

**SUPPLEMENT TO**  
**REQUEST FOR EXTENSION OF TOLLING REQUEST**

Telecinco, Inc. (“Telecinco”), licensee of full-power television Station WRFB(DT), Carolina, Puerto Rico (Facility ID No. 54443) (the “Station”), respectfully submits this Supplement to the Request for Extension of Tolling Request, filed on August 1, 2023 (LMS # 0000218784). At the request of FCC staff, Telecinco is providing the attached documentation regarding the delays caused by the need to install a power at the Station’s transmitter site, including the delays caused by importing and installing electric transformers.

Attached hereto as Exhibit A is a memorandum and supporting documentation from Mr. Javier Sánchez, the electrical contractor hired by Telecinco, Inc., to coordinate the necessary design and implementation of the new electric substation. As Mr. Sánchez notes, the delay in completing the required work is tied to the delivery of the transformers:

The reason for the transformer's long delivery time is the primary voltage in the area where the substation will be located. The 8,320V primary voltage is available in reduced areas of Puerto Rico and is no longer used in the States, therefore the only stateside transformers readily available are old and used. In Puerto Rico, as the 8320V is also slowly being replaced by a higher voltage the local distributors do not inventory transformers for the 8320 primary voltage, those transformers are custom-ordered with a long lead time.

Included in Mr. Sánchez’ memorandum are the invoices and documentation confirming that the orders have been placed for the necessary equipment.

Prior to the orders being placed, it was necessary for Telecinco to receive approval of the electrical installation by the local energy company, LUMA Energy, which is attached hereto as Exhibit B.

Section 73.3598(b) of the Commission’s rules provides that the period of construction for an original construction permit shall toll when “construction is prevented due to an Act of God, defined in terms of natural disasters.” Without question, the extensive damage that the Station sustained during Hurricane Maria constitutes an Act of God justifying tolling. Complicating matter was the Incentive Auction requiring the Station to change channels.

Telecinco has completed construction of the Station’s tower site, and has completed the construction of the transmitter building. The sole delay in taking the final steps necessary to commence operations of the full-power Station is the construction of the electric substation. Because of the damage caused by Hurricane Maria, Telecinco was required to coordinate with, and receive permission from, the local power utility company to reconstruct the electrical substation at the tower site so that the Station can operate with its post-Transition, authorized facilities.

As such, further tolling of the construction permit is in the public interest and will not impact the overall transition schedule or cause interference to other stations. For the reasons set forth above, Telecinco respectfully requests that the CP Authorization be tolled until January 31, 2024.

**EXHIBIT A**



# Javier Sánchez

Perito Electricista • Lic. 11172

TRABAJO INDUSTRIAL • COMERCIAL • RESIDENCIAL

TEL: 787 858-0469 / 787 478-3039

Calle 2 B-17 El Verde Vega Baja 00693

[j.sanchezelectric1@gmail.com](mailto:j.sanchezelectric1@gmail.com)

☐ FACTURA


☒ STATUS REPORT

## CLIENTE

Telecinco Inc WRFB-TV

## DIRECCION

1519 Ponce de Leon Ave. Suite 1501 San Juan P.R

| Fecha     | WRFB150KVA Substation Installation Status Report   | Costo |
|-----------|--|-------|
| 8/24/2023 | <p>The WRFB substation is under construction, the transformers and transformers cabinet (Transclosure) construction were ordered on July 24, 2023. With a transformer's lead time of 16 to 20 weeks, delivery is expected during the month of December 2023. The Transclosure lead time is shorter, therefore I expect to deliver the completed substation by the end of January 2024. The other parts for the construction are readily available but until the transformers are delivered the actual substation construction can't be completed.</p> <p>The reason for the transformer's long delivery time is the primary voltage in the area where the substation will be located. The 8,320V primary voltage is available in reduced areas of Puerto Rico and is no longer used in the States, therefore the only stateside transformers readily available are old and used. In Puerto Rico, as the 8320V is also slowly being replaced by a higher voltage the local distributors do not inventory transformers for the 8320 primary voltage, those transformers are custom-ordered with a long lead time.</p> <p>With these documents are copies of the transformers and Transclosure orders.</p> <p></p> <p>Javier Sánchez<br/>Perito Electricista Lic. 11172</p> <p><b>Observaciones:</b><br/>Se requiere deposito de materiales para fabricar transformadores y subestacion<br/>No incluye punto de coneccion con luma</p> |       |



# MEGA-TRAN INDUSTRIAL CORP.

P.O. BOX 989  
SAN LORENZO, PUERTO RICO 00754  
TEL: (787) 736-1599 FAX (787) 736-1797

PAGE 1 OF 1

NV-041223-8

DATE: 12-Apr-23

## QUOTATION

NAME: Javier Sánchez  
ADDRESS:  
CITY & STATE  
TEL:  
ATTN: Javier Sánchez Pérez <j.sanchezelectric1@gmail.com>  
FROM:

MEGA-TRAN INDUSTRIAL CORP  
URBANIZACION INDUSTRIAL HATO  
CALLE # 1  
SAN LORENZO, P.R. 00754

JOB  
TAX ID  
DATE REQUIRED  
TERMS  
SHIP VIA

M10869  
ASAP  
USUAL

ESTIMATED  
QUANTITY

### ITEM DESCRIPTION

3

Galvanized Steel Pole Type Transformer 50 KVA, 1PH, 60Hz  
8320/14400Y Primary Voltage to 120/208 Secondary Voltage  
-4 x 2.5% TAPS, Oil Immerse Self Cooled  
Non-PCB, 65 OC Temp. Rise

AVAILABILITY APPROX. 16-20 weeks

- 50% Deposit required.
- Final payment must be made by ATH or certified check.
- Manufacturing subject to availability of raw materials.
- See Terms and Conditions MTI

07/24/2023  
Deposito 1 ATH \$3,000  
2 ATH \$3,000

NVD

- Taxes Included.
- Our offer is firm for 5 days.
- Once order is completed prices are subject to change after 60 days of the notification.
- Our offer does not include anything that is not expressly stated in this quotation.

Standard tests as per ANSI C 57.12.90

NEMA, ANSI, DOE & PREPA Applicable

PRICE  
PER UNIT  
\$3,521.00

UNIT  
3

AMOUNT  
\$10,563.00

\$10,563.00

IVU

\$ 1,214.75

TOTAL

\$11,777.75

E-MAIL : ventas@megatranindustrial.com

COMMENTS:

AUTHORIZED:

HECTOR JARED FLORES  
GENERAL MANAGER

NOEL VELAZQUEZ DEL VALLE  
SALES REPRESENTATIVE

|   |                                   |   |
|---|-----------------------------------|---|
| <b>Quote To:</b><br><br>To All Customers<br>P.O. Box<br>PUERTO RICO USA<br><br><br>Phone:<br><br>Project Name | TO002<br><br><br><br><br><br>Fax: | <b>Date:</b> 7/21/2023<br><b>Expires:</b> 8/4/2023<br><b>Reference:</b><br><b>Sales Person:</b> Angel L. Marcano - Ventas<br><b>Fax:</b> 787-418-0642<br><b>Phone:</b> 787-620-4950<br>amarcano@akmmfg.com<br><br><b>Ship To:</b><br><br>To All Customers<br>P.O. Box<br><br>PUERTO RICO<br>PUERTO RICO<br><br><b>Ship Via:</b> TO BE DISCUSSED<br><b>Terms:</b> 50% Down / COD |
|---|-----------------------------------|---|

