Environmental Report
22SS0007 & 22Z00073
Mulreany

December 3, 2022

Mr. Terry Mulreany
Wire & Cable Specialties, Inc
425 Richards Road
Rockledge, FL 32955

RE: Assessment of Jurisdictional Wetlands
Within Six Parcels of Property
Totaling 8.03-ACRES
Located at 39XX Grissom Parkway, Cocoa, Florida
Tax Identification Numbers:
2400694, 2400695, 2400696, 2400697, 2400698 & 2400700

Dear Mr. Mulreany:

The following is a summary of Toland Environmental Consulting's (TEC) determination of the presence or absence of federal and state jurisdictional wetlands within six adjacent parcels of properties located in Brevard County off Grissom Road in Cocoa, Florida. The six parcels have tax identification of 2400694, 2400695, 2400696, 2400697, 2400698 & 2400700 (Figure 1). The property is bounded to the north, east, and south by unimproved single-family residential lots and to the west by Grissom Parkway (Figure 2).

The purpose of the site inspection was to identify whether jurisdictional wetlands are present on the properties. To prepare this wetland assessment, TEC reviewed natural resource maps including GIS database coverages of the Brevard County Soil Survey as maintained by the National Resources Conservation Service (NRCS), the National Wetland Inventory (NWI) as maintained by the US Fish and Wildlife Service (USFWS), Brevard Natural Communities Cover maps maintained by the St. Johns River Water Management District (SJRWMD) using the Florida Department of Transportation's (FDOT) Florida Land Use, Cover and Forms Classification System (FLUCCS) as last amended in 1999, and the United States Geological Survey's (USGS) Topographic Quadrangle Maps.

In addition, on October 31, 2022, TEC ground-truthed, delineated and described the natural communities present within the study area with reference to Florida's Cooperative Land Cover (CLC) classification system as maintained by FWC and last updated in September 2018 as well as by FDOT FLUCCS codes. In its current condition, the property would be classified as having 7.60 acres of CLC 1312-Scrubby Flatwoods (FLUCCS 4110-Pine Flatwoods), and 0.42 acres of 21211-Depression Marsh (FLUCCS 6410-Freshwater Marsh)(Figure 3).

Fire suppression has resulted in the canopy of the scrubby pine flatwoods to become dominated by sand pines (*Pinus clausa*), with lesser amounts of longleaf pines (*Pinus palustris*) and occasional Live oak (Quercus virginiana). The lack of fire has also resulted in a dense and overgrown mid-story and understory with rank saw palmetto (*Serenoa repens*), tall, dense sand live oak (*Quercus geminata*), intermittent dwarf live oak (*Quercus minima*), runner oak (*Quercus pumila*), and rusty lyonia (*Lyonia ferruginea*). The depression marsh shows damage from wild hogs with groundcover including chalky bluestem (*Andropogon capillipes*), redroot (*Lachnanthes caroliniana*), soft rush (*Juncus effusus*), and wax myrtle (*Myrica cerifera*) around the perimeter.

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Figure 1: Map of Study Parcels with Tax Identification Numbers

Figure Prepared by Toland Environmental Consulting Using FDOT 2021 Aerial Imagery

