

**SECTION NO.:** 86050  
**FM No.(s):** 431204-1-52-01  
**COUNTY:** Broward  
**S.R. No.:** A1A/N Ocean Blvd

**DISTRICT FOUR  
MAINTENANCE MEMORANDUM OF AGREEMENT**

**THIS AGREEMENT**, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ 2014, by and between the **STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION**, a component agency of the State of Florida, hereinafter called the **DEPARTMENT**, and **City of Fort Lauderdale**, a municipal corporation existing under the Laws of Florida, hereinafter called the **AGENCY**.

**WITNESSETH:**

**WHEREAS**, the **DEPARTMENT** has jurisdiction over State Road A1A/N Ocean Blvd; and

**WHEREAS**, the **DEPARTMENT** seeks to install and have maintained by the **AGENCY** certain highway improvements; and

**WHEREAS**, as part of the continual updating of the State of Florida Highway System, the **DEPARTMENT**, for the purpose of safety, protection of the investment and other reasons, has constructed and does maintain State Road A1A/N Ocean Blvd (within the limits of the **AGENCY**); and

**WHEREAS**, it is the intent of the **AGENCY** and the **DEPARTMENT** that the **AGENCY** shall maintain the specific elements constructed under Project Number 431204-1-52-01 to include decorative color coated painted pedestrian light fixtures or poles and banner arms installed along State Road A1A/N Ocean Blvd beginning from the intersection of East Oakland Park Blvd, Mile Post (M.P) 5.382 to Flamingo Avenue, M.P. 6.418; and

**WHEREAS**, landscape and all other hardscape elements shall be maintained under the inclusive agreement with the **AGENCY** dated January 31, 2008 and all amendments thereto; and

**WHEREAS**, the Project involves the scope of work as described within **Exhibit A (Project Location and Description) and Exhibit B (Construction Plans)**, which will benefit the **AGENCY**; and

**WHEREAS**, the parties hereto mutually recognize the need for entering into an Agreement designation and setting forth the responsibilities of each party; and

**WHEREAS**, the **AGENCY** by Resolution No. \_\_\_\_\_ dated \_\_\_\_\_, 20\_\_\_\_, attached hereto and by this reference made a part hereof, desires to enter into this Agreement and authorizes its officers to do so;

**NOW THEREFORE**, for and in consideration of the mutual benefits to flow each to the other, the parties covenant and agree as follows:

1. The recitals set forth above are true and correct and are deemed incorporated herein.

2. INSTALLATION OF FACILITIES

The **DEPARTMENT** has issued Project Number 431204-1-52-01 to reconstruct State Road A1A/N Ocean Blvd as detailed in **Exhibit A (Project Location and Description)** and **Exhibit B (Construction Plans)** that will benefit the **AGENCY**.

3. MAINTENANCE OF FACILITIES

A. The **AGENCY** agrees to maintain the improvements to be installed under Project Number 431204-1-52-01 within the limits of construction. Maintenance by the **AGENCY** will include repair, restoration, and general maintenance of all decorative or non-standard features within the limits of construction. Non-standard features are defined as items requested by the **AGENCY** that are not defined in the **DEPARTMENT'S** Design Standards. This includes Project Number 431204-1-52-01 to include decorative color coated painted pedestrian light fixtures or poles and banner arms installed along State Road A1A/N Ocean Blvd beginning from the intersection of East Oakland Park Blvd, Mile Post (M.P) 5.382 to Flamingo Avenue, M.P. 6.418; and

- 1) The **AGENCY** shall be solely responsible for the maintenance and preservation of all colored coatings on light pole assemblies within the limits of construction. The **AGENCY** shall inspect the colored coatings on a yearly basis. All Maintenance or restoration activities shall be performed in accordance with a Maintenance Plan, as approved by the **DEPARTMENT**, as per the requirements in **Exhibit C (Maintenance Plan Requirements)**.
- 2) The above named functions to be performed by the **AGENCY** may be subject to periodic inspections by the **DEPARTMENT** at the discretion of the **DEPARTMENT**. Such inspection findings will be shared with the **AGENCY** and shall be the basis of all decisions regarding, reworking or AGREEMENT termination. The **AGENCY** shall not change or deviate from said plans without written approval of the **DEPARTMENT**.
- 3) The **AGENCY** shall be solely responsible for any damages to surrounding property, real estate, vehicles, pedestrians, attachments to the light poles, or other assets occurring as a result of coating operations and shall repair such damage to the satisfaction of the **DEPARTMENT** at no expense to the **DEPARTMENT**
- 4) Lighting assemblies and systems shall be maintained in such a manner as to prolong the life of the lighting fixture and prevent potential safety hazards. Lighting shall meet requirements for the sea turtle nesting and hatchling seasons. Lights may be required to be turned off if they fail to meet requirements of the law or violate the Endangered Species Act and other law.

B. It is understood and agreed by the parties that upon "final acceptance" (as that term is described in the Standard Specifications for Roadway and Bridge Construction, as amended by contract documents section 5-11) by the **DEPARTMENT** of the Project and Notice thereof to the **AGENCY**, the **AGENCY** shall be responsible for maintenance of the Project in accordance with the following Federally and State accepted standards (current editions at the time of execution of this Agreement and any amendments hereafter) and all costs related thereto: (a) FDOT Plans Preparation Manual (PPM), (b) Florida Green Book, (c) Standard Specifications for Roadway and Bridge Construction, as amended, (d) FDOT Design Standards and (e) Manual on Uniform Traffic Control Devices (MUTCD).

C. If it becomes necessary to provide utilities (water/electricity) to these improvements, all costs associated with the utilities, accent lighting and/or irrigation systems including, but not limited to the impact and connection fees, and the on-going cost of utility usage for water and electrical, are the maintaining **AGENCY'S** responsibility.

1) The **AGENCY** shall be directly responsible for impact and connection

AND

2) The **AGENCY** shall become responsible for the above named ongoing utility costs upon final acceptance of the construction project (including the improvements) by the **DEPARTMENT** and thereafter. The project is accepted prior to the start of the Plant Establishment and Contractor's Warranty Period.

AND

3) The **AGENCY** shall be responsible for the improvements immediately after final acceptance of the construction project by the **DEPARTMENT** except for the plant materials. The **AGENCY** shall be responsible for the maintenance of all improvements after the completion of the Contractor's Warranty Period.

D. The above named functions to be performed by the **AGENCY** may be subject to periodic inspections by the **DEPARTMENT** at the discretion of the **DEPARTMENT**. Such inspection findings will be shared with the **AGENCY** and shall be the basis of all decisions regarding, repayment, reworking or Agreement termination.

E. Any work impacting traffic flow on SR-A1A/N Ocean Blvd must be coordinated with the **DEPARTMENT**. Lane closures must be submitted for approval in accordance with **DEPARTMENT** procedures and policies and will meet the goals established in the **DEPARTMENT's** Open Roads Policy.

#### 4. NOTICE OF MAINTENANCE DEFICIENCIES

A. If, at any time while the terms of this AGREEMENT are in effect, it shall come to the attention of the **DEPARTMENT** that the **AGENCY's** responsibility as established herein or a part thereof is not being properly accomplished pursuant to the terms of this AGREEMENT, the **DEPARTMENT** may issue a written notice, that a deficiency or deficiencies exist(s), by sending a certified letter to the **AGENCY**, in care of the CITY OF FORT LAUDERDALE CITY MANAGER, to place the **AGENCY** on notice regarding its maintenance deficiencies. Thereafter, the **AGENCY** shall have a period of sixty (60) days within which to correct the cited deficiency or deficiencies. If said deficiencies are not corrected within the time period, the **DEPARTMENT** may, at its option, proceed under one or more or a combination of the following items:

1) The **DEPARTMENT** may repair any item or a number of items. Corrective actions will be performed with the **DEPARTMENT** and/or its independent contractor's materials, equipment and personnel. The actual cost for such work will be charged to the **AGENCY**.

2) The **DEPARTMENT** may remove or replace any item or number of items with the standard **DEPARTMENT** item. Corrective actions will be performed with the **DEPARTMENT** and/or its independent contractor's materials, equipment and personnel. The actual cost for such work will be charged to the **AGENCY**.

3) If there is no standard equivalent item or if in the **DEPARTMENT's** discretion the

item is not necessary for the operations of the roadway, the **DEPARTMENT** may remove the item in its entirety and restore the area to a condition acceptable to the **DEPARTMENT**. Corrective actions will be performed with the **DEPARTMENT** and/or its independent contractor's materials, equipment and personnel. The actual cost for such work will be charged to the **AGENCY**.

- 4) At the discretion of the **DEPARTMENT**, terminate the Agreement in accordance with Paragraph 7 of this Agreement and remove, by the **DEPARTMENT** or its Contractor's personnel, all of the improvements installed under this Agreement and charge the **AGENCY** the reasonable cost of such removal.

5. FUTURE DEPARTMENT IMPROVEMENTS

It is understood between the parties hereto that the improvements covered by this Agreement may be removed, relocated or adjusted at any time in the future as determined to be necessary by the **DEPARTMENT** in order that the adjacent state road be widened, altered or otherwise changed to meet with future criteria or planning of the **DEPARTMENT**.

6. FUTURE AGENCY IMPROVEMENTS

The **AGENCY** may construct additional improvements within the limits of the rights of ways identified as a result of this document, subject to the following conditions:

- 1) Plans for any new improvements shall be subject to approval by the **DEPARTMENT**. The **AGENCY** shall not change or deviate from said plans without written approval by the **DEPARTMENT**.
- 2) The **AGENCY** shall procure a permit and/ or Construction Agreement from the **DEPARTMENT**, as appropriate.
- 3) All improvements shall be developed and implemented in accordance with appropriate state safety and roadway design standards.
- 4) The **AGENCY** agrees to comply with the requirements of this Agreement with regard to any additional improvements installed at no cost to the **DEPARTMENT**.

7. AGREEMENT TERMINATION

This Agreement may be terminated under any one (1) of the following conditions:

- 1) By the **DEPARTMENT**, if the **AGENCY** fails to perform its duties under this Agreement, following ten (10) days written notice. The **AGENCY** shall reimburse the **DEPARTMENT** for any expenditures for the installation of said improvements and the cost to remove and or replace said improvement with the standard improvement or remove in its entirety.
- 2) By the **DEPARTMENT**, for refusal by the **AGENCY** to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the **AGENCY** in conjunction with this Agreement.
- 3) Only if mutually agreed to by both parties with a six (6) month written notice.

8. AGREEMENT TERM

The term of this Agreement commences upon execution by all parties. The term of this Agreement shall remain in effect for Fifty (50) years.

9. LIABILITY AND INSURANCE REQUIREMENTS

A. With respect to any of the **AGENCY'S** agents, consultants, sub-consultants, contractors, and/or sub-contractors, such party in any contract for the improvements shall agree to indemnify, defend, save and hold harmless the **DEPARTMENT** from

all claims, demands, liabilities, and suits of any nature arising out of, because of or due to any intentional and/or negligent act or occurrence, omission or commission of such agents, consultants, sub consultants, contractors and/or subcontractors. The **AGENCY** shall provide to the **DEPARTMENT** written evidence of the foregoing upon the request of the **DEPARTMENT**. It is specifically understood and agreed that this indemnification clause does not cover or indemnify the **DEPARTMENT** for its own negligence.

- B. In the event that **AGENCY** contracts with a third party to provide the services set forth herein, any contract with such third party shall include the following provisions:
- 1) **AGENCY'S** contractor shall at all times during the term of this Agreement keep and maintain in full force and effect, at contractor's sole cost and expense, Comprehensive General Liability with minimum limits of \$1,000,000.00 per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability and Worker's Compensation insurance with minimum limits of \$500,000.00 per Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive General Liability and Worker's Compensation policy without restrictive endorsements, as filed by the Insurance Services Office and shall name the **DEPARTMENT** as an additional insured.
  - 2) **AGENCY'S** contractor shall furnish **AGENCY** with Certificates of Insurance of Endorsements evidencing the insurance coverages specified herein prior to the beginning performance of work under this Agreement.
  - 3) Coverage is not to cease and is to remain in full force and effect (subject to cancellation notice) until all performance required of **AGENCY'S** contractor is completed. All policies must be endorsed to provide the **DEPARTMENT** with at least thirty (30) days notice of cancellation and or/ restriction. If any of the insurance coverages will expire prior to the completion of work, copies of renewal policies shall be furnished at least (30) days prior to the date of expiration.

10. E-VERIFY REQUIREMENTS

The **AGENCY** shall

- 1) Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the **AGENCY** for the work performed under this AGREEMENT; and
  - 2) Expressly require any contractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.
11. This writing embodies the entire Agreement and understanding between the parties hereto and there are no other Agreements and understanding, oral or written, with reference to the subject matter hereof that are not merged herein and superseded hereby except the Landscape Memorandum of Agreement(s) signed between the parties, as amended, as to all other improvements not specifically mentioned in this Agreement.
12. The **DEPARTMENT**, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The **DEPARTMENT** shall require a statement

from the Comptroller of the **DEPARTMENT** that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding one (1) year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the **DEPARTMENT** which are for an amount in excess of TWENTY FIVE THOUSAND DOLLARS (\$25,000.00) and which have a term for a period of more than one year.

13. **DISPUTES**

The **DEPARTMENT'S** District Secretary shall decide all questions, difficulties and disputes of any nature whatsoever that may arise under or by reason of this Agreement, the prosecution or fulfillment of the service hereunder and the character, quality, amount and value thereof; and his decision upon all claims, questions and disputes shall be final and conclusive upon the parties hereto.

14. **ASSIGNMENT**

This Agreement may not be assigned or transferred by the **AGENCY** in whole or part without the consent of the **DEPARTMENT**.

15. **LAWS GOVERNING**

This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. In the event of a conflict between any portion of the contract and Florida law, the laws of Florida shall prevail. Venue with respect to judicial proceedings arising out of this Agreement shall be in Broward County, Florida.

