure 3 and Figure 4 identify the approximate 34.1-square-mile study area and the three alternatives with nearby resources on aerial photography and topographic background, respectively.

Depending on the sensitivity of the resource and PAPUC requirements, varying distances from the alternative centerline were used to calculate impacts. All resource impacts were calculated within the 200-foot-wide corridor. However, State Forests, State Parks, State Game Lands, National Natural Landmarks, Designated Natural/Wilderness Areas, Unique Geological Resources, Historic Sites, Designated Scenic Areas, Hiking and Biking Trails, Airports, and Archaeological Sites impacts were also calculated within a two-mile buffer from the alternative centerline. Additionally, Other Recreational Areas, Residences, Apartment Buildings, Institutional Complexes, and Cemeteries impacts were calculated within 1,000-foot corridor centered on the alternative centerline. The potential impacts to resource criteria for each alternative are summarized in Section 4 and Appendix A.

The 30 resources were quantified by the following parameters: linear distance adjacent (miles), number within a specified distance, acres impacted within the ROW, and linear

distance within two miles for the Airport impact calculation.

Following data acquisition, it was found that 9 of the criteria to be used for comparing the alternatives did not occur on or in proximity to any of the alternatives. These 9 criteria were:

- State forests;
- State Park;
- State Game Lands;
- National Natural Landmarks;
- Designated Natural Areas/Wilderness Areas;
- Unique Geologic Resources;
- Designated Scenic Areas;
- National Wild and Scenic Rivers/Exceptional Value Stream; and
- State Scenic Rivers;

### 3.3 Alternative Route Development

Duquesne Light retained GAI Consultants, Inc. (GAI) to prepare this Environmental Assessment and Line Routing Study to identify and evaluate feasible alternative transmission line routes. GAI assembled a team consisting of land use planners, environmental specialists, design engineers, geologists, historians and archaeologists to prepare this environmental assessment and line route study.

Following establishment of the study area, GAI utilized recent aerial photography (2015), USGS topographic mapping, agency coordination, and published data to compile a GIS-based constraints map of the study area. This map identified sensitive natural and human/built resources in the study area. GAI used this information to develop preliminary transmission line routes for further analysis to avoid major constraints to the extent feasible.

Field reconnaissance was conducted to update data available for resources in the vicinity of each of the preliminary routes. Route locations were then eliminated, or refined as necessary based upon environmental and human/built constraints. Three routes that minimize impacts to environmental and human/built constraints were retained for further analysis.

### 3.4 Alternative Routes

#### 3.4.1 Existing Alternative

The Proposed Route is 14.5 miles long and utilizes existing ROW for its entire length. The Proposed Route exits the Brunot Island Substation to the west crossing the Ohio River. It then travels west roughly paralleling Chartiers Creek for approximately two miles in an undeveloped area bordered by an industrial area to the north of Chartiers Creek and residential areas to the south of Chartiers Creek. Once crossing Chartiers Creek for the final time the Proposed Route proceeds west-northwest following an existing ROW through an forested area for approximately 1 mile. The Proposed Route then turns north northwest and precedes for approximately 0.5 miles, where it crosses a subdivision located between McKees Rocks Road and Clever Road and then passes into a forested area that parallels Fairhaven Park. Once past Fairhaven Park the Proposed Route turns northwest and continues for approximately one mile, where it crosses residential areas intermingled with forested areas. The Proposed Route then crosses Interstate 79 and continues for approximately a mile in a northwest direction crossing residential areas intermingled with forested areas. The Proposed Route then turns north to enter and exit the Montour Substation, which involves approximately 0.70 miles of combined ROW. The Proposed Route then continues in a generally northwest direction for



approximately eight miles crossing residential areas intermingled with forested areas. In this eight-mile stretch the Proposed Route crosses numerous residential streets, Thorn Run Road, University Boulevard, Flaugherty Run Road, Spring Run Road, and Bocktown Road before entering the Crescent Substation. The estimated cost to implement the Proposed Route is approximately \$95 and \$115 million.

#### 3.4.2 Alternative Route 1

Alternative 1 is 15.3 miles long and utilizes 2.3 miles of existing ROW. Alternative 1 exits the Brunot Island Substation to the north crossing the Ohio River and enters an industrial portion of McKees Rocks. Alternative 1 roughly parallels railroad ROW for approximately two miles, in a north-northwest direction. When it crosses over the McKees Rocks Bridge, Alternative 1 leaves the railroad ROW and crosses over Route 51. The route then roughly parallels Route 51 on a largely forested hill slope for 2.3 miles. Alternative 1 then crosses Interstate 79 and turns to the south for approximately 0.70 miles before turning northwest for 0.6 miles to enter the Montour Substation. Between Interstate 79 and the Montour Substation, Alternative 1 passes through forested areas. Alternative 1 leaves the Montour Substation in a westward direction passing through forested area for approximately 1.4 miles. At this point Alternative 1 meets and overlaps the Proposed Route and utilizes existing ROW. Alternative 1 continues along the existing ROW to the northwest for approximately 1.2 miles. Alternative 1 then deviates to the west passing through forested area for approximately 1.5 miles and crossing Thorn Run Road. Alternative 1 then turns north staying in forested area and continues for approximately 1.6 miles. Alternative 1 then crosses Route 51 and turns to the

northwest where it continues for approximately three miles passing through mostly forested areas with some residential and industrial areas before it enters the Crescent Substation. The estimated cost to implement Alternative 1 is approximately \$125 million to \$135 million.

### 3.4.3 Alternative Route 2

Alternative 2 is 16.2 miles long and utilizes 1.2 miles of existing ROW. Alternative 2 exits the Brunot Island Substation to the north crossing the Ohio River and enters an industrial portion of McKees Rocks. Alternative 2 roughly parallels railroad ROW for approximately 3.8 miles, in a north-northwest direction. When it crosses over the McKees Rocks Bridge, Alternative 2 leaves the railroad ROW, making several deviations to the south and west, crossing over Route 51 and Interstate 79, and staying within largely forested areas before entering the Montour Substation. Alternative 2 leaves the Montour Substation in a western direction and is located in a forested area while it skirts a large residential area for approximately three miles. Once past the residential area, Alternative 2 turns north for approximately 0.7 miles, and then turns northwest for approximately 1.4 miles, crossing over Thorn Run Road, and staying in forested areas. Alternative 2 then turns north for approximately 1.6 miles, where it is located in forested area that is situated between two residential areas. Alternative 2 then turns to the west and continues for approximately one mile through forested area before meeting the Proposed Route. Alternative 2 then turns northwest and continues along existing ROW for approximately 0.5 miles before diverging to the north-northwest to avoid several residential areas. Alternative 2 continues to the north-northwest for approximately 1.6 miles before entering the Crescent Substation. The estimated cost to

implement Alternative 2 is approximately \$135 million to \$150 million.

#### **4.0 Alternative Route Comparison**

To quantitatively analyze the three routes, the resource categories were converted to a relative scale, weighted and combined to produce a final impact score of each route.

In order to put resource measurements on a relative scale (acres, number, feet) and to obtain an impact score that could be compared across the different alternatives, the data were mathematically proportioned to a scale of 1 to 10. In this procedure, the alternative with the highest value (worst) for individual resources receives a relative score of 10; that with the lowest value (best) receives a relative score of 1. (Note: If all three alternatives have an impact value of zero for a specific resource criterion, then the weighted value is equal to zero). Thus, the raw data values are transformed to a relative scale from 1 to 10 to obtain Relative Scores for each Resource Evaluation Criterion impacted. Using the relative position of the alternative in comparison to the values for all alternatives provided an indication of how the alternative compares overall. This process is based on a methodology suggested by Gaige, et al. (1991).

In order to determine the most suitable alternative, the relative scores for each criterion for each alternative need to be totaled. Criteria weights established by the Siting Criteria Council (SCC) were used. The SCC was created for the GPU-DQE 500 kV Transmission Line siting that included over 500 miles of line and a study area of 20,000 square miles. The SCC consisted of individuals representing diverse backgrounds and interests. The SCC included professors of ecology and history, city, county and regional planners, a school superintendent,

a member of the League of Women Voters, farmers, a business woman, a health professional, a conservation organization member, and an employee of a business association.

The purpose of the SCC was to aid in the selection of the natural and manmade resource criteria that would be used to evaluate impacts along alternative routes. In addition, the SCC was asked to weigh these resource criteria. The SCC was given an overview of the siting and route evaluation process. Then, the SCC assisted in the selection and definition of Resource Evaluation Criteria. Finally, the SCC assigned weights to the Resource Evaluation Criteria, using a nominal group technique that encourages contributions from all members. The weighting session consisted of four interactive rounds of discussion and weighting. Each member was asked to weigh each Resource Evaluation Criteria. After each round of weighting, each SCC member was given a weighting summary sheet that displayed their last vote and the mean for all the votes for each Resource Evaluation Criteria. Each member was given the opportunity during each round of voting to express their views on the weighting scores in an attempt to influence the next round of voting. The results of the SCC's fourth round of weighting are included in the Table 4.0. At the conclusion of round four the SCC was satisfied with the results and voted to adopt the mean weights for each of the Resource Evaluation Criteria when routing decisions needed to be made and choices had to be made as to which resources were to be impacted. The weights established by the SCC are considered an industry standard.

SCC weights were used for 22 of the 30 resource criteria. GAI further augmented these with an additional eight resource criteria (Land Trust Protected Area, Cemeteries, Exceptional

Value Streams, Landslide Prone Area, Commercial/Industrial Areas, Forest Land Cleared, Non-existing ROW, and Length of ROW) to reflect items of local significance and current regulatory concerns. Weights for these eight resources were assigned by a group of environmental, planning and engineering professionals at GAI that have extensive experience siting and evaluating the impacts of projects in similar areas. The weights were determined by considering the relative importance of these resources and the weights assigned to related resources by the SCC. The weights used for the evaluation of the alternatives are shown in Table 4.0.

The relative scores achieved by each alternative for each criterion were then multiplied by the criteria weights to obtain the impact scores shown in Appendix A. The impact scores were totaled to obtain an overall impact score for each alternative.

**Table 4.0**  
**Resource Evaluation Criteria and Weights Assigned**

Resource Evaluation Criteria	Weights
Apartments and houses within 100 feet of centerline	88.8
Institutional Complexes	83.1
National Natural Landmarks	78
Commercial/Industrial Areas	76.9
Historic Sites	76.8
Cemeteries	76.8
Designated Natural/Wilderness Areas	73.2
Scenic Rivers Crossed	72
Core RTE habitat acres	71.9
Land Trust Protected acres	71.9
Designated Scenic Areas	71.3
State Parks	69.2
Other Recreational Areas	67.3

Wetland Cleared	66.2
Unique Geological Resources	59.2

**Table 4.0 (Continued)**

Resource Evaluation Criteria	Weights
EV streams Crossed	58
Archaeological Sites	54
Landslide-Prone Areas	53.7
Airports	52.5
Agricultural Land	44
State Forests	43.4
Perennial Streams	43
Hiking and Bike Trails	42.8
Steep Terrain	40.9
State Game Lands	33.4
Forest Land Cleared	33
Highway, Railroad and Road Crossings	33.1
Non-existing ROW	31.1
ROW length	28.8

#### 4.1 Land Uses

Current land use described in this section is within and adjacent to the alternatives, as well as the changes to land uses which will occur as a result of construction of any of the three alternatives for the transmission line. Impacts have been considered within the proposed ROW and for urban development within 100 feet of the ROW centerline. Land use/cover types within and adjacent to the ROWs of each of the Alternatives were classified according to criteria developed in A Land Use and Land Cover Classification System for Use with Remote Sensor Data (Anderson, et al., 1976).

A GIS-based Anderson Level II evaluation was conducted for each of the Alternatives. Table 4.1.1 presents a description of land use classifications used in this analysis. Present land use patterns were identified from recent aerial photography (2015) and from field reconnaissance. Lands to be affected by the Project were determined based on aerial photographs, field visits, and augmented data from USGS maps for stream, pond, road and utility crossings.

**Table 4.1-1**  
**Land Use Classifications**

<b>Classification</b>	<b>Description</b>
Residential	Areas dominated by single or multi-family housing units.
Commercial/ Industrial	Includes human-dominated land uses, with the exception of residential. Typically includes industrial and/or commercial areas with much of the land covered by structures, or parking lots.
Agricultural	Broadly defined as land devoted primarily to the production of food and fiber. Includes cropland, pastureland, and orchards, as well as farm associated structures.
Forest	Those areas having an aerial tree-crown density of 10 percent or more. Includes both deciduous and coniferous woodlands.
Open	Areas dominated by low vegetation such as range land or grass land.
Municipal/ Institutional	Areas used by municipalities for parks, waste treatment, water/salt storage, etc.; or institutional uses such as churches, schools, hospitals, etc.
Barren	Area where plant growth may be sparse, stunted, and/or contain limited biodiversity. Environmental conditions such as toxic or infertile soil are often key factors in poor plant growth and development.

Source: Anderson, et al., 1976.

The following land use descriptions of the areas crossed by each alternative proceed from east to west, beginning at the Brunot Island Substation and continuing to Crescent

Substation. Figures 3 and 4 show the alternative routes with nearby resources on aerial photography and on topographical mapping, respectively.

### Proposed Route

The Proposed Route exits the Brunot Island Substation crossing the Ohio River and proceeds through an open area alongside Chartiers Creek for approximately 1.7 miles. The Proposed Route parallels an existing railroad line for 0.1-mile. The Proposed Route crosses the existing railroad line, the Chartiers Creek, and then utilizes an existing cleared right-of-way in a forested area (ROW) for 1.5 miles until reaching McKees Rocks Road. The proposed route passes a residential area for approximately 0.2 miles until it crosses Clever Road. Between Clever Road and the crossing of Interstate 79, the Proposed Route switches between passing through forested areas and residential areas, crossing approximately 0.7 miles of forested area and 0.7 miles of residential area. Between Interstate 79 and entering the Montour Substation the Proposed Route again alternates between passing through forested areas and residential areas, crossing approximately one mile of forested area and 0.6 miles of residential area.

After entering and exiting the Montour Substation, the Proposed Route passes through approximately 0.3 miles of residential area before entering a 0.6 mile stretch of forested area. The Proposed Route briefly crosses a residential area associated with Coketown Road before entering another approximately 0.5 mile stretch of forested area. The Proposed Route crosses approximately 0.1 miles of open area along Montour Street Extension. Between Montour Street Extension and Maple Street Extension, the Proposed Route switches between passing through forested areas and residential areas, crossing approximately 0.3 miles of forested area



and 0.4 miles of residential area. After crossing Maple Street Extension, the Proposed Route crosses approximately 1.1 miles of forested area before briefly passing through a commercial industrial area along Thorn Run Road. Between Thorn Run Road and University Boulevard, the Proposed Route crosses mostly forested area, approximately 1.3 miles, and some residential area, approximately 0.2 miles. Between University Boulevard and right before entering the Crescent Substation the Proposed Route alternates between passing through forested areas and residential areas, crossing approximately 2.2 miles of forested area and 0.6 miles of residential area. The Proposed Route crosses a Commercial/Industrial area briefly along Flaugherty Run Road. Before entering the Crescent Substation, the Proposed Route crosses approximately 0.3 miles of open area.

The Proposed Route utilizes existing ROW for its entire length. The Proposed Route has 102 residences, 11 apartment buildings, and four commercial/industrial buildings crossed by the proposed ROW. Four schools and four churches are located within 1000 feet of the Proposed Route, but no institutional complexes are located within the proposed ROW. While no cemeteries are crossed by the proposed ROW of the Proposed Route, five cemeteries are within 1000 feet of the Proposed Route. The Proposed Route Crosses 73.7 acres of forested area and no agricultural areas. Compared to the other alternatives the Proposed Route has the least impact to forested land by a large margin. The results of all the Land Use Criteria calculated are provided in Table 4.1-2.

The Proposed Route crosses the most residential areas compared to the other alternatives. However, because the Proposed Route will be utilizing existing ROW, impacts to

residential land use is expected to be minimal, with most impacts being temporary during construction. Construction of this alternative will require converting approximately 73.7 acres of forest to open land. Compared to the other alternatives the Proposed Route has the least impact to forested land by a large margin. The ROW of the Proposed Route does not cross any schools, churches, hospitals, or cemeteries, visual impacts or noise impacts during construction could cause minor and largely temporary impact to institutional complexes.

### Alternative 1

Alternative 1 exits the Brunot Island Substation crossing the Ohio River into an industrial commercial area for approximately 0.2 miles. Alternative 1 then transitions to a barren area for approximately 1.9 miles before crossing Neville Road and Route 51, approximately 16.3 acres of this barren land crossed is designated for future industrial development. Between Route 51 and Ewing Road, Alternative 1 passes into a forested area for approximately 0.8 miles and approximately 0.1 miles of commercial/industrial area. Between Ewing Road and Old Fleming Road (Route 51), Alternative 1 crosses approximately 0.2 miles of open area, 0.1 miles of barren area, and 0.2 miles of forested area. Between Old Fleming Road (Route 51) and Interstate 79, Alternative 1 crosses 0.8 miles of forested area. After crossing Interstate 79, Alternative 1 crosses approximately one mile of forested land and 0.2 miles of open area before entering the Montour Substation.

After leaving the Montour Substation, Alternative 1 crosses approximately 1.3 miles of forested area and 0.2 miles of open area before crossing Montour Street Extension. Between Montour Street Extension and Maple Street Extension, Alternative 1 switches between passing

through forested areas and residential areas, crossing approximately 0.4 miles of forested area and 0.6 miles of residential area. After crossing Maple Street Extension, Alternative 1 crosses approximately 3.6 miles of forested area before crossing Route 51 and passing through a residential area for approximately 0.4 miles. Alternative 1 passes back into forested area for approximately 0.7 miles before briefly crossing a residential area and commercial/industrial area as it crosses Route 51. Alternative 1 then returns to forested area for the remaining approximate 1.4 miles to the Crescent Substation, with the exception of two small residential areas, one along Spring Run Road and the other along Harper Road.

Alternative 1 is the second longest alternative at 15.3 miles and would require 12.8 miles of new ROW. Alternative 1 has 24 residences, one apartment building, and nine commercial/industrial buildings crossed by the proposed ROW. Two schools and four churches are located within 1000 feet of Alternative 1, but no institutional complexes are located within the proposed ROW. While no cemeteries are crossed by the proposed ROW of Alternative 1, three cemeteries are within 1000 feet of Alternative 1. Alternative 1 Crosses 200.70 acres of forested area and no agricultural areas. The results of all the Land Use Criteria calculated are provided in Table 4.1-2.

The Alternative 1 crosses minimal residential areas, and a number of the residential areas are located where Alternative 1 is paralleling existing ROW. In these areas impacts to residential land use is expected to be minimal, with most impacts being temporary during construction. However, 10 residences are located in areas that would require new ROW and significant long-term impacts would be expected to the residences located in new ROW.

Construction of Alternative 1 will require converting approximately 200.70 acres of forest to open land. The ROW of Alternative 1 does not cross any schools, churches, hospitals, or cemeteries, however, nearby institutional complexes could have minor visual impacts and temporary noise impacts during construction. Additionally, 16.3 acres of the proposed ROW located in an industrial area of McKees Rocks may be in conflict with future industrial development in that area.

### Alternative 2

Alternative 2 exits the Brunot Island Substation crossing the Ohio River into an industrial/commercial area for approximately 0.2 miles. Alternative 2 then transitions to a barren area for approximately 1.9 miles before crossing Neville Road, approximately 16.3 acres of this barren land crossed is designated for future industrial development. Between Neville Road and Interstate 79, Alternative 2 passes through forested area for 2.3 miles. Between Route 51 and Ewing Road, the Alternative passes into a forested area for approximately 0.8 miles and over approximately 0.1 miles of commercial/industrial area. Between Ewing Road and Old Fleming Road (Route 51) Alternative 2 crosses approximately 0.2 miles of open area, 0.1 miles of barren area, and 0.2 miles of forested area. Between Old Fleming Road (Route 51) and Interstate 79 Alternative 2 crosses 0.8 miles of forested area. After crossing Interstate 79, Alternative 2 crosses approximately one mile of forested land and 0.2 miles of open area before entering the Montour Substation.

For the approximately 9.6 miles between the Montour Substation and the Crescent Substation, Alternative 2 passes through almost entirely forested area. Small residential areas

are crossed at Downing Drive, Coraopolis Heights Road, Spring Run Road, and Harper Road. A small commercial/industrial area is crossed at the intersection of Stoop Ferry Road (Route 51) and Flaugherty Run Road.

Alternative 2 is 16.2 miles long and would require 15.0 miles of new ROW. Alternative 2 has eight residences, one apartment building, and six commercial/industrial buildings crossed by the proposed ROW. One schools and five churches are located within 1000 feet of Alternative 2, but no institutional complexes are located within the proposed ROW. While no cemeteries are crossed by the proposed ROW of Alternative 2, one cemetery is within 1000 feet. Alternative 2 Crosses 230.2 acres of forested area and no agricultural areas. The results of all the Land Use Criteria calculated are provided in Table 4.1-2.

The Alternative 2 crosses minimal residential areas, however, these residences are located in areas that would require new ROW and significant long term impacts would be expected to the residences. Construction of Alternative 2 will require converting approximately 230.2 acres of forest to open land. The ROW of Alternative 2 does not cross any schools, churches, hospitals, or cemeteries, however, nearby institutional complexes could have minor visual impacts and temporary noise impacts during construction. Additionally, 16.3 acres of the proposed ROW located in an industrial area of McKees Rocks may be in conflict with future industrial development in that area.

**Table 4.1-2**  
**Land Use and Land Cover**

Criteria <sup>1</sup>	Weight	Alternative Routes		
		Existing	1	2
<b>Commercial/Industrial Areas</b>				
# Structures within 100 feet of Centerline		4	9	6
<b>Score<sup>2</sup></b>	<b>76.9</b>	76.9	769.0	353.7
<b>Residential Areas</b>				
<b>Score<sup>2</sup></b>	<b>88.8</b>	888.0	211.8	88.8
# Houses within 100 feet of Centerline		102	24	8
# Apartment within 100 feet of Centerline		11	1	1
<b>Cemeteries</b>				
Number within 100 feet of Centerline		0	0	0
<b>Score<sup>2</sup></b>	<b>76.8</b>	0	0	0
Number adjacent (1,000 feet of centerline) <sup>1</sup>		5	3	4
<b>Railroad and Highway/Road Crossings</b>				
<b>Score<sup>2</sup></b>	<b>33.1</b>	331.0	182.1	33.1
Number of Highway/Road Crossings		47	33	25
Number of Railroad Crossings		5	11	11
<b>Institutional Complexes (schools, churches, hospitals, nursing homes, recreational areas)</b>				
Number Adjacent/Crossed (1000-foot corridor)		8	6	6
<b>Score<sup>2</sup></b>	<b>83.1</b>	831.0	83.1	83.1

**Table 4.1-2 (Continued)**

Criteria <sup>1</sup>	Weight	Alternative Routes		
		Existing	1	2
<b>Agricultural Land</b>				
Active Agricultural Land Acres within 100 feet of Centerline		0	0	0
Score <sup>2</sup>	44.0	0	0	0
<b>Non-Paralleling ROW</b>				
Miles Required		0	12.8	15.0
Score <sup>2</sup>	31.1	31.1	270.7	311.0
<b>Length</b>				
Miles		14.5	15.3	16.2
Score <sup>2</sup>	28.8	28.8	125.8	288.0
<b>Land Cover</b>				
Forested Land within 100 feet of Centerline (acres)		73.75	200.70	230.2
Score <sup>2</sup>	33.0	33.0	274.0	330.0

**Notes:**

- <sup>1</sup> Not all criteria that were counted or calculated in the review of the alternatives were used in the scoring process. This is because some criteria were counted using multiple parameters and should not be double counted in the scoring process. Additionally, some of the counted or calculated criteria are not considered negative constraints and should not be include in the scoring process.
- <sup>2</sup> Scores are calculated by converting the raw data found to a relative scale of 1-10 as described in Section 4.0. The value in the relative scale is then multiplied by the weight to obtain the score. The Raw data, relative scaling, and final score for each criteria scored are provided in Appendix A.

The Proposed Route is the shortest route and requires the least amount of new ROW. The Proposed Route crosses the least amount of forested land, and would require far less tree clearing than any other Alternative. The Proposed Route crosses the most residential area and is adjacent to the most institutional complexes. However, because the Proposed Route will be utilizing existing ROW minimal new impacts are anticipated, with most impacts being temporary during construction. Alternatives 1 and 2 were located to minimize proximity to residential areas. However, where new ROW crosses residential areas, significant long term impacts would be expected. Additionally, Alternatives 1 and 2 would require far more forested area conversion than the Proposed Route. Therefore, from a land use and land cover perspective, the Proposed Route has the least impact.

#### 4.2 Hydrology

Wetlands in the study area were identified through a review of USFWS and NWI maps. The NWI maps identify numerous palustrine wetlands in the study area. The Proposed Route crosses 0.41 acres of Forested wetland and 18.47 acres of non-forested wetlands. The non-forested wetlands and forested wetlands that are crossed by the Proposed Route, are located along Chartiers Creek. Alternative 1 crosses no forested wetland and 4.41 acres of non-forested wetlands. Alternative 2 crosses no forested wetland and 4.48 acres of non-forested wetlands.

The study area is located in two watersheds, Chartiers Creek and Montour Run, both of which flow into the Ohio River. All the Alternatives cross a portion of the Ohio River as they exit the Brunot Island Substation. The Ohio River is classified as navigable (PA Code 2016).



Streams traversed by Alternative Routes are included in Table 4.2-1. The primary sub-watersheds in the study area are those of Kilbuck Run, Lower Chartiers Creek, Montour Run, McCabe Run, and Flaugherty Run. The principal named streams crossed by Project alternatives include the Ohio River, Chartiers Creek, Moon Run, Montour Run, McCabe Run, Thorn Run, Flaugherty Run, Spring Run, Shouse Run and Meeks Run.

**Table 4.2-1**  
**Perennial Stream Crossings**

Alternative Route	Stream
Proposed Route	Ohio River
	Chartiers Creek
	UNT to Chartiers Creek
	UNT to Chartiers Creek
	UNT to Moon Run
	UNT to Moon Run
	UNT to Moon Run
	Moon Run
	UNT to Montour Run
	Montour Run
	McCabe Run
	UNT to McCabe Run
	Thorn Run
	UNT to the Ohio River
	Flaugherty Run
Spring Run	
Shouse Run	

**Table 4.2-1 (Continued)**

Alternative Route	Stream
Alternative 1	Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to Moon Run
	Moon Run
	UNT to Montour Run
	Montour Run
	McCabe Run
	UNT to McCabe Run
	Thorn Run
	UNT to Thorn Run
	UNT to the Ohio River
	Flaugherty Run
	Spring Run
Shouse Run	
Alternative 2	Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to the Ohio River
	UNT to Moon Run
	Moon Run
	UNT to Montour Run
	Montour Run

**Table 4.2-1 (Continued)**

Alternative Route	Stream
Alternative 2	Meeks Run
	UNT to Thorn Run
	Thorn Run
	UNT to Thorn Run
	UNT to the Ohio River
	Flaugherty Run
	Spring Run
	Shouse Run

\*Source: Chapter 93 Designated Use Streams.

\*Note: some streams may be crossed more than once by an Alternative

The PA Department of Environmental Protection classifies and establishes water quality standards and criteria for all surface waters within the state. These standards include general water use categories and corresponding water quality standards. According to these standards, Montour Run, Meeks Run, and their tributaries are classified as trout stocked fisheries. Ohio River, Chartiers Creek, Moon Run, McCabe Run, Thorn Run, Flaugherty Run, Spring Run, Shouse Run, and their tributaries are classified as warm water fisheries. None of the streams crossed by the three Alternative Routes are classified as Exceptional Value (EV).

**Table 4.2-2**

**Hydrology**

Criteria	Weight	Alternative Routes		
		Existing	1	2
<b>NWI Wetlands</b>				
Acres (200-foot ROW)		18.9	4.4	4.5
<b>Score<sup>1</sup></b>	<b>66.2</b>	<b>662.0</b>	<b>66.2</b>	<b>69.9</b>
<b>Streams</b>				
Number of Perennial Crossings		20.0	22.0	22.0
<b>Score<sup>1</sup></b>	<b>43.0</b>	<b>43.0</b>	<b>430.0</b>	<b>430.0</b>
Number of EV Streams Crossed		0.0	0.0	0.0
<b>Score<sup>1</sup></b>	<b>58.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Notes:

<sup>1</sup> Scores are calculated by converting the raw data found to a relative scale of 1-10 as described in Section 4.0. The value in the relative scale is then multiplied by the weight to obtain the score. The Raw data, relative scaling, and final score for each criteria scored are provided in Appendix A.

None of the Alternatives will impact exceptional value streams. The Proposed Route has the least perennial streams crossed. However, Alternative 1 and Alternative 2 have the least Impacts to wetlands. Because, impacts to wetlands are weighted higher Alternative 1 and 2 would have the least impact from an overall hydrological perspective.

**4.3 Scenic and Recreational Areas**

The Outstanding Scenic Geologic Features of Pennsylvania, Parts 1 and 2 (Geyer and Bolles, 1979 and 1987) and USGS 1:24,000 topographic maps were used to identify scenic areas in and near the proposed Project area. Scenic areas identified in these sources represent some of the most notable scenic geologic features of the Commonwealth. No recognized

scenic areas are located in the Project Area. Aerial mapping was also used to identify any notable resources.

Recreational areas include those lands managed to provide and enhance a wide variety of both active and passive recreational opportunities. These areas include state parks, county and municipal parks, public hunting and fishing areas, playgrounds, athletic fields, golf courses and reservoirs maintained by the United States Army Corps of Engineers. Recreational areas within the study area were identified using GIS data sources, municipal planning documents, property owner data, and aerial mapping. There are no federal or state parks, state forests, state game lands, designated scenic area, natural, wild and scenic/state rivers located in the vicinity of the Project area. Additionally, there are no unique geologic resources crossed or adjacent to any of the three alternatives (Geyer and Bolles, 1979 and 1987).

There are numerous local parks located near the alternatives.

- Sheraden Park is a large urban park that consists of wooded area and sports fields. It is located approximately 400 feet south of the Proposed Route.
- McGonigle Park is a Neighborhood park that consists of playground, sports fields and wooded area. It is located approximately 300 feet south of the Proposed Route.
- Fairhaven Park is a large urban park that consists of wooded area and sports fields. The Proposed Route crosses it in the wooded area.
- Montour Trail is a bike trail. All Alternatives cross over the trail.

- Moon Township Park is a large urban park that consists of wooded area, playgrounds, and sports fields. Alternative 2 crosses the park in the wooded area.
- Montour Heights Country Club is a golf course. It is located approximately 200 feet south of Alternative 1 and Alternative 2.
- Robin Hill Park is a large urban park that consists of a historic structure and wooded area. Alternative 1 and Alternative 2 cross a corner of the park in a wooded area.
- A Moon Township municipal park that consists of a wooded area is located approximately 300 feet west of the Proposed Route.
- Mooncrest Neighborhood Center consists of sports fields and a wooded area. The Proposed Route crosses the edge of this park.
- Davis Park is a mini-park that consists of a basketball court it is located approximately 800 feet south of Alternative 1 and Alternative 2.
- Preston Park is a mini-park that consists of an open space it is located approximately 800 feet north of Alternative 1 and Alternative 2.
- Harriet Street Parklet consists of a playground and is located approximately 300 feet west of Alternative 1 and Alternative 2.
- Rangers Field consists of sports fields and is located approximately 700 feet north of Alternative 1 and Alternative 2.

The Proposed Route crosses near Sheraden Park and McGonigle Park however, due to tree cover and terrain between the parks and the alternative impacts to these parks are not

anticipated. The Proposed Route is within an existing ROW while crossing Fairhaven Park. Impacts to Fairhaven parks are expected to be minimal and temporary during construction. The Proposed Route crosses over the Montour Trail following existing ROW. Additionally, the Montour Trail is located in a valley and the Proposed Route would likely span from ridgetop to ridgetop resulting in minimal impact to the trail. The Proposed Route crosses near a Moon Township municipal park, however, due to tree cover and terrain between the parks and the alternative impacts to these parks are not anticipated. The Proposed Route crosses the edge of Mooncrest Neighborhood Center, the Proposed Route is located in an existing ROW that is buffered by trees, and impacts to Mooncrest Neighborhood Center are expected to be minimal and temporary during construction.

Alternative 1 passes near Davis Park, Preston Park, Harriet Street Parklet, and Rangers Filed these parks are all located within the urban backdrop of McKees Rocks, therefore the construction of a transmission line in their vicinity would have little visual impact. Alternative 1 crosses the Montour Trail in an alignment that would require a turning structure immediately adjacent to the trail causing moderate impact during construction. However, existing transmission lines structures are already in this area so long term visual impacts are not expected. Alternative 1 passes near Montour Heights County Club, however due to tree cover and terrain between the country club and the Alternative impacts are expected to be minimal. Alternative 1 passes through the corner of Robin Hill Park which would cause moderate impacts to the park as trees would have to be cleared to accommodate a new ROW, additionally the transmission line ROW would be in a visible area from the historic structure that is the key feature of the park.

Alternative 2 passes near Davis Park, Preston Park, Harriet Street Parklet, and Rangers Field these parks are all located within the urban backdrop of McKees Rocks, therefore the construction of a transmission line in their vicinity would have little visual impact. Alternative 2 crosses over the Montour Trail. The Montour Trail is located in a valley and Alternative 2 would likely span from ridgetop to ridgetop resulting in minimal impact to the trail. Alternative 2 passes thru Moon Township Park, which would cause moderate impacts to the park as trees would have to be cleared to accommodate a new ROW. Alternative 2 passes near Montour Heights County Club, however due to tree cover and terrain between the country club and the Alternative, impacts are expected to be minimal. Alternative 2 passes through the corner of Robin Hill Park which would cause moderate impacts to the park as trees would have to be cleared to accommodate a new ROW, additionally the transmission line ROW would be in a visible area from the historic structure that is the key feature of the park.

**Table 4.3-1**  
**Scenic and Recreational Areas**

Criteria <sup>1</sup>	Weight	Alternative Routes		
		Existing	1	2
<b>State Forest</b>				
Linear Distance Adjacent (miles)		0	0	0
Score <sup>2</sup>	43.4	0	0	0
Number within two miles		0	0	0
<b>State Parks</b>				
Linear Distance Adjacent (miles)		0	0	0
Score <sup>2</sup>	69.2	0	0	0
Number within two miles		0	0	0



**Table 4.3-1 (Continued)**

Criteria <sup>1</sup>	Alternative Routes			
	Existing	1	2	
<b>State Game Lands</b>				
Linear Distance Adjacent (miles)		0	0	0
Score <sup>2</sup>	<b>33.4</b>	0	0	0
Number within two miles		0	0	0
<b>Recreational Areas (including local parks and golf courses)</b>				
Number Adjacent or crossed (1000-foot Corridor)		3	1	3
Score <sup>2</sup>	<b>67.3</b>	673.0	67.3	673.0
Acres of recreational Area (1,000 feet of new ROW)		0	610	174
<b>Hiking and Biking Trails (excluding parks)</b>				
Number Crossed (200-foot ROW)		1.0	1.0	2.0
Score <sup>2</sup>	<b>42.8</b>	42.8	42.8	428.0
<b>Designated Scenic Areas</b>				
Number Adjacent/Crossed (200-foot ROW)		0.0	0.0	0.0
Score <sup>2</sup>	<b>71.3</b>	0.0	0.0	0.0
Number within two miles		0.0	0.0	0.0
<b>Natural Wild &amp; Scenic/State Scenic Rivers</b>				
# Scenic Rivers Crossed (200-foot ROW)		0.0	0.0	0.0
Score <sup>2</sup>	<b>72.0</b>	0.0	0.0	0.0
<b>Unique Geological Resources</b>				
Number Adjacent/Crossed (200-foot ROW)		0.0	0.0	0.0
Score <sup>2</sup>	<b>59.2</b>	0.0	0.0	0.0
Number within two miles		0.0	0.0	0.0

**Table 4.3-1 (Continued)**

**Notes:**

- <sup>1</sup> Not all criteria that were counted or calculated in the review of the alternatives were used in the scoring process. This is because some criteria were counted using multiple parameters and should not be double counted in the scoring process.
- <sup>2</sup> Scores are calculated by converting the raw data found to a relative scale of 1-10 as described in Section 4.0. The value in the relative scale is then multiplied by the weight to obtain the score. The Raw data, relative scaling, and final score for each criteria scored are provided in Appendix A.

With the exception of local recreation areas and hiking and biking trails the alternatives did not impact any of the criteria examined in this section. While the three alternatives cross roughly the same number of local recreational areas, the degree in which they impact these areas varies. Alternative 2 would have the most impact on recreational areas as new ROW would be required through two parks. Alternatives 1 would require new ROW through one park. While the Proposed Route crosses one park and is adjacent to another, no new ROW will be created and impacts will be minimal and temporary during construction. Therefore, the Proposed Route would have the least impact from a scenic and recreational perspective.

**4.4 Natural Areas and Rare Threatened and Endangered Species**

Natural areas fall under three general classifications: designated natural/wilderness areas, national natural landmarks, and other natural areas (land trust areas and core RTE habitat areas).

No designated natural/wilderness areas designated by the Wilderness Act (16 United States Code, Section 1172) are located in the study area.

National natural landmarks have been recognized by the National Park Service as areas of outstanding biologic or geologic importance. No national natural landmarks are located in the study area (National Park Service, 2016).

Other natural areas with land trust protection include sites maintained as green space areas by governmental agencies or private organizations, these areas include all the parks mentioned in Section 4.3 with the exception of Davis Park, Preston Park, Harriet Street Parklet, and Rangers Field

In addition to the land trusts associated with the recreational areas described in section 4.3 there are three land trust protected areas that are held in trust by Hollow Oaks land trust. The three trusts are Hollow Oaks-Coraopolis Road, Hollow Oaks-Petrie Road, and Hollow Oaks-Montour Woods. These land trusts consist of large wooded area.

The Proposed Route does not cross any of the Hollow Oaks land trust protected areas.

Alternative 1 crosses the edge of Hollow Oaks Land Trust-Coraopolis Road which would cause moderate impacts to the land trust as trees would have to be cleared to accommodate a new ROW. Additionally, Alternative 1 passes near the Hollow Oak Land Trust-Petrie Road, however existing transmission line ROW's in the area and a tree cover buffer would minimize impacts to the land trust.

Alternative 2 crosses the edge of Hollow Oaks Land Trust-Coraopolis Road which would cause moderate impacts to the land trust as trees would have to be cleared to accommodate a new ROW. Additionally, Alternative 2 crosses the of Hollow Oaks Land Trust-Montour

Woods, which would cause moderate impacts to the land trust as trees would have to be cleared to accommodate a new ROW.

The PA Natural Heritage Program (PNHP) Conservation Explorer interactive map was reviewed for potential occurrence of endangered, threatened, and rare species within the study area. The interactive map is a collection of information from USFWS, PFBC, PGC, and PADCNR. A threatened or endangered species under the jurisdiction of the PFBC is located in the Ohio River and in the mouths of some of the larger tributaries near Coraopolis. None of the Alternatives will impact this species. A species of special concern is located in the Ohio River and in the mouths of some of the larger tributaries starting at Neville Island and continuing downstream through the rest of the study area. All Alternatives cross portions of streams where this species could be present. An area containing a species of special concern [rock skullcap (*Scutellaria saxatilis*)] that is under the jurisdiction of the PADCNR is located in the neighborhood of Moon Crest, just south of the Sewickley Bridge. The Proposed Route crosses this area. No RTE species under the jurisdiction of the PGC or USFWS were located in the study area.

Additionally, the Pennsylvania Natural Heritage Program has designated two Core Habitats within the study area. One is the Ohio River, which is a recovering river system that provides habitat for numerous species of concern, and the other is the Moon Run Slopes, which is a steep forested slope along the Ohio River that serves as habitat for a plant species of concern. All the Alternatives briefly cross the Ohio River core habitat as they cross from Brunot Island to McKees Rocks, the crossings will be aerial and no direct impact to this

aquatic core habitat is expected. Alternative 1 crosses the Moon Run Slopes core habitat. Tree clearing would be required to create new ROW for these alternatives, which would cause moderate impact to the core habitat area.

**Table 4.4-1**

Criteria <sup>1</sup>	Weight	Alternative Routes		
		Existing	1	3
<b>National Natural Landmarks</b>				
Number Adjacent/Crossed (200-foot ROW)		0	0	0
<b>Score<sup>2</sup></b>	<b>78.0</b>	0	0	0
Number within two miles		0	0	0
<b>Designated Natural/Wilderness Areas</b>				
Linear Distance Adjacent (miles) (within 200-foot ROW)		0	0	0
<b>Score<sup>2</sup></b>	<b>73.2</b>	0	0	0
Number within two miles		0	0	0
<b>Other Natural Areas</b>				
Core RTE habitat acres (200-foot ROW)		0.6	2.81	3.2
<b>Score<sup>2</sup></b>	<b>71.9</b>	71.9	621.9	719.0
Land Trust Protected acres <sup>3</sup> (200-foot ROW)		0.00	0.10	1.30
<b>Score<sup>2</sup></b>	<b>71.9</b>	71.9	121.7	719.0
Number of PNHP RTE species areas crossed <sup>1</sup>		2	6	1

**Natural Areas**

**Table 4.4-1 (Continued)**

Notes:

- <sup>1</sup> Not all criteria that were counted or calculated in the review of the alternatives were used in the scoring process. This is because some criteria were counted using multiple parameters and should not be double counted in the scoring process.
- <sup>2</sup> Scores are calculated by converting the raw data found to a relative scale of 1-10 as described in Section 4.0. The value in the relative scale is then multiplied by the weight to obtain the score. The Raw data, relative scaling, and final score for each criteria scored are provided in Appendix A.
- <sup>3</sup> Land Trust Protected area calculations does not include parks and recreation areas that were included in Section 4.3

The Proposed Route has the least impact to Core RTE habitat and Land Trust Protected areas. Alternative 2 has the least impact to the PNHP RTE species areas crossed, with the Proposed Route having the second least. From the overall natural areas perspective the Proposed Route would have the least impacts.

#### 4.5 Terrain and Landscape

##### Landscape

The study area is located in the Pittsburgh Low Plateau topographic region, which is defined by a dissected upland, formed on warped sedimentary rock. The area is typified by rolling uplands dissected by deeply entrenched valleys. There are no dominant topographic features within the study area. However, one prominent man-made features on the landscape is the four-lane Interstate 79 that extends north to south through the central portion of the study area. Developments in the study area vary from dense urban industrial and high density residential developments along the Ohio River to secluded subdivisions located on the hilltops and in valleys.

Within the study area, no one terrain feature or land feature dominates the visual environment. Each land use type has an influence on the overall visual character adjacent to the alternatives. Both terrain and vegetation can influence the extent of visual impact, while the existing land use can determine the type and number of viewers that would be affected by the proposed transmission line. For example, transmission lines located on level, open terrain (such as fields and golf courses) can be seen for longer distances than transmission lines located in hilly, wooded areas.

