

From: [Bullock, Karl](#)
To: [Seiler, Ann](#); [Mulkey, Cindy](#); [Senn, Nate](#)
Cc: [Easterling, Chuck](#); [David Dee](#); [Greenwell, Carolyn A](#); [Catrett, Dustin \(DCatrett@ouc.com\)](#)
Subject: OUC St. Cloud - Magnolia Ranch TLSA (TA21-18) - revised completeness responses
Date: Thursday, August 12, 2021 11:19:09 AM
Attachments: [image001.png](#)
[image002.png](#)
[OUC St Cloud East-Magnolia Ranch North Transmission Line \(TA21-18\) Revised Completeness Responses 8-12-21.pdf](#)

Hello Ann, Cindy, and Nate – attached are the revised completeness responses reflecting our discussion on Monday. We've provided strikethrough/underline responses to questions 2, 7, and 9, and also included one additional attachment for question 2 (revised application section 1-1). Please let us know if you have any further questions. Nate, please reach out if you need more clarification on the response to #9.

Thank you!
Karl

Karl Bullock
Associate and Senior Scientist

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August 12, 2021

Cindy Mulkey, Program Administrator
Office of Siting Coordination
Department of Environmental Protection
2600 Blair Stone Road, MS 5500
Tallahassee, Florida 32399-2400

Re: OUC St. Cloud - Magnolia 230kV Transmission Line Siting Application (TA21-18) – Revised Completeness Responses

Dear Ms. Mulkey:

Based on our discussion on August 9, 2021, Orlando Utilities Commission (OUC) is pleased to submit to the Department of Environmental Protection (Department) its revised response to completeness questions for the OUC St. Cloud - Magnolia 230kV Transmission Line Siting Application (TA21-18).

Minor revisions to OUC's responses to Department questions #2, #7, and #9 are included in the attached. Revisions to the responses are identified with strike-through and underlined text. A new attachment (FDEP-2) is also provided.

OUC looks forward to working with the Department and other interested agencies in the certification process. If you should have any questions regarding this submittal, please do not hesitate to contact me at (407) 434-4123 or via email at CEasterling@ouc.com.

Sincerely,

Charles Easterling Digitally signed by Charles
Easterling
Date: 2021.08.11 11:34:17 -04'00'

Charles Easterling
ORLANDO UTILITIES COMMISSION
Director, Transmission Engineering, Construction, & Maintenance

Attachments: Revised Completeness Responses

RESPONSES TO COMPLETENESS COMMENTS
OUC ST. CLOUD EAST-MAGNOLIA RANCH NORTH 230-KV TRANSMISSION LINE
CORRIDOR CERTIFICATION

**I. FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SITING COORDINATION OFFICE**

1. **Rule 62-4.050, Florida Administrative Code, requires that “...All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida...” The Department requests professional certification of the Application filed by OUC.**

RESPONSE: Please see Attachment FDEP-1, which contains the requested certification from a professional engineer registered in the State of Florida upon the title page of the application.

2. **In Section 1.1 of the Application, OUC indicates that the proposed transmission line would traverse two counties and one municipality. This is inconsistent with OUC’s cover letter. Please clarify.**

RESPONSE: The transmission line corridor does not traverse any municipality; ~~this was corrected in Amendment 1 to the Application and associated cover letter submitted on 6/16/21.~~ revised Section 1.1 is provided in Attachment FDEP-2.

3. **According to DEP State Lands review, there are three state-owned parcels that will potentially be impacted by the Corridor. (See attached map.) Please indicate if any of these areas would require necessary interest in state lands the title of which is vested in the Board of Trustees of the Internal Improvement Trust Fund (BOT). Has OUC obtained an interest from the BOT for the existing transmission lines? Would these agreements need to be amended to accommodate the proposed lines? If so, is it OUC’s intent to seek necessary interest in state lands from the BOT during this application certification proceeding?**

RESPONSE: The provided map included three areas: the St. Cloud Tower site (Parcel #142631000000170000), Lake Lizzie Conservation Area, and Lake Joel. The St. Cloud Tower site is located immediately north of the St. Cloud East substation and west of the existing St. Cloud East – St. Cloud North 69-kV transmission line right-of-way. The corridor does include a portion of the St. Cloud Tower site; however the new 230-kV line is proposed to be constructed within the existing OUC right-of-way within this area; no encroachment upon the St. Cloud Tower site is proposed and the conceptual right-of-way has been revised accordingly (see Attachment FDEP-3). Similarly, within the Lake Lizzie Conservation Area, the new 230-kV line will be constructed within the existing St. Cloud East – St. Cloud North 69-kV transmission line right-of-way and no additional easements will be required. The corridor is adjacent to the southwestern edge of Lake Joel; the proposed right-of-way in this area is on the southern edge of the corridor paralleling the Northeast Connector Expressway (see Attachment FDEP-3). No state lands easements are anticipated to be required.

4. **In section 2.0 of the Application, OUC indicates that the proposed Sunbridge Parkway is expected to be completed by 2023. Additionally, in section 2.5 of the Application OUC states, “Based on OUC’s discussions with representatives of the Sunbridge Parkway development team, it is anticipated that the construction of the Sunbridge Parkway will be completed before OUC begins the construction of the Project. What is the current status of the proposed Sunbridge Parkway? Has construction commenced? Please include information pertaining to the status of any known applications for permits, issued permits, anticipated construction**

RESPONSES TO COMPLETENESS COMMENTS
OUC ST. CLOUD EAST-MAGNOLIA RANCH NORTH 230-KV TRANSMISSION LINE
CORRIDOR CERTIFICATION

commencement, and anticipated completion dates for the relevant portions of the proposed Parkway.

RESPONSE: Based on information provided by Tavistock Development Company, construction of Segment 1 of the Sunbridge Parkway in Orange County is scheduled to commence in November 2021, with an anticipated construction duration of 10 to 12 months. The following permits have been issued for the Sunbridge Parkway: Orange County Permit 17-E-054; FDEP Water 0080780-1131-DSGP; FDEP Sewer 0371201-001-DWC/CM; SFWMD ERP 48-02172-P-02; SJRWMD ERP 20270-19. Permit issuance for Segments 2-4 is pending; construction duration for Segments 2-4 is anticipated between 24 and 30 months.

USACE permit SAJ-2017-03135(SP-DJC) has been issued for the Sunbridge Parkway and Cyrils Bypass Road; final design for the bypass segment is pending.

- 5. In Section 2.5.2 of the Application, it is stated that many of the wetlands within the corridor were previously impacted by the construction of existing access roads or will be impacted by the construction of the proposed Sunbridge Parkway prior to the construction of the Project. Are the current anticipated completion dates of the Sunbridge Parkway still consistent with OUC's construction plans?**

RESPONSE: Yes, please see response to question 4. OUC intends to initiate construction within the southern segment of the Project (St. Cloud East to Nova Road) in December 2022.

- 6. What is the current status of each of the proposed Cyril's Bypass Road and Northeast Connector Expressway projects? Please include information pertaining to the status of any known applications for permits, issued permits, anticipated construction commencement, and anticipated completion dates.**

RESPONSE: Please see response 4 for information regarding Cyrils Bypass road. Based on information provided by the Central Florida Expressway Authority (CFX), CFX is nearing completion of their Project Development and Environment (PD&E) Study of the Northeast Connector Expressway – Phase 1 (from Cyrils Drive to Nova Road). They anticipate their Public Hearing to be in November of 2021 and to be before the CFX Board in early 2022 for approval of the final PD&E Study. No other phases of project development (right-of-way, design, permitting or construction) are included their current Five-Year Work Plan. Should the CFX Board decide to advance this project, CFX believes it will likely be added to their Five-Year Work Plan during their annual update of the Plan in May/June of 2022. More information on the CFX Northeast Connector Expressway can be found in the following link: <https://www.cfxway.com/agency-information/plans-studies/project-studies/northeast-connector-expressway/>

- 7. In Section 1.1 of the Application, it is stated that approximately 38% of the Project is located within OUC's existing transmission line ROWs. Does this 38% include only those sections of the proposed corridor that fall completely within the existing ROWs, or does it also include sections of the proposed corridor that run along, but are wider than the existing ROW? Please submit updated percentages if applicable.**

RESPONSE: The percentage noted refers to proposed construction within existing transmission line ROWs, stated as a percentage of the total length of the corridor. The total acreage of existing OUC

RESPONSES TO COMPLETENESS COMMENTS
OUC ST. CLOUD EAST-MAGNOLIA RANCH NORTH 230-KV TRANSMISSION LINE
CORRIDOR CERTIFICATION

transmission line ROWs within the corridor is approximately 146 acres, which represents approximately 10% of the total acreage of the corridor.

8. **At the end of section 3.2, the summarized table indicates an estimated 13.12 acres of fill and 24.90 acres of conversion, resulting in 17.18 credits of functional loss for wetland and upland acreage (FLUCFCS Codes 511, 523, 617, 621, 630, 641, and 643). The total acreage within the corridor, according to the same FLUCFCS Codes listed in Table 2-4, is 495.74 acres. Please explain the inconsistency.**

RESPONSE: The summary at the end of Section 3.2 details the acreage of impact within the conceptual transmission line ROW and layout illustrated in Figure 3-1. Table 2-4 summarizes the acreage of the entire corridor, rather than only the conceptual ROW. Page 36 of the conceptual design illustrated in Figure 3-1 has been revised to remove the access road crossing of the C-32C Canal; the revised sheet is provided in Attachment FDEP-8. The final ROW limits, transmission line design, and wetland impact acreage will be provided as a post-certification submittal prior to construction.

9. **Please explain why the maximum current rating on cross-section #9B is 200 Amperes.**

RESPONSE: The 200A maximum current rating is the result of OUC Transmission Planning's evaluation of a future condition that may occur with the installation of proposed solar infrastructure. Magnolia Ranch North Substation has limited connections that limit the through capacity of the substation, and collectively the lines parallel to the proposed Magnolia Ranch North to St Cloud East line will not be able to simultaneously flow their full capacity in the same direction into the station. The testing of cross section #9B reflected this by testing the worst-case scenario of the other parallel line at its highest continuous rating simultaneous with the proposed Magnolia Ranch North to St Cloud East line flowing the full output of an anticipated solar energy center that will connect to the line forcing flow in the same direction under certain scenarios (approximately 200 Amps). Normal flow of the proposed Magnolia Ranch North to St Cloud East line at/near full capacity is not the worst-case scenario for this cross-section segment.

10. **There is a discrepancy between the application and the EMF submittal package regarding line cut 10 right-of-way width. Is it 100 feet per Table 4-1 in the application or is it 81 feet per the EMF package? Please resubmit calculations for this line cut when the correct right-of-way width is determined. EMF line cut reports must include signatures from an authorized agent and certification by a professional engineer.**

RESPONSE: This discrepancy has been addressed in the latest revision of the EMF package dated 7/28/21. Please see Line Cut 13 (formerly Line Cut 10) as the EMF will be contained within existing OUC substation property. The revised signed and sealed EMF package is provided in Attachment FDEP-10. The revised EMF package has the appropriate authorized agent and PE seal as shown on the cover sheet (per Rule 61G15-23.001, Florida Administrative Code). A digitally signed and sealed copy of the EMF package and the EzEMF data files are provided separately.

11. **Please provide EMF information for each structure type and right of way width, including the underground portion and those structures associated with undergrounding.**

RESPONSE: Please see Attachment FDEP-10. EMF information is provided for each structure type and right-of-way width. Underground EMF calculations have been included as Line Cut 9. Line cuts 8B & 10A have been included to represent the transition from underground to the riser structures.

RESPONSES TO COMPLETENESS COMMENTS
OUC ST. CLOUD EAST-MAGNOLIA RANCH NORTH 230-KV TRANSMISSION LINE
CORRIDOR CERTIFICATION

The following two tables from the application have been updated consistent with the revised EMF package and are included in Attachment FDEP-11:

- Table 4-1 Maximum Electromagnetic Field Capable of Being Produced by the Project
- Table 4-2 Maximum Audible Noise at the Edge of the Right-of-Way

RESPONSES TO COMPLETENESS COMMENTS
OUC ST. CLOUD EAST-MAGNOLIA RANCH NORTH 230-KV TRANSMISSION LINE
CORRIDOR CERTIFICATION

II. ORANGE COUNTY

General Comments

1. **In Section 2.4.4, Vicinity Scenic, Cultural and Natural Landmarks of the Application, fourth paragraph, first sentence, Crosby Island Marsh Preserve is managed by Orange County Environmental Protection Division.**

RESPONSE: Comment noted.

2. **Figure 1-10, Existing OUC Right-of-Way Magnolia Ranch – Stanton Corridor Looking West, please update the Figure to call out the poles as “existing”.**

RESPONSE: Please see Attachment OC-2.

3. **Orange County Real Estate Management has identified existing County real estate interests that may be impacted by the proposed transmission line. Attached is a map and chart listing County real estate interests, with reference to the appropriate recorded document in Orange County Official Records for reference. OUC will need to coordinate as appropriate with Orange County Public Works, Utilities, Environmental Protection or Transportation Planning to determine any specific impacts, if any, to the proposed transmission corridor in the Siting Application.**

RESPONSE: Comment noted; OUC will continue to coordinate as appropriate with Orange County Public Works, Utilities, Environmental Protection, and/or Transportation Planning during the final transmission line design and right-of-way alignment. Based on the corridor, the conceptual right-of-way illustrated in Figure 3-1 of the Siting Application, and the map provided by Orange County Real Estate Management, the following map IDs are located within the conceptual right-of-way: Map ID 1, 6, 7, 14, 18, 19, 21, and 25. The following locations are within the corridor, but outside of the conceptual right-of-way: Map ID 4, 12, and 13.

Sunbridge Parkway

4. **According to the Siting Application, portions of the proposed corridor will be collocated along proposed public and private roadways and canals, including the proposed Sunbridge Parkway, which is expected to be constructed and conveyed to Orange County before the OUC Project begins. Sunbridge Parkway plans are currently at the final stage, with bidding expected to occur later in 2021. Previous delays have been experienced in the proposed Sunbridge Parkway project, and future delays could alter the estimated completion timeframes in the Siting Application. OUC should continue to coordinate with Orange County Public Works Department to ensure their Project timeframes are consistent with completion of construction timeframes for the Sunbridge Parkway.**

RESPONSE: Comment noted; OUC will continue to coordinate with the Orange County Public Works Department.

RESPONSES TO COMPLETENESS COMMENTS
OUC ST. CLOUD EAST-MAGNOLIA RANCH NORTH 230-KV TRANSMISSION LINE
CORRIDOR CERTIFICATION

5. **Please show the future water, wastewater, and reclaimed water mains (as applicable) within the Sunbridge Parkway Trail and Utility Easement required to serve the Sunbridge Regulating Plan Development on Figures 1-8a and 1-8b (100' Right-of-Way West Side of Sunbridge Parkway Looking North).**

RESPONSE: Please see Attachment OC-5. An approximately 16 to 18-foot future utility easement is identified on Figures 1-8a and 1-8b to provide for future water, wastewater, and/or reclaimed water mains to be designed and constructed by others. OUC will continue to coordinate with the applicable entities during final transmission line design and right-of-way alignment to avoid conflicts with future utility easements.

Innovation Way Extension

6. **The proposed OUC corridor intersects with the Innovation Way road extension project. This project is currently under design as detailed in the Transportation Agreement for Innovation Way (from Moss Park to Sunbridge Parkway), recorded at Orange County Official Records Document No. 20190037751, Moss Park Transportation and Proportionate Share Agreement (Moss Park DRI/Innovation Way South), recorded at Orange County Official Records Document No. 20120467348, and First Amendment to Moss Park Transportation and Proportionate Share Agreement, recorded at Orange County Official Records Document No. 20140534419. OUC should coordinate with Orange County Public Works to ensure their Project does not conflict with the Innovation Way road extension under design.**

RESPONSE: Comment noted; OUC will continue to coordinate with the Orange County Public Works Department. The Moss Park Road extension, as presented as part of the Innovation Way South Project (<https://www.orangecountyfl.net/TrafficTransportation/TransportationProjects/InnovationWaySouthRCA.aspx>), is proposed to cross the existing OUC right-of-way between the Magnolia Ranch North substation and the Stanton Energy Center. The proposed 230-kV transmission line in this segment will be installed upon existing transmission structures within OUC existing right-of-way; no conflict with the Innovation Way road extension project is anticipated.

Water Supply Project

7. **Orange County has been working with several local utilities on a regional water supply project that will provide drinking water to partially meet future public water supply demands. The OUC Water Transmission Line Routing Study for the Taylor Creek Reservoir/St. John's River Water Supply Project (January 2020) proposed a water transmission line route along the general alignment of Sunbridge Parkway (Figures 1-8a and 1-8b), Wewahootee Road (Figure 1-9) and the existing OUC power easement adjacent to the railroad (Figure 1-10). In order to evaluate compatibility with the proposed OUC corridor, please update the figures to show the minimum 30-foot utility corridor/easement for the future water transmission route.**

RESPONSE: Based on information from OUC's Water Resources and Compliance Manager, no preferred route has been determined for the Taylor Creek Reservoir/St. John's River Water Supply Project. Table 3-6 of the OUC Water Transmission Line Routing Study for the Taylor Creek Reservoir/St. John's River Water Supply Project identifies six top ranked route alternatives for the water transmission line route, one of which includes segments along the general alignment of the Sunbridge Parkway and Wewahootee Road (Alternative 3-2), but no design details are available to determine the proposed location of the associated utility easement. Alternatives 2-2 and 3-2 include segments of the existing OUC right-of-way between the

RESPONSES TO COMPLETENESS COMMENTS
OUC ST. CLOUD EAST-MAGNOLIA RANCH NORTH 230-KV TRANSMISSION LINE
CORRIDOR CERTIFICATION

Magnolia Ranch North substation and the Stanton Energy Center; the transmission line is proposed to be installed upon existing structures within this area therefore no conflict with the water supply project is anticipated. OUC will continue to coordinate with Orange County as the preferred waterline route is selected and detailed design of the water supply project proceeds to avoid conflict with the transmission line.

Water Quality

8. **Please be aware that portions of the Econlockhatchee River are verified impaired for fecal coliform and nutrients and additional loading of these constituents is prohibited and that all precautions should be taken to avoid water quality impacts to this waterbody.**

RESPONSE: Comment noted; no discharges to the Econlockhatchee River are proposed. The proposed corridor is located over 1,300 feet from the Econlockhatchee River and its tributary Turkey Creek. Erosion control best management practices will be utilized during construction to minimize discharge of sediments outside of the work area.

9. **Please be aware the Econlockhatchee River has been designated as an Outstanding Florida Waterway which prohibits increasing turbidity above background levels and that all precautions should be taken to avoid water quality impacts to this waterbody.**

RESPONSE: Comment noted; no discharges to the Econlockhatchee River are proposed. The proposed corridor is located over 1,300 feet from the Econlockhatchee River and its tributary Turkey Creek. Erosion control best management practices will be utilized during construction to minimize discharge of sediments outside of the work area.

10. **Please be aware Lake Mary Jane and Lake Hart are verified impaired for lead and mercury and that all precautions should be taken to avoid water quality impacts to this waterbody.**

RESPONSE: Comment noted; no discharges to Lake Mary Jane or Lake Hart are proposed. The corridor is located approximately 2,600 and 6,600 feet from Lake Mary Jane and Lake Hart, respectively.

ATTACHMENT FDEP-1

SIGNED/SEALED APPLICATION COVER PAGE

**APPLICATION FOR CERTIFICATION
UNDER TRANSMISSION LINE SITING ACT**

**OUC ST. CLOUD EAST TO MAGNOLIA RANCH NORTH
230-KV TRANSMISSION LINE
(ORLANDO ST. CLOUD RESILIENCY CONNECTION)**

Submitted By:

Orlando Utilities Commission
100 West Anderson St.
Orlando, FL 32801

June 11, 2021

	
08/01/2021 Richard Ridenour, PE#84210 2301 Maitland Center Pkwy, Maitland, FL 32751	THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY <u>RICHARD RIDENOUR</u> ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ATTACHMENT FDEP-2

REVISED APPLICATION SECTION 1-1

1.0 PROJECT OVERVIEW

1.1 Project Introduction

Orlando Utilities Commission (OUC) proposes to construct, operate, and maintain a new 230-kilovolt (kV) transmission line that will extend from OUC's existing St. Cloud East (SCE) Substation in unincorporated Osceola County to the existing OUC Magnolia Ranch North (MRN) Substation in unincorporated Orange County (Figure 1-1). The SCE to MRN transmission line (Project) is needed to enhance OUC's electrical transmission line system in the Orlando/St. Cloud region. The proposed transmission line will extend approximately 21 miles while traversing two counties and one municipality. The proposed corridor for the Project will allow the new transmission line to be located adjacent to or within the right-of-way (ROW) of portions of the existing Magnolia Ranch to Stanton transmission line, the existing St. Cloud East to St. Cloud North transmission line, and the existing and planned roadways in the area (Wewahootee Road, Sunbridge Parkway, Cyrils Bypass Road, and Northeast Connector Expressway) (Figure 1-2). Approximately 38% of the Project is located within OUC's existing transmission line ROWs and the remainder is co-located along existing and proposed public and private roadways and canals, including Wewahootee Road, the C-32C Canal/Sungrove Lane, proposed Sunbridge Parkway, proposed Cyrils Bypass Road, and proposed Northeast Connector Expressway.

OUC is seeking approval (certification) of the Project under the Florida Electric Transmission Line Siting Act (TLSA), Sections 403.52 through 403.539, Florida Statutes (F.S.). This application (Application) for certification of the Project is being filed with the Florida Department of Environmental Protection (FDEP) in compliance with the requirements in the TLSA and the FDEP rules in Chapter 62-17, Florida Administrative Code (F.A.C.). The format and content of this Application follow the guidelines in the FDEP *"Application Instruction Guide: Electrical Power Plant Sites and Associated Facilities; Electrical Transmission Lines"* (Guide) dated September 1, 2009.

This TLSA Application provides information concerning the Project, the corridor proposed for certification, and the impacts associated with the construction, operation, and maintenance of the proposed transmission line. Chapter 1 of the Application discusses the state's determination of need for the Project, provides information about the applicant, and provides an overview of the Project that OUC wishes to certify under the TLSA. Figure 1-2 identifies the study area that was evaluated for this Project, the OUC service area, and OUC's existing transmission lines and substations.

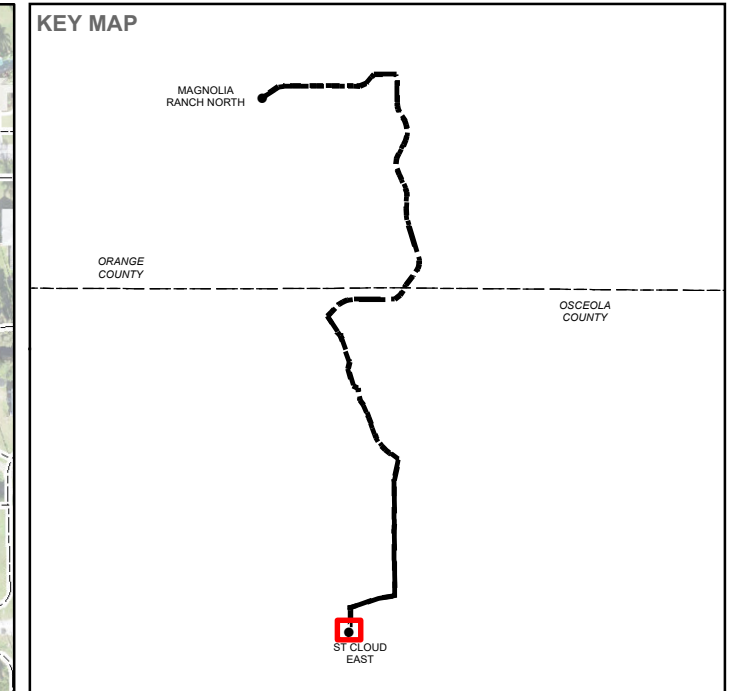
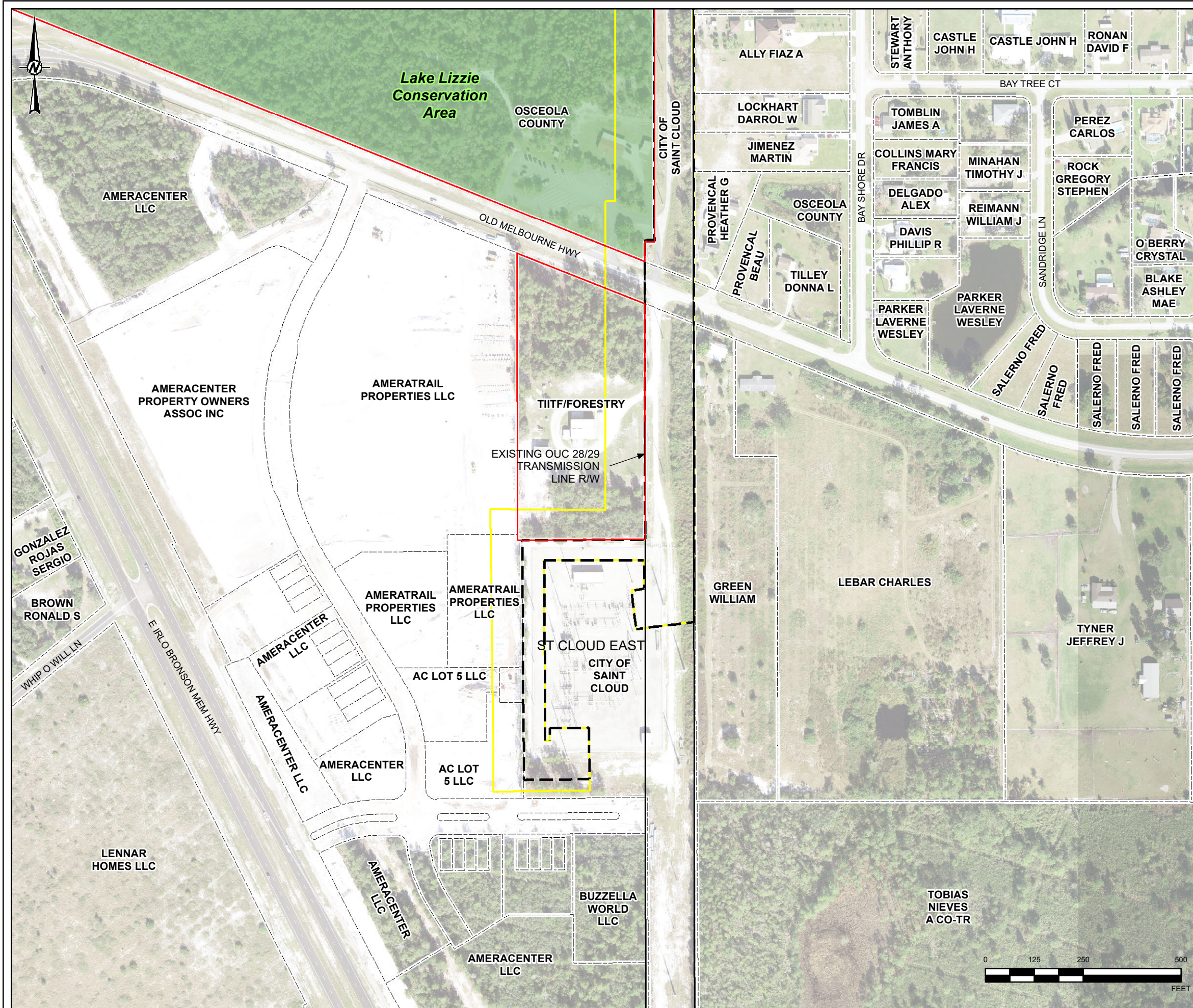
1.1.1 Need for the Project

Pursuant to Section 403.537, F.S., a petition for determination of need for the Project was submitted to the Florida Public Service Commission (FPSC) on May 1, 2020. The FPSC issued a Final Order on June 30, 2020 (FPSC 2020), which noted: (a) there is a need for the Project, taking into account the need for electric system reliability and integrity, as well as the need for abundant, low-cost electrical energy; and (b) OUC's existing Magnolia Ranch North Substation and OUC's existing St. Cloud East Substation are the appropriate starting and ending points for the proposed transmission line.

