

Birdsill, Cynthia

From: Leen, Craig
Sent: Friday, July 18, 2014 5:49 PM
To: Olazabal, Carmen; Birdsill, Cynthia; Merrett Sterheim
Subject: Fwd: UG Study Follow Up

FYI.

Sent from my iPhone

Begin forwarded message:

From: "Scroggs, Steven" <Steven.Scroggs@fpl.com>
Date: July 18, 2014 at 4:10:12 PM EDT
To: "cleen@coralgables.com" <cleen@coralgables.com>
Cc: "Tammaro, Michael" <Michael.Tammaro@fpl.com>
Subject: UG Study Follow Up

Craig,

As you may know we provided the study and other information last Friday, and the cost estimates yesterday. Below is a quick summary.

The estimate is provided in four perspectives:

- Cost to underground the new 230 kV in combination with the existing 138 kV transmission (\$51.6 million, \$20.6 million/mile).
- Cost to underground the new 230 kV transmission alone (\$35.1 million, \$14.04 million/mile). This compares to the \$13.3 - \$18.5 million/mile estimate provided during the SCA process.
- The detailed materials and labor cost estimate that serves as the basis for our full project estimate.
- Cost to underground existing distribution (\$610,000).

The costs are built up from the detailed study conducted by Power Engineers. The estimate includes credits for avoided overhead construction and salvage, as appropriate. There are opportunities to improve the costs, depending on the City's participation, and how the project is executed (i.e., contingency required).

We have made an offer to meet with staff, but have heard nothing back at this point. I know that at one point, the issue was considered for discussion at the 7/22 meeting. Do you have any information on that? Trying to ensure we have appropriate support, if needed.

I will be traveling on company business for the next several weeks, but can be available (with planning) to participate in conference calls.

Sincerely,

Steven D. Scroggs
Senior Director, Project Development

Florida Power & Light Company
O: 561-694-5051



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Florida Power & Light Company, 4200 West Flagler Street, Miami, FL 33134
Phone: 305-442-5454

July 11, 2014

Ms. Carmen Olazabal
City Manager
City of Coral Gables
405 Biltmore Way
Coral Gables, FL

Ms. Olazabal:

As discussed, attached are a number of documents that together constitute the undergrounding study (the "Study") requested by the City of Coral Gables in relation to the potential relocation of existing distribution and transmission lines, and undergrounding of a proposed transmission line along Ponce De Leon Blvd. within the city limits.

As described, the Study is intended to provide specific information with respect to the costs to engineer, procure and construct the utility facilities in a specific geographic location. Further, the Study includes example agreements that would be used to execute the project. Final agreements would be executed by the parties closer to the start of construction to develop a final design and detailed cost estimate.

The following describes the components of the Study:

Attachment A A letter from FPL Transmission Engineering providing an explanation of the assumptions used in creating this conceptual cost estimate, and how the City should use this information.

Attachment B An engineering study conducted by Power Engineers providing the complete description of the assumed route alignment, recommended equipment, materials and construction methods for the contemplated projects.

Attachment C Example forms for the execution of the project, including a Facilities Relocation Agreement (Transmission) and the Underground Facilities Conversion Agreement (Distribution).

Attachment D A detailed cost estimate for the execution of the project. The cost estimate combines the technical requirements including FPL's engineering and project management costs. Appropriate credits, including any credits for salvage or credits available per the distribution tariff are also estimated. [To be provided July 16th]

Attachment E Answers to specific questions developed by dialogue between FPL and City staff over the course of our discussion.

Carmen Olazabal
Page 2

FPL is available to answer your questions with reasonable notification. I will be out of the office the week of July 14, 2014 returning on Monday July 21, 2014. If you have any questions within this period, Please contact Mr. Armando Fernandez at 305-442-5420 and he will help facilitate a response.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Ferrer', with a stylized flourish at the end.

Ramon Ferrer
External Affairs Manager
Florida Power & Light Company

cc:

Craig Leen, City Attorney
Glenn Kephart, Public Works Director
Armando Fernandez, FPL
Victor Muniz, FPL

Attachment "A"



Transmission Engineering – TS4/JW
P.O. Box 14000, Juno Beach, FL 33408-0420

July 11, 2014

Ms. Carmen Olazabal
City Manager
City of Coral Gables
405 Biltmore Way
Coral Gables, FL 33134

Re: Requested Underground Transmission Line in Coral Gables

Dear Ms. Olazabal:

In response to the City's request, FPL has taken a look at opportunities and challenges associated with unique project components:

- Installation of a new underground Transmission line (to be constructed at 230-kV and initially operated at 138-kV parallel to the existing 138-kV line along Ponce de Leon Boulevard) in place of the overhead Transmission line proposed to be collocated with the existing 138-kV Transmission line using FPL's standard overhead construction design practice and removal of the existing 138-kV overhead Transmission line located along the east side of Ponce de Leon Boulevard between approximately Red Road on the south end and SW 38th Avenue on the north and replacement with an underground Transmission line of similar rating and capacity.
 - This estimate includes the installation of 230-kV underground facilities and includes a reduction for the estimated cost to install the proposed overhead transmission line.
 - This estimate assumes the 230-kV and 138-kV lines are placed underground at the same time and includes the installation of 138-kV underground facilities and the removal of existing 138-kV overhead facilities.
- Conversion of existing overhead Distribution facilities to underground facilities along the east side of Ponce de Leon Boulevard between approximately Red Road and Carillo Street.
 - This estimate includes the installation of underground facilities and the removal of existing overhead facilities.

Each Transmission line is designed to operate independently and will be connected at unique termination points to integrate FPL's Transmission and Substation electrical infrastructure. For instance, the existing 138-kV Transmission line crosses Ponce de Leon Boulevard twice to "loop" in and out of FPL's University substation located on the west side of the road just north of the University Metrorail station.

Nature of the Estimates

This estimate is preliminary in nature, is non-binding and is not an offer from FPL to perform the requested work. The cost estimate is the estimated amount to be paid

an FPL Group company

by the applicant to FPL, which includes appropriate credits known at this time. Opportunities for the City to contribute in other ways will be outlined later in this letter and would be credited to reduce the final cost of the project accordingly.

For clarity, it is noted that this non-binding cost estimate does not include the following items:

- The cost to bury any facilities belonging to any other utility (such as phone or cable).
- The cost to convert any facilities owned by individual customers such as traffic signals or other service drops which would be the responsibility of the applicant. (Preliminary review has not identified the presence of other utilities at this time.)
- Costs associated with restoration of property affected by the conversion (beyond sod replacement and pavement patching).
- Acquisition and recording of easements.
- Any efforts required to clear trench routes.

This non-binding estimate is based on limited due diligence performed on an expedited schedule. A detailed estimate will be developed in the future should you decide to continue to pursue underground construction of the transmission line. At that time, a deposit from the City (to be credited toward the final project) would be used to develop the final design (final alignments, underground surveys, soil characterization, current material and labor quotes, specific location of termination structures) and establish final alignments of facilities to be installed. An alignment has been assumed as part of the report but final alignment will depend on the ability of the City to provide adequate property interests.

It is important to note that the requesting party would only be responsible for the final (actual) cost for FPL to construct the project. The cost estimate includes contingency which may or may not be required. The estimate provided addresses the total cost of the project, and includes a number of project cost components. These include labor, material, engineering, and project management costs, along with FPL's General and Administrative cost (G&A). The final cost to the City will be based upon the actual cost of the project with credits such as requesting parties contractor participation, salvage, avoided cost of OH and others based on current regulatory practice.

Easements/Property Rights

An underground transmission system is constructed differently than an overhead system. Typically, overhead systems exist as part of a county or municipal right-of-way, and when necessary, as part of a specific easement. In contrast, an underground system requires more space than can typically be accommodated within easements for overhead facilities along road rights-of-way. In this project, intermediate splice locations (manholes) will be required. Facilities for an underground transmission system will typically be placed on private property with the exception of crossing road rights-of-way. Where constructed on private property, an approximately 30 foot permanent easement (plus and additional temporary construction easement along the route and at cable pulling locations) for the underground facilities is required. For requests to relocate electrical transmission facilities, requesting parties are responsible for providing appropriate property rights. Describing, securing, and recording easements or other

property rights, with opinions of title, will be required as part of this process and are not included in the cost estimates.

City Participation

It is our understanding the City has expressed a desire to partner with FPL in the construction of this project and be responsible for certain tasks to contribute to the success of the project. While it is not appropriate for the City to oversee the civil or electrical portion of the project, there are several areas where FPL may be agreeable to allow the City to participate in contributing resources that are listed below in addition to the property rights mentioned above if agreeable to FPL's Contractor:

- Provide a secure staging site for the contractor to store materials and equipment in close proximity to the project.
- Provide project security to ensure materials are not stolen.
- Provide for Maintenance of Traffic (MOT) and Metrorail flagman services if necessary.
- Surveying services.
- Coordination to resolve utility conflicts.
- Provide a site to deposit excavated materials for disposal by the City.
- Restoration following all construction activities.
- Consider allowing use of open cut trench for road crossings with City restoration of the roadway.
- Provide a liaison to address customer inquiries and concerns.

Next Steps

If the City decides to continue discussing the placement of the transmission lines underground, please let us know. We would be happy to meet further with you to discuss the technical factors that will need to be considered, the potential construction impacts to your community during construction and the agreements and timing for moving to the next stage.

Should you have any questions or need any additional information of a technical nature, please do not hesitate in contacting me at (561) 904-3694.

Sincerely,

David K. Weda, PE
Transmission Engineering Manager

cc: Craig Leen, City Attorney
Glenn Kephart, Director of Public Works
Victor Muniz, FPL
Armando Fernandez, FPL
Ramon Ferrer, FPL

Attachment "B"



July 11, 2014

FLORIDA POWER & LIGHT

Coral Gables

Underground Transmission Cost Estimate Report

DRAFT

DRAFT – For Discussion Purposes Only

PROJECT NUMBER:
128328

PROJECT CONTACT:
POWER ENGINEERS, INC.



Underground Report

PREPARED FOR: FPL

PREPARED BY: POWER ENGINEERS, INC.

REVISION HISTORY		
DATE	REVISED BY	REVISION
7/11/14	POWER Engineers, Inc.	Issued for Review

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1.0 EXECUTIVE SUMMARY

The City of Coral Gables has requested that Florida Power & Light (FPL) perform a cost estimate analysis to underground an existing 138 kV overhead transmission circuit, combined with FPL's new proposed 230 kV transmission circuit within their City limits. The new underground construction would parallel the Miami Metro Rail and Ponce De Leon Blvd, and is approximately 2.5 miles in length.

POWER Engineers, Inc. (POWER) was selected to study the conceptual underground cable system for this project. Overhead transmission lines generally have larger power transfer capacity when compared to an equivalent insulated cable in an underground installation. Underground cable manufacturers are also limited in the size conductor they can produce to achieve a line rating with one cable per phase. POWER performed ampacity calculations based on an extruded dielectric cable system to determine preliminary cable sizing requirements and concluded that one cable per phase would achieve the desired rating for the 138 kV transmission line, and two cables per phase for the 230 kV transmission line. The high voltage insulated cables would contain large copper conductors to meet the FPL rating requirements.

The most basic and economical method for constructing an underground transmission line is by open-cut trenching and placement of a concrete encased duct bank, which would be the preferred configuration for the installation of the new lines in Coral Gables.

Trenchless methods would also be necessary for crossing major obstructions, and for this evaluation it was assumed that there are only a couple of areas along the route which would require them. These are: 1) the Coral Gables Waterway between Orduna Dr. and Riviera Dr. and 2) the crossing of Le Jeune Rd. Additional trenchless crossings may be required due to environmental and/or design restriction imposed by the City of Coral Gables for crossing of roadways. As previously mentioned, FPL's preference would be to open excavate as much as possible, and this could be accomplished by performing the construction in stages or at night to minimize impact to the public.

A summary of the cost estimates are in Figures 6-1 and 6-2 found in Section 6.2. Note, there are two alternatives for consideration:

- The installation of 138 kV and 230 kV underground transmission lines only within the City limits of Coral Gables.
- The additional installation of 138 kV and 230 kV underground transmission at the north and south end of the route which would extend the line in an underground configuration to the Coconut Grove and South Miami Substation's, respectively. This would eliminate the large transition structures that would need to be located within the Coral Gables City limits for the base alternative.

The estimates at this stage are qualified as being 'Class 4 Study or Feasibility', as recommended by the Association for the Advancement of Cost Engineering International (see www.aacei.org). Typical accuracy at this level is L: -15% to -30%; H: +20% to +50%.

2.0 PROJECT DESCRIPTION

The City of Coral Gables has requested that Florida Power & Light (FPL) perform a cost estimate analysis to underground an existing 138 kV overhead transmission circuit, combined with FPL's new proposed 230 kV transmission circuit within their City limits. The new underground construction would parallel the Miami metro rail and Ponce De Leon Blvd, and is approximately 2.5 miles in length.

POWER Engineers, Inc. (POWER) was selected to study the conceptual underground cable system for this project. It was assumed that each transmission line would utilize cross-linked polyethylene (XLPE) insulated cables.

This report describes and summarizes:

- A description for the cable system, including civil and cable installation requirements and terminals,
- The conceptual design in Coral Gables for new underground transmission lines,
- Preliminary cable design concept, and
- Cost estimates.

Appendix A contains conceptual plan drawings for the underground transmission route.

Appendix B contains the detailed cost estimate breakdown.

DRAFT

3.0 UNDERGROUND TRANSMISSION SYSTEM

In this section, a description of the requirements for underground transmission systems utilizing extruded dielectric cables is provided, as it relates to the requirements for this project.

3.1 Extruded Dielectric Cable Systems

High voltage extruded dielectric cable installations in the U.S. are commonly in duct banks within roadways/right-of-ways or other easements, one cable per duct, because direct burial and tunnel installations have not proven practical in city streets.

3.1.1 Cable

The components of a typical dielectric cable are shown in Figure 3-1. The typical cable consists of a stranded copper or aluminum conductor, inner semi-conducting conductor shield, extruded solid dielectric insulation, outer semi-conducting shield, a metallic moisture barrier, and a protective jacket.

The major insulation materials used for solid dielectric cables include ethylene propylene rubber (EPR) or cross-linked polyethylene (XLPE) thermosetting insulation compounds.

For voltages over 69 kV, the preferred insulation in the U.S. for an extruded cable system is XLPE. This is due to the higher dielectric losses associated with EPR-insulated cables. For undergrounding the FPL transmission lines with an extruded cable system, the insulation would be XLPE.

Materials used for semi-conducting extruded conductor and insulation shields are semi-conducting polyethylene (PE), XLPE, or EPR compounds.

Cable jackets are typically extruded PE, and can be high, medium, low, or linear low-density polyethylene.

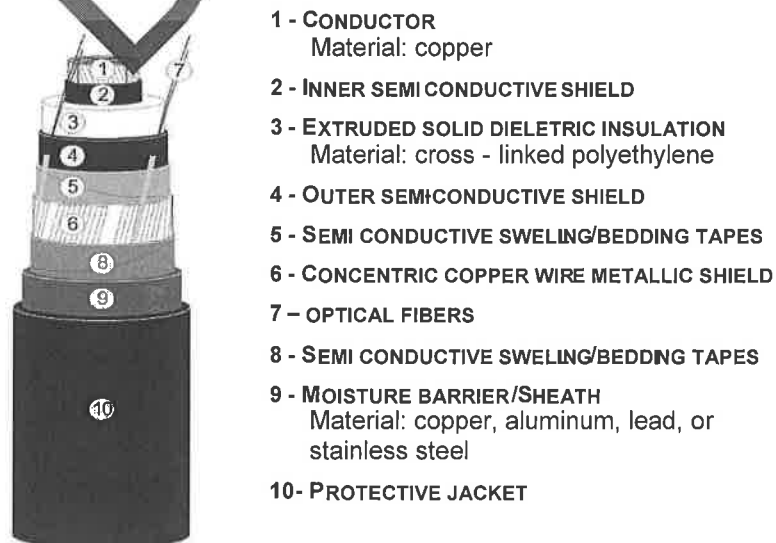


Figure 3-1: Typical XLPE Cable

The manufacturing process for extruded cables is of critical importance in ensuring a reliable end product. Triple extrusion is the preferred and recommended technique. Most transmission cable manufacturers use this “true triple head” extrusion technique today. Microscopic voids and contaminants can lead to cable failures. As such, quality control during manufacture of extruded dielectric cables is critical to minimize moisture contamination, voids, contaminants and protrusions. Manufacturers minimize insulation contamination by using super clean insulation compounds, transporting and storing the compounds in sealed facilities, and screening out contaminants at the extruder head.

3.1.2 Cable Accessories

The fundamental cable accessories for extruded dielectric cables include splices, terminations, clamps, and sheath bonding materials.

Pre-fabricated or pre-molded splices are commonly used to join extruded dielectric cables. Cable preparation for each of these types of splices is generally the same. Insulation and shields are removed from the conductor; and the insulation is penciled near the conductor. The conductor ends are then joined by a compression splice or, if aluminum, are welded. An advantage of using these types of splices is that all parts can be factory tested prior to field installation. Figure 3-2 shows typical 230 kV pre-molded splices racked within a splicing vault. 138 kV splices would be slightly smaller in design and construction.