Along the Ohio River are three towns, McKees Rocks and Coraopolis, and Neville Island with large industrial component. In addition, several railroad ROWs are located along the Ohio River adding to the overall industrial feel of the area. As the study area moves away from the Ohio River the terrain is dominated by ridge tops and valleys. Major roads with scattered homes and businesses are generally located in the valleys. Isolated subdivisions surrounded by forested slopes are generally located on the ridge tops.

For the proposed transmission line itself, the impact on the visual environment is partially related to its scale and physical design properties. The following definitions were used during the visual impact assessment:

- Minimal. Visual impact is low because the existing terrain and/or vegetation will limit the visual impact. Visual impact is also considered low when a limited number of viewers or viewpoints are involved.
- Moderate. Visual impact is moderate when the existing terrain and/or vegetation will only partially limit the visual impact, and multiple viewers

and/or viewpoints are involved.

- Severe. Visual impact is severe because the existing terrain and/or vegetation will not limit the visual impact and large numbers of viewers or viewpoints, or scenic areas are involved.

### Proposed Route

Since the Proposed Route is proposed to utilize existing ROW no new visual impact is anticipated.

### Alternative 1

Alternative 1 consists of approximately 15.3 miles, with 12.8 miles of the total length requiring new ROW. It will present a new transmission corridor to viewers traveling local roads, visiting parks, or from their homes and businesses. Starting at the Brunot Island Substation Alternative 1 passes through a highly industrial area while in McKees Rocks, the alternative would have minimal visual impact due to the industrial backdrop. After crossing Neville Bridge Alternative 1 transitions to a hill slope that parallels Route 51 then Interstate 79, this stretch of the alternative would have severe visual impact. Once Alternative 1 moves away from Interstate 79 it enters a forested area and avoids residential developments. In this section the visual impact would be minimal when it crosses perpendicular to roads located in the valley below. Alternative 1 then overlaps an existing ROW and crosses several residential developments, no new visual impacts would occur in this area. After leaving the existing ROW, Alternative 1 passes near a golf course, then through a park located adjacent to Thorn Run Road, before paralleling a large development on a visible side slope. Visual impacts



would be severe in this area. Alternative 1 then crosses Rout 51 where it passes in front of a townhome community, resulting in sever visual impacts. The reminder of Alternative 1 passes through forested areas only crossing roads perpendicularly with minimal visual impact to residences or roads. The overall visual impacts for Alternative 1 are judged to be moderate to severe due to the extent of new ROW and the extent roads and residential areas paralleled.

### Alternative 2

Alternative 2 consists of approximately 16.2 miles, with 15.0 miles of the total length requiring new ROW. It will present a new transmission corridor to viewers traveling local roads, visiting parks, or form their homes and businesses. Starting at the Brunot Island Substation Alternative 2 passes through a highly industrial area while in McKees Rocks, the alternative would have minimal visual impact due to the industrial backdrop. After crossing Route 51 Alternative 2 transitions to a hill slope that parallels Route 51 then Interstate 79, this stretch of the alternative would have sever visual impact. Once Alternative 2 moves away from Interstate 79 it enters a forested area and avoids residential developments. In this section the visual impact would be minimal, when it crosses perpendicular to roads located in the valley below. After crossing Hassam Road Alternative 2 moves closer to developed areas. It parallels several subdivision, then passes near a golf course, and through a park located adjacent to Thorn Run Road, before paralleling another large development on a visible side slope. Visual impacts would be sever in this area. The reminder of Alternative 2 passes through forested areas only crossing roads perpendicularly with minimal visual impact to residences or roads.

The overall visual impacts for Alternative 2 are judged to be moderate to severe due to the extent of new ROW and the extent roads and residential areas paralleled.

### Terrain

In the vicinity of the alternative routes, the elevation ranges from approximately 848 mean sea level (MSL) near the Ohio River to 1,638 MSL on the hilltops. Steep terrain was identified from USGS topographic mapping. Steep terrain was defined as slopes greater than 20 percent. Steep terrain may cause complications in the engineering, construction, maintenance, or operation of the transmission line. Alternative 2 has the third most terrain crossed with 12.6 mile. The Proposed Route has the least steep terrain crossed with 11 miles and Alternative 1 has the second least steep terrain crossed with 11.2 miles.

Landslide-prone areas are designated by the Allegheny County Planning Department based on slope stability, slope steepness and sources of water. Landslide-prone areas may cause complications with engineering, construction, maintenance, or operation of the transmission line. Alternative 2 crossed the most landslide prone area with 9.6 miles. The Proposed Route crosses the least landslide-prone area with 7.5 miles, and Alternative 1 crosses the second least landslide-prone area with 9.4 miles.

**Table 4.5-1**  
**Terrain and Landscape**

Criteria	Weight	Alternative Routes		
		Existing	1	2
<b>Steep Terrain (&gt; 20%)</b>				
Linear Distance Adjacent (miles)		11.0	11.2	12.6
<b>Score<sup>1</sup></b>	<b>40.9</b>	<b>40.9</b>	<b>77.2</b>	<b>409.0</b>
<b>Landslide-Prone Areas</b>				
Linear Distance Adjacent (miles)		7.5	9.4	9.6
<b>Score<sup>1</sup></b>	<b>53.7</b>	<b>53.7</b>	<b>491.0</b>	<b>537.0</b>

Notes:

<sup>1</sup> Scores are calculated by converting the raw data found to a relative scale of 1-10 as described in Section 4.0. The value in the relative scale is then multiplied by the weight to obtain the score. The Raw data, relative scaling, and final score for each criteria scored are provided in Appendix A.

Based on the qualitative analysis of visual impact the Proposed Route has the least impact on the surrounding landscape view shed as it will use existing ROW for its entire length. Additionally, the Proposed Route would be least impacted by steep terrain and landslide-prone areas. From an overall terrain and landscape perspective, the Proposed Route has the least impact.

4.6 Archaeological and Architectural/Historical Resources

Preliminary background research was conducted to identify previously recorded cultural resources that may be encountered by the Project. Background research included a review of PA Archaeological Site Survey files, PA Historic Resource Survey files, NRHP files, and pertinent cultural resource studies available through the PA SHPO online cultural resources GIS system.

Data was collected on previously recorded archaeological sites, architectural and historical resources, and National Register properties mapped within the background research study area, consisting of a two-mile radius of Project alternatives.

There are 1,006 architectural and historical resources and 46 archaeological sites within the background research study area. Of these resources, two are National Historic Landmarks (NHL), 33 have been listed in the NRHP, and 78 of the architectural and historical resource that have been determined by PA SHPO as eligible for listing the NRHP, while three of the archaeological sites have been determined by PA SHPO as eligible for listing in the NRHP. A description of the previously recorded NRHP-eligible and listed resources within two miles of the Alternative Routes is provided in Appendix B. The previously recorded NRHP-eligible and listed archaeological sites and architectural and historical resources mapped within the study area are shown on Figures 3 and 4.

The Proposed Route and Alternative 2 have nine archaeological sites located within 2,000 feet of the centerline and one site within the 200-foot-wide ROW. Alternative 1 has 12 sites mapped within 2,000 feet of the centerline, with three sites located within the ROW. Table 4.6-1 identifies the number of previously recorded archaeological sites within two miles

of each proposed alternative, as well as within the 200-foot-wide construction ROW and within approximately 2,000 feet of the centerline.

The Proposed Route has 61 architectural and historical resources located within 2,000 feet of the centerline and 34 resources within 1,000 feet of the centerline. Alternative 1 has 83 architectural and historical resources located within 2,000 feet of the centerline and 37 resources within 1,000 feet of the centerline. Alternative 2 has 62 architectural and historical resources located within 2,000 feet of the centerline and 34 resources within 1,000 feet of the centerline. Table 4.6-1 identifies the number of previously recorded architectural or historical resources within two miles of each proposed alternative, as well as within approximately 1,000 and 2,000 feet of the centerline.

**Table 4.6-1**  
**Archaeological and Architectural/Historical Resources**

Criteria <sup>1</sup>	Weight	Alternative Routes		
		Existing	1	2
<b>Architectural and Historic Sites</b>				
Number Adjacent (1000 feet of centerline)		34	37	34
<b>Score<sup>2</sup></b>	<b>76.8</b>	76.8	768.0	76.8
Number Adjacent (2,000 feet of centerline)		61	83	62
Number within two miles		1,006	1,006	1,006
<b>Archaeological Sites</b>				
Number Crossed (200-foot ROW)		1	3	1
<b>Score<sup>2</sup></b>	<b>54.0</b>	54.0	540.0	54.0

**Table 4.6-1 (Continued)**

Number within 2,000 feet		9	12	9
Number within two miles		44	44	46

**Notes:**

- <sup>1</sup> Not all criteria that were counted or calculated in the review of the alternatives were used in the scoring process. This is because some criteria were counted using multiple parameters and should not be double counted in the scoring process.
- <sup>2</sup> Scores are calculated by converting the raw data found to a relative scale of 1-10 as described in Section 4.0. The value in the relative scale is then multiplied by the weight to obtain the score. The Raw data, relative scaling, and final score for each criteria scored are provided in Appendix A.

The three alternatives are relatively similar in terms of potential impacts to archaeological and architectural/historical resources. However, the Proposed Route and Alternative 2 have slightly less impact to archaeological and architectural/historical resources.

**4.7 Airports**

The PAPUC requires that all airports be identified within two miles of a proposed transmission line. Also, Federal Aviation Administration (FAA) regulations provide for a review process and for making a “Determination of Hazard or No Hazard” for all structures that might constitute a hazard to aeronautical operations. Moreover, FAA regulations provide for a review of all electrical structures and devices that might interfere with the navigation aids (NAVAIDS) and communication facilities for air operations. The primary NAVAIDS of concern include:

- VORTAC 360 degree directional beams
- Airport instrument landing system

The Sky Vector Aeronautical Chart (2016) was used to locate aeronautical features relevant to the proposed Project. The Pittsburgh-International Airport is located just southwest of the study area in Moon Township. This is a public airport offering numerous commercial passenger flights daily.

Air navigation directional beacons may be affected if a high voltage line is directly in the line of sight between the facility and its airborne receiver.

At the closest point, the Proposed Route is located approximately two miles northeast of a runway associated with the Pittsburgh International Airport, and approximately 0.6 miles of the alternative is within two miles of the airport. The Proposed Route runs perpendicular to several runways at the Pittsburgh International Airport. Due to the distance from the runway and the location of the Proposed Route at a lower elevation than the runway, no impact to airport operations is anticipated from the Proposed Route. Alternative 1 is at its closet point located approximately 1.7 miles northeast of the airport, and approximately 2.7 miles of this alternatives is located within two miles of the airport. Alternative 1 run perpendicular to several runways at the Pittsburgh International Airport. However, Alternative 1 is located at lower elevations than the Airport, therefore no impact to airport operations are anticipated from Alternative 1. Alternatives 2 is at its closet point located approximately 1.4 miles east of the airport, and approximately four miles of these alternatives are located within two miles of the airport. Alternative 2 runs perpendicular to several runways at the Pittsburgh International Airport. However, this alternatives is located at lower elevations than the Airport and is largely situated along hillslopes, therefore no impact to airport operations are anticipated from

Alternative 2. No impact to airport operations is anticipated from any of the alternatives, but out of an abundance of caution, this resource criterion is retained as part of the analysis of alternatives.

**Table 4.7-1**

**Airports**

Criteria	Alternative Routes		
	Existing	1	2
<b>Airports</b>			
Length of ROW within 2 Miles	0.6	2.7	4.0
Score <sup>1</sup>	52.5	344.3	525.0

**Notes:**

1. Scores are calculated by converting the raw data found to a relative scale of 1-10 as described in Section 4.0. The value in the relative scale is then multiplied by the weight to obtain the score. The Raw data, relative scaling, and final score for each criteria scored are provided in Appendix A.

The Proposed Route has the least amount of its route within two miles of an airport. Additionally, at its closest point, the Proposed Route is the furthest from the airport of the three alternatives. From an airport avoidance perspective, the Proposed Route has the least impact.



## 5.0 Identification of the Preferred Alternative

The three alternatives were qualitatively and quantitatively analyzed and compared by the routing team based on the information gathered through GIS data, field reconnaissance, public outreach, engineering considerations, and cost estimates. The three alternatives developed utilize various combinations of the two main corridors developed through the study area resulting in much overlap between alternatives. However, all alternatives are different enough from at least one other alternative that based on the PAPUC definition, whichever alternative is selected at least one other alternative would function as a “distinct alternative”.

The Proposed Route, is the central and most direct alternative, and has the lowest/best final impact score of all the alternative routes. It is the best overall alternative from an environmental, human/built, cultural, and engineering perspective. The Proposed Route is the shortest and would require the least acquisition of new ROW. This alternative crosses the most human/built resources, as it has the most road crossings, crosses the most residential structures, and crosses the most institutional complexes. However, the Proposed Route will cross these human/built resources within existing ROW and no new long-term impacts are anticipated. Additionally, the Proposed Route crosses the least commercial/industrial areas. The Proposed Route is the best alternative from an engineering perspective, as it crosses the least steep terrain and landslide-prone areas, and is the farthest from the Pittsburgh International Airport. The Proposed Route is the best alternative from an environmental resources perspective. It has the least impact to most of the environmental resources including forest land cleared, core RTE habitat, land trust protected areas, and perennial streams crossed, but has the has some of the higher impact to other criteria such as wetlands crossed and

recreational areas. The Proposed Route is tied for the best alternative from a cultural resources perspective. It is tied for the least historical sites within its views shed and least archaeological sites crossed. The Proposed Route has the lowest cost estimate to acquire and construct.

Alternative 1 utilizes large stretches along the Ohio River when available. It has the second lowest/best final impact score of all the alternative routes. It is the second best overall alternative from an environmental, human/built, cultural, and engineering perspective. Alternative 1 is the second shortest but would require the second most new ROW. This alternative has the second most impact on human/built resources as it is tied for the least impact to institutional complexes, has the second most road crossings, impacts the second least residential structures, but has the most impact to commercial/industrial areas. Alternative 1 is the second best alternative from an engineering perspective, as it has the second least steep terrain crossed, has the second least landslide-prone area crossed, and has the second shortest distance that is within two miles of Pittsburgh International Airport. Alternative 1 has the second least impact to environmental resources, as it crosses the least recreational areas and wetlands; impacts the second least amount of forest, land trust protected areas, and core RTE habitat; but is tied for the most perennial streams crossed. Alternative 1 is the worst alternative from a cultural resources perspective. It has the most historical sites within its views shed and the most archaeological sites crossed. Alternative 1 has the highest cost estimate to acquire and construct.

Alternative 2 uses some of the southwestern most route and some of the route by the Ohio River. It has the highest/worst final impact score, compared to all alternatives. It is the

worst overall alternative from an environmental, human/built, cultural, and engineering perspective. Alternative 2 is the longest route, and would require the most new ROW acquisition. This alternative has the least impact on human/built resources, as it has the least road crossings, has the second least impact to commercial/industrial areas, has the least impact to institutional complexes, and has the least residential structures. Alternative 2 is the worst alternative from an engineering perspective, as it has the most landslide-prone area, has the most steep terrain crossed, and has the most distance within 2 miles of the Pittsburgh International Airport. Alternative 2 has the most impact to environmental resources, as it has the most forest land impacts, crosses the most land trust protected area and core RTE habitat, is tied for the most perennial streams crossed, is tied for the most impacts to recreational areas, and has the second most impact to wetlands. Alternative 2 is tied for the best alternative from a cultural resources perspective, It is tied for the least historical sites within its views shed and tied for the least archaeological sites crossed. Alternative 2 has the second lowest cost estimate to acquire and construct.

## 5.1 Preferred Alternative Impacts and Mitigation

The Proposed Route was selected as the Preferred Alternative, as it is the best overall alternative from an environmental, human/built, cultural, and engineering perspective.

### 5.1.1 Land Use and Land Cover

The Preferred Alternative is 14.5 miles long and is located within existing ROW. The Preferred Alternative has 102 residences, 11 apartment buildings, and four

commercial/industrial buildings crossed by the proposed ROW. Four schools and four churches are located within 1,000 feet of the Preferred Alternative, but no institutional complexes are located within the proposed ROW. Five cemeteries are within 1,000 feet of the Preferred Alternative, but no cemeteries are crossed by the Preferred Alternative.

While the Preferred Alternative will utilize existing ROW, some permanent land use impacts are anticipated. Approximately 73.7 acres of forested land is expected to be cleared to expand the ROW to accommodate this route. The forestland will be converted to rangeland. Any herbaceous and/or mixed rangeland within the existing ROW would be temporarily impacted during construction, but would not result in any permanent land use change, as the land would return to an herbaceous and/or mixed rangeland state.

Construction of the Project will require the clearing and maintenance of permanent ROW up to 150 feet wide. The Preferred Alternative, as the shortest route, and located within an existing ROW, will have the least land use impacts.

The Preferred alternatives will produce temporary and secondary impacts during construction, especially in residential areas, institutional, and commercial areas. These impacts include noise and other construction-related disturbances, including disruptions to vehicular traffic. The most substantial land use effects associated with construction of the proposed line include a reduction in woodland and visual effects in residential areas. Total rangeland area will be increased as a result of construction,

although a temporary reduction in this land use will occur during the construction phase until vegetation becomes re-established. New access roads may also be required to access certain areas of the transmission line.

Land can continue to be used by the property owner as desired provided it does not interfere with operation or maintenance of the transmission line, access to the transmission line, or specific ROW agreements.

All landowners whose access to their property could be potentially impacted will be notified in writing of the possible use of their land for an Access Easement consistent with the construction, maintenance, repair, renewal, use, or operation of said system. Duquesne Light has the right to trim or remove, and control the growth of, by any means selected by Duquesne Light, any trees, brush or shrubbery, and to remove obstructions, which at any time interfere with or threaten to interfere with the access of this easement. Duquesne Light agrees to pay for all damage to fences, crops, and other personal property caused by construction, operation, maintenance, rebuilding, or removal of the transmission line.

During Clearing of the ROW some loss of individual animals may be incurred within the ROW, it is anticipated that most animals can relocate to suitable adjacent habitat during construction. Depending on the habitat type in question, these displaced animals may be able to re-establish in the maintained ROW following construction. Although some wildlife population decreases may be experienced in response to limits upon carrying capacity of adjacent habitats, these decreases should be minimal due to

the small area of disturbance. Additional rangeland may provide foraging areas for numerous wildlife species.

The maintenance of ROW, including tree trimming and brush clearing, may have an effect upon terrestrial animal species occurring in the area. Maintenance may destroy the nests and young of some species if it coincides with the breeding season; driving over the ROW for inspection purpose can also destroy nests and young. However, these impacts should be minimal and should not have any adverse effect upon wildlife populations, as they are infrequent.

Vegetation management practices that will be used by Duquesne Light to minimize impacts to vegetation and wildlife include, but are not limited to:

- ▶ Plant cover in the in the center of the ROW will be maintained as a low shrub-herb-fern-grass community.
- ▶ Implement selective clearing, based on stem density, on the edges of the ROW and allow compatible herbaceous and shrub species to grow. Use selective herbicide applications to manage undesirable vegetation in and along the ROW corridor. Specific herbicides designed for wetland use may also be utilized to promote best practices.
- ▶ Considering span length, allow tree growth in deep valleys and ravines where the conductor height exceeds the mature height of the surrounding trees factoring for minimum allowable electrical safety clearance requirements.

- ▶ All disturbed areas will be restored to their original contours. Seeding and mulching will immediately follow seedbed preparation.
- ▶ All cutting in and along the ROW less than five inches in diameter, other than buffer areas, will be piled and crushed or disposed of by chipping or shredding. Cutting larger than five inches in diameter will be stacked behind the edge of the ROW or removed, as directed by the landowner.
- ▶ Tree pruning and removal and wood disposal efforts in and along the ROW edge will be performed in such a manner as to minimize, as much as possible, damage to desirable plant species.

An Erosion and Sedimentation (E&S) Control Plan will be executed during the construction phase of the Preferred Alternative, minimizing impacts from erosion and resulting sedimentation.

#### 5.1.2 Hydrology

The Preferred Alternative crosses 20 perennial streams and 18.9 acres of NWI wetlands.

A detailed wetland delineations would be required in the field in order to thoroughly define potential wetland impacts of the Preferred Alternative. It is likely that additional wetlands may be identified during wetland delineations conducted.

Wetlands provide a number of significant benefits to the environment. With the exception of forested wetlands, transmission line construction, operation and maintenance do not change the wetlands' basic ecological function; any unavoidable

effects would be minimal and temporary. It is anticipated that no structures would be located in wetlands for any of the alternative routes. Therefore, no permanent loss of wetlands is expected.

None of the streams crossed by the Preferred Alternative are expected to be affected by the placement of poles. However, all streams may be crossed by temporary access roads within the ROW. Temporary equipment crossings will be installed to minimize impacts and will be removed following construction. Temporary equipment crossings will result in a temporary impact to the riparian buffer. The riparian buffers will be replanted following construction and vegetation that is compatible with the transmission line will be allowed to grow. Therefore, no long term impacts to surface waters are anticipated from any of the alternatives. The potential for construction impacts on water quality during construction will be minimized by implementation of the E&S Control Plan.

It is anticipated that crossings of waterbodies for construction of the Project will require a General Permit 5 (GP-5) for Utility Line Stream Crossings and a GP-8 for Temporary Access Roads from the PaDEP, as well as a PA State Programmatic General Permit from the United States Army Corps of Engineers.

Among the protection measures that will be incorporated in this plan are:

- ▶ Stream or wetland crossings by vehicles will be restricted to temporary equipment crossings. Access to structures will be gained from upland locations wherever possible.



- ▶ Temporary stream and wetland crossings will be used as needed, consisting of equipment pads. If needed, culverts will be constructed in streams with clean stone and gravel fill.
- ▶ Any required construction access roads will be laid out to prevent sediments from reaching streams and wetlands. A strip of undisturbed land will be left between the construction road and the stream (filter strip). The width of the filter strip will be greater in steep slope areas than on level areas.
- ▶ Best management practices will be used along the stream banks and wetlands to prevent entry of sediment into the stream.
- ▶ During construction, drainage ditches, creeks and waterways will be kept free of obstructions.
- ▶ Where available, existing access roads will be used to avoid the crossing of streams.
- ▶ Appropriate controls will be used at structure locations to prevent sediments from discharging from the area of disturbance.

### 5.1.3 Scenic and Recreational Areas

The Preferred Alternative cross an undeveloped portion of Fairhaven Park within an existing ROW. Impacts to Fairhaven parks are expected to be minimal and temporary during construction. The Preferred Alternative crosses over the Montour Trail following existing ROW, the Montour Trail is located in a valley and the Preferred Alternative would likely span from ridgetop to ridgetop resulting in minimal

impact to the trail. The Preferred Alternative crosses the edge of Mooncrest Neighborhood Center; the Preferred Alternative is located in an existing ROW that is buffered by trees, and impacts are expected to be minimal and temporary during construction. The Preferred Alternative passes near several other parks. But, due to the use of existing ROW, abundant tree cover and topography, impacts to these parks are not anticipated. The Preferred Alternative is not anticipated to impact the function of any park crossed or adjacent.

#### 5.1.4 Natural Areas and Rare Threatened and Endangered Species

The Preferred Alternative does not impact designated natural/wilderness areas or national natural landmarks.

The Core RTE habitat crossed by the Preferred Alternative is for the Ohio River, which is a recovering river system that provides habitat for numerous species of concern. The Preferred Alternative will cross the Ohio River core habitat as it crosses from Brunot Island to McKees Rocks, the crossings will be aerial and no direct impact to this aquatic core habitat is expected. Any indirect impacts on water quality will be minimized by implementation of the E&S Control Plan during construction.

The Preferred Alternative crosses an area containing a species of special concern [rock skullcap (*Scutellaria saxatilis*)] that is under the jurisdiction of the PADCNR, located in the neighborhood of Moon Crest, just south of the Sewickley Bridge. Surveys for the rock skullcap will be performed in coordination with the PADCNR, and impacts to rock skullcap will be minimized or avoided to the extent

practical.

With the exception of the parks discussed in section 5.1.3, the Preferred Alternative does not cross a Land Trust Protected area.

#### 5.1.5 Terrain and Landscape

As the Preferred Alternative will be along existing ROW it will have a minimal visual impact on the surrounding view shed.

The Preferred Alternative crosses 11.0 miles of steep terrain and 7.5 miles of landslide-prone area. These areas will be taken into consideration for the final design and construction of the Project.

#### 5.1.6 Archaeological and Architectural/Historical Resources

Additional investigations will be conducted, as necessary, during final design and permitting of the Preferred Alternative to determine the presence, extent, and eligibility of architectural and historical resources that could be affected by the Project. These efforts will be coordinated with the PA SHPO.

#### 5.1.7 Airports

The Preferred Alternative, at its closest point is approximately two miles northeast of the Pittsburgh International Airport. Approximately 0.6 miles of the Preferred Alternative is within two miles of the Pittsburgh International Airport. Duquesne Light will coordinate with the FAA and will provide markers or beacons as required.

## 6.0 Permits and Zoning

### 6.1 Anticipated Agency Requirements and Permits

The anticipated agency requirements and permits for the Preferred Alternative are provided in Table 6.1.

**Table 6.1**  
**Agency Requirements and Permits**

Agency	Requirement	Permit Status	Date of Submission	Date of Approval
<b>Federal Agencies</b>				
United States Army Corps of Engineers	Pennsylvania State Programmatic General Permit 5	Application to be Submitted	November 12, 2018 (anticipated)	May 21, 2019 (anticipated)
United States Fish and Wildlife Service	Rare Threatened and Endangered Species Consultation	Approval Granted (expires after two years <sup>1</sup> )	October 15, 2015	November 13, 2015
Federal Aviation Administration	Notice of Proposed Construction or Alteration (Form 7460-1)	Application to be Submitted	December 7, 2018 (anticipated)	February 7, 2019 (anticipated)
Land and Water Conservation Fund	PADCNR Consultation for anti-conversion	Application to be Submitted	October 12, 2018 (anticipated)	November 12, 2018 (anticipated)
<b>State Agencies</b>				
Pennsylvania Department of Environmental Protection	Chapter 105, GP-5 for Utility Line Stream Crossings and a GP-8 for Temporary Access Roads	Application to be Submitted	November 12, 2018 (anticipated)	May 13, 2019 (anticipated)
Pennsylvania Game Commission	Rare Threatened and Endangered Species Consultation	Approval Granted (expires after two years <sup>1</sup> )	October 15, 2015	November 5, 2015

Pennsylvania Department of Conservation and Natural Resources	Rare Threatened and Endangered Species Consultation	Consultation ongoing	October 15, 2015	November 18, 2018
Pennsylvania Fish and Boat Commission	Rare Threatened and Endangered Species Consultation	Approval Granted (expires after two years <sup>1</sup> )	October 15, 2015	November 5, 2015

**Table 6.1 (Continued)**

Agency	Requirement	Permit Status	Date of Submission	Date of Approval
<b>State Agencies (Continued)</b>				
Pennsylvania State Historic Preservation Office	Cultural Resources Consultation	Application to be Submitted	November 12, 2018 (anticipated)	February 8, 2019 (anticipated)
Pennsylvania Department of Transportation	Highway Occupancy Permit, Driveway Permit, Excessive Maintenance Agreement	Application to be Submitted (expires after one year)	November 13, 2018 (anticipated)	March 22, 2019 (anticipated)
<b>Local Agencies</b>				
Allegheny County Conservation District	General (PAG-02) National Pollutant Discharge Elimination System (NPDES) Permit	Application to be Submitted	November 13, 2018 (anticipated)	February 26, 2019 (anticipated)
Allegheny County	Hauling Agreement and Drive Way Permits	Application to be Submitted (expires after one year <sup>2</sup> )	November 13, 2018 (anticipated)	March 22, 2019 (anticipated)
City of Pittsburgh	Grading Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Floodplain Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)

	Driveway Permit and Excessive Maintenance Agreement	Application to be Submitted (expires after one year <sup>2</sup> )	November 13, 2018 (anticipated)	March 22, 2019 (anticipated)
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**Table 6.1 (Continued)**

Agency	Requirement	Permit Status	Date of Submission	Date of Approval
<b>Local Agencies (Continued)</b>				
McKees Rock Borough	Grading Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Floodplain Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Driveway Permit and Excessive Maintenance Agreement	Application to be Submitted (expires after one year <sup>2</sup> )	November 13, 2018 (anticipated)	March 22, 2019 (anticipated)
Moon Township	Grading Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Floodplain Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Driveway Permit and Excessive Maintenance Agreement	Application to be Submitted (expires after one year <sup>2</sup> )	November 13, 2018 (anticipated)	March 22, 2019 (anticipated)
Robinson Township	Grading Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Floodplain Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Driveway Permit and Excessive Maintenance Agreement	Application to be Submitted (expires after one year <sup>2</sup> )	November 13, 2018 (anticipated)	March 22, 2019 (anticipated)

**Table 6.1 (Continued)**

Agency	Requirement	Permit Status	Date of Submission	Date of Approval
Crescent Township	Grading Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Floodplain Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Driveway Permit and Excessive Maintenance Agreement	Application to be Submitted (expires after one year <sup>2</sup> )	November 13, 2018 (anticipated)	March 22, 2019 (anticipated)
Kennedy Township	Grading Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Floodplain Permit	Application to be Submitted	November 12, 2018 (anticipated)	January 11, 2019 (anticipated)
	Driveway Permit and Excessive Maintenance Agreement	Application to be Submitted (expires after one year <sup>2</sup> )	November 13, 2018 (anticipated)	March 22, 2019 (anticipated)
Pittsburgh and Ohio Central Railroad	Railroad Crossing Permit	Application to be Submitted	May 2, 2018 (anticipated)	April 11, 2019 (anticipated)

**Notes:**

1. RTE consultation expiring before permit approval will be updated as needed.
2. PennDOT and local road permits or agreements expiring before the completion of the project will be updated.

**6.2 Review of County Comprehensive Plans and Municipal Level Zoning**

The proposed reconstruction and operation of the existing 138 kV transmission line circuits was evaluated for general compliance with the local Comprehensive Plans located in the Allegheny County Comprehensive Plan (Allegheny County, 2008), McKees Rocks and Stowe Township Multi-Municipal Comprehensive Plan (Char-West, 2011), Moon Township



Comprehensive Plan (Moon Township, 2015), Robinson Township Comprehensive Plan (Robinson Township, 2016), Crescent Township Comprehensive Plan (Crescent Township 1971), and Pittsburgh's Comprehensive Planning Open Space, Parks, and Recreation Plan (Pittsburgh, 2013). A comprehensive plan was not available for the Kennedy Township.

The plans purpose is to help guide local planning for the communities and set short term as well as long-term goals and objectives for all activities that affect the community. Review of the Comprehensive Plans and other associated documentation in relation to the proposed project activities considered the compatibility with local land use, proposed housing developments, future growth areas, community facilities and environmentally sensitive areas.

The available comprehensive plans were reviewed to identify issues specific to the local communities as well as any potential fatal flaws. Mitigation of any potential impacts may include modifying the route, engineering design, locating the corridor in relationship to existing utility infrastructure, and coordinating with individual property owners and municipal governments.

#### Allegheny County

According to the Allegheny County Comprehensive Plan (Allegheny County, 2008) the portion of the county in the Study Area is largely residential with small areas of Commercial, Industrial, Community Facilities, and Recreation/Conservation land uses. The plan's goals that relate to the Project include redeveloping existing areas, providing efficient infrastructure, and creating and maintaining extensive greenways such as parks, trails, riverfronts. The entire of the Project is located in Allegheny County, PA.

### McKees Rocks Borough

The Char-West Multi-Municipal Comprehensive Plan includes plans for McKees Rocks, Neville Township, and Stowe Township collectively. Objectives of this plan that could relate to the construction of a transmission line include the intention to redevelop existing industrial and commercial spaces. In addition, a goal of this plan is to create a Chartiers Creek Greenway, which restores riparian buffers to Chartiers Creek. The Project spans Chartiers Creek at four different sections for approximately 1.1 miles.

McKees Rocks Borough is located at the eastern edge of the Study Area. McKees Rock Borough is highly developed with heavy industry adjacent to the Ohio River and Chartiers Creek. The remainder of McKees Rocks Borough is largely single family residential. The major roadway through the Study Area in the McKees Rock Borough is Route 51. Additionally, several railroads are located in the in the Study Area in McKees Rock Borough, including Pennsylvania Railroad and Pittsburgh Chartiers and Youghiogheny Railroad. According to the Char-West Multi-Municipal Comprehensive Plan Generalized Existing Land Use Map, 0.15 miles of the Project is located in industrial zoning. The Future Land Use and Housing Plan map also show most of the Project in Industrial Zones, and a 0.05-mile section in a Community Oriented Commercial zone.

### Moon Township

The Moon Township Comprehensive Plan's objectives state that the township is interested in encouraging high-quality development in the area, while preserving the Township's historic and cultural resources. The Township aims to incentivize sustainable, yet simple development, and promote use of redevelopment. The Township also plans to maintain

the Landscape Conservation Areas, located in the southwest portion of the Township. The Project exists in approximately 0.5 miles of this designated area.

Moon Township is located at the western end of the Study Area. The Study Area only encompasses the northeastern portion of Moon Township. This portion of the Township is dominated by residential neighborhoods, with several parks and a commercial district located along University Boulevard. Large areas of land remain undeveloped in Moon Township. Major roadways through the Study Area in Moon Township are Route 51, Hassam Road, Maple Street, Coraopolis heights, Thorn Run Road, University Boulevard, Beaver Grade Road, Stoops Ferry, Broadhead Road, and Flaugherty Run Road. One railroad owned by Pittsburgh and Lake Erie Railroad is located along the Ohio River. Additionally, part of the Montour Run Rail Trail is located in Moon Township. According to the Township of Moon Official Zoning Map, approximately 0.4 miles is located in an Industrial zone (M-1), 0.2 miles is located in Commercial (C-2), 0.4 miles in Educational (ED) and 4 miles in Residential (R-1, R-2, R-3, R-4, R-5). The total length of the Project that occurs in Moon Township is approximately 5 miles.

#### Robinson Township

The Robinson Township Comprehensive Plan states that as land becomes scarce in the Township, they recognize the need to preserve environmentally friendly greenspaces, terrain subject to abandoned mine drainage issues, red bed soil complexes, impaired streams, previously mined areas, and recreational areas. They also wish to implement a Land Trust of their own, or join another trust, such as the Allegheny Land Trust, to help identify stated areas of concern.

Robinson Township is located in the center of the Study Area. Robinson Township is largely residential with small pockets of commercial and institutional land use. Large areas of land remain undeveloped in Robinson Township. The major roadway through the Study Area in the Robinson Township are Route 51, Interstate 79, Forest Grove Road, Clever Road, North Silver Lane, and Ewings Mill Road. One railroad, owned by Pittsburgh Chartiers and Youghiogheny Railroads, is located along the Ohio River. Additionally, part of the Montour Run Rail Trail is located in Robinson Township. According to the Official Zoning Map of the Township of Robinson, 1.75 miles of the Project that occurs in Robinson Township exists in Residential zoning (R-1, R-2, R-3). In the area of the Project, the Future Land Use Map, located in the Comprehensive Plan, shows no change from the current zoning map.

#### Crescent Township

The Comprehensive Plan's objective states that land use activities, such as major utility wires, should be designed, arranged, or screened in a manner that will keep the surrounding environment from being adversely affected. The Future Land Use Plan is the basis for municipal zoning policies, hence, there are few differences from the Current Land Use Plan zoning policies and the future plans.

According to the Crescent Township Comprehensive Plan (Crescent Township 1971), the Proposed Route passes through approximately 1.274 miles of Agriculture/Conservation (A-1), 0.326 miles of Residential (R-1, R-2), and .010 miles of Commercial (B-2). Crescent Township is located at the northwest edge of the Study Area. Crescent Township is largely undeveloped with pockets of residential areas. Commercial and industrial districts are located along Route 51 and the Ohio River. Major roadways include Route 51, Spring Run Road,

Bocktown Road, and Harper Road. One railroad owned by Pittsburgh and Lake Erie Railroad is located along the Ohio River.

### Pittsburgh

A small eastern portion of the Study Area is located within the City of Pittsburgh. The goals of Pittsburgh's Comprehensive Planning Open Space, Parks, and Recreation Plan (Pittsburgh, 2013), relating to this Project, include respecting and enhancing the relationship between nature and the built environment, and finding viable interim uses for vacant and distressed properties. Specifically, protecting hillslopes and tree canopy, and repurposing abandoned industrial or vacant sites.

The land use within Pittsburgh city limits encompassed by the Study Area is largely comprised of open green space and industry, and a single family residence neighborhood. The major roadway through the Study Area in the City of Pittsburgh is Route 51. Additionally, several railroads are located in the in the Study Area in the City of Pittsburgh, including Pittsburgh and Lake Erie Railroad, Ohio Railroad, Pittsburgh and Ohio Central Pittsburgh Industrial Railroad, and Pittsburgh Chartiers and Youghiogeny Railroad. The Proposed Route for the Project will occur along existing ROW near Chartiers Playground and Sheraden Park, but does affect them. This 2 mile section of the Project falls within the General Industry (GI) zone in Pittsburgh.

### Kennedy Township

While a Municipal Comprehensive Plan was not available for Kennedy Township, the zoning map was reviewed. The Zoning District Map for the Township of Kennedy indicated that the project crossed areas zoned residential including approximately 0.43 miles in R5

(mobile home parks), 0.15 miles in R3 (multiple family residential), and 1.13 miles in R1 (single family residential). Additionally, the project crosses approximately 0.65 miles of C-3 (highway commercial district) and 0.32 miles of Fairhaven Park.

## 7.0 References

- Allegheny County. 2008. *Allegheny County Comprehensive Plan*.
- American Planning Association Pennsylvania Chapter. 2011. *Char-West Multi-Municipal Comprehensive Plan for McKees Rocks Borough, Neville Township, and Stowe Township*. <https://planningpa.org/resource-library/char-west-multi-municipal-comprehensive-plan/>
- Anderson, J. P., E. E. Hardy, J. L. Roach, and R. E. Witmar. 1976. *A Land Use and Land Cover Classification System for use with Remote Sensor Data*. U.S. Geological Survey Professional Paper 964, Washington, D.C.
- Commonwealth of Pennsylvania. Pennsylvania Code. Title 25, Chapter 93 Water Quality Standards, Section 93.9u. Harrisburg, Pennsylvania. <http://www.pacode.com/secure/data/025/chapter93/s93.9u.html>.
- Cowardin, D. M., V. Carter, F. C. Golet, and E. T. Laurel. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service Biological Services Program. EWS/OBS-79/31.
- Crescent Township. 1971. *Crescent Township Comprehensive Plan*.
- Environmental Laboratory. 1987. Corps of Engineers *Wetlands Delineation Manual*. Technical Report, Y-87-1. Vicksburg, Mississippi. U.S. Army Corps of Engineers Waterways Experiment Station.
- ESRI World Imagery, NAIP, 2015.
- GAI Consultants, Inc. 2016. Field observations conducted during 2016. Homestead, Pennsylvania.
- Gaige, David, Dale Trott, and Cyril Welter. 1991. Computers Aid Selection of Transmission Line Alternatives. Article in *Electric World*, February 1991.
- Geyer, A. R. and W. H. Bolles. 1987. *Outstanding Scenic Geologic Features of Pennsylvania, Part 2*. Pennsylvania Bureau of Topographic and Geological Survey, Harrisburg, Pennsylvania.
- Geyer, A. R. and W. H. Bolles. 1979. *Outstanding Scenic Geologic Features of Pennsylvania*. Pennsylvania Bureau of Topographic and Geological Survey, Harrisburg, Pennsylvania.
- Kennedy Township, 2017. *Zoning District Map Township of Kennedy*.
- Moon Township. 2015. *Moon Township Comprehensive Plan*.
- Pennsylvania Department of Conservation and Natural Resources. Pennsylvania Natural Heritage Program. Pennsylvania Conservation Explorer. <https://conservationexplorer.dcnr.pa.gov/>.
- Pennsylvania Department of Conservation and Natural Resources. State Parks. Interactive GIS Map. <http://www.gis.dcnr.state.pa.us/maps/index.html>.

Pittsburgh. 2013. *Pittsburgh Comprehensive Planning Open Space, Parks, and Recreation Plan*.

Robinson Township. 2016. *Robinson Township Comprehensive Plan*.

Sky Vector Aeronautical Charts. 2016. *Detroit Sectional Chart*. <https://skyvector.com/>. Accessed 2016 16 United States Code, Section 1271. Wilderness Act.

United States Army Corps of Engineers Pittsburgh District. January 11, 2012. *Notice No. 12-2. Current List of Navigable of Waters of the United States Within the Pittsburgh District*.

United States Army Corps of Engineers. 2012. *Regional Supplement to the Corps of Engineers*

United States Department of the Interior. National Park Service. National Natural Landmarks Program. <https://www.nps.gov/subjects/nnlandmarks/index.htm> (Accessed October 2016).

United States Department of the Interior. 2016. *Wetlands Mapper*. <https://www.fws.gov/wetlands/data/mapper.html>

United States Geological Survey. 1986. East Liverpool, Pennsylvania. 7.5-Minute Quadrangle (1:24,000).

United States Geological Survey. 1986. Pittsburgh West, Pennsylvania. 7.5-Minute Quadrangle (1:24,000).



