

R9.0 ROADWAY IMPROVEMENTS

FPL is seeking certification for roadway improvements as an associated linear facility to the Project in order to accommodate peak construction traffic and provide access to Units 6 & 7.

Appendix 10.7.4 presents the construction and operations traffic analyses identifying the location and extent of the recommended roadway improvements. The roadway improvements will involve upgrades to existing paved roads and improvement of existing unpaved roads to paved roadways. In addition, intersection improvements at six locations will be made to accommodate peak construction traffic. Figure R9.0.0-1 shows a map of the approximately ten miles of roadway improvement corridors. Figure R9.0.0-2 shows the roadway improvement corridors on an aerial.

The roadway improvements are uniquely required to support the safe and efficient construction of the facility, but are not necessary post construction. This application identifies and offers mitigation for the impacts of the construction-period roadway improvements. FPL will work with appropriate agencies and stakeholders to determine and create the optimal disposition of the improved public rights-of-way.

R9.1 Maps

Maps providing information required by FDEP's Application Instruction Guide are included at the end of this section.

R9.2 Project Description

The current access to the Turkey Point Plant is by SW 344th Street/Palm Drive to the existing plant access road. During peak construction activities associated with Units 6 & 7, about 3,650 workers will need access to the Site. The existing plant access cannot accommodate the construction traffic. The roadway improvements are uniquely required to support the safe and efficient construction of the facility, but not all of the roadway improvements are necessary for operation. The addition of a separate access road for the Turkey Point Units 6 & 7 Site also allows construction to proceed without inhibiting operations of existing Units 1 through 5. The roadway improvements will provide adequate level of service (LOS) during peak construction periods. FPL will work with appropriate

agencies and stakeholders to determine and create the optimal disposition of the improved public rights-of-way.

The improvements to existing paved roadways consist of widening from two lanes to four lanes the following:

- SW 328th Street/North Canal Drive from SW 137th Avenue/Tallahassee Road to SW 117th Avenue (approximately two miles);
- SW 344th Street/Palm Drive from SW 137th Avenue/Tallahassee Road West to SW 137th Avenue/Tallahassee Road East (approximately 0.3 mile); and
- SW 117th Avenue from SW 328th Street/North Canal Drive to SW 344th Street/Palm Drive (approximately one mile).

The improvements to existing unpaved roadways consist of the following:

- SW 359th Street will be improved to three lanes from SW 137th Avenue/Tallahassee Road to SW 117th Avenue; and to four lanes from SW 117th Avenue to the Units 6 & 7 construction parking areas and Site (approximately five miles). This segment will require a bridge over the L-31E Canal.
- SW 137th Avenue/Tallahassee Road will be improved to three lanes from SW 344th Street/Palm Drive south to SW 359th Street (approximately one mile).
- SW 117th Avenue will be improved to four lanes from SW 344th Street/Palm Drive south to SW 359th Street (approximately one mile).

Four existing intersection improvements and two new intersections are also required to accommodate the traffic. Each intersection will require signalization or traffic control personnel to accommodate construction traffic. The traffic control personnel are required, depending upon the peak traffic periods and flow (i.e., morning or evening).

The six existing intersections requiring improvements include:

- SW 328th Street/North Canal Drive and SW 137th Avenue/Tallahassee Road;
- SW 328th Street/North Canal Drive and SW 117th Avenue;
- SW 344th Street/Palm Drive and SW 137th Avenue/Tallahassee Road (West);
- SW 344th Street/Palm Drive and SW 117th Avenue;

- SW 344th Street/Palm Drive and SW 137th Avenue/Tallahassee Road (East); and
- SW 359th Street and SW 117th Avenue.

If traffic control personnel are used, they would be required at these intersections for both the morning and evening peak periods, with the exception of the intersections at SW 344th Street/Palm Drive and SW 137th Avenue/Tallahassee Road (East and West), which would only require traffic control personnel during peak evening hours.

R9.3 Corridors

R9.3.1 Corridor Selection

The location for the roadway improvement corridors was selected to utilize, to the greatest extent practicable, existing roadways and linear facilities, including existing FPL transmission line roads, to minimize environmental impacts. Appendix 10.7.4 presents the construction and operations traffic analyses identifying the road improvements required to accommodate peak construction traffic associated with the Project.

The corridor widths were selected to encompass the existing roadways and areas required for construction of the proposed roadway improvements. The roadway improvement corridors provide flexibility in the specific location of additional lanes and allow for avoidance and minimization of environmental impacts during final design of the roadway improvements.

To minimize impacts to the existing adjacent wetlands, the locations of the roadway improvement corridors allow for improvements to the existing transmission line right-of-way transmission line road (SW 359th Street) from SW 137th Avenue/Tallahassee Road to the Turkey Point Units 6 & 7 Site to be coordinated with the access requirements for the existing and proposed transmission facilities.

R9.3.2 Corridor Descriptions

The roadway improvement corridors are 330 ft to 560 ft wide and are collocated with existing roadways and transmission rights-of-way. The corridors were selected to maximize utilization of previously disturbed areas and reduce impacts associated with clearing of additional areas. The roadway improvements are approximately ten miles in length, of which approximately five miles are on FPL-owned property. The remaining five miles of the roadway improvements are along existing paved and unpaved roads. The locations, as shown on Figures R9.0.0-1 and R9.0.0-2, are described

below. The roadway improvements will be within existing designated rights-of-way for existing and platted roads, and within the existing FPL transmission rights-of-way.

The roadway improvements include:

- SW 328th Street/North Canal Drive from SW 137th Avenue/Tallahassee Road to SW 117th Avenue [up to 100 ft in width (see Figure 9.3.2-1)];
- SW 344th Street/Palm Drive from SW 137th Avenue/Tallahassee Road West to SW 137th Avenue/Tallahassee Road East [up to 50 ft in width (see Figure 9.3.2-2)];
- SW 359th Street from SW 137th Avenue/Tallahassee Road to the Site and parking area [up to 150 ft in width (see Figure 9.3.2-3 and 9.3.2-4)];
- SW 137th Avenue/Tallahassee Road from SW 344th Street/Palm Drive to SW 359th Street [up to 70 ft in width (see Figure 9.3.2-5)]; and
- SW 117th Avenue from SW 328th Street/North Canal Drive to SW 359th Street [up to 70 ft in width (see Figure 9.3.2-6)].

The roadway improvements will require a new bridge on SW 359th Street to cross the L-31E Canal, and improvements to two canal crossings (Florida City Canal and North Canal). The bridge over the L-31E Canal will be four lanes; a typical cross section shown in Figure R9.3.2-7. For SW 117th Avenue, an improvement to the bridge culvert over the Florida City Canal north of SW 344th Street/Palm Drive is required to accommodate four lanes. A typical section of the bridge culvert over the Florida City Canal is presented in Figure R9.3.2-8. The SW 117th Avenue bridge over the North Canal will be replaced; a typical section is shown in Figure R9.3.2-9.

The conceptual intersection plans are presented in Figures R9.3.2-10 through R9.3.2-15. The connection between SW 137th Avenue/Tallahassee Road and SW 359th Street will be a curve.

Improvements within the roadway improvement corridors are summarized below; further description is provided in Appendix 10.7.4.

The improvements for the existing paved roadways consist of widening from two lanes to four lanes the following roadways:

- SW 328th Street/North Canal Drive from SW 137th Avenue/Tallahassee Road to SW 117th Avenue (approximately two miles);

- SW 344th Street/Palm Drive from SW 137th Avenue/Tallahassee Road West to SW 137th Avenue/Tallahassee Road East (approximately 0.3 mile); and
- SW 117th Avenue from SW 328th Street/North Canal Drive to SW 344th Street/Palm Drive (approximately one mile).

R9.3.3 Alternate Corridors

No alternate corridors are proposed for the roadway improvements.

R9.3.4 Access Roads

The improved SW 359th Street will continue to serve as the access road for the existing and proposed transmission lines within the transmission corridor between SW 137th Avenue/Tallahassee Road and the existing plant, as discussed in Subsection W9.3.4. The access roadway improvements will be designed to improve sheet flow, with the addition of culverts as necessary. Roads will be designed as appropriate to account for potential water level increases in the region associated with approved regional restoration projects.

R9.3.5 Cost Projections

The costs for the roadway improvements are under development. Final cost ranges will be developed incorporating a number of contributing factors, including right-of-way acquisition, the need for access for construction, fill, mitigation, and engineering design and construction costs. The exact location of the roadway improvements will be determined following corridor certification and selection of the right-of-way within the corridors. The actual cost of the roadway improvements will be based on the ultimate design, mitigation costs, acquisition of additional rights-of-way, other location-specific conditions, and conditions of certification.

Since commencement of construction is several years from this application, the impact to final cost of market variations in materials, equipment, and labor is difficult to predict. The detailed location and design of the roadway improvements will be determined following corridor certification and, where necessary, selection of the rights-of-way within the corridors.

R9.3.6 Social and Political Environment of the Corridor Areas

R9.3.6.1 *Governmental Jurisdictions*

The roadway improvement corridors are located within unincorporated southeastern Miami-Dade County and the City of Homestead, Florida (Figure R9.3.6-1). The portions of roadway improvement corridors in the City of Homestead include segments of the four-lane improvements for SW 328th

Street/North Canal Drive and SW 344th Street/Palm Drive near SW 137th Avenue/Tallahassee Road, and intersection improvements at SW 328th Street/North Canal Drive and SW 137th Avenue/Tallahassee Road and SW 344th Street/Palm Drive and SW 137th Avenue/Tallahassee Road (West and East intersections). The remaining roadway improvements are within unincorporated Miami-Dade County. All roadway improvements are within the jurisdiction of the Miami-Dade County Public Works Department (Highway Division).

Towns, cities, and local, regional, state, or federally environmentally sensitive or public lands within one-half mile of the roadway improvement corridors are shown on Figure R9.3.6-1. Information regarding environmentally sensitive areas and public lands is provided in Subsection R9.3.6.4.

R9.3.6.2 Zoning and Land Use Plans

Comprehensive Plans

Miami-Dade County has adopted a Comprehensive Development Master Plan (CDMP) to meet the requirements of the Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163, Part II, F.S., and Chapter 9J-5, F.A.C. The CDMP was last revised in October 2006. The map shown in Figure R9.3.6-2 presents the future land use categories that are traversed by the roadway improvement corridors.

The roadway improvement corridors traverse the following future land use categories: Agriculture; Environmental Protection; Environmentally Protected Parks; Institutions, Utilities and Communications; Open Land; and Major Roads. The relevant future land use categories are described in the Future Land Use Element of the CDMP, which is included in Appendix 10.5. FPL has filed an application to amend the CDMP to allow the specific roadway improvements.

Zoning

The Miami-Dade County Land Development Code (LDC) has been adopted to implement the policies and objectives of the Miami-Dade CDMP and to regulate land development within the unincorporated portions of Miami-Dade County. The Code incorporates a zoning map that depicts the zoning categories of lands lying within unincorporated Miami-Dade County. Figure R9.3.6-3 presents the Miami-Dade County and the City of Homestead zoning maps for the roadway improvement corridors. The roadway improvements are consistent with the applicable zoning requirements. The roadway improvement corridors traverse the following Miami-Dade County zoning designations: Agricultural District (AU), Interim District (GU), and Planned Unit Development (PUD).

R9.3.6.3 Easements, Title, Agency Works

Easements, leases, or titles may be required for portions of the improved roadways. SW 359th Street is on FPL property and will remain a private road when improved. All other roadways within the described corridors have been designated as public rights-of-way by Miami-Dade County. With the expansion of the roadways, certain easements from governmental agencies may be required, depending upon the final design. The L-31E Canal crossing on SW 359th Street will require an easement from the SFWMD.

R9.3.6.4 Vicinity Scenic, Cultural, and Natural Landmarks

The BNP Dante Fascell Visitor Center is located approximately two miles east of the roadway improvement corridors along SW 117th Avenue between SW 328th Street/North Canal Drive and SW 344th Street/Palm Drive. The BNP was first established in 1968 as a National Monument and was expanded in 1980 to approximately 173,000 acres of water, coastal lands, and 42 keys. The BNP fulfills a multi-purpose mission by managing natural and historic resources, advocating responsible stewardship, and enabling visitors to experience scenic vistas and compatible recreation activities. Boating is the most prevalent activity in the BNP, and recreational and commercial fishing are allowed. Other recreational activities include snorkeling, diving, camping, picnicking, and hiking. The BNP headquarters are located at the eastern end of SW 328th Street/North Canal Drive.