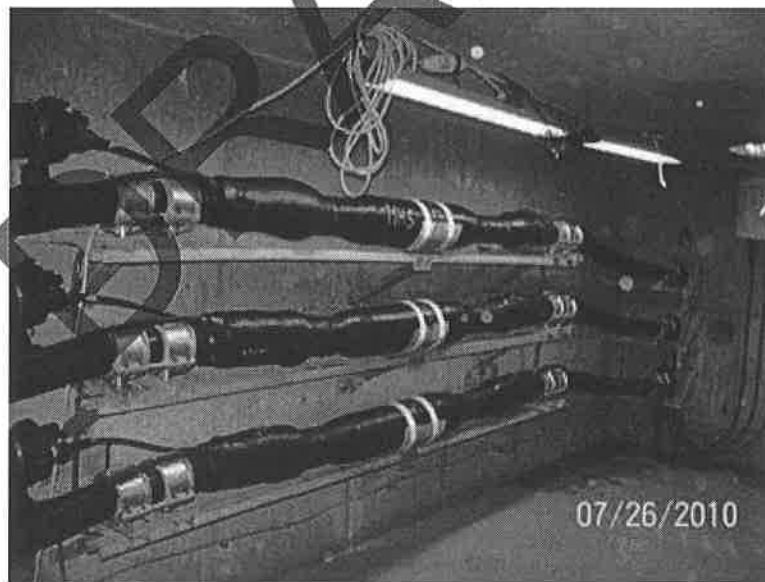


Figure 3-2 Typical 230 kV Pre-Molded XLPE Splices

Terminations are necessary for extruded dielectric cable to allow transitions to overhead lines or above ground equipment. Termination bodies are typically made of porcelain or polymer and include skirts or sheds, which provide additional surface area to minimize the probability of external flashovers due to contamination. Figure 3-3 shows typical 230 kV XLPE terminations (This type of structure would be located within FPL Substations). Like the 138 kV splices mentioned above, 138 kV terminations would be slightly smaller in design and construction.

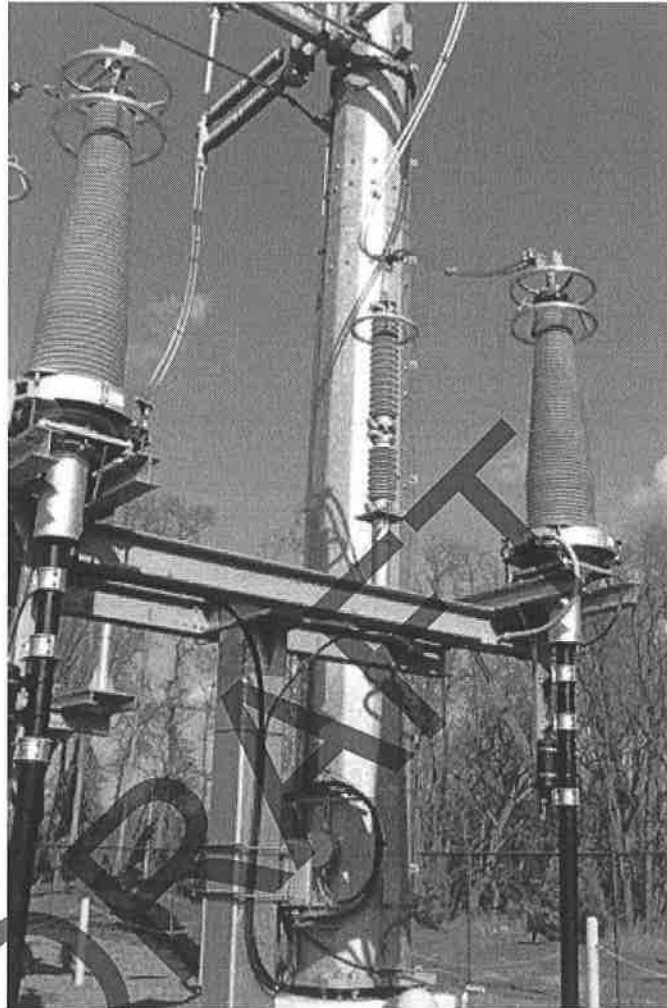


Figure 3-3 Typical 230 kV XLPE Terminations (within a Substation)

Another important component of a high voltage extruded cable system is the grounding/bonding of the cable shield. An underground distribution cable system would typically have the cable shield grounded at each splice and termination. The losses due to heat caused by circulating currents on the cable shield will result in the de-rating of the cable. One way to maximize the ampacity of an underground cable is to eliminate the circulating currents. This is accomplished with underground transmission cables by using special bonding methods such as single-point and cross-bonding. These methods reduce or even eliminate the amount of current that would flow on the cable shield resulting in no or very limited additional heating and ultimately a higher ampacity.

3.2 Civil Installation

3.2.1 Open Cut Excavation Method

The most basic and economical method for constructing an underground duct bank is by open-cut trenching, however, trenchless methods may also be necessary for crossing major obstructions. Typical construction results in the use of mechanical excavation to remove the concrete or asphalt surface (for roadways), topsoil and sub-grade material to the desired depth. Removed material is relocated to an appropriate off-site location for disposal, or occasionally reused as fill. Once a portion of the trench is opened, PVC conduit is assembled and lowered into the trench. The area around the conduit is filled with a high strength (3000 psi) thermal concrete. After the concrete is installed the trench is backfilled, generally with the native soil or an engineered backfill with favorable thermal characteristics, and the site restored. Backfill should be clean excavated material, thermal sand and/or a thermal concrete mix. Figure 3-4 shows a typical trench excavation and duct bank installation in a city street.

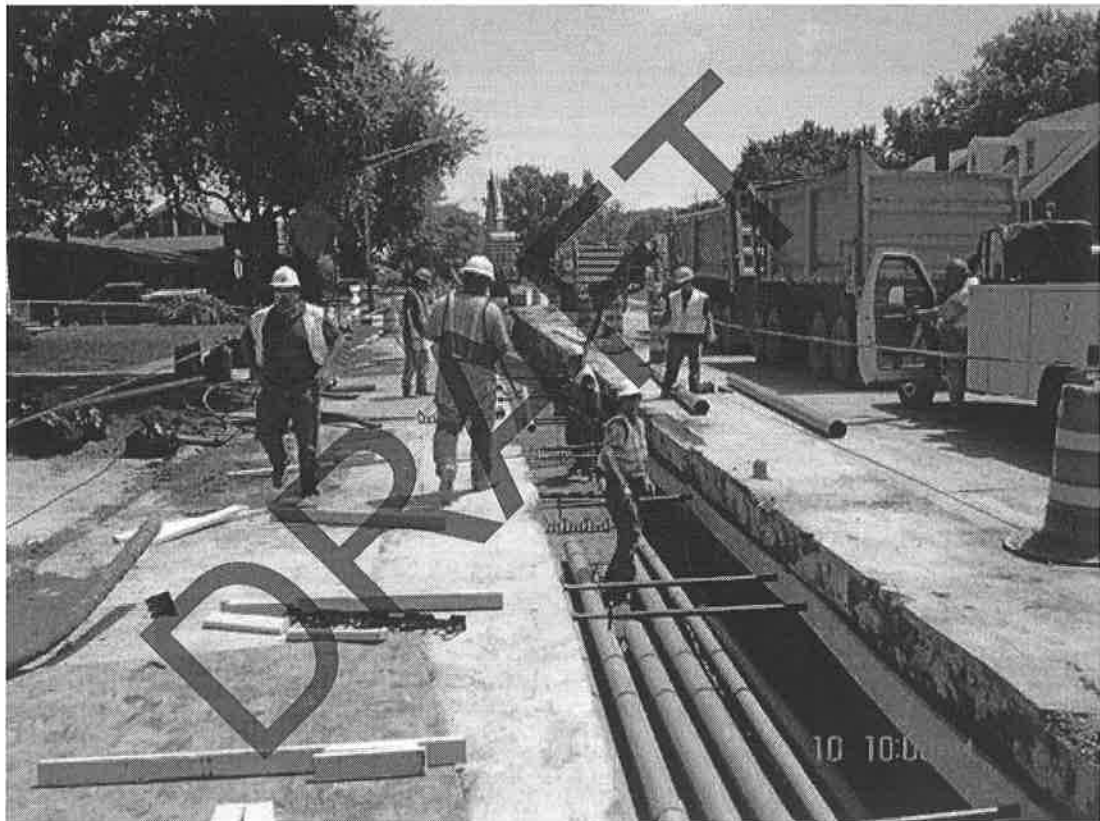


Figure 3-4 Typical trench excavation and duct bank installation

3.2.2 Trenchless Installation

With today's environmentally sensitive society, trenchless civil installation techniques have been developed for crossing environmentally sensitive areas and major obstructions, such as waterways, wetlands, highways and railroads. Three trenchless methods have commonly been used for electric facilities. These methods are:

- Pipe Jacking / Jack and Bore
- Horizontal Directional Drilling
- Micro-tunneling

Pipe Jacking / Jack and Bore

The pipe jacking and jack and bore methods are commonly used for short crossings, typically under 400 feet, and where no bends are required or major water issues exist. Occasionally, these techniques have been used for longer lengths depending on the soil conditions. These techniques involve the placement of a casing under the obstruction and then installing the conduit inside the casing. With pipe jacking, spoil is removed from the advancing casing by workers inside the casing. Pipe jacking would require a 42-inch minimum casing to perform hand-work within this confined space. This method would be used in a variety of situations and often when rock excavation is expected. A jack and bore utilizes a powered auger that removes spoil from the advancing casing. A bore pit, typical dimensions of 40-ft long x 10-ft wide, is needed for boring equipment and operators, as well as for welding 20-ft sections of casing pipe together. Toward the end of the boring process, an exit pit approximately 10 ft in length will be excavated. As with trenching, the entrance and exit pits may require shoring (and possibly tight sheeting) in accordance with OSHA regulations. While this method has been used for water crossings, other methods might be preferred, as keeping the installation properly dewatered can be challenging. Figure 3-5 shows a typical conduit bundle arrangement within a jack and bore.

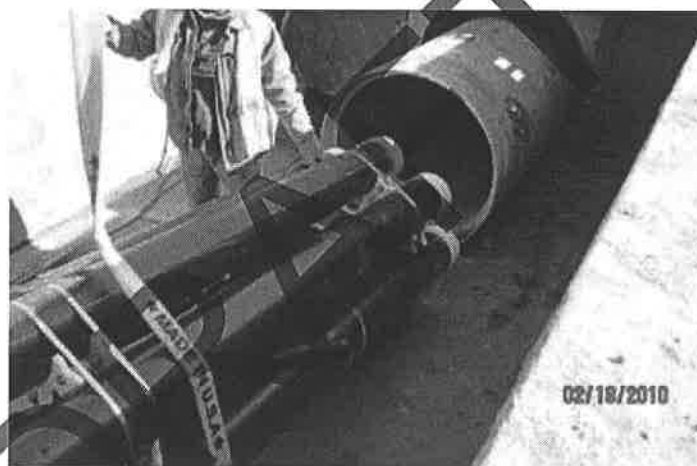


Figure 3-5 Typical Jack and Bore Conduit and Casing Arrangement

Horizontal Directional Drilling (HDD)

The HDD method is commonly used for longer crossings and where bends may be needed. A HDD installation for an XLPE cable system consists of installing a casing with conduits inside or just installing the conduits in a bundle by themselves. The HDD method consists of a three step process. First, a small diameter pilot hole is drilled from entry to exit, followed by a reamer that is pulled back to enlarge the pilot hole. Finally, the product pipe is pulled into the enlarged hole. Horizontal boring operations have become quite popular with utilities since it eliminates the need to excavate large bore pits and the work can be performed from the surface. While this method does not require any significant pit excavation, it does require a generous staging area at the entry point and exit points of the drill. A typical entry point site requires a dedicated space of about 100 ft by 150 ft with an exit area of 100 ft by 100 ft. A typical set up used at the HDD entry point is shown below in Figure 3-6 below.



Figure 3-6 Typical HDD Setup

Tunneling / Microtunneling

Another trenchless alternative is tunneling / microtunneling, which involves digging and building the tunnel simultaneously. This method may be selected if the size of the opening is too large to be accommodated by either HDD or pipe jacking / jack and bore or if water is a significant issue. This method is very costly and should only be used when the other methods cannot be used effectively and the project involves a relatively short length typically less than 200 feet. Tunneling / microtunnel applications are also used when the route length is too short for a directional drill application with a large casing. Figure 3-7 shows a typical tunnel bore machine.



Figure 3-7 Typical Tunnel Bore Machine

3.2.3 Splicing Vault Design and Installation

Access vaults are needed periodically along an underground route to facilitate cable installation, for maintenance, as well as access for future repairs. Reinforced concrete vaults are typically spaced every 1,500 to 2,500 feet along the route. The splicing vault size and layout is determined by the space required for cable pulling, splicing, and supporting the cable in the vault. The anticipated size of each splicing vault would have inside dimensions of about 6 to 8 ft wide by 22 to 26 ft long with enough headroom to allow workers to install the cable, as illustrated in Figure 3-8. A vault would be needed for each set of cables for this project, to allow FPL to perform maintenance or repair on one set of cables while keeping the other energized. This will result in the need to find sufficient space at each splice location to install three manholes. Figure 3-9 shows an underground transmission splicing vault installation for a 230 kV project. For this particular installation there were four 3-phase cable sets which required four vaults, total.

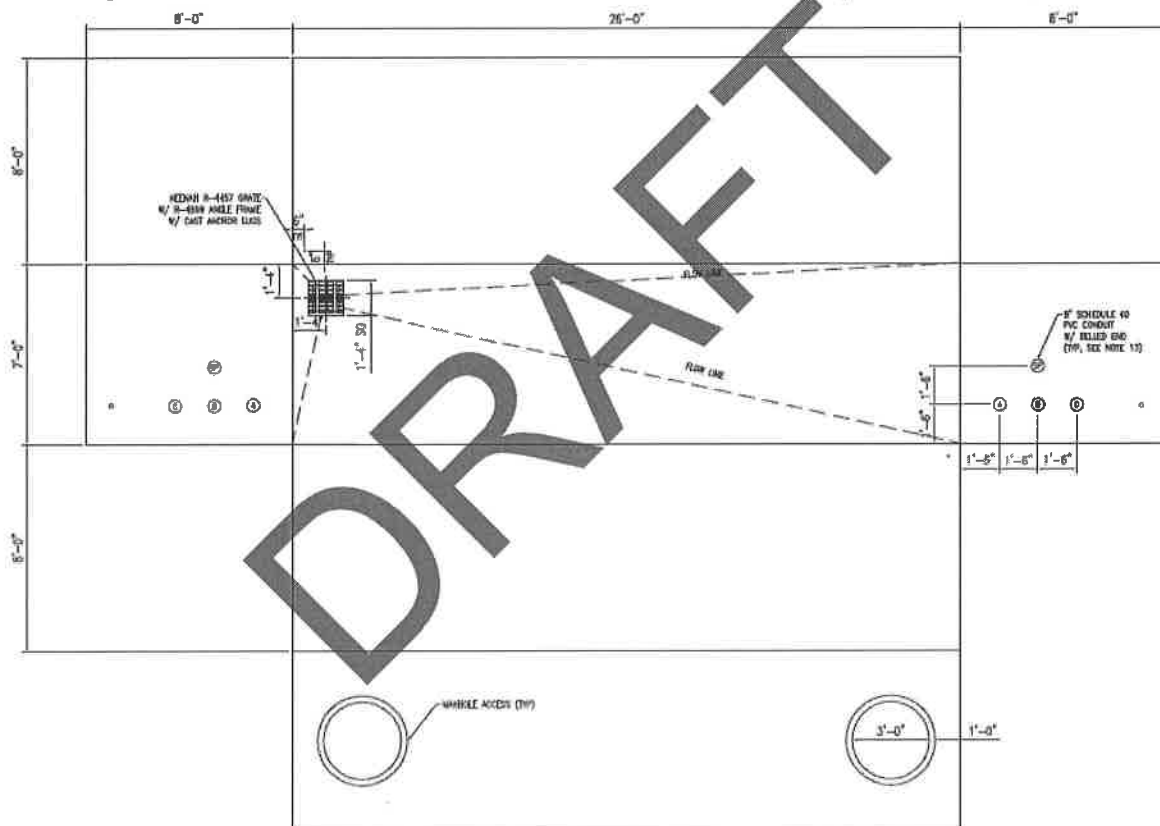


Figure 3-8 XLPE Vault Schematic

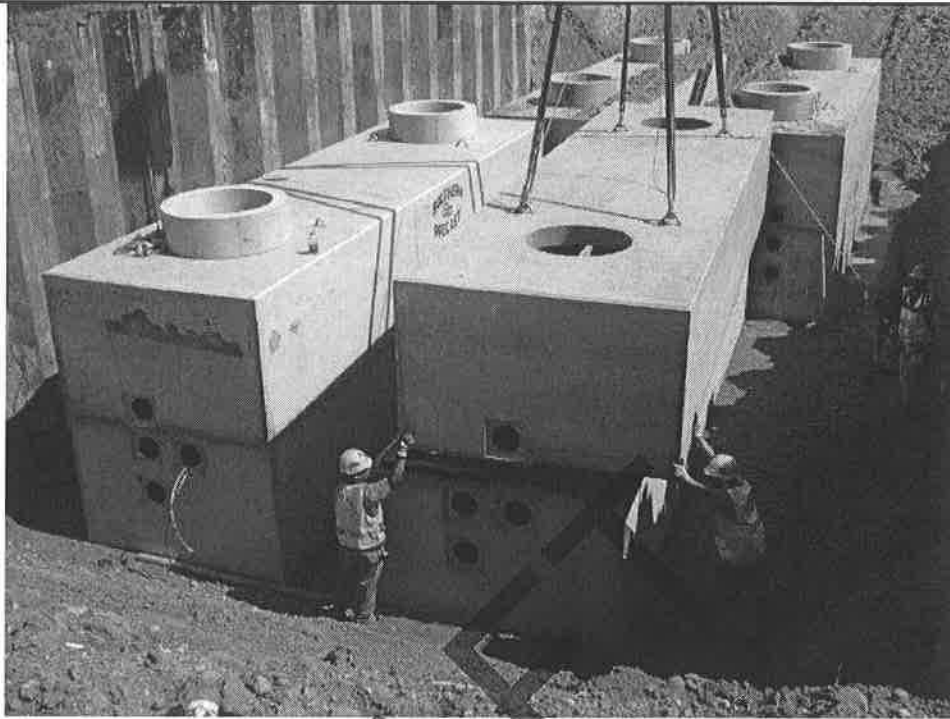


Figure 3-9 Splicing Vault Installation

The factors contributing to the final placement of the splicing vaults are: allowable pulling tensions, sidewall pressure on the cable as it goes around a bend and the maximum length of cable that can be transported on a reel based on the reel's width, height and weight.