16. **NOTICES**

Any and all notices given or required under this Agreement shall be in writing and either personally delivered with receipt acknowledgement or sent by certified mail, return receipt requested. All notices shall be sent to the following addresses.

If to the **DEPARTMENT:**

State of Florida Department of Transportation  
3400 West Commercial Blvd  
Ft. Lauderdale, FL 33309-3421  
District Maintenance Engineer

If to the **AGENCY:**

City of Fort Lauderdale  
100 N. Andrews Avenue  
Fort Lauderdale, FL 33301  
Title: City Manager

17. **LIST OF EXHIBITS**

Exhibit A: Project Location and Description  
Exhibit B: Lighting Plans  
Exhibit C: Maintenance Plan Requirements

**IN WITNESS OF THE FOREGOING**, the parties have set their hands and seals the day and year first above written.

WITNESSES:

CITY OF FORT LAUDERDALE, a municipal Corporation of the State of Florida:

\_\_\_\_\_

By \_\_\_\_\_  
JOHN P. "JACK" SEILER, Mayor

\_\_\_\_\_  
Witness Print Name

\_\_\_\_\_

By \_\_\_\_\_  
LEE R. FELDMAN, City Manager

\_\_\_\_\_  
Witness Print Name

(CORPORATE SEAL)

ATTEST:

\_\_\_\_\_  
JONDA K. JOSEPH, City Clerk

Approved as to form:

\_\_\_\_\_  
CARRIE L. SARVER  
Assistant City Attorney

**IN WITNESS OF THE FOREGOING**, the parties have set their hands and seals the day and year first above written.

DEPARTMENT:

ATTEST:

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Executive Secretary  
(SEAL)

By \_\_\_\_\_  
Courtney Drummond, P.E., Director of Operations

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

Approval as to Form:

By \_\_\_\_\_  
Dawn Raduano, District General Counsel

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

**SECTION NO.:** 86050  
**FM No.(s):** 431204-1-52-01  
**COUNTY:** Broward  
**S.R. No.:** A1A/N Ocean Blvd

EXHIBIT A

PROJECT LOCATION AND DESCRIPTION

**Location:**

The improvements associated with this Agreement are located in the City of Fort Lauderdale, in Broward County, Florida along State Road A1A/N Ocean Blvd beginning from the intersection of East Oakland Park Blvd, Mile Post (M.P) 5.382 to Flamingo Avenue, M.P. 6.418.

**Description of Work:**

Project Number 431204-1-52-01 to include installation of decorative color coated painted pedestrian light fixtures or poles and banner arms.

It will be the responsibility of the **AGENCY** to maintain the features described in this Agreement.

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**SECTION NO.:** 86050  
**FM No.(s):** 431204-1-52-01  
**COUNTY:** Broward  
**S.R. No.:** A1A/N Ocean Blvd

**EXHIBIT B**

Lighting Plans by Genesis Enterprises and Engineering Services, LLC dated October 2, 2014 as approved by the Department.

LIGHTING PLANS (attached)

Sheets Included:

PDF Page Number (#)	Plan Sheet (#)	Sheet(s) Description
12	L-1	KEY SHEET
13 - 14	L-2 – L-3	TABULATION OF QUANTITIES
15	L-4	GENERAL NOTES
16 - 17	L-5 – L-6	POLE DATA AND LEGEND
18 – 29	L-7 – L-18	LIGHTING PLAN
30	L-19	LIGHTING DETAILS (ROADWAY POLE)
31	L-20	LIGHTING DETAILS (PEDESTRIAN POLE)
32	L-21	FOUNDATION DETAILS
33 - 34	L-22 – L-23	SERVICE POINT DETAILS

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**SECTION NO.:** 86050  
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**COUNTY:** Broward  
**S.R. No.:** A1A/N Ocean Blvd

## **EXHIBIT C**

### **MAINTENANCE PLAN REQUIREMENTS**

The **AGENCY** shall submit to the **DEPARTMENT** a maintenance plan detailing the means and methods for accomplishing repairs to the colored coatings on decorative light poles in accordance with all **DEPARTMENT** Standards, Procedures and Specifications. This plan must be submitted and approved by the **DEPARTMENT** prior to commencing any maintenance or repair activities. The plan should at minimum detail how the **AGENCY** will address the following:

1. Providing for continuous traffic control and necessary traffic control devices as required for the safe movement of traffic of vehicular and pedestrian traffic past the location of the structure being repaired for the duration of the repair in accordance with **DEPARTMENT** Standards, Procedures and Specifications.
2. Protection of adjacent surrounding property, real estate, vehicles, pedestrians, attachments to the light poles, or other assets during the preparation and recoating of surfaces.
3. Containment of debris or materials used in or resulting from the repair

After the maintenance plan is approved, the **AGENCY** shall submit a work plan to the **DEPARTMENT** for approval prior to each repair to be performed detailing:

1. The proposed date of the repair
2. The location of the repair
3. The nature of the repair
4. The materials to be used for the repair
5. The methods to be used for the repair

*STATE OF FLORIDA*  
*DEPARTMENT OF TRANSPORTATION*

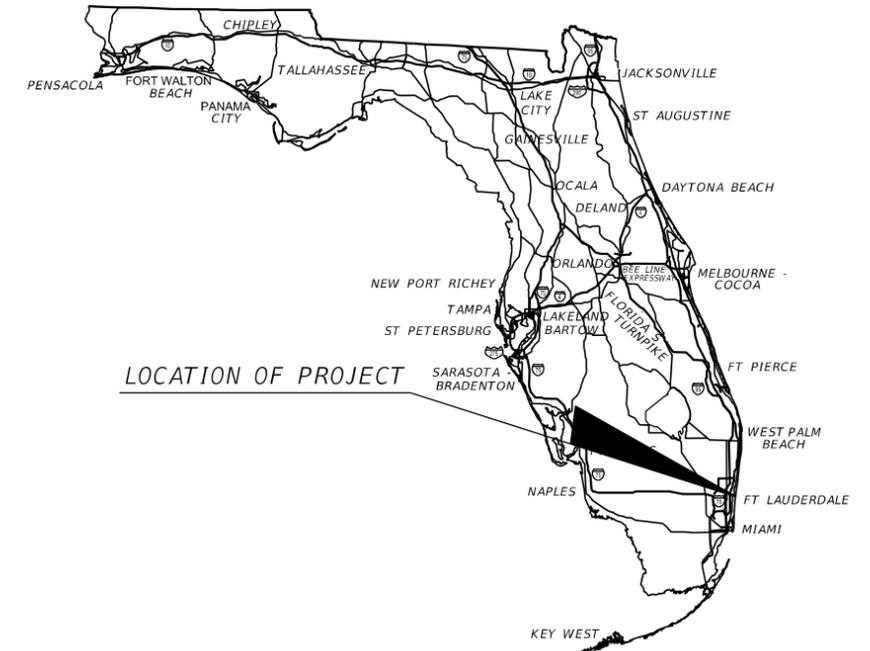
*CONTRACT PLANS*

FINANCIAL PROJECT ID 431204-1-52-01

BROWARD COUNTY (86050)

STATE ROAD NO. A1A

*LIGHTING PLANS*



**INDEX OF LIGHTING PLANS**

SHEET NO.	SHEET DESCRIPTION
L-1	KEY SHEET
L-2 - L-3	TABULATION OF QUANTITIES
L-4	GENERAL NOTES
L-5 - L-6	POLE DATA AND LEGEND
L-7 - L-18	LIGHTING PLAN
L-19	LIGHTING DETAILS (ROADWAY POLE)
L-20	LIGHTING DETAILS (PEDESTRIAN POLE)
L-21	FOUNDATION DETAILS
L-22 - L-23	SERVICE POINT DETAILS

LIGHTING SHOP DRAWINGS  
TO BE SUBMITTED TO:

MICHAEL MELENDEZ, P.E.  
GENESIS ENTERPRISES AND  
ENGINEERING SERVICES, LLC  
1720 SW 3RD AVE  
POMPANO BEACH, FLORIDA 33060  
PHONE: (954) 895-6894  
VENDOR NO.: F-271848735  
CERTIFICATE OF AUTHORIZATION NO. 29333

PLANS PREPARED BY:

GENESIS ENTERPRISES AND  
ENGINEERING SERVICES, LLC  
1720 SW 3RD AVE  
POMPANO BEACH, FLORIDA 33060  
PHONE: (954) 895-6894  
VENDOR NO.: F-271848735  
CERTIFICATE OF AUTHORIZATION NO. 29333

NOTE: THE SCALE OF THESE PLANS MAY  
HAVE CHANGED DUE TO REPRODUCTION.

KEY SHEET REVISIONS	
DATE	DESCRIPTION

LIGHTING PLANS  
ENGINEER OF RECORD: MICHAEL M. MELENDEZ, P.E.

P.E. NO.: 58698

FISCAL YEAR	SHEET NO.
15	14-1129-1
12 of 34	

FDOT PROJECT MANAGER: JAMES HUGHES, P.E.

# TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																				TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET		
			L-7		L-8		L-9		L-10		L-11		L-12		L-13		L-14		L-15		L-16		PLAN	FINAL	PLAN	FINAL			
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL							
110-15-1	ARBORIST WORK, TREE TRIMMING	LF													2		1		1						5				
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	160		737		916		960		796		823		898		947		829		972				8038				
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF			457		144		85				227		272		102		214						1501				
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE	EA	5		21		16		14		13		15		19		16		15		10				144				
715-1-12	LIGHTING CONDUCTORS, F&I, INSULATED, NO.8 - 6	LF	512		8392		7588		4344		4596		6396		10516		5242		4384		2982				54952				
715-1-13	LIGHTING CONDUCTORS, F&I, INSULATED, NO 4 TO NO 2	LF															7863		6576		4473				18912				
715-4-400	LIGHT POLE COMPLETE, RELOCATE	EA					1																		1				
715-4-600	LIGHT POLE COMPLETE, REMOVE	EA	2		8		7		8		7		4		5		7		3		6				57				
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	EA			1										1										2				
715-500-1	POLE CABLE DISTRIBUTION SYSTEM, CONVENTIONAL	EA	4		12		13		12		13		12		14		13		11		10				114				
715-511-330	LIGHT POLE COMPLETE- SPECIAL DESIGN, F&I, SINGLE ARM SHOULDER MOUNT, CONCRETE, 30'	EA	1				2														2				5				
715-512-325	LIGHT POLE COMPLETE- SPECIAL DESIGN, F&I, DOUBLE ARM SHOULDER MOUNT, CONCRETE, 25'	EA	1		6		4		6		7		7		8		8		7		4				58				
715-518-315	LIGHT POLE COMPLETE-SPECIAL DESIGN, F&I, DOUBLE ARM POLE TOP MOUNT, CONCRETE, 15'	EA	2		6		7		6		6		5		6		5		4		4				51				

REVISIONS				GENESIS ENTERPRISES & ENGINEERING SERVICES, LLC 1720 SW 3RD AVENUE POMPANO BEACH, FL 33060		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<h2 style="margin: 0;">TABULATION OF QUANTITIES</h2>				SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID					Exhibit 1 14-1124-2 13 of 34
				A1A	BROWARD	431204-1-52-01							



LIGHTING GENERAL NOTES

1. THE MAINTAINING AGENCY FOR THE PROPOSED ROADWAY LIGHTING SYSTEM IS THE CITY OF FT LAUDERDALE.
2. UTILITY OWNERS ARE AS FOLLOWS:

<u>UTILITY OWNER</u>	<u>TELEPHONE NUMBER</u>	<u>CONTACT</u>
AT&T FLORIDA	(954) 723-2540	OTIS KEEVE
BCTED	(954) 847-2641	SHARON GROSS
CITY OF FORT LAUDERDALE	(954) 828-7830	JON STAHL
COMCAST	(954) 239-8386	KEITH SWINT
FPL DISTRIBUTION	(954) 321-2056	BYRON SAMPLE
TECO PEOPLES GAS	(954) 453-0812	MAX CHAMORRO

3. THE CONTRACTOR SHALL MAINTAIN THE EXISTING LEVEL OF ILLUMINATION ON THE TRAVELED ROADWAY THROUGHOUT CONSTRUCTION AND UNTIL PROPOSED LIGHTING IS ENERGIZED. COST TO BE INCLUDED UNDER 102-1.
4. THE CONTRACTOR SHALL COORDINATE WITH THE MAINTAINING AGENCY (CITY OF FORT LAUDERDALE) AND RETURN LIGHT POLES REMOVED FROM THE PROJECT PRIOR TO DISPOSAL OF THE REMAINING LIGHT POLES REMOVED.
5. LIGHTING CONDUIT TRENCHING SHALL BE PERFORMED IN ACCORDANCE WITH INDEX 17721. THE FLOWABLE FILL SHALL BE PLACED SO THAT THE TOP OF THE FILL IS FLUSH WITH AND MATCHES THE ELEVATION OF THE EXISTING PAVEMENT RIDING SURFACE ADJACENT TO THE TRENCH. THIS CONDITION SHALL BE MAINTAINED UNTIL THE COMMENCEMENT OF MILLING AND RESURFACING OPERATIONS.

PAY ITEM NOTES

715-51X-XXX INCLUDES COSTS TO FURNISH AND INSTALL ONE (1) LED FIXTURE CONTROLLER IN EACH INSTALLED FIXTURE.  
 INCLUDES COSTS TO FURNISH AND INSTALL TWO (2) LED SEGMENT CONTROLLERS AT TWO LIGHT POLE LOCATIONS.  
 INCLUDES COSTS OF GFCI 120V POWER RECEPTACLES AT EACH ROADWAY LIGHT POLE.  
 INCLUDES COSTS TO FURNISH BANNER ARMS (2 PER ROADWAY LIGHT POLE) TO THE MAINTAINING AGENCY (CITY OF FORT LAUDERDALE).