AKM MFG INC  
418 Calle A Ste 1  
San Juan PR 00920-2005



Phone: 787-620-4950 Fax: 787-418-0642

Quote Number: 46230

Page: 2 of 3

*CUSTOMER: JAVIER SANCHEZ  
EMAIL: j.sanchezelectric1@gmail.com  
CEL: 787-478-3039*

| Item  | Part Description  | Rev.                    | Draw No                 |
|---|-------------------|-------------------------|-------------------------|
| 1   | TGXN2M02-06C-BXXX | A                       |                         |
| Pad Mounted Transclosure, 150 KVA, NEMA 3R<br>Operating Voltages: 8.32/14.4V @ 120/208V<br>Material: Galvanized Steel Thk. 0.105 (Type-G-90)<br>Finish: Grey, ANSI 61 |                   |                         |                         |
| Section I:  |                   |                         |                         |
| 1. High Voltage Cubicle   |                   |                         |                         |
| 1. 600 A, Copper Bus Bar Lot  |                   |                         |                         |
| 3. Lightning Arresters, 6KV, MOV  |                   |                         |                         |
| 3. Power Fuse Mountings, NX   |                   |                         |                         |
| 6. Fuse Units NX, 20E, NOT INCLUDED   |                   |                         |                         |
| 2. Safety Dead Fronts   |                   |                         |                         |
| 1. Spare Fuse Pocket  |                   |                         |                         |
| 1. Ground Bar   |                   |                         |                         |
| Section II:   |                   |                         |                         |
| 1. Metering Cubicle   |                   |                         |                         |
| 1. Meter socket, 20A, 8 Clips   |                   |                         |                         |
| 1. Space for PREPA'S Metering Equipment   |                   |                         |                         |
| 1. Ground Bar   |                   |                         |                         |
| Sections III, IV & V:   |                   |                         |                         |
| 1. Cubicle for 3 Transformers   |                   |                         |                         |
| 1. 600 A, Copper Bus Bar Lot  |                   |                         |                         |
| 3. Pole Type Transformers, (NOT INCLUDED-See Below for Type, Price & Lead Times)  |                   |                         |                         |
| 1. Ground Bar   |                   |                         |                         |
| Section VI:   |                   |                         |                         |
| 1. Secondary Cubicle, Back to Back with:  |                   |                         |                         |
| 1. Main Circuit Breaker, 300A, 3 PH, 65 KAIC  |                   |                         |                         |
| Frame: XT5NU330APNN000XXX   |                   |                         |                         |
| Lug Kit: KXT5CUAL3X400K-3PC   |                   |                         |                         |
| 1. 100% Neutral Bus Bar   |                   |                         |                         |
| 1. Ground Bar   |                   |                         |                         |
| Qty: 1.00 EA  |                   | Unit Price: \$13,180.55 | Line Price: \$13,180.55 |

DISCOUNT: 0.000

Subtotal Quote \$13,180.55

TAXES 1,515.77

Total Quote \$14,696.31

Thank you for the opportunity to submit this quote, as per our best interpretation of the drawings and specifications submitted. Our responsibility is limited in quantity and quality of the equipments and material as described as above. All prices are valid for 15 days from the date of this quote. Production time is estimated after customer Shop Drawing Approval. This quotation does not include anything not listed here. It is the customers responsibility to verify it is accurate. Any addendum will be referred for re quoting. All Purchase Order cancellations will have a 25% restocking and paper work charge. If Job has begun production, with clients approval, there will be no cancellations allowed. All Jobs not approved within 6 months of Purchase Order are considered to be Canceled by costumer and a 25% cancellation fee will apply. Some products may contain different Delivery Schedules to our Standard Delivery please see Description for additional information.





AKM MFG Inc.  
#418 Calle A Suite 1  
San Juan, PR 00920-2005  
Tel. (787) 620.4950  
Fax (787) 620.4956

# RECIBO Y CONTRATO DE VENTAS

Fecha:

07/24/2023

## Datos del Cliente

JA013  
Javier Sanchez Perez  
Urb. El Verde  
C/ 2 B-17  
  
Vega Baja, PUERTO RICO  
00693  
787-478-3039

## Datos de la Orden

Orden N° **144736**  
PO N° HOLD UNTIL DEPOSIT  
Sitio de Entrega: 00693  
Javier Sanchez Perez  
Urb. El Verde  
C/ 2 B-17  
Vega Baja, PUERTO RICO  
787-478-3039

## Detalle de Pago

|                 |             |
|-----------------|-------------|
| PRECIO DE VENTA | \$13,180.55 |
| IMPUESTOS       | 1,515.77    |
| TOTAL           | \$14,696.32 |
| DEPOSITOS       | \$10,000.00 |
| BALANCE         | \$4,696.32  |

Metodo de Pago  
**Various Methods**

Deposit **CASH** **144736** 10,000.00 7/24/2023

Totales

Numero de Pagos:

1

Monto Recibido:

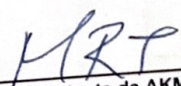
10,000.00

## Terminos y Condiciones

AUTORIZADO Y EN REPRESENTACION DE LA COMPAÑIA ARRIBA MENCIONADA, AUTORIZO A AKM MFG. INC. A COMENZAR LA MANUFACTURA DE LA ORDEN SEGUN SE ESPECIFICO. ENTIENDO Y ME QUE DE LA ORDEN SER CANCELADA, AKM MFG. INC. RETENDRA EL 100% DEL MONTO PAGADO A LA FECHA. ENTIENDO Y ME COMPROMETO A RECOGER LOS EQUIPOS DENTRO DEL PERIODO DE 30 DIAS UNA VEZ MANUFACTURADO EL EQUIPO Y LUEGO DE SER NOTIFICADO POR UN REPRESENTANTE DE AKM MFG. INC. PARA RECOGERLO QUEDA A DISCRECION DE AKM MFG. INC. CANCELAR LA VENTA Y RETENER EL DINERO DEPOSITADO SI NO CUMPLIO CON LAS ESPECIFICACIONES Y LOS TERMINOS AQUI ESTABLECIDOS. ENTIENDO TAMBIEN QUE EL EXPEDIR CHEQUES CON FONDOS INSUFICIENTES ES UN ACTO DELICTIVO SEGUN EL CODIGO PENAL DE PUERTO RICO VIGENTE Y EL CUAL CONLLEVA PENA DE CARCEL. CONSIENTO DE ESTA MANERA, QUE AKM MFG. INC. COBRE LA CANTIDAD DE \$50.00 POR CADA TRANSACCION DE UN CHEQUE DEVUELTO EXPEDIDO POR MI O POR LA COMPAÑIA A LA CUAL REPRESENTO.

**POLITICA DE DEPÓSITOS DE GENERADORES**  
LOS DEPÓSITOS DE GENERADORES NO SON REEMBOLSABLES. LOS GENERADORES PUEDEN TARDAR ENTRE 3 A 4 MESES EN LLEGAR. EN ALGUNOS CASOS PUEDE SER MÁS DEPENDIENDO DE LA DISPONIBILIDAD DE FÁBRICA.