ATTACHMENT FDEP-3

STATE LANDS ADJACENT TO PROPOSED ROW

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- LEGEND**
- EXISTING OUC 28/29 TRANSMISSION LINE R/W
 - - - PROPOSED ST. CLOUD EAST - MAGNOLIA RANCH NORTH 230KV TRANSMISSION LINE R/W
 - PROPOSED CORRIDOR
 - STATE-OWNED PROPERTIES
 - PARCEL BOUNDARIES
 - LAKE LIZZIE CONSERVATION AREA

REFERENCE(S)

1. EXISTING TRANSMISSION LINE ROW, EXISTING SUBSTATIONS, OUC, 2019
2. PROPOSED ROW, PROPOSED CORRIDOR, OUC & GOLDER, 2019-2021.
3. PARCELS, ORANGE & OSCEOLA PROPERTY APPRAISERS, 2020-2021.
4. LAKE LIZZIE CONSERVATION AREA, FNAI, 2019.
5. SERVICE LAYER CREDITS:

COORDINATE SYSTEM: NAD 1983 STATEPLANE FLORIDA EAST FIPS 0901 FEET
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

CLIENT
ORLANDO UTILITIES COMMISSION

PROJECT
ST. CLOUD EAST TO MAGNOLIA RANCH NORTH 230 KV
TRANSMISSION LINE PROJECT

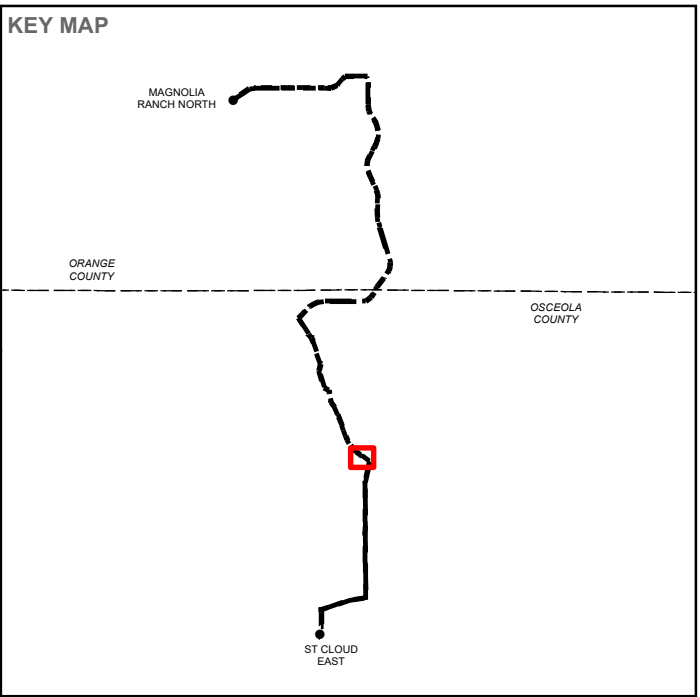
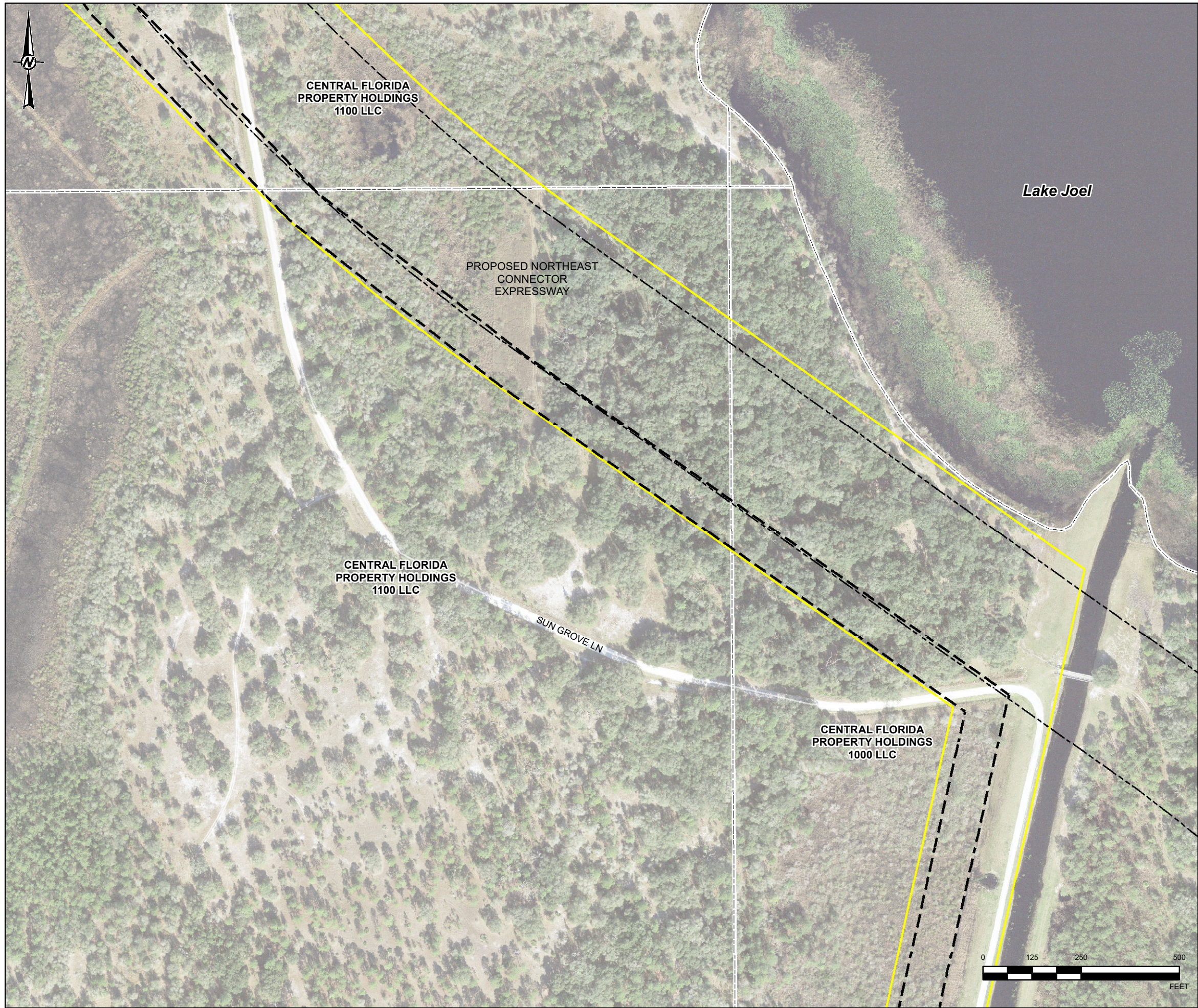
TITLE
**STATE-OWNED PROPERTIES WITHIN PROPOSED
TRANSMISSION R/W AND PROPOSED CORRIDOR**

CONSULTANT	YYYY-MM-DD	2021-07-29
OUC	DESIGNED	NRL
The Reliable One	PREPARED	GFD
	REVIEWED	KAB
	APPROVED	KAB

PROJECT NO. 19115515 CONTROL C041 REV. 0

FIGURE
FDEP-3
Page 1 of 2

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- LEGEND**
- PROPOSED ST. CLOUD EAST - MAGNOLIA RANCH NORTH 230KV TRANSMISSION LINE R/W
 - ▭ PROPOSED CORRIDOR
 - ▭ PROPOSED NORTHEAST CONNECTOR EXPRESSWAY
 - ▭ PARCEL BOUNDARIES

REFERENCE(S)

1. EXISTING TRANSMISSION LINE ROW, EXISTING SUBSTATIONS, OUC, 2019
2. PROPOSED ROW, PROPOSED CORRIDOR, OUC & GOLDER, 2019-2021.
3. PARCELS, ORANGE & OSCEOLA PROPERTY APPRAISERS, 2020-2021.
4. LAKE LIZZIE CONSERVATION AREA, FNAI, 2019.
5. SERVICE LAYER CREDITS:

COORDINATE SYSTEM: NAD 1983 STATEPLANE FLORIDA EAST FIPS 0901 FEET
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

CLIENT
ORLANDO UTILITIES COMMISSION

PROJECT
ST. CLOUD EAST TO MAGNOLIA RANCH NORTH 230 KV
TRANSMISSION LINE PROJECT

TITLE
**STATE-OWNED PROPERTIES WITHIN PROPOSED
TRANSMISSION R/W AND PROPOSED CORRIDOR**

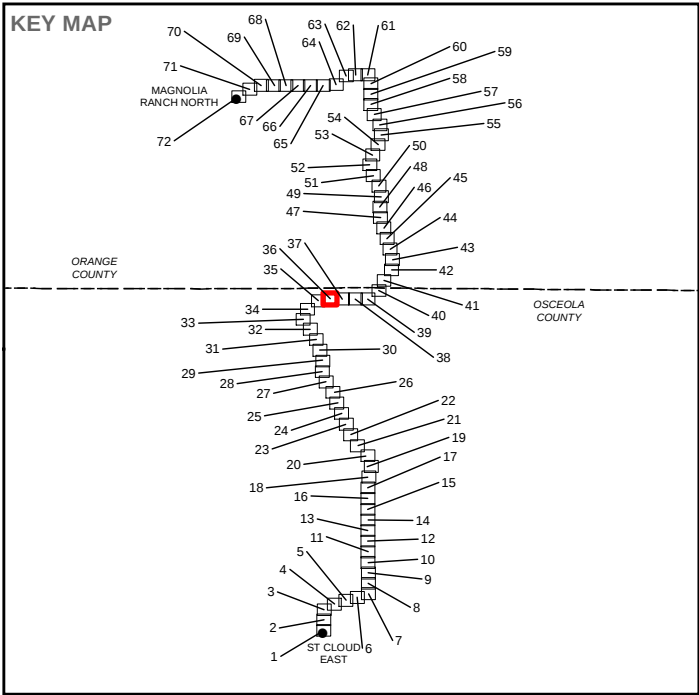
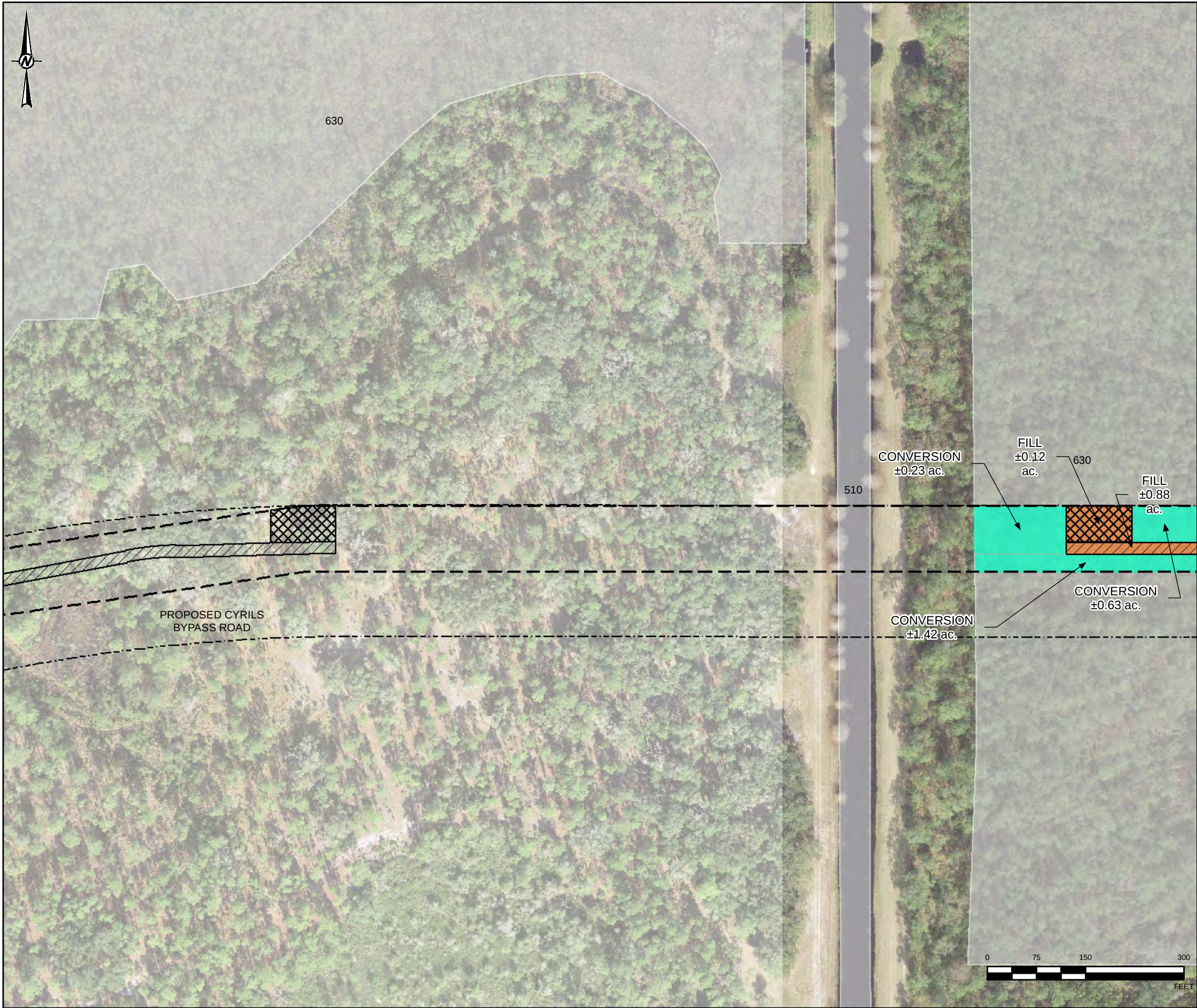
CONSULTANT	YYYY-MM-DD	2021-07-29
OUC 	DESIGNED	NRL
The Reliable One	PREPARED	GFD
	REVIEWED	KAB
	APPROVED	KAB

PROJECT NO. 19115515	CONTROL C041	REV. 0	FIGURE FDEP-3
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ATTACHMENT FDEP-8

REVISED FIGURE 3-1, PAGE 36 of 72

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- LEGEND**
- PROPOSED ST. CLOUD EAST - MAGNOLIA RANCH NORTH 230KV TRANSMISSION LINE R/W
 - - - PROPOSED CYRILS BYPASS ROAD
 - ▨ PROPOSED PAD WORKSPACES
 - ▨ PERMANENT ACCESS ROAD
 - PERMANENT IMPACTS - FILL (±13.12 AC.)
 - PERMANENT IMPACTS - CONVERSION (±24.90 AC.)
 - WETLANDS
 - 510 - STREAMS AND WATERWAYS
 - 630 - WETLAND FORESTED MIXED

REFERENCE(S)

1. EXISTING TRANSMISSION LINE ROW, EXISTING SUBSTATIONS, OUC, 2019
2. PROPOSED PAD WORKSPACES, PROPOSED ROW, ACCESS ROAD, OUC & GOLDER, 2019-2021.
3. WETLAND IMPACTS, GOLDER, 2020-2021.
4. WETLAND AREAS, SJRWMD, SFWMD, GOLDER, 2020.
5. RAILROAD, FLORIDA DEPARTMENT OF TRANSPORTATION, 2017.
6. SERVICE LAYER CREDITS:

COORDINATE SYSTEM: NAD 1983 STATEPLANE FLORIDA EAST FIPS 0901 FEET
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

CLIENT
ORLANDO UTILITIES COMMISSION

PROJECT
ST. CLOUD EAST TO MAGNOLIA RANCH NORTH 230 KV TRANSMISSION LINE PROJECT

TITLE
CONCEPTUAL LAYOUT AND WETLAND IMPACTS

CONSULTANT	YYYY-MM-DD	2021-06-28
OUC 	DESIGNED	NRL
The Reliable One	PREPARED	GFD
	REVIEWED	KAB
	APPROVED	KAB

PROJECT NO. 19115515	CONTROL C021	REV. 0	FIGURE 3-1
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ATTACHMENT FDEP-10

REVISED EMF CALCULATIONS

REPORT ON COMPLIANCE WITH ELECTRIC AND MAGNETIC FIELD (EMF) STANDARDS

OUC ST. CLOUD EAST TO MAGNOLIA RANCH NORTH 230-KV TRANSMISSION LINE (ORLANDO ST. CLOUD RESILIENCY CONNECTION)

Submitted By:

Orlando Utilities Commission
100 West Anderson St.
Orlando, FL 32801

July 28, 2021

Name and Address of Authorized Agent

W. Christopher Browder
OUC, Chief Legal Officer
100 West Anderson St, Orlando, FL 32801



Signature of Authorized Agent

7/29/21
Date

Name and Address of Professional Engineer

Matthew Kapusta
PE# 79576
2301 Maitland Center Parkway, Maitland, FL 32751

Preliminary - These calculations are in compliance with the FDEP EMF requirements based on preliminary plans and are valid only if the line is built in accordance with these preliminary plans.

	
Jul 29 2021 7:14 AM Matthew Kapusta, PE#79576 2301 Maitland Center Pkwy, Maitland, FL 32751	THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY <u>MATTHEW KAPUSTA</u> ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

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January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #1	100	3.2	31	0.4	0	147.8	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #1- Line Cut #1**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

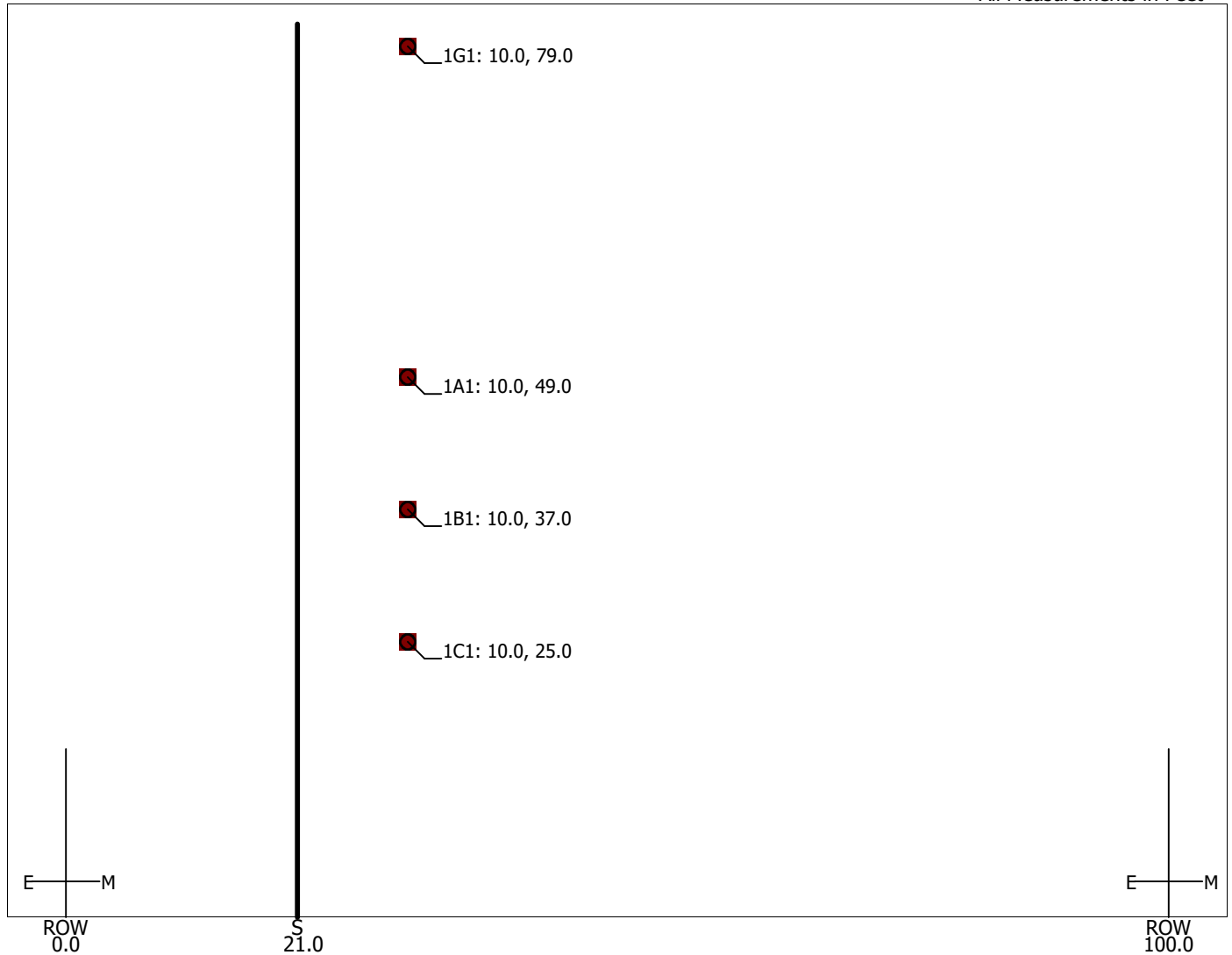
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	31.00	10.00	49.00	1	1.26	0.00	242.0	0	2253
1B1	31.00	10.00	37.00	1	1.26	0.00	242.0	120	2253
1C1	31.00	10.00	25.00	1	1.26	0.00	242.0	240	2253
1G1	31.00	10.00	79.00	1	0.69	0.00	0.0	0	0

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

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Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #2A	125	1.1	64	0.1	125	63.1	125

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #2A- Line Cut #2A**

7-2934

Circuit Name

0 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	60.00	-10.00	70.00	1	1.26	0.00	242.0	0	2253
1B1	60.00	-10.00	58.00	1	1.26	0.00	242.0	120	2253
1C1	60.00	-10.00	46.00	1	1.26	0.00	242.0	240	2253
1G1	60.00	-10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

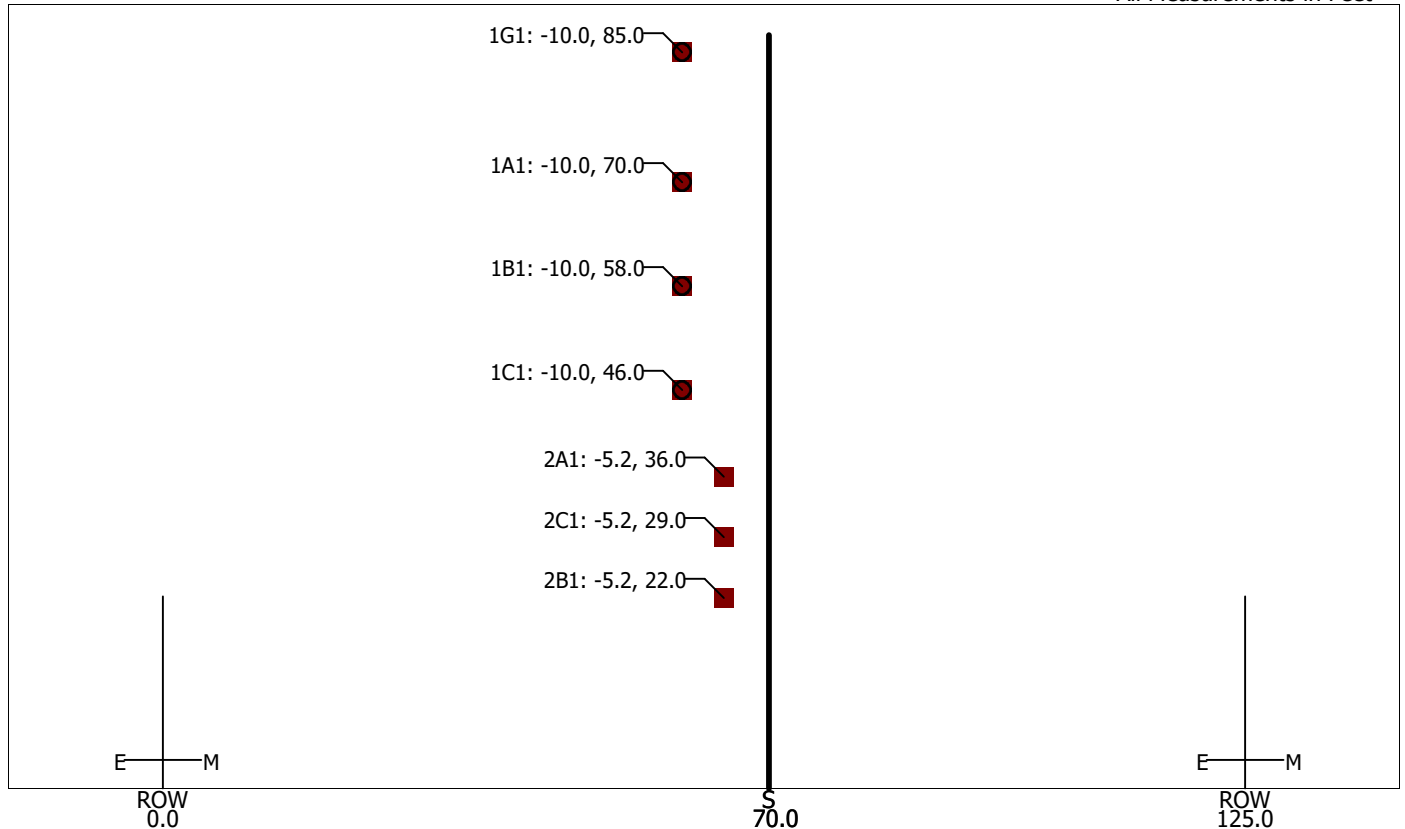
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	64.80	-5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	64.80	-5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	64.80	-5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

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Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #2B	125	1.1	64	0.1	125	41.4	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #2B- Line Cut #2B**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	60.00	-10.00	70.00	1	1.26	0.00	242.0	0	-2253
1B1	60.00	-10.00	58.00	1	1.26	0.00	242.0	120	-2253
1C1	60.00	-10.00	46.00	1	1.26	0.00	242.0	240	-2253
1G1	60.00	-10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

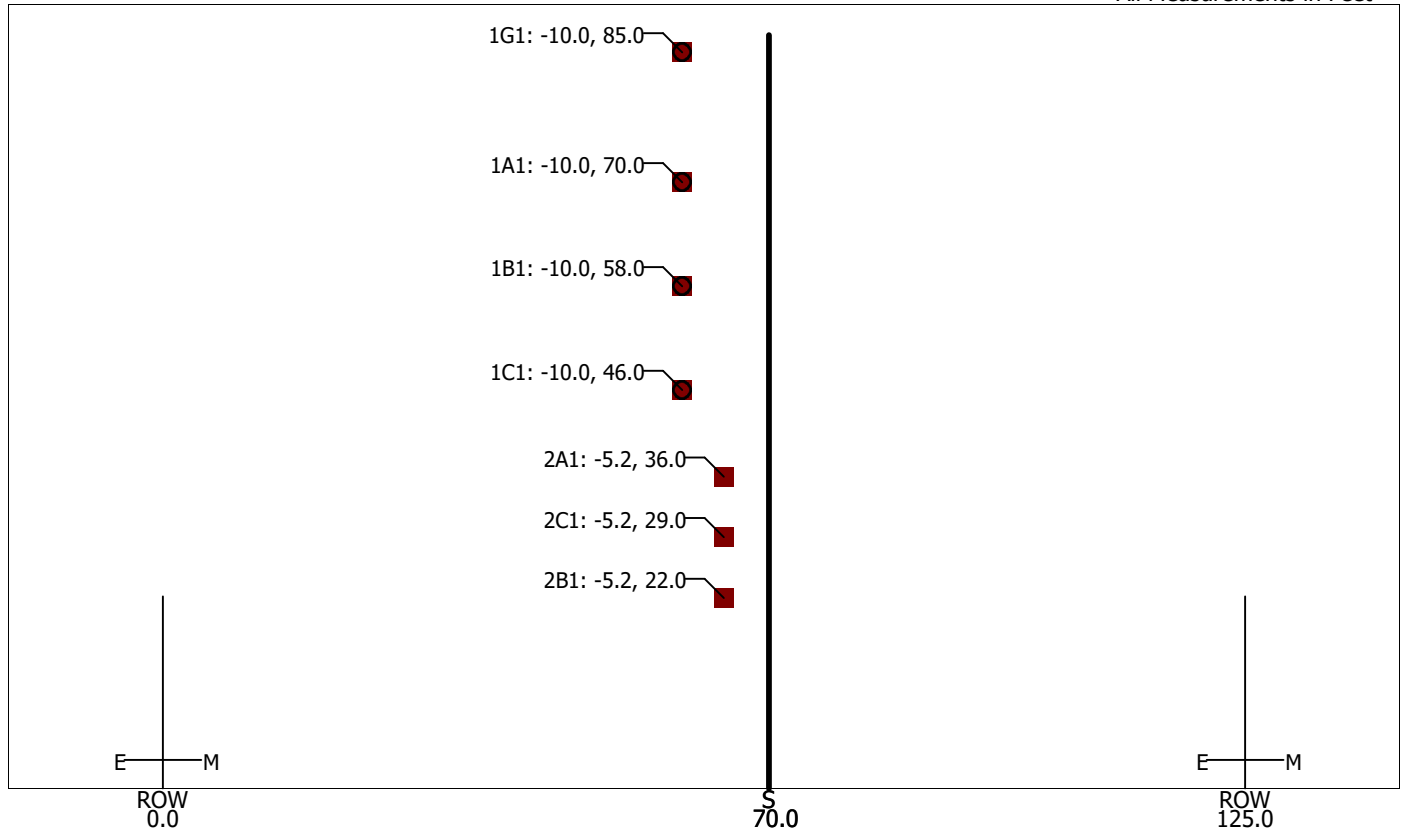
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	64.80	-5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	64.80	-5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	64.80	-5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

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Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #3A	100	1.1	28	0.2	0	147.6	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: Line Cut #3A- Line Cut #3A

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (MCR)
				# of	Diameter (in)	Spacing (in)			
1A1	32.00	10.00	70.00	1	1.26	0.00	242.0	0	2253
1B1	32.00	10.00	58.00	1	1.26	0.00	242.0	120	2253
1C1	32.00	10.00	46.00	1	1.26	0.00	242.0	240	2253
1G1	32.00	10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

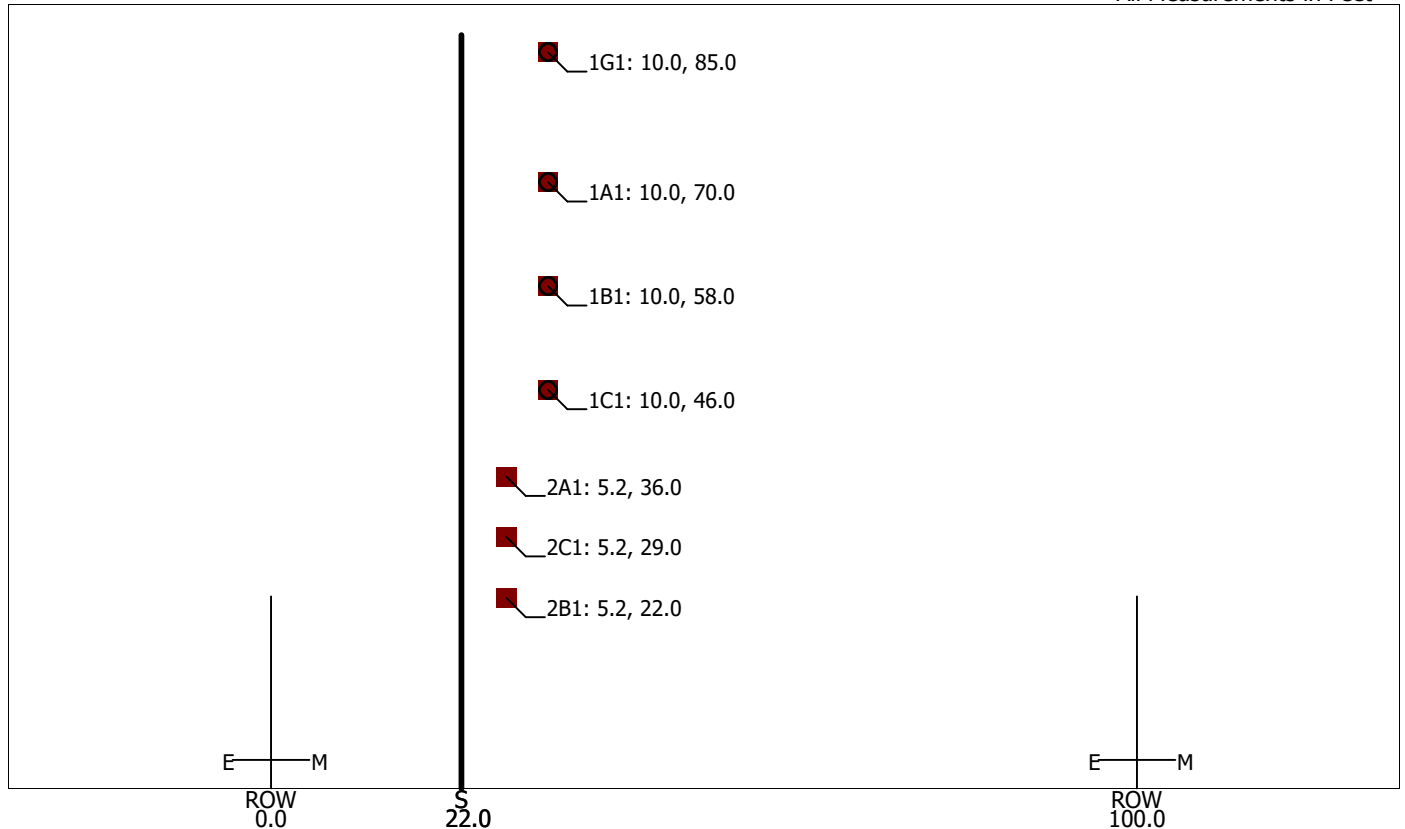
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	27.20	5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	27.20	5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	27.20	5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