**APPENDIX A**  
**Resource Criteria Score Calculations**

**Table A-1.**

**Land Use and Land Cover Criteria Score Calculations**

Criteria	Weight	Alternative Routes		
		Existing	1	2
<b>Commercial/Industrial Areas: within 100 feet of Centerline</b>				
Raw Data		4	9	6
Relative Score		1.00	10.00	4.60
Score	76.9	76.9	769.0	353.7
<b>Residential Areas: within 100 feet of Centerline</b>				
Raw Data		113	25	9
Relative Score		10.00	2.38	1.00
Score	88.8	888.0	211.8	88.8
<b>Cemeteries: Number within 125-foot ROW</b>				
Raw Data		0	0	0
Relative Score		0.00	0.00	0.00
Score	76.8	0.0	0.0	0.0
<b>Railroad and Highway/Road Crossings: Number of Crossings</b>				
Raw Data		52	44	36
Relative Score		10.00	5.50	1.00
Score	33.1	331.0	182.1	33.1
<b>Institutional Complexes: Number Adjacent/Crossed (200-foot ROW)</b>				
Raw Data		8	6	6
Relative Score		10.00	1.00	1.00
Score	83.1	831.0	83.1	83.1
<b>Agricultural Land: Active Agricultural Land Acres (200-foot ROW)</b>				
Raw Data		0.0	0.0	0.0
Relative Score		0.00	0.00	0.00
Score	44.0	0.0	0.0	0.0
<b>Non-Paralleling ROW: Miles Required</b>				
Raw Data		0.0	12.8	15.0
Relative Score		1.00	8.70	10.00
Score	31.1	31.1	270.7	311.0

**Table A-1 (Continued)**

Criteria	Weight	Alternative Routes		
		Existing	1	2
<b>Length: Miles</b>				
Raw Data		14.5	15.3	16.2
Relative Score		1.00	4.37	10.00
Score	<b>28.8</b>	28.8	125.8	288.0
<b>Forested Land: 125-foot ROW (Acres)</b>				
Raw Data		73.75	200.70	230.2
Relative Score		1.00	8.30	10.00
Score	<b>33.0</b>	33.0	274.0	330.0

**Table A-2**

**Hydrology Criteria Score Calculations**

Criteria	Weight	Alternative Routes		
		Existing	1	2
<b>NWI Wetlands: Acres (200-foot ROW)</b>				
<b>Raw Data</b>		18.9	4.4	4.5
<b>Relative Score</b>		10.00	1.00	1.06
<b>Score</b>	<b>66.2</b>	662.0	66.2	69.9
<b>Streams</b>				
<b>Number of Perennial Crossings</b>				
<b>Raw Data</b>		20.0	22.0	22.0
<b>Relative Score</b>		1.00	10.00	10.00
<b>Score</b>	<b>43.0</b>	43.0	430.0	430.0
<b>EV Streams Crossed</b>				
<b>Raw Data</b>		0.0	0.0	0.0
<b>Relative Score</b>		0.00	0.00	0.00
<b>Score</b>	<b>58.0</b>	0.0	0.0	0.0

**Table A-3**

**Scenic and Recreational Area Criteria Score Calculations**

Criteria	Weight	Existing	Alternative Routes	
			1	2
<b>State Forest: Linear Distance Adjacent (miles)</b>				
Raw Data		0	0	0
Relative Score		0.00	0.00	0.00
Score	<b>43.4</b>	0	0	0
<b>State Parks: Linear Distance Adjacent (miles)</b>				
Raw Data		0	0	0
Relative Score		0.00	0.00	0.00
Score	<b>69.2</b>	0	0	0
<b>State Game Lands: Linear Distance Adjacent (miles)</b>				
Raw Data		0	0	0
Relative Score		0.00	0.00	0.00
Score	<b>33.4</b>	0	0	0
<b>Recreational Areas (including local parks and golf courses): Number (200-foot ROW)</b>				
Raw Data		3.0	1.0	3.0
Relative Score		10.00	1.00	10.00
Score	<b>67.3</b>	673.0	67.3	673.0
<b>Hiking and Biking Trails (excluding parks): Number Crossed (200-foot ROW)</b>				
Raw Data		1.0	1.0	2.0
Relative Score		1.00	1.00	10.00
Score	<b>42.8</b>	42.8	42.8	428.0
<b>Designated Scenic Areas: Number Adjacent/Crossed (200-foot ROW)</b>				
Raw Data		0	0	0
Relative Score		0.00	0.00	0.00
Score	<b>71.3</b>	0	0	0
<b>Natural Wild &amp; Scenic/State Scenic Rivers: # Scenic Rivers Crossed (200-foot ROW)</b>				
Raw Data		0	0	0
Relative Score		0.00	0.00	0.00
Score	<b>72.0</b>	0	0	0
<b>Unique Geological Resources: Number Adjacent/Crossed (200-foot ROW)</b>				
Raw Data		0	0	0
Relative Score		0.00	0.00	0.00
Score	<b>59.2</b>	0	0	0

**Table A-4**

Criteria	Weight	Alternative Routes		
		Existing	1	2
<b>National Natural Landmarks: Number Adjacent/Crossed (200-foot ROW)</b>				
Raw Data		0	0	0
Relative Score		0.00	0.00	0.00
Score	78.0	0	0	0
<b>Designated Natural/Wilderness Areas: Linear Distance Adjacent (miles) (within 200-foot ROW)</b>				
Raw Data		0	0	0
Relative Score		0.00	0.00	0.00
Score	73.2	0	0	0
<b>Other Natural Areas</b>				
<b>Core RTE habitat acres (200-foot ROW)</b>				
Raw Data		0.6	2.81	3.2
Relative Score		1.00	8.65	10.00
Score	71.9	71.9	621.9	719.0
<b>Land Trust Protected acres (200-foot ROW)</b>				
Raw Data		0.00	0.10	1.30
Relative Score		1.00	1.69	10.00
Score	71.9	71.9	121.7	719.0

**Natural Areas Resources Criteria Score Calculations**

**Table A-5**

**Terrain and Landscape Criteria Score Calculations**

Criteria	Weight	Alternative Routes		
		Existing	1	2
<b>Steep Terrain (&gt; 20%): Linear Distance Adjacent (miles)</b>				
Raw Data		11.0	11.2	12.6
Relative Score		1.00	1.89	10.00
Score	<b>40.9</b>	40.9	77.2	409.0
<b>Landslide-Prone Areas: Linear Distance Adjacent (miles)</b>				
Raw Data		7.5	9.4	9.6
Relative Score		1.00	9.14	10.00
Score	<b>53.7</b>	53.7	491.0	537.0

**Table A-6**

**Archaeological and Architectural/Historical Resources Criteria Score Calculations**

Criteria	Weight	Alternative Routes		
		Existing	1	2
<b>Architectural and Historic Sites: Number Crossed (200-foot ROW)</b>				
Raw Data		34	37	34
Relative Score		1.00	10.00	1.00
Score	<b>76.8</b>	76.8	768.0	76.8
<b>Archaeological Sites: Number Crossed (200-foot ROW)</b>				
Raw Data		1	3	1
Relative Score		1.00	10.00	1.00
Score	<b>54.0</b>	54.0	540.0	54.0



**Table A-7**

**Airport Criteria Score Calculations**

Criteria	Weight	Alternative Routes		
		Existing	1	2
<b>Airports: Length of ROW within 2 Miles</b>				
<b>Raw Data</b>		0.6	2.7	4.0
<b>Relative Score</b>		1.00	6.56	10.00
<b>Score</b>	<b>52.5</b>	52.5	344.3	525.0

**APPENDIX B**  
**Description of Previously Recorded Architectural, Historical, and Archaeological**  
**Resources within Two Miles of Project Alternatives**

**Description of Previously Recorded Architectural and  
 Historical Resources within Two Miles of Project Alternatives**

Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
679	Allegheny	Thornburg Borough	Thornburg Historic District	District		Listed
1269	Beaver	Ambridge Borough	Old Economy National Historic Landmark	District	270 Sixteenth Street	NHL
1717	Allegheny	Pittsburgh City	Allegheny Observatory	Building	159 Riverview Ave.	Listed
1719	Allegheny	Pittsburgh City	Allegheny West Historic District	District		Listed
1726	Allegheny	Pittsburgh City	Byers-Lyons House	Building	901 Ridge Ave.	Listed
1733	Allegheny	Coraopolis Borough	Coraopolis Railroad Station	Building	Neville Ave.	Listed
1734	Allegheny		Davis Island Lock & Dam Site	Site		Listed
1738	Allegheny	Pittsburgh City	Emmanuel Episcopal Church	Building		NHL
1753	Allegheny	Pittsburgh City	Manchester Historic District	District		Listed
1754	Allegheny	Pittsburgh City	Mexican War Streets Historic District	District		Listed
1759	Allegheny	Edgeworth Borough	Shields, David, House	Building	Shield's Ln.	Listed
1779	Allegheny	Pittsburgh City	Snyder, William Penn, House	Building	852 Ridge Ave.	Listed

Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
1785	Allegheny	Edgeworth Borough	Way, Nicholas, House	Building	108 Beaver Rd.	Listed
1786	Allegheny	Pittsburgh City	West End-North Side Bridge	Structure		Listed
4005	Allegheny	Pittsburgh City	Morrow, John, Elementary School	Building	1611 Davis Ave.	Listed
4023	Allegheny	Pittsburgh City	Allegheny City Stables	Building	836 West North Avenue	SHPO: Eligible
4026	Allegheny	Pittsburgh City	Lasalle Electric Supply Company	Building	1415 Brighton Pl.	SHPO: Eligible
4041	Allegheny	Pittsburgh City	National Casket Company	Building		SHPO: Eligible
5529	Allegheny	Pittsburgh City	Conroy, John M., School	Building	Page St.	Listed
5868	Allegheny	Pittsburgh City	Oliver, David P., High School	Building		Listed
7766	Allegheny	Pittsburgh City	Langley High School	Building	Sheraden Blvd.	Listed
7819	Allegheny	Avalon Borough		Building	640 California Ave.	SHPO: Eligible
7900	Allegheny	Bellevue Borough	Rousseau, Marius, House	Building	100 Watkins Ave.	SHPO: Eligible
7906	Allegheny	Ben Avon Borough		Building	7101 Church Ave.	SHPO: Eligible
8715	Allegheny	Emsworth Borough	Emsworth Locks & Dams	Structure	Western Ave.	SHPO: Eligible

Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
8716	Allegheny	Emsworth Borough	Ohio River Boulevard Bridge & Commemorative Pillars	Structure	Ohio River Blvd.	SHPO: Eligible
8718	Allegheny	Emsworth Borough	Roper, W.A., Property	Building	8100 Ohio River Blvd.	SHPO: Eligible
9595	Allegheny	Pittsburgh City	Western State Penitentiary	Building	Doerr St.	SHPO: Eligible
9648	Allegheny	Pittsburgh City	Brashear, John Alfred, House & Factory	Building	1954 Perrysville Ave.	Listed
9787	Allegheny	Sewickley Borough	Flatiron Building	Building	514 Beaver Rd.	SHPO: Eligible
9799	Allegheny	Sewickley Borough	Sewickley Methodist Episcopal Church	Building	Broad St.	SHPO: Eligible
9804	Allegheny	Sewickley Borough	Pennsylvania Railroad: Station (Sewickley)	Building	Chadwick St.	SHPO: Eligible
9831	Allegheny	Sewickley Borough	Sewickley Public Library	Building	Thom St.	SHPO: Eligible
9906	Allegheny	Sewickley Borough	Sewickley Presbyterian Church	Building	414 Grant St.	SHPO: Eligible
9979	Allegheny	Sewickley Heights Borough	Franklin Farm Watertower	Structure	Blackburn Rd.	SHPO: Eligible
10133	Allegheny	Stowe Township		Building	Charles Ave.	SHPO: Eligible
10516	Allegheny		Coraopolis Bridge	Structure	Ferree St.	Listed

Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
10547	Allegheny	Crafton Borough	Campbell Building	Building	60 E Crafton Ave.	Listed
10548	Allegheny	Crafton Borough	Creighton House	Building	51 Noble Ave.	SHPO: Eligible
10559	Allegheny	Crafton Borough	Crafton National Bank	Building	142 Noble Ave.	SHPO: Eligible
10731	Allegheny	Edgeworth Borough	Singer, William H., Sr., Estate Outbuildings	Building	753 Chestnut Rd.	SHPO: Eligible
10778	Allegheny		Muottas	Building	21 Little Sewickley Creek Rd.	SHPO: Eligible
10779	Allegheny	Edgeworth Borough	Edgeworth Bridge	Structure		SHPO: Eligible
19685	Allegheny	Leet Township	Watson, D.T. Summer Estate Sunny Hill""	Building	Camp Meeting Rd.	SHPO: Eligible
19690	Allegheny	Leetsdale Borough	Elmridge	Building	Beaver Rd.	Listed
19700	Allegheny	Leetsdale Borough	Lark Inn (Halfway House")"	Building	634 Beaver Rd.	SHPO: Eligible
19850	Allegheny	Mckees Rocks Borough	Saint Mary's Roman Catholic Church Complex	Building	St. John St.	SHPO: Eligible
19851	Allegheny	Mckees Rocks Borough	Mann's Hotel	Building	23 Singer Ave.	SHPO: Eligible
19868	Allegheny	Mckees Rocks Borough	Pittsburgh & Lake Erie Railroad: Yard Complex	Building		SHPO: Eligible

Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
43509	Allegheny	Pittsburgh City	Hoene-Werle House	Building	1313 Allegheny Ave.	Listed
50658	Allegheny	Pittsburgh City	Deushtown Historic District	District		Listed
64370	Allegheny	Pittsburgh City	Old Allegheny Rows Historic District	District		Listed
76787	Allegheny	Crescent Township	Shouse, Peter, House	Building	Main St.	SHPO: Eligible
77378	Allegheny	Neville Township	Repair Facility Lock No. 2	Building	River Rd.	SHPO: Eligible
77414	Beaver	Ambridge Borough	Laughlin Memorial Free Library	Building		SHPO: Eligible
77415	Beaver	Ambridge Borough	Ambridge U.S. Post Office	Building	1020 Merchant St.	SHPO: Eligible
78856	Beaver	Ambridge Borough	Economy Historic District	Building		Listed
79659	Allegheny	Pittsburgh City	Brightridge Street Rowhouse Historic District	District	838 Brightridge St.	Listed
79660	Allegheny	Pittsburgh City	Charles Street Rowhouse Historic District	District	2501 Charles St.	Listed
79931	Allegheny	Stowe Township	Apartment Building	Building	908 and 916 Dohrman St.	SHPO: Eligible
82565	Allegheny	Sewickley Borough	United States Post Office-- Sewickley Branch	Building	200 Broad St.	Listed

Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
82589	Allegheny	Pittsburgh City	Westlake Public School	Building	900 Lorenz Ave.	SHPO: Eligible
82597	Allegheny	Pittsburgh City	Calvary Methodist Episcopal Church	Building		SHPO: Eligible
82601	Allegheny	Pittsburgh City	Mexican War Streets Historic District (Boundary Increase)	District		Listed
82614	Allegheny	Pittsburgh City	200 W. North Avenue	Building	200 W North Ave.	Listed
86811	Allegheny	Pittsburgh City	Allegheny Commons	Site		Listed
86878	Allegheny	Pittsburgh City	Manchester Historic District Boundary Increase Area	District		SHPO: Eligible
96119	Allegheny	Bellevue Borough	Northgate Grant School		Grant Ave.	SHPO: Eligible
96456	Allegheny	Coraopolis Borough	Coraopolis Armory	Building	835 5th Ave.	Listed
96518	Allegheny	Sewickley Heights Borough	Robinson-Laughlin Party House	Building	Blackburn Rd.	SHPO: Eligible
96654	Allegheny		McKees Rocks Bridge	Structure		Listed
96831	Allegheny	Coraopolis Borough	Montour Railroad Company: Shops	Building		SHPO: Eligible
97246	Allegheny	Pittsburgh City	Pittsburgh & Lake Erie Railroad: Bridge No. 3.36	Structure		SHPO: Eligible



Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
97247	Allegheny	Coraopolis Borough	Pittsburgh & Lake Erie Railroad: Mr. Tower CP-10	Building		SHPO: Eligible
97496	Allegheny		Western Pennsylvania Railroad (Pittsburgh to Freeport)	District		SHPO: Eligible
97622			Montour Railroad	District		SHPO: Eligible
100102	Allegheny		Crafton Historic District	District		SHPO: Eligible
100104	Allegheny		Ingram Historic District	District		SHPO: Eligible
100105	Washington	Buffalo Township	Pittsburgh & Steubenville Railroad (Pittsburgh to WV line)	District		SHPO: Eligible
100109	Allegheny	Pittsburgh City	Corliss Street Tunnel	Structure	Corliss St.	SHPO: Eligible
100639	Allegheny	Sewickley Borough	02 1 0 0652 0 060887		Ohio River Blvd.	SHPO: Eligible
101760	Allegheny	Pittsburgh City	West End Valley Historic District	District		SHPO: Eligible
101761	Allegheny	Pittsburgh City	Horix Company	Building	2609 Chartiers Ave.	SHPO: Eligible
101775	Allegheny	Bellevue Borough	Bellevue Borough Hall	Building		SHPO: Eligible

Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
102240	Allegheny	Leetsdale Borough	Riter-Conley Manufacturing Company	District	Ohio River Blvd.	SHPO: Eligible
102408	Allegheny	Mckees Rocks Borough		Building	1000 Chartiers Ave.	SHPO: Eligible
102885	Allegheny	Leetsdale Borough	Leetsdale Borough Building	Building	85 Broad St.	SHPO: Eligible
106200	Allegheny	Pittsburgh City	Saint John's Hospital	Building	339 McClure Avenue	SHPO: Eligible
106684	Allegheny	Sewickley Borough	Saint Matthews African Methodist Episcopal Zion Church	Building	345 Thorn St.	SHPO: Eligible
110462	Allegheny	Robinson Township	Bridge over Montour Run	Structure		SHPO: Eligible
111288	Allegheny	Sewickley Borough	Boundary - Beaver Streets Historic District	District		SHPO: Eligible
111869	Allegheny	Sewickley Borough	Old Thorn Farm-Broad Street Historic District	District		SHPO: Eligible
112369			Pennsylvania Railroad: Main Line (Harrisburg to Pittsburgh)	District		SHPO: Eligible
112372			Pennsylvania Railroad: Main Line (Pittsburgh to Ohio State Line)	District		SHPO: Eligible
112503	Allegheny	Ben Avon Borough	Ben Avon Historic District	District		SHPO: Eligible

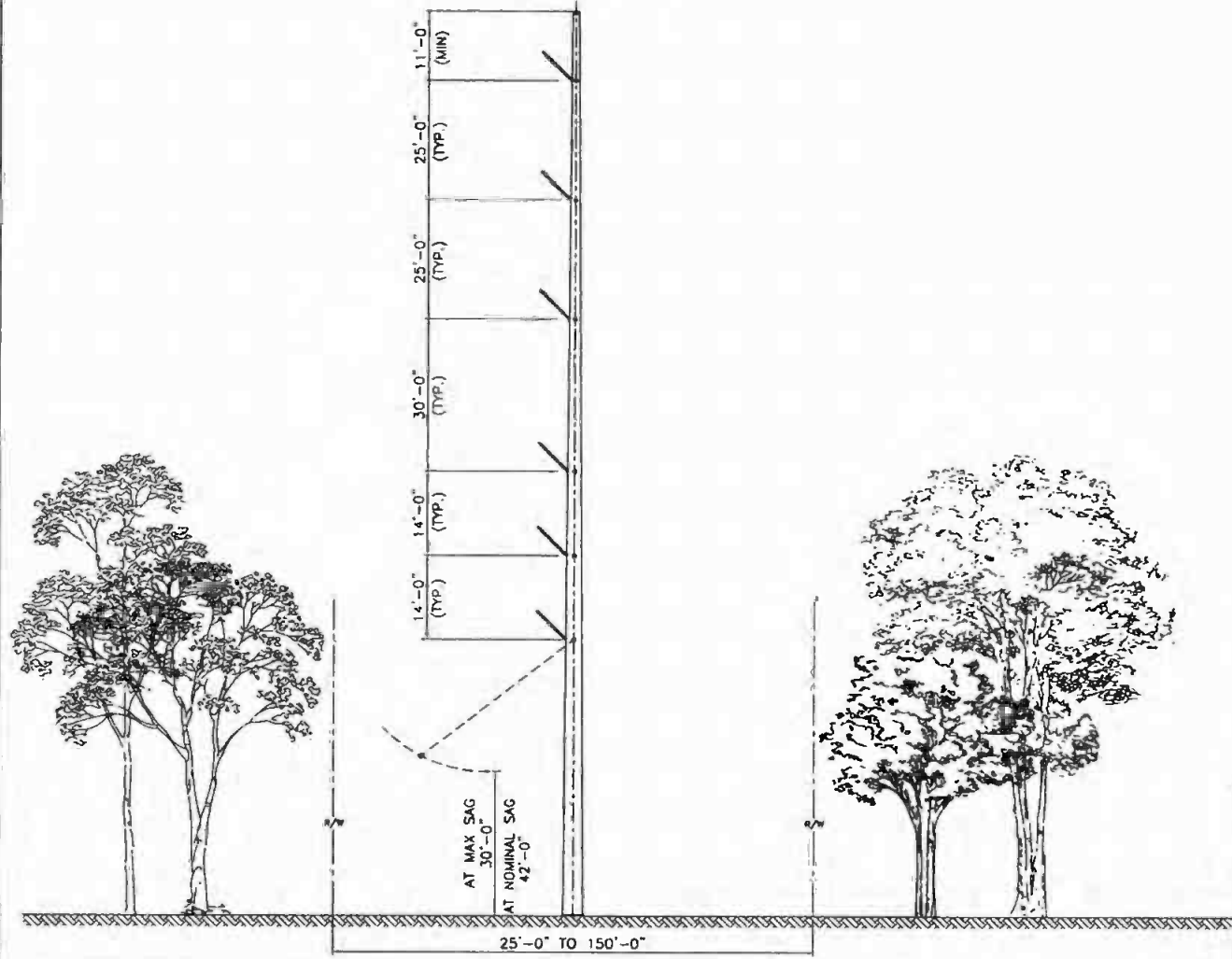
Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
114795	Allegheny	Leetsdale Borough	Seaman House	Building	72 Ohio River Blvd.	SHPO: Eligible
114798	Allegheny	Leetsdale Borough	Leet Street Bridge	Structure	LEET ST	SHPO: Eligible
114800	Allegheny	Leetsdale Borough	Riter-Conway Steel Company Historic District	District	Washington	SHPO: Eligible
116800			Pittsburgh & Lake Erie Railroad (Mahoning Twp. Lawrence Co. to Brownsville Fayette Co. and Connellsville Fayette Co.)	District		SHPO: Eligible
120239	Allegheny	Robinson Township	Oil Extraction Facility No. 1	Site	12 Winter Rd.	SHPO: Eligible
120243	Allegheny	Robinson Township	Oil Extraction Facility No. 2	Structure	Elliot Dr.	SHPO: Eligible
120247	Allegheny	Moon Township	Panner, John, Farm	Structure		SHPO: Eligible
120259	Allegheny	Mckees Rocks Borough	McKay, James & Company Chain Works	Building	1107 Thompson Ave.	SHPO: Eligible
120267	Allegheny	Mckees Rocks Borough	Chartier Trust Company	Building	701 Chartiers Ave.	SHPO: Eligible
125935	Allegheny	Moon Township	Mooncrest Historic District	District		Listed
127092	Allegheny		Oakdale Army Air Defense Base; Oakdale	District		SHPO: Eligible


Key #	County	Municipality	Historic Name	Resource Category	Address	National Register Status
			Nike Missile Site Historic			
128728	Beaver	Ambridge Borough	Ambridge Area Senior High School	Building	909 Duss Ave.	SHPO: Eligible
129447	Allegheny	Ben Avon Borough		Structure	SR 65	SHPO: Eligible
129743	Allegheny	Pittsburgh City	Robert Mcaffee Bridge	Structure	SR 7301	SHPO: Eligible
129802	Allegheny	Pittsburgh City	Jack's Run Bridge No 1	Structure	SR 7301	SHPO: Eligible
130150	Beaver	Ambridge Borough	Ambridge-woodbridge Bridge	Structure	SR 7402	SHPO: Eligible
206320	Allegheny	Pittsburgh City	USS Requin	Structure	1 Allegheny Avenue	SHPO: Eligible
206485	Beaver	Ambridge Borough	Ambridge Commercial Historic District	District	Merchant Street	SHPO: Eligible

Site #	Site Name	Site Type	Topographic Setting	National Register Status
36AL0016	McKees Rock Mound Village	Village	Rise in Floodplain	SHPO: Eligible
36AL0356	Steuben Street Site	Historic Domestic Site	Middle Slopes	SHPO: Eligible
36AL0591	Portman Row	Historic and Pre-Contact	Terrace	SHPO: Eligible

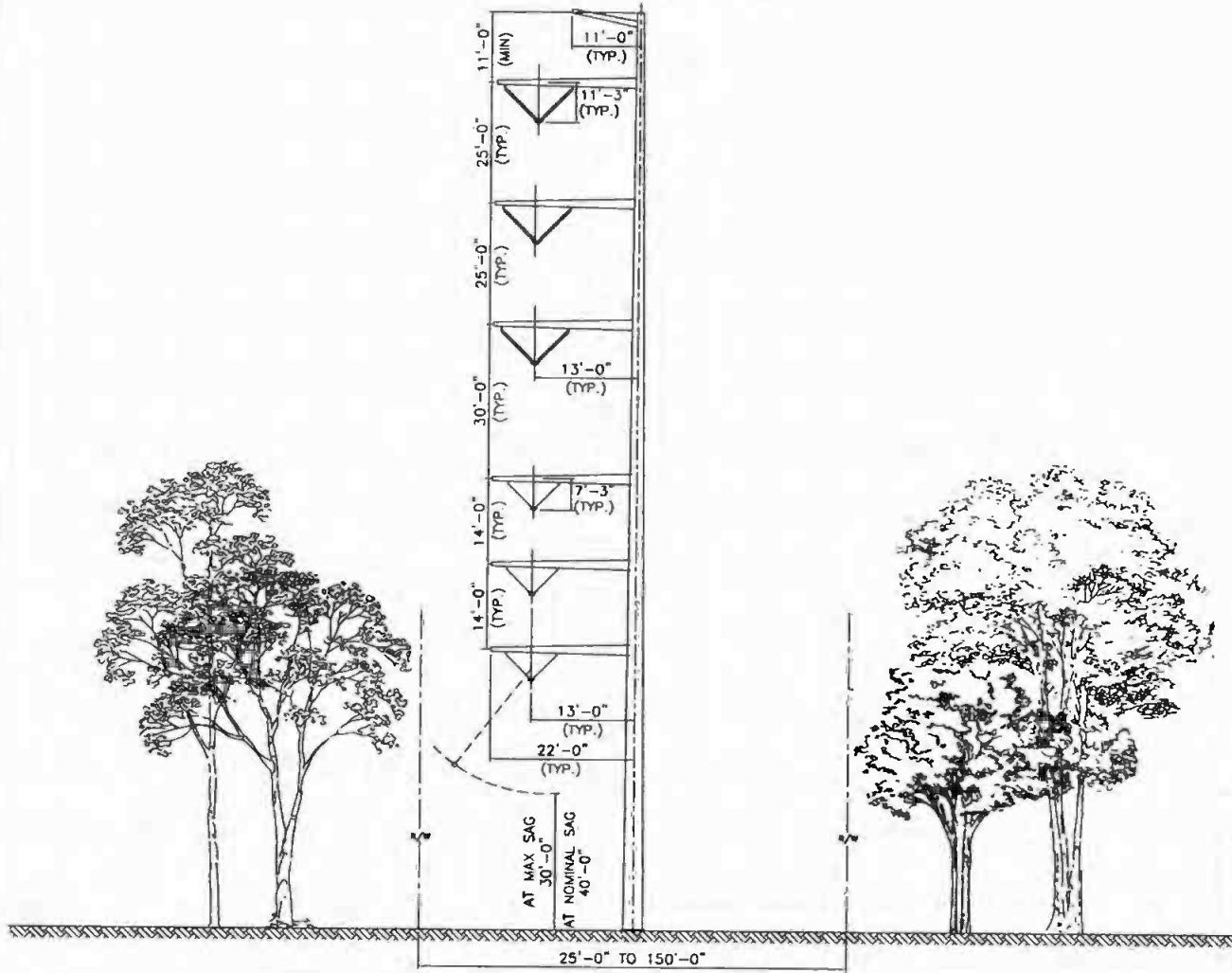
# Attachment 4


PROPOSED C LINE R/W  
TYPICAL DEADEND STRUCTURE  
TOP OF POLE



ATTACHMENT 4A	
TYPICAL CROSS SECTION OF LINE	
BI-CRESCENT	
DUQUESNE LIGHT COMPANY ALLEGHENY COUNTY, PA	

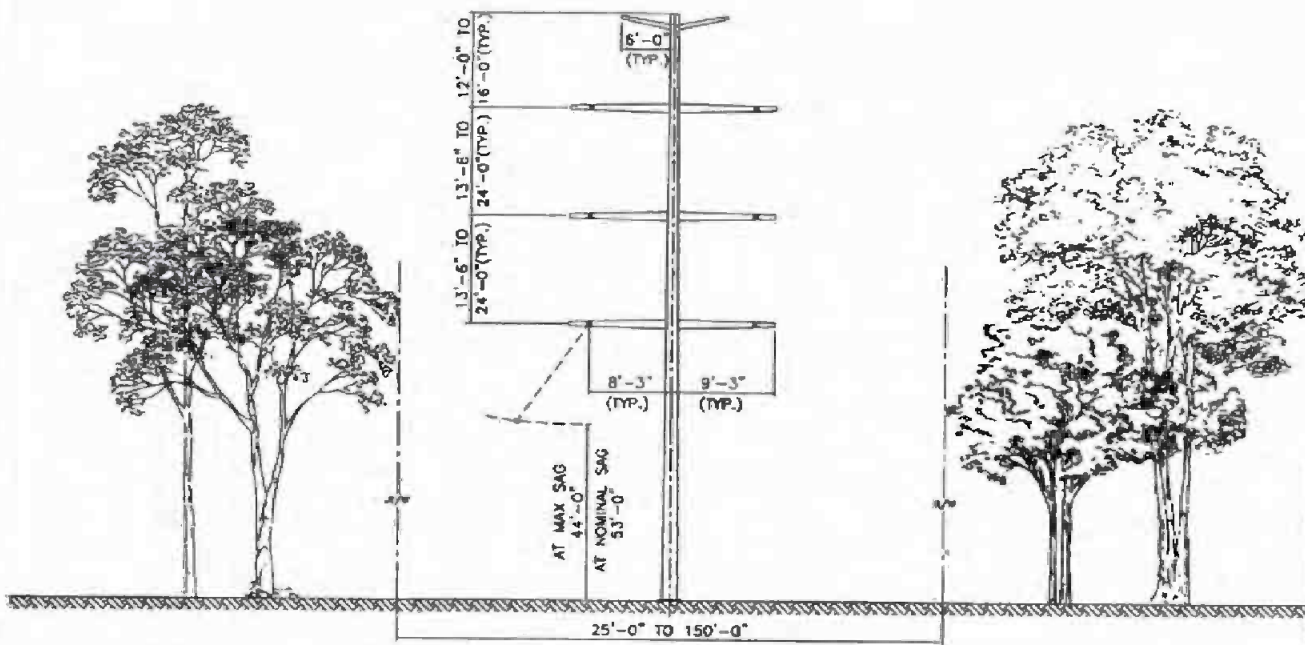
PROPOSED  $\phi$  LINE R/W  
 TYPICAL TANGENT STRUCTURE  
 TOP OF POLE



ATTACHMENT 4B	
TYPICAL CROSS SECTION OF LINE	
BI-CRESCENT	
DUQUESNE LIGHT COMPANY ALLEGHENY COUNTY, PA	



PROPOSED C LINE R/W  
 TYPICAL SIDE-BY-SIDE CONFIGURATION  
TOP OF ROAD

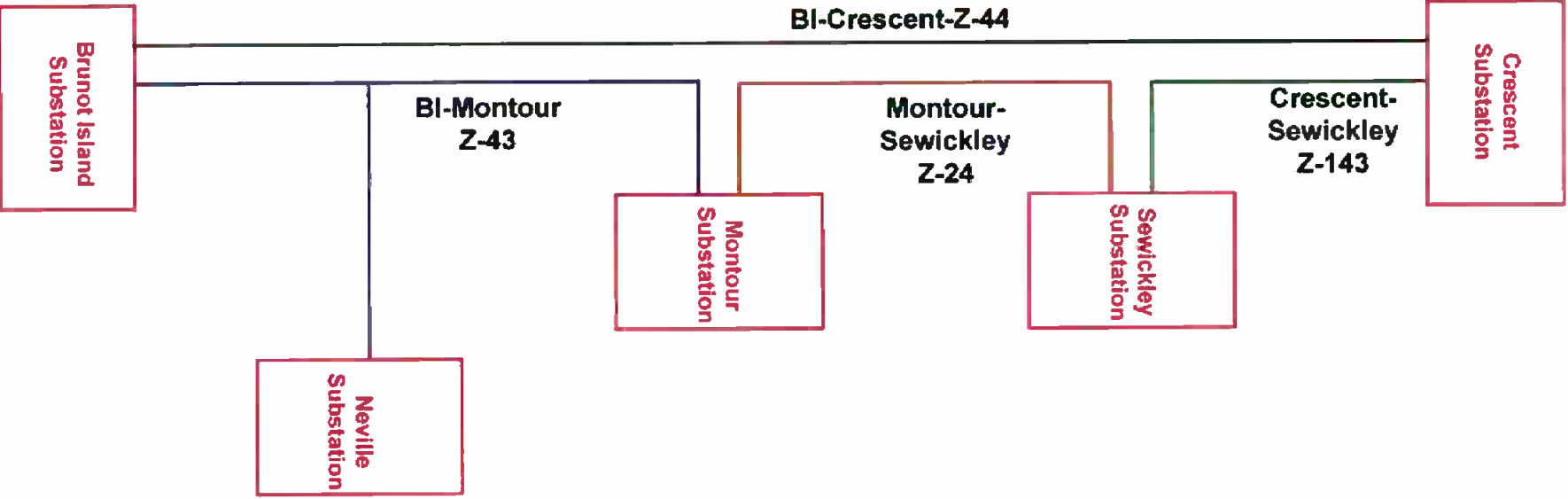
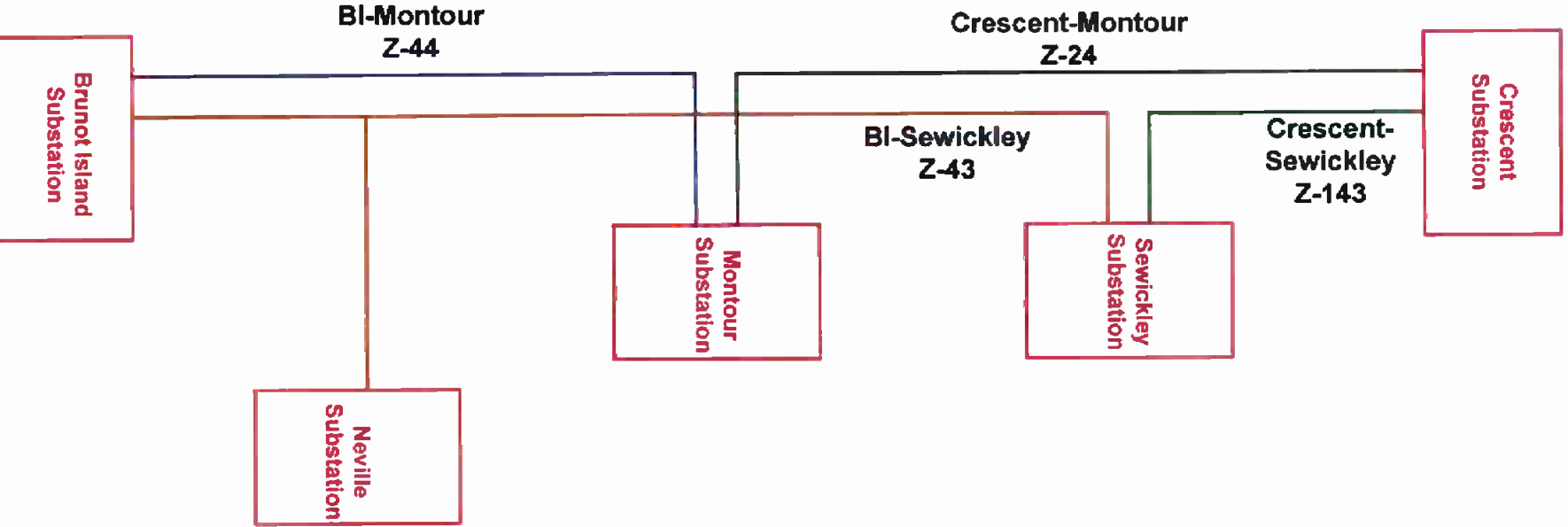


ATTACHMENT 4C	
TYPICAL CROSS SECTION OF LINE	
BI-CRESCENT	
DUQUESNE LIGHT COMPANY ALLEGHENY COUNTY, PA	

**CONFIDENTIAL Attachment 5a**  
**(No Public Version Available)**

**CONFIDENTIAL Attachment 5b**  
**(No Public Version Available)**

# Attachment 6

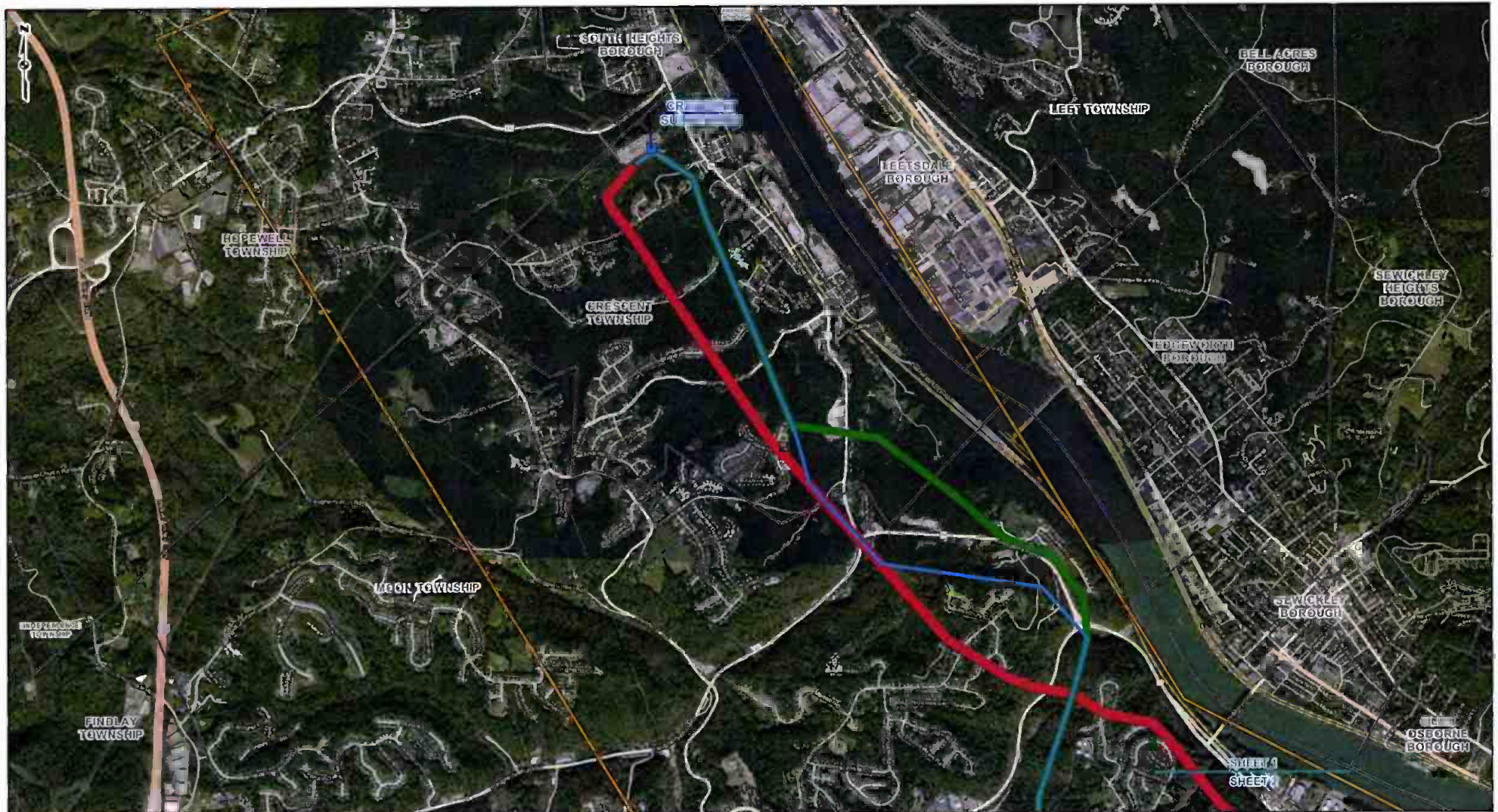


**BI-Crescent Reconductor**  
Circuit Arrangement

Present

Proposed

# Attachment 7



PROJECT LOCATION



ALLEGHENY COUNTY, PENNSYLVANIA

REFERENCES: ESRI WORLD MAGERY, DIGITAL GLOBE, 2015, ACCESSED 02/2019. ESRI TRANSPORTATION, MICROSOFT, 02/2019, ACCESSED 02/2019.

LEGEND

- EXISTING SUBSTATION
- PROPOSED ROUTE
- ALTERNATIVE 1
- ALTERNATIVE 2
- STUDY AREA
- MUNICIPAL BOUNDARY

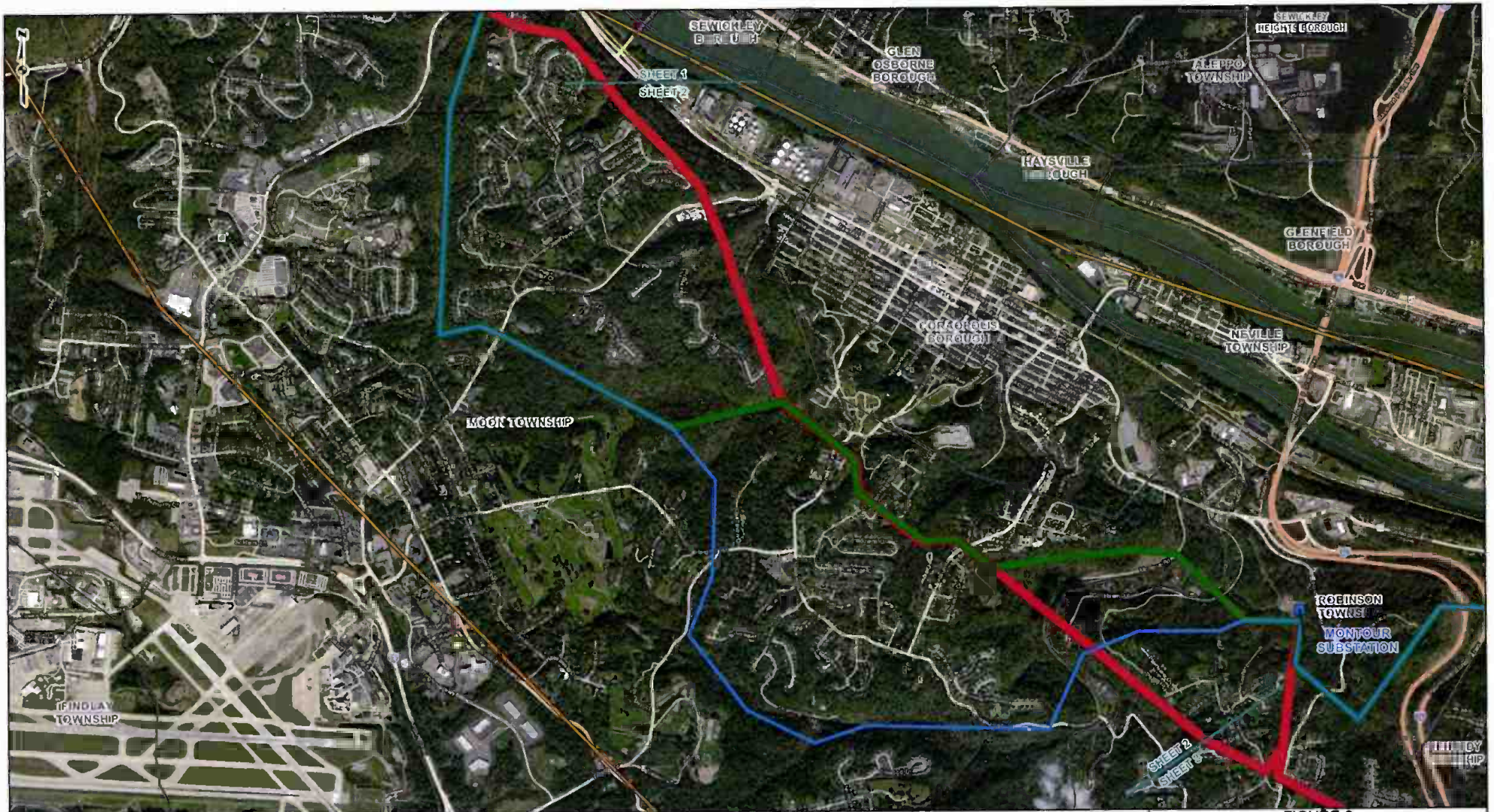


FIGURE 2  
STUDY AREA AND ALTERNATIVE ROUTES  
SHEET 1 OF 3

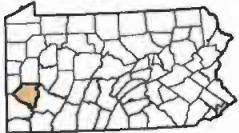
BRUNOT ISLAND - CRESCENT  
138 kV TRANSMISSION LINE REBUILD PROJECT  
DUQUESNE LIGHT COMPANY **DLC**

DRAWN BY: AEK  
CHECKED: EFJ

DATE: 2/15/2019  
APPROVED: AMK



**PROJECT LOCATION**

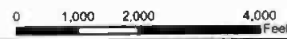


ALLEGHENY COUNTY, PENNSYLVANIA

REFERENCES: ESRI WORLD IMAGERY, DIGITAL GLOBE, 2015, ACCESSED 02/2019, ESRI TRANSPORTATION, MICROSOFT, 02/2019, ACCESSED 02/2019.