Acepto Conforme

  
Firma - Representante de AKM MFG. Inc

COMI

AUTH

**EXHIBIT B**



# CERTIFICACIÓN DE PLANOS DE CONSTRUCCIÓN ELÉCTRICA / ELECTRICAL CONSTRUCTION DRAWINGS CERTIFICATION

Document No.: 4375.004

Version: 3

En armonía con las disposiciones de la Ley Núm. 7 del 19 de julio de 1985 y de la Ley Núm. 173 del 12 de agosto de 1988, según enmendadas, yo, / In accordance with the dispositions of the Law No. 7 from July 19 of 1985 and Law No.173 from August 12 of 1988, as amended, I, RAFAEL A SANCHEZ PEÑA certifico que / certify that:

Nombre y Apellidos / Name and last name

Soy mayor de edad, / I am an adult, CASADO, vecino de / neighbor of BAYAMON, Puerto Rico; que soy /  
Estado civil / Civil state municipality

Puerto Rico; that I am INGENIERO autorizado a ejercer la profesión en Puerto Rico con licencia número / authorized  
Ingeniero o Arquitecto / Engineer or Architect

to practice the profession in Puerto Rico with license number 8784 y soy miembro activo del colegio de mi profesión / and that I am active member from my professional college.

En el ejercicio de mi profesión diseñé la fase eléctrica del proyecto de construcción descrita como: / In my profession exercise I designed the electric phase of the construction project describe as:

|                                     |   |                                   |
|-------------------------------------|---|-----------------------------------|
| Nombre Proyecto / Project Number    | cCONSTRUCCION SUBESTACION ELECTRICA TELECINCO |                                   |
| Núm. AEE/LUMA / PREPA/LUMA Number:  | AEE-LUMA: 20-02-0315                          | Carga (kVA) / Load (kVA): 150 KVA |
| Dirección Física / Physical Address | PR 797 INTERIOR, CALLE PASIONARIA NO. 5       |                                   |
|                                     | BO.JAGUEYES, AGUAS BUENAS, PR 00703           |                                   |

Estoy autorizado por el dueño del proyecto a radicar esta certificación ante LUMA como agente y operador de PREPA (PREPA/LUMA) / I am authorized by the owner project to submit this certification to LUMA as agent and operator of PREPA (PREPA/LUMA)

|                                    |  |
|------------------------------------|--|
| Dueño del Proyecto / Project Owner | ARA INTERNATIONAL INC.-TELECINCO         |
| Dirección Postal / Mail Address    | FIRST BANK BUILDING PISO 15 SANTURCE, PR |


Radico esta certificación ante AEE/LUMA para / I apply this certification to PREPA/LUMA for:

|                                     |  |
|-------------------------------------|--|
| <input type="checkbox"/>            | Endoso de los planos de diseño eléctrico que tienen evaluación vigente desde el / I endorse this electrical design drawings which have updated evaluation from   |
| <input checked="" type="checkbox"/> | Revisión número / Revision number <u>2</u> de los planos de diseño eléctrico previamente endosados por LUMA. Se incluye memorial explicativo / from the electrical drawings previously endorsed by LUMA. Explained memorandum is included. |

La fase eléctrica del Proyecto preparada o diseñada por mí, según se incluye en los planos, documentos y especificaciones que acompañan esta certificación, está conforme con los reglamentos, códigos, normas, patrones y comunicados técnicos vigentes aplicables promulgados, aprobados o adoptados por LUMA, la Junta de Planificación y la Oficina de Gerencia de Permisos (OGPe), así como con las políticas públicas y leyes aplicables / The electrical project phase prepared or designed by me, as included in the drawings, documents and specifications that accompany this certification, is in accordance with the applicable regulations, codes, standards, procedures and current technical communications promulgated, approved or adopted by LUMA, the Planning Board and the Permits Management Office (OGPe), as well as public policies and applicable laws.

Acepto que el endoso de estos planos, documentos y especificaciones por parte LUMA no constituye un relevo de la responsabilidad profesional que conlleva esta certificación / I accept that these drawings endorsement, documents, and specifications by LUMA does not constitute a professional responsibility release that this certification carries.

**Sustitución del Diseñador:** Este Proyecto fue endosado con anterioridad a / **Designer Release:** This project was endorsed previously to \_\_\_\_\_, por lo que se incluye el relevo de responsabilidad expedido por éste / therefore, the responsibility release issued by him is included.  
Ingeniero o Arquitecto / Engineer or Architect

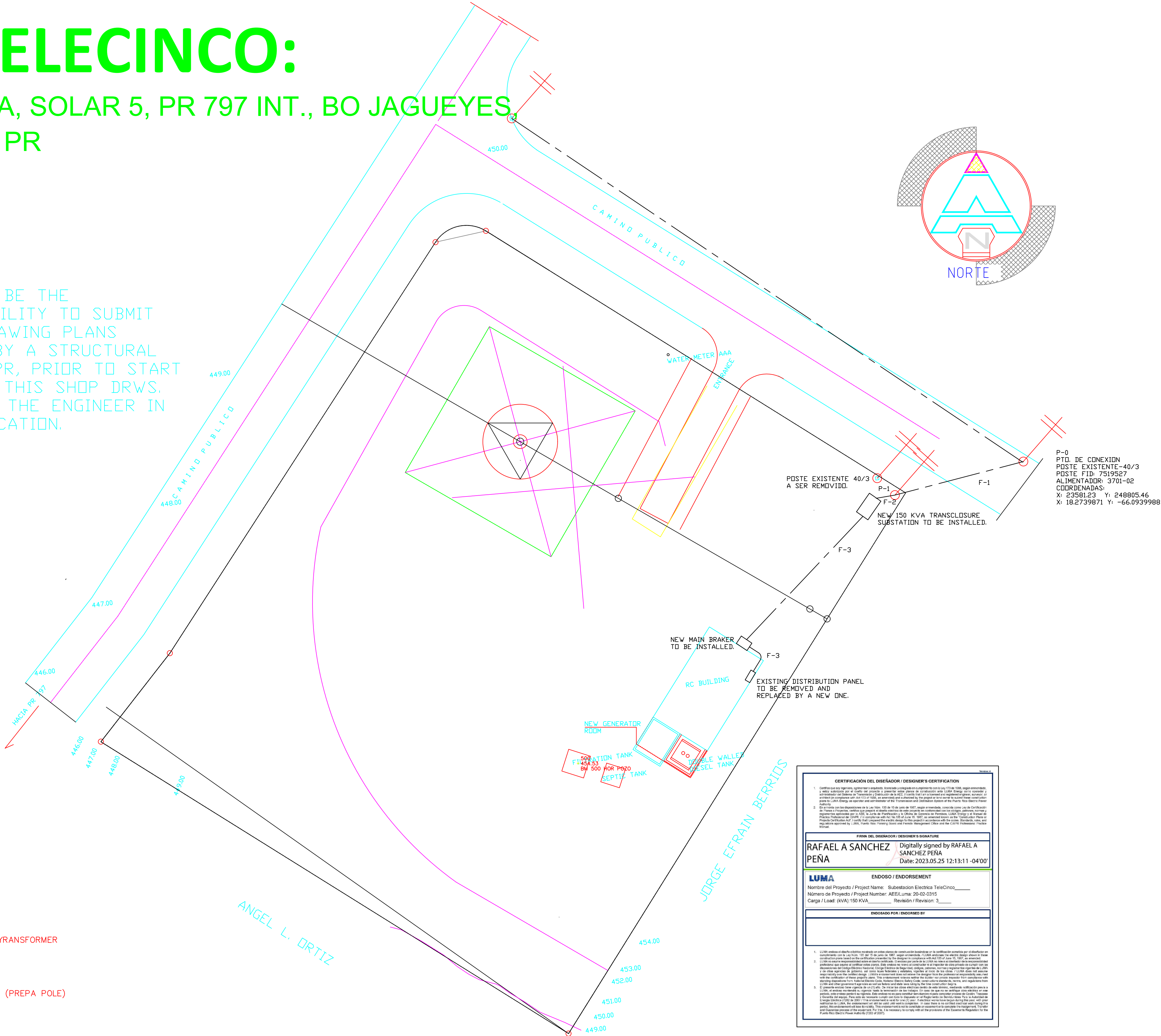
|   |  |
|---|--|
| <b>CERTIFICACIÓN ELECTRÓNICA DEL DISEÑADOR /<br/>DESIGNER ELECTRONIC CERTIFICATION</b>  | <b>ENDOSO ELECTRÓNICO DE LUMA /<br/>LUMA ELECTRONIC ENDORSEMENT</b>  |
| <b>RAFAEL A<br/>SANCHEZ<br/>PEÑA</b><br>Digitally signed by<br>RAFAEL A SANCHEZ<br>PEÑA<br>Date: 2023.05.24<br>16:37:35 -04'00' | <br>Digitally signed by Frank N. Rivera Serrano,<br>PE<br>DN: cn=Frank N. Rivera Serrano, PE,<br>o=LUMA Energy, ou=Utility Transformation,<br>email=frank.rivera@lumapr.com, c=US<br>Reason: REV#3 150KVA<br>Date: 2023.07.13 16:09:32 -04'00' |



