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Observation Report

of the

Electrical services

for

Turtle Cove Condominium Association

1213 Linda Road, Okeechobee, Florida 34974

Issued: February 17, 2026

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TABLE OF CONTENTS

INTRODUCTION

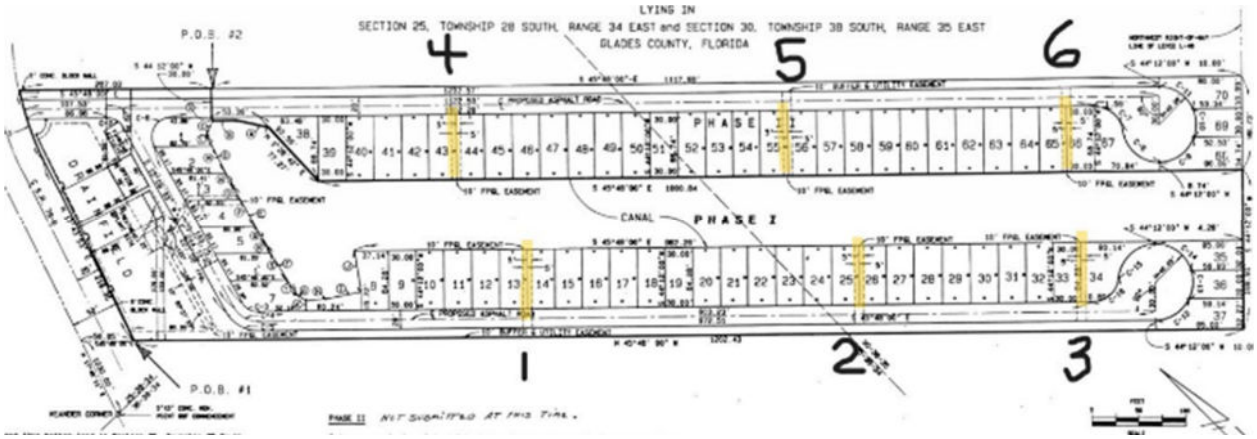
This document describes the existing electrical service conditions in this community of 70 lots.

EVALUATION METHOD

Visual observation per ASTM E2018-15 was the primary method used to evaluate the condition of the electrical services. No invasive testing (e.g., megger, thermal imaging).
We selected several typical items for investigation. The engineering opinion as to the overall conditions is derived from these evaluation methods.

SITE DESCRIPTION

This report outlines the evaluation of Turtle Cove Community. The site in question consists of 70 individual lots, originally intended for RVs. Many lots have been upgraded over the years to park models. There are 6 existing overhead FPL services to stanchions with exposed meters and disconnects that then feed out to each lot. Each lot was originally served by a 60-amp, 120/240-volt single-phase service using direct-burial #6 AWG RHH/RHW copper wire.



