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CLERK OF THE BOARD
OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA

MEMORANDUM

Agenda Item No. 8(N)(6)

TO: Honorable Chairwoman Audrey M. Edmonson and Members, Board of County Commissioners

DATE: October 6, 2020

FROM: Abigail Price-Williams County Attorney

SUBJECT: Resolution approving a License Agreement between Miami-Dade County and Florida Power & Light (FPL) (Collectively the "Parties") for the installation, operation, and maintenance of underground transmission lines and related above-ground infrastructure within a portion of the Metrorail corridor located between SW 40th Street/Bird Road and SW 15th Road within the City of Miami; approving an Amendment to the License Agreement between the Parties which reduces the license rent payment for the County's use of the property owned by FPL and located on 88th Street and SW 127th Avenue as the Kendall Park and Ride lot by $50,000.00 to $104,792.12, plus the cost of applicable taxes and insurance, for the 2020-2021 license year, and making the annual rent payment subject to an annual two percent adjustment commencing on July 1, 2021; and further authorizing the County Mayor to execute the subject Agreements for and on behalf of Miami-Dade County, to take all actions necessary to effectuate same, and to exercise all provisions contained therein

Resolution No. R-973-20

A substitute was presented and forwarded to the BCC with a favorable recommendation at the 9-11-20 Parks, Recreation and Cultural Affairs Committee. This item differs from the original as stated in the Mayor's memorandum.

The accompanying resolution was prepared by the Transportation and Public Works Department and placed on the agenda at the request of Prime Sponsor Commissioner Eileen Higgins.

APW/lmp

Abigail Price-Williams
County Attorney

Memorandum

Date: October 6, 2020

To: Honorable Chairwoman Audrey M. Edmonson
and Members, Board of County Commissioners

From: Carlos A. Gimenez
Mayor

Subject: Resolution Approving a License Agreement Between Miami-Dade County and Florida Power & Light for the Installation, Operation and Maintenance of Underground Transmission Lines and Related Above-Ground Infrastructure Within a Portion of the Metrorail Corridor Located Between SW 40th Street/Bird Road and SW 15th Road Within the City of Miami and Approving an Amendment to the License Agreement with Florida Power & Light Reducing the License Rent Payment Amount Paid by Miami-Dade County for its Use of Property Located on SW 88th Street and SW 127th Avenue as a Park and Ride Lot

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The substitute differs from the original item in that it; 1) incorporates two recently agreed upon terms, annual instead of monthly license rent payments and a two percent annual rent increase commencing on July 1, 2021, to the Amendment to the License Agreement on typewritten Page 251 of the item; 2) clearly identifies the taxes and insurance responsibilities of the County for the Park and Ride Lot; 3) accordingly replaces the Amendment to the License Agreement to reflect such changes; and 4) makes the conforming changes to the resolution.

Recommendation

It is recommended that the Board of County Commissioners (Board) adopt the attached resolution approving a License Agreement (DMI License Agreement) between Miami-Dade County and Florida Power & Light Company (FPL) which would allow FPL to install, operate and maintain underground transmission lines and related above-ground infrastructure in a portion of the Metrorail Corridor between SW 40th Street/Bird Road and approximately SW 15th Road. This resolution further authorizes an Amendment to the License Agreement between Miami-Dade County and FPL (Amendment to the Kendall License Agreement), which reduces the annual license rent payment paid by the County to FPL for the County's use of property owned by FPL and located at SW 88th Street and SW 127th Avenue as the Kendall Park and Ride lot.

Scope

The impacts of the subject license agreements are Countywide in nature, however, the transmission equipment and infrastructure will be installed within County Commission Districts 5 and 7, represented by Commissioner Eileen Higgins and Commissioner Xavier L. Suarez, respectively. The Kendall Park and Ride lot is located in County Commissioner District 7.

Fiscal Impact

Both license agreements will have a positive fiscal impact to the County. Pursuant to the DMI License Agreement, FPL will pay to the County a one-time, upfront fee of $1,575,000 and pay an annual fee to the County of $22,000 which shall be increased by two percent each year beginning with the second year of the term of the DMI License Agreement. It is recommended that the upfront fee and the subsequent annual payments be deposited in the Underline O&M Trust Fund, which is being recommended for creation under a companion item, for the purposes of ensuring recurring revenue to support the operations and maintenance

of the Underline. The Underline will run above and along the transmission infrastructure authorized by the DMI License Agreement.

Pursuant to the terms of the DMI License Agreement, if the permit from the Division of Environmental Resources and Management (DERM) for the construction work related to the installation of FPL's equipment requires that FPL perform any type of environmental remediation, then FPL has the option to terminate the DMI License Agreement or proceed to undertake such remediation activities required under the DERM permit at FPL's sole cost and expense. If FPL elects to terminate the DMI License Agreement, then the County is obligated to refund the upfront fee to FPL.

The DMI License Agreement also provides that the County will pay the cost of relocating FPL's equipment under certain circumstances. In the event the County terminates the agreement or requires FPL to relocate any or all of its equipment for any public purpose within the first seven years of the term of the agreement (starting from the commencement date), the County will be responsible for all of FPL's actual and reasonable relocation costs, which is currently estimated at $82 million. If the County requires that FPL relocate its facilities at any time staring from the seventh anniversary of the commencement date through the 30th anniversary of the commencement date, then the County shall be responsible for paying FPL 67 percent of the pro-rated amount of FPL's actual and reasonable relocation costs. The relocation costs shall be pro-rated on a 30-year straight-line amortization basis. If the County requires that FPL relocate any of its facilities beginning with and after the 30th anniversary of the commencement date, then FPL must relocate at its sole cost and expense.

The Amendment to the Kendall License Agreement requires a $50,000 reduction to the annual license rent payment to FPL for the County's use of the Kendall Park and Ride lot. This reduction will provide unanticipated savings to the Department of Transportation and Public Works (DTPW).

Track Record/Monitor
Javier Bustamante, Chief of the Right-of-Way, Utilities and Joint Development Division of DTPW will be responsible for monitoring the DMI License Agreement and the License Agreement for the Kendall Park and Ride lot, as amended by this resolution.

Background
As a result of continuing rapid development in the Brickell and downtown areas of the City of Miami, it is necessary to bring additional electrical power into those areas. FPL is planning to meet this demand through the Downtown Miami Injection (DMI) Project. As part of DMI, FPL is proposing to enter into the DMI License Agreement with the County which will allow the installation of two 138 KV underground transmission lines, eight underground vaults and related above-ground infrastructure within the Metrorail Corridor between SW 40th Street/Bird Road and approximately SW 15th Road. The DMI License Agreement provides that the parties will update Exhibit A to the agreement, which shows the license area, as may be needed to conform to the "as-built" plans upon FPL's installation of its improvements.

The proposed DMI License Agreement has an initial term of 30 years with two 30-year renewal terms which may be exercised at the discretion of FPL provided it has remained in compliance with the terms of agreement. The provisions contained in the agreement provide for the protection of the Metrorail system including any potential electrical interference with the Metrorail system. Additionally, the DMI License

Agreement requires that FPL indemnify the County against any liability arising out of FPL's activities under the agreement, however, said liability is capped at $30 million.

On May 6, 2014, this Board adopted Resolution No. R-430-14, which approved the License Agreement between Miami-Dade County and FPL for the County's use of the property owned by FPL and located on 88th Street and SW 127th Avenue as the Kendall Park and Ride lot. As part of the DMI negotiations, the administration was able to secure a reduction of $50,000 in the license rent payment that the County pays to FPL for the license year commencing on July 1, 2020 and ending on June 30, 2021. The attached Amendment to the Kendall License Agreement enforces said reduction and reflects that the license rent payment for the 2020-2021 license year will be $104,792.12, plus applicable taxes and insurance costs set at $8,813.86 and $1,300.00, respectively. Additionally, the Amendment makes the rent, taxes, and insurance payments due on an annual basis instead of monthly and also amends the annual rent adjustment to a two percent adjustment commencing on July 1, 2021, instead of an annual Consumer Price Index adjustment of no greater than three percent per year. Accordingly, the rent payment for the license year commencing on July 1, 2021 and ending on June 30, 2021 shall be $106,887.96, plus applicable taxes and insurance costs.

Jennifer Moon
Deputy Mayor

MEMORANDUM
(Revised)

TO: Honorable Chairwoman Audrey M. Edmonson and Members, Board of County Commissioners

DATE: October 6, 2020

FROM: Abigail Price-Williams County Attorney

SUBJECT: Agenda Item No. 8(N)(6)

Please note any items checked.

_____	**"3-Day Rule" for committees applicable if raised**
_____	**6 weeks required between first reading and public hearing**
_____	**4 weeks notification to municipal officials required prior to public hearing**
_____	**Decreases revenues or increases expenditures without balancing budget**
_____	**Budget required**
_____	**Statement of fiscal impact required**
_____	**Statement of social equity required**
_____	**Ordinance creating a new board requires detailed County Mayor's report for public hearing**
_____	**No committee review**
_____	**Applicable legislation requires more than a majority vote (i.e., 2/3's present ____, 2/3 membership ____, 3/5's ____, unanimous ____, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) ____, CDMP 2/3 vote requirement per 2-116.1(3)(h) or (4)(c) ____, or CDMP 9 vote requirement per 2-116.1(4)(c)(2) ____) to approve**
_____	**Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required**

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(N)(6)
10-6-20

RESOLUTION NO. R-973-20

RESOLUTION APPROVING A LICENSE AGREEMENT BETWEEN MIAMI-DADE COUNTY AND FLORIDA POWER & LIGHT (FPL) (COLLECTIVELY THE "PARTIES") FOR THE INSTALLATION, OPERATION, AND MAINTENANCE OF UNDERGROUND TRANSMISSION LINES AND RELATED ABOVE-GROUND INFRASTRUCTURE WITHIN A PORTION OF THE METRORAIL CORRIDOR LOCATED BETWEEN SW 40TH STREET/BIRD ROAD AND SW 15TH ROAD WITHIN THE CITY OF MIAMI; APPROVING AN AMENDMENT TO THE LICENSE AGREEMENT BETWEEN THE PARTIES WHICH REDUCES THE LICENSE RENT PAYMENT FOR THE COUNTY'S USE OF THE PROPERTY OWNED BY FPL AND LOCATED ON 88TH STREET AND SW 127TH AVENUE AS THE KENDALL PARK AND RIDE LOT BY $50,000.00 TO $104,792.12, PLUS THE COST OF APPLICABLE TAXES AND INSURANCE, FOR THE 2020-2021 LICENSE YEAR, AND MAKING THE ANNUAL RENT PAYMENT SUBJECT TO AN ANNUAL TWO PERCENT ADJUSTMENT COMMENCING ON JULY 1, 2021; AND FURTHER AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXECUTE THE SUBJECT AGREEMENTS FOR AND ON BEHALF OF MIAMI-DADE COUNTY, TO TAKE ALL ACTIONS NECESSARY TO EFFECTUATE SAME, AND TO EXERCISE ALL PROVISIONS CONTAINED THEREIN

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board:

Section 1. Approves the Downtown Miami Injection License Agreement (the "DMI License Agreement") between Miami-Dade County and Florida Power & Light ("FPL"), in substantially the form attached hereto and made part hereof, for the installation, operation, and maintenance of underground transmission lines and related above-ground infrastructure within a

portion of the Metrorail Corridor located between SW 40th Street/Bird Road and SW 15th Road within the City of Miami.

Section 2. Approves the Amendment to the License Agreement between Miami-Dade County and FPL, in substantially the form attached hereto and made part hereof, reducing the license >>rent<<[1] [[~~fee~~]] payment for the County's use of the property owned by FPL and located on 88th Street and SW 127th Avenue as the Kendall Park and Ride lot >>by $50,000.00 to $104,792.12, plus the cost of applicable taxes and insurance, for the 2020-2021 license year,<< [[~~to $8,560.02 monthly, plus the cost of applicable taxes and insurance~~]] and >>making the annual rent payment subject to an annual two percent adjustment commencing on July 1, 2021.<< [[~~subject to an annual Consumer Price Index adjustment not to exceed three percent per year.~~]]

Section 3. Authorizes the County Mayor or County Mayor's designee to execute the DMI License Agreement and the Amendment to the License Agreement for and on behalf of Miami-Dade County, to take all actions necessary to effectuate same, and to exercise all provisions contained therein, including, to the extent necessary, amending Exhibit A to the DMI License Agreement to conform to the as-built plans of the improvements.

Section 4. Directs the County Mayor or the County Mayor's designee to record the DMI License Agreement in the Public Records of the County and provide a recorded copy to the Clerk of the Board within 30 days of execution of said instrument and directs the Clerk of the Board and permanently store the recorded copy with the resolution.

[1] The differences between the substitute and the original item are indicated as follows: Words stricken through and/or [[double bracketed]] shall be deleted, words underscored and/or >>double arrowed<< are added.

The foregoing resolution was offered by Commissioner **Rebeca Sosa**, who moved its adoption. The motion was seconded by Commissioner **José "Pepe" Diaz** and upon being put to a vote, the vote was as follows:

Audrey M. Edmonson, Chairwoman	**aye**		
Rebeca Sosa, Vice Chairwoman	**aye**		
Esteban L. Bovo, Jr.	**aye**	Daniella Levine Cava	**aye**
Jose "Pepe" Diaz	**aye**	Sally A. Heyman	**aye**
Eileen Higgins	**aye**	Barbara J. Jordan	**aye**
Joe A. Martinez	**aye**	Jean Monestime	**aye**
Dennis C. Moss	**absent**	Sen. Javier D. Souto	**aye**
Xavier L. Suarez	**aye**		

The Chairperson thereupon declared this resolution duly passed and adopted this 6th day of October, 2020. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this resolution and the filing of this approval with the Clerk of the Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By: **Melissa Adames**
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

Annery Pulgar Alfonso

LICENSE AGREEMENT

BETWEEN

MIAMI-DADE COUNTY

AND

FLORIDA POWER & LIGHT COMPANY

LICENSE AGREEMENT

THIS LICENSE AGREEMENT is made and entered into as of this _____ day of _____, 2020, by and between MIAMI-DADE COUNTY, FLORIDA, a political subdivision of the State of Florida ("**County**" or "**Licensor**"), through the Miami-Dade Department of Transportation and Public Works ("**DTPW**"), a Department of the County, and FLORIDA POWER & LIGHT COMPANY, a Florida corporation, its affiliates, licensees, agents, successors, and assigns ("**FPL**" or "**Licensee**"), an electric utility as defined in section 366.02(2), Florida Statutes. County and Licensee may each be referred to herein individually as a "**Party**", and collectively as the "**Parties.**"

WITNESSETH

WHEREAS, Licensee has the need to construct the Improvements (as defined in Section 3 below) as part of FPL project number T17042.

WHEREAS, the County is the fee simple owner of the Metrorail corridor between SW 40th Street and SW 15th Road; and

WHEREAS, Licensee desires to enter into an agreement with the County for the installation, operation and maintenance of the Improvements underground within the Metrorail right-of-way.

WHEREAS, the License Area was acquired in part with funds provided by the FTA (as defined in Section 3 below), previously called the Urban Mass Transit Administration, and in which the FTA retains an interest and the FDOT (as defined in Section 3 below); and

WHEREAS, Licensee acknowledges that this Agreement is subject to the approval of the FTA, the FDOT and the Board (as defined in Section 3 below) as set forth below.

NOW THEREFORE, in consideration of the mutual covenants contained herein, the Parties agree as follows:

Section 1. License Area.

The County hereby grants Licensee, and Licensee hereby accepts from the County, a non-exclusive license for the long-term use by Licensee of that certain County-owned License Area (as defined in Section 3 below, and as more fully described in Exhibit A attached hereto and made part hereof), solely for the installation, operation, and maintenance of the Improvements, in the manner hereinafter set forth. The Parties hereby agree to update Exhibit A of this Agreement once the initial installation of the Improvements is completed and "as-built" plans are provided to DTPW for any and all Improvements installed under this Agreement. No other uses of the License Area by Licensee are permitted. For the avoidance of doubt, this Agreement does not grant Licensee an easement or any property rights in the License Area.

Section 2. Term.

The initial term of this Agreement (as defined in Section 3 below) shall be for a period of thirty (30) years, commencing on the Commencement Date (as defined in Section 3 below) and ending on the thirtieth (30^{th}) anniversary of the Commencement Date ("**Initial Term**"). Provided this Agreement has not been sooner terminated pursuant to the terms herein and Licensee is not then in default of this Agreement beyond any applicable notice and cure period, Licensee shall have the right to renew this Agreement for up to two (2) additional consecutive thirty (30) year renewal terms (each a "**Renewal Term**") by providing written notice to the County of Licensee's intent to renew the term prior to the expiration of the then applicable term (the "Initial Term" and the two (2) "Renewal Terms" shall be collectively referred to hereafter as the "**Term**"). This Agreement shall not become effective unless and until the Board (as defined in Section 3 below), the FTA (as defined in Section 3 below), and the FDOT (as defined in Section 3 below) shall have approved the execution of this Agreement. This Agreement may be cancelled (i) by Licensee at any time upon providing at least thirty (30) days prior written notice to County, or (ii) by County at any time subject to the terms of Section 15 below.

Section 3. Terms Defined.

The terms set forth below, when used in this Agreement, shall be defined as follows:

(a) "**Affected Area**" shall mean the License Area and the area within thirty (30) feet of the Metrorail System.

(b) "**Agreement**" or "**License Agreement**" shall mean this License Agreement and all amendments, supplements and modifications hereof.

(c) "**Board**" shall mean the Board of County Commissioners of Miami-Dade County, a political subdivision of the State of Florida.

(d) "**Commencement Date**" shall mean the date upon which the last Party has signed this Agreement and it has been formally approved by the Board, FTA and FDOT, as may be applicable.

(e) "**Construction Plans**" shall mean final plans, drawings and specifications in the form and with sufficient detail as required to obtain a County construction permit for the Improvements.

(f) "**County**" shall have the same meaning given to such term in the opening paragraph of this Agreement.

(g) "**County Mayor**" shall mean the County Mayor or his designee. If, during the lifetime of this Agreement, the position of County Mayor is redefined and/or dissolved, the individual who is deemed head of the executive branch of Miami-Dade County government shall be authorized to have all rights, obligations and responsibilities that had been granted to the County Mayor pursuant to this Agreement at the time this Agreement was executed.

(h) "**DTPW**" shall have the same meaning given to such term in the opening paragraph of this Agreement.

(i) "**FDOT**" shall mean the State of Florida Department of Transportation.

(j) "**FPL**" shall have the same meaning given to such term in the opening paragraph of this Agreement, and its successor-in-interest.

(k) "**FTA**" shall mean the United States Federal Transit Administration.

(l) "**Improvements**" shall mean those certain underground electric transmission facilities, including, conduits, cables, vaults, structures, and appurtenant equipment associated therewith, and communication equipment solely for FPL's monitoring of electric transmission service (not for third party or any other use) and appurtenant above-ground equipment such as handholes and markers to mark the location of the underground facilities, installed under, upon, and across the

License Area, as mutually-agreed upon by the County and Licensee as set forth on attached Exhibit B, Design Plan of Improvements.

(m) "**Law and Ordinance**" or "**Laws and Ordinances**" shall mean all present and future applicable laws, ordinances, rules, regulations, permits, authorizations, orders and requirements of all federal, state, county and municipal governments, the departments, bureaus, or commissions thereof, authorities, boards or officers, or any other body or bodies exercising similar functions having or acquiring jurisdiction over all or any part of the License Area or the Improvements thereon.

(n) "**License Area**" shall mean the approximately 120,700 square feet (2.77 acres) of rights, commencing below grade within the Metrorail between SW 40th Street and SW 15th Road, except for those certain above-ground handholes and markers which shall be at or above grade, all as more particularly described on and depicted in Exhibit A attached hereto and made a part hereof.

(o) "**License Payment**" shall mean payment made by Licensee to the County for use of the License Area in accordance with Section 4 of this Agreement.

(p) "**License Year**" shall mean calendar year; provided, however, that if this Agreement commences on a day other than January 1st then the first License Year shall consist of such fractional year starting from the Commencement Date through and including December 31, and the last License Year shall consist of such fractional year starting from January 1st and ending on the expiration date of this Agreement.

(q) "**Licensee**" shall have the same meaning given to such term in the opening paragraph of this Agreement.

(r) "**Licensor**" shall have the same meaning given to such term in the opening paragraph of this Agreement.

(s) "**Metrorail**" or **"Metrorail System"** shall mean the County's third-rail Rapid Transit System in its entirety, operated by the County, including all Metrorail structures, infrastructure, Metrorail right-of-way and subsurface, surface and air rights.

(t) **"M-Path"** shall mean the paved pedestrian and bicycle shared-use path in Miami-Dade County, which was opened in 1983 and is part of the Miami-Dade Metrorail System. The multi-use path follows the Metrorail right-of-way generally parallel to US-1 and beneath the elevated Metrorail guideways from the Miami River to the Dadeland South Metrorail station.

(u) "**Permit**" shall mean any permit to be issued by the appropriate agency or person including but not limited to applicable permits for building construction, excavation, site work, paving, drainage, landscaping, lighting and the like.

(v) "**Term**" shall have the same meaning given to such term in Section 2 of this Agreement.

(w) **"Upfront Payment"** shall mean the payment made by Licensee to the County in accordance with Section 4.1 of this Agreement.

Section 4. License Payment and Cost Reimbursement.

4.1 Upfront Payment: Licensee shall pay the County on or prior to the Commencement Date an upfront payment of One Million Five Hundred and Seventy-Five Thousand and No/100 Dollars ($1,575,000.00) ("Upfront Payment"). The Parties acknowledge and agree that the Upfront Payment represents Licensee's prepayment to the County for:

(i) Unless otherwise required by applicable federal, state, or local law or regulations, Licensee's restoration obligations (including tree and other vegetation) for the portion of the project located between SW 15th Road and 19th Avenue; specifically, and subject to the remediation obligations of Section 5.16, shall be limited to restoring this portion of the License Area to "shovel ready" condition upon completion of its initial installation of the Improvements, and except for the M-Path, Licensee shall not be obligated to restore or replace any asphalt, trees, sod, landscaping or other vegetation, or any other obstructions removed or damaged by Licensee upon this portion of the project, unless otherwise required by applicable federal, state, or local law or regulations. Licensee must restore the M-Path to substantially the same condition as it existed immediately prior to Licensee's initial installation of its Improvements, except for those certain areas of realignment of the M-Path required by Licensee's initial installation of its Improvements in the areas previously approved by the County and depicted on attached Exhibit B, whereupon Licensee shall construct and realign those portions of the M-Path to connect to the existing M-Path; and

(ii) Further, for the remainder portion of the project located between South of SW 19th Avenue to Bird Road, Licensee, at Licensee's sole cost and expense, shall only be responsible to restore this portion of the License Area to, subject to the remediation obligations of Section 5.16, substantially the same condition as practical as it existed immediately prior to Licensee's initial installation of its Improvements limited to restoring sod and any existing asphalt path, including

the M-Path, located on this portion of the License Area removed or damaged by Licensee hereunder, but not replacing any trees or other vegetation removed by Licensee or replacing the original asphalt path, unless otherwise required by applicable federal, state, or local law or regulations. Licensee must restore the M-Path to substantially the same condition as it existed immediately prior to Licensee's initial installation of its Improvements, except for those certain areas of realignment of the M-Path required by Licensee's initial installation of its Improvements in the areas previously approved by the County and depicted on attached Exhibit B, whereupon Licensee shall construct and realign those portions of the M-Path to connect to the existing M-Path.

The Parties further acknowledge and agree that nothing herein precludes the County from utilizing the Upfront Payment for any eligible purpose at the County's discretion; provided, however, in the event Licensee terminates this Agreement under Section 6.3 below prior to the expiration of the DERM Permit Period (as defined in Section 6.3 below), County shall refund the Upfront Payment in full to Licensee in accordance with Section 6.3 below.

4.2 License Payment: As additional consideration for entering into this Agreement, Licensee shall pay the County Twenty-Two Thousand and No/100 Dollars ($22,000) for the first License Year ("**License Payment**"), prorated as set forth in Section 4.3 below. Commencing in the second Lease Year, and each year thereafter during the Term, the License Payment shall increase annually as set forth below in Section 4.6.

4.3 License Payment for First Partial License Year: Payment of License Payment by Licensee to the County for the first (1st) partial License Year from the Commencement Date through and including December 31, 2020, shall be calculated as follows: The License Payment shall be divided by 365 and multiplied by the number of days remaining in the calendar year including the Commencement Date. Applicable State of Florida sales tax, if any, shall be added to the resulting product of this multiplication. After the Commencement Date, and this Agreement is deemed effective under Section 2 above, Licensee shall pay County for such first annual installment of the License Payment, which payment shall be due within thirty (30) days after the expiration of the DERM Permit Period, provided Licensee has not terminated this Agreement under Section 6.3.

4.4 License Payments After First Partial License Year: Licensee shall pay License Payments to the County prior to January 1 of each License Year, plus applicable State of Florida sales tax, if applicable.

4.5 License Payment for Last Partial License Year: Payment of License Payment by Licensee to the County for the last partial License Year from the January 1 of the last License Year through and including the expiration date of this Agreement shall be calculated as follows: The License Payment shall be divided by 365 and multiplied by the number of days remaining in the Term. Applicable State of Florida sales tax, if any, shall be added to the resulting product of this multiplication.

4.6 Annual Adjustment to License Payment: Beginning with the second License Year of the Term of this Agreement, and continuing on each anniversary thereafter during the Term, the License Payment shall be adjusted annually. The annual License Payment adjustments will be equal to a two-percent (2%) increase of the prior year's License Payment.

4.7 Reimbursements: Currently, the Licensor is exempt from paying real estate property taxes on County-owned property, including the License Area. However, if the License Area shall cease to be exempt from ad valorem property taxes at any time during the Term of this Agreement, Licensee shall reimburse Licensor for the incremental increase in ad valorem property taxes due on the License Area and non-ad valorem taxes, if any, caused by Licensee's use and occupancy of the License Area for the purposes permitted under this Agreement during the Term; excluding, however, any ad valorem or non-ad valorem taxes assessed, levied, confirmed, imposed upon or becoming a lien upon any part of the License Area reserved in this Agreement for the exclusive use of County, if any.

As of the effective date of this Agreement, Licensee acknowledges that it is exempt from paying Florida sales taxes. If Licensee ceases to be exempt from paying sales taxes during the Term, then all applicable sales tax shall be added to the License Payment and paid by Licensee.

Notwithstanding the foregoing, Licensee shall pay or cause to be paid, before any fine, penalty, interest or cost may be added thereto, all taxes, assessments, and other governmental charges and assessments which at any time during the term of this Agreement have been, or which may become, a lien on the License Area, or any part thereof, or any appurtenance thereto, or may be assessed, levied, confirmed, imposed upon or becoming a lien upon any part of the License Area caused by Licensee's use and occupancy of the License Area for the purposes permitted under this Agreement during the Term, or which are caused directly and solely by Licensee or any of its contractors, subcontractors, or independent contractors. Further, Licensee shall pay before delinquency, all taxes, assessments, fees and charges levied, assessed or imposed upon it, as well as upon its fixtures, furnishings, equipment, improvements made by Licensee to the License Area, and personal property of any kind owned, installed or used by Licensee in or upon the License Area.

4.8 Payment of License Payment and Reimbursements: The License Payment, Upfront Payment, reimbursements, and all other payments due to Licensor under this Agreement shall be made by electronic payment or by check payable to Miami-Dade County and submitted or mailed to the following address as may be amended from time to time by the County:

Miami-Dade County Department of Transportation and Public Works
Right-of-Way, Utilities and Joint Development Division
701 N.W. 1st Court, Suite 1500
Miami, Florida 33136-3922

4.9 Late Payments: In the event that any payment of the License Payment, Upfront Payment and/or reimbursement remains overdue for a period of twenty (20) calendar days or more after it is due Licensee shall pay the County interest on any such amount at a rate equal to the lesser of eighteen percent (18%) per annum or the maximum lawful rate, which interest shall accrue from the due date.

Section 5. Use of License Area.

5.1 Improvements: Licensee and the County agree that Licensee shall use the License Area solely for the installation, operation, and maintenance of Licensee's Improvements as approved by

County and described on attached Exhibit B and for no other purpose. Licensee shall be responsible to install, construct and maintain all Improvements in the License Area at its sole cost and expense. Approval of the Licensee's installation, operation and/or maintenance of such Improvements may be required by governmental entities other than the County, and Licensee shall be solely responsible for obtaining all such approvals and costs associated with same. This Agreement shall only apply to the Improvements being constructed hereunder and not any existing Licensee facilities, if any, located within the License Area as of the effective date of this Agreement ("Existing Facilities"). For the avoidance of doubt, the Parties hereby acknowledge and agree that this Agreement does not authorize any Existing Facilities.

5.2 Safety Manual: Licensee shall perform all activities provided for by this Agreement only as approved by the County and in accordance with the Miami Dade Transit Safety Manual and Miami-Dade Transit Adjacent Construction Safety Manual attached hereto as Exhibit D, as may be amended from time to time, and the DTPW escort/monitor requirements attached as Exhibit E. Licensee acknowledges that the County may at its sole discretion and without need to amend this Agreement, reasonably change the requirements and rates provided for in Exhibit E, provided same do not interfere with Licensee's use of the License Area under this Agreement, and such changes are not arbitrary or capricious.

5.3 Contractors: Pursuant to all applicable laws, ordinances, and regulations, only licensed, certified and/or registered and insured contractors and subcontractors are authorized to perform work in the License Area.

5.4 Illegal and Unauthorized Uses: Licensee shall not knowingly use or permit the use of its Improvements or the License Area to be used for any illegal purposes or other purposes not specifically authorized by this Agreement.

5.5 Changes in Improvements within the License Area: The Licensee shall not make any changes, modifications, upgrade, expansion, alterations, additions, or improvements in or to the Premises including but not limited to changing electrical capacity, service, or voltage. For the purposes of this Agreement, Licensee's routine inspections and maintenance (as that term is

defined in Section 5.6), repairs, and like for like replacements, are not considered to be a change, alteration, upgrade, or expansion of the Improvements.

5.6 Notification to County: Except in the event of an emergency, Licensee shall notify the County in writing in accordance with Section 25 a minimum of thirty (30) days in advance of any activities being performed by Licensee (or commissioned by Licensee) that (i) may impact the Metrorail and/or County facilities or operations, or (ii) be located within thirty (30) feet of the dripline of the Metrorail guideway. Licensee agrees that, whenever possible, major construction activities will be performed between the hours of 8:00 P.M. and 5:00 A.M. on weekdays or on Saturdays or Sundays, when such major construction activities are being performed within thirty (30) feet of the dripline of the Metrorail guideway. The County, in its sole discretion in accordance with Section 5.2 of this Agreement, may require County employees or representatives to be present, at the expense of Licensee at the rate set forth in attached Exhibit E, which is subject to change from time to time, when Licensee, or other parties on behalf of Licensee or who are conducting activities commissioned by Licensee, that (i) may impact the Metrorail and/or County facilities or operations, or (ii) are located within thirty (30) feet of the dripline of the Metrorail guideway. In such event Licensee shall notify DTPW a minimum of thirty (30) days in advance of such except in the event of an emergency. Notwithstanding the foregoing, Licensee's routine inspection and maintenance activities in connection with the Improvements shall require only twenty-four (24) hours prior: (1) written notice in accordance with Section 25, and (2) verbal notification to DTPW Central Control at 305-375-3938. For purposes of this Agreement, routine inspection and maintenance activities consists of patrolling the License Area for any anomalies with the Improvements, performing cable location for managing construction Sunshine one call tickets as they are issued, or/and being present for any excavations by third party construction activities within the License Area as needed. For the avoidance of doubt, this Agreement does not authorize any third party construction or excavation activities. Licensee's inspections are done by at least two (2) Licensee crewmen in a pickup truck and a small trailer. The crewmen will stop at every manhole in the License Area and perform the following activities once every three (3) years: (i) open manhole lids; (ii) set up for crew safety; (iii) check manhole structures; (iv) check pipe coating for oxidations; and (v) check mounting brackets, if applicable.

In the event of an emergency which requires an immediate response by Licensee, Licensee shall promptly notify DTPW Central Control prior to the commencement of any work at 305-375-3938.

5.7 Non-Exclusivity: This Agreement is non-exclusive and does not expressly or implicitly preclude the County from issuance of other permits, license or lease agreements, or granting any interest, to any other person or entity. This Agreement in no way affects the right of the County to authorize use of Metrorail corridor for other lawful purposes to other persons as it determines appropriate, as long as such use does not unreasonably interfere with Licensee's use of the License Area as provided by this Agreement. The County will review any proposed plans with Licensee prior to approval to ensure that the proposed use does not interfere with the Licensee use of the License Area.

5.8 No Property Rights: This Agreement is only a license for permissive use and does not grant Licensee any legal right, title, tenancy, or leasehold interest whatsoever of real property, nor shall the County be compelled to maintain any of its property any longer than, or in any other fashion than in the County's judgment, its own business or needs may require.

5.9 Prohibition against Liens: Licensee is prohibited from placing a lien or allowing the placement of liens on County property. This prohibition shall be placed on all contractor, subcontractor and supplier contracts. With respect to Licensee's activities hereunder, Licensee shall not allow any mechanics liens or materialman's liens, or liens, judgments or encumbrances of any kind ("**Encumbrances**"), to be placed on, or to cloud title of, the County's fee simple interest in the License Area, and shall indemnify the County for any costs, expenses, or damages the County incurs which are caused by Licensee or any of its contractors, subcontractors, or independent contractors. In the event that any such Encumbrance is not removed as a lien on the County's fee simple interest in the License Area within thirty (30) days after Licensee receives written notice from the County demanding removal of such Encumbrance, such Encumbrance shall be deemed a default hereunder. Licensee shall promptly take all steps required to promptly remove or otherwise resolve all such Encumbrances of which Licensee has been given actual notice.

5.10 Use of License Area by Third Party: This Agreement authorizes Licensee's use of the License Area solely as contemplated herein, any use of the License Area by any other person, entity, or other third party, regardless of the duration of such use, is not authorized.

5.11 License Area of Critical Importance to County: The County and Licensee recognize and acknowledge that the manner in which the License Area is developed, used and operated are matters of critical importance to the County and the general welfare of the community. Licensee agrees that at all times during the term of this Agreement, Licensee shall use reasonable efforts to protect the safety of the Metrorail System and the safety and security of County employees, contractors, representatives, and patrons and the public while performing its activities hereunder and to avoid any activities which may unreasonably interfere with the County's Metrorail operations and maintenance, the free flow of pedestrian and vehicular traffic or public access to the Metrorail corridor and facilities. The County agrees that at all times during the term of this Agreement, the County shall use reasonable efforts to protect the Licensee's Improvements in the License Area from being damaged or altered as a result of its activities and/or operations and to avoid any activities which may interfere with the Licensee's use of the License Area as provided by this Agreement. If changes in Licensor's operations become necessary or desirable in providing for the general welfare of the community, Licensor will, in consultation with Licensee, make reasonable efforts to minimize the effects of such changes on Licensee's use of the License Area. Nothing herein shall in anyway limit the provisions found in Section 5.16, Section 15, or Section 16.

5.12 Prohibited Uses: The License Area shall not be used for the following:

(a) any unlawful or illegal business, use or purpose, or for any businesses, uses or purposes which is/are, at the reasonable discretion of the County, based on County's good faith and determination, immoral, disreputable, hazardous, or constitutes a nuisance of any kind (public or private);

(b) any purpose which violates the Certificates of Occupancy (or other similar approvals of applicable governmental authorities);

(c) any use or activity which is in violation of Chapter 30 B, 33, and/or 33 C. of the Miami-Dade County Code,

(d) any use not specifically provided for by this Agreement; or

(e) any use or activity which violates any Law and Ordinance.

5.13 Construction, Installation and/or Modifications; Electromagnetic Interference Tests:

(a) The County requires specific construction and installation plans for any work being done within the License Area and/or within thirty (30) feet of the Metrorail System (the "**Affected Area**"). Consistent with Section 5.5, the County and Licensee hereby agree and acknowledge that during the Term of this Agreement, Licensee shall make no changes, expansions, alternations, additions, modifications, upgrades and/or enhancements to Improvements within the License Area, or the Affected Area.

(b) Licensee shall perform electromagnetic interference tests on Licensee's equipment and provide the results of such tests to the County, as provided below:

(i) installed within the Affected Area within two (2) months of energizing any such equipment;

(ii) installed within the License Area after any change in transmission voltage; and

(iii) at any time the County reasonably believes that Licensee is causing electromagnetic interference within the License Area or Affected Area.

(c) Licensee shall, upon written request from the County, provide reasonable proof of compliance with all applicable required licenses and permits for any of its construction, subcontractors, or installation activities hereunder.

(d) Licensee shall ensure that its Improvements are in safe conditions at all times and shall take on any and all monitoring that may be required by applicable federal, state, and/or local laws, regulations, and/or ordinances to ensure the safety of the Improvements as well as not impacting the safety of the Metrorail System and/or Miami-Dade County's employees and patrons. Licensee shall take on any and all actions necessary to immediately remedy any unsafe conditions, or any conditions that requires remediation pursuant to applicable federal, state, and/or local laws, regulations, and/or ordinances, found within the License Area and/or Affected Area that are caused by, or resulting from, the Improvements.

5.14 Performance of Improvements: Only improvements and activities as approved in writing by the County pursuant to the terms of this Agreement shall be performed, constructed, installed, and/or modified in the License Area by Licensee. All work by Licensee shall be in conformity with the approved plans, this Agreement, and all applicable federal, state, County, and local codes, laws, ordinances, and regulations.

5.15 As-Built Plans: Upon completion of the construction and installation of the Improvements, Licensee shall provide to DTPW "as-built" plans for any and all Improvements constructed, installed or modified under this Agreement which shall be incorporated into this Agreement as Exhibit C. The "as built" plans shall be submitted in the following manner:

(a) Three (3) full-size printed copies;

(b) One (1) electronic copy in pdf format; and

(c) One (1) electronic copy in AutoCAD.

5.16 "AS IS" Condition: Licensee accepts the License Area and the use of which is granted as provided hereunder based on its "AS IS" physical condition and in an "AS IS" state of repair. Except as otherwise expressly stated herein, the County expressly disclaims and makes no representations or warranties, whether expressed or implied, to Licensee with respect to the Licenses Area or facilities located therein, including, without limitation, with respect to merchantability of title, the suitability or fitness of the License Area or such facilities or for any of the uses or purposes contemplated by this Agreement or otherwise, or the compliance of same with all applicable Laws and Ordinances, or the condition thereof. In the event that any remediation is required, including but not limited to of soil, groundwater, or air contamination, under Licensee's DERM Permit, Licensee may either (i) terminate this Agreement in accordance with Section 6.3 below, or (ii) not terminate this Agreement and proceed to undertake such remediation activities required under the DERM Permit at Licensee's sole cost and expense.

5.17 Payment and Performance Bond: With respect to the License Area, at least ten (10) days before Licensee commences any construction work within the License Area, Licensee shall execute, deliver to the County and record in the public records of the County, a payment and performance bond equal to the total cost of construction contracts within the License Area. Each

payment and performance bond shall be in compliance with all applicable laws including the terms of Section 255.05, Florida Statutes, and in compliance with the requirements of Sections 255.05(1)(a) and (c), Section 255.05(3), and Section 255.05(6), and shall name the County and the Licensee beneficiaries thereof, as joint obligees. Licensee shall not allow any mechanics liens or materialman's liens, or liens, judgments or encumbrances of any kind ("Encumbrances"), to be placed on, or to cloud title of, County's fee simple interest in the Property and shall indemnify County for any costs, expenses, or damages County incurs by reason thereof, in the event that any such Encumbrance is not removed as a lien on the County's fee simple interest in the Property within thirty (30) days after Licensee receives written notice from County demanding removal of such Encumbrance, and in which case such Encumbrance shall be deemed an Event of Default hereunder. Licensee shall promptly take all steps required to promptly remove or otherwise resolve all such Encumbrances of which Licensee has been given actual notice.

Alternatively to the 255.05 payment and performance bond, Licensee may: (1) provide the County with an alternate form of security in the form of a certified check that the County may deposit in a County-controlled bank account or an irrevocable letter of credit in a form and for an amount that is acceptable to the County ("Alternative Security"), to remain in place until evidence reasonably satisfactory to the County is submitted to demonstrate all contractors performing the Improvements have been paid and the Improvements have achieved Completion of Construction, and such Alternative Security shall meet the specifications set forth below; (2) require that each prime contractor hired by Licensee to perform work on the Improvements shall provide a performance bond with a surety insurer authorized to do business in the State of Florida as a surety in an amount not less than 100% of his/her/its respective contract in a form acceptable to the County to insure that his/her construction work shall be completed by the contractor or, on its default, his/her surety and shall name the County as an additional obligee and shall meet the specifications set forth below; and (3) each prime contractor hired by Licensee to perform work on the Improvements shall provide a payment bond with a surety insurer authorized to do business in the State of Florida as a surety in an amount not less than 100% of his/her/its respective contract in a form acceptable to the County to secure the completion of the Improvements free from all liens and claims of sub-contractors, mechanics, laborers and material men and shall name the County as an additional obligee and payee. The Alternative Security and

the Bond(s) shall comply with the requirements of Section 255.05.

If Licensee provides the Alternative Security, Licensee shall also comply with the following obligations:

(A) Licensee shall obtain a conditional release of lien from each of its prime contractor(s) at the time each progress payment is made.

(B) Licensee shall obtain an unconditional release of lien from each of its prime contractor(s) within five (5) business days after payment is made.

(C) In the event Licensee's contractor(s) claim non-payment(s), and/or, fail to timely provide unconditional releases of lien within the timeframe stipulated under these terms, County reserves the right but not the obligation to:

(i) Reduce the amount(s) in question from the cash deposit(s) or security posted until the claim(s) is/are liquidated; or

(ii) Appropriate funds for such payment(s) from any cash deposit(s) or security posted and make payment(s) directly to the claimant(s).

In either case, Licensee shall within thirty (30) days of the County's notification to deposit an amount equal to the reduced/disbursed amount in the County's escrow account or increase the irrevocable letter of credit so as to replenish the original amount of the cash deposit(s) or security posted.

5.18 Third Party Attachments: No third-party attachments are permitted hereunder. Third party attachments shall require a separate permit and County approval.

Section 6. Dangerous Liquids, Materials, Hazardous Waste, and Contamination.

6.1 Dangerous Liquids and Materials: Licensee shall not permit any vehicle to carry flammable or combustible liquids into or onto the License Area and within thirty (30) feet of the Metrorail System structure or guideway dripline at any time and shall prohibit the manufacture or storage of any flammable or combustible liquid or dangerous or explosive materials in or on the License Area and within thirty (30) feet of the Metrorail System structure or guideway dripline, provided that this restriction shall not apply to prevent the entry or parking of motor vehicles carrying flammable or combustible liquids solely for the purpose of their own propulsion.

During construction only, Licensee or the Licensee's contractor(s) shall be permitted to store any material, vehicle or equipment within the License Area for more than three (3) days without the County's authorization; provided, however, in no event shall passenger access to any Metrorail station or the County's access to the Metrorail System be obstructed by such activity during this time period, and the Licensee shall secure (including within temporary fencing), maintain and utilize security personnel, at its sole cost and expense, as it deems necessary to protect any such material, vehicle or equipment within the License Area. For purposes of this Agreement, materials in the process of being prepared and laid out for installation, and/or equipment actively working or in the process being readied for installation of Licensee's Improvements is not considered to be storage. Notwithstanding any provision to the contrary, Licensee or the Licensee's contractor shall not store hazardous or flammable material underneath the Metrorail System.

6.2 Hazardous Waste or Contamination: Subject to Section 6.1 above, all persons are STRICTLY PROHIBITED from storing toxic or flammable materials within the License Area provided that this restriction shall not apply to prevent the entry or parking of motor vehicles carrying flammable or combustible liquids solely for the purpose of the motor vehicle's own propulsion. If Licensee's use of the License Area results in the introduction of hazardous materials or contamination of the soil or ground water caused solely and directly by or through Licensee, then Licensee agrees: (i) to notify County immediately of any contamination, claim of contamination or damage, (ii) after consultation and approval of County, to clean up the contamination in full compliance with all applicable statutes, regulations and standards, and (iii) to indemnify, defend and hold County harmless from and against any claim, suits, causes of action, costs and fees, including attorney's fees, arising from or connected with any such contamination or damage. This provision shall survive termination of this Agreement.

6.3 DERM Permit: Licensee shall submit an application for a permit from the Department of Environmental Resource Management ("**DERM Permit**") within one hundred twenty (120) days after the Commencement Date. Once the DERM Permit has been obtained by Licensee, if the terms of the Permit are unacceptable to Licensee for any reason or no reason whatsoever, in Licensee's sole and absolute discretion, Licensee may terminate this Agreement upon delivering written notice to the County within thirty (30) days from the date Licensee receives the DERM

Permit ("**DERM Permit Period**"); whereupon County shall refund the Upfront Payment in full to Licensee within fifteen (15) days of such termination notice, and this Agreement shall be deemed terminated and of no further force and effect and the parties shall be released and relieved from any further liability or obligation hereunder except for matters specifically provided herein to survive the termination hereof. In the event Licensee needs additional time to review the DERM Permit in order to determine if the terms of the Permit are unacceptable, Licensee shall have the right to extend the DERM Permit Period for an additional thirty (30) days upon delivering written notice to the County of such extension prior to the end of the initial DERM Permit Period. In the event Licensee fails to deliver such termination notice prior to the expiration of the DERM Permit Period, as same may be extended as set forth above, it shall be deemed that Licensee has elected to proceed with the terms of this Agreement, and pay the first annual installment of the Licensee Payment in accordance with Section 4 above.

Section 7. Protection of Metrorail System.

7.1 Measures: Licensee, at its sole cost and expense, shall take necessary and reasonable measures to protect the Metrorail System, operations and corridor from damage or impacts resulting from Licensee's use of the License Area and/or activities performed or authorized by the Licensee, its employees, invitees, or any other persons entering the License Area in connection with this Agreement. If the County reasonably determines that precautionary measures are necessary or desirable to protect County real property, personal property, equipment, and systems, Licensee shall prepare a written plan detailing the measures to be taken by Licensee to ensure this protection and submit same to the County for its approval. Failure by Licensee to fully comply with this requirement and to take all precautionary measures as required by the County may result in Licensee being in default of this Agreement, and consequently, termination of this Agreement.

7.2 County Cost Damage Reimbursement: Licensee shall be responsible for reimbursing the County for any and all actual and reasonable costs incurred by the County, as a result of activities performed or authorized by Licensee, which includes, but is not limited to, any displacement, damage or destruction caused by Licensee, its employees, agents, contractors, subcontractors or invitees or its Improvements to the County's real property, property, systems, equipment and/or structures, including but not limited to, any damages associated with intentional or accidental

failure of any component of the Improvements. Notwithstanding the foregoing, Licensee shall not be responsible for anything caused by the County's sole gross negligence. Further, neither Party shall be responsible for any consequential, special, or punitive damages. The forgoing sentence does not apply to actual damage to the Metrorail caused by FPL, or its employees, agents, servants, partners, principals, contractors, subcontractors, or independent contractors.

7.3 Emergency Affecting Public Safety: Upon a finding by the County that the Licensee's installation or use poses an emergency or serious risk to the safety of the Metrorail System, its passengers, its employees or the public, the DTPW Director or his/her designee may, require the Licensee to immediately temporarily de-energize the electrical power until such emergency or serious risk to the safety of the Metrorail System, its passengers, its employees or the public, has been addressed in accordance with all applicable federal, state and local laws and codes and all provisions of this Agreement. Licensee shall, upon becoming aware of any condition that poses a risk to the safety of County facilities, operations, systems and/or to any persons, regardless of the means by which Licensee is made aware of such condition, immediately notify the County at the telephone number below and shall immediately fully correct such condition. Failure of Licensee immediately and fully correct such hazardous condition may result in termination of this Agreement.

The 24-hour emergency contact telephone numbers of DTPW and FPL are:
DTPW "Central Control": 305-375-3938
FPL "Trouble Office": 305-442-5731

7.4 Access: Licensee shall not impede access to Metrorail facilities and shall comply with all federal, state and local laws and regulations and all provisions of this Agreement regarding accessibility issues. Licensee shall request and obtain approval by the County prior to impeding access to the Metrorail facilities or prior to using barricades. Licensee shall be cognizant of accessibility issues when/if using barricades in County sidewalk areas while performing construction, maintenance and repairs. The County shall not be liable for Licensee's said impediment of access or use of said barricades. Licensee acknowledges and agrees that it shall indemnify and hold harmless the County from any all liability losses and damages, including cost

of defense, resulting from impediment of access and the installation and use of said barricades. In no event shall Licensee's liability under this paragraph exceed $30,000,000, subject to Section 17.

Section 8. County's Rights as Sovereign.

It is expressly understood that notwithstanding any provision of this Agreement and County's status hereunder:

(a) The County retains all of its sovereign prerogatives and rights as a county under State of Florida laws and shall not be estopped from withholding or refusing to issue any approvals of and applications for buildings, zoning, planning or development under present or future laws and regulations of whatever nature applicable to the design, construction and development of the Improvements provided for in this Agreement, and

(b) The County is not obligated to grant any applications for building, zoning, planning or development under present or future laws and regulations of whatever nature applicable to the design, construction and development of the Improvements provided for in this Agreement.

Section 9. Licensee's Obligations.

The County's approval of any of the Construction Plans shall not relieve Licensee of its obligations under law to file such plans with any department of the County or any other governmental authority having jurisdiction over the issuance of building or any other permits required by law and to take such steps as are necessary to obtain the issuance of such permits. Licensee acknowledges that any approval given by the County, acting as Licensor hereunder, shall not constitute an opinion or agreement by the County that the plans are structurally sufficient or in compliance with any Laws or Ordinances or codes or other applicable regulations, and no such approval shall impose any liability upon the County as Licensor hereunder.

Section 10. Cost of Improvements.

Licensee shall be responsible for any and all costs or expenses associated with Licensee's Improvements in the License Area including but not limited to installation, operation, maintenance, relocation, and removal/abandonment, subject to Section 15 below.

Section 11. Safety and Security.

It is expressly understood that Licensee is solely responsible for the personal safety of its employees, agents and invitees in connection with this License Agreement as well as any and all equipment and/or personal property installed or brought into the License Area. The County shall not in any way assume responsibility for the personal safety of such persons, equipment, or personal property in case of loss, theft, damage, or any other type of casualty which may occur, unless caused by the County's gross negligence. Licensee shall provide additional security, if any, at its sole cost and expense to insure the personal safety of its employees, agents, and invitees, as well as to protect any personal property in the License Area as Licensee deems appropriate or necessary, if any. Licensee acknowledges and accepts full and sole responsibility for the security of its employees, agents and invitees and its property in the License Area.

Section 12. Repairs and Maintenance of License Area.

Throughout the Term of this Agreement, Licensee, at its sole cost and expense, shall keep the Improvements in the License Area in good order and condition, and make all necessary repairs thereto. The term "repairs" shall include all like-kind replacements, and renewals, deemed necessary by Licensee in accordance with County approved Construction Plans. All repairs made by Licensee shall be at least similar or equal in quality and class to the original work, ordinary wear and tear excepted. County, at its option, and after written notice to Licensee, may perform any maintenance or repairs required of the Licensee hereunder which have not been performed by Licensee following such notice, excluding any repairs to Licensee's electrical equipment or facilities. Licensee shall reimburse County for all actual and reasonable costs and expenses within thirty (30) days after notification by the County of the amount of the expenses incurred. All repairs to Licensee's electrical equipment and facilities within the License Area must be promptly repaired by Licensee upon notification by County. Licensee shall remove graffiti on any Licensee equipment as soon as practical after receipt of written notification.

Section 13. Right of Entry and Inspection of License Area.

The County, or any of its agents, retains its right to enter the License Area on a regular basis, during all hours, for any purpose, including to examine, inspect, repair, and/or maintain any part of the Metrorail System. Such entry shall not unreasonably disturb the Licensee thereof.

However, it is hereby agreed and understood that safety, maintenance, revenue service and operation of the Metrorail System is paramount and will take precedence over any other activity in the License Area.

Section 14. Licensee Personnel in License Area.

Licensee is solely responsible for work of its contractors, subcontractors, independent contractors and any other person or entity performing work in the License Area. All personnel utilized by Licensee shall possess identification providing the individual's name and employer's name. Pursuant to all applicable laws, ordinances, and regulations, only licensed, certified, and/or registered and insured contractors and subcontractors are authorized to perform Licensee's work in the License Area. In the event any personnel utilized by Licensee does not possess identification providing the individual's name and employer's name, and such personnel is not verified by the person in charge reasonably satisfactory to the County, then access to the License Area by such personnel may be denied by the County.

Section 15. Relocation.

In the event the County, within the first seven (7) years of this Agreement, starting from and after the Commencement Date, terminates this Agreement in accordance with Section 2 above, or requires Licensee to relocate any or all of its facilities, equipment or Improvements within the License Area for any public transportation or other public purpose the County shall be responsible for paying Licensee for all of its actual and reasonable relocation costs. Starting from and after the seventh (7th) anniversary of the Commencement Date to the thirtieth (30th) anniversary of the Commencement Date, if such relocation becomes necessary hereunder, the County shall be responsible for paying Licensee a pro-rated amount of its actual and reasonable relocation costs of its Improvements as follows: Sixty-seven percent (67%) of the total cost for relocation of the Improvements (representing Licensee's share of the Improvement costs split with other agencies) divided by three hundred sixty (360) months (representing the relocation reimbursement term of thirty (30) years) ("Relocation Term"), multiplied by the number of months left in the Relocation Term to generate the prorated amount for the actual and reasonable relocation cost the County is be responsible for paying Licensee for such relocation. From and after the thirtieth (30th) anniversary of the Commencement Date, if such relocation becomes necessary hereunder,

Licensee, at its sole cost and expense, shall be responsible for paying for such relocation costs. Upon written notice of relocation by the County hereunder, the Licensee, at its sole cost and expense, will actively pursue and secure an alternate location for Licensee's Improvements. If Licensee secures a location within County property, Licensee shall relocate its Improvements within two (2) years upon written notice of relocation by the County. If Licensee secures a location outside County property, Licensee shall relocate its Improvements within four (4) years upon written notice of relocation by the County. In the event of any relocation hereunder, Licensee, in its sole discretion, shall be permitted to abandon its Improvements in place by removing all cables and fluid from the pipes, then filling all pipes with flowable fill, then cap all pipes, and put flowable fill in all manholes located within the License Area in compliance with applicable federal, state, and local laws and regulations and all provisions of this Agreement.

In addition to any right or remedy County may have, failure on the part of Licensee to completely remove (or abandon in place in compliance with applicable federal, state, and local laws and regulations and all provisions of this Agreement) said Improvements within the time period and in accordance with the other requirements specified above, shall result in the County's ability to seek injunctive relief requiring the removal of said Improvements. In the event the County obtains said injunctive relief, the County shall be entitled to recover from Licensee all actual and reasonable attorney's fees and court costs. Notwithstanding the foregoing, in no event shall County have the right to perform any work on or removal of Licensee's energized Improvements.

Licensee acknowledges that at all times the County has the right to use and operate the License Area as fee simple owner unencumbered by this Agreement and by Licensee's improvements, facilities, and equipment within and/or adjacent to the License Area. If the County requires Licensee to relocate all of its Improvements outside of the License Area, such shall result in the termination of this Agreement. If the County requires Licensee to relocate some but not all of its Improvements outside of the License Area, the parties shall amend the License Area to reflect the removal of the relocated Improvements. Provided that Licensee is paid its relocation costs by the County, in full, as required under this Section, Licensee waives any claim or entitlement against the County for other compensation or equitable relief under contractual, statutory, or common law

for the relocation of any utility lines, improvements, facilities or property. This Article shall survive termination or cancellation of this Agreement.

Section 16. Indemnification.

Licensee shall indemnify and hold harmless the County and its officers, employees, agents and instrumentalities from any and all liability, losses or damages, including attorney's fees and costs of defense, which the County or its officers, employees, agents or instrumentalities may incur as a result of claims, demands, suits, causes of actions or proceeding of any kind or nature arising out of, relating to or resulting from Licensee's activities under this Agreement or performance of same, by the Licensee or its employees, agents, servants, partners, principals, contractors, subcontractors, or independent contractors, but excepting liability, losses or damages to the extent caused by the gross negligence of the County and its officers, employees, agents and instrumentalities. Licensee shall pay all claims and losses in connection therewith and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the County, where applicable, including appellate proceedings, and shall pay all cost, judgments, and attorney's fees which may issue thereon. Licensee expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by the Licensee shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County or its officers, employees, agents and instrumentalities as herein provided. This provision survives termination or cancellation of this Agreement. Provided however, in no event shall either party be responsible to the other party for any consequential, punitive or special damages. Licensee's liability under this paragraph shall not exceed $30,000,000, subject to Section 17.

Nothing in this Agreement shall be construed as altering or impacting in any way the County's sovereign immunity under Florida Statute Section 768.28, and the protections, limitations, and dollar thresholds afforded thereunder.

It is expressly understood and Licensee acknowledges that elevated noise levels and certain particles and sediments result from transit operations may adversely affect the License Area and Licensee's Improvements. Licensee shall hold harmless the County for any costs, losses, injuries or damages resulting from elevated noise levels and particles or sediments caused by the operation

of the Metrorail System, unless caused by the gross negligence of the County or its employees, agents, servants, partners, principals, contractors, subcontractors, or independent contractors subject to the provisions, limitation, and dollar thresholds set forth in in Florida Statutes Section 768.28.

Section 17. Insurance.

Prior to the Commencement Date of this Agreement, Licensee shall furnish to the Miami-Dade Department of Transportation, Right-of-Way, Utilities and Joint Development Division, 701 N.W. First Court, 15th Floor, Miami, Florida 33136, and Miami-Dade County, Risk Management, 111 NW 1st Street, Suite 2340, Miami, FL 33128 certificate(s) of insurance which indicate(s) that insurance coverage has been obtained which meets the requirements as outlined below.

Licensee shall maintain coverage as required in A through C below throughout the term of the Agreement.

(a) Worker's Compensation Insurance for all employees of the Licensee as required by Chapter 440, Florida State Statutes.

(b) Commercial General Liability Insurance on a comprehensive basis in an amount not less than $30,000,000 per occurrence. Removal of exclusion for work within fifty feet of railroad property. **Miami-Dade County must be shown as an additional insured with respect to this coverage.**

(c) Automobile Liability Insurance covering all owned, non-owned and hired vehicles used in connection with the work, in an amount not less than $1,000,000 combined single limit per occurrence for bodily injury and property damage combined.

(d) Railroad Protective Liability Insurance in an amount not less than $5,000,000 per occurrence and $10,000,000 in the aggregate. **Miami-Dade County must be shown as an additional insured with respect to this coverage.**

All insurance policies required above shall be issued by companies authorized to do business under the laws of the State of Florida, with the following qualifications:

The company shall (i) have an A.M. Best rating of "A-"or better, or (ii) have a Standard & Poor's global rating of "A" or better, or (iii) an equivalent rating by another nationally recognized insurance rating agency, or (iv) other insurance carriers of recognized responsibility, of which consent will not be unreasonably withheld by , the Miami-Dade County Risk Management Division.

or

The company must hold a valid Florida Certificate of Authority as shown in the latest "List of All Insurance Companies Authorized or Approved to Do Business in Florida" issued by the State of Florida Department of Financial Services and are members of the Florida Guaranty Fund.

Certificates will indicate no modification or change in insurance shall be made without thirty (30) days in advance notice to the certificate holder.

CERTIFICATE HOLDER MUST READ: **MIAMI-DADE COUNTY**
111 NW 1st STREET
SUITE 2340
MIAMI, FL 33128

The Licensee shall be responsible for ensuring that the insurance certificates required in conjunction with this Agreement remain in full force for the duration of this Agreement. If insurance certificates are scheduled to expire during the term of the Agreement, the Licensee shall be responsible for submitting new or renewed insurance certificates to the County at a minimum of thirty (30) days in advance of such expiration.

The Risk Management Division of Miami-Dade County Internal Services department shall have the right to reasonably amend insurance requirements and approve companies providing coverage. Additionally, the County shall have the right from time to time to reasonably amend Licensee's cap of liability for indemnifying the County under Section 16 above, not to exceed any percentage

increase in the Utility Price Index for the relative time period since the last change to Licensee's cap pursuant to this Section 17.

Compliance with the foregoing requirements shall not relieve the Licensee of liability and obligation under Section 16 above, or and other section of this Agreement.

Licensee may meet these requirements using any combination of primary, umbrella/excess and or self-insurance.

Section 18. Laws, Regulations and Permits.

Throughout the Term of this Agreement, Licensee shall comply with all applicable statutes, ordinances, rules, orders, regulations and requirements of federal, state, county or municipal governments. Licensee shall, upon written request from the County, provide reasonable proof of compliance with all applicable required licenses, permits and other legal requirements for its operations hereunder.

Section 19. Assignment.

Licensee is not entitled to assign this Agreement or any portion thereof except upon written request on the part of Licensee to the County and only with the prior written consent of the County which consent shall not be unreasonably withheld, conditioned or delayed; provided, however, Licensee may assign this Agreement or any portion thereof to (a) an affiliate, or to (b) a Federal Energy Regulatory Commission-approved (FERC) entity which may, in the future, own the subject electric facilities in the License Area, without the prior written consent of the County.

Section 20. Surrender of License Area.

Upon termination of this Agreement or upon County's request for Licensee to relocate its Improvements (or a portion thereof) from the License Area (or a portion thereof) pursuant to Section 15, above, Licensee shall within two (2) years de-energize and remove (or abandon in place by removing all cables and fluid from the pipes, then filling all pipes with flowable fill, then cap all pipes, and put flowable fill in all manholes located within the License Area in compliance with applicable federal, state, and local laws and regulations and all provisions of this Agreement)

its Improvements (or portion thereof) within the License Area (or a portion thereof), and surrender possession of the License Area (or portion thereof) to County in substantially the same condition as existed immediately prior to Commencement Date of this Agreement, except for reasonable wear and tear, or damage not caused by Licensee, its agents, employees or invitees. Licensee shall continue to pay the License Payment during the aforementioned two (2) year period in accordance with Section 4 above. In the event this License is terminated by the County as a result of a Licensee default, beyond any applicable notice and cure period, in addition to any right or remedy in law or equity, if, following such termination, Licensee fails to remove (or abandon in place by removing all cables and fluid from the pipes, then filling all pipes with flowable fill, then cap all pipes, and put flowable fill in all manholes located within the License Area in compliance with applicable federal, state, and local laws and regulations and all provisions of this Agreement) its Improvements and to restore License Area to substantially the condition which existed prior to the Commencement Date of this Agreement as set forth herein (excluding any damage not caused by Licensee, its agents, employees or invitees), the County may, at its option, cause all required removals, maintenance, repairs, replacements or restorations to be made, whereupon Licensee shall promptly pay the County all actual and reasonable costs incurred or County may seek injunctive relief requiring the removal of said Improvements. In the event the County obtains said injunctive relief, the County shall be entitled to recover from Licensee all actual and reasonable attorney's fees and court costs and any other costs incurred as a result of Licensee's failure to completely dismantle and remove (or abandon in place by removing all cables and fluid from the pipes, then filling all pipes with flowable fill, then cap all pipes, and put flowable fill in all manholes located within the License Area in compliance with applicable federal, state, and local laws and regulations and all provisions of this Agreement) its Improvements.

Upon expiration of this Agreement, Licensee shall immediately de-energize the Improvements. Within one hundred eighty (180) days after the expiration of this Agreement, Licensee shall remove (or abandon in place by removing all cables and fluid from the pipes, then filling all pipes with flowable fill, then cap all pipes, and put flowable fill in all manholes located within the License Area in compliance with applicable federal, state, and local laws and regulations and all provisions of this Agreement) all Improvements within the License Area and surrender possession of the License Area to County in substantially the same condition as existed immediately prior to

Commencement Date of this Agreement, except for reasonable wear and tear, or damage not caused by Licensee, its agents, employees or invitees. Within fifteen (15) days of the expiration of this Agreement, Licensee shall pay County the pro rata portion of the License Payment due in accordance with Section 4 above. If, after such one hundred eighty (180) day period following the expiration of this Agreement, Licensee fails to remove (or abandon in place by removing all cables and fluid from the pipes, then filling all pipes with flowable fill, then cap all pipes, and put flowable fill in all manholes located within the License Area in compliance with applicable federal, state, and local laws and regulations and all provisions of this Agreement) its Improvements and to restore License Area to substantially the condition which existed prior to the Commencement Date of this Agreement (excluding any damage not caused by Licensee, its agents, employees or invitees) the County may, at its option, cause all required removals, maintenance, repairs, replacements or restorations to be made, whereupon Licensee shall promptly pay the County all actual and reasonable costs incurred.

Section 21. Event(s) of Default.

It shall be an "**Event of Default**" of Licensee if the Licensee fails to keep, observe or perform any of its obligations or duties imposed upon the Licensee under this Agreement and such failure shall continue for a period of thirty (30) days after receipt of written notice thereof from the County to the Licensee setting forth with reasonable specificity the nature of the alleged breach; or in the case of any such default or contingency which cannot, with due diligence and in good faith, be cured within thirty (30) days, the Licensee fails within said thirty (30) day period to promptly and with due diligence and in good faith commence to pursue curing said default to completion within such reasonable period not to exceed two (2) years. The thirty (30) day period to cure an Event of Default does not apply to conditions affecting the safety of County facilities, operations or persons as described in Section 7.3 of this Agreement.

Section 22. Failure to Cure Default.

If an Event of Default on the part of the Licensee shall occur, the County, at any time after the periods set forth in Section 21 above and Licensee has failed to cure such Event of Default within such applicable period, shall have the following rights and remedies, which are cumulative and in

addition to any and all other remedies, in law or in equity, that the County may have against Licensee, the County shall be entitled to:

(a) to sue Licensee for all damages, costs and expenses arising from Licensee's committing an Event of Default hereunder and to recover all such damages, costs and expenses, including reasonable attorney's fees at both trial and appellate levels, provided however, in no event shall Licensee be liable for any consequential, special or punitive damages;

(b) to restrain, by injunction, the commission of or attempt or threatened commission of an Event of Default and to obtain a decree specifically compelling performance of any such term or provision of this Agreement; and

(c) to terminate any and all obligations that the County may have under this Agreement, in which event the County shall be released and relieved from any and all liability under this Agreement from and after the date of such termination, except for those that expressly survive termination herein. In the event of a termination of this Agreement by the County hereunder, the County shall immediately return to Licensee the prorated portion of that year's License Payment paid by Licensee for the period of time between the date of termination and the last day of the subject year, minus any outstanding amount Licensee due and owing to the County at the time of termination.

Section 23. No Waiver.

Failure by either Party to insist upon the strict performance of any of the terms of this Agreement or to exercise any right or remedy upon a breach thereof, shall not constitute a waiver of any such breach or of any of the terms of this Agreement. None of the terms of this Agreement to be kept, observed or performed by either Party, or no breach thereof, shall be waived, altered or modified except by written instrument executed by the non-defaulting Party. No waiver of any default of a Party hereunder shall be implied from any omission by the other Party to take any action on account of such default if such default persists or is repeated, and no express waiver shall affect any default other than the default specified in the express waiver and then only for the time and to the extent therein stated. One or more waivers by the non-defaulting Party shall not be construed as a waiver of a subsequent breach of the same covenant, term or condition.

Section 24. Consent of County.

Whenever in this Agreement the consent or approval of the County is required, such consent or approval:

(a) Shall be made by the County Mayor, or his/her designee or successor on behalf of the County;

(b) Shall not be unreasonably or arbitrarily withheld, conditioned, or delayed unless specifically provided to the contrary;

(c) Shall not be effective unless it is issued by the County in writing;

(d) Shall apply only to the specific act or transaction so approved or consented to and shall not relieve Licensee of the obligation of obtaining the County's prior written consent or approval to any future similar act or transaction.

Section 25. Notices.

It is understood and agreed between County and Licensee that written notice, addressed as follows, shall be delivered, sent electronically (if applicable), and by United States Postal Service Certified Mail to:

COUNTY **Miami-Dade County, Department of Transportation and Public Works**
Attention: Director
701 N.W. 1st Court, Suite 1700
Miami, Florida 33136-3922

with copy to: Miami-Dade County, Department of Transportation and Public Works
Right-of-Way, Utilities and Joint Development Division
Attention: Right of Way Division
701 N.W. 1st Court, Suite 1500
Miami, Florida 33136-3922
Email: javier.bustamante@miamidade.gov

LICENSEE **Florida Power & Light Company**
Attention: Director of Corporate Real Estate
700 Universe Boulevard, CRE/JB
Juno Beach, Florida 33408

with copy to: Florida Power & Light Company
Attention: Mr. Ignacio Sarmiento
Senior ROW Representative
4200 West Flagler Street
Miami, FL 33134

and shall constitute sufficient notice to both Parties to comply with the terms of this Agreement. Notices provided in this section shall include all notices and/or requests required in this Agreement or required by law. Either Party may, by notice given as aforesaid, change its address and/or addressee for all subsequent notices as either Party may, from time to time, designate by written notice to the other Party. If either Party, at any time during the Term hereof, changes its office address as herein stated, said Party will promptly give notice of same in writing to the other Party.

Section 26. Quiet Enjoyment.

Licensee, upon paying the License Payments herein provided for and performing the terms, agreements and provisions of this Agreement on Licensee's part, shall peaceably and quietly have, hold and enjoy the License Area during the Term hereof in accordance with the terms of this Agreement without interruption, disturbance, hindrance or molestation by County or by any person or entity acting on behalf of the County.

Section 27. Federal Provisions.

Licensee shall comply with all applicable federal regulations including, but not limited to, the following:

(a) 49 CFR 26.7 binding the lessee or transferee not to discriminate based on race, color, national origin, or sex;

(b) 49 CFR 27.7; 27.9(b) and 37 binding the lessee or transferee not to discriminate based on disability and binding the same to compliance with the Americans with Disabilities Act with regard to any improvements constructed; and

(c) FTA's Master Agreement, updated annually, particularly relating to conflicts of interest.

(d) Prohibition against Liens. The Licensee is prohibited from placing a lien on County property. This prohibition shall also apply to all of Licensee's contractors, subcontractors and suppliers.

Section 28. Non-Discrimination.

During the performance of this Agreement, Licensee agrees to not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, national origin, sex, pregnancy, age, disability, marital status, familial status, sexual orientation, gender identity or gender expression, status as victim of domestic violence, dating violence or stalking, or veteran status, and on housing related contracts the source of income, and will take affirmative action to ensure that employees and applicants are afforded equal employment opportunities without discrimination. Such action shall be taken with reference to, but not limited to: recruitment, employment, termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on the job training.

By entering into this Agreement, Licensee attests that it is not in violation of the Americans with Disabilities Act of 1990 ("Act") or Miami-Dade County Resolution No. R-385-95 ("Resolution"). If Licensee or any owner, subsidiary or other firm affiliated with or related to Licensee is found by the responsible enforcement agency or the County to be in violation of the Act or the Resolution, such violation shall be deemed a default under this Agreement. The Agreement shall be void if the Licensee submits a false affidavit pursuant to the Resolution or Licensee.

Section 29. Disclosure Affidavits.

Licensee must complete and submit County's Disclosure Affidavit documents, the forms for which are herein contained in Exhibit F, attached hereto and made a part hereof. Publicly-traded corporations are exempt from I (Ownership Disclosure) and II (Employment Disclosure) and may waive VI (Collection of Taxes, Fees and Parking Tickets).

In order to be exempt from I and II above, Licensee must submit the following information on letterhead, which must be signed by a duly authorized officer of Licensee, and shall become part of Exhibit F, attached hereto and made a part hereof:

(a) Statement that NextEra Energy, Inc. is a publicly-traded corporation – The name must be the same
as it is throughout this Agreement.

(b) Name of stock exchange market.

(c) Symbol where registered.

In order to waive VI, Licensee must submit on letterhead, and signed by the Director of Corporate Real Estate, a statement to the effect that NextEra Energy, Inc. is a publicly traded corporation and has ascertained that submission of information for "Collection of Taxes, Fees and Parking Tickets" is non-applicable and shall become part of Exhibit F attached hereto and made a part hereof.

Section 30. Responsible Wages.

Licensee acknowledges and agrees that it is required to pay to all workers Responsible Wages, in accordance with Section 2-11.16 of the Code. Responsible Wages and Benefits are those established by the Board for the listed trades working on this project under Section 2-11.16 of the Code. The rates have been established in accordance with the stipulations contained in Section 2-11.16 of the Code, and have been established as being the rates for the corresponding classes of workers employed for construction projects of a similar character in the locality where the project is located. Licensee, or its contractors, subcontractors, or independent contractors shall pay wages and fringe benefits at rates not less than the Responsible Wages and Benefits (Section 2-11.16 of the Code) as stipulated for each listed trade in effect as of January 1st, of the year in which the work is performed. Licensee, or its contractors, subcontractors, or independent contractors shall complete the Miami-Dade County Fair Wage Affidavit and comply with the requirements of Section 2-11.16 of the Code in the construction of this project.

Section 31. Entire Agreement.

This Agreement contains the entire agreement between the Parties hereto with respect to the License Area and shall not be modified or amended in any manner except by an instrument in writing agreed to and executed by the Parties hereto. All prior understandings and agreements heretofore had between the Parties with respect to this Agreement are merged into this Agreement which alone fully and completely expresses the understandings of the Parties.

Section 32. Jurisdiction.

ALL DISPUTES BETWEEN LICENSEE AND THE COUNTY ARISING UNDER OR RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT, WHETHER SOUNDING IN CONTRACT, TORT OR EQUITY OR OTHERWISE, SHALL BE RESOLVED ONLY IN THE FEDERAL OR STATE COURTS IN MIAMI-DADE COUNTY, FLORIDA; AND EACH PARTY HERETO SUBMITS TO THE JURISDICTION OF SUCH COURTS AND WAIVES ANY OBJECTION TO THE VENUE AND JURISDICTION OF SUCH COURTS.

Section 33. Governing Law.

This Agreement shall be interpreted and enforced in accordance with the laws of the State of Florida.

Section 34. Severability.

In the event any term or provision of this Agreement is determined to be illegal or otherwise invalid, the remainder of this Agreement shall be construed to be in full force and effect.

Section 35. Counterparts.

This Agreement may be executed simultaneously or in counterparts, each of which together shall constitute one and the same agreement. For purposes of this Agreement, a facsimile or PDF copy shall be deemed to be an original.

Section 36. Construction.

All pronouns and any variations thereof shall be deemed to refer to the masculine, feminine or neuter, singular or plural, as the identity of the party or parties may require. The Parties hereby acknowledge and agree that each was properly represented by counsel and this Agreement was negotiated and drafted at arm's length so that the judicial rule of construction to the effect that a legal document shall be construed against the draftsman shall be inapplicable to this Agreement which has been drafted by counsel for both County and Licensee.

Section 37. Holdover.

Licensee agrees that should it be in possession of the License Area after the time periods set forth for the expiration or earlier termination of this Agreement, that it shall, in addition to being liable to the County for any and all actual and reasonable damages as a result of such holdover, be obligated to pay two hundred (200%) percent of the full annual License Payment in existence prior to the period of holdover. In no event shall Licensee be liable for any consequential, special, or punitive damages.

[Signatures appear on following page.]

IN WITNESS WHEREOF, the County and Licensee have each caused this Agreement to be executed by their duly authorized representatives all on the day and year first hereinabove written after approval by the Miami-Dade County Board of County Commissioners.