**LEGEND**

- EXISTING SUBSTATION
- PROPOSED ROUTE
- ALTERNATIVE 1
- ALTERNATIVE 2
- STUDY AREA
- MUNICIPAL BOUNDARY

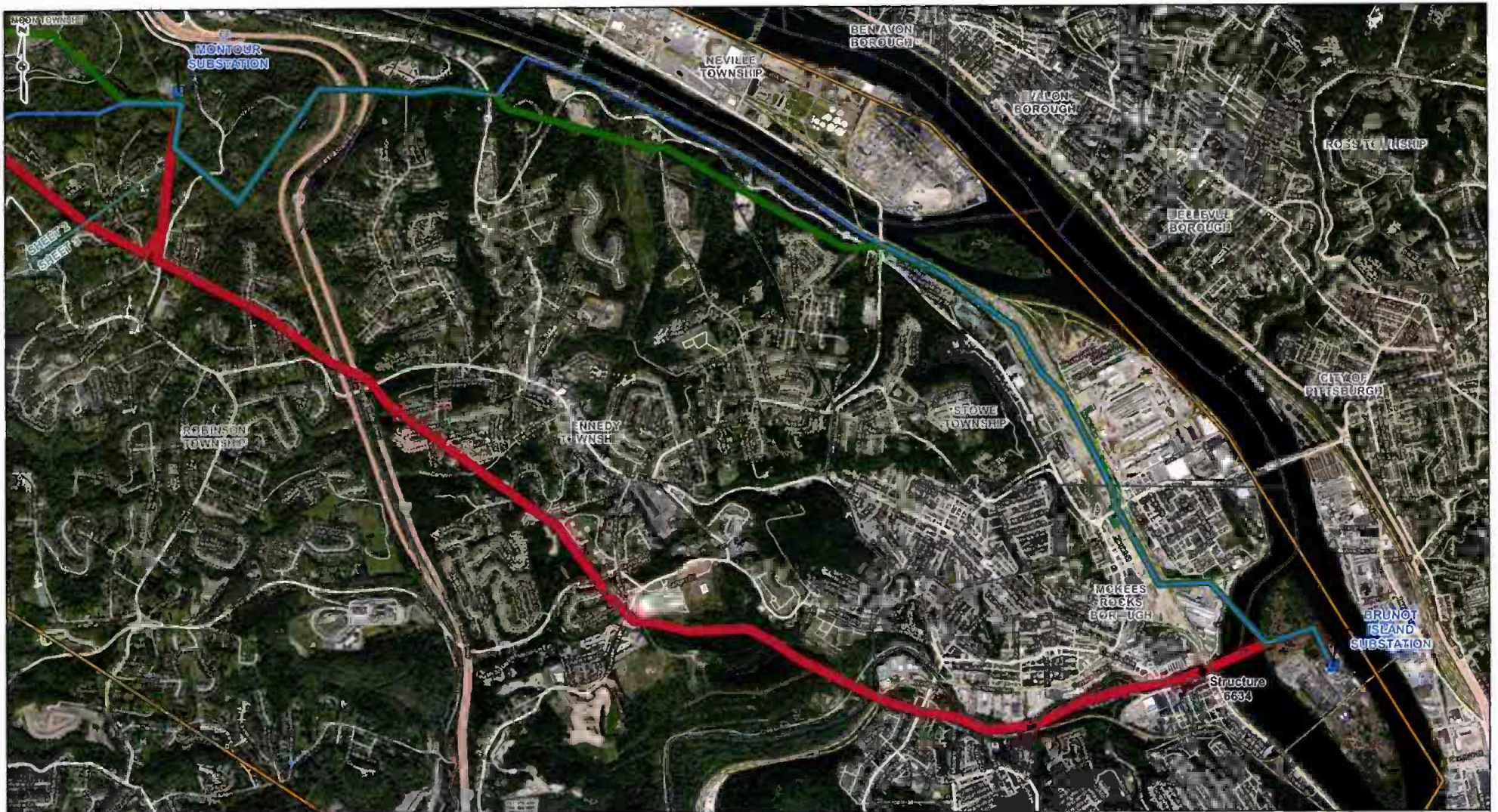


**FIGURE 2**  
**STUDY AREA AND ALTERNATIVE ROUTES**  
**SHEET 2 OF 3**

BRUNOT ISLAND - CRESCENT  
 138 kV TRANSMISSION LINE REBUILD PROJECT  
 DUQUESNE LIGHT COMPANY **D&C**

DRAWN BY: AEK      DATE: 2/15/2019  
 CHECKED: EFJ      APPROVED: AMK





**PROJECT LOCATION**

ALLEGHENY COUNTY, PENNSYLVANIA

REFERENCES: ESRI WORLD IMAGERY, DIGITAL GLOBE, 2015, ACCESSED 02/2019. ESRI TRANSPORTATION, MICROSOFT, 02/2019, ACCESSED 02/2019.

**LEGEND**

- EXISTING SUBSTATION
- PROPOSED ROUTE
- ALTERNATIVE 1
- ALTERNATIVE 2
- STUDY AREA
- MUNICIPAL BOUNDARY

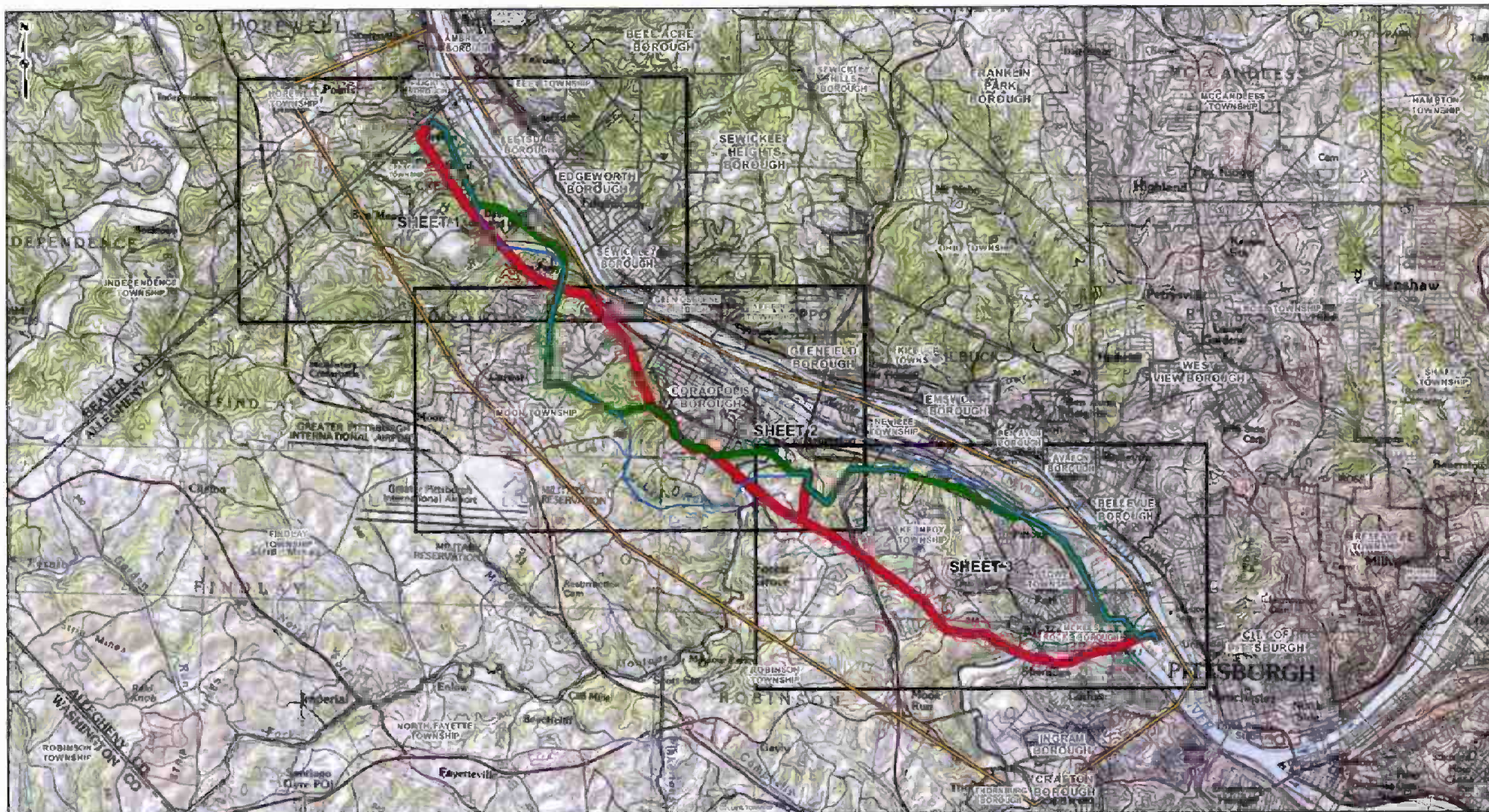
0 1,000 2,000 4,000 Feet

**FIGURE 2**  
**STUDY AREA AND ALTERNATIVE ROUTES**  
 SHEET 3 OF 3

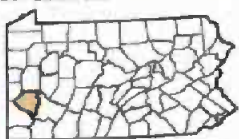
BRUNOT ISLAND - CRESCENT  
 138 kV TRANSMISSION LINE REBUILD PROJECT  
 DUQUESNE LIGHT COMPANY

DRAWN BY: AEK      DATE: 2/15/2019  
 CHECKED: EFJ      APPROVED: AMK

# Attachment 8



**PROJECT LOCATION**



ALLEGHENY COUNTY, PENNSYLVANIA

REFERENCE: USGS 30'X60' TOPOGRAPHIC QUADRANGLES, EAST LIVERPOOL (1980) AND PITTSBURGH WEST (1986), PENNSYLVANIA, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS. ACCESSED 02/2019.

**LEGEND**

- █ PROPOSED ROUTE
- █ ALTERNATIVE 1
- █ ALTERNATIVE 2
- STUDY AREA
- SHEET INDEX
- MUNICIPAL BOUNDARY



**FIGURE 2  
STUDY AREA AND ALTERNATIVE ROUTES  
SHEET INDEX**

**BRUNOT ISLAND - CRESCENT  
138 kV TRANSMISSION LINE REBUILD PROJECT  
DUQUESNE LIGHT COMPANY**



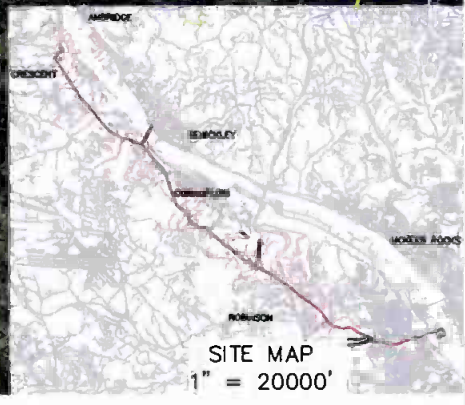
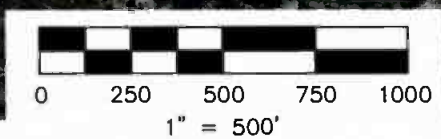
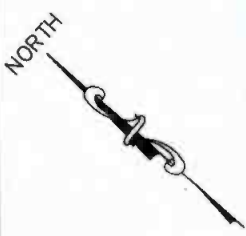
DRAWN BY: AEK      DATE: 2/15/2019  
CHECKED: EFJ      APPROVED: AMK

# Attachment 9

LABEL	OWNER NAME
1	MATTHEW & GEORGINA WAIBEL
2	JOSEPH & KAREN GERY



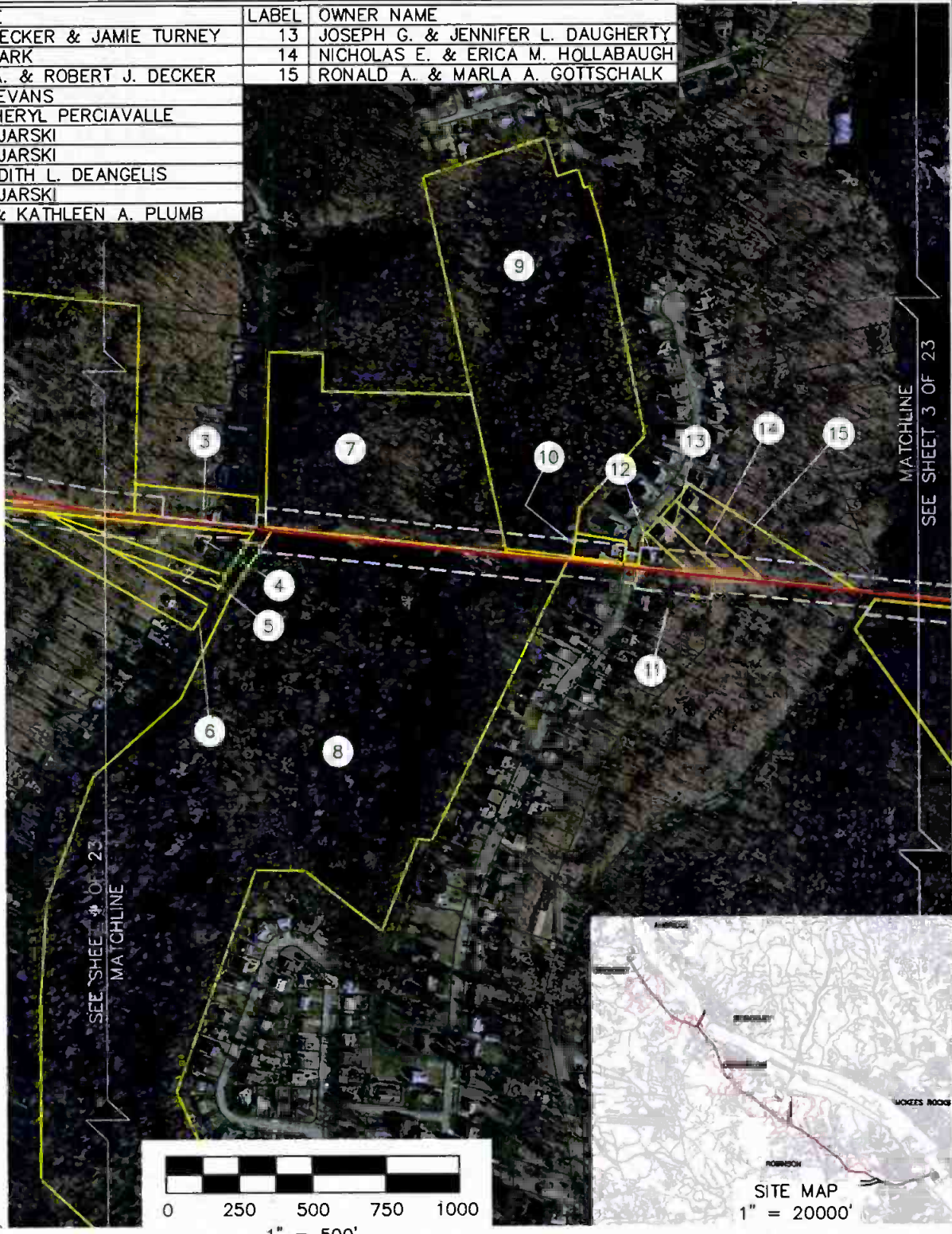
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THE EASEMENT IS  
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AND IS NOT  
REPRESENTATIVE ON  
THE PARCEL.



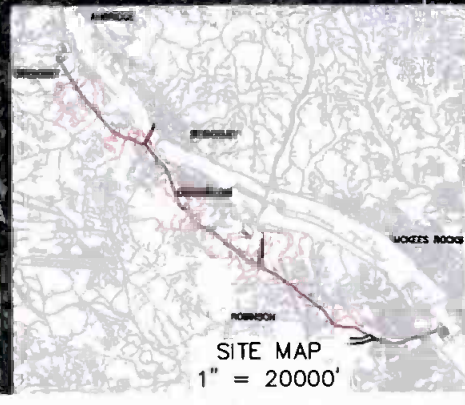
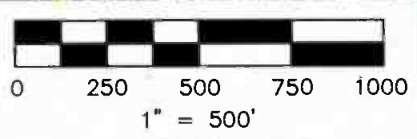
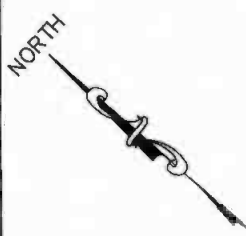
MATCHLINE  
SEE SHEET 2 OF 23

LEGEND		DUQUESNE LIGHT COMPANY		B.I. - CRESCENT AERIAL EXHIBIT	
△	SUBSTATION	REAL ESTATE DEPT.-SURVEYING	PITTSBURGH, PA.	BEAVER COUNTY/ALLEGHENY COUNTY CRESCENT TWP. SHEET 1 OF 23	
—	PROPOSED ROUTE	SCALE AS SHOWN			
—	ROW	DATE 3/04/19	ARCH. APP.	APP. COMPLETE WHEN INITIALED HERE	O.F.E.
—	PARCEL WITHIN ROW	DRAWN JLS	ELECT. APP.	C.O.	L No. 8790
—	GIS PARCEL BOUNDARY	CHECKED MEH	MECH. APP.		
<small>SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PASDA) PROJECTION: COORDINATE SYSTEM PA STATE PLANE SOUTH DATUM: NORTH AMERICAN DATUM OF 1883 (NAD83) PROJECTION: LAMBERT CONFORMAL CONIC LINEAR UNITS: FEET ELLIPSOID: GEODETIC REFERENCE SYSTEM 80</small>		INSP.	STRUCT. APP.		

LABEL	OWNER NAME	LABEL	OWNER NAME
3	ROBERT J. DECKER & JAMIE TURNEY	13	JOSEPH G. & JENNIFER L. DAUGHERTY
4	VICKIE D. STARK	14	NICHOLAS E. & ERICA M. HOLLABAUGH
5	CATHERINE A. & ROBERT J. DECKER	15	RONALD A. & MARLA A. GOTTSCHALK
6	MICHAEL S. EVANS		
7	DANIEL & CHERYL PERCIAVALLE		
8	LOUIS A. BOJARSKI		
9	LOUIS A. BOJARSKI		
10	JAMES & JUDITH L. DEANGELIS		
11	LOUIS A. BOJARSKI		
12	JOSEPH W. & KATHLEEN A. PLUMB		



NOTE:  
THE EASEMENT IS  
VARIABLE IN WIDTH  
AND IS NOT  
REPRESENTATIVE ON  
THE PARCEL.

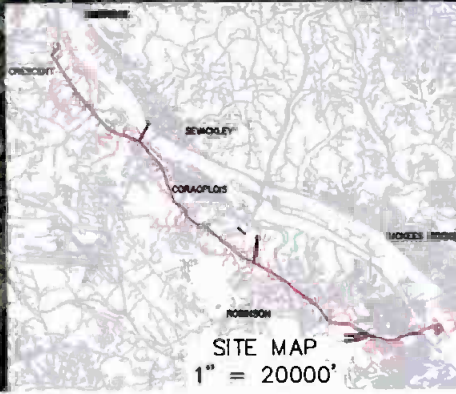
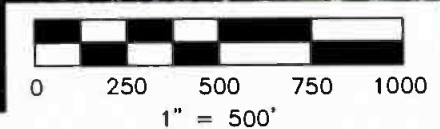
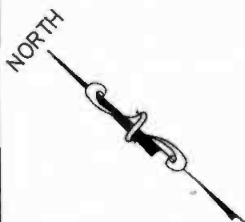


LEGEND		DUQUESNE LIGHT COMPANY		B.I. - CRESCENT AERIAL EXHIBIT	
	SUBSTATION	REAL ESTATE DEPT.-SURVEYING	PITTSBURGH, PA.		
	PROPOSED ROUTE	SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	
	ROW		DRAWN JLS	ELECT. APP.	
	PARCEL WITHIN ROW		CHECKED MEH	MECH. APP.	
	GIS PARCEL BOUNDARY		INSP.	STRUCT. APP.	
<small>           SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)            PROJECTION: COORDINATE SYSTEM: PA STATE PLANE SOUTH            DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)            PROJECTION: LAMBERT CONFORMAL CONIC            UNIT: FEET            REFERENCE: GEODETIC REFERENCE SYSTEM 80         </small>				ALLEGHENY COUNTY CRESCENT TWP. SHEET 2 OF 23	
				<small>APP. COMPLETE WHEN INITIALED HERE</small> O.F.E. C.O.	L No. 8790

LABEL	OWNER NAME
16	ROBERT J. & NANCY J. KERNICK



NOTE:  
THE EASEMENT IS VARIABLE IN WIDTH AND IS NOT REPRESENTATIVE ON THE PARCEL.



LEGEND	
	SUBSTATION
	PROPOSED ROUTE
	ROW
	PARCEL WITHIN ROW
	GIS PARCEL BOUNDARY

SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)  
PROJECTIONS: COORDINATE SYSTEM: PA STATE PLANE SOUTH  
DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)  
PROJECTION: LAMBERT CONFORMAL CONIC  
UNITS: FEET  
RELEASED: GEODETIC REFERENCE SYSTEM 80

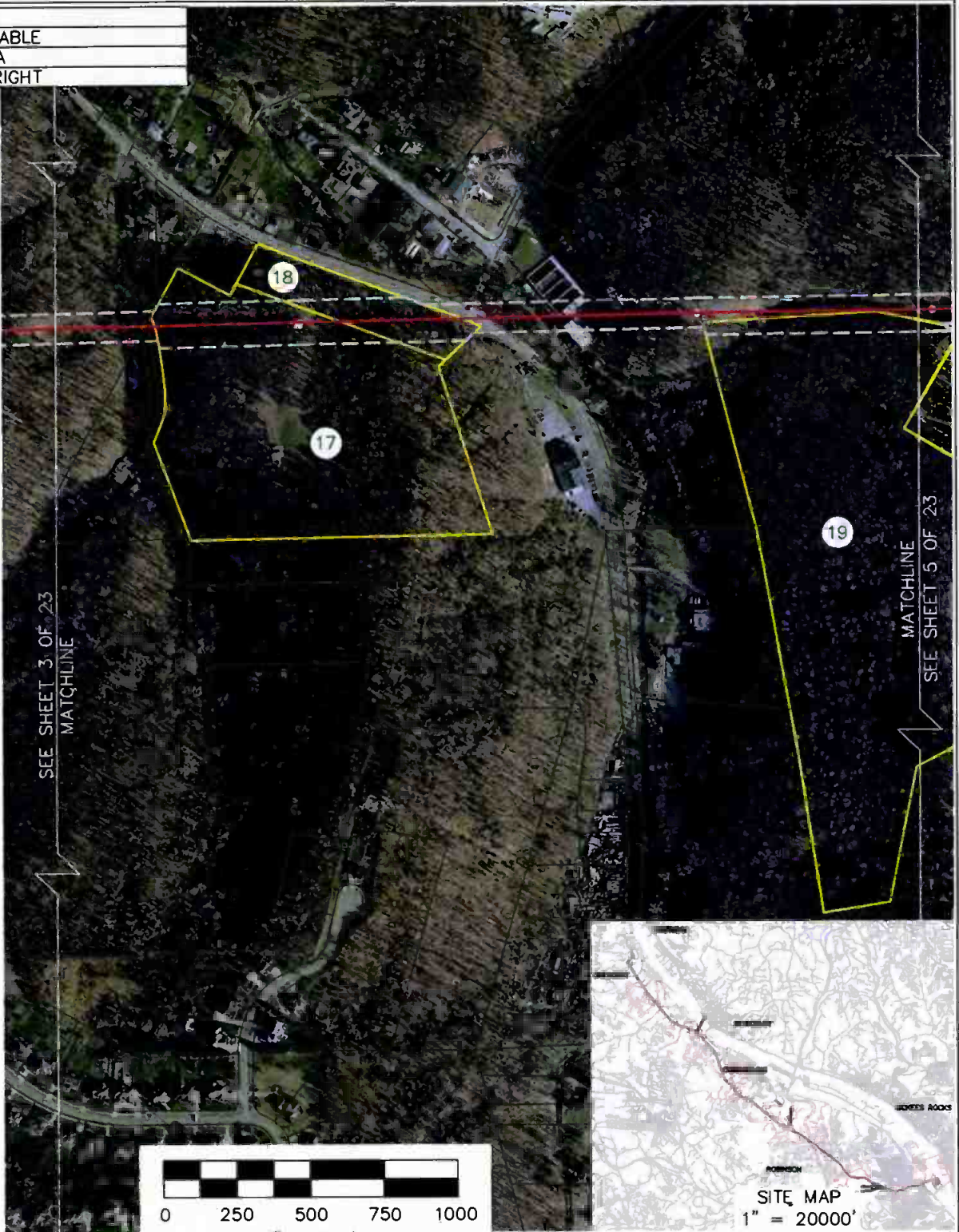
**DUQUESNE LIGHT COMPANY**  
REAL ESTATE DEPT.-SURVEYING      PITTSBURGH, PA.

SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.
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	CHECKED MEH	MECH. APP.
	INSP.	STRUCT. APP.

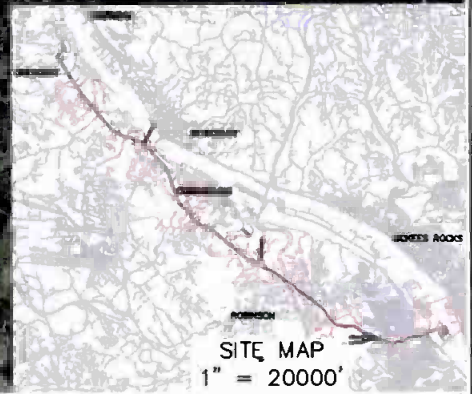
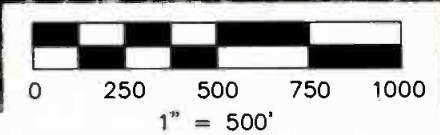
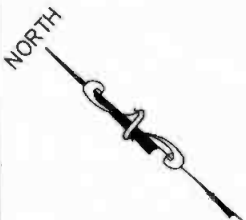
B.I. - CRESCENT  
AERIAL EXHIBIT

ALLEGHENY COUNTY CRESCENT TWP. SHEET 3 OF 23		APP. COMPLETE WHEN INITIALED HERE	O.F.E.	L No. 8790
		C.O.		

LABEL	OWNER NAME
17	RICHARD I. GABLE
18	MARTIN MEDIA
19	DANIEL C. WRIGHT



NOTE:  
THE EASEMENT IS  
VARIABLE IN WIDTH  
AND IS NOT  
REPRESENTATIVE ON  
THE PARCEL.



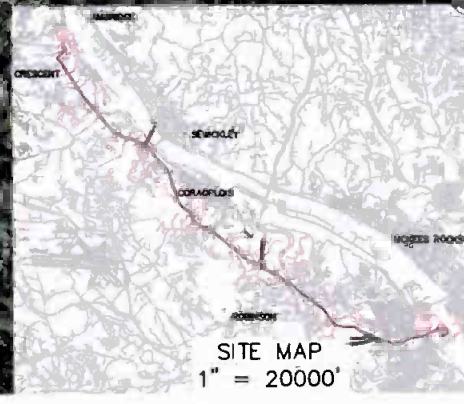
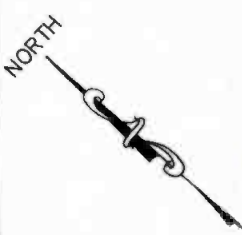
<b>LEGEND</b> △ SUBSTATION — PROPOSED ROUTE — ROW — PARCEL WITHIN ROW — GIS PARCEL BOUNDARY <small>SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)          PENNSYLVANIA COORDINATE SYSTEM, PA STATE PLANE SOUTH          DATUM, NORTH AMERICAN DATUM OF 1883 (NAD83)          PROJECTION: LAMBERT CONFORMAL CONIC          LOCAL UNIT: FEET          DATUM: GEOCENTRIC REFERENCE SYSTEM 80</small>	<b>DUQUESNE LIGHT COMPANY</b> REAL ESTATE DEPT.—SURVEYING      PITTSBURGH, PA.		B.I. — CRESCENT AERIAL EXHIBIT		
	SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	ALLEGHENY COUNTY MOON TWP. SHEET 4 OF 23	
		DRAWN JLS	ELECT. APP.		
		CHECKED MEH	MECH. APP.		
INSP.	STRUCT. APP.	APP. COMPLETE WHEN DETAILLED HERE	O.F.E.  C.O.	L No. 8790	



LABEL	OWNER NAME
20	MICHAEL R. NOVAK
21	GEOFFREY W. & MEGAN A. HATTON
22	CHRISTINA M. COLAROSSO



NOTE:  
THE EASEMENT IS  
VARIABLE IN WIDTH  
AND IS NOT  
REPRESENTATIVE ON  
THE PARCEL.



LEGEND	
	SUBSTATION
	PROPOSED ROUTE
	ROW
	PARCEL WITHIN ROW
	GIS SPARCIAL BOUNDARY

SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)  
PROJECTION: COORDINATE SYSTEM: PA STATE PLANE SOUTH  
DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)  
PROJECTION: LAMBERT CONFORMAL, CONC.  
LOCAL UNIT: FEET  
ELLIPSOID: GEODETIC REFERENCE SYSTEM 80

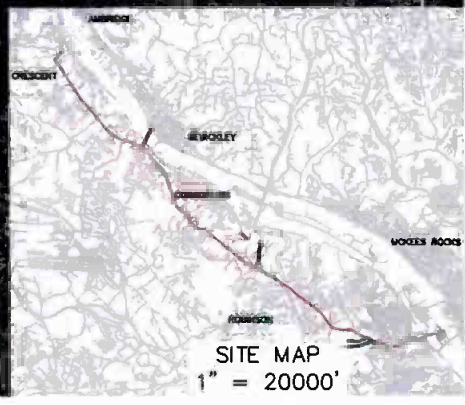
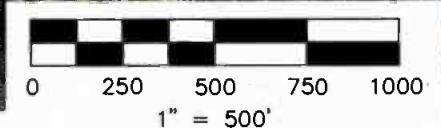
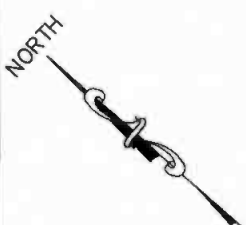
DUQUESNE LIGHT COMPANY			
REAL ESTATE DEPT.-SURVEYING		PITTSBURGH, PA.	
SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	
	DRAWN JLS	ELECT. APP.	
	CHECKED MEH	MECH. APP.	
	INSP.	STRUCT. APP.	

B.I. - CRESCENT AERIAL EXHIBIT		
ALLEGHENY COUNTY MOON TWP. SHEET 5 OF 23		
APP. COMPLETE WHEN INITIALED HERE	O.F.E.  C.O.	L No. 8790

LABEL	OWNER NAME
23	MORRISON FARMS (CINDRAN INC.)



NOTE:  
THE EASEMENT IS  
VARIABLE IN WIDTH  
AND IS NOT  
REPRESENTATIVE ON  
THE PARCEL.

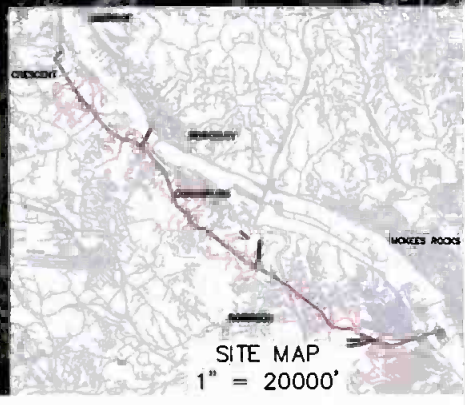
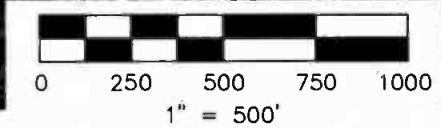
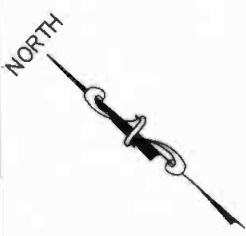


<b>LEGEND</b> Δ SUBSTATION — PROPOSED ROUTE — ROW — PARCEL WITHIN ROW — GIS PARCEL BOUNDARY <small>SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)          PROTECTED COORDINATE SYSTEM, PA STATE PLANE SOUTH          DATUM: NORTH AMERICAN DATUM OF 1883 (NAD83)          PROJECTION: LAMBERT CONFORMAL, CONIC          LINEAR UNIT: FEET          ELLIPSOID: GEODETIC REFERENCE SYSTEM 80</small>	<b>DUQUESNE LIGHT COMPANY</b> REAL ESTATE DEPT. - SURVEYING      PITTSBURGH, PA.		B.I. - CRESCENT AERIAL EXHIBIT		
	SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	ALLEGHENY COUNTY MOON TWP. SHEET 6 OF 23	
		DRAWN JLS	ELECT. APP.		
		CHECKED MEH	MECH. APP.		
INSP.	STRUCT. APP.	APP. COMPLETE WHEN INITIALED HERE O.F.E. C.O.	L No. 8790		

LABEL	OWNER NAME
23	MORRISON FARMS - CINDRAN INC.
24	MORRISON FARMS - CINDRAN INC.
25	HENRY & JULIA B. REYNOLDS

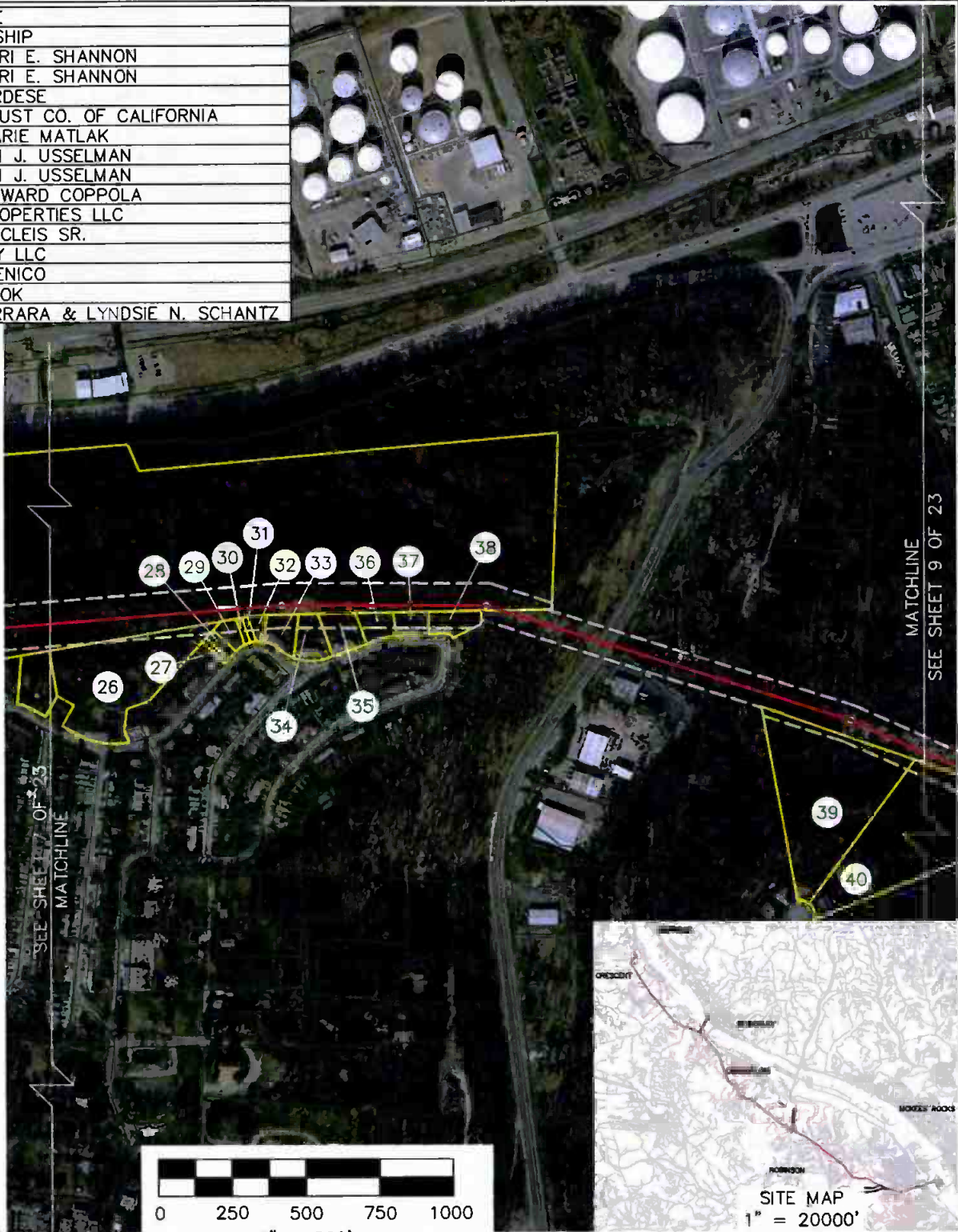


NOTE:  
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AND IS NOT  
REPRESENTATIVE ON  
THE PARCEL.