Homestead Bayfront Park, adjacent to the BNP, is a recreational park located approximately two miles east of the roadway improvement corridors along SW 117th Avenue from SW 328th Street/North Canal Drive and SW 344th Street/Palm Drive. Miami-Dade County owns and operates the Park. Facilities include the Hoover Marina, an atoll pool and beach, picnic pavilions, grills, a playground, and a fishing area.

R9.3.6.5 Archaeological and Historical Sites

The FMSF was reviewed to obtain data on known cultural resources within 500 ft of the roadway improvement corridors. The results of the cultural resource assessments are presented in Appendix 10.7.2. Previously recorded archaeological sites, historic structures, historic cemeteries, historic bridges, and resource groups were noted if they fell within the areas of potential effects or adjacent to the roadway improvement corridors. No previously recorded archaeological sites, archaeological zones, historic structures, historic districts, historic linear resources, historic cemeteries, or historic bridges were identified within 500 ft of the access roads and bridges.

The roadway improvement corridors are collocated with existing linear facility rights-of-way and include minimal areas of undisturbed lands. The probability of impacts on undiscovered archaeological and historical sites is considered extremely low due to the fact that the area does not contain known sites and the roadway improvements will be constructed within or immediately adjacent to previously disturbed areas. If unforeseen archaeological finds are discovered during construction, DHR will be notified. Following a determination of the importance of such finds, FPL will work with DHR to assess mitigation measures necessary to minimize adverse impacts.

R9.3.7 Biological and Physical Environment of the Roadway Corridor

R9.3.7.1 Land Use/Vegetation

The roadway improvement corridors are located adjacent to and along established road and transmission rights-of-way. Dominant land use and vegetative communities within the corridor and within one-half mile of the corridor include tree nurseries (FLUCFCS 241), Brazilian pepper (*Schinus terebinthifolia*) (FLUCFCS 422), man-made canals (FLUCFCS 510), maintained grassed roadside rights-of-way (FLUCFCS 814), exotic wetland hardwoods (FLUCFCS 619), freshwater marshes (FLUCFCS 641), and mixed hardwood wetlands (FLUCFCS 617).

Figure R9.3.7-1 presents land use and land cover within and adjacent to the roadway improvement corridors classified according to the FLUCFCS [Florida Department of Transportation (FDOT), 1999]. Land cover and land use are mapped at Level III; each vegetative community is described in more detail in Subsection R9.3.7.3.

R9.3.7.2 Affected Waters and Wetlands

Surface water features within the roadway improvement corridors include canals, which typically occur on the borders of roadside rights-of-way, freshwater marshes, exotic wetland hardwoods, and mixed hardwood wetlands. Any impacts to wetlands associated with the roadway improvements will be addressed in accordance with FDEP, USACE, and DERM requirements. Unavoidable wetland impacts resulting from construction of the roadway improvements will be mitigated in consultation with the FDEP, USACE, and DERM. BMPs, such as silt fencing and floating turbidity curtains, will be used to prevent secondary impacts to surface waters or wetlands associated with construction of the roadway improvements.

R9.3.7.3 Ecology

Species–Environmental Relationships

The following subsections include descriptions of important flora and fauna within and surrounding the roadway improvement corridors. This discussion includes information related to the occurrence of important species found and the value of the habitats present. Details of threatened, endangered, and plant or animal species of special concern (listed species) observed or potentially occurring within the roadway improvement corridors and surrounding area are provided below following the discussion of non-listed species.

Terrestrial and Wetland Ecosystems–Flora

The following descriptions of primary flora habitats within the roadway improvement corridors are categorized according to the FLUCFCS. Figure R9.3.7-1 shows land use and vegetative communities within the roadway improvement corridors and one-half mile surrounding the corridors.

Tree Nurseries (FLUCFCS 241) – Areas of tree nurseries are common within the roadway improvement corridors adjacent to SW 328th Street/North Canal Drive. These are agricultural areas cleared of natural vegetative communities, topographically graded, and converted to commercial production of palm trees. This intensive agricultural land use provides limited habitat for wildlife or listed species of plants/animals.

Canals (FLUCFCS 510) – Canals occur adjacent to the roadway improvement corridors associated with SW 344th Street/Palm Drive and SW 328th Street/North Canal Drive. In-stream vegetation is minimal within the man-made canals adjacent to existing roadways, due to the steep slopes and minimal littoral zone. Emergent and floating leaved species typical of the canals include spatterdock (*Nuphar luteum*), water lettuce (*Pistia stratioides*), and water hyacinth (*Eichhornia crassipes*), while the banks contain beggarticks (*Bidens* sp.), primrose willow (*Ludwigia* sp.), Brazilian pepper, willow (*Salix caroliniana*), and ragweed (*Ambrosia artemisiifolia*).

Mangroves (FLUCFCS 612) – Areas of mangroves occur within the roadway improvement corridors adjacent to SW 359th Street near the L-31E Canal. These areas are dominated by a mixture of red mangrove (*Rhizophora mangle*) and black mangrove (*Avicennia germinans*), along with subdominant species white mangrove (*Laguncularia racemosa*), buttonwood (*Conocarpus erectus*), Brazilian pepper, cocoplum (*Chrysobalanus icaco*), sea grape (*Coccoloba uvifera*), half-flower (*Scaevola sericea*), and occasional Australian pine (*Casuarina equisetifolia*).

Mixed Wetland Hardwoods (FLUCFCS 617) – Several areas of mixed wetland hardwood communities are present within and adjacent to the roadway improvement roadway improvement corridors. Mixed wetland hardwoods are comprised of a variety of native and exotic canopy species, including buttonwood, Australian pine, cocoplum, red mangrove, Brazilian pepper, cabbage palm (*Sabal palmetto*), and willow.

Exotic Wetland Hardwoods (FLUCFCS 619) – Areas of exotic wetland hardwoods dominated by Brazilian pepper occur within the roadway improvement corridors adjacent to the existing roadways. In addition to the nuisance exotic species Brazilian pepper, additional species commonly observed within these areas include Australian pine, willow, groundsel tree (*Baccharis halimifolia*), elderberry (*Sambucus canadensis*), primrose willow, cattail (*Typha latifolia*), paragrass (*Urochloa mutabilis*), and torpedo grass (*Panicum repens*).

Freshwater Marsh (FLUCFCS 641) – Areas of freshwater marsh are prevalent within the roadway improvement corridor adjacent to SW 359th Street. These marshes are dominated by sawgrass (*Cladium* spp.), with subdominant species including cattail, willow, primrose willow, buttonwood, wax myrtle (*Myrica cerifera*), cabbage palm, Brazilian pepper, poisonwood (*Metopium toxiferum*), Australian pine, musky mint (*Hyptis alata*), silk tree (*Albizia julibrissin*), and nettletree (*Trema micranthum*).

Terrestrial and Wetland Ecosystems–Fauna

Wildlife habitat in the roadway improvement corridors have been altered significantly from the natural state for the existing roadways and canals. The conversion of areas to tree nurseries, in conjunction with the widespread occurrence of exotic species of vegetation, principally Brazilian pepper and Australian pine, reduces the quantity and quality of native habitat. Wildlife utilization of the roadway improvement corridors includes those species typical of disturbed areas of southeast Florida. A discussion of habitat quality and wildlife species observed or likely to occur within the roadway improvement corridors and surrounding area follows.

Tree Nurseries (FLUCFCS 241) and Brazilian Pepper (FLUCFCS 422) – These upland communities within the roadway improvement corridors and adjacent areas provide limited habitat for wildlife or listed species of plants/animals. Only common species of wildlife typically utilize tree nurseries or areas of upland Brazilian pepper, such as mockingbird (*Mimus polyglottis*), loggerhead shrike (*Lanius ludovicianus*), black vulture (*Coragyps atratus*), turkey vulture (*Cathartes aura*),

mourning dove (*Zenaida macroura*), red-winged blackbird (*Agelaius phoeniceus*), ground dove (*Columbina passerina*), cattle egret (*Bubulcus ibis*), Eastern cottontail rabbit (*Sylvilagus floridanus*), raccoon (*Procyon lotor*), and the exotic species brown basilisk (*Basiliscus vittatus*).

Canals (FLUCFCS 510) – The artificial canals within the roadway improvement corridors and surrounding area contain relatively steep slopes and limited littoral zone vegetation, reducing the quality of wildlife habitat. Common avian species utilize the canals, such as moorhen (*Gallinula chloropus*), green heron (*Butorides virescens*), great egret (*Casmerodias albus*), anhinga (*Anhinga anhinga*), cattle egret, cormorant (*Phalacrocorax auritis*), great blue heron (*Ardea herodias*), belted kingfisher (*Ceryle alcyon*), and osprey (*Pandion haliaetus*).

Canals adjacent to SW 328th Street/North Canal Drive and SW 344th Street/Palm Drive provide habitat for common freshwater forage fishes, such as mosquitofish (*Gambusia holbrooki*), sailfin molly (*Poecilia latipinna*), and least killifish (*Heterandria formosa*), as well as sunfish (*Lepomis* sp.), gar (*Lepisosteus* sp.), and exotic species commonly inhabiting canals of Miami-Dade County, such as peacock bass (*Cichla ocellaris*), spotted tilapia (*Tilapia mariae*), blue tilapia (*Oreochromis aureus*), Mayan cichlid (*Cichlasoma urophthalmus*), jaguar guapote (*Cichlasoma managuense*), and oscar (*Astronotus ocellatus*).

Mangrove (FLUCFCS 612), Mixed Wetland Hardwood (FLUCFCS 617), and Freshwater Marsh (FLUCFCS 641) – A variety of avifauna use wetland habitats within the roadway improvement corridors, including great blue heron, cattle egret, great egret, belted kingfisher, anhinga, cormorant, red-winged blackbird, green heron, least bittern (*Ixobrychus exilis*), yellow-crowned night heron (*Nycticorax violaceus*), black-crowned night heron (*Nycticorax nycticorax*), and listed species described below.

Listed Species–Flora and Fauna

Listed species are those plant and animal species that are designated by FFWCC, FDACS and/or USFWS as threatened, endangered, or of special concern. Listed species known to occur in Miami-Dade County and their probability of occurrence along the roadway improvement corridors are identified in Table R9.3.7-1 and discussed below. In addition, the FNAI database of documented occurrences of listed species was consulted to identify known occurrences of any listed species within one-half mile of the roadway improvements (see Figure 9.3.7-2).

Listed plant species observed or likely to occur within the roadway improvement corridors and adjacent area include the state-threatened mullein nightshade (*Solanum donianum*), pinepink (*Bletia purpurea*), and Bahama brake (*Pteris bahamensis*), as well as the State-endangered Lamarck's trema (*Trema lamarckianum*), all of which are found within disturbed uplands such as the areas adjacent to the existing roadway of SW 359th Street. Based on existing habitat and results of field surveys, there is a moderate probability of occurrence for a number of listed plants within the roadway improvement corridors (Table R9.3.7-1). The FNAI database did not indicate any occurrences of listed plants in the vicinity of the roadway improvement corridors.

Listed species of animals observed or likely to occur within or adjacent to the roadway improvement corridors include wading birds associated with canals, mangroves, mixed wetland hardwoods, and freshwater marsh habitats. Listed wading birds observed or likely to forage within the corridors include white ibis (*Eudocimus albus*), little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), snowy egret (*Egretta thula*), roseate spoonbill (*Platalea ajaja*), and wood stork (*Mycteria americana*). In addition, the canals and other wetland habitats provide habitat for the American alligator (*Alligator mississippiensis*) and potential habitat for the American crocodile (*Crocodylus acutus*). According to the FNAI database, no listed species have been documented within the roadway improvement corridors. Listed species observed or potentially utilizing habitats within the roadway improvement corridors are described below.

White Ibis– SSC – The white ibis is listed as a species of special concern by the FFWCC, but is not federally listed by the USFWS. White ibis are likely to forage within freshwater marsh habitats and along the banks of canals within the roadway improvement corridors.

Little Blue Heron– SSC – The little blue heron is listed as a species of special concern by the FFWCC, but is not listed federally. Little blue herons are likely to forage on the edges of canals and are likely to occur within freshwater marshes within and adjacent to the roadway improvement corridors.

Tricolored Heron– SSC – The tricolored heron is listed as a species of special concern by the FFWCC, but is not listed federally. No tricolored herons were observed within the roadway improvement corridors, although it is likely that they occasionally utilize freshwater marsh, canal, and mangrove habitats for foraging.

Snowy Egret– SSC – The snowy egret is listed as a species of special concern by the FFWCC, but is not listed federally by the USFWS. Snowy egrets have been observed along the edges of the canals and are likely to utilize mangrove, mixed wetland hardwood, and freshwater marsh wetlands within the roadway improvement corridors.