WRFB TELECINCO:

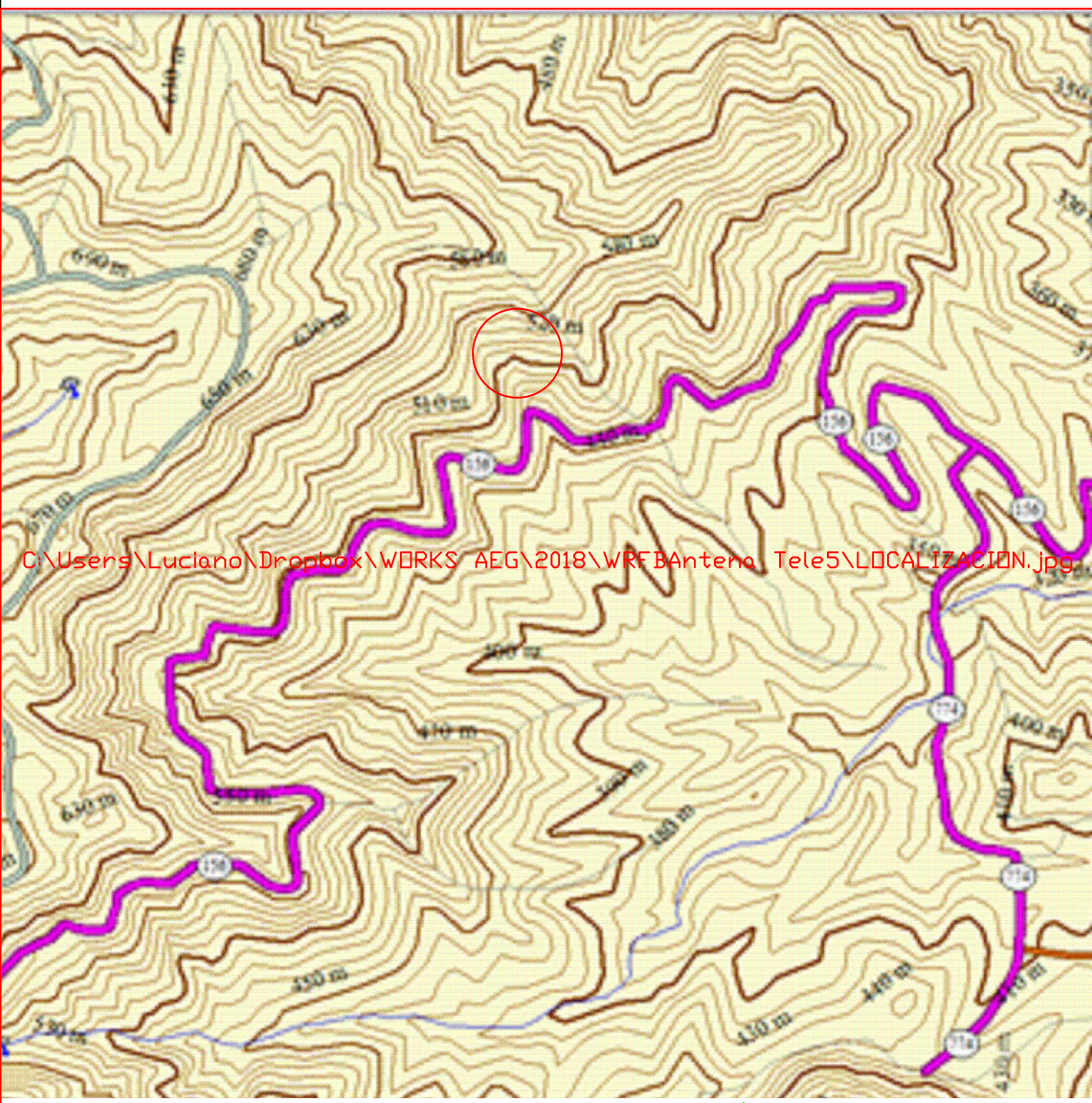
C. LA PASIONARIA, SOLAR 5, PR 797 INT., BO JAGUEYES, AGUAS BUENAS, PR

SHOPDRAWING: IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SUBMIT FOR APPROVAL SHOP DRAWING PLANS SIGNED AND CERTIFIED BY A STRUCTURAL ENGINEER LICENSED IN PR, PRIOR TO START FABRICATION OF TOWER. THIS SHOP DRWS. SHALL BE APPROVED BY THE ENGINEER IN CHARGE PRIOR TO FABRICATION.



LEYENDA:

- 112.5 KVA PAD MOUNTED TYRANSFORMER
- MAIN BREAKER
- POSTE ELECTRICO HORMIGON (PREPA POLE)
- PANEL ELECTRICO
- POSTE TELEFONO (PHONE POLE)



VICINITY PLAN

- INDICE
- SE-1 ELECTRICAL SITE PLAN, LOCATION & VICINITY
  - SE-2 ONE LINE DIAGRAM, FEEDER SCH. & DETS.
  - SE-3 ELECTRICAL NOTES.