3.3 Cable Installation and Testing

Prior to installation of the cable, the conduit system would be tested and cleaned by pulling a swab and mandrel through each of the ducts. If the mandrel is pulled successfully, the conduit would be declared suitable for installation of the cable. Cable installation procedures and equipment would be based on environmental conditions, equipment and material placement, and pulling requirements.

The typical cable pulling setup would include setting the reel of cable at the termination structure or at one of the splicing vaults and placing the winch truck at the opposite end. The cable should always be pulled from the termination structure to the nearest splicing vault. The direction of pull between vaults should be determined based on the lowest pulling tensions or sidewall pressures. After the cables have been pulled into a splicing vault from each direction, splicing could commence. This process would be followed until all the cable has been pulled, terminated or spliced. Once this has occurred the cable would be tested.

Figure 3-10 shows a typical cable reel set up.

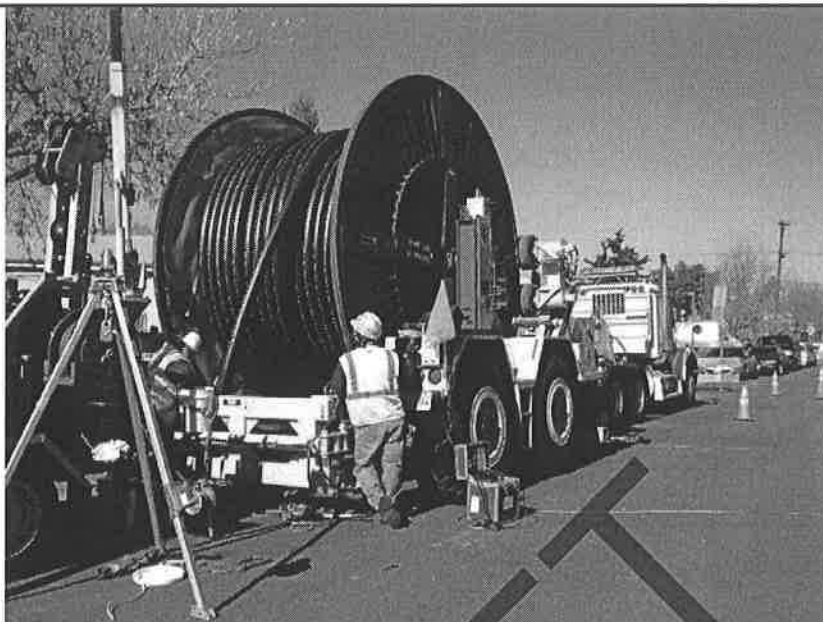


Figure 3-10 Typical Cable Pulling Set up

3.4 Termination / Transition Structures

For this project, it will be necessary to transition from underground conductors to overhead conductor on transition structures at both ends of each underground transmission circuits. This overhead to underground transition can be accommodated on a single shaft structure (steel pole), as shown in Figure 3-11. This figure represents a 230 kV installation with two cables per phase. A picture of the installation is shown in Figure 3-12 (note, only one set of cables is installed).

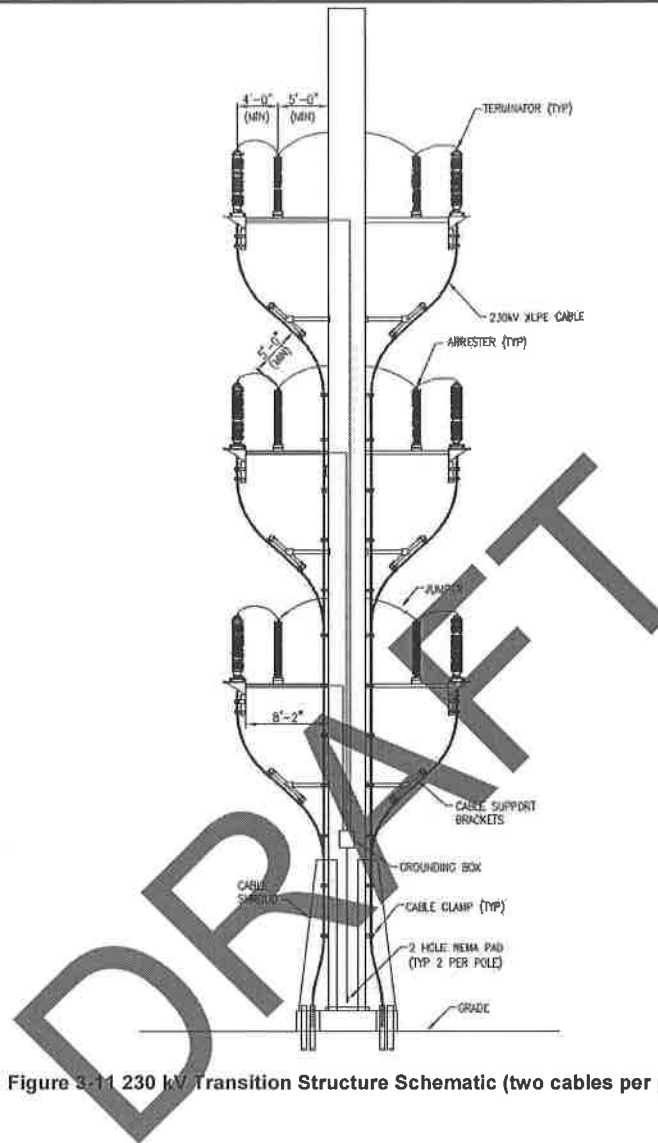


Figure 3-11 230 kV Transition Structure Schematic (two cables per phase)

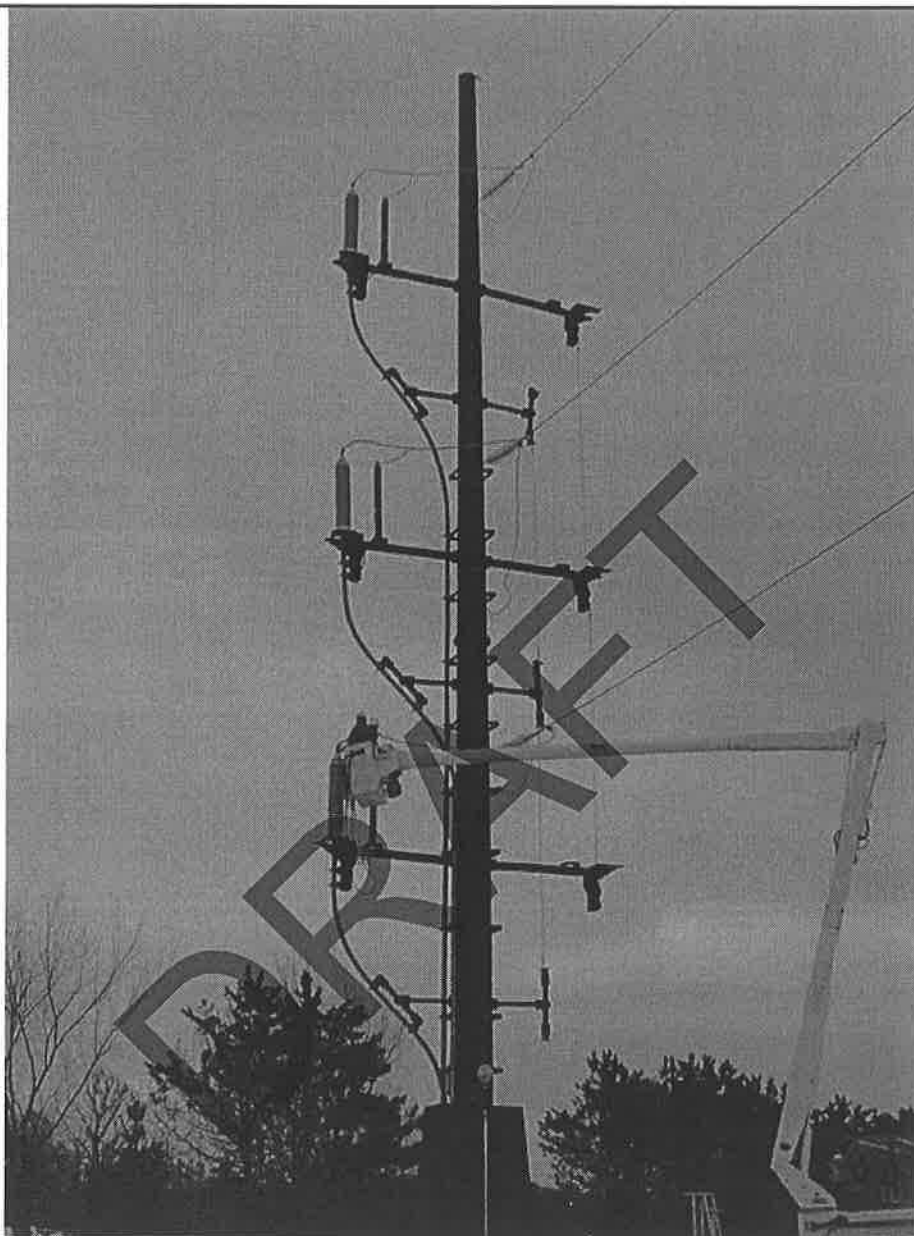


Figure 3-12 Double Circuit Single Shaft Transition Structure

The easement requirement for transition structures is slightly larger than what is required for overhead transmission poles. An increased footprint would be needed to accommodate cables as they are 'swept' from the below grade configuration to above grade, and clamped up the structure. The terminations are located on steel arms that are attached to the structure to maintain electrical clearance requirements.

A 138 kV transition structure would be very similar in design when compared to the 230 kV, except a little smaller in overall size (height) due to reduced clearance requirements. In addition, for a line with only one set of cables, there would be no need for provisions (arms) for the second set.

4.0 UNDERGROUND CONCEPTUAL DESIGN

The primary route alignment for new 138 kV and 230 kV underground transmission lines within Coral Gables would parallel the existing Miami Metro Rail and Ponce De Leon Blvd.

When routing the underground transmission lines, the type of area and terrain that the line would be crossing play a critical role in the design and cost. Urban areas like the Metro Rail / Ponce De Leon corridor are becoming more and more congested with vehicular traffic and underground utilities. This makes the installation of new underground transmission lines difficult, and extreme care is required to locate the existing underground facilities.

The preferred method for construction would be via open cut excavation and installation of a concrete encased duct bank. For this evaluation, it was assumed that there are only a couple of areas along the route which would require trenchless crossings. These are: 1) the Coral Gables Waterway between Orduna Dr. and Riviera Dr. and 2) the crossing of Le Jeune Rd. Additional trenchless crossings may be required due to environmental and/or design restriction imposed by the City of Coral Gables for crossing of roadways.

4.1 Conceptual Route Alignment

FPL performed preliminary survey and utility work (above ground, topographic) along Ponce De Leon Blvd and the Metro Rail corridor to identify features that would need to be considered as part of the conceptual route development. In order to avoid any potential conflict with the large Metro Rail foundations, most of the preferred route alignment would be located in the landscaped area between the roadway and the paved parking lot(s) that are next to the Metro Rail. There are segments, however, in which the duct bank installation would be within the paved parking lot, or have to sweep into the roadway due to the congestion of other below ground (and above ground) utilities. There are a number of items that would need to be considered during the final engineering and design phase of the project, such as: existing storm, sanitary, electric, and telecom below ground facilities in addition to above ground overhead lines that have not yet been located, which could impact the new underground transmission construction and alignment.

The 138 kV and 230 kV conceptual plan alignment drawings are located in the Appendix. These plans are very preliminary and do not contain all of the existing utilities which might impact the design and construction of the new underground transmission lines. In fact, many of the utilities that were contacted during the surveying activities did not respond to the design ticket request which was placed through Sunshine 811 (Florida dig safe). Additional survey work will be required to complete the final engineering and design of the new transmission lines.

4.2 System Description

For underground construction, the cable system would consist of a 138 kV transmission circuit with one cable per phase, and a 230 kV transmission circuit using two cables per phase.

Open Cut Trench Configuration

The details of the final duct bank size and layout constructed via open cut trenching would be determined during final design based on FPL's final design criteria. Factors to be considered are electrical requirements, heat dissipation, minimal burial depths, existing facility/utility locations and cable installation requirements. Figure 4-1 shows a preliminary trench detail and installation cross section. This is referred to as a 3X4 (3 rows, 4 columns) duct bank utilizing 8-inch conduits as the carriers for each power cable.

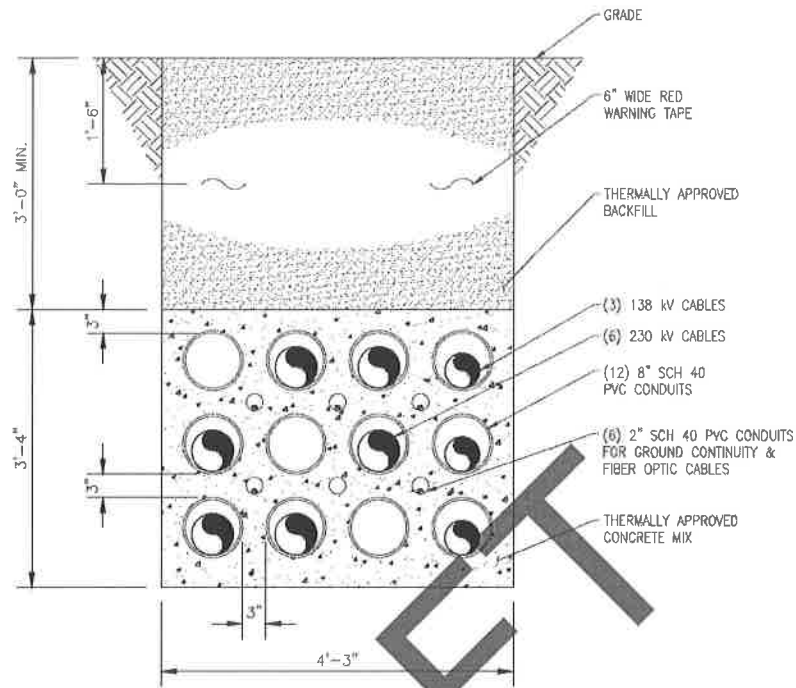


Figure 4-1 Preliminary 3X4 Duct Bank Detail

Trenchless Crossing Configuration

Since the proposed trenchless crossings at the Coral Gables Waterway between Orduna Dr. and Riviera Dr. and the crossing of Le Jeune Rd. are relatively short, the trenchless method of pipe jacking / jack and bore method was selected for this project. Microtunneling may be required; if it is determined during the detail design that water is an issue.

For the purposes of this analysis and cost estimate it was assumed that the crossings would consist of separating each transmission line and performing individual bores. Figure 4-2 shows the configuration of a typical bore detail and cross section.