Roseate Spoonbill– SSC – The roseate spoonbill is listed as a species of special concern by the FFWCC, but is not listed federally by the USFWS. Although no individuals were observed, it is likely that they occasionally utilize mangrove and freshwater marsh wetlands within and adjacent to the roadway improvement corridors for foraging.

Wood Stork (*Mycteria americana*) – E – The wood stork is listed as endangered by the FFWCC and USFWS. Although no individuals were observed within the roadway improvement corridors, based on available habitat, it is probable that wood storks occasionally forage in shallow freshwater marsh and mangrove habitats adjacent to existing roadways.

Reddish Egret– SSC – The reddish egret is classified as a species of special concern by the FFWCC, but is not listed federally by the USFWS. Although none were observed within or adjacent to the roadway improvement corridors, it is likely that they occasionally utilize freshwater marsh, canal, and mangrove habitats in the area for foraging.

White-crowned Pigeon (*Patagioenas leucocephala*) – T – The white-crowned pigeon is classified as threatened by the FFWCC, but is not listed federally by the USFWS. No individuals were observed within the roadway improvement corridors or surrounding area. However, based on suitable foraging habitat in the form of fruit-bearing tropical hardwoods, it is probable that the white-crowned pigeon utilizes wooded areas adjacent to the roadway improvement corridors.

Limpkin (*Aramus guarauna*) – SSC – The limpkin is classified as a species of special concern by the FFWCC, but is not listed federally by the USFWS. No individuals were observed; however, due to the presence of suitable mangrove habitat and irrigation canals, there is a moderate probability that the limpkin may forage within areas adjacent to the roadway improvement corridors.

Florida Manatee (*Trichechus manatus latirostris*) – E – The manatee is listed as endangered by the FFWCC and USFWS. Although no individuals were observed within the roadway improvement

corridors, based on available habitat it is probable that manatees occasionally occur within the canals adjacent to SW 328th Street/North Canal Drive and SW 344th Street/Palm Drive.

Mangrove Rivulus (*Rivulus marmoratus*) – SSC – The mangrove rivulus is classified as a species of special concern by the FFWCC, but is not listed federally by the USFWS. No individuals were observed; however, due to the presence of suitable mangrove habitat and other surface waters, it is likely that the mangrove rivulus occurs within or adjacent to the roadway improvement corridors.

American Alligator– SSC/T – The American alligator is listed as a species of special concern by the FFWCC, and is federally listed by the USFWS as threatened due to similarity of appearance with the endangered American crocodile (*Crocodylus acutus*). Alligators are known to utilize the canals within the roadway improvement corridors.

American Crocodile– E/T – The American crocodile is classified by the FFWCC as endangered and by the USFWS as threatened. The Turkey Point plant cooling canals are known to support a population of American crocodiles, as described in Subsection 2.3.6. Although no individual crocodiles have been observed within the aquatic habitats of the roadway improvement corridors, the area adjacent to the L-31E Canal contains mangrove wetlands that provide potential foraging habitat..

Florida panther (*Puma concolor coryi*) - E - The panther is listed by USFWS and FFWCC as endangered. This large cat prefers the mostly natural vegetation communities of South Florida. No Florida panthers have been observed in the area of the roadway improvement corridor since 1988. The USFWS Panther Consultation Area includes the western boundary of the Turkey Point plant property and a portion of the roadway improvement corridor. This corresponds to the general vicinity element occurrence location identified in the FNAI database (Figure R9.3.7-2), indicative of the presence of habitat conditions for the panther.

According to FFWCC panther telemetry data (dated 1981-2008), one panther (FP-21) was recorded in the area west of the plant in 1987 and 1988. Records further indicate that this individual was captured for monitoring the USFWS in March 1987, then removed from the wild in July 1988 for medical reasons and relocated to White Oak Plantation in Nassau County. Panther FP 21 was eventually euthanized in December 1997. Appendix 10.7.1.3 presents additional information on the Florida panther.

R9.3.7.4 Aquatic Systems

The only significant aquatic systems along the roadway improvement corridors are artificial drainage canals [refer to previous discussion on Canals (FLUCFCS 510) for more information]. The SFWMD canal system is primarily utilized for drainage and water conveyance as part of the SFWMD management of flood control and water supply. The majority of the native vegetation along the banks of the canals has been cleared.

R9.3.7.5 Other Environmental Features

A portion of the lands designated as Model Lands Basin are located adjacent to the roadway improvement corridors. The Model Lands Basin was SOR land acquired by the SFWMD. The Model Lands Basin is comprised largely of freshwater and saltwater wetlands that form a contiguous habitat passageway with the ENP, the Southern Glades SOR project located further to the southwest, the BNP, and other designated lands in Miami-Dade County.

As described in Subsection R6.3.6.4, the BNP Dante Fascell Visitor Center is located about two miles east of the roadway improvement corridors.

R9.4 Effects of Rights-of-Way Preparation and Construction**R9.4.1 Construction Techniques**

Construction of the roadway improvements will follow the Miami-Dade County Public Works Manual and the FDOT Design Standards. Typical cross-sections for the roadway improvements are presented in Figures R9.3.2-1 through R9.3.2-9. These figures show typical dimensions for the road or bridge, typical construction specifications and conceptual stormwater management. All proposed design elements (design speed, lane width, shoulder width, median width, cross slope, border width, bridge width, horizontal clearance, etc.) included in these typical sections comply with all applicable design criteria and design standards. Based on the existing field conditions and design constraints, criteria were selected as deemed practical from the Miami-Dade County Public Works Standards, FDOT Plans Preparation Manual or FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (commonly known as the “Florida Greenbook”), FDOT Design Standards, and FDOT Drainage Manual. Typical road construction equipment will be used to construct the roadway improvements, such as dump trucks, bulldozers, graders, pavers, rollers, backhoes, frontend loaders and tanker trucks.

The Metropolitan Dade County Public Works Manual Water Control Detail W.C. 2.2 was referenced for the Seasonal High Water Table (SHWT) elevations. The SFWMD and DERM were contacted for the control elevation of the canals which can be used as the Normal High Water (NHW) elevations. The selection of the water elevation criteria is as follows:

- Roadway Typical in which a canal runs parallel to the roadway, the highest value between the NHW elevation and the SHWT elevation is selected.
- Roadway Typical in which no canal runs parallel to the roadway, the SHWT elevation is selected.
- Bridge Typical, Per the FDOT Drainage Manual, Section 4.6.1, the highest value between the NHW elevation plus 6' and the Design High Water (DHW) elevation (50YR Frequency Model) plus 2' is selected for the design of the low member of bridges.

The construction activities will involve the installation of silt fences, removal of vegetation, construction of drainage, removal of unsuitable soils, placement of road-base materials, laying layers of asphalt, and striping. The access roads will be designed to maintain sheet flow along alignments with the addition of culverts as necessary to maintain flow. The elevation of the access roads will account for increased water elevations. Construction stormwater discharges released into waters of the state will be addressed through compliance with Rule 62-621.300(4) (Generic Permit for Stormwater from Large and Small Construction Activities).

R9.4.2 Environmental Resource Permit (ERP)

The widening of existing paved roads, paving of existing unpaved roads, bridge over the L-31E Canal, and intersection improvements will result in impacts to wetlands. The information typically provided in an ERP application will be submitted to reviewing agencies for postcertification monitoring of compliance with the Conditions of Certification, as authorized Section 62-17.191, F.A.C. The ERP informational data submittal contained in Appendix 10.4 reflects an enveloping approach for the roadway improvements portion of the Project.

R9.4.3 Solid Wastes

Solid wastes generated by the clearing associated with the roadway improvements is anticipated to be minimal, since most of the roadway improvement corridors have already been cleared for the existing canals, roadways, agricultural activities, and transmission lines. Solid wastes generated will typically consist of unsuitable soils, asphalt, minor amounts of vegetation, and construction debris. All solid

wastes will be collected and removed for off-site disposal at a permitted disposal facility. No disposal of debris by burial within the roadway improvement corridors shall be performed.

R9.4.4 Changes to Vegetation, Wildlife, and Aquatic Life

No adverse changes to the vegetation, wildlife, or aquatic systems in the roadway improvement corridors are anticipated. The improved roadways are collocated with existing linear facilities (existing paved and unpaved roads and/or transmission corridors), reducing disturbance of altered habitats during installation.

No adverse impacts to threatened or endangered species are expected. Listed animal species observed along the roadway improvement corridors are mostly limited to mobile avian and aquatic species that may relocate to similar habitat during construction activities. Listed plant species occurring in the area of the roadway improvement corridors utilize the upland edges of existing roadway rights-of-way. Following improvement of roadways, similar upland areas will occur on the edges of the improved roadways, providing habitat for listed plants.

To reduce the potential for impacts to crocodiles along the roadway immediately north of the existing industrial wastewater facility, FPL will install a system of wildlife underpasses to allow crocodiles to move safely under the primary access road when traveling between the main cooling canals and the test cooling canals and associated freshwater ponds on the berms to the north (Figure R9.4.4-1). The crossings will be bottomless culverts constructed of precast concrete with wing walls to direct crocodiles through the openings (Figure R9.4.4-2). Chain link with mesh size small enough to prohibit passage of hatchling crocodiles or other suitable fencing will also be installed on either side of the roadway from the L-31E Canal east along the length of the test cooling canal area to facilitate utilization of the underpasses and discourage attempts to cross the access road. This wildlife underpass design is similar to those used successfully in Florida and other parts of the country for control of the movement of wildlife, and should significantly reduce and/or eliminate the probability of traffic mortalities associated with the Site access road. SCA Appendix 10.7.1.3 contains more information on the mitigation and management plan for the American crocodile.

Based on the final designs for the roadway improvements, any planting required for areas impacted by roads will be coordinated through Miami-Dade County. The planting will be native material appropriate to the planting area and will be Florida Landscape Grade A.

R9.4.5 Impacts to Human Populations

Construction of the roadway improvements will consist of a series of tasks performed by specialized roadway contractors. There are no residential communities along the areas where construction of roadway improvements will occur. Use of construction equipment may result in temporary noise impacts near the roadway improvement corridors. Impacts will be brief and intermittent due to the nature of road construction and equipment use. Clearing will be minimized because the roadway improvements will follow existing, predominantly cleared corridors. The construction contractor will follow applicable standards for maintenance of traffic that may include flagging and use of barriers/warning lights for traffic control.

Because of the temporary nature of the construction process and the relatively short duration of each phase of construction at any given location, any inconvenience experienced by individuals near the roadway improvement corridors will be minimal and of short duration.

R9.4.6 Impact on Regional Scenic, Cultural, and Natural Landmarks

No significant impacts to regional scenic, cultural, or natural landmarks are anticipated from the construction of the roadway improvements. The roadway improvements will not impact the BNP because all construction activities will be located approximately two miles west of the BNP. Some traffic disturbance may occur to visitors to the Dante Fascell Visitor Center at BNP along SW 328th Street/North Canal Drive. This disturbance will only occur on SW 328th Street/North Canal Drive and the intersection with SW 117th Avenue during construction. After the roadway improvements are complete, access to the BNP will be improved on SW 328th Street/North Canal Drive.

R9.4.7 Impact of Archaeological and Historical Sites

The probability of impacts on undiscovered archaeological and historical sites is considered extremely low due to the fact that the area does not contain known sites and the roadway improvements will be constructed within or immediately adjacent to previously disturbed areas. If unforeseen archaeological finds are discovered during construction, DHR will be notified. Following a determination of the importance of such finds, FPL will work with DHR to assess mitigation measures necessary to minimize adverse impacts.

R9.5 Postconstruction Impacts and Effects of Maintenance

R9.5.1 Maintenance Techniques

FPL will be responsible for maintaining the roadway improvements on FPL property. The other roads will be maintained by Miami-Dade County. Typical roadway maintenance techniques will be used.

R9.5.2 Multiple Uses

Current uses within and adjacent to the roadway improvement corridors will continue after the roadway improvements are complete. These uses include road travel, transmission of electricity from the Turkey Point Plant to the FPL system, and water conveyance in the L-31E Canal. Potable water pipelines will be installed within some of the roadway improvements (see Section D9.0).

R9.5.3 Changes in Species Populations

No significant changes in species populations are expected upon completion of construction. No adverse changes to available wildlife habitat are expected, and no adverse changes in species populations will occur as a result of maintenance activities.

R9.5.4 Effects of Public Access

The public will have full access to the improved roadways on SW 328th Street/North Canal Drive, SW 344th Street/Palm Drive, SW 137th Avenue/Tallahassee Road, and SW 117th Avenue north of SW 344th Street/Palm Drive. These roads are currently accessible by the public. The roadway improvements are uniquely required to support the safe and efficient construction of the facility, but not all are necessary post-construction.