COUNTY OR LICENSOR

MIAMI-DADE COUNTY, a political subdivision of the State of Florida
BY ITS BOARD OF
COUNTY COMMISSIONERS

ATTEST:
Harvey Ruvin, Clerk

By:_____
Deputy Clerk

By: _____
(signature)
For: County Mayor

Date Executed: _____

Approved by the County's Attorney's Office as to form and legal sufficiency

_____

Witnesses

Donna E Kent

Print Name: Donna E Kent

Jennifer Cornell

Print Name: Jennifer Cornell

LICENSEE:

FLORIDA POWER & LIGHT COMPANY, a Florida corporation

By: _____

Name: Manny Miranda

Title: Senior VP, Power Delivery

Date executed: 7/22/20

STATE OF FLORIDA)

) SS:

COUNTY OF PALM BEACH)

BEFORE ME by means of ☑ physical presence or ☐ online notarization, the undersigned authority, personally appeared Manny Miranda, as Senior Vice President of Florida Power & Light Company, a Florida corporation, who acknowledged before me that s/he executed the foregoing instrument on behalf of the corporation.

WITNESS my hand and official seal this 22nd day of July, 2020.

Dianna Sullivan

NOTARY PUBLIC

My Commission Expires: 12/22/22

Dianna Sullivan
COMMISSION # GG271459
EXPIRES: December 22, 2022
Bonded Thru Aaron Notary

EXHIBIT A

Legal Description and Sketch of License Area

SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

A parcel of land being a portion of the Metrorail Right-of-Way corridor as recorded in Plat Book 124, Page 6 and Plat Book 124, Page 20, all of the Public Records of Miami-Dade County, Florida, said parcel being more particularly described as follows:

COMMENCE at a point being the intersection of the Metrorail Northerly right-of-way line and the South right-of-way line of Bird Road (S.R. 976), said intersection being on the arc of a curve concave to the Southeast, a radial line of said curve through said point having an assumed bearing of N 29° 10'28" W, said curve being the Metrorail Northerly right-of-way line

THENCE Northeasterly along the said Metrorail Northerly right-of-way line, along the arc of said curve to the right, having a central angle of 06° 53'31" and a radius of 1960.00 feet for an arc distance of 235.77 feet to a point of tangency;

THENCE N 67° 43'03" E continuing along the said Metrorail Northerly right-of-way line, a distance of 77.72 feet;

THENCE S 22° 16'57" E a distance of 51.03 fee to the POINT OF BEGINNING;

THENCE N 89° 14'08" E a distance of 20.81 feet;

THENCE N 67° 08'25" E a distance of 150.47 feet;

THENCE N 55° 49'49" E a distance of 10.20 feet;

THENCE N 67° 08'25" E a distance of 8.75 feet;

THENCE S 22° 51'35" E a distance of 2.09 feet;

THENCE N 67° 08'25" E a distance of 22.00 feet;

THENCE N 22° 51'35" W a distance of 2.09 feet;

THENCE N 67° 08'25" E a distance of 14.28 feet;

THENCE N 55° 09'49" E a distance of 24.58 feet;

THENCE N 67° 42'04" E a distance of 1578.22 feet to a point to be referred to later in this description as Point A;
THENCE N 05° 35'50" E a distance of 3.20 feet;

Prepared By:
CALVIN, GIORDANO AND ASSOCIATES, INC.
1800 Eller Drive, Suite 600
Fort Lauderdale, Florida 33316
August 17, 2020

THENCE S 67° 42'04" W a distance of 1593.54 feet;

THENCE S 55° 09'49" W a distance of 10.78 feet;

THENCE S 67° 08'25" W a distance of 13.98 feet;

THENCE N 22° 51'35" W a distance of 2.09 feet;

THENCE S 67° 08'25" W a distance of 22.00 feet;

THENCE S 22° 51'35" E a distance of 2.09 feet;

THENCE S 67° 08'25" W a distance of 188.51 feet to the POINT OF BEGINNING;

TOGETHER WITH;

COMMENCE at previously described Point A;

THENCE N 67° 42'04" E a distance of 65.60 feet to the POINT OF BEGINNING;

THENCE continue N 67° 42'04" E a distance of 91.99 feet to a point of curvature of a tangent curve concave to the South;

THENCE Northeasterly and Easterly along the arc of said curve to the right, having a central angle of 17° 29'59" and a radius of 38.00 feet for an arc distance of 11.61 feet to a point of tangency;

THENCE N 85° 12'03" E a distance of 21.85 feet to a point of curvature of a tangent curve concave to the North;

THENCE Easterly along the arc of said curve to the left, having a central angle of 17° 24'57" and a radius of 41.00 feet for an arc distance of 12.46 feet to a point of tangency;

THENCE N 67° 47'06" E a distance of 8.17 feet;

THENCE S 22° 10'13" E a distance of 2.02 feet;

THENCE N 67° 49'47" E a distance of 22.00 feet

THENCE N 22° 10'13" W a distance of 2.04 feet;

THENCE N 67° 31'48" E a distance of 11.56 feet to a point of curvature of a tangent curve concave to the North;

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THENCE Northeasterly along the arc of said curve to the left, having a central angle of 11° 56'10" and a radius of 41.00 feet for an arc distance of 8.54 feet to a point of tangency;

THENCE N 55° 35'38" E a distance of 13.98 feet to a point of curvature of a tangent curve concave to the Southeast;

THENCE Northeasterly along the arc of said curve to the right, having a central angle of 12° 06'08" and a radius of 38.00 feet for an arc distance of 8.03 feet to a point of tangency;

THENCE N 67° 41'46" E a distance of 472.77 feet to a point to be referred to later in this description as Point B;

THENCE N 05° 20'35" E a distance of 8.84 feet;

THENCE S 67° 41'46" W a distance of 473.92 feet of a tangent curve concave to the Southeast;

THENCE Southwesterly along the arc of said curve to the left, having a central angle of 15° 41'25" and a radius of 41.00 feet for an arc distance of 11.23 feet to a point of tangency;

THENCE S 52° 00'21" W a distance of 13.96 feet to a point of curvature of a tangent curve concave to the North;

THENCE Southwesterly along the arc of said curve to the right, having a central angle of 15° 44'19" and a radius of 38.00 feet for an arc distance of 10.44 feet to a point of tangency;

THENCE S 67° 44'39" W a distance of 9.78 feet;

THENCE N 22° 10'13" W a distance of 2.12 feet;

THENCE S 67° 49'47" W a distance of 22.00 feet;

THENCE S 22° 10'13" E a distance of 2.15 feet;

THENCE S 67° 44'39" W a distance of 8.91 feet to a point of curvature of a tangent curve concave to the North;

THENCE Westerly and Northwesterly along the arc of said curve to the right, having a central angle of 15° 40'33" and a radius of 38.00 feet for an arc distance of 10.40 feet to a point of tangency;

THENCE S 83° 25'12" W a distance of 15.77 feet to a point of curvature of a tangent curve concave to the South;

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THENCE Westerly and Southwesterly along the arc of said curve to the left, having a central angle of 15° 43'08" and a radius of 41.00 feet for an arc distance of 11.25 feet to a point of tangency;

THENCE S 67° 42'04" W a distance of 99.65 feet;

THENCE S 30° 26'51" E a distance of 2.86 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at previously described Point B;

THENCE N 67° 41'46" E a distance of 52.13 feet to the POINT OF BEGINNING;

THENCE continue N 67° 41'46" E a distance of 568.27 feet;

THENCE N 68° 48'01" E a distance of 408.36 feet;

THENCE N 60° 52'14" E a distance of 20.36 feet;

THENCE N 67° 59'59" E a distance of 18.18 feet;

THENCE S 22° 10'13" E a distance of 2.00 feet;

THENCE N 67° 49'47" E a distance of 22.00 feet;

THENCE N 22° 10'13" W a distance of 1.94 feet;

THENCE N 68° 03'17" E a distance of 997.46 feet to a point to be referred to later in this description as Point C;

THENCE N 08° 59'56" E a distance of 3.30 feet;

THENCE S 68° 03'30" W a distance of 966.54 feet to a point of curvature of a tangent curve concave to the North;

THENCE Southwesterly and Westerly along the arc of said curve to the right, having a central angle of 16° 12'34" and a radius of 38.00 feet for an arc distance of 10.75 feet to a point of reverse curvature of a tangent curve concave to the South;

THENCE Westerly and Southwesterly along the arc of said curve to the left, having a central angle of 16° 17'30" and a radius of 41.00 feet for an arc distance of 11.66 feet to a point of tangency;

THENCE S 67° 58'35" W a distance of 10.53 feet;

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August 17, 2020

THENCE N 22° 10'13" W a distance of 2.04 feet;

THENCE S 67° 49'47" W a distance of 22.00 feet;

THENCE S 22° 10'13" E a distance of 1.99 feet;

THENCE S 67° 58'35" W a distance of 17.81 feet;

THENCE S 66° 31'35" W a distance of 20.70 feet;

THENCE S 68° 46'31" W a distance of 408.84 feet;

THENCE S 67° 41'46" W a distance of 572.32 feet;

THENCE S 52° 49'06" E a distance of 9.09 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at previously described Point C;

THENCE N 67° 31'24" E a distance of 168.12 feet to the POINT OF BEGINNING;

THENCE N 67° 08'20" E a distance of 463.66 feet;

THENCE N 69° 40'13" E a distance of 22.85 feet;

THENCE N 67° 42'45" E a distance of 800.69 feet to a point to be referred to later in this description as Point D;

THENCE N 09° 17'18" E a distance of 3.32 feet;

THENCE S 67° 42'45" W a distance of 802.38 feet;

THENCE S 69° 40'13" W a distance of 22.87 feet;

THENCE S 67° 08'20" W a distance of 469.20 feet;

THENCE S85° 33'39" E a distance of 6.17 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at previously described Point D;

Prepared By:
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August 17, 2020

THENCE N 67° 42'45" E a distance of 69.75 feet to the POINT OF BEGINNING;

THENCE continue N 67° 42'45" E a distance of 178.39 feet to a point of curvature of a tangent curve concave to the Northwest;

THENCE Northeasterly and Northerly along the arc of said curve to the left, having a central angle of 64° 30'16" and a radius of 41.00 feet for an arc distance of 46.16 feet to a point of tangency;

THENCE N 03° 12'29" E a distance of 20.43 feet to a point of curvature of a tangent curve concave to the Southeast;

THENCE Northerly and Northeasterly along the arc of said curve to the right, having a central angle of 38° 55'07" and a radius of 38.00 feet for an arc distance of 25.81 feet to a point on a non-tangent line, said line being the Metrorail Northerly right-of-way line, said point to be referred to later in this description as Point E;

THENCE S 67° 44'28" W along the said Metrorail Northerly right-of-way line, a distance of 11.75 feet to a point on the arc of a non-tangent curve concave to the Southeast, a radial line of said curve through said point having a bearing of N 62° 43'35" W;

THENCE Southerly along the arc of said curve to the left, having a central angle of 24° 01'04" and a radius of 41.50 feet for an arc distance of 17.40 feet to a point of tangency;

THENCE S 03° 12'29" W a distance of 17.24 feet to a point of curvature of a tangent curve concave to the Northwest;

THENCE Southerly and Southwesterly along the arc of said curve to the right, having a central angle of 64° 30'16" and a radius of 48.50 feet for an arc distance of 54.60 feet to a point of tangency;

THENCE S 67° 42'45" W a distance of 172.05 feet;

THENCE S 72° 40'15" E a distance of 4.44 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at previously described Point E;

THENCE N 67° 44'28" E along the said Metrorail Northerly right-of-way line, a distance of 954.54 feet to the POINT OF BEGINNING;

THENCE continue N 67° 44'28" E continuing along the said Metrorail Northerly right-of-way line a distance of 128.95 feet to a point to be referred to later in this description as Point F;

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THENCE S 39° 22'14" E a distance of 5.91 feet;

THENCE S 68° 12'49" W a distance of 111.80 feet to a point of curvature of a tangent curve concave to the North;

THENCE Southwesterly and Westerly along the arc of said curve to the right, having a central angle of 27° 08'11" and a radius of 41.50 feet for an arc distance of 19.66 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at previously described Point F;

THENCE N 67° 44'28" E along the said Metrorail Northerly right-of-way line,a distance of 68.70 feet;

THENCE N 67° 44'19" E continuing along the said Metrorail Northerly right-of-way line, a distance of 57.17 feet to the POINT OF BEGINNING;

THENCE continue N 67° 44'19" E continuing along the said Metrorail Northerly right-of-way line, a distance of 139.68 feet;

THENCE N 68° 12'49" E a distance of 208.42 feet;

THENCE N 67° 57'09" E a distance of 1014.59 feet to a point to be referred to later in this description as Point G;

THENCE S 00° 03'45" E a distance of 8.44 feet;

THENCE S 67° 57'09" W a distance of 1011.45 feet;

THENCE S 68° 12'49" W a distance of 349.39 feet;

THENCE N 10° 54'19" W a distance of 6.79 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at previously described Point G;

THENCE N 67° 57'09" E a distance of 25.29 feet to the POINT OF BEGINNING;

THENCE continue N 67° 57'09" E a distance of 183.20 feet;

THENCE N 70° 14'34" E a distance of 27.86 feet;

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THENCE N 67° 19'41" E a distance of 1048.83 feet to the said Metrorail Northerly right-of-way line;

THENCE N 67° 44'19" E along the said Metrorail Northerly right-of-way line, a distance of 129.16 feet;

THENCE S 02° 17'19" E a distance of 6.65 feet to a point to be referred to later in this description as Point H;

THENCE S 66° 17'21" W a distance of 37.23 feet;

THENCE S 67° 19'41" W a distance of 1138.62 feet;

THENCE S 70° 14'34" W a distance of 27.90 feet;

THENCE S 67° 57'09" W a distance of 187.14 feet;

THENCE N 05° 32'43" E a distance of 8.84 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at previously described Point H;

THENCE N 66° 17'21" E a distance of 62.18 feet to the POINT OF BEGINNING;

THENCE N 66° 35'14" E a distance of 181.20 feet;

THENCE N 22° 20'55" W a distance of 1.07 feet to the said Metrorail Northerly right-of-way line, said point to be referred to later in this description as Point I;

THENCE S 67° 43'40" W along the said Metrorail Northerly right-of-way line a distance of 176.81 feet;

THENCE S 20° 41'10" W a distance of 6.39 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at previously described Point I;

THENCE N 67° 43'40" E along the said Metrorail Northerly right-of-way line a distance of 57.17 feet to the POINT OF BEGINNING;

THENCE continue N 67° 43'40" E continuing along the said Metrorail Northerly right-of-way line; a distance of 366.64 feet to a point to be referred to later in this description as Point J;

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THENCE S 71° 08'00" E a distance of 9.56 feet;

THENCE S 68° 41'28" W a distance of 373.88 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at previously described Point J;

THENCE N 67° 43'40" E along the said Metrorail Northerly right-of-way line a distance of 93.26 feet to the POINT OF BEGINNING;

THENCE S 04° 55'03" E a distance of 6.55 feet;

THENCE N 67° 48'07" E a distance of 1183.82 feet to a point of curvature of a tangent curve concave to the South;

THENCE Northeasterly, Easterly and Southeasterly along the arc of said curve to the right, having a central angle of 67° 39'36" and a radius of 28.50 feet for an arc distance of 33.66 feet to a point of tangency;

THENCE S 44° 32'17" E a distance of 8.17 feet to a point of curvature of a tangent curve concave to the Northeast;

THENCE Southeasterly, Easterly and Northeasterly along the arc of said curve to the left, having a central angle of 67° 48'43" and a radius of 51.50 feet for an arc distance of 60.95 feet to a point of tangency;

THENCE N 67° 39'00" E a distance of 24.59 feet;

THENCE S 22° 20'55" E a distance of 2.09 feet;

THENCE N 67° 39'05" E a distance of 22.00 feet;

THENCE N 22° 20'55" W a distance of 2.09 feet;

THENCE N 67° 39'00" E a distance of 13.54 feet;

THENCE N 55° 37'07" E a distance of 35.19 feet;

THENCE N 67° 53'25" E a distance of 886.63 feet;

THENCE N 67° 49'34" E a distance of 1184.35 feet to a point of curvature of a tangent curve concave to the Northwest;

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THENCE Easterly and Northeasterly along the arc of said curve to the left, having a central angle of 10° 58'47" and a radius of 1001.40 feet for an arc distance of 191.90 feet to a point of tangency;

THENCE N 56° 50'47" E a distance of 380.15 feet to a point of curvature of a tangent curve concave to the Southeast;

THENCE Northeasterly and Easterly along the arc of said curve to the right, having a central angle of 17° 05'43" and a radius of 36.80 feet for an arc distance of 10.98 feet to a point of reverse curvature of a tangent curve concave to the Northwest;

THENCE Easterly and Northeasterly along the arc of said curve to the left, having a central angle of 21° 45'53" and a radius of 41.50 feet for an arc distance of 15.76 feet to a point of tangency;

THENCE N 52° 10'38" E a distance of 6.42 feet;

THENCE S 37° 49'22" E a distance of 2.09 feet;

THENCE N 52° 10'38" E a distance of 22.00 feet;

THENCE S 37° 49'22" E a distance of 2.09 feet;

THENCE N 52° 10'38" W a distance of 15.61 feet to a point of curvature of a tangent curve concave to the Northwest;

THENCE Northeasterly, Northerly and Northwesterly along the arc of said curve to the left, having a central angle of 78° 50'21" and a radius of 41.40 feet for an arc distance of 56.97 feet to a point of tangency;

THENCE N 26° 39'43" W a distance of 8.89 feet to a point of curvature of a tangent concave to the Southeast;

THENCE Northwesterly, Northerly and Northeasterly along the arc of said curve to the right, having a central angle of 78° 50'21" and a radius of 38.50 feet for an arc distance of 52.98 feet to a point of tangency;

THENCE N 52° 10'38" E a distance of 114.71 feet;

THENCE N 50° 53'37" E a distance of 526.59 feet to the said Metrorail Northerly right-of-way line;

THENCE S 52° 24'15" W along the said Metrorail Northerly right-of-way line a distance of 297.05 feet;

THENCE S 50° 53'37" W a distance of 229.27 feet;

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THENCE S 42° 30'16" W a distance of 12.00 feet;

THENCE S 52° 10'38" W a distance of 106.35 feet to a point of curvature of a tangent concave to the Southeast;

THENCE Southwesterly, Southerly and Southeasterly along the arc of said curve to the left, having a central angle of 78° 50'21" and a radius of 41.40 feet for an arc distance of 56.97 feet to a point of tangency;

THENCE S 26° 39'43" E a distance of 8.89 feet to a point of curvature of a tangent concave to the Northwest;

THENCE Southerly and Southwesterly along the arc of said curve to the right, having a central angle of 78° 50'21" and a radius of 38.50 feet for an arc distance of 52.97 feet to a point of tangency;

THENCE S 52° 10'38" W a distance of 13.20 feet

THENCE N 37° 49'22" W a distance of 2.08 feet;

THENCE S 52° 10'38" W a distance of 22.00 feet

THENCE S 37° 49'22" E a distance of 2.08 feet;

THENCE S 52° 10'47" W a distance of 10.51 feet;

THENCE S 59° 15'45" W a distance of 15.95 feet;

THENCE S 56° 50'47" W a distance of 386.06 feet to a point of curvature of a tangent curve concave to the Northwest;

THENCE Southwesterly along the arc of said curve to the right, having a central angle of 10° 58'47" and a radius of 998.57 feet for an arc distance of 191.36 feet to a point of tangency;

THENCE S 67° 49'34" W a distance of 1160.67 feet to a point of curvature of a tangent curve concave to the North;

THENCE Southwesterly, Westerly and Northwesterly along the arc of said curve to the right, having a central angle of 89° 52'44" and a radius of 18.50 feet for an arc distance of 29.02 feet to a point of tangency;
THENCE N 22° 17'43" W a distance of 38.81 feet to the said Metrorail Northerly right-of-way line;

THENCE S 67° 43'40" W along the said Metrorail Northerly right-of-way line a distance of 5.80 feet;

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THENCE S 22° 17'43" E a distance of 3.18 feet;

THENCE S 07° 03'21" E a distance of 41.81 feet to a point of curvature of a tangent curve concave to the Northwest;

THENCE Southerly and Southwesterly along the arc of said curve to the right, having a central angle of 74° 56'46" and a radius of 18.50 feet for an arc distance of 24.20 feet to a point of tangency;

THENCE S 67° 53'25" W a distance of 871.26 feet;

THENCE S 55° 37'07" W a distance of 21.08 feet;

THENCE S 67° 39'05" W a distance of 13.24 feet;

THENCE N 22° 20'55" W a distance of 2.09 feet;

THENCE S 67° 39'05" W a distance of 22.00 feet;

THENCE S 22° 20'55" E a distance of 2.09 feet;

THENCE S 67° 39'00" W a distance of 22.68 feet to a point of curvature of a tangent curve concave to the North;

THENCE Southwesterly, Westerly and Northwesterly along the arc of said curve to the right, having a central angle of 67° 48'43" and a radius of 48.50 feet for an arc distance of 57.40 feet to a point of tangency;

THENCE N 44° 32'17" W a distance of 10.29 feet to a point of curvature of a tangent curve concave to the Southeast;

THENCE Northwesterly, Westerly and Southwesterly along the arc of said curve to the left, having a central angle of 67° 44'03" and a radius of 31.50 feet for an arc distance of 37.24 feet to a point of tangency, said line being the Metrorail Northerly right-of-way line;
THENCE S 67° 43'40" W along the said Metrorail Northerly right-of-way line a distance of 1182.93 feet to the POINT OF BEGINNING;

TOGETHER WITH:

COMMENCE at a point of intersection of the Metrorail Southerly right-of-way line and the Southwesterly right-of-way line of S.W. 15th Road

THENCE N 57° 35'47" W along the said Southwesterly right-of-way line of S.W. 15th Road, a distance of 81.88 feet to the POINT OF BEGINNING;

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THENCE continue N 57° 35'47" W continuing along the said Southwesterly right-of-way line of S.W. 15th Road, a distance of 6.76 feet;

THENCE S 28° 37'18" W a distance of 11.93 feet;

THENCE N 60° 55'31" W a distance of 2.09 feet;

THENCE S 29° 04'29" W a distance of 11.93 feet;

THENCE S 28° 37'18" W a distance of 22.00 feet;

THENCE S 60° 55'31" W a distance of 2.09 feet;

THENCE S 29° 04'29" W a distance of 12.66 feet;

THENCE S 47° 15'18" W a distance of 86.52 feet to a point on the arc of a non-tangent curve concave to the Northwest, a radial line of said curve having a bearing of S 52° 04'47" E, said curve being the Metrorail Northerly right-of-way line,;

THENCE Southwesterly along the said Metrorail Northerly right-of-way line, along the arc of said curve to the right, having a central angle of 01° 37'40" and a radius of 1860.00 feet for an arc distance of 52.85 feet to a point on a non-tangent line;

THENCE N 47° 15'18" E a distance of 133.62 feet;

THENCE N 29° 04'29" E a distance of 20.00 feet;

THENCE S 60° 55'31" E a distance of 2.09 feet;

THENCE N 29° 04'29" E a distance of 22.00 feet;

THENCE N 60° 55'31" W a distance of 2.09 feet;

THENCE N 33° 09'54" E a distance of 11.57 feet to the POINT OF BEGINNING;

Said land situate within the Miami-Dade County, Florida containing 1.711 Acres, more or less.

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NOTES:

1. Lands described hereon were not abstracted and the ownership, easements and rights-of-way as shown hereon are per a diligent search of the that appear in the Public Records of Miami-Dade Broward County, Florida.

2. The legal description shown hereon was prepared by Calvin, Giordano & Associates, Inc.

3. Bearings shown hereon are based upon an assumed bearing of N 57°35'47" W along the Southwesterly right-of-way line of S.W. 15th Road.

4. The description contained herein does not represent a field boundary survey.

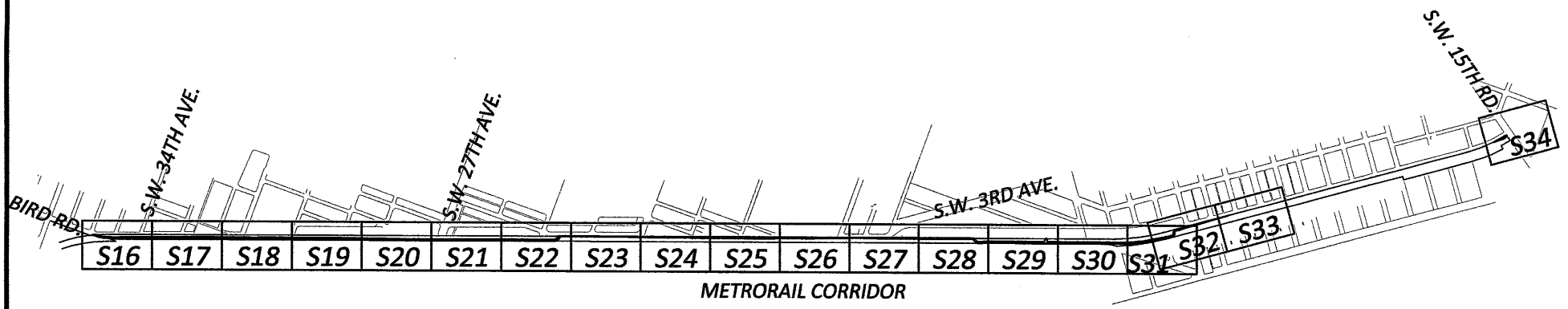
5. This document is intended to describe that portion of the proposed F.P.L. duct bank through the Miami Metrorail right-of-way corridor. The metes and bounds legal description describes only that portion of the route that is within the Metrorail right-of-way.

CALVIN, GIORDANO AND ASSOCIATES, INC.

Date: 8/17/2020

Steven M. Watts
Professional Surveyor and Mapper
Florida Registration Number PSM 4588

Prepared By:
CALVIN, GIORDANO AND ASSOCIATES, INC.
1800 Eller Drive, Suite 600
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August 17, 2020



KEY MAP

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ABBREVIATIONS

M.D.C.R.	=	MIAMI-DADE COUNTY RECORDS
℄	=	CENTERLINE
D.B.	=	DEED BOOK
F.D.O.T.	=	FLORIDA DEPARTMENT OF TRANSPORTATION
F.P.L.	=	FLORIDA POWER & LIGHT
LB	=	LICENSED BUSINESS
O.R.B.	=	OFFICIAL RECORDS BOOK
PG.	=	PAGE
P.B.	=	PLAT BOOK
PSM	=	PROFESSIONAL SURVEYOR & MAPPER
R/W	=	RIGHT-OF-WAY
S.R.	=	STATE ROAD
N.T.S.	=	NOT-TO-SCALE
P.O.C.	=	POINT OF COMMENCEMENT
P.O.B.	=	POINT OF BEGINNING

NOTE: THIS SKETCH AND LEGAL DESCRIPTION ONLY DESCRIBES THAT PORTION OF THE F.P.L. DUCT BANK THAT LIES WITHIN THE METRORAIL RIGHT-OF-WAY

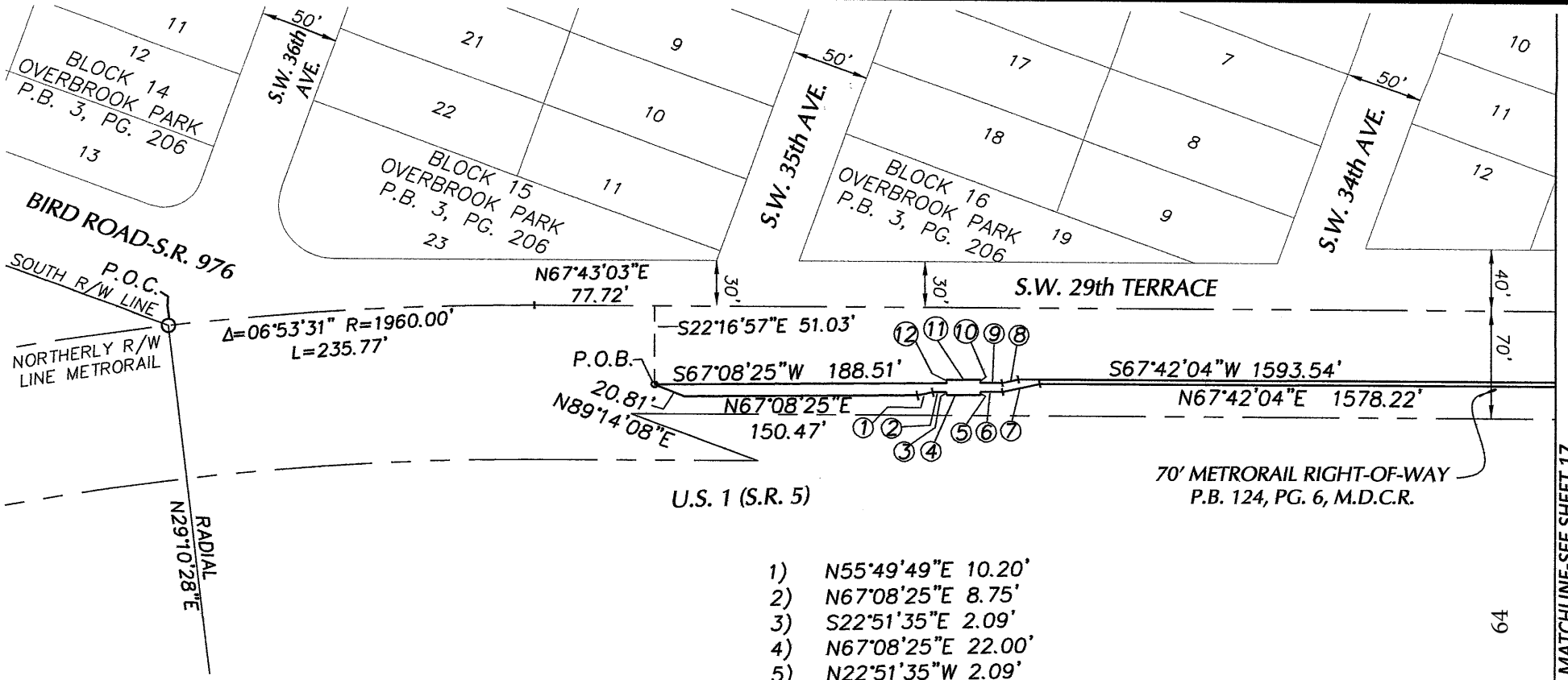
1"=100'

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Certificate of Authorization 6791

SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	15
DATE	CAD FILE	
08-17-2020		



1) N55°49'49"E 10.20'
2) N67°08'25"E 8.75'
3) S22°51'35"E 2.09'
4) N67°08'25"E 22.00'
5) N22°51'35"W 2.09'
6) N67°08'25"E 14.28'
7) N55°09'49"E 24.58'
8) S55°09'49"W 10.78'
9) S67°08'25"W 13.98'
10) N22°51'35"W 2.09'
11) S67°08'25"W 22.00'
12) S22°51'35"E 2.09'

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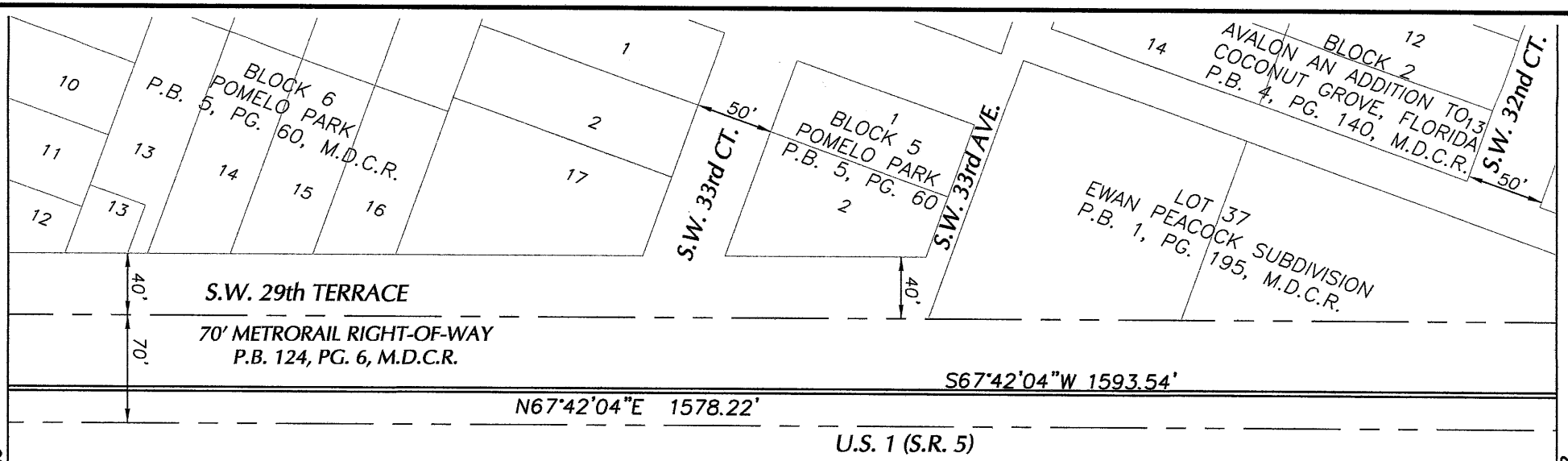
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SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	16
DATE	CAD FILE	
08-17-2020		



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NOTE: THIS SKETCH AND LEGAL DESCRIPTION ONLY DESCRIBES THAT PORTION OF THE F.P.L. DUCT BANK THAT LIES WITHIN THE METRORAIL RIGHT-OF-WAY

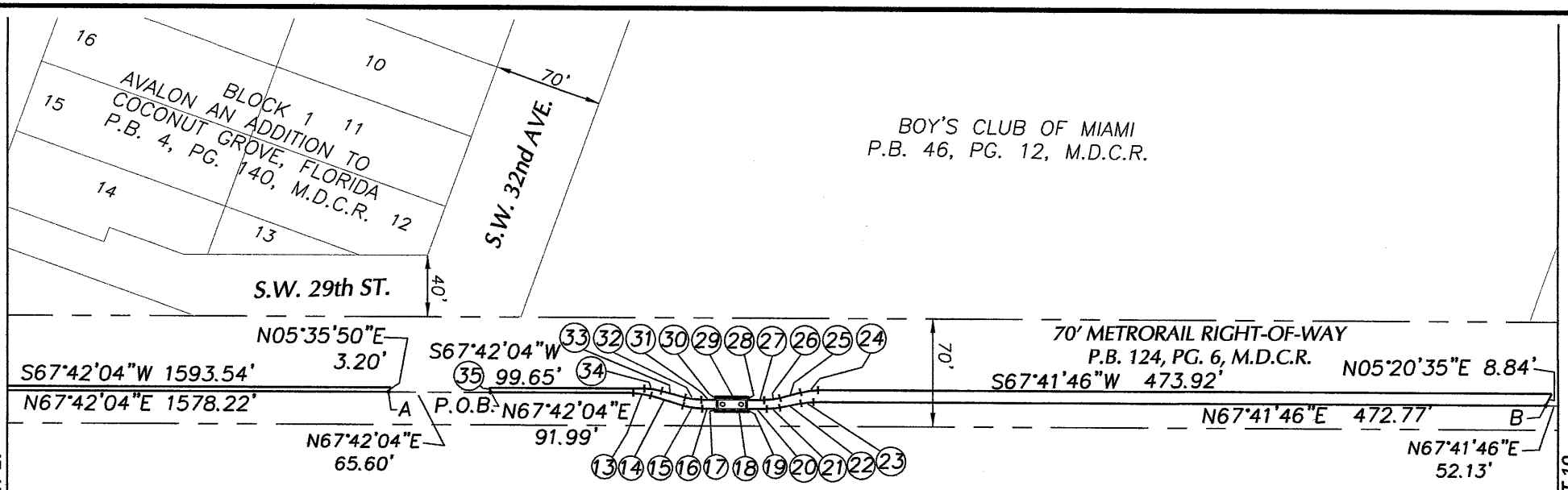
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SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	17
DATE	CAD FILE	
08-17-2020		



MATCHLINE-SEE SHEET 17

MATCHLINE-SEE SHEET 19

NOTE: THIS SKETCH AND LEGAL DESCRIPTION ONLY DESCRIBES THAT PORTION OF THE F.P.L. DUCT BANK THAT LIES WITHIN THE METRORAIL RIGHT-OF-WAY

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13) Δ=17°29'59" R=38.00' L=11.61'
14) N85°12'03"E 21.85'
15) Δ=17°24'57" R=41.00' L=12.46'
16) N67°47'06"E 8.17'
17) S22°10'13"E 2.02'
18) N67°49'47"E 22.00'
19) N22°10'13"W 2.04'
20) N67°31'48"E 11.56'
21) Δ=11°56'10" R=41.00' L=8.54'
22) N55°35'38"E 13.98'
23) Δ=12°06'08" R=38.00' L=8.03
24) Δ=15°41'25" R=41.00' L=11.23'
25) S52°00'21"W 13.96'
26) Δ=15°44'19" R=38.00' L=10.44'
27) S67°44'39"W 9.78'
28) N22°10'13"W 2.12'
29) S67°49'47"W 22.00'
30) S22°10'13"E 2.15'
31) S67°44'39"W 8.91
32) Δ=15°40'33" R=38.00' L=10.40'
33) S83°25'12"W 15.77'
34) Δ=15°43'08" R=41.00' L=11.25'
35) S30°26'51"E 2.86'

99

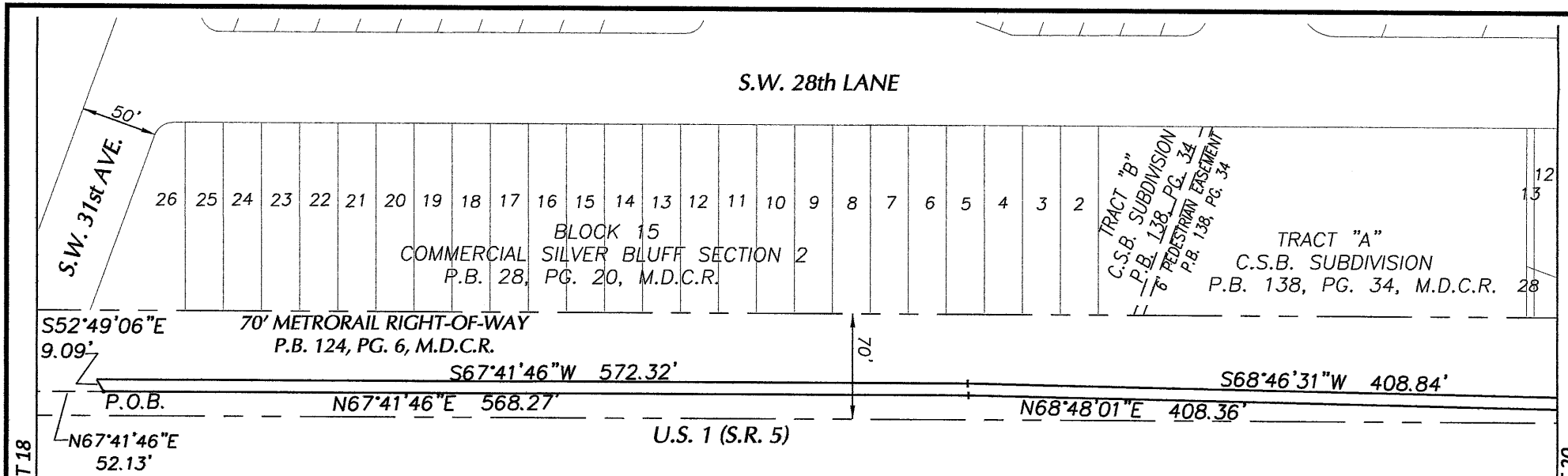
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Certificate of Authorization 6791

SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	18
DATE	CAD FILE	
08-17-2020		



ABBREVIATIONS

M.D.C.R.	=	MIAMI-DADE COUNTY RECORDS
℄	=	CENTERLINE
D.B.	=	DEED BOOK
F.D.O.T.	=	FLORIDA DEPARTMENT OF TRANSPORTATION
F.P.L.	=	FLORIDA POWER & LIGHT
LB	=	LICENSED BUSINESS
O.R.B.	=	OFFICIAL RECORDS BOOK
PG.	=	PAGE
P.B.	=	PLAT BOOK
PSM	=	PROFESSIONAL SURVEYOR & MAPPER
R/W	=	RIGHT-OF-WAY
S.R.	=	STATE ROAD
N.T.S.	=	NOT-TO-SCALE
P.O.C.	=	POINT OF COMMENCEMENT
P.O.B.	=	POINT OF BEGINNING

NOTE: THIS SKETCH AND LEGAL DESCRIPTION ONLY DESCRIBES THAT PORTION OF THE F.P.L. DUCT BANK THAT LIES WITHIN THE METRORAIL RIGHT-OF-WAY

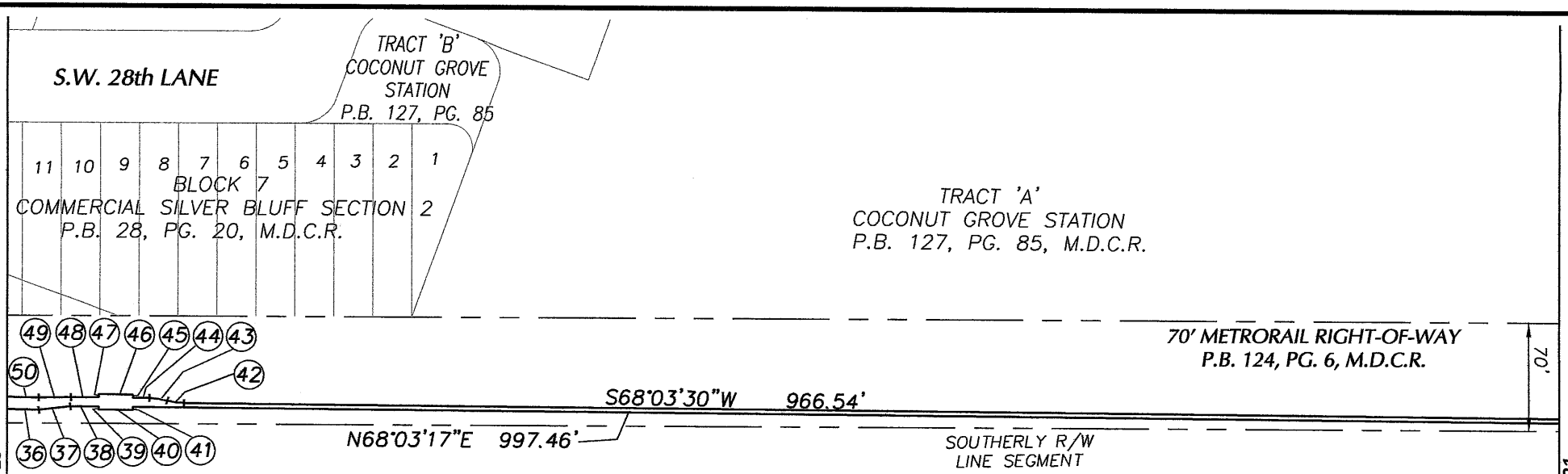
1"=100'

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SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	19
DATE	CAD FILE	
08-17-2020		



MATCHLINE-SEE SHEET 19

MATCHLINE-SEE SHEET 21

36) N68°48'01"E 408.36'
37) N60°52'14"E 20.36'
38) N67°59'59"E 18.18'
39) S22°10'13"E 2.00'
40) N67°49'47"E 22.00'
41) N22°10'13"W 1.94'
42) Δ=16°12'34" R=38.00' L=10.75'
43) Δ=16°17'30" R=41.00' L=11.66'
44) S67°58'35"W 10.53'
45) N22°10'13"W 2.04'
46) S67°49'47"W 22.00'
47) S22°10'13"E 1.99'
48) S67°58'35"W 17.81'
49) S66°31'35"W 20.70'
50) S68°46'01"W 408.84'

U.S. 1 (S.R. 5)

ABBREVIATIONS

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68

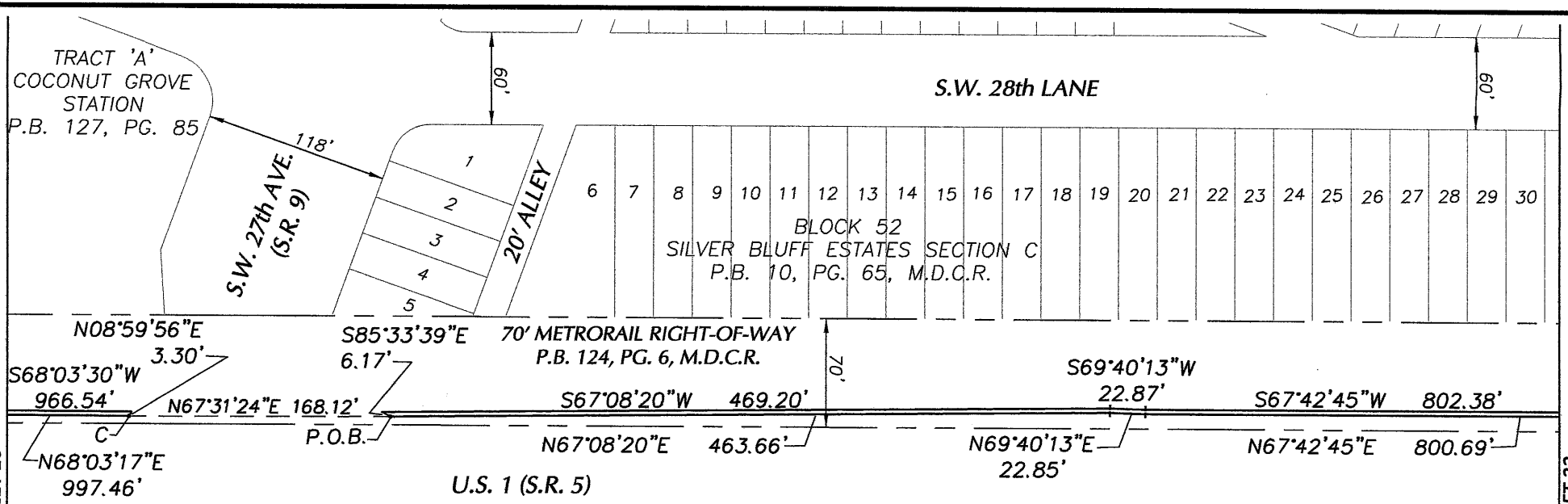
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DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	20
DATE	CAD FILE	
08-17-2020		



69

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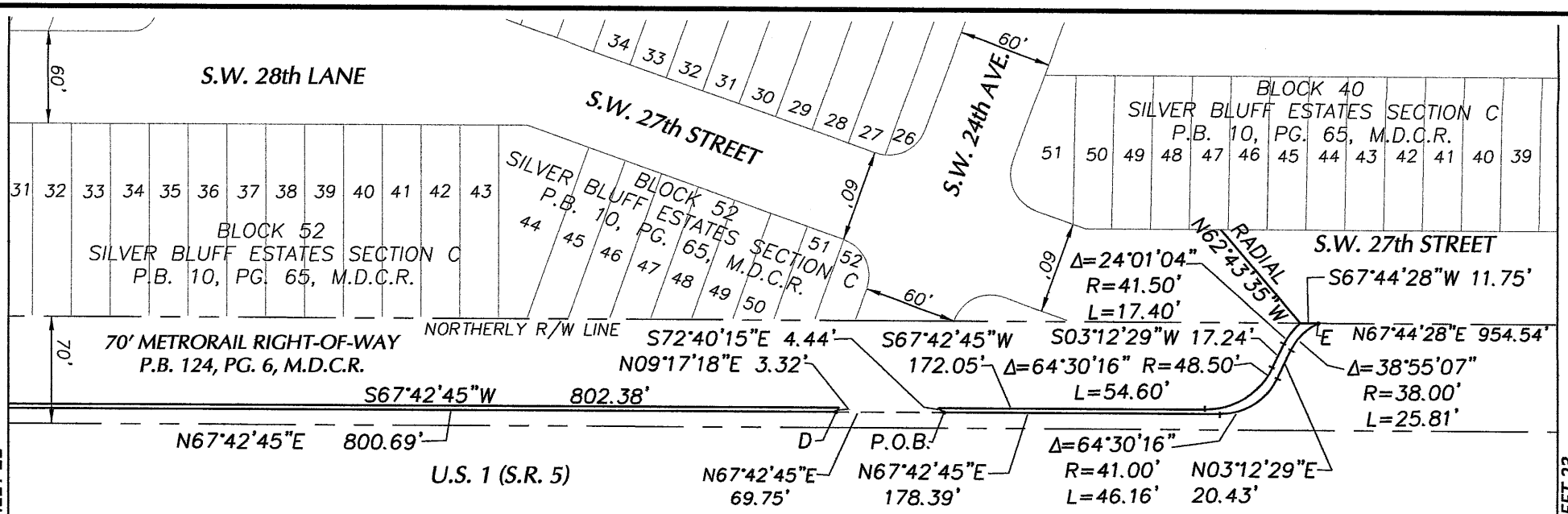
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F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	21
DATE	CAD FILE	
08-17-2020		



70

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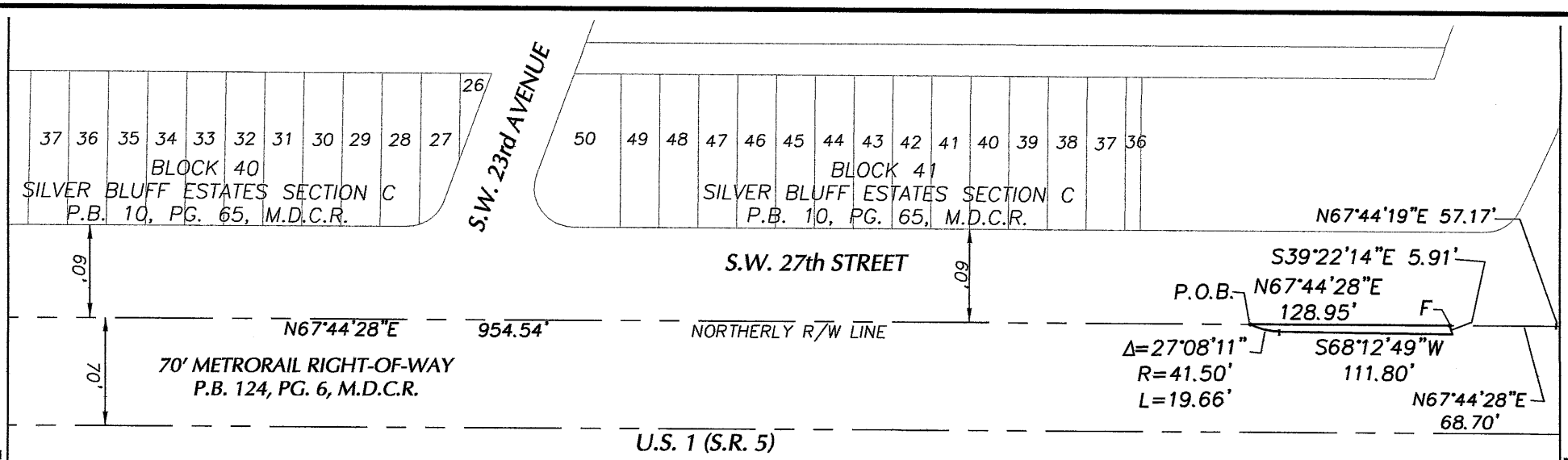
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DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	22
DATE	CAD FILE	
08-17-2020		



MATCHLINE-SEE SHEET 22

MATCHLINE-SEE SHEET 24

71

ABBREVIATIONS

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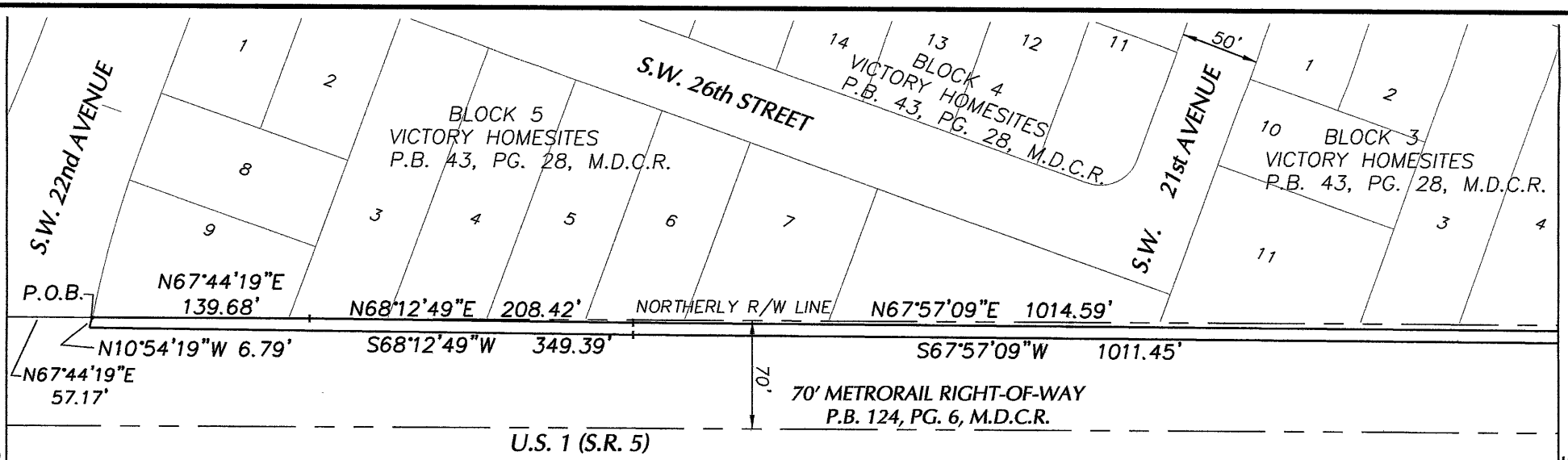
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DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	23
DATE	CAD FILE	
08-17-2020		



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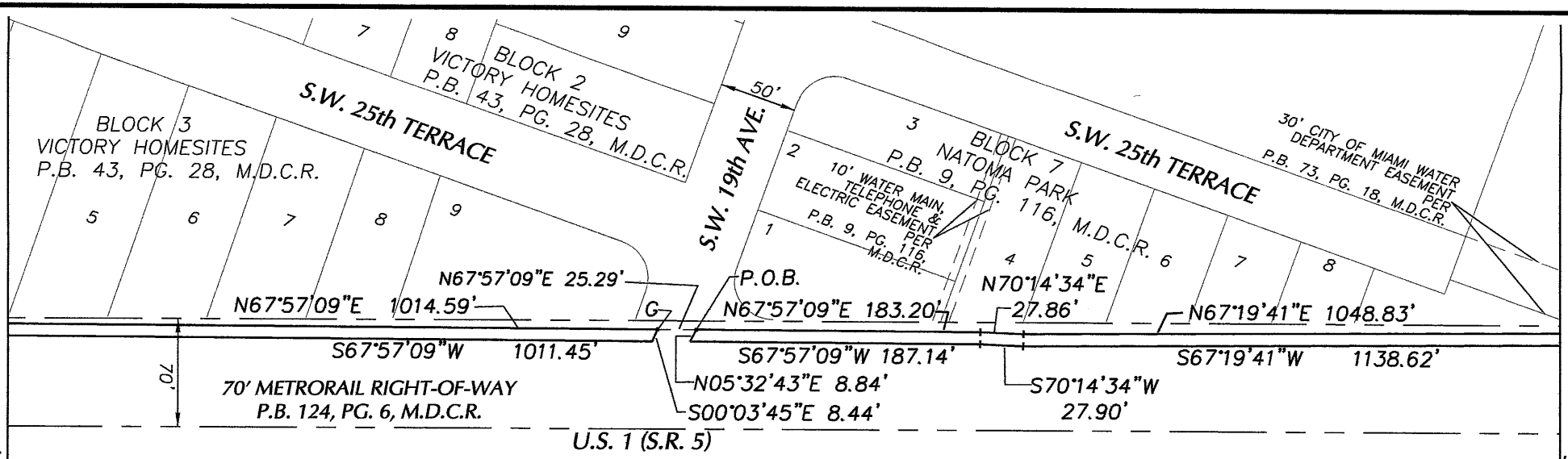
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F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	24
DATE	CAD FILE	
08-17-2020		



73

ABBREVIATIONS

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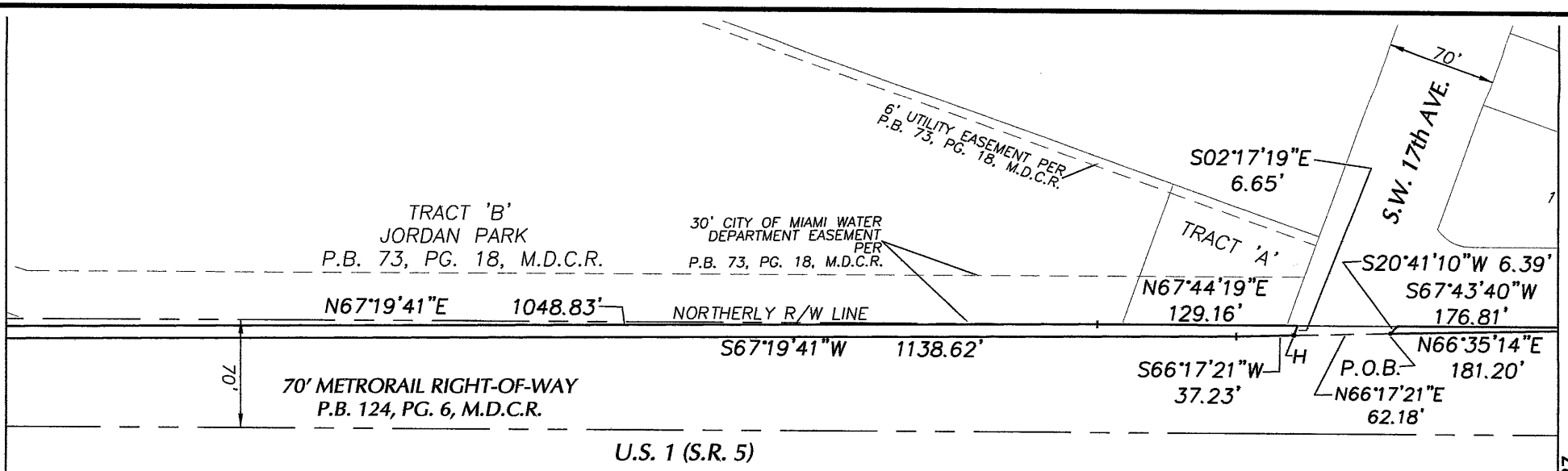
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SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRO RAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	25
DATE	CAD FILE	
08-17-2020		



MATCHLINE-SEE SHEET 25

MATCHLINE-SEE SHEET 27

74

ABBREVIATIONS

M.D.C.R.	=	MIAMI-DADE COUNTY RECORDS
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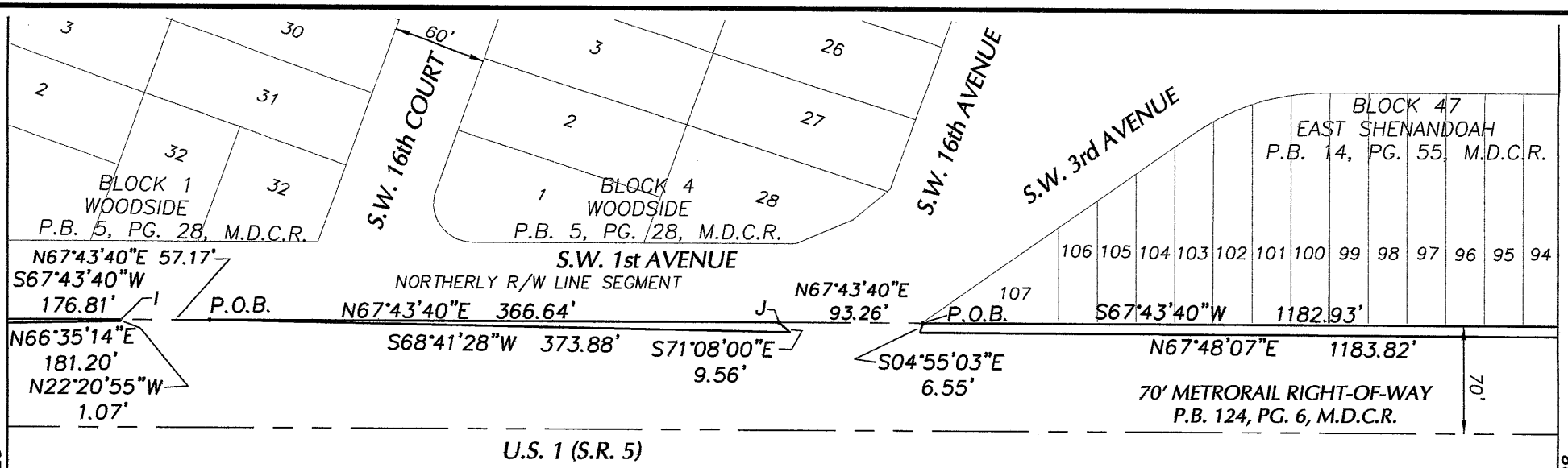
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DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	26
DATE	CAD FILE	
08-17-2020		



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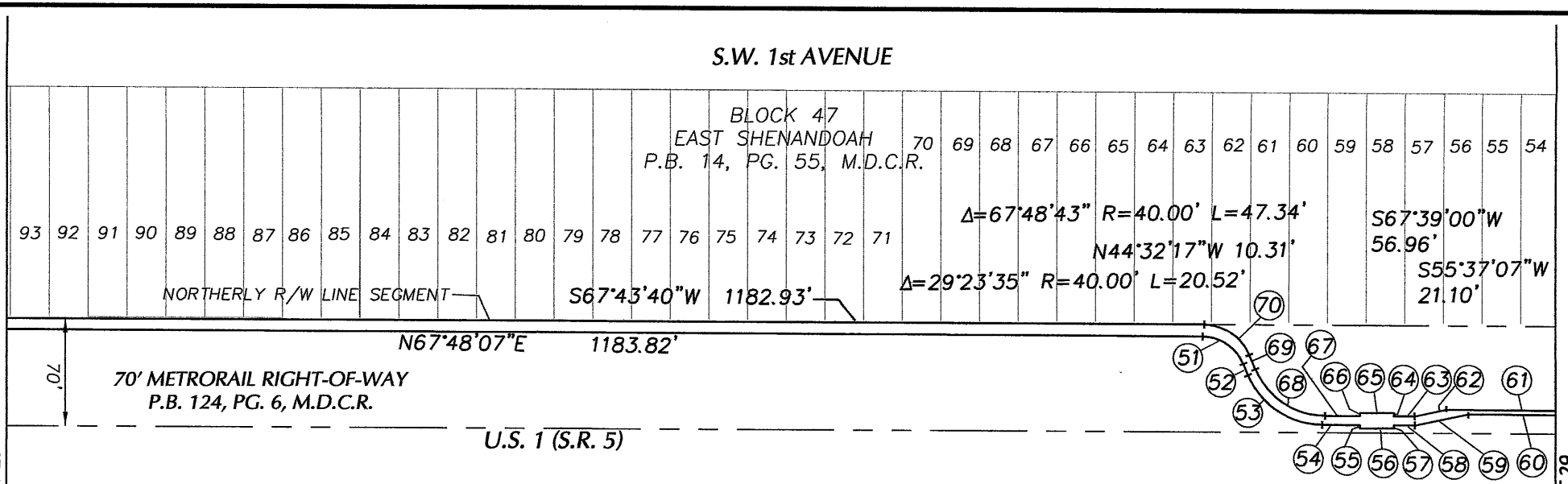
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SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	27
DATE	CAD FILE	
08-17-2020		



MATCHLINE-SEE SHEET 27

MATCHLINE-SEE SHEET 29

NOTE: THIS SKETCH AND LEGAL DESCRIPTION ONLY DESCRIBES THAT PORTION OF THE F.P.L. DUCT BANK THAT LIES WITHIN THE METRORAIL RIGHT-OF-WAY

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51) Δ =67°39'36" R=28.50' L=33.66'
52) S44°32'17"E 8.17'
53) Δ =67°48'43" R=51.50' L=60.95'
54) N67°39'00"E 24.59'
55) S22°20'55"E 2.09'
56) N67°39'05"E 22.00'
57) N22°20'55"W 2.09'
58) N67°39'00" 13.54'
59) N55°37'07"E 35.19'
60) N67°53'25"E 886.63'
61) S67°53'25"W 871.26'
62) S55°37'07"W 21.08'
63) S67°39'00"W 13.24'
64) N22°20'55"W 2.09'
65) S67°39'05"W 22.00'
66) S22°20'55"E 2.09'
67) S67°39'00"W 22.68'
68) Δ =67°48'43" R=48.50' L=57.40'
69) N44°32'17"W 10.29
70) Δ =67°44'03" R=31.50' L=37.24'

76

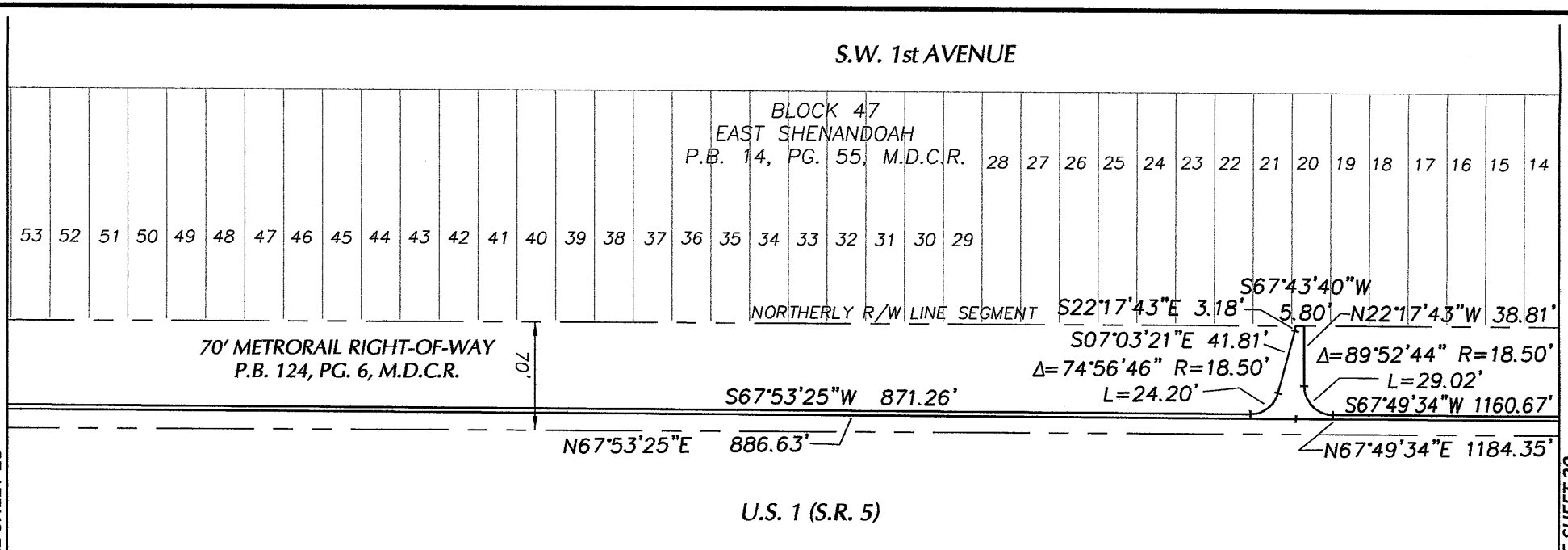
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F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	28
DATE	CAD FILE	
08-17-2020		



77

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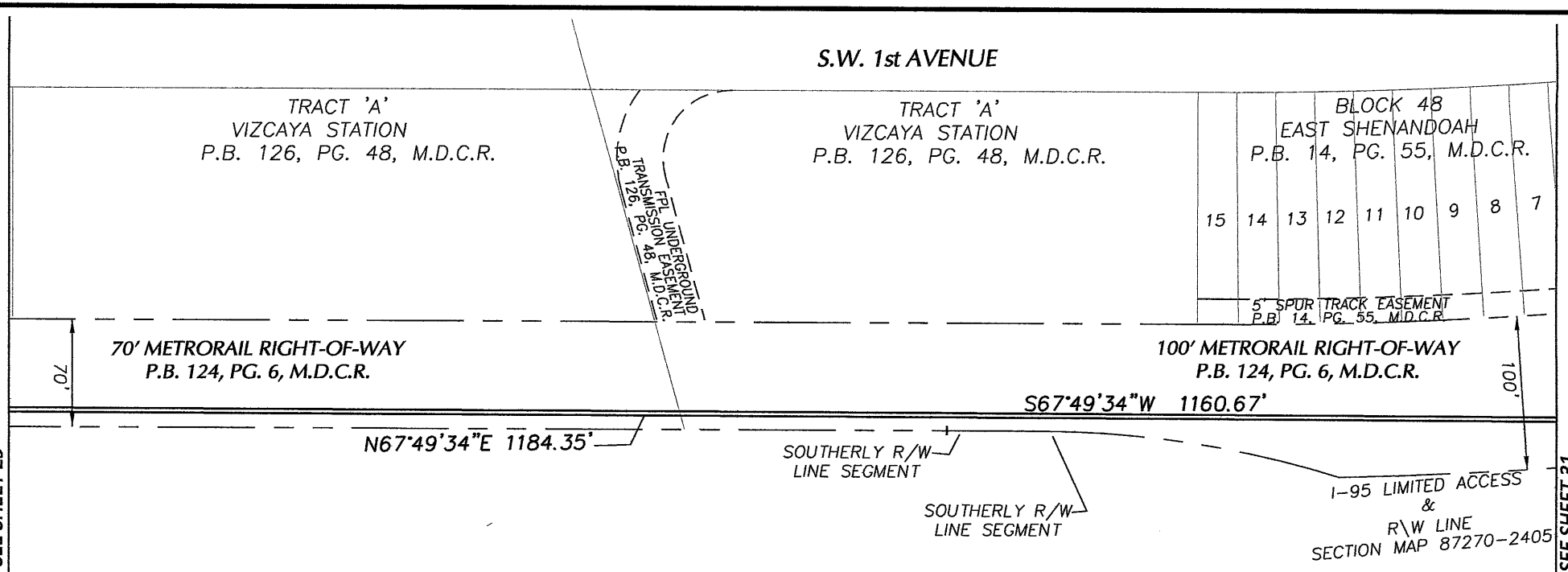
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DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	29
DATE	CAD FILE	
08-17-2020		



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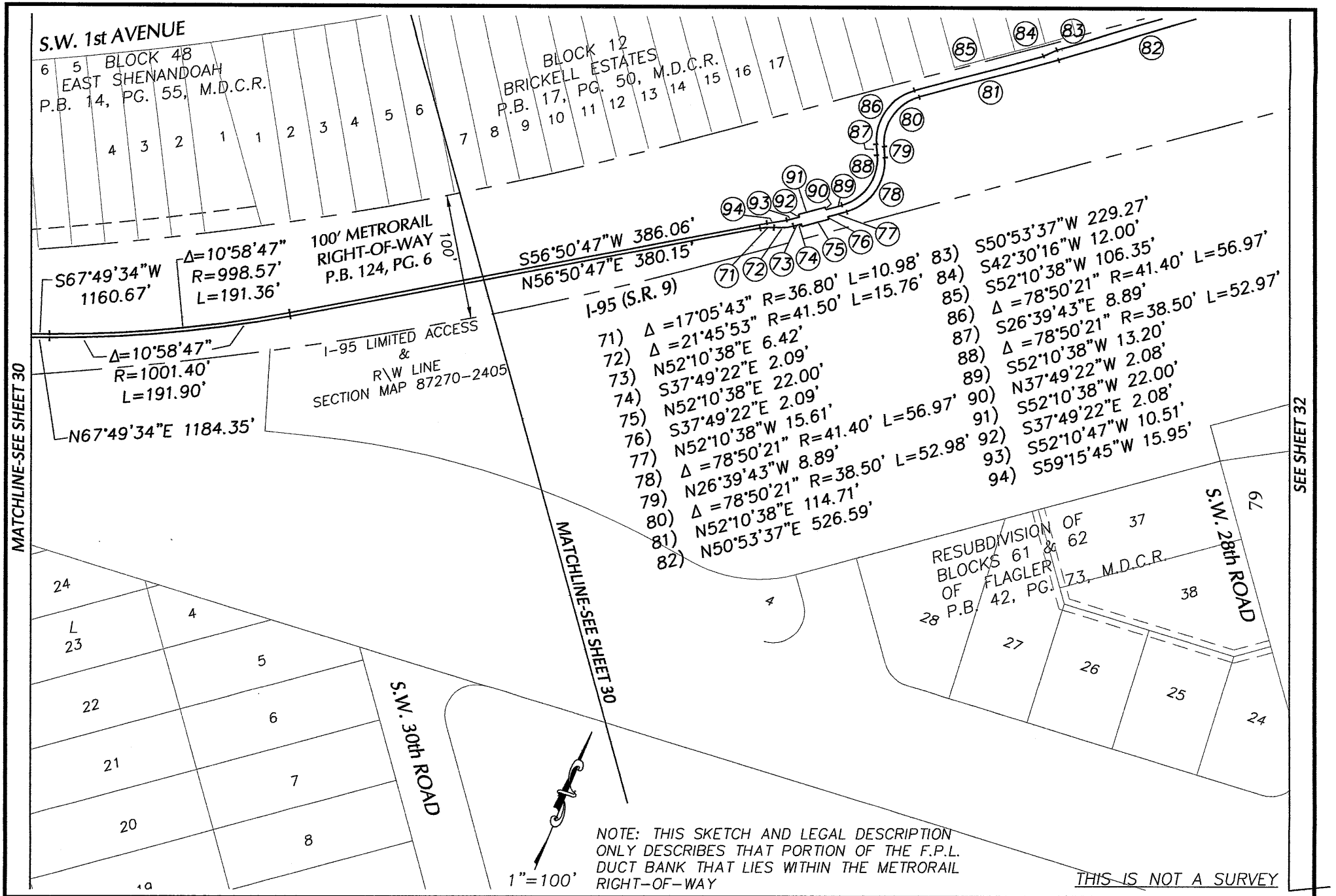
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DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