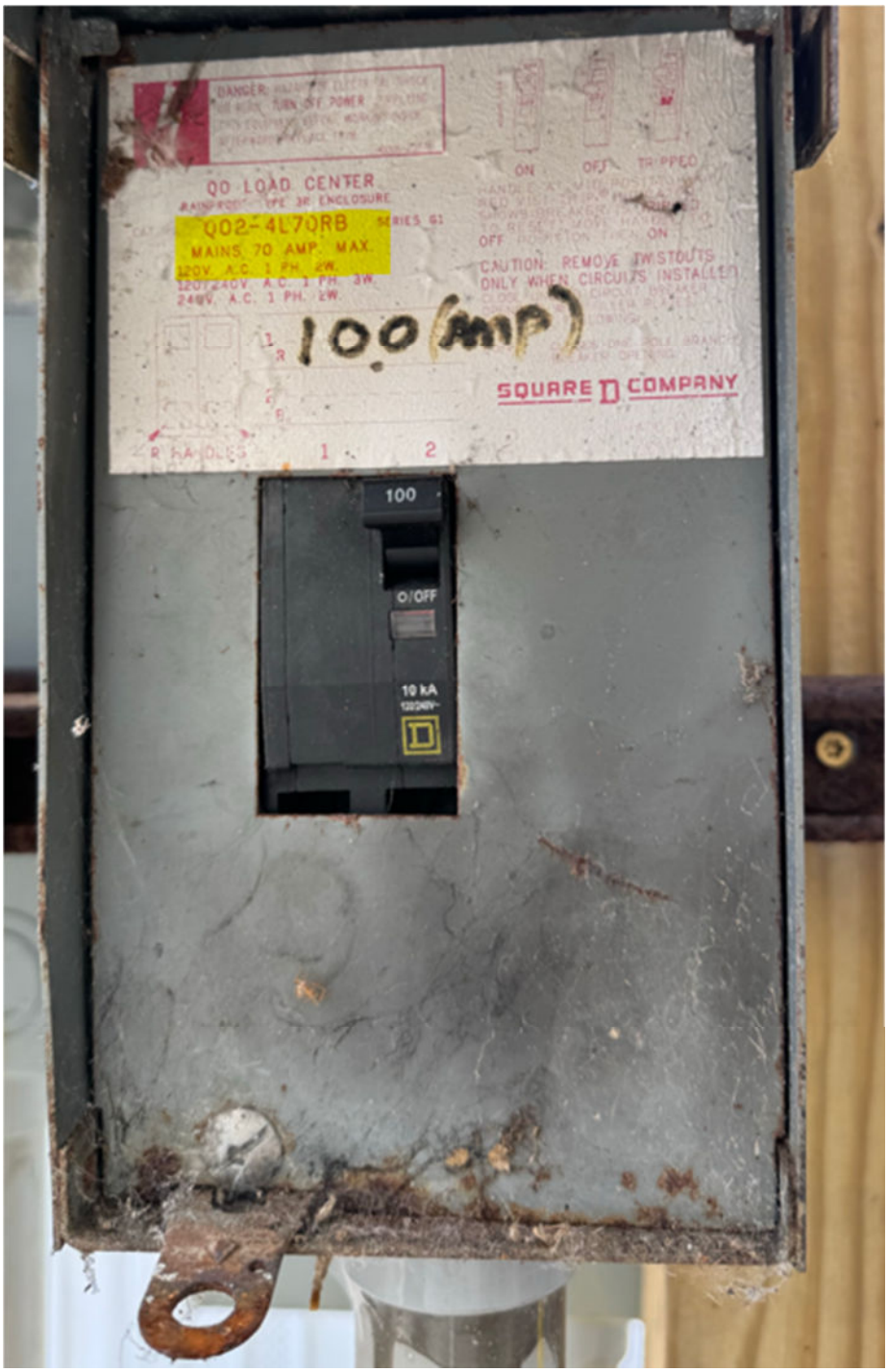
ELECTRICAL SERVICES

1. **Observation:** Each overhead service feeds anywhere from 9 – 12 individual meters and mains that then feed underground to each lot.

2. **Observation:** Each lot was originally fed with a 60-amp breaker, 120/240v single-phase service to a plug located on each lot. (Breaker box rated for a maximum of 70 amps)

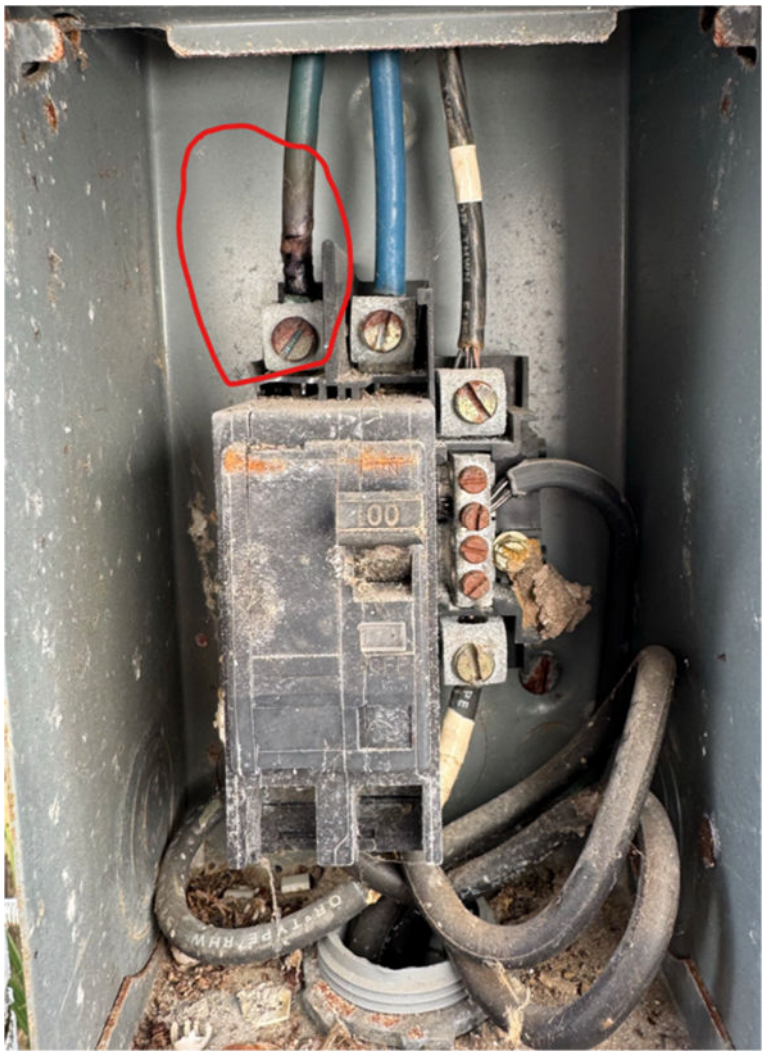
3. **Observation:** Each lot was fed with a direct burial USE RHH/RHW #6 awg copper wire from the meter/main to the lot.