<u>REVISIONS</u>				GENESIS ENTERPRISES & ENGINEERING SERVICES, LLC 1720 SW 3RD AVENUE POMPANO BEACH, FL 33060  ENGINEER OF RECORD MICHAEL M. MELENDEZ, P.E. PE NO. 58698	<b>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</b>			SHEET NO.  <b>GENERAL NOTES</b>
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					AIA	BROWARD	431204-1-52-01	Exhibit 1 14-1129-4 15 of 34

POLE DATA

POLE NO.	CIRCUIT	STATION	OFFSET	ROADWAY LUMINAIRE			PEDESTRIAN LUMINAIRE			PAY ITEM	REMARK
				DIST. OR ARM	LUMINAIRE WATTAGE	MOUNTING HEIGHT	DIST. OR ARM	LUMINAIRE WATTAGE	MOUNTING HEIGHT		
R-1	A-1	344+08.92	-44.20	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-1	A-1	344+27.34	52.27				2 x 2'	2 x 96	13.5'	715-518-315	
P-2	A-1	344+71.62	-44.20				2 x 2'	2 x 96	13.5'	715-518-315	
R-2	A-1	344+75.81	51.38	1 x 6'	1 x 244	28.5'				715-511-330	
P-3	A-1	345+44.51	54.61				2 x 2'	2 x 96	13.5'	715-518-315	
R-3	A-1	345+51.46	-44.20	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-4	A-1	346+09.24	-41.25				2 x 2'	2 x 96	13.5'	715-518-315	
R-4	A-1	346+11.97	51.40	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
R-5	A-2	346+81.97	-37.04	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-6	A-2	347+53.30	-42.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-7	A-2	348+25.13	-37.17	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-8	A-2	348+85.19	-39.02				2 x 2'	2 x 96	13.5'	715-518-315	
R-9	A-2	350+31.97	-48.50	1 x 6'	1 x 244	28.5'				715-511-330	SPREAD FOOTER
P-10	A-2	351+06.97	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-10	A-2	351+51.71	-51.50	1 x 6'	1 x 244	28.5'				715-511-330	
R-12	A-3	353+16.07	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-14	A-3	354+29.49	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-14	A-3	355+17.33	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-16	A-3	356+01.23	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	SPREAD FOOTER
R-16	A-3	356+77.42	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-18	A-3	357+76.68	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-18	A-3	358+56.94	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-20	A-3	359+41.23	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-20	A-3	360+08.93	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-22	A-3	360+91.98	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
P-5	A-4	346+70.88	47.77				2 x 2'	2 x 96	13.5'	715-518-315	
R-6	A-4	347+43.94	41.97	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-7	A-4	348+31.40	39.99				2 x 2'	2 x 96	13.5'	715-518-315	
R-8	A-4	349+25.85	34.22	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-9	A-4	350+49.62	36.96				2 x 2'	2 x 96	13.5'	715-518-315	
P-11	A-4	351+49.84	28.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-11	A-4	352+34.01	28.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-12	A-4	352+39.37	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
P-13	A-4	353+24.44	28.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-13	A-4	354+15.88	28.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-15	A-4	355+04.83	28.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-15	A-5	356+00.98	28.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-17	A-5	356+97.19	28.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-17	A-5	357+61.78	28.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-19	A-5	358+45.95	28.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-19	A-5	359+31.71	28.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-21	A-5	360+22.24	28.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-21	A-5	361+14.25	28.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
R-22	B-1	362+06.24	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-24	B-1	362+82.72	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-24	B-1	363+62.87	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-26	B-1	364+57.60	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-27	B-1	365+09.27	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-28	B-1	366+00.94	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-28	B-1	366+53.61	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-30	B-1	367+09.59	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-29	B-1	367+91.97	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-32	B-1	368+55.60	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-31	B-2	369+06.02	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-34	B-2	370+08.77	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-33	B-2	371+02.48	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-36	B-2	371+55.12	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-35	B-2	372+06.29	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-37	B-2	372+48.96	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-36	B-2	373+05.16	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	SPREAD FOOTER
R-39	B-2	373+74.70	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-38	B-2	374+45.46	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-41	B-2	374+98.42	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER

\*\* POTENTIAL TREE TRIMMING (PAY ITEM 110-15-1)

POLE NO.	CIRCUIT	STATION	OFFSET	ROADWAY LUMINAIRE			PEDESTRIAN LUMINAIRE			PAY ITEM	REMARK
				DIST. OR ARM	LUMINAIRE WATTAGE	MOUNTING HEIGHT	DIST. OR ARM	LUMINAIRE WATTAGE	MOUNTING HEIGHT		
P-30	B-3	368+73.80	34.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-33	B-3	369+66.31	31.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-32	B-3	370+11.54	34.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-35	B-3	371+08.81	31.42	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-34	B-3	371+89.20	38.51				2 x 2'	2 x 96	13.5'	715-518-315	
R-38	B-3	373+28.79	38.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-37	B-3	373+76.82	44.77				2 x 2'	2 x 96	13.5'	715-518-315	
R-40	B-3	374+65.45	38.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-23	B-4	362+30.24	35.53				2 x 2'	2 x 96	13.5'	715-518-315	
R-23	B-4	362+71.40	31.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-25	B-4	363+31.00	34.52				2 x 2'	2 x 96	13.5'	715-518-315	
R-25	B-4	364+12.65	38.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-26	B-4	364+85.67	48.50				2 x 2'	2 x 96	13.5'	715-518-315	
R-27	B-4	365+39.83	38.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
R-29	B-4	366+61.86	39.46	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
R-31	B-4	368+28.38	31.50	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
R-42	B-5	377+89.53	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-518-315	
P-39	B-5	376+33.48	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	SPREAD FOOTER
R-44	B-5	377+12.34	-44.99	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-41	B-5	377+89.53	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	SPREAD FOOTER
R-46	B-5	378+41.05	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-48	B-5	379+46.88	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-50	B-5	380+77.06	-44.99	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-44	B-5	381+76.59	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	SPREAD FOOTER
R-52	B-5	382+41.64	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-46	B-5	383+16.45	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	
R-54	B-5	383+72.89	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-55	B-5	384+85.51	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
P-49	B-6	387+27.13	-45.00				2 x 2'	2 x 96	13.5'	715-518-315	SPREAD FOOTER
R-59	B-6	387+84.88	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-61	B-6	389+27.33	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-57	B-6	386+20.86	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	
P-51	B-7	390+39.02	-44.99				2 x 2'	2 x 96	13.5'	715-518-315	SPREAD FOOTER
R-64	B-7	391+81.44	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-65	B-7	392+38.33	-44.99	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-66	B-7	393+20.69	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-67	B-7	394+02.67	-45.01	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-68	B-7	395+06.39	-44.99	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-69	B-7	396+02.10	-45.00	1 x 6'	1 x 244	28.5'	1 x 2'	1 x 96	13.5'	715-512-330	SPREAD FOOTER
R-70	B-7	396+73.39	-49.54	1 x 6'	1 x 244	28.5'				715-511-330	
R-71	B-7										

## LEGEND

### CONVENTIONAL LIGHTING DESIGN CRITERIA

*Minor Arterial*

*Average Initial Intensity 1.0 Foot Candles*

*Uniformity Ratio*  
*Avg./Min.                      4:1 Or Less*  
*Max./Min.                      10:1 Or Less*

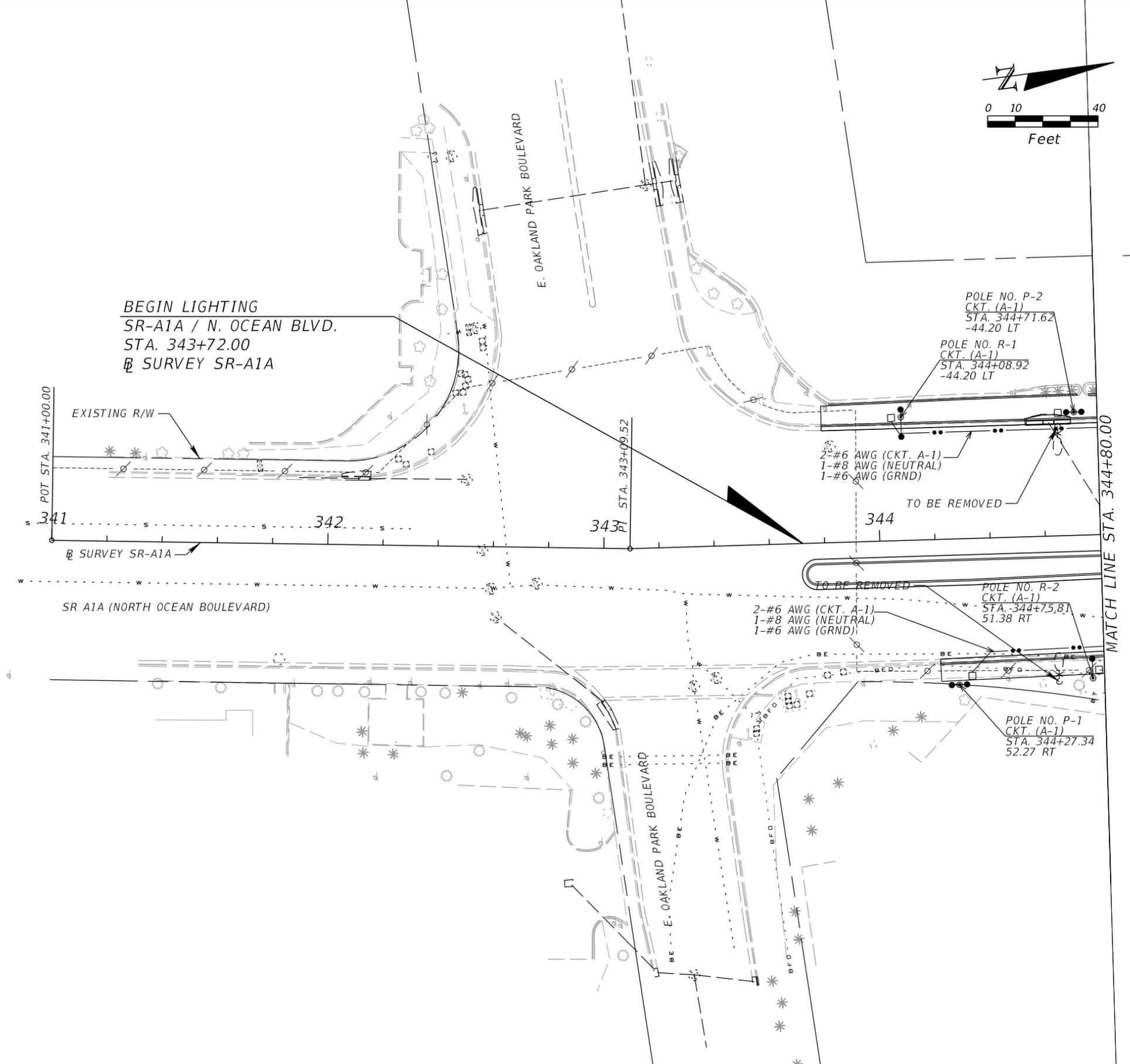
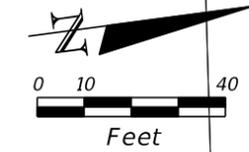
*Wind Speed Criteria              150 MPH*

#### SYMBOLS

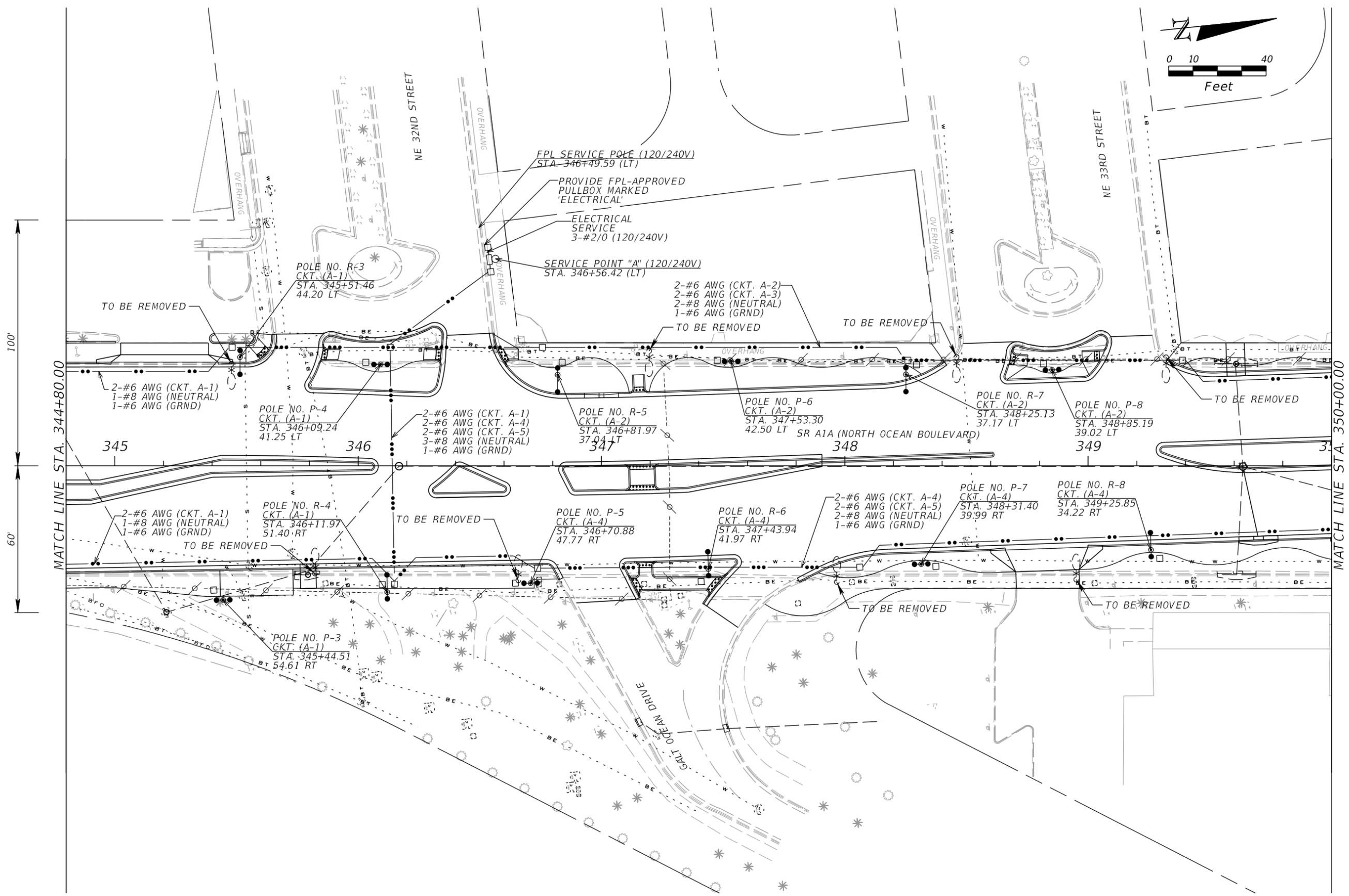
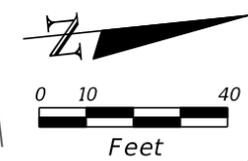
#### DESCRIPTION