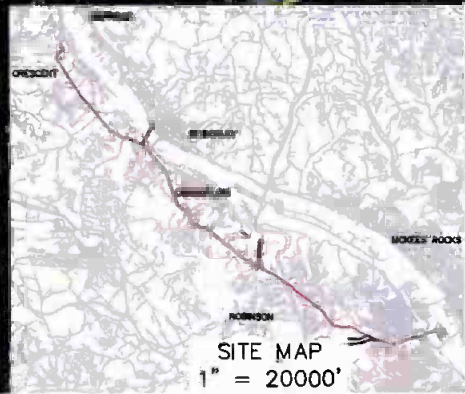
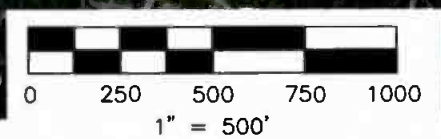
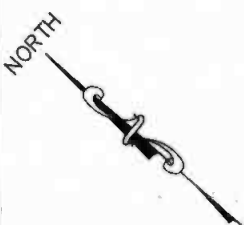


LEGEND		DUQUESNE LIGHT COMPANY		B.I. - CRESCENT AERIAL EXHIBIT	
△	SUBSTATION	REAL ESTATE DEPT. - SURVEYING	PITTSBURGH, PA.		
—	PROPOSED ROUTE	SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	
—	ROW		DRAWN JLS	ELECT. APP.	
—	PARCEL WITHIN ROW		CHECKED MEH	MECH. APP.	
—	GIS PARCEL BOUNDARY		INSP.	STRUCT. APP.	
<small>SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA) PROTECTED COORDINATE SYSTEM PA STATE PLANE SOUTH DATUM: NORTH AMERICAN DATUM OF 1883 (NAD83) PROJECTION: LAMBERT CONFORMAL CONIC LINEAR UNIT: FEET ELECTED: GEODETIC REFERENCE SYSTEM 80</small>				ALLEGHENY COUNTY MOON TWP. SHEET 7 OF 23	
				<small>APP. COMPLETE WHEN INITIALED HERE</small>	O.F.E. C.O.
				<b>L No. 8790</b>	

LABEL	OWNER NAME
26	MOON TOWNSHIP
27	KIM E. & LORI E. SHANNON
28	KIM E. & LORI E. SHANNON
29	JOHN CAMARDESE
30	BANKERS TRUST CO. OF CALIFORNIA
31	CAROLYN MARIE MATLAK
32	ERIC & HEIDI J. USSELMAN
33	ERIC & HEIDI J. USSELMAN
34	MATTHEW EDWARD COPPOLA
35	TWOTUTS PROPERTIES LLC
36	CHARLES J. CLEIS SR.
37	JOLA REALTY LLC
38	JON S. DOMENICO
39	MORGAN MIHOK
40	MICHAEL FERRARA & LYNDSIE N. SCHANTZ



NOTE:  
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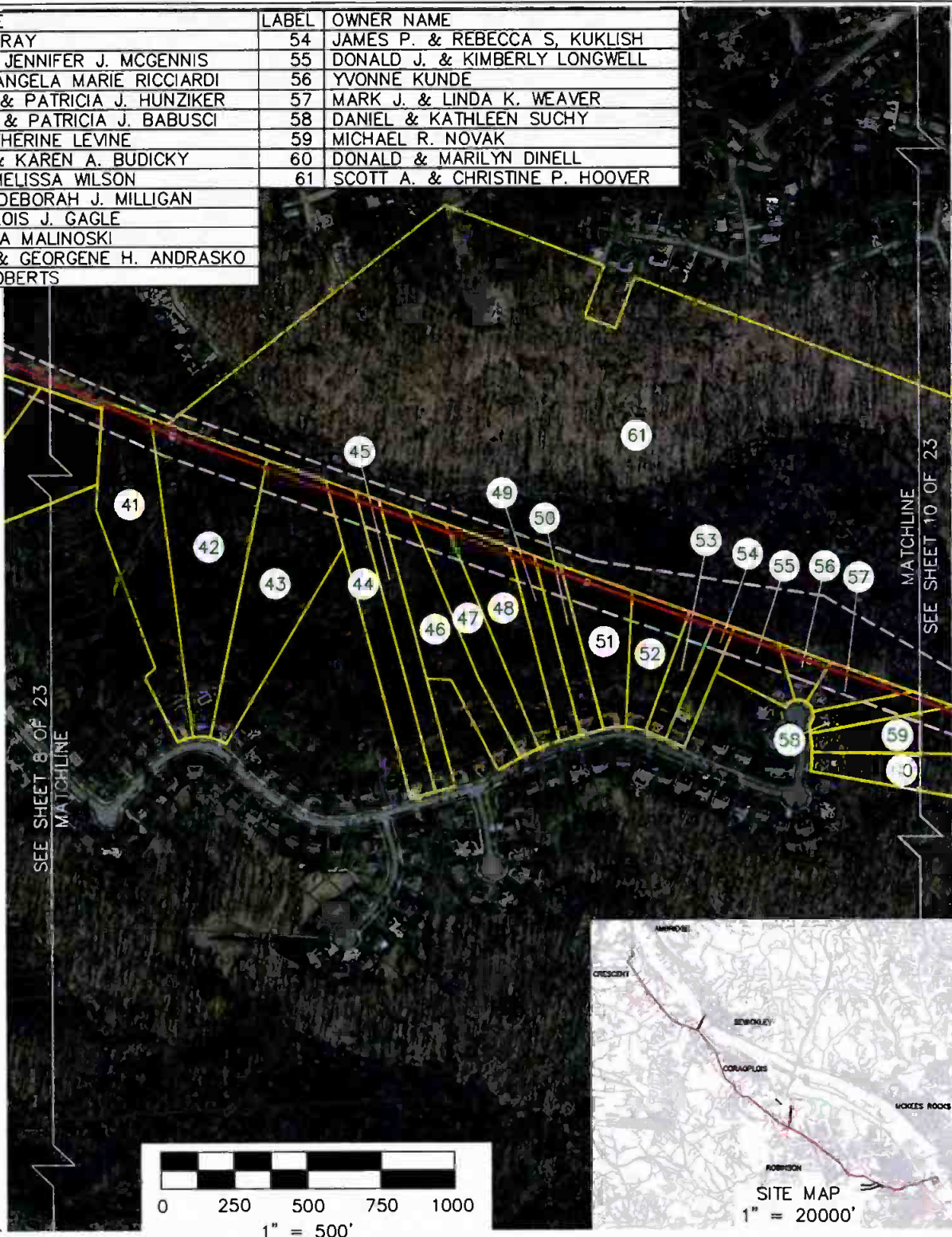


MATCHLINE  
SEE SHEET 9 OF 23

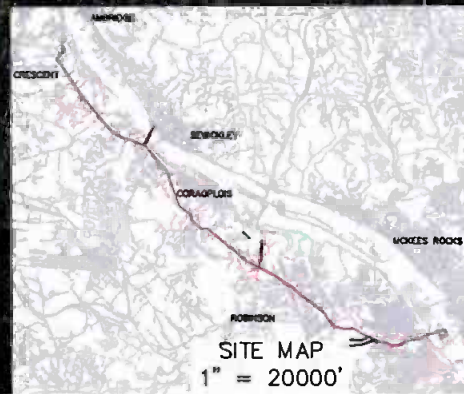
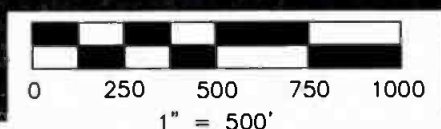
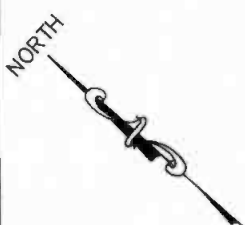
SEE SHEET 7 OF 23  
MATCHLINE

LEGEND		DUQUESNE LIGHT COMPANY		B.I. - CRESCENT AERIAL EXHIBIT	
△	SUBSTATION	REAL ESTATE DEPT. - SURVEYING	PITTSBURGH, PA.	ALLEGHENY COUNTY MOON TWP. SHEET 8 OF 23	
—	PROPOSED ROUTE	SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	APP. COMPLETE WHEN INITIALED HERE
—	ROW	DRAWN JLS	CHECKED MEH	ELECT. APP.	
—	PARCEL WITHIN ROW	INSP.	INSP.	MECH. APP.	
—	GIS PARCEL BOUNDARY			STRUCT. APP.	
<small>SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PSADA) PROTECTED COORDINATE SYSTEM: PA STATE PLANE SOUTH DATUM: NORTH AMERICAN DATUM OF 1883 (NAD83) PROJECTION: LAMBERT CONFORMAL CONIC LINEAR UNIT: FEET ELLIPSOID: GEOIDING REFERENCE SYSTEM 80</small>					O.F.E. C.O. <b>L No. 8790</b>

LABEL	OWNER NAME	LABEL	OWNER NAME
41	WILLIAM E. GRAY	54	JAMES P. & REBECCA S, KUKLISH
42	BRETT W. & JENNIFER J. MCGENNIS	55	DONALD J. & KIMBERLY LONGWELL
43	VINCENT & ANGELA MARIE RICCIARDI	56	YVONNE KUNDE
44	RICHARD A. & PATRICIA J. HUNZIKER	57	MARK J. & LINDA K. WEAVER
45	ANTHONY J. & PATRICIA J. BABUSCI	58	DANIEL & KATHLEEN SUCHY
46	JOHN & CATHERINE LEVINE	59	MICHAEL R. NOVAK
47	RONALD J. & KAREN A. BUDICKY	60	DONALD & MARILYN DINELL
48	BRANDT & MELISSA WILSON	61	SCOTT A. & CHRISTINE P. HOOVER
49	OWEN R. & DEBORAH J. MILLIGAN		
50	TODD J. & LOIS J. GAGLE		
51	KEITH & DINA MALINOSKI		
52	RONALD A. & GEORGENE H. ANDRASKO		
53	DEREK C. ROBERTS		

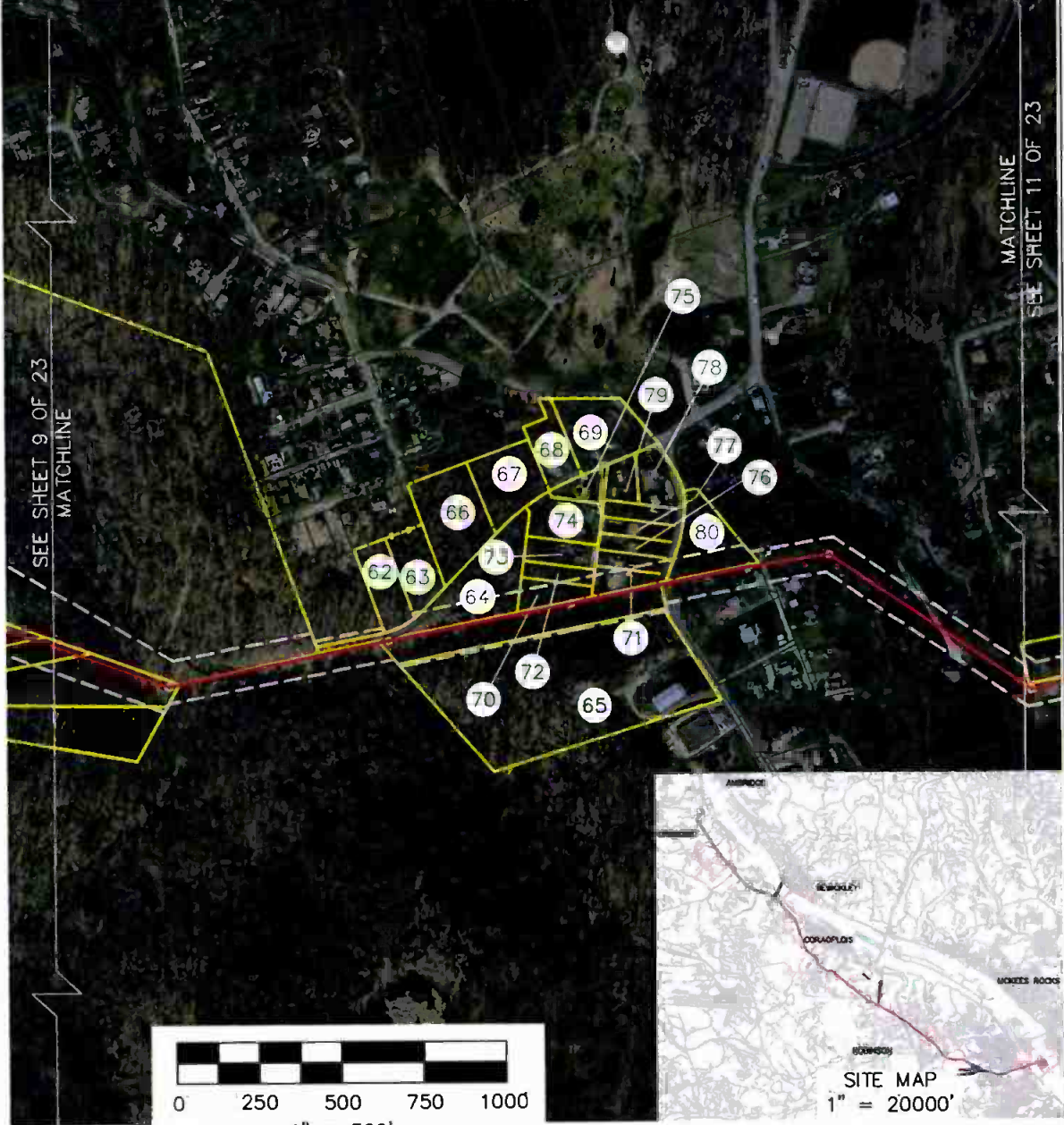


NOTE:  
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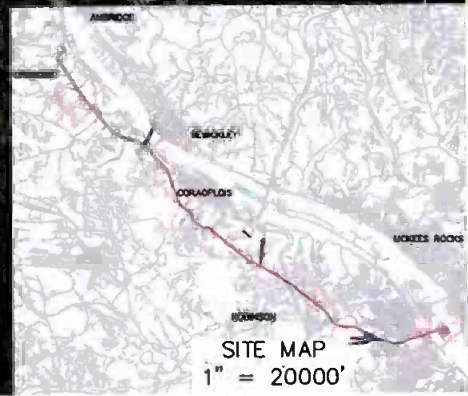
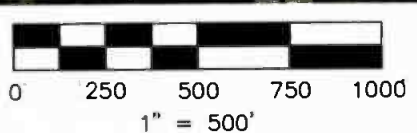
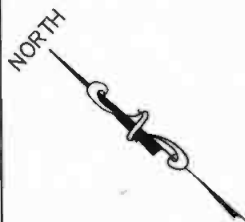


LEGEND		DUQUESNE LIGHT COMPANY		B.I. - CRESCENT AERIAL EXHIBIT	
△	SUBSTATION	REAL ESTATE DEPT.-SURVEYING	PITTSBURGH, PA.	ALLEGHENY COUNTY MOON TWP. SHEET 9 OF 23	
—	PROPOSED ROUTE	SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	APP. COMPLETE WHEN INITIALED HERE
—	ROW	DRAWN JLS	ELECT. APP.	O.F.E.	
—	PARCEL WITHIN ROW	CHECKED MEH	MECH. APP.	C.O.	
—	GIS PARCEL BOUNDARY	INSP.	STRUCT. APP.		
<small>SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PASDA)            PROTECTED COORDINATE SYSTEMS, PA STATE PLANE SOUTH            DATUM, NORTH AMERICAN DATUM OF 1983 (NAD83)            PROJECTION: LAMBERT CONFORMAL CONIC            HORIZONTAL UNITS: FEET            ELLIPSOID: GEODETIC REFERENCE SYSTEM 80</small>				L No. 8790	

LABEL	OWNER NAME	LABEL	OWNER NAME
62	JOSEPH A. & RUTH M. NICKLES REV. TRUST	72	PAUL D. & HEIDI M. SOUZA
63	LYNNE J. BOLEY	73	PAUL D. & HEIDI M. SOUZA
64	HEIRS OF GEORGE N. SCHAEFER	74	PAUL D. & HEIDI M. SOUZA
65	CORAOPOLIS TEMPLE SERVICE ASSOCIATION	75	SANDRA L. BURGUNDER
66	CHRISTIAN GUZZO	76	ADAM SACCO & DOMINIQUE LUCIA SACCO
67	WILLIAM DAVID & MARTIN GILL ONDRASICK	77	MICHAEL J. & SHARON WITHROW
68	NICHOLAS M. STERI III	78	WILLIAM C. SCHILLIG
69	FREESTONE LLLP	79	MICHAEL A. FEDORKA
70	CHARLES E. & JAYNE LISICA	80	ANTHONY R. & SANDRA R. MARTIN
71	CHARLES E. & JAYNE LISICA		



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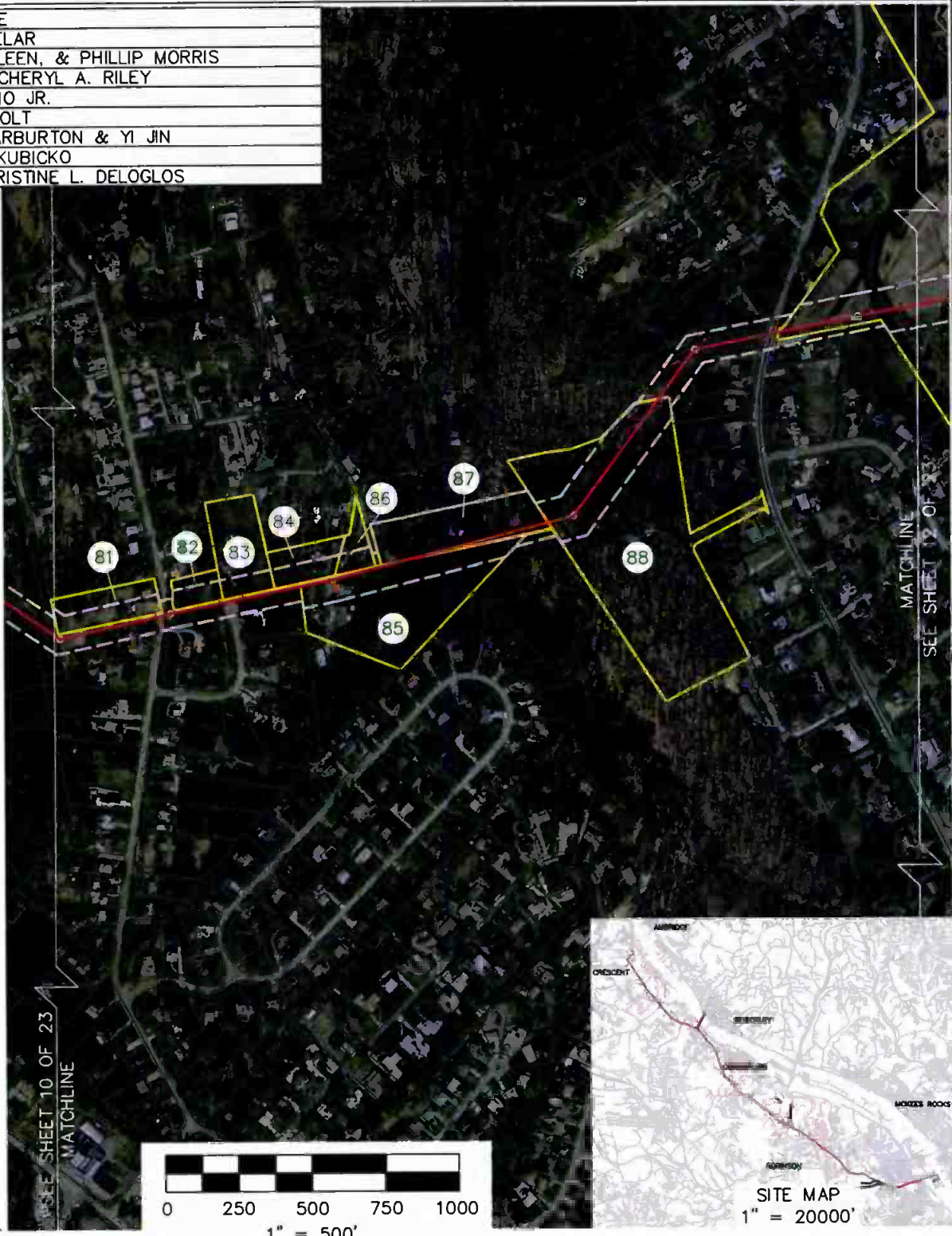
LEGEND	
	SUBSTATION
	PROPOSED ROUTE
	ROW
	PARCEL WITHIN ROW
	GIS PARCEL BOUNDARY

SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)  
PROVIDER: COMBINED SERVICES PA STATE PLANE SOUTH  
DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)  
PROJECTION: LAMBERT CONFORMAL CONIC  
UNIT: FEET  
ELLIPSOID: GEODETIC REFERENCE SYSTEM 80

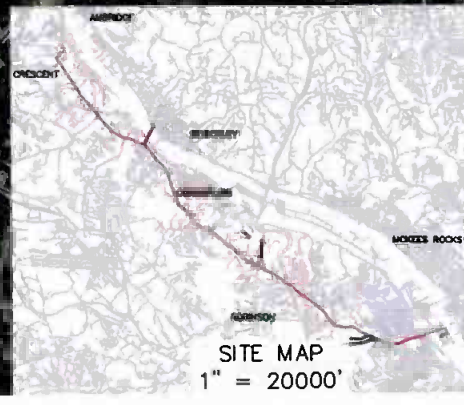
DUQUESNE LIGHT COMPANY			
REAL ESTATE DEPT.-SURVEYING		PITTSBURGH, PA.	
SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	
	DRAWN JLS	ELECT. APP.	
	CHECKED MEH	MECH. APP.	
	INSP.	STRUCT. APP.	

B.I. - CRESCENT AERIAL EXHIBIT			
ALLEGHENY COUNTY MOON TWP. SHEET 10 OF 23			
APP. COMPLETE WHEN INITIALED HERE	O.F.E.	L	No. 8790
	C.O.		

LABEL	OWNER NAME
81	MARISSA KIELAR
82	JASON, COLLEEN, & PHILLIP MORRIS
83	JOHN F. & CHERYL A. RILEY
84	JOSEPH VANO JR.
85	DENNIS J. SOLT
86	RICHARD WARBURTON & YI JIN
87	ROBERT S. KUBICKO
88	GUST & CHRISTINE L. DELOGLOS



NOTE:  
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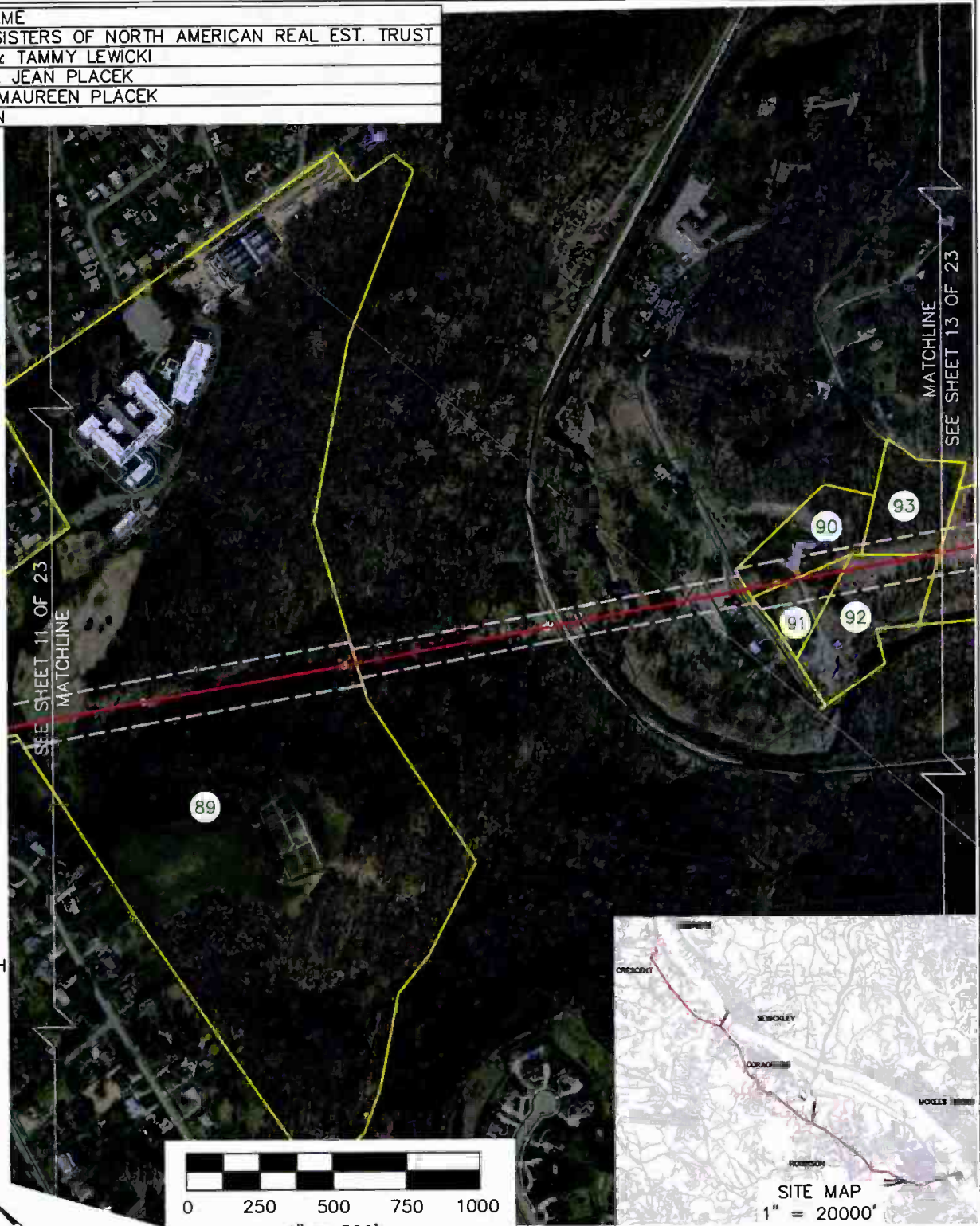
LEGEND	
	SUBSTATION
	PROPOSED ROUTE
	ROW
	PARCEL WITHIN ROW
	GIS PARCEL BOUNDARY

SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)  
PROCESSED COORDINATE SYSTEM: PA STATE PLANE SOUTH  
DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)  
PROJECTION: LAMBERT CONFORMAL CONIC  
UNIT: FEET  
EARTHED: GEODETIC REFERENCE SYSTEM 80

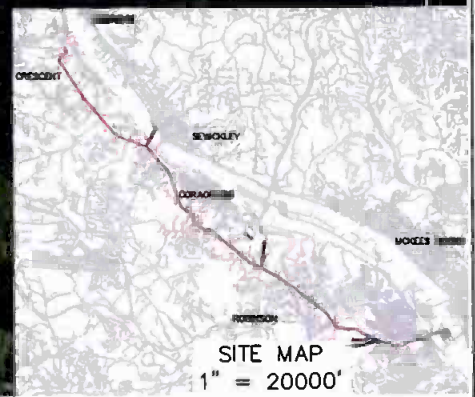
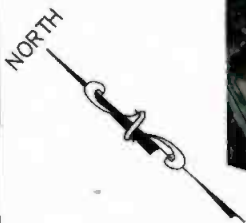
<b>DUQUESNE LIGHT COMPANY</b>		REAL ESTATE DEPT.-SURVEYING		PITTSBURGH, PA.	
		SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	
		DRAWN JLS	ELECT. APP.		
		CHECKED MEH	MECH. APP.		
		INSP.	STRUCT. APP.		

B.I. - CRESCENT AERIAL EXHIBIT		ALLEGHENY COUNTY MOON TWP. SHEET 11 OF 23	
APP. COMPLETE WHEN INITIALED HERE	O.F.E.	L No. 8790	
	C.O.		

LABEL	OWNER NAME
89	FELICIAN SISTERS OF NORTH AMERICAN REAL EST. TRUST
90	MICHAEL & TAMMY LEWICKI
91	ADOLPH & JEAN PLACEK
92	TERRY & MAUREEN PLACEK
93	COY ALLEN



NOTE:  
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LEGEND	
$\Delta$	SUBSTATION
	PROPOSED ROUTE
	ROW
	PARCEL WITHIN ROW
	GIS PARCEL BOUNDARY

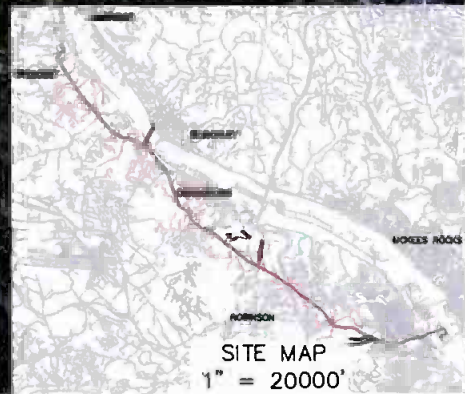
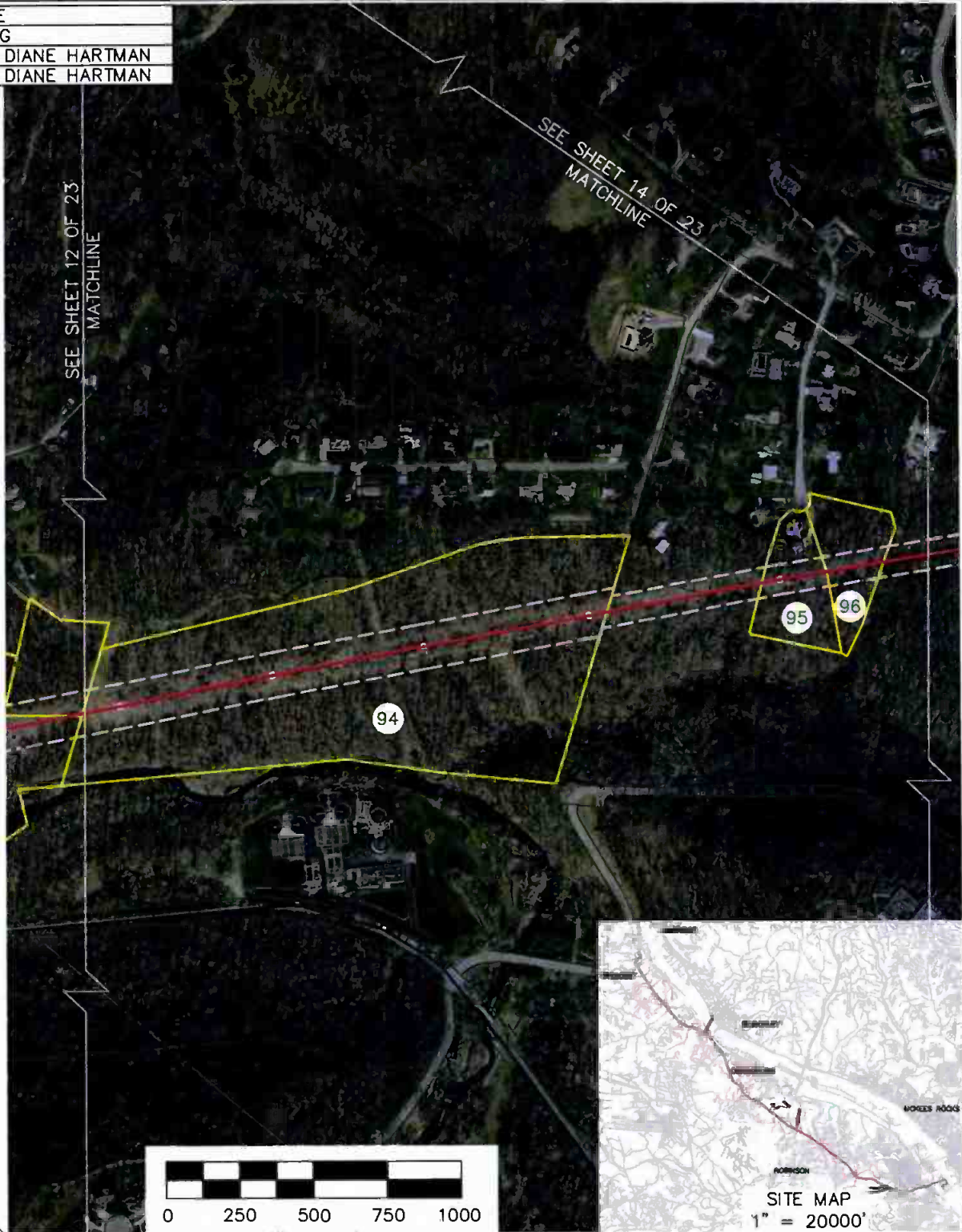
SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)  
PROJECTED COORDINATE SYSTEM: PA STATE PLANE SOUTH  
DATUM: NORTH AMERICAN DATUM OF 1883 (NAD83)  
PROJECTION: LAMBERT CONFORMAL CONIC  
LINEAR UNIT: FEET  
ELLIPSOID: GEODETIC REFERENCE SYSTEM 80

DUQUESNE LIGHT COMPANY			
REAL ESTATE DEPT.-SURVEYING		PITTSBURGH, PA.	
SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	
	DRAWN JLS	ELECT. APP.	
	CHECKED MEH	MECH. APP.	
	INSP.	STRUCT. APP.	

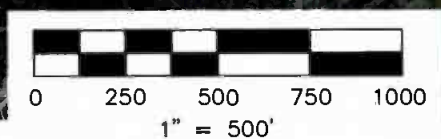
B.I. - CRESCENT AERIAL EXHIBIT			
ALLEGHENY COUNTY MOON TWP. & ROBINSON TWP. SHEET 12 OF 23			
APP. COMPLETE WHEN INITIALED HERE	O.F.E.	L	No. 8790
	C.O.		



LABEL	OWNER NAME
94	UTA COLBERG
95	JAMES F. & DIANE HARTMAN
96	JAMES F. & DIANE HARTMAN



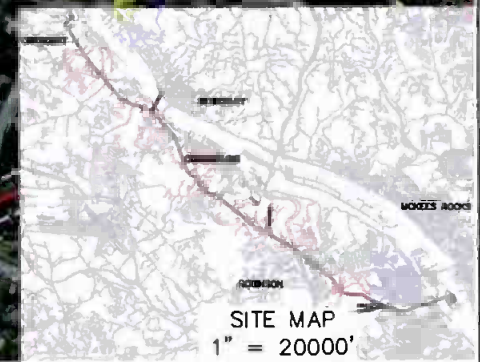
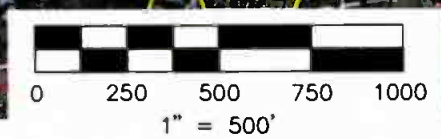
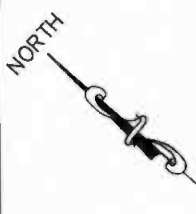
NOTE:  
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AND IS NOT  
REPRESENTATIVE ON  
THE PARCEL.



<b>LEGEND</b>		<b>DUQUESNE LIGHT COMPANY</b>		<b>B.I. - CRESCENT AERIAL EXHIBIT</b>	
△	SUBSTATION	REAL ESTATE DEPT.-SURVEYING		PITTSBURGH, PA.	
—	PROPOSED ROUTE	SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	ALLEGHENY COUNTY ROBINSON TWP. SHEET 13 OF 23
—	ROW	DRAWN JLS	CHECKED MEH	INSP.	
—	PARCEL WITHIN ROW				
—	GIS PARCEL BOUNDARY				
<small>SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PASDA)          PENNSYLVANIA COORDINATE SYSTEM, PA STATE PLANE SOUTH          DATUM: NORTH AMERICAN DATUM OF 1883 (NAD83)          PROJECTION: LAMBERT CONFORMAL CONIC          HORIZONTAL UNITS: FEET          REFERENCE: GEODETIC REFERENCE SYSTEM 80</small>					APP. COMPLETE WHEN INITIALED HERE
					O.F.E.
					C.O.
					<b>L No. 8790</b>

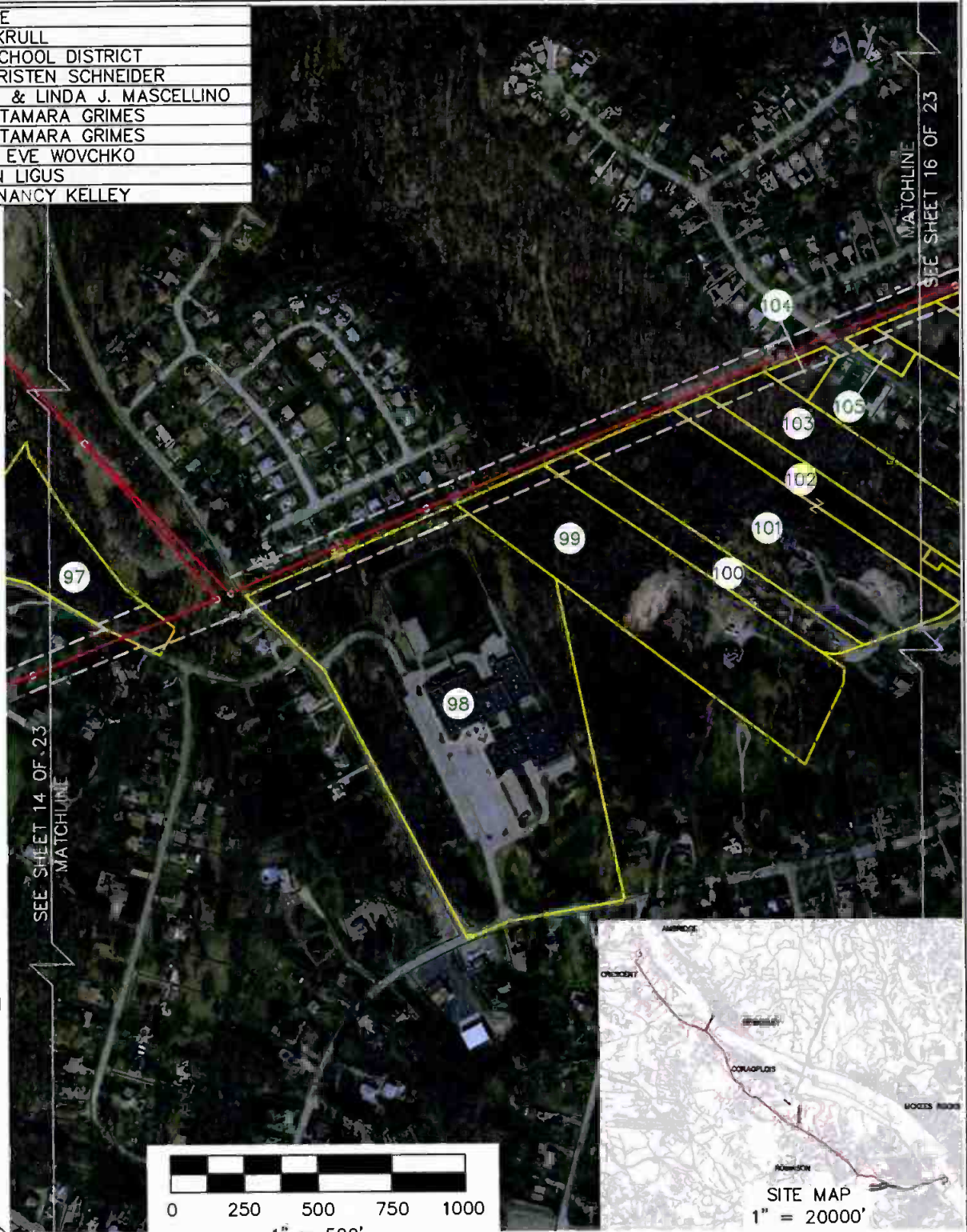


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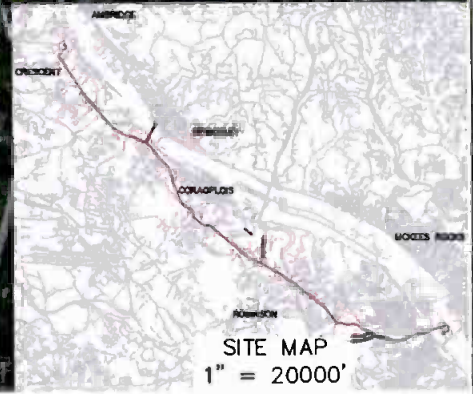
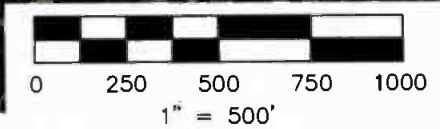
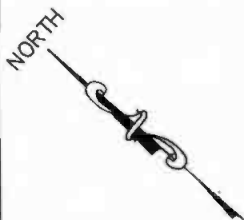


<b>LEGEND</b>		<b>DUQUESNE LIGHT COMPANY</b>		<b>B.I. - CRESCENT AERIAL EXHIBIT</b>	
△ SUBSTATION — PROPOSED ROUTE --- ROW — PARCEL WITHIN ROW — GIS PARCEL BOUNDARY		REAL ESTATE DEPT.-SURVEYING PITTSBURGH, PA.		ALLEGHENY COUNTY ROBINSON TWP. SHEET 14 OF 23	
<small>           SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)            PROJECTION: QUADRICENTRAL SYSTEM PA STATE PLANE SOUTH            DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)            PROJECTION: LAMBERT CONFORMAL CONIC            LINEAR UNIT: FEET            REFERENCE: GEODETIC REFERENCE SYSTEM 80         </small>		SCALE AS SHOWN	DATE 3/04/19 ARCH. APP.	APP. COMPLETE WHEN INITIALED HERE	
		DRAWN JLS ELECT. APP.	CHECKED MEH MECH. APP.	O.F.E.	<b>L No. 8790</b>
		INSP. STRUCT. APP.		C.O.	

LABEL	OWNER NAME
97	WILLIAM J. KRULL
98	MONTOUR SCHOOL DISTRICT
99	FRANK & KRISTEN SCHNEIDER
100	CHARLES M. & LINDA J. MASCELLINO
101	DWAYNE & TAMARA GRIMES
102	DWAYNE & TAMARA GRIMES
103	CHARLES & EVE WOVCHKO
104	PAULA JEAN LIGUS
105	ROBERT & NANCY KELLEY



NOTE:  
THE EASEMENT IS  
VARIABLE IN WIDTH  
AND IS NOT  
REPRESENTATIVE ON  
THE PARCEL.



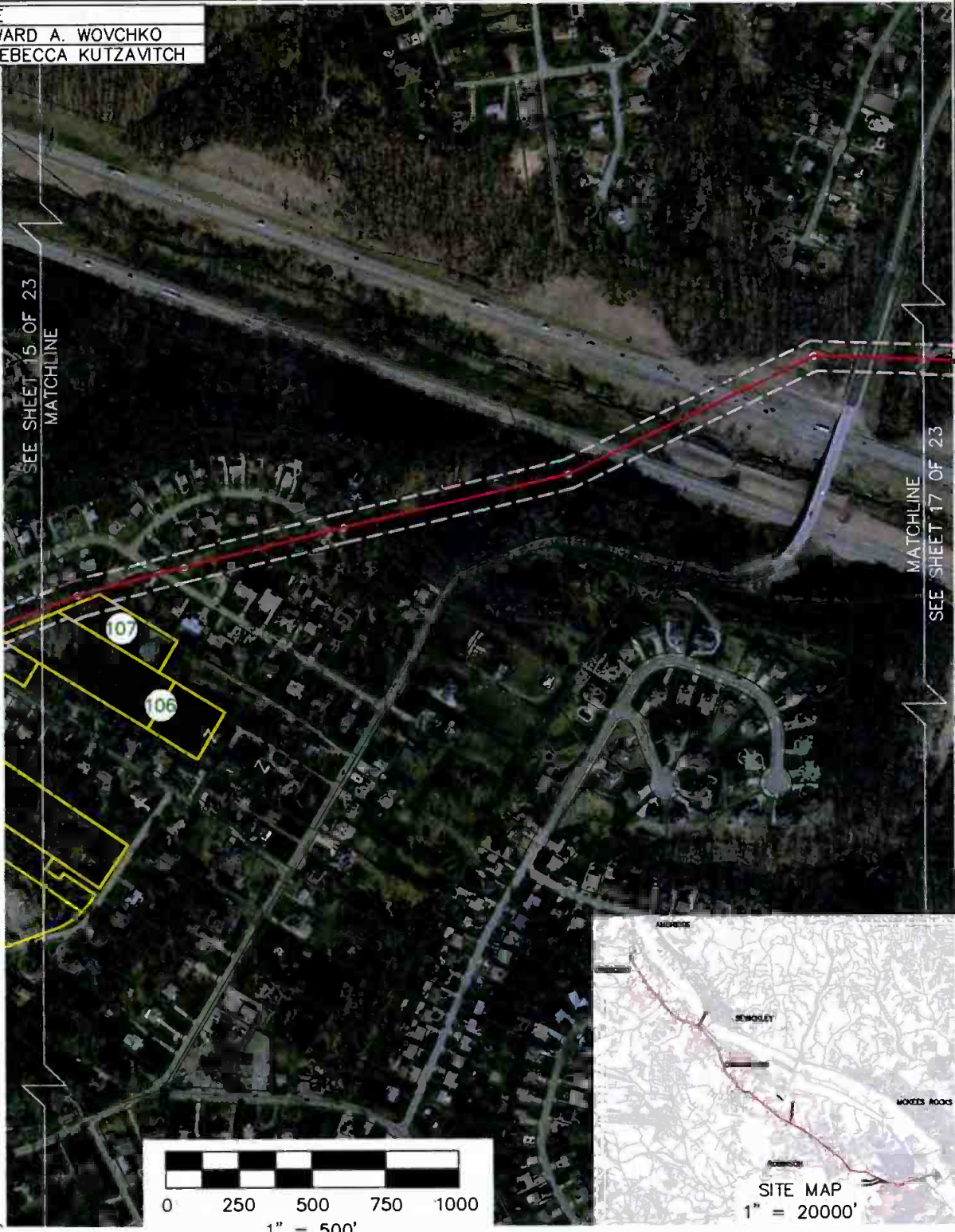
LEGEND	
	SUBSTATION
	PROPOSED ROUTE
	ROW
	PARCEL WITHIN ROW
	GIS PARCEL BOUNDARY

SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)  
PROCESSED COORDINATE SYSTEM: PA STATE PLANE SOUTH  
DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)  
PROJECTION: LAMBERT CONFORMAL CONIC  
UNIT: FEET  
EPOCH: GEODETIC REFERENCE SYSTEM 80

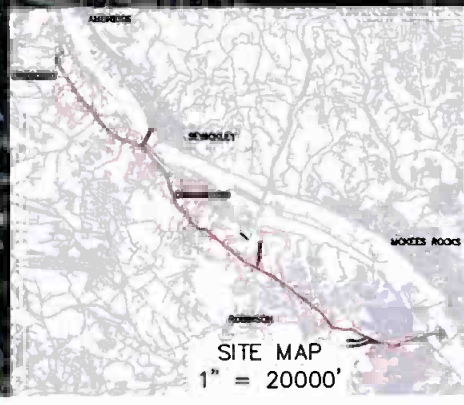
<b>DUQUESNE LIGHT COMPANY</b>	
REAL ESTATE DEPT. - SURVEYING      PITTSBURGH, PA.	
SCALE AS SHOWN	DATE 3/04/19    ARCH. APP.
	DRAWN JLS      ELECT. APP.
	CHECKED MEH    MECH. APP.
	INSP.              STRUCT. APP.