4. **Observation:** Many of the original 60-amp breakers have been switched out for larger 100-amp breakers. These exceed the rating of the breaker box and the #6 wire. Breakers shall not exceed conductor ampacity per NEC 240.4. Also violates panel labeling/max rating (70 A noted). Immediate hazard per NEC 110.3(B) (listed equipment use).



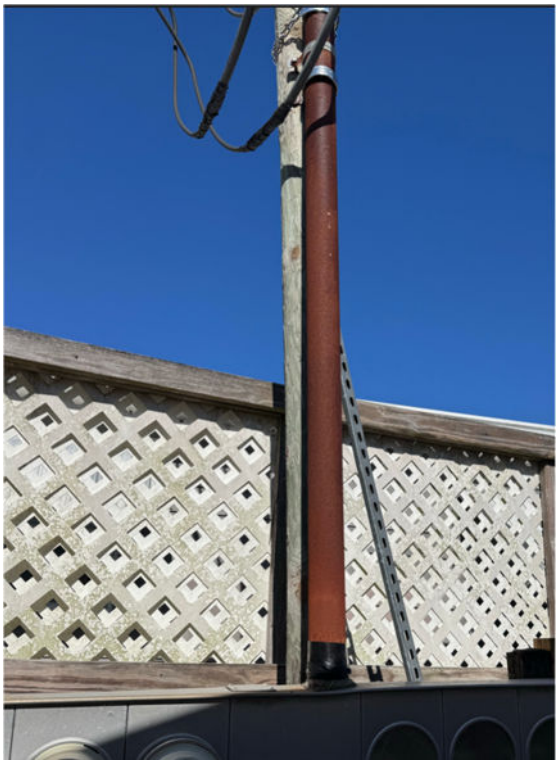
Recommendation: Replace these with 60-amp breakers immediately.

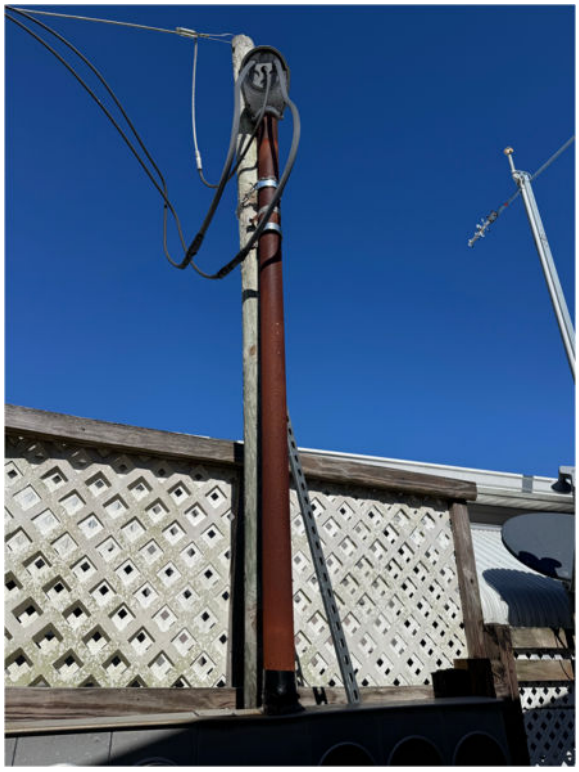
5. **Observation:** Evidence of thermal damage indicates high-resistance terminations or overload.