CERTIFICACIÓN: Yo, Rafael A Sánchez Peña, ingeniero Electricista, con lic. 8784, CERTIFICO que soy el profesional que diseñó estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de las agencias, Juntas Reglamentadoras y o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido sin conocimiento o por negligencia ya sea por mí, mis agentes o empleados o por otras personas con mi conocimiento me hacen responsable de cualquier acción judicial o disciplinaria por la OIGPe y otras autoridades competentes, incluyendo pero sin limitarse a la terminación de la participación en los procedimientos de Certificación Profesional en la OIGPe.

| REVISION |            | DESCRIPCION |             |
|----------|------------|-------------|-------------|
| NO.      | FECHA      | STAKING     | COORDINATES |
| 1        | 11-17-2021 |             |             |

RAFAEL A SANCHEZ PEÑA  
INGENIERO ELECTRICISTA  
CONSULTOR LIC. NO.8784

NEW ELECTRICAL SUBSTATION

WRFB, LOT 5, PR 797 INT., JAGUEYES WARD, AGUAS, BUENAS, PR

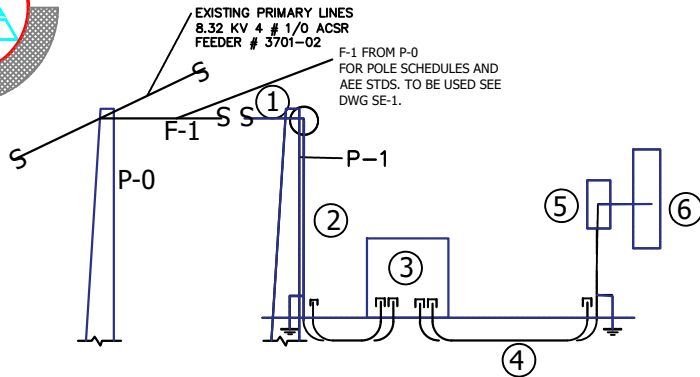
PROYECTO

ALL engineering group  
consulting civil engineers & planners  
lic. num. 8426  
TEL. 0971 640-7244



| DRAWING DESCRIPTION:                      |             |
|---|-------------|
| ELECTRICAL SITE PLAN, LOCATION & VICINITY |             |
| DESIGN BY:                                | FILE NAME:  |
| RASP                                      |             |
| DRAWN BY:                                 | ISSUE DATE: |
| RASP                                      | 09/05/2022  |
| DRW. NO.                                  | SHEET NO.   |
| SE-1                                      | 1           |
|   | OF 3        |

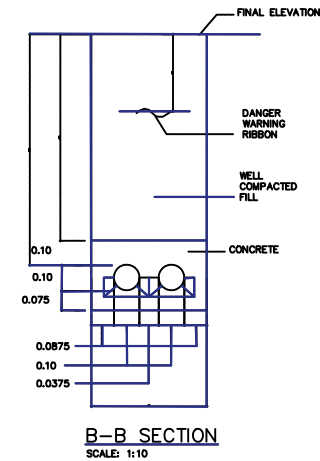




**NOT TO SCALE**

| POSTE | CLASE                               | AEE STDS. TO BE USED                       |
|-------|-------------------------------------|--|
| P-0   | 40/ 3                               | AC-C7                                      |
| P-1   | 40/H-3<br>NEW TO<br>BE<br>INSTALLED | URD-3A, URD-4, URD-5<br>URD-6<br>M16-2,3,4 |

- 1 -- F-1, AERIAL PRIMARY FEEDER. 4 # 1/0 ACSR  
FROM P-0 TO P-1.
- 2 -- PRIMARY FEEDER. 3 # 2 AWG 15 KV TXLPE, 1 # 2 XHHW-2 IN 4" PVC  
SCH 40 CONDUIT. REMOVE ONE 1" SPARE CONDUIT.
- 3 -- 150 KVA TRANSLOCATOR SUBSTATION.
- 4 -- SECONDARY FEEDER 4 # 500 MCUM THHN. THWN IN 4" PVC SCH 40 CONDUIT.  
REMOVE ONE 4" PVC SCH 40 CONDUIT.
- 5 -- EXISTING METER BASE TO BE REMOVED AND REPLACED  
BY AN 400 AMPS ENCLOSED BRKRR.
- 6 -- EXISTING LOAD PANEL TO BE REMOVED AND REPLACED BY A  
400 AMPS NEW ONE.



|          |                           |  |          |                     |
|----------|---------------------------|--|----------|---------------------|
| PROYECTO | NEW ELECTRICAL SUBSTATION | RAFAEL A SANCHEZ PEÑA<br>INGENIERO ELECTRICISTA<br>CONSULTOR LIC. NO. 8784 | REVISION |                     |
|          |                           |  | NO.      | FECHA               |
|          |                           |  | Δ        | 11-17-2021          |
|          |                           |  |          | DESCRIPCION         |
|          |                           |  |          | STAKING COORDINATES |

**ALL engineering group**  
consulting civil engineers & planners  
lic. num. 8426  
TEL: 0707 644-7844



**All** engineering group

**ONE LINE DIAGRAM  
LEGENDS, DETAILS.**

|   |                   |
|---|-------------------|
| <b>COPYRIGHTS</b>   |                   |
| <p>THIS DESIGN AND CONTENT IS THE PROPERTY OF KAI ENGINEERING GROUP (KAG) AND SHALL BE USED AS A REFERENCE AND WORKING INSTRUMENT ONLY FOR THE PURPOSE OF KAG PROVIDED. ANY TOTAL OR PARTIAL REPRODUCTION OR USE OF THIS INSTRUMENT OR THE INFORMATION THEREIN CONTAINED IS STRICTLY PROHIBITED WITHOUT THE APPROPRIATE WRITTEN CONSENT OF KAG. AND SHALL BE RETURNED IF REQUESTED.</p> |                   |
| <b>ALL RIGHTS RESERVED.</b>   |                   |
| DESIGN BY:  | FILE NAME:        |
| <b>RASP</b>   |                   |
| DRAWN BY:   | ISSUE DATE:       |
| <b>RASP</b>   | <b>09/05/2020</b> |
| DRW. NO.  | SHEET NO.         |
|   | <b>2</b>          |
| <b>SE-2</b>   | <b>OF</b>         |
|   | <b>3</b>          |