Figure 2: Regional Location Map

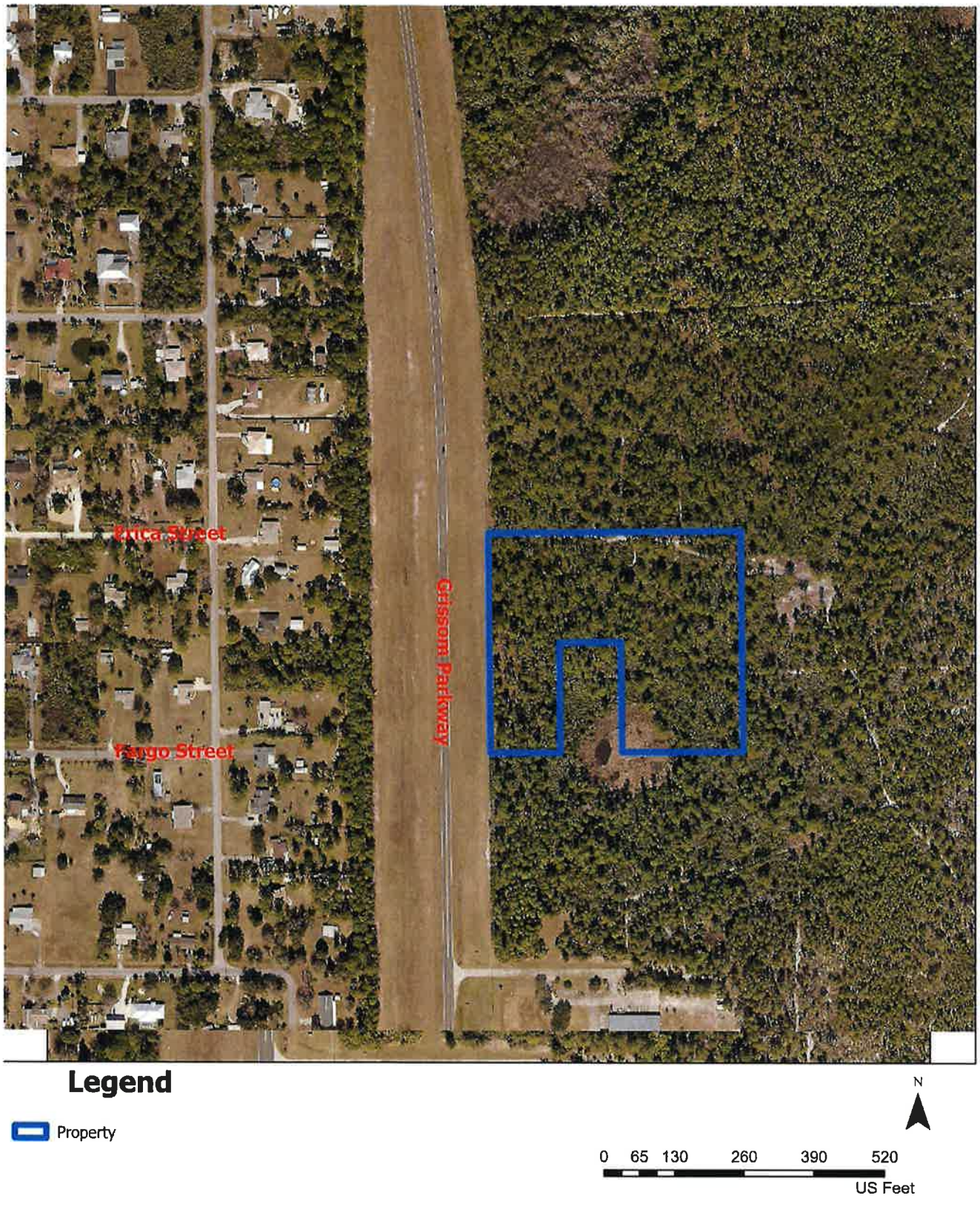

Figure Prepared by Toland Environmental Consulting Using FDOT 2021 Aerial Imagery

Figure 3: Natural Communities Cover Map

Figure Prepared by Toland Environmental Consulting Using FDOT 2021 Aerial Imagery

In order of relative abundance, the onsite soils are classified by NRCS as Immokalee sand, Myakka sand, Myakka sand, depressional, and Pomello sand (Figure 4). Of these soil series, Myakka sand, depressional is the only soil classified as hydric within the "Hydric Soils of Florida Handbook, fourth edition" prepared by Florida Association of Environmental Soil Scientist. Hydric soils are usually associated with wetlands while non-hydric soils are generally associated with upland habitats.

Within the scrubby flatwoods, TEC reviewed representative samples of the onsite soils and found they lacked the required features to be classified as hydric or indicative of having been formed under aerobic conditions by exhibiting signs of stripping, redox concentrations, or substantial organic accumulations within the first six inches of the soil profile. Soils within the depression marshes showed organic accumulations within the first six inches of the soil profile including mucky minerals (A7 indicator) and muck (A9 indicator) that demonstrated the soils formed under anaerobic conditions and would meet the criteria found within the Handbook and Florida's wetland delineation rules to be classified as hydric.

TEC observed signs of hydrology within the depression marsh that would indicate that the property flooded or had water ponding on it. Signs of hydrology included algal matting, standing water, and vegetative adaptations. TEC did not observe signs of hydrology within the other onsite habitats.

The NWI wetland inventory has mapped two potential wetland systems within the study parcels which they classify as a PEM1C (Palustrine, emergent, persistent, seasonally flooded). By contrast, the SJRWMD has mapped one potential freshwater marsh system (FLUCCS 6410) in the same area TEC field verified a depression marsh (Figure 5). TEC attributes the discrepancy between federal and state potential wetland maps to the federal map including a historical system that could have existed in the area mapped as having hydric soils and would have been visible in aerial images in the early seventies (Figures 6). By 1986, this system was shows signs of succession into pine flatwoods (Figure 7). After the construction of Grissom Parkway, most of the wetland system was gone by 1993 and what remained was heavily altered by changes in regional drainage patterns brought on by the construction of the road (Figure 8). TEC reviewed the old wetland system to establish whether it still met the delineation criteria found within Chapter 62-340, Florida Administrative Code or Section 404 of the Clean Water Act (33U.S.C. 1344) to be jurisdictional for regulatory purposes. TEC's field review established that this system was no longer jurisdictional with an upland canopy, no signs of hydrology and soils that lacked the organic coating requirements to be classified as hydric. Accordingly, this area was excluded from TEC's jurisdictional wetland map (Figure 3).