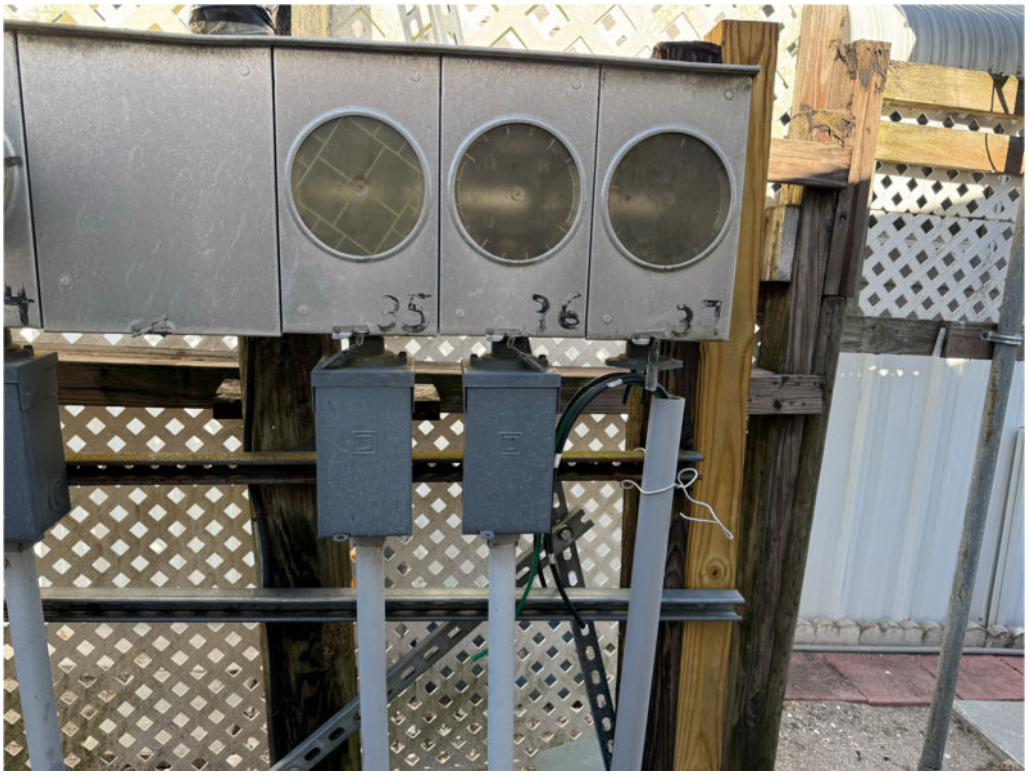
Recommendation: Recommend an infrared scan (if not already done) and replacement per NEC 110.14 (electrical connections) and NEC 110.12 (neat/workmanlike).

6. **Observation:** Some weather head masts are under strain from overhead lines. Causing bending, flexing, and damage to the threaded connection to the meter cans. Weather head strain risks conductor damage/failure per NEC 230.28 (service masts).