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Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #3B	100	1.1	28	0.2	0	107.1	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #3B- Line Cut #3B**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	32.00	10.00	70.00	1	1.26	0.00	242.0	0	-2253
1B1	32.00	10.00	58.00	1	1.26	0.00	242.0	120	-2253
1C1	32.00	10.00	46.00	1	1.26	0.00	242.0	240	-2253
1G1	32.00	10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

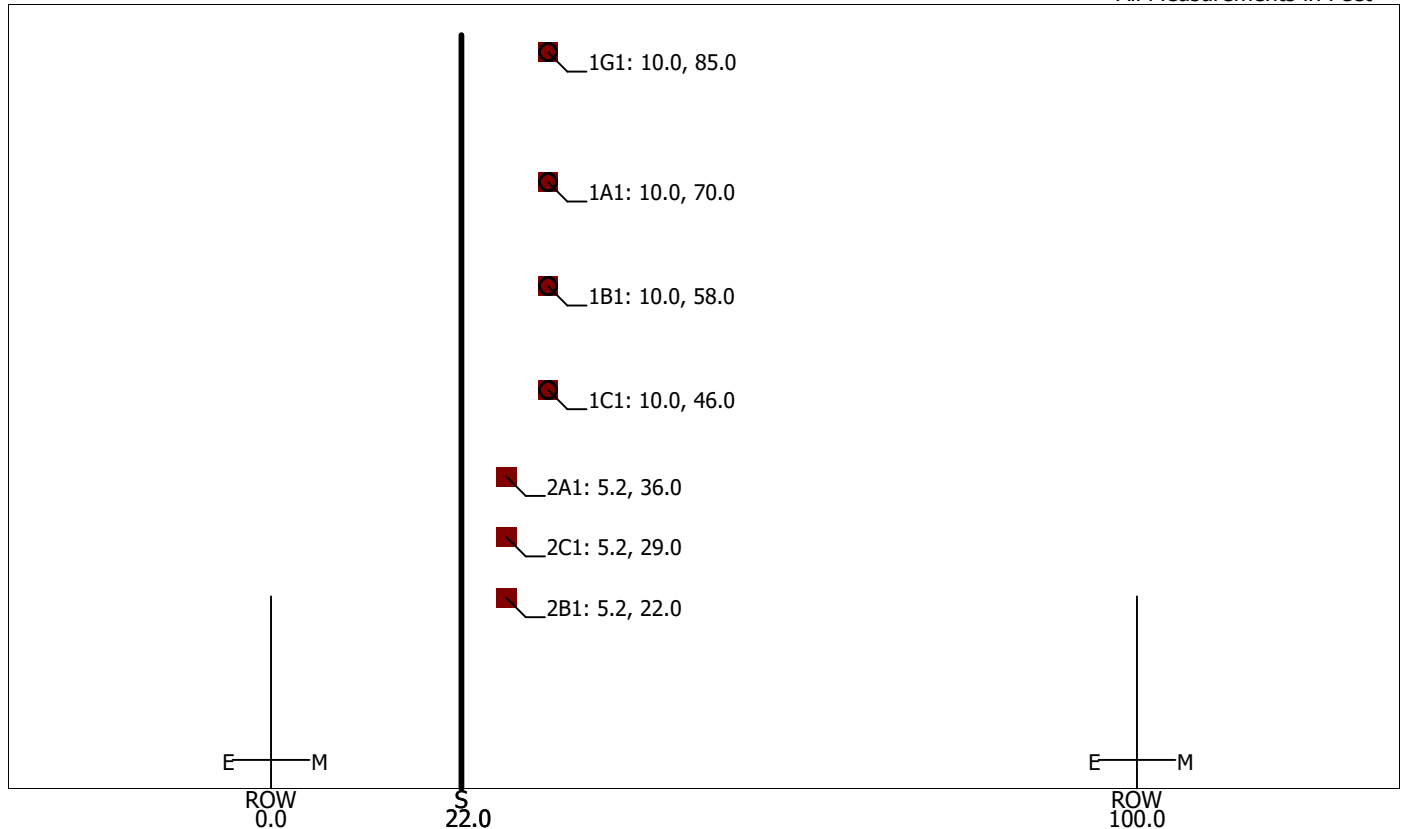
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	27.20	5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	27.20	5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	27.20	5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

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Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #4A	100	1.1	46	0.1	100	89.2	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #4A- Line Cut #4A**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	50.00	10.00	70.00	1	1.26	0.00	242.0	0	2253
1B1	50.00	10.00	58.00	1	1.26	0.00	242.0	120	2253
1C1	50.00	10.00	46.00	1	1.26	0.00	242.0	240	2253
1G1	50.00	10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

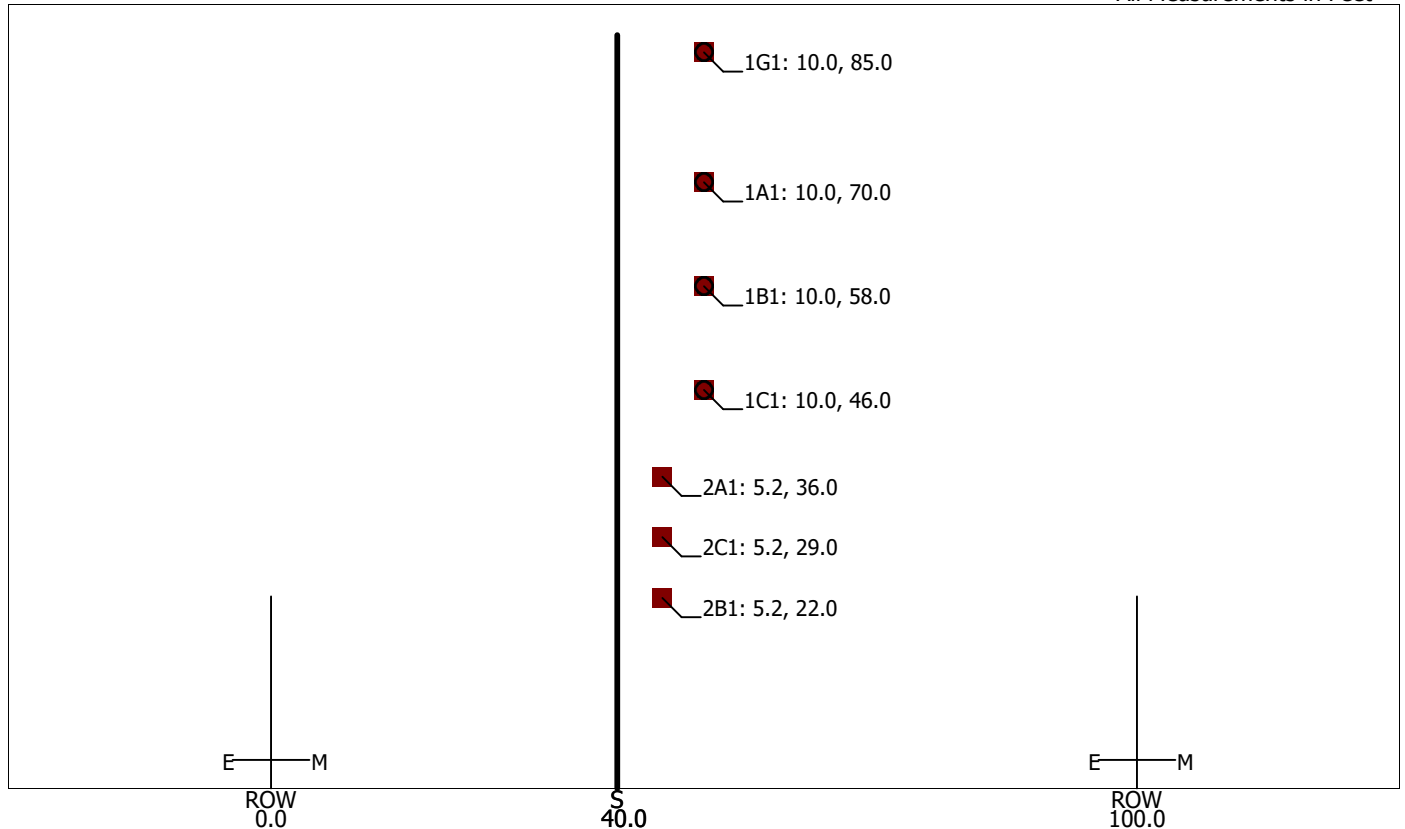
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	45.20	5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	45.20	5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	45.20	5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



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Signature of Authorized Agent

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Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #4B	100	1.1	46	0.1	100	58.3	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #4B- Line Cut #4B**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	50.00	10.00	70.00	1	1.26	0.00	242.0	0	-2253
1B1	50.00	10.00	58.00	1	1.26	0.00	242.0	120	-2253
1C1	50.00	10.00	46.00	1	1.26	0.00	242.0	240	-2253
1G1	50.00	10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

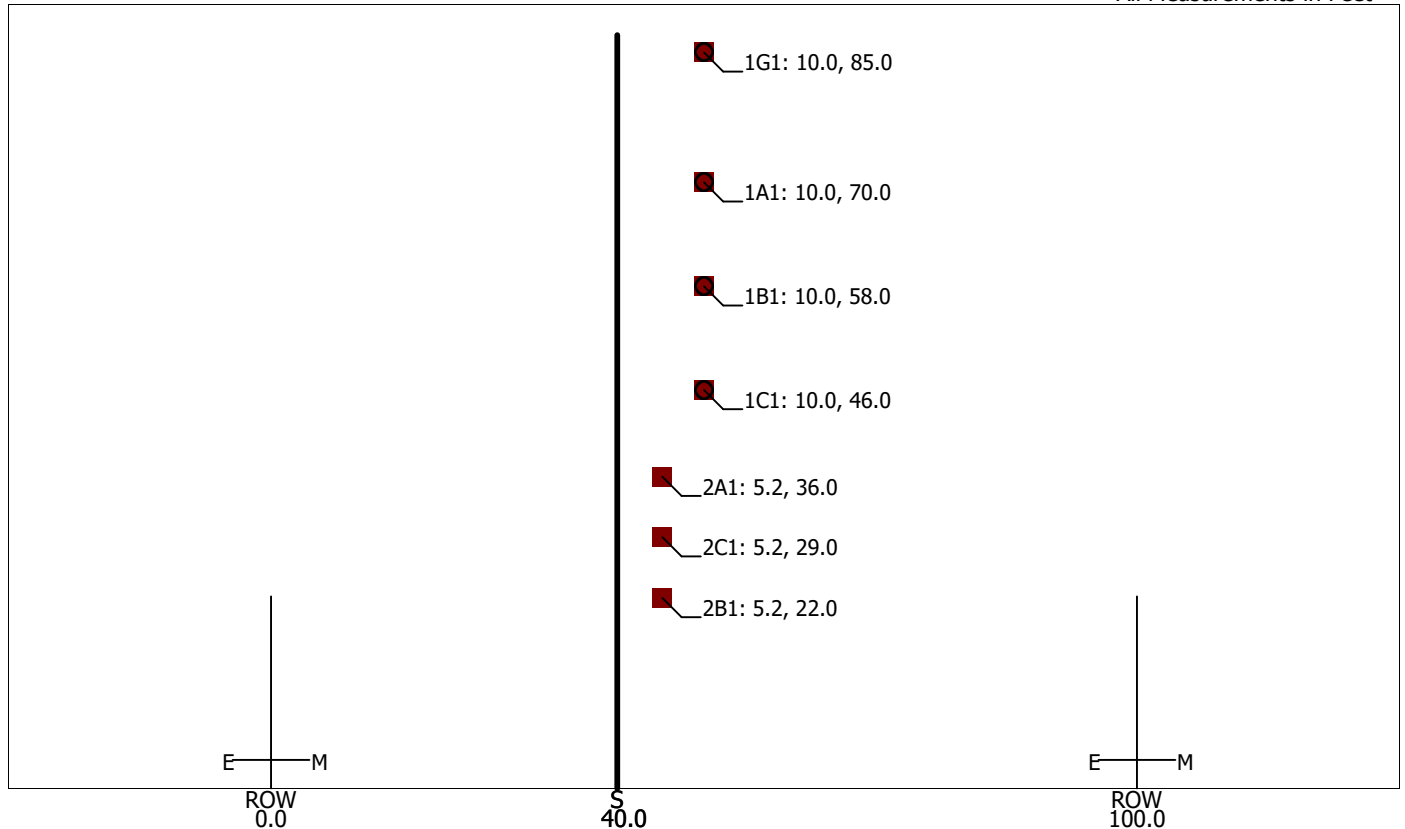
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	45.20	5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	45.20	5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	45.20	5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

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Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #5A DE	75	1.1	45	0.3	75	137.0	75

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #5A DE- Line Cut #5A DE**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (MCR)
				# of	Diameter (in)	Spacing (in)			
1A1	45.00	0.00	70.00	1	1.26	0.00	242.0	0	2253
1B1	45.00	0.00	58.00	1	1.26	0.00	242.0	120	2253
1C1	45.00	0.00	46.00	1	1.26	0.00	242.0	240	2253
1G1	45.00	0.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

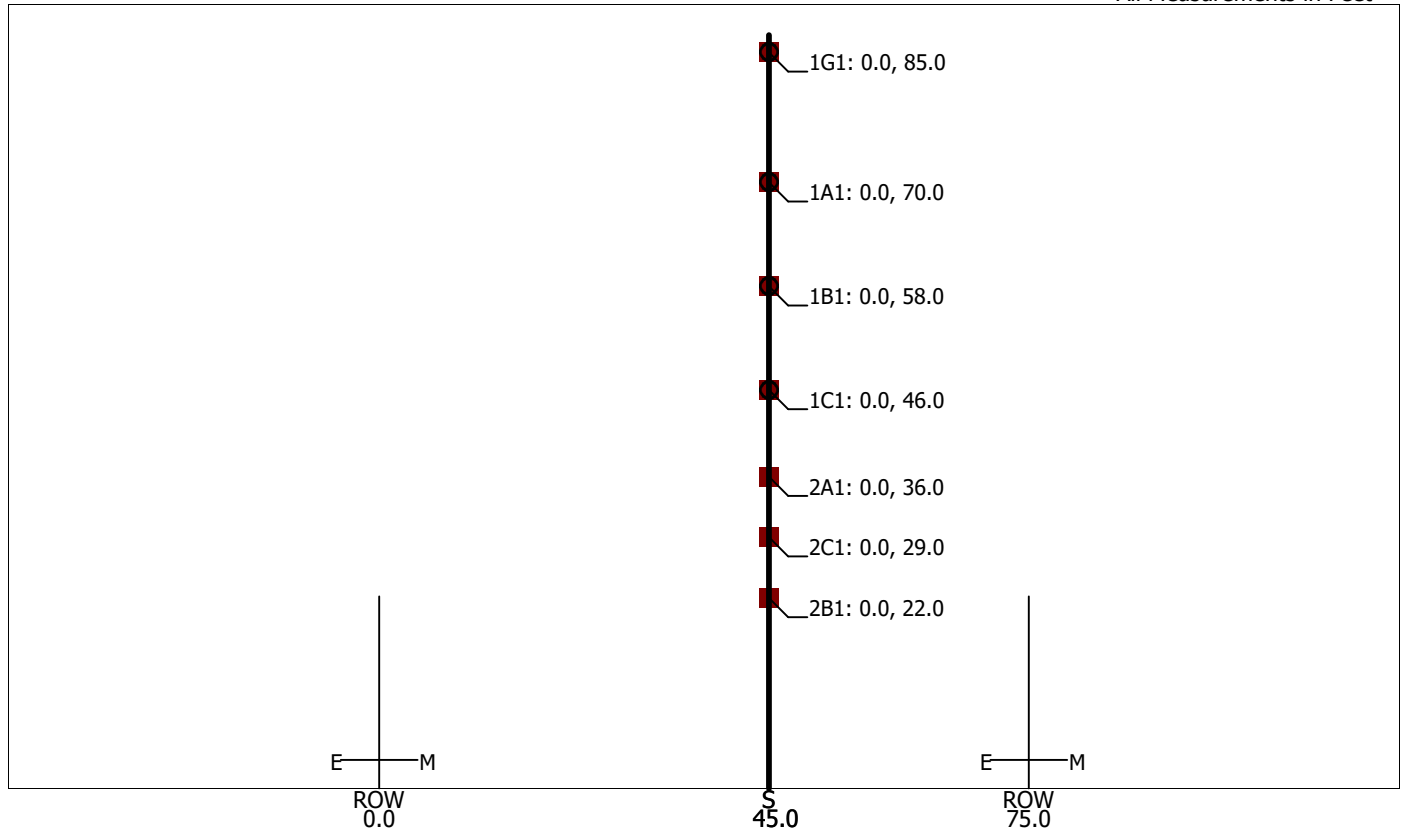
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	45.00	0.00	36.00	1	1.08	0.00	73.0	0	1896
2B1	45.00	0.00	22.00	1	1.08	0.00	73.0	120	1896
2C1	45.00	0.00	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #5A	75	1.1	46	0.4	75	138.4	75

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #5A- Line Cut #5A**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (MCR)
				# of	Diameter (in)	Spacing (in)			
1A1	50.00	10.00	70.00	1	1.26	0.00	242.0	0	2253
1B1	50.00	10.00	58.00	1	1.26	0.00	242.0	120	2253
1C1	50.00	10.00	46.00	1	1.26	0.00	242.0	240	2253
1G1	50.00	10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

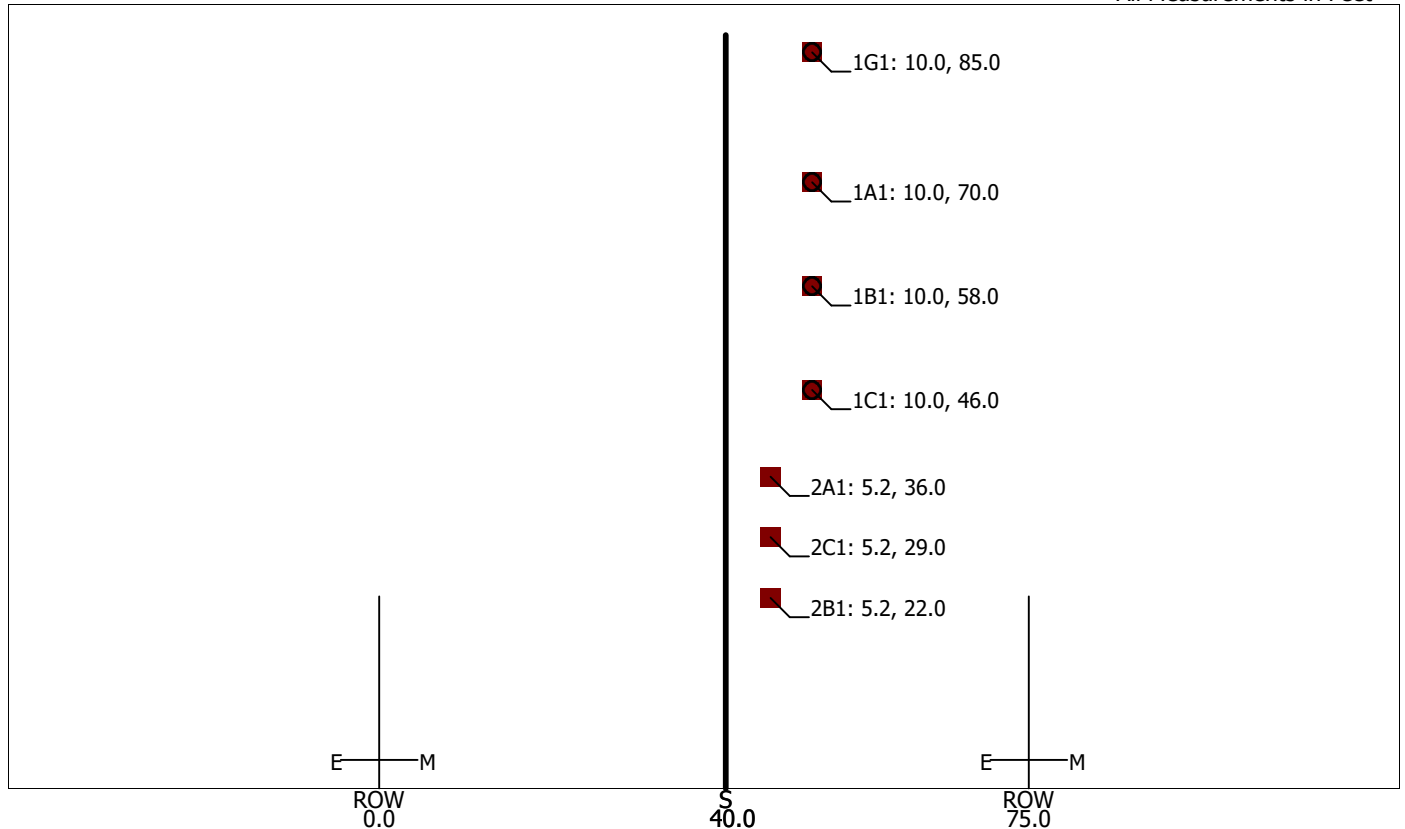
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	45.20	5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	45.20	5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	45.20	5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

BBurns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #5B DE	75	1.1	45	0.3	75	97.1	75

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #5B DE- Line Cut #5B DE**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (MCR)
				# of	Diameter (in)	Spacing (in)			
1A1	45.00	0.00	70.00	1	1.26	0.00	242.0	0	-2253
1B1	45.00	0.00	58.00	1	1.26	0.00	242.0	120	-2253
1C1	45.00	0.00	46.00	1	1.26	0.00	242.0	240	-2253
1G1	45.00	0.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

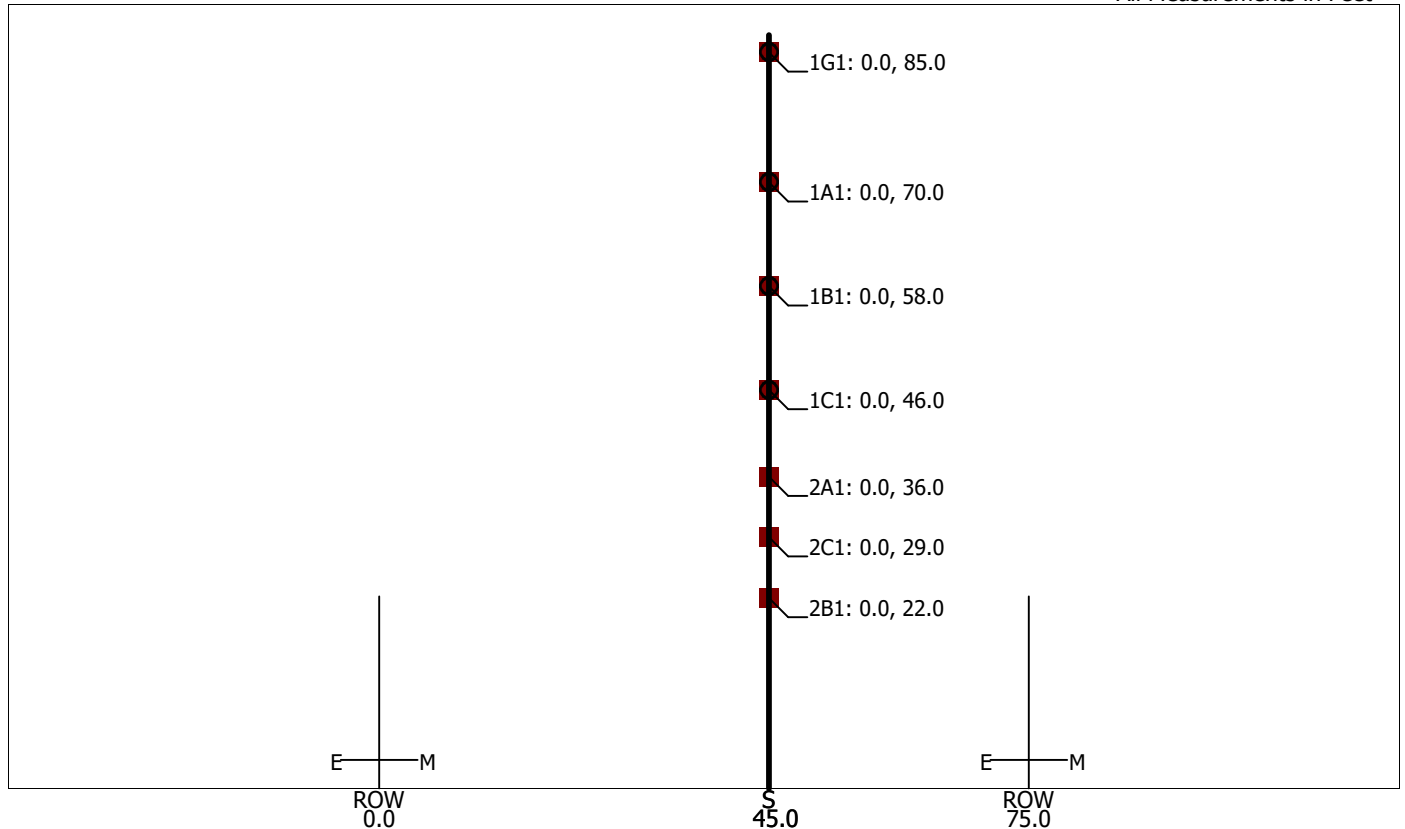
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	45.00	0.00	36.00	1	1.08	0.00	73.0	0	1896
2B1	45.00	0.00	22.00	1	1.08	0.00	73.0	120	1896
2C1	45.00	0.00	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #5B	75	1.1	46	0.4	75	97.9	75

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #5B- Line Cut #5B**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	50.00	10.00	70.00	1	1.26	0.00	242.0	0	-2253
1B1	50.00	10.00	58.00	1	1.26	0.00	242.0	120	-2253
1C1	50.00	10.00	46.00	1	1.26	0.00	242.0	240	-2253
1G1	50.00	10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

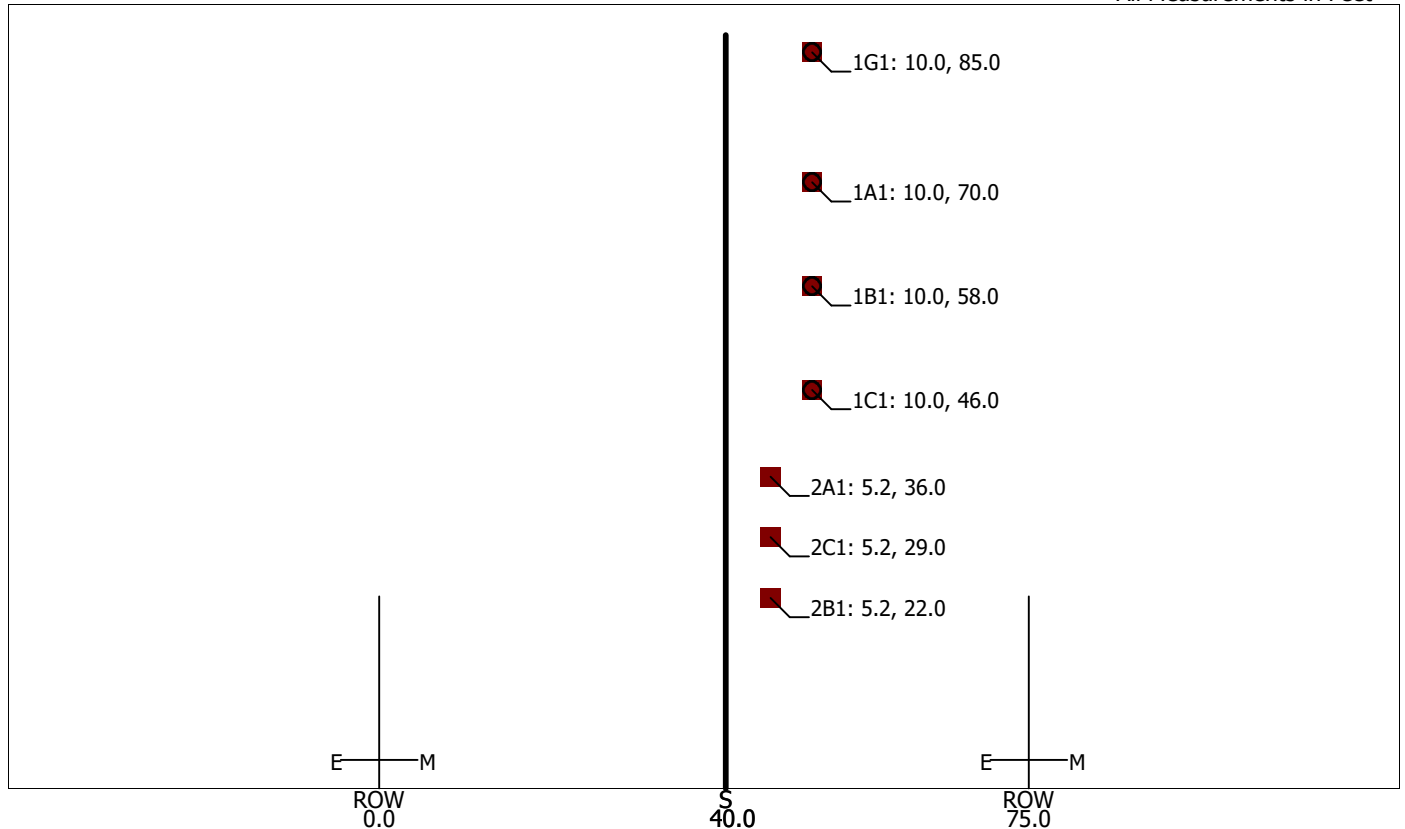
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	45.20	5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	45.20	5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	45.20	5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #6A	100	1.1	54	0.1	0	89.2	100

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #6A- Line Cut #6A**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (MCR)
				# of	Diameter (in)	Spacing (in)			
1A1	50.00	-10.00	70.00	1	1.26	0.00	242.0	0	2253
1B1	50.00	-10.00	58.00	1	1.26	0.00	242.0	120	2253
1C1	50.00	-10.00	46.00	1	1.26	0.00	242.0	240	2253
1G1	50.00	-10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