- Single-arm Pole:  
244 W LED roadway luminaire (spun aluminum bell, round, styled dome)  
(refer to lighting details)
- Double-arm Pole:  
244 W LED roadway luminaire (spun aluminum bell, round, styled dome)  
96 W LED pedestrian luminaire (spun aluminum bell, round, styled dome)  
(refer to lighting details)
- Double-arm Pole:  
96 W LED pedestrian luminaire (spun aluminum bell, round, styled dome)  
96 W LED pedestrian luminaire (spun aluminum bell, round, styled dome)  
(refer to lighting details)
- Existing pole, arm, or luminaire to be relocated.
- ✕ Existing pole, arm, or luminaire to be removed.
- 3" Rigid Galvanized Steel Conduit for service power from FPL pole to service point with RHW Cross-Poly link insulated conductors inside conduit.
- 2" Schedule 40 PVC under-pavement conduit with RHW Cross-link poly insulated conductors inside conduit. Size and number of conductors as shown on plans. Pay Item 630-2-11
- 2" Schedule 40 PVC directional bore with RHW Cross-link poly insulated conductors inside conduit. Size and number of conductors as shown on plans. Pay Item 630-2-12
- Proposed Load Center (See Index 17504) - Contractor shall verify the exact location of the load center prior to installation. Enclosure to be mounted opposite approaching traffic.
- Existing Load Center (See Index 17504).
- Pull Box - If metal covers are used, the covers should be supplied with a ground lug and shall be grounded.

REVISIONS			GENESIS ENTERPRISES & ENGINEERING SERVICES, LLC 1720 SW 3RD AVENUE POMPANO BEACH, FL 33060  ENGINEER OF RECORD MICHAEL M. MELENDEZ, P.E. PE NO. 58698	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<b>POLE DATA AND LEGEND</b>	SHEET NO.
DATE	DESCRIPTION	DATE		DESCRIPTION	ROAD NO.	COUNTY		FINANCIAL PROJECT ID
				A1A	BROWARD	431204-1-52-01		



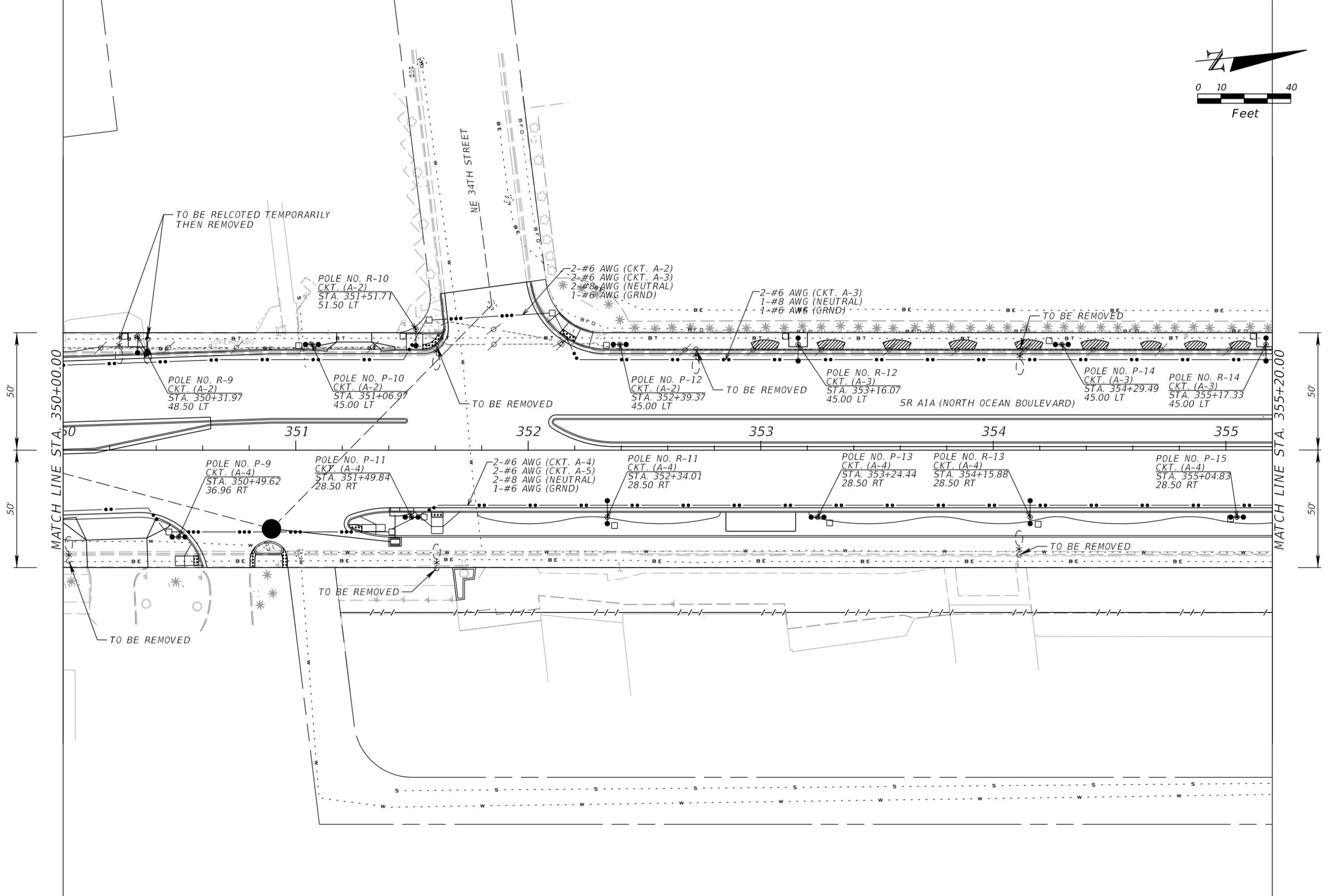
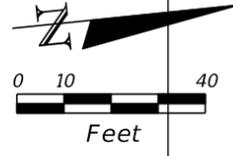
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					A1A	BROWARD	431204-1-52-01		



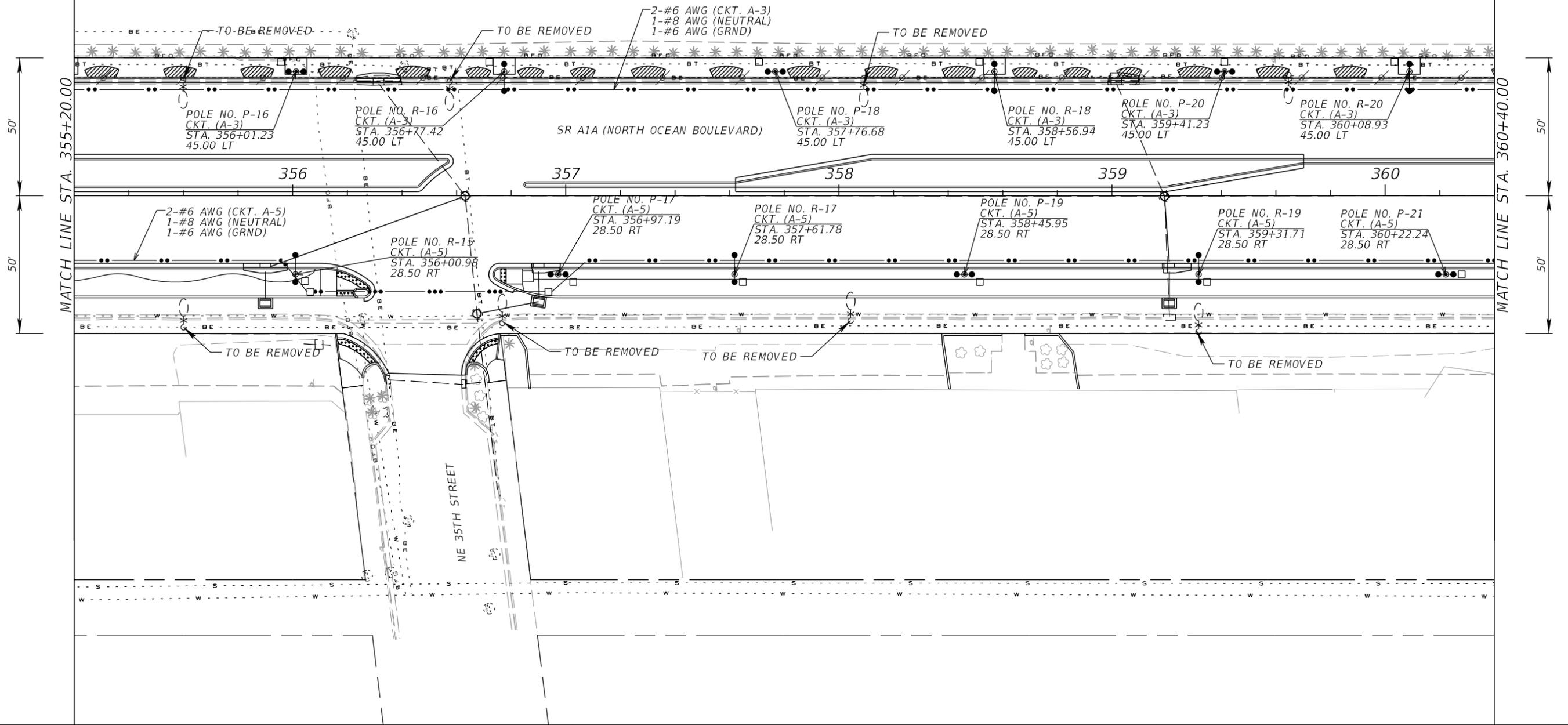
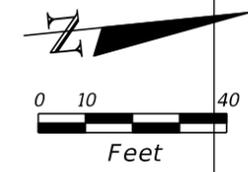
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
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**LIGHTING PLAN**

Exhibit 1  
14-1129-8  
19 of 34

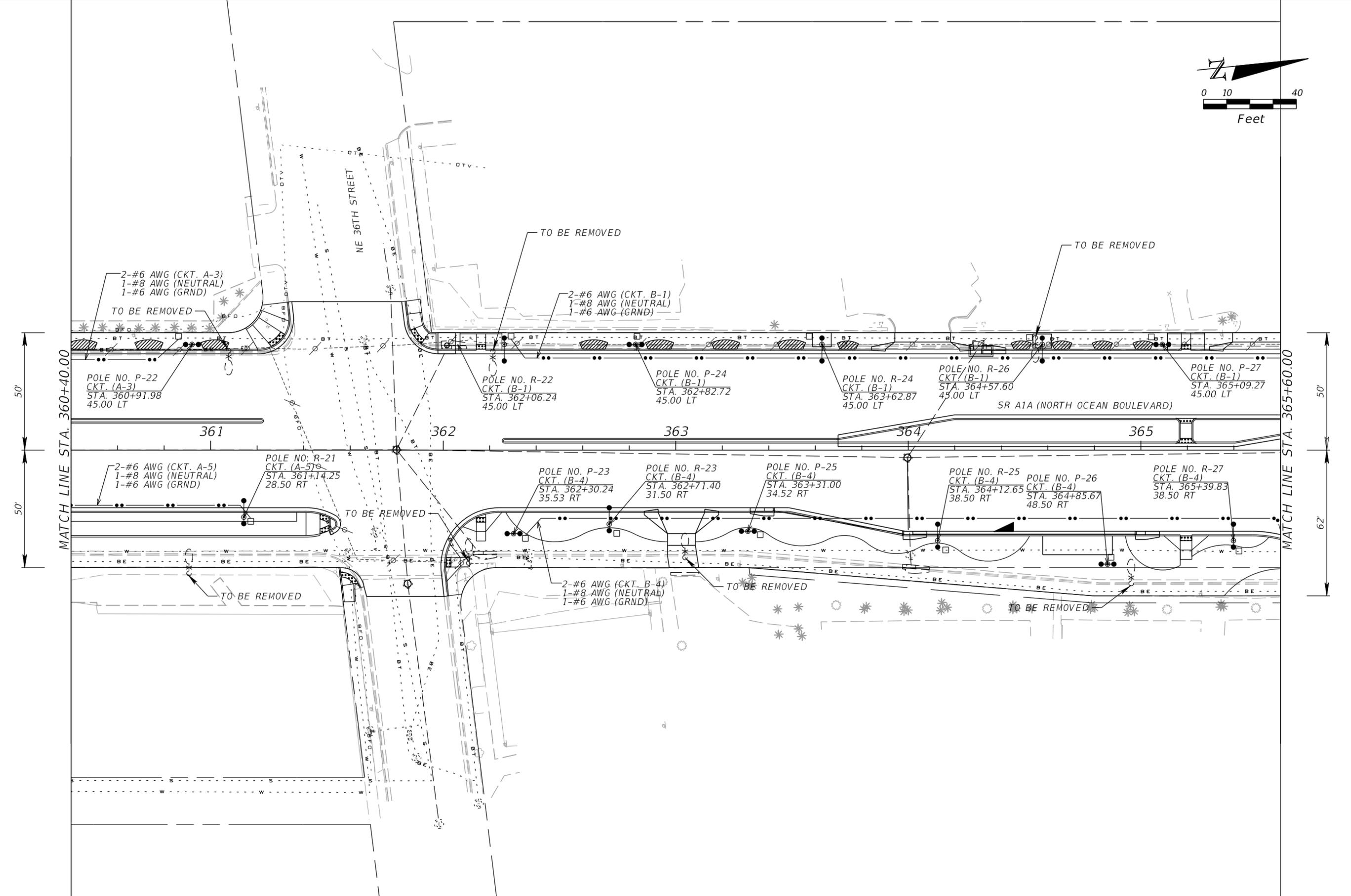
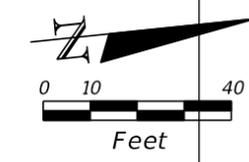