If you have any questions or require additional information regarding this wetland review of the six parcels of property, please contact me on my office phone at 321-242-7173 or by e-mail at teclisa@cfl.rr.com.

Sincerely,

Lisa J. Toland

Lisa Toland, President

Figure 4: NRCS Soils Map

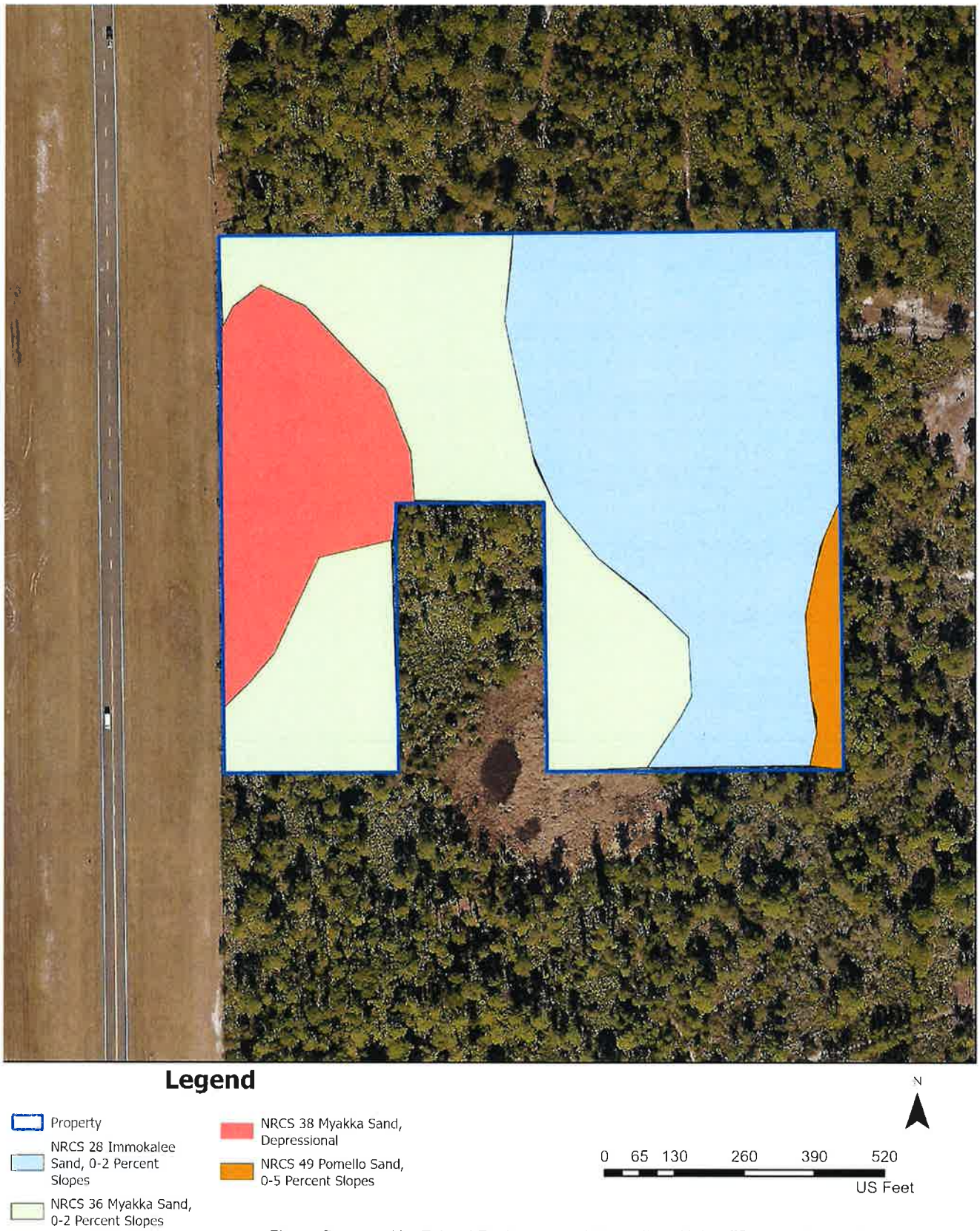

Figure Prepared by Toland Environmental Consulting Using FDOT 2021 Aerial Imagery