After the construction of Turkey Point Units 6 & 7 is complete, FPL intends that the roadway improvements on FPL-owned property south of SW 344th Street/Palm Drive will have no public access. Access to these roads may be limited by appropriate means to provide access only to FPL, its contractors, leaseholders, or property owners.

R9.5.5 Other Postconstruction Effects

No other post-construction effects are anticipated.

TABLE R9.3.7-1
THREATENED, ENDANGERED, AND SPECIES OF SPECIAL CONCERN KNOWN TO OCCUR IN MIAMI-DADE COUNTY, FL
AND PROBABILITY OF OCCURRENCE IN THE VICINITY OF THE ROADWAY CORRIDORS

Scientific Name	Common Name	Federal Status	State Status	Probability of Occurrence		
				High	Moderate	Low
<u>Fish</u>						
<i>Rivulus marmoratus</i>	Mangrove Rivulus	C	SSC	X		
<u>Amphibians</u>						
<i>Rana capito</i>	Gopher Frog	N	SSC			X
<u>Reptiles</u>						
<i>Alligator mississippiensis</i>	American Alligator	T (SA)	SSC	X		
<i>Caretta caretta</i>	Loggerhead	T	T			X
<i>Chelonia mydas</i>	Green Turtle	E	E			X
<i>Crocodylus acutus</i>	American Crocodile	T	E		X	
<i>Dermochelys coriacea</i>	Leatherback	E	E			X
<i>Drymarchon couperi</i>	Eastern Indigo Snake	T	T		X	
<i>Eretmochelys imbricata</i>	Hawksbill	E	E			X
<i>Gopherus polyphemus</i>	Gopher Tortoise	N	T		X	
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	N	SSC		X	
<i>Tantilla oolitica</i>	Rim Rock Crowned Snake	N	T		X	
<u>Birds</u>						
<i>Ammodramus maritimus mirabilis</i>	Cape Sable Seaside Sparrow	E	E			
<i>Aramus guarana</i>	Limpkin	N	SSC	X		
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	N	SSC			X
<i>Charadrius melodus</i>	Piping Plover	T	T		X	
<i>Egretta caerulea</i>	Little Blue Heron	N	SSC	X		
<i>Egretta rufescens</i>	Reddish Egret	N	SSC	X		
<i>Egretta thula</i>	Snowy Egret	N	SSC	X		
<i>Egretta tricolor</i>	Tricolored Heron	N	SSC	X		
<i>Eudocimus albus</i>	White Ibis	N	SSC	X		
<i>Falco peregrinus</i>	Peregrine Falcon	N	E			
<i>Falco sparverius paulus</i>	Southeastern American Kestrel	N	T		X	
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	N	T			X
<i>Haematopus palliatus</i>	American Oystercatcher	N	SSC		X	
<i>Mycteria americana</i>	Wood Stork	E	E	X		
<i>Patagioenas leucocephala</i>	White-crowned Pigeon	N	T	X		
<i>Pelecanus occidentalis</i>	Brown Pelican	N	SSC		X	
<i>Platalea ajaja</i>	Roseate Spoonbill	N	SSC	X		
<i>Rostrahamus sociabilis plumbeus</i>	Snail Kite	E	E		X	
<i>Rynchops niger</i>	Black Skimmer	N	SSC		X	
<i>Sterna antillarum</i>	Least Tern	N	T		X	
<u>Mammals</u>						
<i>Eumops floridanus</i>	Florida Bonneted Bat	N	E			X
<i>Mustela vison evergladensis</i>	Everglades Mink	N	T			X
<i>Podomys floridanus</i>	Florida Mouse	N	SSC		X	
<i>Puma concolor coryi</i>	Florida Panther	E	E			X
<i>Trichechus manatus latirostris</i>	Florida manatee	E	E	X		
<u>Plants</u>						
<i>Acrostichum aureum</i>	Golden Leather Fern	N	T			X

TABLE R9.3.7-1
THREATENED, ENDANGERED, AND SPECIES OF SPECIAL CONCERN KNOWN TO OCCUR IN MIAMI-DADE COUNTY, FL
AND PROBABILITY OF OCCURRENCE IN THE VICINITY OF THE ROADWAY CORRIDORS

Scientific Name	Common Name	Federal Status	State Status	Probability of Occurrence		
				High	Moderate	Low
<i>Adiantum melanoleucum</i>	Fragrant Maidenhair Fern	N	E			X
<i>Adiantum tenerum</i>	Brittle Maidenhair Fern	N	E			X
<i>Aeschynomene pratensis</i>	Meadow Jointvetch	N	E			X
<i>Aletris bracteata</i>	Bracted Colic-root	N	E			X
<i>Alvaradoa amorphoides</i>	Everglades Leaf Lace	N	E			X
<i>Amorpha herbacea</i> var. <i>crenulata</i>	Crenulate Lead-plant	E	E			X
<i>Anemia wrightii</i>	Wright's Anemia	N	E			X
<i>Argusia gnaphalodes</i>	Sea Lavender	N	E			X
<i>Argythamnia blodgettii</i>	Blodgett's Wild-mercury	C	E			X
<i>Aristolochia pentandra</i>	Dutchman's Pipe	N	E			X
<i>Asplenium dentatum</i>	American Toothed Spleenwort	N	E			X
<i>Asplenium serratum</i>	American Bird's Nest Fern	N	E			X
<i>Asplenium verecundum</i>	Modest Spleenwort	N	E			X
<i>Basiphyllaea corallicola</i>	Rockland Orchid	N	E			X
<i>Beloglottis costaricensis</i>	Costa Rican Ladies'-tresses	N	E			X
<i>Bletia purpurea</i>	Pinepink	N	T	X		
<i>Bourreria cassinifolia</i>	Smooth Strongbark	N	E			X
<i>Brassia caudata</i>	Spider Orchid	N	E			X
<i>Brickellia mosieri</i>	Florida Brickell-bush	C	E		X	
<i>Byrsonima lucida</i>	Locustberry	N	T		X	
<i>Calypttranthes zuzygium</i>	Myrtle-of-the-river	N	E			X
<i>Campyloneurum angustifolium</i>	Narrow-leaved Strap Fern	N	E			X
<i>Catopsis berteroniana</i>	Powdery Catopsis	N	E			X
<i>Catopsis floribunda</i>	Many-flowered Catopsis	N	E			X
<i>Chamaesyce deltoidea</i> ssp. <i>adhaerens</i>	Hairy Deltoid Spurge	E	E			X
<i>Chamaesyce deltoidea</i> ssp. <i>deltoidea</i>	Deltoid Spurge	E	E			X
<i>Chamaesyce deltoidea</i> ssp. <i>pinetorum</i>	Pinelands Spurge	C	E		X	
<i>Chamaesyce garberi</i>	Garber's Spurge	T	E			X
<i>Chamaesyce porteriana</i>	Porter's Broad-leaved Spurge	N	E			X
<i>Coccothrinax argentata</i>	Silver Palm	N	T		X	
<i>Colubrina cubensis</i> var. <i>floridana</i>	Cuban Snake-bark	N	E			X
<i>Crossopetalum ilicifolium</i>	Christmas Berry	N	T		X	
<i>Crossopetalum rhacoma</i>	Rhacoma	N	T			X
<i>Ctenitis sloanei</i>	Florida Tree Fern	N	E			X
<i>Cyclopogon elatus</i>	Tall Neottia	N	E			X
<i>Cyrtopodium punctatum</i>	Cowhorn Orchid	N	E			X
<i>Dalea carthagenensis</i> var. <i>floridana</i>	Florida Prairie Clover	C	E			X
<i>Digitaria pauciflora</i>	Few-flowered Fingergrass	C	E			X
<i>Drypetes diversifolia</i>	Milkbark	N	E			X
<i>Eltroplectris calcarata</i>	Spurred Neottia	N	E			X
<i>Encyclia boothiana</i> var. <i>erythronioides</i>	Dollar Orchid	N	E			X
<i>Encyclia cochleata</i> var. <i>triandra</i>	Clamshell Orchid	N	E			X
<i>Epidendrum nocturnum</i>	Night-scented Orchid	N	E			X
<i>Ernodea cokeri</i>	Coker's Beach Creeper	N	E			X
<i>Eugenia confusa</i>	Tropical Ironwood	N	E			X
<i>Eugenia rhombea</i>	Red Stopper	N	E			X
<i>Eupatorium villosum</i>	Villose Fennel	N	E			X
<i>Euphorbia pinetorum</i>	Rockland Painted-leaf	N	E			X
<i>Galactia smallii</i>	Small's Milk Pea	E	E			X

TABLE R9.3.7-1
THREATENED, ENDANGERED, AND SPECIES OF SPECIAL CONCERN KNOWN TO OCCUR IN MIAMI-DADE COUNTY, FL
AND PROBABILITY OF OCCURRENCE IN THE VICINITY OF THE ROADWAY CORRIDORS

Scientific Name	Common Name	Federal Status	State Status	Probability of Occurrence		
				High	Moderate	Low
<i>Galeandra bicarinata</i>	Two-keeled Helmet Orchid	N	E			X
<i>Glandularia maritima</i>	Coastal Vervain	N	E			X
<i>Govenia floridana</i>	Sheathing Govenia	N	E			X
<i>Guaiacum sanctum</i>	Lignum-vitae	N	E			X
<i>Guzmania monostachia</i>	Fakahatchee Guzmania	N	E			X
<i>Halophila johnsonii</i>	Johnson's Seagrass	T	N			X
<i>Harrisia simpsonii</i>	Simpson's Prickly Apple	N	E			X
<i>Hippomane mancinella</i>	Manchineel	N	E			X
<i>Hypelate trifoliata</i>	White Ironwood	N	E			X
<i>Ilex krugiana</i>	Krug's Holly	N	T		X	
<i>Ipomoea microdactyla</i>	Wild Potato Morning Glory	N	E			X
<i>Ipomoea tenuissima</i>	Rocklands Morning Glory	N	E		X	
<i>Jacquemontia curtisii</i>	Pineland Jacquemontia	N	T		X	
<i>Jacquemontia pentanthos</i>	Skyblue Clustervine	N	E			X
<i>Jacquemontia reclinata</i>	Beach Jacquemontia	E	E			X
<i>Jacquinia keyensis</i>	Joewood	N	T			X
<i>Lantana canescens</i>	Small-headed Lantana	N	E			X
<i>Lantana depressa</i> var. <i>depressa</i>	Florida Lantana	N	E		X	
<i>Lantana depressa</i> var. <i>floridana</i>	Atlantic Coast Florida Lantana	N	E			X
<i>Leiphaimos parasitica</i>	Ghost Plant	N	E			X
<i>Licaria triandra</i>	Gulf Licaria	N	E			X
<i>Linum arenicola</i>	Sand Flax	C	E		X	
<i>Linum carteri</i> var. <i>carteri</i>	Carter's Small-flowered Flax	C	E			X
<i>Linum carteri</i> var. <i>smallii</i>	Small's flax	N	E			X
<i>Lomariopsis kunzeana</i>	Holly Vine Fern	N	E			X
<i>Microgramma heterophylla</i>	Climbing Vine Fern	N	E			X
<i>Odontosoria clavata</i>	Wedgelet Fern	N	E			X
<i>Okenia hypogaea</i>	Burrowing Four-o'clock	N	E			X
<i>Oncidium floridanum</i>	Florida Dancinglady Orchid	N	E			X
<i>Ophioglossum palmatum</i>	Hand Fern	N	E			X
<i>Opuntia corallicola</i>	Florida Semaphore Cactus	C	E			X
<i>Passiflora multiflora</i>	White Passionflower	N	E			X
<i>Passiflora sexflora</i>	Everglades Key Passion-flower	N	E			X
<i>Pavonia paludicola</i>	Mangrove Mallow	N	E			X
<i>Peperomia obtusifolia</i>	Blunt-leaved Peperomia	N	E			X
<i>Phoradendron rubrum</i>	Mahogany Mistletoe	N	E			X
<i>Picramnia pentandra</i>	Bitter Bush	N	E			X
<i>Polygala smallii</i>	Tiny Polygala	E	E			X
<i>Polyrrhiza lindenii</i>	Ghost Orchid	N	E			X
<i>Ponthieva brittoniae</i>	Britton's Shadow-witch	N	E			X
<i>Prescotia oligantha</i>	Small-flowered Prescotia	N	E			X
<i>Prunus myrtifolia</i>	West Indian Cherry	N	T			X
<i>Pseudophoenix sargentii</i>	Florida Cherry-palm	N	E			X
<i>Psidium longipes</i>	Mangrove Berry	N	T			X
<i>Psychotria ligustrifolia</i>	Bahama Wild Coffee	N	E			X
<i>Pteris bahamensis</i>	Bahama Brake	N	T	X		
<i>Pteroglossaspis ecristata</i>	Giant Orchid	N	T			X
<i>Roystonea elata</i>	Florida Royal Palm	N	E			X
<i>Sachsia polycephala</i>	Bahama Sachsia	N	T		X	