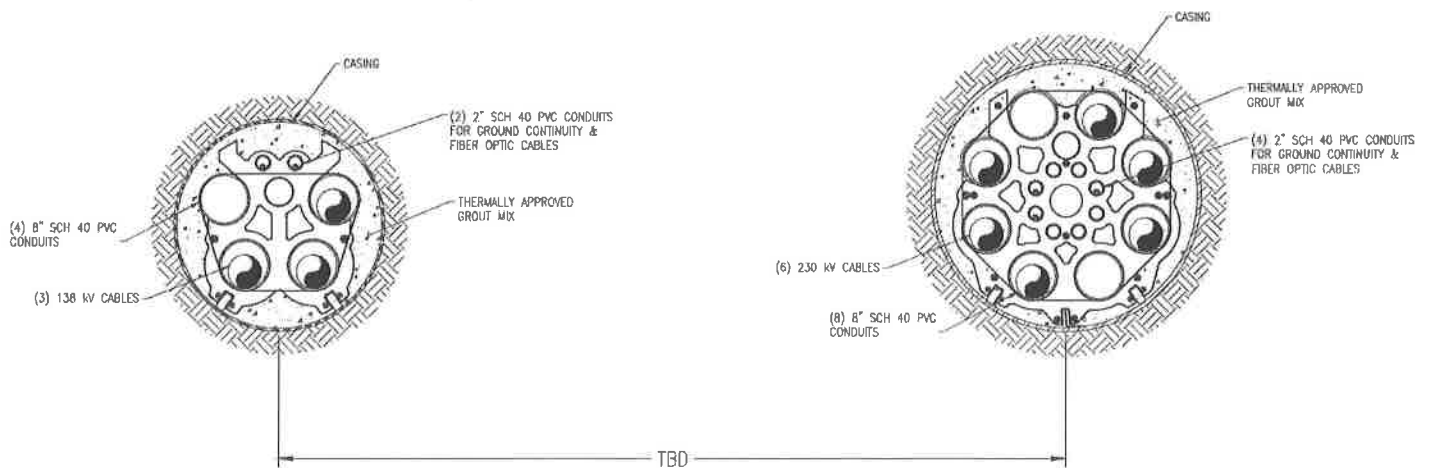


Figure 4-2 Typical Bore Detail

5.0 CABLE DESIGN

Overhead transmission lines generally have larger power transfer capacity when compared to an equivalent insulated cable in an underground installation. Underground cable manufacturers are also limited in the size conductor they can produce to achieve a line rating with one cable per phase.

Ampacity in an underground cable system is determined by the capacity of the installation to extract heat from the cable and dissipate it to the surrounding soil and atmosphere. The maximum operating temperature of a cable is a function of the impact that the insulation can suffer as a consequence of high operating temperatures. The insulation withstands different temperatures as a function of the duration of the currents, i.e. steady state, transient (or emergency), or short-circuit.

For these cable ampacity calculations, the different installations were modeled in the worst case scenario that each would encounter. The different installation configurations were used to assemble the final ampacity summary tables below.

Soil thermal resistivity values and earth ambient temperatures were based on assumed values. Ampacity calculations were performed using the following system requirements:

138 kV Required Normal Ampacity: 1495 A
 230 kV Required Normal Ampacity: 2300 A

5.1 Cross-Linked Polyethylene Ampacity Calculations

POWER performed ampacity calculations based on an extruded dielectric cable system to determine preliminary cable sizing requirements.

Design Parameters

Maximum Conductor Operating Temperature: 90°C (steady-state)
 105°C (emergency)
 Assumed Native Soil Thermal Resistivity: 90°C-cm/W (3-feet depth) (drier soil)
 70°C-cm/W (10-feet depth)
 Assumed Encasement Thermal Resistivity: 50°C-cm/W
 Earth Ambient Temperature: 30°C (3-feet depth)
 25°C (10-feet depth)
 Open Cut Trench Max Calculation Depth: 10 feet (top of concrete)
 Duct Bank: 3X4 configuration, 8-inch conduits

5.2 Summary of Ampacity Calculations

POWER concluded that one cable per phase would be required for the 138 kV transmission circuit, and two cables per phase for the 230 kV transmission circuit. The high voltage insulated cables would contain large copper conductors to meet the rating requirements-

- The 138 kV cable would require a 5000 kcmil segmented copper conductor
- The 230 kV cable would require a 4000 kcmil segmented copper conductor

The conductor strands for each cable would be coated, either enameled or oxidized, to further reduce the effective AC resistance and achieve the desired ampacities. The final circuit ratings would depend on detailed engineering and final configuration of the underground transmission line.

6.0 COST ESTIMATES

The cost estimate is based on pricing obtained from recent underground projects. There are many factors that affect the overall cost of an underground project. These factors are:

1. Cost of materials.
2. Contractor/Manufacturer availability.
3. Subsurface conditions. The type and depth of soil and rock that must be excavated to place the cable can dramatically impact the cost. For example, construction costs in rock formations are significantly higher than construction costs in clay soils. The presence of existing underground facilities also presents a significant uncertainty when estimating the cost of an underground project.

6.1 Cost Estimate Assumptions

1. Materials used in the cost estimates meet all applicable industry standards.
2. Construction would be performed by qualified craftsmen experienced in installing high voltage XLPE underground transmission systems.
3. Due to the volatility of material costs, these estimates are subject to market fluctuations.
4. Costs to obtain all environmental, local, state, and federal permits and mitigation as required are not included.
5. Costs to obtain all necessary right-of-way, easement, and property as required are not included.
6. A 15% contingency has been included.
7. Material and labor costs reflect the installation of a 138 kV XLPE duct bank system, one cable per phase, combined with a 230 kV XLPE duct bank system, two cables per phase, in the same trench including associated termination structures at each terminal.
8. Costs to install a fiber optic cable for communication are included. However, the installation of temperature monitoring equipment for the cable system is not included.
9. Vault installations for cable pulling and splicing have been assumed approximately every 2,000-feet. Three vaults would be installed at each location because there are three sets of cables.
10. Substation engineering and construction costs are not included.
11. Trenchless installation costs assume drilling through favorable soils (non-rock).
12. Engineering has assumed to be 2% of the total construction costs.
13. Costs to relocate existing facilities, both above ground and below ground, are not included.
14. FPL overhead costs and taxes are not included.

The estimates at this stage are qualified as being ‘Class 4 Study or Feasibility’, as recommended by the Association for the Advancement of Cost Engineering International (see www.aacei.org). Typical accuracy at this level is L: -15% to -30%; H: +20% to +50%.

6.2 Summary of Cost Estimates

A summary of the cost estimates are in Figures 6-1 and 6-2. Note, there are two alternatives for consideration:

- The installation of 138 kV and 230 kV underground transmission lines only within the City limits of Coral Gables.
- The additional installation of 138 kV and 230 kV underground transmission at the north and south end of the route which would extend the line in an underground configuration to the Coconut Grove and South Miami Substation’s, respectively. This would eliminate the large transition

structures that would need to be located within the Coral Gables City limits for the base alternative.

A detailed breakdown of each estimate by section is in the Appendix.

Figure to be inserted

Figure 6-1 Cost Estimate Summary (Underground Only within City Limits)

Figure to be inserted

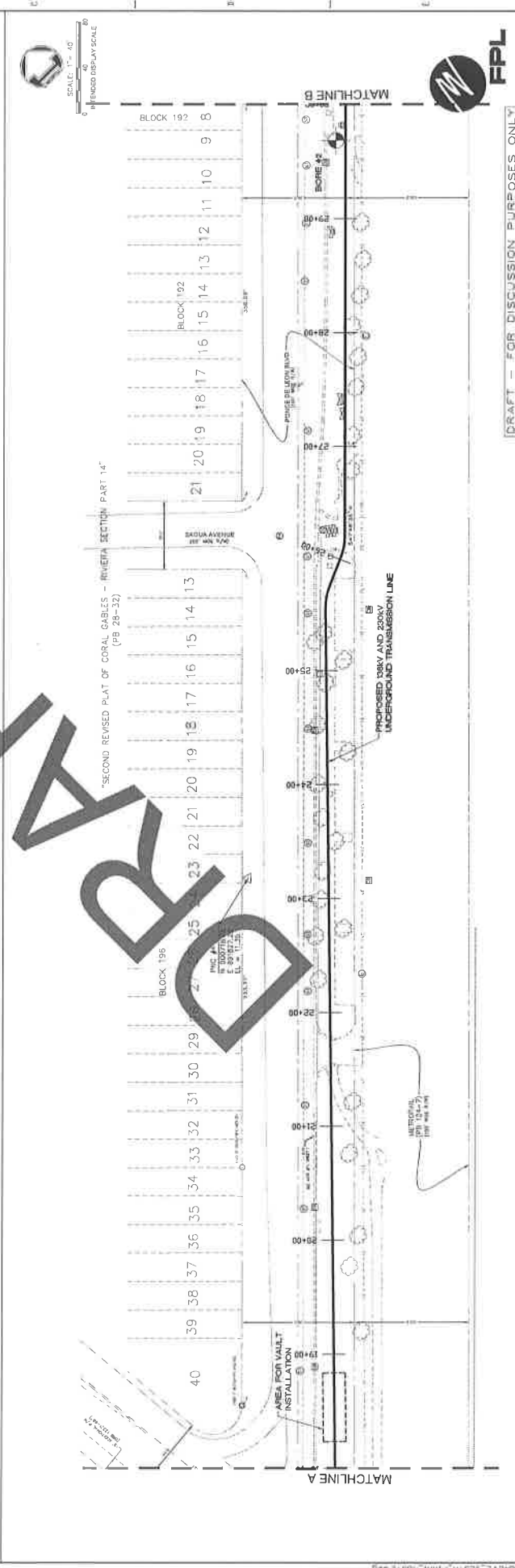
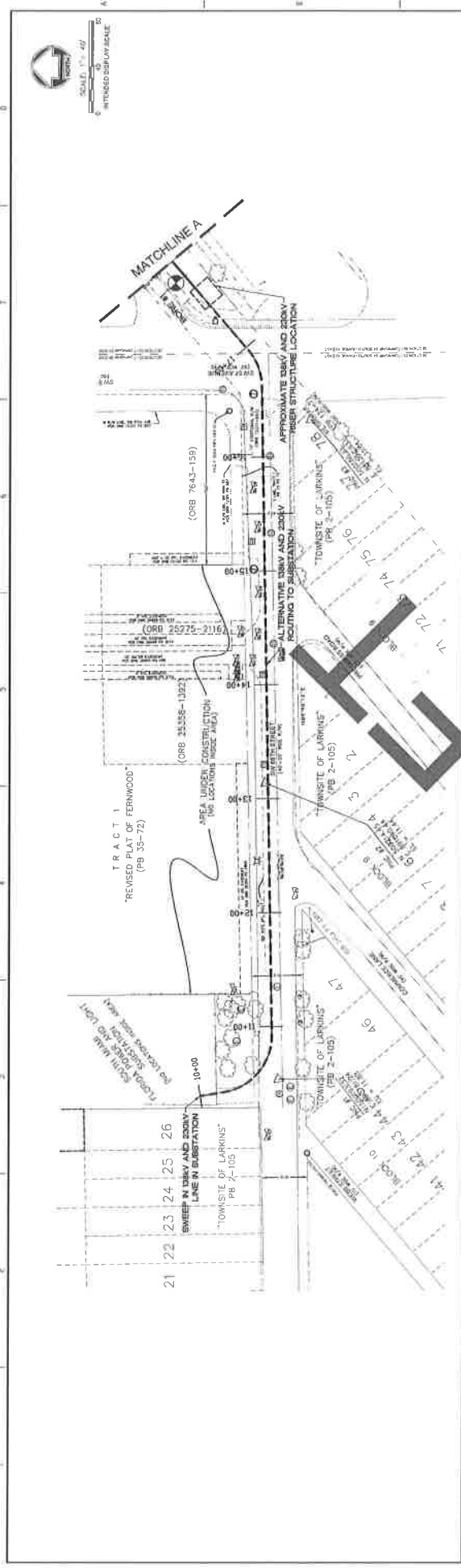
Figure 6-2 Cost Estimate Summary (Additional Costs to Extend 138 kV and 230 kV into Substations)

The estimates at this stage are qualified as being 'Class 4 Study or Feasibility', as recommended by the Association for the Advancement of Cost Engineering International (see www.aacei.org). Typical accuracy at this level is L: -15% to -30%; H: +20% to +50%.

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APPENDIX A
Conceptual Plan Drawings

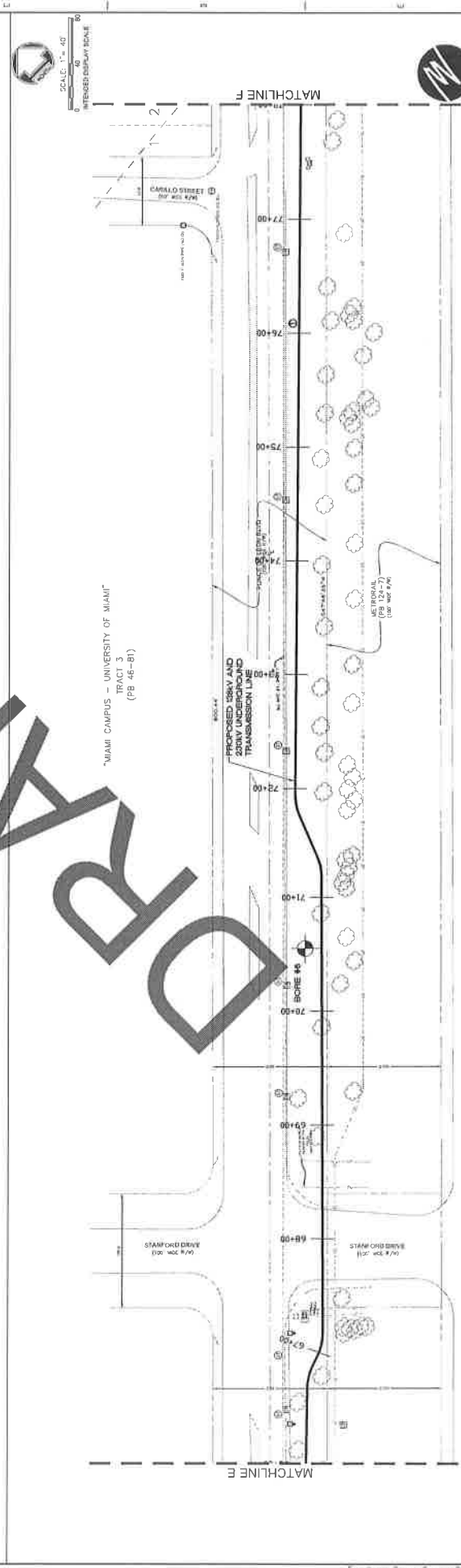
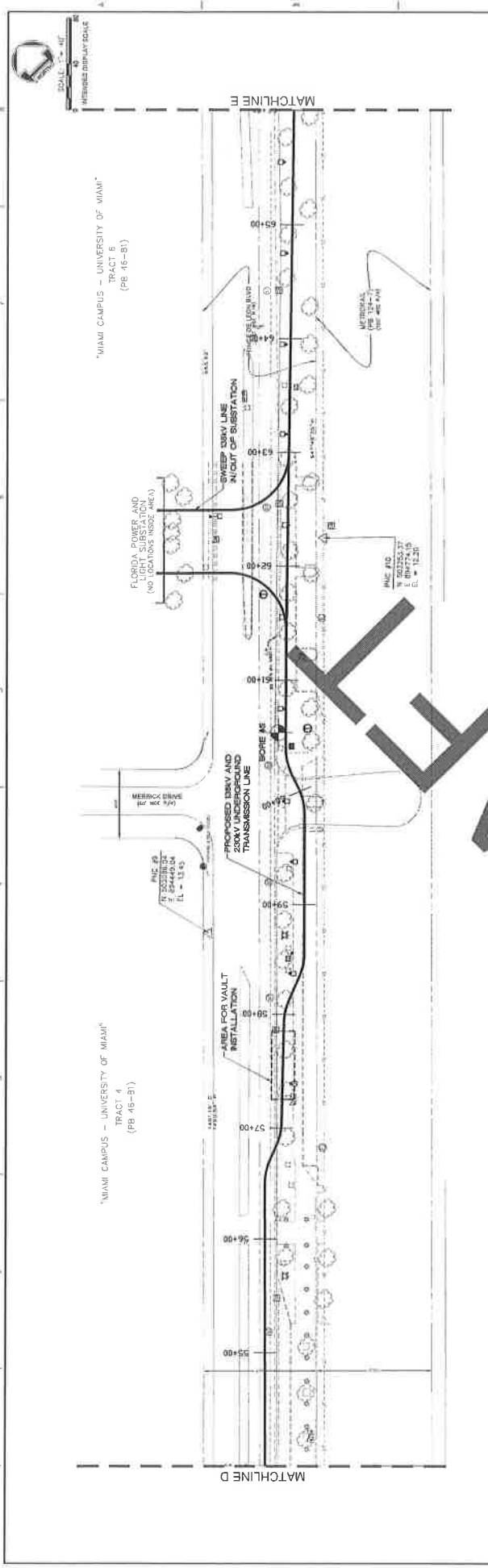
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GFL POWER ENGINEERS 10000 W. 10th Ave., Suite 100 Denver, CO 80202 Phone: (303) 755-1111 Fax: (303) 755-1112 Email: info@gflpe.com Website: www.gflpe.com										FLORIDA POWER & LIGHT CORAL GABLES TRANSMISSION ROUTE SOUTH MIAMI TO COCONUT GROVE STA. 30+00 TO 54+00									
DESIGN 1-9-14										JOB NUMBER 128328									
DESIGN 1-9-14										DRAWINGS NUMBER P0-2									
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SCALE: 1" = 40'

INTERIOR DISPLAY SCALE

SCALE: 1" = 40'

