



## THE CITY OF KEY WEST

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February 4, 2016

Peary Court Property Infrastructure Review  
City of Key West Engineering Services Department

Engineering Services conducted a physical site review of the Perry Court Complex on January 27, 2016. Prior to conducting site observations, staff reviewed the Atkins Engineers' July 17, 2013 Peary Court Property Report including Item 4 Site and Landscaping general discussion and Exhibit 3 property exterior 50 photographs, and the Architect McCall and Associates' September 1992 civil design drawings sheets C12 and C13.

This property's legal address is 541 White Street and property is located on 24 acres southeast of the street intersection of White Street and Palm Avenue. Development of this property includes over a mile of perimeter fencing, 49 townhouse style residential buildings, nearly half a mile asphalt roadway, and nearly a mile of concrete sidewalks. Supplementary property developments include street lighting, multiple pocket children's playgrounds, four asphalt paved basketball half courts, two racquetball courts, and pet waste container dispensing stations. (Figures 1 and 2 – Sitework Layout and Aerial Site Overview)

The physical site review included visually assessing current conditions and future maintenance needs of vehicular travel areas, pedestrian walkways, stormwater surface drainage, sanitary sewer, exterior fencing and gates, and above supplementary property developments. Staff observations including the following:

**Perimeter Fencing and Gates** - Fencing and gates are standard local area Navy design including aluminum square tubing fence panels and concrete masonry unit fence posts. Fencing appears in original alignment and plumbness. Split drive entrance gates appear originally motorized with automated openers; however, these gates no longer include electrical service, controllers, or motors. (Figure 3 – Typical Fencing and Gate Entrance)

**Vehicle Routing and Uncovered Parking** - Roadways within the development have natural traffic speed calming winding alignments and the typical section of roadway consists of 24 foot wide roadway divided into 2-12 foot wide vehicle lanes. Concrete curb and gutters and adjacent concrete sidewalks abut both sides of roadways. Asphalt paved driving surfaces are also provided to all building parking areas. Ample parking exists on asphalt surfacing throughout the property. Deterioration of pervious surfaces (grassy areas) resulting from vehicles parking off the asphalt was not observed. (Figures 4 and 5 – Typical Roadway and Drive)

**Pedestrian Routing** – Concrete sidewalks are provided on both sides of asphalt roadways adjacent to the backside of roadway curbing and follow roadway grades. Concrete sidewalks were constructed to 4 foot wide by 4 inch thick dimensions. Control joints are located at 5 foot centers. Expansion joints between the sidewalk and back of curb are consistent throughout the property. Sidewalk ramps are provided at street intersections for pedestrians crossing streets. Varying width asphalt surfaced pathways provided throughout the development between various buildings where past foot traffic apparently created a path in the grass. Asphalt pathways are constructed flush or level with the ground. Concrete sidewalk and asphalt

pathways appear in good condition and major repairs or replacement of entire sections do not appear warranted at this time.

**Stormwater Management** - The property contains a comprehensive stormwater management system with rainwater runoff remaining within the property boundary inside retention ponds. Roadway rainwater flows off the crowned roadway (elevated centerline) to concrete gutters on each side of the roadway. Rainwater then flows away from the roadway either into curb drop inlets or through sidewalk crosscuts onto grassy areas to catch basins, ultimately flowing through underground piping into one of five on-site stormwater retention ponds. Water appears to either percolate through or evaporate from the ponds. Evidence of injection wells and dewatering structures were not observed. (Figures 6 and 7 – Typical Curb Drop Inlet and Retention Pond)

**Sanitary Sewer** - The property sanitary sewer infrastructure consists of approximately 80 - 4 inch diameter PVC service laterals with cleanouts (1 cleanout for every two units). The services discharge into a gravity collection system with approximately 3,000 feet of 8 inch diameter PVC pipe and approximately 20 service manholes. The gravity system flows to a single pump station located on the Palm Ave (Southwest) side of the development. The pump station has a 6 inch diameter PVC force main that discharges into the City of Key West collection system and sent to the Richard A. Heyman Environmental Pollution Control Facility (Waste water Treatment Plant) on Fleming Key for treatment and disposal.

**Supplementary Property Developments** – Supplement property developments and observations including the following:

- Utilities are constructed underground, including electrical distribution to buildings and electrical service to street lighting.
- Playground equipment and playground areas appear updated over recent years through raising playground areas by adding gravel and retaining walls. Playground areas deserve a closer review for compliance with current Florida Building Codes ADA Accessibility and Fall Protection.
- This development's site work appears overall well designed and constructed as observed by a site review after a light morning rain. The only evidence of rainwater ponding was adjacent to one driveway away from the roadway.
- Existing asphalt/concrete surface conditions do not indicate major repairs due to differential settlement issues throughout entire vehicle and pedestrian traffic patterns. Note that adequate maintenance of any asphalt pavement surface requires routine surface sealing on a 2 to 3 year interval, especially when considering extreme ultraviolet levels of the local area.
- Roadway centerline striping and crosswalk pavement markings were not installed during construction. Installing these pavement markings for delineating vehicle and pedestrian travel limits is recommended after sealing asphalt surfaces.
- Sidewalk current conditions illustrate limited areas of differential settlement at control joints due to vegetation roots. In addition, a void typically exists between the back of roadway curb and sidewalk caused by expansion joint material settling. This expansion joint material settlement most likely resulted from design and construction lacking installation of a backer rod and joint sealant over expansion joint material.
- Sidewalk crosscut drain covers appear permanently sprung (or bowed) thus requiring re-designing and replacing drain covers.
- A detailed pedestrian routing condition assessment recommended for complying with Florida Building Code's ADA Accessibility.

- Replacing the roadway and sidewalks between the razed commercial (former credit union) building and associated parking lot in the center of the property recommended for providing a thoroughfare between all property buildings and public safety personnel alternate access/egress routes.
- The fencing alignment, plumbness, and finish appear satisfactory with exception to the portion of fencing along the south side of property, where vegetation is encroaching on fencing and damaging fencing material.

Refer to Figures 8 through 13 - Typical Street Lighting / Signage, Playground Area, Typical Asphalt Surface Condition, Sidewalk Settlement, Sidewalk Cross Drain Covers, and Fencing Vegetation Encroachment)



City of Key West

Engineering Services  
3132 Flagler Avenue, Key West, FL 33040

- EXISTING ROADWAY
- EXISTING FENCE
- EXISTING STORMWATER POND



TITLE  
**FIGURE 1: SITEWORK LAYOUT**  
**PEARY COURT**

DRAWN	JTJ
SCALE	AS NOTED
DATE	02/03/16
SHEET	1 of 1



Figure 2 – Site Aerial Overview



Figure 3 – Typical Fencing and Gate Entrance



Figure 4 – Typical Roadway



Figure 5 – Typical Drive



Figure 6 – Typical Curb Drop Inlet



Figure 7 – Typical Retention Pond



Figure 8 – Typical Street Lighting / Signage



Figure 9 – Typical Playground



Figure 10 – Typical Asphalt Surface Condition



Figure 11 – Typical Sidewalk Settlement



Figure 12 – Typical Sidewalk Cross Drain Cover



Figure 13 – Typical Fencing Vegetation Encroachment