TABLE R9.3.7-1
THREATENED, ENDANGERED, AND SPECIES OF SPECIAL CONCERN KNOWN TO OCCUR IN MIAMI-DADE COUNTY, FL
AND PROBABILITY OF OCCURRENCE IN THE VICINITY OF THE ROADWAY CORRIDORS

Scientific Name	Common Name	Federal Status	State Status	Probability of Occurrence		
				High	Moderate	Low
<i>Sacoila lanceolata</i> var. <i>paludicola</i>	Fahkahatchee Ladies' -tresses	N	T			X
<i>Schizaea pennula</i>	Ray Fern	N	E			X
<i>Scutellaria havanensis</i>	Havana Skullcap	N	E			X
<i>Selaginella eatonii</i>	Eaton's Spikemoss	N	E			X
<i>Solanum donianum</i>	Mullein Nightshade	N	T	X		
<i>Spiranthes polyantha</i>	Green Ladies'-tresses	N	E			X
<i>Spiranthes torta</i>	Southern Ladies'-tresses	N	E			X
<i>Stylosanthes calycicola</i>	Pineland Pencil Flower	N	E			X
<i>Swietenia mahagoni</i>	West Indies Mahogany	N	T			X
<i>Tectaria fimbriata</i>	Least Halberd Fern	N	E			X
<i>Tephrosia angustissima</i> var. <i>angustissima</i>	Devil's Shoestring	N	E			X
<i>Tephrosia angustissima</i> var. <i>corallicola</i>	Rockland Hoary-pea	N	E			X
<i>Tephrosia angustissima</i> var. <i>curtissii</i>	Coastal Hoary-pea	N	E			X
<i>Thelypteris reptans</i>	Creeping Maiden Fern	N	E			X
<i>Thelypteris sclerophylla</i>	Stiff-leaved Maiden Fern	N	E			X
<i>Thelypteris serrata</i>	Toothed Maiden Fern	N	E			X
<i>Thrinax morrisii</i>	Brittle Thatch Palm	N	E			X
<i>Thrinax radiata</i>	Florida Thatch Palm	N	E			X
<i>Tillandsia flexuosa</i>	Banded Wild-pine	N	T		X	
<i>Tragia saxicola</i>	Pineland Noseburn	N	T			X
<i>Trema lamarckianum</i>	Lamarck's Trema	N	E	X		
<i>Trichomanes krausii</i>	Kraus' Bristle Fern	N	E			X
<i>Trichomanes punctatum</i> ssp. <i>floridanum</i>	Florida Filmy Fern	N	E			X
<i>Tripsacum floridanum</i>	Florida Gama Grass	N	T		X	
<i>Tropidia polystachya</i>	Young-palm Orchid	N	E			X
<i>Vanilla barbellata</i>	Worm-vine Orchid	N	E			X
<i>Vanilla phaeantha</i>	Leafy Vanilla	N	E			X
<i>Zanthoxylum coriaceum</i>	Biscayne Prickly Ash	N	E			X
<i>Zephyranthes simpsonii</i>	Rain Lily	N	T			X

Notes:

N = Not currently listed, nor currently being considered for listing

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list as Endangered or Threatened

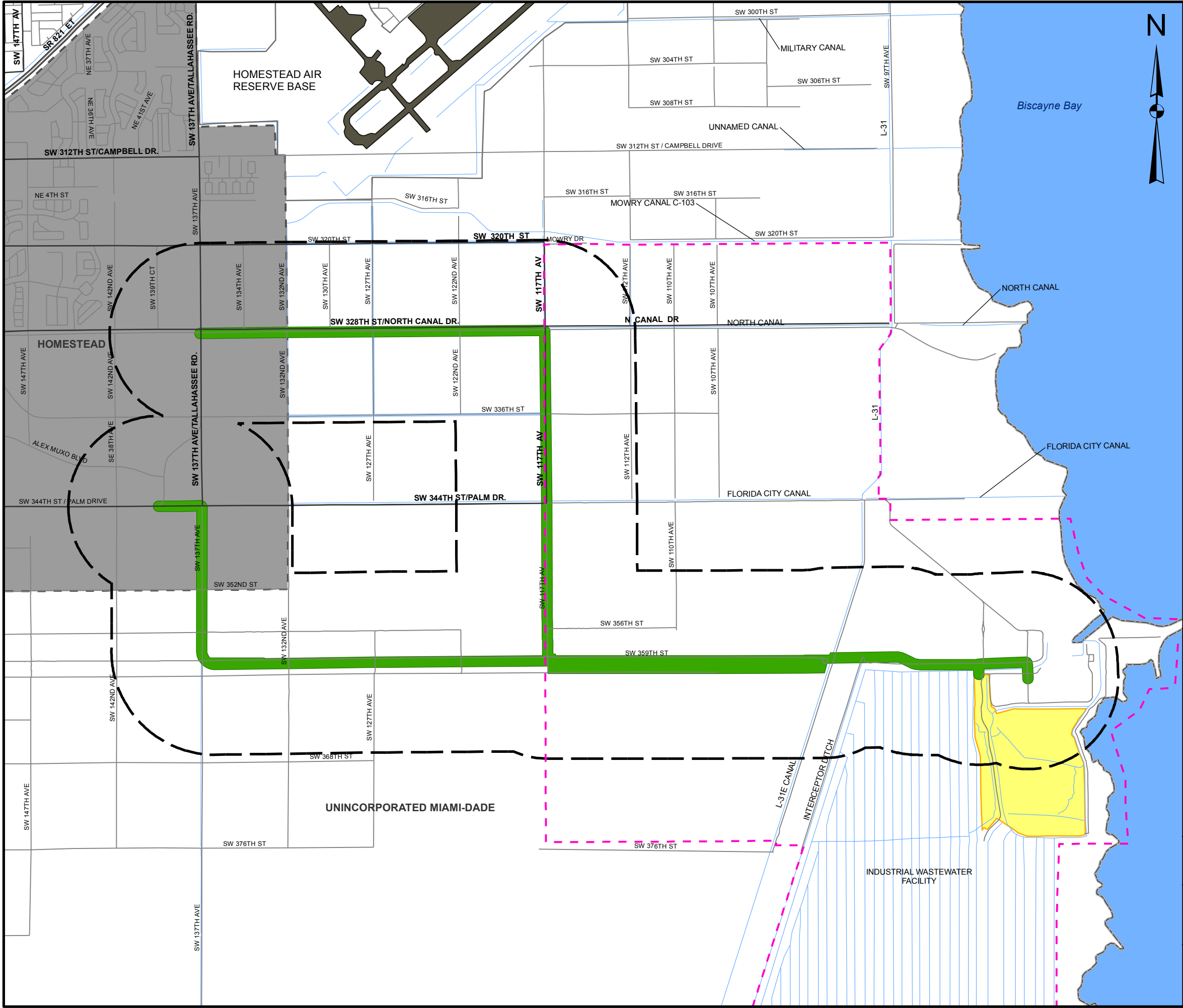
SSC = Species of Special Concern

T = Threatened

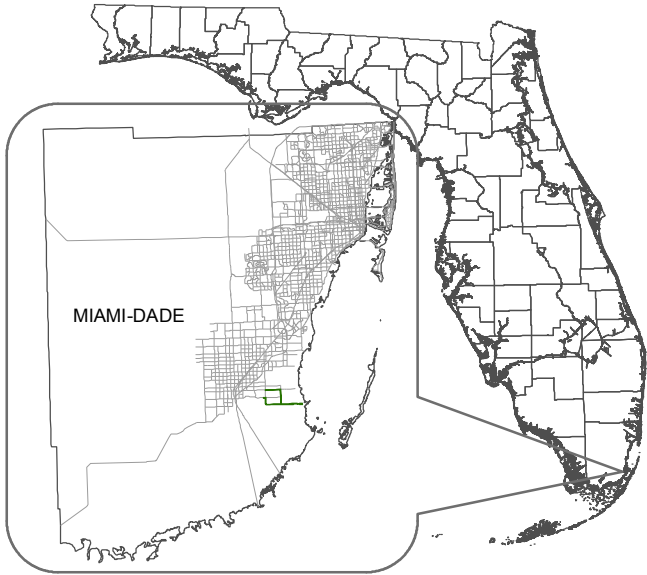
T (SA) = Threatened due to similarity of appearance to the American crocodile

E = Endangered

Source: Florida Natural Areas Inventory, 2008.



AREA MAP

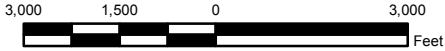


LEGEND

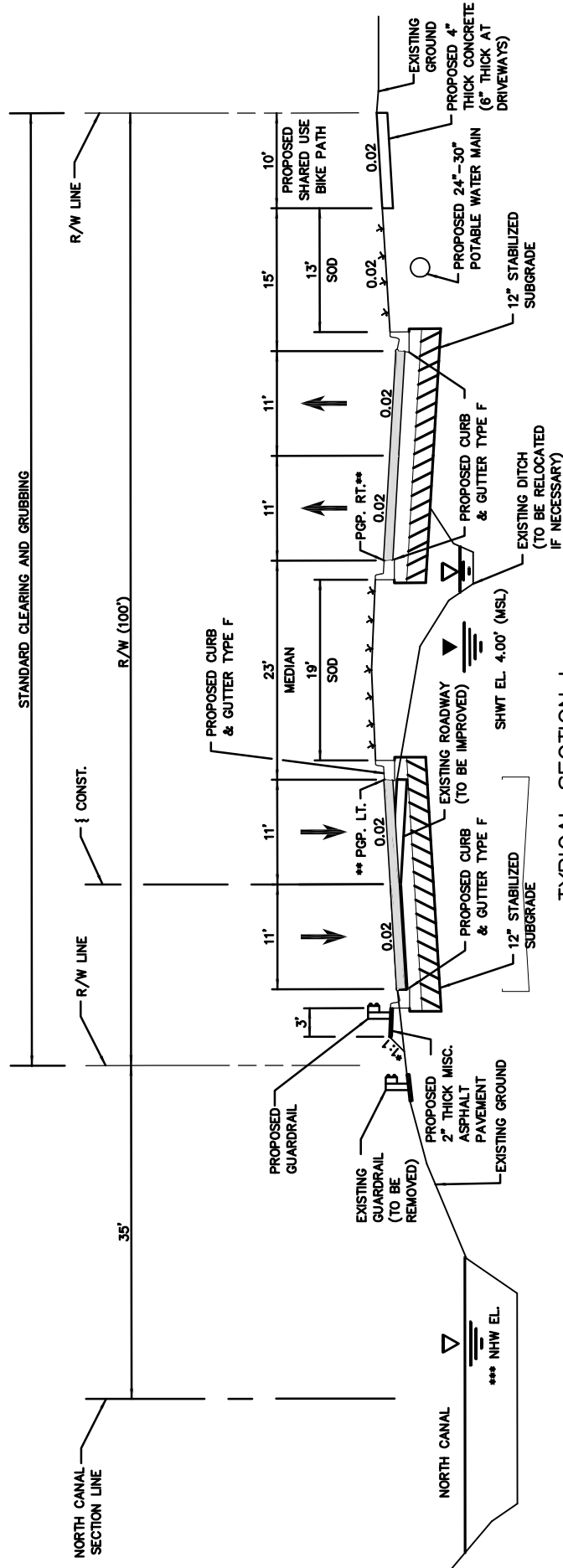
- Turkey Point Units 6 & 7 Site
- Turkey Point Plant Property
- Roadway Improvement Corridor
- Roadway Improvement Corridor 0.5 Mile Area

REFERENCES

- Roads, Municipal Boundaries, Miami-Dade County, 1998 / 2006.



PROJECT	TURKEY POINT UNITS 6 & 7 PROJECT	
TITLE	ROADWAY IMPROVEMENT CORRIDOR LOCATION MAP	
	FILE No. 08387584H001	FIGURE R9.0.0-1
	REV. 0	
	PLOT DATE 6/12/2009	



*** 1:1 OR TO SUIT PROPERTY OWNER**

*** THE PROPOSED ROADWAY IMPROVEMENT PROFILE GRADE POINT (PGP) DESIGN IS TO MEET MINIMUM 3' CLEARANCE REQUIREMENTS PER THE FDOT PLANS PREPARATION MANUAL VOL. 1, TABLE 2.6.3. FOR THE ROADWAY BASE COURSE ABOVE THE BASE CLEARANCE WATER ELEVATION.