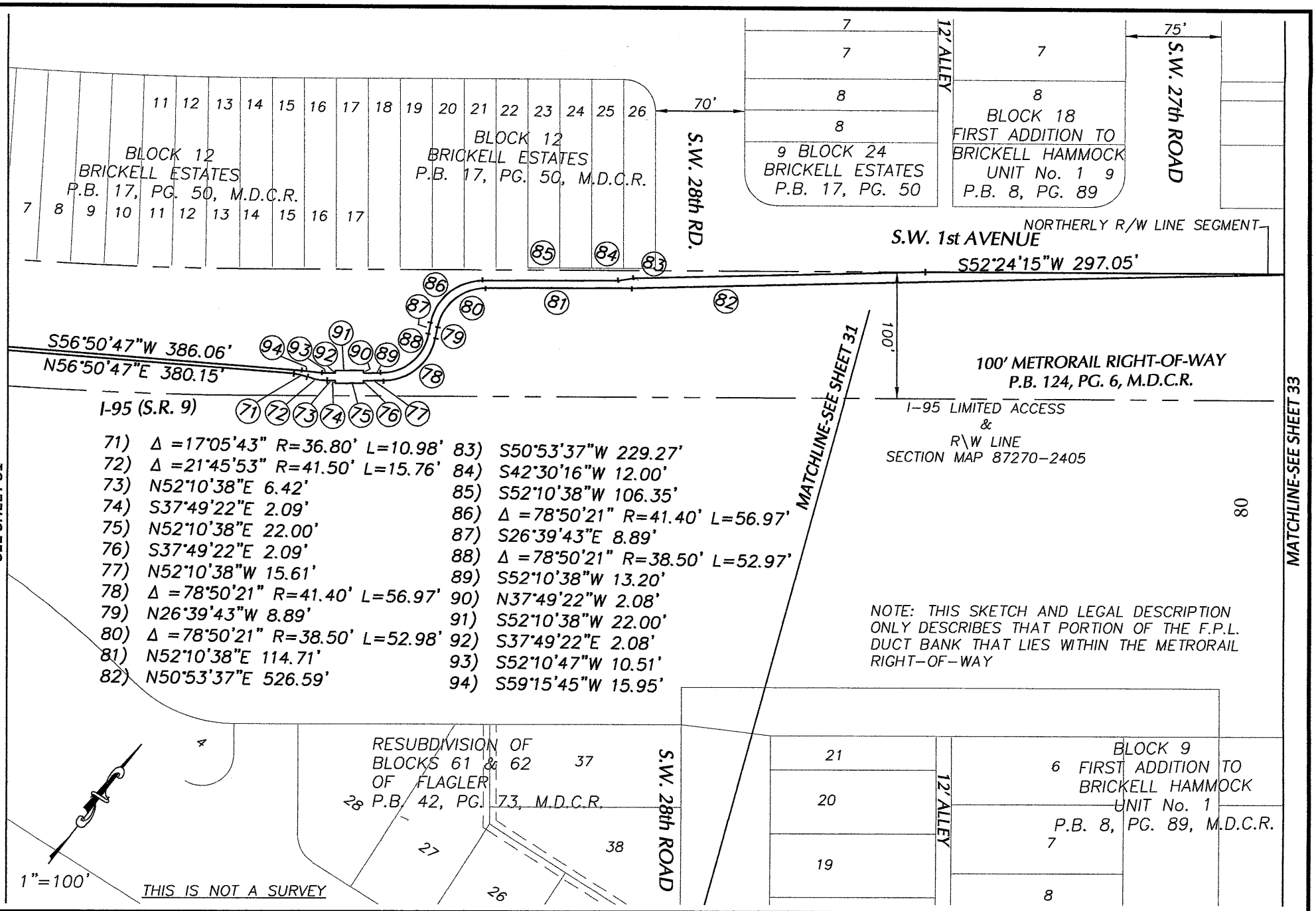
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DATE	CAD FILE	
08-17-2020		



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EXCEPTIONAL SOLUTIONS℠
1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
Phone: 954.921.7781 • Fax: 954.921.8807
Certificate of Authorization 6791

SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

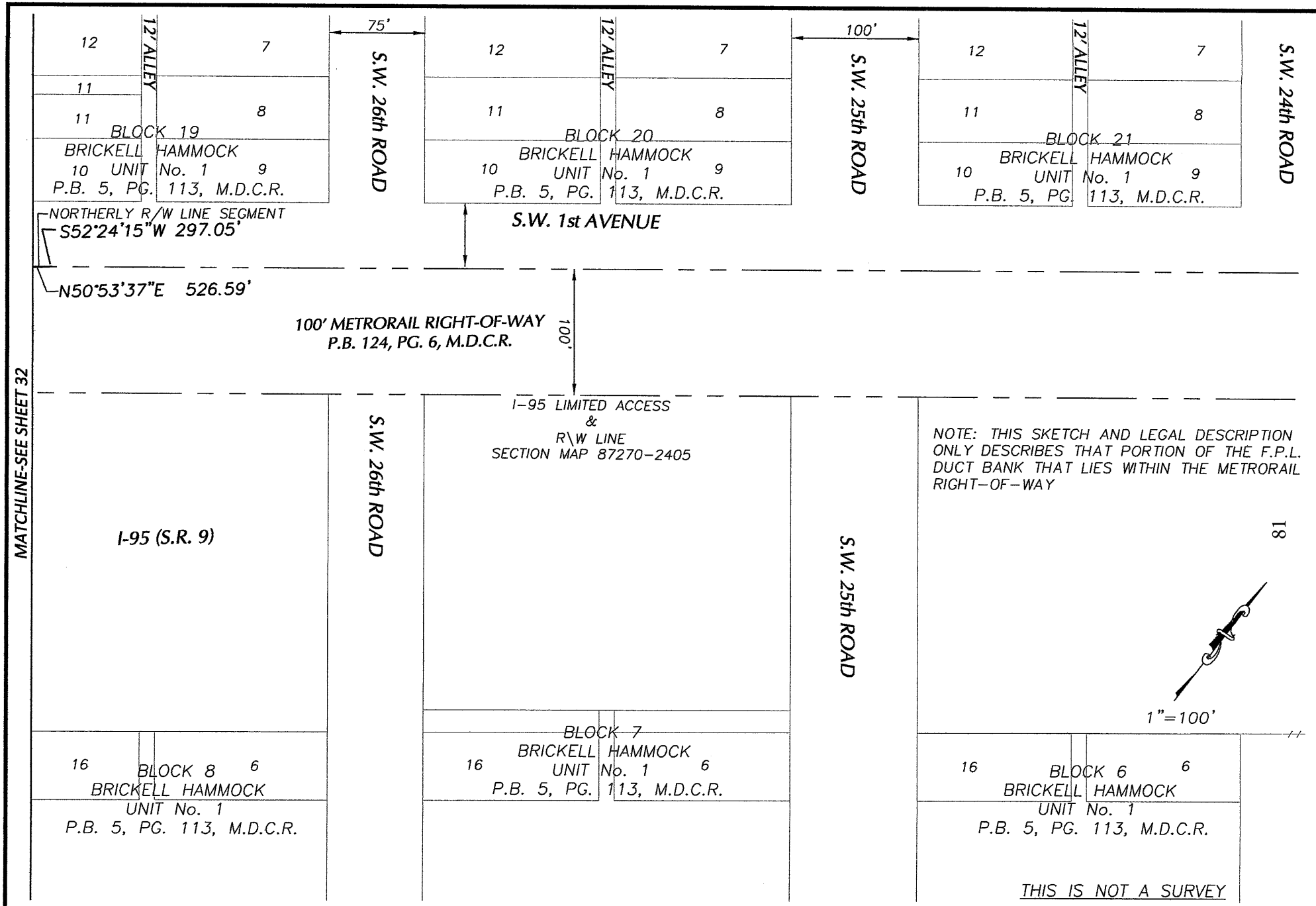
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DATE	CAD FILE	
08-17-2020		



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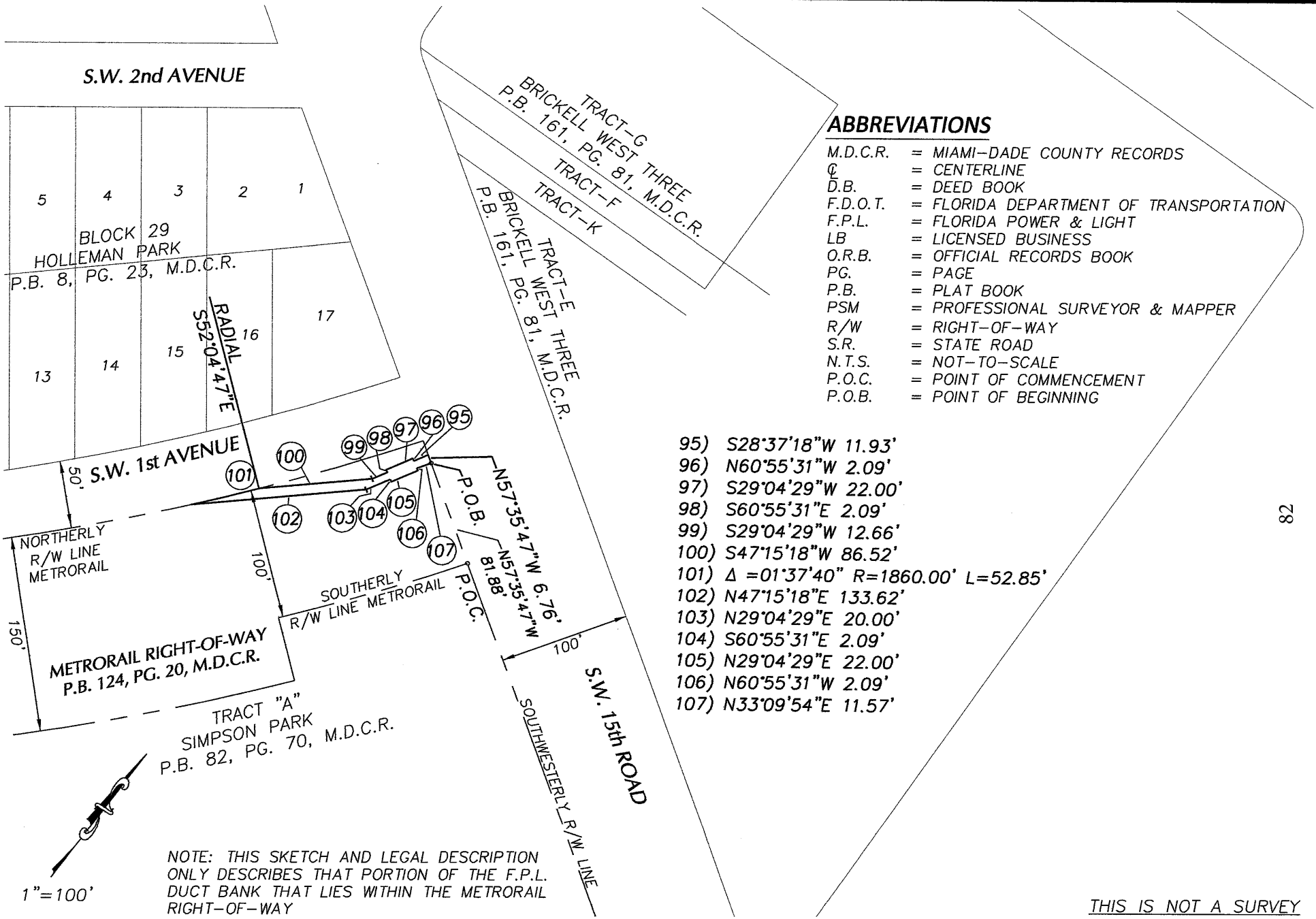
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DATE	CAD FILE	
08-17-2020		



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SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
F.P.L. COCONUT GROVE TO SIMPSON SUBSTATION ROUTE

SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	33
DATE	CAD FILE	
08-17-2020		



ABBREVIATIONS

M.D.C.R.	=	MIAMI-DADE COUNTY RECORDS
℄	=	CENTERLINE
D.B.	=	DEED BOOK
F.D.O.T.	=	FLORIDA DEPARTMENT OF TRANSPORTATION
F.P.L.	=	FLORIDA POWER & LIGHT
LB	=	LICENSED BUSINESS
O.R.B.	=	OFFICIAL RECORDS BOOK
PG.	=	PAGE
P.B.	=	PLAT BOOK
PSM	=	PROFESSIONAL SURVEYOR & MAPPER
R/W	=	RIGHT-OF-WAY
S.R.	=	STATE ROAD
N.T.S.	=	NOT-TO-SCALE
P.O.C.	=	POINT OF COMMENCEMENT
P.O.B.	=	POINT OF BEGINNING

95) S28°37'18"W 11.93'
96) N60°55'31"W 2.09'
97) S29°04'29"W 22.00'
98) S60°55'31"E 2.09'
99) S29°04'29"W 12.66'
100) S47°15'18"W 86.52'
101) Δ =01°37'40" R=1860.00' L=52.85'
102) N47°15'18"E 133.62'
103) N29°04'29"E 20.00'
104) S60°55'31"E 2.09'
105) N29°04'29"E 22.00'
106) N60°55'31"W 2.09'
107) N33°09'54"E 11.57'

NOTE: THIS SKETCH AND LEGAL DESCRIPTION ONLY DESCRIBES THAT PORTION OF THE F.P.L. DUCT BANK THAT LIES WITHIN THE METRORAIL RIGHT-OF-WAY

THIS IS NOT A SURVEY

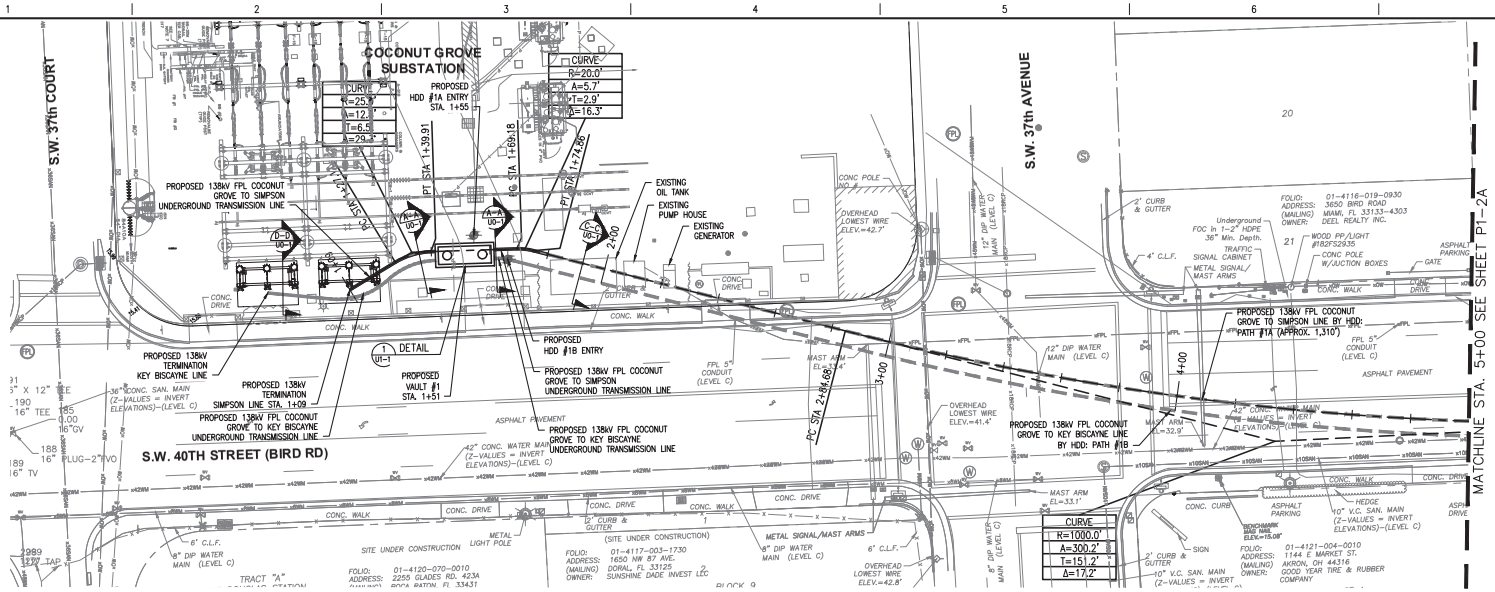
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SKETCH & LEGAL DESCRIPTION
DUCT BANK THROUGH MIAMI METRORAIL CORRIDOR
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SCALE	PROJECT No.	SHEET:
1"=100'	20-3905	34
DATE	CAD FILE	
08-17-2020		

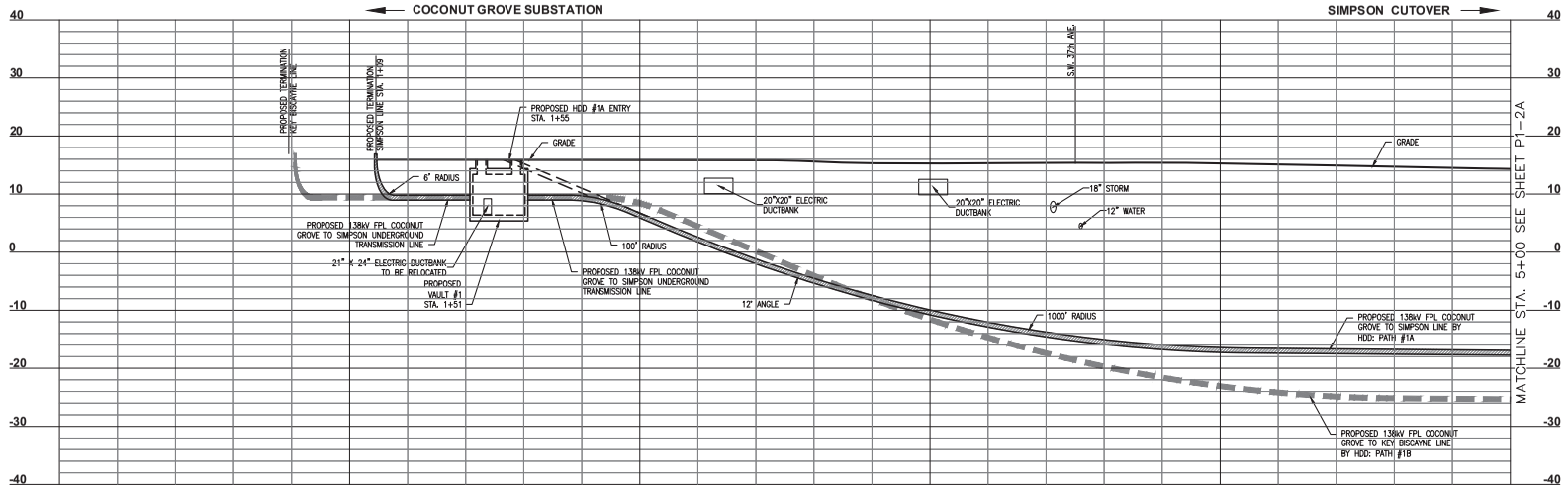
EXHIBIT B

Design Plan of Improvements



PLAN VIEW

84



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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2. ALL VERTICAL RADII ARE 400' UNLESS OTHERWISE NOTED.

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TOLL FREE
811 or 1-800-432-4770

FPL

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

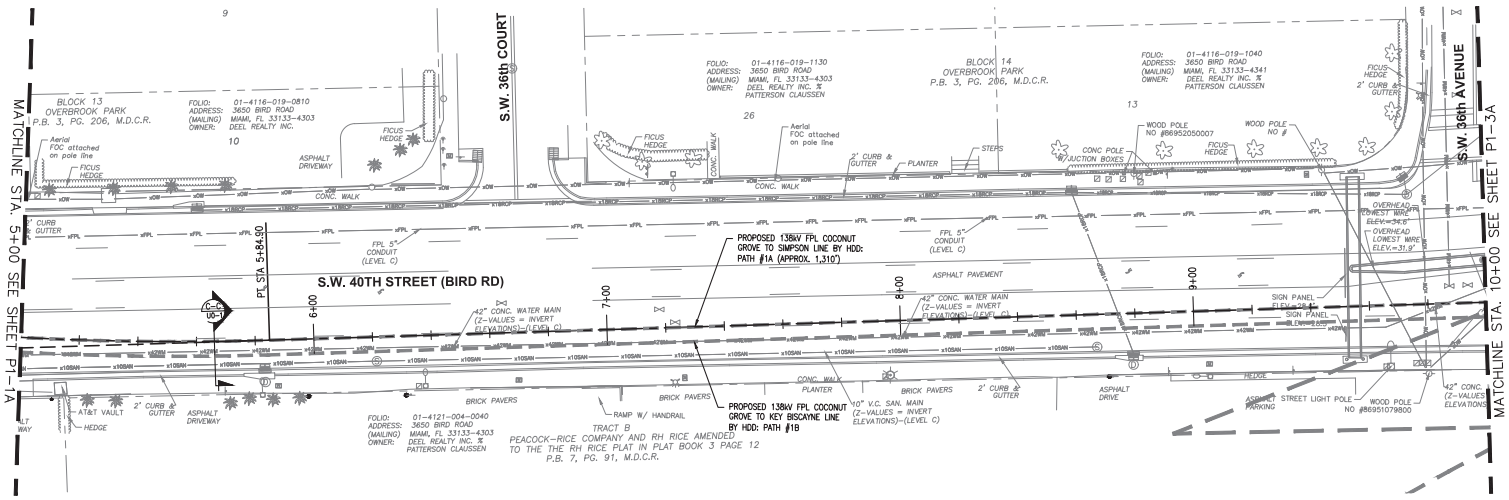
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

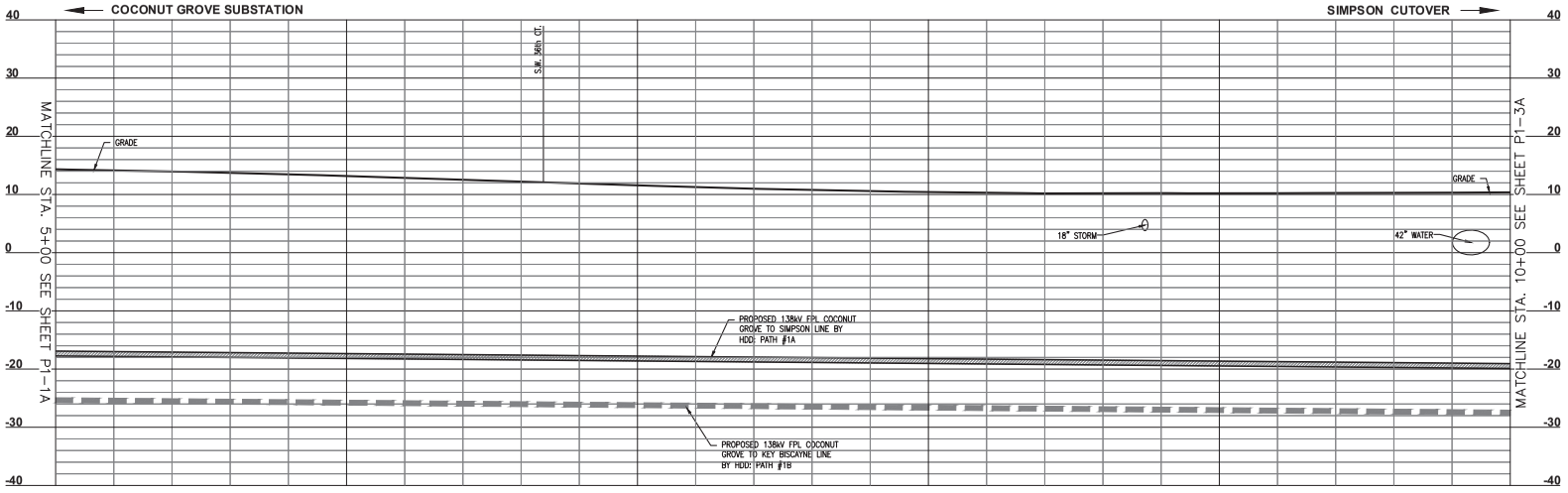
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 1+09 TO 5+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-1A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

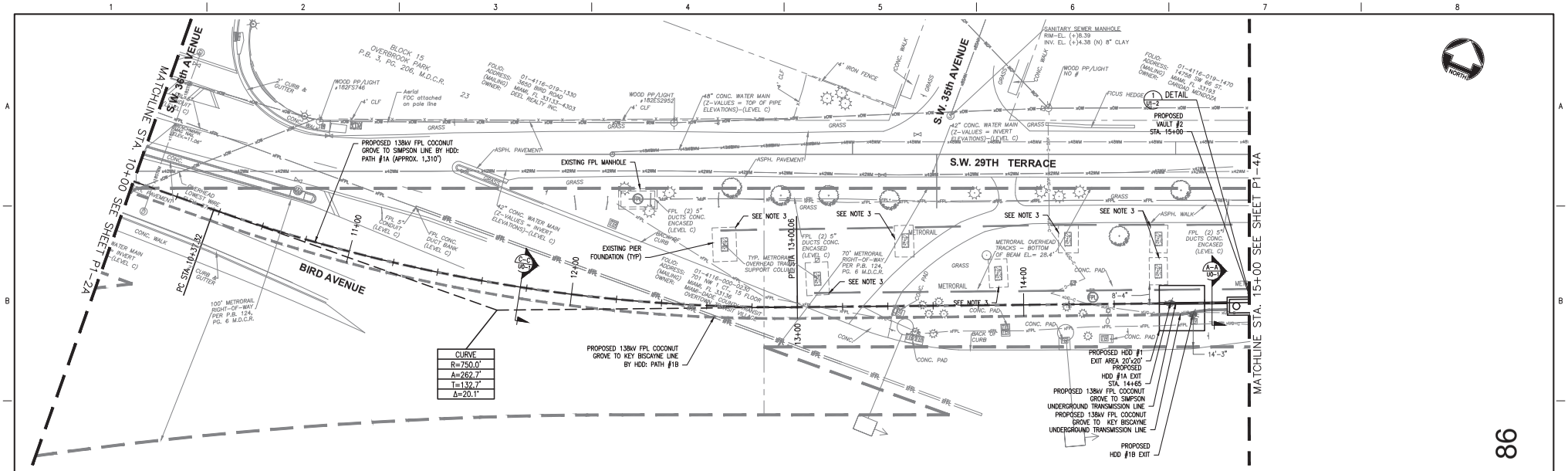
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

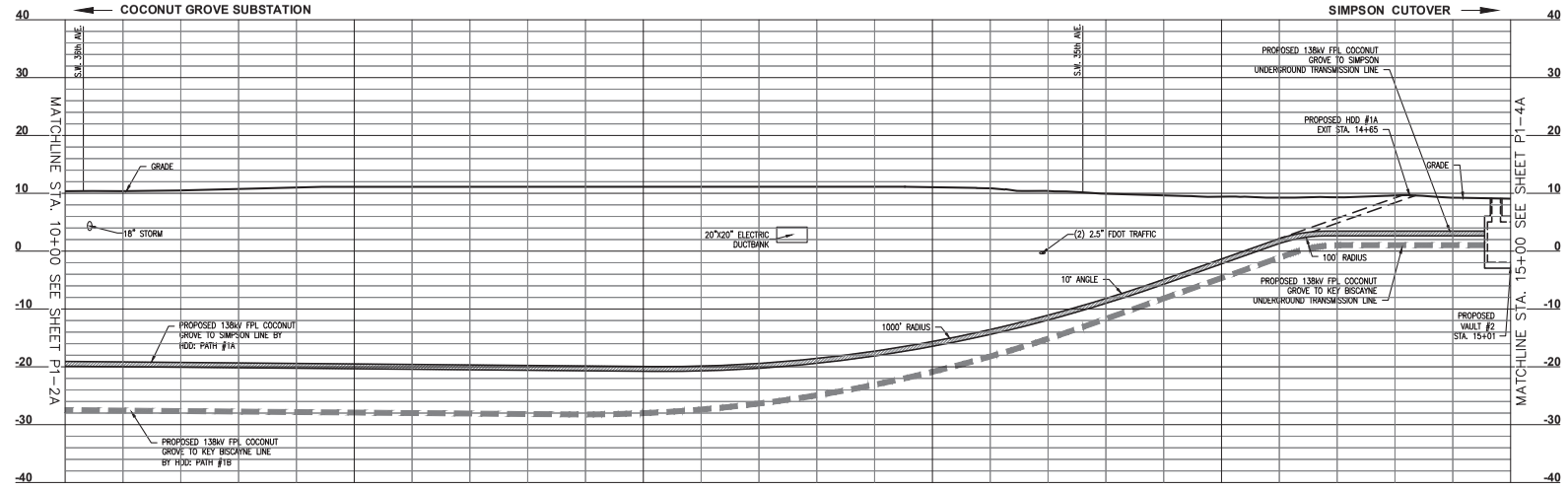
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 5+00 TO 10+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-2A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20' (0 10 20 40 60 FEET)

VERTICAL SCALE 1"= 10' (0 5 10 20 30 FEET)

NOTES:

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2. ALL VERTICAL RADII ARE 400' UNLESS OTHERWISE NOTED.
3. PIER FOUNDATION INSTALLED WITH 8' PILES UNDERNEATH. SEE METRORAIL DRAWINGS

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TOLL FREE
811 or 1-800-432-4770

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AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

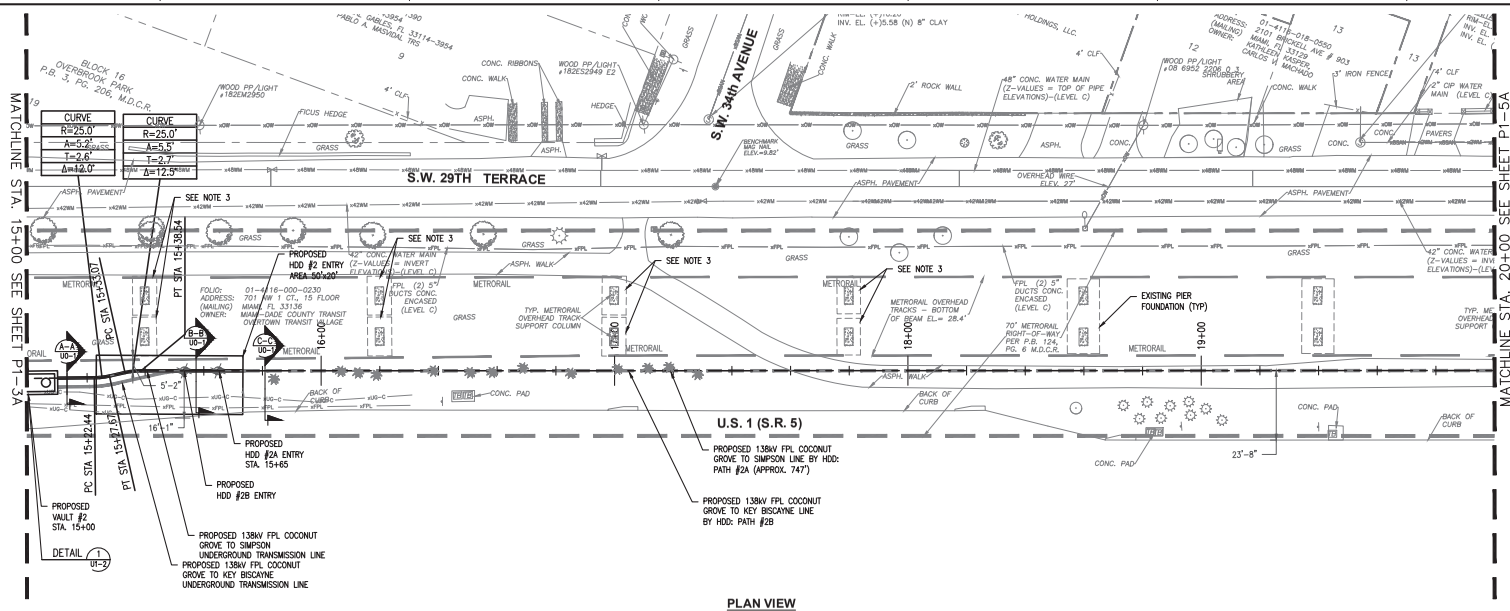
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

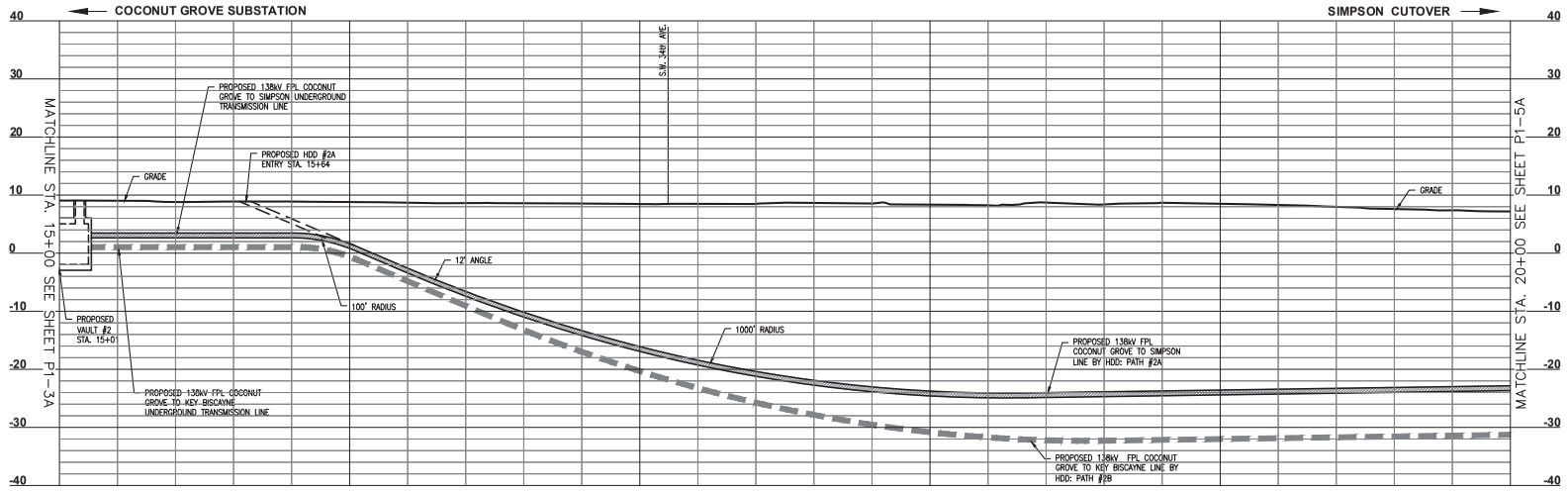
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 10+00 TO 15+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-3A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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TOLL FREE
811 or 1-800-432-4770

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AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

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REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

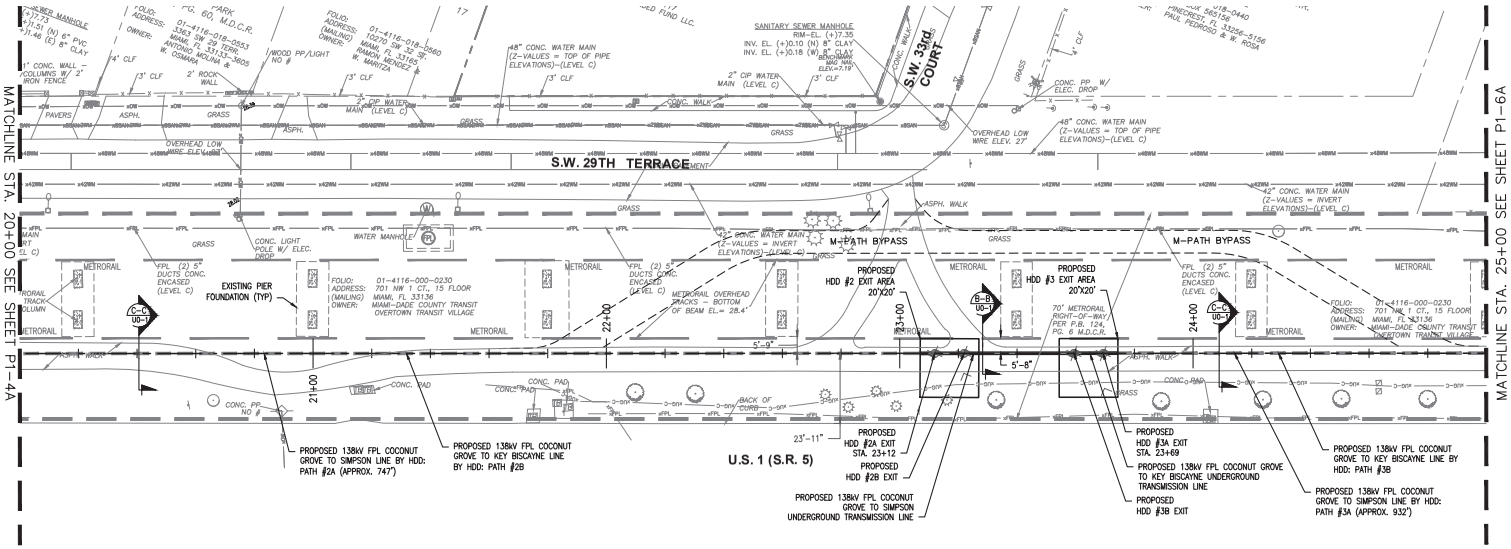
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FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 15+00 TO 20+00

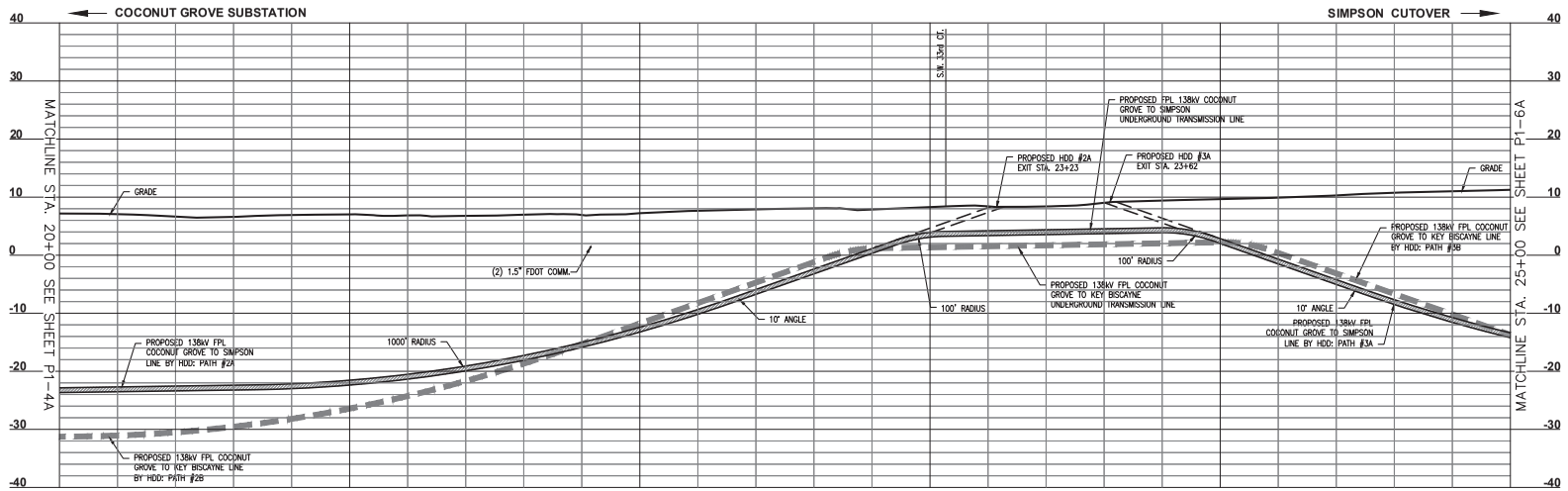
JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-4A

154295_Plan And Profile.dwg

87



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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TOLL FREE
811 or 1-800-432-4770

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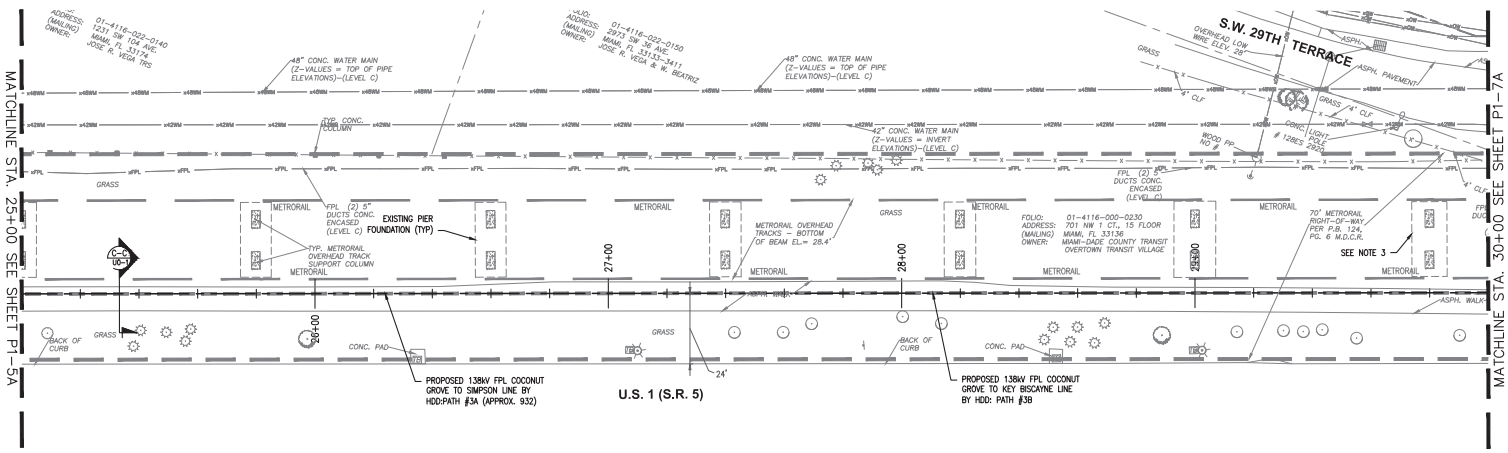
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

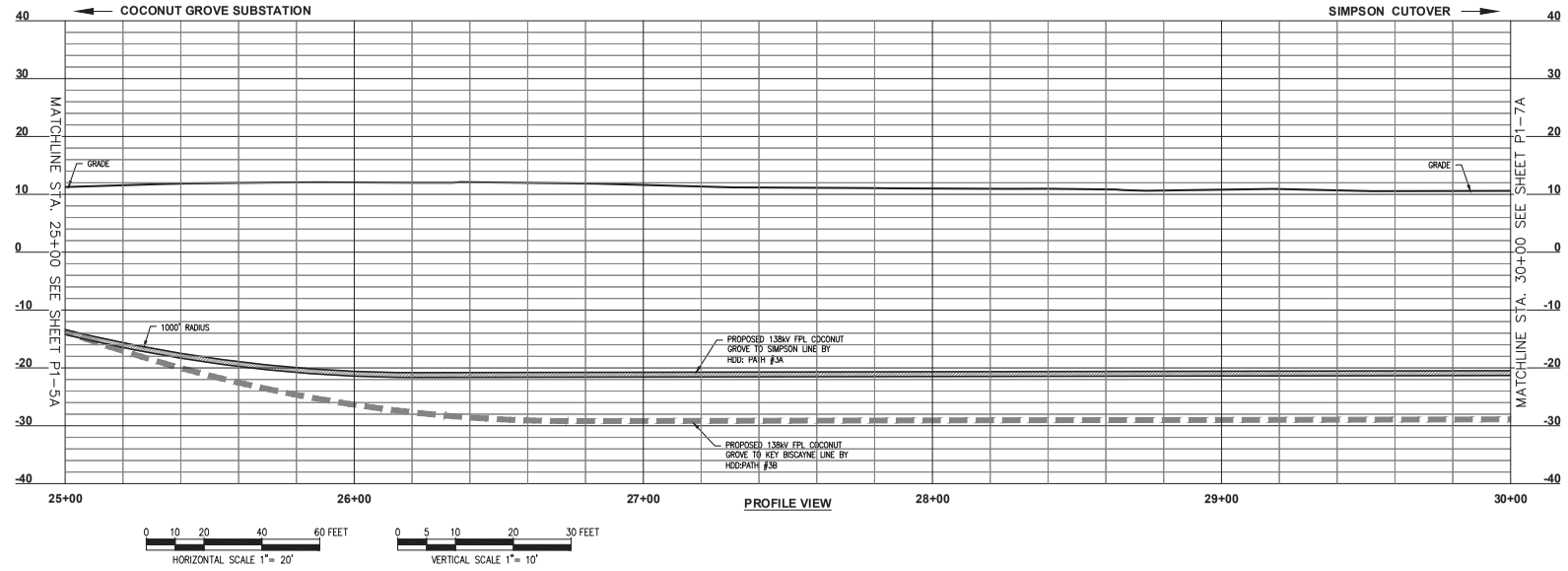
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 20+00 TO 25+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-5A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20' (0 10 20 40 60 FEET)

VERTICAL SCALE 1"= 10' (0 5 10 20 30 FEET)

NOTES:

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811 or 1-800-432-4770

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AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

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CKD	MRM	03/20/17

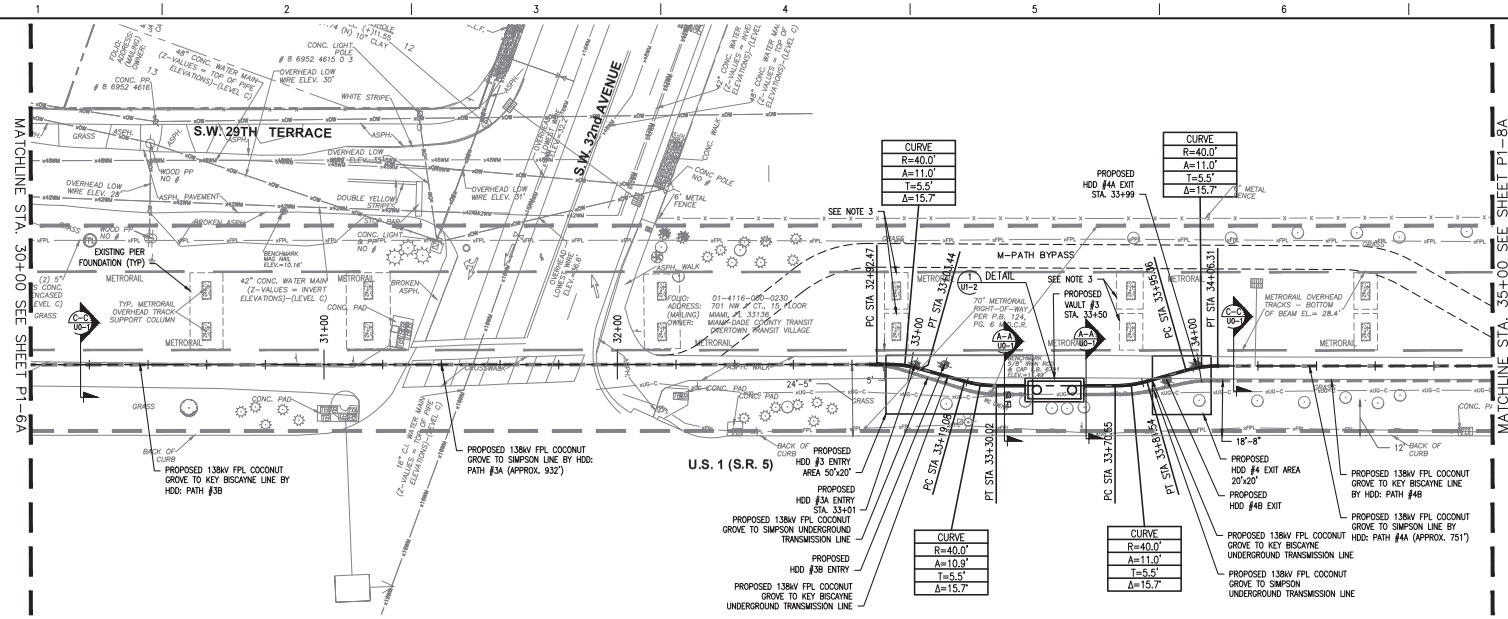
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FOR 24x36 DWG ONLY

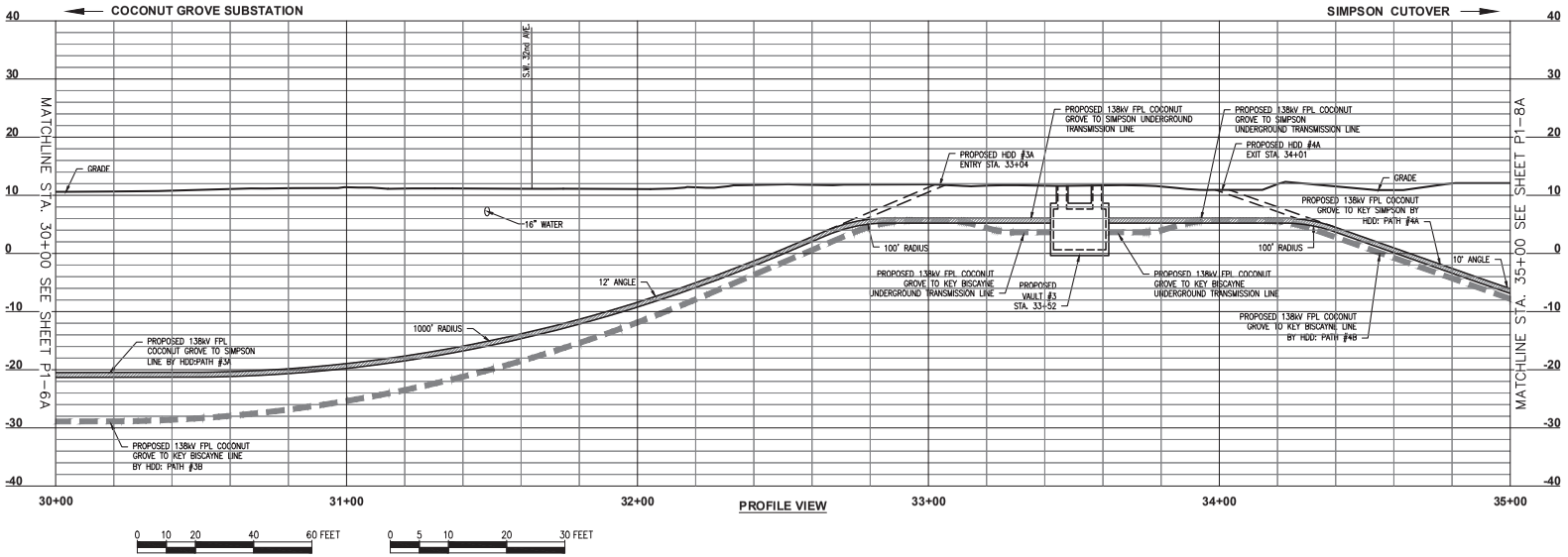
POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 25+00 TO 30+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-6A

154295_Plan And Profile.dwg





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REFERENCE DRAWINGS

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DRN	DRC	03/20/17
CKD	MRM	03/20/17

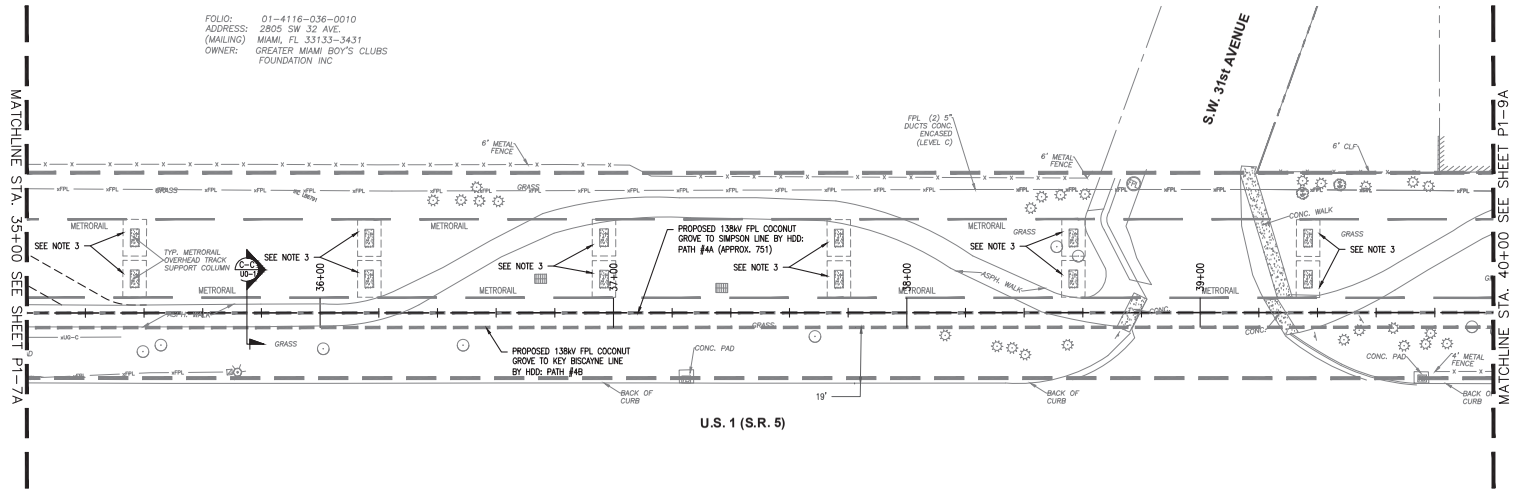
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VERT. SCALE: 1"=10'
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POWER ENGINEERS

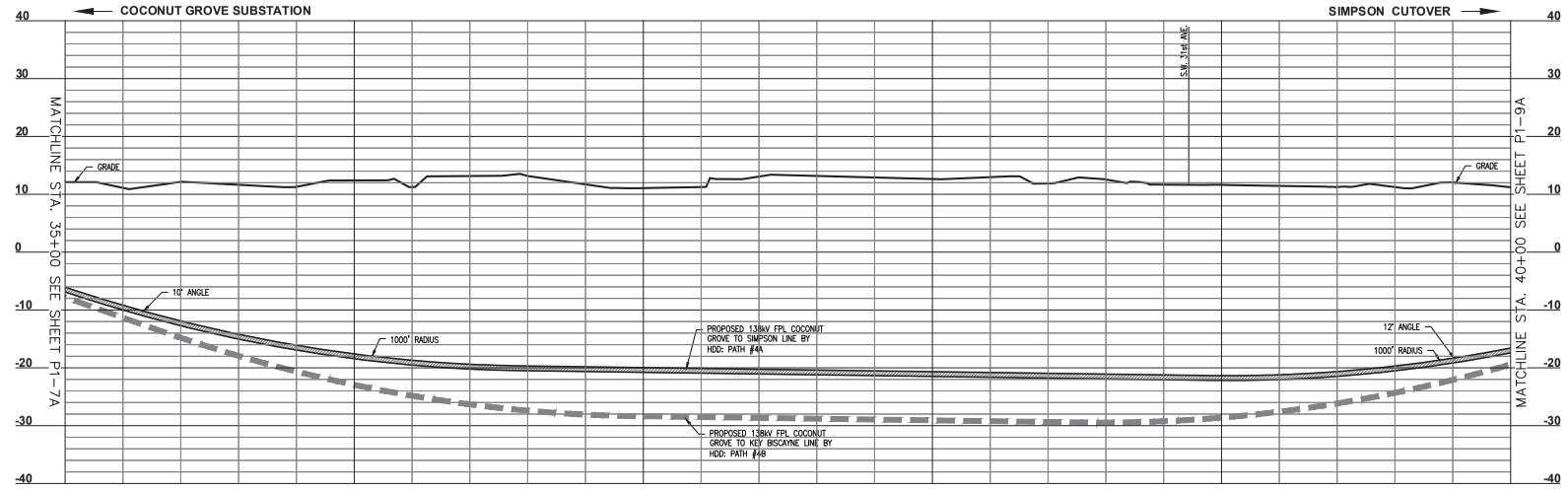
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 30+00 TO 35+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-7A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

0 10 20 40 60 FEET
HORIZONTAL SCALE 1"= 20'

0 5 10 20 30 FEET
VERTICAL SCALE 1"= 10'

NOTES:

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2. ALL VERTICAL RADII ARE 400' UNLESS OTHERWISE NOTED.
3. PIER FOUNDATION INSTALLED WITH 8' PILES UNDERNEATH. SEE METRORAIL DRAWINGS

THREE BUSINESS DAYS BEFORE YOU DIG CALL
FLORIDA SUNSHINE 811
TOLL FREE
811 or 1-800-432-4770

91

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

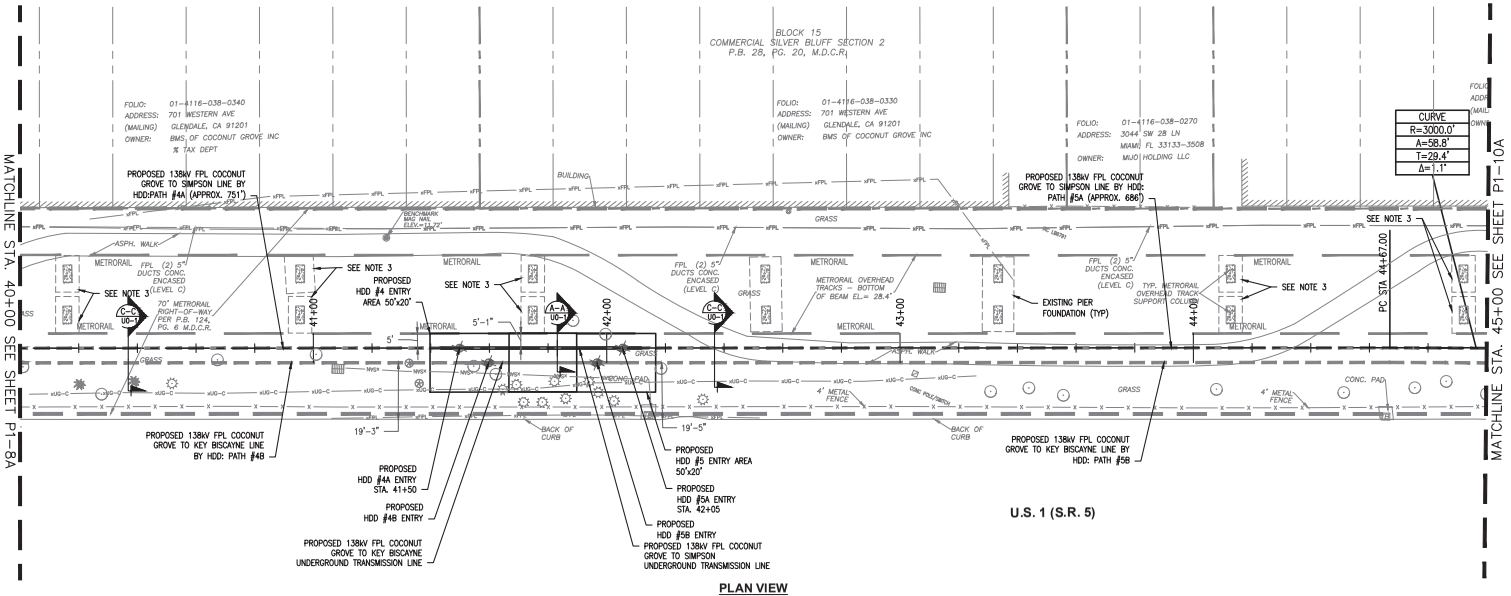
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

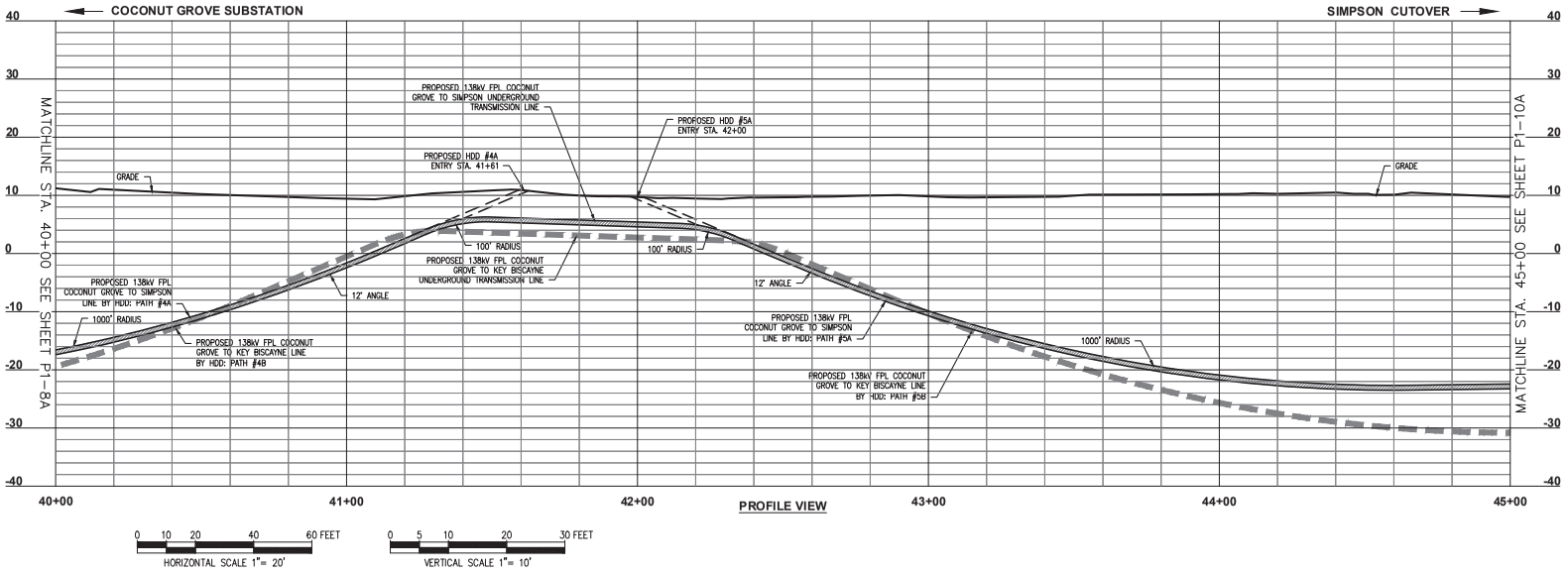
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 35+00 TO 40+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-8A

154295_Plan And Profile.dwg



92



NOTES:

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AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

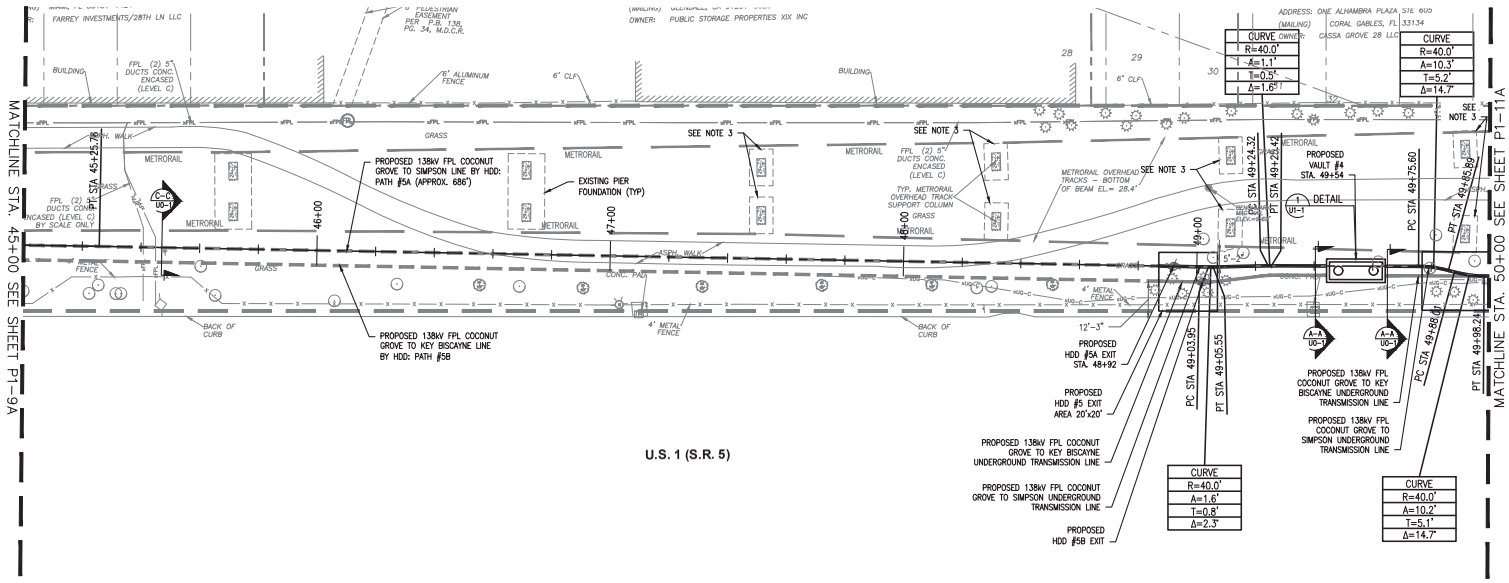
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

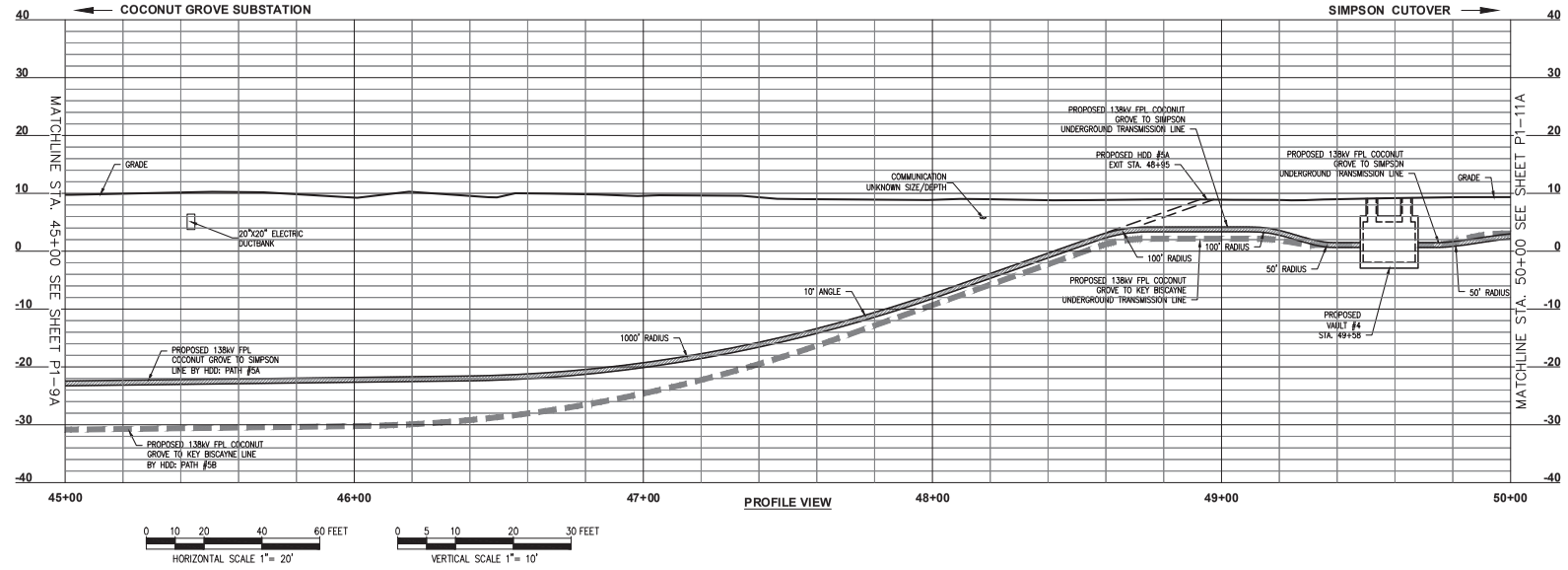
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 40+00 TO 45+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-9A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

SCALE: HORIZ. SCALE: 1"=20' VERT. SCALE: 1"=10' FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT

138kV UNDERGROUND TRANSMISSION LINE

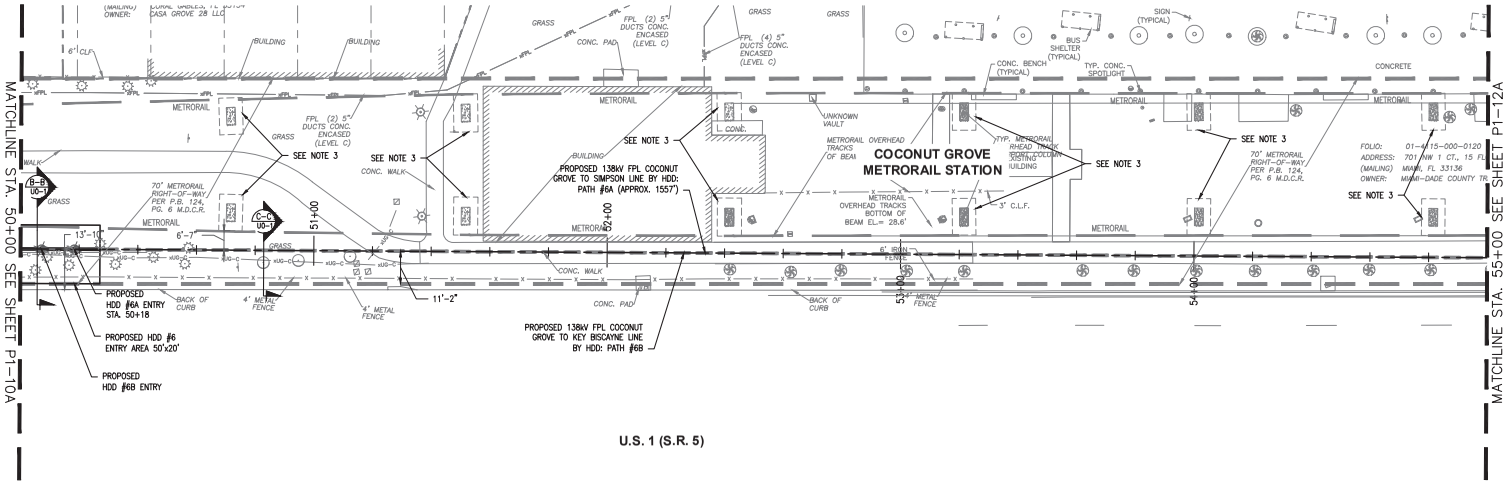
COCONUT GROVE TO SIMPSON CUTOVER PLAN & PROFILE STA. 45+00 TO 50+00

JOB NUMBER 154295

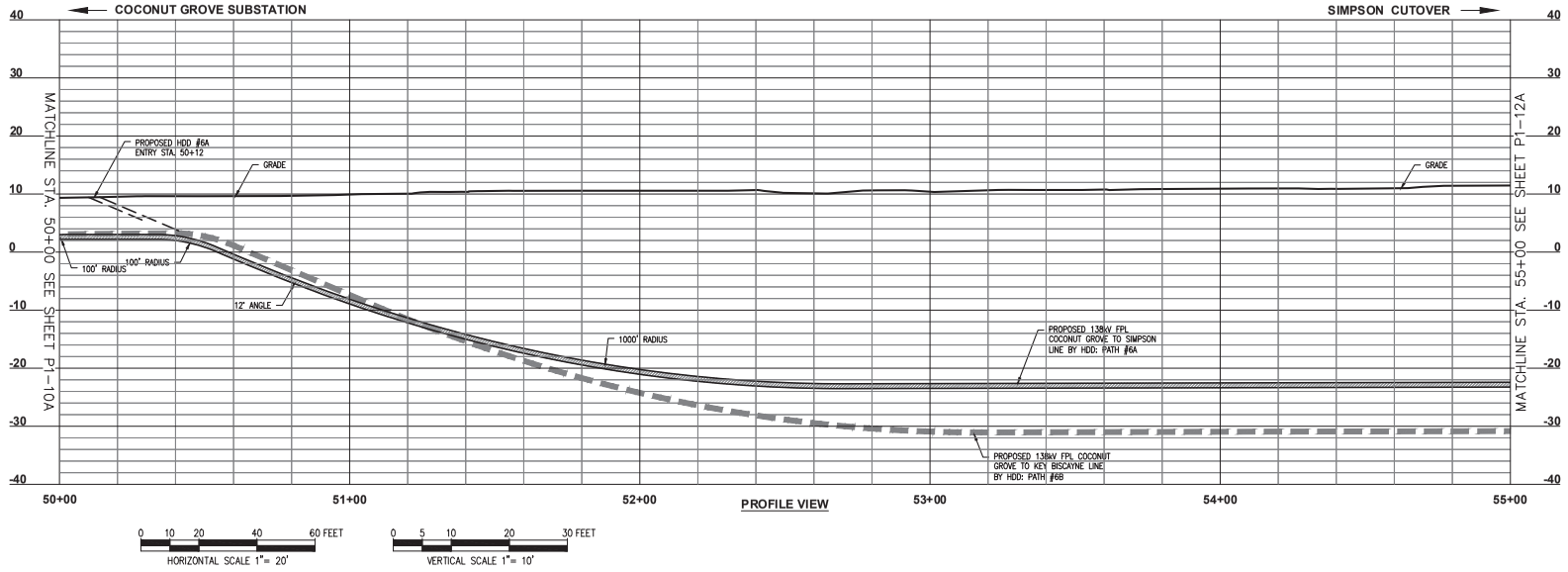
REV AA

DRAWING NUMBER P1-10A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

0 10 20 40 60 FEET
HORIZONTAL SCALE 1"= 20'

0 5 10 20 30 FEET
VERTICAL SCALE 1"= 10'

NOTES:

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FLORIDA SUNSHINE 811
TOLL FREE
811 or 1-800-432-4770

94

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

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DRN	DRC	03/20/17
CKD	MRM	03/20/17

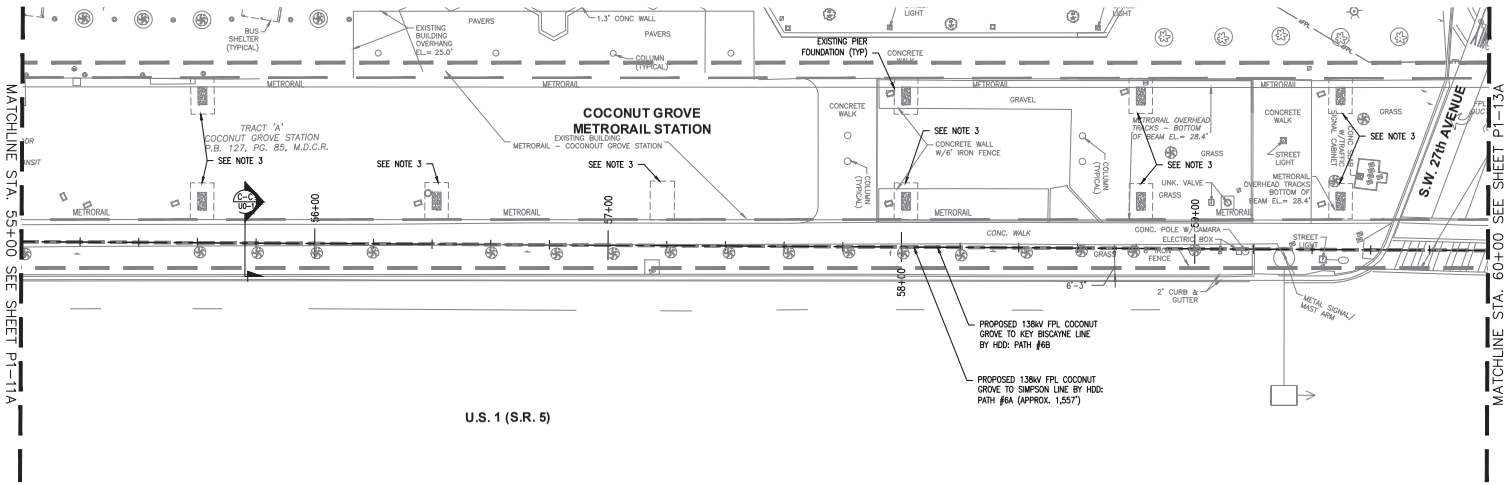
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

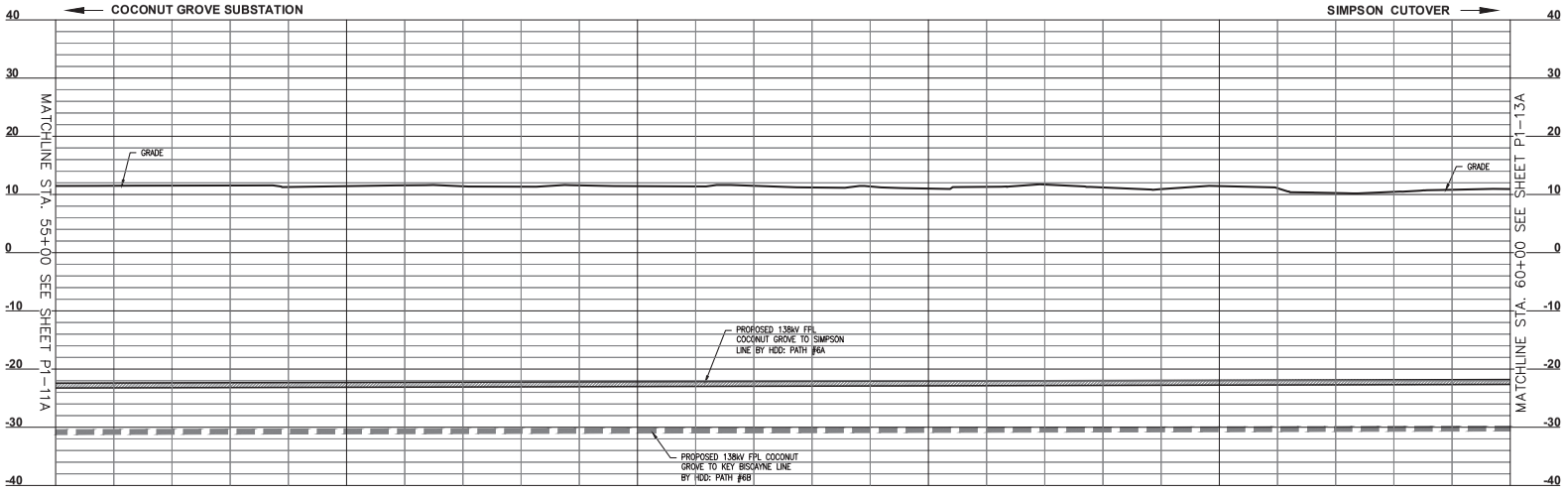
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 50+00 TO 55+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-11A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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TOLL FREE
811 or 1–800–432–4770