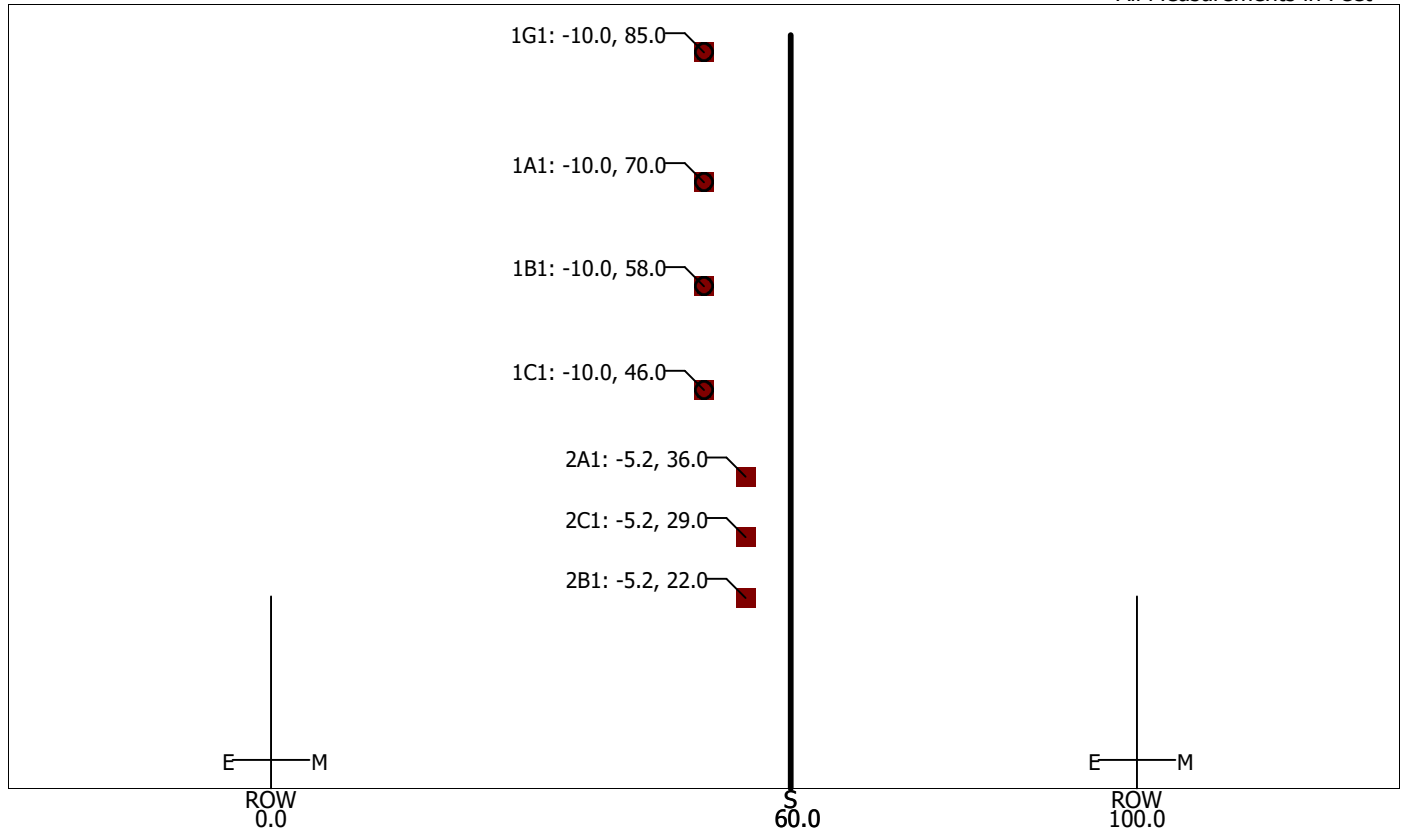
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	54.80	-5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	54.80	-5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	54.80	-5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #6B	100	1.1	54	0.1	0	58.3	100

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #6B- Line Cut #6B**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (MCR)
				# of	Diameter (in)	Spacing (in)			
1A1	50.00	-10.00	70.00	1	1.26	0.00	242.0	0	-2253
1B1	50.00	-10.00	58.00	1	1.26	0.00	242.0	120	-2253
1C1	50.00	-10.00	46.00	1	1.26	0.00	242.0	240	-2253
1G1	50.00	-10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

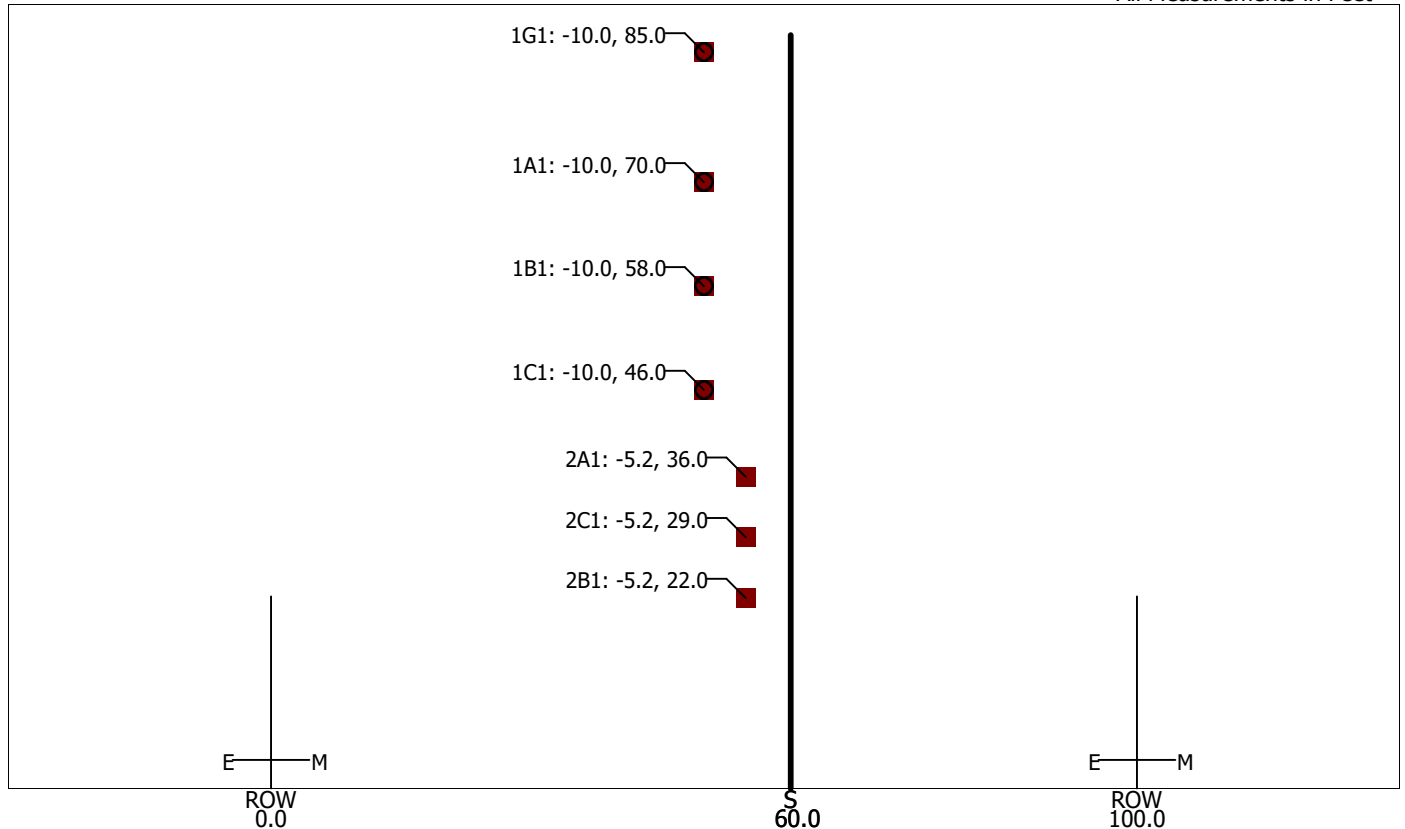
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	54.80	-5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	54.80	-5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	54.80	-5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #7A	100	1.1	46	0.1	100	89.2	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #7A- Line Cut #7A**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	50.00	10.00	70.00	1	1.26	0.00	242.0	0	2253
1B1	50.00	10.00	58.00	1	1.26	0.00	242.0	120	2253
1C1	50.00	10.00	46.00	1	1.26	0.00	242.0	240	2253
1G1	50.00	10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

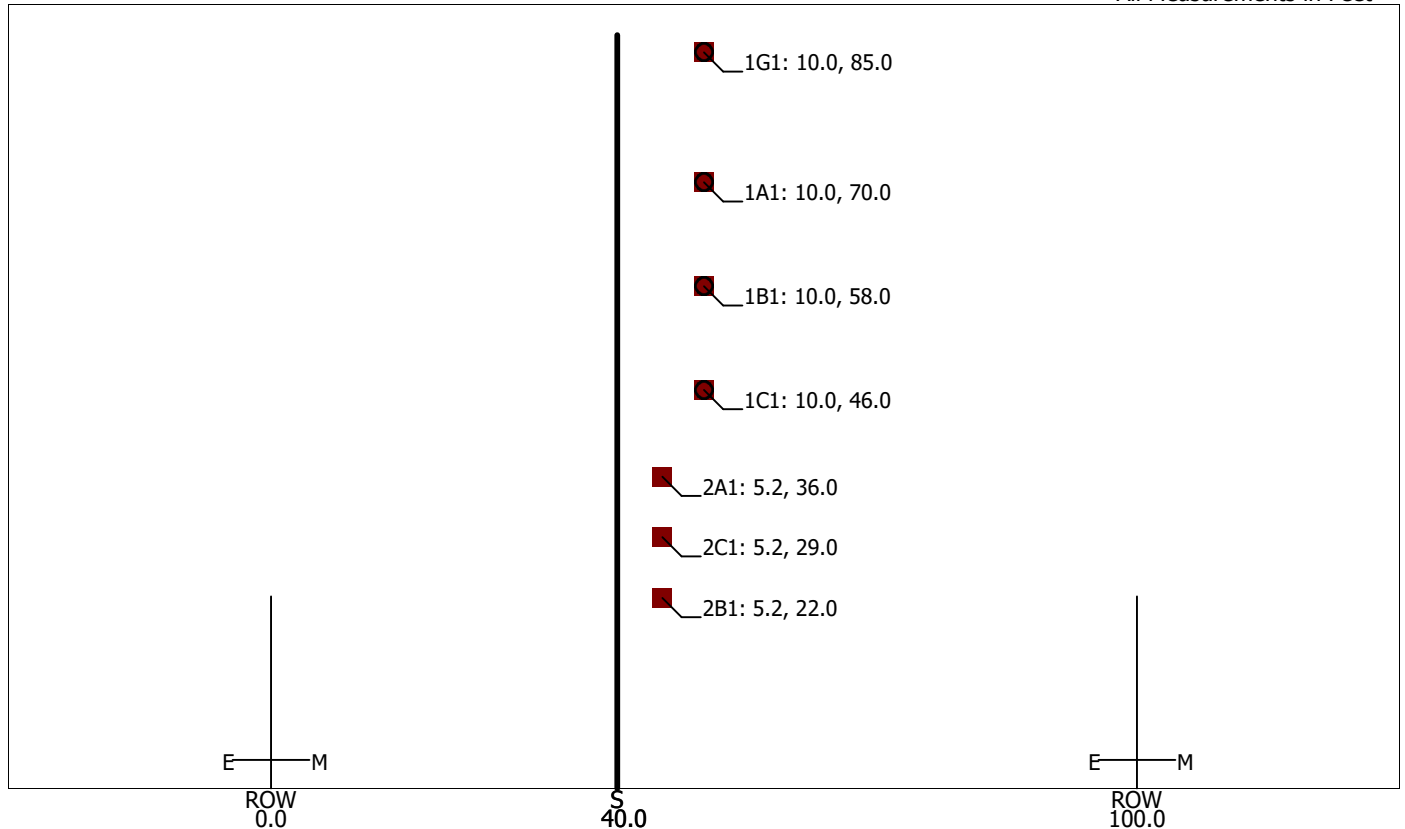
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	45.20	5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	45.20	5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	45.20	5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #7B	100	1.1	46	0.1	100	58.3	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #7B- Line Cut #7B**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	50.00	10.00	70.00	1	1.26	0.00	242.0	0	-2253
1B1	50.00	10.00	58.00	1	1.26	0.00	242.0	120	-2253
1C1	50.00	10.00	46.00	1	1.26	0.00	242.0	240	-2253
1G1	50.00	10.00	85.00	1	0.69	0.00	0.0	0	0

4-2829

Circuit Name

69 kV

Rated Voltage

Existing Circuit

New/Existing

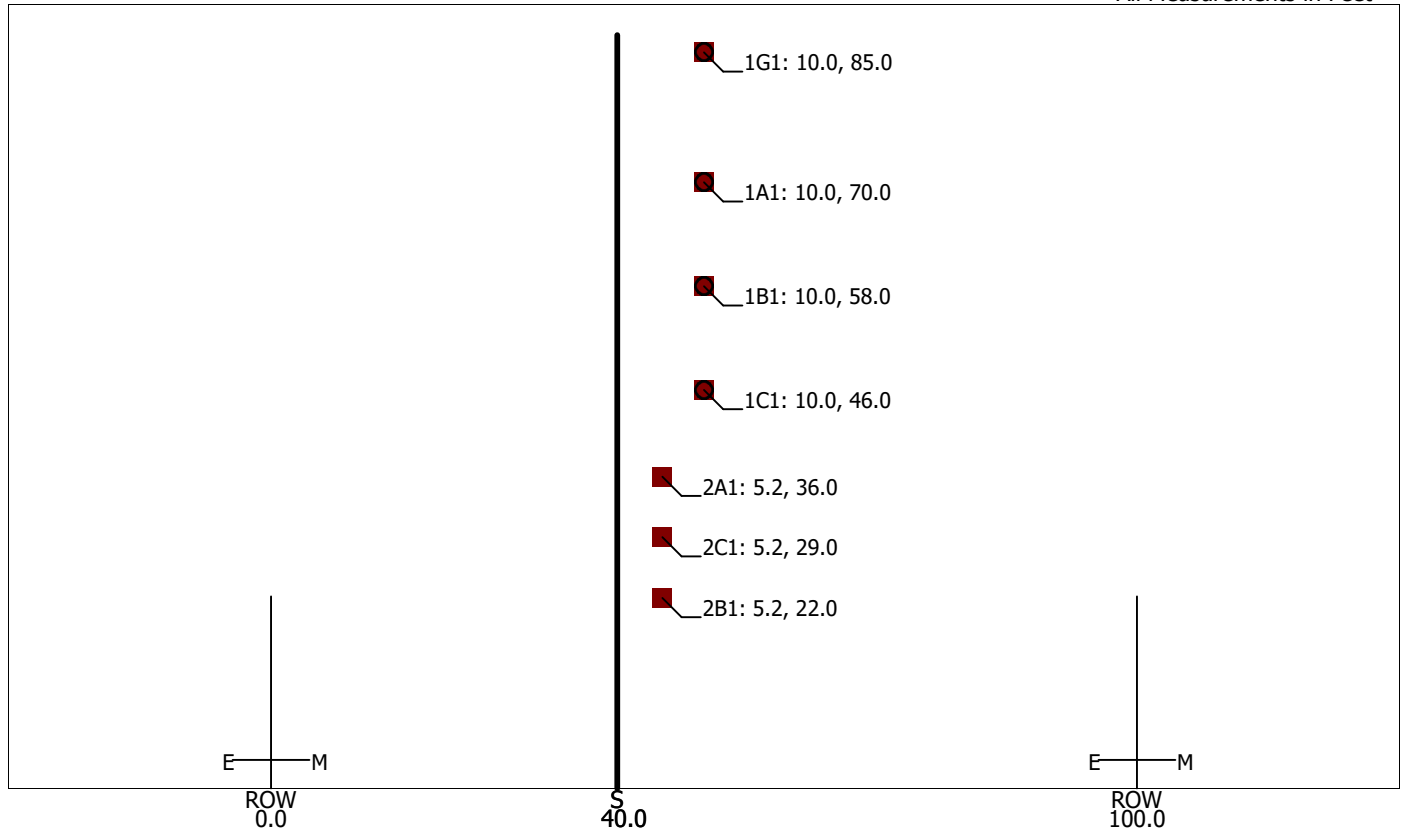
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	45.20	5.20	36.00	1	1.08	0.00	73.0	0	1896
2B1	45.20	5.20	22.00	1	1.08	0.00	73.0	120	1896
2C1	45.20	5.20	29.00	1	1.08	0.00	73.0	240	1896

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #8A	100	3.2	40	0.1	100	111.5	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #8A- Line Cut #8A**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

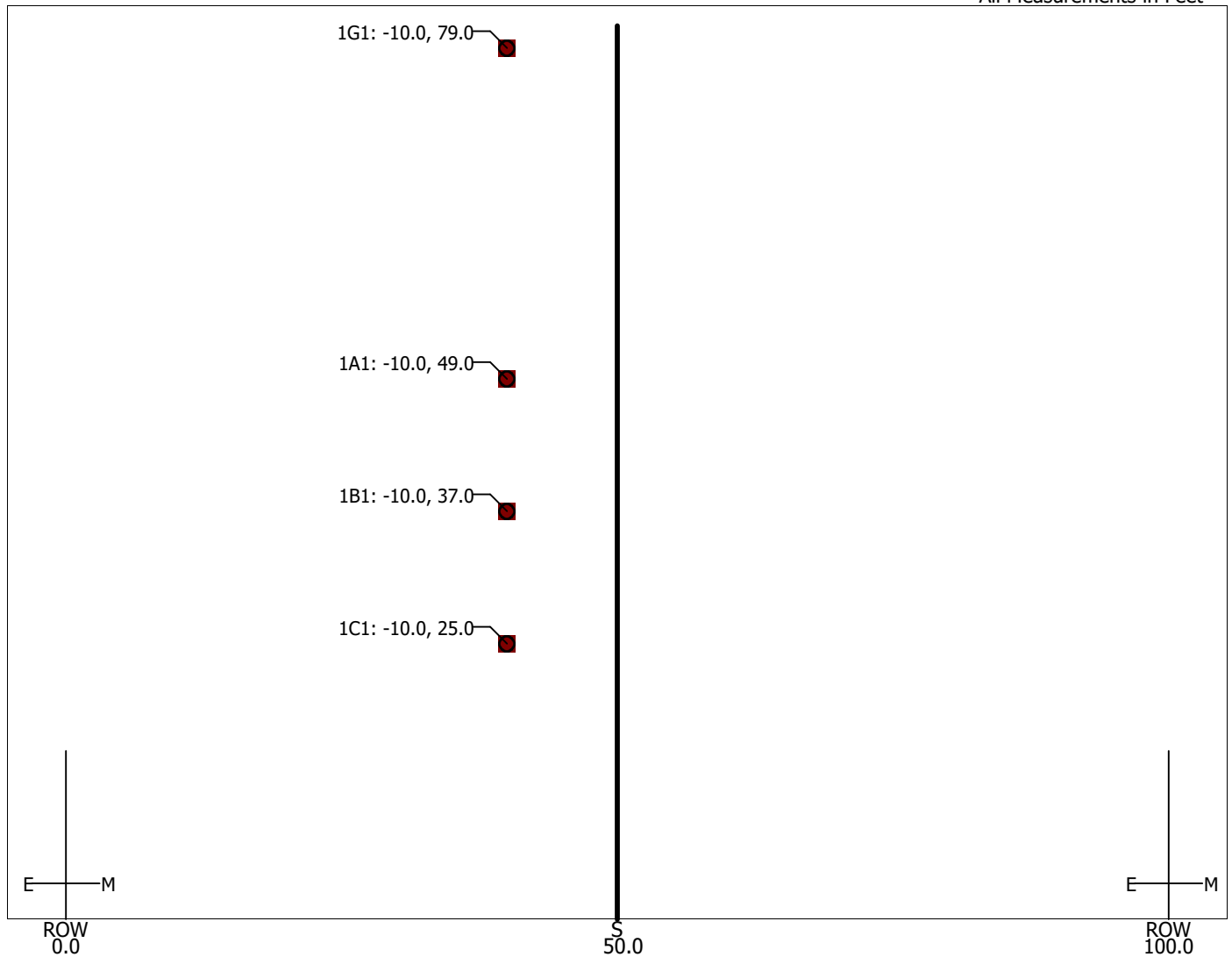
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	40.00	-10.00	49.00	1	1.26	0.00	242.0	0	2253
1B1	40.00	-10.00	37.00	1	1.26	0.00	242.0	120	2253
1C1	40.00	-10.00	25.00	1	1.26	0.00	242.0	240	2253
1G1	40.00	-10.00	79.00	1	0.69	0.00	0.0	0	0

Points of Interest

None

Phase Configuration

All Measurements in Feet



Line Cut 8B - Underground Riser Structure

MAGNETIC FLUX DENSITY [mG]
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Study : 230kV UG Duct Bank
Execution: 230kV 3500 kcmil Copper conductor Duct Bank GCC Riser Pole

Report created on: 07/23/21 9:44:09 AM

50 ft from conductor centerline (edge of 100 ft ROW)

X (feet)	Y=0.0 (feet)	Y=1.0 (feet)	Y=10.0 (feet)	Y=20.0 (feet)	Y=30.0 (feet)	Y=40.0 (feet)	Y=50.0 (feet)
	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)
-50.0	3.7929	3.7908	3.6412	3.2602	2.7783	2.3029	1.8881
-49.0	3.9494	3.9471	3.7852	3.3751	2.8613	2.3597	1.9261
-48.0	4.1157	4.1132	3.9377	3.4959	2.9476	2.418	1.9648
-47.0	4.2928	4.2901	4.0995	3.6228	3.0374	2.4781	2.0043
-46.0	4.4815	4.4786	4.2713	3.7563	3.1306	2.5398	2.0444
-45.0	4.683	4.6798	4.454	3.8968	3.2276	2.6033	2.0854
-44.0	4.8985	4.8949	4.6484	4.0448	3.3285	2.6685	2.127
-43.0	5.1291	5.1252	4.8555	4.2007	3.4333	2.7355	2.1694
-42.0	5.3764	5.3721	5.0765	4.3651	3.5424	2.8043	2.2124
-41.0	5.642	5.6373	5.3127	4.5386	3.6515	2.8792	2.2594
-40.0	5.9278	5.9226	5.5654	4.7217	3.7597	2.9548	2.3107
-39.0	6.2359	6.2301	5.8361	4.9151	3.8678	3.0313	2.3672
-38.0	6.5687	6.5623	6.1265	5.1195	4.0357	3.1088	2.4287
-37.0	6.9288	6.9217	6.4386	5.3355	4.1557	3.1752	2.437
-36.0	7.3194	7.3115	6.7745	5.5641	4.293	3.2548	2.4836
-35.0	7.744	7.7351	7.1366	5.806	4.4356	3.3361	2.5307
-34.0	8.2066	8.1967	7.5276	6.0622	4.5836	3.4191	2.5781
-33.0	8.712	8.7008	7.9506	6.3335	4.737	3.5037	2.626
-32.0	9.2656	9.2529	8.4091	6.6209	4.8959	3.5899	2.6741
-31.0	9.8737	9.8593	8.9068	6.9256	5.0605	3.6776	2.7225
-30.0	10.5437	10.5272	9.4483	7.2485	5.2308	3.7667	2.771
-29.0	11.2843	11.2654	10.0385	7.5908	5.4067	3.8571	2.8196
-28.0	12.1058	12.0841	10.6833	7.9537	5.5883	3.9487	2.8682
-27.0	13.0204	12.9953	11.3891	8.3383	5.7754	4.0412	2.9168
-26.0	14.0428	14.0136	12.1635	8.7458	5.968	4.1346	2.9651
-25.0	15.1906	15.1565	13.015	9.1773	6.1659	4.2286	3.0131
-24.0	16.4852	16.445	13.9534	9.634	6.3687	4.323	3.0608
-23.0	17.9528	17.9051	14.9901	10.1169	6.5762	4.4176	3.1079
-22.0	19.6256	19.5686	16.1379	10.6268	6.7879	4.5122	3.1544
-21.0	21.5437	21.475	17.4117	11.1644	7.0034	4.6064	3.2002
-20.0	23.7577	23.6742	18.8287	11.7301	7.2219	4.7	3.2451
-19.0	26.3317	26.2291	20.4084	12.3241	7.4428	4.7926	3.289
-18.0	29.3484	29.2209	22.1728	12.946	7.6653	4.8839	3.3318
-17.0	32.9156	32.7552	24.1473	13.5948	7.8883	4.9735	3.3732
-16.0	37.1759	36.9712	26.36	14.2689	8.1107	5.0611	3.4133
-15.0	42.3217	42.0564	28.8419	14.9659	8.3314	5.1462	3.4518
-14.0	48.6173	48.2669	31.6267	15.6824	8.549	5.2284	3.4886
-13.0	56.4326	55.9604	34.7488	16.4138	8.762	5.3074	3.5236
-12.0	66.3012	65.6489	38.2424	17.1545	8.969	5.3826	3.5566
-11.0	79.0131	78.086	42.1372	17.8973	9.1681	5.4538	3.5876
-10.0	95.7799	94.4162	46.4531	18.6338	9.3579	5.5204	3.6163
-9.0	118.5383	116.4469	51.1921	19.3542	9.5364	5.5821	3.6427
-8.0	150.543	147.1643	56.3271	20.0475	9.702	5.6385	3.6666
-7.0	197.6207	191.7863	61.7876	20.7017	9.853	5.6892	3.688
-6.0	271.0863	260.0799	67.4442	21.304	9.9877	5.7339	3.7067
-5.0	395.4641	371.9823	73.0957	21.8416	10.1045	5.7722	3.7227
-4.0	633.0044	572.8721	78.4642	22.3019	10.2022	5.804	3.7359
-3.0	1186.703	979.6678	83.2074	22.6735	10.2795	5.829	3.7463
-2.0	3131.9607	1904.0289	86.9553	22.9466	10.3354	5.8469	3.7537
-1.0	29643.2966	3460.9779	89.3671	23.1136	10.3693	5.8577	3.7581
0.0	22815.6737	3563.8269	90.2004	23.1698	10.3806	5.8614	3.7596
1.0	29643.2966	3460.9779	89.3671	23.1136	10.3693	5.8577	3.7581
2.0	3131.9607	1904.0289	86.9553	22.9466	10.3354	5.8469	3.7537
3.0	1186.703	979.6678	83.2074	22.6735	10.2795	5.829	3.7463
4.0	633.0044	572.8721	78.4642	22.3019	10.2022	5.804	3.7359
5.0	395.4695	371.987	73.0958	21.8416	10.1046	5.7722	3.7227
6.0	271.0863	260.0799	67.4442	21.304	9.9877	5.7339	3.7067
7.0	197.6207	191.7863	61.7876	20.7017	9.853	5.6892	3.688
8.0	150.543	147.1643	56.3271	20.0475	9.702	5.6385	3.6666
9.0	118.5383	116.4469	51.1921	19.3542	9.5364	5.5821	3.6427
10.0	95.7799	94.4162	46.4531	18.6338	9.3579	5.5204	3.6163
11.0	79.0131	78.086	42.1372	17.8973	9.1681	5.4538	3.5876
12.0	66.3012	65.6489	38.2424	17.1545	8.969	5.3826	3.5566
13.0	56.4326	55.9604	34.7488	16.4138	8.762	5.3074	3.5236
14.0	48.6173	48.2669	31.6267	15.6824	8.549	5.2284	3.4886
15.0	42.3217	42.0564	28.8419	14.9659	8.3314	5.1462	3.4518
16.0	37.1759	36.9712	26.36	14.2689	8.1107	5.0611	3.4133
17.0	32.9156	32.7552	24.1473	13.5948	7.8883	4.9735	3.3732
18.0	29.3484	29.2209	22.1728	12.946	7.6653	4.8839	3.3318
19.0	26.3317	26.2291	20.4084	12.3241	7.4428	4.7926	3.289
20.0	23.7577	23.6742	18.8287	11.7301	7.2219	4.7	3.2451
21.0	21.5437	21.475	17.4117	11.1644	7.0034	4.6064	3.2002

Magnetic field at edge of ROW at ground level for underground conductors

22.0	19.6256	19.5686	16.1379	10.6268	6.7879	4.5122	3.1544
23.0	17.9528	17.9051	14.9901	10.1169	6.5762	4.4176	3.1079
24.0	16.4852	16.445	13.9534	9.634	6.3687	4.323	3.0608
25.0	15.1906	15.1565	13.015	9.1773	6.1659	4.2286	3.0131
26.0	14.0428	14.0136	12.1635	8.7458	5.968	4.1346	2.9651
27.0	13.0204	12.9953	11.3891	8.3383	5.7754	4.0412	2.9168
28.0	12.1058	12.0841	10.6833	7.9537	5.5883	3.9487	2.8682
29.0	11.2843	11.2654	10.0385	7.5908	5.4067	3.8571	2.8196
30.0	10.5437	10.5272	9.4483	7.2485	5.2308	3.7667	2.771
31.0	9.8737	9.8593	8.9068	6.9256	5.0605	3.6776	2.7225
32.0	9.2656	9.2529	8.4091	6.6209	4.8959	3.5899	2.6741
33.0	8.712	8.7008	7.9506	6.3335	4.737	3.5037	2.626
34.0	8.2066	8.1967	7.5276	6.0622	4.5836	3.4191	2.5781
35.0	7.744	7.7351	7.1366	5.806	4.4356	3.3361	2.5307
36.0	7.3194	7.3115	6.7745	5.5641	4.293	3.2548	2.4836
37.0	6.9288	6.9217	6.4386	5.3355	4.1557	3.1752	2.437
38.0	6.5687	6.5623	6.1265	5.1195	4.0234	3.0974	2.3909
39.0	6.2359	6.2301	5.8361	4.9151	3.8961	3.0214	2.3454
40.0	5.9278	5.9226	5.5654	4.7217	3.7736	2.9472	2.3004
41.0	5.642	5.6373	5.3127	4.5386	3.6558	2.8748	2.2561
42.0	5.3764	5.3721	5.0765	4.3651	3.5424	2.8043	2.2124
43.0	5.1291	5.1252	4.8555	4.2007	3.4333	2.7355	2.1694
44.0	4.8985	4.8949	4.6484	4.0448	3.3285	2.6685	2.127
45.0	4.6831	4.6798	4.454	3.8968	3.2276	2.6033	2.0854
46.0	4.4815	4.4786	4.2713	3.7563	3.1306	2.5398	2.0444
47.0	4.2928	4.2901	4.0995	3.6228	3.0374	2.4781	2.0043
48.0	4.1157	4.1132	3.9377	3.4959	2.9476	2.418	1.9648
49.0	3.9494	3.9471	3.7852	3.3751	2.8613	2.3597	1.9261
50.0	3.7929	3.7908	3.6412	3.2602	2.7783	2.3029	1.8881

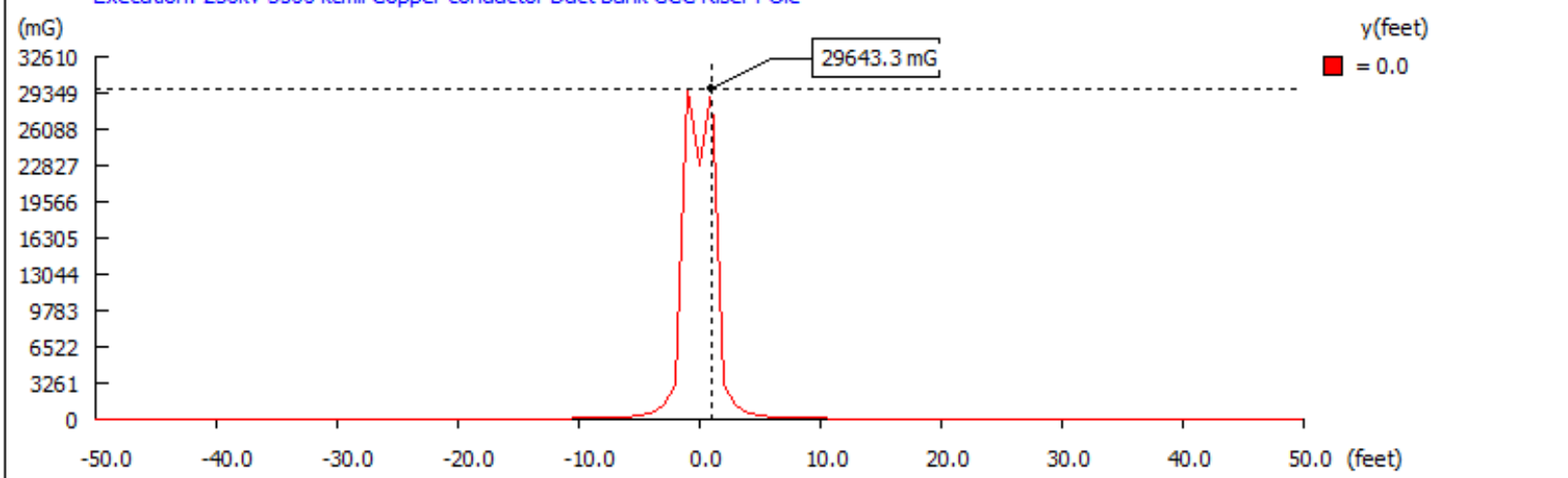
Peak value found at:

X (feet)	Y=0.0 (feet)	Y=1.0 (feet)	Y=10.0 (feet)	Y=20.0 (feet)	Y=30.0 (feet)	Y=40.0 (feet)	Y=50.0 (feet)
	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)
-1.0	29643.2966	3460.9779	89.3671	23.1136	10.3693	5.8577	3.7581

Magnetic field at edge of ROW at ground level for underground conductors

50 ft from conductor centerline (edge of 100 ft ROW)

Line Cut 8B - Underground Riser Structure



Input data:

Circuit No.	Phase	X (feet)	Y (feet)	Ampacity	Angle
1	A	-0.925	0.2	1127.0	0.0
1	B	-0.555	0.2	1127.0	-120.0
1	C	-0.185	0.2	1127.0	120.0
2	A	0.185	0.2	1127.0	0.0
2	B	0.555	0.2	1127.0	-120.0
2	C	0.925	0.2	1127.0	120.0

X Min: X Max: Step X: feet

☒ Add a range of Y values
☐ Add a single Y value

Y Min: feet
 Y Max: feet
 Step Y: feet

0.0
1.0
10.0
20.0
30.0
40.0
50.0

Save...