- CONTRACTOR SHALL INSPECT THE STREET SIDEWALK AND BUILDING AREA TO FAMILIARIZE WITH EXTENT OF EXISTING ELEMENTS TO BE DEMOLISHED AND REMOVED AND SHALL DISPOSE OF SAID EQUIPMENT OF SCRAP MATERIALS AS REQUIRED.
- CONTRACTOR SHALL REMOVE FROM THE SITE, SCRAP MATERIALS OR ANY OTHER ELEMENT DISCOVERED WITHIN THE PROJECT LIMIT; THIS WAY REQUIRE INSPECTION HANDLING AND/OR DISPOSAL AT CONTRACTOR'S OWN EXPENSES.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO ACTUAL CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES, ERRORS OR OMISSIONS, PRIOR CONTINUE WORK, SO THAT PROPER CORRECTIONS ARE MADE. UNAUTHORIZED REVISIONS TO EXTENT OF WORK WILL BE AT NO EXTRA COST TO OWNER.
- THE CONTRACTOR SHALL COORDINATE OR VERIFY THE LOCATION OF EXISTING UTILITIES SUCH AS TELEPHONE, ELECTRICAL CONDUITS, SANITARY, WATER AND STORM SEWER. ANY DISCREPANCIES WITH ANY EXCAVATION OR CONSTRUCTION IN CASE OF EXISTING INTERFERENCE THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER AT NO COST OF THE OWNER.
- ALL DETAILS SECTION AND NOTES SHOWN OR DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE NOTED.
- PROVISIONS FOR DETAILS, NOT SPECIFICALLY DRAWN SHALL BE MADE BY THE CONTRACTOR IN ACCORDANCE WITH UBC 97 BUILDING CODE OR ACTUAL AND/OR CLARIFIED WITH THE DESIGN.
- CONTRACTOR SHALL INSPECT EXISTING POINT OF CONNECTION OF ALL UTILITIES AND REHABILITATE SAME AS REQUIRED FOR THE NEW BUILDINGS INSTALLATION.
- ALL DETAILING AND CONSTRUCTION TO BE MADE IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE" (ACI-315), "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI-318) AND ALL OTHER AMERICAN CONCRETE INSTITUTE STANDARD AND RECOMMENDATIONS FOR ACCEPTABLE PRACTICES.
- IN CASE OF DOUBT IN THE INTERPRETATION OF ANY ASPECT OF THE STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS, THE DESIGNER SHALL BE CONSULTED.
- CONTRACTOR SHALL VERIFY THAT SIDEWALKS OR RAMP HAS ADEQUATE SLOPE TOWARDS THE OTSIDE OF THE SIDEWALK, TO PROVIDE FOR DRAINAGE, PRIOR TO THE APPLICATION OF FINISHED TOP.
- ALL DEMOLISHED MATERIALS OR ANYTHING REMOVED INSIDE AND OUTSIDE OF THE SITE MUST BE TRANSPORTED OUT OF THE PROJECT LIMITS TO THE APPROPRIATE LOCATIONS AS APPROVED BY THE INSPECTION AND AT NO COST OF THE OWNER. CONTRACTOR MAY CONSIDER THE LOCAL MUNICIPAL GARAGE DUMP FOR DISPOSITION OF SCRAP MATERIALS AND FURTHERMORE, VISITED THE PROJECT SITE AND FAMILIARIZED OFFICIALS AS REQUIRED OR IN AREAS APPROVED BY PR ENVIRONMENTAL QUALITY BOARD AND PR NATURAL RESOURCES DEPARTMENT.
- THE CONTRACTOR, PRIOR TO COMMENCEMENT OF THE WORK, SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE PROJECT'S SITE AND SHALL NOTIFY THE RESIDENT ENGINEER IN WRITING, OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS WHICH MIGHT AFFECT PROPER CONSTRUCTION WORKS SCHEDULE AND/OR PERFORMANCE. THEREFORE THE CONTRACTOR SHALL HAVE STUDIED THE DRAWINGS AND FURTHERMORE, VISITED THE PROJECT SITE AND FAMILIARIZED HIMSELF WITH THE EXISTING CONDITIONS PRIOR TO ENTERING INTO A CONSTRUCTION AGREEMENT WITH THE OWNER.
- ALL SCRAP MATERIAL FORM THE CONSTRUCTION WORKS SHALL BE DISPOSED OF AS PER OWNERS INSTRUCTIONS.
- AFTER REMOVAL OF SPECIFIED ITEMS, THE CONTRACTOR SHALL CLEAN AND PREPARE ALL SURFACES AS PER RESIDENT ENGINEER INSTRUCTIONS FOR THE FINISHED SPECIFIED.
- THIS DRAWING IS TO BE USED FOR ARCHITECTURAL WORK ONLY. THE EXTEND OF ALL WORK OF OTHER TRADES SHALL BE SHOWN ON SEPARATE DRAWINGS RESPECTIVELY.
- CONTRACTOR SHALL VERIFY ON SITE THE LOCATION AND CONDITION OF EXISTING UTILITIES AND EXISTING STRUCTURES BEFORE PROCEEDING WITH CONSTRUCTION.
- CONTRACTOR RESTORE TO THE ORIGINAL CONDITION THE AREA AFFECTED DURING CONSTRUCTION
- CONTRACTOR SHALL VISIT THE PROJECT SITE TO OBSERVE EXISTING CONDITIONS SO AS TO INCLUDE ALL DEMOLITION IF ANY REQUIRED, EVEN IF NOT SPECIFICALLY NOTED OR SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL REPAIR, CLEAN, AND RESTORE TO FINISHED GRADE AS REQUIRED ALL CURBS, SIDEWALKS AND AREAS AFFECTED DURING THE CONSTRUCTION OPERATION, DUE TO THE MOVEMENT OF HEAVY EQUIPMENT OR TEMPORARY STOCKING OF CONSTRUCTION MATERIALS AT ADJACENT AREAS OF THE PROJECT IN ORDER TO RESIDENT ENGINEER AND LIMIT TO A MINIMUM THE USE OF AREAS FOR SAID MOVEMENT AND STORAGE OF MATERIALS AND EQUIPMENT.
- CONTRACTOR SHALL REMOVE FROM THE SITE SCRAP MATERIAL OR ANY OTHER ELEMENT DISCARDED WITHIN THE PROJECT LIMITS THIS MAY REQUIRE INSPECTION, HANDLING AND/OR DISPOSAL AT CONTRACTOR OWN EXPENSES.
- THE CONTRACTOR SHALL REPAIR OR RESTORE ALL PAVEMENTS OR AREAS AFFECTED BY THE EXISTING POSTS, TRANSFORMERS, PADS OR ELEMENTS NO TO REMAIN AS ORIGINAL CONDITION.
- DURING CONSTRUCTION WORK INCLUDING EXCAVATIONS, CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY OR ALL DAMAGE TO EXISTING UNDERGROUND UTILITIES, SUCH AS SANITARY, WATER AND STORM SYSTEMS, BUILDINGS CONNECTIONS, AND UNDERGROUND ELECTRICAL FACILITIES. ANY DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR WITHIN 12 HOURS OF ITS OCCURRENCE WITHOUT ADDITIONAL COMPENSATION.