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AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

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DRN	DRC	03/20/17
CKD	MRM	03/20/17

SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT

138kV UNDERGROUND TRANSMISSION LINE

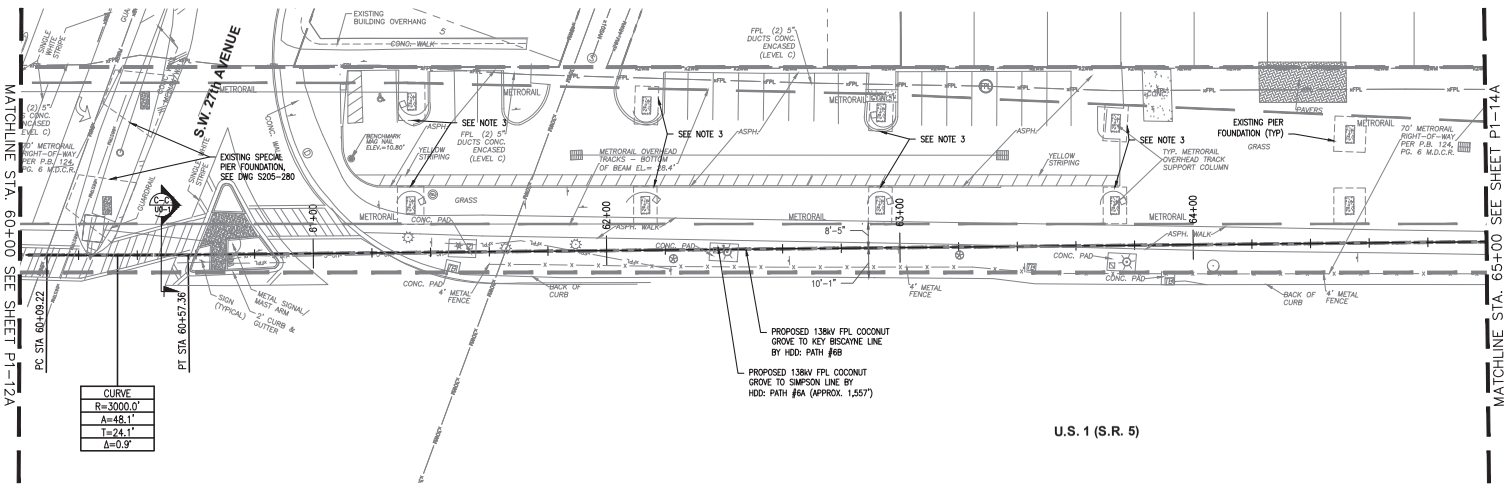
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 55+00 TO 60+00

JOB NUMBER 154295

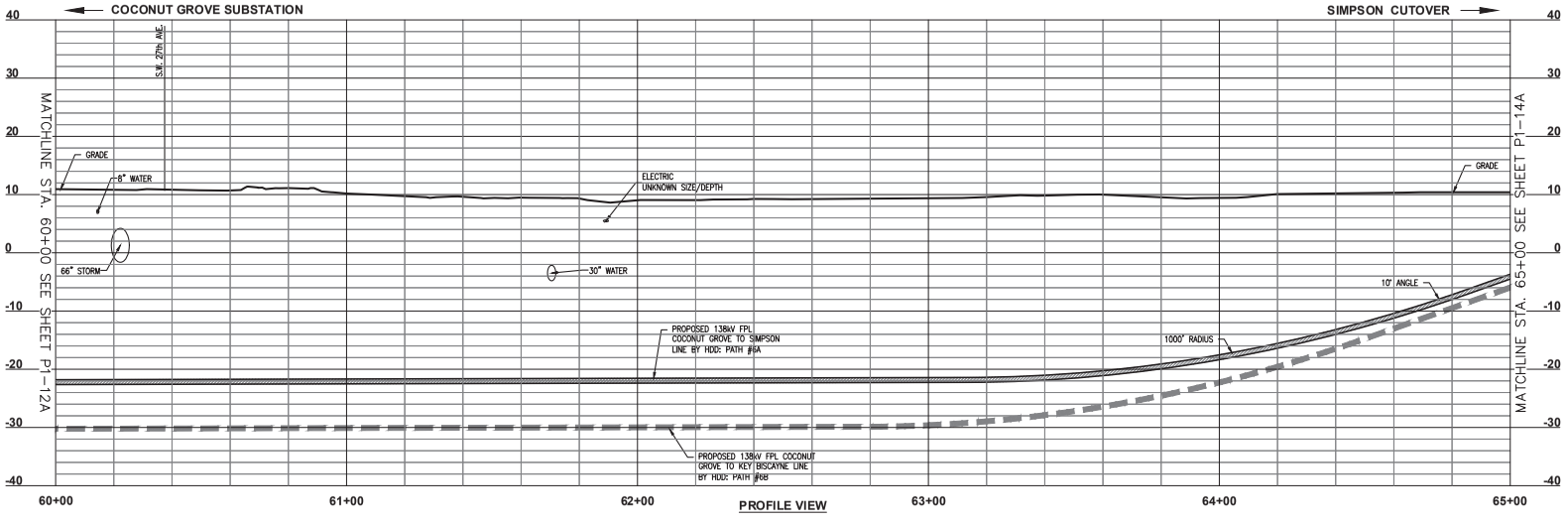
REV AA

DRAWING NUMBER P1–12A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

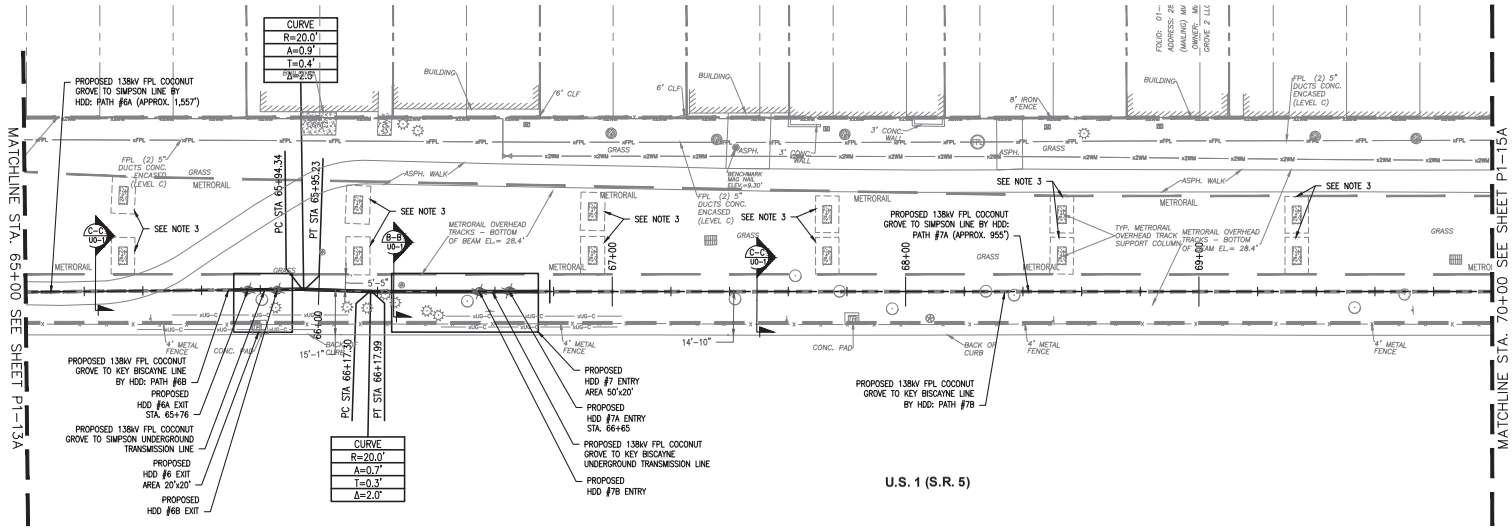
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

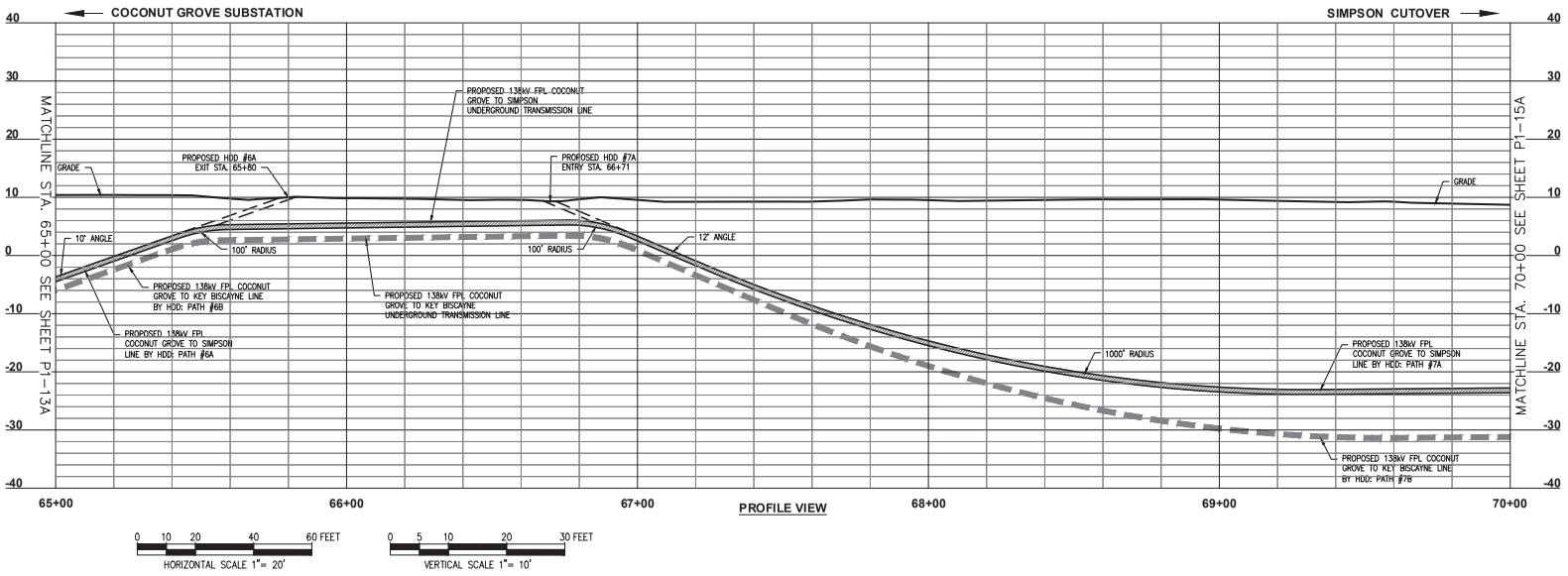
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 60+00 TO 65+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-13A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

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DRN	DRC	03/20/17
CKD	MRM	03/20/17

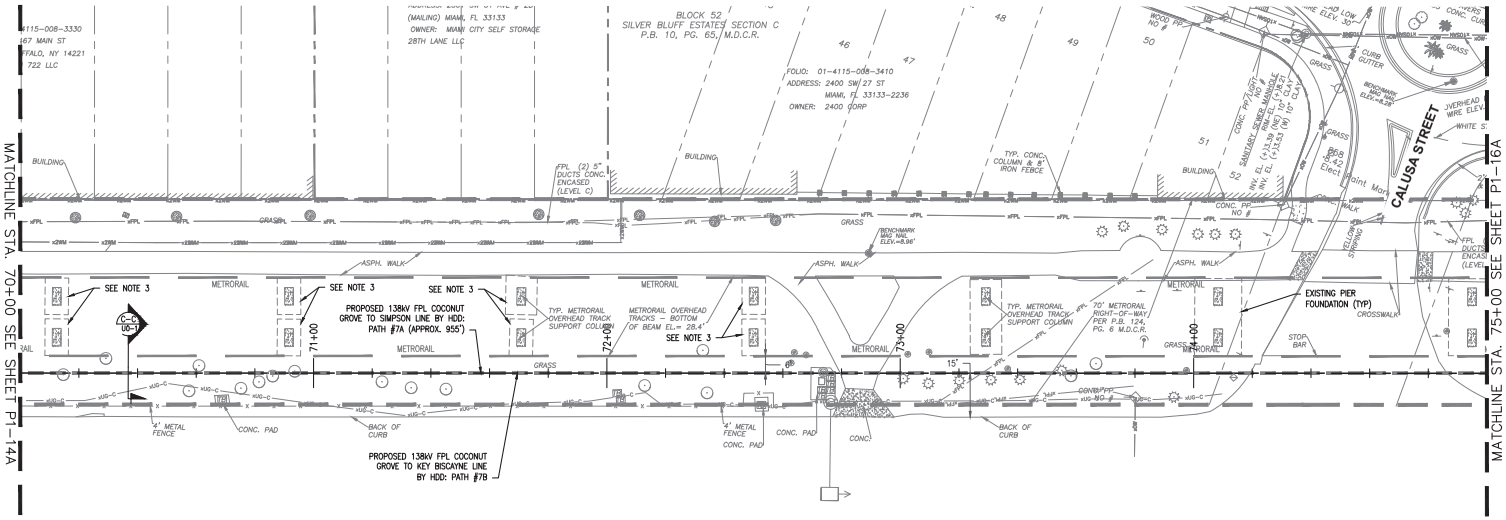
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

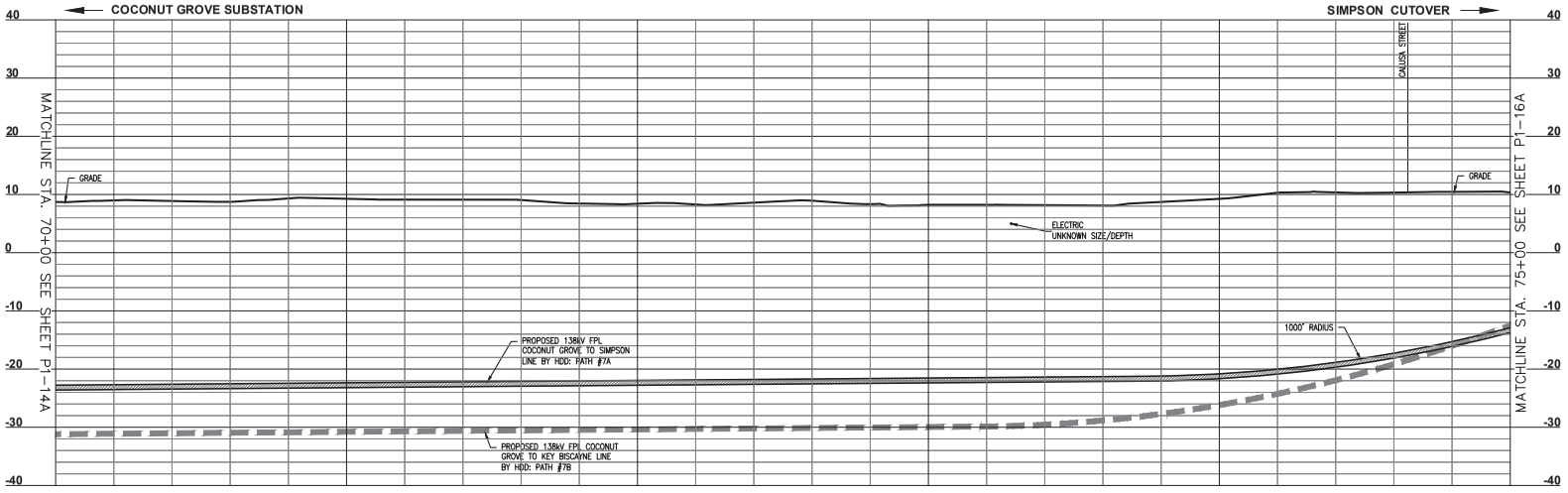
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 65+00 TO 70+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-14A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20' (0 10 20 40 60 FEET)

VERTICAL SCALE 1"= 10' (0 5 10 20 30 FEET)

NOTES:

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REFERENCE DRAWINGS

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CKD	MRM	03/20/17

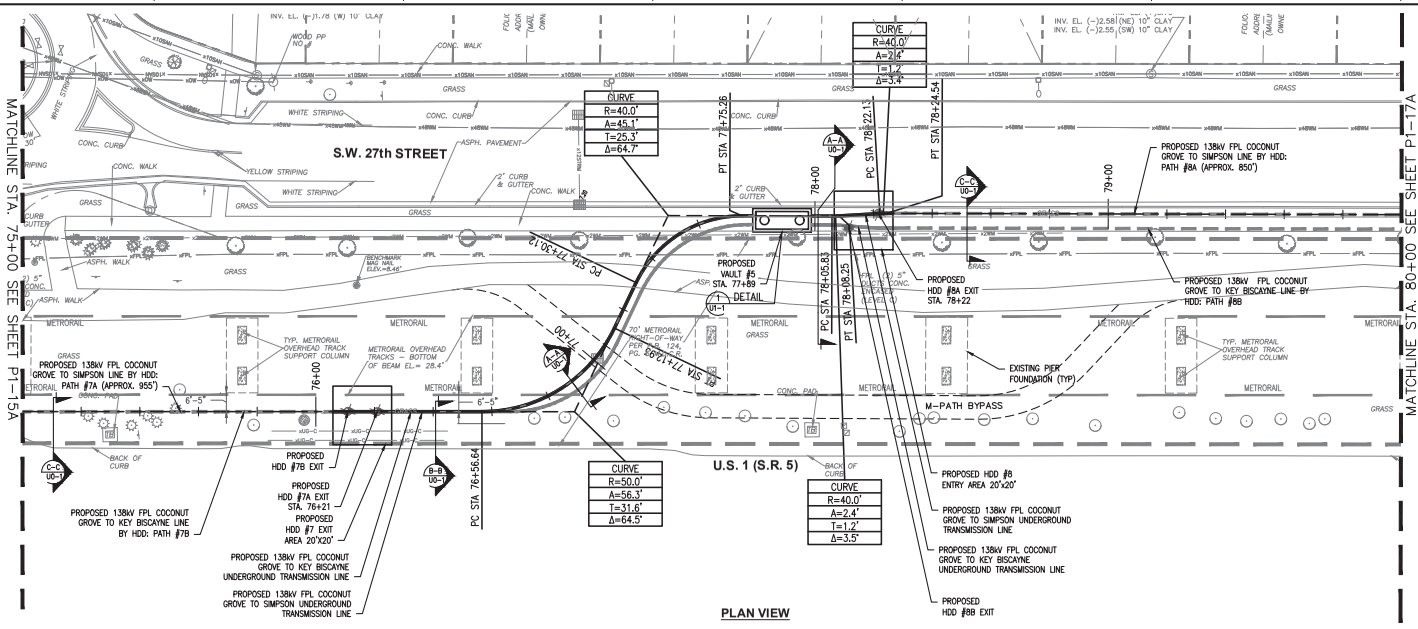
SCALE: HORIZ. SCALE: 1"=20'
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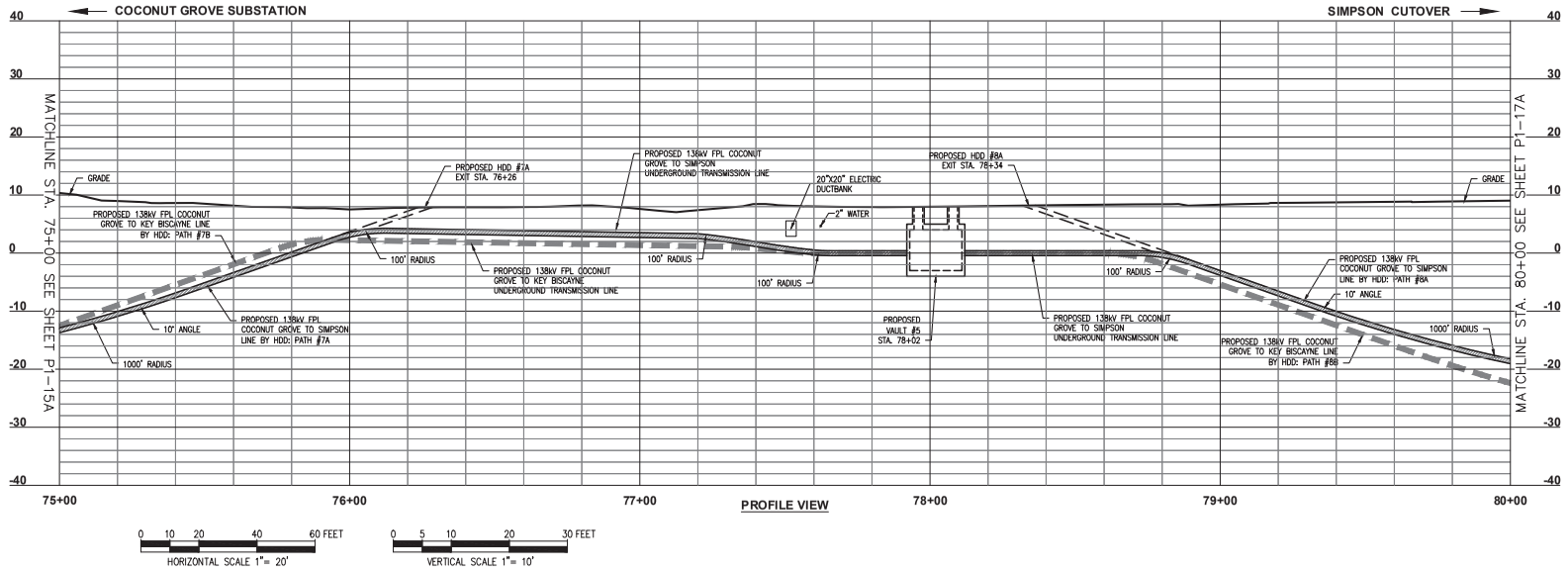
POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 70+00 TO 75+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-15A

154295_Plan And Profile.dwg





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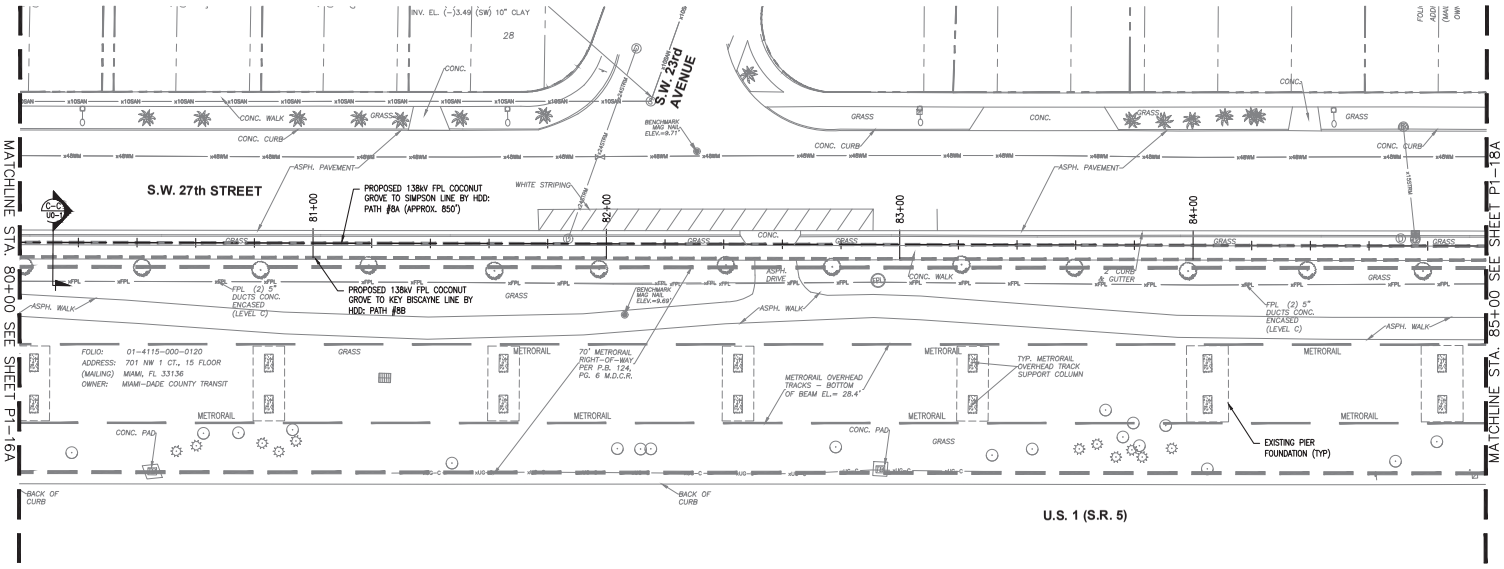
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

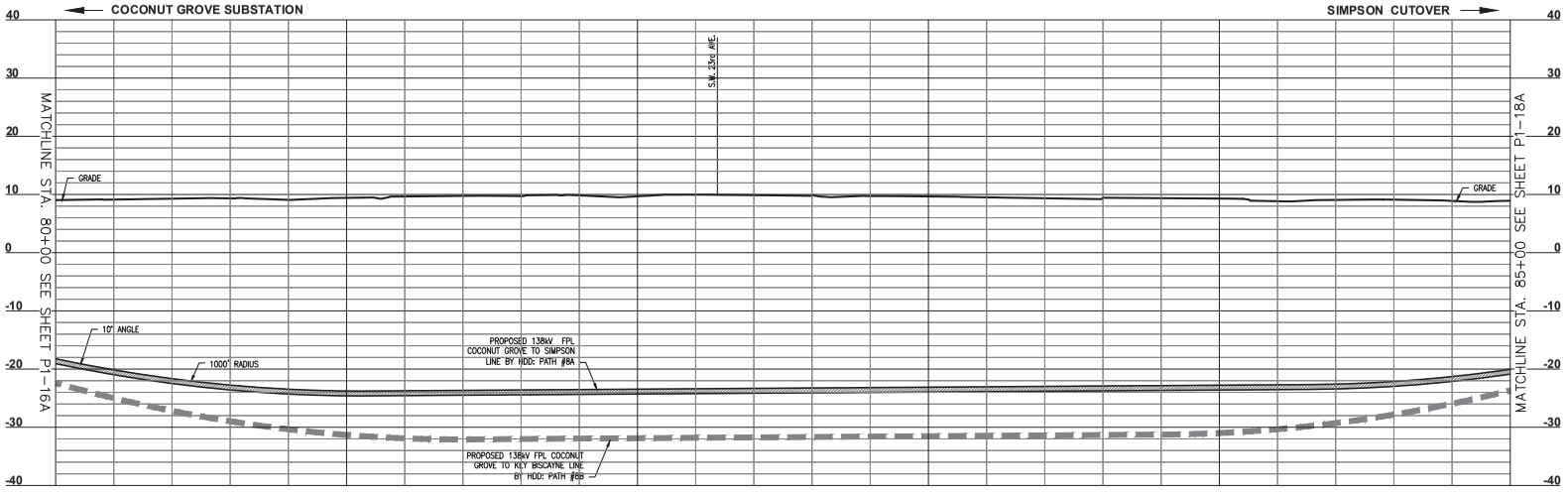
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 75+00 TO 80+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-16A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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TOLL FREE
811 or 1-800-432-4770

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

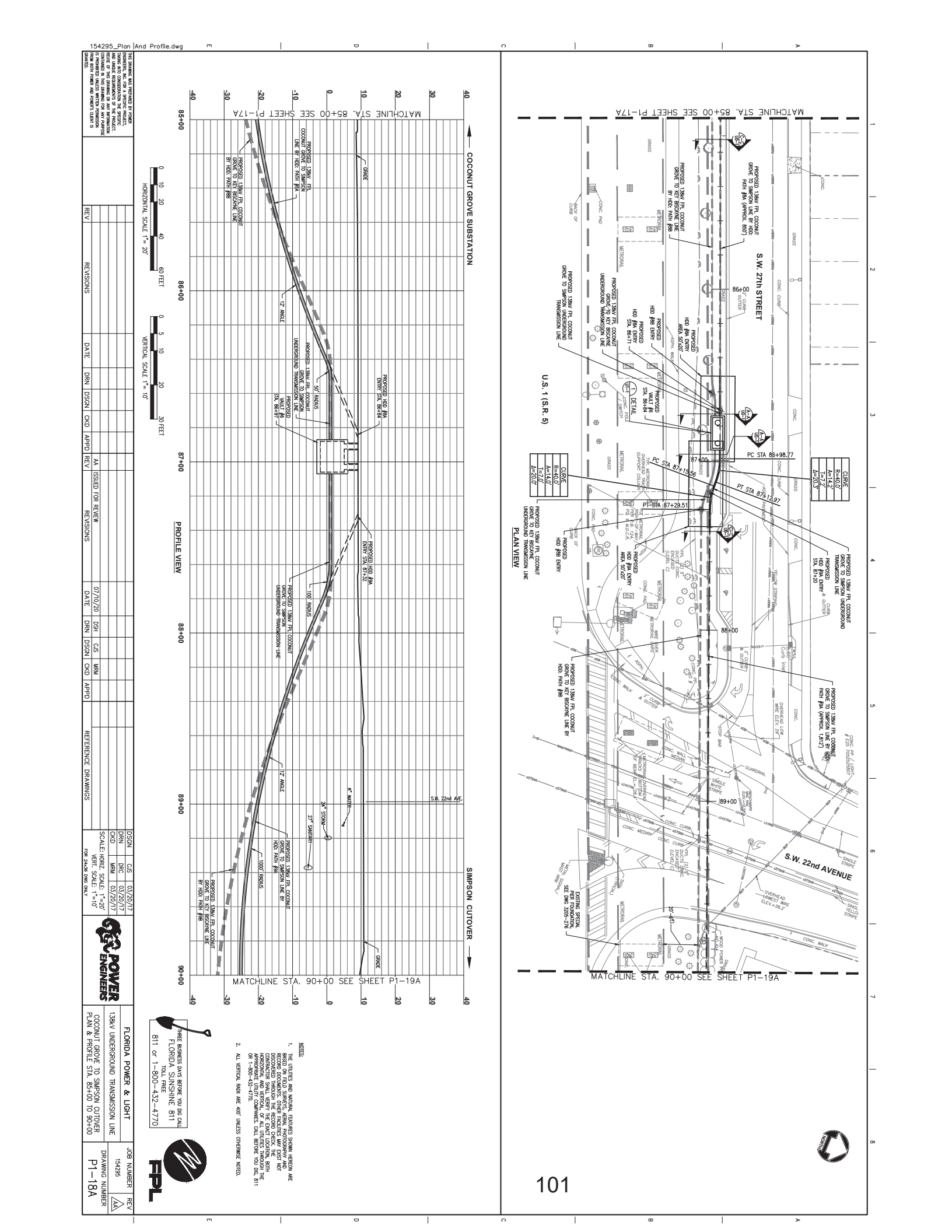
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

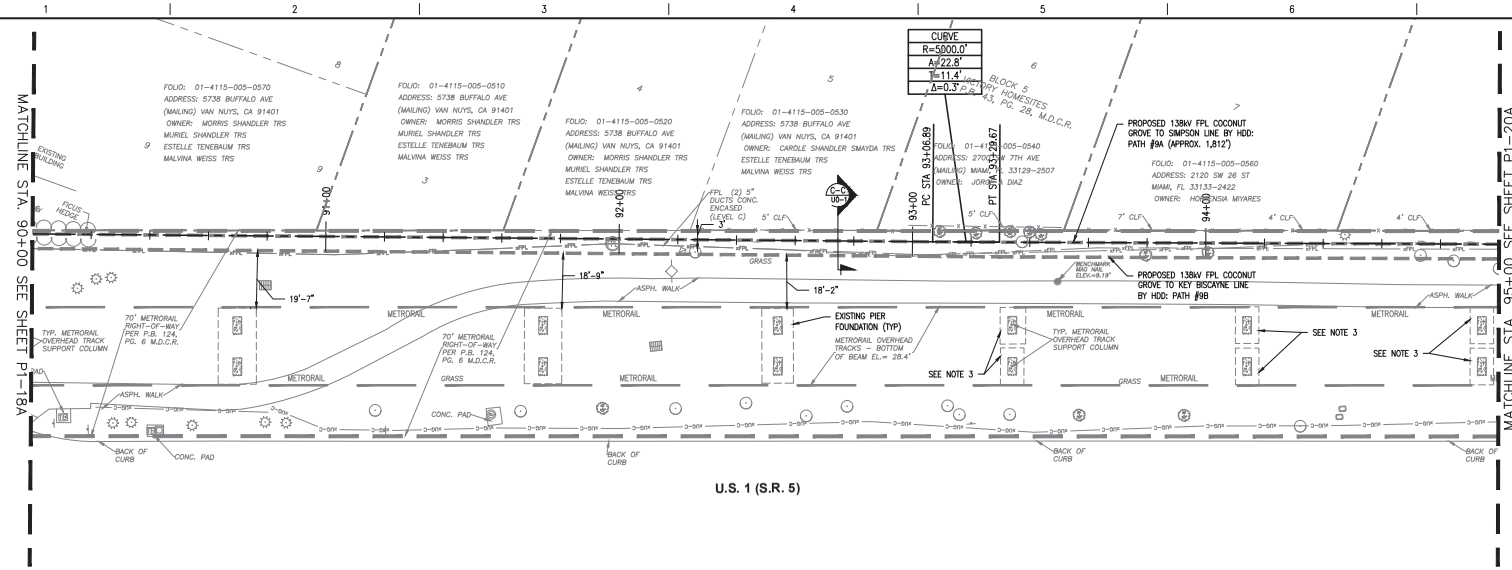
POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 80+00 TO 85+00

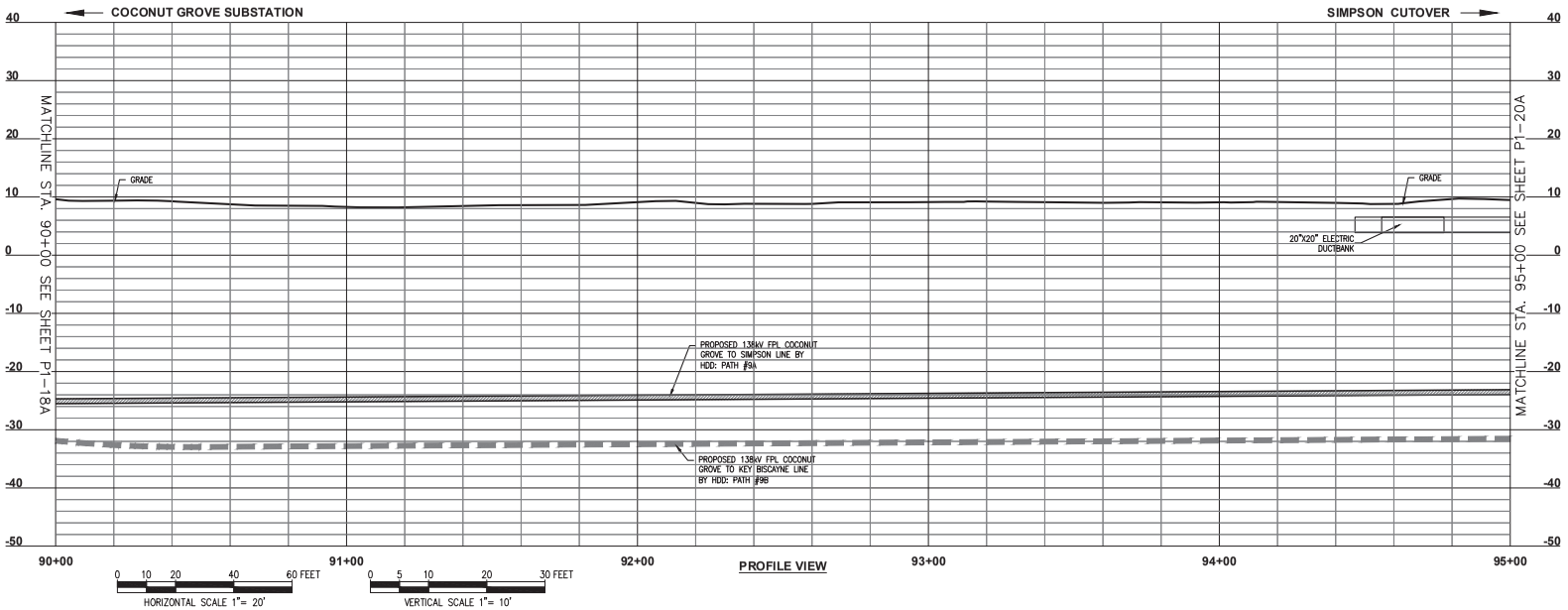
JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-17A

154295_Plan And Profile.dwg


PLAN VIEW
PROFILE VIEW
MATCHLINE STA. 85+00 SEE SHEET P1-17A
MATCHLINE STA. 90+00 SEE SHEET P1-19A
S.W. 27th STREET
S.W. 22nd AVENUE
U.S. 1 (S.R. 5)
COCONUT GROVE SUBSTATION
SIMPSON CUTOVER
PROPOSED 138kV FPL COCONUT GROVE TO SIMPSON UNDERGROUND TRANSMISSION LINE
PROPOSED 138kV FPL COCONUT GROVE TO KEY BISCAYNE LINE BY HDD: PATH #8B
PROPOSED HDD #8A ENTRY STA. 87+32
PROPOSED HDD #8B ENTRY
PROPOSED VAULT #6 STA. 86+64
PROPOSED VAULT #5 STA. 86+97
PROPOSED HDD #8A ENTRY STA. 86+84
PROPOSED HDD #8A ENTRY AREA 50'x20'
PROPOSED HDD #8B ENTRY AREA 50'x20'
PROPOSED HDD #8A ENTRY STA. 87+20
PC STA 86+98.77
PC STA 87+15.56
PT STA 87+29.51
PT STA 87+12.97
CURVE R=40.0' Δ=14.2' T=5.2' A=20.3'
CURVE R=40.0' Δ=14.0' T=5.0' A=20.0'
DETAIL
EXISTING SPECIAL PURPOSE MANHOLE SEE DWG 3205-276
OVERHEAD FIBER OPTIC WIRE ELEV.=38.2'
OVERHEAD FIBER OPTIC WIRE ELEV.=39.2'
OVERHEAD TELEPHONE WIRES ELEV.=29.2'
OVERHEAD TELEPHONE WIRES ELEV.=27.2'
OVERHEAD TELEPHONE WIRES ELEV.=25.2'
OVERHEAD TELEPHONE WIRES ELEV.=23.2'
OVERHEAD TELEPHONE WIRES ELEV.=21.2'
OVERHEAD TELEPHONE WIRES ELEV.=19.2'
OVERHEAD TELEPHONE WIRES ELEV.=17.2'
OVERHEAD TELEPHONE WIRES ELEV.=15.2'
OVERHEAD TELEPHONE WIRES ELEV.=13.2'
OVERHEAD TELEPHONE WIRES ELEV.=11.2'
OVERHEAD TELEPHONE WIRES ELEV.=9.2'
OVERHEAD TELEPHONE WIRES ELEV.=7.2'
OVERHEAD TELEPHONE WIRES ELEV.=5.2'
OVERHEAD TELEPHONE WIRES ELEV.=3.2'
OVERHEAD TELEPHONE WIRES ELEV.=1.2'
OVERHEAD TELEPHONE WIRES ELEV.=-0.8'
OVERHEAD TELEPHONE WIRES ELEV.=-2.8'
OVERHEAD TELEPHONE WIRES ELEV.=-4.8'
OVERHEAD TELEPHONE WIRES ELEV.=-6.8'
OVERHEAD TELEPHONE WIRES ELEV.=-8.8'
OVERHEAD TELEPHONE WIRES ELEV.=-10.8'
OVERHEAD TELEPHONE WIRES ELEV.=-12.8'
OVERHEAD TELEPHONE WIRES ELEV.=-14.8'
OVERHEAD TELEPHONE WIRES ELEV.=-16.8'
OVERHEAD TELEPHONE WIRES ELEV.=-18.8'
OVERHEAD TELEPHONE WIRES



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
2. ALL VERTICAL RADII ARE 400' UNLESS OTHERWISE NOTED.
3. PIER FOUNDATION INSTALLED WITH 8' PILES UNDERNEATH. SEE METRORAIL DRAWINGS

THREE BUSINESS DAYS BEFORE YOU DIG CALL
FLORIDA SUNSHINE 811
TOLL FREE
811 or 1-800-432-4770

102

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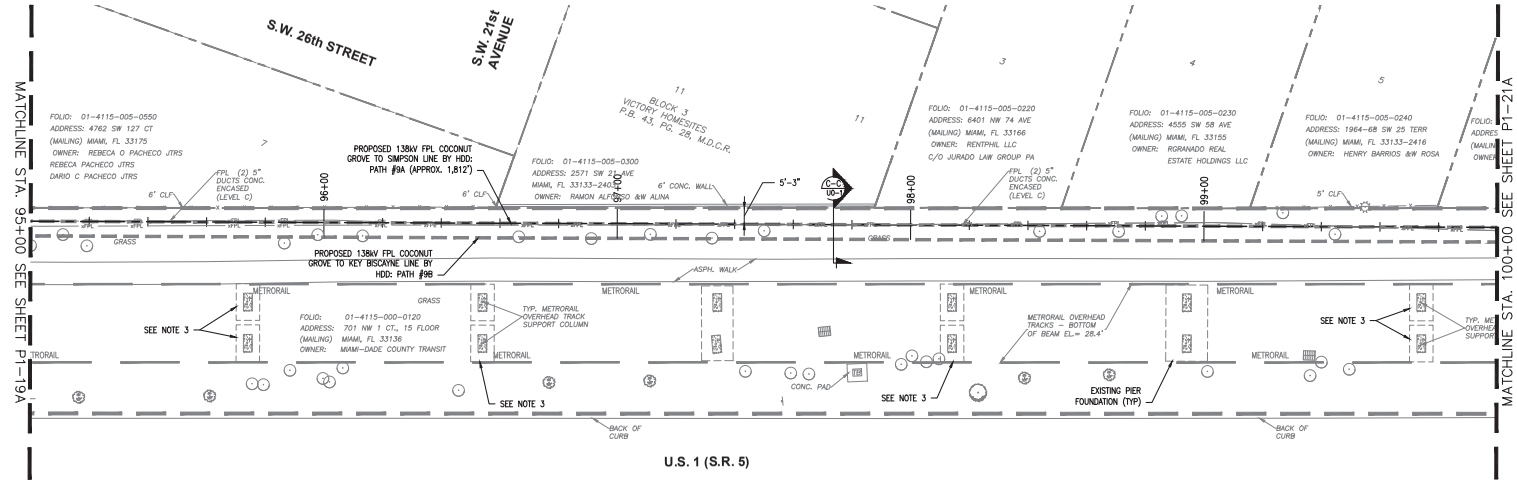
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

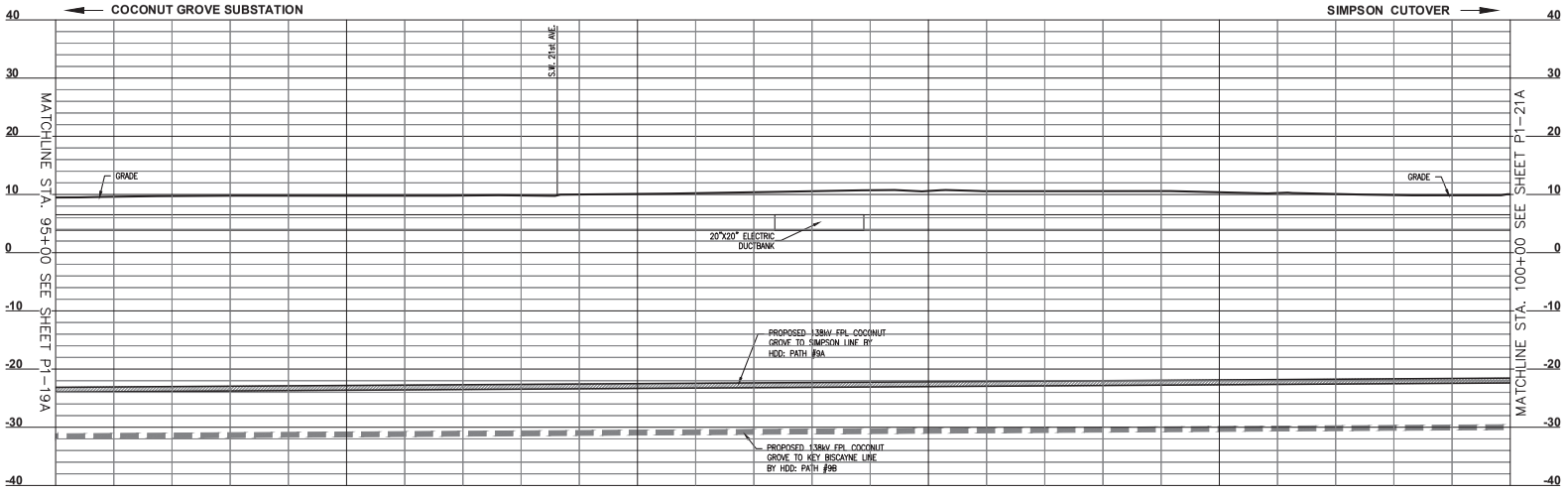
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 90+00 TO 95+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-19A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

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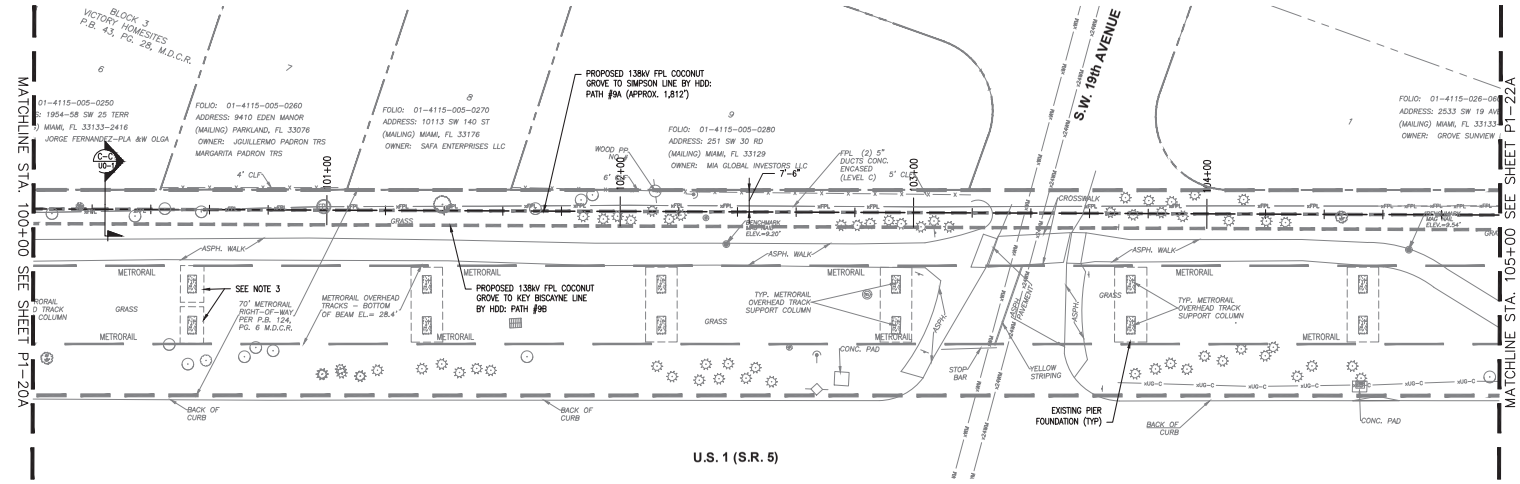
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

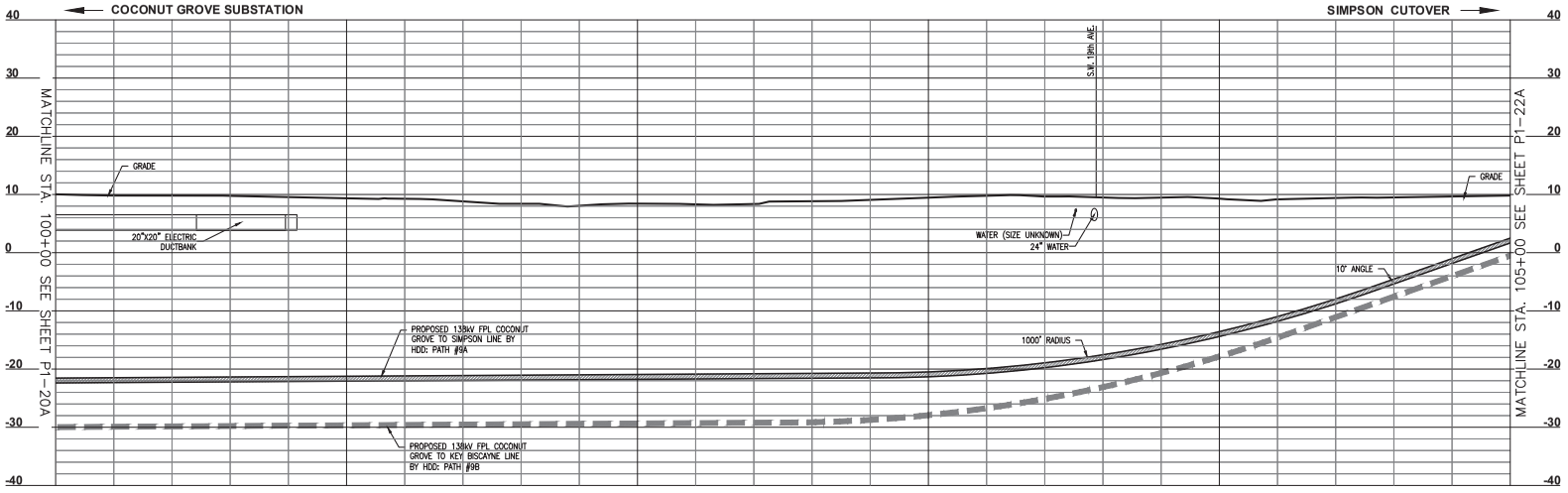
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 95+00 TO 100+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-20A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

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TOLL FREE
811 or 1-800-432-4770

104

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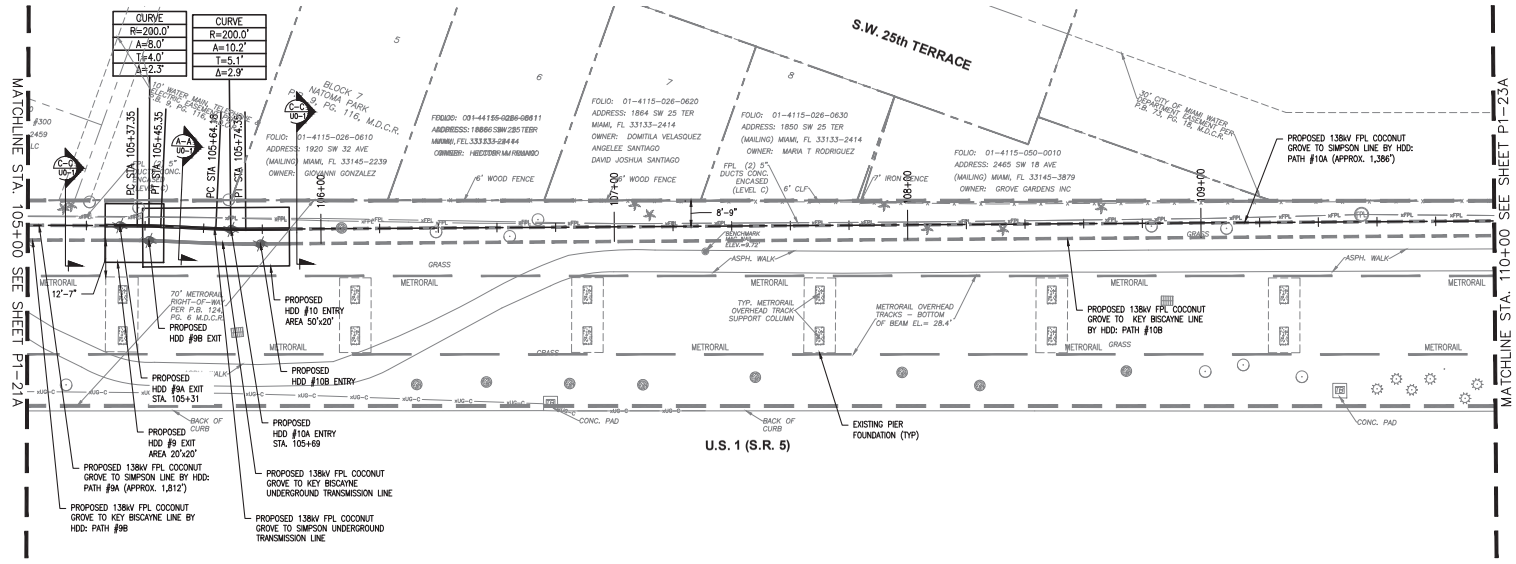
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 100+00 TO 105+00

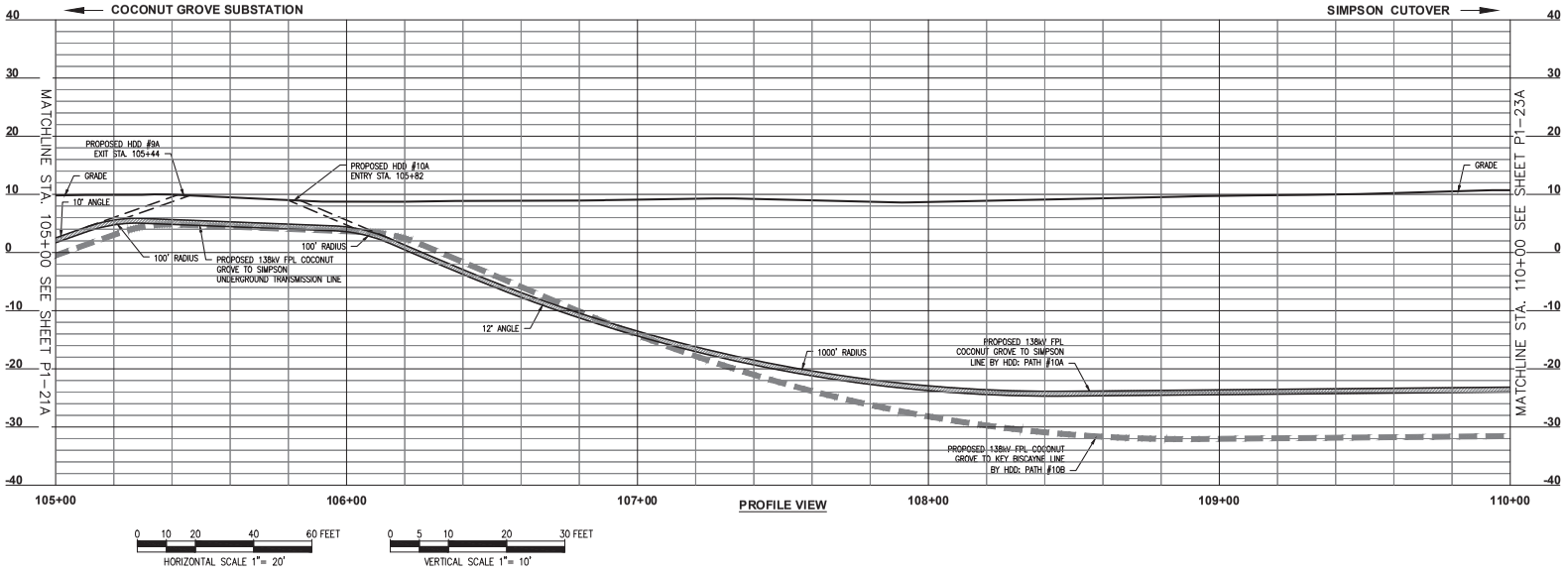
JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-21A

154295_Plan And Profile.dwg



PLAN VIEW

105



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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CKD	MRM	03/20/17

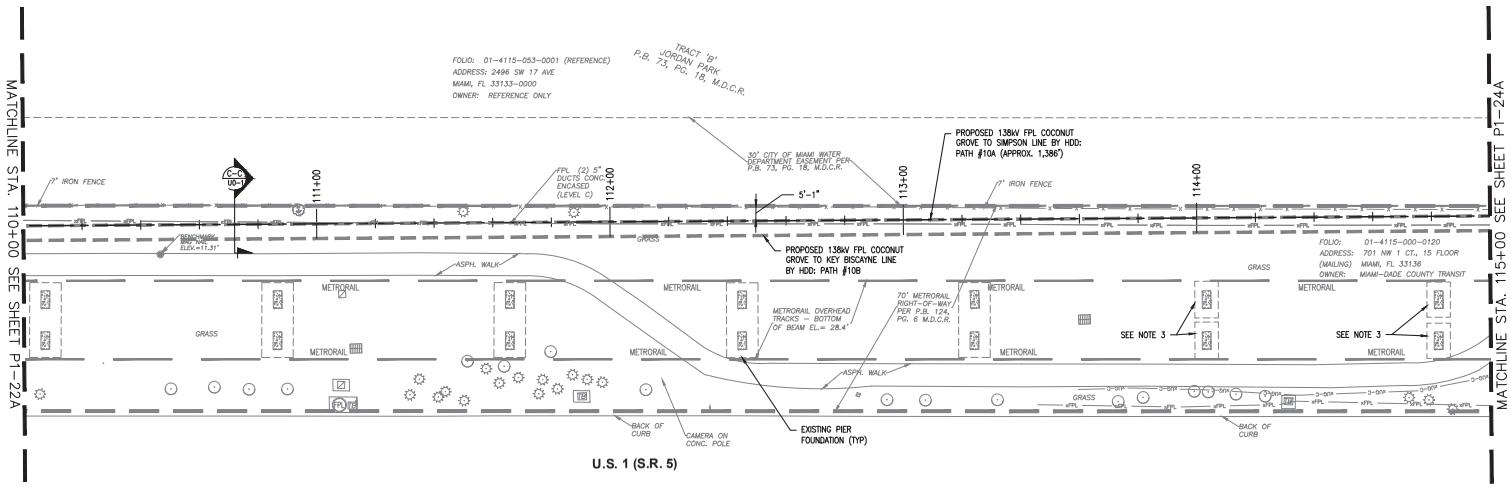
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 105+00 TO 110+00

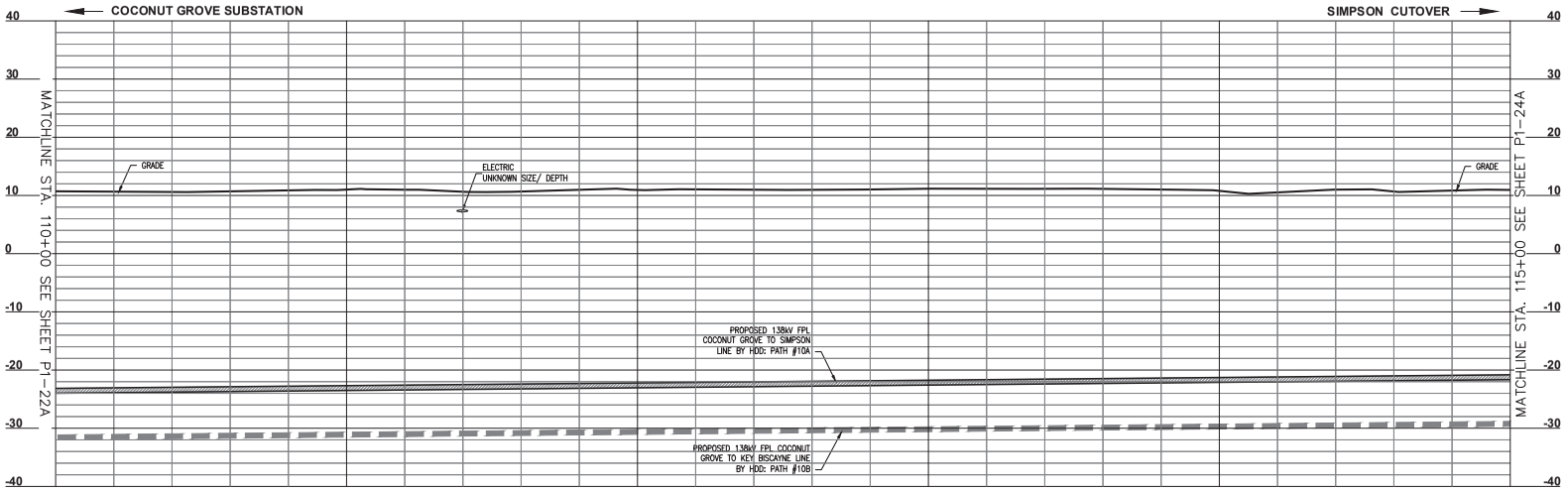
JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-22A

154295_Plan And Profile.dwg



PLAN VIEW

106



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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CKD	MRM	03/20/17

SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT

138kV UNDERGROUND TRANSMISSION LINE

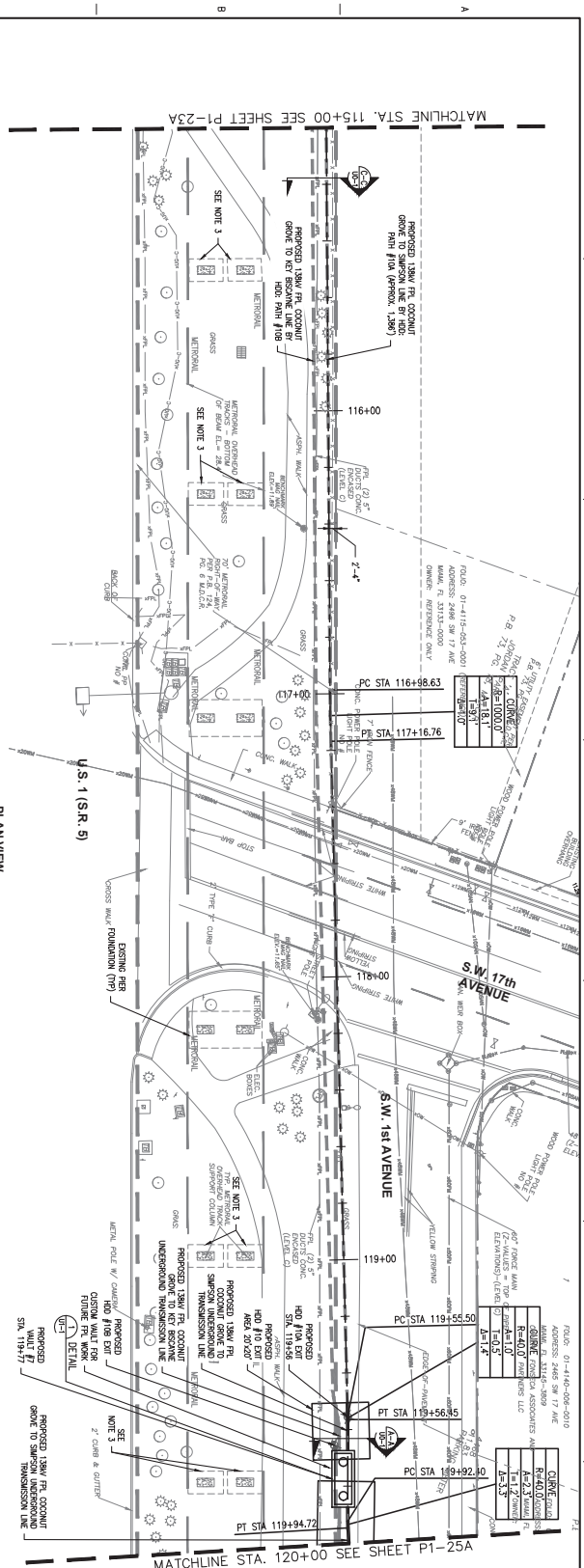
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 110+00 TO 115+00

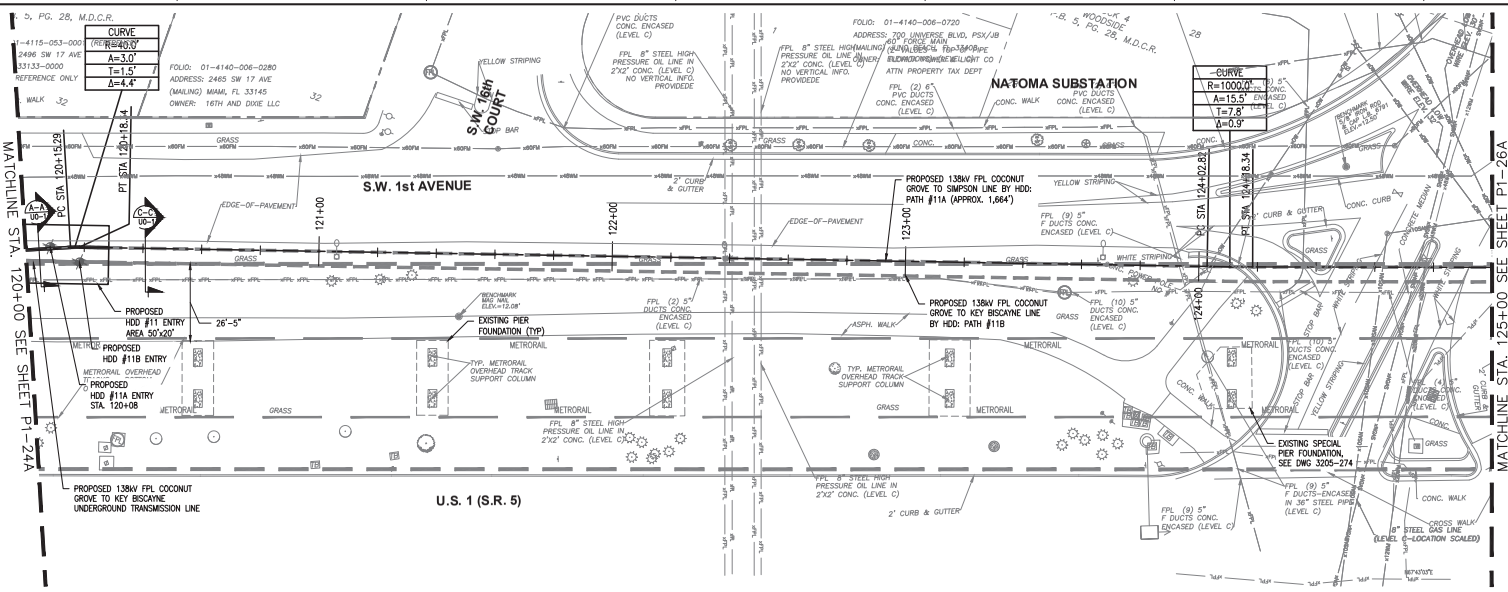
JOB NUMBER 154295

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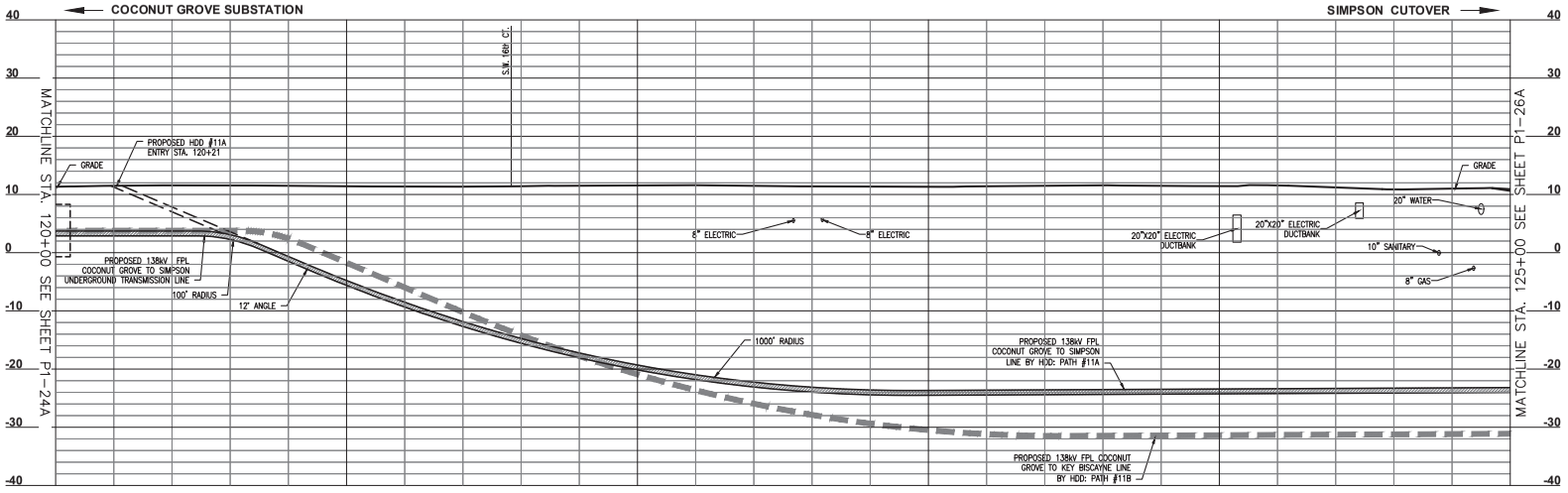
DRAWING NUMBER P1-23A

154295_Plan And Profile.dwg


PLAN VIEW
MATCHLINE STA. 115+00 SEE SHEET P1-23A
MATCHLINE STA. 120+00 SEE SHEET P1-25A
U.S. 1 (S.R. 5)
S.W. 17th AVENUE
S.W. 1st AVENUE
PROPOSED 138kV FPL COCONUT GROVE TO KEY BISCAYNE LINE #1 HDD PATH #10B (APPROX. 1,390')
PROPOSED 138kV FPL COCONUT GROVE TO KEY BISCAYNE LINE #1 HDD PATH #10A
PROPOSED 138kV FPL COCONUT GROVE TO SIMPSON UNDERGROUND TRANSMISSION LINE
PROPOSED HDD #10A EXIT STA. 119+68
PROPOSED HDD #10B EXIT STA. 119+77
PROPOSED HDD #19A EXIT STA. 119+56
PROPOSED HDD #19B EXIT AREA 20'x20'
PROPOSED VAULT #7 STA. 119+90
CUSTOM VAULT FOR FUTURE FPL WORK
CUSTOM VAULT FOR FUTURE FPL WORK
PC STA 116+98.63
PT STA 117+16.76
PC STA 119+55.50
PT STA 119+56.85
PC STA 119+92.40
PT STA 119+94.72
EXISTING PIER FOUNDATION (TYP)
SEE NOTE 3
SEE DETAIL 1
SEE DETAIL 2
METRORAIL
METRORAIL GUIDEWAY
METRORAIL STATION
METRORAIL OVERHEAD TRACK SUPPORT COLUMN
METRORAIL DISTRIBUTION SUBSTATION
METRORAIL TRACTION POWER SUBSTATION
FPL (2) 5" DUCTS CONC. (LEVEL 0)
FPL (2) 5" DUCTS CONC. (LEVEL 2)
FPL (2) 5" DUCTS CONC. (LEVEL 1)
FPL (2) 5" DUCTS CONC. (LEVEL 3)
FPL (2) 5" DUCTS CONC. (LEVEL 4)
FPL (2) 5" DUCTS CONC. (LEVEL 5)
FPL (2) 5" DUCTS CONC. (LEVEL 6)
FPL (2) 5" DUCTS CONC. (LEVEL 7)
FPL (2) 5" DUCTS CONC. (LEVEL



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

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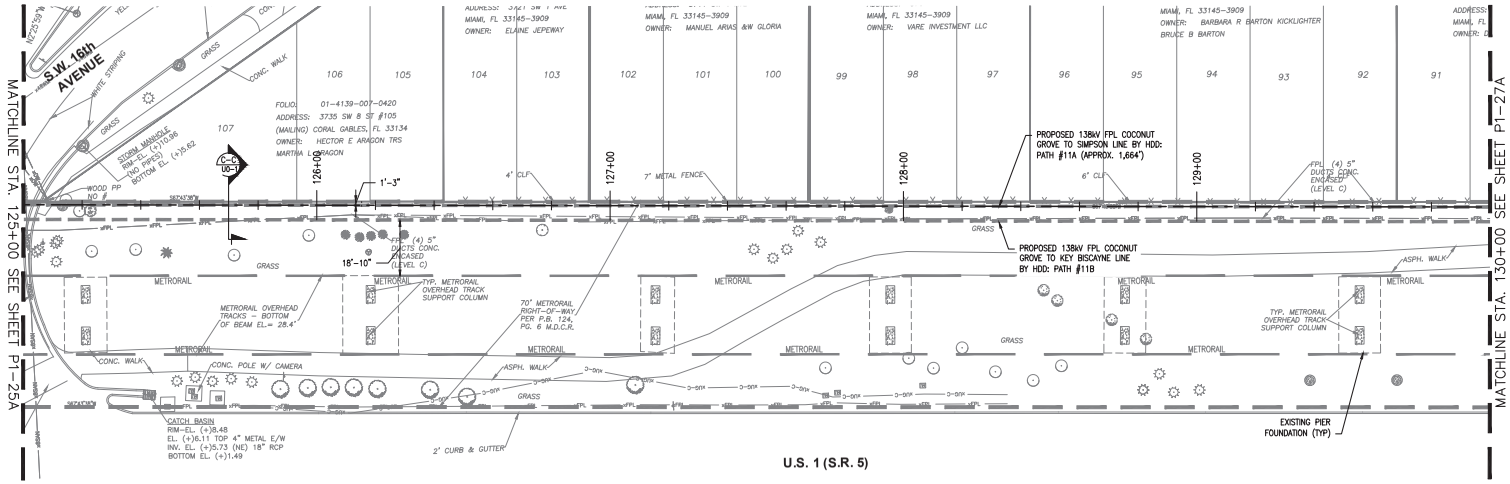
POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 120+00 TO 125+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-25A

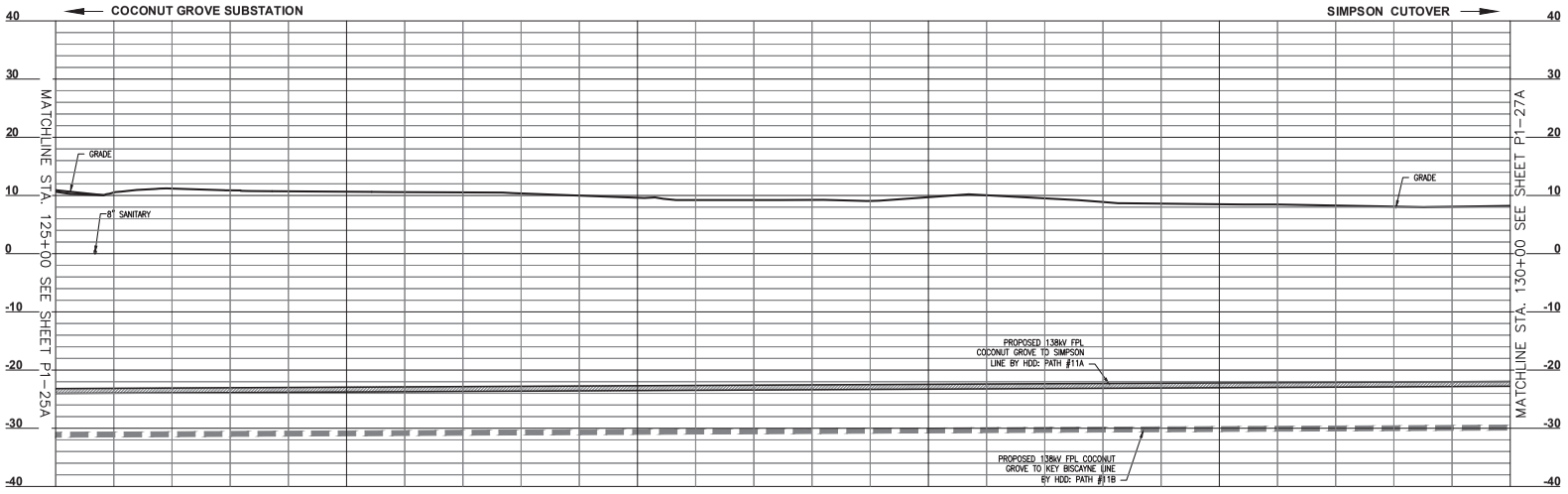
154295_Plan And Profile.dwg

108



PLAN VIEW

109



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

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FPL

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REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

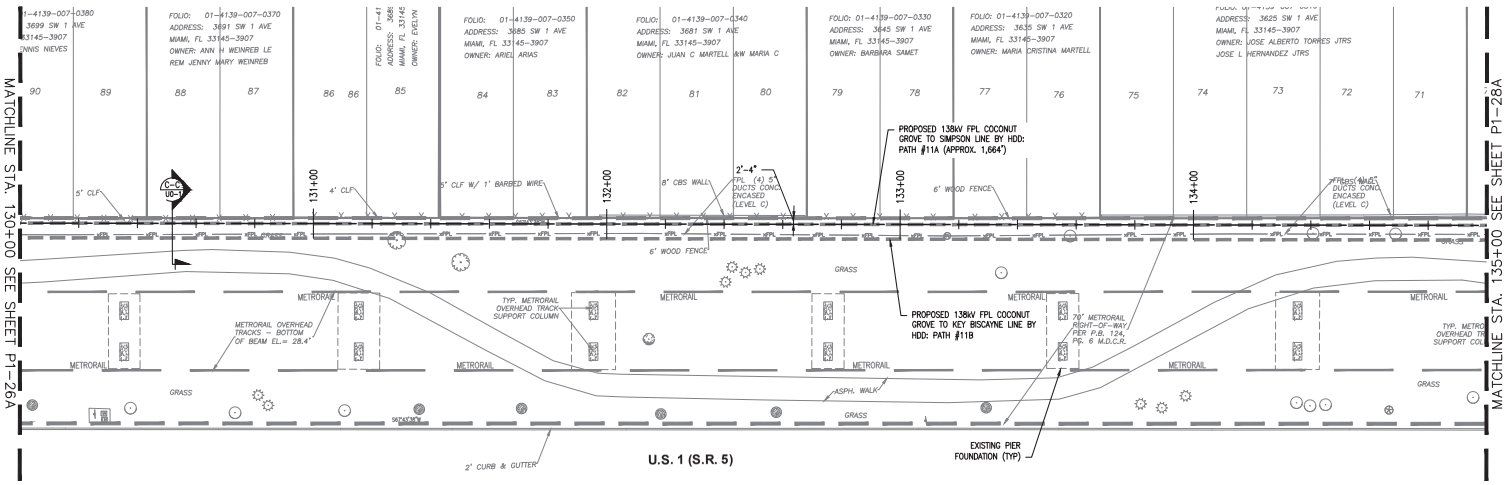
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 125+00 TO 130+00

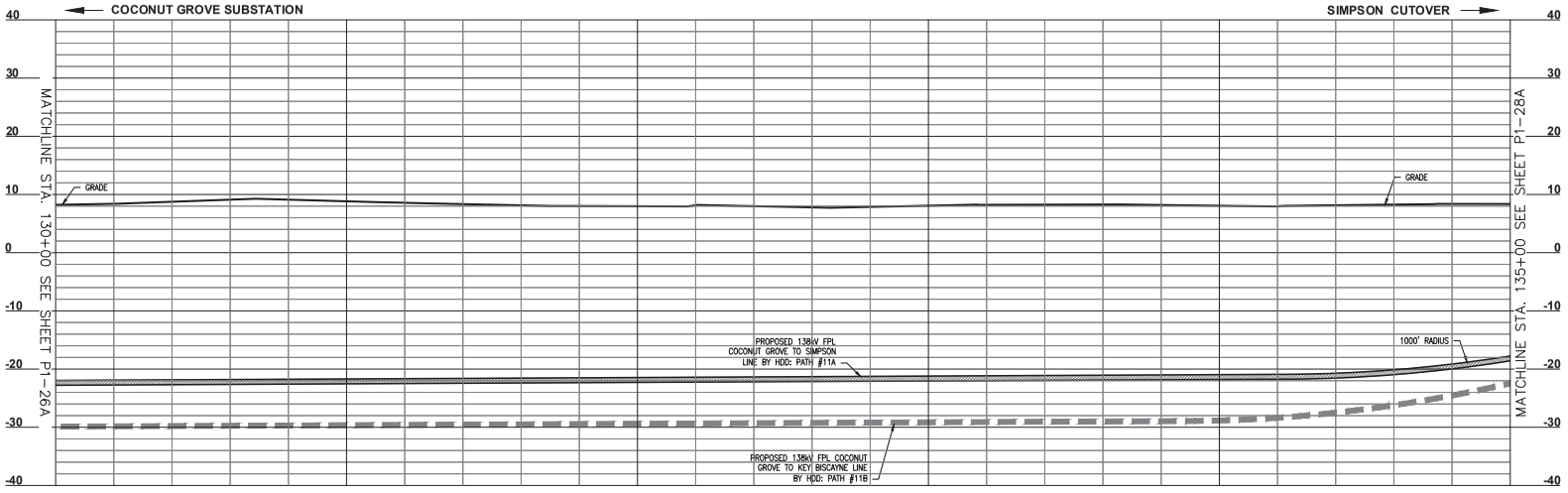
JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-26A

154295_Plan And Profile.dwg



PLAN VIEW

110



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
2. ALL VERTICAL RADII ARE 400' UNLESS OTHERWISE NOTED.