Default Ok Cancel

Study : 230kV UG Duct Bank
Execution: 230kV 3500 kcmil Copper conductor Duct Bank GCC
Report created on: 7/26/2021 3:48:19 PM

X (feet)	Y=0.0 (feet)	Y=1.0 (feet)
	B (mG)	B (mG)

-12.5	97.8211	92.0959
-12.0	105.2881	98.6755
-11.5	113.5931	105.9224
-11.0	122.856	113.9181
-10.5	133.2165	122.7544
-10.0	144.8372	132.5331
-9.5	157.9063	143.3671
-9.0	172.6417	155.3793
-8.5	189.2931	168.7012
-8.0	208.1434	183.4695
-7.5	229.5082	199.82
-7.0	253.7293	217.8783
-6.5	281.1606	237.7452
-6.0	312.1422	259.4767
-5.5	346.9546	283.056
-5.0	385.7487	308.3598
-4.5	428.4499	335.1213
-4.0	474.6215	362.8856
-3.5	523.3484	390.9932
-3.0	573.1231	418.5682
-2.5	621.8281	444.5479
-2.0	666.8442	467.7508
-1.5	705.2958	486.9771
-1.0	734.3943	501.1298
-0.5	751.8138	509.3364
0.0	756.0264	511.0505
0.5	746.5353	506.1216
1.0	723.9748	494.8199
1.5	690.0607	477.8134
2.0	647.3764	456.0944
2.5	598.9955	430.8641
3.0	548.0132	403.3931
3.5	497.1188	374.8861
4.0	448.3335	346.3776
4.5	402.952	318.6747
5.0	361.6356	292.3453
5.5	324.573	267.7394
6.0	291.6533	245.0361
6.5	262.5845	224.279
7.0	236.9961	205.4242
7.5	214.4964	188.372
8.0	194.7063	172.9919
8.5	177.2763	159.1398
9.0	161.8944	146.6699
9.5	148.2865	135.4414
10.0	136.2151	125.3227
10.5	125.4757	116.1933
11.0	115.8928	107.9441
11.5	107.3163	100.4778
12.0	99.6177	93.7078
12.5	92.6869	87.5573

Magnetic field at edge of ROW at ground level
for underground conductors

12.5 ft from conductor centerline (edge of 25 ft ROW)

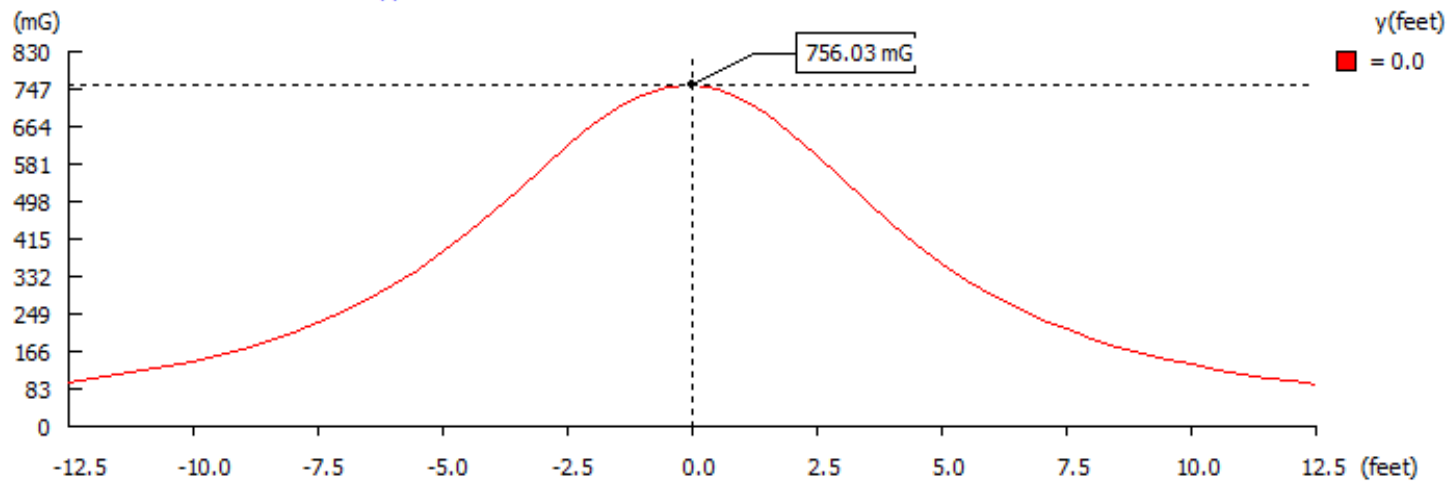
Peak value found at:

X (feet)	Y=0.0 (feet)	Y=1.0 (feet)
	B (mG)	B (mG)

Magnetic field at edge of ROW at ground level
for underground conductors

12.5 ft from conductor centerline (edge of 25 ft ROW)

0.0	756.0264	511.0505
-----	----------	----------



Input data:

Circuit No.	Phase	X (feet)	Y (feet)	Ampacity	Angle
1	A	-0.5	4.0	1127.0	0.0
1	B	-1.5	5.0	1127.0	-120.0
1	C	-1.5	4.0	1127.0	120.0
2	A	0.5	4.0	1127.0	0.0
2	B	0.5	5.0	1127.0	-120.0
2	C	1.5	4.0	1127.0	120.0

X Min: -12.5 X Max: 12.5 Step X: 0.5 feet

☒ Add a range of Y values
☐ Add a single Y value

Y Min: 0.0 feet

Y Max: 1.0 feet

Step Y: 1.0 feet

> 0.0
1.0

<

<<

Save...

Default

Ok

Cancel

Line Cut 10A - Underground Riser Structure

MAGNETIC FLUX DENSITY [mG]
=====

Study : 230kV UG Duct Bank
Execution: 230kV 3500 kcmil Copper conductor Duct Bank GCC Riser POle

Report created on: 07/23/21 9:44:09 AM

50 ft from conductor centerline (edge of 100 ft ROW)

X (feet)	Y=0.0 (feet)	Y=1.0 (feet)	Y=10.0 (feet)	Y=20.0 (feet)	Y=30.0 (feet)	Y=40.0 (feet)	Y=50.0 (feet)
	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)
-50.0	3.7929	3.7908	3.6412	3.2602	2.7783	2.3029	1.8881
-49.0	3.9494	3.9471	3.7852	3.3751	2.8613	2.3597	1.9261
-48.0	4.1157	4.1132	3.9377	3.4959	2.9476	2.418	1.9648
-47.0	4.2928	4.2901	4.0995	3.6228	3.0374	2.4781	2.0043
-46.0	4.4815	4.4786	4.2713	3.7563	3.1306	2.5398	2.0444
-45.0	4.683	4.6798	4.454	3.8968	3.2276	2.6033	2.0854
-44.0	4.8985	4.8949	4.6484	4.0448	3.3285	2.6685	2.127
-43.0	5.1291	5.1252	4.8555	4.2007	3.4333	2.7355	2.1694
-42.0	5.3764	5.3721	5.0765	4.3651	3.5424	2.8043	2.2124
-41.0	5.642	5.6373	5.3127	4.5386	3.6517	2.8797	2.2597
-40.0	5.9278	5.9226	5.5654	4.7217	3.7597	2.9567	2.3117
-39.0	6.2359	6.2301	5.8361	4.9151	3.8677	3.0357	2.3697
-38.0	6.5687	6.5623	6.1265	5.1195	4.0	3.1157	2.4337
-37.0	6.9288	6.9217	6.4386	5.3355	4.1557	3.1752	2.437
-36.0	7.3194	7.3115	6.7745	5.5641	4.293	3.2548	2.4836
-35.0	7.744	7.7351	7.1366	5.806	4.4356	3.3361	2.5307
-34.0	8.2066	8.1967	7.5276	6.0622	4.5836	3.4191	2.5781
-33.0	8.712	8.7008	7.9506	6.3335	4.737	3.5037	2.626
-32.0	9.2656	9.2529	8.4091	6.6209	4.8959	3.5899	2.6741
-31.0	9.8737	9.8593	8.9068	6.9256	5.0605	3.6776	2.7225
-30.0	10.5437	10.5272	9.4483	7.2485	5.2308	3.7667	2.771
-29.0	11.2843	11.2654	10.0385	7.5908	5.4067	3.8571	2.8196
-28.0	12.1058	12.0841	10.6833	7.9537	5.5883	3.9487	2.8682
-27.0	13.0204	12.9953	11.3891	8.3383	5.7754	4.0412	2.9168
-26.0	14.0428	14.0136	12.1635	8.7458	5.968	4.1346	2.9651
-25.0	15.1906	15.1565	13.015	9.1773	6.1659	4.2286	3.0131
-24.0	16.4852	16.445	13.9534	9.634	6.3687	4.323	3.0608
-23.0	17.9528	17.9051	14.9901	10.1169	6.5762	4.4176	3.1079
-22.0	19.6256	19.5686	16.1379	10.6268	6.7879	4.5122	3.1544
-21.0	21.5437	21.475	17.4117	11.1644	7.0034	4.6064	3.2002
-20.0	23.7577	23.6742	18.8287	11.7301	7.2219	4.7	3.2451
-19.0	26.3317	26.2291	20.4084	12.3241	7.4428	4.7926	3.289
-18.0	29.3484	29.2209	22.1728	12.946	7.6653	4.8839	3.3318
-17.0	32.9156	32.7552	24.1473	13.5948	7.8883	4.9735	3.3732
-16.0	37.1759	36.9712	26.36	14.2689	8.1107	5.0611	3.4133
-15.0	42.3217	42.0564	28.8419	14.9659	8.3314	5.1462	3.4518
-14.0	48.6173	48.2669	31.6267	15.6824	8.549	5.2284	3.4886
-13.0	56.4326	55.9604	34.7488	16.4138	8.762	5.3074	3.5236
-12.0	66.3012	65.6489	38.2424	17.1545	8.969	5.3826	3.5566
-11.0	79.0131	78.086	42.1372	17.8973	9.1681	5.4538	3.5876
-10.0	95.7799	94.4162	46.4531	18.6338	9.3579	5.5204	3.6163
-9.0	118.5383	116.4469	51.1921	19.3542	9.5364	5.5821	3.6427
-8.0	150.543	147.1643	56.3271	20.0475	9.702	5.6385	3.6666
-7.0	197.6207	191.7863	61.7876	20.7017	9.853	5.6892	3.688
-6.0	271.0863	260.0799	67.4442	21.304	9.9877	5.7339	3.7067
-5.0	395.4641	371.9823	73.0957	21.8416	10.1045	5.7722	3.7227
-4.0	633.0044	572.8721	78.4642	22.3019	10.2022	5.804	3.7359
-3.0	1186.703	979.6678	83.2074	22.6735	10.2795	5.829	3.7463
-2.0	3131.9607	1904.0289	86.9553	22.9466	10.3354	5.8469	3.7537
-1.0	29643.2966	3460.9779	89.3671	23.1136	10.3693	5.8577	3.7581
0.0	22815.6737	3563.8269	90.2004	23.1698	10.3806	5.8614	3.7596
1.0	29643.2966	3460.9779	89.3671	23.1136	10.3693	5.8577	3.7581
2.0	3131.9607	1904.0289	86.9553	22.9466	10.3354	5.8469	3.7537
3.0	1186.703	979.6678	83.2074	22.6735	10.2795	5.829	3.7463
4.0	633.0044	572.8721	78.4642	22.3019	10.2022	5.804	3.7359
5.0	395.4695	371.987	73.0958	21.8416	10.1046	5.7722	3.7227
6.0	271.0863	260.0799	67.4442	21.304	9.9877	5.7339	3.7067
7.0	197.6207	191.7863	61.7876	20.7017	9.853	5.6892	3.688
8.0	150.543	147.1643	56.3271	20.0475	9.702	5.6385	3.6666
9.0	118.5383	116.4469	51.1921	19.3542	9.5364	5.5821	3.6427
10.0	95.7799	94.4162	46.4531	18.6338	9.3579	5.5204	3.6163
11.0	79.0131	78.086	42.1372	17.8973	9.1681	5.4538	3.5876
12.0	66.3012	65.6489	38.2424	17.1545	8.969	5.3826	3.5566
13.0	56.4326	55.9604	34.7488	16.4138	8.762	5.3074	3.5236
14.0	48.6173	48.2669	31.6267	15.6824	8.549	5.2284	3.4886
15.0	42.3217	42.0564	28.8419	14.9659	8.3314	5.1462	3.4518
16.0	37.1759	36.9712	26.36	14.2689	8.1107	5.0611	3.4133
17.0	32.9156	32.7552	24.1473	13.5948	7.8883	4.9735	3.3732
18.0	29.3484	29.2209	22.1728	12.946	7.6653	4.8839	3.3318
19.0	26.3317	26.2291	20.4084	12.3241	7.4428	4.7926	3.289
20.0	23.7577	23.6742	18.8287	11.7301	7.2219	4.7	3.2451
21.0	21.5437	21.475	17.4117	11.1644	7.0034	4.6064	3.2002

Magnetic field at edge of ROW at ground level for underground conductors

22.0	19.6256	19.5686	16.1379	10.6268	6.7879	4.5122	3.1544
23.0	17.9528	17.9051	14.9901	10.1169	6.5762	4.4176	3.1079
24.0	16.4852	16.445	13.9534	9.634	6.3687	4.323	3.0608
25.0	15.1906	15.1565	13.015	9.1773	6.1659	4.2286	3.0131
26.0	14.0428	14.0136	12.1635	8.7458	5.968	4.1346	2.9651
27.0	13.0204	12.9953	11.3891	8.3383	5.7754	4.0412	2.9168
28.0	12.1058	12.0841	10.6833	7.9537	5.5883	3.9487	2.8682
29.0	11.2843	11.2654	10.0385	7.5908	5.4067	3.8571	2.8196
30.0	10.5437	10.5272	9.4483	7.2485	5.2308	3.7667	2.771
31.0	9.8737	9.8593	8.9068	6.9256	5.0605	3.6776	2.7225
32.0	9.2656	9.2529	8.4091	6.6209	4.8959	3.5899	2.6741
33.0	8.712	8.7008	7.9506	6.3335	4.737	3.5037	2.626
34.0	8.2066	8.1967	7.5276	6.0622	4.5836	3.4191	2.5781
35.0	7.744	7.7351	7.1366	5.806	4.4356	3.3361	2.5307
36.0	7.3194	7.3115	6.7745	5.5641	4.293	3.2548	2.4836
37.0	6.9288	6.9217	6.4386	5.3355	4.1557	3.1752	2.437
38.0	6.5687	6.5623	6.1265	5.1195	4.0234	3.0974	2.3909
39.0	6.2359	6.2301	5.8361	4.9151	3.8961	3.0214	2.3454
40.0	5.9278	5.9226	5.5654	4.7217	3.7736	2.9472	2.3004
41.0	5.642	5.6373	5.3127	4.5386	3.6558	2.8748	2.2561
42.0	5.3764	5.3721	5.0765	4.3651	3.5424	2.8043	2.2124
43.0	5.1291	5.1252	4.8555	4.2007	3.4333	2.7355	2.1694
44.0	4.8985	4.8949	4.6484	4.0448	3.3285	2.6685	2.127
45.0	4.6831	4.6798	4.454	3.8968	3.2276	2.6033	2.0854
46.0	4.4815	4.4786	4.2713	3.7563	3.1306	2.5398	2.0444
47.0	4.2928	4.2901	4.0995	3.6228	3.0374	2.4781	2.0043
48.0	4.1157	4.1132	3.9377	3.4959	2.9476	2.418	1.9648
49.0	3.9494	3.9471	3.7852	3.3751	2.8613	2.3597	1.9261
50.0	3.7929	3.7908	3.6412	3.2602	2.7783	2.3029	1.8881

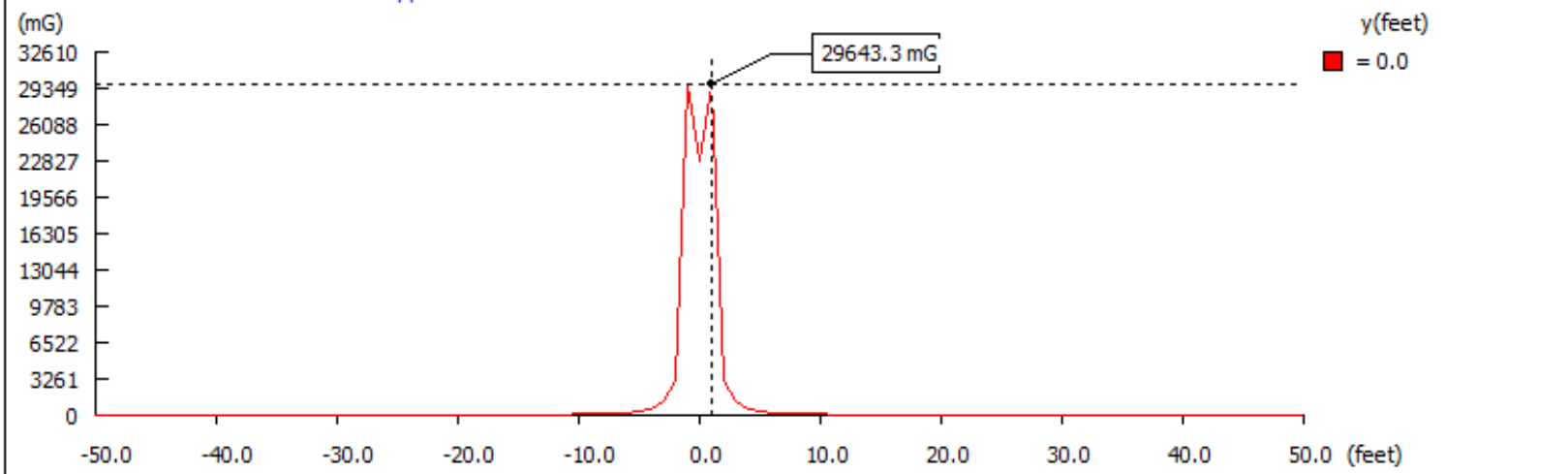
Peak value found at:

X (feet)	Y=0.0 (feet)	Y=1.0 (feet)	Y=10.0 (feet)	Y=20.0 (feet)	Y=30.0 (feet)	Y=40.0 (feet)	Y=50.0 (feet)
	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)	B (mG)
-1.0	29643.2966	3460.9779	891.3671	23.1136	10.3693	5.8577	3.7581

Magnetic field at edge of ROW at ground level for underground conductors

50 ft from conductor centerline (edge of 100 ft ROW)

Line Cut 10A - Underground Riser Structure



Input data:

Circuit No.	Phase	X (feet)	Y (feet)	Ampacity	Angle
1	A	-0.925	0.2	1127.0	0.0
1	B	-0.555	0.2	1127.0	-120.0
1	C	-0.185	0.2	1127.0	120.0
2	A	0.185	0.2	1127.0	0.0
2	B	0.555	0.2	1127.0	-120.0
2	C	0.925	0.2	1127.0	120.0

X Min: X Max: Step X: feet

☒ Add a range of Y values
☐ Add a single Y value

Y Min: feet
 Y Max: feet
 Step Y: feet

> < <<

0.0
1.0
10.0
20.0
30.0
40.0
50.0

Save...

Default Ok Cancel

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #10B	100	3.2	60	0.1	0	111.5	100

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #10B- Line Cut #10B**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

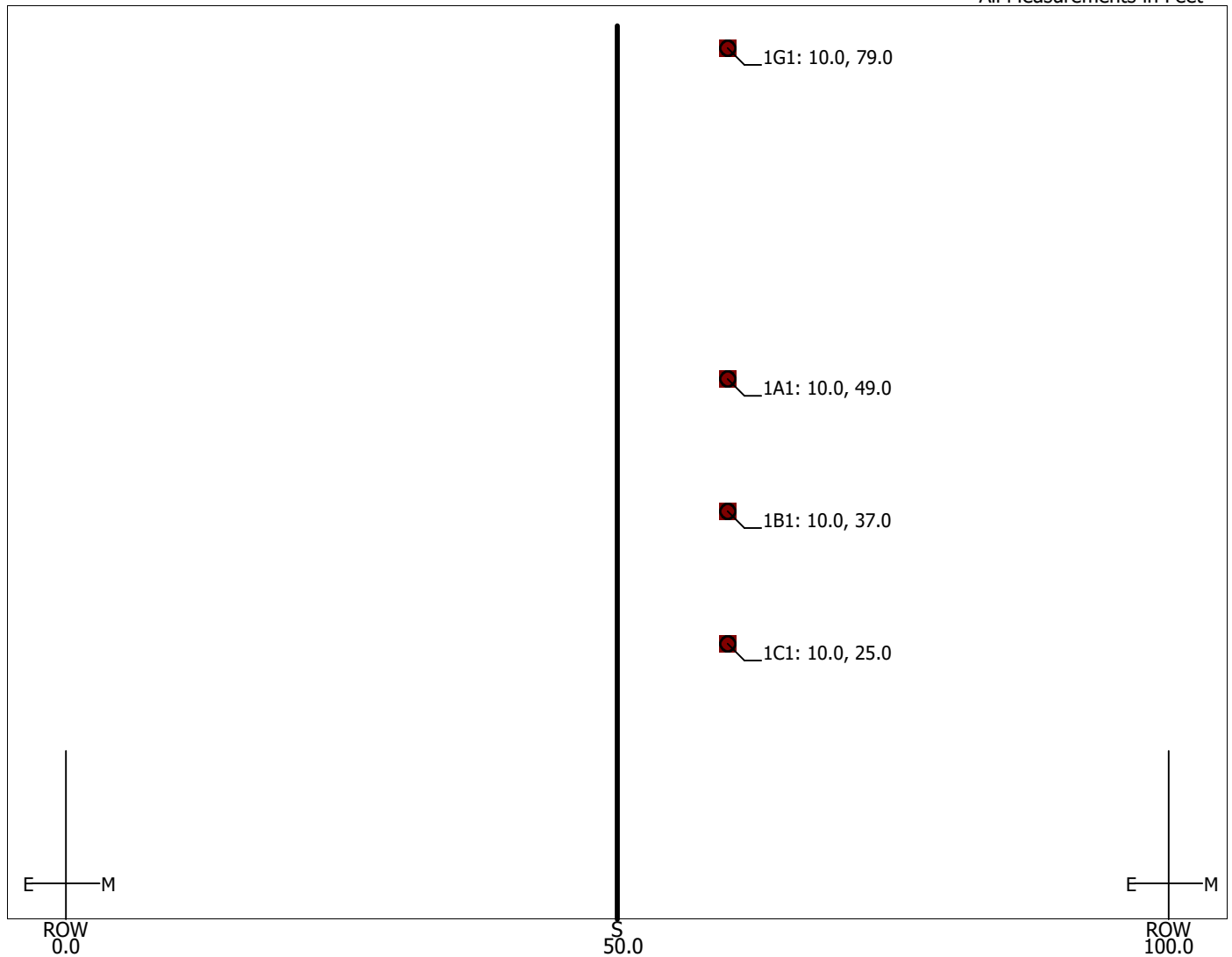
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	60.00	10.00	49.00	1	1.26	0.00	242.0	0	2253
1B1	60.00	10.00	37.00	1	1.26	0.00	242.0	120	2253
1C1	60.00	10.00	25.00	1	1.26	0.00	242.0	240	2253
1G1	60.00	10.00	79.00	1	0.69	0.00	0.0	0	0

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #11	100	3.2	50	0.1	100	83.3	100

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #11- Line Cut #11**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

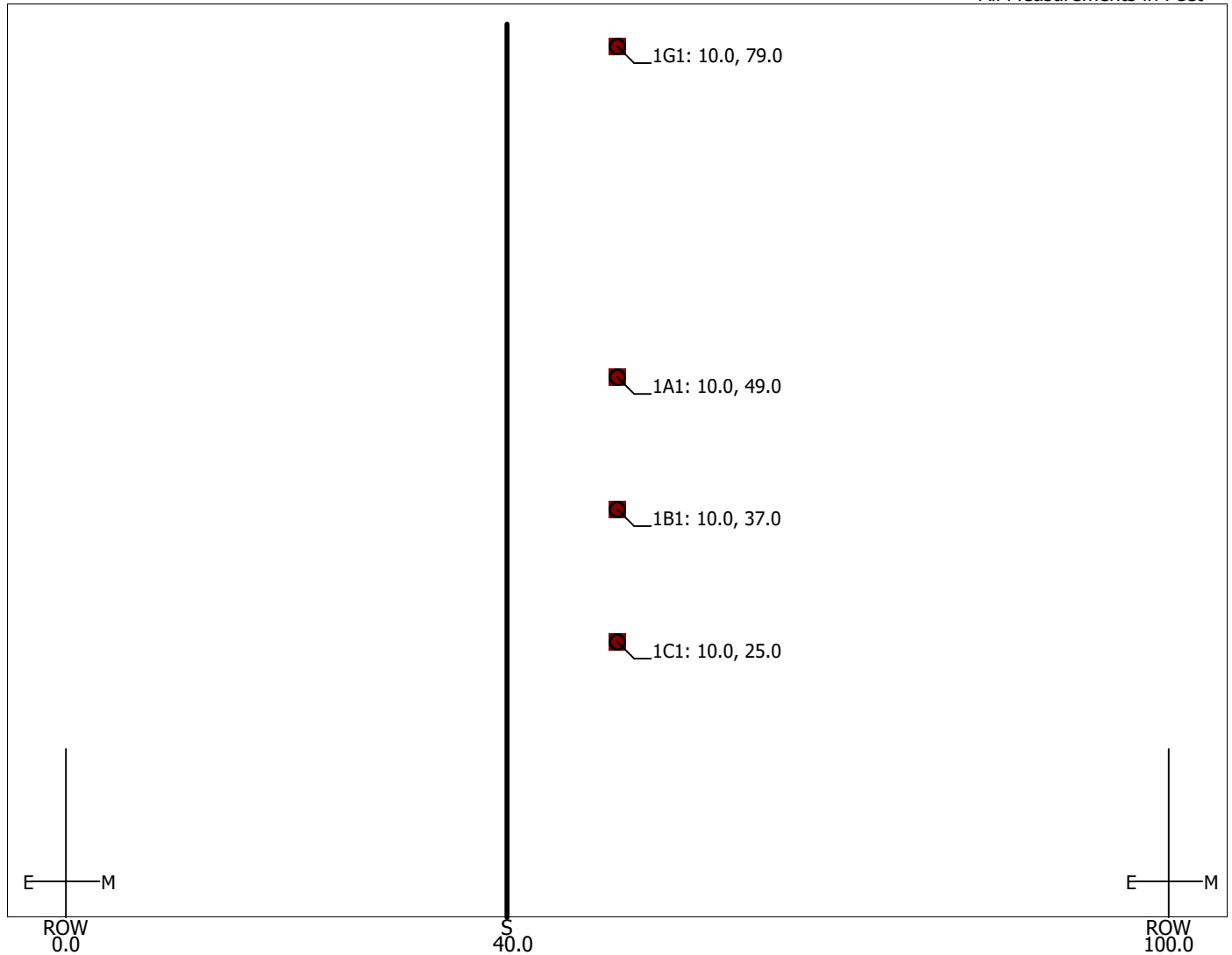
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	50.00	10.00	49.00	1	1.26	0.00	242.0	0	2253
1B1	50.00	10.00	37.00	1	1.26	0.00	242.0	120	2253
1C1	50.00	10.00	25.00	1	1.26	0.00	242.0	240	2253
1G1	50.00	10.00	79.00	1	0.69	0.00	0.0	0	0