REVISIONS				GENESIS ENTERPRISES & ENGINEERING SERVICES, LLC 1720 SW 3RD AVENUE POMPANO BEACH, FL 33060  ENGINEER OF RECORD MICHAEL M. MELENDEZ, P.E. PE NO. 58698	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			LIGHTING PLAN	SHEET NO.  Exhibit 1 14-1129-9 20 of 34
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
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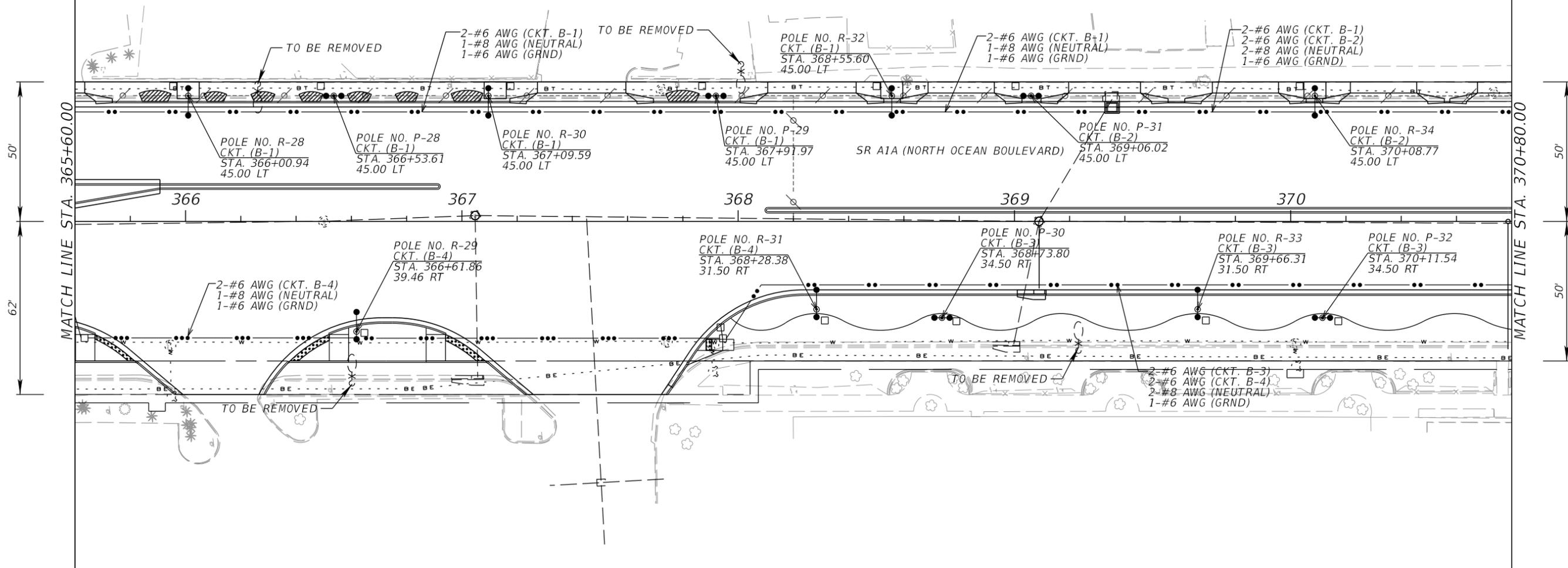
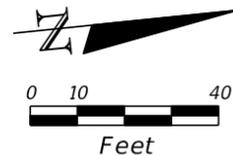


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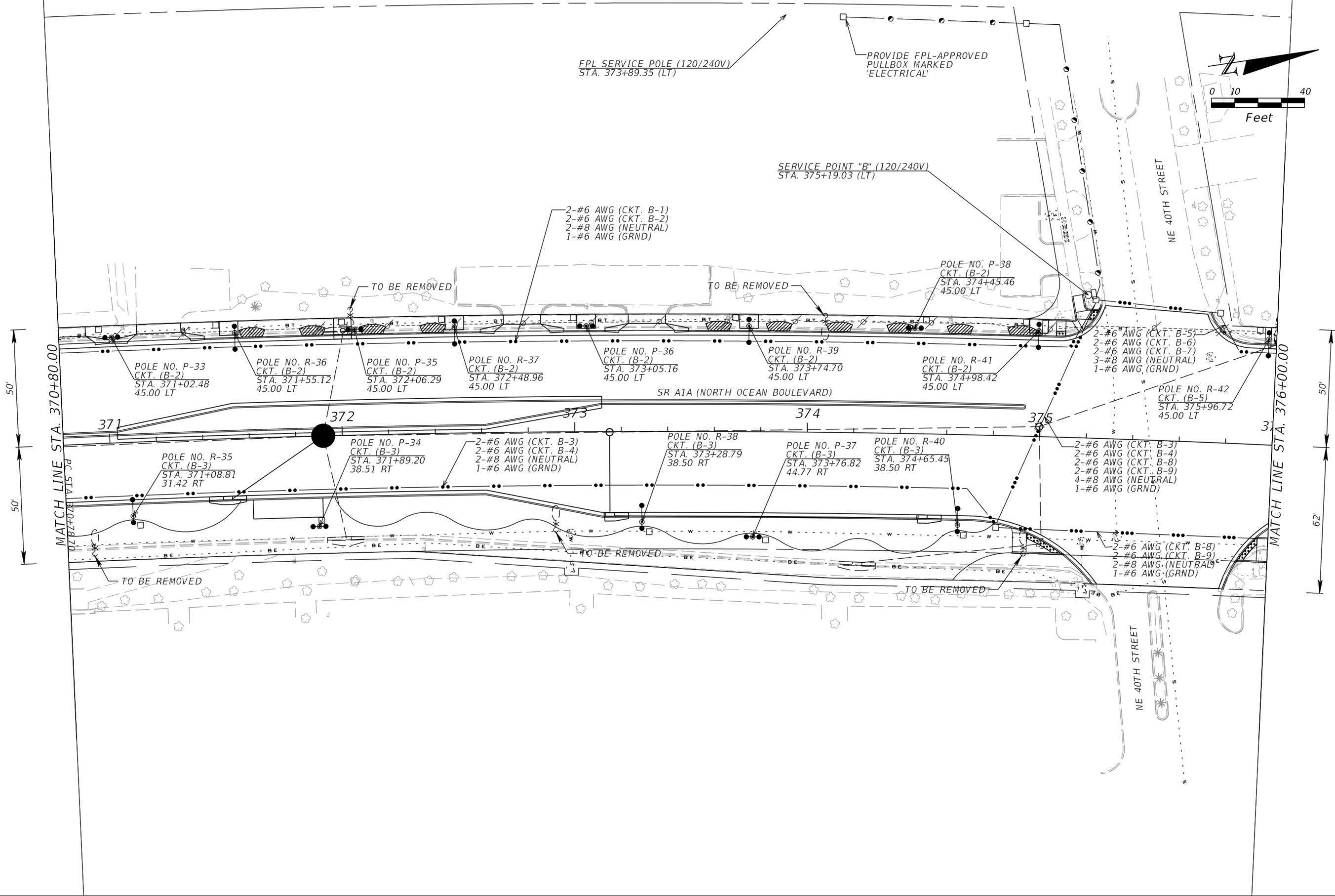
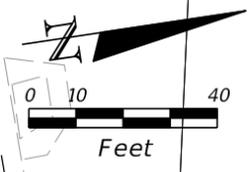
**LIGHTING PLAN**