THREE BUSINESS DAYS BEFORE YOU DIG CALL
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TOLL FREE
811 or 1-800-432-4770

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

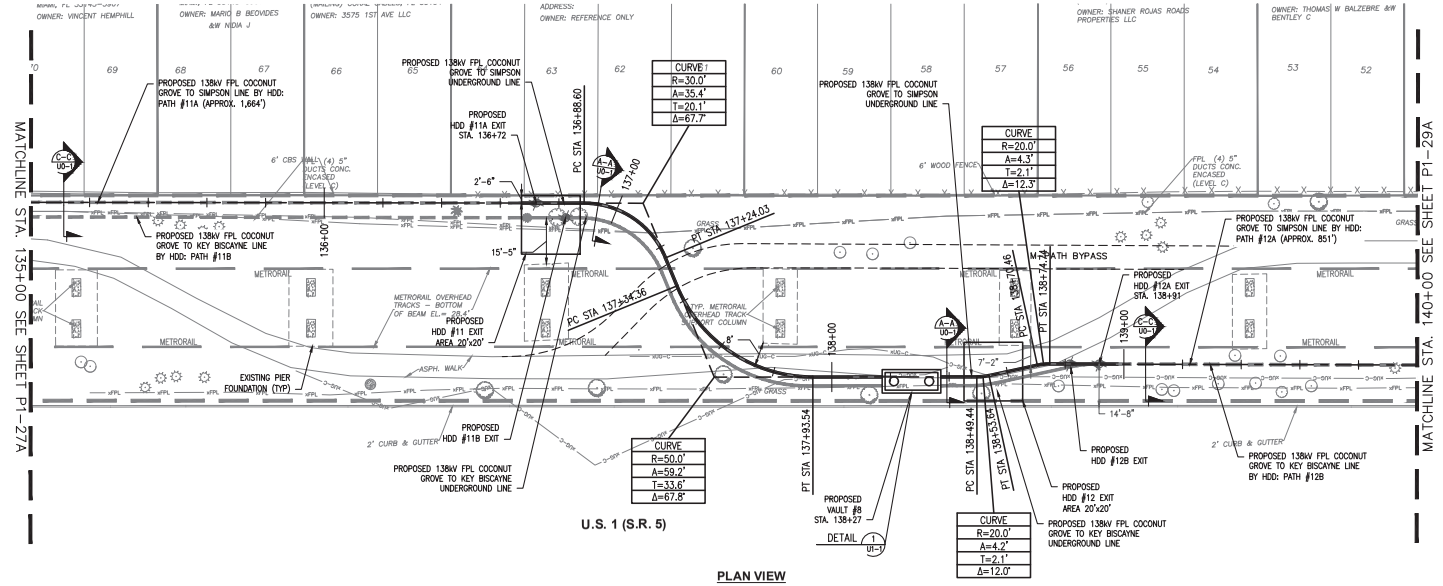
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 130+00 TO 135+00

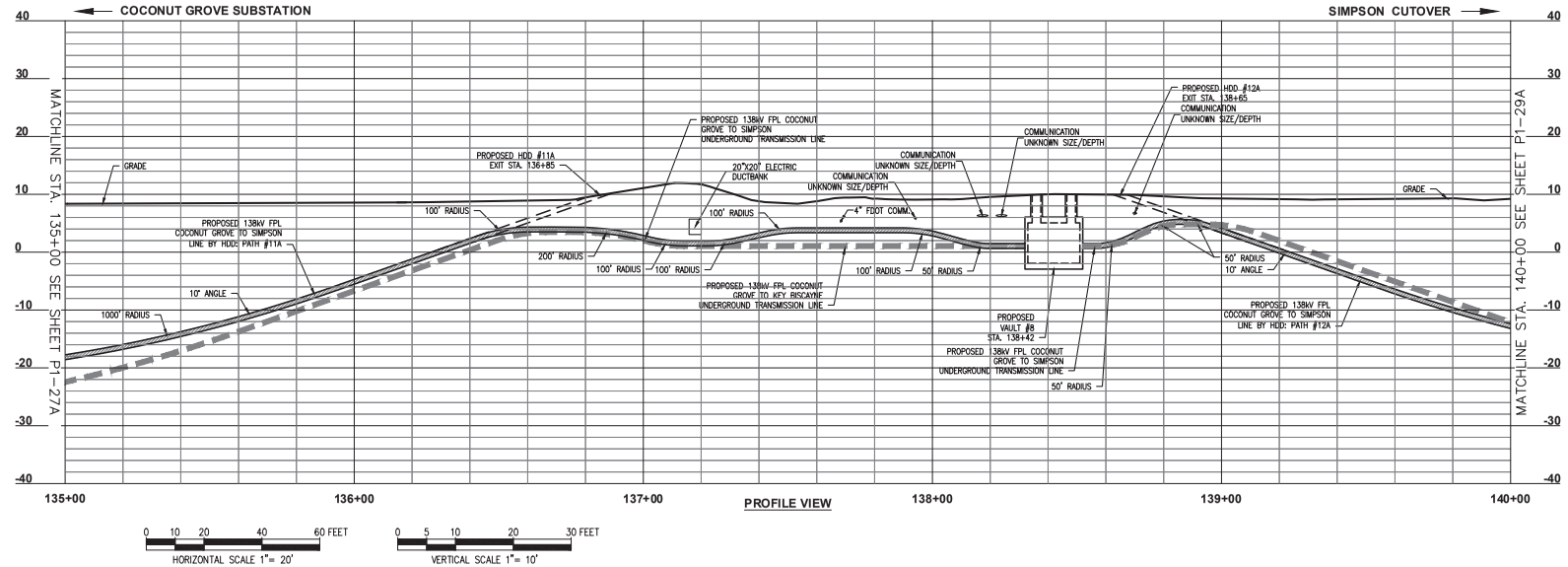
JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-27A

154295_Plan And Profile.dwg



PLAN VIEW

111



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

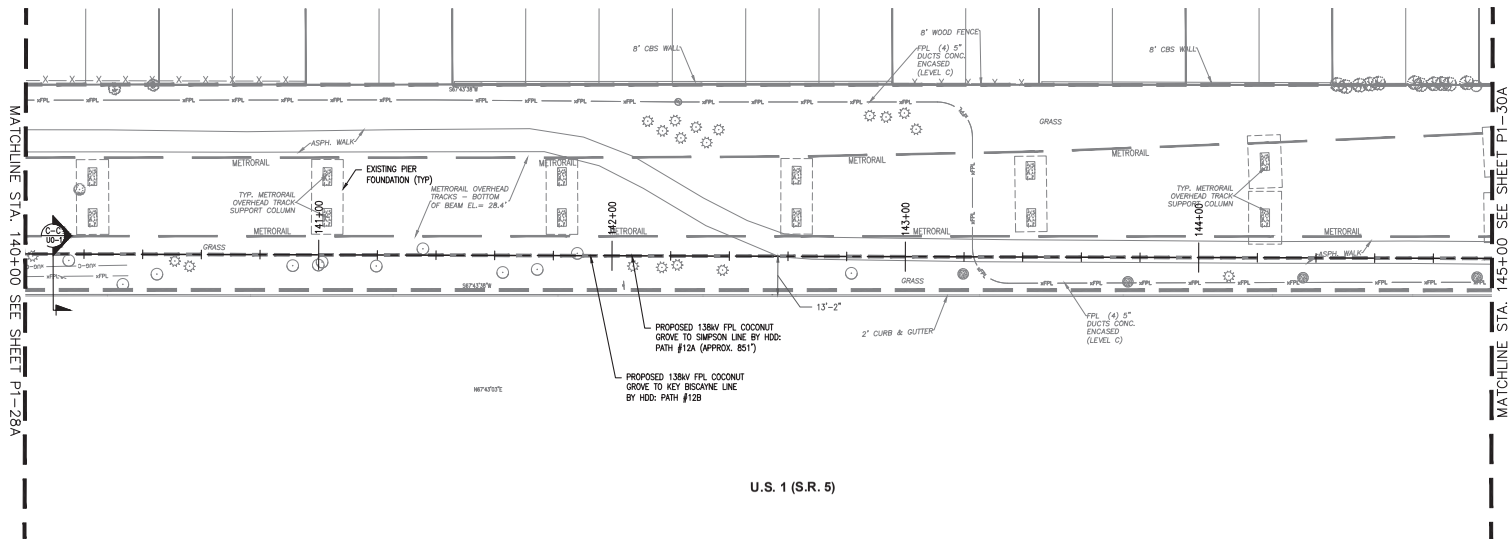
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 135+00 TO 140+00

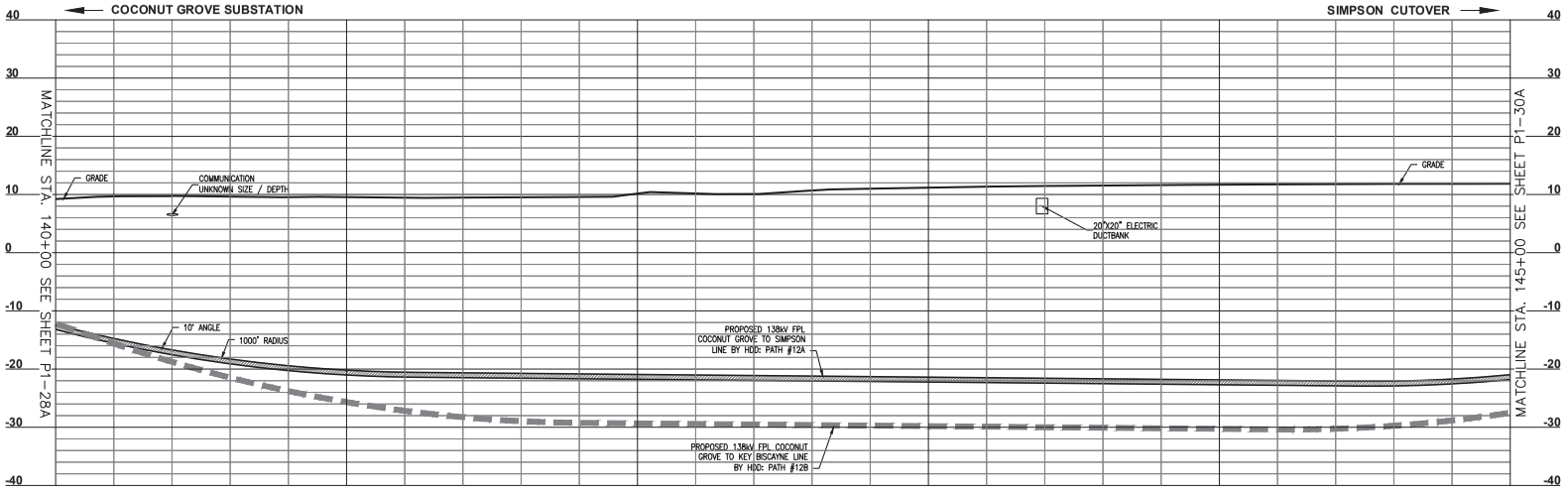
JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-28A

154295_Plan And Profile.dwg



PLAN VIEW

112



PROFILE VIEW

0 10 20 40 60 FEET
HORIZONTAL SCALE 1"= 20'

0 5 10 20 30 FEET
VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
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FPL

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

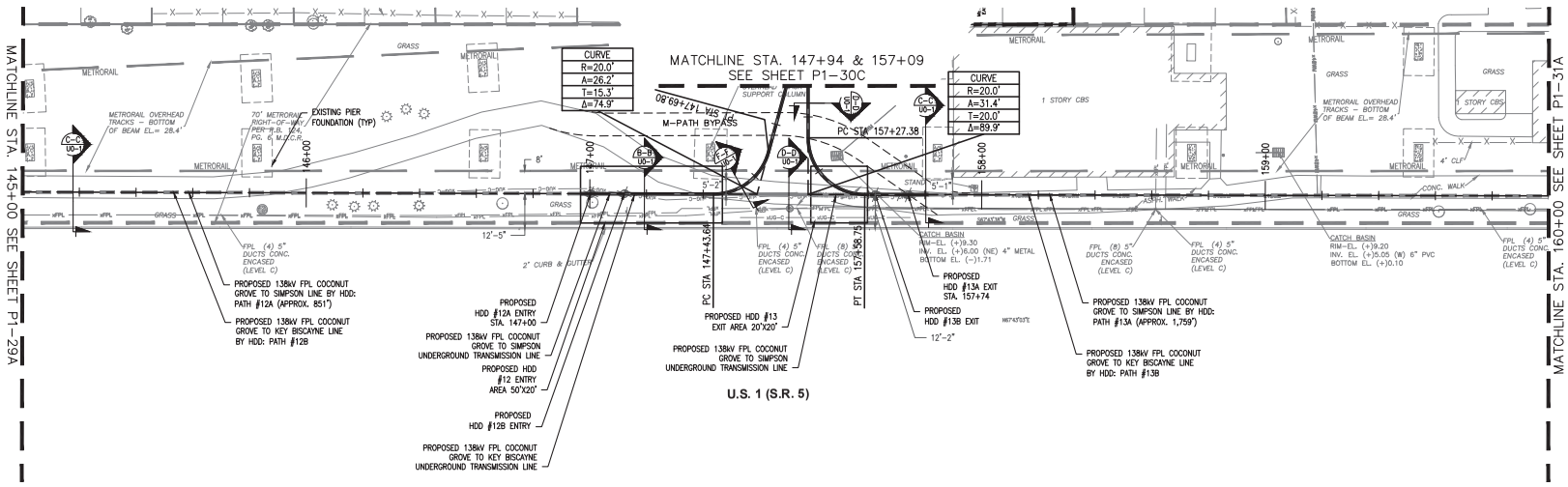
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 140+00 TO 145+00

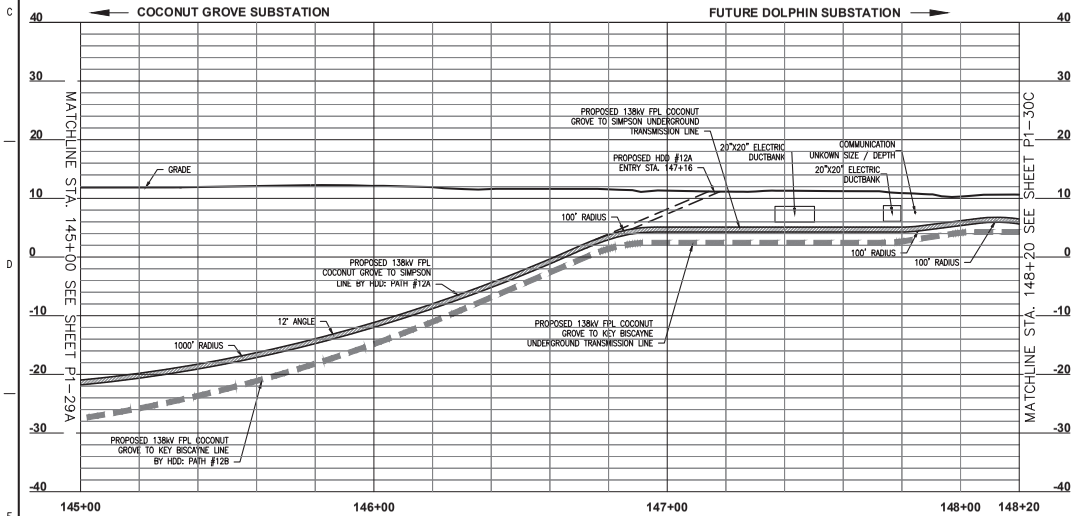
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REV AA
DRAWING NUMBER P1-29A

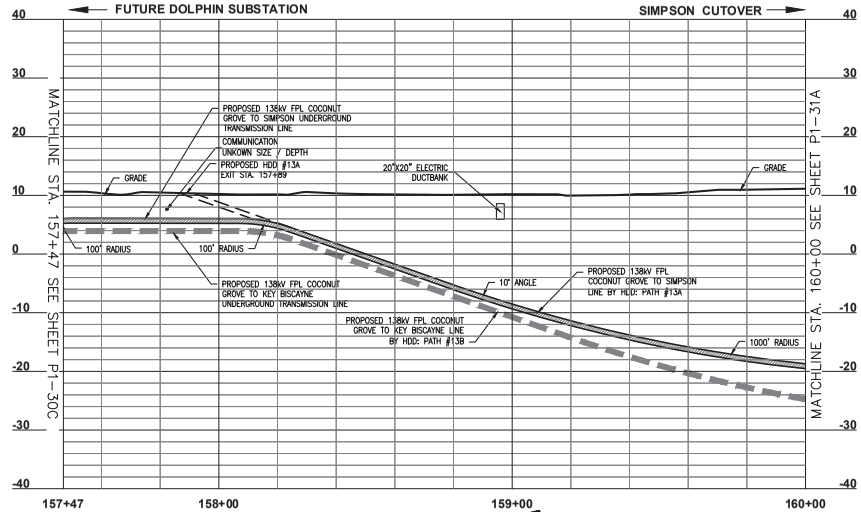
154295_Plan And Profile.dwg



PLAN VIEW

113





PROFILE VIEW

0 10 20 40 60 FEET
HORIZONTAL SCALE 1"= 20'

0 5 10 20 30 FEET
VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
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811 or 1-800-432-4770

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AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

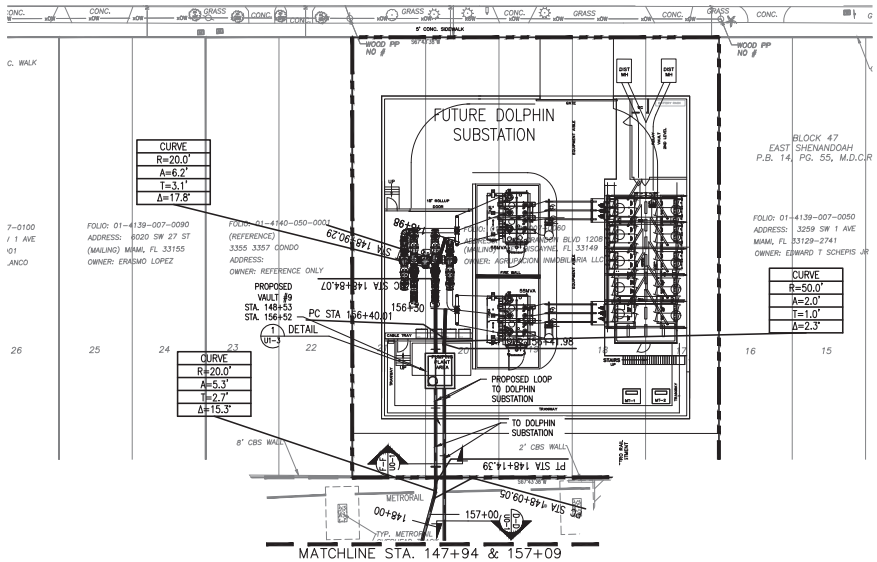
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 145+00 TO 160+00

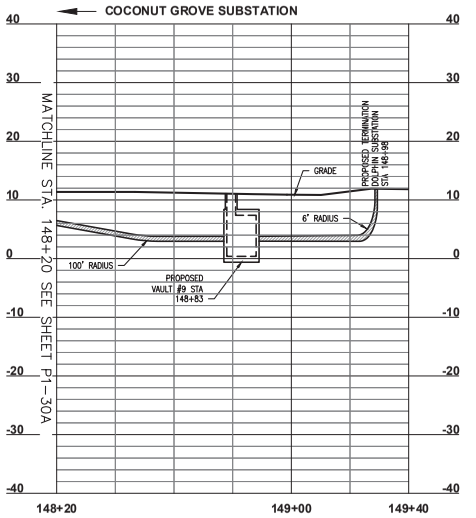
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REV AA
DRAWING NUMBER P1-30A

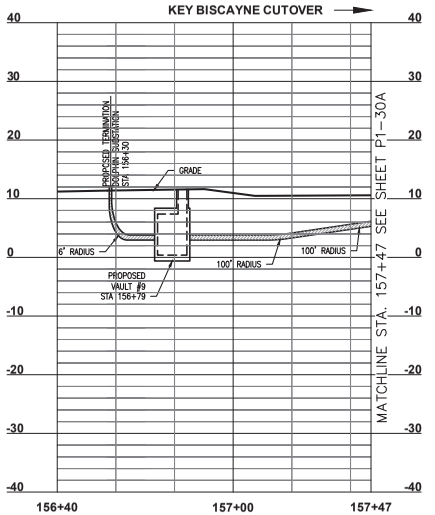
154295_Plan And Profile.dwg



MATCHLINE STA. 147+94 & 157+09
SEE SHEET P1-30A

PLAN VIEW





FUTURE DOLPHIN SUBSTATION

PROFILE VIEW

HORIZONTAL SCALE 1"= 20'
VERTICAL SCALE 1"= 10'

NOTES:

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2. ALL VERTICAL RADII ARE 400' UNLESS OTHERWISE NOTED.

THREE BUSINESS DAYS BEFORE YOU DIG CALL
FLORIDA SUNSHINE 811
TOLL FREE
811 or 1-800-432-4770

114

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AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

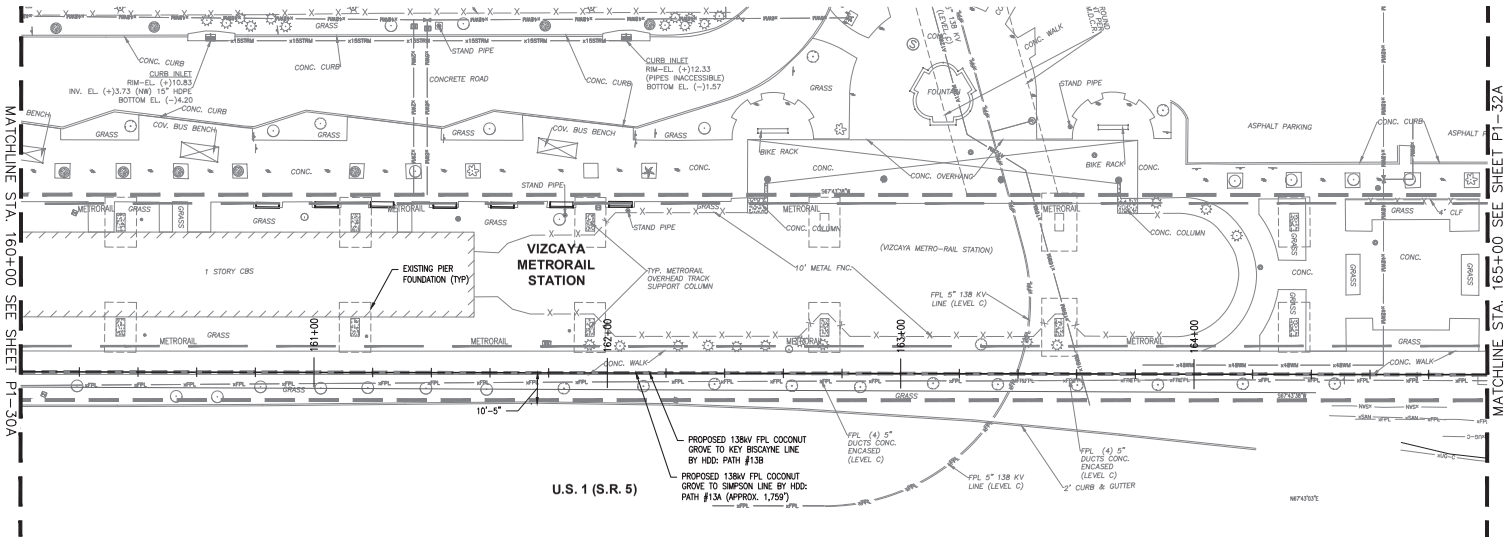
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

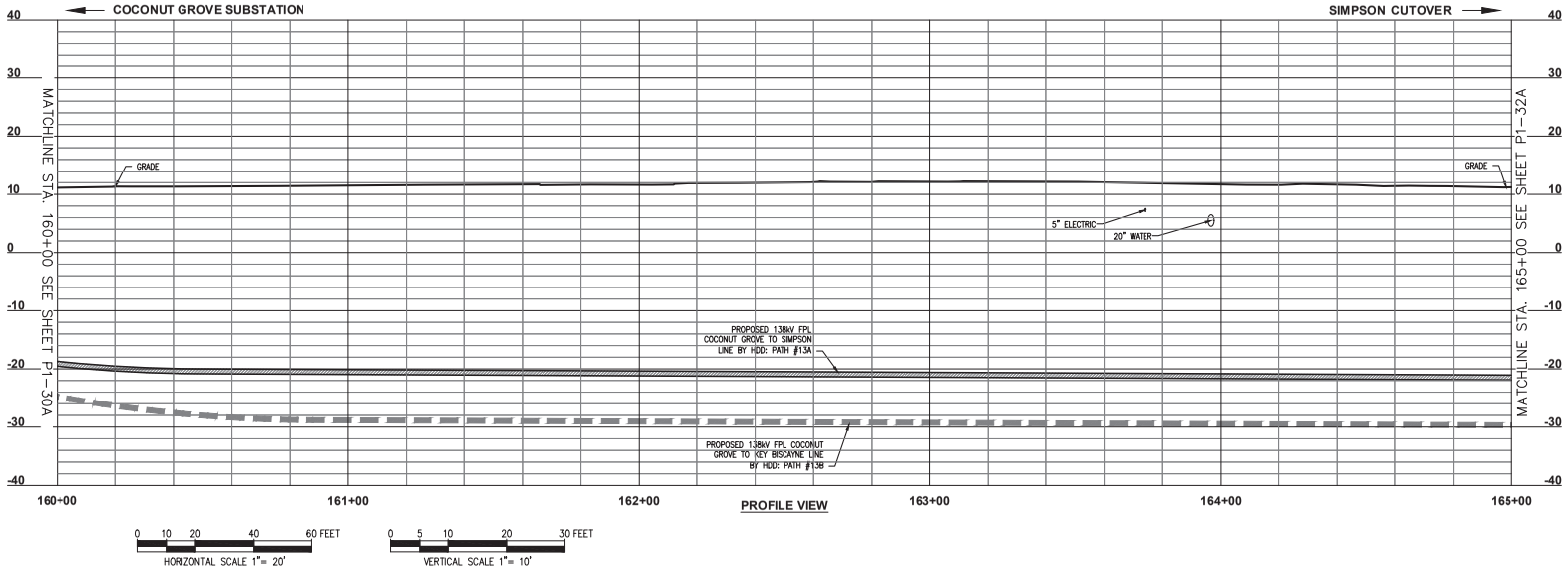
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO KEY BISCAYNE CUTOVER
PLAN & PROFILE STA. 148+20 TO 157+47

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-30C

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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TOLL FREE
811 or 1-800-432-4770

115

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REFERENCE DRAWINGS

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DRN	DRC	03/20/17
CKD	MRM	03/20/17

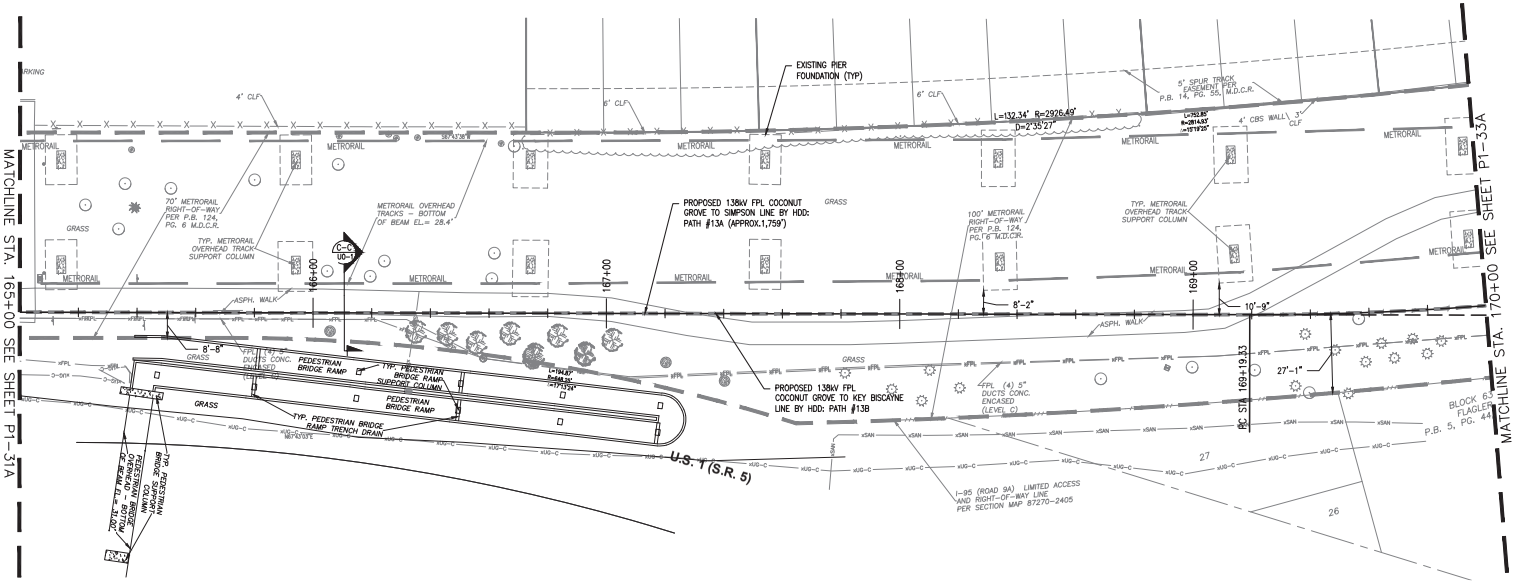
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

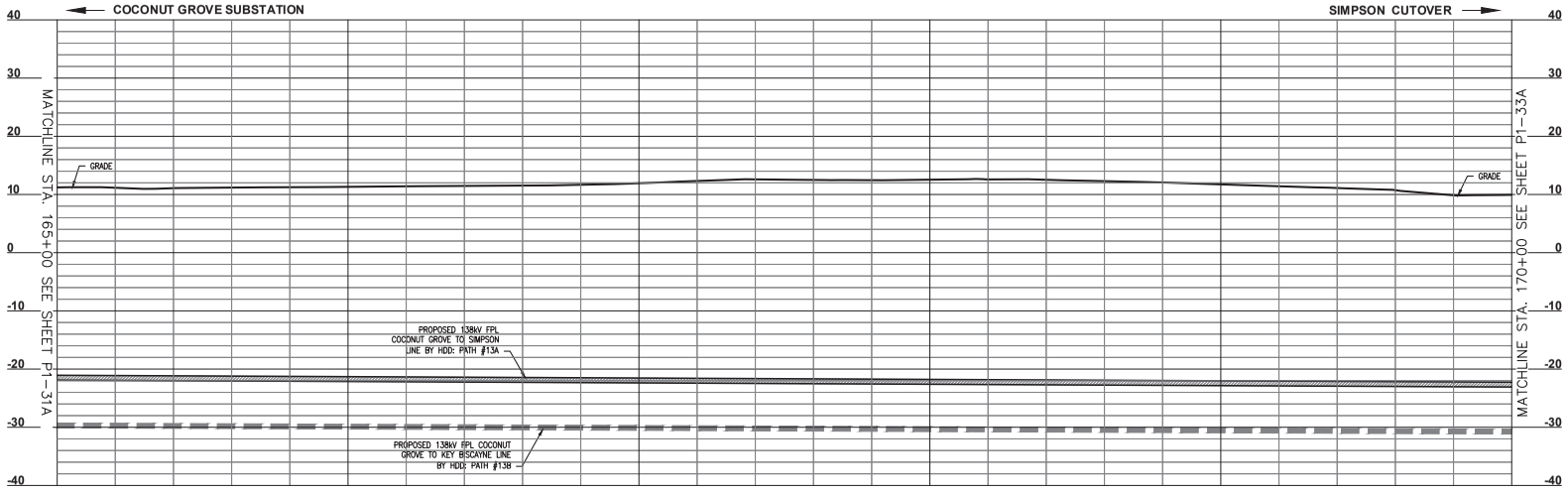
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 160+00 TO 165+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-31A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

0 10 20 40 60 FEET
HORIZONTAL SCALE 1"= 20'

0 5 10 20 30 FEET
VERTICAL SCALE 1"= 10'

NOTES:

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DRN	DRC	03/20/17
CKD	MRM	03/20/17

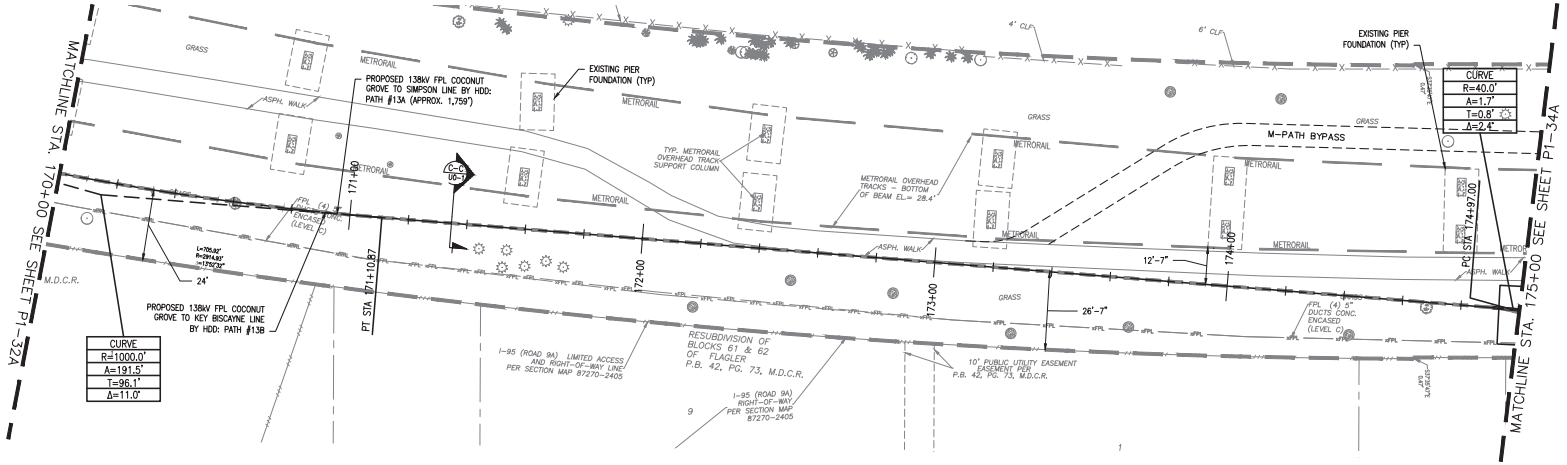
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
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POWER ENGINEERS

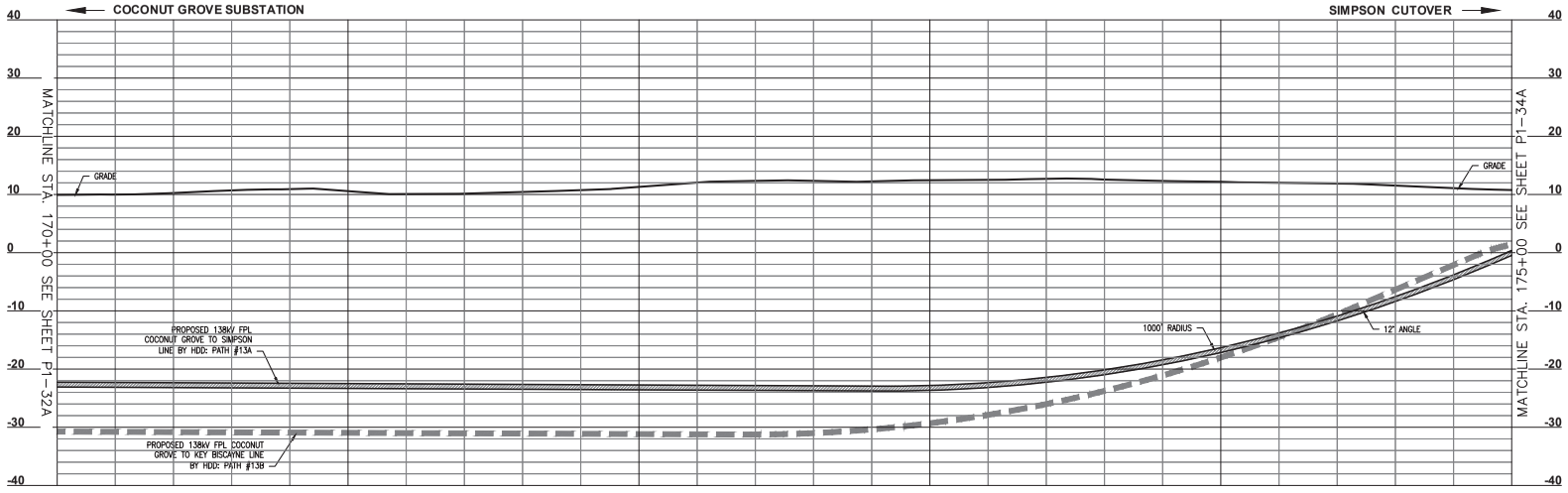
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 165+00 TO 170+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-32A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20' (0 10 20 40 60 FEET)

VERTICAL SCALE 1"= 10' (0 5 10 20 30 FEET)

NOTES:

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2. ALL VERTICAL RADII ARE 400' UNLESS OTHERWISE NOTED.
3. PIER FOUNDATION INSTALLED WITH 8' PILES UNDERNEATH. SEE METRORAIL DRAWINGS

THREE BUSINESS DAYS BEFORE YOU DIG CALL
FLORIDA SUNSHINE 811
TOLL FREE
811 or 1-800-432-4770

117

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

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DRN	DRC	03/20/17
CKD	MRM	03/20/17

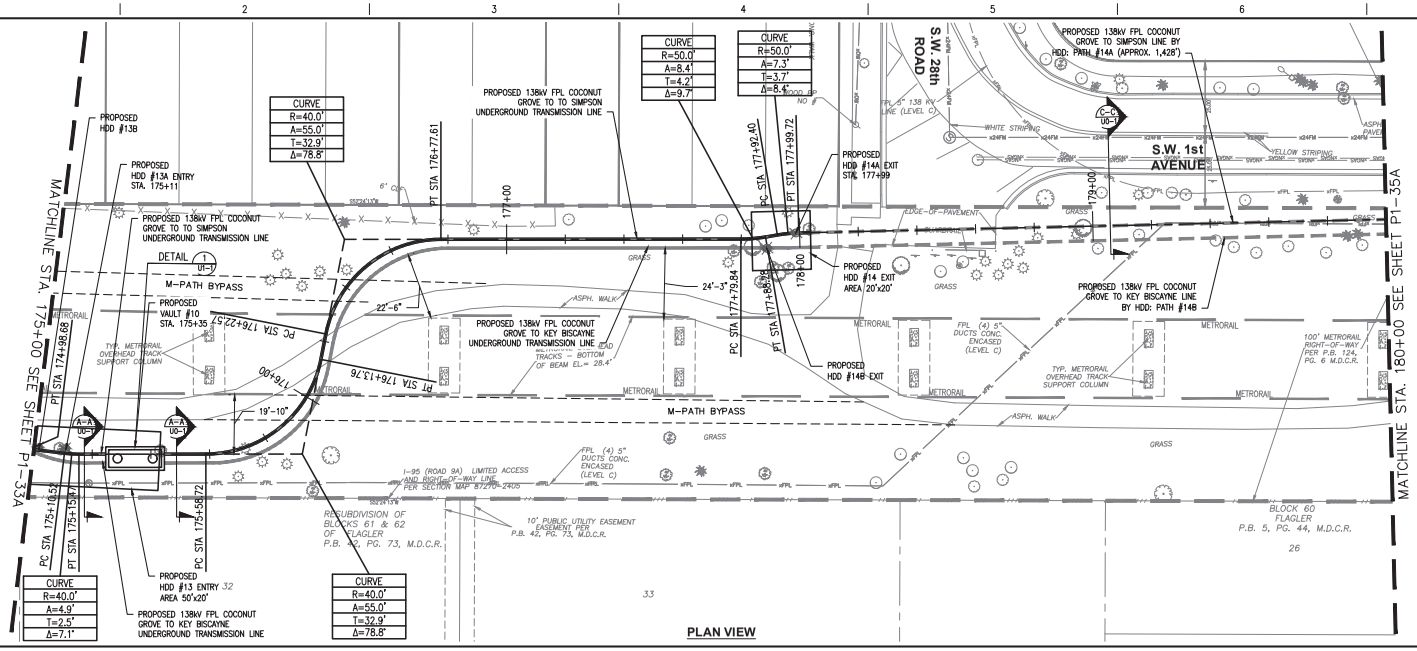
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

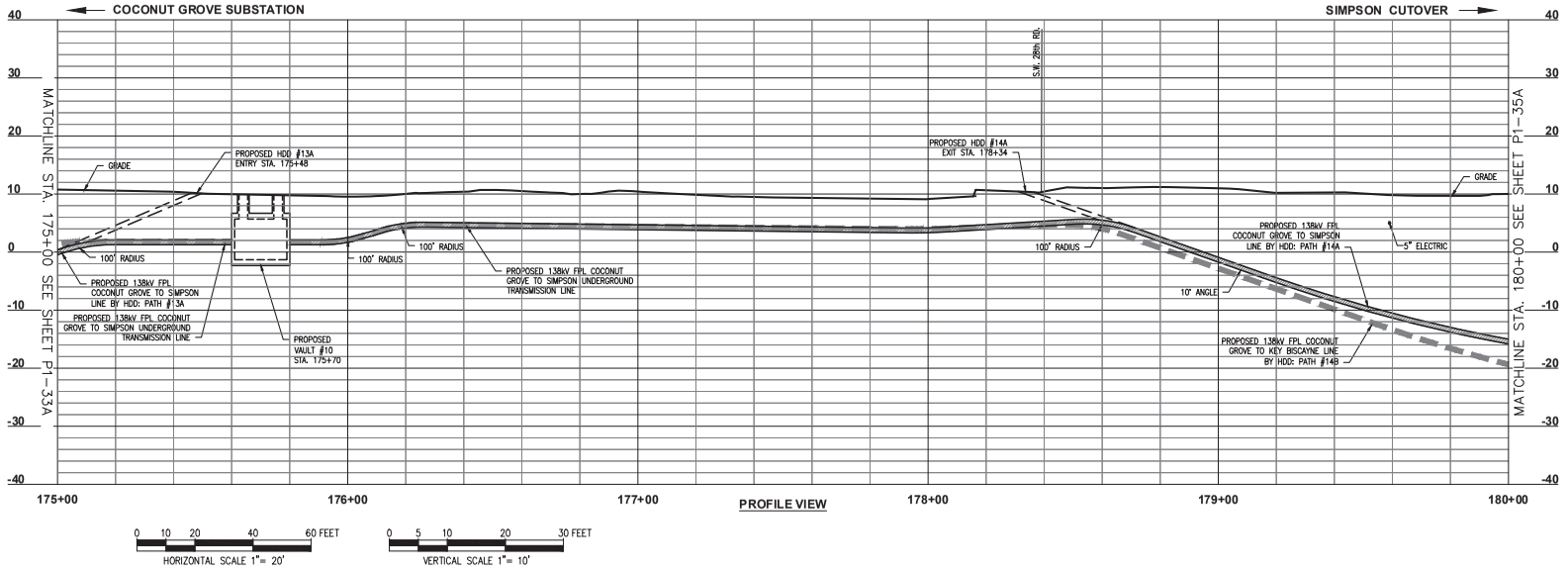
POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 170+00 TO 175+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-33A

154295_Plan And Profile.dwg





118

NOTES:

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

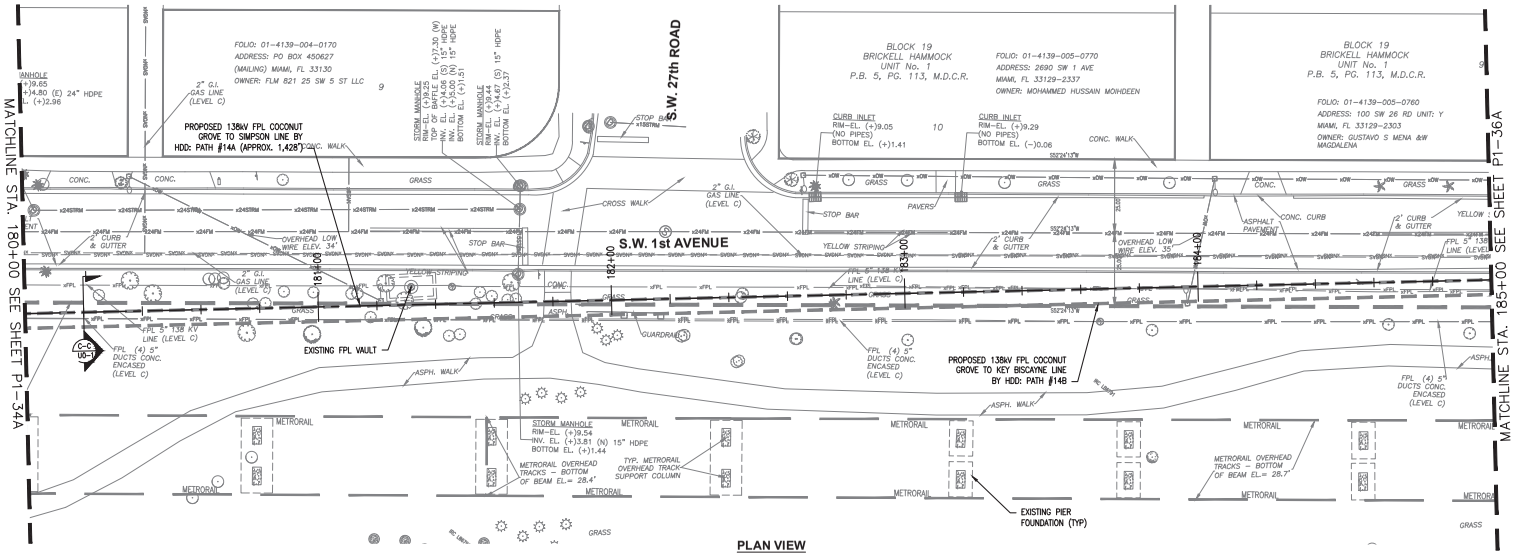
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

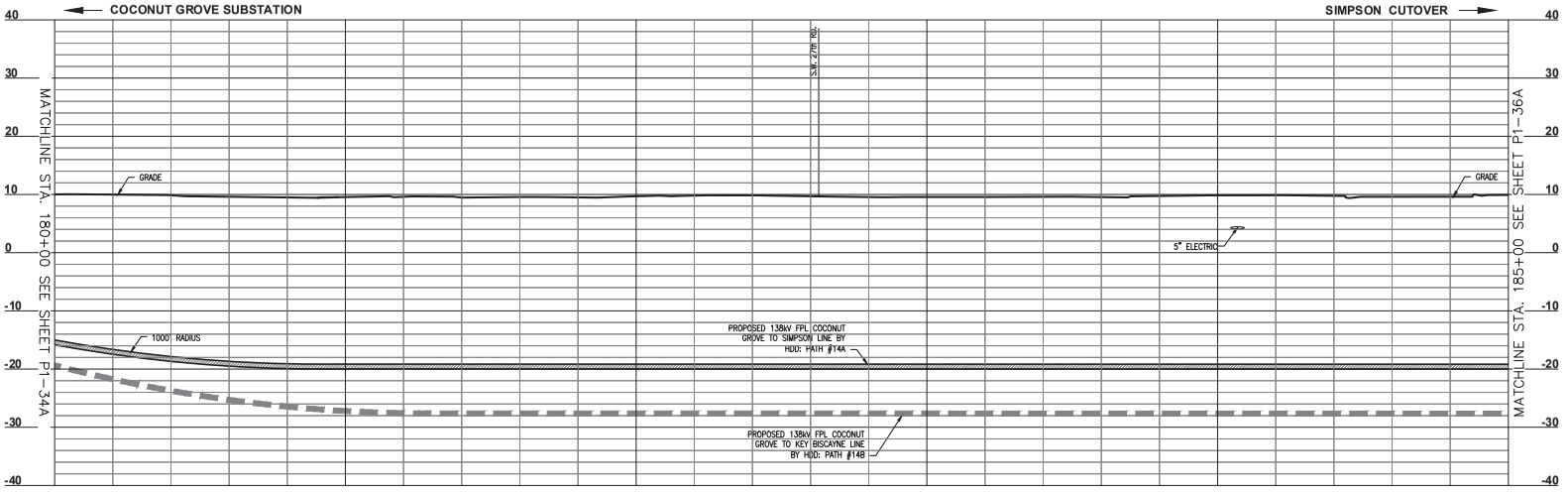
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 175+00 TO 180+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-34A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
2. ALL VERTICAL RADII ARE 400' UNLESS OTHERWISE NOTED.

THREE BUSINESS DAYS BEFORE YOU DIG CALL
FLORIDA SUNSHINE 811
TOLL FREE
811 or 1-800-432-4770

119

154295_Plan And Profile.dwg

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

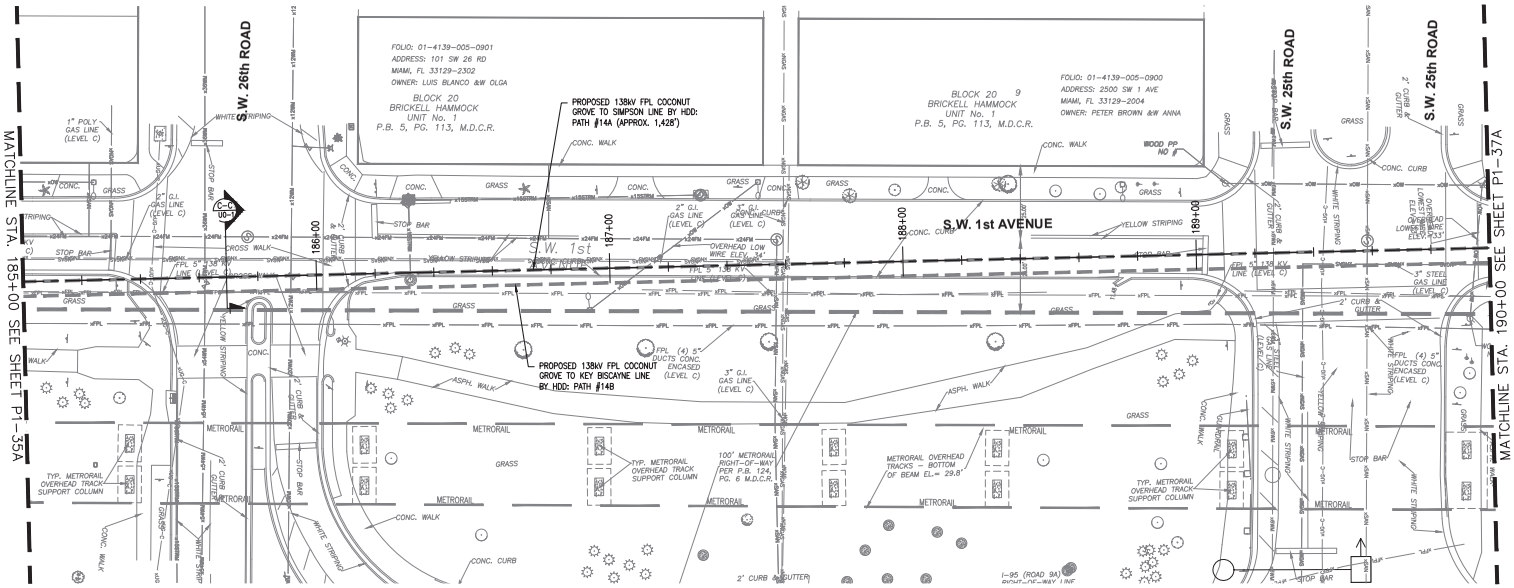
DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

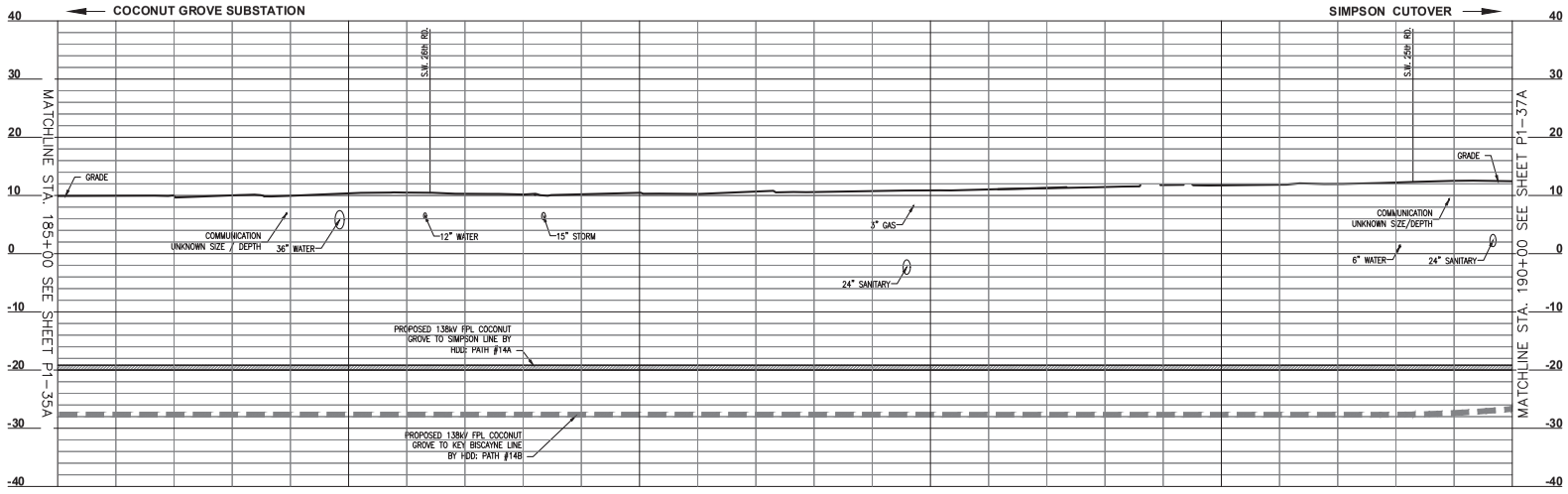
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 180+00 TO 185+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-35A



PLAN VIEW

120



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

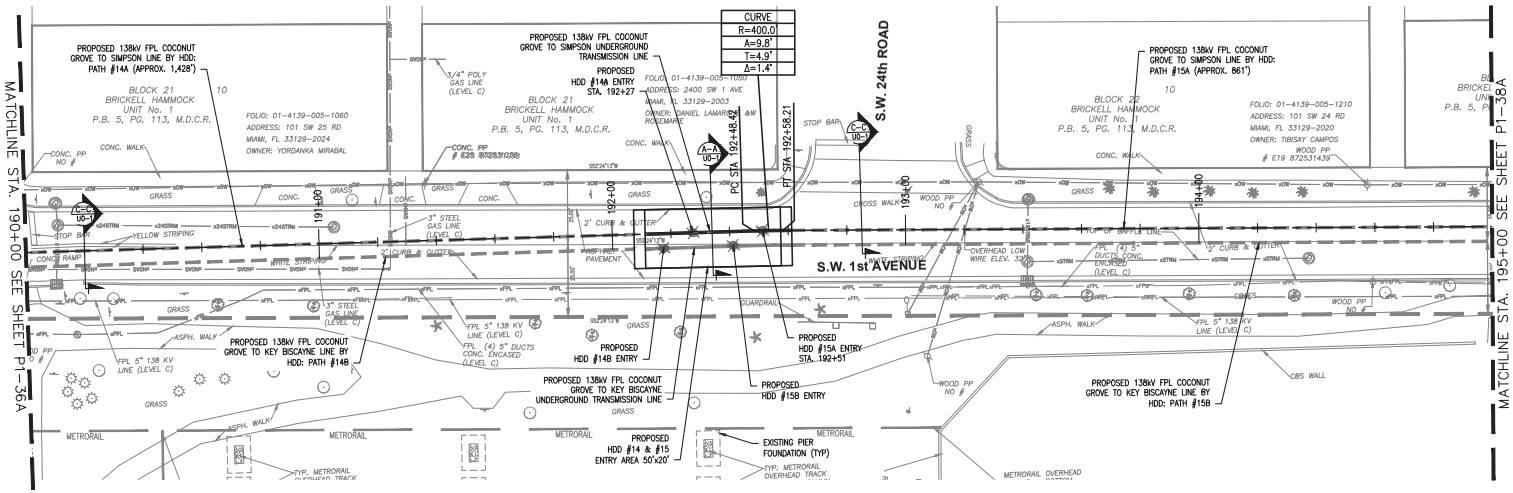
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

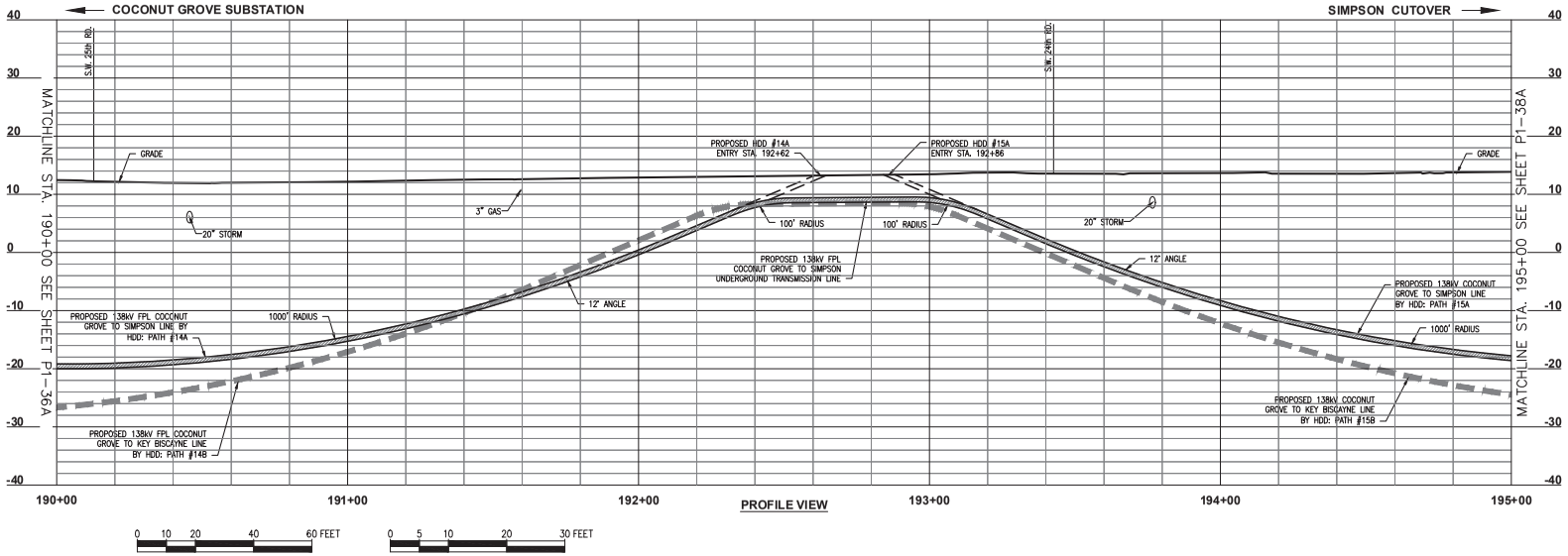
POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 185+00 TO 190+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-36A

154295_Plan And Profile.dwg





0 10 20 40 60 FEET
HORIZONTAL SCALE 1"= 20'

0 5 10 20 30 FEET
VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
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AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

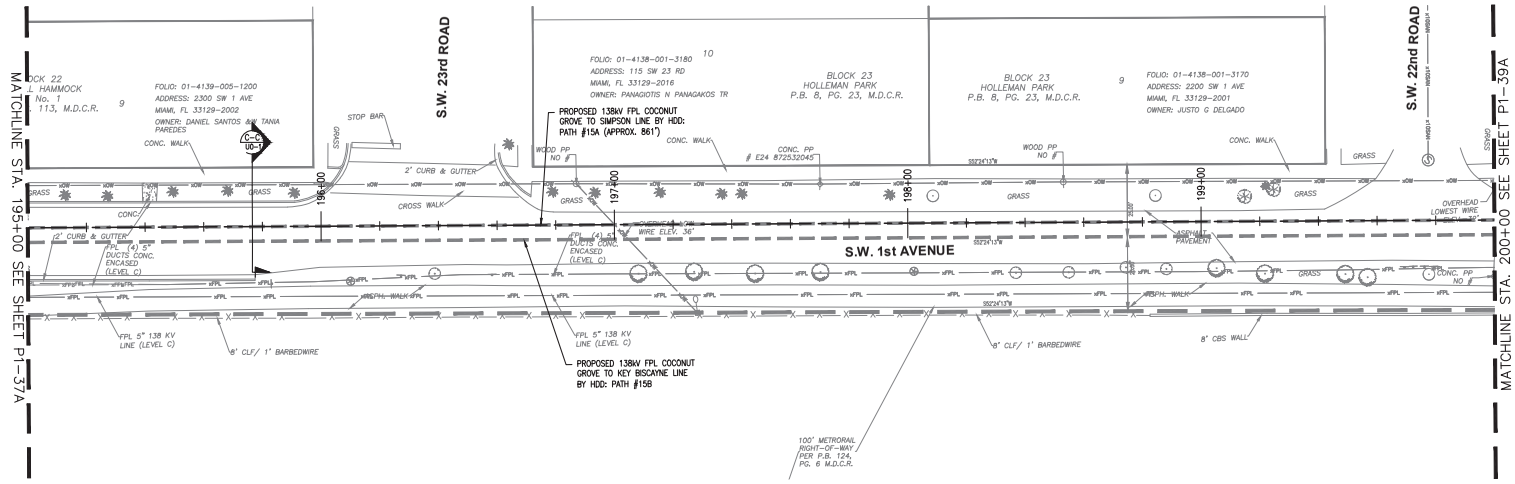
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

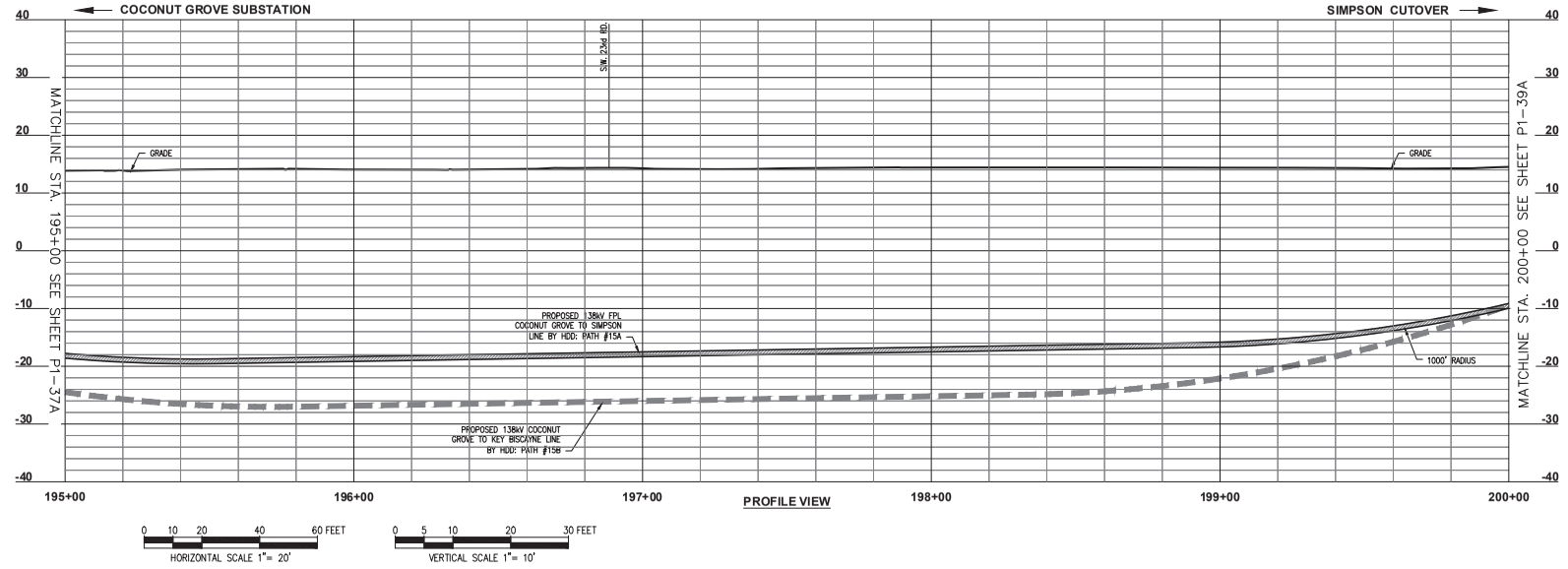
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 190+00 TO 195+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-37A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
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122

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

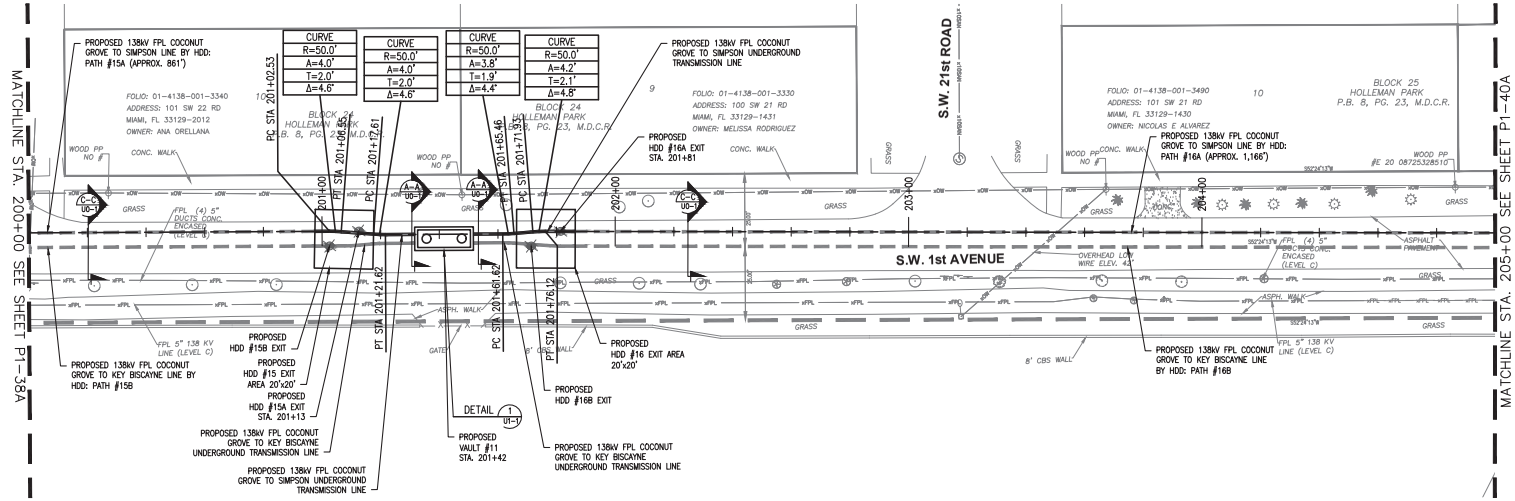
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

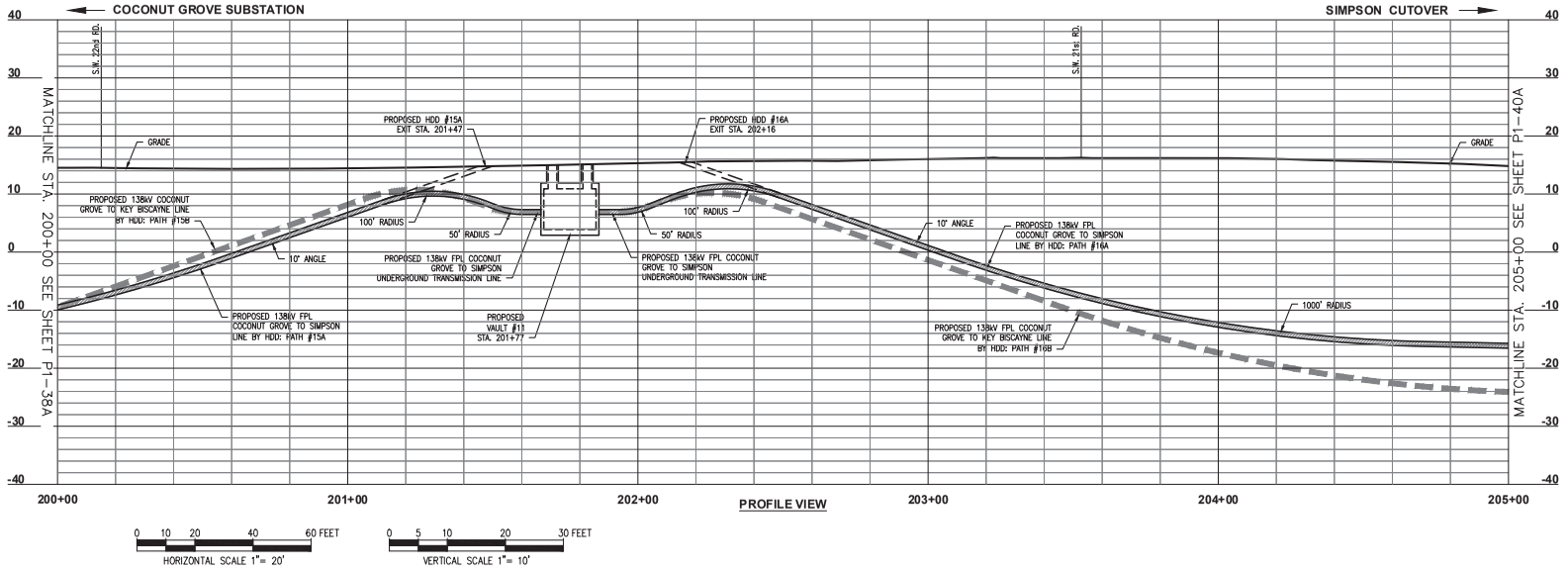
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 195+00 TO 200+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-38A