PGP = BASE CLEARANCE WATER ELEVATION (NHW OR SHWT, WHICH EVER YIELDS THE HIGHEST VALUE) + 3' MINIMUM CLEARANCE + PAVEMENT DESIGN

A PRELIMINARY PAVEMENT DESIGN CONSISTING OF
ANIMEROCK BASE (12"), TYPE S-1 STRUCTURAL
COURSE (2"), AND FRICTION COURSE (1") SHALL BE
USED FOR CONCEPT ANALYSIS ONLY.

*** THE NHW EL. IS TO BE PROVIDED BY DERM.

NOTE: THIS FIGURE ALSO CONTAINS A
UNIQUE TYPICAL SECTION IDENTIFICATION NUMBER

TYPICAL SECTION NOTES:

1. TYPICAL SECTION 1 MATCHES THE PROPOSED MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT PROJECT No. 20060302 SW 328th STREET TYPICAL SECTION FROM SW 152nd AVENUE TO SW 137th AVENUE.
2. DESIGN SPEED 45 MPH
3. STORM WATER MANAGEMENT: CLOSED SYSTEM TREATMENT AND ATTENUATION WILL BE PROVIDED BY PROPOSED EXFILTRATION TRENCH AND OVERFLOW INTO EXISTING CANAL (PRE VS. POST DISCHARGE). WATER QUANTITY/QUALITY SF/MD CRITERIA WILL BE APPLIED.



TURKEY POINT UNITS 6 & 7
PROJECT

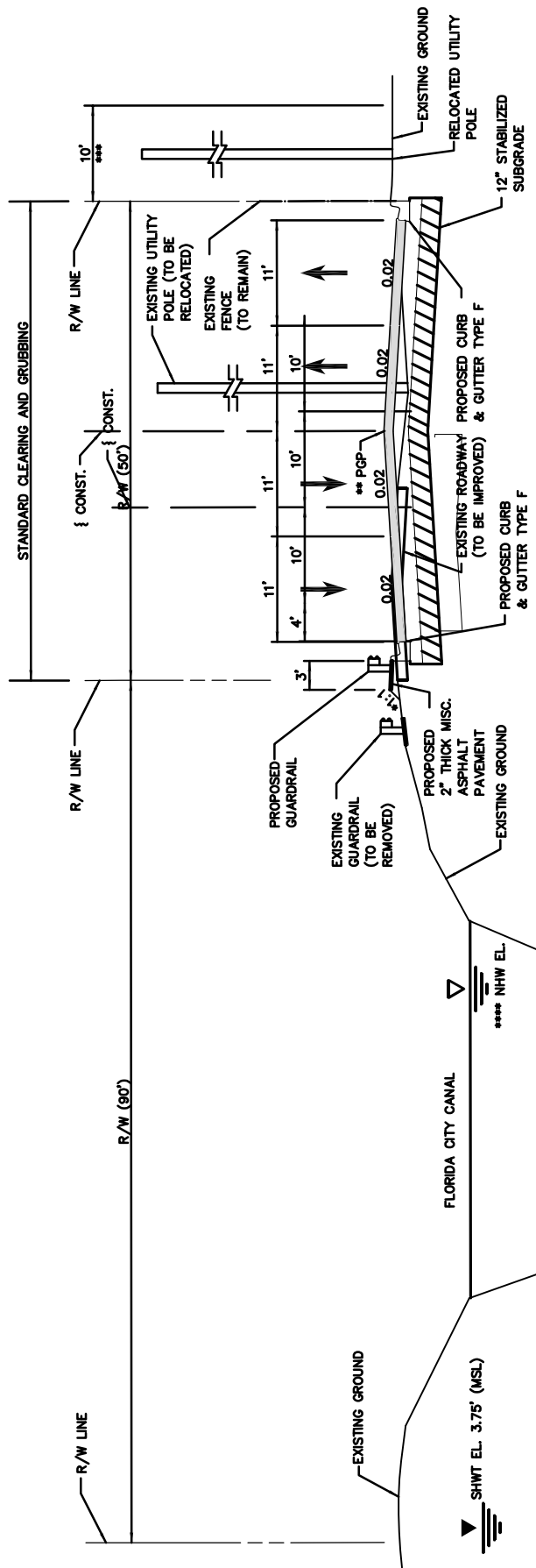
TITLE

FILE No. 08387584H010

REV. 0

PLOT DATE 06/14/2009

FIGURE
R9.3.2-1



TYPICAL SECTION 4
(LOOKING EAST)
SW 344th STREET (PALM DRIVE)
(SW 137th AVENUE CONNECTION)

TYPICAL SECTION NOTES:

1. PROPOSED TRAVEL LANE WIDTH OF 11'-FT TO RIGHT-OF-WAY CONSTRAINTS.
2. CURB AND GUTTER TYPE F WAS PROVIDED DUE TO RIGHT-OF-WAY CONSTRAINTS.
3. DESIGN SPEED 45 MPH
3. STORM WATER MANAGEMENT: CLOSED SYSTEM TREATMENT AND ATTENUATION WILL BE PROVIDED BY PROPOSED EXFILTRATION TRENCH AND OVERFLOW INTO EXISTING CANAL (PRE VS. POST DISCHARGE). WATER QUANTITY/QUALITY SFWD CRITERIA WILL BE APPLIED.

* 1:1 OR TO SUIT PROPERTY OWNER

** THE PROPOSED ROADWAY IMPROVEMENT PROFILE GRADE POINT (PGP) DESIGN IS TO MEET MINIMUM 3' CLEARANCE REQUIREMENTS PER THE FDOT PLANS PREPARATION MANUAL VOL. 1, TABLE 2.6.3. FOR THE ROADWAY BASE COURSE ABOVE THE BASE CLEARANCE WATER ELEVATION.

PGP = BASE CLEARANCE WATER ELEVATION (NHW OR SHWT, WHICH EVER YIELDS THE HIGHEST VALUE) + 3' MINIMUM CLEARANCE + PAVEMENT DESIGN

A PRELIMINARY PAVEMENT DESIGN CONSISTING OF LIMEROCK BASE (12"), TYPE S-1 STRUCTURAL COURSE (27"), AND FRICTION COURSE (1") SHALL BE USED FOR CONCEPT ANALYSIS ONLY.

*** PROPOSED EASEMENT TO BE USED FOR THE RELOCATION OF THE EXISTING UTILITY POLES.

**** THE NHW EL IS TO BE PROVIDED BY DERM.

NOTE: THIS FIGURE ALSO CONTAINS A UNIQUE TYPICAL SECTION IDENTIFICATION NUMBER

TITLE

FILE No. 08387584H011

REV. 0

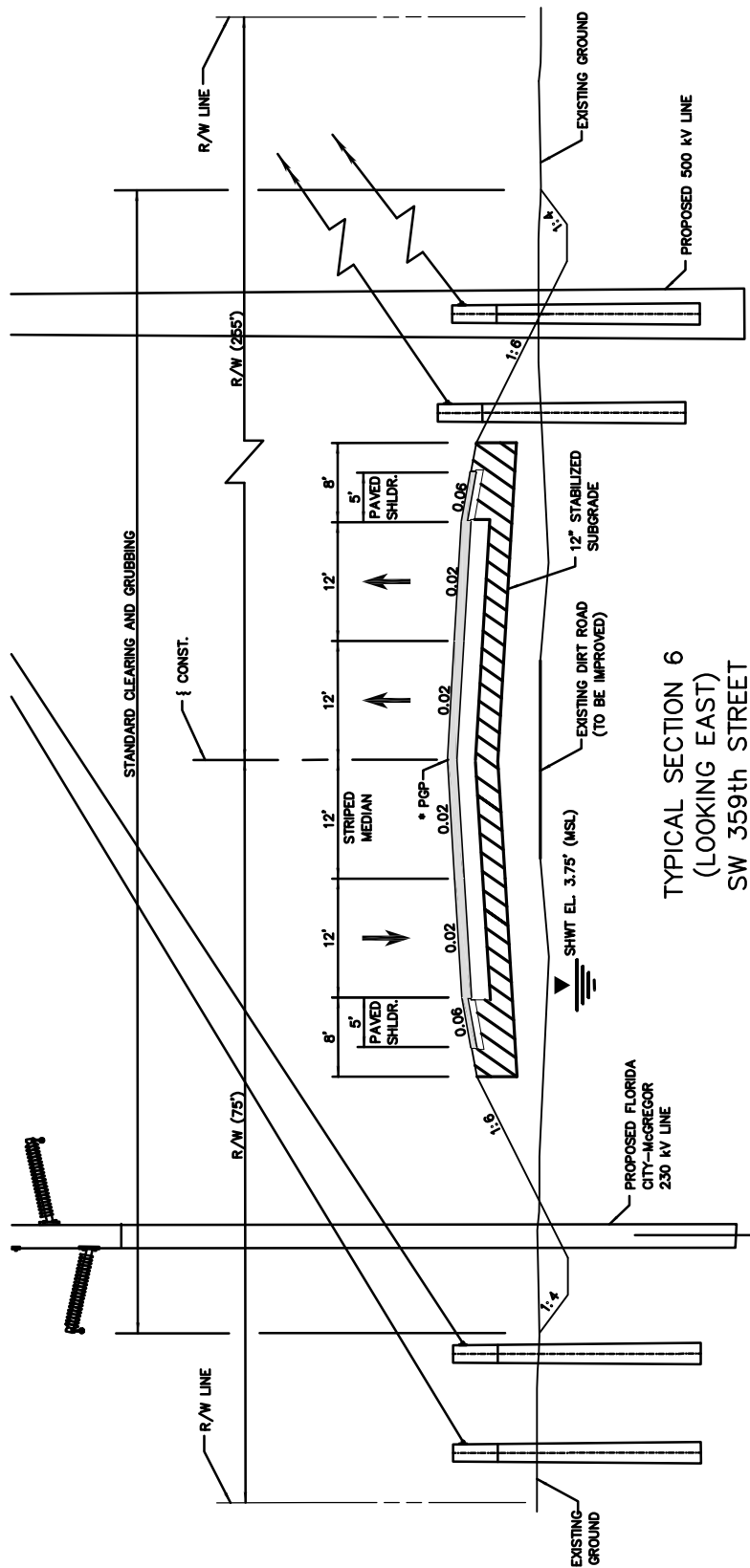
PLOT DATE 06/14/2009

FIGURE
R9.3.2-2

PROJECT

TURKEY POINT UNITS 6 & 7
PROJECT





TYPICAL SECTION 6
(LOOKING EAST)
SW 359th STREET
(FROM SW 137th AVENUE TO SW 117th AVENUE)

TYPICAL SECTION NOTES:

1. 12-FT STRIPED MEDIAN WAS PROVIDED PER THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, SECTION C.7.8 AND PER METROPOLITAN DADE COUNTY PUBLIC WORKS MANUAL ROAD DETAIL R-3.2A.
 2. 8-FT SHOULDER TOTAL WIDTH (5-FT PAVED) WAS PROVIDED PER FDOT PLANS PREPARATION MANUAL VOL. 1, TABLE 2.3.3 FOR A MULTILANE LOW VOLUME HIGHWAY.
 3. DESIGN SPEED 45 MPH
 4. STORM WATER MANAGEMENT: OPEN SYSTEM TREATMENT AND ATTENUATION WILL BE PROVIDED BY PROPOSED ROADSIDE SWALES (BOTH SIDES OF ROADWAY), WATER QUANTITY/QUALITY SF/MD CRITERIA WILL BE APPLIED.
- NOTE: THIS FIGURE ALSO CONTAINS A UNIQUE TYPICAL SECTION IDENTIFICATION NUMBER

- THE PROPOSED ROADWAY IMPROVEMENT PROFILE GRADE POINT (PGP) DESIGN IS TO MEET MINIMUM 3' CLEARANCE REQUIREMENTS PER THE FDOT PLANS PREPARATION MANUAL VOL. 1, TABLE 2.6.3. FOR THE ROADWAY BASE COURSE ABOVE THE BASE CLEARANCE WATER ELEVATION.

PGP = BASE CLEARANCE WATER ELEVATION + 3' MINIMUM CLEARANCE + PAVEMENT DESIGN

A PRELIMINARY PAVEMENT DESIGN CONSISTING OF LIME ROCK BASE (12"), TYPE S-1 STRUCTURAL COURSE (12"), AND FRICTION COURSE (1") SHALL BE USED FOR CONCEPT ANALYSIS ONLY.