INTERIOR DISPLAY SCALE

MIAMI CAMPUS - UNIVERSITY OF MIAMI

TRACT 4

(PB 46-81)

MIAMI CAMPUS - UNIVERSITY OF MIAMI

TRACT 3

(PB 46-81)

FLORIDA POWER & LIGHT

CORAL GABLES

TRANSMISSION ROUTE

SOUTH MIAMI TO COCONUT GROVE

STA. 54+00 TO 78+00

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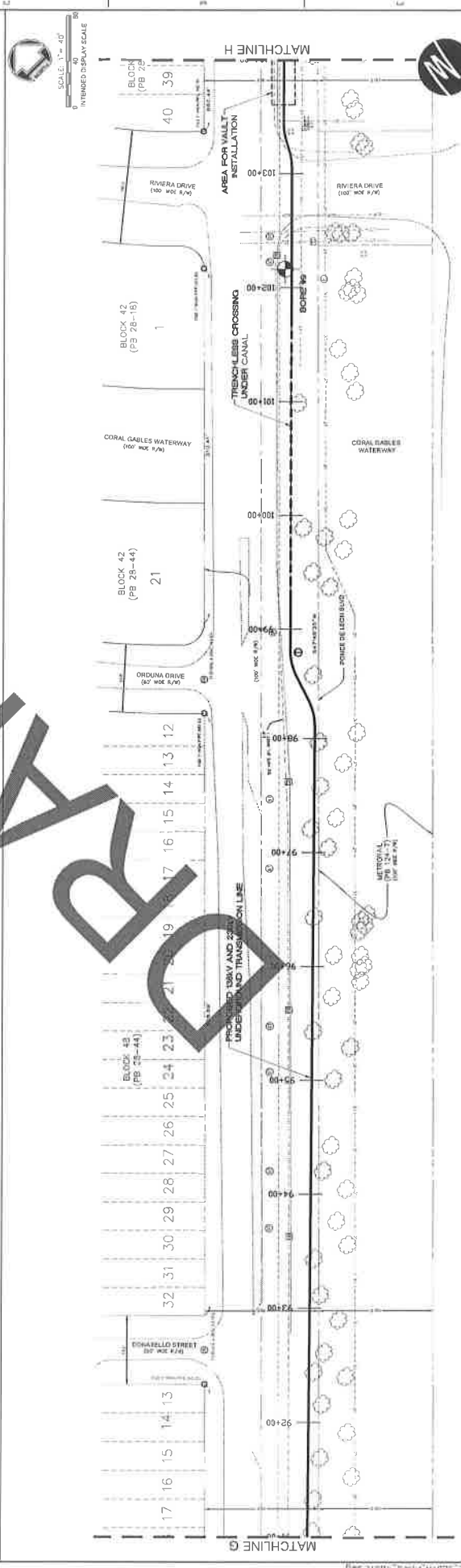
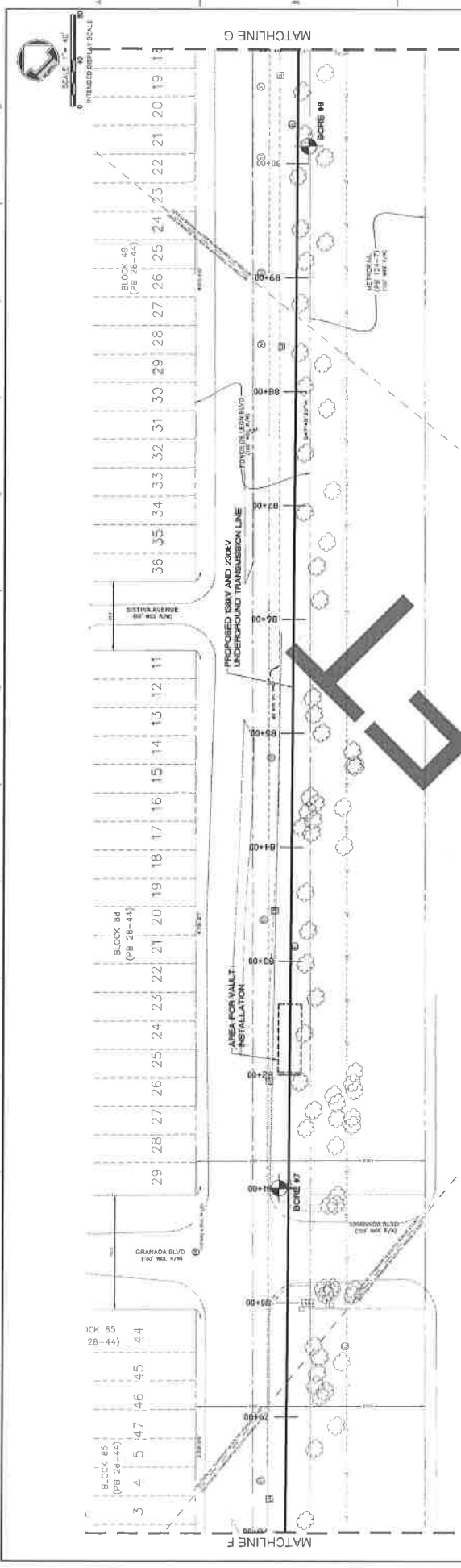
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LEADER: [Signature]

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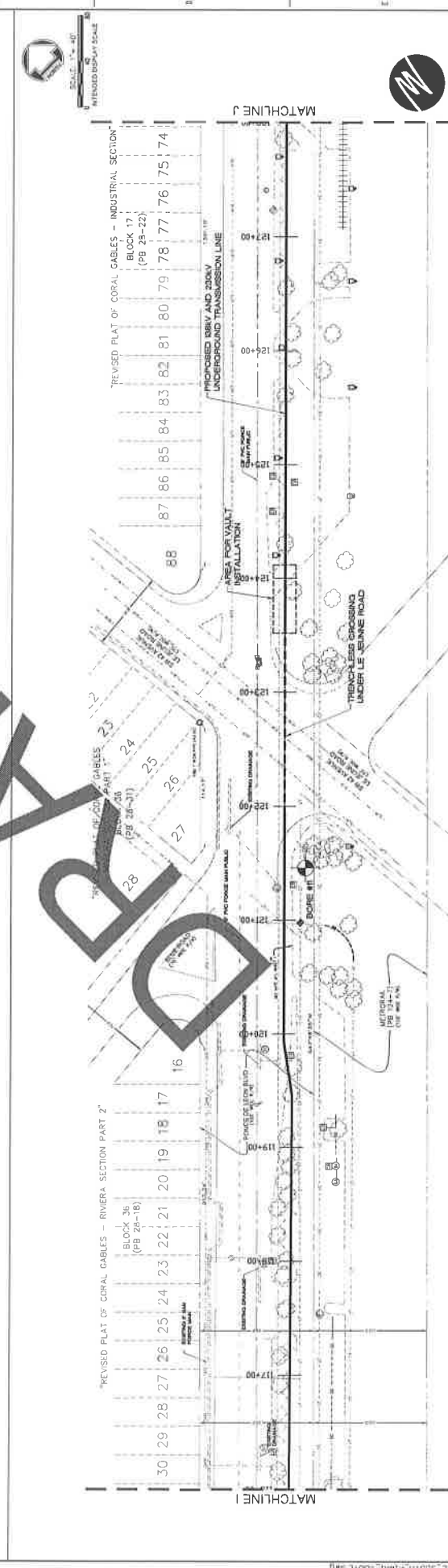
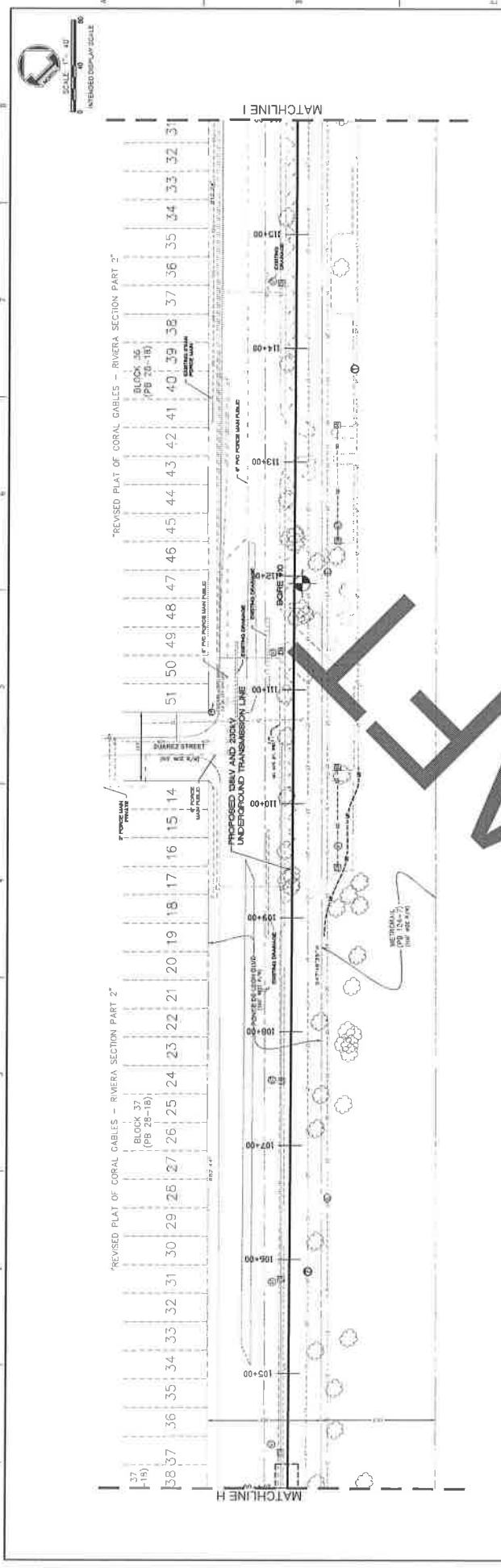
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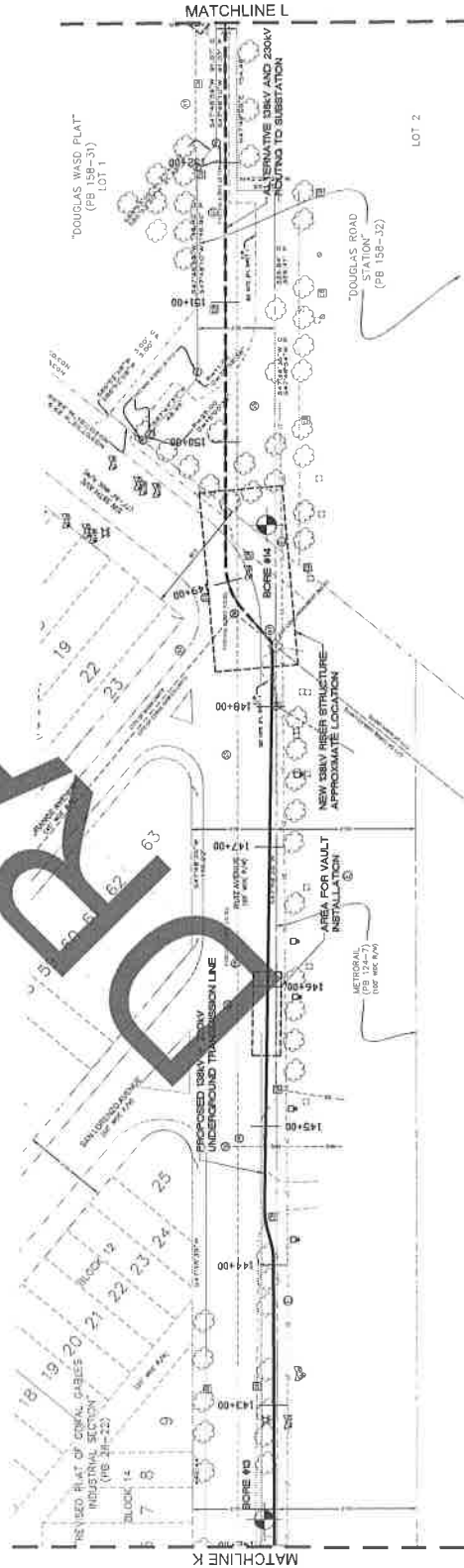
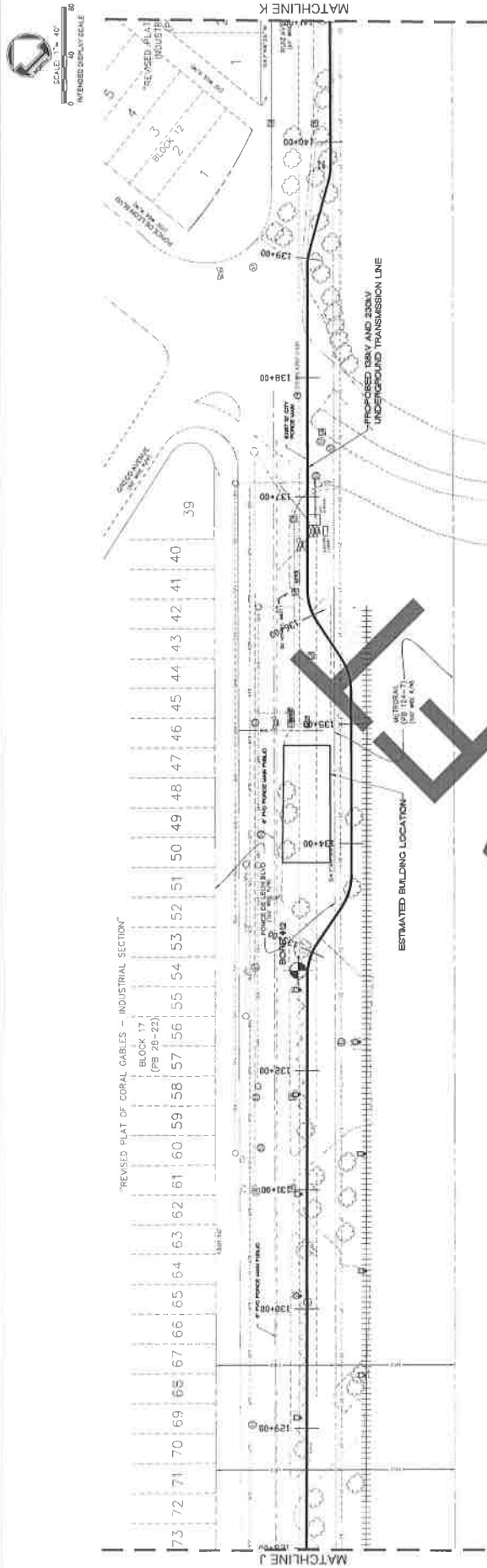


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	12838			
DRAWING NUMBER	P0-5	POWER ENGINEERS	SCALE	NTS
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FLORIDA POWER & LIGHT

CORAL GABLES TRANSMISSION ROUTE

SOUTH MIAMI TO COCONUT GROVE

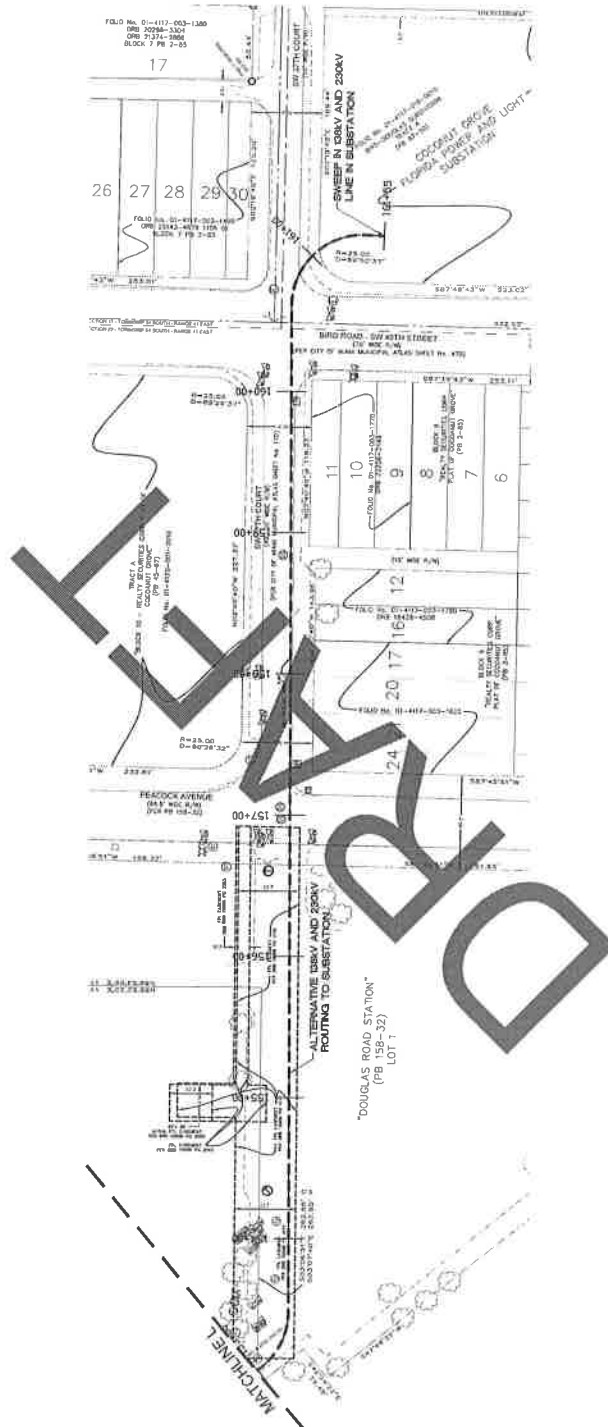
STA. 128+00 TO 153+00

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APPENDIX B

Cost Estimate Details

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Attachment C

FACILITIES RELOCATION AGREEMENT (FPL – TRANSMISSION)

THIS AGREEMENT made and entered into this ____ day of _____, 2013 ("Agreement") by and between

_____, with address _____,
(hereinafter called the "Applicant"), and FLORIDA POWER & LIGHT COMPANY, a Florida corporation with its principal place of business in Palm Beach County, Florida (hereinafter called "FPL").