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

St. Cloud East - Magnolia Ranch North (7-2934)

Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

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Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #12A	260	6.4	56	0.1	260	57.8	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #12A- Line Cut #12A**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	40.00	-10.00	51.00	1	1.26	0.00	242.0	0	-2253
1B1	40.00	-10.00	38.00	1	1.26	0.00	242.0	120	-2253
1C1	40.00	-10.00	25.00	1	1.26	0.00	242.0	240	-2253
1G1	40.00	-10.00	79.00	1	0.69	0.00	0.0	0	0

7-1732

Circuit Name

230 kV

Rated Voltage

Existing Circuit

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	100.00	-10.00	46.00	1	1.20	0.00	242.0	0	1372
2B1	100.00	-10.00	35.50	1	1.20	0.00	242.0	120	1372
2C1	100.00	-10.00	25.00	1	1.20	0.00	242.0	240	1372
2G1	100.00	-10.00	73.00	1	0.69	0.00	0.0	0	0
2A2	120.00	10.00	46.00	1	1.20	0.00	242.0	0	1372
2B2	120.00	10.00	35.50	1	1.20	0.00	242.0	120	1372
2C2	120.00	10.00	25.00	1	1.20	0.00	242.0	240	1372
2G2	120.00	10.00	73.00	1	0.69	0.00	0.0	0	0

7-1734

Circuit Name

230 kV

Rated Voltage

Existing Circuit

New/Existing

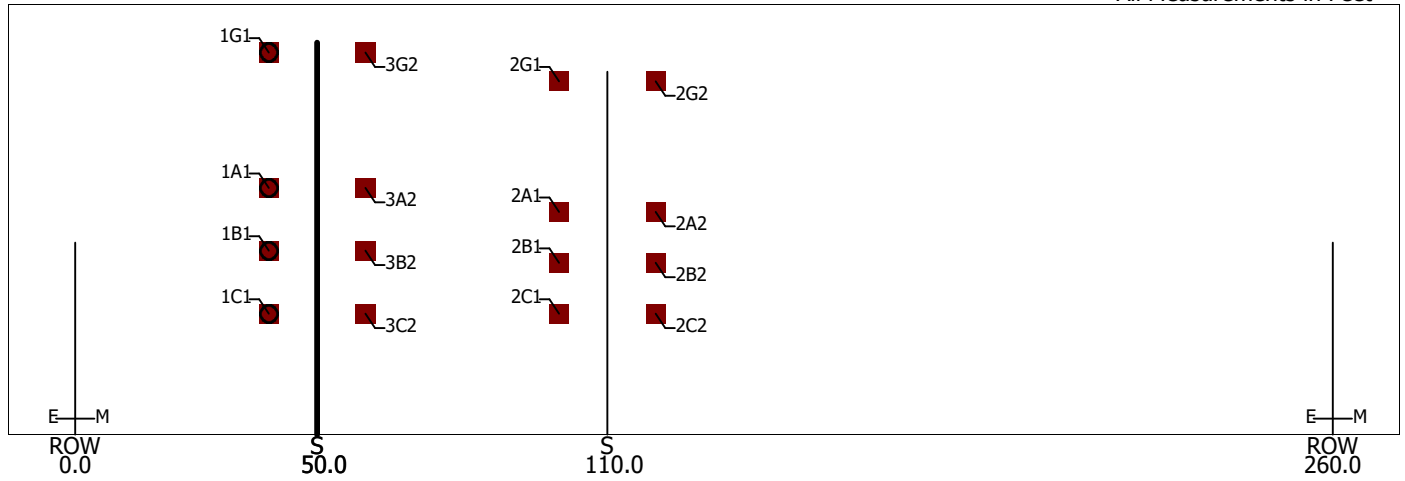
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
3A2	60.00	10.00	51.00	2	1.26	18.00	242.0	0	3781
3B2	60.00	10.00	38.00	2	1.26	18.00	242.0	120	3781
3C2	60.00	10.00	25.00	2	1.26	18.00	242.0	240	3781
3G2	60.00	10.00	79.00	1	0.69	0.00	0.0	0	0

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Report on Compliance with Electric and Magnetic Field (EMF) Standards

Agent/Facility Information

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Name of Transmission Line/InterestPoint

Orlando Utilities Commission

100 West Anderson St.

Orlando, FL 32801

Name and Address of Facility (Utility) Owner

W. Christopher Browder

OUC, Chief Legal Officer

100 West Anderson St.

Orlando, FL 32801

Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

Matthew Kapusta PE 79576

Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #12B	260	6.4	56	0.1	260	147.1	0

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #12B- Line Cut #12B**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	40.00	-10.00	51.00	1	1.26	0.00	242.0	0	200
1B1	40.00	-10.00	38.00	1	1.26	0.00	242.0	120	200
1C1	40.00	-10.00	25.00	1	1.26	0.00	242.0	240	200
1G1	40.00	-10.00	79.00	1	0.69	0.00	0.0	0	0

7-1732

Circuit Name

230 kV

Rated Voltage

Existing Circuit

New/Existing

Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
2A1	100.00	-10.00	46.00	1	1.20	0.00	242.0	0	1372
2B1	100.00	-10.00	35.50	1	1.20	0.00	242.0	120	1372
2C1	100.00	-10.00	25.00	1	1.20	0.00	242.0	240	1372
2G1	100.00	-10.00	73.00	1	0.69	0.00	0.0	0	0
2A2	120.00	10.00	46.00	1	1.20	0.00	242.0	0	1372
2B2	120.00	10.00	35.50	1	1.20	0.00	242.0	120	1372
2C2	120.00	10.00	25.00	1	1.20	0.00	242.0	240	1372
2G2	120.00	10.00	73.00	1	0.69	0.00	0.0	0	0

7-1734

Circuit Name

230 kV

Rated Voltage

Existing Circuit

New/Existing

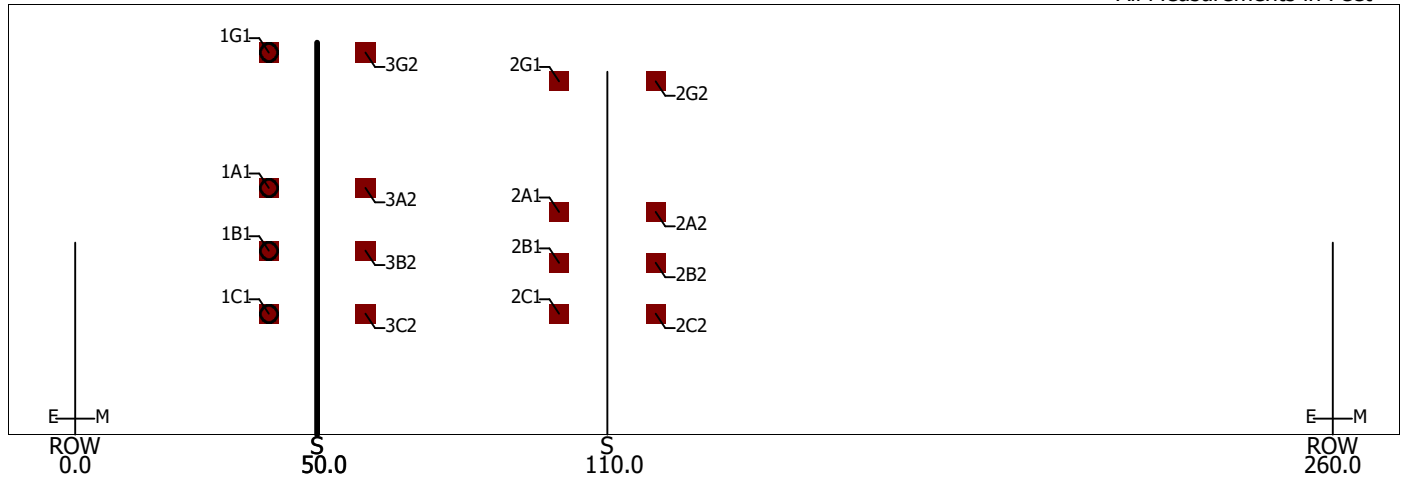
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
3A2	60.00	10.00	51.00	2	1.26	18.00	242.0	0	3781
3B2	60.00	10.00	38.00	2	1.26	18.00	242.0	120	3781
3C2	60.00	10.00	25.00	2	1.26	18.00	242.0	240	3781
3G2	60.00	10.00	79.00	1	0.69	0.00	0.0	0	0

Points of Interest

None

Phase Configuration

All Measurements in Feet



Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

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Agent/Facility Information

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Name of Transmission Line/InterestPoint

Orlando Utilities Commission

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Orlando, FL 32801

Name and Address of Facility (Utility) Owner

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OUC, Chief Legal Officer

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Name and Address of Authorized Agent

January 02, 2023

Date of Proposed Construction

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Burns & McDonnell

2301 Maitland Center Parkway

Maitland, FL 32751

Name and Address of Professional Engineer

Signature of Authorized Agent

Date

Signature and Seal of Professional Engineer

Date

Field Strength Information

Transmission Lines

Cross Section	Right-of-Way (ROW) Width (ft)	Maximum Calculated Fields and Distance From ROW Left					
		Electric				Magnetic	
		Within ROW		At Edge of ROW		At Edge of ROW	
		(kV/m)	(ft)	(kV/m)	(ft)	(mG)	(ft)
Line Cut #13	100	3.2	69	0.4	100	147.8	100

Substations

None

Florida Department of Environmental Protection

Twin Tower Office Bldg * 2600 Blair Stone Road * Tallahassee, Florida 32399-2400

Details for CrossSection: **Line Cut #13- Line Cut #13**

7-2934

Circuit Name

230 kV

Rated Voltage

NEW CIRCUIT

New/Existing

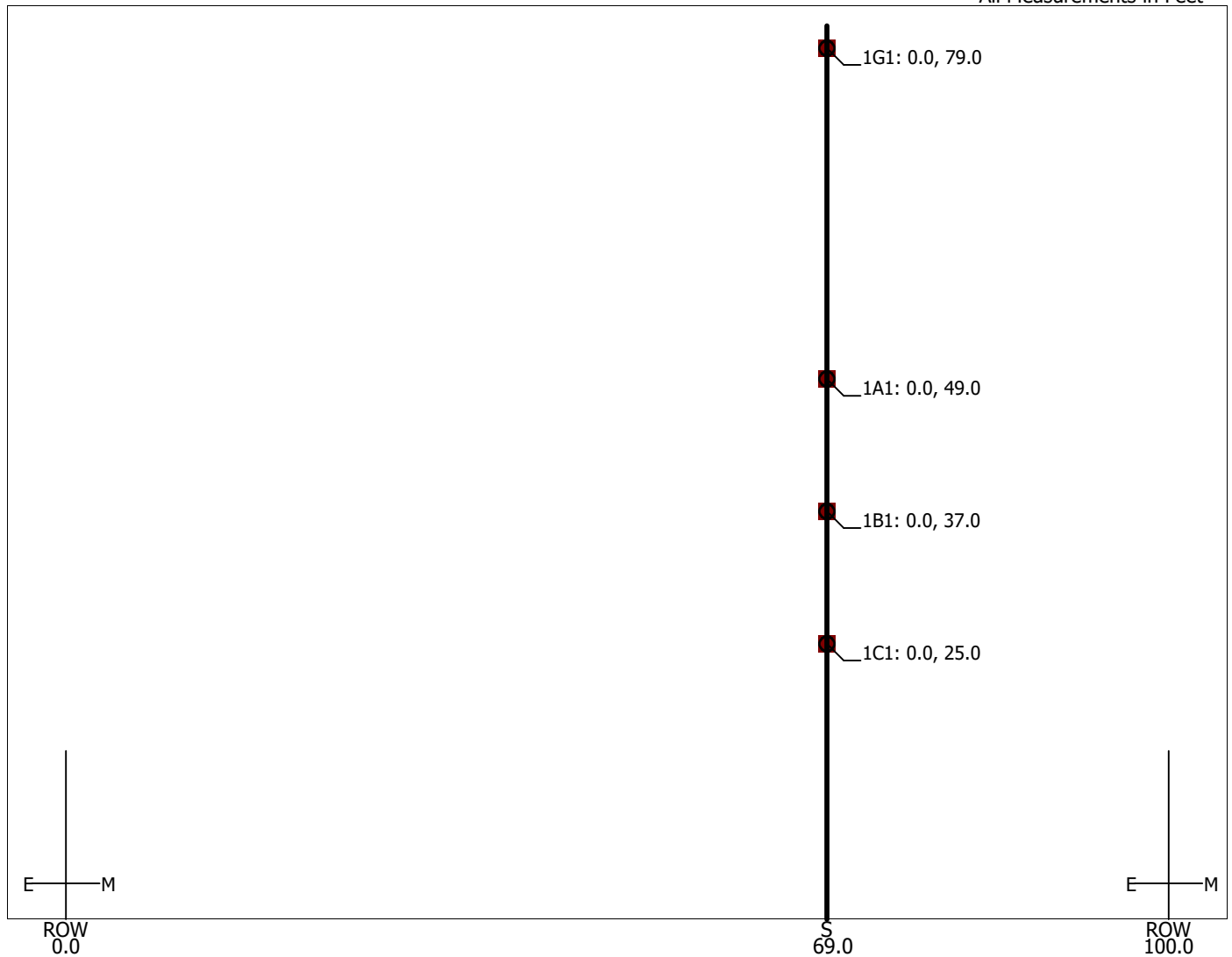
Id	Dist From Left ROW (ft)	Dist From Circuit CL (ft)	Minimum Height (ft)	SubConductors			Maximum Voltage (kV)	Angle (Degrees)	MCR (Amps)
				# of	Diameter (in)	Spacing (in)			
1A1	69.00	0.00	49.00	1	1.26	0.00	242.0	0	2253
1B1	69.00	0.00	37.00	1	1.26	0.00	242.0	120	2253
1C1	69.00	0.00	25.00	1	1.26	0.00	242.0	240	2253
1G1	69.00	0.00	79.00	1	0.69	0.00	0.0	0	0

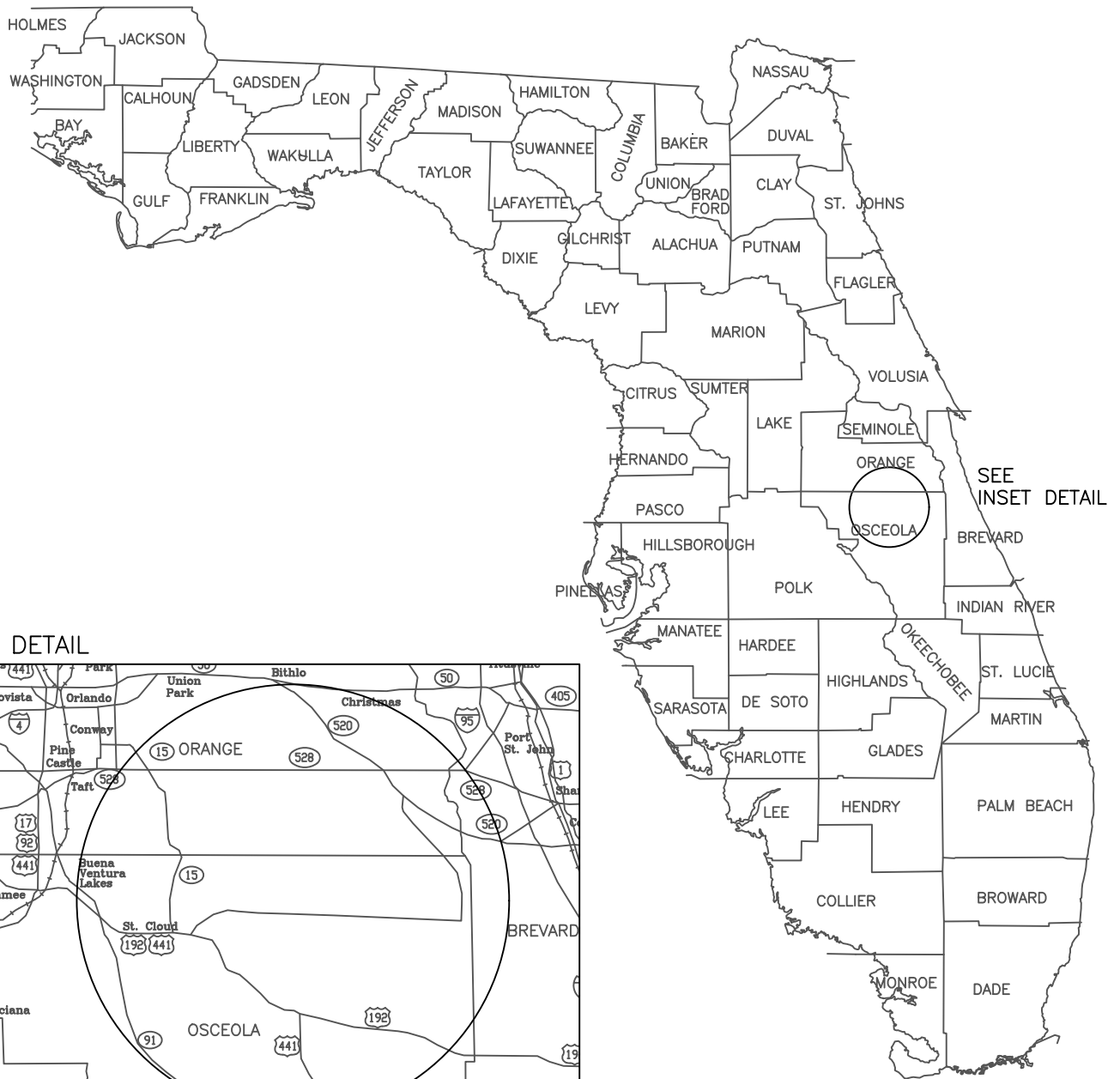
Points of Interest

None

Phase Configuration

All Measurements in Feet





PROJECT INFORMATION

TYPE OF CONSTRUCTION: TRANSMISSION

LINE LENGTH: 21 MILES (APPROX.)

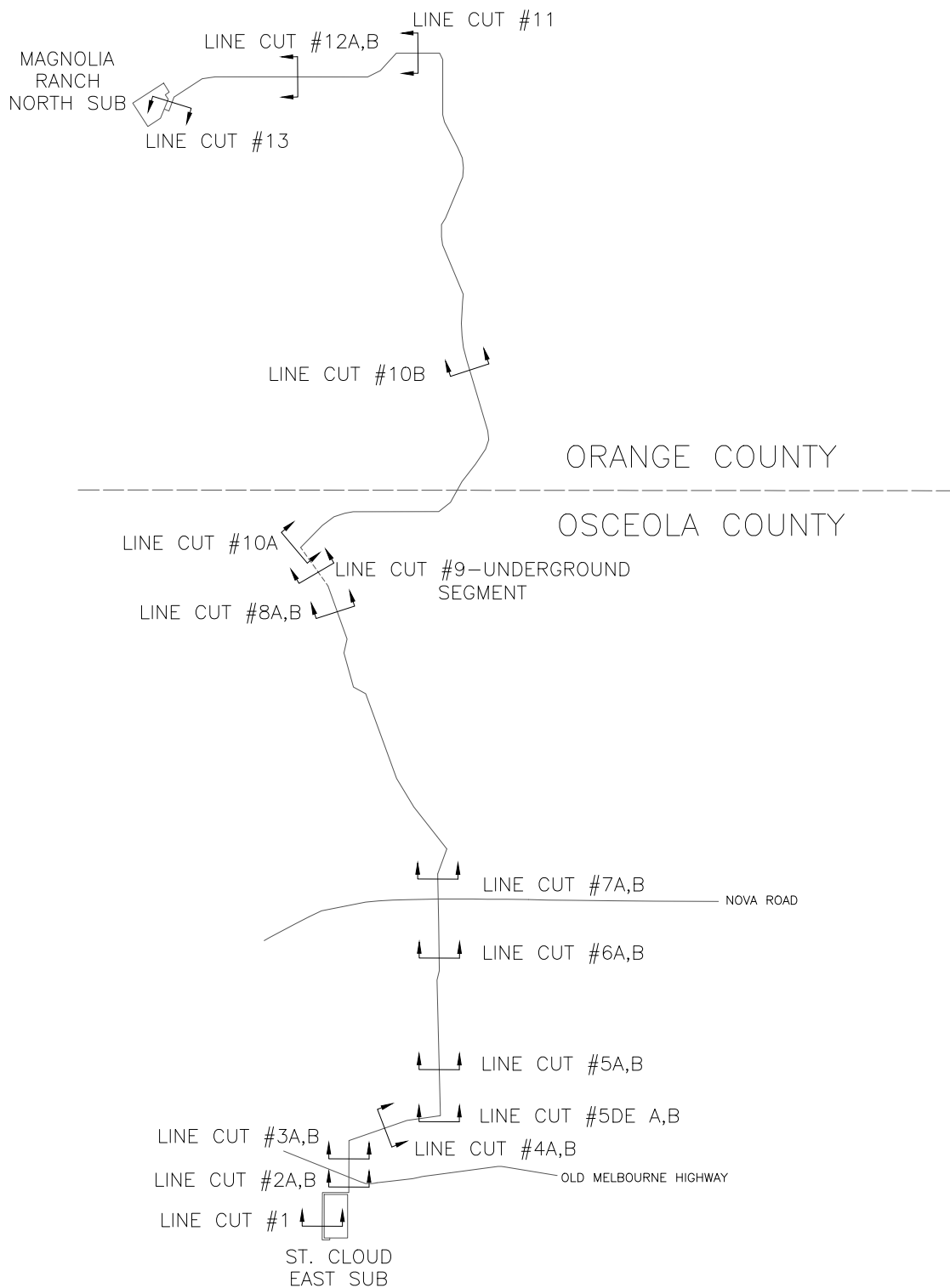
CMI DATE: 01/02/23 IN SERVICE DATE: 06/01/25

SECTION: TWP.: RGE.:
 1,9,10,12,14,15, 24,25,26 26, 31, 32
 18,27,30,31,34

BURNS & MCDONNELL



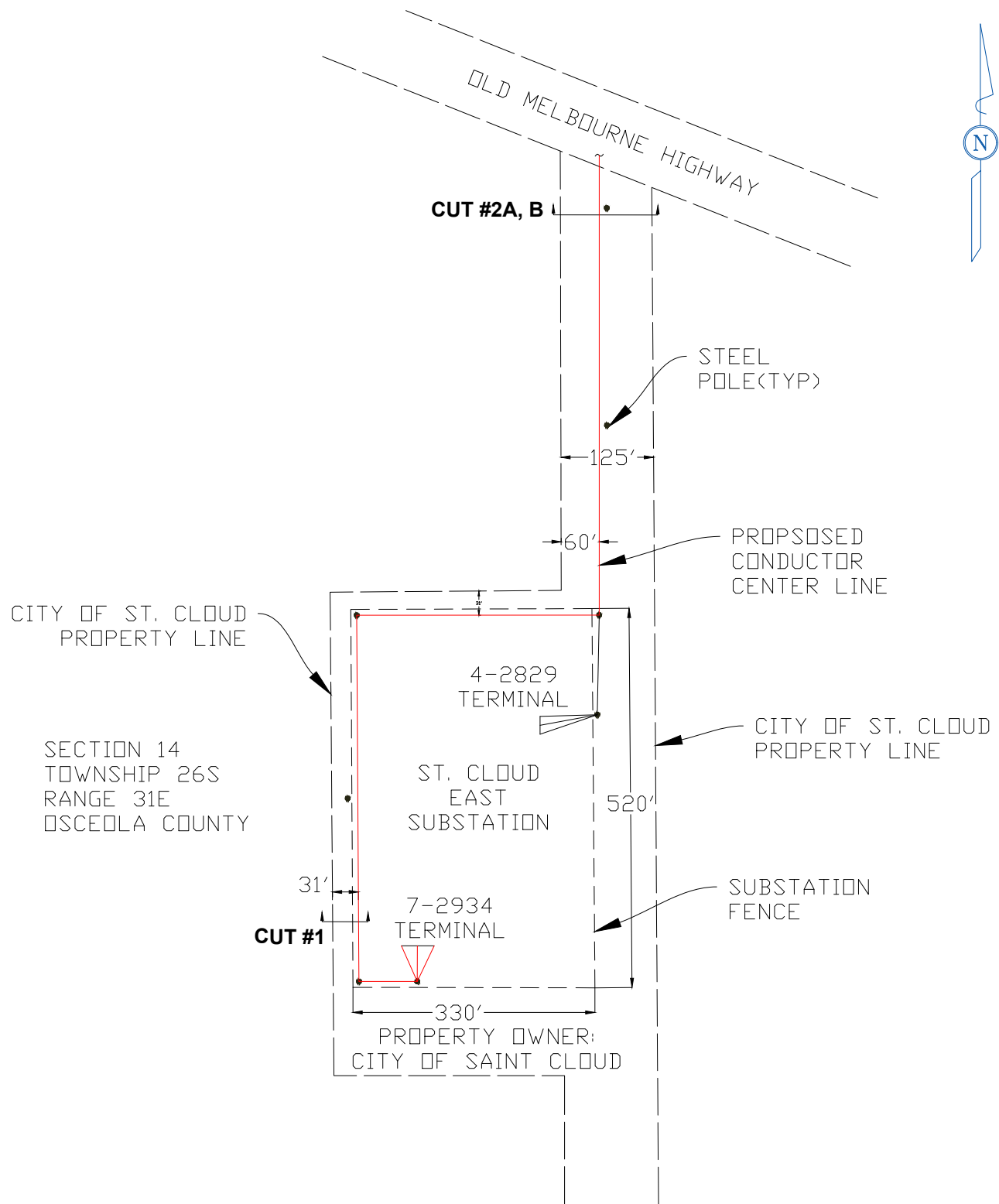
07/21 DATE	V: H:	NTS NTS SCALE	LINE ENGINEERING
DMT DRAWN	DMT TECH	RWR CHECK	LOCATION MAP ST. CLOUD E. – MAG. RANCH N. 230–KV LINE 7–2934 TRANSMISSION LINE PROJECT
1 OF 1 SHEET	DWG.	EMF–3000	



BURNS & MCDONNELL



07/21 DATE	V: NTS H: NTS SCALE	LINE ENGINEERING
DMT DRAWN	DMT TECH	LINE ROUTE ST. CLOUD E. - MAG. RANCH N. 230-kV LINE 7-2934 21 MILES (APPROX.)
RWR CHECK	RWR ENGR	
1 OF 1 SHEET	DWG.	EMF 3001



BURNS & MCDONNELL



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUTS 1 & 2
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

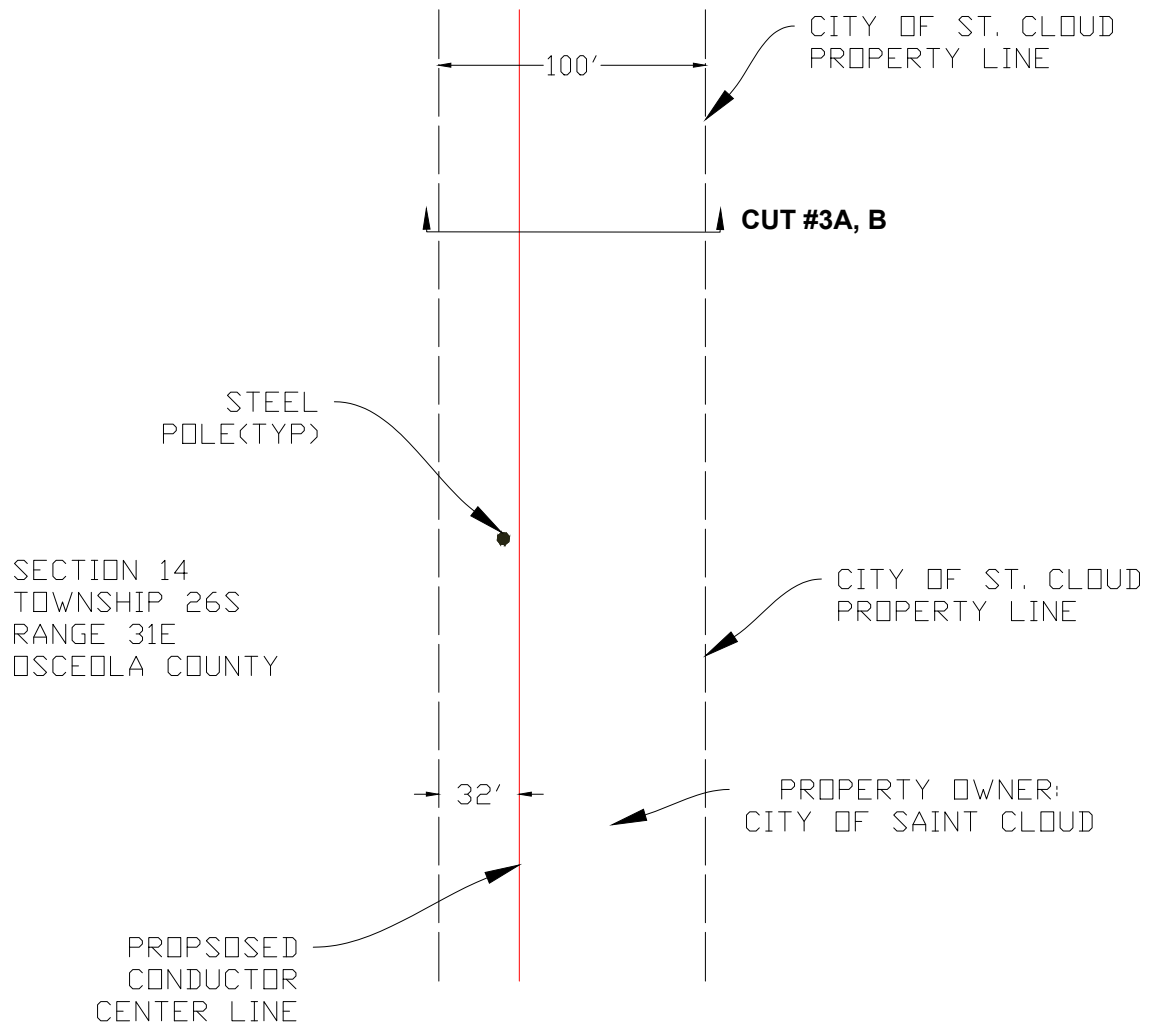
RWR
CHECK

RWR
ENGR

1 OF 1
SHEET

DWG.