B.I. - CRESCENT AERIAL EXHIBIT	
ALLEGHENY COUNTY ROBINSON TWP. SHEET 15 OF 23	
APP. COMPLETE WEREN INITIALED HERE	O.F.E.  C.O.
L No. 8790	

LABEL	OWNER NAME
106	JOHN & EDWARD A. WOVCHKO
107	WILLIAM & REBECCA KUTZAVITCH



NOTE:  
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AND IS NOT  
REPRESENTATIVE ON  
THE PARCEL.



LEGEND
SUBSTATION
PROPOSED ROUTE
ROW
PARCEL WITHIN ROW
GIS PARCEL BOUNDARY

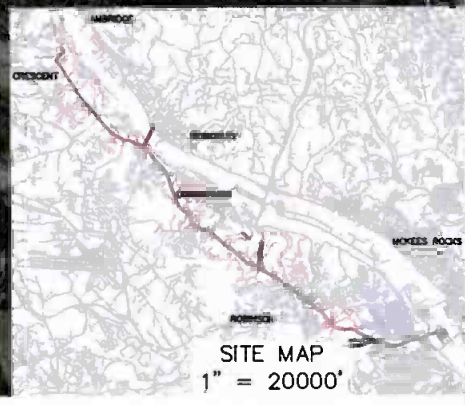
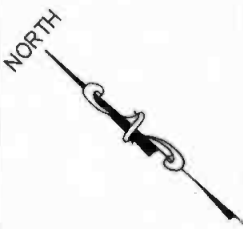
SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)  
PROTECTED COORDINATE SYSTEM PA STATE PLANE SOUTH  
DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)  
PROJECTION: LAMBERT CONFORMAL CONIC  
LINEAR UNIT: FEET  
EARTHQUAKE: GEODETIC REFERENCE SYSTEM 80

<b>DUQUESNE LIGHT COMPANY</b>	
REAL ESTATE DEPT.-SURVEYING	PITTSBURGH, PA.
SCALE AS SHOWN	DATE 3/04/19 ARCH. APP.
	DRAWN JLS ELECT. APP.
	CHECKED MEH MECH. APP.
	INSP. STRUCT. APP.

B.I. - CRESCENT AERIAL EXHIBIT	
ALLEGHENY COUNTY ROBINSON TWP. SHEET 16 OF 23	
APP. COMPLETE WHEN INITIALED HERE	O.F.E. C.O.
L No. 8790	



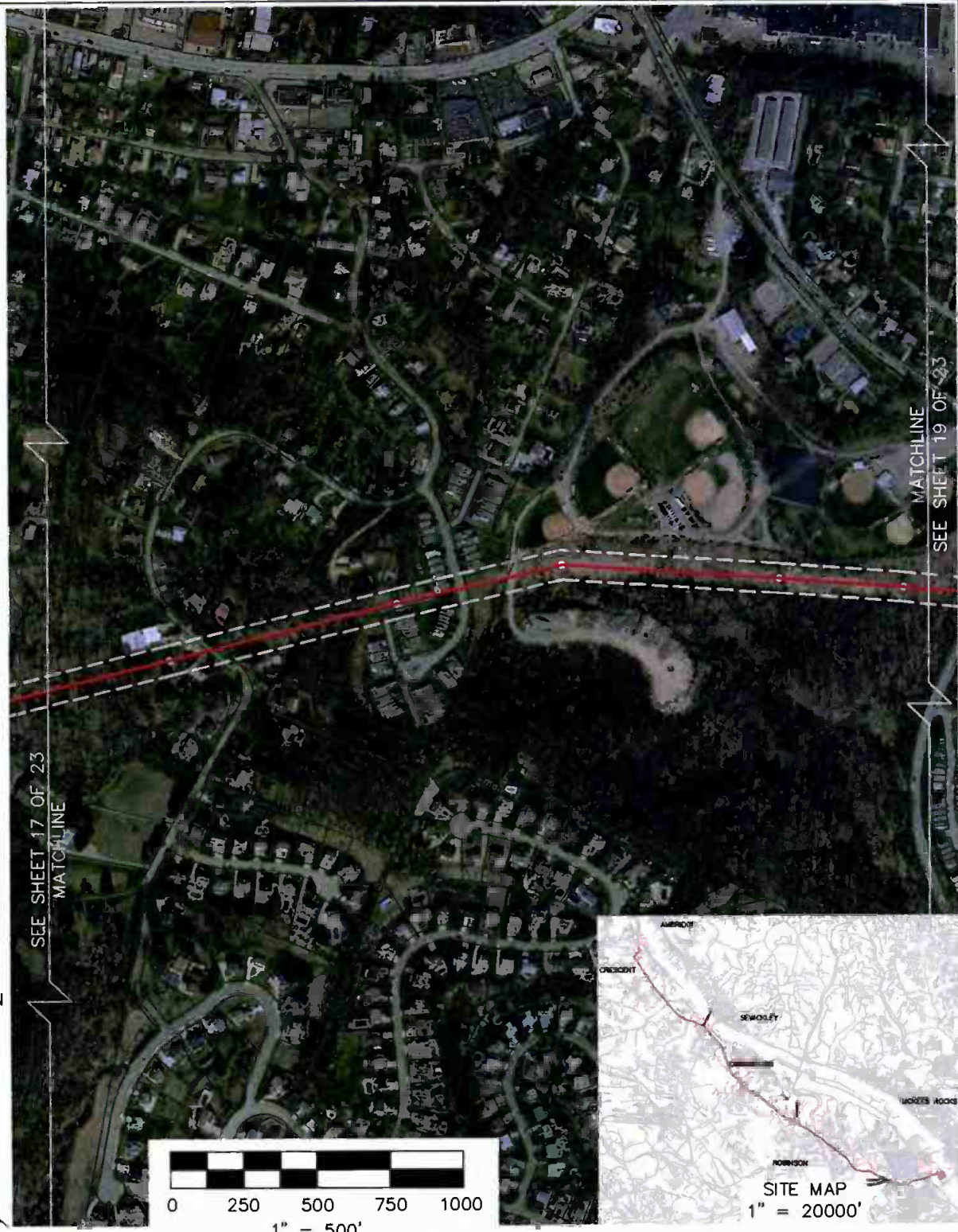
NOTE:  
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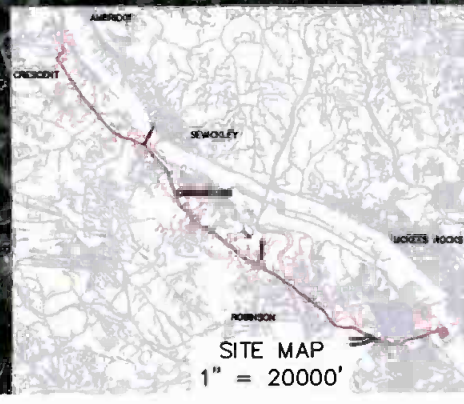
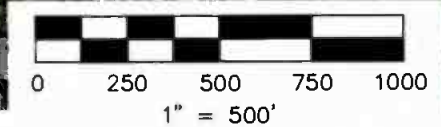
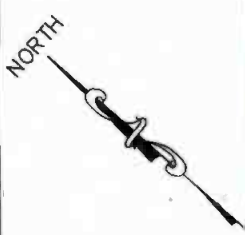
LEGEND	
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	PROPOSED ROUTE
	ROW
	PARCEL WITHIN ROW
	GIS PARCEL BOUNDARY
<small>SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PASDA)          PROJECTION: COORDINATE SYSTEM: PA STATE PLANE SOUTH          DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)          PROJECTION: LAMBERT CONFORMAL CONIC          UNIT: FEET          REFERENCE: GEODETIC REFERENCE SYSTEM 80</small>	

DUQUESNE LIGHT COMPANY			
REAL ESTATE DEPT. - SURVEYING		PITTSBURGH, PA.	
SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	
	DRAWN JLS	ELECT. APP.	
	CHECKED MEH	MECH. APP.	
	INSP.	STRUCT. APP.	

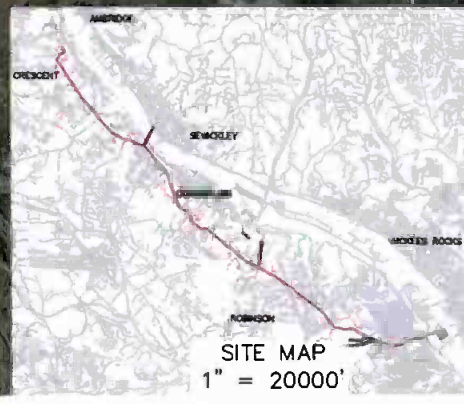
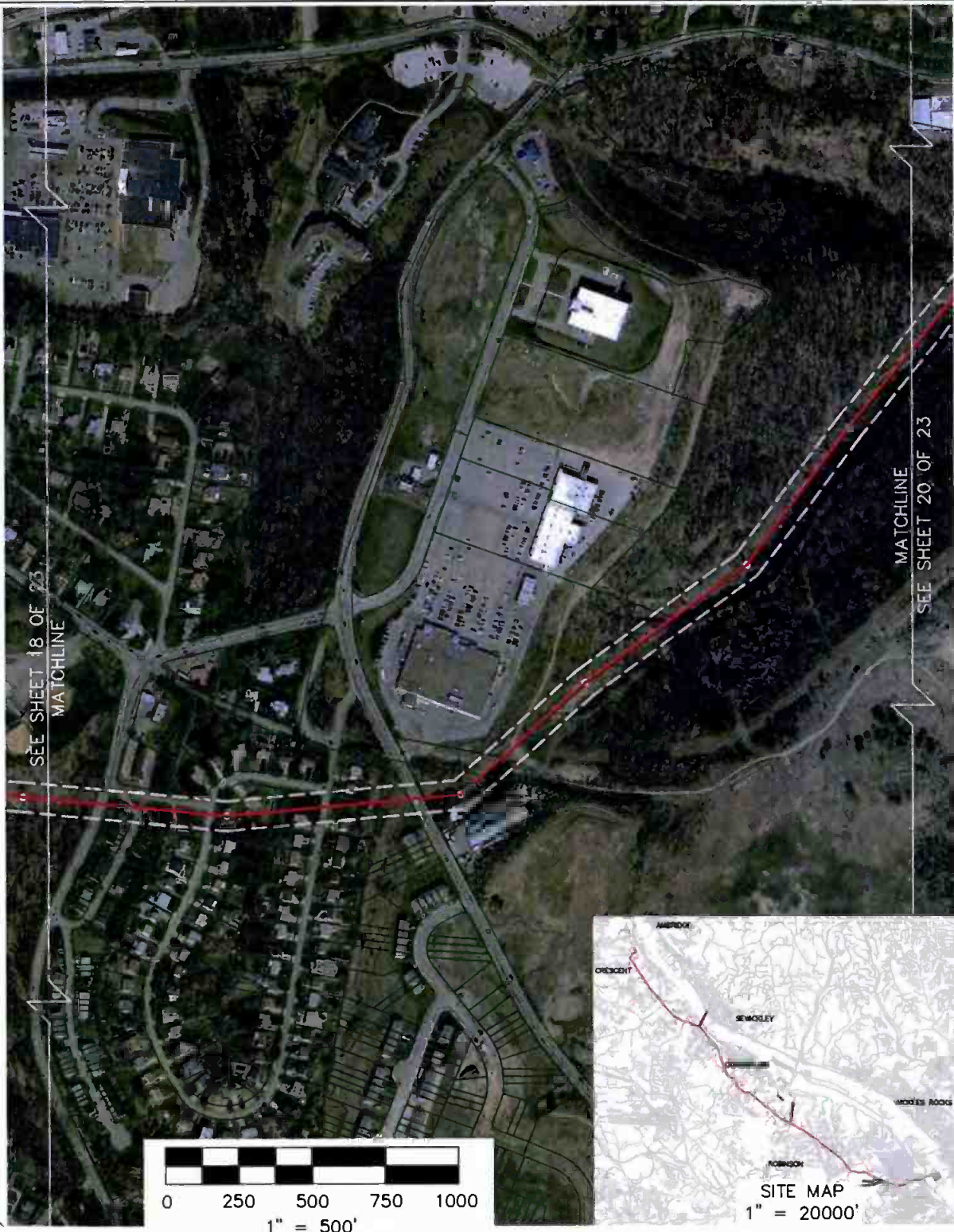
B.I. - CRESCENT AERIAL EXHIBIT			
ALLEGHENY COUNTY KENNEDY TWP. SHEET 17 OF 23			
APP. COMPLETE WHEN INITIALED HERE	O.F.E.	L	No. 8790
	C.O.		



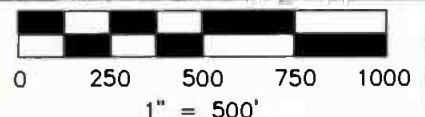
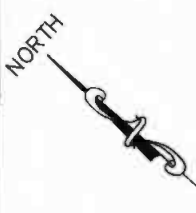
NOTE:  
 THE EASEMENT IS  
 VARIABLE IN WIDTH  
 AND IS NOT  
 REPRESENTATIVE ON  
 THE PARCEL.



<b>LEGEND</b> SUBSTATION PROPOSED ROUTE ROW PARCEL WITHIN ROW GIS PARCEL BOUNDARY <small>SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PASDA)          PROTECTED COORDINATE SYSTEM, PA STATE PLANE SOUTH          DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)          PROJECTION: LAMBERT CONFORMAL, ZONE          HORIZONTAL UNIT: FEET          DATUM: GEODETIC REFERENCE SYSTEM 80</small>	<b>DUQUESNE LIGHT COMPANY</b> REAL ESTATE DEPT.-SURVEYING      PITTSBURGH, PA.		B.I. - CRESCENT AERIAL EXHIBIT					
	SCALE AS SHOWN	DATE 3/04/19      ARCH. APP.	ALLEGHENY COUNTY KENNEDY TWP. SHEET 18 OF 23					
	DRAWN JLS      ELECT. APP.	<table border="1" style="width: 100%;"> <tr> <td rowspan="2" style="font-size: small;">APP. COMPLETE WHEN INITIALED HERE</td> <td>O.F.E.</td> <td rowspan="2" style="font-size: large; vertical-align: middle;">L No. 8790</td> </tr> <tr> <td>C.O.</td> </tr> </table>			APP. COMPLETE WHEN INITIALED HERE	O.F.E.	L No. 8790	C.O.
APP. COMPLETE WHEN INITIALED HERE	O.F.E.					L No. 8790		
	C.O.							
	CHECKED MEH      MECH. APP.							
	INSP.      STRUCT. APP.							



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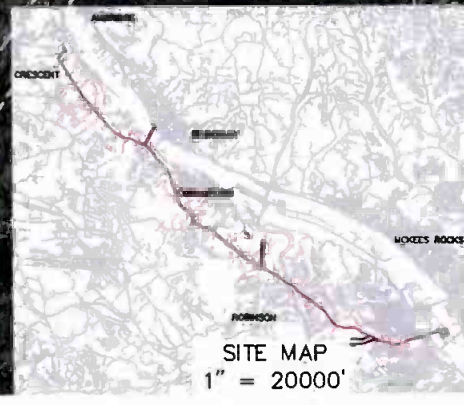
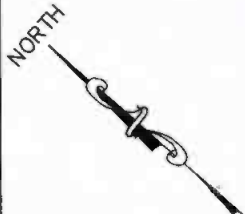


<b>LEGEND</b> △ SUBSTATION — PROPOSED ROUTE — ROW — PARCEL WITHIN ROW — GIS PARCEL BOUNDARY <small>SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)          PROJECTION: COORDINATE SYSTEM PA STATE PLANE SOUTH          DATUM: NORTH AMERICAN DATUM OF 1883 (NAD83)          PROJECTION: LAMBERT CONFORMAL CONIC          LINEAR UNIT: FEET          REFERENCE: GEODETIC REFERENCE SYSTEM 80</small>	<b>DUQUESNE LIGHT COMPANY</b> REAL ESTATE DEPT.-SURVEYING      PITTSBURGH, PA.		B.I. - CRESCENT AERIAL EXHIBIT		
	SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	ALLEGHENY COUNTY KENNEDY TWP. SHEET 19 OF 23	
		DRAWN JLS	ELECT. APP.		
		CHECKED MEH	MECH. APP.		
INSP.	STRUCT. APP.	APP. COMPLETE WHEN INITIALED HERE	O.F.E.  C.O.	L No. 8790	

LABEL	OWNER NAME
108	STANLEY CIESLAK JR.



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THE PARCEL.



LEGEND	
	SUBSTATION
	PROPOSED ROUTE
	ROW
	PARCEL WITHIN ROW
	GIS PARCEL BOUNDARY

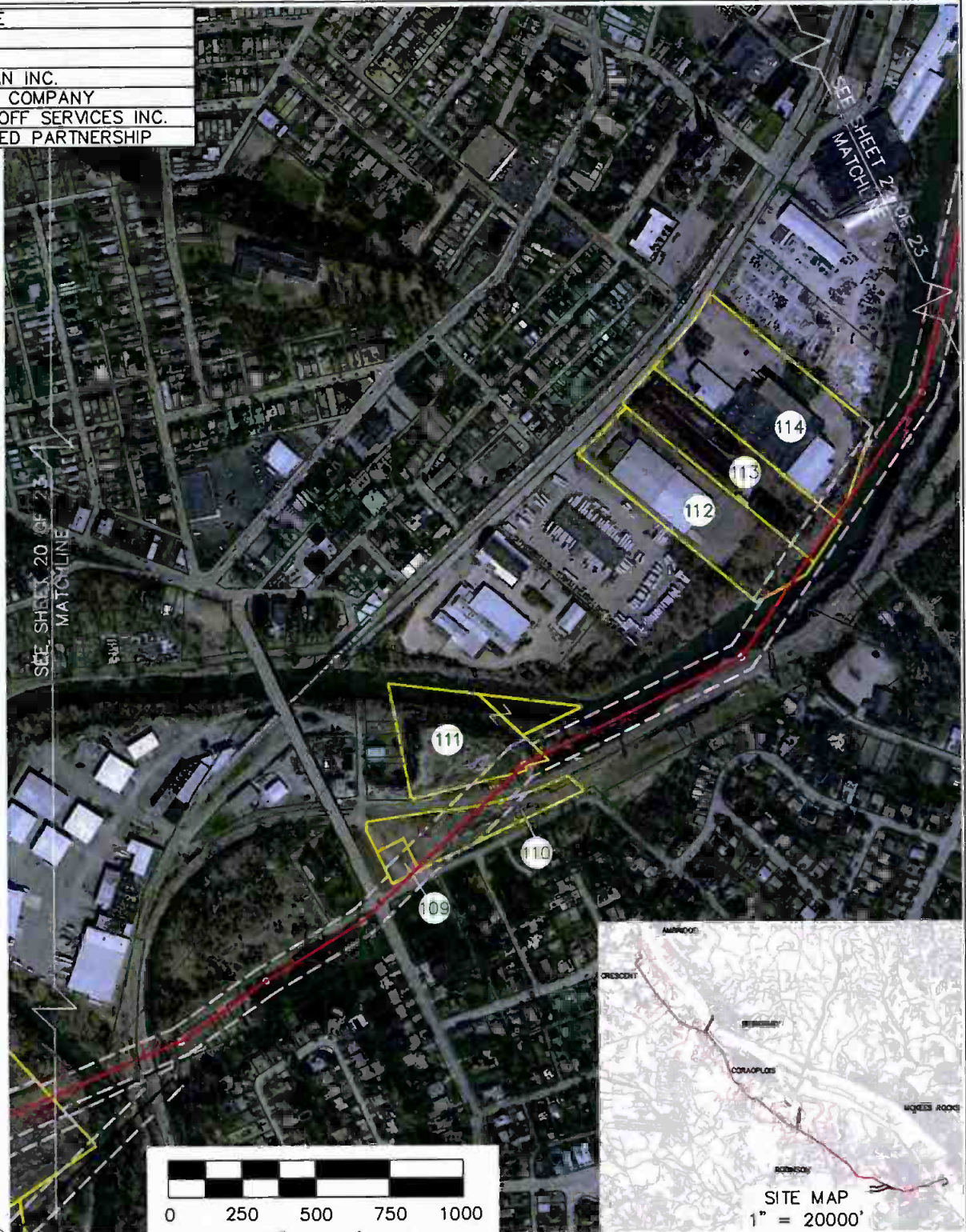
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PROJECTION: COORDINATE SYSTEM: PA STATE PLANE SOUTH  
DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)  
PROJECTION: LAMBERT CONFORMAL, CONIC  
UNIT: FEET  
REFERENCE: GEODETIC REFERENCE SYSTEM 80

<b>DUQUESNE LIGHT COMPANY</b>		REAL ESTATE DEPT.-SURVEYING		PITTSBURGH, PA.	
		SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	
		DRAWN JLS	ELECT. APP.		
		CHECKED MEH	MECH. APP.		
		INSP.	STRUCT. APP.		

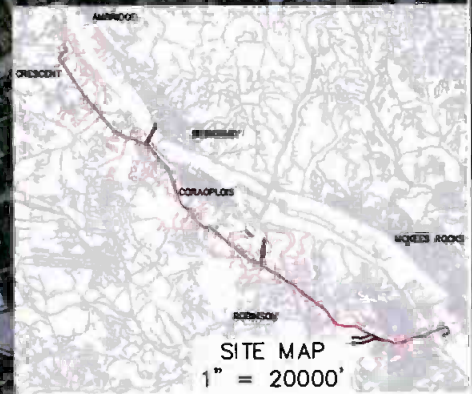
B.I. - CRESCENT AERIAL EXHIBIT		ALLEGHENY COUNTY KENNEDY TWP. SHEET 20 OF 23	
APP. COMPLETE WHEN INITIALED HERE	O.F.E.	L No. 8790	
	C.O.		



LABEL	OWNER NAME
109	PENNDOT
110	PENNDOT
111	FRANK BRYAN INC.
112	R&L REALTY COMPANY
113	BOYD ROLL OFF SERVICES INC.
114	AGGCO LIMITED PARTNERSHIP



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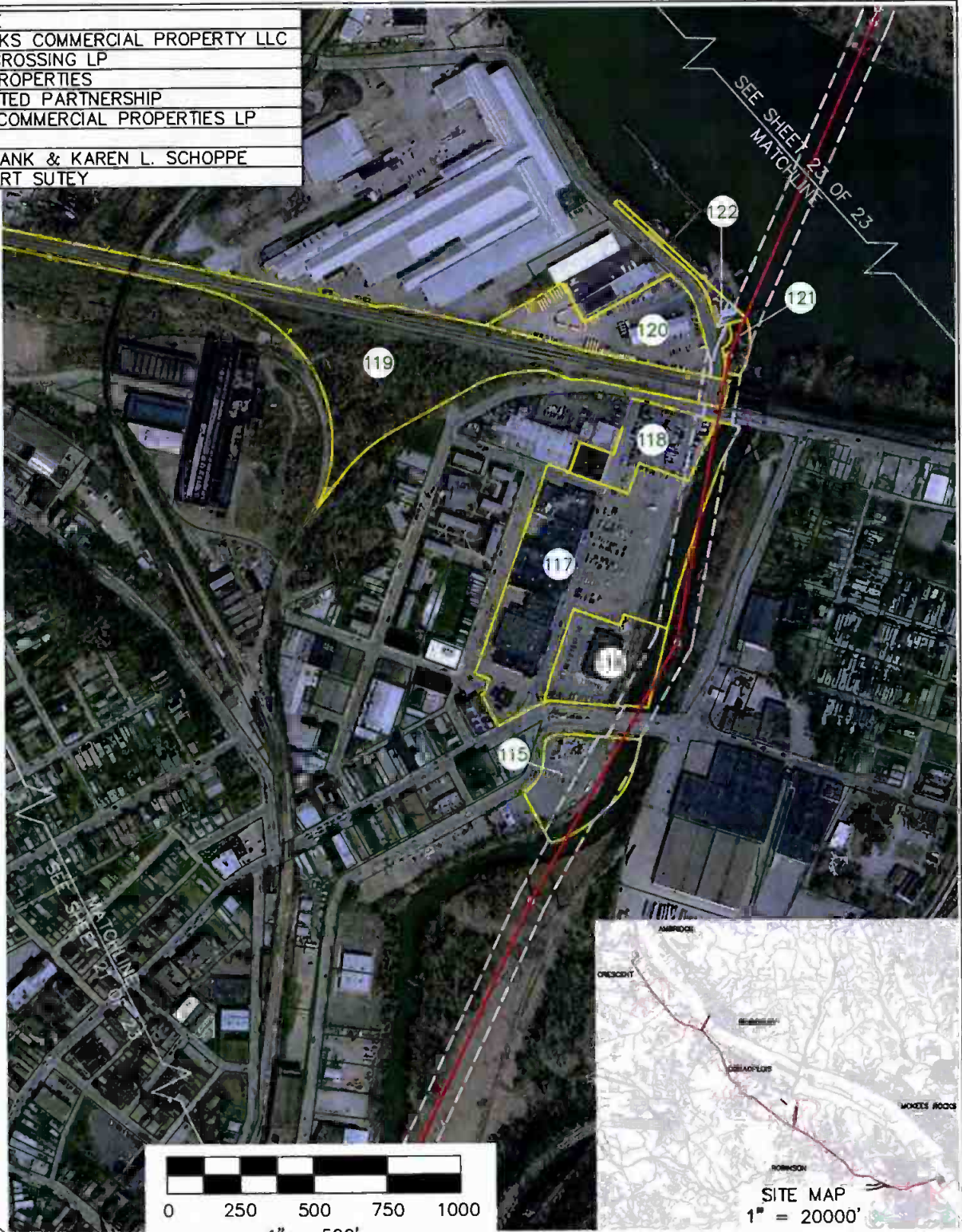


LEGEND	
	SUBSTATION
	PROPOSED ROUTE
	ROW
	PARCEL WITHIN ROW
	GIS PARCEL BOUNDARY
<small>SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA)            PROJECTIONS: COORDINATE SYSTEM: PA STATE PLANE SOUTH            DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)            PROJECTION: LAMBERT CONFORMAL CONIC            HORIZONTAL UNIT: FEET            ELLIPSOID: GEODETIC REFERENCE SYSTEM 80</small>	

DUQUESNE LIGHT COMPANY			
REAL ESTATE DEPT.-SURVEYING		PITTSBURGH, PA.	
SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	
	DRAWN JLS	ELECT. APP.	
	CHECKED MEH	MECH. APP.	
	INSP.	STRUCT. APP.	

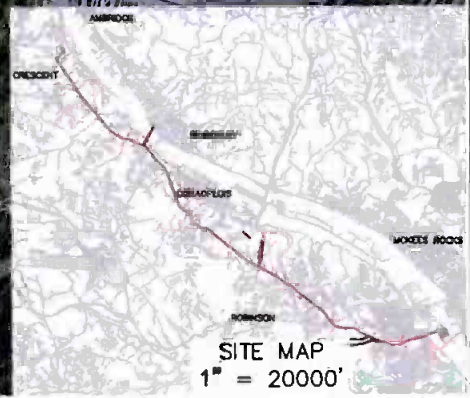
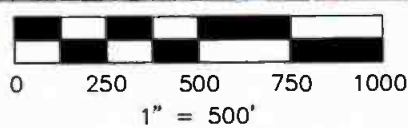
B.I. - CRESCENT AERIAL EXHIBIT			
ALLEGHENY COUNTY CITY OF PITTSBURGH & MCKEES ROCKS BORO SHEET 21 OF 23			
APP. COMPLETE WHEN INITIALED HERE	O.F.E.	L	No. 8790
	C.O.		

LABEL	OWNER NAME
115	MCKEES ROCKS COMMERCIAL PROPERTY LLC
116	CHARTIERS CROSSING LP
117	OLD TOWN PROPERTIES
118	CRIVELLI LIMITED PARTNERSHIP
119	GREENVILLE COMMERCIAL PROPERTIES LP
120	CMC REALTY
121	JAMES F. FRANK & KAREN L. SCHOPPE
122	VICTOR ALBERT SUTEY



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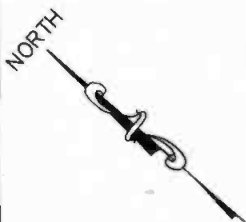
NORTH



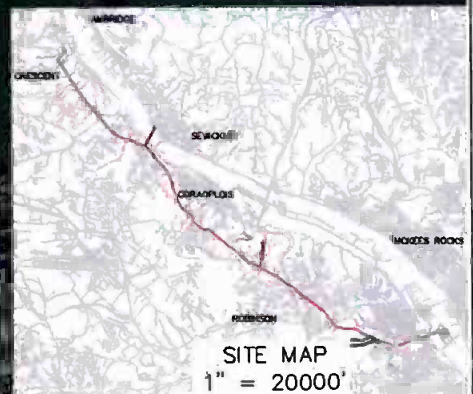
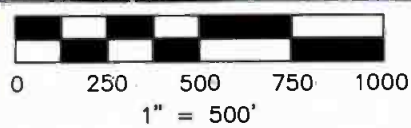
LEGEND		DUQUESNE LIGHT COMPANY		B.I. -- CRESCENT AERIAL EXHIBIT	
△	SUBSTATION	REAL ESTATE DEPT.-SURVEYING PITTSBURGH, PA.		ALLEGHENY COUNTY CITY OF PITTSBURGH & MCKEES ROCKS BORO SHEET 22 OF 23	
—	PROPOSED ROUTE	SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.	APP. COMPLETE WHEN INITIALED HERE
—	ROW		DRAWN JLS	ELECT. APP.	O.F.E.
—	PARCEL WITHIN ROW		CHECKED MEH	MECH. APP.	C.O.
—	GIS PARCEL BOUNDARY		INSP.	STRUCT. APP.	L No. 8790
<small>SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS (PSDA) PROJECTION: COORDINATE SYSTEM: PA STATE PLANE SOUTH DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83) PROJECTION: LAMBERT CONFORMAL CONIC UNIT OF MEASURE: FEET EARTH MODEL: GEODETIC REFERENCE SYSTEM 80</small>					



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MATCHLINE  
SEE SHEET 22 OF 23



<b>LEGEND</b>		<b>DUQUESNE LIGHT COMPANY</b>		<b>B.I. - CRESCENT AERIAL EXHIBIT</b>		
<ul style="list-style-type: none"> <li>△ SUBSTATION</li> <li>— PROPOSED ROUTE</li> <li>— ROW</li> <li>— PARCEL WITHIN ROW</li> <li>— GIS PARCEL BOUNDARY</li> </ul>		REAL ESTATE DEPT.-SURVEYING PITTSBURGH, PA.		ALLEGHENY COUNTY CITY OF PITTSBURGH & MCKEES ROCKS BORO SHEET 23 OF 23		
SCALE AS SHOWN	DATE 3/04/19	ARCH. APP.		APP. COMPLETE WHEN INITIALED HERE	O.F.E.	L No. 8790
	DRAWN JLS	ELECT. APP.			C.O.	
	CHECKED MEH	MECH. APP.				
	INSP.	STRUCT. APP.				
<small>SOURCES: PENNSYLVANIA SPATIAL DATA ACCESS (PASDA) PROJECTED COORDINATE SYSTEM: PA STATE PLANE SOUTH DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83) PROJECTION: LAMBERT CONFORMAL CONIC UNIT: FEET ELLIPSOID: GEODETIC REFERENCE SYSTEM 80</small>						

# Attachment 10

**Attachment 10**

**Owners of Property Along the Route Selected for the Proposed Project**

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
1	21-L-1	0021L00001000000	ORION POWER MIDWEST LP	PO BOX 1410 HOUSTON TX 77251
2	74-K-250-0-1	0074K00250000001	PITTSBURGH & LAKE ERIE RAILROAD COMPANY	4 STATION SQ PITTSBURGH PA 15219
3	43-M-30	0043M00030000000	VICTOR ALBERT SUTHEY	1 RIVER RD MCKEES ROCKS PA 15136
4	43-M-25	0043M00025000000	JAMES F & KAREN L FRANK; SCHOPPE-FRANK TRUSTEES, BENEFIT OF JAMES L FRANK & KAREN L SCHOPPE-FRANK	C/O Mariah Venture Capital 98 Glenbury Street Pittsburgh, PA 15234
5	43-M-1	0043M00001000000	GREENVILLE COMMERCIAL PROPERTIES LP	1 ATLANTIC AVE PITTSBURGH PA 15202
6	43-M-375-9	0043M00375000900	CSX TRANSPORTATION INC	500 WATER ST JACKSONVILLE FL 32202
7	43-L-130	0043L00130000000	CRIVELLI LIMITED PARTNERSHIP	108 MC KEES ROCKS PLAZA MCKEES ROCKS PA 15136
8	43-L-100	0043L00100000000	OLD TOWN PROPERTIES LP	1 ATLANTIC AVE PITTSBURGH PA 15202
9	43-R-350	0043R00350000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
10	43-R-10	0043R00010000000	CHARTIERS CROSSING LP	1 ATLANTIC AVE PITTSBURGH PA 15202
11	43-P-56	0043P00056000000	MC KEES ROCKS COMMERCIAL PROPERTIES LLC	1 ATLANTIC AVE PITTSBURGH PA 15202
12	43-P-1-0-1	0043P00001000001	ALLEGHENY COUNTY SANITARY AUTHORITY	3300 PREBLE AVE PITTSBURGH PA 15233
13	43-P-64	0043P00064000000	MC KEES ROCKS COMMUNITY DEVELOPMENT CORPORATION	611 CHARTIERS AVE MCKEES ROCKS PA 15136
14	43-N-186	0043N00186000000	23 FURNACE STREET ASSOCIATES	23 FURNACE ST EXT MCKEES ROCKS PA 15136
15	72-S-205	0072S00205000000	FRANK BRYAN INC	1263 CHARTIERS AVE MCKEES ROCKS PA 15136
16	72-S-220	0072S00220000000	FRANK BRYAN INC	1263 CHARTIERS AVE MCKEES ROCKS PA 15136
17	72-S-240	0072S00240000000	AGGCO LIMITED PARTNERSHIP	1101 THOMPSON AVE MCKEES ROCKS PA 15136
18	21-K-66	0021K00066000000	CONRAIL	110 FRANKLIN RD SE PROPERTY TAX DEPT ROANOKE VA 24042
19	72-S-250-0-1	0072S00250000001	BOYD ROLL OFF SERVICES INC	300 FOURTH AVE PITTSBURGH PA 15222

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
20	72-S-260	0072S00260000000	R & L REALTY COMPANY PENNA	1105 THOMPSON AVE MCKEES ROCKS PA 15136
21	71-D-25	0071D00025000000	CITY OF PITTSBURGH	414 GRANT ST RM 200 CITY-COUNTY BUILDING PITTSBURGH PA 15219
22	71-C-200	0071C00200000000	FRANK BYRAN INC	1263 CHARTIERS AVE MCKEES ROCKS PA 15136
23	71-B-52	0071B00052000000	CITY OF PITTSBURGH	414 GRANT ST RM 200 CITY-COUNTY BUILDING PITTSBURGH PA 15219
24	71-B-94	0071B00094000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
25	71-B-48	0071B00048000000	CITY OF PITTSBURGH	414 GRANT ST RM 200 CITY-COUNTY BUILDING PITTSBURGH PA 15219
26	71-B-48	0071B00048000000	PENNSYLVANIA DEPARTMENT OF TRANSPORTATION	45 THOMS RUN ROAD BRIDGEVILLE PA 15107
27	71-B-140	0071B00140000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
28	71-B-138	0071B00138000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
29	71-B-146	0071B00146000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
30	71-B-46	0071B00046000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
31	71-B-181	0071B00181000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
32	72-P-200-0-2	0072P00200000002	COMMONWEALTH OF PENNSYLVANIA	300 LIBERTY AVE PITTSBURGH PA 15222
33	71-B-180-0-2	0071B00180000002	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
34	71-B-180-0-1	0071B00180000001	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
35	71-B-204-0-2	0071B00204000002	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
36	71-B-204-0-1	0071B00204000001	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
37	71-B-214-0-2	0071B00214000002	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
38	71-B-214-0-1	0071B00214000001	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
39	71-B-230-0-1	0071B00230000001	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
40	71-B-230-0-2	0071B00230000002	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
41	71-A-90	0071A00090000000	URBAN REDEVELOPMENT AUTHORITY OF PITTSBURGH	200 ROSS ST FL 10 PITTSBURGH PA 15219
42	72-P-200-0-3	0072P00200000003	PITTSBURGH & OHIO CENTRAL RR CO	47849 PAPERMILL RD COSHOCOTON OH 43812
43	72-N-50	0072N00050000000	WINDGAP ENTERPRISES INC	6104 GRAND AVE STE A PITTSBURGH PA 15225
44	72-P-10	0072P00010000000	WINDGAP ENTERPRISES INC	6104 GRAND AVE STE A PITTSBURGH PA 15225
45	72-N-180	0072N00180000000	STANLEY CIESLAK JR	103 CREEK RD MCKEES ROCKS PA 15136
46	108-B-275	0108B00275000000	RICHARD LANG E	1801 MC KEES ROCKS RD MCKEES ROCKS PA 15136
47	109-F-61	0109F00061000000	UIRC GSA V MC KEES ROCKS PA LLC	1570 103 <sup>RD</sup> STREET LEMONT, IL 60439-9610
48	109-F-21	0109F00021000000	PENNSYLVANIA ADULT LIVING II, LLC	625 LIBERTY AVE, STE 3110 PITTSBURGH, PA 15222
49	109-E-197	0109E00197000000	CLEVER ROAD ASSOCIATES	560 EPSILON DRIVE PITTSBURGH, PA 15238
50	109-E-195	0109E00195000000	CHRISTOPHER M LANG & (TRUSTEE)	1801 MC KEES ROCKS RD MCKEES ROCKS PA 15136
51	109-J-11	0109J00011000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
52	109-J-19	0109J00019000000	RAYMOND HELLMANN JR AND RAYMOND HELLMANN SR	731 1/2 CHARTIERS AVE PITTSBURGH PA 15220
53	109-J-43	0109J00043000000	ZAGARI JOHN J & PAMELA (W)	1929 MCKEES ROCKS RD MC KEES ROCKS PA 15136-1611
54	109-J-109	0109J00109000000	KENNEDY HIGHLANDS ASSOCIATES LP	310 SEVEN FIELDS BLVD STE 350 MARS PA 16046
55	109-E-17	0109E00017000000	MICHELLE L MASSUCCI	100 CONNIE PARK DR MCKEES ROCKS PA 15136
56	154-H-323	0154H00323000000	LINDA MARIE OSMAN	102 CONNIE PARK DR MCKEES ROCKS PA 15136
57	154-H-317	0154H00317000000	JACQUELINE MCKENZIE AND KENNETH L SALTERS	104 CONNIE PARK DR MCKEES ROCKS PA 15136
58	154-H-253	0154H00253000000	RONALD BRUNI	31 LONGVIEW DR MCKEES ROCKS PA 15136
59	154-H-258	0154H00258000000	JAY MICHAEL MICHEL, ALYSSA SUSAN PETRELLA	103 CONNIE PARK DR MCKEES ROCKS PA 15136-1647
60	154-H-240	0154H00240000000	TONI L MASON	191 PATRICIA PARK DR MCKEES ROCKS PA 15136

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
61	154-H-357	0154H00357000000	CHRISTOPHER J STARR & JUDITH L (W)	200 PATRICIA PARK DR MCKEES ROCKS PA 15136
62	154-H-101	0154H00101000000	MICHAEL L PAPPATERRI & AMY L VICE PAPPATERRI (W)	180 CONNIE PARK DR MCKEES ROCKS PA 15136
63	154-H-98	0154H00098000000	PRESTIGE WORLDWIDE ENTERPRISE LLC	1283 SILVER LN MC KEES ROCKS PA 15136
64	154-H-96	0154H00096000000	WILLIAM J RUST	139 FIELD CLUB DR MCKEES ROCKS PA 15136
65	154-H-99	0154H00099000000	CORTLAND PROPERTIES	3010 MELLON BANK BUILDING 525 WILLIAM PENN PLACE PITTSBURGH, PA 15219
66	154-H-363	0154H00363000000	KENMAWR CARWASH INC	101 CLEVER RD MCKEES ROCKS PA 15136
67	154-H-99	0154H00099000000	CORTLAND PROPERTIES	3010 MELLON BANK BUILDING 525 WILLIAM PENN PLACE PITTSBURGH, PA 15219
68	154-H-25	0154H00025000000	ROBERT A MUHA JR & KIMBERLY A (W)	111 JULIANNA DR CORAOPOLIS PA 15108
69	154-H-27	0154H00027000000	ROBERT A MUHA JR & KIMBERLY A (W)	111 JULIANNE DR CORAOPOLIS PA 15108
70	154-H-29	0154H00029000000	ROBERT A MUHA JR & KIMBERLY A (W)	111 JULIANNA DR CORAOPOLIS PA 15108
71	154-H-31	0154H00031000000	ROBERT A MUHA JR & KIMBERLY A (W)	111 JULIANNA DR CORAOPOLIS PA 15108
72	155-S-368	0155S00368000000	TOWNSHIP OF KENNEDY	340 FOREST GROVE RD CORAPOLIS PA 15108
73	155-R-225	0155R00225000000	PRESTIGE LAND DEVELOPMENT	1789 PINE HOLLOW RD MCKEES ROCKS PA 15136
74	155-R-175	0155R00175000000	PARK PLACE ESTATES HOMEOWNERS ASSOCIATION, INC	1752 PINE HOLLOW RD MCKEES ROCKS PA 15136
75	155-R-132	0155R00132000000	KIERSTEN F. LAREN	107 PARK PLACE MCKEES ROCKS PA 15136
76	155-R-180	0155R00180000000	CHARLENE A CHEROKE	128 PARK PLACE MCKEES ROCKS PA 15136
77	155-R-133	0155R00133000000	ROBERT H. EGOLF IV	108 PARK PLACE MCKEES ROCKS PA 15136
78	155-R-134	0155R00134000000	JAMES M TITUS & AMANDA M (W)	109 PARK PLACE MCKEES ROCKS PA 15136
79	155-R-145	0155R00145000000	PARK PLACE ESTATES HOMEOWNERS ASSOCIATION, INC	1752 PINE HOLLOW RD MCKEES ROCKS PA 15136
80	155-R-135	0155R00135000000	SAMANTHA LYNN MOORE AND DAVID J HARRISON	110 PARK PLACE MCKEES ROCKS PA 15136



LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
81	155-R-136	0155R00136000000	ALYSSA M. MILLER AND JARYD HERBERT	111 PARK PLACE MCKEES ROCKS PA 15136
82	155-R-137	0155R00137000000	SARAH TURNER	112 PARK PLACE MCKEES ROCKS PA 15136
83	155-R-138	0155R00138000000	TAMMY L KELMECKIS	113 PARK PLACE MCKEES ROCKS PA 15136
84	155-R-142	0155R00142000000	CANDIDO E & SHIRLEY J NOLFI (W)	116 PARK PL MC KEES ROCKS, PA 15136-1698
85	155-R-150	0155R00150000000	PHILIP A KOSSLER & NAOMI C (W)	117 PARK PLACE MCKEES ROCKS PA 15136
86	155-R-59	0155R00059000000	SANDRA MAGLIOCCO & RANDALL LABRIE (H)	61 MIDWAY DR MCKEES ROCKS PA 15136
87	155-P-136	0155P00136000000	THOMAS M & MARY A (W) FENIO	103 MIDWAY DR MCKEES ROCKS PA 15136
88	155-K-9	0155K00090000000	ROBERT P & NICOLA A STREINER (W)	101 MIDWAY DR MCKEES ROCKS PA 15136
89	155-P-220	0155P00220000000	ANTHONY J & JUDITH L PASTELLA (W)	107 MIDWAY DR MCKEES ROCKS PA 15136
90	155-P-119	0155P00119000000	RUEBEN JEFFERSON	110 MIDWAY DR MCKEES ROCKS PA 15136
91	155-P-123	0155P00123000000	RUEBEN JEFFERSON	110 MIDWAY DR MCKEES ROCKS PA 15136
92	155-K-82	0155K00082000000	WILLIAM J & ARDUTH M CLAIR (W)	104 MIDWAY DR MCKEES ROCKS PA 15136
93	155-K-190	0155K00190000000	SARAH ELIZABETH ELLISON, JAMES ANDREW CAMPBELL	375 MIDWAY DR MCKEES ROCKS PA 15136
94	155-K-500	0155K00500000000	KENNEDY TWP	340 FOREST GROVE RD CORAOPOLIS PA 15108
95	155-K-358	0155K00358000000	MARK V & LISA A ALETTO (W)	199 WINDSOR DR CORAOPOLIS PA 15108
96	155-K-135	0155K00135000000	OTTAVIO J JR & MARGARET L PAUL (W)	2008 CANYON DR MCKEES ROCKS PA 15136
97	155-K-137	0155K00137000000	KEVIN M CHU	2010 CANYON DR MCKEES ROCKS PA 15136
98	155-K-139	0155K00139000000	HERBERT A & PATRICIA L MCCROSKEY (W)	2012 CANYON DR MCKEES ROCKS PA 15136
99	155-K-141	0155K00141000000	VERLAND HOUSING CORPORATION	212 IRIS RIDGE SEWICKLEY, PA 15143
100	155-K-145	0155K00145000000	PAUL & KIZZIE JOHNSON (W)	3114 ASHLYN ST PITTSBURGH, PA 15204-1706
101	155-K-147	0155K00147000000	WILLIAM J & NICOLE C OLIVANI (W)	2020 CANYON DR MCKEES ROCKS PA 15136
102	155-J-43	0155J00043000000	GEORGE J & FRANCES M GOEHRING (W)	4004 ORCHARD CIR MCKEES ROCKS PA 15136

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
103	155-J-45	0155J00045000000	ROBERT D & ALMERENTEA M HULL (W)	4002 ORCHARD CIR MCKEES ROCKS PA 15136
104	155-J-47	0155J00047000000	GINGER N KUTSCHBACH	3012 TIMBERCREEK DR MCKEES ROCKS PA 15136
105	155-K-149	0155K00149000000	MICHELLE MITCHELL	2022 CANYON DR MCKEES ROCKS PA 15136
106	155-J-29	0155J00029000000	RICHARD & KAREN L OSHEA (W)	3014 TIMBERCREEK DR MCKEES ROCKS PA 15136
107	155-J-100	0155J00100000000	T A WARD	1405 MCLAUGHLIN RUN RD PITTSBURGH PA 15241
108	155-E-205	0155E00205000000	JUDITH A BURROUGHS	3019 TIMBERCREEK DR MCKEES ROCKS PA 15136
109	155-E-207	0155E00207000000	LOGAN E. WEIGLE AND CELESTE N DONATUCCI	3021 TIMBERCREEK DR MCKEES ROCKS PA 15136
110	155-E-211	0155E00211000000	NGO AND HUONG TRINH HOA	506 OVERBROOK BLVD PITTSBURGH PA 15210
111	155-J-1	0155J00001000000	BRIAN J & KELLY M SMARRA (W)	3027 TIMBERCREEK DR MCKEES ROCKS PA 15136
112	155-E-12	0155E00012000000	GEOFFREY P & MARY JO METZLER (W)	4026 FIRETHORN DR MCKEES ROCKS PA 15136
113	155-E-14	0155E00014000000	MICHAEL R CESSNA	4028 FIRETHORN DR MCKEES ROCKS PA 15136
114	155-E-16	0155E00016000000	DANIEL W RYAN AND MARY JEAN H STEINER	4030 FIRETHORN DR MCKEES ROCKS PA 15136
115	155-E-18	0155E00018000000	DAVID C & CHARLENE E KRAUTH (W)	4032 FIRETHORN DR MCKEES ROCKS PA 15136
116	155-E-22	0155E00022000000	ROBERT J & VIRGINIA A BADINI (W)	2039 CANYON DR EXT MCKEES ROCKS PA 15136
117	155-E-40	0155E00040000000	JOSEPH JR & SANDRA A JAWORSKI (W)	4035 FIRETHORN DR MCKEES ROCKS PA 15136
118	155-E-42	0155E00042000000	MARK F & JODY M VATER (W)	4037 FIRETHORN DR MCKEES ROCKS PA 15136
119	155-E-44	0155E00044000000	FRANK & ABBY CHYNOWETH	4039 FIRETHORN DR MCKEES ROCKS PA 15136
120	155-E-46	0155E00046000000	OLEH M & MOTRIA M HODOWANEC (W)	5040 WINDRIVER DR MCKEES ROCKS PA 15136
121	155-E-130	0155E00130000000	ALBERT M SOROKIS JR	5072 WINDRIVER DR MCKEES ROCKS PA 15136
122	155-E-100	0155E00100000000	SHAWN T & JILL JONES (W)	5042 WINDRIVER DR MCKEES ROCKS PA 15136
123	155-E-102	0155E00102000000	JAMES C & MAUREEN B CARLINS (W)	5044 WINDRIVER DR MCKEES ROCKS PA 15136
124	155-E-104	0155E00104000000	KENNETH E & MARY ANN S SCHNELBACH (W)	5046 WINDRIVER DR MCKEES ROCKS PA 15136

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
125	155-E-98	0155E00098000000	STEPHEN H & PATRICIA C JASENAK (W)	5047 WINDRIVER DR MCKEES ROCKS PA 15136
126	155-E-131	0155E00131000000	TERRY J & BERNADINE GENSEL (W)	5049 WINDRIVER DR MCKEES ROCKS PA 15136
127	155-E-150	0155E00150000000	DAVID R & PAULETTE PASS (W)	5053 WINDRIVER DR MCKEES ROCKS PA 15136
128	155-E-135	0155E00135000000	DAVID R & PAULETTE PASS (W)	5053 WINDRIVER DR MCKEES ROCKS PA 15136
129	155-E-137	0155E00137000000	MARK J & NANCY B JAROCKI (W)	5055 WINDRIVER DR MCKEES ROCKS PA 15136
130	155-E-141	0155E00141000000	ROBERT A MUHA JR & KIMBERLY A (W)	111 JULIANNA DR CORAOPOLIS PA 15108
131	155-E-143	0155E00143000000	KEVIN S & JENNIFER L SHERMAN (W)	110 JULIANNA DR CORAOPOLIS PA 15108
132	208-H-56	0208H00056000000	ROBERT W SIDICK JR & VANESSA A (W)	109 JULIANNA DR CORAOPOLIS PA 15108
133	208-H-58	0208H00058000000	EDWARD J & JOYCE G CHEZOSKY (W)	108 JULIANNA DR CORAOPOLIS PA 15108
134	208-H-60	0208H00060000000	DAVID C GALLAGHER	107 JULIANNA DR CORAOPOLIS PA 15108
135	208-D-134	0208D00134000000	MELLON BANK N A (TRUSTEE) FOR TYLER HUDSON	525 WILLIAM PENN PL RM 153-1315 ATTN: JEFF LICHVAR PITTSBURGH PA 15259
136	208-D-132	0208D00132000000	PAUL F CHICHIN	10 ROSE AVE CORAOPOLIS PA 15108
137	209-S-56	0209S00056000000	MARK R & KATHLEEN A PANIZZI (W)	36 SUNSET DR CORAOPOLIS PA 15108
138	209-S-61	0209S00061000000	MARK R & KATHLEEN A PANIZZI (W)	36 SUNSET DR CORAOPOLIS PA 15108
139	208-C-225	0208C00225000000	MJH DEVELOPMENT COMPANY INC	44 PETRIE RD CORAOPOLIS PA 15108
140	209-R-97	0209R00097000000	GEORGE A & LEONA E DOUGLASS	9 WOODLAND RD PITTSBURGH PA 15228
141	209-P-380	0209P00380000000	GEORGE A JR & JANYCE DOUGLAS (W)	125 FAIRLAMB DR CORAOPOLIS PA 15108
142	209-P-342	0209P00342000000	DONALD J & GRACE B DEVENZIO	8 DENDRON RD CORAOPOLIS PA 15108
143	209-P-333	0209P00333000000	PAUL F & RUTH A GERGER (W)	108 FAIRLAMB DR CORAOPOLIS PA 15108
144	209-K-5	0209K00005000000	RICHARD H & NANCY M ANTANTIS	106 FAIRLAMB DR CORAOPOLIS PA 15108
145	209-K-9	0209K00009000000	FRED A. IORIO & HEATHER R NIEWIERSKI	104 FAIRLAMB DR CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
146	209-K-15	0209K00015000000	ALDO & CHRISTINE A MITRI (W)	102 FAIRLAMB DR CORAOPOLIS PA 15108
147	209-K-23	0209K00023000000	MICHAEL FRANCIS & NICOLE MARIE CONTI (W)	530 DENDRON DR CORAOPOLIS PA 15108
148	209-P-304	0209P00304000000	JOSEPH & DOLORES PERRI	10 DENDRON DR CORAOPOLIS PA 15108
149	209-P-313	0209P00313000000	MICHAEL A & MIA CALA (W)	12 DENDRON DR CORAOPOLIS PA 15108
150	209-P-319	0209P00319000000	KRISTIN MARY BRANDL & STEVEN BRANDL III (H)	14 DENDRON DR CORAOPOLIS PA 15108
151	209-P-327	0209P00327000000	KRISTIN MARY BRANDL & STEVEN BRANDL III (II)	14 DENDRON DR CORAOPOLIS PA 15108
152	209-P-108	0209P00108000000	SPIOTTA FAMILY TRUST (THE)	13 DENDRON DR CORAOPOLIS PA 15108
153	209-K-75	0209K00075000000	BRUCE & PATRICIA COWAN (W)	15 DENDRON DR CORAOPOLIS PA 15108
154	209-K-81	0209K00081000000	EQUITABLE GAS COMPANY	PO BOX 6135 PITTSBURGH PA 15212
155	209-K-86	0209K00086000000	FRANK A & AUDREY MCBURNEY	537 DENDRON DR CORAOPOLIS PA 15108
156	209-P-98	0209P00098000000	WILLIAM A JR & REBECCA J KUTZAVITCH (W)	89 FOREST GROVE RD CORAOPOLIS PA 15108
157	209-K-89	0209K00089000000	SEAN J & HAYLEE C BURKE (W)	539 DENDRON DR CORAOPOLIS PA 15108
158	209-K-93	0209K00093000000	LEONARD R & KATHLEEN A RIDER (W)	541 DENDRON DR CORAOPOLIS PA 15108
159	209-K-97	0209K00097000000	DORIS A GLANCE	543 DENDRON DR CORAOPOLIS PA 15108
160	209-P-56	0209P00056000000	JOHN WOVCHKO & EDWARD A WOVCHKO	85 FOREST GROVE RD CORAOPOLIS PA 15108
161	209-K-101	0209K00101000000	H WAYNE & LUCILLE A MILLER	545 DENDRON DR CORAOPOLIS PA 15108
162	209-K-105	0209K00105000000	KENNETH J & CAROLYN L RIEDER	547 DENDRON DR CORAOPOLIS PA 15108
163	209-K-109	0209K00109000000	THOMAS C & KAREN A BAYER (W)	549 DENDRON DR CORAOPOLIS PA 15108
164	209-K-113	0209K00113000000	ANTHONY S & AUDREY TARQUINIO	551 DENDRON DR CORAOPOLIS PA 15108
165	209-J-16	0209J00016000000	TIMOTHY M & CRYSTAL L LISOWSKI (W)	630 MAGNUS LN CORAOPOLIS PA 15108
166	209-J-16-1	0209J00016000100	ANTHONY & AUDREY TARQUINIO (W)	551 DENRON DR CORAOPOLIS PA 15108
167	209-J-20	0209J00020000000	ROBERT G & NANCY B KELLEY (W)	628 MAGNUS LN CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
168	209-J-48	0209J00048000000	JOHN A BIEDRZYCKI JR & BETTE JEAN (W)	625 MAGNUS LN CORAOPOLIS PA 15108
169	209-J-50	0209J00050000000	PAULA JEAN LIGUS	625 MAGNUS LN # B CORAOPOLIS PA 15108
170	209-J-82	0209J00082000000	LEONA V WARREN AND NANCY L JOHNSTON AND KAREN A SCHULMEISTER	627 MAGNUS LN CORAOPOLIS PA 15108
171	209-J-88	0209J00088000000	TINA R DOPUDJA	629 MAGNUS LN CORAOPOLIS PA 15108
172	209-F-273	0209F00273000000	TOWNSHIP OF ROBINSON	1000 CHURCH HILL RD PITTSBURGH PA 15205
173	209-N-155	0209N00155000000	CHARLES J & EVE M WOVCHKO (W)	13 HAWTORNE AVE PITTSBURGH PA 15205
174	209-N-163	0209N00163000000	DWAYNE & TAMARA GRIMES (W)	11 STRAWBERRY LN CORAOPOLIS PA 15108
175	209-N-198	0209N00198000000	DWAYNE & TAMARA GRIMES (W)	11 STRAWBERRY LN CORAOPOLIS PA 15108
176	209-N-207	0209N00207000000	FRANK & KRISTEN MARIA SCHNEIDER (W)	15 STRAWBERRY LN CORAOPOLIS PA 15108
177	209-A-89	0209A00089000000	JOHN P & JENNIFER A CROWE (W)	1123 JUANITA DR CORAOPOLIS PA 15108
178	270-H-261	0270H00261000000	CATHY A JAMIOLKOWSKI	1120 ZENOBIA DR CORAOPOLIS PA 15108
179	270-H-272	0270H00272000000	CATHY A JAMIOLKOWSKI	1120 ZENOBIA DR CORAOPOLIS PA 15108
180	270-H-277	0270H00277000000	JAMES A KRIVANEK JR & DENISE M BROOKS & BECKY M TAYLOR & SANDRA M LASCOLA & JENNIFER M CLEGG	192 BARNETT ST WASHINGTON PA 15301
181	270-H-282	0270H00282000000	AMY LYNN KANTZ	1116 ZENOBIA DR CORAOPOLIS PA 15108
182	270-H-287	0270H00287000000	GERALD D & CHARLOTTE A TOMASZEWSKI	1114 ZENOBIA DR CORAOPOLIS PA 15108
183	270-H-292	0270H00292000000	ANTHONY L YAKEMOWICZ	1112 ZENOBIA DR CORAOPOLIS PA 15108
184	270-H-297	0270H00297000000	BRIAN J & ELIZABETH A EISEL (W)	1110 ZENOBIA DR CORAOPOLIS PA 15108
185	270-H-302	0270H00302000000	DANTE AND EMILY PLASSIO M BYROM	1108 ZENOBIA DR CORAOPOLIS PA 15108
186	270-H-307	0270H00307000000	DANIEL & LUCINE A DABECCO (W)	1106 ZENOBIA DR CORAOPOLIS PA 15108
187	270-H-312	0270H00312000000	ROBERT & NOEL ZYCHOWSKI (W)	1104 ZENOBIA DR CORAOPOLIS PA 15108
188	270-H-317	0270H00317000000	MARJORIE C (W) AND ROBERT A PERRONE JR	2301 FOREST GROVE RD CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
189	270-H-326	0270H00326000000	MARJORIE C (W) AND ROBERT A PERRONE JR	2301 FOREST GROVE RD CORAOPOLIS PA 15108
190	270-L-34	0270L00034000000	MONTOUR SCHOOL DISTRICT	223 CLEVER RD MCKEES ROCKS PA 15136
191	270-H-24	0270H00024000000	CYNTHIA A ELLEK	2308 FOREST GROVE RD CORAOPOLIS PA 15108
192	270-D-231	0270D00231000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
193	270-G-80	0270G00080000000	E N & BERNICE VIRGINIA SCHULER (W)	DECEASED NO KNOWN HEIRS OF RECORD
194	270-C-283	0270C00283000000	WILLIAM J KRULL	39 S PETRIE RD CORAOPOLIS PA 15108
195	270-D-379	0270D00379000000	MUNICIPAL AUTH TWP OF ROBINSON (THE)	PO BOX 15539 PITTSBURGH PA 15244
196	271-S-165	0271S00165000000	ALYSSA M KRAMER, WILLIAM A GRAFF (H)	2100 FOREST GROVE RD CORAOPOLIS, PA 15108-3352
197	270-C-235	0270C00235000000	ROBIN L HOUCK	55 S PETRIE RD CORAOPOLIS PA 15108
198	271-S-35	0271S00035000000	KING HENRY'S COURT HOMEOWNERS ASSOCIATION (THE)	317 2ND AVE CARNEGIE PA 15106
199	271-R-28	0271R00028000000	MICHAEL E & CHRISTINE A CRUNY (W)	3 WINDSOR WAY CORAOPOLIS PA 15108
200	271-R-145	0271R00145000000	HENRY D DUCKSTEIN	627 CHARTIERS AVE MCKEES ROCKS PA 15136
201	271-S-25	0271S00025000000	PATRICK M & MARY BETH ROGERS (W)	137 CAMELOT CIR CORAOPOLIS PA 15108
202	271-S-27	0271S00027000000	WILLIAM P & DIANA M MUDRYK (W)	135 CAMELOT CIR CORAOPOLIS PA 15108
203	271-S-29	0271S00029000000	KENNETH P & ELIZABETH M DURBIN (W)	133 CAMELOT CIR CORAOPOLIS PA 15108
204	271-S-31	0271S00031000000	ROBERT M AND BERG SUSAN M BERG	2 LANCELOT LN CORAOPOLIS PA 15108
205	271-S-33	0271S00033000000	CRAIG & LAUNETTE WEBER (W)	4 LANCELOT LN CORAOPOLIS PA 15108
206	271-M-25	0271M00025000000	BRIAN T & LISA M DANKE (W)	3 LANCELOT LN CORAOPOLIS PA 15108
207	271-L-10	0271L00010000000	KING HENRY'S COURT HOMEOWNERS ASSOCIATION (THE)	317 2ND AVE CARNEGIE PA 15106
208	271-H-62	0271H00062000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
209	270-G-140	0270G00140000000	JAMES E & GEORGINE MASON (W)	14 S PETRIE RD CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
210	270-G-124	0270G00124000000	DANIELLE TERPACK	30 S PETRIE RD CORAOPOLIS PA 15108
211	270-G-122	0270G00122000000	FRANK W HANDLOVITCH & AMELIA S REVOCABLE LIVING	34 S PETRIE RD CORAOPOLIS PA 15108
212	270-C-62	0270C00062000000	JEFFREY T & PATRICIA A CATANZARITE (W)	36 S PETRIE RD CORAOPOLIS PA 15108
213	270-G-120	0270G00120000000	THOMAS P & AMY C HANDLOVITCH (W)	32 S PETRIE RD CORAOPOLIS PA 15108
214	270-C-91	0270C00091000000	MJH DEVELOPMENT CO	44 S PETRIE RD CORAOPOLIS PA 15108
215	270-C-59	0270C00059000000	FRANK W HANDLOVITCH & AMELIA S REVOCABLE LIVING TRUST (THE)	34 S PETRIE RD CORAOPOLIS PA 15108
216	270-G-128	0270G00128000000	MICHAEL P & MICHELLE G LUCAS (W)	39 JEFF DR CORAOPOLIS PA 15108
217	270-B-141	0270B00141000000	JOSEPH & TERESA M NOVAKOWSKI (W)	37 JEFF DR CORAOPOLIS PA 15108
218	270-C-85	0270C00085000000	MARTIN & TERRI LYNN SCANLON (W)	21 JEFF DR CORAOPOLIS PA 15108
219	270-B-123	0270B00123000000	KEVIN J & MICHELE R (GOSS W)	31 JEFF DR CORAOPOLIS PA 15108
220	270-B-129	0270B00129000000	CHERYL A SOWERS	30 JEFF DR CORAOPOLIS PA 15108
221	270-B-127	0270B00127000000	STEPHEN J & NEYRCHEL D LUDWICK (W)	28 JEFF DR CORAOPOLIS PA 15108
222	270-B-125	0270B00125000000	CHARLES W III & CYNTHIA L EISEL (W)	26 JEFF DR CORAOPOLIS PA 15108
223	270-B-131	0270B00131000000	SILVIA L BRAIDIC	112 AMY JO LN CORAOPOLIS PA 15108
224	270-B-133	0270B00133000000	MARK & CHRISTINE FERA (W)	114 AMY JO LN CORAOPOLIS PA 15108
225	270-B-150	0270B00150000000	ROBERT AND ZHOU JIANJUN ALLSOP	116 AMY JO LN CORAOPOLIS PA 15108
226	270-B-152	0270B00152000000	MARK & CHRISTINE FERA (W)	114 AMY JO LN CORAOPOLIS PA 15108
227	270-B-128	0270B00128000000	STEPHEN J & NEYRCHEL D LUDWICK (W)	28 JEFF DR CORAOPOLIS PA 15108
228	270-C-181	0270C00181000000	JUNE C PETERS	56 S PETRIE RD CORAOPOLIS PA 15108
229	270-C-193	0270C00193000000	LEONARD J & BRENDA L JONES (W)	58 S PETRIE RD CORAOPOLIS PA 15108
230	270-B-122	0270B00122000000	STEPHEN L JR & NANCY A PAWLISH	62 S PETRIE RD CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
231	270-B-50	0270B00050000000	JAMES F & DIANE R HARTMAN (W)	12 BURATTI DR CORAOPOLIS PA 15108
232	270-B-25	0270B00025000000	JAMES F & DIANE R HARTMAN (W)	12 BURATTI DR CORAOPOLIS PA 15108
233	270-A-125	0270A00125000000	FOREST GROVE SPORTSMENS ASSOCIATION	20 HICKMAN RD CORAOPOLIS PA 15108
234	271-P-109	0271P00109000000	SCOTT M & SUSAN F LOCKRIDGE (W)	10 BURATTI DR CORAOPOLIS PA 15108
235	271-P-282	0271P00282000000	EDWARD & MARGARET VIETMEIER (W)	2606 COUNTRY CLUB RD PITTSBURGH PA 15205
236	271-N-389	0271N00389000000	EDWARD & MARGARET VIETMEIER (W)	2606 COUNTRY CLUB DR PITTSBURGH PA 15205
237	271-N-115	0271N00115000000	UTA COLBERG	87 S. PETRIE RD CORAOPOLIS, PA 15108
238	340-M-135	0340M00135000000	COY ALLEN	N. PETRIE RD CORAOPOLIS, PA 15108
239	340-M-331	0340M00331000000	TERRY F & MAUREEN PLACEK (W)	10 REGINA DR MCKEES ROCKS PA 15136
240	340-M-380	0340M00380000000	ADOLPH & JEAN PLACEK (W)	175 COKETOWN RD CORAOPOLIS PA 15108
241	340-M-382	0340M00382000000	MICHAEL & TAMMY LEWICKI (W)	173 COKETOWN RD CORAOPOLIS PA 15108
242	340-H-380	0340H00380000000	TAMMIE S WEBB	171 COKETOWN RD CORAOPOLIS PA 15108
243	340-H-398	0340H00398000000	NOCK TAYLOR ASHLEY NICOLE	172 COKETOWN RD CORAOPOLIS PA 15108
244	340-G-21	0340G00021000000	HAUDENSHIELD REALTY CO	3207 EANES CIRCLE, UNIT A AUSTIN, TX 78746
245	340-H-387	0340H00387000000	VICKI J JONES	160 COKETOWN RD CORAOPOLIS PA 15108
246	498-M-396-0-2	0498M00396000002	MONTOUR TRAIL COUNCIL	304 HICKMAN ST BRIDGEVILLE PA 15017
247	498-M-396-0-1	0498M00396000001	MONTOUR TRAIL COUNCIL	304 HICKMAN ST BRIDGEVILLE PA 15017
248	340-G-114	0340G00114000000	HAUDENSHIELD REALTY CO	3207 EANES CIRCLE, UNIT A AUSTIN, TX 78746
249	341-R-126	0341R00126000000	FELICIAN SISTERS OF NORTH AMERICA REAL ESTATE TRUST	871 MERCER RD BEAVERS FALLS PA 15010
250	340-B-102	0340B00102000000	CHARLES BOBURKA	2107 POCOCEN DR CORAOPOLIS PA 15108
251	340-B-62	0340B00062000000	RONALD A & KIMBERLY WISNESKY E (W)	2039 MONTOUR ST EXT CORAOPOLIS PA 15108
252	341-P-112	0341P00112000000	JOSEPH S & NANCY C STEINER (W)	2037 MONTOUR ST CORAOPOLIS PA 15108



LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
253	341-P-114	0341P00114000000	RICHARD J JR & GEORGETTE E ARENA (W)	231 STREAMSIDE PL MOORESVILLE NC 28115
254	341-P-2	0341P00002000000	NADINE R & RICHARD DANIELS E (H)	2044 MONTOUR ST CORAOPOLIS PA 15108
255	341-J-366	0341J00366000000	SUSAN D LIVINGSTON (CO-TRUSTEE) AND LORRAINE M GORMLEY (CO-TRUSTEE)	1130 GREENTREE RD PITTSBURGH PA 15220
256	340-A-83	0340A00083000000	WILLIAM D MORROW JR & CYNTHIA S (W)	2046 MONTOUR ST CORAOPOLIS PA 15108
257	340-A-103	0340A00103000000	GUST & CHRISTINE L DELOGLOS	115 CRAIGWOOD DR CORAOPOLIS PA 15108
258	418-S-87	0418S00087000000	HAYWARD V & ELAINE MCINTOSH	LANDSDOWNE DR CORAOPOLIS PA 15108
259	418-S-187	0418S00187000000	DENNIS J SOLT	1626 RIDGE ST CORAOPOLIS PA 15108
260	418-S-135	0418S00135000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH, PA 15233
261	418-S-186	0418S00186000000	RICHARD P & YI JIN WARBURTON	1619 RIDGE ST CORAOPOLIS PA 15108
262	418-S-183	0418S00183000000	JOSEPH JR VANO	1620 RIDGE ST CORAOPOLIS PA 15108
263	418-S-333	0418S00333000000	JOHN A LOUNDER	117 SANDRALAYNE RD CORAOPOLIS PA 15108
264	418-S-334	0418S00334000000	JOHN F & CHERYL A (W)RILEY	121 SANDRALAYNE DR CORAOPOLIS PA 15108
265	418-M-274	0418M00274000000	JASON N MORRIS AND COLLEEN A MORRIS AND PHILIP W MORRIS	1621 CHARLTON HEIGHTS RD CORAOPOLIS PA 15108
266	418-S-361	0418S00361000000	ROBERT T BEST	1627 CHARLTON HEIGHTS RD CORAOPOLIS PA 15108
267	418-S-367	0418S00367000000	ROBERT T BEST	1627 CHARLTON HEIGHTS RD CORAOPOLIS PA 15108
268	418-M-260	0418M00260000000	MARISSA KIELAR	1620 CHARLTON HEIGHTS RD CORAOPOLIS PA 15108
269	418-M-269	0418M00269000000	WILLIAM A & MARGARET BREEDLOVE	1626 CHARLTON HEIGHTS RD CORAOPOLIS PA 15108
270	418-L-86	0418L00086000000	DARRELL J & MARY ANN PAPINCHAK (W)	1203 MAPLE ST EXT CORAOPOLIS PA 15108
271	418-M-64	0418M00064000000	MICHAEL J & VIKKI A RICHARDS (W)	1424 CHARLTON HEIGHTS RD CORAOPOLIS PA 15108
272	418-M-30	0418M00030000000	ORVILLE A III & GAYLE A ANTRAM (W)	1426 CHARLTON HEIGHTS RD CORAOPOLIS PA 15108
273	418-L-385	0418L00385000000	ROBERT G & TERRY L CHESKY (W)	1422 CHARLTON HEIGHTS RD CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
274	418-G-4	0418G00004000000	SAYLOR DAVID K & DORIS M PEREZ (W)	107 SEIBERT RD CORAOPOLIS PA 15108
275	418-G-9	0418G00009000000	MARY E & NICHOLAS J JOY (H)	105 SEIBERT RD CORAOPOLIS PA 15108
276	418-G-24	0418G00024000000	DAVRONBEK P KUDRATULLAEV & MICHELLE L CIARAMELLA (W)	101 SEIBERT RD CORAOPOLIS PA 15108
277	418-G-59	0418G00059000000	ANTHONY R & SANDRA R MARTIN (W)	1133 MAPLE ST EXT CORAOPOLIS PA 15108
278	418-G-68	0418G00068000000	MICHAEL A & APRIL M CRAWFORD (W)	1137 MAPLE ST EXT CORAOPOLIS PA 15108
279	418-G-77	0418G00077000000	CHRISTEN & JOLENE L WILLIAMS (W)	104 SEIBERT RD CORAOPOLIS PA 15108
280	418-G-183	0418G00183000000	CHARLES E & JAYNE LISICA	1140 MAPLE ST EXT CORAOPOLIS PA 15108
281	418-G-145	0418G00145000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
282	418-G-118	0418G00118000000	CORAOPOLIS TEMPLE SERVICE ASSOCIATION	PO BOX 41 CORAOPOLIS PA 15108
283	418-G-201	0418G00201000000	PAUL D & HEIDI M SOUZA (W)	224 ABBOTT ST CORAOPOLIS PA 15108
284	418-G-195	0418G00195000000	CHARLES E & JAYNE LISICA	1140 MAPLE ST EXT CORAOPOLIS PA 15108
285	418-C-122	0418C00122000000	GEORGE N SCHAEFER	DECEASED NO KNOWN HEIRS OF RECORD
286	418-C-147	0418C00147000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
287	418-C-135	0418C00135000000	GEORGE A JELLISON AND GEORGE A JELLISON JR AND LYNNE BOLEY AND BONITA L JELLISON	834 ROYAL AVE CORAOPOLIS PA 15108
288	418-C-183	0418C00183000000	LAWSON REALTY COMPANY	8 DEL MAR CT DELMONT PA 15626
289	418-F-49	0418F00049000000	KARL M & OLGA D FLORENCE (W)	132 LAKEVIEW DR MCKEES ROCK PA 15136
290	419-P-29	0419P00029000000	DONALD & MARILYN DINELL (W)	373 INDIAN RIDGE DR CORAOPOLIS PA 15108
291	418-B-192	0418B00192000000	SCOTT A & CHRISTINE P HOOVER (W)	526 SOUTHERN AVE CORAOPOLIS PA 15108
292	419-P-27	0419P00027000000	SILVIYA N NOVAK	375 INDIAN RIDGE DR CORAOPOLIS PA 15108
293	419-P-25	0419P00025000000	DANIEL A & KATHLEEN M SUCHY (W)	377 INDIAN RIDGE DR CORAOPOLIS PA 15108
294	419-P-23	0419P00023000000	MARK J & LINDA K WEAVER (W)	379 INDIAN RIDGE DR CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
295	419-P-21	0419P00021000000	YVONNE KUNDE	378 INDIAN RIDGE DR CORAOPOLIS PA 15108
296	419-P-19	0419P00019000000	DONALD J & KIMBERLY LONGWELL (W)	376 INDIAN RIDGE DR CORAOPOLIS PA 15108
297	419-P-5	0419P00005000000	JAMES P & REBECCA S KUKLISH (W)	354 INDIAN RIDGE DR CORAOPOLIS PA 15108
298	419-P-3	0419P00003000000	AARON J & ELISA A BOOTH (W)	352 INDIAN RIDGE DR CORAOPOLIS PA 15108
299	419-P-1	0419P00001000000	RONALD A & GEORGENE H ANDRASKO (W)	350 INDIAN RIDGE DR CORAOPOLIS PA 15108
300	419-N-4	0419N00004000000	KEITH M & DINA L MALINOSKI (W)	348 INDIAN RIDGE DR CORAOPOLIS PA 15108
301	419-N-2	0419N00002000000	TODD J & LOIS J GAGLE (W)	346 INDIAN RIDGE DR CORAOPOLIS PA 15108
302	419-J-73	0419J00073000000	OWEN R & DEBORAH J MILLIGAN (W)	344 INDIAN RIDGE DR CORAOPOLIS PA 15108
303	419-J-71	0419J00071000000	BRANDT & MELISSA WILSON (W)	342 INDIAN RIDGE DR CORAOPOLIS PA 15108
304	419-J-69	0419J00069000000	RONALD J & KAREN A BUDICKY (W)	340 INDIAN RIDGE DR CORAOPOLIS PA 15108
305	419-J-67	0419J00067000000	JOHN & CATHERINE B LEVINE (W)	338 INDIAN RIDGE DR CORAOPOLIS PA 15108
306	419-J-61	0419J00061000000	ANTHONY J & PATRICIA J BABUSCI (W)	332 INDIAN RIDGE DR CORAOPOLIS PA 15108
307	419-J-59	0419J00059000000	RICHARD J & PATRICIA A HUNZIKER (W)	330 INDIAN RIDGE DR CORAOPOLIS PA 15108
308	419-J-41	0419J00041000000	VINCENT & ANGELA MARIE RICCIARDI (W)	312 INDIAN RIDGE DR CORAOPOLIS PA 15108
309	419-E-152	0419E00152000000	BRETT W & JENNIFER J MCGENNIS (W)	310 INDIAN RIDGE DR CORAOPOLIS PA 15108
310	419-E-151	0419E00151000000	JUSTIN & BRETLYNN STARK	308 INDIAN RIDGE DR CORAOPOLIS PA 15108
311	420-P-303	0420P00303000000	400 FIFTH AVENUE LIMITED PARTNERSHIP	400 5TH AVE CORAOPOLIS PA 15108
312	419-A-162	0419A00162000000	MICHAEL J FERRARA AND LYNSIE N SCHANTZ	136 TIFFANY RIDGE DR CORAOPOLIS PA 15108
313	419-A-160	0419A00160000000	MORGAN MIHOK	134 TIFFANY RIDGE DR CORAOPOLIS PA 15108
314	420-N-114	0420N00114000000	MOON LAND CO	8 DEL MAR CT DELMONT PA 15626
315	504-D-29	0504D00029000000	PHIL PATTON	132 TIFFANY RIDGE DR CORAOPOLIS PA 15108
316	420-N-99	0420N00099000000	CURTIS JORDAN JR	110 LANSDOWNE DR CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
317	505-S-348	0505S00348000000	STEVE & THERESA BABIK	THORON RUN RD CORAOPOLIS PA 15108
318	420-N-331	0420N00331000000	ROBERT J & SHARON M RUSH (W)	520 THORN RUN RD CORAOPOLIS PA 15108
319	505-F-217	0505F00217000000	MORRISON FARMS	745 LINCOLN AVE BENTLEYVILLE PA 15314
320	505-S-307	0505S00307000000	BEE'S REAL ESTATE LP	3273 RALEIGH AVE STE L PITTSBURGH, PA 15216
321	505-S-314	0505S00314000000	JON S DOMENICO	424 AMHERST AVE CORAOPOLIS PA 15108
322	505-M-161	0505M00161000000	JOLA REALTY LLC	227 MCCARTNEY DR CORAOPOLIS PA 15108
323	505-M-156	0505M00156000000	CHARLES J SR AND MARY CLEIS	392 CEDAR DR CORAOPOLIS PA 15108
324	505-M-149	0505M00149000000	TWOTUTS PROPERTIES LLC	828 OLD THORN RUN RD CORAOPOLIS PA 15108
325	505-M-142	0505M00142000000	MATTHEW EDWARD COPPOLA	640 7 <sup>TH</sup> AVE CORAOPOLIS PA 15108
326	505-M-136	0505M00136000000	ERIC & HEIDI USSELMAN	207 PATTON DR CORAOPOLIS PA 15108
327	505-M-135	0505M00135000000	ERIC & HEIDI USSELMAN	207 PATTON DR CORAOPOLIS PA 15108
328	505-M-134	0505M00134000000	CAROLYN MARIE MATLAK	199 PARSON LB ALIQUIPPA PA 15001
329	505-M-133	0505M00133000000	BANKERS TRUST COMPANY OF CALIFORNIA NA (TRUSTEE)	360 HEMLOCK DR CORAOPOLIS PA 15108
330	505-M-131	0505M00131000000	JOHN CAMARDESE	2 MCGOVERN BLVD CRESCENT PA 15046
331	505-M-129	0505M00129000000	KIM E & LORI E SHANNON (W)	354 HEMLOCK DR CORAOPOLIS PA 15108
332	505-M-128	0505M00128000000	KIM E & LORI E SHANNON (W)	354 HEMLOCK DR CORAOPOLIS PA 15108
333	505-M-127	0505M00127000000	JOSEPH ANTHONY & BEVERLY SUE WEBER (W)	352 HEMLOCK DR CORAOPOLIS PA 15108
334	505-L-295	0505L00295000000	MOON TOWNSHIP	1000 BEAVER GRADE RD CORAOPOLIS PA 15108
335	505-L-278	0505L00278000000	HENRY & JULIA B REYNOLDS (W)	1209 ROBINA DR PITTSBURGH PA 15221
336	505-G-17	0505G00017000000	RONALD J AND CONLEY STELLA RENNICH	284 OAK DR CORAOPOLIS PA 15108
337	505-G-300	0505G00300000000	LMS THORN RUN LP	ATTN CASEY STEINER 121 EDGEWOOD AVE PITTSBURGH, PA 15218-1593