154295_Plan And Profile.dwg



123



0 10 20 40 60 FEET
HORIZONTAL SCALE 1"= 20'

0 5 10 20 30 FEET
VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
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FPL

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

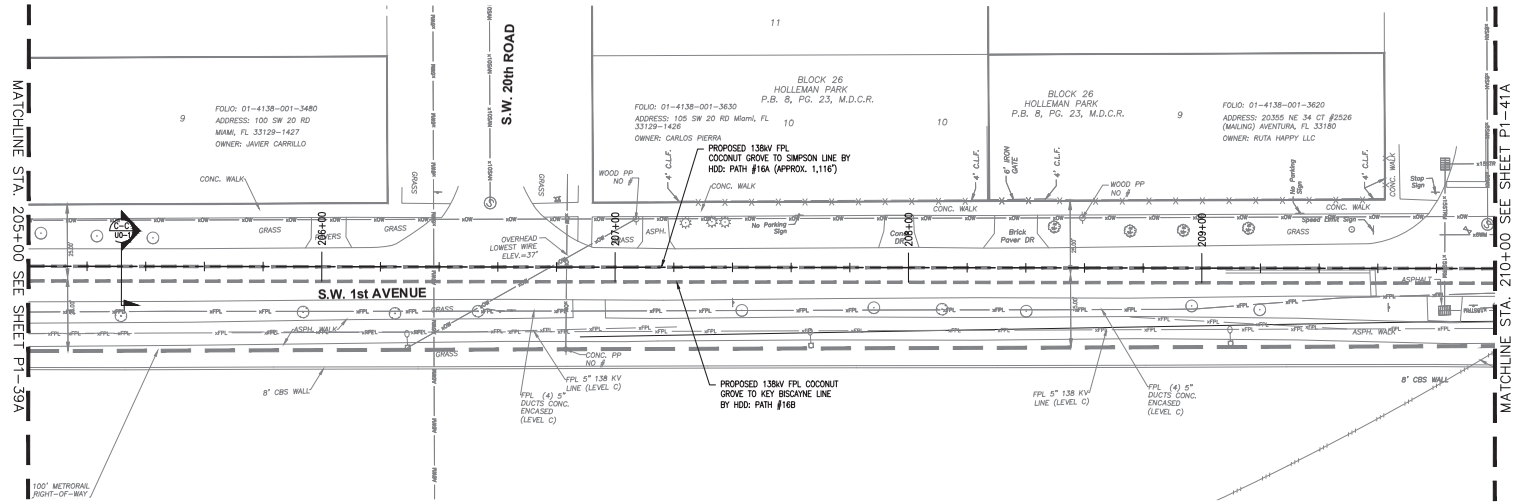
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 200+00 TO 205+00

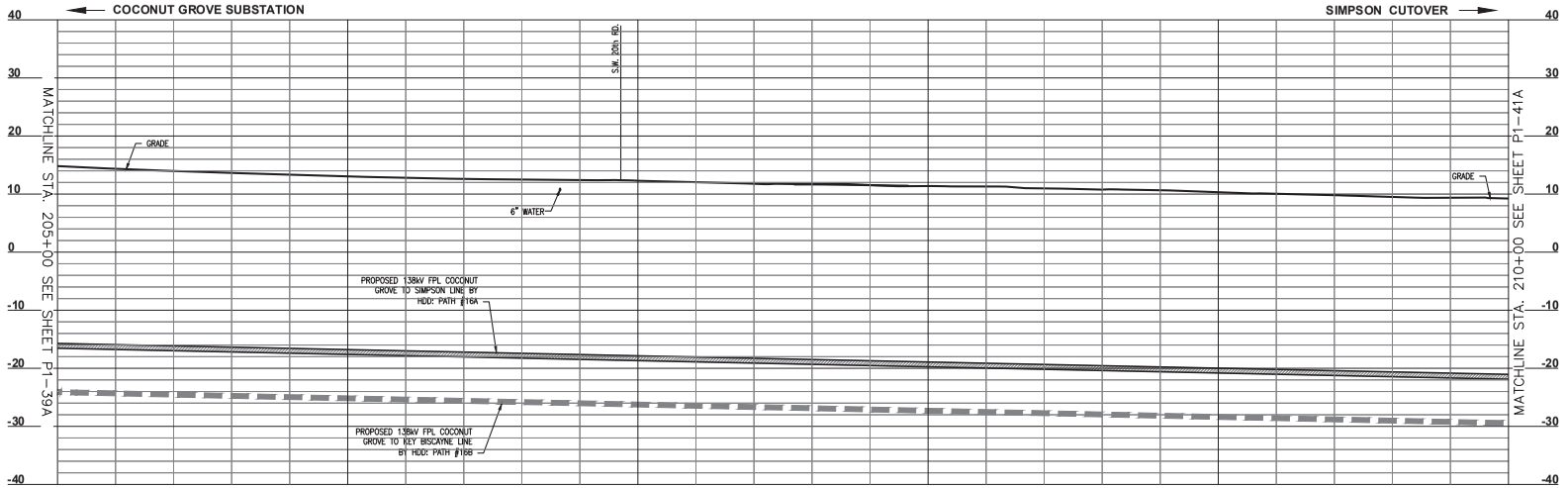
JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-39A

154295_Plan And Profile.dwg



PLAN VIEW

124



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
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TOLL FREE
811 or 1-800-432-4770

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

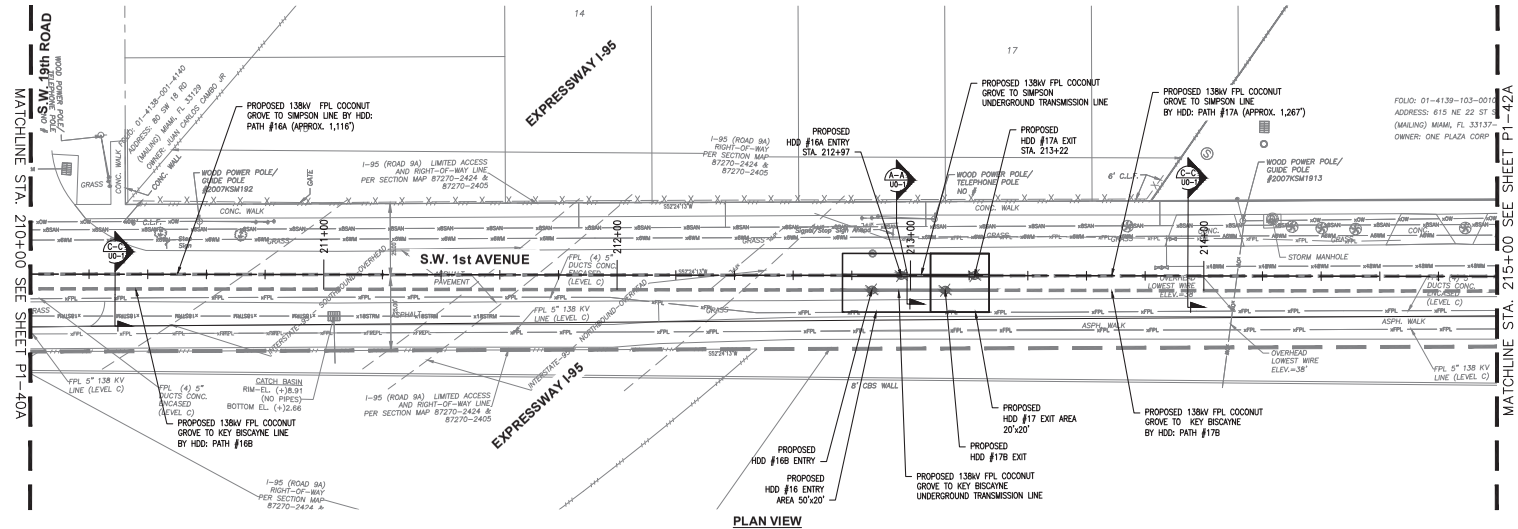
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

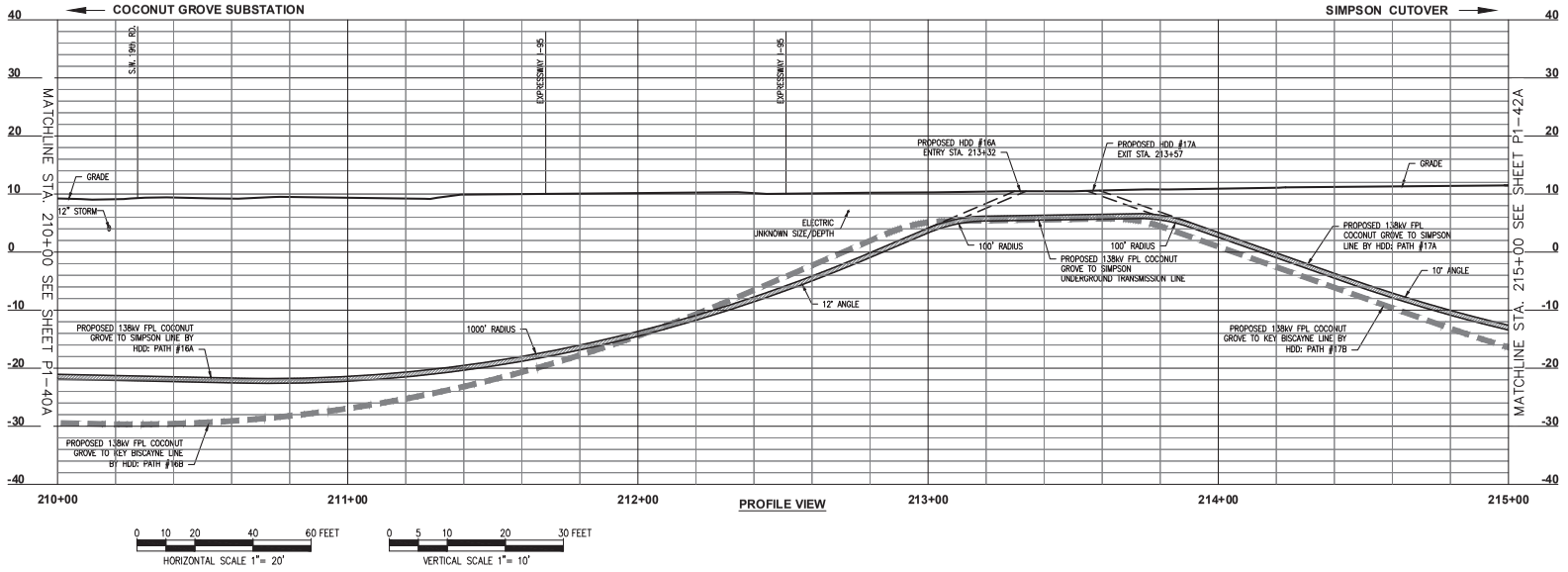
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 205+00 TO 210+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-40A

154295_Plan And Profile.dwg



125



NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
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811 or 1-800-432-4770

FPL

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

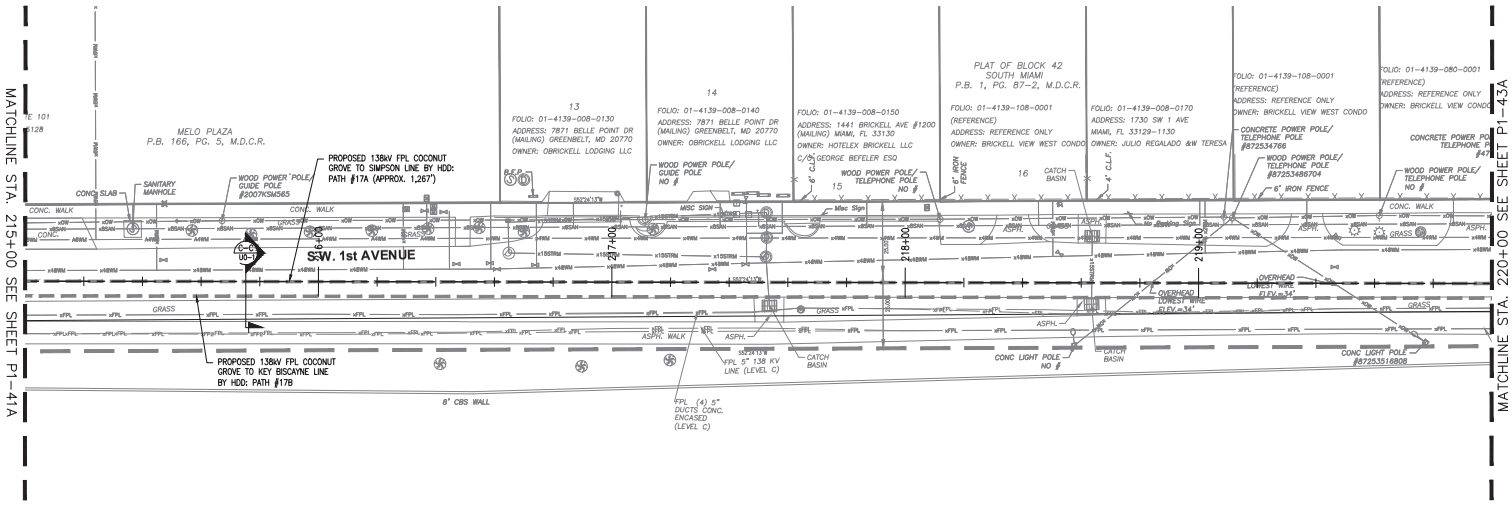
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VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

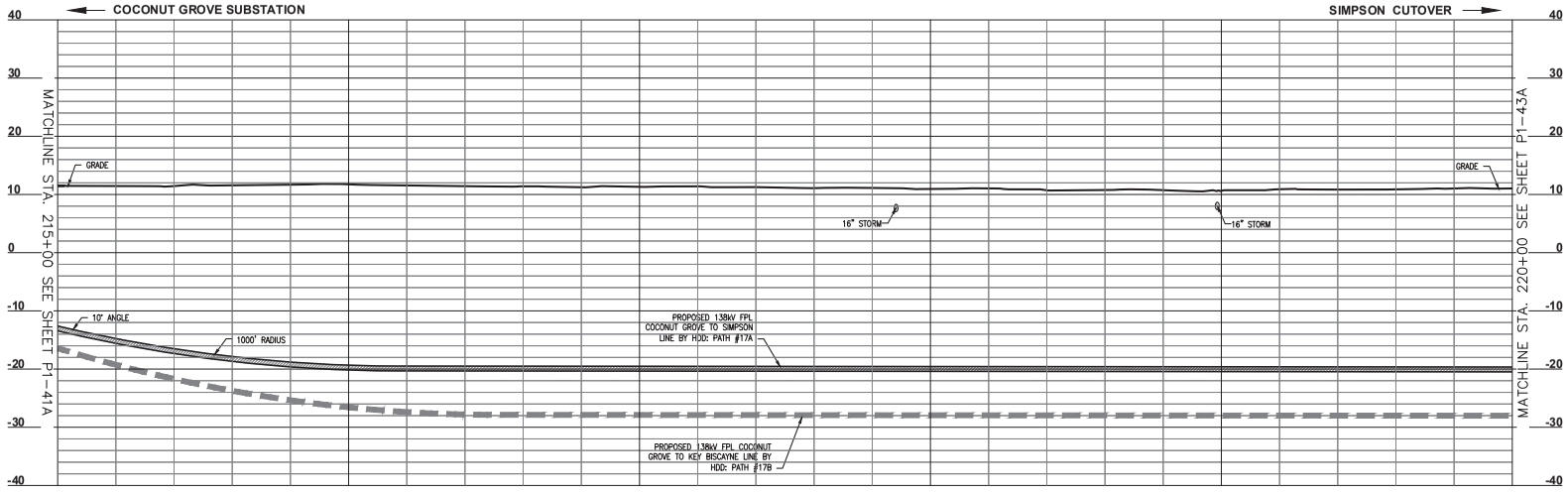
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 210+00 TO 215+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-41A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

NOTES:

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126

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

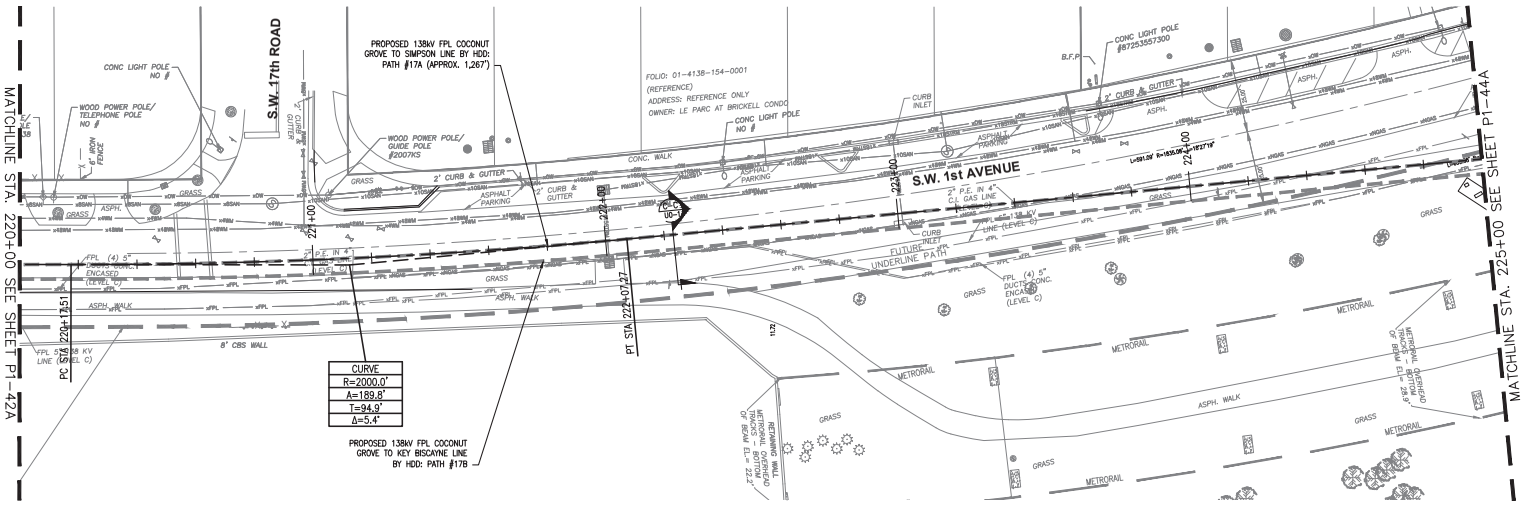
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

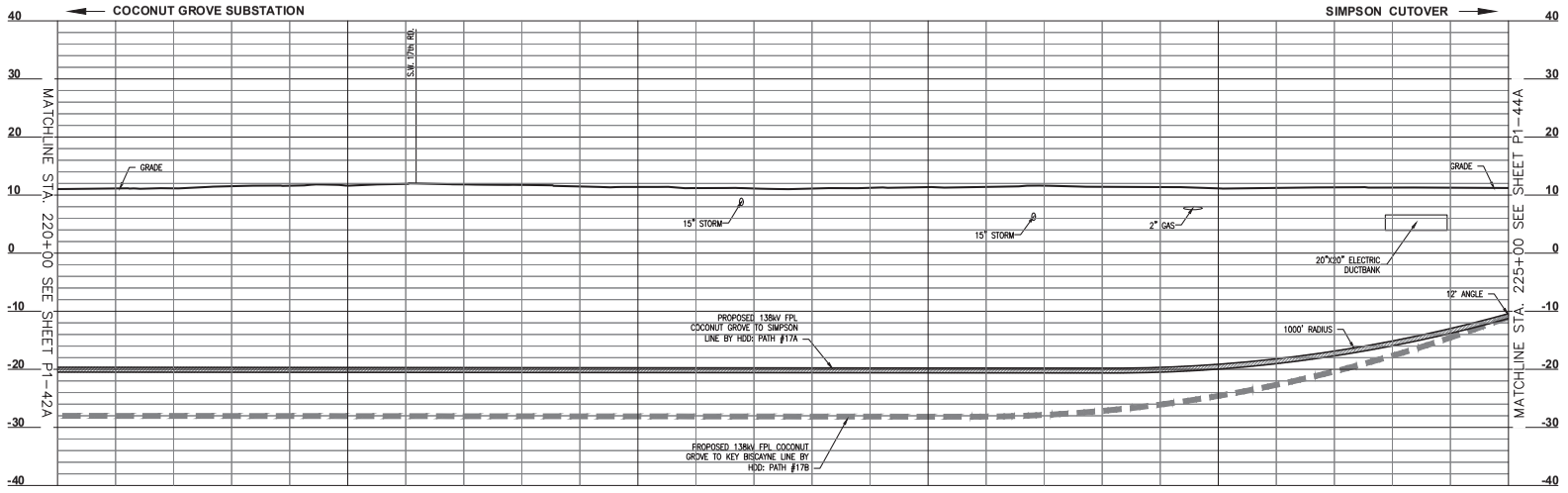
FLORIDA POWER & LIGHT
138kV UNDERGROUND TRANSMISSION LINE
COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 215+00 TO 220+00

JOB NUMBER 154295
REV AA
DRAWING NUMBER P1-42A

154295_Plan And Profile.dwg



PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20' (0 10 20 40 60 FEET)

VERTICAL SCALE 1"= 10' (0 5 10 20 30 FEET)

NOTES:

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

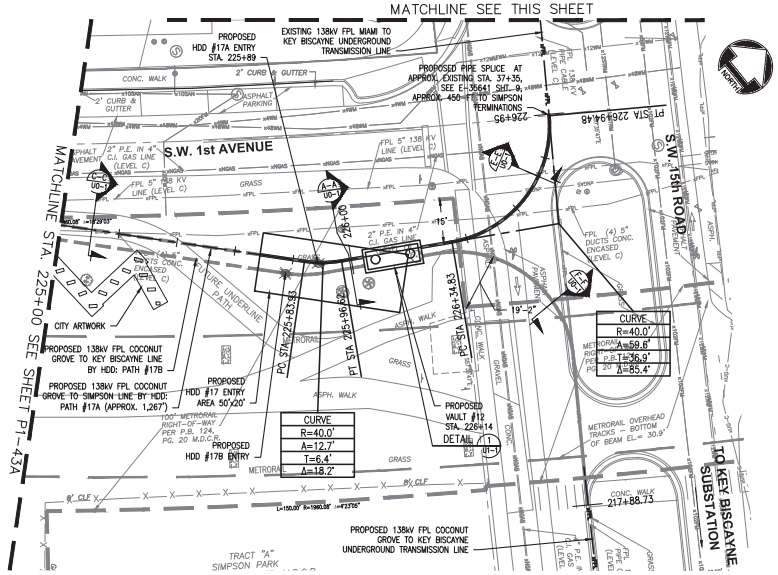
SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

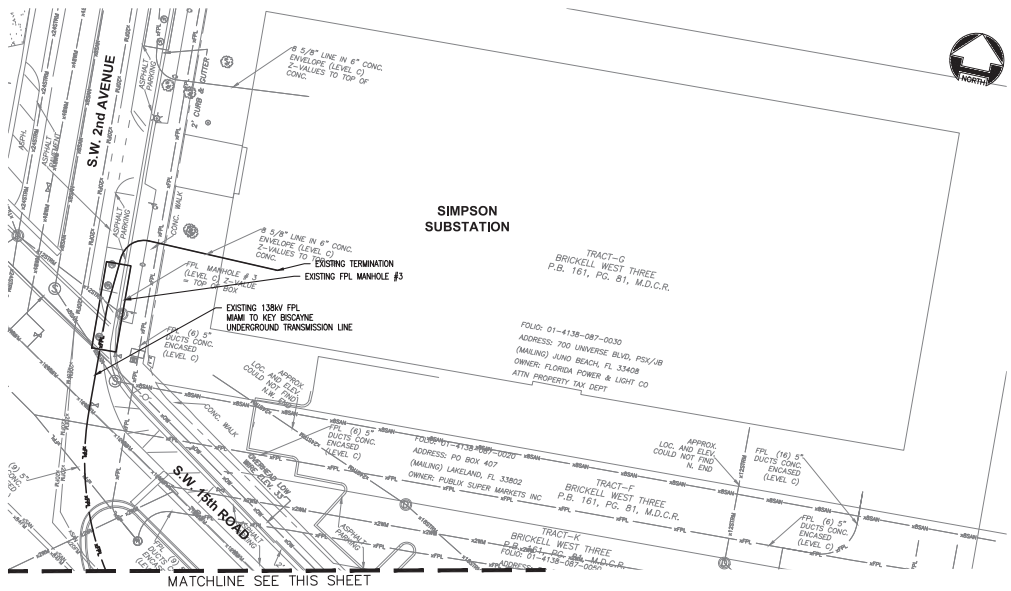
POWER ENGINEERS

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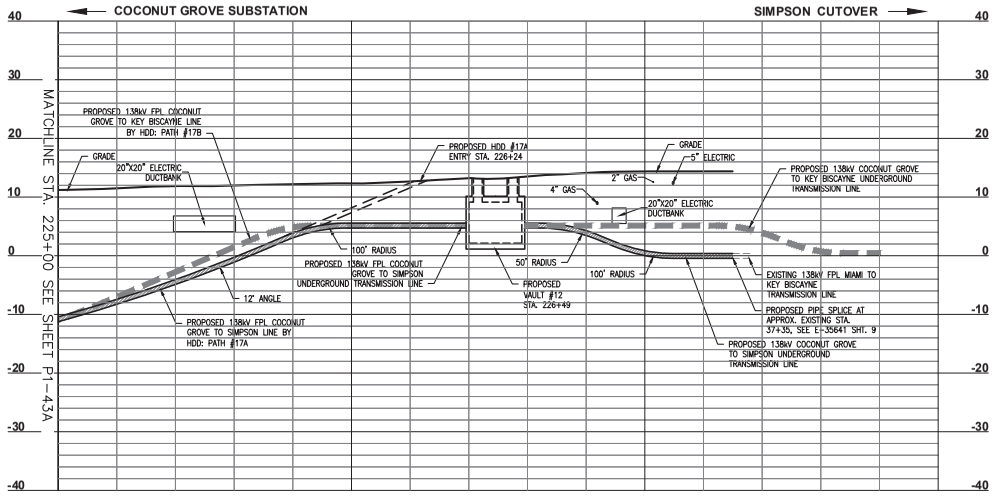
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PLAN VIEW



PROFILE VIEW

HORIZONTAL SCALE 1"= 20'

VERTICAL SCALE 1"= 10'

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NOTES:

1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-432-4770.
2. ALL VERTICAL RADII ARE 400' UNLESS OTHERWISE NOTED.
3. NEW CABLES WILL BE INSTALLED FROM PROPOSED VAULT #12 TO SIMPSON SUBSTATION TERMINATION LOCATION.

THREE BUSINESS DAYS BEFORE YOU DIG CALL
FLORIDA SUNSHINE 811
TOLL FREE
811 or 1-800-432-4770

FPL

THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS GRANTED.

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
AA	ISSUED FOR REVIEW	07/10/20	DSH	CJS	MRM	

REFERENCE DRAWINGS

DSGN	CJS	03/20/17
DRN	DRC	03/20/17
CKD	MRM	03/20/17

SCALE: HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=10'
FOR 24x36 DWG ONLY

POWER ENGINEERS

FLORIDA POWER & LIGHT

138kV UNDERGROUND TRANSMISSION LINE

COCONUT GROVE TO SIMPSON CUTOVER
PLAN & PROFILE STA. 225+00 TO 227+30

JOB NUMBER 154295

REV AA

DRAWING NUMBER P1-44A

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EXHIBIT C

As-Built Plans

EXHIBIT D

Miami-Dade Transit Safety Manual and

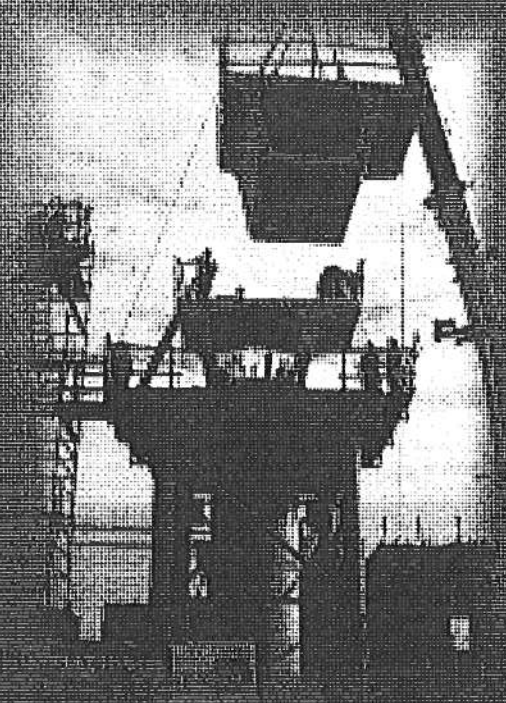
Miami-Dade Transit Adjacent Construction Safety Manual

(See attached)

MIAMI-DADE COUNTY

Miami-Dade Transit

Construction Safety Manual



MIAMI-DADE TRANSIT

MIAMI, FLORIDA

CONSTRUCTION SAFETY MANUAL

Revision No. 6

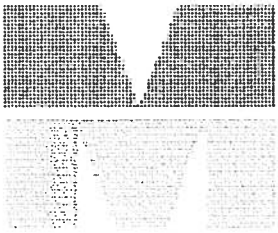
May 2012

6/4/2012
Date

Approved By:
James A. Sumoski
Construction Manager 3
MDT Construction

6/7/12
Date

Approved By:
Eric Muntan
Chief, MDT
Office of Safety and Security



MIAMI-DADE
TRANSIT

111 Northwest 1st Street, Suite 910, Miami, Florida 33128-1999

Policy Statement

It is the policy of the Miami-Dade Transit (MDT) and Miami-Dade County (MDC) to maintain a safe working environment for all employees and the public. The Construction Safety Program has been designed in accordance with the William-Steiger Occupational Safety and Health Act of 1970. The success of the safety program requires the full support of every employee and contractor working on the MDT system.

Regardless of the urgency or monetary cost of a job; all safety precautions must be observed. Prevention of personal injury or damage to property and equipment must always remain paramount in the minds of every employee and contractor.

PREFACE

THE CONSTRUCTION SAFETY MANUAL (CSM) is one of the Miami-Dade County (MDC) Contract Documents. Contractors are required to assure that all employees, subcontractors, and their suppliers / vendors, while on the work site and in the conduct of MDC contractors, comply with the provisions of the CSM and the minimum standards set forth under the William-Steiger Occupational Safety and Health Act of 1970 and as amended, the Construction and General Industry Standards (29CFR1926/1910), and all other applicable Federal, State and Local laws. The Contractors are expected to be familiar with the contents applicable to their operations. The provisions set forth in this CSM will be strictly enforced. Non-compliance with the CSM will be treated the same as non-compliance with any contract provision. Willful or repeated noncompliance shall result in the suspension of part or all work.

Safety at the work site shall be the sole responsibility of the Contractor. The CSM shall be used as a guide in developing the Contractor's Accident Prevention Program. The Contractor shall assume full responsibility for compliance with all applicable Federal, State and Local safety related regulations and for complying with this Construction Safety Manual during the performance of all activities.

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A. DEFINITIONS

The following definitions apply for the purpose of this Construction Safety Manual.

ACCIDENT – An unforeseen event or occurrence which causes death, injury or damage to property.

ACCIDENT PREVENTION PROGRAM (APP) - A program designed to provide for the protection to life and health of employees and other persons; and for the prevention of damage to property, materials, supplies and equipment. The Contractor's APP shall be developed by the Contractor using the Contractor's Safety Manual as a guide. Once approved by MDC, the Contractor's APP shall be used by the Contractor and his subcontractors to insure the safe prosecution of the work.

ALARM CONDITION - Any abnormal condition that requires the attention or intervention of responsible personnel or an individual monitoring the transit system operations.

ANOMALY - Deviation from nominal performance, which does not cause a significant, effect on system performance but does warrant investigation and/ or repair.

AUDIT - Formal or official examination and verification.

AUTOMATIC - A term applied to a system, subsystem, or device which has the inherent capability to function without direct manual participation.

CENTRAL CONTROL - That place where train control or train supervision is accomplished for the entire Metrorail and Metromover system, the train command center.

CENTRAL DISPATCH - That place where bus, rail or mover supervision or dispatcher is accomplished for the entire transit system.

COMPETENT PERSON – A person who is capable of identifying existing or predicting hazards in the surroundings, or working conditions which are unsanitary, hazardous or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them.

CONSTRUCTION SAFETY - The optimum degree of safety within the constraints of construction effectiveness, time and cost through specific application of safety management throughout all phases of the construction.

CONSTRUCTION SAFETY MANUAL (CSM) - This manual, issued as a contract document by the Miami-Dade Transit (MDT), to be used as a guide by the Contractors in developing the Accident Prevention Program.

CONTRACTOR'S AUTHORIZED SAFETY REPRESENTATIVE - The person designated as authorized safety representative who will be responsible for work site safety and for reporting all insurance claims. On contracts of over $5 million in award amount this person shall have full-time safety responsibility, unless deemed by the Office of Safety and Security that due to the nature of the work, part-time oversight is adequate. On contracts of under $5 million award amount, the person may have part time safety responsibility, unless deemed by the Office of Safety and Security that the nature of the work necessitates full-time safety oversight. Whether part-time or full-time, this person shall NOT report to the Contractor's superintendent.

CONTRACT DRAWINGS - The plans, profiles, typical cross-sections, general cross-section, elevations, schedules and details which show locations, character and dimensions of the work.

CONTRACTING OFFICER - The Director, Miami-Dade Transit.

CONTRACTOR - The individual, firm, partnership, corporation, or combination thereof, private, municipal, or public, including joint ventures which, as an independent contractor, has entered into a contract with MDC, who is referred to throughout the Contract Documents by singular in number and masculine in gender.

DEGRADATION - Falling from an initial level to a lower level in quality or performance.

EMERGENCY - A situation which is life threatening or which can cause serious damage on or in the immediate vicinity of any transit facility, structure, bus or train.

EMPLOYEE - A person employed by the Contractor or Subcontractor.

ENGINEER - MDC or its authorized representatives, including but not limited to the Resident Engineer; the Contracting Officer's Representatives and the Engineer of Record.

EQUIPMENT FAILURE - The state in which equipment no longer meets the minimum acceptable specified performance and cannot be restored through operator adjustment or control.

FTA - Federal Transit Administration, formerly UMTA.

FAILURE - An inability to perform an intended function.

HAZARD - Any real or potential condition that can cause injury or death; or damage to or loss of equipment or property.

HAZARD MANAGEMENT (LOSS CONTROL) - An element of the system safety management function that evaluates the safety effects of potential hazards considering acceptance, control, or elimination of such hazards with respect to expenditure or

resources. (The feasibility of hazard elimination must be considered in light of financial, legal, and human considerations).

HAZARD SEVERITY - A qualitative measure or the worst potential consequences that could be caused by a specific hazard.

Category I - Catastrophic. May cause death, serious injury/illness or major system loss.

Category II - Critical. May cause injury/illness, or major system damage.

Category III - Marginal. May cause minor injury/illness, or minor system damage.

Category IV - Negligible. Will not result in injury/illness, or system damage.

HAZARD INDEX - A quantitative measure, combining the numerical probability of occurrence with a hazard severity.

HAZARD RESOLUTION - The analysis and subsequent actions taken to reduce, to the lowest level practical, the risk associated with an identified hazard.

HAZARD PROBABILITY - The probability that a hazard will occur during the planned life of the system. Hazard probability may be expressed in quantitative or qualitative terms. An example of a hazard probability ranking system is:

A	Frequent
B	Probable
C	Occasional
D	Remote
E	Improbable

IMMINENT DANGER - Refers to any condition or practice where there is reasonable certainty that a danger exists that can be expected to cause death or serious physical harm and/or serious property damage immediately or before the danger can be eliminated through normal enforcement procedures.

INCIDENT - An unforeseen event or occurrence which does not necessarily result in injury or property damage.

MAINTENANCE - All actions necessary for retaining an item in or restoring it to an operable condition.

MALFUNCTION - Any anomaly or failure wherein the system, subsystem, or component fails to function as intended.

MDC - Miami-Dade County - the Board of County Commissioners of Dade County, Florida, a political subdivision of the State of Florida, and MDT, and office under the

County Manager of Miami-Dade County, Created March 1, 1974, by Administrative Order No. 3-8, under the authority of Sections 4.01 and 4.02 of the Miami-Dade County Charter – and any authority, board, body, commission, official or officials to which or to whom the powers now belonging to MDT in respect to the location, construction, equipment, maintenance and operation of transit facilities shall, by virtue of any act or acts, hereinafter pass or appertain.

MDT - Miami-Dade Transit, Miami-Dade County, located at 111 NW 1st Street, Suite 910, Miami, Florida 33128.

MISHAP - An unplanned event or series of events that result in death, injury, occupational illness, or damage to or loss of equipment or property. (See also ACCIDENT).

OFFICE OF SAFETY AND SECURITY (OSS) - Miami-Dade Transit, Miami-Dade County, located at 111 NW 1st Street, 4th Floor, Miami, Florida 33128.

OPERATOR - That person having direct and immediate control of the movement of a vehicle or machinery.

OPERATING TIME - The time period between turn-on and turn-off of a system, subsystem, component or part during which time operation is as specified. Total operating time is the summation of all operating time periods.

OSHA - The Occupational Safety and Health Administration. An agency of the U.S. Government which sets standards to provide for the safety of employees in the workplace. The area office is located in Ft. Lauderdale, Florida, phone (305) 424-0242.

PERSONAL PROTECTIVE EQUIPMENT (PPE) - Equipment designed and worn to provide protection against hazard to some part of an employee's body. Example of PPE are safety glasses, respirators, hard hats, gloves etc. All PPE used at MDT work sites must comply with applicable OSHA standards.

POWER RAIL - A rail mounted on insulators alongside the running surfaces, which provides Metromover traction power for train propulsion.

PROCEDURES - Established methods to perform a series of tasks.

RELIABILITY - The probability that the system or subsystem will perform satisfactorily for a given period of time when used under stated conditions.

REPAIR - The maintenance activity, which restores a failed item to operable state.

RISK - An expression of possible loss over a specific period of time or number of operational cycles. It may by indicated in terms of hazard severity and probability.

RISK MANAGEMENT - The Risk Management Division, Miami-Dade County, General Services Administration, located at 111 NW 1st Street, Suite 2340, Miami, Florida 33128; phone 305-375-4280.

RULE - A law or order authoritatively governing conduct or action.

SAFE - Secure from danger or loss.

SAFETY - A reasonable degree of freedom from those conditions that can cause injury or death to personnel; damage to or loss of equipment or property; and freedom from danger.

SAFETY CHECKLIST - A list for examining the safety aspect of equipment, procedures and personnel.

SAFETY DEVICES - Protective devices, which do not alter the fundamental nature of a hazard but which, do control the extent of the hazard in some manner.

SAFETY CRITICAL - A designation placed on a system, subsystem, element component device, or function denoting that satisfactory operation of such is mandatory to assurance of patron, personnel, equipment, or facility safety. Such a designation dictates incorporation of special safety design features.

SAFETY MANAGEMENT - An element of management that establishes safety programs requirements and ensures the planning, implementation and accomplishment of task and activities to achieve work place safety.

SAFETY PROGRAM - The combined task and activities of safety management and safety engineering that enhance operational effectiveness by satisfying the safety requirements in a timely, cost-effective manner throughout all phases of the work.

SAFETY SUBCONTRACTOR - A subcontractor who satisfies the Florida Department of Labor and Employment Security Industrial Safety and Health Program, Chapter 38F-44, and is duly approved by MDC.

SECURITY PROGRAM PLAN (SPP) - A program designed to provide guidelines to implement security procedures and describe the contractors' commitments and specific actions proposed to provide a secure project site. The Contractor's SPP shall be developed by the Contractor using the Contractor's Safety Manual as a guide. Once approved by MDC, the Contractor's SPP shall be used by the Contractor and his subcontractors to insure the safe prosecution of the work.

SERVICE CONTRACTS/CONTRACTOR - Those operations that are providing any services, or repair, replacement or maintenance functions that are indigenous to the construction process on the work site.

STATE - The State of Florida.

SUBCONTRACTOR - Any person, firm or corporation, other than the employees of the Contractor, who contracts with the Contractor to furnish labor and/or materials under this Contract. The contractor shall be responsible for ensuring that their subcontractors comply with this manual.

SUPPLIER/VENDOR - Those entities whose sole responsibility to the project is the delivery of goods or materials, exclusive of direct labor.

SYSTEM – A composite of people, procedures and equipment operating in a specific environment to accomplished a specific mission or task.

THIRD RAIL - A rail mounted on insulators alongside the running rail which provides Metrorail traction power for train propulsion.

TRANSIT SYSTEM – A transportation system comprised of fleets of motor buses and electrically propelled transit vehicles and all of their operational/support personnel and systems (e.g. maintenance facilities, tracks, structures, etc.) utilized for the mass movement of passengers within a metropolitan area.

UNUSUAL OCCURRENCE – An unforeseen event or incident which does not necessarily result in injury or property damage.

UNSAFE CONDITIONS – Any condition which if not corrected will endanger human life or property.

WARNING DEVICES – Sensors that monitor or detect conditions and provide visible and/or audible alerting signals as desired for selected events.

WORK SITE - The area enclosed by the limit of work indicated in the Contract Documents and boundaries of local streets and public easements in which the Contractor is to perform the work under the Contract. It shall also include areas obtained by the Contractor for use in connection with the Contractor, when contiguous to the limit of work.

B. CONTRACTOR'S ACCIDENT PREVENTION PROGRAM (APP) & SECURITY PROGRAM (SPP) PLANS

1) OBJECTIVES OF THE ACCIDENT PREVENTION PROGRAM

- to achieve an injury-free experience for the Project.
- to achieve maximum property conservation.
- to reduce direct and indirect costs.

Accomplishing the above objectives will provide for:

a) A greater efficiency as a result of a safer working environment.

b) A reduction of the construction work interruptions which develop when unsafe environments are created and when accidents occur.

2) METHODS OF ATTAINING OBJECTIVES:

Effectiveness of the Accident Prevention Program depends on the comprehensive participation and cooperation extended by all participants in support of the basic requirements listed below.

The Contractor's Authorized Safety Representative shall be informed immediately of any recognized hazards or potential hazards, related to health & safety, which may impact on the effectiveness of the Project's Accident Prevention Program that cannot be handled promptly as set forth herein, and report such to the Engineer.

The major accident prevention requirements are:

a) Initiation and maintenance of programs, plans, training, etc. as necessary to comply with the requirements of this manual, and applicable Federal, State and Local standards.

b) Allocating manpower, as required, for professional safety personnel assistance.

c) Planning and coordinating all work to avoid personnel injury, property damage and loss of productive time.

d) Establishing and maintaining a system for prompt detection, reporting, and correction or control of unsafe practices and unsafe conditions.

e) Assuring the availability, and enforcing the use of appropriate personal protective equipment.

f) Establishing and maintaining an effective and comprehensive system of tools and equipment inspection and maintenance including records required by applicable regulations or internal directives. The tool and equipment inspection and maintenance program shall include all employee-owned items brought onto the work site.

g) Establishing and supporting an educational and job skill-training program designed to foster and maintain accident prevention knowledge and cooperation at all levels of employment by:

1. providing for new employee's orientations.

2. conducting targeted subject safety meetings.

3. posting adequate safety and health requirements for all operations.

4. maintaining a list of adequately trained and licensed employees authorized to operate specific equipment.

5. maintaining a list of the trained and certified crane operators.

6. maintain a list of employees who have been certified in accordance with Florida Department of Transportation to perform flagging operations and placement of traffic signs or devices (cones, barricades, warning signs, etc.).

7. maintain a list of "Competent Person" employees who satisfy OSHA standard requirements to perform specific functions under the OSHA standards. A partial list of standards that require a competent person is included in appendix G of this CSM.

8. investigating all accidents to determine causes (s) and taking prompt, reasonable and prudent necessary action to eliminate or control responsible factors.

h) Providing visitor control and hazard protection.

i) Providing work site security.

j) Establishment and maintenance of a first aid and/or medical facility.

k) Controlling the safe placement of materials or equipment received, or used, consistent with the traffic control pattern established and progression of construction on the work site.

l) Providing maintenance of traffic control plans and procedures consistent with the work to be performed in accordance with the Contract Documents.

m) Providing work site fire prevention/protection in coordination with local authorities and applicable standards.

n) Establishment and maintenance of an effective program in accordance with Federal, State and Local regulations for the storage, use, and disposal of hazardous substances.

o) Conducting accident/incident investigations.

3) **MDC AND THE ENGINEER:**

a) The Engineer will:

1. Receive from the Contractor an Accident Prevention Program and Security Program Plan no later than 25 days after approval of Award Recommendation by the Board of County Commissioners and no less that 15 days before the projected date for notice to proceed of the Contract. The Contractor shall assume full responsibility for compliance with all applicable Federal, State and Local safety related regulations and for complying with this Construction Safety Manual during the performance of all work performed prior to the approval of the Contractor's Accident Prevention Program and Security Program Plan. (See definition of Accident Prevention and Security Program).

2. verify that Contractor plans and executes the work in compliance with the stated objectives of the Accident Prevention Program, Security Program Plan and applicable regulations.

3. authorize work site inspections by MDC representatives to monitor Contractor compliance with this manual.

4. require prompt remedial action to correct substandard or illegal safety and/or health conditions reported or observed by MDC representatives.

5. verify that the Contractor has adequate fire prevention/ protection equipment; contained in ready-operating status at all times.

6. verify that the Contractor has temporary lighting and power systems during the construction phase set up and utilized in such a manner as to reduce hazards to a minimum.

7. ascertain that trained first aid personnel are available and certified for their work.

8. verify that good housekeeping procedures are maintained at all times by the Contractor and subcontractors.

9. establish procedures for the reporting of all fire incidents or damages as stated herein.

10. instruct the Contractor to establish an identification program for all employees at the work site.

11. verify that the Contractor reports all accidents immediately, as required by this manual and State and Federal regulations.

12. instruct the Contractor that employee access to unauthorized or restricted areas on Metromover or Metrorail property requires that the Contractor provide prior notification to, and receive authorization from Central Control.

13. establish procedures for timely reporting/notification to OSS for accidents and injuries.

4) **CONTRACTOR: The Contractor Shall:**

a) Submit in writing to the Engineer an Accident Prevention Program and Security Program Plan for approval no later than 25 days after approval of Award Recommendation by the Board of County Commissioners and no less than 15 days before the projected date for notice to proceed of the contract. Provide the name, qualifications, and a "24 hour" phone number of the Contractor's Authorized Safety Representative who shall devote his time to the work site as defined by the definitions section of this Construction Safety Manual. No work on the work site shall begin until MDC approves the Contractor's authorized safety representative. The Contractor shall assume full responsibility for compliance with all applicable Federal, State and local safety related regulations and for complying with this Construction Safety Manual during the performance of all work performed prior to the approval of the Contractor's Accident Prevention Program. (See definition of Accident Prevention and Security Program). For furnish and install equipment contracts (non-construction), the stated approval period will commence ten (10) days prior to the beginning of work on the work site.

b) Substantiate in writing to the Engineer that the Contractor's Authorized Safety Representative possesses at least two years of construction safety experience, is a managerial supervisory capacity, related to the work contemplated under this Contract.

c) Maintain responsibility for project safety on the work site for his own or subcontractor's employees at any time, under any circumstances.

d) After approval of the Contractor's Authorized Safety Representative, the Contractor, his Authorized Safety Representative and the Engineer will be required to attend a meeting with the MDT staff. At that time, a formal presentation and discussion of the Accident Prevention Program will be conducted.

e) Follow all of the requirements and procedures of the Accident Prevention Program.

f) Promptly provide the Engineer with a detailed written submission of the safety and/or health hazards not consistent to his work at the work site and a detailed program to control all such hazards. Such program must be consistent with the Accident Prevention Program and conform in all respects to all legal and safety requirements, including those of OSHA and Federal, State, and Local regulations. All such programs must be approved by the Engineer prior to the commencement of this work.

g) Require each new employee, before he starts work, to be oriented by his supervisor on the safety and health rules, procedures, and requirements established for the work task (s) to be performed and procedures to be adhered to. Tool-box safety meetings are not an acceptable substitute for new employee orientation. The name of the employee and orientation date shall be on record at the work site.

h) Provide an overall traffic control plan for pedestrians, vehicular traffic and construction operations; and establish a general visitor control program.

i) Set up and implement a program to protect persons and property in the event of emergencies.

j) Complete supervisory investigation reports of all injuries.

k) Require supervisory employees and subcontractors to attend monthly supervisor's safety meetings.

l) Schedule weekly "tool-box" safety sessions to be held by the job foremen for all employees. A record including date, employee attendance, and subject covered shall be kept of these meetings for the duration of the Construction

Project. The Engineer shall be advised of the time and location of the scheduled meetings. (See Appendix B for suggested format). The meeting should be used to review safety and health rules and procedures, applicable Federal, State or Local standards, and to discuss any problems related to safety at the work site. This would include information as to storage, use and disposal of hazardous materials at the work site.

m) Schedule and preside at safety meetings to be held monthly at which appropriate supervisory staff of the Contractor and subcontractors will be required to attend. The Engineer shall be advised of the time and location of the scheduled meetings.

n) Take immediate action to correct unsafe practices and unsafe conditions.

o) Report to the Engineer and observed conditions or violations of job safety regardless of weather they are within the observer's power or responsibility to correct.

p) Assure that supervisory employees at all levels have a good working knowledge of applicable safety and health standards as they pertain to their areas of supervisory control and encourage all supervisory personnel and employees to improve their accident prevention awareness.

q) Provide the establishment of first aid facilities for treatment of employees.

r) Obtain a personal copy of the OSHA Construction Industry Standards 29CFR1926 and OSHA General Industry Standards 29CFR1910 to be available for the Contractor's reference as required by this manual. (The OSHA standards may be obtained free, or at a minimal cost, by contacting the OSHA area office, phone (305) 424-0242, in Ft. Lauderdale).

s) Ensure that prior to accessing restricted areas on Metrorail or Metromover property; he has provided proper notifications to and received proper authorization from Central Control through the Engineer.

t) Ensure that during all times that employees are at the work site, an acceptable and reliable means of communication with local emergency response personnel is available.

u) In addition to complying with this manual, comply with all applicable safety & health governmental standards including the OSHA Construction Industry Standards 29CFR1926/1910, the Florida Right to Know Law, the Federal Hazard Communication Act, Florida Worker's Compensation Laws, etc. Maintain the necessary documentation, program, and/or training required by such standards.

v) Ensure all of his subcontractors, and subcontractor's employees, comply with the requirements of this Manual and applicable Federal, State and Local regulations.

w) Comply with the current edition of the Florida Building codes unless specifically exempt, in writing by the Engineer.

5) EMERGENCIES

For the purposes of the Accident Prevention Program, emergencies are classified as follows:

a) A fire, or major hazardous material leak or spill, requiring the response of the local fire or environmental protection department.

b) Unplanned collapse of equipment used in the course of construction.

c) Unplanned collapse of a substantial part of any structure at the work site.

d) Any serious accident involving an employee.

e) Any serious accident involving a member of the public.

f) Any other occurrence which would require immediate protection of life or property.

6) HOW TO REPORT AN ACCIDENT TO THE MDT ENGINEER:

a) The Contractor and all other participants in the Program shall instruct their employees and all other concerned personnel in how to report an accident which must include, at a minimum, the following procedures:

1. Report the matter immediately to the supervisor who shall arrange for first aid or other required emergency medical treatment.

2. In the event of serious injury or a death, in the absence of emergency first aid facilities on the work site, the supervisor of the injured employee is to arrange for necessary treatment. There shall be full compliance with all requirements of the Contractor's insurance carrier(s) with regard to accident reporting.

3. The emergency phone number is: **911**

4. In case of a death, or if five or more employees are seriously injured in the same accident, the Contractor's Authorized Safety Representative shall, not later than 24 hours after the occurrence report the same to:

    a. Office of the Area OSHA Director (305) 424-0242.

    b. State of Florida, Bureau of Industrial Safety and Health (305) 377-5373.

5. The employer of any injured employee shall be required to complete the Notice of Injury Form, as required by State of Florida Worker's Compensation Division. (See appendix A).

6. The employer of any injured employee shall be required to record all work related injuries on Form 301 (or equivalent), Form 300 and complete/post the summary (Form 300A) at the beginning of the calendar year as required by OSHA 29CFR1904. (See appendix A).

7. The supervisor of the injured employee shall be responsible to immediately report the injury to the Engineer, to fill out the Supervisor's Report of Accident (Appendix A), and make it and the notice of Injury report available to the Engineer.

8. All participants in this Accident Prevention Program shall cooperate fully in the investigation of any accident and/or occurrence.

    b) The contractors and other participants in the Accident Prevention Program shall instruct employees and all other concerned personnel of the following procedures if there is loss or damage to property of others, including damage to equipment or tools being used at he work site.

        1. Promptly report the loss or damage to the office of the Contractor's Authorized Safety Representative.

        2. In the event of a substantial loss or damage to the property of others, the Contractor is to immediately notify the Contractor's Authorized Safety Representative and the Engineer.

        3. There shall be full compliance with all requirements of the Contractor's insurance carrier (s) with regard to property loss and damages.

MDT SECURITY REQUIREMENTS

All Contractors are required to submit for review and approval a Security Program Plan (SPP), as defined in this Manual. This SPP shall provide guidelines to implement security procedures and describe the contractors' commitments and specific actions proposed to provide a secure project site. The Security Program Plan shall include, at a minimum:

- ✓ Procedures for inspecting perimeter security;
- ✓ Procedures for restricting who may visit the project site;
- ✓ Procedure for performing background checks;
- ✓ Procedure for overseeing security with respect to deliveries and other short-term visitors;
- ✓ Procedure for identification badges;
- ✓ Procedure for conducting periodic security meetings;
- ✓ Procedures for monitoring world-wide security threats and national security warnings and alerts;
- ✓ Emergency security procedures;
- ✓ Procedures for preparing, issuing and reporting security incidents.

MDT Contractor Identification Badges

All MDT contractors are to present identification along with documentation showing reason for visit. Following are the identification badge requirements for contractors.

1. Contractor's must be in possession of a photo identification card issued by MDT noting them as contractor's OR must be provided a VISITOR's BADGE upon the surrender of an approved government-issued photo identification.

2. All contractors under permanent, full-time assignment to MDT are required to display their MDT photo contractor identification. The identification is issued by the MDT Office of Safety and Security. A supervisory employee must be present with the contract employee for them to be issued identification.

3. All MDT employees who are involved in any way with contractor employees are to ensure that these security requirements are provided to those employees. MDT employees are to also assist contractors in meeting those requirements.

4. Contractor's requiring access to critical areas MUST BE ACCOMPANIED BY AN MDT EMPLOYEE WITH AUTHORIZED ACCESS TO THAT AREA AT ALL TIMES. AT NO TIME MAY A CONTRACTOR BE LEFT UNSUPERVISED IN ANY CRITICAL OR SENSITIVE AREA. These areas include, but are not limited to: bus and mover central control, bus dispatch, William Lehman Yard Tower,

traction power substations, switchgear rooms, train control rooms, electrical rooms, telephone rooms, computer server rooms, video monitoring areas, and communications rooms.

Visitor's to MDT Facilities

1. All visitors will be logged in before entering the premises.

2. Employees shall not allow any unauthorized persons to enter any MDT facility, including yard gates, buildings and other secure entrances. As necessary, MDT employees may direct visitor's to the security desk or, as necessary, request intervention by security personnel.

3. The employee entering the area is to ensure that each secured door is closed behind them and that no one else enters.

4. Any visitor who comes to our facilities for food delivery or any other personal type delivery will be met at the facility entrance by the employee who ordered the delivery. The delivery person shall not be allowed into the facility under any circumstances.

5. In instances where remote entry buttons are used at secure facilities, the entry button is not be used unless there is direct observation of the person entering. Direct observation includes visual observation and observation of closed circuit television monitors only.

   All appropriate MDT field staff will be familiar with each contractor's approved Security Program and will comply with specific requirements of the plan when carrying out their assigned tasks. The contractors have the primary responsibility for developing and implementing the program; however, the Engineer will monitor the contractors' compliance with each contractor's security program.

C. GENERAL SAFETY AND HEALTH PROVISIONS

1) The Contractor shall ensure employees do not work under conditions, which are unsanitary, hazardous, or dangerous to their health or safety.

2) The Contractor shall initiate and maintain such programs as may be necessary to comply with this manual, and all applicable government regulations.

3) Such programs shall provide for the frequent and regular inspections of the job sites, materials, and equipment to be made by competent persons designated by the Contractors; and shall include a program for the

performance of work, to promote its orderly and expeditious progress and ensure its safe completion within the prescribed time.

4) The use of any machinery, tool, material or equipment not in good working order, or which has had a safety feature removed or tampered with, is prohibited. Such machine, tool, material or equipment shall either be identified as unsafe by tagging or locking the controls to render them inoperable or shall be physically removed from the work site.

5) The Contractors shall permit only those employees qualified by training or experience to operate equipment and machinery Applicable laws requiring employee to have a current license or certification (i.e., Class A Commercial Drivers License, etc.) to operate equipment are to be complied with.

6) The Contractor shall be solely responsible for the performance of the work in a manner, which will not create safety hazards, objectionable noise or other nuisance to the public.

7) Employees of the Contractor or subcontractors who are found to be intoxicated or appear to be under the influence of alcohol or drugs (other than as prescribed by a doctor) while on the work site shall be removed from the work site by the Contractor for the duration of the Contract. Employees who are found to be in possession of alcohol or drugs (other than as prescribed by a doctor) at the work site shall be removed from the work site by the Contractor for the duration of the Contract. An employee who is under a doctor's care and taking prescription drugs should inform his supervisor of same to determine if restrictions should be imposed.

8) Prior to the start of, and during the course of, any work, above or below ground level, the Contractor shall make a through survey of the entire work site to determine the type and locations of all utilities or other lines on the work site. The Contractors must verify this information by notifying the Underground Utilities Notification Center at 1-800-432-4770, other utilities not members of the Underground Utilities Notification Center, and notify the Engineer.

9) The Contractor shall instruct employees as to any precautions and procedures to be followed while working in the proximity of any utility or power line.

10) The Contractor shall develop and have readily available at the work site an emergency plan with the locations of any utility or line shut-offs or disconnects so that if any emergency arises, immediate action may be taken.

11) The Contractor will be required to identify and provide a notification procedure for all contingencies where cutting off a utility could adversely

affect any operation or render inoperative any protective apparatus in the surrounding area.

12) All structural repairs, alterations or reconstruction of any equipment used on the work site shall be certified in accordance with all applicable laws and regulations.
13) Portable toilets shall be chemical type or equal and shall be located convenient to work crews and maintained in proper sanitary conditions at all times.

14) Construction operations will normally be confined to those hours between dawn and dusk. Any work done other than during daylight hours must be approved by the Engineer. In requesting approval during other than daylight hours, the Contractor must present a written statement outlining the special precautions to be taken to control the extraordinary hazards presented by night work. This program shall include, but not limited to such items as supplementary lighting of work areas, illuminated barricades, proper supervision, availability of medical facilities, and security precautions.

15) Emergency lighting facilities, (i.e. battery operated or equivalent) shall be required in all construction areas where normal light failures would cause employees to be subjected to hazardous conditions. Such systems shall be maintained monthly.

16) Employees required to enter into confined or enclosed spaces shall be instructed as to the nature of the hazards involved, the precautions to take, and the use of protective and emergency equipment. The Contractor shall comply with all regulations applicable for working in dangerous or potentially dangerous areas.

17) The use of torpedo or salamander type heaters are prohibited.

18) No open burning of any kind shall be permitted without permits from appropriate local authorities and the Engineer.

19) Flammable storage cabinets shall be labeled in conspicuous lettering "Flammable – Keep Fire Away" and "No Smoking".

D. MEDICAL SERVICES AND FIRST AID

1) At least one person who has valid certificates in first-aid training from either the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence, shall be available at the work site to render first-aid. Further, a minimum ratio of one such qualified person to 50 employees shall be maintained throughout the course of the

construction. A suitable emblem shall be affixed to the qualified person's hard hat, or other suitable means of identification shall be used.

2) First-aid supplies, approved by a physician licensed to practice in the State of Florida, shall be accessible for immediate use. One 16-unit first-aid kit (or equivalent) shall be provided for each 50 persons or fraction thereof.

3) First-aid kit (s) shall be provided in a weatherproof container with individual sealed packages for each type item. The kits shall be checked by the Contractor before being sent out on each job and at least weekly on each job to ensure that the expanded items are replaced.

4) A telephone shall be made available at the site before construction begins. Telephone numbers and locations of emergency facilities including emergency hospitals, physicians, ambulance service, police and fire department, as well as the complete street address of the work site, shall be posted in conspicuous locations at the work site, and at all telephone locations. The communication system for contacting necessary ambulance service or other emergency response personnel shall be operable at all times personnel are on the work site.

5) The location and number of approved stretchers provided for each contract shall be submitted to MDC for approval immediately after work commences on site. They will be maintained, properly protected and easily accessible at all times.

6) The Contractors, his supervisors and foreman, shall assure that any of his employees who suffers a job-related injury shall receive first aid and medical attention consistent with and as required by law.

7) The Contractor's first aid facility shall maintain a daily log of all injuries, both first aid and doctor cases. The log shall contain information to reflect the date, name of employee, employer, craft, supervisor, type of injury, how accident happened, time, disposition of patient and name of attendant.

8) The Contractor shall ensure that all OSHA and State of Florida record-keeping and reporting requirements are met.

E. DRINKING WATER

1) An adequate supply of potable water shall be provided in all places of employment.

2) Portable water containers shall be capable of being tightly closed and be equipped with a tap.

3) A common drinking cup is prohibited. Disposable cups shall be furnished.

4) Unused disposable cups shall be kept in a sanitary container, and a receptacle shall be provided for used cups.

5) All containers utilized for potable water shall be labeled as "Potable/Drinking Water Only".

F. PERSONAL PROTECTIVE AND LIFE SAVING EQUIPMENT

1) GENERAL

a) The Contractor is responsible for requiring and enforcing the wearing of appropriate personal protective equipment in all operations where there is an exposure to hazardous conditions.

b) The Contractors is to comply with all OSHA regulations (29CFR1926 Subpart E) regarding personal protection devices and life saving equipment.

c) All persons on the Work Site shall utilize the proper foot protection which meets ANSI Z41 (toe), Z41.2 (metatarsal) and Z41.4 (electrical) standards.

d) All persons on the Work Site shall utilize hand and body protection which meets ANSI/ISEA 105 and ASTM F23 standards.

2) HEAD PROTECTION

a) All persons on the Work Site shall be protected by NON-METALLIC protective helmets, which meet ANSI Z89.2 standards. Helmets for the protection of employees against impact and penetration of falling and flying objects shall meet the specifications contained in ANSI Z89.1 Safety Requirements for Industrial Head Protection. Bump caps are not acceptable.

b) All Work Sites shall have posted approved signs alerting all persons that hard hats are required on the site. The use of hard hats at the Work Site will be strictly enforced.

3) RESPIRATORY PROTECTION

a) Whenever feasible administrative and/or engineering controls fail or are inadequate to prevent harmful exposures to employees; the Contractor shall

provide and require the use of appropriate respiratory protective devices in accordance with OSHA, 29 CFR 1910.134.

b) Respiratory protective devices must be approved by the U.S. Bureau of Mines or acceptable to the U.S. Department of Labor for the specific contaminant to which the employee is exposed.

c) Employers must have a written respiratory protection program as defined in 29 CFR 1910.134.

d) Employees required to use respiratory protective equipment must be trained in the use and limitations of such equipment, fit tested annually and medically approved to wear respiratory protection as required by 29 CFR 1910.134.

e) Respiratory protective equipment shall be inspected regularly and maintained in good condition. Defective or worn parts shall be replaced.

4) HEARING PROTECTION

a) Feasible engineering or administrative controls shall be utilized to protect employees against sound levels in excess of those shown in the table below.

b) When engineering or administrative controls fail to reduce sound levels within the limits of the Table below, protective hearing devices in accordance with OSHA (29CFR1926.101) shall be provided and us.

c) Exposure to impulsive or impact noise should not exceed 140-db peak sound pressure level.

d) In all cases, where the sound levels exceed the values shown in the Table below, a continuing, effective hearing conservation program shall be administered.

e) PERMISSIBLE NOISE EXPOSURE TABLE (Source: OSHA, 29CFR1926.52)

Duration per day, hours	Sound level dBA slow response
8	90
6	92
4	95
3	97
2	100
1 –1/2	102

Duration per day, hours	Sound level dBA slow response
1	105
1 / 2	110
1 / 4 or less	115

f) Plain cotton is not an acceptable protective device. Hearing protection shall be used only when it meets OSHA requirements and is suitable to correct the exposure.

5. EYE AND FACE PROTECTION

a) Eye and face protection shall be provided and worn when machines or operations present potential eye or face injury.

b) Eye and face protective equipment shall meet the requirements of ANSI Z87. 1 – 2003, "Occupational and Educational Eye and Face Protection".

c) Employees involved in welding operations shall be furnished with a welding helmet with minimum grade 10 shade filter lens for shielded arc welding or cutting. Welding goggles with a minimum grade 4 shade filter lens may be worn only for oxyacetylene gas welding or burning.

d) Employees exposed to laser beams must be furnished suitable laser safety goggles, which will protect for the specific wavelength of the laser and be of optical density (0.0) adequate for the energy involved.

6. SAFETY NETS

a) Safety nets shall be provided when workplace are over roads, guideways, or more than 25 feet above other surfaces where the use of ladders, scaffold catch platforms, temporary floors, safety lines, or safety belts is impractical. Safety net systems shall conform to OSHA 29 CFR 1926 502.

b) Where nets are required, operations shall not be undertaken until the net is in place and has been tested & inspected by the Resident Engineer.

7. SAFETY BELTS, LIFELINES AND OTHER PERSONAL FALL ARREST SYSTEMS

a) Approved personal fall arrest systems (in accordance with OSHA; 29 CFR 1926.104 and 29 CFR 1926.502) shall be worn by those employees whose

work exposes them to falling from the perimeter of a structure or through shaftways and openings. Protection must also be provided for employees who are exposed to the hazard of falling into/onto dangerous equipment,

b) Employers must provide a training program for employees who might be exposed to fall hazards. The training shall include how to recognize such hazards and how the employees can minimize their exposure to such hazards. The training shall, at a minimum, comply with 29 CFR 1926.503. Re-training or refresher training must also be provided when necessary. Records of such training must be available for inspection by MDT.

8. WORKING OVER OR NEAR WATER

a) Employees shall be provided with a U.S Coast Guard approved life jacket or buoyant work vest.

b) Prior to and after each use, the buoyant work vest or life jacket shall be inspected for defects which would alter their strength or buoyancy. Defective units shall not be used and be removed from the job site.

c) Ring buoys with at least 90 feet of line shall be provided and available for emergency rescue operations. Distance between ring buoys shall not exceed 200 feet.

d) At least one lifesaving skiff shall be immediately available at locations where employees are working over or adjacent to water.

G. SIGNS, SIGNALS, BARRICADES AND TRAFFIC CONTROL

1) All traffic signs or devices used for protection of construction workmen or the public shall conform to the State of Florida Department of Transportation's "Roadway and Traffic Design Standards" and applicable permit(s) conditions. All work areas on or around highways, roads and streets shall follow approved maintenance of traffic plans.

2) Barricades, cones and/or similar protective devices shall be used whenever men or equipment are exposed to traffic or similar hazards.

3) When traffic lanes are closed due to work activity, advance warning signals and high level warning devices shall be used as described in the State of Florida Department of Transportation's "Roadway and Traffic Design Standards" and applicable permit(s) conditions. All work areas on or around highways, roads and streets shall follow approved maintenance of traffic plans.

4) Flagmen and signalmen will be properly trained, certified, wear high-visability clothing (as required by F-DOT FTDS600) and use appropriate procedures following the current F-DOT manual. Where flaggers are used, a flagger symbol or legend sign must als o be used.

5) All employees within 15 feet of the edge of the travelway and/or where employees are exposed to roadway traffic shall be required to wear a high visability vest vest/garment, per F-DOT manual.

6) Whenever and wherever possible and necessary, line voltage (12 volt) protected lights shall be used to mark fences and barricades and other such encroachments onto public streets or sidewalks. Warning lights shall be in accordance with F-DOT RTDS 600.

7) Where covered sidewalks are required they shall be provided with permanent lights to provide sufficient illumination for safe use by the public day or night. All bulbs shall be cage-protected.

8) Public walkways shall be kept clean and free of hazards at all times. When an existing pedestrian way or bicycle way is located within a traffic control work zone, accommodations must be maintained and include provisions for the disabled. Only approved temporary traffic control devices may be used to delineate a temporary traffic control zone for pedestrian and bicycle ways. Advanced notification af sidewalk closures and detours shall be provided by appropriate signs.

9) Where the Contractor is required to provide public walkway, they shall have abrasive, non-slip surface.

10) Where access to bus stop is disturbed or obstructed by the Contractors operations, safe access will be maintained or the bus stop relocated as directed by the Engineer. Coordination for maintaining or relocating bus stops with the appropriate agencies is the sole responsibility of the Contractors.

11) When steel plates or similar covers are used on public ways to cover excavations they shall be substantially secured to prevent movement imposed by traffic. Covers shall have non-slip surface, conforming to OSHA Specifications.

12) When such covers are located where there is pedestrian exposure, they shall be tapered at all sides with cut-back cold mix or similar material to eliminate tripping hazards. Covers shall have non-slip surface.

13) Free access shall be maintained to every fire extinguisher, fire hydrant, fire alarm box, fire escape and standpipe connection, street and traffic light control box. When required, hydrants shall be extended by suitable tube or piping to an

accessible point as approved by the Engineer. No obstructions shall be allowed at any time within 15 feet of a fire hydrant. Where materials are placed in the vicinity of a fire hydrant or a fire alarm box or fire extinguisher, and to such a height as to prevent the same from being readily seen, the position of such hydrant or fire alarm box or fire extinguisher shall be indicated by suitable signals, both day and night.

14) The Contractor shall erect and maintain fences and barricades to enclose the Contractor's work area, and provide watchmen where required to prevent unauthorized access.

15) No work shall be allowed above or below an active traffic lane. Contractor shall establish a work zone including appropriate lane closures following F-DOT RTDS 600 series.

H. MATERIAL HANDLING – (STORAGE, USE AND DISPOSAL)

1) All materials stored in tiers shall be secured to prevent sliding, falling or collapse.

2) Reinforcing steel shall not be used as a lifting ("Pick") point on any load nor as a guy line anchor.

3) Hooks, except special sliding choker hooks shall be securely moused when in use, or shall be provided with a functioning safety latch.

4) Scrap material of any kind, type or nature shall be placed daily into appropriate containers specifically supplied for this purpose. Containers shall be removed from the Work Site when full.

5) Loose material on open decks or other exposed locations shall be removed or secured at the end of each day to eliminate dislodgment by wind or other causes.

6) Compatibility of stored materials and storage methods will comply with all applicable OSHA, Fire Department and environmental agency standards.

7) Employees required to handle, use or dispose of hazardous materials shall be instructed regarding the safe handling, proper procedures, potential hazards, personal hygiene, and personal protective equipment required.

8) Disposal of materials shall be in accordance with all applicable Federal, State and Local regulations. All applicable recordkeeping and reporting requirements will be met by the Contractors.

I. TOOLS – HAND AND POWER

1) General

a) Keep the work area clear of clutter
b) Keep the work area well lighted
c) Maintain and keep tools sharpened, oiled and stored in a safe place
d) Supervisors instruct employees on using equipment and safe work practices before using equipment
e) Inspect tools, cords and accessories prior to use
f) Repair or replace problem equipment immediately
g) Use 3-prong electrical plugs, double insulated tools and safety switches
h) Machine guards must be in place and not removed
i) Do not wear loose clothing or jewelry when operating equipment
j) Install and repair equipment only if you are qualified to do so
k) Use the right tool for the job (i.e. do not use a pipe wrench as a hammer)
l) Carry a sharp tool pointed downward or place it in a tool belt/box
m) Protect sharp blades with a shield/sheath
n) Store tools in draws or chests with cutting edge down
o) Proper personal protective equipment shall be worn
p) All power hand tools shall be equipped with a "dead man" control where the power is shut down when the operator releases the tool
q) Never leave a running tool unattended
r) Tools of a non-sparking material and/or intrinsically safe tools must be used if fire or explosion hazards exist
s) All fuel operated tools shall be stoped and allowed to cool prior to being refueled, serviced, or maintained and proper ventiliating used when used in enclosed spaces
t) Power grinding machines shall have proper grounding. Work rests must be kept at a distance not to exceed 1/8" from the wheel surface
u) Avoid repetitive motion, hold tools in a neutral position

2) "Lock on" buttons on all hand held power drills are prohibited.

3) Powder Actuated Tools

a) High velocity tools are prohibited. Only low velocity piston drive tools are permitted.

b) Only employees who have been trained in the operation of the particular tool in use shall be allowed to operate a power actuated tool. ANSI STANDARD A10.3-1970.

c) Firing of the tools shall be dependent upon at least two separate and distinct operations of the operator, with the final firing movement being separate from the operation of bringing the tool into firing position. The tool shall be so

designed so as not to be operable other than when being held against a work surface with a force of at least five pounds greater than the total tool weight. Caution must be exercised to ascertain that the proper color coded charge, for the materials involved, is utilized.

d) In case of misfire, the operator shall hold the tool in the operating position for at least 30 seconds. He shall then try to operate the tool a second time. He shall wait again 30 seconds, holding the tool in the operating position. Then he shall proceed to remove the explosive load in strict accordance with the manufacturer's instructions. Misfired cartridges shall be placed carefully in a metal container filled with water and returned to the supervisor for disposal.

4) Grinding wheels shall not be operated at speeds in excess of the manufacturer's RPM rating as labeled on the wheel.

5) Face and eye protection or safety goggles shall be worn by all employees using grinding wheels, jackhammering, slag chipping, powder actuated tools or similar operations.

6) Radial Saws

a) The upper hood shall completely enclose the upper portion of the blade down to a point that will include the end of the saw arbor. The slides of the lower exposed portion of the blade shall be guarded to the full diameter of the blade by a device that will automatically adjust itself to the thickness of the stock.

b) Radial saw for ripping shall be provided with non-kickback finger or dogs approved by the manufacturer.

c) The saw and table shall be designed to prevent the blade from traveling beyond front of table.

d) Installation shall be in such a manner so that the front end of the unit be slightly higher than the rear, so as to cause the cutting head to return gently to the starting position when released by the operator.

7) Table saws shall be equipped with a functioning hood, guard, anti-kickback device and splitter.

8) Only power saws specifically designed by the manufacturer for cutting concrete block, or similar materials, shall be used for this purpose.

9) Cutting shall be done with water spray and the operator shall wear a face shield.

10) All hose couplings or any pneumatic or hydraulic equipment or tools shall be equipped with appropriate safety clips or retainers and shall be properly installed and maintained.

11) All appropriate machine and tool guarding devices shall be provided, shall be operational, and shall be use when the equipment is in operation.

J. WELDING AND CUTTING

1) Contractors shall instruct employees in the safe and proper use of cutting and welding equipment prior to using that equipment.