EMF 3002



BURNS  **MCDONNELL**



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUT 3
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

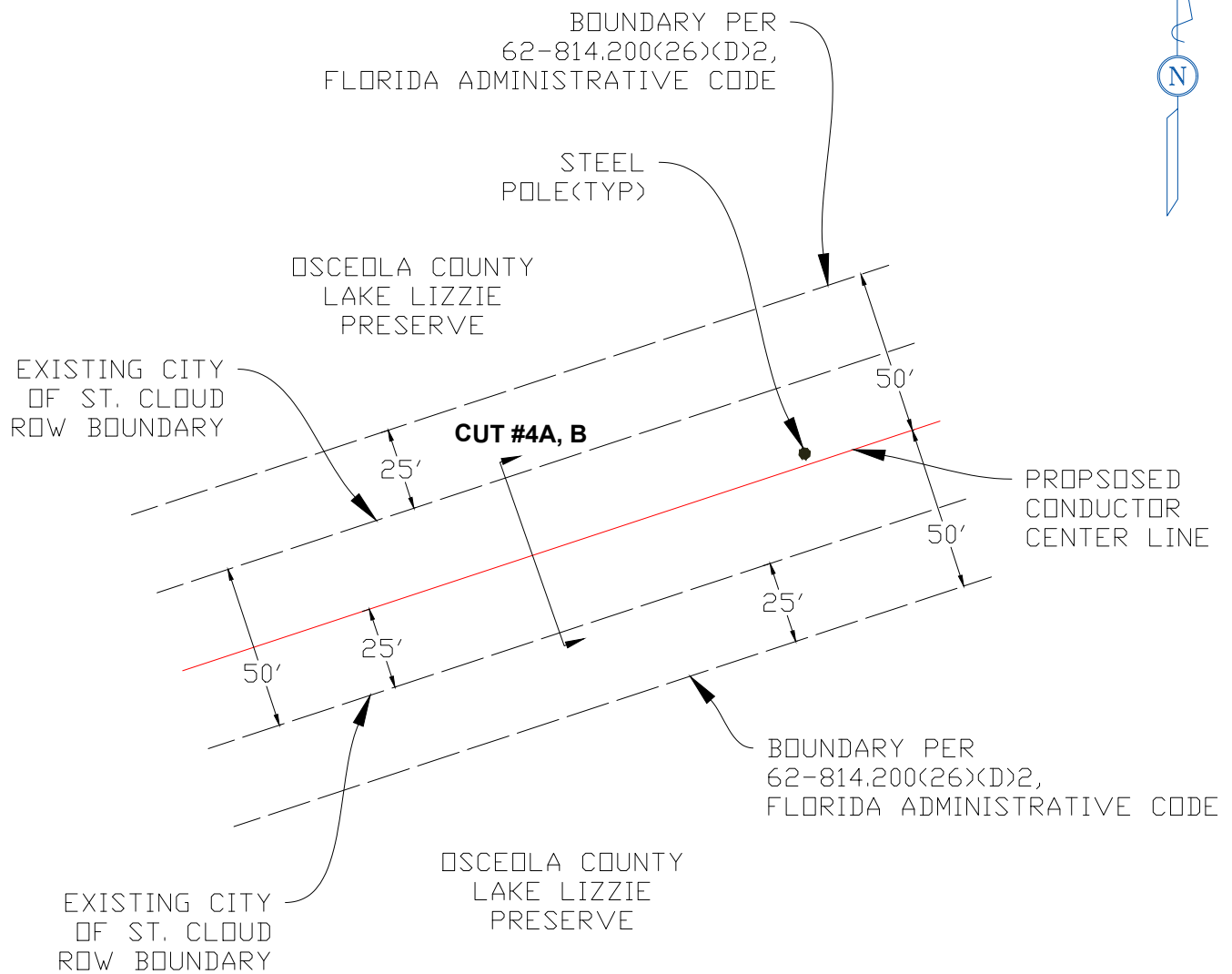
RWR
CHECK

RWR
ENGR

1 OF 1
SHEET

DWG.

EMF 3003



SECTION 12
TOWNSHIP 26S
RANGE 31E
OSCEOLA COUNTY

BURNS  **MCDONNELL**



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUT 4
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

RWR
CHECK

RWR
ENGR

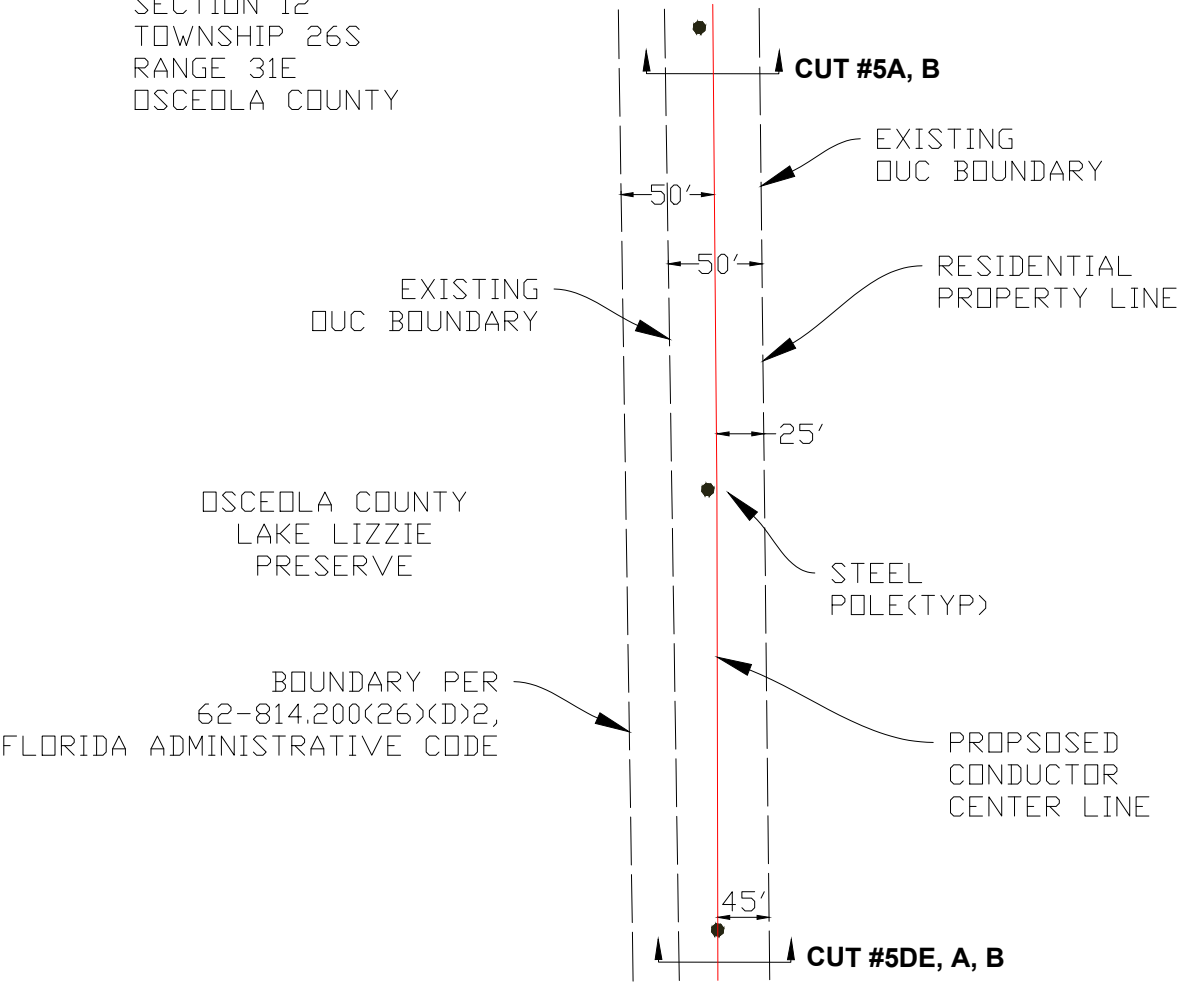
1 OF 1
SHEET

DWG.

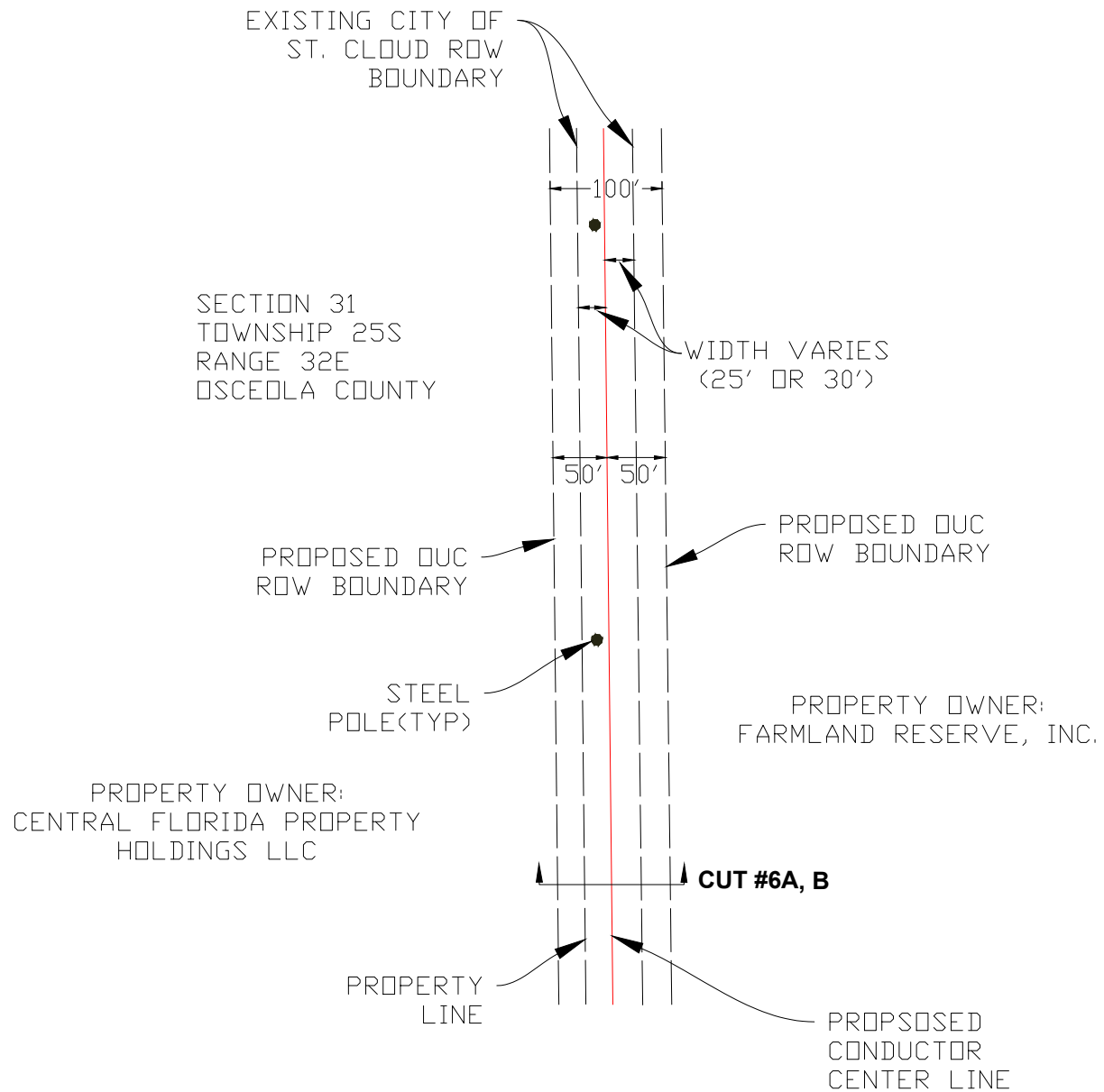
EMF 3004



SECTION 12
TOWNSHIP 26S
RANGE 31E
OSCEOLA COUNTY



BURNS  MCDONNELL		 <i>The Reliable One</i>
07/21 DATE	V: H: NTS NTS SCALE	LINE ENGINEERING
DMT DRAWN	DMT TECH	LINE CUT 5 ST. CLOUD E. - MAG RANCH N. 230-kV LINE 7-2934 TRANSMISSION LINE PROJECT
RWR CHECK	RWR ENGR	
1 OF 1 SHEET	DWG.	EMF 3005



BURNS  **MCDONNELL**



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUT 6
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

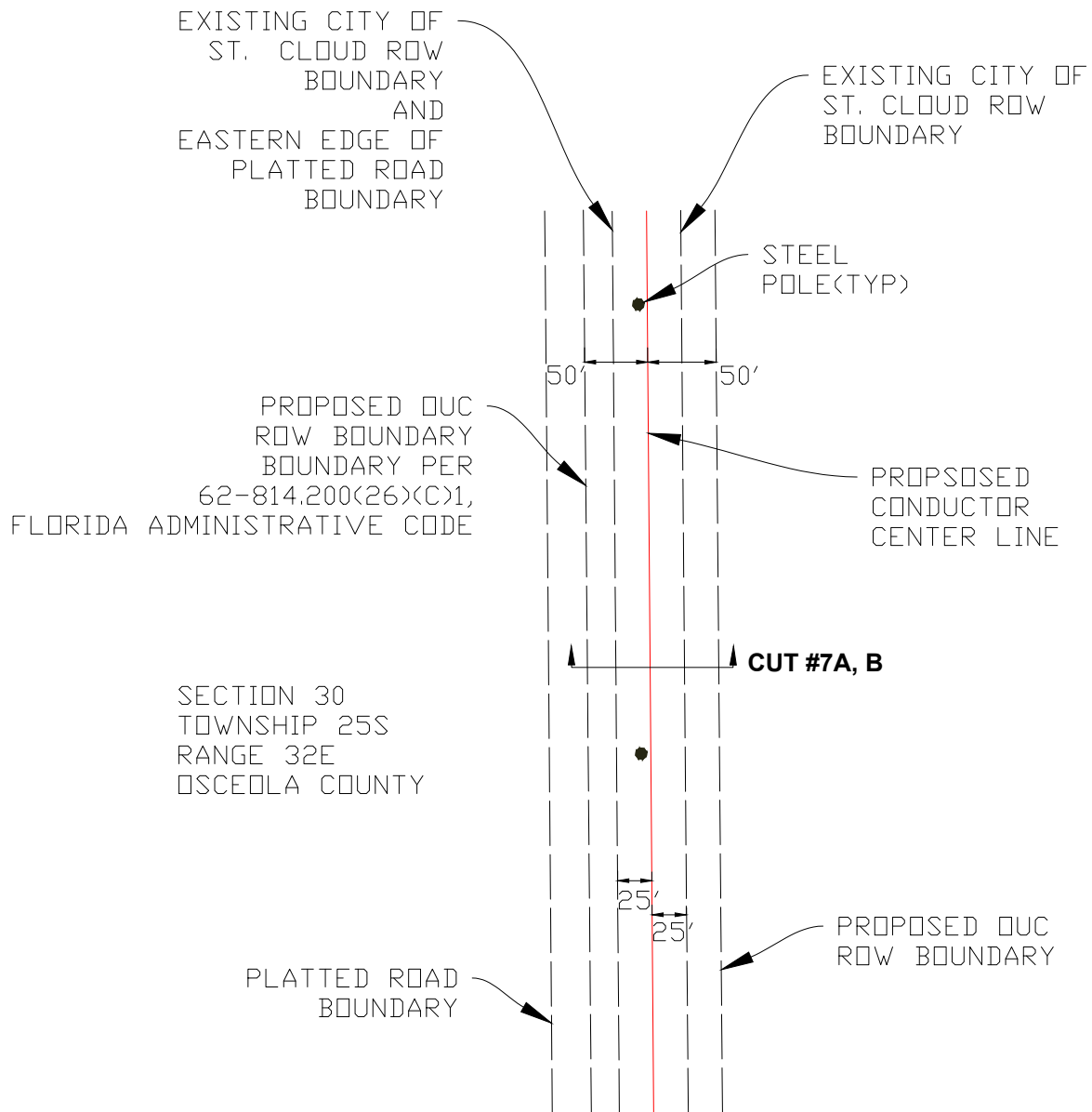
RWR
CHECK

RWR
ENGR

1 OF 1
SHEET

DWG.

EMF 3006



BURNS  **MCDONNELL**



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUT 7
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

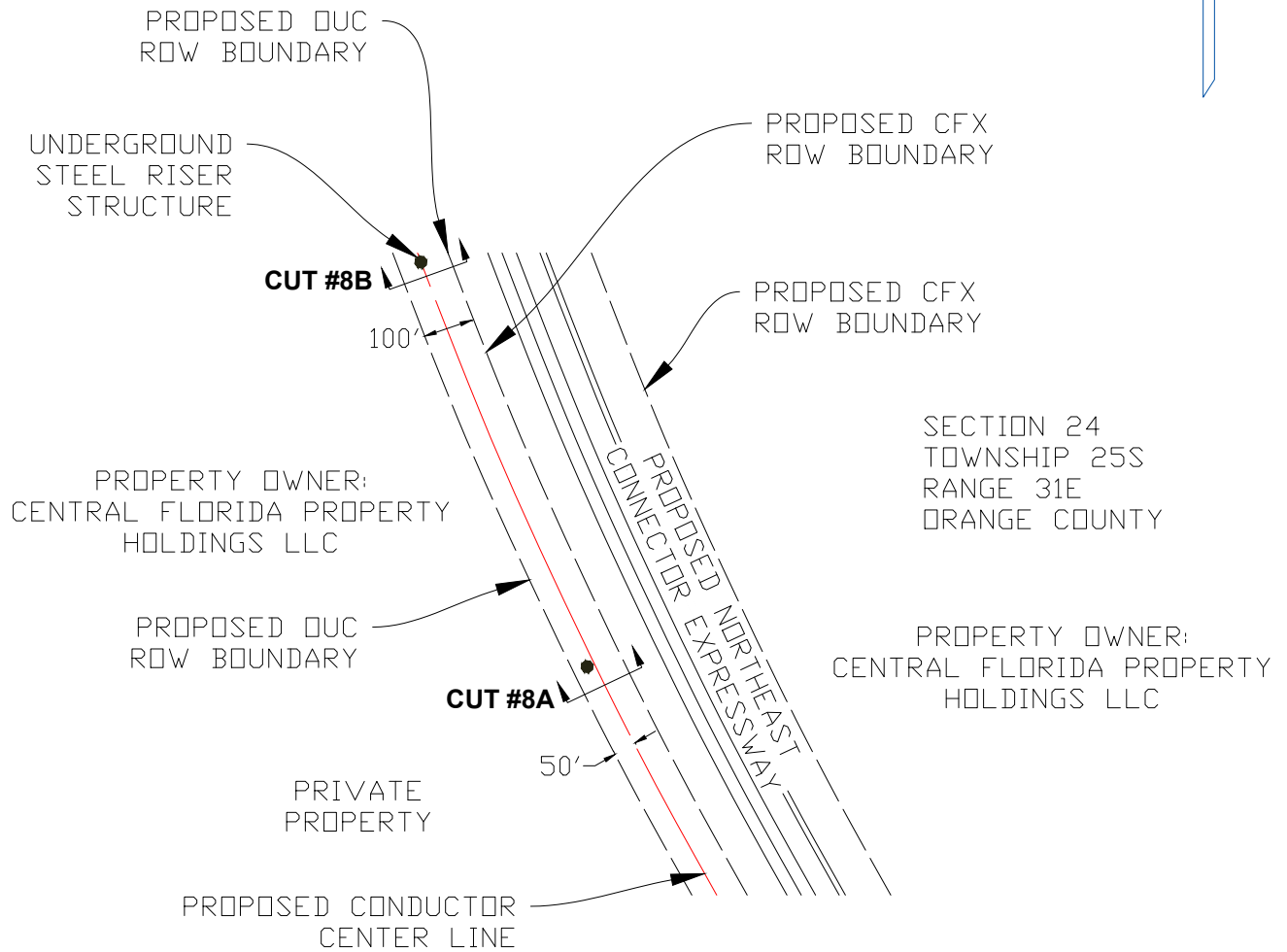
RWR
CHECK

RWR
ENGR

1 OF 1
SHEET

DWG.

EMF 3007



BURNS  **MCDONNELL**



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUT 8
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

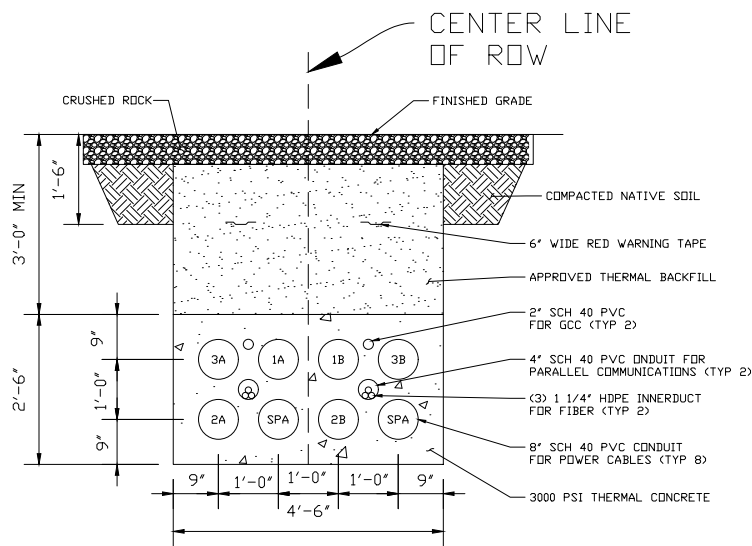
RWR
CHECK

RWR
ENGR

1 OF 1
SHEET

DWG.

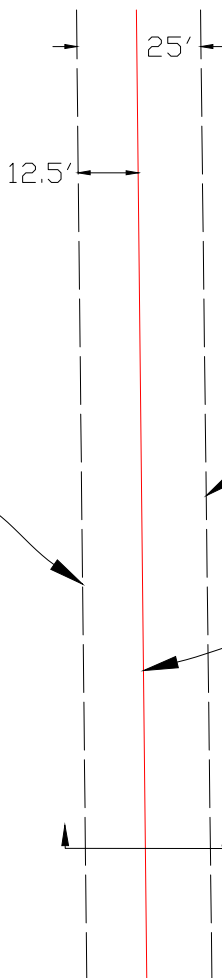
EMF 3008



CUT #9
8 CONDUIT 2 CABLES PER PHASE
DUCT BANK

SECTION 31
TOWNSHIP 25S
RANGE 32E
OSCEOLA COUNTY

PROPOSED
OUC UG ROW
BOUNDARY



PROPOSED
OUC UG ROW
BOUNDARY

PROPOSED CONDUCTOR
CENTER LINE OF ROW
AND PROPOSED DUCT BANK

CUT #9

BURNS **MCDONNELL**



07/21
DATE

V: NTS
H: NTS
SCALE

DMT
DRAWN

DMT
TECH

RWR
CHECK

RWR
ENGR

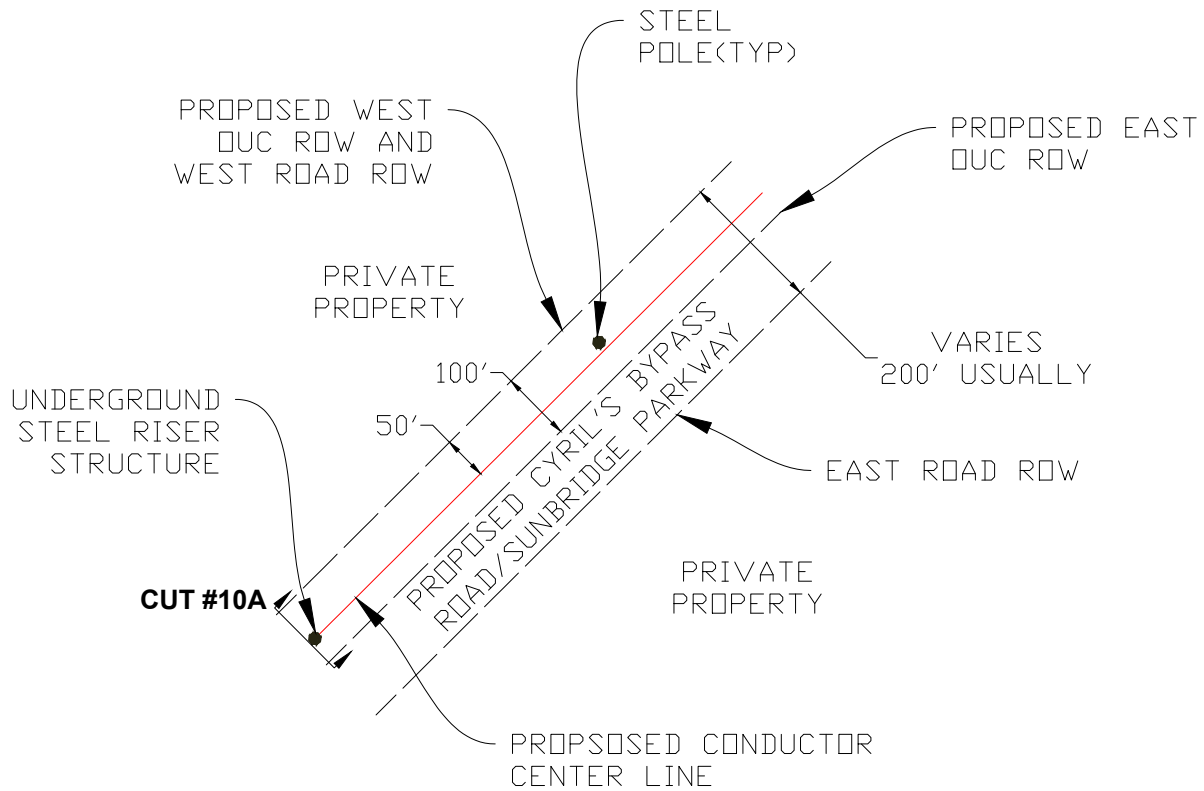
LINE ENGINEERING

LINE CUT 9
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

1 OF 1
SHEET

DWG.

EMF 3009



BURNS  **MCDONNELL**



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUT 10
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

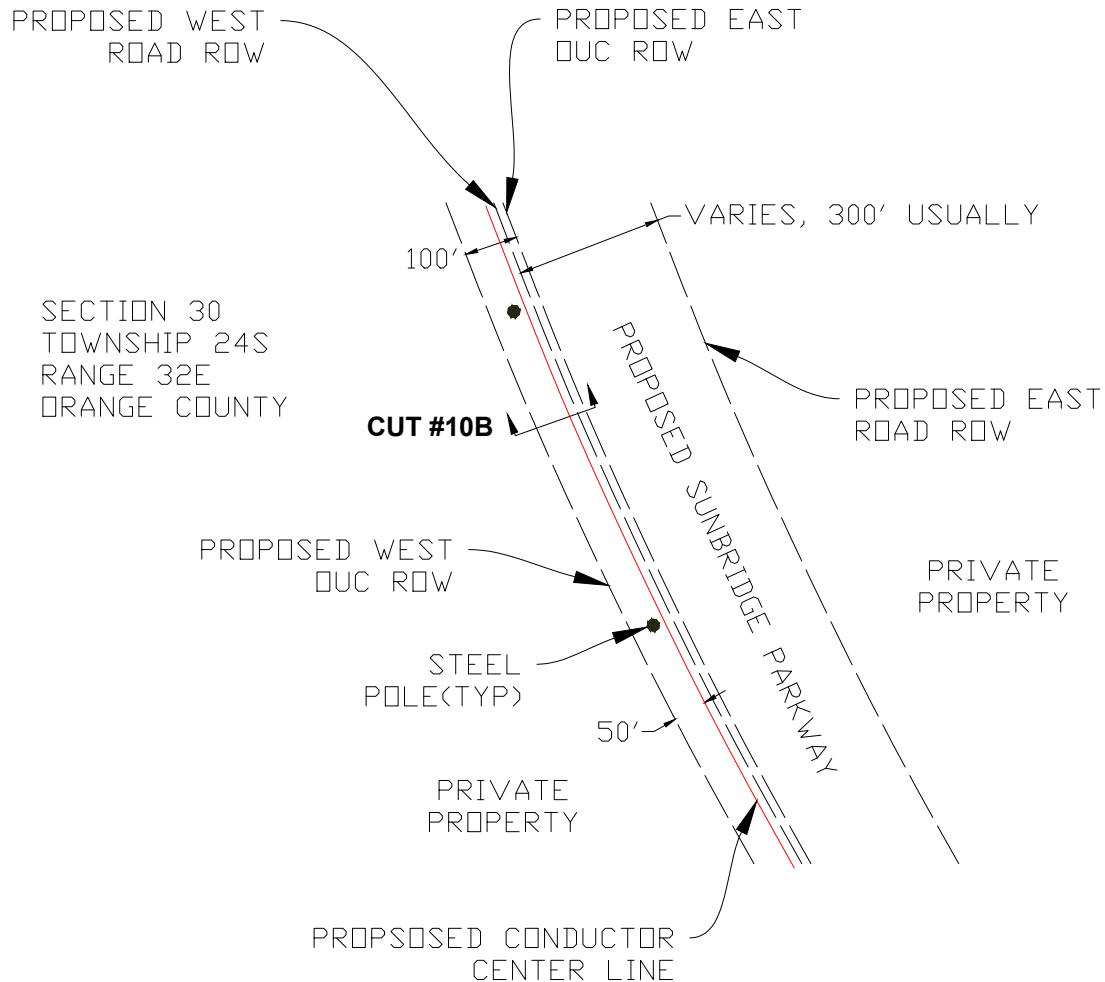
RWR
CHECK

RWR
ENGR

1 OF 2
SHEET

DWG.