TITLE

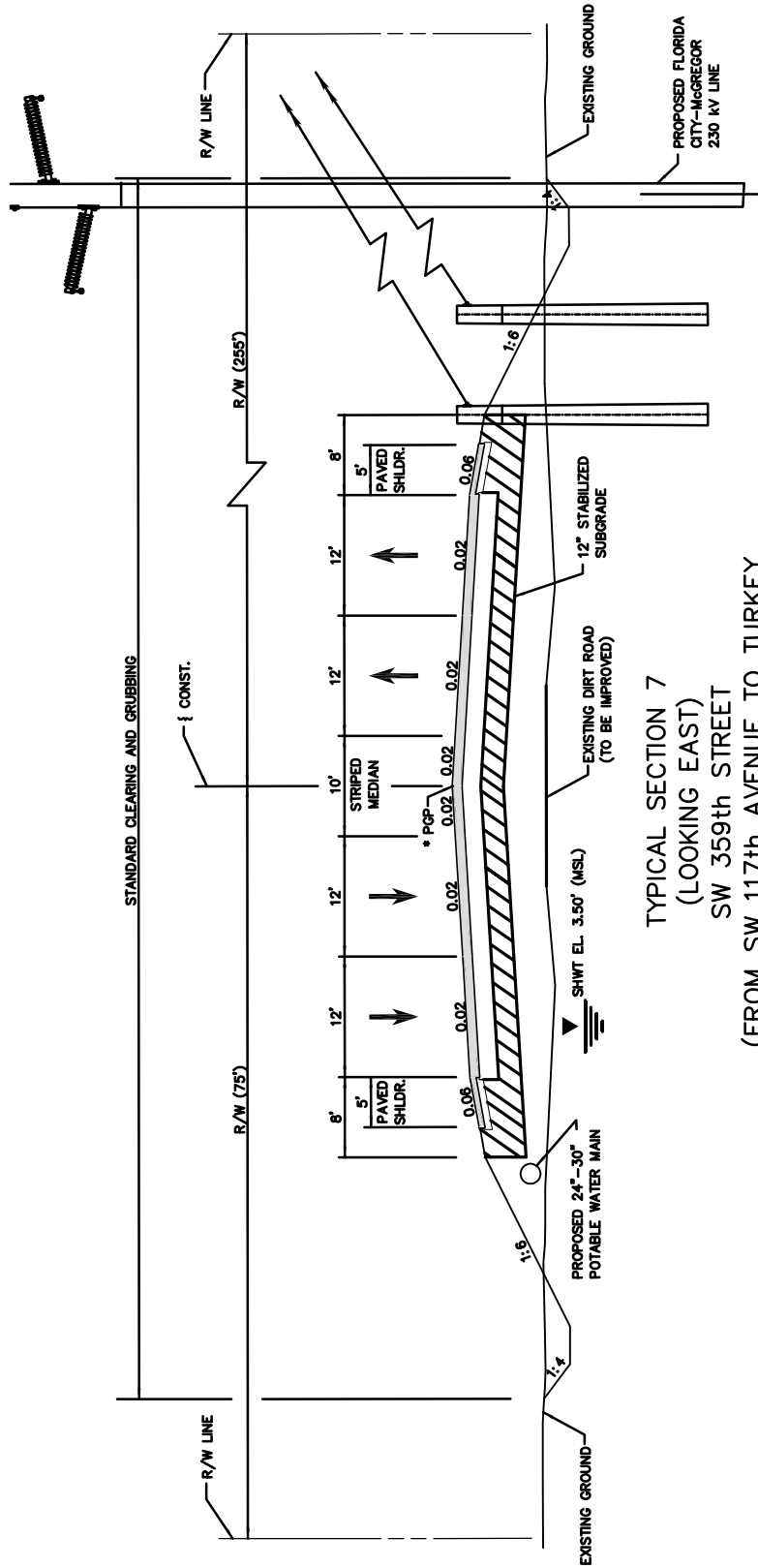
FILE No. 08387584H012
REV. 0
PLOT DATE 06/14/2009

FIGURE
R9.3.2-3

PROJECT

TURKEY POINT UNITS 6 & 7
PROJECT





TYPICAL SECTION 7
(LOOKING EAST)
SW 359th STREET
(FROM SW 117th AVENUE TO TURKEY
POINT POWER PLANT FACILITY)

TYPICAL SECTION NOTES:

1. 10-FT STRIPED MEDIAN WAS PROVIDED PER THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, SECTION C.7.8 AND PER METROPOLITAN DADE COUNTY PUBLIC WORKS MANUAL ROAD DETAIL R-3.2A.
2. 8-FT SHOULDER TOTAL WIDTH (5-FT PAVED) WAS PROVIDED PER FDOT PLANS PREPARATION MANUAL VOL. 1, TABLE 2.3.3 FOR A MULTILANE LOW VOLUME HIGHWAY.
3. DESIGN SPEED 45 MPH
4. STORM WATER MANAGEMENT: OPEN SYSTEM TREATMENT AND ATTENUATION WILL BE PROVIDED BY PROPOSED ROADSIDE SWALES (BOTH SIDES OF ROADWAY). WATER QUANTITY/QUALITY SFWM CRITERIA WILL BE APPLIED.
5. SEE FIGURE WB.2.0-10 FOR ROAD PLACEMENT IN RELATION TO TRANSMISSION FACILITIES.

- THE PROPOSED ROADWAY IMPROVEMENT PROFILE GRADE POINT (PGP) DESIGN IS TO MEET MINIMUM 3' CLEARANCE REQUIREMENTS PER THE FDOT PLANS PREPARATION MANUAL VOL. 1, TABLE 2.6.3. FOR THE ROADWAY BASE COURSE ABOVE THE BASE CLEARANCE WATER ELEVATION.
- PGP = BASE CLEARANCE WATER ELEVATION + 3' MINIMUM CLEARANCE + PAVEMENT DESIGN
- A PRELIMINARY PAVEMENT DESIGN CONSISTING OF LIME/ROCK BASE (12"), TYPE S-1 STRUCTURAL COURSE (2"), AND ERICION COURSE (1") SHALL BE USED FOR CONCEPT ANALYSIS ONLY.

NOTE: THIS FIGURE ALSO CONTAINS A UNIQUE TYPICAL SECTION IDENTIFICATION NUMBER

TITLE

FILE No. 08387584H013
REV. 0
PLOT DATE 06/14/2009

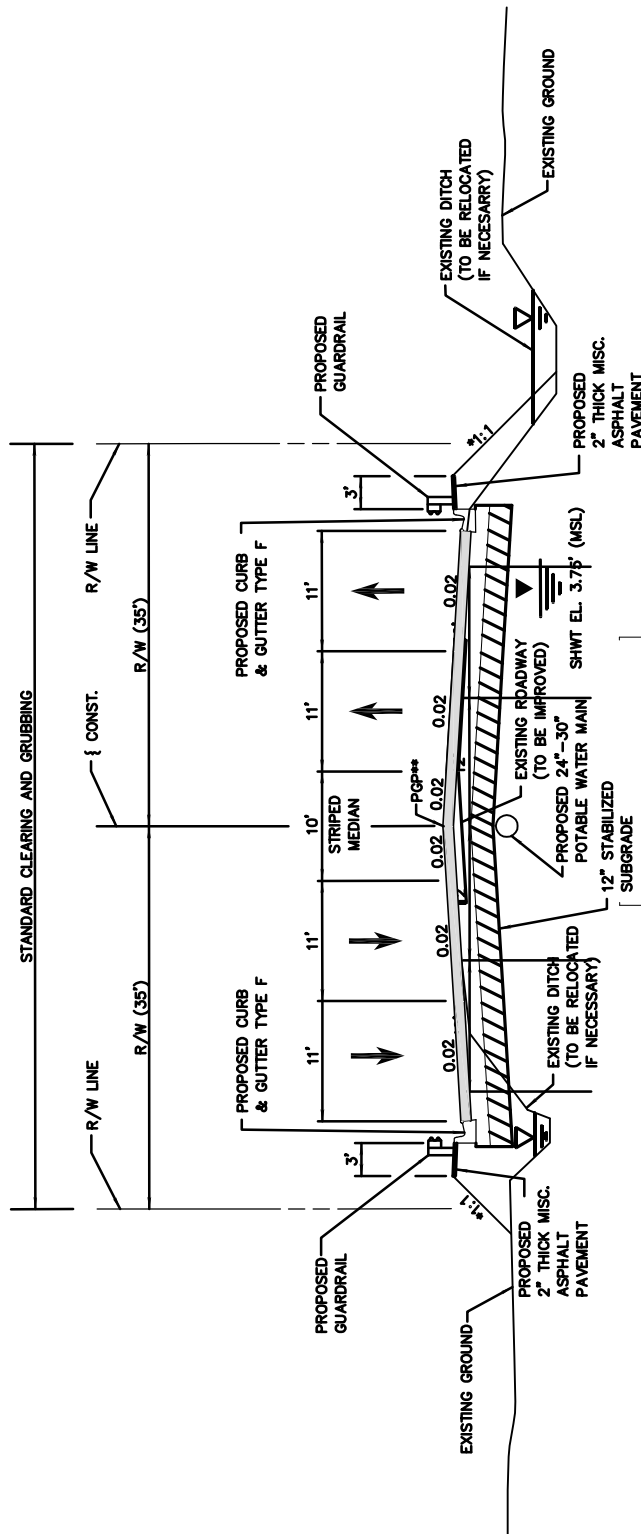
PROJECT

TYPICAL SECTION
SW 359TH STREET
(FROM SW 117TH AVENUE TO
SITE)

TURKEY POINT UNITS 6 & 7
PROJECT



FIGURE
R9.3.2-4



TYPICAL SECTION 2

(LOOKING NORTH)

SW 117th AVENUE (SIX MILE ROAD)
(FROM SW 359th STREET TO SW 328th STREET)

TYPICAL SECTION NOTES:

1. PROPOSED TRAVEL LANE WIDTH OF 11-FT DUE TO RIGHT-OF-WAY CONSTRAINTS.
2. 10-FT STRIPED MEDIAN WAS PROVIDED PER THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, SECTION C.7.6 AND PER METROPOLITAN DADE COUNTY PUBLIC WORKS MANUAL ROAD DETAIL R-3.2A.
3. CURB AND GUTTER TYPE F WAS PROVIDED DUE TO RIGHT-OF-WAY CONSTRAINTS.
4. DESIGN SPEED 45 MPH
5. STORM WATER MANAGEMENT: CLOSED SYSTEM TREATMENT AND ATTENUATION WILL BE PROVIDED BY PROPOSED EXFILTRATION TRENCH AND OVERFLOW INTO EXISTING DITCH (PRE VS. POST DISCHARGE). WATER QUANTITY/QUALITY SFHWD CRITERIA WILL BE APPLIED.

* 1:1 OR TO SUIT PROPERTY OWNER

** THE PROPOSED ROADWAY IMPROVEMENT PROFILE GRADE POINT (PGP) DESIGN IS TO MEET MINIMUM 3' CLEARANCE REQUIREMENTS PER THE FOOT PLANS PREPARATION MANUAL VOL. 1, TABLE 2.6.3. FOR THE ROADWAY BASE COURSE ABOVE THE BASE CLEARANCE WATER ELEVATION.

PGP = BASE CLEARANCE WATER ELEVATION + 3' MINIMUM CLEARANCE + PAVEMENT DESIGN

A PRELIMINARY PAVEMENT DESIGN CONSISTING OF LIME ROCK BASE (12") TYPE S-1 STRUCTURAL COURSE (2") AND ERICION COURSE (1") SHALL BE USED FOR CONCEPT ANALYSIS ONLY.