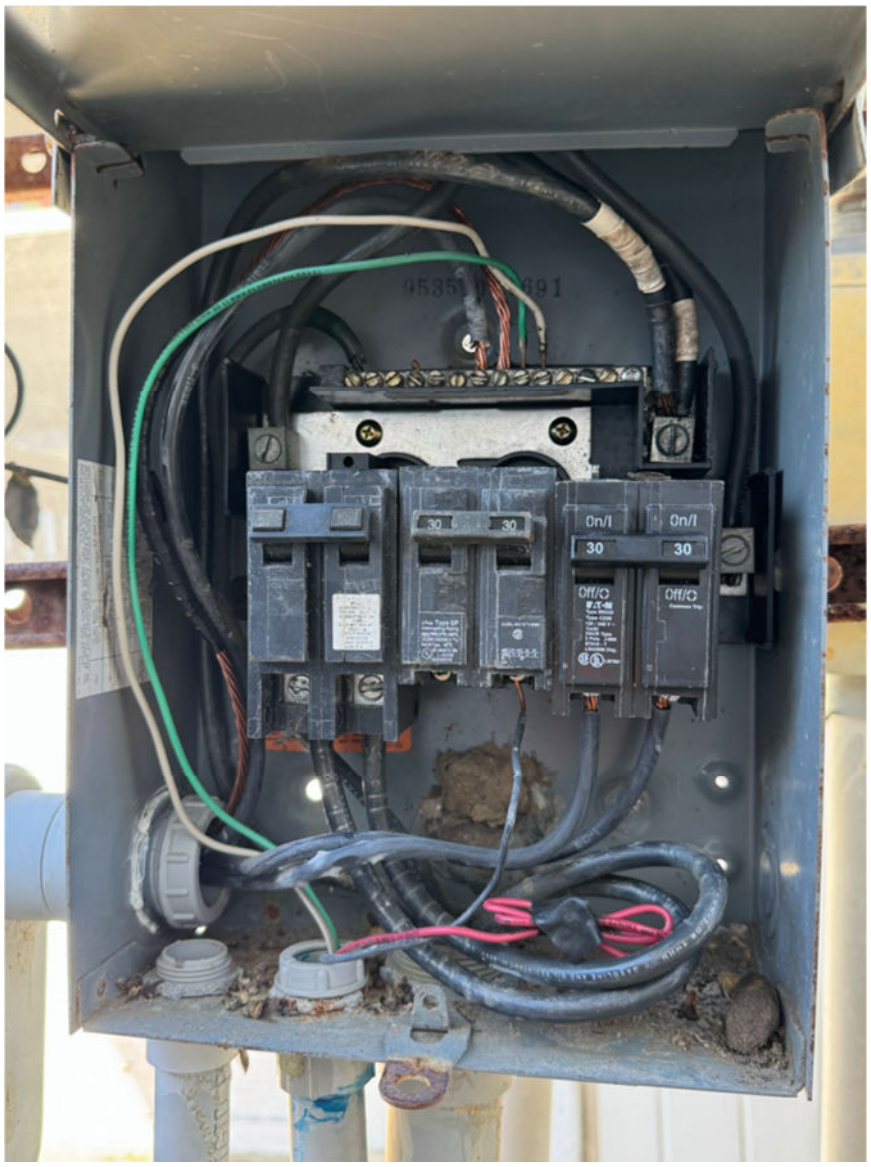




7. **Observation:** Meters and mains are mounted on stanchions constructed of wood and steel Unistrut. Wood stanchions, masts, and Unistrut are in varying degrees of disrepair. Many have been jerry-rigged in an attempt to secure the structures. Jerry-rigged supports violate NEC 110.12.



8. **Observation:** Some mains have been replaced with sub-panels with multiple breakers. The panel below has an undersized wire (#14) connected to a two-pole breaker (30-amps). #14 AWG on 30 A breaker violates NEC 240.4(D) (small conductor rule: #14 copper max 15 A) and NEC 240.4.



Recommendation: Replace the breaker with the correct size.

9. **Observation:** One of the sub-panels located at stanchion #4 appears to have had a fire. Immediate replacement required per NEC 110.7 (integrity of equipment) and NEC 110.3 (damaged equipment unfit).

Recommendation: All fire damaged equipment to be replaced.

10. **Observation:** Existing electrical systems were installed in 1985 and are over 40 years old. This exceeds the typical 10-15-year life expectancy for painted steel NEMA 3R equipment. Although some equipment appears to have been replaced over the years, many have been replaced in violation of the code.

    Recommendation: All code violations listed in the observations above should be addressed immediately.

    Given that many park models have been installed that require a minimum of 100-amp service, which would require replacing both the mains and the underground feeders to each lot, the community-wide recommended design solution is described below.

    We recommend removing the existing overhead FPL services, mastheads, stanchions, meter/main banks, and unprotected direct burial feeders running under multiple lots. These are to be replaced with a new underground FPL service that runs down from the pole-mounted transformer to a pull box at the base. From this location, a new directional bore will install a 100-amp service to each lot, terminating at a new 100-amp meter main combo. This ensures a clean, cost-effective solution that does not require electrical feeds running underneath neighbors' properties.

If you have any questions regarding this report, please contact me at your convenience.

Sincerely,
Kamm Consulting, Inc.

Bradly L. Brown, P.E.
Principal, Executive Vice President