- 1- ALL WORK ON EXISTING P.R.E.P.A. LINES SHALL BE DONE BY P.R.E.P.A. AT CONTRACTOR'S EXPENSE.
- 2- COORDINATE POINT OF CONNECTION AT LOCAL P.R.E.P.A. OFFICE BEFORE CONSTRUCTION BEGINS.
- 3- ALL EQUIPMENT SHALL BE CONSTRUCTED ACCORDING TO ANSI, NEMA AND P.R.E.P.A. STANDARDS.
- 4- INSTALL APPROVED PREFABRICATED RELIEF STRESS CONES AT ALL PRIMARY CABLE TERMINALS.
- 5- BLADE OR FUSE RUNS SHALL ALWAYS CLEAR METAL PARTS BY AT LEAST SIX (6) INCHES.
- 6- CONTRACTOR SHALL PROVIDE ONE SPARE FUSE FOR EACH PRIMARY FUSE HOLDER.
- 7- OPEN BLADE OR FUSE OF PRIMARY SWITCH SHALL BE DEENERGIZED.
- 8- THE CONTRACTOR SHALL INFORM P.R.E.P.A. WHEN THE CONSTRUCTION WILL START.
- 9- ALL CONSTRUCTION WORK SHALL BE DONE IN A THOROUGH AND WORKMAN-LIKE MANNER IN ACCORDANCE WITH THE SPECIFICATIONS AND CONSTRUCTION DRAWINGS. THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE SHALL BE FOLLOWED, EXCEPT WHERE LOCAL REGULATIONS ARE MORE STRINGENT, IN WHICH CASE LOCAL REGULATIONS SHALL GOVERN.
- 10- P.R.E.P.A. APPROVAL OF THESE PLANS APPLIES ONLY TO ELECTRICAL LINES AND EQUIPMENT PRECEDING THE METERING EQUIPMENT.
- 11- INSTALL A 6" WIDE YELLOW IDENTIFICATION TAPE 12" BELOW GRADE, OVER ALL UNDERGROUND ELECTRICAL CIRCUITS. THE TAPE SHALL BE PERMANENTLY IMPRINTED WITH CONTINUOUS BLACK LETTERS 1-1/4 X 5/8, WITH THE WORDS "PELIGRO, PELIGRO, ETC." AT THE TOP AND "LINEAS ELECTRICAS DEBAJO" AT THE BOTTOM.
- 12- SERVICE USERS WITH A CONNECTED LOAD OF 50 KVA OR LARGER SHALL BE BILLED UNDER P.R.E.P.A. GSP-1 RATE.
- 13- P.R.E.P.A. WILL NOT ENERGIZE THE PROJECT UNTIL ALL THE ELECTRICAL RIGHT OF WAYS, EITHER INSIDE OR OUTSIDE THE PROJECT LIMITS, ARE GRANTED TO THE AUTHORITY, AND A CERTIFICATION IS ISSUED BY THE AUTHORITY LEGAL DEPARTMENT IN THIS RESPECT.
- 14- ALL THE INSTALLATIONS SHALL BE MADE ACCORDING TO THE APPLICABLE CONSTRUCTION STANDARDS OF THE PUERTO RICO ELECTRICAL POWER AUTHORITY (P.R.E.P.A.)
- 15- ALL STANDARD NUMBERS ON THESE DRAWINGS REFER TO P.R.E.P.A.'S METER DISTRIBUTION STANDARD MANUAL AND PUBLIC LIGHTING STANDARDS MANUAL AND DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS STANDARD DRAWINGS.
- 16- CONNECTION TO EXISTING LINES SHALL BE DONE BY P.R.E.P.A. AT CONTRACTOR'S EXPENSE.
- 17- CONTRACTOR SHALL COORDINATE WITH THE PUBLIC WORKS DEPARTMENT ANY ELECTRICAL LINES CROSSING OVER HIGHWAYS.
- 18- ALL EQUIPMENT SHALL BE APPROVED BY P.R.E.P.A. PRIOR TO INSTALLATION.
- 19- THE APPROVAL OF THESE PLANS BY THE AUTHORITY IS ONLY LIMITED TO THE ELECTRICAL DESIGN OF THE PRIMARY AND SECONDARY DISTRIBUTION INCLUDING ALL THE EQUIPMENT PRECEDING THE METERING INSTRUMENT.
- 20- AT THE STREET CROSSING, SIDEWALKS AND WHERE CABLE CROSSES GAS, SEWAGE AND OTHER UTILITY FACILITIES, ELECTRICAL CONDUITS SHALL BE PROTECTED WITH 3" OF CONCRETE ENVELOPE AND KEPT AT A MINIMUM SEPARATION OF 13" FROM THE OTHER UTILITY LINES.
- 21- FINAL CONNECTION POINT LOCATION SHALL BE COORDINATED WITH LOCAL PREPA OFFICE AREA MANAGER BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES BETWEEN THE CONNECTION POINT INDICATED IN THE DRAWINGS AND THE ONE INDICATED BY LOCAL PREPA OFFICE SHALL BE REFERRED IMMEDIATELY TO THE ATTENTION OF THE ENGINEER AND THE CENTRAL PREPA OFFICE FOR A FINAL DECISION.

- 1.- LINEAS AEREAS ELECTRICAS EXISTENTES, TRIFASICA, TRES CONDUCTORES NUMERO 1/0 ACSR.  
VOLTAJE DE 8.32 KV.
- 2.- EL VOLTAJE DE ALIMENTACION DEL PROYECTO SERA DE 8.32 KV. SE SERVIRA DEL ALIMENTADOR 3701-02.
- 3.- EL DISEÑO SERA DE UN SISTEMA AEREO.
- 4.- SE REQUIERE COMO PARTE DEL DISEÑO LA INSTALACION DE DISYUNTORES CON PROTECCION DE FUSIBLES A LA ENTRADA DEL PROYECTO EN EL PUNTO DE CONEXION.
- 5.- EL DUEÑO DEL PROYECTO PROVEERA TODOS LOS MATERIALES NECESARIOS INCLUYENDO LOS TRANSFORMADORES.
- 6.- EL DUEÑO DEL PROYECTO DEBERA CONFIRMAR CON EL INGENIERO DE DISTRITO CORRESPONDIENTE  
EL VOLTAJE PRIMARIO A SER UTILIZADO, PREVIO A LA COMPRA DE LOS TRANSFORMADORES.
- 7.- ESTA EVALUACION DEL PUNTO DE CONEXION NO CONSTITUTE UNA REVISION DE LOS PLANOS DE DISEÑO.  
DISEÑADOS POR EL DUEÑO DEL PROYECTO, CUMPLIR CON LOS CODIGOS, REGLAMENTOS, MANUALES, ESTANDARES Y NORMAS APLICABLES VIGENTES PARA LOS SISTEMAS ELECTRICOS EN PUERTO RICO. ADEMAS DEBERA CUMPLIR CO LOS  
REGLAMENTOS DE ORDENACION DE LA INFRAESTRUCTURA EN EL ESPACIO PUBLICO (REGLAMENTO DE PLANIFICACION NUMERO 22)  
SEGUN EXIGE LA OFICINA DE GERENCIA DE PERMISOS (OGPE). LOS SISTEMAS DE DISTRIBUCION Y TRANSMISION  
A DESARROLLARSE EN ESTAS ZONAS DEBERAN SEGUIR LAS GUIAS ESTABLECIDAS EN ESTE REGLAMENTO.
- 8.- EL DUEÑO DEL PROYECTO O SU REPRESENTANTE DEBERA NOTIFICARLE LA SECCION DE INSPECCIONES  
DE LA REGION DE CAGUAS AL COMIENZO DE LA OBRA POSTERIOR AL ENDOSO DE LOS PLANOS  
Y PREVIO AL INICIO DE LOS TRABAJOS ELECTRICOS DEL PROYECTO PARA LA REQUERIDA INSPECCION,  
APROBACION Y COORDINACION NECESARIA.
- 9.- ESTA EVALUACION CADUCA AL AÑO.

[illegible]

**ALL engineering group**  
consulting civil engineers & planners  
lic. num. 8426  
TEL. 0773 648-7844



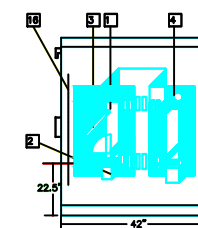
**All** engineering group

### ELECTRICAL NOTES

**COPYRIGHTS**  
THIS DWG AND CONTENT IS THE PROPERTY  
OF ALL ENGINEERING GROUP (AEG) AND  
SHALL BE USED AS A REFERENCE AND  
WORKING INSTRUMENT ONLY FOR THE  
PURPOSE IT WAS PREPARED. ANY TOTAL OR  
PARTIAL REPRODUCTION OR USE OF SAID  
INSTRUMENT OR THE INFORMATION THEREIN  
CONTAINED IS STRICTLY PROHIBITED WHO  
THE APPROPRIATE WRITTEN CONSENT OF AEG  
IS OBTAINED. ALL RIGHTS ARE RESERVED.