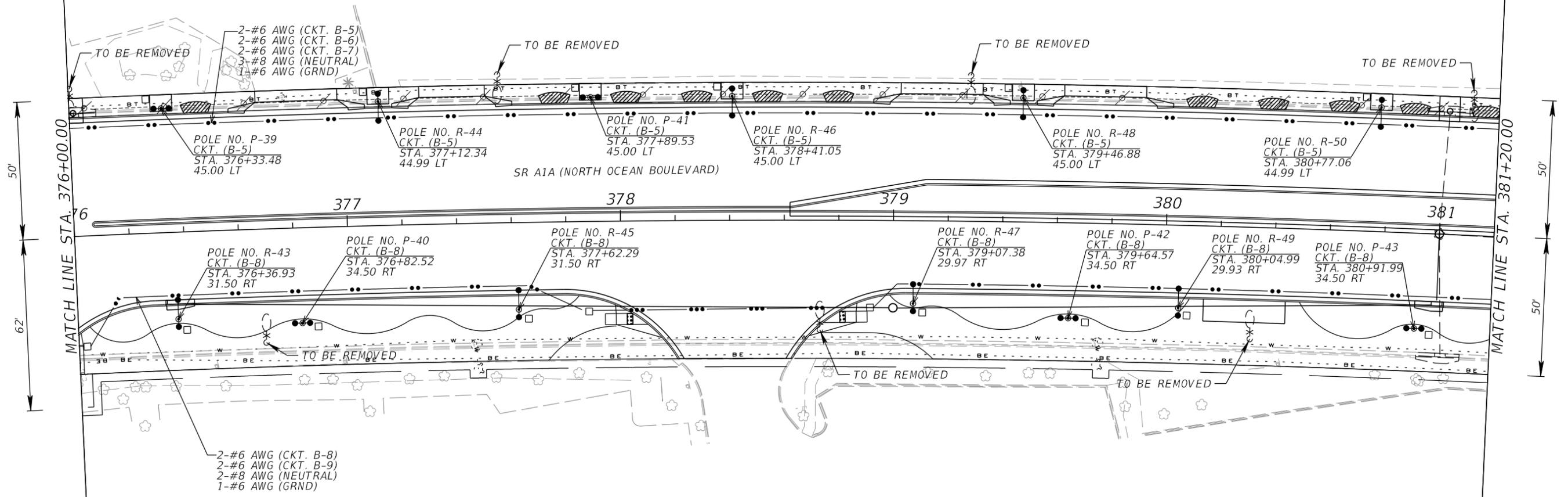
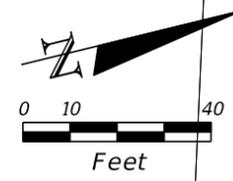
REVISIONS				GENESIS ENTERPRISES & ENGINEERING SERVICES, LLC 1720 SW 3RD AVENUE POMPANO BEACH, FL 33060  ENGINEER OF RECORD MICHAEL M. MELENDEZ, P.E. PE NO. 58698	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			LIGHTING PLAN	SHEET NO. 14-1129-11 22 of 34
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
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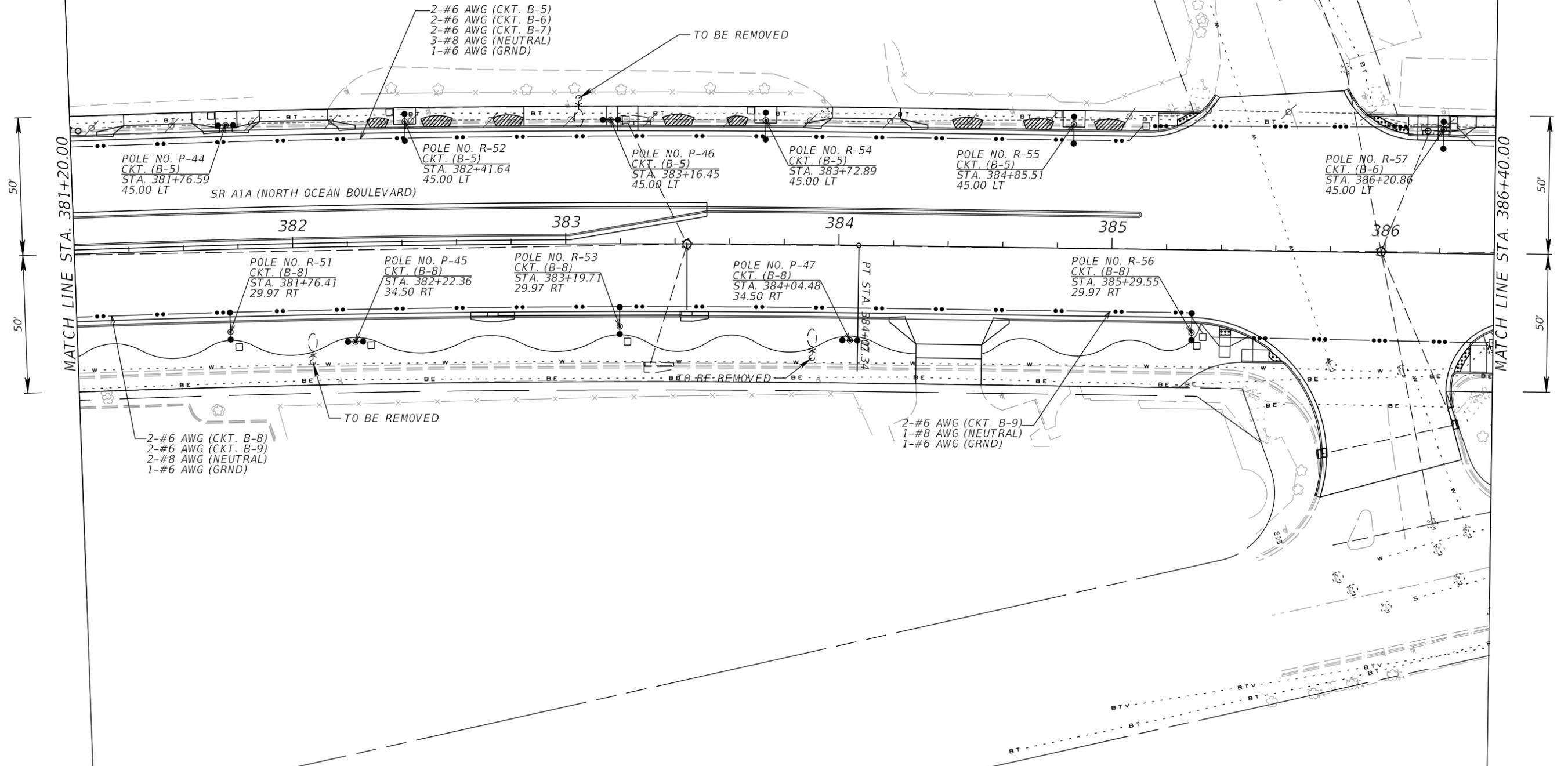
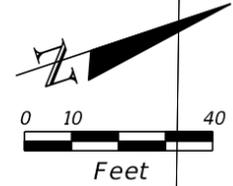
REVISIONS				GENESIS ENTERPRISES & ENGINEERING SERVICES, LLC 1720 SW 3RD AVENUE POMPANO BEACH, FL 33060  ENGINEER OF RECORD MICHAEL M. MELENDEZ, P.E. PE NO. 58698	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			LIGHTING PLAN	SHEET NO.  Exhibit 1 14-1129-12 23 of 34
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
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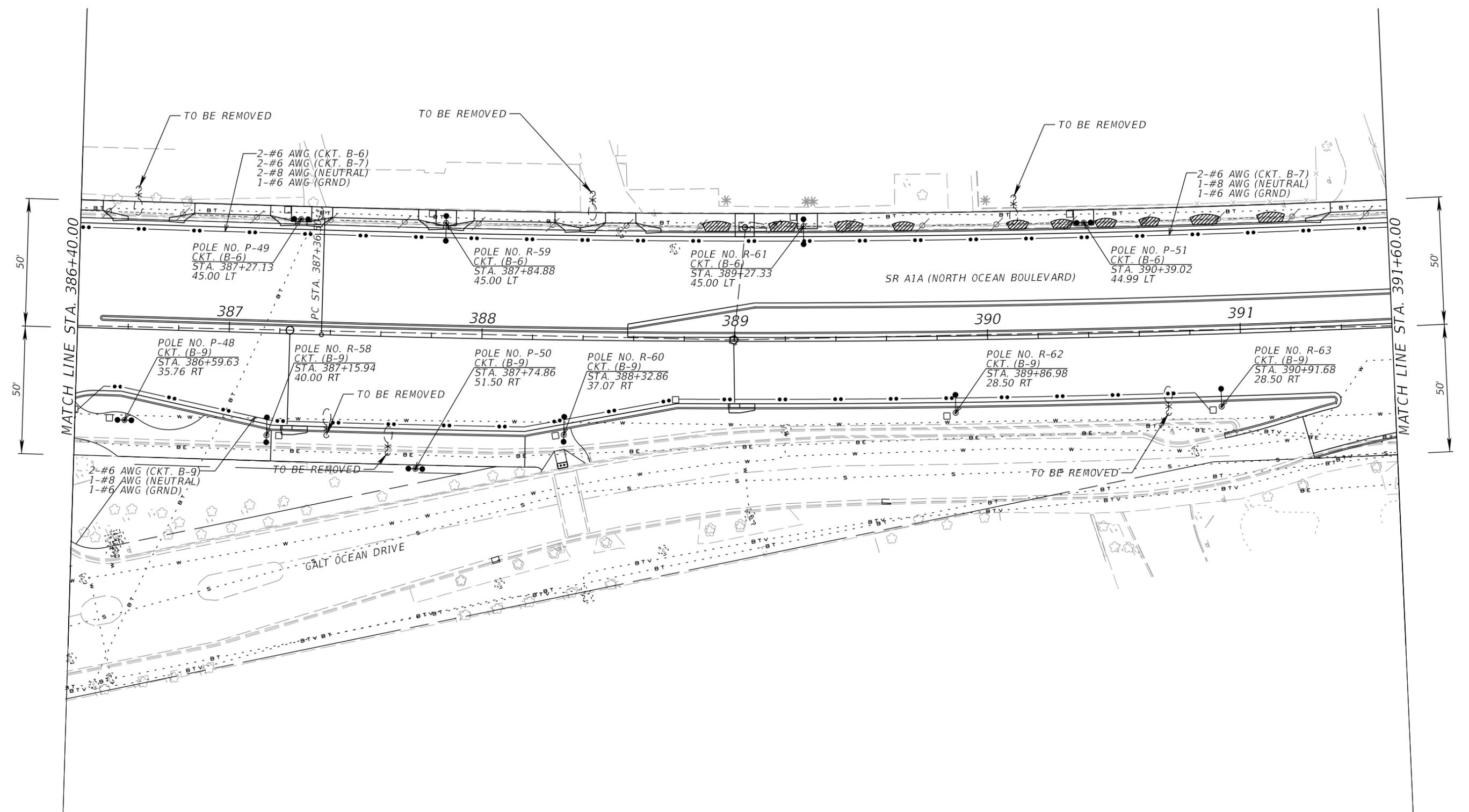
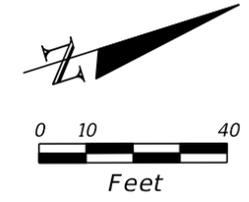
REVISIONS				GENESIS ENTERPRISES & ENGINEERING SERVICES, LLC 1720 SW 3RD AVENUE POMPANO BEACH, FL 33060  ENGINEER OF RECORD MICHAEL M. MELENDEZ, P.E. PE NO. 58698	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.  14-1129-13 24 of 34
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				A1A	BROWARD	431204-1-52-01	<b>LIGHTING PLAN</b>	



REVISIONS				GENESIS ENTERPRISES & ENGINEERING SERVICES, LLC 1720 SW 3RD AVENUE POMPANO BEACH, FL 33060	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
				ENGINEER OF RECORD MICHAEL M. MELENDEZ, P.E. PE NO. 58698	A1A	BROWARD	431204-1-52-01	<b>LIGHTING PLAN</b> Exhibit 1 14-1129-14 25 of 34

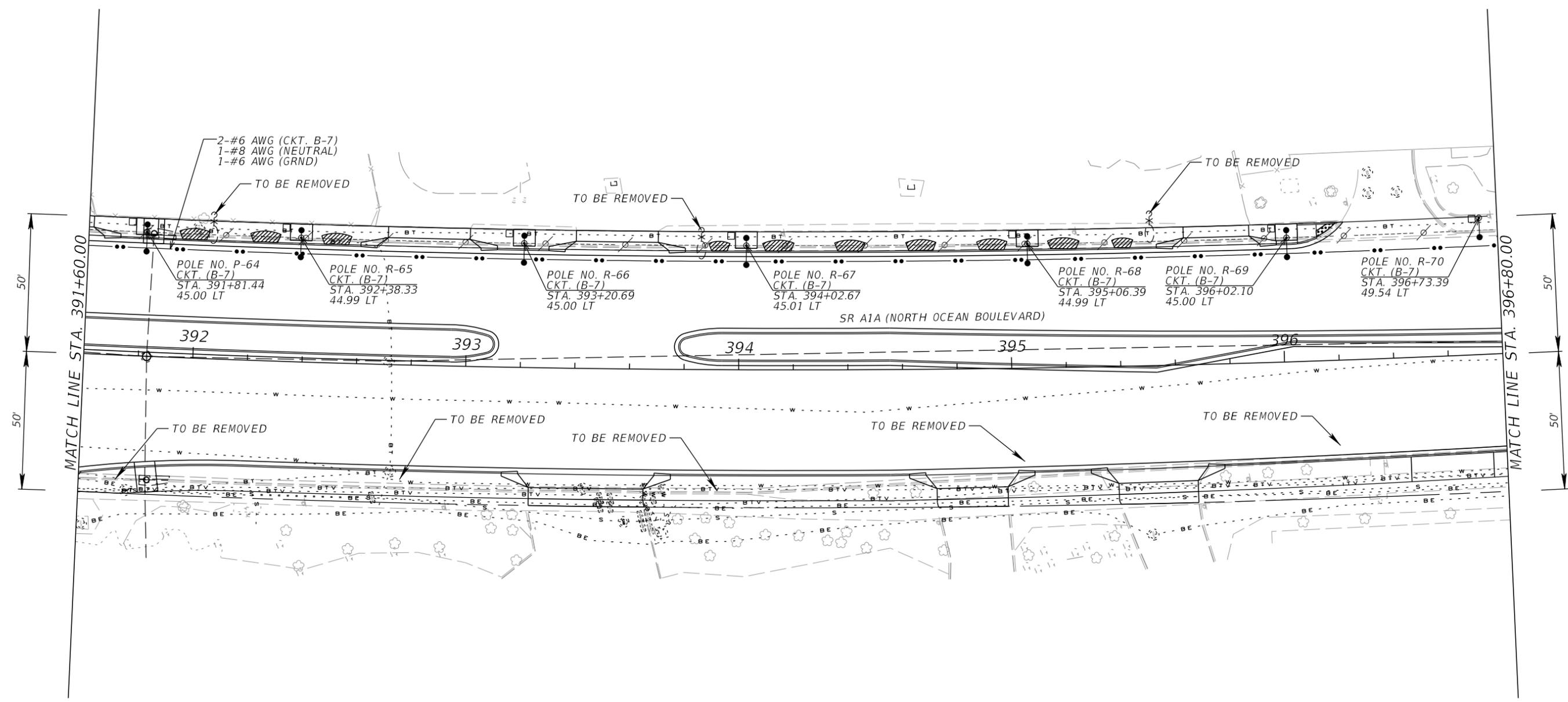
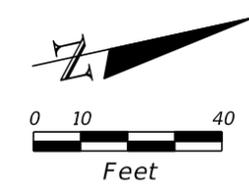


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				ENGINEER OF RECORD MICHAEL M. MELENDEZ, P.E. PE NO. 58698	A1A	BROWARD	431204-1-52-01	<b>LIGHTING PLAN</b> Exhibit 1 14-1126-15 26 of 34

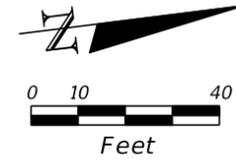


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**LIGHTING PLAN**



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END LIGHTING  
 SR-A1A / N. OCEAN BLVD.  
 STA. 397+83.52  
 SURVEY SR-A1A

TO BE REMOVED

2-#6 AWG (CKT. B-7)  
 1-#8 AWG (NEUTRAL)  
 1-#6 AWG (GRND)

POLE NO. R-71  
 CKT. (B-7)  
 STA. 397+45.41  
 48.84 LT

50'  
 50'

MATCH LINE STA. 396+80.00

PT STA. 401+38.81

SR A1A (NORTH OCEAN BOULEVARD)

398

399

400

401

FLAMINGO AVENUE

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LIGHTING PLAN

**VICTORIAN BASEPLATE WASHINGTON POLES**

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	OVERALL POLE LENGTH	BOLT CIRCLE	BASE O.D.	ULTIMATE G.L. MOMENT (ft. lbs.)	WEIGHT (lbs.)
VBWX09	29'-2"	29'-6"	20'-1/2"	24"	28,200	1,400

**ROADWAY LUMINAIRE:**

**STERNBERG LIGHTING.**  
 CAT#1A-1531LED-EZ-FG-10ARC45T3R-F-MDH05-COLT.  
 HOOD: SPUN ALUMINUM BELL, ROUND, STYLED DOME.  
 HOUSING: SPUN ALUMINUM BELL SHADE ATTACHED TO A CAST ALUMINUM TOP. IT SHALL BE CONSTRUCTED OF SPUN ALUMINUM HOUSING, CAST FRAME, ANODIZED HEAT SPREADER PLATE, AND DIE CAST DOOR.  
 HOUSING SHALL BE IP65 RATED. STAINLESS STEEL HARDWARE SHALL BE USED ON ALL EXTERNAL FASTENING APPLICATIONS.  
 ACCESS-MECHANISM: THE LUMINAIRE SHALL BE SUPPLIED WITH AN ALUMINUM HINGED DOOR FRAME AND LENS WITH TOLL-LESS ACCESS. THE DOOR ASSEMBLY SHALL HINGE DOWN FOR EASY ACCESS TO DRIVER ASSEMBLY. THE DOOR SHALL BE SECURED BY TWO STAINLESS SPRING LOADED, TOOL-LESS LATCHES.  
 OPTICAL CHAMBER: LED BOARD SHALL DELIVER AT LEAST 18,005 DELIVERED LUMENS AND BE OF TYPE 3R PHOTOMETRIC DISTRIBUTION WITH A MINIMUM COLOR RENDITION INDEX (CRI) OF 70 AND A CORRELATED COLOR TEMPERATURE (CCT) OF 4500K. OPTICAL CHAMBER SHALL BE IP66 RATED.  
 LENS: THE LENS SHALL BE FLAT CLEAR GLAS WITH A BUG RATING OF U-0 TO MEET IES FULL-CUTOFF CLASSIFICATION.  
 LED RATING: L70 GREATER THAN 200,000 HOURS BASED ON TM21 RATING METHOD AND 525ma DRIVE CURRENT. IT SHALL BE RoHS COMPLIANT.  
 ELECTRICAL: THE TOTAL SYSTEM WATTAGE SHALL NOT EXCEED 244 WATTS. 120-277 VOLT AND 347-480 VOLT AVAILABLE WITHOUT THE USE OF A STEP-DOWN TRANSFORMER. LED DRIVER SHALL BE A STANDARD DIMMING (0-10V) TYPE, SECURELY MOUNTED INSIDE THE LUMINAIRE BODY, AND SHALL BE ACCESSED BY WAY OF A TWIST LOCK MECHANISM. THE DRIVER SHALL BE EQUIPPED WITH ELECTRICAL QUICK DISCONNECT DEVICES. LUMINAIRE SHALL HAVE ELECTRICAL SURGE PROTECTION IN ACCORDANCE WITH IEEE/ANSI C62.41.2 GUIDELINES (10KV) AND SHALL BE UL OR ETL LISTED IN U.S. AND CANADA. THE LUMINAIRE SHALL OPERATE AT -40°C (-40°F) TO +50°C (122°F) AMBIENT AIR TEMPERATURE RANGE.  
 DLC QUALIFICATION: THE FIXTURE SHALL HAVE A DLC QUALIFICATION TO THE CURRENT V2.1 STANDARD.  
 WARRANTY: MINIMUM OF 7 YEARS FROM THE DATE OF MANUFACTURE. THE LUMINAIRE MANUFACTURER SHALL WARRANT THE LED BOARDS/SYSTEM, DURING THE STATED WARRANTY PERIOD, AGAINST FAILURE DEFINED AS MORE THAN TEN (10) PERCENT OF NON-OPERATING LEDS.  
 THE LUMINAIRE SHALL BE ATTACHED TO THE RA6 ARM WITH A HANG STRAIGHT (HS) ADAPTER.