2) Oxygen and fuel gas pressure regulators, including their related gauges, shall be in proper working order while in use. Each regulator shall be provided with an anti-flashback device for protection against excessive oxygen back pressure in the fuel gas supply.

3) A minimum of one 10-pound all-purpose (ABC) dry chemical fire extinguisher shall be kept within 10 feet of any cutting or welding operation. The extinguisher shall be kept in a conspicuous place, free of any obstructions.

4) Proper personal protective equipment shall be worn while welding and cutting.

5) Welding screens shall be used in areas where prefabrication work is to be performed.

6) Oxygen and fuel gas regulators and hoses shall be maintained and in proper working order while in use.

7) All oxygen cylinders and fittings shall be kept free of grease and oil.

8) Do not weld without the approved goggles, hood and jacket/apron.

9) Always use approved gloves when welding.

10) Do not weld or burn in an area where fellow employees are working, without protective barriers, non-combustible flameproof screens/shields (blankets, covers, curtains etc.).

11) Do not weld where flammable or combustible material, such as waste, rags, paper, etc. can be ignited by the sparks or molten metal.

12) Do not weld in any location where open flame is not permitted.

13) Do not weld on a wooden bench or other structure that can burn.

14) Do not use leaky regulators, hose or other defective gas welding tools.

15) Do not use leaky gas cylinders.

16) Do not operate gas welding or cutting torches at pressure in excess of prescribed maximum.

17) Do not change or adjust pressure on regulators with torch valve closed.

18) Do not leave valves of gas cylinders open when not in use.

19) Do not leave valve key on gas cylinders when not in use.

20) Always remove all scale, rust, grease, protective surface coatings, oil and other foreign matter from metals before welding.

21) Always keep welding bench clear of dirt.

22) Always locate electric welding machine where it is protected from dirt, dust and harmful fumes.

23) Always see that the material being electrically welded is well grounded, and the ground connection from machine is tight.

24) Avoid fires on personal clothing from sparks or hot metal.

25) Always use protective clothing (welders legging, aprons, sleeves, jacket, etc.) when welding or burning.

26) Oxygen must not be used near flammable or combustible materials, such as grease, oil, etc., or any substance likely to cause fire.

27) Do not weld or cut in confined spaces without adequate ventilation.

28) Protect welding hose from being burned, trampled on or run over. Do not leave hose where it may be tripped over.

29) Valves on acetylene and oxygen tanks must be tightly closed when work is completed.

30) Carrying a lighted torch while climbing is forbidden.

31) Put rod stubs in a container. Stubs thrown on the floor become a slipping hazard.

32) Do not direct the flow of oxygen, from the torch, at clothing to remove dust, etc. This is a fire hazard.

33) Always have good ventilation when welding and gas cutting.

34) In the open air, when welding, cutting or heating metals having toxic substance(s), such as zinc, lead, cadmium, or chromebearing metals, approved respirator shall be used

35) When required have a certified fireguard while burning or welding. Fireguard must have a functional fire extinguisher present.

36) Use caution when removing eye protection. Hot slag may pop during cooling.

37) Remove manifold and replace protective caps on cylinders before storing welding unit (overnight, etc.).

38) Manifold hoses must be equipped with flash arrestors.

K. COMPRESSED GAS CYLINDERS

1) Valve protection caps shall be in place when compressed gas cylinders are transported, moved, or stored.

2) Cylinder valves shall be closed when work is finished and when cylinders are empty or are moved.

3) Compressed gas cylinders shall be secured in an upright position at all times, except when cylinders are actually being hoisted or carried.

4) Cylinders shall be kept at a safe distance or shielded from welding or cutting operations. Cylinders shall not be placed where they can contact an electrical circuit.

5) You are forbidden to lift or transport gas cylinders with hoisting equipment. Rough handling of loaded or empty gas cylinders is dangerous. Install protective caps onto cylinders before moving same. Transport cylinders on handcarts equipped with chains and secure the cylinder during movement. Do not accept cylinders, which do not have a protective cap.

6) Grease or oil on acetylene cylinders or oxygen cylinders is forbidden. It is extremely dangerous.

7) Avoid freezing acetylene cylinders.

8) Always remove leaky gas cylinders to open air, place them clear of flammable material or anything that might ignite them.

9) Always secure cylinders in an upright position. When a cylinder is empty, it must be marked "empty" and stored separately from full cylinders.

10) Protect cylinders from excessive heat. Do not store near steam pipes, furnaces, etc.

11) Oxygen cylinders should not be stored with acetylene or other highly combustible materials, including welding units. A minimum of 20 feet must be maintained from combustible and flammable gases.

12) All cylinders must be transported and stored with the protective cap securely in place. Never store cylinders with regulators/manifolds attached.

13) All cylinders must be clearly labeled as to content.

L. ELECTRICAL

1) Extension cords and temporary lighting electrical cords shall conform to the current edition of the National Electrical Code table 400.11. "Hard Usage" or "Extra Hard Usage", and shall be protected against all types of abrasion and damage.

2) All male plugs and female receptacle connections shall have cords physically interlocked to prevent accidental or unintentional separation and provide complete and positive continuity and grounding.

3) All power cords connected to panels of breaker boxes shall be connected using plugs. No direct wiring is permitted.

4) Temporary (extension) cords used to supply tools shall be limited to a maximum length of 200 feet, except that additional length may be used if supplemental positive equipment grounding is maintained within 200 feet of the tool or power use.

5) All portable power generators shall be grounded.

6) Ground-Fault Circuit Protection:

   a) Ground-Fault Circuit interrupters will be installed on all 120 volts, single-phase, 15 and 20 ampere receptacles, on the Work Site.

   b) An assured equipment grounding conductor program may be substituted for ground-fault circuit protectors, only after the following has been provided.

c) Submit a written program, developed by a licensed electrician, including specific procedures adopted by the Contractor to the Engineer and MDC Risk Management.

7) All Work Site conditions will comply with requirements in OSHA 1926 Subpart K.

8) Before starting work on electrical equipment and lines, inspections and tests must be made to determine if they are alive or dead.

9) Use only tools or devices provided and see that they are in good condition.

10) Never touch two parts at different potentials or a single exposed live part at a dangerous potential to ground unless employee is insulated from other conducting surfaces, including ground.

11) Standing with hands behind back, with back toward generator or switchboard, is prohibited.

12) Employees working near live equipment and lines must protect themselves from tripping, slipping or falling, or from touching equipment or lines with body, tools or material.

13) Work on or about electrical circuit, apparatus or equipment only if qualified and with a thorough knowledge of its operating voltage and service, and then only when authorized by the immediate supervisor.

14) Do not use appliance, device, tool, flashlight, material or equipment that is not designed and approved for the maintenance and operation of the circuit on which it is to be used.

15) Insulation, weather proofing or covering on electrical wire, apparatus or equipment must not be depended upon for protection against shock.

16) Do not use bolt, rivet, cotter key or other object as a jumper in place of fuse.

17) Do not place clothing, lunch, tools, clothes hanger, or other unauthorized items in or about the power or control cabinet, switch box, battery box or on top of electrical apparatus.

18) Place "DO NOT OPERATE" warning tag on switch, set to de-energize line, apparatus or equipment. "Lock Out" procedures are preferred where feasible. At all times, when working on equipment that has the potential to cause harm or create a hazard, "Lockout/Tagout projection Televisions" procedure shall be followed. Lockout/Tagout procedure requires each employee to place a lock (if possible) or a safety tag on the energy source of any equipment that has the

potential to cause harm if the equipment is activated while it is being worked on. Refer to OSHA Standard 1910.147, "Control of Hazardous Energy".

19) Consider every circuit to be alive.

20) Use extreme care when using "snakes" in preparation of installing wire or cable. The coiled "snake" may fly loose and strike a person or electrified equipment.

21) Do not allow wet clothing, raincoats, etc., to come in contact with electrified equipment.

22) Do not lubricate electrical apparatus with power on.

23) Do not use water to put out electrical fires.

24) Do not change any wire or connections with power on.

25) Do not shift brushes in electrical motors with power on.

26) Do not leave the secondary of a current transformer open-circuited, or open up the secondary with power on.

27) Never wear ring(s) or jewelry on fingers on person when working near or handling electrical equipment.

28) Inspect all temporary cords and plug equipment for damage prior to use. Cords with damaged insulation, covers, plugs or missing grounding pins are not to be used.

29) Do not pass temporary cords through door openings or other areas where they are likely to be cut.

30) When temporary cords are used, care must be taken to ensure a trip hazard is not created.

31) Portable extension lights shall be visually inspected by employees using them. Lamp guards must be in place on all extension lamps.

32) Electrical plugs of portable extension cords, or cords attached to any electrical apparatus, shall be disconnected by grasping the plug and not by pulling the cord.

LADDERS AND SCAFFOLDS

1) Ladders:

   a) The use of ladders with broken or missing rungs or steps, broken or split side rails, or with other faulty or defective construction is prohibited. When ladders with such defects are discovered, they shall immediately be withdrawn from service.

   b) Portable ladders shall be placed on a substantial base at a 4-1 pitch, have cleat access at top and bottom, extend a minimum of 36 inches above the landing, and be secured against movement while in use.

   c) Portable metal ladders shall not be used for electrical work or where they may contact electrical conductors.

   d) Job-made ladders shall be constructed for this intended use. Cleats shall be inset into side rails ½ inch, or filler blocks used. Cleats shall be uniformly spaced, 12 inches, top-to-top.

   e) Wooden ladders must not be painted. Split or rotted conditions would not be easily seen and constitute a hazard.

   f) The foot of a ladder shall be placed 1/4 of its length away from vertical plane of its support and must be secured to prevent all possibility of slipping.

   g) Before climbing ladders, see that your shoes are free and clean of slippery substances. Watch out for broken rungs.

   h) Face the ladder while climbing either up or down.

   i) Never place a ladder in front of an unlocked door.

   j) Employees must not reach out from a ladder more than an arm's length.

   k) Ladders must be inspected by employees using them daily. Defective ladders are to be marked and kept separate from serviceable equipment and must be repaired before using.

   l) Do not "walk" a ladder while on it.

   m) Do not jump from or slide down any portion of any kind of ladder.

n) When getting off a ladder, make certain of secure footing and avoid stepping on loose stones, debris or into a depression before releasing handhold on the ladder.

o) A stepladder must be fully opened and spread properly before being used. Never stand on the top step of a stepladder.

p) When carrying tools or other objects up a ladder presents a hazard, they should be raised with a rope and bucket.

q) Two or more persons should raise, extend, shorten or move extension ladders. Never use the top section of an extension ladder as a single ladder, since it has no safety feet.

r) Always rope off the area directly beneath ladders.

s) Never leave extended ladders unattended. Remove ladders when there is a temporary stoppage of work.

2) Scaffolds:

a) Platforms shall be tightly planked for the FULL width of the scaffold except for any necessary entrance opening. Platforms shall be secured in place, with proper guardrail and toe boards.

b) Workmen shall not be allowed to climb or stand in cross bracing, or scaffold bucks.

c) Adjustment screws on scaffold legs shall not be extended beyond the manufacturer's recommendations, or two-thirds of the threaded length, whichever is shorter.

d) Casters shall be properly designed for strength and dimensions to support four times the maximum intended load. All casters shall be provided with a positive locking device to hold the scaffold in position. Casters shall be provided with a positive means of attachment to the scaffold legs.

e) Scaffold support bearing shall not be comprised of concrete block or similar materials and footed securely or a solid, stable base.

f) Materials shall not be stored on scaffolds in excess of the suppliers needed for the immediate operation.

g) The edges of scaffolds shall be protected with railings and toe boards.

h) When using rollers for moveable scaffolds, lock or secure wheels.

i) Do not use bent or twisted members on scaffolds.

k) Always remove a scaffold as soon as there is no more need for it. A scaffold is a constant hazard.

l) Always rope off the area directly beneath scaffolds.

m) Use extreme caution and use approved fall protection equipment on elevated surfaces lacking side rail and/or approved guard.

FLOORS, WALL, OPENINGS AND STAIRWAYS

1) One-half inch mild plow steel cables or equivalent, or ¼ inch alloy steel chains may be used on bridge or guideway decks, open floor edges, and similar applications, in lieu of standard wooden top midrails. Such cables or chains shall be firmly anchored and kept taut. All connections or cables shall be looped and clamped. Standard toeboards shall be used in such instances.

2) Floor openings shall be guarded by a standard railing and toeboards or cover. In general, the railing shall be provided on all exposed sides, except at entrances to stairways. Temporary floor openings shall have standard railings.

3) Every open-sided floor or platform, six feet or more above adjacent floor or ground level, shall be guarded by a standard railing, or the equivalent, on all open sides except where there is entrance to a ramp, stairway, or fixed ladder.

4) Runways four feet or higher shall have standard railings on all open sides except runways more than 18 inches wide used exclusively for special purposes may have the railing on one side omitted where operating conditions necessitate.

RAILING

1) A standard railing shall consist of top rail, intermediate rail and posts, and have a vertical height of approximately 42 inches from upper surface of top rail to the floor, platform, etc.

2) The top rail of a railing shall be smooth-surfaced, with a strength to withstand at least 200 pounds. The intermediate rail shall be approximately halfway between the top rail and floor.

3) A stair railing shall be of construction similar to a standard railing, but the vertical height shall be not more that 34 inches nor less than 30 inches from upper surface of top rail of tread, in line with face of riser at forward edge of tread.

4) A standard toeboard shall be at least four inches in height, and may be of any substantial material either solid or open, with openings not to exceed one inch in greatest dimension.

CRANES, DERRICKS, HOISTS, ELEVATORS, PILE DRIVERS, & CONVEYORS

1) Prior to commencement of any work using any hoisting equipment on the Work Site, the Contractor will provide the Engineer with a valid certification of compliance for shore-based, or water borne equipment meeting all the provisions of OSHA 29CFR 1919.

2) Record Keeping Requirements:

   a) Supervision of all testing, examinations, inspections, heat treatments and record keeping procedures shall be carried out by such persons as are so designated in OSHA 29CFR 1919.

   b) Certificates issued by an accredited person (agency) shall be signed and all register entries made only by persons authorized by such accredited person (agency).

   c) Certification shall not be issued until all conditions cited for correction on the semi-annual certification report form have been corrected in a manner satisfactory to the certifying agency.

   d) In the event deficiencies remain uncorrected, no certification shall be issued.

   e) An accredited person (agency) shall maintain records of all work performed including reports of work or tests performed by others (nondestructive testing, heat treating, etc.), in relation to each certification. Such records shall be available for examination upon request by MDC Risk Management, the Engineer or their authorized representatives.

   f) A copy of each certificate relating to semi-annual examination and/or unit proof load test shall be available with each crane or derrick.

3) A checklist will be prepared and submitted to the Engineer by the Contractor for any lift where the load exceeds 80% of the load chart capacity for the crane or derrick, or, where the lift involves the use of two or more cranes. (See Appendix C).

a) No lifts meeting the above criteria will be made without prior submission of a Critical Lift Checklist.

b) Where erection drawings are prepared for submittal to the Engineer, Appendix C, will not be required if all the information contained therein is shown on the drawing submitted.

c) Prior to making the lift, the conditions shown on the drawing submitted will be verified by the Contractor's representative at the Work site. Any deviations from the erection drawing submitted will be reviewed and verified as safe by the Contractor's representative.

4) Operation of boom equipment, or other equipment such as forklifts, backhoes, and the handling of any load in the proximity of electrical transmission lines is forbidden within a minimum of 10 feet. Further, if such equipment is positioned so that it is possible by rotation or any other movement, whether anticipated or not, to possibly contact high voltage, de-energizing of the lines, restraints, "hold-backs", or other positive physical means will be required. (Note: "High Voltage" is defined as voltage in excess of 400 volts).

5) All cranes shall be equipped with spirit level, or equivalent, to indicate the level of the crane fore and aft, and across the width. As nearly as possible, the crane shall be operated in level position.

6) After normal working hours and during other extended periods of non-usage, crane booms shall be lowered to a horizontal position to minimize the chance of movement due to wind. If this cannot be accomplished, load lines shall be securely fastened to a substantial anchoring point.

7) Except for floor-controlled overhead track cranes, a bell or other effective audible warning signal shall be provided for each crane equipped with power traveling mechanism, which shall be automatically engage and immediately audible when the crane begins to travel.

8) All pinch points drive mechanisms, and other hazardous moving parts shall be effectively guarded. (See Appendix C for suggested checklist).

9) Conveyor Systems

a) Conveyor systems shall be equipped with an automatic audible warning signal sounded immediately **BEFORE** starting up the conveyor.

b) Whenever a conveyor is equipped with a catwalk, a safety cable shall be installed on the conveyor to stop it instantly in an emergency, so as it cannot be started until the actuating switch has been reset to the "On" position. The

cable shall not be less than 12 inches nor more than 18 inches above the conveyor belt and shall extend the entire length of the conveyor.

10) Catwalks shall be kept clean and free of tripping hazards.

11) Any anticipated use of helicopters for lifting operations shall require advance notice and approval by the Engineer and MDC Risk Management.

12) No person will be allowed to ride on a suspended load or hook for any reason.

13) No person shall be allowed to stand or pass under the elevated portion of any equipment whether loaded or empty.

14) Pile driving loftsmen shall use safety belts when working at elevations outside loft platforms. When the leads are to be rotated or moved, the loftsman shall descent from the leads.

15) Exhaust pipes, steam lines, and other hot surfaces, located where employees could contact them, shall be effectively guarded or insulated.

16) Do not operate cranes or hoisting machines unless qualified to do so.

17) Do not stand under load being moved by crane.

18) Always test crane brakes and limit switches before operating on your tour of duty.

19) Always be sure that path of crane travel is clear of people or alerted by signal alarm in advance of moving load and while crane is in motion.

20) Always be sure that hooks, chains or cables are secure and properly placed before raising load.

21) Always be sure that loose parts are removed from load before raising it.

22) Only the operator is permitted to be in the operators cab while crane is in operation, except when authorized maintenance is being performed or a new operator is being trained.

23) Hoisting hooks, chains or cables are to be visually inspected daily for flaws, cracks, etc., by employees using them and defects reported to their immediate supervisor. A monthly inspection with a certification record which includes the inspection date and signature of individual inspector must also be done.

24) Do not lift load with twists or kinks in the chain, rope or sling.

25) Operators of cranes that are moving loads in close proximity of exposed current carrying devices, are required to maintain a safe operating distance at least 10 feet from such devices to avoid contact with hoisting cables, blocks, hooks, etc.

26) Know the load rating of equipment when starting to raise an unusual or heavier than normal load (Load should not exceed limits of crane). Test brakes when load is a few inches from floor or ground.

27) When hoisting unusual material or machinery, attach a chain or cable well above the center of gravity to prevent the load from tilting or falling over when lift is made

28) When hoisting long shaped objects, a red tag line or other method of control is required to prevent load from turning end on end.

29) No employee shall ride or hang onto tongs, slings, hooks or load of hoisting equipment.

30) Before removing sling or chain from load, observe arrangement of load to be sure it has settled securely.

31) Keep from positioning yourself between the load being handled and a fixed object, (wall, stanchion or car) to avoid being pinned.

32) Leaving any hoisting equipment with a suspended load unattended, is forbidden.

33) Before hoisting a load, one (1) person must be designated to give signals, and all persons involved in the hoisting operation shall be notified who has been designated.

34) Before pulling a hoisting rope, wire, cable, chain or other such tackle, secure a firm footing, assume a braced position, and move clear in the event of adverse action.

35) Use both hands, when climbing into or leaving the crane cab. Lift tools and materials to the cab with a hand line.

36) If repairs to crane cause it to be laid up for a long period of time, lock the main switch in the open position to prevent use.

37) Make sure the controllers are in the "Off' position before opening or closing the main switch.

38) If power should go off, move the controllers to the "Off' position at once. Wait until power is restored before operating controllers again.

39)Never depend upon a limit switch to stop hoisting motor. Use your controls. Do not attempt to use two controls at the same time when approaching limits.

40)Whenever leaving the crane, place all controllers in the "Off" position, open the main switch and set the brakes.

41)When hoist operator's view is obstructed in the direction of movement, assign an employee to precede the hoist and warn others of its approach.

42)Do not shorten, repair or splice hoisting chain with wire, nails, bolts or other objects.

43)Use standard hoisting hand signals.

44)Do not make side pulls with a hoist, which will misalign the rope. It may cause the load to swing sideways or damage the rope itself.

45)Do not operate crane (move load) while the load is being raised or lowered.

46)Approved fire extinguishers are required in overhead cabs.

47)Any construction activity, including crane movement, occurring within 30' of the drip line of a Metromover or Metrorail guideway will also be subject to compliance with Miami-Dade Transit Adjacent Construction Manual requirements and OSS approval.

Q. WIRE ROPES, CHAINS, AND ROPES

1) Wire ropes, chains, ropes, and other rigging equipment shall be inspected prior to use and as necessary to assure their safety. Defective gear shall be tagged and removed from service.

2) Job or shop hooks and links, or makeshift fasteners, formed from bolts, rods, etc., or other such attachments, shall not be used.

5) The proper type of chain is to be used for the particular application (overhead lifting, transport, cargo securement, etc)

6) Any attachment, such as hooks or links, are to have a rated "working load limit" at least equal to the chain/rope with which it is used.

3) When U-bolts are use for eye splices, the U-bolt shall be applied so that the "U" section is in contact with the dead end of the rope.

4) When U-bolt wire rope clips are used to form eyes, the following table shall be used to determine the number and spacing of clips.

NUMBER AND SPACING OF U-BOLT WIRE ROPE CLIPS

Improved plow steel, rope diameter inches	Number of clips Drop forged	Other material	Minimum Spacing (inches)
1/2.....	3	4	3
5/8	3	4	3-3/4
3/4.....	4	5	4-1/2
7/8.....	4	5	5-1/4
1.....	5	6	6
1-1/8.....	6	6	6-3/4
1-1/4.....	6	7	7-1/2
1-3/8.....	7	7	8-1/4
1-1/2.....	7	8	9

7) Slings are to be tagged for simple inclusion of sling type, working load limit, reach, serial number, chain size and grade.

8) State and federal regulations regarding size and number of chain systems required for securing loads on trucks are to be adhered too.

R. MOTOR VEHICLES AND MECHANIZED EQUIPMENT

1) All equipment that is left unattended adjacent to a roadway in normal use shall have appropriate lighted barricades placed around the location of the equipment

2) Loaders, backhoes, bulldozer and other similar equipment shall have their blades or buckets fully lowered and engines shut-off when left unattended.

3) All vehicles and equipment shall be checked at the beginning of each shift to ensure that the equipment is in proper operating condition and that accessories that affect safe operations are free from defects.

4) Heavy equipment, machinery, or parts thereof, shall be blocked to prevent falling or shifting before employees are permitted to work under or between them.

5) All equipment and vehicles with cabs shall have safety glass or equivalent windshields that are free of cracks and defects. Broken or cracked glass shall be replaced.

6) No person shall be allowed to ride in or on any equipment or vehicle except in seats, which are provided by the manufacturer.

7) Only trained, qualified and/or licensed persons are to operate equipment/vehicles.

8) All vehicles are required to have visual and audio back-up alarms.

S. EXCAVATION, TRENCHING AND SHORING

1) The Contractor shall call the Engineer who will call the Underground Utilities Notification Center at 1-800-432-4770 prior to any excavation regarding utilities. All initial excavation, which is done to expose all subsurface utilities, shall be done by hand to prevent damage. When exposed, they shall be protected at all times by suitable bridging, boxing, hangers or other supports during the prosecution of the work.

   a) To provide access in emergencies, and for routine inspections of valves on water, gas or other mains, and to electrical power, communications, signal alarm and other service boxes, junction boxes and manhole that are decked over; trap door of a suitable size with suitable identifying steel plates securely attached thereto, shall be provided at all times in the decking.

   b) The Contractors shall have a copy of the water main and gas drawings, clearly marked, to show the valves that control flow in the area and at the construction site. At least two valves in all directions outside the net lines shall be shown. The Contractor's superintendent shall mark and keep clear the location of valves for ready identification, should trouble develop.

2) Walkways shall be kept clean and free of all hazards at all times.

3) Internal combustion engines used in confined areas, such as in excavations or utility vaults where natural ventilation is limited, shall have exhaust fumes dispelled with forced ventilation or equivalent means.

4) All excavations and similar work areas where an exposure to the public or work personnel exists shall be promptly and completely fenced or barricaded, as shown in the Contact Drawings, except in those areas temporarily required to be open for the conduct of the work, then these openings shall be guarded to prevent access.

5) Adjustment screws on cross braces or trench jacks shall not be extended beyond the manufacturer's recommendations or 2/3 of the threaded length, whichever is more restrictive.

6) No one shall be permitted to climb or work from cross bracing.

7) Supervision – Excavation work shall at all times be under the immediate supervision of someone with authority to modify the shoring system or work methods, as necessary, to provide greater safety. He shall frequently examine the material under excavation and improve the shoring or methods beyond the minimum requirements, as necessary, to insure protection of workmen from moving material.

8) Removal of Shoring – No part of the shoring system of any excavation shall be removed until proper steps have been taken to avoid hazard to workmen from moving material. If a newly installed masonry or concrete wall is to be depended upon for this protection, it must have attained adequate strength to sustain resulting pressures.

9) Access and Egress – Convenient and safe means shall be provided for workmen to enter and leave the excavated area. This shall consist of a standard stairway, ladder, or ramp securely fastened in place at suitably guarded or protected locations where men are working and shall not require movement farther than 25 feet to reach such egress.

10) Blasting will not be permitted on the Work Site without prior approval of the Engineer and MDC Risk Management.

11) If any excavation (s) are required or requested to be left open by a utility company (s), municipality (s), or governmental agency, the excavations (s) will remain the sole responsibility of the Contractor for proper barricading and protection.

T. LASERS

1) Only qualified and trained employees shall be assigned to install, adjust, and operate laser equipment.

2) Employees shall wear proper eye protection where there is potential exposure to laser light greater than 0.005 watts (5 milliwatts).

3) Beams shutters or caps shall be utilized, or the laser turned off, when laser transmission is not actually required. When the laser is left unattended for a substantial period of time, such as during lunch hour, over-night, or at change of shifts, the laser shall be turned off and shall be secured in a manner, which will preclude indiscriminate or unauthorized activation.

4) Employees shall not be exposed to light intensities above: direct staring – 1 microwatt per square centimeter; incidental observing – 1 milliwatt per square

centimeter: diffused reflected light – 21/2 watts per square centimeter. Employees shall not be exposed to microwave power densities in excess of 10 milliwatts per square centimeter.

5) The Engineer shall be notified of the location, time and qualifications of person or persons operating the laser.

U. ROLLOVER PROTECTIVE STRUCTURES, OVERHEAD PROTECTION AND REVERSE WARNING ALARMS

1) On ALL rubber-tried or crawler scrapers, bulldozers, front-end loaders, backhoes, motor graders, industrial tractors and forklift trucks, Rollover Protective Structures (ROPS) and Falling Object Protective Structures (FOPS) are required. (Note: See OSHA for structural performance standards).

2) On equipment where ROPS are required (above), seat belts shall be installed and worn by operators.

3) In lieu of a signalman, all bi-directional earthmoving, haulage or compacting equipment, and all trucks with a body capacity of 1-1/2 yards or more used to haul dirt, rock, concrete or other material shall be equipped with an automatically operated reverse signal alarm (such as buzzer, horn or bell) which is audible from a distance of 100 feet from the rear of the vehicle in operation. It shall be the duty of the contractor to inform his suppliers of these requirements.

V. CONCRETE

1) All equipment and materials used in concrete construction and masonry work shall meet the applicable requirements for design, construction, inspection, testing, maintenance and operations as provided in OSHA.

2) Employees working more than six feet above adjacent working surfaces, placing and typing reinforcing steels in walls, piers, columns, etc., shall be provided with a personal fall arrest system (29CFR 1926.502), or equivalent device.

3) Employees shall not be permitted to work above vertically protruding reinforcing steel unless it has been protected to eliminate the hazard of implement.

4) Guying – Reinforcing steel for walls, piers, column and similar vertical structures shall be guyed and supported to prevent collapse.

5) Wire mesh rolls – Wire mesh rolls shall be secured at each end to prevent dangerous recoiling action.

6) Pumpcrete systems – Pumpcrete or similar systems using discharge pipes shall be provided with pipe supports designed for 100 percent overload. Compressed air hose in such systems shall be provided with positive fail-safe joint connectors to prevent separation of sections when pressurized. Safety chains shall be provided on all line two inches in diameter or larger.

7) Concrete buckets equipped with hydraulic or pneumatically operated gates shall have positive safety latches or similar safety devices installed to prevent aggregate and loose material from accumulating on the top and sides of the bucket.

8) Riding of concrete buckets for any purpose shall be prohibited, and vibrator crews shall be kept out from under concrete buckets suspended from cranes or cableways.

9) When discharging on a slope, the wheels of ready-mix trucks shall be locked and the brakes set to prevent movement. The use of chocks is also required.

10) Nozzlemen applying a cement, sand, and water mixture through a pneumatic hose shall be required to wear protective head and face equipment.

11) When temporary storage of reinforcing rods, materials, or equipment on top of formwork becomes necessary, these areas shall be strengthened to meet the intended loads.

12) The sills for shoring shall be sound, rigid, and capable of carrying the maximum intended load.

13) All shoring equipment shall be inspected prior to erection to determine that it is as specified in the shoring layout. Any equipment found to be damaged should not be used for shoring.

14) Erected shoring equipment shall be inspected immediately prior to, during, and immediately after the placement of concrete. Any shoring equipment that is found to be damaged or weakened shall be immediately reinforced or reshored.

15) Reshoring shall be provided when necessary to safety support slabs and beams after stripping or where such members are subjected to superimposed loads due to construction work done.

16) Metal tubular frames used for shoring shall not be loaded beyond the safe working load recommended by the manufacturer.

17) All locking devices on frames and braces shall be in good working order; coupling pins shall align the frame or panel legs; pivoted cross braces shall have

their center pivot in place; and all components shall be in a condition similar to that of original manufacture.

18) When checking the erected shoring frames with the shoring layout, the spacing between towers and cross brace spacing shall not exceed that shown on the layout, and all locking devices shall be in the closed position.

19) Devices for attaching the external lateral stability bracing shall be securely fastened to the legs of the shoring frames.

20) Formwork and shoring shall be designed, erected, supported, braced, and maintained so that it will safely support all vertical and lateral loads that may be imposed upon it during placement of concrete.

21) Working drawing showing the jack layout, formwork, shoring, working decks, and scaffolding, shall be available at the Work Site for review by the Engineer.

22) Stripped forms and shoring shall be removed and stockpiled promptly after stripping. In all areas which persons are required to work or pass, protruding nails, wire ties, and other form accessories not necessary to subsequent work shall be pulled, cut, or other means taken to eliminate the hazard.

23) Imposition of any construction loads on the partially completed structure shall not be permitted unless such loading has been considered in the design and approved by the Engineer.

24) Jacks and vertical supports shall be positioned in such a manner that the vertical loads are distributed equally and do not exceed the capacity of the jacks.

25) When checking the erected shoring towers with the shoring layout, the spacing between posts shall not exceed that shown on the layout, and all interlocking of tubular members and tightness of couples shall be checked.

26) All baseplates, shore heads, extension devices, or adjustment screws shall be in firm contact with the footing sill and the form material and shall be snug against the posts.

27) For stability, single post shores shall be horizontally braced in both the longitudinal and transverse directions, and diagonal bracing shall also be installed. Such bracing shall be installed as the shores are being erected.

28) All baseplates or shore heads of single post shores shall be in firm contact with the footing sill and the form materials.

29) Whenever single post shores are used in more than one tier, the layout shall be approved by the Engineer.

30) When formwork is at an angle, or sloping, or when the surface shored is sloping, the shoring shall be designed for such loading.

31) Adjustment of single post shores to raise formwork shall not be made after concrete is in place.

32) Fabricated single post shores shall not be used if heavily rusted, bent, dented, rewelded, or having broken weldments or other defects.

33) Timber shall not be used if it is split, cut, has sections removed, is rotted, or is otherwise structurally damaged.

34) Nails used to secure bracing or adjustable timber single post shores shall be driven home and the point of the nail bent over if possible. Double head nails will be permitted.

W. DEMOLITION

1) All sidewalks and walkways open to the public shall have abrasive non-skid surface and shall be kept clean and free of tripping hazards at all times.

2) "NO PARKING" zones with appropriate signs and barricades shall be displayed adjacent to buildings being demolished.

3) Water or other means of dust control shall be used where dust presents a health or environmental hazard, property damage potential, or nuisance.

4) See this Manual's section for Rollover and Falling Object Protection Structures, which also applies to demolition equipment.
5) Provide adequate protection to prevent damage to pipes, conduits, wires, cables, or structures above or below ground, which are not designated for removal.

6) Overhead protection shall be erected over sidewalks and shall extend at least ten feet beyond the building lines along direction of the sidewalks. Overhead planking shall be a minimum of three-inch full dimension lumber placed on adequately designed, metal or timber frames.

7) Substantial catch platforms shall be erected around all sides of the building prior to any demolition. Design must be approved by the Engineer.

8) Solid barriers of ¾ inch exterior fire rated B/D Plywood at least eight feet high shall be erected around the structure at ground or sidewalk level to protect the public. The barriers shall be framed with, at a minimum, 2"x3" fire rated studs 16" on center.

9) Full time flagman shall be provided to assist truck egress and ingress.

10) All mechanical, electrical, air conditioning, ducting, skylights, windows, and any other equipment, material or objects on roofs or walls of adjoining or adjacent structures to buildings under demolishment shall be adequately protected from falling material and activity of wrecking crews and equipment.

11) No mechanical equipment (i.e. headache ball, impact equipment other than hand held) shall be used within six feet of any adjoining structure.

12) Employees engage in the demolition or removal of any pipes, structures or machinery covered or insulated with asbestos shall conform with all federal, state and local codes, rules, regulations and requirements including but not limited to:

a) 29CFR 1926.1101

b) 40CFR 61, Subpart M

c) Florida Statue 469.001-469.099

d) Miami-Dade Department of Environmental Resource Management

13) Employees engage in the demolition, removal or disturbance of any listed hazardous substance shall conform with all applicable federal, state and local codes, rules, regulations and requirements.

X. ADVERSE WEATHER CONDITIONS

1) Disassemble all scaffolds, loose formwork, radio antennas and secure properly.

2) All items that cannot be secured shall be stored inside secured storage areas or buildings.

3) All crane booms shall be lowered to ground level and secured to prevent movement.

4) All office trailers shall be tied down in compliance with MDC Tie Down Ordinance No. 77-1 upon original installation. All tie down straps, ground anchors, piers, etc., shall be checked for condition and operation.

5) All exposed glass on the Work Site shall be protected by a solid, rigid covering.

6) All free standing walls shall be shored from both sides.

7) Before employees are dismissed from the Work Site, the Contractors shall make a thorough inspection to verify all necessary precautions have been taken, and report to the engineer for any further instructions.

8) All precautions for construction sites during hurricane conditions, as required by the Florida Building Codes (Appendix D) shall be met.

9) All contractors shall develop a project specific hurricane plan. This plan will include a detailed description of all hurricane preparation activities for each MDT phase of hurricane readiness including:

   a) Phase A – Pre-Season Preparedness

   b) Phase B – Hurricane Advisory (48 hours prior to landfall)

   c) Phase C – Hurricane Watch (24-48 hours prior to landfall)

   d) Phase D – Hurricane Warning (24 hours prior to landfall)

   e) Phase E – Landfall

   f) Phase F – Recovery/Post Hurricane

10) Progression through the MDT phases of hurricane readiness will be declared by the MDT Hurricane Disaster Preparedness Coordinator (Coordinator). The Coordinator may accelerate preparedness levels based on prevailing conditions and expectations. The time of day the storm is expected to arrive, along with the Miami-Dade Emergency Operations Center levels of activation, are some of the factors that are considered. The MDT readiness phase will be communicated through the Resident Engineer or other MDT contract representative.

Y. HOUSEKEEPING

1) All refuse piles shall be removed from the Work Site immediately.

2) Stored and stacked materials shall be kept orderly, properly stacked, choked, and secured.

3) Any protruding nails, etc., shall be bent, removed or clinched immediately.

4) Oil, grease, and water spills shall be cleaned up immediately.

5) Loose materials, tools, or equipment shall be kept off stairs, out of walkways, ramps, platforms at all times when not in use.

6) Depressions and pot-holes in vehicle or walkway surfaces on the Work Site shall be properly filled and graded immediately.

7) Walkways, vehicle travel ways, ramps, railings, and stairways, shall be kept free from debris, properly installed and maintained.

8) Smoking or the use of open flames within 25 feet of flammable storage areas or fueling areas shall not be permitted.

9) Flammable storage areas shall be properly posted **"NO SMOKING"**, provided with adequate fire extinguishers and free of combustible materials.

10) All sanitary facilities used on the Work Site shall be maintained on a daily basis.

11) All structures shall have a minimum of a 5-foot perimeter clearance that is to be free from any combustible debris or materials.

Z. HAZARDOUS SUBSTANCES

1) The Contractor shall develop, implement and maintain a written Hazard Communication/Right-to-Know Program and comply with all applicable requirements of OSHA Hazard Communication Standard 29CFR1910.1200.

2) The Contractor shall ensure that each container of hazardous substances in the workplace is labeled, tagged, or marked with the following information:

   a) identify of the hazardous substance (s) contained therein
   b) appropriate hazard warnings

3) The Contractor's written hazard communication program shall describe how the criteria for labeling; Material Safety Data Sheets (MSDS); employee information and training will be met and also include:

   a) A list of the hazardous chemicals known to be present and their locations at the Work Site.
   b) The methods the employer will use to inform employees of the hazards of non-routine tasks & the hazards associated with hazardous substances contained in unlabeled pipes in their work areas.

4) The Contractor shall maintain copies of the required Material Safety Data Sheet (MSDS) for each hazardous substance in the workplace, and shall ensure that they are readily accessible during each work shift to employees. (The Contractor may obtain the MSDS for a product by requesting it from the product's manufacturer, distributor, or importer.

5) Where employees must travel between workplaces during a workshift, i.e., their work is carried out at more than one geographical location, the MSDS may be kept at a central location at the primary workplace facility. In this situation, the employer shall ensure that employees can immediately obtain the required information in an emergency.

6) MSDS shall also be made readily available to fire & emergency response personnel, the Engineer and MDC Rick Management.

7) Contractors shall provide their employees with the following:

   a) Information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new hazard is introduced into their work area.
   b) Any operations in there work area where hazardous chemicals are present.
   c) The location and availability of the written hazard communication program, including the required list (s) of hazardous chemicals and material safety data sheets.
   d) Information as to the employees' rights under the Florida Right-to-Know Law:

      1. The right to know of the listed toxic substances present in the workplace.
      2. The right to obtain a copy of the Material Safety Data Sheet for each listed toxic substance present.
      3. The right to refuse to work, under specified circumstances, with a listed substance, if not provided a copy of the Material Safety Data Sheet for that substance within 5 of the requesting employee's working days after submitting a written request to the employee's employer.
      4. The right to instruction, within 30 days of employment, and at least annually thereafter, on the adverse health effects of each listed toxic substance with which they work in the workplace, how to use each substance safety, and what to do in case of any emergency.
      5. The right to obtain further information on the properties and hazards of listed toxic substances from the Toxic Substance Information Center (1-800-367-4378).
      6. The right to protection against discharge, discipline, or discrimination for having exercised any of these rights.

8) The Contractor shall post the State of Florida Right-to-Know Poster at the Work Site. The poster and information/assistance in complying with the Right-to-Know Law is available from the Toxic Substance Information Center (1-800-367-4378). As soon as any environmental item is discovered, the Contractor shall immediately inform the Resident Engineer and the MDT Senior Professional Engineer (Environmental).

APPENDICES

Appendix A - State of Florida, First Report of Injury or Illness; Supervisor's Report; OSHA 300 & 300A

Appendix B - Tool Box Safety Meeting Document, Suggested Format

Appendix C - Safety Inspection Checklist For Crane Inspection & Critical Lifts

Appendix D - Special Hurricane Precautions

Appendix E - OSHA General Industry and Construction Standards Requiring a Competent Person

APPENDIX A

INSTRUCTION - FIRST REPORT OF INJURY OR ILLNESS
LES FORM DWC – 1

EMPLOYER -You are required by law to report all industrial accidents to the Division of Workers' Compensation within seven days of your first knowledge of the accident. A civil penalty of up to $500 is provided for failure. Fully complete this form, using the employee's description of the accident, signs it, have the employees sign it and mail the original to the Division. Copies marked for the employee and your carrier (insurance company) must be sent to them.

If, for any reason, the employee cannot or will not sign the notice, **do not delay your report.**

EMPLOYEE -You are required by law to report your accident to the Worker's Compensation Division. Enter your description of the accident on this form, have your employer complete the form, then both of you should sign. If your employer refuses to sign or complete the report you should complete it. Send the original to the division, a copy to your employer.

For assistance, or for answers to questions on Workers' Compensation, call the toll free number shown on the form.

DISTRIBUTION: Part 1 - Division Copy
Part 2 - Carrier Copy
Part 3 - Employer Copy
Part 4 - Employer Copy

FIRST REPORT OF INJURY OR ILLNESS

FLORIDA DEPARTMENT OF FINANCIAL SERVICES
DIVISION OF WORKERS' COMPENSATION

For assistance call 1-800-342-1741
or contact (1) your local EAO Office
Report all claims within 24 hours 1-800-518-9233 or (850) 922-1565

RECEIVED BY CLAIMS-HANDLING ENTITY	SENT TO DIVISION DATE	DIVISION RECEIVED DATE

PLEASE PRINT OR TYPE

EMPLOYEE INFORMATION

NAME (First, Middle, Last)	Social Security Number	Date of Accident (Month-Day-Year)	Time of Accident ☐ AM ☐ PM
HOME ADDRESS Street # _____ City _____ State _____ Zip _____ TELEPHONE Area Code Number	EMP. CYCLE'S DESCRIPTION OF ACCIDENT (Include Cause of Injury)		
OCCUPATION	NATURE/ILLNESS THAT OCCURRED	PART OF BODY AFFECTED	
DATE OF BIRTH ____/____/____	SEX ☐ M ☐ F		

EMPLOYER INFORMATION

COMPANY NAME _____ D.B.A. _____ Street _____ City _____ State _____ Zip _____ TELEPHONE Area Code Number	FEDERAL ID NUMBER (FEIN)	DATE FIRST REPORTED (Month/Day/Year)
	NATURE OF BUSINESS	POLICY/MEMORANDUM NUMBER
EMPLOYER'S LOCATION ADDRESS (If Different) Street _____ City _____ State _____ Zip _____ LOCATION # (if applicable) _____	DATE EMPLOYED ____/____/____ LAST DATE EMPLOYEE WORKED ____/____/____ RETURNED TO WORK ☐ YES ☐ NO IF YES, GIVE DATE ____/____/____	PAID FOR DATE OF INJURY ☐ YES ☐ NO WILL YOU CONTINUE TO PAY WAGES INSTEAD OF WORKERS' COMP? ☐ YES LAST DAY WAGES WILL BE PAID INSTEAD OF WORKERS' COMP ____/____/____
PLACE OF ACCIDENT (Street, City, State, Zip) Street _____ City _____ State _____ Zip _____ COUNTY OF ACCIDENT _____	DATE OF DEATH (if applicable) ____/____/____ AGREE WITH DESCRIPTION OF ACCIDENT ☐ YES ☐ NO	RATE OF PAY ☐ HR ☐ WK $ _____ FOR ☐ DAY ☐ MO Number of hours per day _____ Number of hours per week _____ Number of days per week _____
Any person who knowingly and with intent to injure, defraud, or deceive any employer or employee, insurance carrier, or self-insured program, files a report or claim containing any false or misleading information commits a felony of the third degree. (Section 440.105(5), F.S.) I have reviewed, understand and acknowledge the above statement _____ EMPLOYEE SIGNATURE (Mandatory for Injury) _____ DATE _____ EMPLOYER SIGNATURE _____ DATE		NAME, ADDRESS AND TELEPHONE OF PHYSICIAN OR HOSPITAL AUTHORIZED BY EMPLOYER ☐ YES ☐ NO

CLAIMS-HANDLING ENTITY INFORMATION

☐ 1(a) Denied Case - DWC-12, Notice of Denial Attached
☐ 1(b) Indemnity Only Denied Case - DWC-12, Notice of Denial Attached
☐ 2 Medical Only (which becomes a Lost Time Case (Complete all required information in #3)
Employee's 8th Day of Disability ____/____/____
Entity's Knowledge of 8th Day of Disability ____/____/____
☐ 3 Lost Time Case - 1st day of disability ____/____/____ Full Salary or loss of comp? ☐ YES Full Salary End Date ____/____/____
Date First Payment Mailed ____/____/____ AWW _____ Comp Rate _____
☐ T.T. ☐ T.T. - 80% ☐ T.P. ☐ I.B. ☐ P.T. ☐ DEATH ☐ SETTLEMENT ONLY
Penalty Amount Paid in 1st Payment $_____ Interest Amount Paid in 1st Payment $_____

REMARKS:			INSURER NAME CLAIMS-HANDLING ENTITY NAME, ADDRESS & TELEPHONE
INSURER CODE #	EMPLOYER'S CLASS CODE	EMPLOYER'S NAICS CODE	
SERVICE CONTRACTOR CODE #	CLAIMS-HANDLING ENTITY FEIN #		

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 20 ___

U.S. Department of Labor

Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

| Identify the person | | | Describe the case | | | Classify the case | | |

OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

Year 20____

U.S. Department of Labor

Establishment information

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
(G)	(H)	(I)	(J)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
(K)	(L)

Injury and Illness Types

Total number of . . .

	(M)
(1) Injuries	(4) Hearing loss
(2) Skin disorders	(5) All other illnesses
(3) Respiratory conditions	

Employment information

Sign here

Post this Summary page from February 1 to April 30 of the year following the year covered by the form.

OSHA's Form 301

Injury and Illness Incident Report

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

U.S. Department of Labor

This Injury and Illness Incident Report is one of the first forms you must fill out when a recordable work-related injury or illness has occurred. Together with the Log of Work-Related Injuries and Illnesses and the accompanying Summary, these forms help the employer and OSHA develop a picture of the extent and severity of work-related incidents.

Within 7 calendar days after you receive information that a recordable work-related injury or illness has occurred, you must fill out this form or an equivalent. Some state workers' compensation, insurance, or other reports may be acceptable substitutes. To be considered an equivalent form, any substitute must contain all the information asked for on this form.

According to Public Law 91-596 and 29 CFR 1904, OSHA's recordkeeping rule, you must keep this form on file for 5 years following the year to which it pertains.

If you need additional copies of this form, you may photocopy and use as many as you need.

Completed by _____

Title _____

Phone ____ - ____ - _____ Date ____ / ____ / ____

Information about the employee

1) Full name _____

2) Street _____

City _____ State ____ ZIP _____

3) Date of birth ____ / ____ / ____

4) Date hired ____ / ____ / ____

5) ☐ Male
☐ Female

Information about the physician or other health care professional

6) Name of physician or other health care professional _____

7) If treatment was given away from the worksite, where was it given?

Facility _____

Street _____

City _____ State ____ ZIP _____

8) Was employee treated in an emergency room?
☐ Yes
☐ No

9) Was employee hospitalized overnight as an inpatient?
☐ Yes
☐ No

Information about the case

10) Case number from the Log _____ (Transfer this number from the Log after you record the case.)

11) Date of injury or illness ____ / ____ / ____

12) Time employee began work _____ AM / PM

13) Time of event _____ AM / PM ☐ Check if time cannot be determined

14) What was the employee doing just before the incident occurred? Describe the activity, as well as the tools, equipment, or material the employee was using. Be specific. Examples: "Climbing a ladder while carrying roofing materials"; "Spraying chlorine from tank during repair"; "Daily computer key entry."

15) What happened? Tell us how the injury occurred. Examples: "When ladder slipped on wet floor, worker fell 20 feet"; "Worker was exposed to chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."

16) What was the injury or illness? Tell us the part of the body that was affected and how it was affected; be more specific than "hurt," "pain," or "sore." Examples: "Strained back"; "Chemical burns, hand"; "Carpal tunnel syndrome."

17) What object or substance directly harmed the employee? Examples: "Concrete floor"; "Chlorine"; "Radial saw." If this question does not apply to the incident, leave it blank.

18) If the employee died, when did death occur? Date of death ____ / ____ / ____

APPENDIX B
TOOL BOX SAFETY MEETING

FOREMAN/SUPERVISOR – PRINT NAME _____ Date and Shift _____

FOREMAN/SUPERVISOR – SIGNATURE _____ Section _____

TOPICS COVERED AT MEETING:

_____

_____

_____

Name(s) of Personnel Present for Meeting _____

Name (print)	Signature	Job Title

MDC AUDIT: _____
(name) (signature) (date)

Original must be filed for length of construction project.

APPENDIX C: SAFETY INSPECTION CHECKLIST
Page 1 of 3

TITLE: JOB SITE ERECTION – Crane Inspection

AREA INSPECTED: _____

INSPECTED BY: _____ DATE: _____

INSPECTOR SUGNATURE: _____

PCI SAFETY MANUAL REFERENCE SECTIONS: _____

* Check items to be inspected in your area – disregard others not applicable

*	OK	ITEM INSPECTED	NOT OK	COMMENTS
		The Crane Crew: Is the operator and crew properly trained and medically fit to perform their job?		
		Operating is a full time job – does the operator pay strict attention to his duties?		
		Do crane personnel wear hard hats when away from the crane?		
		Is the operator aware of the regulations involving working close to high voltage lines and electrical equipment?		
		High Voltage, even from a distance source, can be induced in metal parts of the crane. Is the operator aware of these situations?		
		Does the operator know the weight of each piece before he picks it?		
		Does the crane crew know the manufacturer's proper recommendations for making short moves on the job site?		
		Does the crew get help when lifting heavy items?		
		Does the crew periodically check for level?		
		Do they check outriggers for stability?		
		Do they check the boom angel indicator and other electronic load equipment for accuracy?		
		Does the operator allow anyone to ride the load or the hooks?		
		The Ground Crew (hooking up product) Does the ground crew have, maintain and use proper safety equipment?		
		Are they familiar with the product erection sequence?		

TITLE: JOB SITE ERECTION – Crane Inspection (continued)

AREA INSPECTED: _____

INSPECTED BY: _____ DATE: _____

INSPECTOR SIGNATURE: _____

PCI SAFETY MANUAL REFERENCE SECTIONS: _____

* Check items to be inspected in your area – disregard others not applicable

*	OK	ITEM INSPECTED	NOT OK	COMMENTS
		(Continue) Are they familiar with the crane signals and general operation of the crane?		
		Do they know how to properly hook pieces and provide aerial stability?		
		Do they know how to properly use tag lines?		
		Are tag lines in good condition, strong enough?		
		Long Enough?		
		Two-way communication between the operator and erection foreman are becoming more common to provide safety on the job. Does the crew know how to operator and maintain the system? Are spare parts available for quick repair?		
		Is the crane swing radius roped off to prohibit the crane (during swing) from causing damage or hurting someone? Is entire swing checked? Including counterweights?		
		The Machine: Is the crane operated within all capacities?		
		Is the machine inspected daily?		
		Are the required crane inspections recorded?		
		Are all controls properly identified?		
		Are warning devices operative?		
		Is an operator's manual available to the crew for easy reference?		
		Are load charts, operating signals and other important information posted and/or readily available?		

APPENDIX C: SAFETY INSPECTION CHECKLIST
Page 3 of 3

TITLE: JOB SITE ERECTION – Crane Inspection (continued)

AREA INSPECTED: _____

INSPECTED BY: _____ DATE: _____

INSPECTOR SIGNATURE: _____

PCI SAFETY MANUAL REFERENCE SECTIONS: _____

* Check items to be inspected in your area – disregard others not applicable

*	OK	ITEM INSPECTED	NOT OK	COMMENTS
		(continued) Are brakes within operating limits?		
		Are clutch and brakes surfaces dry?		
		Are all protective panels and guards in place?		
		Are electrical systems in good condition?		
		Are all of the sheaves properly aligned so as to reduce rope wear during work?		
		Is cable in good condition?		
		Are hooks in good condition?		
		Have hooks been inspected by magnetic particle inspection?		
		Are there safety latches on hooks?		
		Are fuel tanks in good condition and without leaks?		
		Are fire extinguishers available and routinely inspected?		
		Slings Are slings in good conditions? Is safety factor of 5 maintained?		
		Are slings stored properly?		
		Are sling inspected reports maintained?		
		Are "U" bolt wire rope clips correctly placed?		
		Are all other lifting devices in good condition?		

APPENDIX C (continued)
Page 1 of 2

CHECK LIST FOR CRITICAL LIFTS

NOTE: THIS FORM IS TO BE COMPLETED WHEN THE LOAD EXCEEDS 80% OF THE LOAD CHART FOR THE CRANE OR DERRICK OR WHERE THE PICK INVOLVES THE USE OF TWO OR MORE CRANES.

DATE:_____

(1) SUPERVISOR RESPONSIBLE FOR LIFT:_____

(2) DESCRIPTION OF ITEM TO BE LIFTED AND ESTIMATED WEIGHT:

_____

_____

(3) EQUIPMENT AND LIFT RELATIONSHIP:

(A) OPERATING RADIUS.....

(B) BOOM LENGTH.....

(C) ALLOWABLE LOAD (FROM LOAD CHART).....

(D) RATIO OF LIFT TO ALLOWABLE LOAD.....

(E) CLEARANCE TO SURROUNDING FACILITIES.....

(F) SLING ANGLE.....

(4) CONDITION OF HOISTING EQUIPMENT AND RIGGING:

(A) HAS ALL EQUIPMENT BEEN REINSPECTED FOR THIS LIFT? o YES o NO

(5) STABILITY OF GROUND AREA:

(A) CHECK SOIL BEARING ALLOWABLE LOAD (COMMENTS):

_____

_____

_____

(B) WILL MATS BE NEEDED? o YES o NO

APPENDIX C (continued)
Page 2 of 2

CHECK LIST FOR CRITICAL LIFTS (cont.)

(B) ANY UNDERGROUND INSTALLATIONS NEEDING SPECIAL ATTENTION?

o YES o NO

(C) WILL IT BE NECESSARY FOR THE CRANE TO WALK WITH THE LOAD?

o YES o NO

IF THE ANSWER IS "YES", ANSWER QUESTIONS E, F, & G.

(E) IS AREA SURFACE LEVEL AND STABLE WHERE THE CRANE WILL BE WALKING

o YES o NO

(F) HAVE FACILITIES BEEN PROVIDED TO KEEP THE LOAD RADIUS FROM CHANGING?

o YES o NO

(G) HAVE ALL OVERHEAD FACILITIES BEEN CHECKED FOR CLEARANCE IN THE AREA WHERE THE CRANE WILL BE MOVING?

(6) DOES THE OPERATOR HAVE THE NECESSARY EXPERIENCE ON THE CRANE AND ON THIS TYPE OF LIFT?

o YES o NO

(7) IF LIFT INVOLVES USE OF TWO CRANES ANSWER THE FOLLOWING:

A) HAVE OPERATORS WORKED TOGETHER BEFORE? o YES o NO

B) WHO WILL COORDINATE INSTRUCTIONS TO OPERATORS?_____

_____

_____

BY: _____
CONTRACTOR'S SUPERINTENDENT

APPENDIX D

SPECIAL HURRICANE PRECAUTIONS

During such periods of time as are designated by the United States Weather Bureau as being a hurricane warning or alert, all construction materials or equipment shall be secured against displacement by wind forces; provided that where a full complement of personnel is employed or otherwise in attendance, or engaged for such protection purposes, normal construction procedures or uses of materials or equipment may continue allowing such reasonable time as may be necessary to secure such materials or equipment before winds of hurricane force are anticipated. Construction materials and equipment shall be secured by guying and shoring, by tying down loose materials equipment and construction sheds.

APPENDIX E

OSHA General Industry and Construction Standards Requiring a Competent Person

The following OSHA standards require a competent person to perform specific functions under the standard. Standards are arranged numerically within the categories of General Industry and Construction. This list of standards requiring a competent person is to be used as a reference tool and does not supercede OSHA requirements.

General Industry (1910)

- 1910.66, Powered platforms for building maintenance.
- 1910.66 App C, Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms, Personal Fall Arrest System (Section I - Mandatory; Sections II and III - Non-Mandatory).
- 1910.109, Explosives and blasting agents.
- 1910.139, Respiratory protection for M. tuberculosis.
- 1910.183, Helicopters.
- 1910.184, Slings.
- 1910.268, Telecommunications.

Construction (1926)

- 1926.20, General safety and health provisions.
- 1926.53, Ionizing radiation.
- 1926.62, Lead.
- 1926.101, Hearing Protection.
- 1926.251, Rigging equipment for material handling.
- 1926.354, Welding, cutting, and heating in way of preservative coatings.
- 1926.404, Wiring design and protection.
- 1926.451, Scaffolds.
- 1926.454, Scaffolds, Training requirements.
- 1926.500, Fall Protections, Scope, application, and definitions applicable to this subpart.
- 1926.502, Fall protection systems criteria and practices.
  1926 Subpart M App C, Personal Fall Arrest Systems - Non-Mandatory Guidelines for Complying with 1926.502(d).
- 1926 Subpart M App E, Sample Fall Protection Plan - Non-Mandatory Guidelines for Complying with 1926.502(k).
- 1926.503, Fall Protection, Training Requirements.
- 1926.550, Cranes and derricks.
- 1926.552, Material hoists, personnel hoists, and elevators.
- 1926 Subpart P App A, Excavations, Soil Classification.
- 1926 Subpart P App B, Excavations, Sloping and Benching.
- 1926.651, Specific Excavation Requirements.
- 1926.652, Excavations, Requirements for protective systems.
-

- 1926.705, Concrete and Masonry Construction, Requirements for lift-slab operations.
- 1926.752, Steel Erection, Bolting, riveting, fitting-up, and plumbing-up.
- 1926.800, Underground Construction.
- 1926.803, Underground Construction, Caissons, Cofferdams, and Compressed Air, Compressed air.
- 1926.850, Demolition, Preparatory operations.
- 1926.859, Mechanical demolition.
- 1926.900, Blasting and the Use of Explosives.
- 1926.1053, Ladders.
- 1926.1060, Stairways and Ladders, Training requirements.
- 1926.1101, Asbestos.
- 1926.1101 App F, Work practices and engineering controls for Class I Asbestos Operations - non-mandatory.
- 1926.1127, Cadmium.



DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS ADJACENT CONSTRUCTION MANUAL

July 2017

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DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

OFFICE OF SAFETY AND SECURITY

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Approved By:
Eric Muntan
Chief, DTPW
Office of Safety and Security

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1.0 Introduction

This manual was prepared in the interest and for the guidance of those who may want to construct a non-Department of Transportation and Public Works (DTPW) physical structure (incl. any excavation, demolition or use of DTPW real property) on, adjacent to, or over, an existing DTPW facility and/or property. The purpose of this Manual is to provide uniform minimum standards and criteria for the construction, development and maintenance of all properties that have or may enter the **Safety Zone** (defined in Appendix A and C) that has been established for all DTPW property and extending on either side of the Metrorail and/or Metromover systems. This includes any equipment, regardless of distance from the guideway, which static or operational failure could directly or indirectly affect DTPW operations or structures.

These standards are intended to provide the basic guidance for the construction, development and maintenance of property adjacent to the operating guideway systems so as to:

1. Protect the safety of the general public and DTPW Employees.
2. Protect the guideway system and the DTPW property from physical damage.
3. Preserve the level of service and operational schedules so as to cause the least disruption for the ridership and use of the DTPW system.

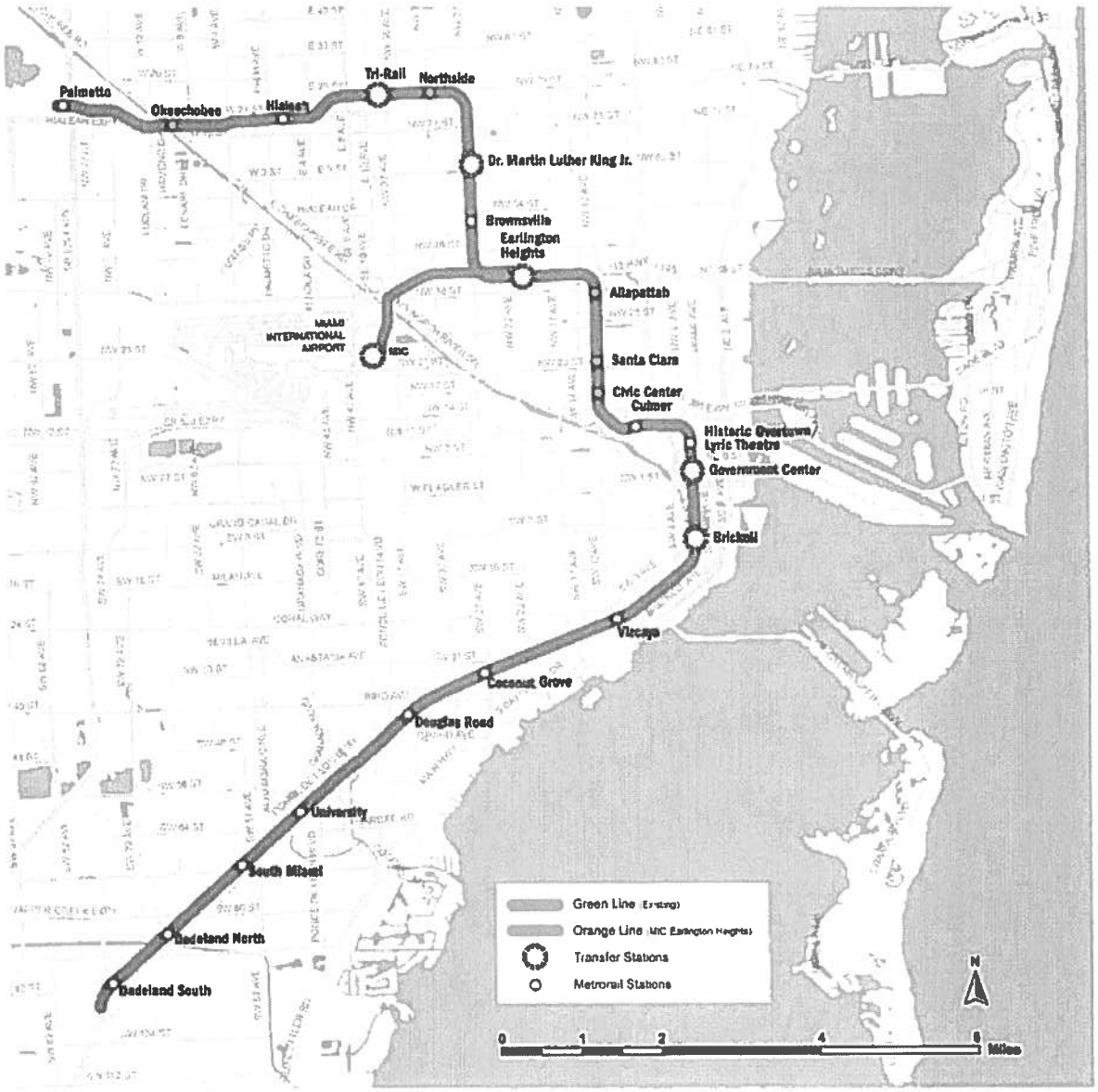
This manual outlines the design guidelines and criteria to follow for the design and submittal of construction plans and specifications to DTPW for review prior to construction of the project. It is the general policy of DTPW to review designs for construction projects adjacent to or on DTPW property on a case-by-case basis to ensure that DTPW facilities are not damaged by the proposed construction, and that DTPW operations are not impacted during or after the adjacent construction.

DTPW maintains half-size "as-built" drawings in its Engineering, Planning & Development (EP&D) Library. Half-size copies of any of the drawings on file are available at printing costs. The full-size drawings on file are available at printing costs. The full-size drawings are normally in archival storage. Full size drawings may be obtained by special request. The Manager, DTPW Document Control, may be contacted (telephone: (786) 469-5268) for an appointment to review the drawings and to order prepaid copies as required.

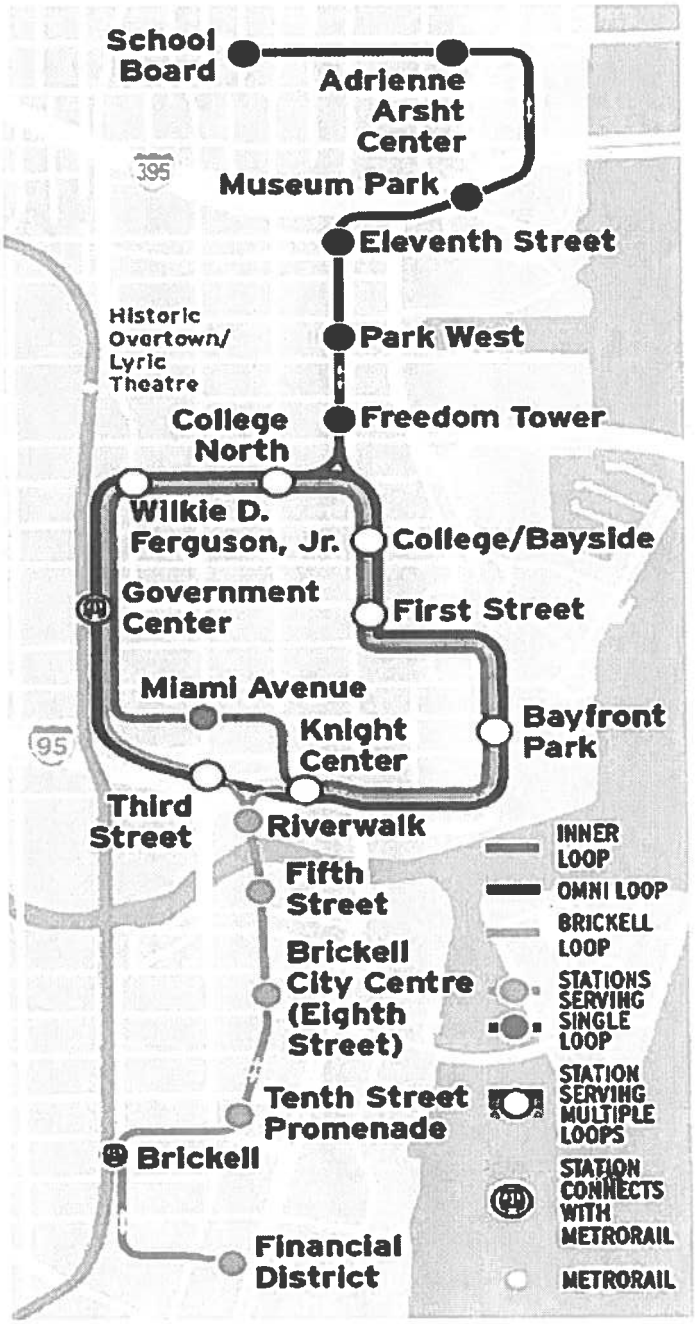
The criteria provided herein are general in nature and for the sole purpose of providing a selective overview of the design requirements. Specific designs performed in the past by DTPW's consultants may not necessarily be in total conformance with this manual. It is considered to be the Developer's responsibility to obtain the original design computations, where available, from DTPW to completely understand the original design intent in order to accurately assess the impact of their proposed construction on the DTPW structures and facilities. A map of the DTPW Metrorail and Metromover system is provided in Section 2.0 (below) for use in locating "as-built" drawings.

2.0 System Maps (Rail & Mover)

2.1 Metrorail System



2.2 Metromover System



3.0 General Procedures for Adjacent and Transit Right-of-Way Construction Activity

Developers or agencies contemplating any construction activity adjacent to or on Department of Transportation and Public Works (DTPW) facility, structure or property, including any excavation, maintenance, restoration, demolition or use of DTPW real property, should provide, for review, three (3) copies of their drawings and three (3) copies of their calculations, showing the relationship between their project and the DTPW facilities.

Sufficient drawings and details should be submitted to facilitate DTPW's review of the effects that the proposed project may or may not have on the DTPW facilities. A DTPW review requires internal circulation of the construction drawings to concerned departments. Drawings normally required for review are:

- Site Plan
- Drainage Area Maps and Drainage Calculations
- Architectural drawings (basement plans through top floor)
- Sections showing foundations and DTPW Structures
- Structural drawings (provide relative sections showing DTPW)
- Column load tables
- Pertinent drawings detailing an impact on DTPW facilities
- A copy of the geotechnical report

If uncertainty exits on the possible impacts a project may have on the DTPW facilities, and before making a formal application for a review of a construction project adjacent to the DTPW System, the developer or his agent may contact the **Chief, Right-of-Way and Utilities Division should be contacted at (786) 469-5244.**

Sheeting and shoring drawings should be accompanied by calculations. The drawings and calculations should contain comments, details, notes, and instructions describing the proposed sequence of construction.

When the design of foundations and site work of the project has progressed to the point considered complete and ready for review, the drawings and calculations, as applicable, should be sent to:

Chief
Right-of-Way and Utilities
Department of Transportation and Public Works
701 N.W. 1st Court, Suite 1500
Miami, FL 33136

A period of 15 working days should be allowed for review of the drawings and calculations. Fifteen (15) days should be allowed for each successive review as required. Additional review time may be required for complex projects.

Reimbursement is required for the cost of providing support services for adjacent construction and joint development projects where access is required into the operating Metrorail/Metromover system; or the system is impacted. As part of the review procedure, and before any work may proceed, the developer will be required to sign a letter accepting this obligation.

The applicant must receive written approval for the design of a given project by the DTPW Chief, Right-of-Way & Utilities or DTPW Fire/Life Safety Technical Committee Chairperson (as applicable), prior to the start of construction.

Project Documents shall be reviewed and accepted by the appropriate DTPW Divisions for possible impact on DTPW facilities and operations, including all elements associated with the construction of the project and any temporary protection system needed to preserve the system safety.

Each "Part" of the project's design shall be reviewed and approved by the DTPW Design and Engineering Division (DED). A few of the more common "Parts" of a project are considered to be sheeting and shoring, overhead protection, dust protection, dewatering, temporary use of public space for construction activities.

The DTPW review process is outlined in Figure 1 below

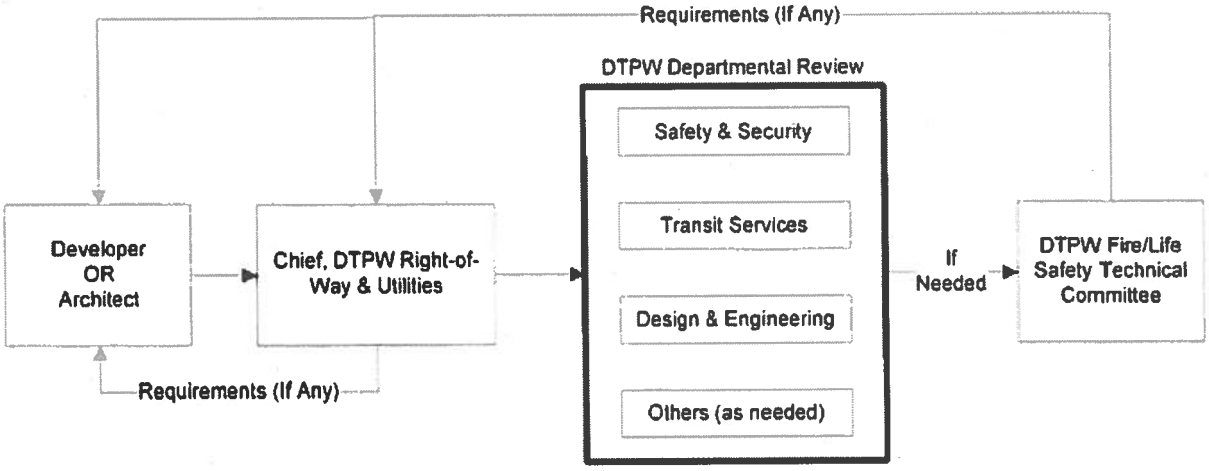


Figure 1

3.1 Fire/Life Safety

DTPW Office of Safety and Security is charged with the responsibility to chair the DTPW Fire/Life Safety Technical Committee which was formed in 1978 to guide Department of Transportation and Public Works (DTPW), rapid transit operations, in developing and following emergency procedures and operational procedures to ensure all fire/life safety related equipment is in proper order and all associated personnel are appropriately trained; to prescribe testing and inspection procedures for fire/life safety equipment in accordance with appropriate codes; to assist the DTPW in developing and implementing a comprehensive joint training program for fire/rescue personnel and DTPW employees; and, to interpret and apply fire/life safety codes, criteria and standards to the design of the fixed guideway systems.

The DTPW Fire/Life Safety Technical Committee acts on behalf of the DTPW Director in accordance with the above to interpret and apply fire/life-safety requirements incorporated in the Florida Building code; National Fire Protection Association Codes and Standards; State Statutes and Fire Marshal's Office; South Florida Fire Protection Code; DTPW Criteria and Standards; other applicable codes, standards and criteria; and, as required, to develop, and verify implementation of, design standards for the DTPW to protect life and property. The Committee works closely with Transit Engineering for design of fire/life safety features and test and maintenance of alarm systems. For test and maintenance of fire suppression systems, the Committee works with facilities maintenance organizations.

As required by the current System Safety Program Plan, the Fire/Life Safety Technical Committee addresses fire/life safety concerns, as described above, for all phases of DTPW Metrorail, Metromover, Metrobus and Special Transportation Services Operations. The Committee also serves as liaison with all Miami-Dade County jurisdictions for development and coordination of emergency response procedures and annual emergency response drills.

4.0 DTPW Review Policy

All design work will be reviewed based upon the assumption that the design will meet the applicable code adopted in the jurisdiction as well as the DTPW Design Criteria and DTPW Standard Specifications. The DTPW design concepts, as set forth herein, generally represent the design approach used by DTPW in the design of its facilities. The effect of adjacent construction upon DTPW structures should be examined based upon the same approach.

Permits, where required by the local jurisdiction, shall be the responsibility of the developer.

Monitoring of the temporary support of excavation structures for adjacent construction shall be required in all cases for excavations within the influence line of DTPW structures (Appendix B). The extent of the monitoring will vary from case to case. Structural design computations maybe required for the adjacent construction. When requested by DTPW, the calculations submitted for review shall include the following:

- A concise statement of the problem and the purpose of the calculation.
- Input data, applicable criteria, clearly stated assumptions and justifying rationale.
- References to articles, manuals and source material should be furnished with the calculations.
- References to pertinent codes and standards.
- Sufficient sketches or drawing references for the work to be easily understood by an independent reviewer. Diagrams indicating data (such as loads and dimensions) shall be included along with adequate sketches of all details not considered standard by DTPW.
- The source or derivation of all equations shall be shown where they are introduced into the calculations.
- Numerical calculations shall clearly show all English units.
- Identify results and conclusions.
- Calculations shall be neat, orderly, and legible.

Drawings should be drawn, to scale, showing the location and relationship of the proposed adjacent construction to existing DTPW structures at various stages of new construction along the entire adjacent alignment. The stresses and deflections induced in the existing DTPW structures should be provided.

The short-term and long-term effects of the new loading due to the adjacent construction on the DTPW structures should be provided. The soil parameters and other pertinent geo-technical criteria contained herein should be used to analyze the existing DTPW structures.

DTPW structures shall be analyzed for differential pressure loadings caused by dewatering the adjacent construction site.

A system of earth retaining structures is required for new excavations adjacent to DTPW structures. Design calculations and drawings stamped and prepared by a Registered Professional Engineer experienced in this type of work, and registered in the state where the work will be performed, are required.

All DTPW underground concrete structures are designed using the ACI Alternate Design Method (working stress design) to curtail excessive deflections and cracking. DTPW underground structures shall be fully reevaluated, for the effects caused by the adjacent construction, using working stress techniques.