ALL RIGHTS RESERVED

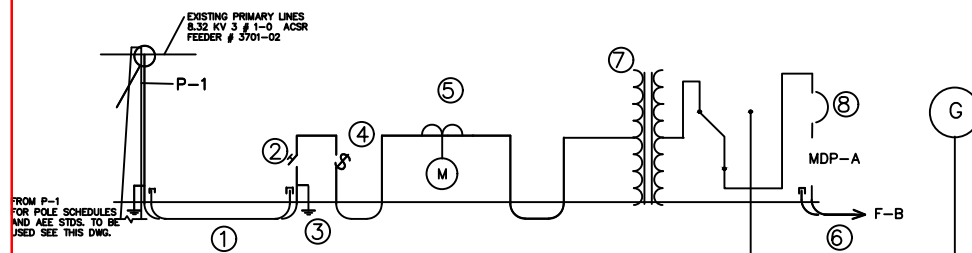
|                           |                                  |
|---------------------------|----------------------------------|
| DESIGN BY:<br><b>RASP</b> | FILE NAME:                       |
| DRAWN BY:<br><b>RASP</b>  | ISSUE DATE:<br><b>09/05/2022</b> |
| DRW. NO.<br><b>SE-3</b>   | SHEET NO.<br><b>3</b>            |
|                           | OF<br><b>3</b>                   |



**A-A SECTION**



150 KVA UNIT SUBSTATION



### PRIMARY ONE LINE DIAGRAM

**NOT TO SCALE**

ONE LINE DIAGRAM LEGEND:

- 1 - PRIMARY FEEDER. 3/2 AWG, 15 KV. XLP, 1/2 THW GROUND IN 4" PVC-SCH. 40 CONDUIT. PROVIDE ONE 4" SPARE CONDUIT.
- 2 - GANG OPERATED LOAD INTERRUPTER SWITCH, 15 KV, 200 AMPS., 3 POLES, 20 K A. I. C., 95 KV B. I. L., MECHANICALLY INTERLOCKED WITH DOOR TO PREVENT OPENING DOOR WITH SWITCH CLOSED.
- 3 - 10 KV MOV DISTRIBUTION TYPE LIGHTNING ARRESTERS.
- 4 - POWER FUSES S&C SM 20, 20 AMP. PROVIDE ONE SET OF SPARE FUSES.
- 5 - PT'S AND CT'S.
- 6 - SECONDARY FEEDER. 3-500 MCM THHN, 1/2 AWG THW GROUND IN 4" PVC SCH. 40 CONDUIT. PROVIDE 1-4" SPARE CONDUIT.
- 7 - 3-50 KVA DISTRIBUTION TYPE, OIL FILLED, POWER TRANSFORMERS, NON PCB LABELED, IMPROVED LOSSES DESIGN, WITH 4-2 1/2 % TABS, 2 ABOVE, 2 BELOW.
- 8 - 400 AMPS MOLDED CASE SECONDARY MAIN BREAKER.

500 KVA SUBSTATION LEGEND:

- 1 - GANG OPERATED LOAD INTERRUPTER SWITCH, 15 KV, 200 AMPS., 3 POLES, 20KA.I.C., 95 KV B.I.L. MECHANICALLY INTERLOCKED WITH DOOR TO PREVENT DOOR OPENING WITH SWITCH CLOSED.
- 2 - DISTRIBUTION TYPE LIGHTNING ARRESTERS, M. O. V., 10 KV.
- 3 - GLASS REINFORCED POLYESTER (GLASTIK) BARRIERS, 3/16" AS PER PREPA SPECS. 02-82.
- 4 - POWER FUSES S&C TYPE SM-20, 20 A, WITH 3 SPARE FUSE UNITS.
- 5 - LIFTING LUGS.
- 6 - VENTILATING LOUVERS WITH TAMPER PROOF GUARD.
- 7 - TAMPER PROOF VENTILATION MEETS OR EXCEEDS VENTILATION REQUIREMENTS AS PER N. E. C.
- 8 - FULL OPENING DOOR WITH OPEN POSITION LATCH.
- 9 - REMOVABLE ROOF.
- 10 - METERING COMPARTMENT. (PT'S AND CT'S BY PREPA)
- 11 - METER BASE COMPARTMENT. AS PER PREPA SPECS.
- 12 - SECONDARY COMPARTMENT WITH A 400 AMPS./3P. MAIN CIRCUIT BREAKER.
- 13 - DOOR HANDLE.
- 14 - COPPER SECONDARY BUS BARS, 400 AMPS.
- 15 - COPPER GROUND BUS.
- 16 - SECOND BARRIER BEHIND DOOR, AS PER PREPA CIRCULAR 88-4

CONSTRUCTION NOTES:

- 1 - ENCLOSURE MATERIAL, STAINLESS STEEL 304 GA. 14.
- 2 - MATERIAL CLEANED AND DEGREASED PRIOR TO APPLICATION OF COATING WITH RUST INHIBITOR, PRIMER AND STELCO ANSI 49 PAINT.
- 3 - SWITCH OPERATING HANDLE INTERLOCKED WITH DOORS.
- 4 - MAIN BUS BARS SHALL BE COPPER.
- 5 - MAIN BUS SHALL BE RATED 400 AMPS.
- 6 - ENCLOSURE AS P.R.E.P.A. AND ANSI STANDARDS, CONSTRUCTED FROM FORMED STEEL SHEETS AND SUPPORTING POSTS BOLTED TOGETHER INTO A RIGID STRUCTURE.
- 7 - CUBICLES ARE PROVIDED WITH REMOVABLE ROOF SECTIONS AND PANELS TO ALLOW FOR FLEXIBILITY IN SHIPPING, INSTALLATION, AND MODIFICATIONS.
- 8 - ENCLOSURE CONSTRUCTION SHALL BE SUCH AS TO ALLOW FOR ROOF TO PREVENT ACCUMULATION OF WATER.

[illegible]

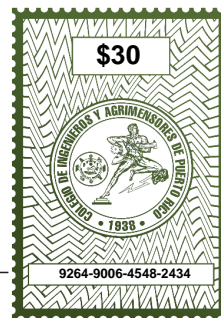


COLEGIO DE INGENIEROS Y AGRIMENSORES  
DE PUERTO RICO

PO Box 363845 San Juan Puerto Rico 00936-3845  
Tel. 787.758.2250 #205 · practica@ciapr.org

**ESTAMPILLA DIGITAL ESPECIAL (EDE)**

Ing. Rafael A. Sanchez Peña, PE



|                          |                          |
|--------------------------|--------------------------|
| Práctica de:             | Ingeniería               |
| Licencia:                | 8784                     |
| Renglón:                 | Plano                    |
| Descripción del Trabajo: | Diseño en Ingeniería     |
| Fecha de Emisión:        | 05/20/2023               |
| Monto Emitido:           | \$30                     |
| Número de Serie:         | 9264-9006-4548-2434      |
| Número de Caso:          | AEE: 20-02-0315          |
| Proyecto / Unidad:       | Sub. Eléctrica Telecinco |
| Rol del Profesional:     | Diseñador                |

SELLO PROFESIONAL

**Certificación:**

El profesional certifica con la emisión de la estampilla digital especial del Colegio de Ingenieros y Agrimensores de Puerto Rico el haber cumplido con las disposiciones de la Sección 11 de la Ley 319 del 15 de mayo de 1938, según enmendada.

*La colocación del sello profesional constituye la cancelación de la estampilla digital especial*