**ROADWAY ARM:**

**STERNBERG LIGHTING. CAT#RA6-HS-S-COLT.**  
 ROADWAY STYLE ALUMINUM ARM WITH HANG STRAIGHT (HS) ADAPTER AND SPIKED FINIAL FOR PENDANT MOUNTED LUMINAIRE.  
 6-FT IN LENGTH.  
 FINISH: COLOR TO BE \_\_\_\_\_ (TBD).

**POLE:**

**NOV AMERON. CAT#VBWX09-SPL-COL(TBD)-AMER**  
 TALL WASHINGTON TRADITIONAL SERIES ANCHORED BASED, SPUN-CAST, PRESTRESSED CONCRETE POLE. 29'-6" ABOVE GRADE HEIGHT.  
 STANDARD AGGREGATE COLOR (TBD) WITH AMERSHIELD™ (ANTI-GRAFFITI) COATING.  
 POLE SHALL MEET AASHTO LTS-6 AND FDOT WIND ZONE REQUIREMENTS. ALL EXPOSED METAL SHALL BE PAINTED WITH SAME RAL COLOR AS THE LUMINAIRE AND ARM.  
 POLE SHALL HAVE THE CAPABILITY TO ACCEPT OPTIONS SUCH AS BANNER ARMS AND GFCI RECEPTACLES AS LONG AS THEY CONFORM WITH FDOT AND/OR MUNICIPALITY REGULATIONS.

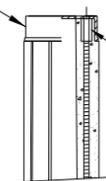
**FIXTURE LED CONTROLLER:**

SCHREDER LUCO-NX LUMEN CONTROLLER

**SEGMENT LED CONTROLLER:**

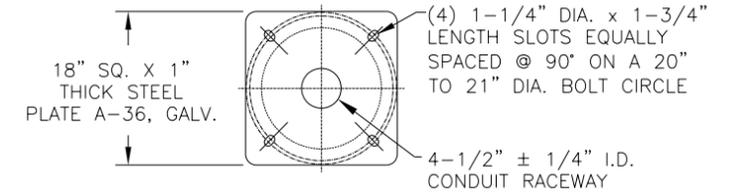
SCHREDER SECO CONTROLLER (ONE PER 150 FIXTURES)

5" O.D. CAST ALUMINUM ROUND COLLAR

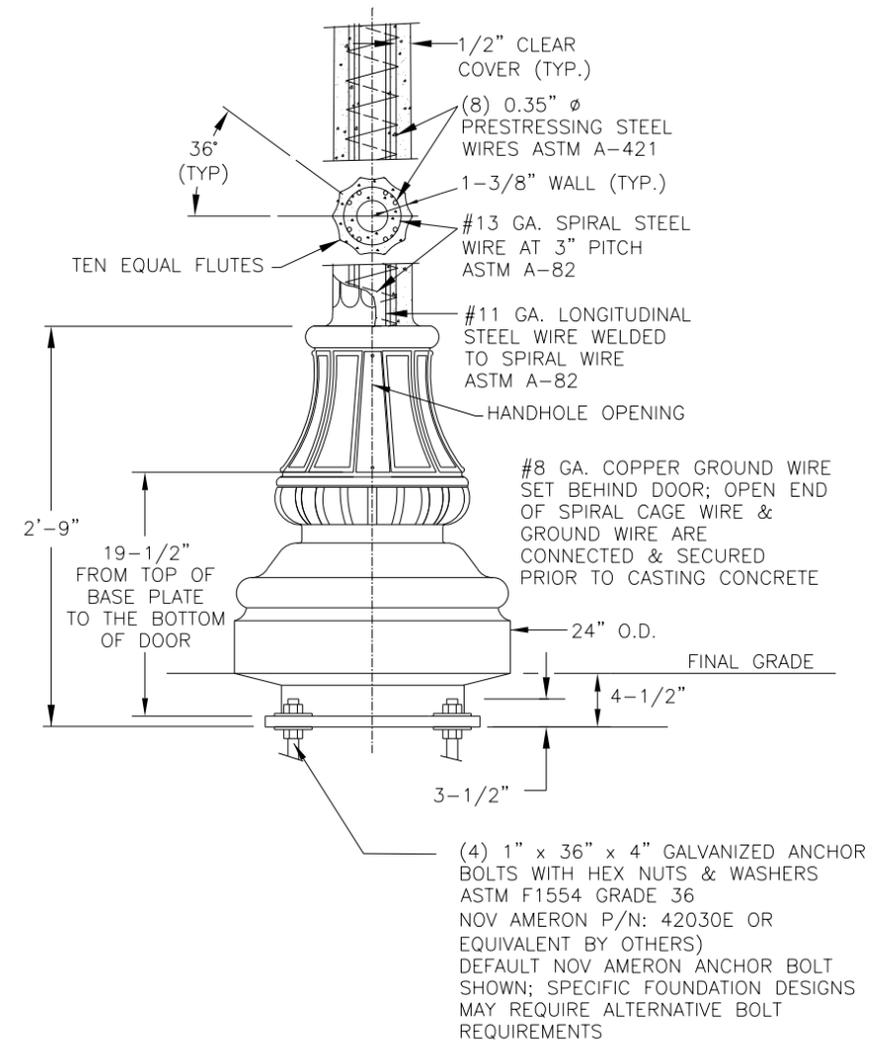


(STANDARD MOD38 POLE TOP)  
 (4) 3/8"-16UNC x 1-3/4" LG. STL COUPLINGS @ 90° APART ON A 3-1/2" DIA. BOLT CIRCLE EACH WITH 12" LG. ANCHOR

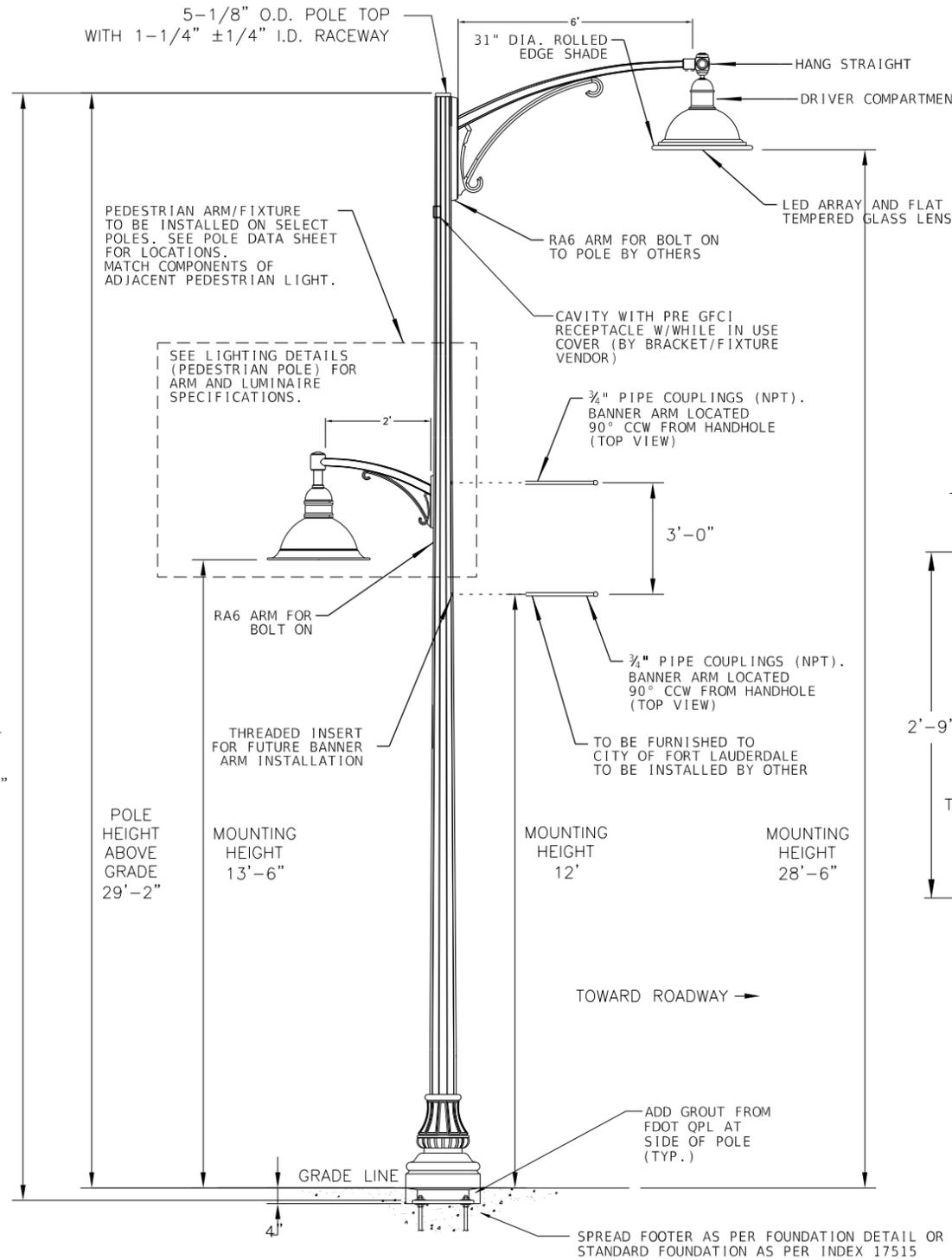
**POLE TOP DETAIL**



**BASE PLATE (SLOT)**



**POLE SECTION**



**ROADWAY LIGHT POLE DETAIL**

N.T.S.

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**FOUNDATION NOTES**

CONCRETE SHALL BE CLASS II WITH MIN.  $F'c = 3,400$  PSI

STEEL SHALL BE ASTM A615, GRADE 60 ( $Fy = 60,000$  PSI)

BASE FORCES AND MOMENTS CALCULATED BASED ON A DESIGN WIND SPEED OF 150 MPH, USING DESIGN GUIDELINES OUTLINED IN THE STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (4TH ED, SECTION 3).

**BASE SERVICE FORCES AND MOMENTS:**

AXIAL 600 LBF  
 MOMENT (X & Y AXES) 19,300 FT-LBF  
 MAX SHEAR 770 LBF

IF ACTUAL FORCES ARE HIGHER THAN THESE DESIGN LOADS, NOTIFY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTING THE FOUNDATION.