4.1 REVIEW SUBMITTALS - DRAWING CRITERIA

General
All designs for the protection, support (sheeting and shoring) and underpinning of existing DTPW structures shall be reviewed by DTPW's Design and Engineering Division (DED). The investigation of the feasibility of various underpinning and dewatering schemes for structures constructed adjacent to DTPW facilities shall be investigated by the developer. The developer's engineer should make recommendations concerning the best underpinning design for a particular structure.

The developer's contract drawings and specifications shall require his construction contractor to maintain, protect and be responsible for the safety, stability and integrity of all adjacent DTPW structures which may be affected by his work.

Drawing Details
The following information shall be included in the drawings submitted for review of an adjacent construction project:

- Dimensioned clearances, both horizontal and vertical, between the adjacent developer's construction and DTPW structures, track, roadways, parking areas and utilities.
- Details of the proposed modifications to DTPW's roadways, parking areas, and busways. Include sections and details showing the relationship of existing facilities and proposed facilities.
- Cross sections with the existing and proposed contours and limits of grading work shown in relation to the property lines and the impact or lack thereof on DTPW facilities. Where grading changes are required in DTPW property, provide the dimensions and square footage of the area required for construction easements.
- Hydrologic and hydraulic calculations showing the impacts on the DTPW drainage system are required if storm drainage from the proposed development is to be discharged into the existing DTPW drainage system. Appropriate sedimentation

and erosion control measures should be included upstream of the discharge point onto DTPW property.

- Where modifications to DTPW utilities are required by adjacent construction, submit for review cross sections, plan and profiles, specifications and design calculations concerning the utility modifications. Details for maintaining electrical and water service to DTPW Stations should be shown when required.
- Where construction will impact a DTPW station entrance and the public, include in the submittal plans for temporary pedestrian and vehicular traffic circulation for the area around the station entrance. Where construction will be adjacent to or above a Metrorail/Metromover station entrance, protection will be required over the escalators in accordance with Section "Overhead Protection" of this Manual. Provide the construction plans, the shop drawings or the working drawings showing the phasing of adjacent construction as well as the construction details for overhead protection, pedestrian barricades, and sidewalk protection. Requests for relocation of bus stops and bus shelters shall be clearly shown on the plans. Barricades and signing necessary to direct the public through the construction zone will be required. Lighting will be required as part of all overhead protection structures.
- Provide construction protection details to preclude impacts on DTPW landscaping, street furniture, pylons, bus shelters and light fixtures.

5.0 DTPW Operational Requirements

DTPW shall have the right to stop any work or construction activities that effects the safety of the DTPW patrons and or facilities or normal DTPW operations. DTPW will exercise reasonable advance notice, except for any matters related to immediate system concerns which will require no advance notice.

Construction work which may have any impact on the Metrorail/Metromover Systems may be scheduled during the Non-Peak Operating Hours or Non-Passenger Hours. Non- Peak Operating Hours are defined as weekdays prior to 6:30 A.M. or after 7:00 P.M. and between 10 A.M. and 3 P.M.; and all day Saturday and Sunday. Non-Passenger hours are defined as Monday through Sunday 12:30 A.M. to 4:30 A.M. Passenger hours may change without notice.

Construction work that may impact weekend or special operational conditions will be limited. Schedule requirements will be addressed on a project by project basis where the individual scheduling need of the project can be evaluated with respect to the operations of the DTPW system.

5.1 General Conditions for Construction Adjacent to the Metrorail or Metromover Guideway/Facilities

A. Clear access is required on a 24 hour basis for ingress and egress for transit patrons, fire and rescue personnel, and maintenance personnel.

B. A contact person will be named by the Contractor to act as liaison with the DTPW Office of Safety and Security for all matters related to safety of the DTPW System. A contact person shall also be named (may be the same person) to act as liaison with the DTPW Metrorail/Metromover Operations Division for all matters related to operation of the Transit System.

C. DTPW shall have the right to review all plans and any construction with reasonable advance notice, except for any matters related to immediate system safety concerns which will require no advance notice.

D. No construction elevators or cranes will be erected on the Metrorail/Metromover guideway side of the building/structure being constructed or demolished.

E. The Metrorail/Metromover guideway shall not be used to support and/or brace construction scaffolding or equipment.

F. For any activity within the **Safety Zone**, the following requirements may apply pending DTPW review.

G. At least forty-eight hours notice describing the nature of the work shall be provided to the DTPW prior to commencement of work.

H. The contractor will provide special protection, such as netting, barricades, walks, screens, scaffolds, etc., acceptable to DTPW, to help ensure the safety

of DTPW property, patrons and employees. No work shall be permitted unless such protection is provided as determined necessary by DTPW.

I. Best efforts will be used to schedule all construction work which may have any impact on the Metrorail/Metromover System during the Non-Peak Operating Hours or Non-Passenger Hours. Non-Peak Operating Hours are defined as weekdays prior to 6:30 A.M.; after 7:00 P.M. and between 10 A.M. and 3 P.M.; and all Saturdays and Sundays. Non-Passenger Hours are defined as Monday through Sunday 12:30 A.M. to 5:00 A.M. or such other hours as may be designated by the County as Non-Passenger hours. Passenger hours will change as required by DTPW.

J. No crane lifts, other crane operations or any other operation shall be performed within the **Safety Zone** (Appendix A and C) without prior approval (in writing) from DTPW. This paragraph shall apply where any part of the load or crane (incl. counter weight), construction equipment or operation that is above the surface of the guideway running pad/rail.

K. For any construction activity within the **Safety Zone** (Appendix A and C) or that may encroach into the Safety Zone, DTPW may deem, as necessary, at the contractor's expense, a DTPW employee or DTPW authorized contractor or consultant (Monitor), to coordinate the contractor's activities with Central Control. This employee will be responsible for monitoring construction activities and communicating with DTPW Central Control. DTPW will determine, in the reasonable exercise of its discretion, the number of hours the above-mentioned employee is needed. The construction contractor will reimburse DTPW for costs arising from the provision of the above-mentioned employee which will be charged at the current rate.

L. DTPW may, at its discretion, modify any of the above conditions or impose additional conditions, to help ensure the safety of the public, and its patrons, employees or property.

5.2 DTPW Monitor and Contractor Coordination

A. Start-up

There will be continued meetings between representatives from DTPW, and Contractor/Developer's project manager, DTPW crane Monitors, the Contractor's crane operators and the form-work Contractor prior to the commencement of the phase work by the tower cranes and any other equipment or operation, adjacent to the DTPW Metromover/Metrorail Guideway System. In addition, DTPW Monitors and the contractor equipment/crane operators will continue to meet daily, at the beginning of the work day, of the project to establish a working relationship of the daily routines in and around the DTPW safety zone.

No construction work requiring a DTPW Monitor will commence until the Contractor provides the DTPW Monitor a functional Contractor radio, and sign off for same as per contractor procedures. Upon arrival at the project site, the DTPW Monitor will

immediately contact the DTPW Central Control Facility, to advise of his/her presence at the project site.

If, at any time during the construction project, a new crane operator is brought on-site to operate any crane, he/she must be apprised of all of the rules and regulations outlined in this Plan by the Contractor's/Developer's Project Manager.

B. Special Provisions – Pre-Task Plan

At the discretion of DTPW, based on construction project proximity to DTPW system and scope of work, DTPW may assign a DTPW manager to log in arrival of DTPW Monitor(s), at the construction site. The assigned DTPW manager will contact the Contractor Senior Superintendent to request and receive a Contractor radio and meet with the Contractor Senior Superintendent and Contractor trade partner /Superintendent or Foreman to go over planned work. The Contractor Senior Superintendent, Contractor Trade Superintendent/Foreman, the DTPW Monitor and the assigned DTPW manager will complete and sign the Contractor Pre-Task Plan (PTP) Form, as specified in the DTPW Adjacent Construction Manual. Until this revised PTP form is accurately and completely filled out, scheduled work warranting a DTPW Monitor shall not proceed. After the PTP form is completed, if PTP is deemed by DTPW, the assigned DTPW manager and the DTPW Monitor shall walk to the selected area to commence monitoring duties, performing a radio check with the operator or crew on the other end of the Contractor radio. If the radio check is successful, the DTPW Monitor will use the DTPW radio to communicate to the Rail Central Control Facility to advise that the Contractor will commence with construction work.

C. Commencement of Work

Once receiving authorization from the appropriate Rail Traffic Controller, the DTPW Monitor will use the Contractor radio to communicate to the work crew that it is now permissible to begin work. The Contractor representative and the DTPW Monitor will sign the provided Central Control log form (as specified in the DTPW Adjacent Construction Manual), with the corresponding approval code, to confirm hearing the verbal approval from the Rail Central Control Facility over the DTPW radio before commencing with work. This log records the code, date, time, location, equipment being used, person giving code and DTPW Monitor receiving code.

6.0 Construction Activity Considerations

The Contractor shall comply with the following requirements:

- The Contractor shall assume full responsibility for the compliance with all applicable Federal, State and local regulations and for complying with this Manual for construction adjacent to the right-of-way during the performance of all work.
- Provide an overall maintenance of traffic (MOT) control plan for pedestrians, vehicular traffic and construction operations. Establish a general visitor control program if required.
- Maintain responsibility for project safety on the work site for the company employees as well as its' subcontractor employees.
- Require each of the Contractor's personnel that may need access on the guideway, to attend the DTPW Orientation and Guideway Safety Class. The Contractor shall reimburse costs of these classes to the DTPW.

6.1 DTPW Personnel/Public/Property Safety & Security

6.1.1 Mechanical Criteria

Existing services to DTPW facilities, including chilled water and condenser water piping, potable and fire water, fire standpipes and storm and sanitary sewers, are not be interrupted nor disturbed without written approval of DTPW.

Clear access for the fire department to the DTPW fire standpipe system and guideways shall be maintained at all times. Construction signs shall be provided to identify the location of DTPW fire standpipes. Call **DTPW Office of Safety and Security (305-375-4240)** 48 hours in advance of any approved interruption to fire standpipe water service.

Modifications to existing DTPW mechanical systems and equipment, required by new connections into the DTPW System, will only be permitted with prior review and approval by DTPW.

The adjacent construction developer will be required to submit the design calculations, drawings, specifications, catalog cuts and any other information necessary to fully describe the proposed modification.

At the option of DTPW, the adjacent construction developer will be requested to perform the field tests necessary to verify the adequacy of the modified system and the equipment performance. Where a modification is approved, the developer shall be held responsible to maintain original operating capacity of the equipment and the system impacted by the modification.

6.1.2 Corrosion & Stray Current Protection

The developer should be aware that, since Metrorail/Metromover transit cars are powered by direct current (DC) electricity, direct current can enter the earth through

unintentional leakage from the DTPW negative ground return system. The leakage or stray current may flow to the discharge from underground metallic elements (i.e. steel reinforcing, pipelines, grounding systems, etc.) which are in contact with any electrolyte, including earth, in the vicinity of the DTPW System. Because stray current may be corrosive to metal at locations where it flows into an electrolyte, the developer is cautioned to investigate the site for stray current and to provide the means for stray current mitigation when warranted.

Further information concerning stray current mitigation can be obtained by contacting The National Association of Corrosion Engineers (NACE), P.O. BOX 218340, Houston, Texas 77812, telephone (713) 492-0535.

6.1.3 Electrical System Interference

No interference to existing DTPW duct banks for the following electrical services shall be allowed:

- 13.8 K.V. service from Florida Power & Light
- 480 V. Florida Power & Light or from DTPW substations
- 480 V service to lighting in Parking Lots, Kiss and Ride areas, and 120 V service to Bus Shelters.

If any of the listed duct banks are affected by the adjacent construction, all information shall be submitted to the DTPW and utility company for review and approval.

No interference to existing DTPW duct banks for the following services shall be allowed:

- Telephone cables from Bell South
- DTPW train control and communications cables

Redesign of Facilities

The design for relocation or modification to existing DTPW parking lots, or Kiss & Ride areas and bus shelters shall be done in accordance with DTPW Design Criteria, Directive Drawings and Standard Specifications. To minimize interruption of DTPW operations, a phasing plan shall be developed and submitted for approval.

Proposed relocation of light fixtures, if any, shall be submitted for DTPW approval.

Existing ground-grids and ground conductors from ground-grids to DTPW facilities shall not be disturbed. No digging or cutting into existing DTPW facilities (ductbanks, wall, floor or ceiling) shall be permitted.

Access to personnel and equipment hatches for underground facilities shall not be blocked. In case any structure is built over an equipment access hatch, adequate passageway for entry of a heavy truck and clearance for the use of a crane to lower equipment from the truck into the hatch shall be provided.

In case any structure is built adjacent to DTPW at-grade facilities (traction power substations, tiebreaker stations, train control or communications rooms), passageways for heavy trucks and adequate clearance for the use of cranes to move equipment from trucks into and out of the equipment hatches shall be provided.

Emergency access gates for at-grade or aerial sections of DTPW rail shall not be blocked. Adequate passage from the gates to public streets shall be provided.

6.1.4 Modifications/Direct Connections to a DTPW Station

Connections to Metrorail/Metromover Facilities shall be designed, built and paid for by the person requesting the connection in accordance with DTPW Design Criteria or through a Direct Connection Agreement. Below are the items that shall be considered in the design of the connections.

The connection shall have a bronze flexible gate installed between the two passageways. The gate or grate shall be keyed on both sides with separate locks. To open the gate both locks will have to be open. Where the connection has 24-hour manned security on the non-DTPW side of the connection, glass doors may be used in lieu of a gate. If doors are used, each door shall be locked from both sides.

When required, a Closed-Circuit Television (CCTV) will be installed at the developer's expense and connected to the DTPW Kiosk. Power for the cameras shall be run from the CCTV to the station power room. The existing conduit runs and spare breaker locations can be found in the DTPW "As Built" drawings. It is the developer's responsibility to have this research performed by a competent professional. Intrusion alarms shall be installed on the gate or door and control wires installed between the gate or door and the communications room by the developer's contractor. Final connection will be made by DTPW to the DTPW security system.

Finishes on the interior of the DTPW side of the connection shall be to DTPW standards and specifications.

Lights in the new passageway shall be run to the developer's power room and included in the development's emergency power panel.

In the event that a Direct Connection is to be maintained by DTPW then the design will be in accordance with DTPW Design Criteria and construction would be required to meet DTPW's standard construction specifications. Normally the Direct Connection passageway is designed to be compatible with the building of which they are constructed as a part.

Before removing the knock-out panel the contractor shall have an approved dust protection system in place and fully functional. Typically, a dust protection system shall consist of a stationary partition that isolates the knock-out panel from the station. The dust partition shall be constructed using only fire rated materials. All joints shall be sealed with tape. Construction of the partition shall be during non-passenger hours.

Adjacent construction with a connecting passageway(s) to DTPW facilities will require special features to isolate one facility from the other for fire-safety, and may include automatic fire doors and dampers, sprinkler systems, smoke removal and ventilation systems and detection and alarm systems as required by the local fire code.

6.1.5 Signs, Signals, Barricades and Traffic Control General Requirements

1. All traffic signs or devices used for protection of construction workmen or the public shall conform to the State of Florida Manual on Traffic Control and Safe Practices on Street and Highway Construction.

2. Barricades, cones and/or similar protective devices shall be used whenever men or equipment are exposed to traffic or similar hazards.

3. When traffic lanes are closed due to work activity, advance warning signals and high level warning devices shall be used as described in the State of Florida Manual on Traffic Control and Safe Practices on Street and Highway Construction.

4. Flagmen and signalmen will be properly trained and use appropriate procedures, using the current FDOT manual.

5. All employees working adjacent to traffic shall be required to wear reflective vest, per FDOT manual.

6. Whenever and wherever possible and necessary, line voltage (12 volt) protected lights shall be used to mark fences and barricades and other such encroachments onto public streets or sidewalks.

7. Where covered sidewalks are required they shall be provided with permanent lights to provide sufficient illumination for safe use by the public day or night. All bulbs shall be cage-protected.

8. Public walkways shall be kept clean and free of hazards at all times.

9. Where the Contractors are required to provide public walkway, they shall have abrasive non-slip surface.

10. Where access to bus stop is disturbed or obstructed by the Contractors operations, safe access will be maintained or the bus stop relocated as directed by DTPW. Coordination for maintaining or relocating bus stops with the appropriate agencies is the sole responsibility of the Contractors.

11. When steel plates or similar covers are used on public ways to cover excavations they shall be substantially secured to prevent movement imposed by traffic. Covers shall have non-slip surface, conforming to OSHA Specifications.

12. When such covers are located where there is pedestrian exposure, they shall be tapered at all sides with cut back cold mix or similar material to eliminate tripping hazards. Covers shall have non-slip surface.

13. Free access shall be maintained to every fire extinguisher, fire hydrant, fire alarm box, fire escape and standpipe connection, street and traffic light control box. When required, hydrants shall be extended by suitable tube or piping to an accessible point as approved by DTPW. No obstructions shall be allowed at any time within 15 feet of a fire hydrant. Where materials are placed in the vicinity of a fire hydrant or a fire alarm box or fire extinguisher, and to such a height as to prevent the same from being readily seen, the position of such hydrant or fire alarm box or fire extinguisher shall be indicated by suitable signals, both day and night.

14. The Contractor shall erect and maintain fences and barricades to enclose the Contractor's work area, and provide watchmen where required to prevent unauthorized access.

6.1.6 Material Handling (Storage, Use and Disposal) General Requirements

1. All materials stored in tiers shall be secured to prevent sliding, falling or collapse.

2. Reinforcing steel shall not be used as a lifting ("Pick") point on any load or as a guy line anchor.

3. Hooks, except special sliding choker hooks shall be securely moused when in use, or shall be provided with a functioning safety latch.

4. Scrap material of any kind, type or nature shall be placed daily into appropriate containers specifically supplied for this purpose. Containers shall be removed from the work site when full.

5. Loose material on open decks or other exposed locations shall be removed or secured at the end of each day to eliminate dislodgment by wind or other causes.

6. Compatibility of stored materials and storage methods will comply with all applicable OSHA, Fire Department and environmental agency standards.

7. Employees required to handle, use or dispose of hazardous materials shall be instructed regarding the safe handling, proper procedures, potential hazards, personal hygiene, and personal protective equipment required.

8. No explosive or flammable materials shall be stored under the guideways.

9. Disposal of materials shall be in accordance with all applicable Federal, State and Local regulations. All applicable recordkeeping and reporting requirements shall be met by the Contractors.

6.1.7 Adverse Weather Conditions General Requirements

1. Disassemble all scaffolds, loose formwork, radio antennas and secure properly.
2. All items that cannot be secure shall be stored inside secured storage areas or buildings.
3. All crane booms shall be lowered to ground level and secured to prevent movement.
4. All office trailers shall be tied down in compliance with MDC Tie-Down Ordinance No. 77-1 upon original installation. All tie down straps, ground anchors, piers, etc., shall be checked for condition and operation.
5. All exposed glass on the Work Site shall be protected by a solid, rigid covering.
6. All free standing walls shall be stored from both sides.
7. Before employees are dismissed from the Work Site, the Contractors shall make a through inspection to verify all necessary precautions have been taken.
8. All precautions for construction sites during hurricane conditions, as required by the Florida Building Code shall be met.

6.1.8 Housekeeping General Requirements

1. All refuse piles shall be removed from the Work Site immediately.
2. Stored and stacked materials shall be kept orderly, properly stacked, choked, and secured.
3. Any protruding nails, etc., shall be bent, removed or clinched immediately.
4. Oil, grease, and water spills shall be cleaned up immediately.
5. Loose materials, tools, or equipment shall be kept off stairs, out of walkways, ramps, platforms at all times when not in use.
6. Depressions and pot-holes in vehicle or walkway surfaces on the Work Site shall be properly filled and graded immediately.
7. Walkways, vehicle travel ways, ramps, railings, and stairways, shall be kept free from debris, properly installed and maintained.
8. Smoking or the use of open flames within 25 feet of flammable storage areas or fueling areas shall not be permitted.

9. Flammable storage areas shall be properly posted **"NO SMOKING"**, provided with adequate fire extinguishers and free of combustible materials.

10. All sanitary facilities used on the Work Site shall be maintained on a daily basis.

11. All structures shall have a minimum of a 5-foot perimeter clearance that is to be free from any combustible debris or materials.

6.1.9 Overhead Protection

Overhead protection from falling objects shall be provided over DTPW facilities whenever there is a possibility, due to the nature of a construction operation, that objects could fall in or around DTPW guideway, at- grade sections, DTPW facilities, DTPW station entrances and areas designated for public access to DTPW facilities. Erection of the overhead protection for these areas shall be done in strict accordance with the requirements of this Manual and applicable standards cited herein.

The design live load for all overhead protection shall be in compliance with the minimum required by the current Florida Building Code and/or other(s) enforceable code. Overhead protection design shall include provision for impact loading when located adjacent to demolition projects or construction / maintenance projects where it is foreseeable that construction debris could fall on or near DTPW Facilities. Overhead protection for impact loading must be designed for a minimum of 300 pounds per square foot and to resist the force of impact of the largest foreseeable member or building element as taken from the elevation of that element. All overhead protection shall be designed by a licensed professional engineer. The design wind load on the temporary structures shall be in accordance with the calculated loads for components and claddings per the latest edition of the ASCE 7 Code.

Overhead protection over sidewalks and pedestrian areas shall be constructed of fire resistant materials. The vertical clearance between walking surface and the lowest projection of the overhead protection shall be 6'- 8". Construction materials and equipment shall not be stored on the completed walkway and pedestrian areas of the overhead protection roofs. A clear path from any DTPW emergency exit to the public street shall be maintained at all times.

The contractor will provide special protection, such as netting, barricades, walks, screens, scaffolds, etc., acceptable to DTPW, to help ensure the safety of DTPW property, patrons and employees. No work shall be permitted unless such protection is provided as determined necessary by DTPW. Erection of protective structures shall not be done during normal passenger hours unless by written authorization through DTPW.

Lighting of overhead protection at sidewalks and pedestrian areas is required and shall be provided under the overhead protective to maintain a minimum level of ten (10) foot candles at the walking surface. The temporary lighting will be maintained by the contractor.

With written DTPW authorization, the Overhead or Fall Protection structure may be constructed over the right of way and the guideway, if designed for the use for which it is intended, as well as in accordance with the above minimum design load requirements. The shield shall be constructed or installed during non-passenger hours. Once installed, limited work may proceed above the overhead protection during non-passenger hours.

6.1.10 Cranes and Swing Stage Scaffolding
General Requirements
The erection or staging of cranes, construction elevators and man lifts, swing stage or scaffolding, debris chutes or gantries shall not be performed within the 30 feet of the guideway drip line during passenger hours, without an authorized DTPW "Monitor" under radio communication with Central Control, on site.

Crane lifts located within 30 feet of the DTPW guideway drip line are permitted during non-peak passenger operating hours only when coordinated by an authorized DTPW crane Monitor or DTPW authorized employee under radio communication with Central Control on site. Under no conditions will loads be permitted to be swung over or within 5 feet of the guideway.

Crane lifts and exterior building operation conducted from swing stage that are located within the DTPW Right of Way or within 30 feet of the guideway drip line are permitted only during non-peak operating hours and only when coordinated by an authorized DTPW Monitor under radio contact with Central Control.

No construction elevators or cranes will be erected on the Metrorail / Metromover guideway side of the building /structure.

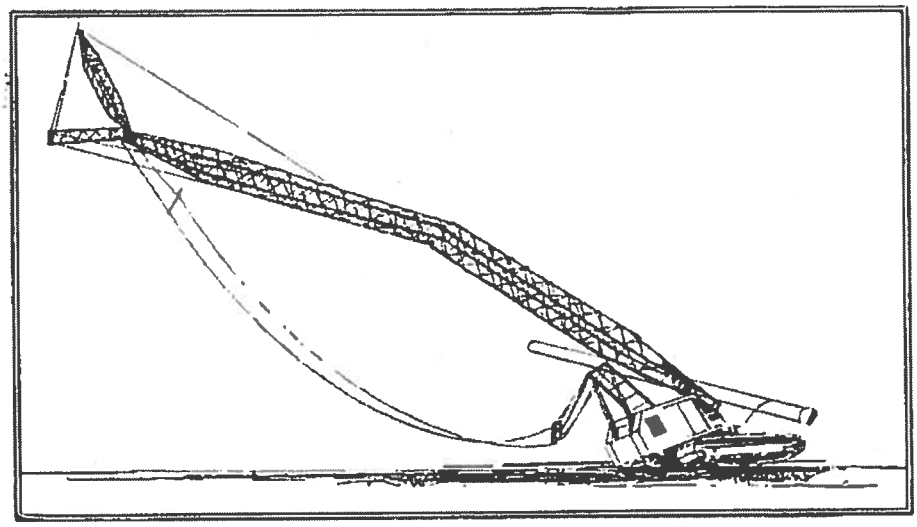
The contractor must ensure that all cranes are operated only by trained, experienced and competent operators who hold either an Operating Engineers, Local Union, Verification of Competence and Experience or equivalent licensure.

The contractor must also ensure that the men who direct, rig and handle loads are adequately trained, able to establish load weights, judge distance, heights and clearance and capable of selecting tackle and lifting gear suitable for the loads lifted.

All crane/scaffolding operations within the DTPW Right of Way and 30 feet of the guideway drip line are subject to inspection by the DTPW Design and Engineering Division, Metromover Maintenance Division and DTPW Office of Safety and Security. Cranes operated within DTPW Right of Way and Safety zones shall have complete maintenance, repair and inspection logs present on the machine and available for review. DTPW reserves the right to refuse the operation of any machine that the structural condition or stability of the machine is questioned regarding the task attempted by the contractor.

MOBILE CRANES

Over 50% of all Crane Accidents are "caused" when the machine is improperly set up.



The size, boom length and capacity of all cranes operated on projects within the DTPW Right of Way and Protective Safety Zones must be clearly shown on a site plan as part of an DTPW Access Permit application. The swing radius of the machine must be shown on the site plan with respect to the location of DTPW facilities.

Adequate care must be demonstrated by the contractor to DTPW representatives when setting up cranes and booms. Cranes shall be erected in strict conformance with the manufacturer's specifications and standard of good construction practice. Outriggers and support shall be adequately cribbed and blocked so as to properly brace the crane frame.

Adequate swing clearance shall be provided at the counterweight of the crane cab. At no time shall the counterweight swing clearance be less than 5 feet from the DTPW guideway drip line, without an authorized DTPW crane Monitor or employee under radio communication with Central Control on site. Overturning boom stops are required on all cranes when the boom angle exceeds 50 degrees from horizontal.

Mechanical swing limit switches and stops may be required to limit crane swing over and adjacent to the DTPW guideway and DTPW facilities. At no time will loads be allowed to be swung over the DTPW guideway, DTPW Stations or DTPW facilities.

Sheet pile and driven pile crane operations should be erected so that the crane and boom are situated perpendicular to the DTPW guideway. Staging and erection of piling should be adequately restrained or stayed such that the piling cannot topple into DTPW facilities during setup operations.

Tower Cranes
Tower cranes may be employed on projects that are adjacent to the DTPW facilities and guideway systems and that are tall enough, have sufficient jib length to reach a distance of 30 feet from the guideway drip line or that loads could be swung over DTPW facilities, are regulated by this manual. In general all tower cranes with base of tower located at a distance from the DTPW guideway drip line less than the height of the tower crane are subject to the restrictions in operation of this chapter.

Tower cranes are subject to wind movement and must be able to weather-vane during periods of high wind. Weather-vaning tower cranes, when cranes are not in use, are allowed to swing over DTPW guideway or facilities during passenger hours.

Tower cranes are subject to fatigue cracking and failure at the tower and jib connections. A certified structural inspection log of the Crane tower, jib, cables and haulage assemblies must be provided to DTPW on all tower cranes located in areas that they could affect DTPW facilities.

6.1.11 Excavations, Foundations and Sheet Piling

Until provisions for permanent support have been made, all excavations shall be properly guarded and protected so as to prevent the same from becoming dangerous to life and property and shall be sheet piled, braced and/or shored, where necessary, to prevent the adjoining earth from caving in; such protection to be provided by the person causing the excavation to be made. No excavation, for any purpose, shall extend within five (5) feet of the angle of repose of any soil bearing footing or foundation unless such footing or foundation is first properly underpinned or protected against settlement.

The design of all soils excavations, stabilization, modifications, underpinning or laterally protected with sheet piling shall be designed by a licensed professional engineer known to the Building Official to be qualified to evaluate the bearing capacity of soils. This design shall include a Geotechnical Soils investigation such that the registered Professional Engineer shall submit to the Building Official a letter attesting that the site has been observed and the foundation conditions are similar to those upon which the designed is based. The letter shall be signed and bear the impress seal of the engineer or architect, as applicable. Geotechnical soils sampling shall be conducted at sufficient frequency to ensure that the soils conditions on the project site are representative of the design conditions.

Angle of Repose
The angle of repose of all support soils within the DTPW Right of Way and safety zones shall be considered as 1:1 ratio. No excavation, for any purpose, shall extend within five (5) feet of the angle of repose of any DTPW soil bearing footing or foundation unless the design capacity of that footing is evaluated by the design Engineer of Record and his recommendations are approved by DTPW with respect to the design engineers modifications. Refer to Appendix B for clarification.

Pilings
Sheet pilings, driven pilings, auger cast pilings or other operations that create significant soils vibration shall be closely monitored with seismic accelerometers to verify the energy transmitted into the DTPW structures is less than 0.22 inches per second. Additional detailed survey analysis may be required to verify that no settlement has occurred in the course of the work.

Excavators
Excavation equipment operated within the DTPW Right of Way and Safety Zones must take extra care to avoid causing damage to DTPW facilities. Track excavators have similar swing geometry problems as mobile cranes and are capable of causing significant damage if improperly operated. Similarly, improper operation of wheel loaders, excavators, dump trucks and vibratory rollers can cause impact and vibration damage to structures.

The contractor must ensure that all heavy excavation equipment is operated only by trained, experienced and competent operators who hold either an Operating Engineers, Local Union, Verification of Competence and Experience or equivalent licensure.

Excavations may be conducted within the DTPW Right of Way and Safety Zones only during non-passenger hours. Excavation operations within the DTPW Right of Way and Safety Zones require a trained DTPW Monitor, in radio communication with DTPW Central Control, during all excavation operations.

Protection of underground site utilities is the responsibility of the contractor. All utilities must be located by an approved utilities locator service prior to the start of any excavation or piling activities.

DTPW may, at its discretion, modify any of the above conditions or impose additional conditions, to help ensure the safety of the public, and its patrons, employees or property.

6.1.12 Demolition
No Demolition of structures adjacent to DTPW facilities by blasting shall be permitted. During piece-by-piece demolition, it is essential that the DTPW escalators, and/or other DTPW equipment be protected from dust generated by the demolition. The DTPW equipment must be covered with polyethylene sheets during demolition to prevent dust from entering the equipment. Guideway protection diagrams and location plans shall be submitted by the contractor when appropriate or requested by DTPW. Such plans shall clearly show the alignment of the DTPW right-of-way together with the setback dimensions of the portions of the building to be demolished.

Application

This section is intended to apply to all activity on the exterior of buildings located within the Safety Zone including maintenance, inspections, probing, demolition operations and shall comply with the American National Standard (ANSI) A 10.6 standard for demolition

operations. In cases of practical difficulty and unnecessary hardship, or where other extenuating circumstances exist, DTPW may grant exceptions to the requirements stated herein, or may permit alternative methods, but only when it is clearly evident that equivalent protection is thereby secured.

Demolition Plan
The contractor must submit a detailed demolition plan to DTPW Engineering for review as part of the permit application package. This Demolition plan must include the scope of proposed demolition, location plan and building elevation of the proposed demolition work detailing the setback distance to DTPW facilities. Additionally the anticipated contractor means and methods, anticipated protective methods, equipment list including sizing of all demolition equipment should be supplied in the demolition submittal plan. The plan shall describe the type of construction (concrete, steel frame, masonry, etc.) and the overall construction configuration.

Guideway protection diagrams and location plans shall be submitted by the contractor when appropriate and requested by DTPW. Such plans shall clearly show the alignment of the DTPW right-of-way together with the setback dimensions of the portions of the building to be demolished.

Protection
During demolition, it is essential that the DTPW facilities be protected from dust generated by the demolition. The DTPW stations, escalators, train control and traction power rooms/buildings must be covered with polyethylene lined sheets during demolition to prevent dust from entering the DTPW switch gear and equipment.

Structural Condition and Analysis Survey
Prior to starting any demolition operation within the safety zone, an engineering survey of the structure shall be made to determine the condition at all locations of the exterior walls adjacent to the DTPW system. The purpose of the survey is to determine the condition of the framing, floors, and walls so that actions can be taken, if needed to prevent premature collapse of any portion of the structure. Such survey shall be made on the outside utilizing swing stages with full rail protection. The survey shall consist of documenting all locations displaying loose, cracked, and/or deteriorated stucco, tile, or other building facade materials in which such condition could result in falling debris.

An exterior crack survey may be required as part of the engineering survey of building to be demolished. A crack survey should be prepared locating all significant cracks including a location sketch, description, width, estimated recent activity, and the existence of previous repairs. Cracks of any significance shall be physically marked so that future observation may be made with telescopic equipment at the ground level. A stucco condition survey locating all significant irregularities in the stucco facade including bulges, micro/map cracking, hollow and de-bonded areas, discoloration due to water absorbance effervesce scaling, or other abnormalities should be included in the crack / engineering survey.

Guideway Protection Diagrams and Location Plans shall be submitted by the contractor when appropriate and requested by DTPW. Such plans shall clearly show the alignment of the DTPW right-of-way together with the setback dimensions of the portions of the building to be demolished.

Similarly a window / wall opening survey of the condition of window vents, plywood covers, sill stability, and other characteristics from which conclusions can be made as to the security of such openings. Where a hazard exists from fragmentation of glass or instability of the window frame/vent, all glazed openings shall be removed or protected.

Scheduling
Exterior building element demolition activities located within the safety zone are permitted only during non-passenger operating hours and only when coordinated by an authorized DTPW "Monitor" under radio communication with Central Control on site.

Protective Measures
Remove all loose materials by hand which are in imminent danger of falling. The removal of such loose materials must also include a temporary repair or stabilization at any location where the removal results in an opening or area, which can allow water to penetrate resulting in further or future deterioration.

Pedestrian Site Security and Safeguards
Prior to the engineering survey of the building exterior and other invasive activities, it is necessary to fully protect the public and in particular, DTPW facilities. Every sidewalk, train guideway, station platform, stairs, escalator, or public thoroughfare adjacent to or near enough to be affected by the operations on the building shall be closed, relocated or protected as specified in overhead protection above.

Demolition Observer
Provide a full time observer who is classified as a qualified person and who is capable of recognizing changes in the building facade and appearance. The purpose of this person is to provide warnings to the DTPW operators in the event of a sudden change in the building's outward appearance or stability so that service on a rail section may be discontinued. The observer and shall remain at the site at all times DTPW is in operation and providing service to the public

Periodic Demolition Reports
A certification shall be provided by a licensed engineer after each periodic inspection stating that the building components are secure and that it is safe to operate the DTPW system in that location.

Demolition Means and Methods
No wall sections shall be permitted to stand alone without lateral bracing. Additionally, all walls shall be left in a stable condition at the end of each shift. Masonry walls or other sections of masonry shall not be permitted to fall upon the floors of the building unless qualified persons have determined the impact of such masses will not exceed the safe carrying capacities of the floors.

Chutes
Materials shall be dropped only through chutes to any point lying outside the exterior walls of the building and chutes at any angle exceeding 45 degrees from the horizontal shall be entirely enclosed. Also, chutes shall be designed and constructed to eliminate hazards of impact of materials or debris

Particle Velocity and Seismograph Reports
When required, the contractor shall measure and furnish reports of particle velocity caused by impacts in accordance with provisions in Appendix E of this document.

Additional Requirements
DTPW may, at its discretion, modify any of the above conditions or impose additional conditions, to help ensure the safety of the public, and its patrons, employees or property.

6.1.13 Exterior Building Maintenance

Pressure Washing	Painting
Window Washing	Sandblasting
Stucco Damage Repair	Other Maintenance Operations
Structural/ Non-Structural Inspections	

General
In general, some routine maintenance activities associated with the exterior building envelope of buildings may not require a building permit. However, to adequately ensure the safety of the DTPW system, provisions are made in this manual detailing specific requirements and limitations of allowed building maintenance activities within the DTPW Safety Zone. A DTPW Access Permit is required on all exterior building maintenance activities for buildings located within the Safety Zone.

Access to exterior building components located within the Safety Zone including window cleaning operations and roofing operations is prohibited during DTPW passenger hours without a DTPW Monitor. The simple DTPW policy is that "there shall not be any exterior building maintenance activity at or above the elevation of the DTPW guideway during normal passenger operations without a DTPW Monitor".

Maintenance
This section is intended to apply to all activity on the exterior of buildings located within the Safety Zone including maintenance, inspections, probing, stucco repair, painting and waterproofing operations. In cases of practical difficulty and unnecessary hardship, or where other extenuating circumstances exist, DTPW may grant exceptions to the requirements stated herein, or may permit alternative methods, but only when it is clearly evident that equivalent protection is thereby secured.

Small Particle Protection
Routine exterior building cleaning is required to some extent on most structures. Much of this work is commonly accomplished by access to the building exterior via either swing stage or boson chair. Access on building exteriors located within the safety zones is prohibited during passenger hours without a DTPW Monitor.

Pressure cleaning and sandblasting activities produce over spray, dirt and particle fallout below the work area. DTPW guideway, stations and facilities must be adequately protected from the fallout of the dirt, particles, sand, loose paint, etc. prior to the start of any exterior building cleaning activity. Such protection may be in the form of polyurethane lines, canvas tarps or other catchment devices. Design of required protection must be approved by DTPW.

Stucco probing and repair, painting and waterproofing activities produce falling debris. DTPW guideway and DTPW Facilities must be adequately protected with overhead protection as described in this manual as part of the DTPW Work Order for stucco repair and painting activities.

DTPW may, at its discretion, modify any of the above conditions or impose additional conditions, to help ensure the safety of the public, and its patrons, employees or property.

DTPW Operations and Scheduling
DTPW shall have the right to stop any work or construction activity that affects the safety of DTPW patrons and or facilities or normal DTPW operations. DTPW will exercise reasonable advance notice, except for any matters related to immediate system safety concerns which will require no advance notice.

Construction work which may have any impact on the Metrorail/Metromover System may be scheduled during the Non-Peak Operating Hours or Non-Passenger Hours. Non- Peak Operating Hours are defined as weekdays prior to 6:30 A.M. or after 7:00 P.M. and between 10 A.M. and 3 P.M.; and all day Saturday and Sunday. Non-Passenger hours are defined as Monday through Sunday 12:30 A.M. to 4:30 A.M. or such other hours as may be designated by the County as Non-Passenger Hours. Passenger hours may change without notice as needed by DTPW.

Weekends / Holidays & Special Events
Construction work that may impact weekend or special operational conditions will be limited. Schedule requirements will be addressed on a project to project basis where the individual scheduling needs of the project can be evaluated with respect to the operations of the DTPW systems.

APPENDIX A: GLOSSARY

The following terms shall, for the purpose of this Manual, have the meanings respectively ascribed to them:

ACCIDENT - An unforeseen event or occurrence that causes death, injury or damage to property. Any abnormal condition that requires the attention or intervention of responsible personnel or an individual monitoring the transit system operation.

ALARM CONDITION - Deviation from nominal performance, which does not cause a significant, effect on system performance but does warrant investigation and/or repair. Sanctioned or accepted by the building official and Department of Transportation and Public Works.

AUTOMATIC - A term applied to a system, subsystem, or device, which has the inherent capability to function without direct manual participation.

CATCH PLATFORM - A temporary structure erected around or attached to, and abutting a building for the purpose of safeguarding the employees, and the public, by catching and retaining falling objects or debris.

CENTRAL CONTROL - That place where train control or train supervision is accomplished for the entire Metro-rail and Metro-mover system; the train command center.

CONSTRUCTION SAFETY - The optimum degree of safety within the constraints of construction effectiveness, time and cost through specific application of safety management throughout all phases of the construction.

CONSTRUCTION SAFETY MANUAL - Issued as a contract document by Department of Transportation and Public Works (DTPW), to be used as a guide by the Contractor in developing his Accident Prevention Program.

DTPW ACCESS PERMIT - Issued written authorization from DTPW for work in the DTPW Right of Way and DTPW Safety Zones. Construction Work Orders are specific with regard to the scope, extent, additional requirements or limitations, and allowable

schedule of approved work to be completed in the DTPW Right of Way and Safety Zones.

CONTRACT DRAWINGS - The plans, profiles, typical cross-sections, general cross-sections, elevations, schedules and details which show locations, character and dimensions of the work.

CONTRACTOR'S AUTHORIZED SAFETY REPRESENTATIVE - The person designated as authorized safety representative who will be responsible for work site safety and for reporting all insurance claims.

CONTRACTOR- The individual, firm, partnership, corporation, or combination thereof, private, municipal, or public, including joint ventures, which, as an independent contractor, has entered into a contract with MDC, who is referred to throughout the Contract Documents by singular in number and masculine in gender.

CHUTE- A trough or tube used to guide and transport sliding objects, materials, or debris from a higher to a lower level.

DEGRADATION - Falling from an initial level to a lower level in quality or performance.

DEMOLITION - Dismantling, razing, destroying, or wrecking any fixed building or structure or any part thereof.

EMERGENCY - A situation which is life threatening or which can cause serious damage on or in the immediate vicinity of any transit facility, structure, bus or train.

EMPLOYEE - A person employed by the Contractor or Subcontractor.

EQUIPMENT FAILURE - The state in which equipment no longer meets the minimum acceptable specified performance and cannot be restored through operator adjustment or control.

FTA - Federal Transit Administration, formerly UMTA.

FAILURE - An inability to perform an intended function within specified tolerances.

HAZARD - Any real or potential condition that can cause injury or death; or damage to or loss of equipment or property.

HAZARD MANAGEMENT (LOSS CONTROL) - An element of the system safety management function that evaluates the safety effects of potential hazards considering acceptance, control, or elimination of such hazards with respect to expenditure or resources. (The feasibility of hazard elimination must be considered in light of financial, legal, and human considerations).

HAZARD SEVERITY – A qualitative measure or the worst potential consequences that could be caused by a specific hazard.

Category I Catastrophic	May cause death, serious injury/illness or major system loss.
Category II Critical	May cause injury/illness, or major system damage.
Category III Marginal	May cause minor injury/illness, or minor system damage.
Category IV Negligible	Will not result in injury/illness, or system damage.

HAZARD RESOLUTION - The analysis and subsequent actions taken to reduce, to the lowest level practical, the risk associated with an identified hazard.

IMMINENT DANGER - Refers to any condition or practice where there is reasonable certainty that a danger exists that can be expected to cause death or serious physical harm and/or serious property damage immediately or before the danger can be eliminated through normal enforcement procedures

INCIDENT - An unforeseen event or occurrence that does not necessarily result in injury or property damage.

MAINTENANCE - All actions necessary for retaining an item in or restoring it to an operable condition.

MALFUNCTION - Any anomaly or failure wherein the system, subsystem, or component fails to function as intended.

MAY - A permissive condition. Where the work "may" is used, it is considered to denote permissive usage

MIAMI DADE COUNTY - The Board of County Commissioners of Dade County, (MDC) Florida, political subdivision of the State of Florida, and the DTPW, an office under the County manager of Miami Dade County, Created March 1, 1974, by Administrative

Order No. 3-8, under the authority of Sections 4.01 and 4.02 of the Miami Dade County Charter - and any authority, board, body, commission, official or officials to which or to whom the powers now belonging to DTPW in respect to the location, construction, equipment, maintenance and operation of transit facilities shall, by virtue of any act or acts, hereinafter pass or appertain.

DTPW - Department of Transportation and Public Works, Miami-Dade County, located at 701 N.W. 1st Court, Suite 1700, Miami, Florida 33136

DTPW RIGHT OF WAY- As defined by the legal description of the properties that the DTPW facilities occupy or are situated above and supportive easements. For the purpose of this manual the Right of Way shall be defined as those properties located within the drip lines of the DTPW rails, stations and facilities and include those properties used for access and egress to the DTPW facilities by the general public and normal DTPW operations.

MISHAP - An unplanned event or series of events that result in death, injury, occupational illness, or damage to or loss of equipment or property. (See also ACCIDENT).

MONITOR - An authorized DTPW employee, DTPW contractor or DTPW consultant monitoring the movement of construction equipment or materials that may infringe upon the 30' "Safety Zone" (that area of the Department of Transportation and Public Works Guideway (Metrorail and/or Metromover) that lies within 30' of the outermost edge of the superstructure) which has the potential to interfere with Department of Transportation and Public Works operations and/or maintenance. This person(s) shall ensure the safety of Department of Transportation and Public Works patrons, employees, property and the public. DTPW contractors and DTPW consultants shall be trained per DTPW Rail Services Metromover and Metrorail training packages before they perform duties as Monitors.

OPERATOR - That person having direct and immediate control of the movement of a vehicle or machinery.

OPERATING TIME - The time period between turn-on and turn-off of a system, subsystem, component or part during which time operation is as specified. Total operating time is the summation of all operating time periods

OSHA - The Occupational Safety and Health Administration. An agency of the U.S. Government which sets standards to provide for the safety of employees in the workplace. The local area office is located in Ft. Lauderdale, Florida, phone (305) 527-7292

PERSONAL PROTECTIVE EQUIPMENT (PPE) - Equipment designed and worn to provide protection against hazard to some part of an employee's body. Examples of PPE are safety glasses, respirators, hart hats, gloves etc. All PPE used at DTPW work sites must comply with applicable OSHA standards

POWER RAIL - Three separate rails center mounted on insulators on the guidebeam which provides traction power for vehicle propulsion. (Metromover)

PROCEDURES - Established methods to perform a series of tasks.

QUALIFIED PERSONS - Those who by possession of a recognized degree, certificate, or professional standing, or by extensive knowledge, training, and experience in the demolition industry have successfully demonstrated their ability to solve or resolve problems relating to the subject matter of demolition.

QUALIFYING BUILDINGS - Buildings located within 30 feet of DTPW Right of Way corridor, and greater than 35 feet, in height, that have a building
footprint located adjacent to a Safety Zone where the elevation of the building encroaches into the Vertical Safety Zone extensions as defined in Safety Zone above and at the rate of 1 foot horizontal offset per 4 feet of building height above DTPW facility. See the definition of Safety Zone above and attached drawing CZ-1 (Appendix C).

QUALIFYING STRUCTURES - Cranes whose boom swing infringes within the 30 feet Safety Zone or DTPW Right-of-Way corridor. Signs located within the safety zone. Temporary scaffolding or construction towers within the Safety Zone or DTPW Right of Way corridor with heights greater than 30 feet.

QUALIFYING WORK- Any construction, demolition, equipment operations or building maintenance activity performed on or in a building or structure which may be hazardous to persons or property within the DTPW Right of Way or protective safety zones.

RELIABILITY - The probability that the system or sub-system will perform satisfactorily for a given period of time when used under stated conditions.

REPAIR - The maintenance activity which restores a failed item to operable state.

RISK - An expression of possible loss over a specific period of time or number of operational cycles. It may be indicated in terms of hazard severity and probability.

RISK MANAGEMENT - The Risk Management Division, Miami Dade County, General Services Administration, located at III N.W. I" Street, Suite 2340, Miami, Florida 33128; phone 375-4280.

RULE - A law or order authoritatively governing conduct or action.

SAFE - Secure from danger of loss.

SAFETY - A reasonable degree of freedom from those conditions that can cause injury or death to personnel; damage to or loss of equipment or property; and freedom from danger.

SAFETY CHECKLIST - A list for examining the safety aspects of equipment, procedures and personnel.

SAFETY CRITICAL - A designation placed on a system, sub-system, element, component, device, or function denoting that satisfactory operation of such is mandatory to assurance of patron, personnel, equipment, or facility safety. Such a designation dictates incorporation of special safety design features.

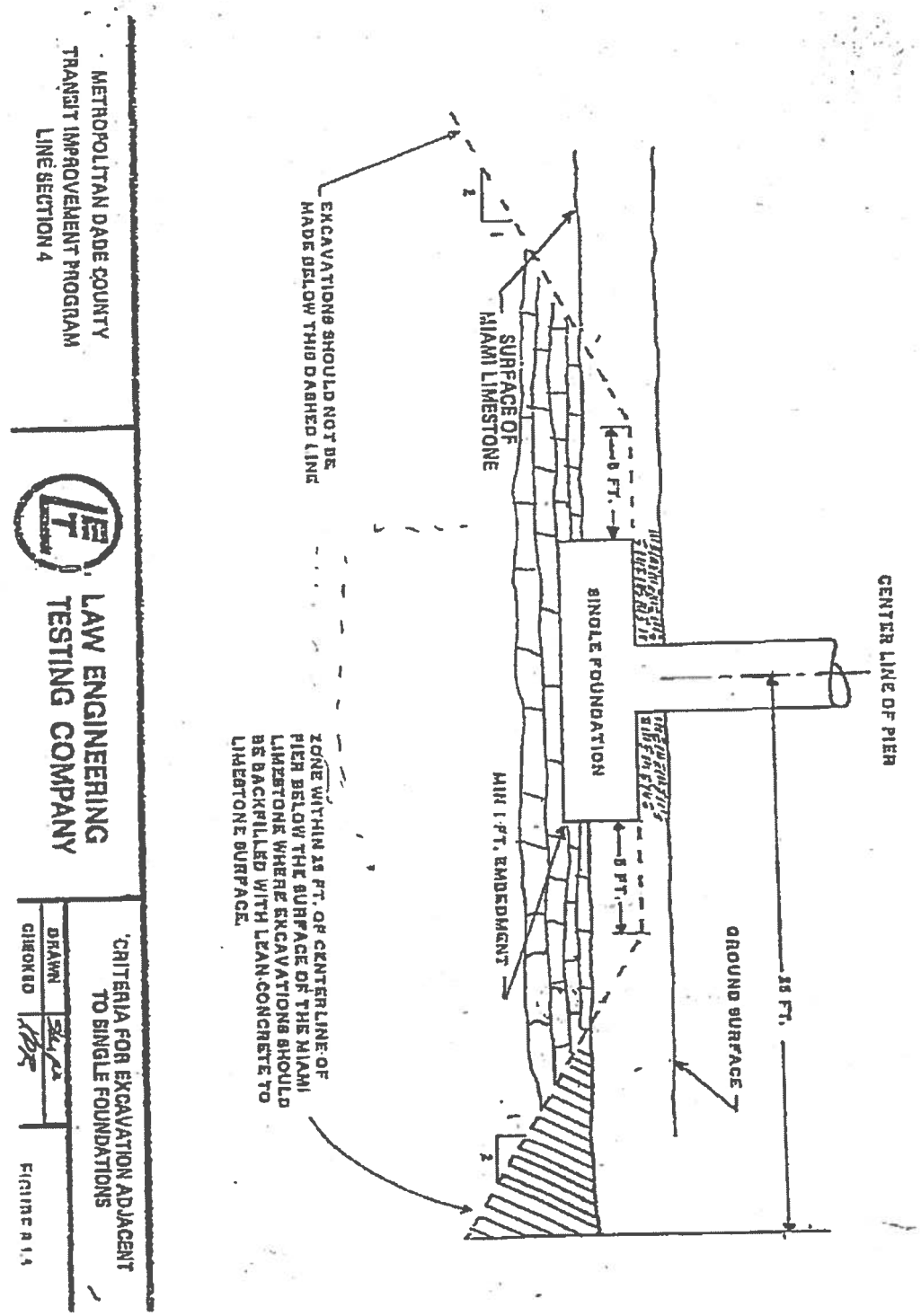
SAFETY DEVICES - Protective devices which do not alter the fundamental nature of a hazard but which do control the extent of the hazard in some manner.

SAFETY MANAGEMENT - An element of management that establishes safety program requirements and ensures the planning, implementation and accomplishment of task and activities to achieve work place safety.

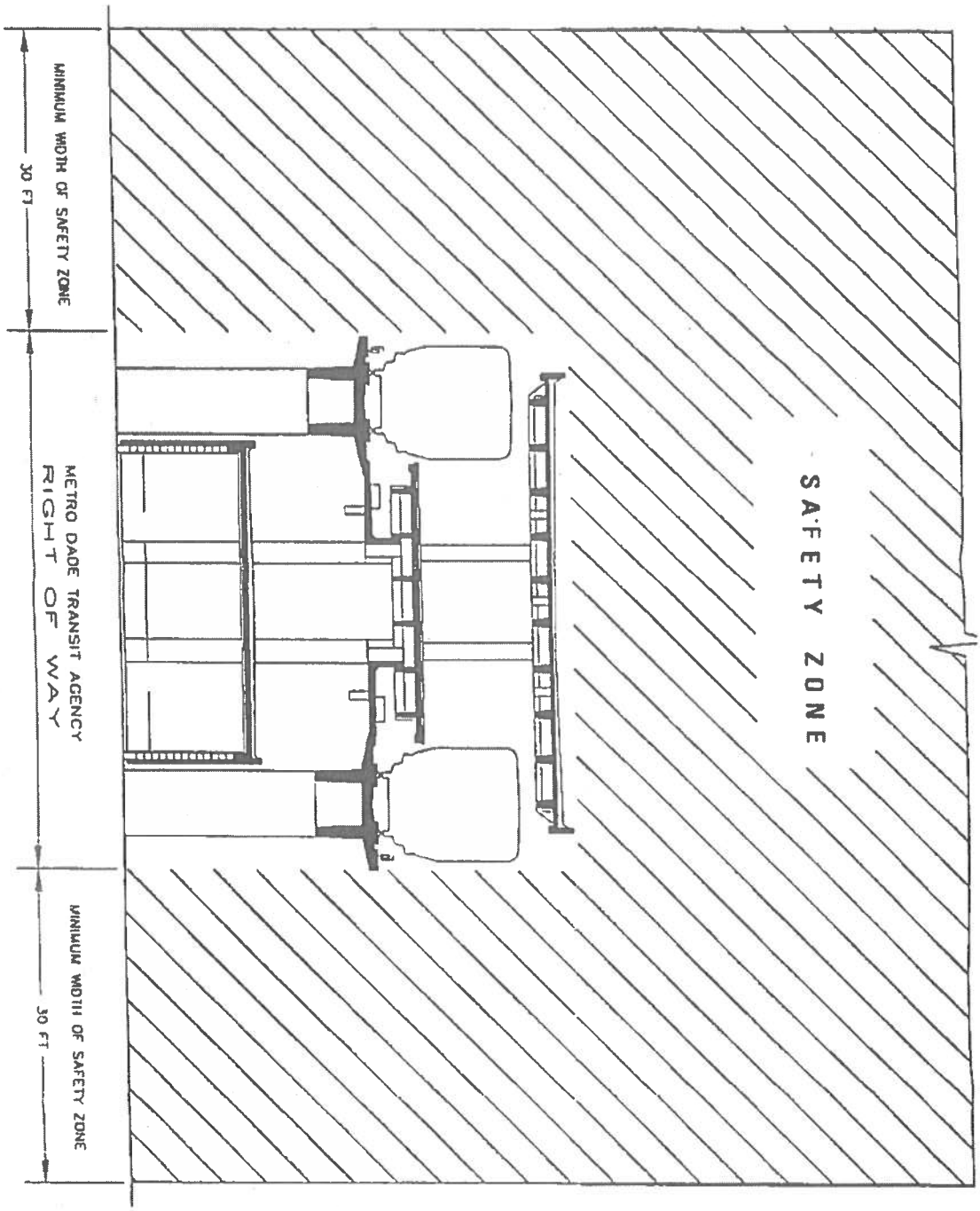
SAFETY PROGRAM -	The combined task and activities of safety management and safety engineering that enhance operational effectiveness by satisfying the safety requirements in a timely, cost-effective manner throughout all phases of the work.
SAFETY SUBCONTRACTOR -	A subcontractor who satisfies the Florida Department of Labor and Employment Security Industrial Safety and Health Programs, Chapter 38F-44, and is duly approved by MDC
SAFETY ZONE -	Safety Zones are defined as a protective safety buffer zone adjacent to the DTPW Right of Way. Safety Zones include all lands public or private within 30 feet (horizontally) of the DTPW Right of Way measured from the drip line of the facility/guideway. No work is allowed at the exterior of any building located within the protective safety zone without an approved DTPW Access Permit.
SERVICE CONTRACTS/ CONTRACTOR -	Those operations that are providing any services, or repair, replacement or maintenance functions that are indigenous to the construction process on the Work Site.
SHALL -	A mandatory condition. Where certain requirement are described with the "shall" stipulation, it is mandatory that these requirements be met.
SHOULD -	An advisory condition. Where the " should" is used, it is considered to be advisable usage, recommended but not mandatory.
STATE -	The State of Florida.
SUBCONTRACTOR -	Any person, firm or corporation, other than the employees of the Contractor, who contracts with the Contractor to furnish labor and/or materials under this Contract.
SUPPLIER/VENDOR -	Those entities whose. sole responsibility to the project is the delivery of goods or materials, exclusive of direct labor.
SYSTEM -	A composite of people, procedures and equipment operating in a specific environment to accomplish a specific mission or task
THIRD RAIL -	A rail mounted on insulators adjacent to running rails which provides traction power for train propulsion. (Metrorail).

TRANSIT SYSTEM -	A transportation system comprised of fleets of motor buses and electrically propelled transit vehicles and all of their operational / support personnel and systems (e.g. maintenance facilities, tracks, structures, etc.) utilized for the mass movement of passengers within a metropolitan area.
UNUSUAL OCCURRENCE -	An unforeseen event or incident which does not necessarily result in injury or property damage.
UNSAFE CONDITION -	Any condition which if not corrected, will endanger human life or property.
WARNING DEVICES -	Sensors that monitor or detect conditions and provide visible and/or audible alerting signals as desired for selected events.
WORK SITE -	The area enclosed by the limit of Work indicated in the Project Drawings and boundaries of local streets and public easements in which the Contractor is to perform the work under the Contract. It shall also include areas obtained by the Contractor for use in connection with the Contract, when contiguous to the Limit of Work.

APPENDIX B: CRITERIA FOR EXCAVATION ADJACENT TO SINGLE FOUNDATIONS



APPENDIX C: SAFETY ZONE CRITERIA



APPENDIX D: SAMPLE CRANE SAFETY INSPECTION CHECKLIST

CRANE SAFETY INSPECTION CHECKLIST

Location:

Area Inspected:

Inspected By: Date:

* Check Items to be inspected in your area - Disregard others as not applicable

*	OK	ITEM INSPECTED	NOT OK	COMMENTS
		THE CRANE CREW		
		Is the operator and crew properly trained?		
		Operating is a full time job--does the operator pay strict attention to his duties?		
		Do crane personnel wear hard hats when away from the crane?		
		Is the operator aware of the regulations involving working close to high voltage lines and electrical equipment?		
		High voltage, even from a distant source, can be introduced in metal parts of the crane. Is the operator aware of these situations?		
		Does the operator know the weight of each piece before he picks it?		
		Does the crane crew know the manufacturer's proper recommendations for making short moves on the job site?		
		Does the crew get help when lifting heavy objects?		
		Does the crew periodically check for level?		
		Do they check the outriggers for stability?		
		Do they check the boom angle indicator and other electronic load equipment for accuracy?		
		Does the operator allow anyone to ride the load or to the hooks?		
		THE GROUND CREW (HOOKING UP THE LOAD)		
		Does the ground crew have, maintain and use proper safety equipment?		
		Are they familiar with the product erection sequence?		
		Are they familiar with the crane signals and general operation of the crane?		
		Do they know how to properly hook pieces and provide aerial stability?		
		Do they know how to properly use tag lines?		
		Are the tag lines in good condition, strong enough and long enough?		

APPENDIX D: SAMPLE CRANE SAFETY INSPECTION CHECKLIST (CONT)

*	OK	ITEM INSPECTED	NOT OK	COMMENTS
		Is two way communication between the operator and the erection foreman being used? Does the crew know how to use and maintain the equipment? Are spare parts available for quick repair?		
		Is the crane swing radius roped off to prohibit the crane (during swing) from causing damage or hurting someone? Is entire swing checked including the counterweights?		
		THE MACHINE		
		Is the crane operated within all capacities?		
		Is the machine inspected daily?		
		Are the required crane inspections recorded?		
		Are all controls properly identified?		
		Are warning devices operative?		
		Is the manufacturer's rating plate visible?		
		Is the operator's manual available to the crew for easy reference?		
		Are load charts, operating signals and other important information posted and/or readily available?		
		Are brakes within operating limits?		
		Are clutch and brake surfaces dry?		
		Are all protective panels and guards in place?		
		Are electrical systems in good condition?		
		Are all of the sheaves properly aligned so as to reduce rope wear during work?		
		Is cable in good conditions?		
		Are hooks in good condition?		
		Have hooks been inspected by magnetic particle inspection?		
		Are there safety latches on the hooks?		
		Are fuel tanks in good condition and without leaks?		
		Are fire extinguishers available and routinely inspected?		
		SLINGS		
		Are slings in good condition/ Is safety factor of 5 maintained?		
		Are slings stored properly?		
		Are sling inspection reports maintained?		
		Are "U" bolt wire rope clips correctly placed?		
		Are all other lifting devices in good condition?		

APPENDIX D: CHECKLIST FOR CRITICAL LIFTS

CHECKLIST FOR CRITICAL LIFTS

This form is to be completed when the load exceeds 80% of the load chart for the crane or derrick or where the pick involves two or more cranes.

LIFT DATE: _____

1) Supervisor responsible for the lift: _____
2) Description of item to be lifted and estimated weight: _____

_____

_____

_____

3) Equipment and Lift Relationship:
   a. Operating Radius _____
   b. Boom Length _____
   c. Allowable Load (From Load Chart) _____
   d. Ratio of Lift to Allowable Load _____
   e. Clearance to Surrounding Facilities _____
   f. Sling Angle _____
4) Condition of Hoisting Equipment and Rigging
   a. Has all equipment been reinspected for this lift: ____Yes ____No
5) Stability of Ground Area:
   a. Check Soil/Ground Bearing Allowable Load (List Conditions) _____

      _____

      _____

   b. Will mats be needed? ____Yes ____No
   c. Any underground installations needing special attention? ____Yes ____No
   d. Will it be necessary for the crane to walk with the load? ____Yes ____No
   e. Is the surface level and stable where the crane will be walking?

      ____Yes ____No

APPENDIX D: CHECKLIST FOR CRITICAL LIFTS (CONT)

f. Have facilities been provided to keep the load radius from changing?

_____Yes _____No

g. Have all overhead facilities been checked for clearance in the area where the crane will be moving/operating? _____Yes _____No

6) Does the operator have the necessary experience on the crane and this type of lift?

_____Yes _____No

7) If the lift involves the use of two cranes answer the following:

a. Have operators worked together before? _____Yes _____No

b. Who will coordinate instructions to operators? _____

_____

_____

By: _____

Contractor's Superintendent

APPENDIX E: RECOMMENDED VIBRATION LIMITS

Seismological research by the U.S. Bureau of Mines, foreign investigative groups, and individual seismologists has established criteria relating the occurrence of structural damage to certain frequencies and levels of ground motion.

USBM Report of Investigations 8507[1] states that residential structures are most prone to damage as a result of vibration energy within the frequency range of 4-12 hertz. Within this range, a 0.5-inch per second maximum particle velocity is recommended to preclude 'threshold' damage to the plaster-on-wood-lath interior portions of older structures.

Threshold damage is defined by the USBM as the loosening of paint, small plaster cracks at joints between construction elements or the lengthening of old plaster cracks. A maximum of 0.75 inch per second is recommended for the protection of modern drywall interior construction. The damage threshold is normally considerably higher for load bearing or other structural portions of a house.

Above 12 hertz, the allowable vibration increases as the frequency increases, up to 40 hertz, above 40 hertz, a constant 2.0 inches per second level is recommended to protect the interior walls and ceilings of structures, regardless of construction material. A graphic representation of the USBM recommended criteria is shown In the velocity versus frequency curve on the following page, and the vibration analysis of the recordings are plotted on graphic representations at the end of this report.

It should be noted[2], however, that it is almost impossible in actual practice to visually determine if the recorded peak vibration on a typical seismogram is actually within the Bureau's 4-12 hertz range. This is because ground vibration is usually a complex mixture of many frequencies that cannot be accurately separated by visual analysis of a seismogram.

Proper implementation of the Bureau's limit can only be accomplished by a computerized technique that analyzes the seismographic data in terms of both peak particle velocity and frequency. Therefore, in order to best determine the potential effects of ground vibrations recorded in this study, a computerized response versus frequency technique known as RSVP was used in the preparation of this report.

RSVP TECHNIQUE

The Response Spectrum Velocity Profile (RSVP) technique used in this study was developed by Dr. Kenneth Medearis. It is a powerful vibration analysis tool which not only conforms to USSM recommendations, but also provides insight into the responses of various types of residences to a given vibration episode.

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[2] Siskind, David *et al*, *Structural Response and Damage Produced by Ground Vibration From Blasting*. *U.S. Bureau of* Mines, RI, 1980.

APPENDIX E: RECOMMENDED VIBRATION LIMITS (cont)

All buildings are characterized by a single natural fundamental frequency. This means that, as with a pendulum or a tuning fork, there is one dominant frequency at which a particular building will vibrate when excited. The fundamental natural frequency of a building depends primarily upon its height. Tall buildings are more flexible and vibrate at low frequencies. Low-rise structures, being stiffer, vibrate at higher frequencies.

When the frequency of a ground vibration wave matches the structure's natural frequency, the ground motion will be amplified within the structure. According to the USSM, the natural frequency of typical residential structures ranges between 4 and 12 hertz. Thus, it is within this range that the vibration limits recommended by the USBM are most stringent.

By applying the computerized RSVP Technique to the data obtained in this survey, both the ground particle velocity and response characteristics of residential structures are considered over a wide range of frequencies. The results are then related to the USSM velocity versus frequency curve discussed previously, and are plotted on the analysis sheets at the end of this report.

When particle velocities exceed the limits of the USBM Curve, non-damage probability calculations are performed, based on the research of Medearis. These probabilities are given under the graphs on the analysis sheet for 1, 1-1/2, and 2story houses. When no figures are given, probability of non-damage is essentially 100 percent.

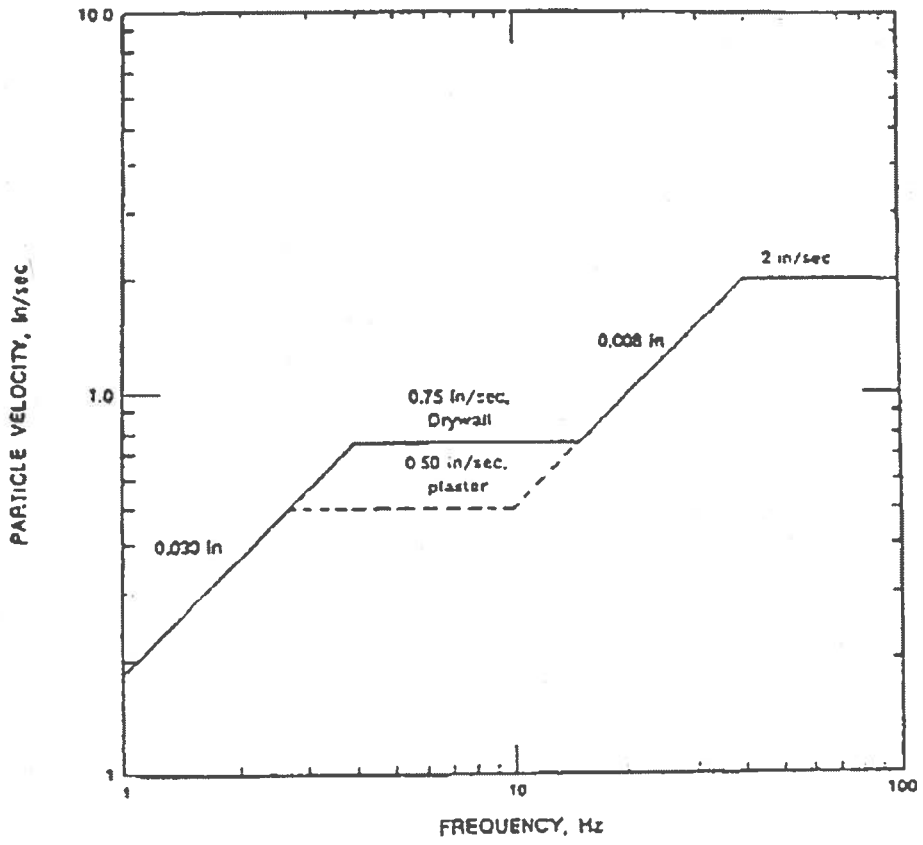


EXHIBIT E

DTPW Escort/Monitor Requirements

A DTPW escort is required if/when work is to be performed within thirty (30) feet of the dripline of the Metrorail guideway in accordance with DTPW's discretion. A DTPW rail escort will be provided at a cost of $69.51 per hour including one additional hour travel time, 30 minutes, to and from the project. At the County's discretion, this rate may change from time to time subject to, in whole or in part, union contractual agreements. **Note:** DTPW escorts are employees that are scheduled to work on their day-off at a construction jobsite. They are called in to work so that DTPWs work productivity isn't impacted. These employees report to work at minimum a half shift (four hours) or full shift (eight hours). Billing shall be at minimum four (4) hours. If work is cancelled, contractor is responsible for the hours unless cancellation is received at least 24 hours in advance of the scheduled work.

A DTPW Construction and Facility Monitor (Spotter) is required if/when work is to be performed within thirty (30) feet of the dripline of the Metrorail guideway in accordance with DTPW's discretion. A DTPW Monitor (Spotter) will be provided at a cost of $23.53 per hour including one additional hour travel time, 30 minutes, to and from the project. This rate may change without notice based on an annual review by DTPW Finance Division. **Note:** These workers are hired as part-time temporarily so that DTPW's work productivity isn't impacted. These employees report to work at minimum a half shift (four hours) or full shift (eight hours). Billing shall be at minimum four (4) hours. If work is cancelled, contractor is responsible for the hours unless cancellation is received at least 24 hours in advance of the scheduled work.

Based on the scheduled times needed for a DTPW escort/monitor, all payments must be made payable to Miami-Dade Department of Transportation and Public Works Finance Division, Attn: Accounts Receivable, P.O. Box 010791, Miami, Florida 33101-0791.

To make arrangements for the required DTPW escort or monitor, please contact Michael Aviles at 305-375-3387 (michael.aviles@miamidade.gov) or Carol Wilson at 786-469-5278 (carolw@miamidade.gov) at least three (3) business days prior to beginning the work.

EXHIBIT F

Miami-Dade County Disclosure Affidavits

AMENDMENT TO LICENSE AGREEMENT
(FPL License # 0335-SD-2013)

THIS AMENDMENT TO LICENSE AGREEMENT ("**Amendment**") is made effective as of the _____ day of _____, 2020, by and between Florida Power & Light Company, a Florida corporation ("**Licensor**") and Miami-Dade County, a political subdivision of the State of Florida ("**Licensee**").

RECITALS

WHEREAS, Licensor and Licensee entered into that certain License Agreement (FPL License # 0335-SD-2013) dated May 22, 2014 ("**Agreement**"); and

WHEREAS, the Licensed Premises consists of the following: (i) 100% of folio 30-5901-006-0011 totaling 62,152 SF (North MDT-14); (ii) 100% of folio 30-5901-006-0051 totaling 37,755 SF (Center MDT-13) and (iii) 50% of folio 30-5901-006-0081 totaling 24,656 (South MDT-12N); and

WHEREAS, Licensor and Licensee wish to amend the Agreement as more specifically set forth herein.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties, it is mutually agreed as follows:

1. Recitals. The foregoing recitals are true and correct and incorporated herein by this reference. All initially capitalized terms not otherwise defined in this Amendment shall have the same meaning ascribed to such terms in the Agreement.

2. Section 3 is hereby deleted in its entirety and replaced with the following new Section 3:

> 3. **Rent and Cost Reimbursement**: For and during the Term which this License is effective, Licensee shall, upon receipt of a written invoice, reimburse Licensor's costs and pay rent to Licensor as follows:
>
> a.) On or before each annual Rent Commencement Date (as defined below) throughout the Term, Licensee shall reimburse on a pass-through basis and pay to Licensor an amount equal to Licensor's total annual cost to purchase and maintain an Owners and Contractors Protective Liability (OCP) insurance policy where Licensee shall be shown as the designated contractor, with coverage types and limits determined by Licensor, with Licensee's approval, to be commensurate with Licensee's use of the Licensed Premises. For purposes of this License, "**Rent Commencement Date**" shall mean July 1 of each calendar year. The parties hereby acknowledge and agree that the OCP insurance policy for the July 1, 2020 through June 30, 2021 license year is $1,300.00.
>
> b.) On or before each annual Rent Commencement Date throughout the Term, Licensee shall reimburse on a pass-through basis and pay to Licensor an amount equal to Licensor's total annual cost for all

property taxes paid by Licensor for the Licensed Premises for each immediately preceding year, as follows: (i) 100% for folio 30-5901-006-0011 (North MDT-14); (ii) 100% for folio 30-5901-006-0051 (Center MDT-13); and (iii) 50% for folio 30-5901-006-0081 (South MDT-12N). The parties hereby acknowledge and agree that the property taxes for the Licensed Premises, consisting of all three (3) folios collectively based upon the percentage leased by Licensee as stated herein, for the July 1, 2020 through June 30, 2021 license year is $8,813.86

c.) On or before each annual Rent Commencement Date throughout the Term, Licensee shall pay rent to Licensor as stated herein. The parties hereby acknowledge and agree that rent for the July 1, 2020 through June 30, 2021 license year shall be reduced by $50,000 over the immediately preceding year's rent payment, so that rent for the July 1, 2020 through June 30, 2021 license year is $104,792.12

d.) Commencing on July 1, 2021, the annual rent shall be $106,887.96, and continuing on each anniversary of the Rent Commencement Date thereafter throughout the Term, the annual rent shall increase by two percent (2%) per year over the immediately preceding year's rent payment.

e.) Rent shall be separate from and in addition to Licensee's reimbursement to Licensor of Licensor's costs for the OCP insurance policy and property taxes. As of the Effective Date, Licensee is exempt from paying sales taxes. If Licensee becomes not exempt from paying sales taxes, then all applicable sales taxes shall be added to rent and paid by Licensee. All payments made by Licensee to Licensor shall be sent to Licensor at:

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408
Attention: CRE - Asset Management

3. No other Modifications. Except as expressly modified by this Amendment, all the provisions of the Agreement which are not in conflict with the terms of this Amendment shall remain in full force and effect and unmodified. In the case of any conflicts between the terms of the Agreement and this Amendment, the terms of this Amendment shall control. This Amendment may be executed in several counterparts, each of which shall be deemed an original but together shall constitute one agreement. For purposes of this Amendment, a facsimile or other electronic signature shall be deemed to be an original.

[Signatures on following page.]

IN WITNESS WHEREOF, the parties hereto, intending to be legally bound hereby, have executed this Amendment as of the date first above written.

Witnesses for Licensor:

Signature: _____
Print Name: Robert Simm

Signature: _____
Print Name: Stacy B. Winnubst

Licensor:

Florida Power & Light Company,
a Florida corporation

By: _____

Name: Deborah Caplan

Title: Executive Vice President, Human Resources & Corporate Services

SS

Witnesses for Licensee:

Signature: _____
Print Name: _____

Signature: _____
Print Name: _____

Licensee:

Miami-Dade County,
a political subdivision of the State of Florida

By: _____

Name: _____

Title: _____

Attest:

By: _____

Name: _____

Title: Deputy Clerk

Approved by Miami-Dade County Attorney as to form and legal sufficiency

By: _____

Name: _____

Title: County Attorney