WITNESSETH:

WHEREAS the Applicant intends to construct _____ and will require the relocation of certain incompatible and conflicting portions of FPL's Facilities and equipment, and

WHEREAS FPL will incur costs in the relocation of FPL's existing and proposed facilities which costs would not have occurred but for the Applicant's construction,

NOW THEREFORE, in consideration of the mutual promises of the Applicant and FPL and other good and valuable consideration, the Parties agree that FPL shall relocate the FPL facilities and the Applicant shall reimburse FPL for the actual cost of such relocation as follows:

ARTICLE 1 - DEFINITIONS

For the purposes of this Agreement the following terms, whether used in the singular or plural, shall have the meanings set forth below when used with initial capitalization:

- 1.1 Date Cost Estimate Received, for purposes of this Agreement, shall be deemed to be the day that the cost estimate was hand-delivered or transmitted by facsimile, or if mailed, five (5) days from the date of postmark.
- 1.2 FPL's Facility or Facilities shall be, but shall not be limited to, any structure consisting of manholes, conduits, poles, wires, cables, substations, system protection equipment or other appurtenances, and associated equipment, and used by FPL in connection with the transmission and/or distribution of electric power.
- 1.3 Relocation and/or Relocate includes the terms "rearrange or rearrangement" and is the work performed by FPL under this Agreement and any activity made necessary by Applicant's construction which conflicts with or affects FPL, its Facilities, or service. Relocations shall include, but shall not be limited to, permanent or temporary support, protection, relocation, rearrangement, design, redesign, abandonment or reconstruction of the FPL Facilities and all other work required to provide continuity of service to FPL's customers which is a result of a conflict.
- 1.4 Replacement FPL Facility is any facility which will be constructed under the terms of this Agreement as a consequence of Relocation of an FPL Facility or portion thereof.

ARTICLE II - IDENTIFICATION OF CONFLICTS

- 2.1 Known Conflicts. The Applicant shall reimburse FPL for costs associated with the Relocation of the FPL Facilities more particularly described and located on property described in Exhibit A attached hereto and incorporated herein ("Property").
- 2.2 Other Conflicts. The identification of any other conflicting facilities of FPL requiring Relocation shall be undertaken by FPL pursuant to a subsequent written agreement between FPL and the Applicant.

ARTICLE III - DESIGN AND CONSTRUCTION OF REPLACEMENT FACILITIES

- 3.1 Design Standards. Engineering design standards and material specified shall meet FPL's Current Design Standards. In addition, the design of Relocations will be in conformity with all laws and regulations.
- 3.2 Construction Standards. Materials and construction procedures shall meet FPL's Current Construction Standards. In addition, Relocations or Replacement Facilities will be accomplished in conformance with all laws, codes and regulations.

ARTICLE IV - REPLACEMENT RIGHT-OF-WAY

- 4.1 Replacement Right-of-Way. The Applicant shall provide FPL with replacement rights-of-way in one of the following manners:
- ☐ (a) The Applicant shall reimburse FPL for costs associated with the identification and acquisition of replacement rights-of-way, including, but not limited to, FPL's attorney fees for costs in prosecuting or in connection with any condemnation actions for the acquisition of necessary rights-of-way.
 - ☒ (b) The Applicant shall convey or grant to FPL replacement rights-of-way sufficient to permit FPL to accomplish Relocations of the FPL Facilities and to operate and maintain the Replacement Facilities in accordance with FPL's customary practices. Such conveyances or grants of replacement rights-of-way shall be accomplished at no cost to FPL and in a form and substance satisfactory to FPL.
- 4.2 Location of Replacement Right-of-Way. The Location of the aforesaid replacement rights-of-way are generally set forth in Exhibit B attached hereto and shall be within the Property where conflicts are identified due to this project.

ARTICLE V - COST ESTIMATES, CREDITS AND BILLING

- 5.1 Full Cost. The Applicant shall pay FPL for the full cost of Relocation of the FPL Facilities. The work to be performed by FPL will be in accordance with the construction drawings attached hereto as Exhibit B.
- 5.2 Cost Estimate. The Applicant shall be responsible for the total cost of the project. The estimated cost to Relocate the FPL Facilities is as below:
- a. Relocation: \$ _____. This cost estimate is set out in detail in Exhibit C attached hereto
 - Engineering deposit received: \$ _____
 - Balance due: \$ _____. Applicant to send check for this amount to FPL along with two signed copies of this Agreement.

The Applicant understands and agrees that the amount set forth in Exhibit C is an estimate only. The Applicant shall be responsible for the total cost of the project. The cost for the Relocation portion shall not exceed 120% of a valid Relocation cost estimate based upon an actual labor bid, except as provided herein.

5.3 Duration of Cost Estimate.

The cost estimate in Section 5.2 is valid only for the time period which is:

- a. Ninety (90) days from the date the estimate is received by Applicant (this includes the estimate attached as Exhibit C and any subsequent estimate) or
- b. Subject to the terms and conditions set forth in Section 5.4.

5.4 Re-estimates, Scope of Work Changes.

5.4.1 Pre-construction. If the construction of the Relocation of the FPL Facilities has not commenced within one hundred eighty (180) days of the date that the latest cost estimate is received by Applicant or if the Applicant requests a change in the Relocation scope of work on any individual work order prior to any construction, the estimate is invalid. A new estimate is required. FPL shall provide a re-estimate of the work prior to commencement of the Relocation by FPL. The Applicant shall agree in writing to pay the re-estimated cost and shall be responsible for the full cost of Relocation, not to exceed 120% of the re-estimate.

5.4.2 After Start of Construction. If after the start of construction any of the following occurs: (a) Applicant requests a change in the Relocation scope of work of FPL Facilities; (b) FPL determines that there is a need for a change in the Relocation scope of work and such change causes the reimbursable cost of the project to change by 20% or more; or (c) there is an increase in costs due to unknown or unforeseen physical conditions at the site which differ materially from those originally encountered; FPL shall provide the Applicant with a new estimate as soon as practicable and the Applicant shall pay any increased costs in the revised estimate to FPL within thirty (30) days after receipt of the revised estimate.

5.5 Credits.

- 5.5.1 The Applicant shall receive a credit for the payment of any non-refundable deposit required for the design, engineering, and estimating of the Relocation of FPL Facilities (as shown in Section 5.2).

- 5.5.2 The Applicant shall receive a credit for payment made to FPL for a detailed cost estimate, if payment is received by FPL prior to issuing such estimate and if the Agreement has been entered into within ninety (90) days of the date that estimate was received by the Applicant and the Relocation performed.
- 5.5.3 The Applicant shall receive no credit for payment for an estimate, and such payment shall not be refunded: (a) if the Applicant has not executed the Agreement within ninety (90) days of the date that estimate was received by the Applicant, (b) if a subsequent estimate is required and not paid within thirty (30) days of the date Applicant receives the estimate; or (c) if the Applicant terminates the Agreement.
- 5.5.4 Any estimate provided to the Applicant after the initial, detailed estimate shall be done at additional cost and expense to Applicant. Applicant's payment for estimates shall be credited or retained by FPL as provided above.
- 5.6 Billing and Payment. Prior to the commencement of any Relocation of FPL Facilities under this Agreement, the Applicant shall pay in advance the full estimated cost of such Relocation per Sections 5.2 & 5.4.2 above.
- 5.7 Final Bill. Upon completion of the work, FPL shall at the earliest date practicable furnish to the Applicant a final billing of all outstanding costs, including any overhead costs, incurred in connection with performance of Relocation of the FPL Facilities less any prepaid credits for additional cost estimates. The Applicant shall have thirty (30) days from the date of an invoice to approve and pay the invoice. Failure to provide FPL with written notice to the contrary within the thirty (30) day period shall constitute approval by the Applicant of the invoice against which payment must be remitted in full to FPL within thirty (30) days of the date of the invoice. If payment by the Applicant is not postmarked within thirty (30) days of the date of the invoice, then a late payment charge shall be assessed in the amount of one and one-half percent (1½%) of the amount of the billing per month, charged on a daily basis or highest interest allowable under law.
- 5.8 Refund and Effect of Termination.
- 5.8.1 Consistent with the terms of this Agreement, FPL shall refund to the Applicant any amounts which the Applicant has paid to FPL beyond the full cost of Relocation including any overhead costs.
- 5.8.2 In the event that this Agreement is terminated due to the cancellation or indefinite suspension of work in furtherance of the Applicant's construction, the Applicant shall be responsible for the costs of Relocation already incurred, including but not limited to all engineering, design, equipment, and materials cost, labor costs, and if any, the costs of replacement facilities already installed, necessary to place FPL's Facilities into a permanent condition suitable to provide continuous, reliable electric service to the public in accordance with all applicable laws, regulations and FPL's usual practices as set forth in Article III herein. Nothing in this section shall be construed to modify or abrogate FPL's legal duty to mitigate damages.

ARTICLE VI - INSPECTIONS

- 6.0 Inspections. All cost records and accounts of FPL directly related to the work performed under this Agreement shall be subject to inspection by the Applicant for a period of one (1) year from the completion date of all work performed under this Agreement. Such inspections shall be performed by the Applicant and in accordance with the following considerations:
- (a) The Applicant shall provide FPL with thirty (30) days written notice requesting an inspection,
 - (b) The specific time of inspection must be mutually agreed to,
 - (c) Information required for inspection purposes shall be accounts and records kept by FPL directly related to Relocation and reimbursable costs,
 - (d) The Applicant may request only information reasonably required by it concerning Relocation and such request for information shall be in writing and shall include the purpose of the inspection,
 - (e) FPL shall make available the requested information at its offices during normal business hours, Monday through Friday,
 - (f) The Applicant shall bear any costs associated with any inspections, including FPL costs, if any, and (g) information available under this Agreement shall not be used in violation of any law or regulation. FPL shall quote a deposit amount when such a request for inspection is made which the Applicant shall pay in advance.

ARTICLE VII - GENERAL CONDITIONS

- 7.1 Benefit of Agreement; Assignment. The provisions of this Agreement shall inure to the benefit of and bind the successors and assigns of the Parties to this Agreement but shall not inure to the benefit of any third party or other person. This Agreement shall not be assigned by either Party except upon receipt of the prior written permission of the other Party. Such permission shall not be unreasonably withheld.
- 7.2 Nonwaiver. The failure of either Party at any time to require performance by the other Party of any provision hereof shall not affect the full right to require such performance at any time thereafter. Waiver by either Party of a breach of the same provision or any other provision shall not constitute a waiver of the provision itself.
- 7.3 Limitations of Liability. Neither Party shall be liable in contract, in tort (including negligence), or otherwise to the other Party for any incidental or consequential loss or damage whatsoever including but not limited to loss of profits or revenue on work not performed, for loss of use or underutilization of the Party's facilities, or loss of use of revenues or loss of anticipated profits resulting from either Party's performance, nonperformance, or delay in performance of its obligations under this Agreement.
- 7.4 Indemnification. The Applicant shall indemnify, defend and hold harmless FPL, its parent, subsidiaries or affiliates and their respective officers, directors and employees (collectively "FPL Entities") from and against any liabilities whatsoever, occasioned wholly or in part by the negligence of the Applicant, its contractors, subcontractors or employees, including attorney fees, for injury to or death of person(s) and property damage arising or resulting in connection with any activity associated with work or service under this Agreement. If the liability arises out of a claim made by an employee of the Applicant, its contractors or assigns, the Applicant shall indemnify FPL Entities whether or not the damage or liability is due to or caused by the sole negligence of FPL Entities. The Applicant's obligation to protect, defend and hold FPL Entities free and unharmed against such liabilities shall be subject to the limitation set forth in Section 768.28(5) Florida Statutes, except in the event the Applicant purchases insurance covering the liability with limits in excess of the statutory limits, the Applicant's obligation shall extend up to but shall not exceed the limits of that insurance.
- 7.5 Insurance. If the Applicant utilizes its own personnel in the construction or maintenance work around the FPL Facilities, the Applicant shall furnish FPL with evidence of insurance maintained by Applicant insuring FPL Entities from liabilities assumed under the above indemnification. Said insurance shall contain a broad form contractual endorsement or, alternatively, the Applicant shall cause FPL, its parent, subsidiaries and affiliates and their respective officers, directors and employees to be named as additional named insured on the Applicant's comprehensive general liability policy. Such liability coverage shall be primary to any liability coverage maintained by or on behalf of FPL up to the \$1,000,000 limit of liability.

In the event that the policy is on a "claims made" basis, the retroactive date of the policy shall be the effective date of this Agreement or such other date as to protect the interest of FPL and the coverage shall survive the termination of this Agreement until the expiration of the maximum statutory period of limitations in the State of Florida for actions based in contract or in tort (currently, five years). If coverage is on an "occurrence" basis, such insurance shall be maintained by the Applicant during the entire term of this Agreement. The policy shall not be canceled or materially altered without at least thirty (30) days written notice to FPL.

The Applicant shall provide FPL with evidence of such liability insurance coverage on the standard insurance industry form (ACORD) without modification. A copy of the policy shall be made available for inspection by FPL upon reasonable request.

- 7.6 Contractor Indemnification. The Applicant further agrees to include the following indemnification in all contracts between the Applicant and its general contractors who perform or are responsible for construction or maintenance work on or around the subject FPL Facilities:

"The Contractor hereby agrees to release, indemnify, defend, save and hold harmless the Applicant and FPL, its parent, subsidiaries, affiliates or their respective officers, directors, or employees, from all claims, demands, liabilities and suits whether or not due to or caused by negligence of the Applicant or FPL for bodily injuries or death to person(s) or damage to property resulting in connection with the performance of the described work by Contractor, its subcontractor, agents or employees. This indemnification shall extend up to but shall not exceed the sum of \$1,000,000.00 for bodily injury or death of person(s) or property damage combined single limit and \$3,000,000 occurrence aggregate. In the event the Contractor is insured for liability with limits in excess of these amounts, Contractor's said obligation shall extend up to but shall not exceed the limits of that insurance. Contractor's costs of defending Applicant and FPL, including attorneys' fees are excluded from and are in addition to the aforesaid limitation of liability for injury, death and property damage."

- 7.7 Contractor Insurance and Notice. The Applicant agrees to require its contractors to obtain insurance to cover the above indemnity and further agrees to verify with its contractors that such insurance is in full force and effect. The Applicant shall provide FPL Group Inc.'s Risk Management Department with notice of the name and address of Applicant's contractors as specified in Section 7.6 above, prior to the commencement of the Relocation of FPL Facilities by FPL.
- 7.8 Modification or Termination of Agreement. This Agreement may be modified, amended, or terminated at any time by written agreement of the Parties authorized and executed with the same formality as this Agreement.
- 7.9 Effect of Headings. The headings set forth herein are for convenience only and shall not be deemed to modify or affect the rights and obligations of the Parties to this Agreement.
- 7.10 FPL Consent to Relocations. FPL agrees to the Relocation of the FPL Facilities to the extent necessary to eliminate Conflicts with the Applicant's construction in accordance with the terms and conditions of this Agreement. The Applicant, at no expense to FPL, shall make all necessary arrangements and agreements with any person or entity which has facilities attached to the FPL poles for the relocation of those facilities.
- 7.11 Delegation of Power and Duties Notice. The following persons are designated as the authorized representatives of the Parties for the purposes of this Agreement and all notices or other communications to either Party by the other shall be made in writing and addressed as follows:

To the Applicant:

(Name and Title)

With Copies to:

To FPL:

George J. Beck
Transmission Relocation Coordinator
Florida Power & Light Company
700 Universe Boulevard, TS4/JW
Juno Beach, FL 33408

7.12 Notification of FPL Facilities, Form 360. Applicant acknowledges that high voltage electric lines are located in the area of Applicant's project and agrees to warn its employees, agents, contractors and invitees, new and experienced alike, of the danger of holding on to or touching a cable or other piece of equipment that is located or working close to any overhead power line and to use all safety and precautionary measures when working under or near FPL's Facilities. Applicant acknowledges and agrees that he has read and will comply with the Notification of FPL Facilities attached hereto. Applicant shall sign and return two (2) copies of the attached Notification of FPL Facilities along with two (2) signed copies of this Agreement.