Figure 5: Potential Wetlands Mapped by the NWI and the SJRWMD

Legend

- PropertyLocation
- CLC 21211- Depression Marsh (FLUCCS 6410 - Freshwater Marsh)
- NWI_Upper St. Johns
- SJRWMD_FLUCCS

N

0 65 130 260 390 520
US Feet

Figure Prepared by Toland Environmental Consulting Using FDOT 2021 Aerial Imagery

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Figure 6: Aerial Image of Properties – 1972

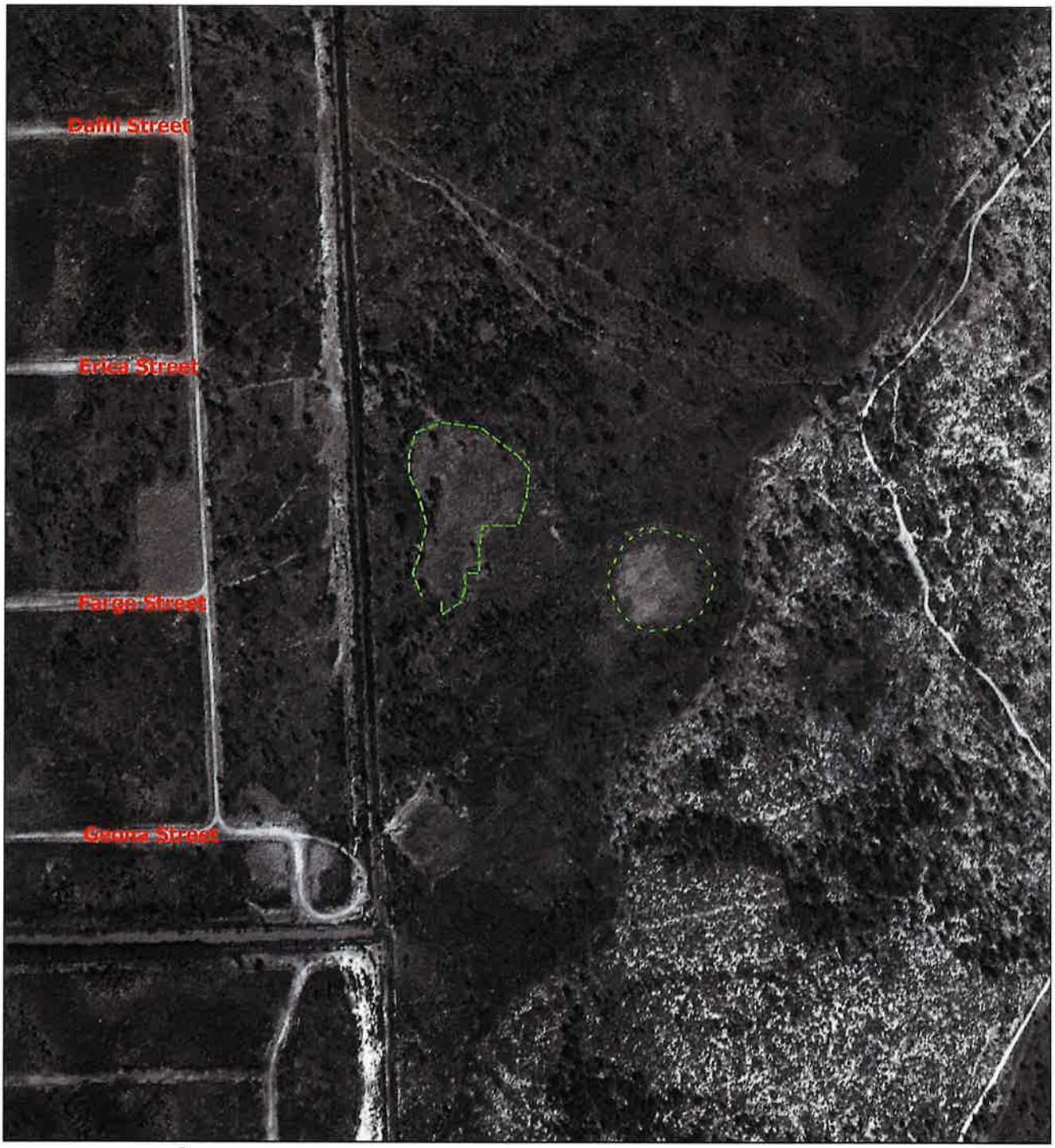

Figure Prepared by Toland Environmental Consulting Using FDOT 1972 Aerial Imagery

Figure 7: Aerial Image of Properties – 1986

Figure Prepared by Toland Environmental Consulting Using FDOT 1986 Aerial Imagery

Figure 8: Aerial Image of Properties – 1993

Figure Prepared by Toland Environmental Consulting Using FDOT 1993 Aerial Imagery