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
338	505-G-38	0505G00038000000	MERRIT COMMONS LLC	112 PORT VUE DR CORAPOLIS PA 15108
339	505-G-38-1	0505G00038000100	MERRIT COMMONS LLC	112 PORT VUE DR CORAPOLIS PA 15108
340	505-B-72	0505B00072000000	BUTTON PETER M & LISA L (W)	128 RIVERCREST DR CORAOPOLIS PA 15108
341	505-B-68	0505B00068000000	CINDRAN INC	745 LINCOLN AVE BENTLEYVILLE PA 15314
342	505-B-64	0505B00064000000	LISA G DOMENICK	132 RIVERCREST DR CORAOPOLIS PA 15108
343	505-B-62	0505B00062000000	PATRICIA ANN WALTER & ANTHONY MARIANO (TRUST)	134 RIVERCREST DR CORAOPOLIS PA 15108
344	506-P-31	0506P00031000000	ROBERT M & SHAYLA M HOFF	136 RIVERCREST DR CORAOPOLIS PA 15108
345	506-P-35	0506P00035000000	KEITH A MARSHALL	138 RIVERCREST DR CORAOPOLIS PA 15108
346	506-P-39	0506P00039000000	TRICIA JO CARTISANO	140 RIVERCREST DR CORAOPOLIS PA 15108
347	506-P-43	0506P00043000000	RICHARD L & JOYCE M KRANE (W)	142 RIVERCREST DR CORAOPOLIS PA 15108
348	506-P-85	0506P00085000000	JOSEPH R & MARGARET G MANUEL (W)	144 JAROD DR CORAOPOLIS PA 15108
349	506-P-87	0506P00087000000	PETER J & MELISSA R NOSSAL (W)	143 JAROD DR CORAOPOLIS PA 15108
350	506-P-88	0506P00088000000	ARTHUR & SUZANNE LANGUILLI (W)	141 JAROD DR CORAOPOLIS PA 15108
351	506-P-89	0506P00089000000	DAVID L & ABBY J JACKSON	139 JAROD DR CORAOPOLIS PA 15108
352	506-P-91	0506P00091000000	DONALD RAY III & RACHEL DAWN MOORE (W)	137 JAROD DR CORAOPOLIS PA 15108
353	506-P-93	0506P00093000000	CYNTHIA N GALISH	135 JAROD DR CORAOPOLIS PA 15108
354	506-N-13	0506N00013000000	LUKE M & MICHELLE C DIXON (W)	133 JAROD DR CORAOPOLIS PA 15108
355	506-N-11	0506N00011000000	JOHN L & SALLY C PRONESTI (W)	131 JAROD DR CORAOPOLIS PA 15108
356	506-N-201	0506N00201000000	PENN SHERMAN CORP	6171 BETHEL RD ALEXANDRIA PA 16611
357	506-N-117	0506N00117000000	JOSE G & GRISEL C CAMPOS MARTIN (W)	283 RANDY LN CORAOPOLIS PA 15108
358	506-N-115	0506N00115000000	AUSTIN C & AMANDA RUSSIAN	285 RANDY LN CORAOPOLIS PA 15108
359	506-N-113	0506N00113000000	NANCI E RICH	287 RANDY DR CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
360	506-N-127	0506N00127000000	DAVID T POST	288 RANDY LN CORAOPOLIS PA 15108
361	506-N-129	0506N00129000000	CHRIS J & ALYSON R PATSILEVAS (W)	230 RANDY LN CORAOPOLIS PA 15108
362	506-J-68	0506J00068000000	SEETHALER WILLIAM L & LYNN L LIVING TRUST	237 RANDY LN CORAOPOLIS PA 15108
363	506-N-107	0506N00107000000	MILISSA A & SIDNEY F MOORE	229 RANDY LN CORAOPOLIS PA 15108
364	599-M-200	0599M00200000000	PITTSBURGH AIRPORT PROPERTY INC	5596 23RD W TER BOCA RATON FL 33496
365	599-R-115	0599R00115000000	MOON TOWNSHIP	1000 BEAVER GRADE RD CORAOPOLIS PA 15108
366	599-L-292	0599L00292000000	AARON SIGEL AND REBECCA BRAUND	110 WYNVIEW RD CORAOPOLIS PA 15108
367	599-L-286	0599L00286000000	DENNIS J & JEANNE M ZONA (W)	108 WYNVIEW DR CORAOPOLIS PA 15108
368	599-L-277	0599L00277000000	CAROL A GORDON ASSET PROTECTION TRUST	106 WYNVIEW DR CORAOPOLIS PA 15108
369	599-L-227	0599L00227000000	HANS H NAM & WON JI (W)	110 WESTBURY DR CORAOPOLIS PA 15108
370	599-L-237	0599L00237000000	CYNTHIA L WOOLLETT	112 WESTBURY DR CORAOPOLIS PA 15108
371	599-L-268	0599L00268000000	JOSEPH G & SUZANNE L RABOSKY (W)	104 WYNVIEW DR CORAOPOLIS PA 15108
372	599-L-260	0599L00260000000	RONALD W & MARLANE J MCGINNIS (W)	102 WYNVIEW DR CORAOPOLIS PA 15108
373	599-L-246	0599L00246000000	RANJAN & MEENA BHANDARI (W)	226 LAKEVIEW DR CORAOPOLIS PA 15108
374	599-G-136	0599G00136000000	VALJEAN C ECKERT	116 WESTBURY DR CORAOPOLIS PA 15108
375	599-G-124	0599G00124000000	DONALD E & TILLIE J MUELLER (W)	115 WESTBURY DR CORAOPOLIS PA 15108
376	599-G-127	0599G00127000000	CARLTON T & PATRICIA A MILLER	113 WESTBURY DR CORAOPOLIS PA 15108
377	599-L-352	0599L00352000000	JAMES W & ETHEL W JACOBS (W)	111 WESTBURY DR CORAOPOLIS PA 15108
378	599-F-53	0599F00053000000	ANDREW P & CAROL ANN KOSARIK (W)	280 SHAFER RD CORAOPOLIS PA 15108
379	599-F-41	0599F00041000000	VINCENT & MARIA DINUNNO (W)	278 SHAFER RD CORAOPOLIS PA 15108
380	599-F-27	0599F00027000000	ZACHARY C & GEORGIANA R SMITH (W)	274 SHAFER RD CORAOPOLIS PA 15108
381	599-F-7	0599F00007000000	JAMES T & GAIL E HOLMES (W)	272 SHAFER RD CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
382	599-F-91	0599F00091000000	DARREN J & CORINNE M MILLER	279 SHAFER RD CORAOPOLIS PA 15108
383	599-F-92	0599F00092000000	BARRETT KLAAS	271 SHAFER RD CORAOPOLIS PA 15108
384	599-F-70	0599F00070000000	BARRETT KLAAS	271 SHAFER RD CORAOPOLIS PA 15108
385	599-F-97	0599F00097000000	WILLIAM F & HELEN L SUTTON (W)	101 CRABTREE DR CORAOPOLIS PA 15108
386	599-F-98	0599F00098000000	WILLIAM F & HELEN L SUTTON (W)	101 CRABTREE DR CORAOPOLIS PA 15108
387	599-F-124	0599F00124000000	CHARLES S & PATRICIA C DEMME	103 CRABTREE LN CORAOPOLIS PA 15108
388	599-F-122	0599F00122000000	MARK C & CHARLYN D MULKEY (W)	105 CRABTREE DR CORAOPOLIS PA 15108
389	599-F-120	0599F00120000000	CHRISTOPHER D & ERIN MARIE MANNA (W)	107 CRABTREE DR CORAOPOLIS PA 15108
390	599-F-118	0599F00118000000	JOSEPH P FAULK	109 CRABTREE DR CORAOPOLIS PA 15108
391	599-F-112	0599F00112000000	GREGORY C & LISA D MCVAY (W)	110 CRABTREE DR CORAOPOLIS PA 15108
392	599-F-109	0599F00109000000	KEITH R STUCKEMAN, LENA M LENGYEL-BEADLING	310 WESTBURY DR CORAOPOLIS PA 15108
393	599-B-111	0599B00111000000	GEOFFREY W HATTON AND MEGAN A HATTON	312 WESTBURY DR CORAOPOLIS PA 15108
394	599-B-113	0599B00113000000	MICHAEL R NOVAK	314 WESTBURY DR CORAOPOLIS PA 15108
395	600-K-14	0600K00014000000	WEST PENN LACO INC	331 OHIO ST PITTSBURGH PA 15209
396	600-J-32	0600J00032000000	B P O E ELKS CLUB CORAOPOLIS LODGE 1090	PO BOX 1091 CORAOPOLIS PA 15108
397	700-H-324	0700H00324000000	D & K WRIGHT LLC	113 HELDON DR CORAOPOLIS PA 1510
398	701-S-46	0701S00046000000	MOON TOWNSHIP MUNICIPAL AUTHORITY	1700 BEAVER GRADE RD CORAOPOLIS PA 15108
399	701-S-102	0701S00102000000	MOON TOWNSHIP MUNICIPAL AUTHORITY	1700 BEAVER GRADE RD CORAOPOLIS PA 15108
400	701-S-221	0701S00221000000	MARK H & JUDITH C MILLER (W)	459 WATTERS STATION EVANS CITY PA 16033
401	701-M-178	0701M00178000000	MARTIN MEDIA	740 TRUMBULL DR PITTSBURGH PA 15205-4363
402	701-L-116	0701L00116000000	RICHARD J GABLE	126 FLAUGHERTY RUN RD CORAOPOLIS PA 15108
403	701-L-28	0701L00028000000	MARLENE LUDMAN, MARK LUDMAN	206 PURDY RD CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
404	701-H-296	0701H00296000000	JAMES A STOKES	5 MCGOVERN BLVD CRESCENT PA 15046
405	701-H-286	0701H00286000000	ZACHARIAH R NAVE	PO BOX 524 CLARION PA 16214
406	701-H-255	0701H00255000000	CYNTHIA A CHAMBERLIN AND PATRICK L WILSON	9 MCGOVERN BLVD CRESCENT PA 15046
407	701-D-304	0701D00304000000	RANDY J INCHES	1582 SPRING RUN RD EXT CORAOPOLIS PA 15108
408	701-C-100	0701C00100000000	PAUL M SCHREIBER	1215 MAPLE ST EXT CORAOPOLIS PA 15108
409	701-G-31	0701G00031000000	ALLEN M & JANE L NEMETZ W)	1510 LAUREL RIDGE DR CRESCENT PA 15046
410	701-G-29	0701G00029000000	KIERSTEN & GEORGE E CROSBY (H)	1512 LAUREL RIDGE DR CRESCENT PA 15046
411	701-G-27	0701G00027000000	DAVID L & BARBARA A ROSS (W)	1514 LAUREL RIDGE DR CRESCENT PA 15046
412	701-G-25	0701G00025000000	LOUIS GLUMAC JR AND DENISE THOMAS	1516 LAUREL RIDGE DR CRESCENT PA 15046
413	701-G-23	0701G00023000000	ZACHARY J BYRD & MEGAN T DELISLE	1518 LAUREL RIDGE DR CRESCENT PA 15046
414	701-C-121	0701C00121000000	ZOKAITES PROPERTIES LP	375 GOLFSIDE DR WEXFORD PA 15090
415	701-C-46	0701C00046000000	30 BEAVER LP	3000 WASHINGTON PIKE BRIDGEVILLE PA 15017
416	701-C-48	0701C00048000000	TERRY A DEZORT	1522 PARKWOOD POINTE DR UNIT 604 CRESCENT PA 15046
417	701-C-44	0701C00044000000	BONNY J FOX	1528 PARKWOOD POINTE DR CRESCENT PA 15046
418	701-C-42	0701C00042000000	30 BEAVER LP	3000 WASHINGTON PIKE BRIDGEVILLE PA 15017
419	701-C-40	0701C00040000000	LOUIS E. & MARILYN E SMOLENSKI (W)	1530 PARKWOOD POINT DR UNIT 504 CRESCENT, PA 15046
420	701-C-3	0701C00003000000	ZOKAITES PROPERTIES LP	375 GOLFSIDE DR WEXFORD PA 15090
421	701-C-120	0701C00120000000	ZOKAITES PROPERTIES LP	375 GOLFSIDE DR WEXFORD PA 15090
422	701-C-120-701	0701C00120070100	ZOKAITES PROPERTIES LP	375 GOLFSIDE DR WEXFORD PA 15090
423	701-C-120-704	0701C00120070400	ZOKAITES PROPERTIES LP	375 GOLFSIDE DR WEXFORD PA 15090
424	701-C-120-703	0701C00120070300	ZOKAITES PROPERTIES LP	375 GOLFSIDE DR WEXFORD PA 15090
425	701-C-120-702	0701C00120070200	ZOKAITES PROPERTIES LP	375 GOLFSIDE DR WEXFORD PA 15090



LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
426	701-C-2	0701C00002000000	CHARLOTTE L MUIA	1531 PARKWOOD POINTE DR CRESCENT PA 15046
427	701-C-8	0701C00008000000	BUNDY FAMILY TRUST	33 MCCOVERN BLVD CRESCENT PA 15046
428	701-B-4	0701B00004000000	CHRISTOPHER J & HEIDI L GARITI (W)	1601 CLOVERDALE LN CRESCENT PA 15046
429	701-B-6	0701B00006000000	ADAM W ZUREK	1602 CLOVERDALE LN CRESCENT PA 15046
430	701-B-200	0701B00200000000	PAUL M SCHREIBER	1215 MAPLE ST EXT CORAOPOLIS PA 15108
431	702-P-236	0702P00236000000	ROBERT J & NANCY J KERNICK (W)	259 SPRING RUN RD CRESCENT PA 15046
432	702-P-252	0702P00252000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
433	702-P-257	0702P00257000000	HENRY K & MARILYN G WHITE (W)	248 SPRING RUN RD CRESCENT PA 15046
434	702-P-363	0702P00363000000	JUSTIN T SMITH	258 SPRING RUN RD CRESCENT PA 15046
435	702-K-16	0702K00016000000	STEVEN M & CAROLINE S DOTTERER	1208 CRESCENT BLVD EXT CRESCENT PA 15046
436	702-K-18	0702K00018000000	RONALD A GOTTSCHALK AND MARLA A GOTTSCHALK	1206 CRESCENT BLVD EXT CRESCENT PA 15046
437	702-N-398	0702N00398000000	IAN & CHRISTIE HOUSTON	470 CRESCENT BLVD CRESCENT PA 15046
438	702-J-149	0702J00149000000	NICHOLAS E & ERICA M HOLLABAUGH (W)	1204 CRESCENT BLVD EXT CRESCENT PA 15046
439	702-J-147	0702J00147000000	JOSEPH G & JENNIFER L DAUGHERTY (W)	1202 CRESCENT BLVD EXT CRESCENT PA 15046
440	702-J-143	0702J00143000000	LOUIS A BOJARSKI	648 MAGNUS LN CORAOPOLIS PA 15108
441	702-J-135	0702J00135000000	JEAN BUBENHEIM & BARBARA HUSUAR	524 CRESCENT BLVD EXT CRESCENT PA 15046
442	702-J-145	0702J00145000000	JOSEPH W & KATHLEEN A PLUMB (W)	1200 CRESCENT BLVD EXT CRESCENT PA 15046
443	702-J-158	0702J00158000000	JAMES & JUDITH L DEANGELIS (W)	1201 CRESCENT BLVD EXT CRESCENT PA 15046
444	702-J-156	0702J00156000000	PATRICK E HAYES	223 N GUADALUPE ST UNIT #218 SANTA FE NM 87501
445	702-J-165	0702J00165000000	NORMAN P & BARBARA J BONAZZA (W)	200 GLENGARRY DR CORAOPOLIS PA 15108
446	702-P-371	0702P00371000000	LOUIS A BOJARSKI	648 MAGNUS LN CORAOPOLIS PA 15108
447	811-R-129	0811R00129000000	LOUIS A BOJARSKI	648 MAGNUS LN CORAOPOLIS PA 15108

LINE NUMBER	MAB BLOCK LOT NUMBER	PARCEL ID	OWNER	TAX MAILING ADDRESS
448	702-E-293	0702E00293000000	DANIEL & CHERYL L PERCIAVALLE (W)	815 BOCKTOWN RD CRESCENT PA 15046
449	702-E-377	0702E00377000000	ROBERT J DECKER & JAMIE TURNEY	826 BOCKTOWN RD CRESCENT PA 15046
450	702-E-381	0702E00381000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
451	811-H-346	0811H00346000000	VICKIE D STARK	828 BOCKTOWN RD CRESCENT PA 15046
452	811-H-341	0811H00341000000	CATHERINE A DECKER AND ROBERT J DECKER	830 BOCKTOWN RD CRESCENT PA 15046
453	811-H-326	0811H00326000000	MICHAEL S EVANS	834 BOCKTOWN RD CRESCENT PA 15046
454	811-H-321	0811H00321000000	DONNA ABBOTT	117 COLONIAL DR CLINTON PA 15026
455	812-S-226	0812S00226000000	MATTHEW WAIBEL & MARIA GEORGINA (W)	923 HARPER RD CRESCENT PA 15046
456	812-S-129	0812S00129000000	JOSEPH & KAREN GERY (W)	1040 CHANTICLEER DR CRESCENT PA 15046
457	812-S-354	0812S00354000000	CRESWELL HEIGHTS JOINT AUTHORITY	PO BOX 301 SOUTH HEIGHTS PA 15081
458	812-R-128	0812R00128000000	DAVID J & ELIZABETH L VREDENBURG (W)	932 HARPER RD CRESCENT PA 15046
459	812-M-107	0812M00107000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
460	703-A-395-0-1	0703A00395000001	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233
461	703-A-395	0703A00395000000	DUQUESNE LIGHT COMPANY	1800 SEYMOUR ST PITTSBURGH PA 15233

# Attachment 11

**ATTACHMENT 11  
BRUNOT ISLAND-CRESCENT PROJECT  
DUQUESNE LIGHT COMPANY DESIGN CRITERIA, ELECTROMAGNETIC FIELD-  
POLICY AND APPLICATION, AND SAFETY PRACTICES**

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The National Electrical Safety Code (NESC) is a set of rules to safeguard people during the installation, operation, and maintenance of electric power lines. The NESC contains the basic provisions considered necessary for the safety of employees and the public. Although it is not intended as a design specification, its provisions establish minimum design requirements. Duquesne Light Company ("Duquesne Light") has developed design specifications and safety rules which meet or surpass all provisions specified by the NESC.

Engineering Design Criteria and Parameters

The NESC includes loading requirements and clearances for the design, construction, and operation of power lines. The "loads" on conductors and supporting structures are the forces that develop from the weight of the conductors, the weight of ice on the conductors, plus wind pressure on the conductors and supporting structures. Loading requirements are the loads on the conductors and structures that are anticipated assuming certain ice and wind conditions. Loading requirements always contain "safety factors" to allow for unknown or unanticipated contingencies. The clearances and loading requirements contained in the NESC were developed to ensure public safety and welfare.

Duquesne Light transmission line design standards meet or surpass the NESC standards. For example, the relative order of grades of construction for conductors and supporting structures is B, C, and N; Grade B being the highest. According to the NESC standards, construction Grades B, C, or N may be used for transmission lines (except at crossings of railroad tracks and limited access highways where Grade B construction is specified). However, Duquesne Light designs all of its transmission lines for Grade B construction. The use of Grade B design and construction specifies such things as larger-minimum crossarm dimensions, larger-minimum conductor size, and increased safety factors.

Duquesne Light also surpasses the NESC standards in the clearance requirements. Duquesne Light designs 138 kV and 345kV transmission lines to meet 30 feet of ground clearance under the worst-case load scenario, 9.4 feet more than the NESC minimum of 20.6 feet for new construction on 138kV transmission lines and 5.2 feet more than the NESC minimum of 24.8 feet for new construction on 345kV transmission lines. For reconductor projects and spans with new structures on 138kV and 345kV transmission lines, Duquesne Light strives to obtain either 30 feet of ground clearance or NESC+10%, modifying existing structures as necessary to meet this criteria. For all other types of clearances on new lines, NESC+10% is used.

Duquesne Light also surpasses the NESC standards in the structure overload or multiplying factors. The guideline for structural load factors for transmission structures can be found in the NESC Code. Duquesne Light applies overload factors of 1.1 for NESC 250C and NESC 250D loads compared to the NESC requirement of using 1.0 overload factors for NESC 250C and NESC 250D loads.

#### Electromagnetic Field Management Practices for New Transmission Lines

##### *a. Transmission Line Planning*

All electric currents, including those running within electric transmission lines, generate electric and magnetic fields (sometimes referred to jointly as electromagnetic fields or EMF). Electric and magnetic fields share some similarities, but have differences as well. Magnetic fields are directly related to the flow of electrical current in wires and devices. Electric fields are directly related to voltage, which creates the force to make electrical current flow. Both fields decrease quickly with distance from the source.

A large body of scientific evidence does not demonstrate that exposure to EMF are harmful, although guidelines have been set. The EMF exposure standard for the United States is the IEEE Standard C95.6 “Safety Levels with Respect to Human Exposure to Electromagnetic Fields, 0-3 kHz,” which specifies maximum permissible exposure (MPE) limits for the general public of 9040mG (60 Hz) for magnetic fields and 10kV/m (60 Hz) for electric fields within in the right-of-way and 5 kV/m off the right-of-way. Internally, the World Health Organization does not produce an EMF standard, but recognizes the International Council on Non-Ionizing Radiation Protection (ICNIRP) standard. The 2010 ICNIRP standard “ICNIRP Guidelines for Limiting Exposure to

Time-varying Electric and Magnetic Fields (1 Hz to 100 kHz)” lists general public reference levels of 2000mG (60Hz) for magnetic fields and 4.167 kV/m (60Hz) for electric fields. Duquesne Light’s transmission lines have EMF levels that are under the reference levels as indicated in these standards and guidelines. Duquesne Light also takes additional steps in its transmission line planning and design processes to identify and minimize any potential EMF impacts on the surrounding area.

Because EMF decrease significantly with distance from the source, any potential EMF emitted by a new transmission line is highly localized. Duquesne Light therefore first identifies the point(s) in a new transmission line with highest potential for EMF exposure. This point is usually a span with (i) lowest ground clearance, (ii) in densely populated neighborhoods; and (iii) in close proximity to publically-accessible areas (such as public sidewalks).

Second, because magnetic fields are a function of current, the next step is to determine the load current along that point of the transmission line. For this, Duquesne Light uses its power flow models, which are based upon projected load growth ten years into the future. Duquesne Light examines two load scenarios: (i) the “50/50” expected peak load forecast (i.e., projections indicate 50% chance the peak will be less than the scenario, and 50% chance the peak will be greater), and (ii) the “90/10” high load condition (i.e., projections indicate 90% chance the peak will be less than the scenario, and 10% the peak will be greater). These power flow studies also consider various contingencies, such as a generators being offline and other transmission lines being out of service. After evaluating the scenarios and contingencies, the greatest load currents on the transmission lines being studied are used for the EMF study. Where Duquesne Light plans to replace an existing transmission line with a new transmission line, it calculates the load in the same way for the existing transmission line as though the new line were not built, so that the net effect on the EMF levels can be determined.

Third, as part of its design process, Duquesne Light adjusts the line design to minimize the potential for exposure to EMF. For example, where a line has two 138 kV circuits, Duquesne Light balances circuit loads where practical to maximize the EMF-mitigating effects of reverse phasing.

*b. Brunot Island-Crescent Project*

Duquesne Light followed the above process for 138 kV transmission lines to design the Brunot Island-Crescent Project, employing several design and planning characteristics to mitigate their EMF propagation and impacts.

First, wherever possible, the lines are predominantly routed through unoccupied parcels; where the route would approach occupied areas, it would run around their edges.

Second, the above-ground lines have been designed with a minimum conductor clearance of 30 feet. This establishes a wide “buffer area” in which EMF emitted by the line will rapidly dissipate.

#### Periodic Maintenance Program on All Transmission Lines

Duquesne Light ensures the continued public safety from our transmission line infrastructure by implementing various maintenance and inspection programs. One program is the routine inspection of as-built conditions to meet clearance requirements described above through advanced surveying technology referred to as “LiDAR”. This technology allows Duquesne Light to model its transmission system three-dimensionally to analyze clearances from the conductors to the world around them, including vegetation, homes, pools, roads, and more. This program provides Duquesne Light with accurate as-built records to ensure compliance with designs while also identifying any new or changing conditions to surrounding landscape.

Other Duquesne Light Maintenance programs for inspected towers include:

- a. Ground inspections, performed by Duquesne Light mobile workers walking around the base of the structure, on approximately 350 structures annually. These inspections focus heavily on foundations, structure integrity, and failed hardware, though additional information may be noted.
- b. Aerial inspections, performed by a Duquesne Light subcontractor from a helicopter on approximately 500 structures annually. These inspections focus heavily on hardware and structural defects in tower members, though additional information may be noted.

### Personnel Safety Rules

Duquesne Light follows OSHA regulations to ensure safe practices. These regulations are incorporated into the Duquesne Light employee Safety Handbook. Duquesne Light safety rules and good practices include the following:

1. Only qualified employees and trainees working under their direct supervision may work on or with exposed energized lines or parts of equipment operating at 50 volts or more, and must be familiar with the minimum approach distances as indicated by OSHA regulations.
2. Before work is commenced, a job briefing will be held with all employees to orient each employee as to:
  - a. The hazards associated with the job.
  - b. The work procedures involved.
  - c. Any special precautions to be taken.
  - d. All energy source controls.
  - e. Personal protective equipment required.
3. When working in elevated locations, above four feet, employees shall use appropriate fall protection systems. Each employee working from an aerial lift, bucket truck, or man lift shall use a full body harness and either a shock absorbing lanyard or self-retracting lanyard. Duquesne Light ensures that all fall protection follows the OSHA regulations.
4. Prior to climbing towers and other similar structures a documented visual inspection shall be conducted by a competent person to:
  - a. Determine type of work, materials, and construction methods required.
  - b. Determine whether ground access, without climbing a structure, is possible through use of access roads and bucket trucks.
  - c. Determine physical condition of the structure.
  - d. Contact Engineering to determine if a structural analysis has been performed to identify tie-off and anchorage points for construction activities.
  - e. Tie-off and anchorage points follow the OSHA regulations, in which the anchorage points can support 5,000 lbs per employee or a twice the impact load per employee.



- f. Determine the type of fall protection systems to be used, appropriate anchorage points and complete documented fall safety analysis. All work is to be inspected prior to construction to evaluate the site conditions. If there are any concerns about the integrity of a structure, Duquesne Light Engineering is engaged to perform the appropriate investigation and analysis to provide guidance for safely completing the job.

## Attachment 12

**ATTACHMENT 12  
BRUNOT ISLAND-CRESCENT PROJECT  
VEGETATION MANAGEMENT PRACTICES**

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This Attachment describes Duquesne Light Company's ("Duquesne Light" or the "Company") plans for managing vegetation within and around the transmission line corridor.

*(1) A general description of the utility's vegetation management plan.*

Duquesne Light will apply the Wire Zone/Border Zone management technique, which is recognized as an industry best practice to manage vegetation and ensure the safe and reliable delivery of electricity. Under the Wire Zone/Border Zone management technique, non-compatible species in both the Wire Zone/Border Zone areas are removed. Areas within the Wire zone are cleared of all woody vegetation leaving only grasses and other herbaceous plants. Areas within the Border Zone are cleared of vegetation that would exceed 15 feet at maturity. ROW management extends beyond the managed corridor to include "danger trees" located outside the ROW that present a hazard to, or target, a transmission line. Danger trees are those that, upon partial or complete failure, would either strike the conductors or pass within the minimum clearances required for the conductors, structures, and facilities.

*(2) Factors that dictate when each method, including aerial spraying, is utilized.*

Vegetation management methods are site-dependent. Duquesne Light employs a Utility Vegetation Management ("UVM") assessment of each vegetation management job to align job objectives, the characteristics and setting of the work site and vegetation thereon, and the vegetation management tools available. For example, field personnel consider species composition, stem density, and stand age to assist in the selection of management methods appropriate for the site.

Vegetation management methods are often used in combination to produce desired outcomes. Methods for consideration include, but are not limited to, the following and recognized as an Industry Best Practice and documented in the ANSI A300 Part 7, Integrated Vegetation Management:

- Manual Control: work performed with hand tools.
  - Highly selective method; can be useful in sensitive sites.
  - May be less efficient and more costly compared to other methods.
- Mechanical Control: work performed with the assistance of mechanized equipment.
  - Less selective; may result in site disturbance requiring restoration.
  - Can be highly efficient and cost-effective.
  - Application is limited by terrain and right-of-way accessibility.
- Chemical Control: application of herbicides.
  - When properly used, can be efficient and cost-effective, while minimizing site disturbance and enhancing plant and wildlife diversity.
  - Selection of proper herbicide and application method depend upon site and vegetation characteristics, and will be consistent with the manufacturer's label and applicable laws and regulations.
  - Selective application directly to targeted species is preferred. Non-selective aerial applications may be appropriate for less-sensitive sites that are in sparsely-populated areas, are difficult to safely access, and/or have a high stem density.

- Biological Control: encouragement of mutually beneficial interactions of naturally-occurring plant and animal species inhabiting the right-of-way .
  - Certain plants compatible with transmission line rights-of-way (“compatible species”) naturally produce substances that inhibit the establishment of incompatible competing species (for example, fern allelopathy).
  - In some instances, field personnel may be able to selectively remove certain plants to encourage the growth of other, more favorable species.
  - Availability and feasibility of this method is highly dependent on site conditions, plant and animal species present at the site, and vegetation management objectives.
- Cultural Control: management of vegetation within the right-of-way to promote desired compatible plant communities (or “cultures”).
  - In some instances, it can be feasible to supplement the above control methods with additional interventions to encourage the development of relatively stable communities of compatible plants within the right-of-way. For example, Duquesne Light can provide landowners with informational resources to aid them in the cultivation and management of desirable, compatible plant species in the right-of-way.
  - Can reduce longer-term maintenance requirements and costs once plant community stability is achieved.

*(3) Vegetation management practices near aquatic and other sensitive locations.*

All sites, notably those that are environmentally sensitive, should only be managed using appropriate UVM control methods. Field personnel assess special site characteristics, such as

proximity to wetlands or sensitive species habitats, as part of their UVM analysis. The control methods employed are then tailored to the site conditions to minimize or mitigate impacts consistent with the desired UVM objectives. Special site conditions are then noted for routine vegetation maintenance work.

*(4) Notice procedures to affected landowners regarding vegetation management practices.*

Duquesne Light employs robust landowner notification procedures regarding its vegetation management practices. Duquesne Light or its representatives (referred to collectively as Duquesne Light) notify landowners of routine vegetation management, such as maintenance of the right-of-way corridor, approximately 2-8 weeks prior to the scheduled vegetation management work. Duquesne Light typically makes at least one attempt at in-person contact with each landowner, except for landowners who reside outside of Duquesne Light's service territory, whom Duquesne Light contacts via telephone, mail or email. At such initial contact, Duquesne Light provides information regarding the scheduled work, including:

- A brief explanation of what and when work will be performed;
- Why the work is necessary;
- A general location of the work and utility facilities involved;
- The extent of work and how it will be performed;
- The contractor to perform the work and crew members involved; and
- Contact information for customer questions or follow-up.

Also at these in-person visits, Duquesne Light marks trees affected with either flagging or paint (blue for those identified for removal, yellow for those identified for pruning), and requests a landowner signature on a written description of work.

Where the in-person contact attempt is unsuccessful, Duquesne Light marks trees as discussed above and leaves a door hanger explaining the nature, necessity, and anticipated date of the scheduled work, as well as contact information for customer questions or follow-up. Depending on the nature and extent of the scheduled work, Duquesne Light may also supplement this notice with other written correspondence mailed to the landowner or via telephone upon request by the landowner.

In addition to these individualized contacts, Duquesne Light provides general notice of its vegetation management practices through other outlets. Duquesne Light's website, [duquesnelight.com](http://duquesnelight.com), includes extensive information concerning the reasons, methods, and features of Duquesne Light's vegetation management practices, as well as links to other educational sites for customers who wish to learn more. Duquesne Light staff also participate in periodic public events, such as the annual Pittsburgh Home & Garden Show, where they are available to respond directly to landowner questions or concerns.

*(5) Provision of a copy of a landowner maintenance agreement that describes the duties and responsibilities of landowners and the utility for vegetation management to the extent utilized.*

Landowners' and Duquesne Light's respective rights and responsibilities are perpetualized in the right-of-way and easement agreements between Duquesne Light and respective landowners. In general, landowners can continue to use the right-of-way area, so long as such use is compatible with the safe and reliable operation and maintenance of Duquesne Light facilities. Compatible uses that require no prior review or approval from the Duquesne Light include agricultural farming and gardening. Duquesne Light also allows compatible development within the right-of-way area, provided that the design and work in the area does not interfere with the safe and reliable operation and maintenance of Duquesne Light facilities. Such uses can include:

grading, installation of roadways or parking lots, and installation of underground infrastructure (such as utilities).



# Attachment 13



Duquesne Light Company  
411 Seventh Avenue  
Pittsburgh, PA 15219  
May 3, 2016

Dear Resident:

Duquesne Light is committed to maintaining a level of reliability customers have come to expect from us. In the coming months, we will be conducting land surveys and field studies to evaluate our infrastructure for future improvements. You are receiving this letter because your property is within our Right of Way under a network of transmission lines.

Duquesne Light has engaged GAI Consultants, an engineering consulting firm, to assist us with this work. Together we will be looking at Duquesne Light infrastructure and surrounding land, documenting existing conditions and conducting land surveys and field studies for vegetation and wildlife. This will occur initially in May and then again in July and August. Because of the nocturnal nature of some wildlife, some of these studies will need to be conducted at night in specific areas. Our work will be performed safely, courteously and as quickly as possible. No wildlife will be harmed in any way during these studies.

A Duquesne Light or GAI employee will notify you in advance that we will be accessing the Right of Way. The representative will show proper identification and clearly state the purpose of the visit. If no one is home, Duquesne Light will leave a door tag notice and proceed with the land survey and field study.

Should you have any concerns, please contact Duquesne Light by calling our Customer Service Center at (412) 393-7100 between 8:00 a.m. and 5:00 p.m.

Thank you for your cooperation and assistance in this matter.

Sincerely,

Duquesne Light Company



January 23, 2017

Dear Duquesne Light Customer:

As our communities continue to develop and thrive, the demand for energy is growing. As a result, Duquesne Light Company is working to maintain a level of service and reliability customers have come to expect while increasing the overall resiliency of the grid. Our dedication to improving the way energy is delivered is just one of the many ways we are working to become your next generation energy company.

Duquesne Light customers in Moon Township, Robinson Township, Kennedy Township, Crescent Township, McKees Rocks Borough, and the City of Pittsburgh are served by a network of 138-kilovolt transmission lines that were originally installed when the region looked very different than it does today. This network needs to be upgraded to better serve our customers who live or work in this part of the region. As such, we are planning to replace the transmission line that stretches from our substation in Crescent Township to our substation located on Brunot Island on the Ohio River, just west of downtown Pittsburgh. We are referring to this important effort as the Brunot Island-Crescent Transmission Reliability Project.

You are receiving this letter because, over the next few months, you may see Duquesne Light employees or associates in your neighborhood conducting field studies and soil testing. We can assure you that our studies will be performed as safely, courteously and as quickly as possible. If your property is along the transmission route, you will be receiving additional communication in the near future.

To give you and your neighbors a chance to learn more about this important project, Duquesne Light will be hosting multiple open house meetings to gather input and answer questions. Our goal is to keep you informed, to listen carefully to your comments, and to incorporate your input wherever we can. Please choose the date and location that is most convenient for you. Upcoming open houses include:

- *Crescent Township Municipal Building*, 225 Spring Run Road, Crescent, Pa 15046, on February 21, 2017 from 4 p.m. to 7 p.m.
- *VFW Post 418 Hall*, 1242 Chartiers Ave., McKees Rocks, Pa 15136, on February 28, 2017 from 2 p.m. to 7 p.m.
- *Kennedy Township Independent Volunteer Fire Company*, 1796 Pine Hollow Road, McKees Rocks, Pa 15136, on March 2, 2017 from 4 p.m. to 7 p.m.

Should you have any concerns, please contact Travis Moore, Brunot Island-Crescent Transmission Reliability Project Manager at (412) 393-6500 or email [BI-Crescent@duqlight.com](mailto:BI-Crescent@duqlight.com). Additional information can be found at [DuquesneLight.com/BI-Crescent](http://DuquesneLight.com/BI-Crescent). Thank you for your cooperation and assistance in this matter.

Sincerely,

Duquesne Light Company



January 30, 2017

<Address 1>  
<Address 2>  
<City, State, Zip>  
Parcel ID: <XXX-XXX-XXX>

Dear Duquesne Light Customer:

You recently received a letter about an important project that will be occurring in your area. The Brunot Island-Crescent Transmission Reliability Project is intended to upgrade the transmission line that stretches from our substation in Crescent Township, PA, to our substation located on Brunot Island on the Ohio River, just west of downtown Pittsburgh. This work will help us continue to maintain a level of reliability you have come to expect while increasing the overall resiliency of the grid.

You are receiving this letter because you own property in the proposed route of the transmission line. Duquesne Light has engaged GAI Consultants, an engineering consulting firm, to assist us with the work needed for this project, including field studies and soil testing. A Duquesne Light or GAI representative will show proper identification and clearly state the purpose of the visit. If no one is home, a door tag notice will be left so you are aware that someone visited your property while you were away and we will proceed with the field study. The studies will be performed safely, courteously and as quickly as possible.

Also enclosed are our Standards of Conduct guidelines, notice of eminent domain rights and Right-Of-Way maintenance practices. Duquesne Light has also engaged Burns and McDonnell, a land services company, to contact you to discuss acquiring the right of way needed to complete this project. Like GAI, a Burns and McDonnell representative will show proper identification and clearly state the purpose of the visit.

To give you and your neighbors a chance to learn more about the Brunot Island-Crescent Transmission Reliability Project, Duquesne Light is hosting multiple open house meetings to gather input and answer questions. Our goal is to keep you informed, to listen carefully to your comments, and to incorporate your input wherever we can. Please choose the date and location that is most convenient for you. Upcoming open houses include:

- *Crescent Township Municipal Building*, 225 Spring Run Road, Crescent, Pa 15046, on February 21, 2017 from 4 p.m. to 7 p.m.
- *VFW Post 418 Hall*, 1242 Chartiers Ave., McKees Rocks, Pa 15136, on February 28, 2017 from 2 p.m. to 7 p.m.
- *Kennedy Township Independent Volunteer Fire Company*, 1796 Pine Hollow Road, McKees Rocks, Pa 15136, on March 2, 2017 from 4 p.m. to 7 p.m.

Should you have any concerns, please contact Travis Moore, Brunot Island-Crescent Transmission Reliability Project Manager at (412) 393-6500 or email [BI-Crescent@duqlight.com](mailto:BI-Crescent@duqlight.com). Additional information can be found at [DuquesneLight.com/BI-Crescent](http://DuquesneLight.com/BI-Crescent). Thank you for your cooperation and assistance in this matter.

Sincerely,

Duquesne Light Company  
411 Seventh Avenue  
Pittsburgh, PA 15219



**NOTICE  
INTERNAL PRACTICES FOR DEALING WITH  
THE PUBLIC ON POWER LINE PROJECTS**

Duquesne Light Company has a long-standing commitment to conducting business in an honest and ethical manner. Duquesne Light's employees, contractors and agents who interact with members of the public (including landowners along proposed rights-of-way) in activities such as planning; real estate and right-of-way transactions and construction of power lines and other facilities will:

- Act with integrity at all times.
- Treat people courteously and in a professional manner.
- Be forthright and honest in all actions and communications.
- Comply with applicable laws and regulations.
- Seek to avoid conflicts of interest.
- Accept responsibility for actions and decisions.
- Be responsible stewards of the environment.
- Place a high priority on the safety of the public and our representatives and employees.



**NOTICE  
EMINENT DOMAIN POWER**

The Pennsylvania Public Utility Commission requires that Duquesne Light Company give you the following information:

Duquesne Light Company is presently planning to upgrade the 138 kilovolt (kV) electric transmission line from the Crescent Substation in Crescent Township, PA, to the Brunot Island Substation in the Ohio River, Pittsburgh, PA, as part of the Brunot Island-Crescent Transmission Reliability Project. Replacing this transmission line is needed to ensure reliable electric service for Allegheny and Beaver County. Although the final design of the transmission line is not complete, the line includes approximately 110 self-supporting steel monopoles on drilled pier reinforced concrete foundations. The monopoles will be less than 200 feet in height.

Since the route presently under consideration could affect your property, a representative of the utility will contact you in the near future to discuss the utility's plans as they may affect your property. In order to better prepare you for these discussions and to avoid possible misunderstandings, we want to take this opportunity to inform you of your legal rights and the legal rights and duties of Duquesne Light Company with regard to this project.

You have the right to have legal counsel represent you in these negotiations. You do not have to sign any agreement without the advice of counsel. If you do not know an attorney, you may contact your local bar association.

**MUST YOU ACCEPT ANY OFFER MADE BY THE UTILITY FOR YOUR PROPERTY?**

No. You may refuse to accept it. However, the utility has the power to take property by eminent domain, subject to the approval of the Public Utility Commission, for the construction of transmission lines if the utility is unable to negotiate an agreement to buy a right-of-way. If your property is condemned, you must be paid "just compensation." "Just compensation" has been defined by the courts in Pennsylvania as the difference between the fair market value of your property before condemnation, unaffected by the condemnation, and the fair market value of your remaining property after condemnation, as affected by the condemnation.

**CAN THE UTILITY CONDEMN YOUR HOUSE?**

No. The company cannot condemn your house or a reasonable "curtilage" around your house. Generally, curtilage includes the land or buildings within 300 feet of your house which are used for your domestic purposes. However, the 300-foot limit does not automatically extend beyond the homeowner's property line.



## **DO YOU HAVE A RIGHT TO A PUBLIC HEARING WHEN THE UTILITY SEEKS TO CONDEMN YOUR PROPERTY?**

Yes. When an electric utility seeks to have your property condemned, the utility must first apply to the Pennsylvania Public Utility Commission for a certificate finding the condemnation to be necessary or proper for the service, accommodation, convenience, or safety of the public. The Commission will then hold a public hearing. As the landowner whose property may be condemned, you are a party to the proceeding and may retain counsel, present evidence, and/or testify yourself in opposition to the application for a certification. If you wish to testify at the public hearing, you should make your intention known by letter to Secretary, Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, Pennsylvania 17120.

If the Commission approves the utility's application for a certificate finding the condemnation in the public interest, then the utility may proceed before the local Court of Common Pleas to condemn your land. If the Commission denies the utility's application, the utility cannot condemn your land. If you retain an attorney to represent you before the Commission, you must do so at your own expense.

The Commission will not decide how much money you should receive if your land is condemned. The only issue the Commission will decide is whether the condemnation serves the public interest. If the Commission approves the utility's application for condemnation, the amount of money to which you are entitled will be determined by a local Board of View or the Court of Common Pleas. However, you may at any time make an agreement with the utility as to the amount of damages you are to be paid.



## **NOTICE RIGHT OF WAY MAINTENANCE PRACTICES**

The Pennsylvania Public Utility Commission requires that Duquesne Light Company give you the following information on the Right-Of-Way Maintenance Practices for the Brunot Island-Crescent Transmission Reliability Project:

If you wish further information concerning right-of-way maintenance methods, you may contact Travis Moore at (412) 393-6500 or [BI-Crescent@duqlight.com](mailto:BI-Crescent@duqlight.com). You may discuss with Mr. Moore, either before or during negotiation of the right-of-way agreement, these methods and any other questions you may have about right-of-way maintenance.

Once a utility has constructed an electric transmission line on a right-of-way across your land, the utility must maintain the right-of-way free of tall-growing trees and brush which might impair the reliability of electric service, the safety of the line, and access to the line or its towers. The utility or its contractors may remove and control tall-growing trees and brush by several methods: hand cutting of trees, limbs, and brush; mechanical cutting with chain saws, motorized cutting machines, or aerial saws; application of herbicides, either from the ground or aerially. The utility must confine its maintenance activities to the approved right-of-way across your land, except where tall-growing trees or brush or their root systems grow into the right-of-way from adjoining land and constitute a threat to the electric transmission line and its structures.

If you believe that the maintenance method(s) used by the company would raise problems with your use of your land adjacent to the right-of-way, it is your responsibility as the landowner to bring this to the attention of the utility before you sign the right-of-way agreement.

The utility company has the responsibility to maintain its right-of-way, and regular maintenance must occur. Although you as the landowner cannot determine whether or not maintenance will occur, your right-of-way agreement may specify certain conditions on the performance of the maintenance program which are important to you. These conditions can be part of the negotiations between you and the utility company for your land, since a right-of-way agreement is a legal contract between a landowner and a utility company. It is important for you to understand also that the maintenance methods used by the utility company may change over time as the costs of maintenance or the methods of performing maintenance change. You may want to specify in your right-of-way agreement that the utility company inform you of changes in its maintenance methods or in the maintenance schedule for your land.

The provisions of the right-of-way agreement are enforceable in the local Court of Common Pleas. The right-of-way agreement cannot be enforced by the Pennsylvania Public Utility Commission. Any claims for damage resulting from improper maintenance of the right-of-way must be settled with the utility, its contractors, or in the local Court of Common Pleas at your own expense. The Commission cannot award damages for violations of the right-of-way agreement.





January 30, 2017

<Address 1>  
<Address 2>  
<City, State, Zip>  
Parcel ID: <XXX-XXX-XXX>

Dear Duquesne Light Customer:

You recently received a letter about an important project that will be occurring in your area. The Brunot Island-Crescent Transmission Reliability Project is intended to upgrade the transmission line that stretches from our substation in Crescent Township, PA, to our substation located on Brunot Island on the Ohio River, just west of downtown Pittsburgh. This work will help us continue to maintain a level of reliability you have come to expect while increasing the overall resiliency of the grid.

You are receiving this letter because you own property in the proposed route of the transmission line. Duquesne Light has engaged GAI Consultants, an engineering consulting firm, to assist us with the work needed for this project, including field studies and soil testing, and will need to access your property for further evaluation. Enclosed is a Permission Form for your review, signature, and return.

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**PERMISSION FORM**

In order to complete the design of this critical infrastructure project and enhance the reliability of its services in your area, Duquesne Light Company will need to access your property to evaluate property boundaries, environmental, and archeological issues.

All representatives accessing your property under this Permission Form, including Duquesne Light Company, GAI Consultants, and Burns and McDonnell will show proper identification and clearly state the purpose of the visit. Following return of this form, If no one is home, a door tag notice will be left, and we will proceed with the evaluation.

Please sign below and return this Permission Form using the enclosed envelope as soon as possible. If you have any questions, please contact Travis Moore at (412) 393-6500 or [Bl-Crescent@duqlight.com](mailto:Bl-Crescent@duqlight.com) .

**Duquesne Light Company and/or its agents or contractors may enter onto my property for the purpose of performing the above evaluation.**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Address(es): \_\_\_\_\_

Parcel ID(s): \_\_\_\_\_  
(listed on Page 1)

Telephone Number: \_\_\_\_\_

Date: \_\_\_\_\_