7.13 Force Majeure.

- (a) Neither Party shall be liable or responsible for any delay in the performance of, or the ability to perform, any duty or obligation required by this Agreement in the event of a Force Majeure occurrence. Such occurrence shall include, but shall not be limited to acts of civil or military authority (including courts or administrative agencies), acts of God, war, riot, or insurrection, inability to obtain required permits or licenses, blockades, embargoes, sabotage, epidemics, fires, unusually severe floods or weather (anywhere in the United States where FPL utility workers and contractors support restoration), strikes, lockouts or other labor disputes or difficulties. The obligation of either Party to pay money in a timely manner is absolute and shall not be subject to the force majeure provisions. Force Majeure as used herein means, without limitation, any cause or event not reasonably within the control of FPL or the Applicant.
- (b) In the event of any delay resulting from a Force Majeure circumstance, the time for performance hereunder shall be extended for a period of time reasonably necessary to overcome the effect of such delays.

(c) In the event of any delay or nonperformance caused by a Force Majeure circumstance, the Party affected shall promptly notify the other in writing.

7.14 Severability. In the event that any of the provisions or portions or applications thereof of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the Applicant and FPL shall negotiate an equitable adjustment in the affected provisions of this Agreement. The validity and enforceability of the remaining independent provisions shall not be affected.

7.15 Effective Date. This Agreement shall become effective upon execution by the Parties and shall continue in effect until completion of all Relocation work by FPL unless otherwise provided herein or earlier termination in accordance with this Agreement.

7.16 Complete Agreement. This Agreement shall be signed by the authorized representatives of both Parties and constitutes the final written expression of all the terms of the agreement between the Parties and is a complete and exclusive statement of those terms. Any and all prior or contemporaneous course of dealing, representations, promises, warranties or statements by the Parties or their agents, employees, or representatives that differ in any way from the terms of this written Agreement shall be given no force or effect.

IN WITNESS WHEREOF, the Parties have executed this Agreement, to be effective as of the date first above written.

APPLICANT:

FLORIDA POWER & LIGHT COMPANY

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

Attest:

_____ (Seal) Title

FLORIDA POWER & LIGHT COMPANY

Fourth Revised Sheet No. 6.300
Cancels Third Revised Sheet No. 6.300INSTALLATION OF UNDERGROUND ELECTRIC DISTRIBUTION FACILITIES
FOR THE CONVERSION OF OVERHEAD ELECTRIC DISTRIBUTION FACILITIES

SECTION 12.1 DEFINITIONS

APPLICANT - Any person, corporation, or entity capable of complying with the requirements of this tariff that has made a written request for underground electric distribution facilities in accordance with this tariff.

CONVERSION - Any installation of underground electric distribution facilities where the underground facilities will be substituted for existing overhead electric distribution facilities, including relocations.

CONTRIBUTION-IN-AID-OF-CONSTRUCTION (CIAC) - The CIAC to be paid by an Applicant under this tariff section shall be the result of the following formula:

CIAC =

- 1) The estimated cost to install the requested underground facilities;
- + 2) The estimated cost to remove the existing overhead facilities;
- + 3) The net book value of the existing overhead facilities;
- 4) The estimated cost that would be incurred to install new overhead facilities, in lieu of underground, to replace the existing overhead facilities (the "Hypothetical Overhead Facilities");
- 5) The estimated salvage value of the existing overhead facilities to be removed;
- + 6) The 30-year net present value of the estimated non-storm underground v. overhead operational costs differential, which is set at \$0 (zero) per pole-line mile of the existing overhead facilities;
- + 7) The 30-year net present value of the estimated average Avoided Storm Restoration Costs ("ASRC") calculated as a percentage of the sum of lines 1) through 6). Simplified eligibility criteria for each ASRC Tier are summarized below. Applicants must enter into an Underground Facilities Conversion Agreement with the Company which provides full details on terms, conditions and compliance requirements.

Tier	Percentage	Pole-Line Miles	Customer Conversions	Completion
1 *	25%	3 or more	100%	3 phases
2	10%	1 to <3	100%	3 phases
3	5%	< 1	n/a	n/a

* The GAF Waiver will apply in lieu of Tier 1 ASRC for eligible conversions by Local Government Applicants.

GAF Waiver

For Applicants entering into an Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver with the Company, the otherwise applicable CIAC amount, as calculated above, shall be reduced by the GAF Waiver. The amount of the GAF Waiver shall be calculated as follows:

GAF Waiver =

- 25% x the otherwise applicable CIAC;
- + 75% x the ASRC (avoids double-counting the ASRC embedded in the otherwise applicable CIAC.)

If the Applicant elects to construct and install all or part of the underground facilities, then for purposes of calculating the ASRC or the GAF Waiver amount only, the otherwise applicable CIAC shall be adjusted to add FPL's estimated cost for the Applicant-performed work. In addition, the Direct Engineering, Supervision, and Support (DESS) costs associated with this Applicant-performed work will be reduced by 20% from the amount that would have applied if FPL performed this work.

DISTRIBUTION SYSTEM - Electric service facilities consisting of primary and secondary conductors, service drops, service laterals, conduits, transformers and necessary accessories and appurtenances for the furnishing of electric power at utilization voltage.

SERVICE FACILITIES - The entire length of conductors between the distribution source, including any conduit and or risers at a pole or other structure or from transformers, from which only one point of service will result, and the first point of connection to the service entrance conductors at a weatherhead, in a terminal, or meter box outside the building wall; the terminal or meter box; and the meter.

(Continued on Sheet No. 6.301)

(Continued from Sheet No. 6.300)

SECTION 12.2 GENERAL

12.2.1 Application

This tariff section applies to all requests for underground electric distribution facilities where the facilities requested will be substituted for existing overhead electric distribution facilities. Any person, corporation, or entity capable of complying with the requirements of this tariff may submit a request as follows. Requests shall be in writing and must specify in detail the overhead electric distribution facilities to be converted or the area to be served by underground electric distribution facilities in lieu of presently existing overhead electric distribution facilities serving said area. Upon receipt of a written request, FPL will determine the feasibility of converting the existing facilities, any necessary revisions to this written request, and the non-refundable deposit amount necessary to secure a binding cost estimate and notify the applicant of said amount.

12.2.2 Contribution-in-Aid-Of-Construction (CIAC)

Upon the payment of a non-refundable deposit by an Applicant, FPL shall prepare a binding cost estimate specifying the contribution in aid of construction (CIAC) required for the installation of the requested underground distribution facilities, where the installation of such facilities is feasible, and provide said estimate to the Applicant upon completion of the estimate along with either an Underground Facilities Conversion Agreement or an Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver. The CIAC amount to be collected pursuant to a binding cost estimate from an Applicant shall not be increased by more than 10 percent of the binding cost estimate to account for actual costs incurred in excess of the binding cost estimate. However, the CIAC may be subject to increase or refund if the project scope is enlarged or reduced at the request of the Applicant, or the CIAC is found to have a material error prior to the commencement of construction. The binding cost estimate provided to an Applicant shall be considered expired if the Applicant does not enter into either an Underground Facilities Conversion Agreement or an Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver and pay the CIAC amount specified for the installation of the requested underground electric distribution facilities within 180 days of delivery of the binding cost estimate to the Applicant by FPL.

(Continued on Sheet No. 6.310)

(Continued from Sheet No. 6.301)

12.2.3 Non-Refundable Deposits

The non-refundable deposit for a binding cost estimate for conversion to a direct buried cable in conduit underground electric distribution system shall be determined by multiplying the number of pole line feet of existing overhead electric distribution facilities to be converted by \$1.20. The deposit must be paid to FPL to initiate the estimating process. The deposit will not be refundable, however, it will be applied in the calculation of the CIAC required for the installation of underground distribution facilities. The deposit and the preparation of a binding cost estimate are a prerequisite to the execution of either an Underground Facilities Conversion Agreement or an Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver. If the request for underground electric distribution facilities involves the conversion of less than 250 pole line feet of existing overhead facilities, then no deposit will be required for a binding cost estimate, provided, however, that all other requirements of this tariff shall still apply.

12.2.4 Non-Binding Cost Estimates

Any person, corporation, or entity may request a non-binding cost estimate free of charge. The non-binding cost estimate shall be an order of magnitude estimate to assist the requestor in determining whether to go forward with a binding cost estimate. Neither an Underground Facilities Conversion Agreement nor an Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver may be executed on the basis of a non-binding cost estimate.

12.2.5 Underground Facilities Conversion Agreement

Any Applicant seeking the installation of underground distribution facilities pursuant to a written request hereunder shall execute either the Underground Facilities Conversion Agreement set forth in this tariff at Sheet No. 9.720 or, if applicable, the Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver set forth in this tariff at Sheet No. 9.725. The applicable Agreement must be executed and the CIAC paid by the Applicant within 180 days of the delivery of the binding cost estimate to the Applicant. Failure to execute the applicable Agreement and pay the CIAC specified in the Agreement within the 180 day time limit, or termination of the Agreement, shall result in the expiration of the binding cost estimate. Any subsequent request for underground facilities will require the payment of a new deposit and the presentation of a new binding cost estimate. For good cause FPL may extend the 180 day time limit. Upon execution of either the Underground Facilities Conversion Agreement or the Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver, payment in full of the CIAC specified in the binding cost estimate, and compliance with the requirements of this tariff, FPL shall proceed to convert the facilities identified in a timely manner. However, new service extensions, maintenance and reliability projects, and service restorations shall take precedence over facilities conversions.

12.2.6 Simultaneous Conversion of Other Pole Licensees

Before the initiation of any project to provide underground electric distribution facilities pursuant to either an Underground Facilities Conversion Agreement or an the Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver the Applicant shall have executed agreements with all affected pole licensees (e.g. telephone, cable TV, etc.) for the simultaneous conversion of those pole licensees' facilities and provide FPL with an executed copy of the Agreement(s). Such agreements shall specifically acknowledge that the affected pole licensees will coordinate their conversion with FPL and other licensees in a timely manner so as to not create unnecessary delays. Failure to present FPL with executed copies of any necessary agreements with affected pole licensees within 180 days after delivery of the binding cost estimate to the Applicant shall result in the expiration of the binding cost estimate, the return of any CIAC paid, and the termination of any Underground Facilities Conversion Agreement or Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver entered into between the Applicant and FPL.

12.2.7 Easements

Before the initiation of any project to provide underground electric distribution facilities pursuant to either an Underground Facilities Conversion Agreement or an Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver, the Applicant shall provide FPL, at no cost to FPL, all easements, including legal descriptions of such easements and all survey work associated with producing legal descriptions of such easements, specified as necessary by FPL to accommodate the requested underground facilities along with an opinion of title that the easements are valid. Failure to provide the easements in the manner set forth above within 180 days after the delivery of the binding cost estimate to the Applicant shall result in the expiration of the binding cost estimate, the return of any CIAC paid, and the termination of any Underground Facilities Conversion Agreement or Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver entered into between the Applicant and FPL.

(Continued on Sheet No. 6.320)

(Continued from Sheet No. 6.310)

12.2.8 Affected Customer Services

The Applicant shall be responsible for the costs associated with any modifications to the service facilities of customers affected by the conversion of FPL distribution facilities which are made necessary as a result of the conversion. The Applicant shall be responsible for arranging the conversion of affected residential overhead customer service facilities by providing, at no cost to FPL:

- a) any necessary rearranging of the customer's existing electric service entrance facilities to accommodate an underground service lateral through the use of a licensed electrical contractor, in accordance with all local ordinances, codes, and FPL specifications; and
- b) a suitable trench, install FPL provided conduit according to FPL specifications to a point designated by FPL, and perform the backfilling and any landscape, pavement or other similar repairs

FPL shall be responsible for the installation of the service lateral cable, the cost of which shall be included in the Applicant's binding cost estimate. In the event a customer does not allow the Applicant to convert the customer's affected overhead services, or the Applicant fails to comply with the above requirements in a timely manner consistent with FPL's conversion construction schedule, then the Applicant shall pay FPL, in addition to the CIAC specified in the binding cost estimate, the costs associated with maintaining service to said customer through an overhead service drop. The cost for maintaining an overhead service drop from an underground system shall be:

- a) the sum of \$789 for residential dwellings containing less than five individual units; or,
- b) the estimated cost to maintain service for residential dwellings containing five or more individual units.

For existing residential underground service laterals affected by a conversion the Applicant shall be responsible for the trenching, backfilling and any landscape, pavement or other similar repairs and installation of FPL provided conduit, according to FPL specifications, necessary to bring existing underground service laterals of affected customers to an FPL designated handhole or transformer. FPL will install the necessary cable, the cost of which shall be included in the binding cost estimate. However, in the event that a customer owned service lateral fails on connection to the underground distribution system the customer will be responsible for the replacement of their service lateral or compliance with section 10.5 of FPL's tariff.

The Applicant's responsibilities for modifications to the service facilities of non-residential customers affected by the conversion of FPL distribution facilities which are made necessary as a result of the conversion will be specified in an attachment to any Underground Facilities Conversion Agreement or Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver.

12.2.9 Other Terms and Conditions

Through the execution of either the Underground Facilities Conversion Agreement set forth in this tariff at Sheet No. 9.720 or the Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver set forth in this tariff at Sheet No. 9.725 the Applicant agrees to the following:

- a) The Applicant shall be responsible for all restoration of, repair of, or compensation for, property affected, damaged, or destroyed, to accommodate the installation of underground distribution facilities and the removal of FPL's overhead distribution facilities;
- b) subject to section 2.7 Indemnity to Company, or section 2.71 Indemnity to Company - Governmental, FPL's General Rules and Regulations, the Applicant shall indemnify FPL from any claim, suit, or other proceeding, which seeks the restoration of, or repair of, or compensation for, property affected, damaged, or destroyed, to remove existing facilities or to accommodate the installation of underground distribution facilities arising from or brought as a result of the installation of underground distribution facilities;
- c) the Applicant shall clear easements provided to FPL of trees, tree stumps and other obstructions that conflict with construction or installation of underground distribution facilities in a timely manner consistent with FPL's construction schedule.

(Continued on Sheet No. 6.330)

(Continued from Sheet No. 6.320)

12.2.10 Type of System Provided

An underground distribution system will be provided in accordance with FPL's current design and construction standards.

12.2.11 Design and Ownership

FPL will design, install, own, and maintain the electric distribution facilities up to the designated point of delivery except as otherwise noted. The Applicant may, subject to a contractual agreement with FPL, construct and install all or a portion of the underground distribution facilities provided that:

- a) such work meets FPL's construction standards;
- b) FPL will own and maintain the completed distribution facilities;
- c) the construction and installation of underground distribution facilities by the Applicant is not expected to cause the general body of ratepayers to incur greater costs;
- d) the Applicant agrees to pay FPL's current applicable hourly rate for engineering personnel for all time spent for (i) reviewing and inspecting the Applicant's work done, and (ii) developing any separate cost estimate(s) that are either requested by the Applicant to reflect only FPL's portion of the work or are required by FPL to reflect both the Applicant's and FPL's portions of the work for the purpose of a GAF Waiver calculation pursuant to an Underground Facilities Conversion Agreement -- Governmental Adjustment Factor Waiver; and
- e) the Applicant agrees to rectify any deficiencies found by FPL prior to the connection of any Customers to the underground electric distribution system and the removal of the overhead electric distribution facilities.

12.2.12 Relocation

Where underground electric facilities are requested as part of, or for the purpose of, relocation, the requirements of this tariff shall apply. As applicable, the Underground Facilities Conversion Agreement or the Underground Facilities Conversion Agreement - Governmental Adjustment Factor Waiver shall be executed as an addendum to the relocation agreement between FPL and the Applicant. In the event of any conflict between the relocation agreement and this tariff, the tariff shall control. Furthermore, where the regulations of the Federal or State Department of Transportation (DOT) prevent pre-payment of deposits and other conversion costs, the Federal or State DOT may pay the CIAC after the work has been performed.

FLORIDA POWER & LIGHT COMPANY

Eighth Revised Sheet No. 9.725
Cancels Seventh Revised Sheet No. 9.725**UNDERGROUND FACILITIES CONVERSION AGREEMENT -
GOVERNMENTAL ADJUSTMENT FACTOR WAIVER**

This Agreement is made and entered into this _____ day of _____, 20____, by and between _____ ("Local Government Applicant"), a Florida municipal corporation or county with an address of _____ and FLORIDA POWER & LIGHT COMPANY ("FPL"), a Florida corporation with an address of P.O. Box 14000, 700 Universe Boulevard, Juno Beach, FL 33408-0429.

WHEREAS, the Local Government Applicant has requested that FPL convert certain overhead electric distribution facilities located within the following boundaries (the "Conversion"):

(collectively, the "Existing Overhead Facilities") to underground facilities, including transformers, switch cabinets and other appurtenant facilities installed above ground as set forth in Attachment A hereof (collectively, the "Underground Facilities").