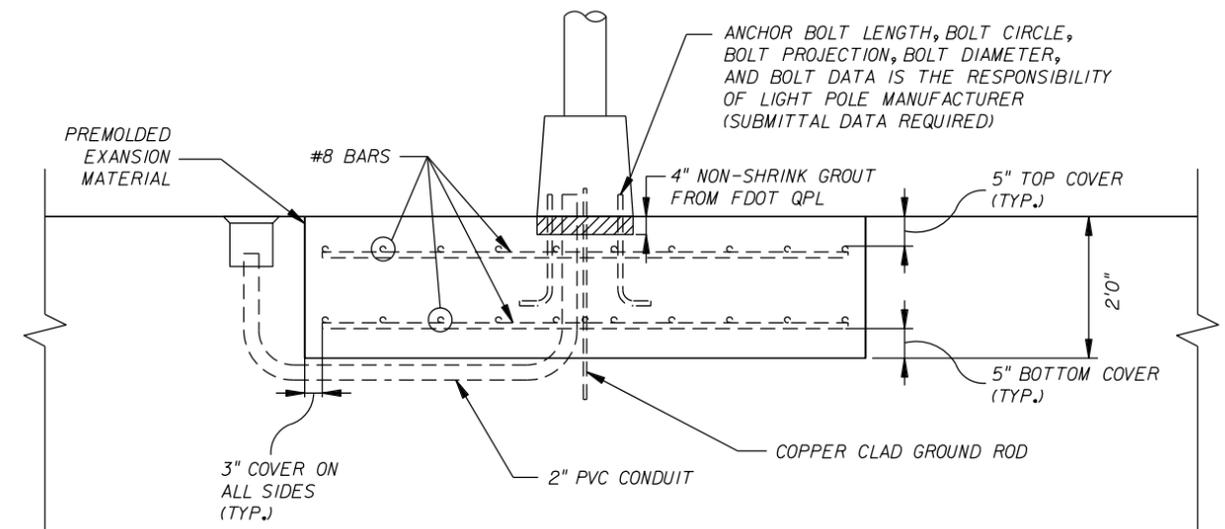
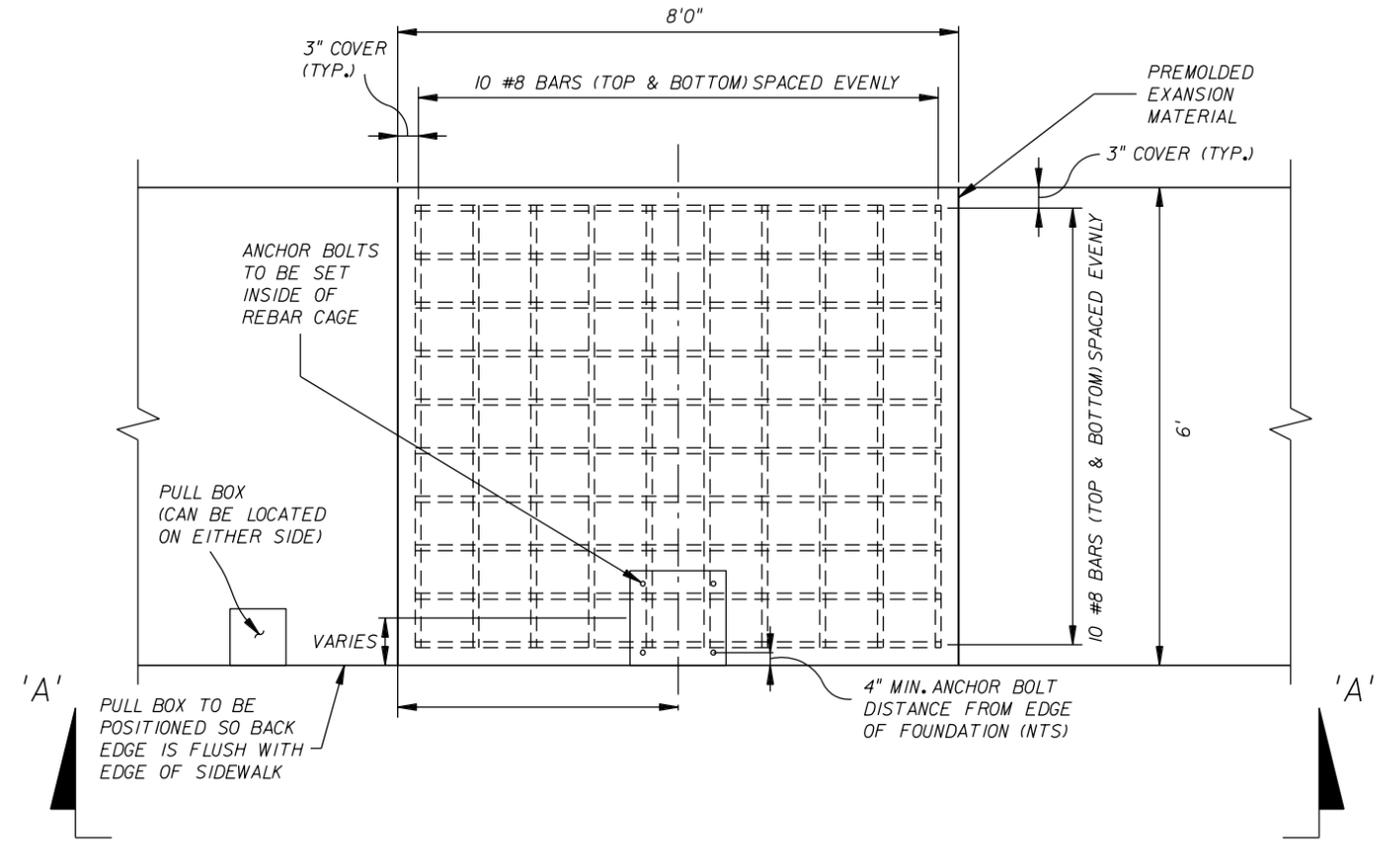
**DESIGN ASSUMPTIONS:**

ALLOWABLE SOIL PRESSURE = 1,500 PSF (CONSERVATIVE)  
 POLE BASE - CONCRETE SLAB CONNECTION IS COMPLETELY RIGID

PULL BOXES MAY BE PLACED ON EITHER SIDE OF FOOTING. THE CONTRACTOR SHOULD TAKE SPECIAL CARE NOT TO PLACE PULL BOXES IN ADA RAMPS.

QUANTITIES PROVIDED IN TABLE BELOW ARE PER FOUNDATION.

ESTIMATED QUANTITIES PER EACH FOUNDATION		
ITEM	UNIT	QUANTITY
CLASS II CONCRETE	CY	4.0
REINFORCING STEEL	LBS	735



VIEW 'A-A'

SPREAD FOOTING FOUNDATION

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3-#1 STRANDED CU RHW CROSS POLYLINK INSULATED WIRES IN 3" RIGID METAL CONDUIT TO WEATHERHEAD. (RISER AND WEATHERHEAD MOUNTING AS PER POWER COMPANY INSTRUCTIONS). LEAVE 10 FT. OF SLACK IN WIRE FOR CONNECTION TO 120/240 VOLT SINGLE PHASE SERVICE. FPL TO MAKE CONNECTION. MAKE CONDUIT RUN DIRECTLY FROM WEATHERHEAD TO ENCLOSURE. DO NOT RUN CONDUIT THROUGH PULL BOX. HOA SWITCH AND LIGHTING CONTACTOR ARE TO BE PROVIDED INSIDE THE ENCLOSURE.

INCLUDE INSTALLATION OF METER CAN ON CONCRETE PEDESTAL AS PER INDEX 17504 AND COORDINATE WITH FPL ON INSTALLATION OF METER.

ENCLOSURE, BOND GROUND WIRE, SOLID NEUTRAL BAR AND INCOMING NEUTRAL WIRE TO BE CONNECTED TOGETHER AND GROUNDED IN EARTH WITH THREE (3) 3/8" X 20 FT. LONG GROUND RODS. DO NOT GROUND NEUTRAL TO ANY OTHER LOCATION.

PHOTO-ELECTRIC CELL TO BE MOUNTED TO TOP OF THE CABINET.

H.O.A. SWITCH

2P/150A/240V MAIN BREAKER

LIGHTING CONTACTOR

SEE TABLE BELOW FOR CIRCUIT BREAKER SIZES

CONDUCTORS AS PER TABLE BELOW IN 2" RIGID METAL CONDUIT SURFACE MOUNTED ON CONCRETE POLE.

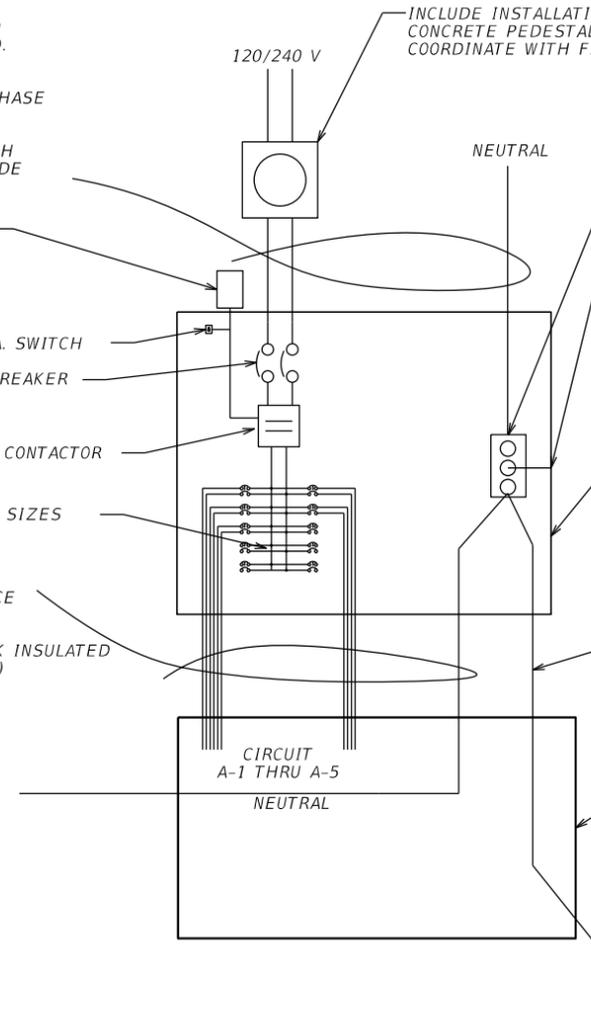
STRANDED CU RHW CROSS POLYLINK INSULATED WIRES IN 2" PVC CONDUIT (TYPICAL) SEE TABLE FOR CONDUCTOR SIZE

BUS BAR TO BE COPPER COATED AND HAVE A MIN. RATING OF 100 AMP. ENCLOSURE IN NEMA 4X, SS CABINET, LOCKABLE BY PADLOCK AND MOUNTED ON CONCRETE POLE. A 600 V LIGHTNING PROTECTOR SHALL BE WIRED INSIDE THE ENCLOSURE.

1-#4 STRANDED CU GREEN RHW CROSS POLYLINK INSULATED WIRE IN 3/4" RIGID METAL CONDUIT SURFACE MOUNTED ON CONCRETE POLE.

PULL BOX

THREE (3) 3/8" X 20 FT. LONG GROUND ROD FOR A TOTAL OF 60 FT. OF GROUNDING ELECTRODE AT SERVICE POINT.



**SERVICE POINT WIRING SCHEMATIC**  
 SERVICE POINT "A" (120/240 V.)  
 STA. 346+56  
 84.0 LT

SERVICE POINT	CIRCUIT	CONDUCTORS	BREAKER SIZE	MAINTAINING AGENCY	MAIN CIRCUIT BREAKER SIZE
A	A-1	2-#6 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	150 AMPS
	A-2	2-#6 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	
	A-3	2-#6 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	
	A-4	2-#6 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	
	A-5	2-#6 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	

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3-#2/0 STRANDED CU RHW CROSS POLYLINK INSULATED WIRES IN 3" RIGID METAL CONDUIT TO WEATHERHEAD. (RISER AND WEATHERHEAD MOUNTING AS PER POWER COMPANY INSTRUCTIONS). LEAVE 10 FT. OF SLACK IN WIRE FOR CONNECTION TO 120/240 VOLT SINGLE PHASE SERVICE. FPL TO MAKE CONNECTION. MAKE CONDUIT RUN DIRECTLY FROM WEATHERHEAD TO ENCLOSURE. DO NOT RUN CONDUIT THROUGH PULL BOX. HOA SWITCH AND LIGHTING CONTACTOR ARE TO BE PROVIDED INSIDE THE ENCLOSURE.

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PHOTO-ELECTRIC CELL TO BE MOUNTED TO TOP OF THE CABINET.

H.O.A. SWITCH  
2P/200A/240V MAIN BREAKER

LIGHTING CONTACTOR

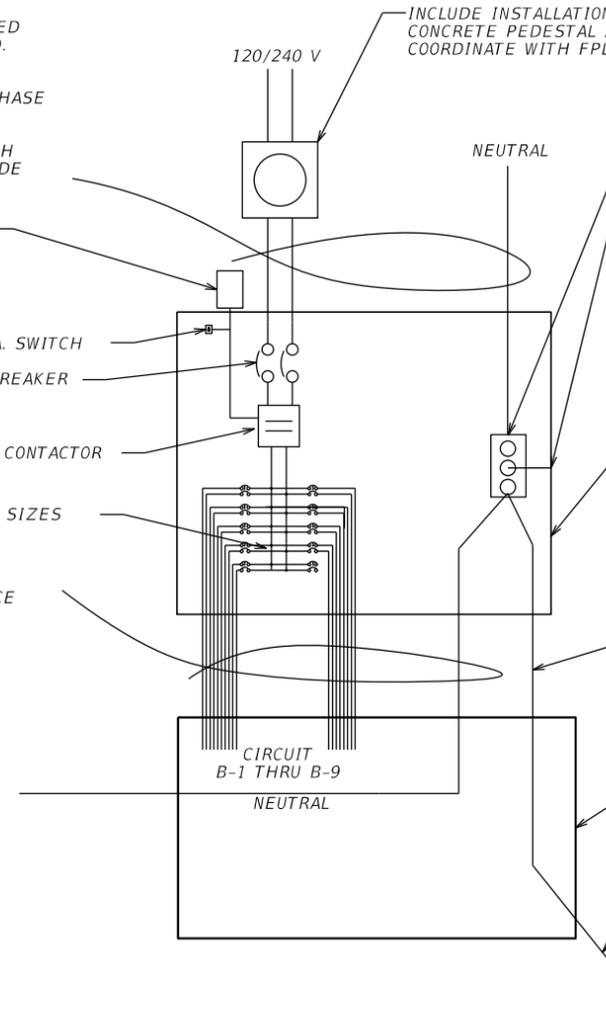
SEE TABLE BELOW FOR CIRCUIT BREAKER SIZES

CONDUCTORS AS PER TABLE BELOW IN 2" RIGID METAL CONDUIT SURFACE MOUNTED ON CONCRETE POLE.

BUS BAR TO BE COPPER COATED AND HAVE A MIN. RATING OF 100 AMP. ENCLOSURE IN NEMA 4X, SS CABINET, LOCKABLE BY PADLOCK AND MOUNTED ON CONCRETE POLE. A 600 V LIGHTNING PROTECTOR SHALL BE WIRED INSIDE THE ENCLOSURE.

1-#2 STRANDED CU GREEN RHW CROSS POLYLINK INSULATED WIRE IN 3/4" RIGID METAL CONDUIT SURFACE MOUNTED ON CONCRETE POLE.

PULL BOX  
THREE (3) 5/8" X 20 FT. LONG GROUND ROD FOR A TOTAL OF 60 FT. OF GROUNDING ELECTRODE AT SERVICE POINT.



**SERVICE POINT WIRING SCHEMATIC**  
SERVICE POINT "B" (120/240 V.)  
STA. 375+19  
60.0 LT

SERVICE POINT	CIRCUIT	CONDUCTORS	BREAKER SIZE	MAINTAINING AGENCY	MAIN CIRCUIT BREAKER SIZE
B	B-1	2-#6 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	200 AMPS
	B-2	2-#6 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	
	B-3	2-#6 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	
	B-4	2-#6 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	
	B-5	2-#4 AND 1-#8	40 AMPS	CITY OF FORT LAUDERDALE	
	B-7	2-#4 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	
	B-8	2-#4 AND 1-#8	30 AMPS	CITY OF FORT LAUDERDALE	
	B-9	2-#4 AND 1-#8	40 AMPS	CITY OF FORT LAUDERDALE	

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