EMF 3010



BURNS  **MCDONNELL**



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUT 10
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

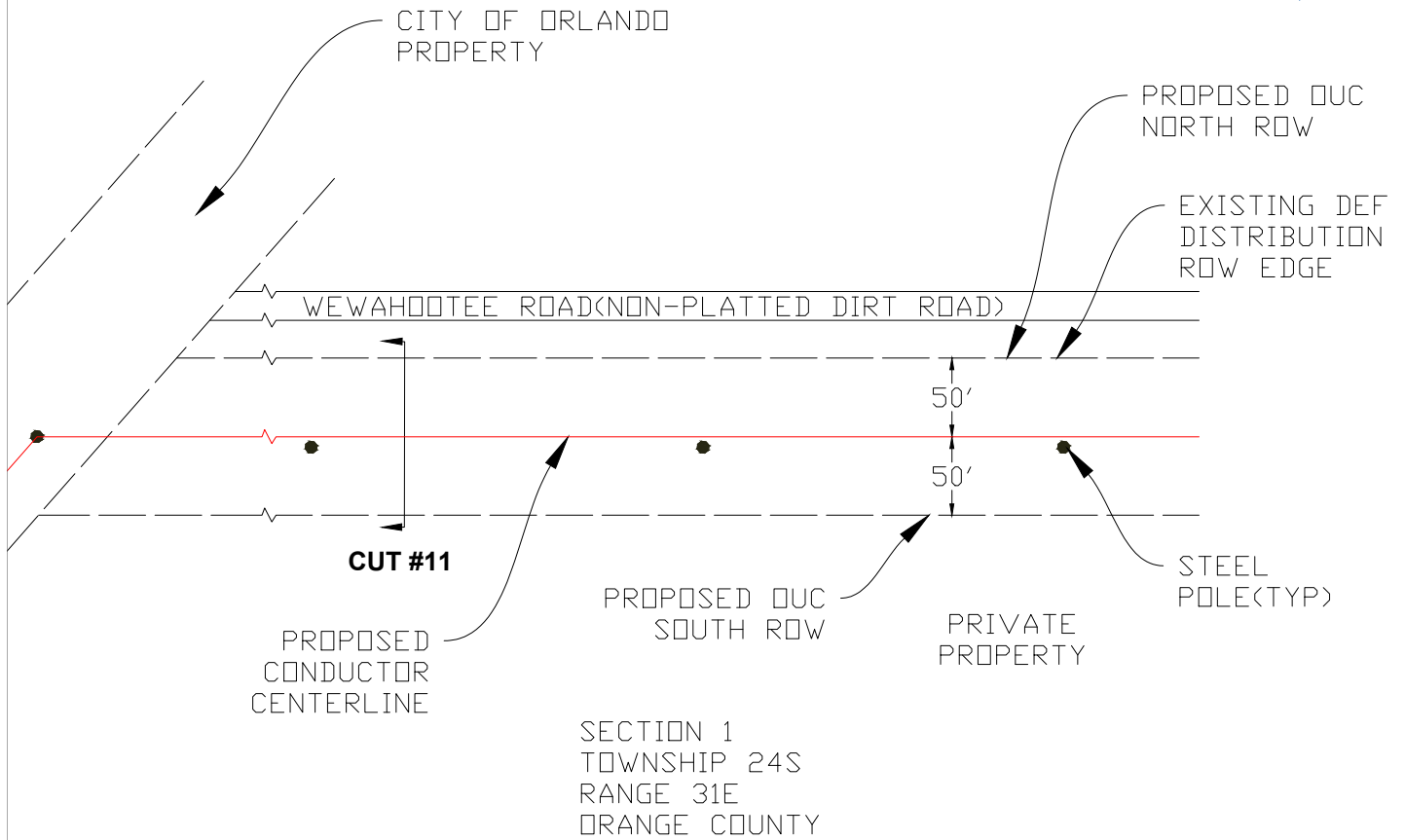
RWR
CHECK

RWR
ENGR

2 OF 2
SHEET

DWG.

EMF 3010



BURNS & MCDONNELL



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUT 11
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

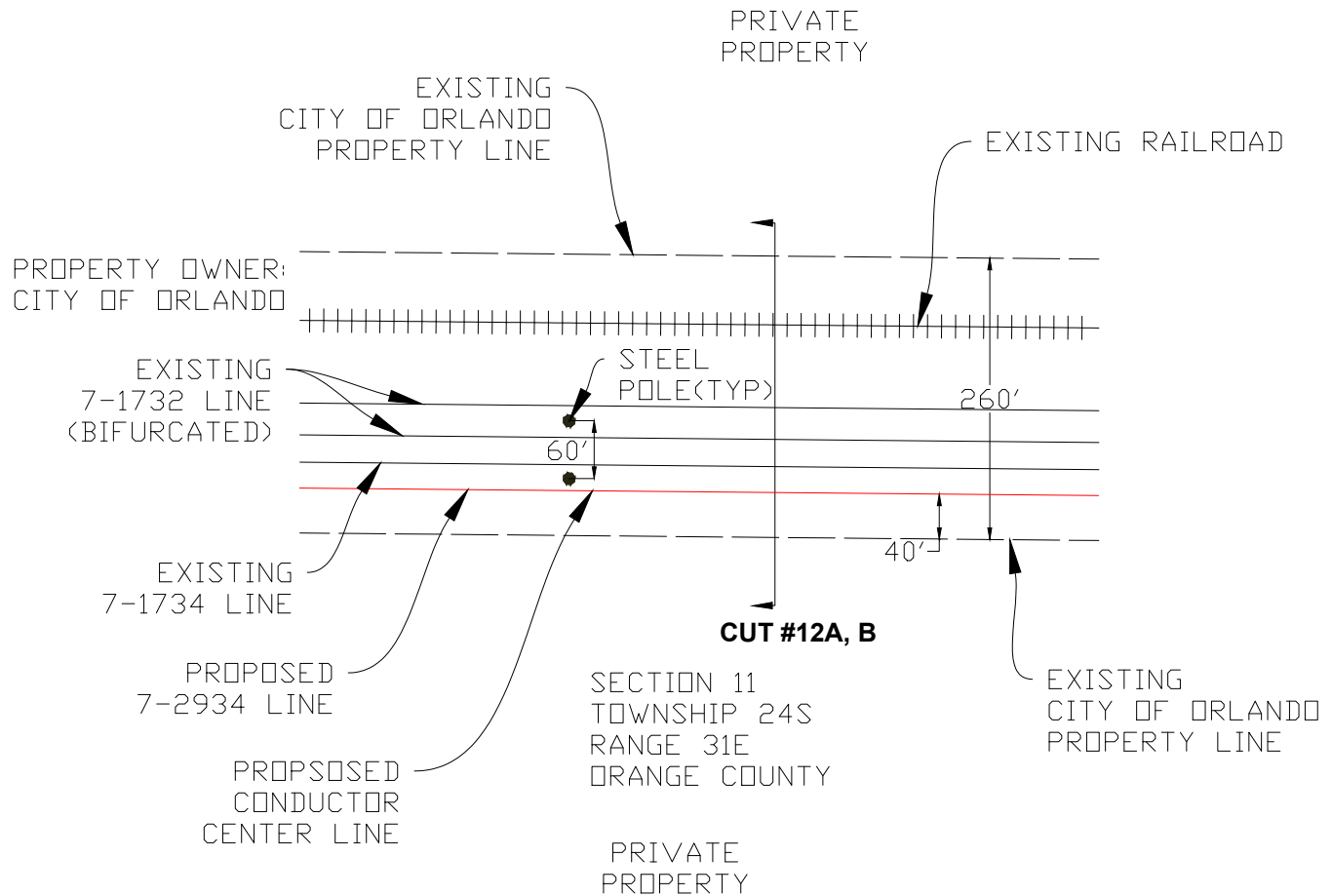
RWR
CHECK

RWR
ENGR

1 OF 1
SHEET

DWG.

EMF 3011



BURNS & MCDONNELL



07/21
DATE

V: NTS
H: NTS
SCALE

LINE ENGINEERING

DMT
DRAWN

DMT
TECH

LINE CUT 12
ST. CLOUD E. - MAG RANCH N.
230-kV LINE 7-2934
TRANSMISSION LINE PROJECT

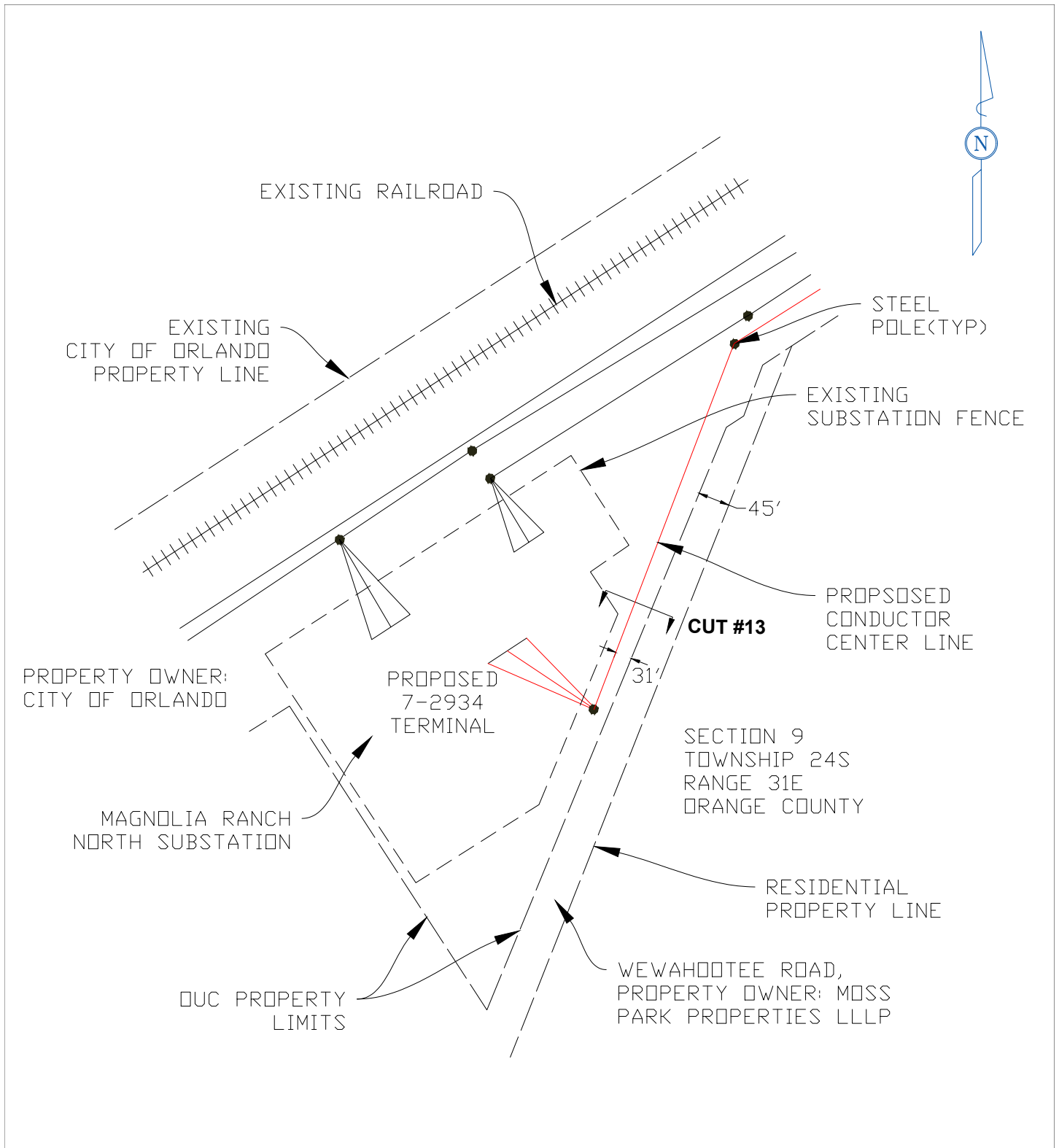
RWR
CHECK

RWR
ENGR

1 OF 1
SHEET

DWG.

EMF 3012



BURNS & MCDONNELL		 The Reliable One®	
07/21 DATE	V: H: NTS SCALE	LINE ENGINEERING	
DMT DRAWN	DMT TECH	LINE CUT 13	
RWR CHECK	RWR ENGR	ST. CLOUD E. - MAG RANCH N. 230-kV LINE 7-2934 TRANSMISSION LINE PROJECT	
1 OF 1 SHEET	1 DWG.	EMF 3013	

ATTACHMENT FDEP-11

REVISED TABLES 4-1 and 4-2

Table 4-1 (Revised). Maximum Electromagnetic Field Capable of Being Produced by the Project

Cross Section Location ¹		New or Existing Right-of-Way	Ampacity of New Line (amps)	Existing Right-of-Way Width (ft)	Public Right-of-Way Utilized (ft)	New Right-of-Way to be Acquired (ft)	Electric Field (kV/m)			Magnetic Field (mG)	
							On Right-of-Way	Left Edge of Right-of-Way ²	Right Edge of Right-of-Way ²	Left Edge of Right-of-Way ²	Right Edge of Right-of-Way ²
1	St. Cloud East Substation	Existing	2253	Existing Substation Property	0	0	3.2	0.44	0.16	147.84	51.34
2A	2829 South of Old Melbourne Highway	Existing	2253	125	0	0	1.1	0.02	0.07	62.49	63.06
2B	2829 South of Old Melbourne Highway	Existing	-2253	125	0	0	1.1	0.02	0.07	41.43	40.05
3A	2829 North of Old Melbourne Highway	Existing	2253	100	0	0	1.1	0.24	0.04	147.56	53.5
3B	2829 North of Old Melbourne Highway	Existing	-2253	100	0	0	1.1	0.24	0.04	107.09	35.58
4A	2829 Lake Lizzie Preserve East-West Section	Existing	2253	50	50	0	1.1	0.03	0.09	89.19	76.73
4B	2829 Lake Lizzie Preserve East-West Section	Existing	-2253	50	50	0	1.1	0.03	0.09	58.33	50.64
5A	2829 Lake Lizzie Preserve North-South Section	Existing	2253	50	25, west of existing	0	1.1	0.03	0.45	89.19	138.39
5A DE	2829 Lake Lizzie Preserve North-South Section	Existing	2253	50	25, west of existing	0	1.1	0.09	0.29	92.37	136.98
5B	2829 Lake Lizzie Preserve North-South Section	Existing	-2253	50	25, west of existing	0	1.1	0.03	0.45	58.33	97.87
5B DE	2829 Lake Lizzie Preserve North-South Section	Existing	-2253	50	25, west of existing	0	1.1	0.09	0.29	60.56	97.11

Table 4-1 (Revised). Maximum Electromagnetic Field Capable of Being Produced by the Project

Cross Section Location¹		New or Existing Right-of-Way	Ampacity of New Line (amps)	Existing Right-of-Way Width (ft)	Public Right-of-Way Utilized (ft)	New Right-of-Way to be Acquired (ft)	Electric Field (kV/m)			Magnetic Field (mG)	
							On Right-of-Way	Left Edge of Right-of-Way²	Right Edge of Right-of-Way²	Left Edge of Right-of-Way²	Right Edge of Right-of-Way²
6A	2829 Deseret Section	Existing	2253	50-60, varies	0	40-50, as required	1.1	0.09	0.03	76.73	89.19
6B	2829 Deseret Section	Existing	-2253	50-60, varies	0	40-50, as required	1.1	0.09	0.03	50.64	58.33
7A	2829 Deseret Section Adjacent to Platted Road/Canal	Existing	2253	50	0	50	1.1	0.03	0.09	89.19	76.73
7B	2829 Deseret Section Adjacent to Platted Road/Canal	Existing	-2253	50	0	50	1.1	0.03	0.09	58.33	50.64
8A	Northeast Connector Expressway	New	2253	0	0	100	3.2	0.11	0.14	111.51	63.9
8B	South Riser Structure	New	2253	0	0	100	0	0	0	3.79	3.79
9	Underground Segment	New	2253	0	0	25	0	0	0	98	93
10A	North Riser Structure	New	2253	0	0	100	0	0	0	3.79	3.79
10B	Sunbridge Parkway/Cyril's Bypass Road	New	2253	0	0	100	3.2	0.14	0.11	63.9	111.51
11	Wewahootee Road	New	2253	0	0	100	3.2	0.09	0.09	83.35	83.35
12A	Stanton Corridor	Existing	-2253	260	0	0	6.4	0.13	0.13	57.76	20.82
12B	Stanton Corridor	Existing	200	260	0	0	6.4	0.13	0.13	147.14	28.08
13	Magnolia Ranch North Substation	Existing	2253	Existing Substation Property	0	0	3.2	0.16	0.44	51.34	147.84
Florida EMF rule limit for new 230-kV lines³							8	2	2	150	150

Table 4-1 (Revised). Maximum Electromagnetic Field Capable of Being Produced by the Project

Notes: EMF = electromagnetic field
kV = kilovolt
kV/m = kilovolts per meter
mG = milliGauss

The field levels of the proposed transmission lines shown in this table are based on the highest fields anticipated for the 230-kV transmission line configurations, even though structural configurations with lower fields may be employed for some portions of the line routes. The transmission lines will generally operate at a level well under the maximum current rating (MCR). MCR is the nominal value expected to cause the conductor to reach a temperature limit of 250°Celsius.

¹ Locations depicted in Line Route Map in the EMF package.

² “Left” and “right” designations are as shown on Cuts 1 through 10 of the EMF package.

³ The standard field levels are established in Rule 62-814.450(3), F.A.C.

Source: EzEMF software program developed through Florida Electric Coordinating Group and accepted by the FDEP.

Table 4-2 (Revised). Maximum Audible Noise at the Edge of the Right-of-Way

Cross Section Location¹		L50¹ (dBA)
1	St. Cloud East Substation	49.0
2A	South of Old Melbourne Highway	46.5
2B	South of Old Melbourne Highway	46.5
3A	North of Old Melbourne Highway	47.9
3B	North of Old Melbourne Highway	47.9
4A	Lake Lizzie Preserve East-West Section	47.0
4B	Lake Lizzie Preserve East-West Section	47.0
5A	Lake Lizzie Preserve North-South Section	48.2
5A DE	Lake Lizzie Preserve North-South Section	48.1
5B	Lake Lizzie Preserve North-South Section	48.2
5B DE	Lake Lizzie Preserve North-South Section	48.1
6A	Deseret Section	48.7
6B	Deseret Section	48.7
7A	Deseret Section Adjacent to Platted Road/Canal	48.2
7B	Deseret Section Adjacent to Platted Road/Canal	48.2
8A	Northeast Connector Expressway	48.3
8B	South Riser Structure	N/A
9	Underground Segment	N/A
10A	North Riser Structure	N/A
10B	Sunbridge Parkway/Cyril's Bypass Road	48.3
11	Wewahootee Road	47.5
12A	Stanton Corridor	51.5
12B	Stanton Corridor	51.5
13	Magnolia Ranch North Substation	48.4
L50 (dBA) Audible Noise Limit²		52.0

Notes:

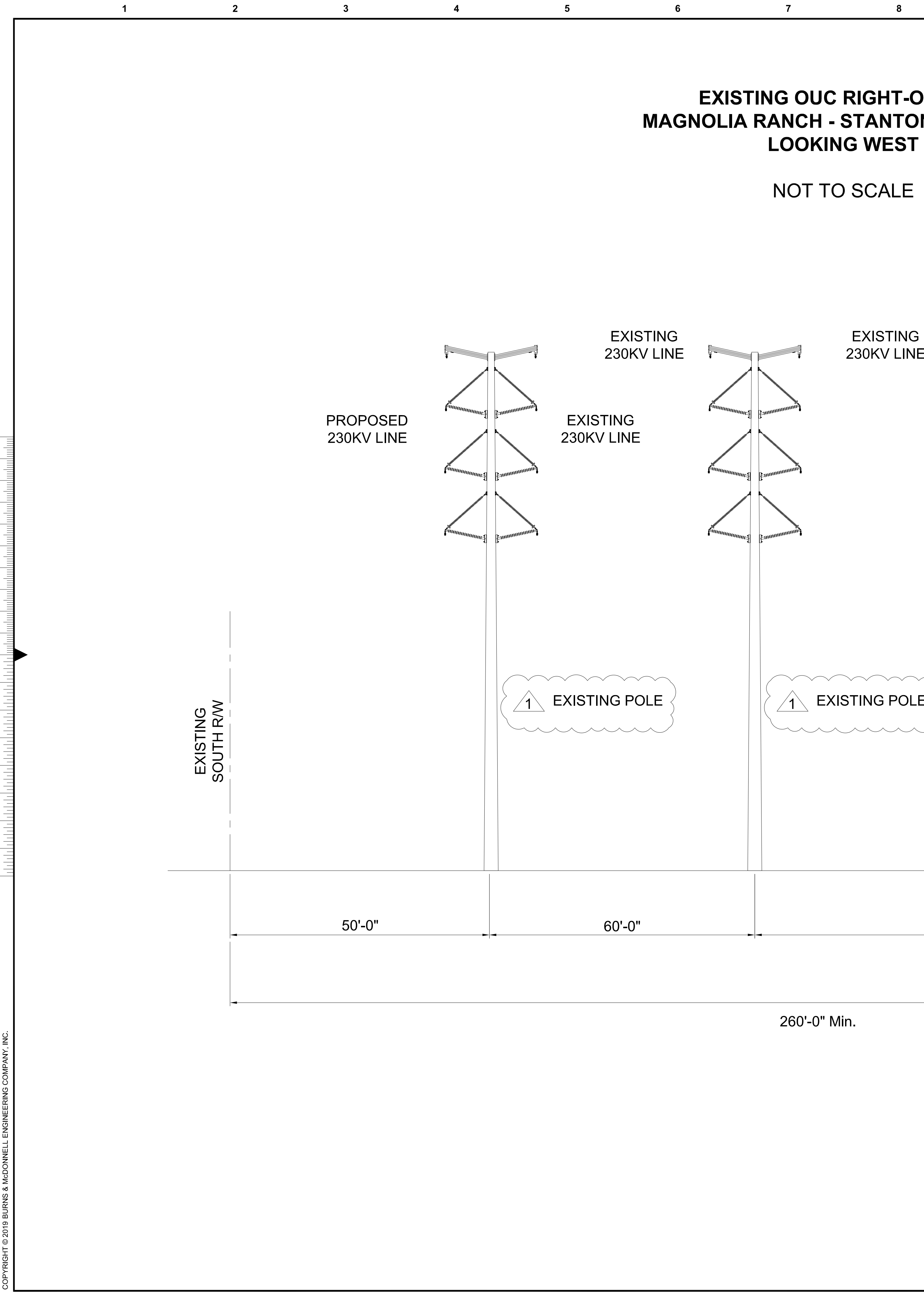
¹ L50 – The noise level that is exceeded 50% the time during that measuring interval is the median level. Maximum audible noise occurs during rain or other wet weather conditions. Noise levels will be lower during dry weather conditions.

² The audible noise limit is based on the most notable New York State Public Service Commission Cases 26529 and 26559 - "Common Record Hearing on Health and Safety of Extra High Voltage Transmission Lines."

Source: State Of New York Public Service Commission, 1978.

ATTACHMENT OC-2

REVISED FIGURE 1-10



no.	date	by	ckd	description
0	11/24/20	RWR	RWR	
1	07/20/21	RWR	RWR	NOTED POLES AS EXISTING

PRELIMINARY- NOT FOR CONSTRUCTION			
date 11/24/20		detailed KW	
designed RWR		checked RWR	
ST. CLOUD EAST - MAGNOLIA RANCH NORTH 230KV TRANSMISSION LINE TYPICAL CROSS SECTION EXISTING RIGHT-OF-WAY			
project 7-2934		contract -	
drawing		rev.	
FIGURE 1-10		0	
sheet - of - sheets			
file FIGURE 1-10.DWG			

NOTES:

1. TYPICAL CONFIGURATION SHOWN. FINAL CONFIGURATION MAY VARY.

2. STRUCTURES MAY BE SPACED AT DIFFERING INTERVALS LONGITUDINALLY ALONG THE RIGHT-OF-WAY.

A

B

C

D

E

F

G

H

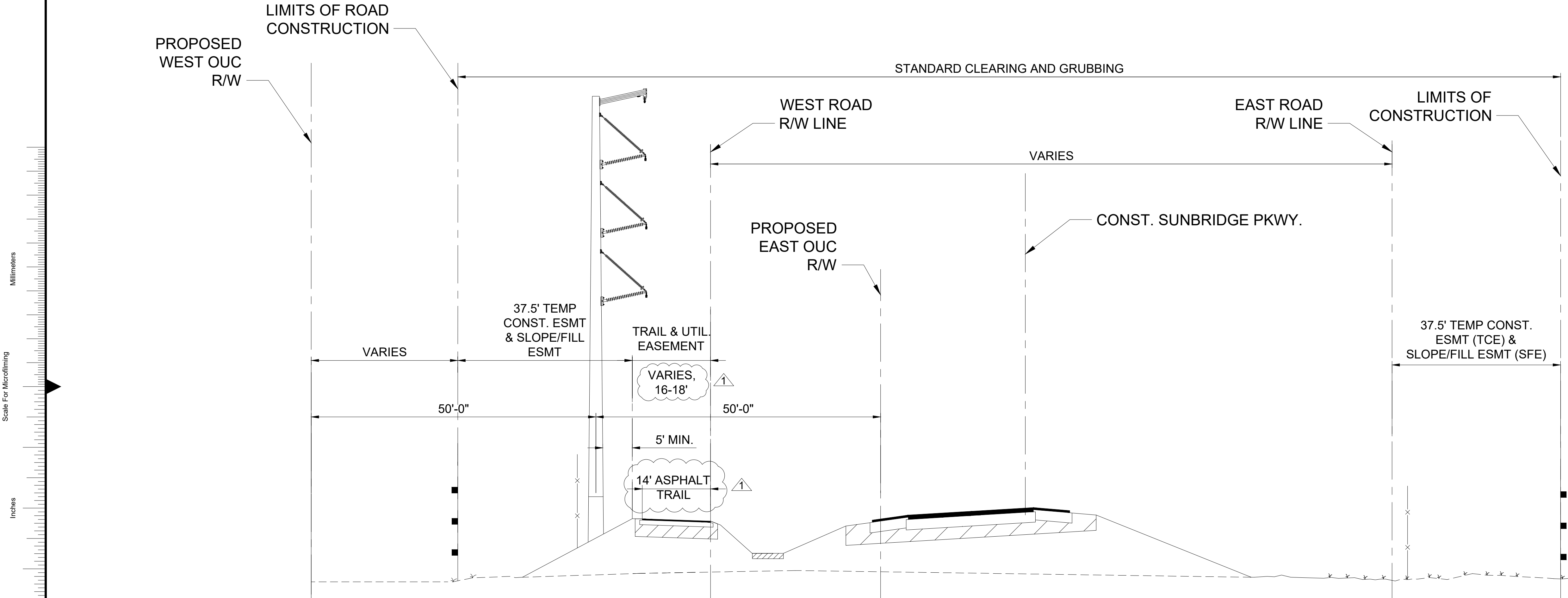
I

J

ATTACHMENT OC-5

REVISED FIGURES 1-8a and 1-8b

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- NOTES:**
1. TYPICAL CONFIGURATION SHOWN. FINAL CONFIGURATION MAY VARY.
 2. STRUCTURES MAY BE SPACED AT DIFFERING INTERVALS LONGITUDINALLY ALONG THE RIGHT-OF-WAY.

no.	date	by	ckd	description
0	11/24/20	RWR	RWR	--
1	07/26/21	DMT	RWR	Added trail and utility easement widths

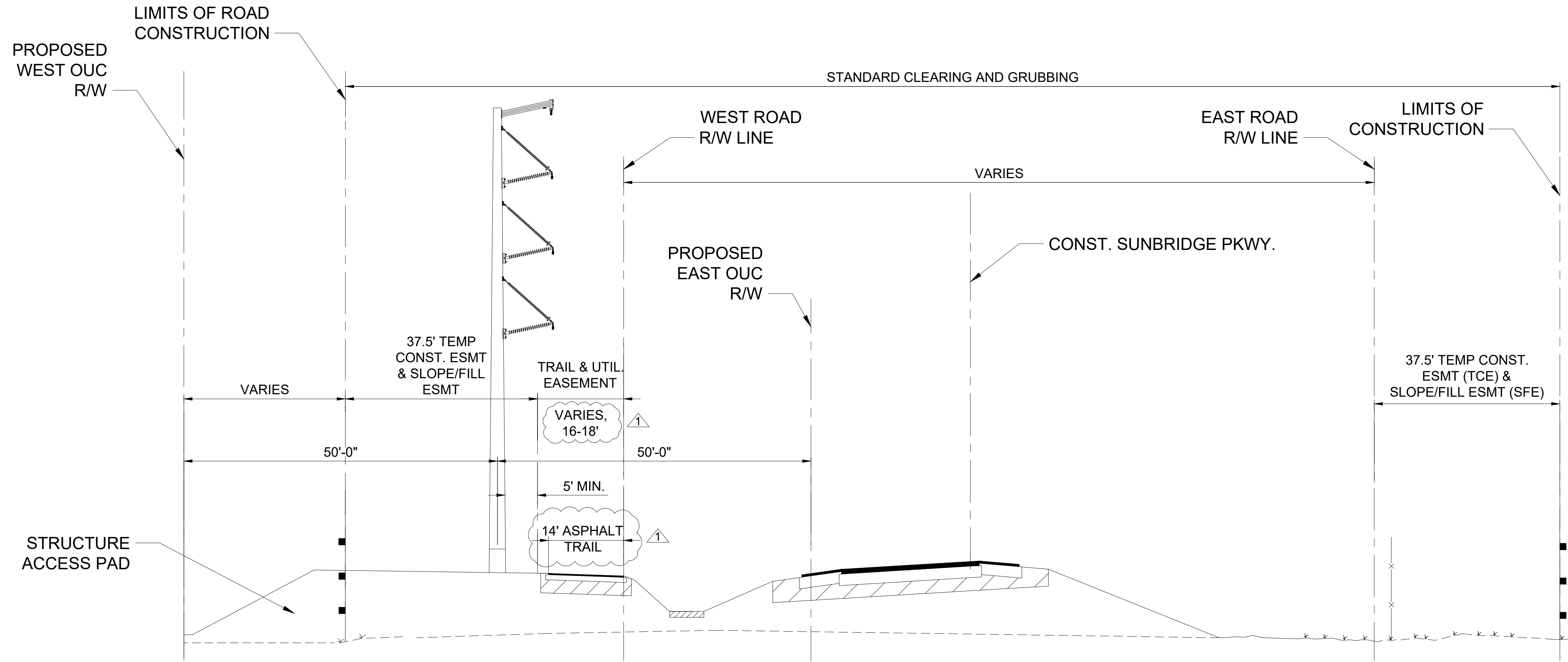
PRELIMINARY- NOT FOR CONSTRUCTION			
date	11/24/20	detailed	RWR
designed	RWR	checked	RWR
ST. CLOUD EAST - MAGNOLIA RANCH NORTH			
230KV TRANSMISSION LINE			
TYPICAL CROSS SECTION - 100' RIGHT-OF-WAY			
NO STRUCTURE ACCESS PAD			
project	7-2934	contract	-
drawing	FIGURE 1-8A — 1		
sheet	-	of	- sheets
file FIGURE 1-8A.DWG			

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1234567891011121314

100' RIGHT-OF-WAY
WEST SIDE OF SUNBRIDGE PARKWAY
LOOKING NORTH

NOT TO SCALE



NOTES:

1. TYPICAL CONFIGURATION SHOWN. FINAL CONFIGURATION MAY VARY.
2. STRUCTURES MAY BE SPACED AT DIFFERING INTERVALS LONGITUDINALLY ALONG THE RIGHT-OF-WAY.

no.	date	by	ckd	description
0	11/24/20	RWR	RWR	--
1	07/26/21	DMT	RWR	Added trail and utility easement widths

PRELIMINARY-
NOT FOR CONSTRUCTION



date	11/24/20	detailed	RWR
designed	RWR	checked	RWR



ST. CLOUD EAST - MAGNOLIA RANCH NORTH
230KV TRANSMISSION LINE
TYPICAL CROSS SECTION - 100' RIGHT-OF-WAY
WITH STRUCTURE ACCESS PAD

project	7-2934	contract	-
drawing	FIGURE 1-8B — 1		
sheet	-	of	- sheets
file	FIGURE 1-8B.DWG		