NOW THEREFORE, in consideration of the foregoing premises and the covenants and agreements set forth herein, and other consideration the sufficiency of which is hereby acknowledged, the parties intending to be legally bound, hereby covenant and agree as follows:

1. Governmental Adjustment Factor Waiver ("GAF Waiver") Eligibility Criteria. The Local Government Applicant represents and warrants that it meets the following eligibility criteria for the Conversion:

- a. In order for the Conversion to incorporate a sufficient amount of overhead facilities to provide electrical continuity, the Conversion must include a minimum of approximately 3 pole line miles or approximately 200 detached dwelling units within contiguous or closely proximate geographic areas (the "Conversion Area"). The Conversion may be completed in mutually agreed upon phases, with the project size minimums applying to the aggregate project - provided that any necessary subsequent phase begins within a 1 year period from completion of the prior phase and the minimums are met within, at most, 3 phases; and
- b. The Local Government Applicant must require all customers within the Conversion Area who currently have overhead service directly from the Existing Overhead Facilities to convert their service entrances to underground within 6 months of completion of the Underground Facilities installation or each phase thereof; and
- c. The Local Government Applicant must be willing and able to execute a right of way ("ROW") agreement with FPL if the Local Government Applicant requests that facilities be placed in the ROW; and
- d. For any affected laterals, the complete lateral must be converted, including all stages of any multi-stage lateral; and
- e. The Local Government Applicant must demonstrate to the reasonable satisfaction of FPL that the sum of the GAF Waiver credit plus any federal or state funds that the Local Government Applicant is able to use to support the Conversion does not exceed the otherwise applicable CIAC as calculated before application of the GAF Waiver.

Special Circumstances. Conversions which do not meet the project size minimums described in section 1.a are eligible for the GAF Waiver in the following special circumstances:

- i. 100% of the Existing Overhead Facilities within the Local Government Applicant's corporate limits are to be converted, but are less than the pole line mileage or dwelling unit minimums; or
- ii. A single lateral that serves at least one Critical Infrastructure Facility as determined by the appropriate local agency with the mutual agreement of FPL; or
- iii. An island or peninsula where 100% of the Existing Overhead Facilities are to be converted; or

(Continued on Sheet No. 9.726)

(Continued from Sheet No. 9.725)

- iv. When the aggregate size of the first 3 phases of a project would satisfy the minimum size criteria but, for mutually-agreed engineering or logistical reasons, those phases are non-contiguous; provided that (a) the next (4th) phase must be adjacent to one or more of the first 3 phases such that the combined contiguous area meets the minimum size criteria, and (b) this 4th phase begins within 1 year from completion of the 3rd phase.
2. **Contribution-in-Aid-of-Construction (CIAC).** The Local Government Applicant shall pay FPL a CIAC as required by FPL's Electric Tariff and Section 25-6.115 of the Florida Administrative Code with the Otherwise Applicable CIAC amount reduced by the GAF Waiver.
- | | |
|------------------------------|----------|
| i. Otherwise Applicable CIAC | \$ _____ |
| ii. GAF Waiver | \$ _____ |
| iii. CIAC Due | \$ _____ |

In the event the actual cost of the Conversion exceeds the estimate, the Otherwise Applicable CIAC shall be adjusted by the lesser of (a) the difference between the actual cost of the Conversion and the estimate, or (b) 10% of the Otherwise Applicable CIAC identified above. The GAF Waiver shall also be adjusted accordingly and the Local Government Applicant shall pay FPL the resulting difference in the amount of the CIAC Due.

3. **Applicant-Installed Facilities.** The Local Government Applicant may, upon entering into an applicant-installed facilities agreement satisfactory to FPL, construct and install all or a portion of the Underground Facilities. Such work must meet FPL's construction standards and FPL will own and maintain the completed facilities. The Local Government Applicant agrees to rectify any deficiencies, found by FPL, prior to the connection of any customers to the Underground Facilities and the removal of the Existing Overhead Facilities.
4. **Compliance with Tariff.** The Local Government Applicant agrees to comply with and abide by the requirements, terms, and conditions of FPL's Electric Tariff.
5. **Timing of Conversion.** Upon compliance by the Local Government Applicant with the requirements, terms, and conditions of FPL's Electric Tariff, this Agreement and any other applicable agreements, FPL will proceed in a timely manner with the Conversion in accordance with the construction drawings and specifications set forth in Attachment A hereof.
6. **Relocation.** In the event that the Underground Facilities are part of, or are for the purposes of, relocation, then this Agreement shall be an addendum to the relocation agreement between FPL and the Local Government Applicant. In the event of any conflict between the relocation agreement and this Agreement or the Electric Tariff, this Agreement and the Electric Tariff shall control.
7. **Term.** This Agreement shall remain in effect for as long as FPL or any successor or assign owns or operates the Underground Facilities.
8. **GAF Waiver Repayment.** If the Local Government Applicant does not satisfy the relevant eligibility criteria, the Local Government Applicant shall repay the GAF Waiver within 30 days of written notice from FPL of such failure. Additionally, if at any point within 30 years of completion of the Underground Facilities installation, the Local Government Applicant elects to have electric service within the Conversion Area supplied by a provider other than FPL, the Local Government Applicant shall repay FPL a pro-rata share of the GAF Waiver. The pro-rata share (which shall reflect partial years) shall be determined as follows:

$$\text{GAF Waiver} * [(30 - \text{years since the Underground Facilities completion date}) / 30]$$

(Continued on Sheet No. 9.727)

(Continued from Sheet No. 9.726)

9. **Termination Prior to the Conversion Completion.** Failure by the Local Government Applicant to comply with any of the requirements, terms, or conditions of this Agreement or FPL's Electric Tariff shall result in termination of this Agreement. The Local Government Applicant may terminate this Agreement at any time prior to the start of the Conversion and the CIAC paid by the Local Government Applicant will be refunded to the Local Government Applicant; provided however, that the refund of the CIAC shall be offset by any costs incurred by FPL in performing under the Agreement up to the date of termination.
10. **Assignment.** The Local Government Applicant shall not assign this Agreement without the written consent of FPL.
11. **Adoption and Recording.** This Agreement shall be adopted by the Local Government Applicant and maintained in the official records of the Local Government Applicant for the duration of the term of this Agreement. This Agreement also shall be recorded in the Official Records of the County in which the Underground Facilities are located, in the place and in the manner in which deeds are typically recorded.
12. **Conflict between Terms of Franchise Agreement.** In the event of a conflict between the terms of this Agreement and any permit or franchise agreement entered into by Local Government Applicant and FPL, the terms of this Agreement shall control.

IN WITNESS WHEREOF, FPL and the Local Government Applicant have executed this Agreement on the date first set forth above.

LOCAL GOVERNMENT APPLICANT**FPL**

Signed _____

Signed _____

Name _____

Name _____

Title _____

Title _____

Signed _____

Name _____

Title _____

Approved as to Terms and Conditions

Signed _____

Name _____

Title _____

Approved as to Form and Legal Sufficiency

Signed _____

Name _____

Title _____

FLORIDA POWER & LIGHT COMPANY

Third Revised Sheet No. 9.720
Cancels Second Revised Sheet No. 9.720

UNDERGROUND FACILITIES CONVERSION AGREEMENT (NON-GAF)

This Agreement, is made and entered into this _____ day of _____, 20____, by and between _____ ("Applicant"), with an address of _____ and FLORIDA POWER & LIGHT COMPANY ("FPL"), a Florida corporation with an address of P.O. Box 14000, 700 Universe Boulevard, Juno Beach, FL 33408-0429.

WHEREAS, the Applicant has requested that FPL convert certain overhead electric distribution facilities located within the following boundaries (the "Conversion"):

(collectively, the "Existing Overhead Facilities") to underground facilities, including transformers, switch cabinets and other appurtenant facilities installed above ground as set forth in Attachment A hereof (collectively, the "Underground Facilities").

NOW THEREFORE, in consideration of the foregoing premises and the covenants and agreements set forth herein, and other consideration the sufficiency of which is hereby acknowledged, the parties intending to be legally bound, hereby covenant and agree as follows:

1. **Avoided Storm Restoration Cost ("ASRC") Eligibility Criteria.** The Applicant represents and warrants that it meets, and is capable and willing to enforce, the applicable eligibility criteria for the Conversion (select one of the following ASRC Tiers):

☐ **ASRC Tier 1:**

- a. In order for the Conversion to incorporate a sufficient amount of overhead facilities to provide electrical continuity, the Conversion must include a minimum of approximately 3 pole line miles or approximately 200 detached dwelling units within contiguous or closely proximate geographic areas (the "Conversion Area"). The Conversion may be completed in mutually agreed upon phases, with the project size minimums applying to the aggregate project -- provided that any necessary subsequent phase begins within a 1 year period from completion of the prior phase and the minimums are met within, at most, 3 phases; and
- b. The Applicant must require all customers within the Conversion Area who currently have overhead service directly from the Existing Overhead Facilities to convert their service entrances to underground within 6 months of completion of the Underground Facilities installation or each phase thereof; and
- c. If the Applicant requests that facilities be placed in the ROW, the Applicant must be willing and able to execute a right of way ("ROW") agreement with FPL or secure a ROW agreement through the appropriate local government(s) with FPL; and
- d. For any affected laterals, the complete lateral must be converted, including all stages of any multi-stage lateral; and
- e. There are no state or federal funds available to the Applicant to cover any portion of the cost of the Conversion.

Special Circumstances. Conversions which do not meet the Tier 1 project size minimums described in section 1.a are eligible for the ASRC in the following special circumstances:

- i. An island or peninsula where 100% of the Existing Overhead Facilities are to be converted; or
- ii. When the aggregate size of the first 3 phases of a project would satisfy the minimum size criteria but, for mutually-agreed engineering or logistical reasons, those phases are non-contiguous; provided that (a) the next (4th) phase must be adjacent to one or more of the first 3 phases such that the combined contiguous area meets the minimum size criteria, and (b) this 4th phase begins within 1 year from completion of the 3rd phase.

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☐ **ASRC Tier 2.** All eligibility criteria remain the same as Tier 1 with the exception that the Conversion Area must only include between approximately 1 to 3 pole line miles or a minimum of approximately 85 detached dwelling units within contiguous or closely proximate geographic areas.

☐ **ASRC Tier 3.** A Conversion Area that is less than 1 pole line mile within contiguous or closely proximate geographic areas. Additionally, Tier 1 requirements for project completion timing in paragraph 1.a., as well as, paragraphs 1.b. and 1.d. do not apply.

2. **Contribution-in-Aid-of-Construction (CIAC).** The Applicant shall pay FPL a CIAC as required by FPL's Electric Tariff and Section 25-6.115 of the Florida Administrative Code.

i. CIAC (excluding ASRC)	\$ _____
ii. ASRC	\$ _____
iii. CIAC Due	\$ _____

In the event the actual cost of the Conversion (excluding ASRC) exceeds the estimate, the CIAC (excluding ASRC) shall be adjusted by the lesser of (a) the difference between the actual cost of the Conversion and the estimate, or (b) 10% of the CIAC (excluding ASRC) identified above. The ASRC shall also be adjusted accordingly and the Applicant shall pay FPL the resulting difference in the amount of the CIAC Due.

3. **Applicant-Installed Facilities.** The Applicant may, upon entering into an applicant-installed facilities agreement satisfactory to FPL, construct and install all or a portion of the Underground Facilities. Such work must meet FPL's construction standards and FPL will own and maintain the completed facilities. The Applicant agrees to rectify any deficiencies, found by FPL, prior to the connection of any customers to the Underground Facilities and the removal of the Existing Overhead Facilities.
4. **Compliance with Tariff.** The Applicant agrees to comply with and abide by the requirements, terms, and conditions of FPL's Electric Tariff.
5. **Timing of Conversion.** Upon compliance by the Applicant with the requirements, terms, and conditions of FPL's Electric Tariff, this Agreement and any other applicable agreements, FPL will proceed in a timely manner with the Conversion in accordance with the construction drawings and specifications set forth in Attachment A hereof.
6. **Relocation.** In the event that the Underground Facilities are part of, or are for the purposes of, relocation, then this Agreement shall be an addendum to the relocation agreement between FPL and the Applicant. In the event of any conflict between the relocation agreement and this Agreement or the Electric Tariff, this Agreement and the Electric Tariff shall control.
7. **Term.** This Agreement shall remain in effect for as long as FPL or any successor or assign owns or operates the Underground Facilities.
8. **ASRC Repayment.** If the Applicant does not satisfy the relevant eligibility criteria, the Applicant shall repay the ASRC within 30 days of written notice from FPL of such failure. Additionally, if at any point within 30 years of completion of the Underground Facilities installation, the Applicant elects to have electric service within the Conversion Area supplied by a provider other than FPL, the Applicant shall repay FPL a pro-rata share of the ASRC. The pro-rata share (which shall reflect partial years) shall be determined as follows:

$$\text{ASRC} * [(30 - \text{years since the Underground Facilities completion date}) / 30]$$

Non-governmental Applicants, whose CIAC includes a Tier 1 or Tier 2 ASRC, shall provide, at the time of execution of this Agreement, either a surety bond or irrevocable bank letter of credit (the "Security Instrument") in a form acceptable to FPL evidencing ability to repay the ASRC. This Security Instrument shall remain in effect until such time as all customers within the Conversion Area are converted. The Applicant may provide either an amended or replacement Security Instrument in a form acceptable to FPL at any time to reflect the pro-rata adjustments to the ASRC amount. If, upon notice of cancellation or prior to expiration of the Security Instrument, a replacement Security Instrument in a form acceptable to FPL is not provided by the Applicant to FPL, FPL will require the third party issuing the Security Instrument to pay the full balance due in accordance with this Agreement in cash.

(Continued on Sheet No. 9.722)

(Continued from Sheet No. 9.721)

9. **Termination Prior to the Conversion Completion.** Failure by the Applicant to comply with any of the requirements, terms, or conditions of this Agreement or FPL's Electric Tariff shall result in termination of this Agreement. The Applicant may terminate this Agreement at any time prior to the start of the Conversion and the CIAC paid by the Applicant will be refunded to the Applicant; provided however, that the refund of the CIAC shall be offset by any costs incurred by FPL in performing under the Agreement up to the date of termination.
10. **Assignment.** The Applicant shall not assign this Agreement without the written consent of FPL.
11. **Adoption and Recording.** This Agreement shall be adopted by the Applicant and maintained in the official records of the Applicant for the duration of the term of this Agreement. This Agreement also shall be recorded in the Official Records of the County in which the Underground Facilities are located, in the place and in the manner in which deeds are typically recorded.
12. **Conflict between Terms of Franchise Agreement.** In the event of a conflict between the terms of this Agreement and any permit or franchise agreement entered into by Applicant and FPL, the terms of this Agreement shall control.

IN WITNESS WHEREOF, FPL and the Applicant have executed this Agreement on the date first set forth above.

APPLICANT

FPL

Signed _____

Signed _____

Name _____

Name _____

Title _____

Title _____

Signed _____

Name _____

Title _____

Approved as to Terms and Conditions (if required by Applicant)

Signed _____

Name _____

Title _____

Approved as to Form and Legal Sufficiency (if required by Applicant)

Signed _____

Name _____

Title _____

Attachment "E"

Q & A Regarding Undergrounding of Utilities

Q. Are requests to underground transmission lines and distribution lines handled in the same manner?

A. No. The Florida Public Service Commission has authorized a specific tariff that addresses requests to install or convert distribution lines to underground, recognizing this fairly common practice. Relocation of transmission facilities, while not specifically addressed in a tariff, is addressed through an FPL procedure (Relocation of Transmission Facilities). Both processes describe the roles and responsibilities of the parties, and the costs and procedures for executing these requests.

Q. Would you provide a high level summary of the transaction?

A. Yes. FPL is responsible for the design, construction and operation of the facilities that make up the integrated transmission and distribution grid. When an entity (the “applicant”) requests that certain facilities be placed underground, FPL conducts the final engineering design and develops a detailed cost estimate for the project. The applicant provides a deposit to cover this work. This is typically done three to six months prior to the start of construction to ensure an accurate detailed cost estimate tied to contractor bids and current material costs. Upon acceptance, the applicant provides a payment equal to detailed cost estimate. A credit is provided for the deposit, and other appropriate items.

Q. How does the Study relate to the final engineering and detailed cost estimate discussed above?

A. This Study provides a conceptual design and project cost estimate based on that design, for three specific independent tasks: undergrounding of existing distribution lines, undergrounding of existing transmission lines and undergrounding of the future transmission line. The cost estimate reflects current prices for engineering, materials, labor and FPL’s costs to conduct the three specific tasks. The Study provides a conservative estimate of costs and description of process to inform COCG’s decision at this stage. A final design and detailed cost estimate would be conducted in accordance with the relevant processes closer to construction.

Q. Does an applicant receive credit for the avoided costs of placing utilities overhead, when they elect to place utilities underground?

A. A credit equal to the avoided cost of overhead construction is provided when an applicant pays the costs for undergrounding a new transmission or distribution line. No avoided cost credit is applied when existing lines are replaced by underground lines; rather the detailed cost estimate will include the estimated costs to be incurred to remove the existing overhead lines.

Q. Can the applicant engage a contractor to provide some portion of the construction of the facilities?

A. The distribution tariff addresses how this request is handled for distribution facilities. For transmission facilities, FPL would work with the applicant to define an appropriate scope that could be pursued. A credit would be developed by FPL representing the value of this scope.

Q. Who owns and operates the facilities once constructed?

A. FPL owns and operates the facilities.

Q. Will distribution customers served by a line being placed underground be subject to additional connection fees?

A. No. The applicant is responsible for all costs associated with any modifications to the service facilities of customers affected by the conversion.

Q. Does the estimated cost include relocation of non-FPL utilities?

A. No.