NOTE: THIS FIGURE ALSO CONTAINS A
UNIQUE TYPICAL SECTION IDENTIFICATION NUMBER



TURKEY POINT UNITS 6 & 7
PROJECT

TYPICAL SECTION
SW 117TH AVENUE
(SIX MILE ROAD)

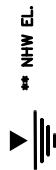
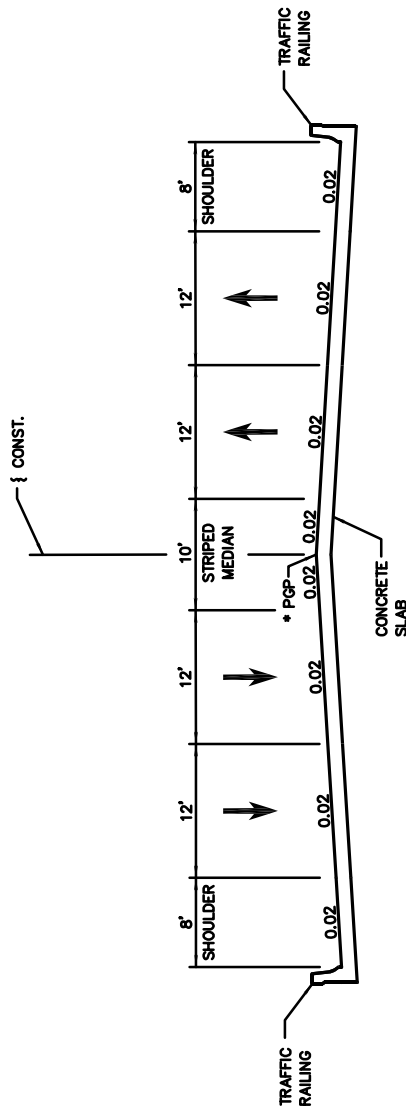
TITLE

FILE No. 08387584H015

REV. 0

PLOT DATE 06/14/2009

FIGURE
R9.3.2-6



TYPICAL SECTION 8
(LOOKING EAST)
SW 359th STREET
(PROPOSED BRIDGE TYPICAL OVER CANAL L-31E)

TYPICAL SECTION NOTES:

1. 10-FT STRIPED MEDIAN WAS PROVIDED PER THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, SECTION C.7.6 AND PER METROPOLITAN DADE COUNTY PUBLIC WORKS MANUAL ROAD DETAIL R-3.2A.
2. 8-FT SHOULDER WAS PROVIDED PER FDOT PLANS PREPARATION MANUAL VOL. 1, FIGURE 2.0.2 FOR A MULTILANE LOW VOLUME HIGHWAY.
3. DESIGN SPEED 45 MPH
4. STORM WATER MANAGEMENT: THE BRIDGE VERTICAL ALIGNMENT WILL INCLUDE A HIGHPOINT AT ITS MID-POINT LOCATION WHICH WILL DIRECT THE COLLECTED STORM WATER TOWARDS THE SW 359th STREET DRAINAGE OPEN SYSTEM. (SEE TYPICAL SECTION 7 NOTES)

* THE PROPOSED ROADWAY IMPROVEMENT PROFILE GRADE POINT (PGP) DESIGN IS TO MEET MINIMUM FDOT DRAINAGE MANUAL SECTION 4.6.1, CRITERIA FOR CLEARANCE BETWEEN DHW ELEVATION (50 YR FREQUENCY) OR NHV ELEVATION AND THE LOW MEMBER OF BRIDGES.

PGP = (NHV ELEVATION + 6') OR (DHW ELEVATION + 2') (WHICH EVER YIELDS THE HIGHEST VALUE) + SUPERSTRUCTURE DESIGN

SUPERSTRUCTURE DESIGN NOT AVAILABLE, PENDING FEASIBILITY STRUCTURE ANALYSIS. DHW ELEVATION NOT AVAILABLE, PENDING DRAINAGE ANALYSIS.

** THE NHV EL. IS TO BE PROVIDED BY DERM.

NOTES:
THIS FIGURE ALSO CONTAINS A
UNIQUE TYPICAL SECTION IDENTIFICATION NUMBER
THERE IS A CROSS REFERENCE TO ANOTHER
TYPICAL SECTION NUMBER IDENTIFIED IN THIS
FIGURE THAT PROVIDES ADDITIONAL INFORMATION

TITLE

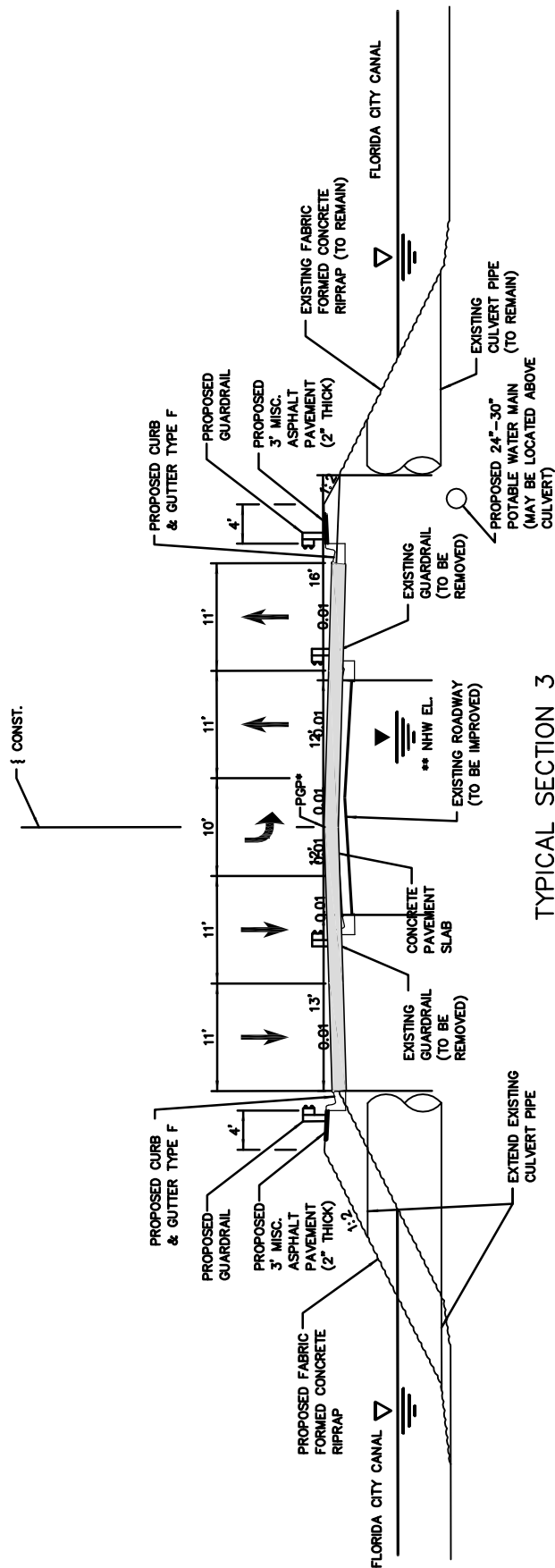
FILE No. 08387584H016
REV. 0
PLOT DATE 06/14/2009

FIGURE
R9.3.2-7

PROJECT

TURKEY POINT UNITS 6 & 7
PROJECT





**TYPICAL SECTION 3
(LOOKING NORTH)**
SW 117th AVENUE (SIX MILE ROAD)
**(NORTH OF SW 344th STREET OVER THE
 BRIDGE CULVERT No. 874128)**

TYPICAL SECTION NOTES:

1. PROPOSED TRAVEL LANE WIDTH OF 11'-FT DUE TO RIGHT-OF-WAY CONSTRAINTS.
2. 10'-FT STRIPED MEDIAN WAS PROVIDED PER THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, SECTION C.7.6 AND PER METROPOLITAN DADE COUNTY PUBLIC WORKS MANUAL ROAD DETAIL R-3.2A.
3. CURB AND GUTTER TYPE F WAS PROVIDED DUE TO RIGHT-OF-WAY CONSTRAINTS.
4. CONCRETE PAVEMENT SLAB WAS PROVIDED TO MEET REQUIRED PIPE COVER AND MINIMIZE IMPACT TO THE SW 117th AVENUE VERTICAL ALIGNMENT.
5. EXTENSION OF THE EXISTING CULVERT PIPE AND RECONSTRUCTION OF THE FABRIC FORMED CONCRETE RIPRAP ON THE WEST SIDE WILL BE REQUIRED.

6. CROSS SLOPES DEPICTED REPRESENT THE SW 117th AVENUE LANE SLOPES AT THE TRANSITION'S MID-POINT LOCATION WHILE TRANSITIONING TO MATCH THE SW 344th STREET EDGE OF PAVEMENT TO PROVIDE A PLATEAU EFFECT AT THE INTERSECTION.
7. DESIGN SPEED 45 MPH
8. STORM WATER MANAGEMENT: THE BRIDGE CULVERT VERTICAL ALIGNMENT WILL INCLUDE A HIGHPOINT WHICH WILL DIRECT THE COLLECTED STORM WATER TOWARDS THE SW 117th AVENUE DRAINAGE CLOSED SYSTEM. (SEE TYPICAL SECTION 2 NOTES)

* THE PROPOSED ROADWAY IMPROVEMENT PROFILE GRADE POINT (PGP) DESIGN IS TO MEET MINIMUM 9" COVER REQUIREMENTS PER THE FDOT DESIGN STANDARDS, INDEX 205 (SHEET 1 OF 6), FOR A 15"-72" CORRUGATED ALUMINUM PIPE AND RIGID PAVEMENT.

PGP = NHW OR DHW ELEVATION (WHICH EVER YIELDS THE HIGHEST VALUE) + 9" MINIMUM COVER + RIGID PAVEMENT DESIGN

DHW ELEVATION NOT AVAILABLE. PENDING DRAINAGE ANALYSIS. RIGID PAVEMENT DESIGN NOT AVAILABLE.

** THE NHW EL IS TO BE PROVIDED BY DERM.

NOTES:
THIS FIGURE ALSO CONTAINS A
UNIQUE TYPICAL SECTION IDENTIFICATION NUMBER.

THERE IS A CROSS REFERENCE TO ANOTHER TYPICAL SECTION NUMBER IDENTIFIED IN THIS FIGURE THAT PROVIDES ADDITIONAL INFORMATION.

TITLE

FILE No. 08387584H017
 REV. 0
 PLOT DATE 06/14/2009

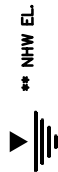
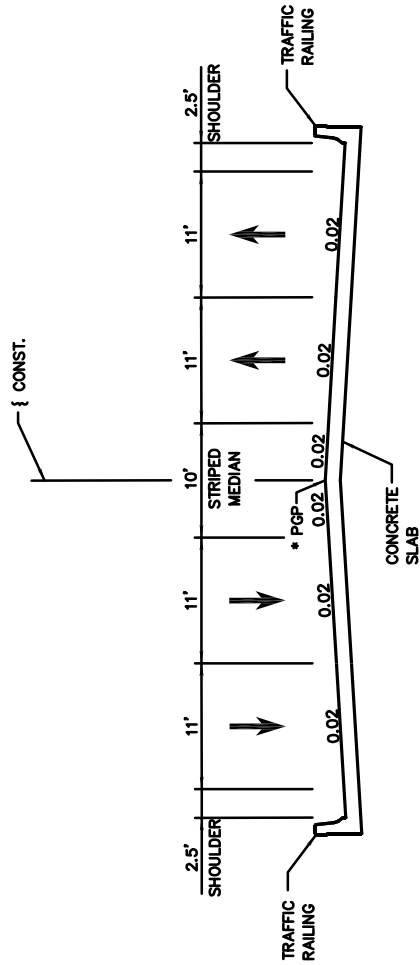
PROJECT

**TYPICAL SECTION
 SW 117TH AVENUE
 (SIX MILE ROAD; BRIDGE
 CULVERT OVER FLORIDA CITY
 CANAL)**

**TURKEY POINT UNITS 6 & 7
 PROJECT**



**FIGURE
 R9.3.2-8**



TYPICAL SECTION 9
(LOOKING NORTH)
SW 117th AVENUE (SIX MILE ROAD)
(PROPOSED BRIDGE OVER NORTH CANAL)

TYPICAL SECTION NOTES:

1. TRAVEL LANE AND STRIPED MEDIAN WIDTHS MATCH TYPICAL SECTION 2.
2. 2.5-FT SHOULDER WAS PROVIDED PER FDOT PLANS PREPARATION MANUAL VOL. 1, FIGURE 2.0.4.
4. DESIGN SPEED 45 MPH
5. STORM WATER MANAGEMENT: EXISTING CONDITIONS ARE TO REMAIN UNTIL FURTHER EVALUATION.

* THE PROPOSED ROADWAY IMPROVEMENT PROFILE GRADE POINT (PGP) DESIGN IS TO MEET MINIMUM FDOT DRAINAGE MANUAL, SECTION 4.6.1, CRITERIA FOR CLEARANCE BETWEEN DHW ELEVATION (50 YR FREQUENCY) OR NHW ELEVATION AND THE LOW MEMBER OF BRIDGES.

PGP = (NHW ELEVATION + 6') OR (DHW ELEVATION + 2') (WHICH EVER YIELDS THE HIGHEST VALUE) + SUPERSTRUCTURE DESIGN

SUPERSTRUCTURE DESIGN NOT AVAILABLE, PENDING FEASIBILITY STRUCTURE ANALYSIS. DHW ELEVATION NOT AVAILABLE, PENDING DRAINAGE ANALYSIS.

** THE NHW EL. IS TO BE PROVIDED BY DERM.

NOTES:
THIS FIGURE ALSO CONTAINS A
UNIQUE TYPICAL SECTION IDENTIFICATION NUMBER
THERE IS A CROSS REFERENCE TO ANOTHER
TYPICAL SECTION NUMBER IDENTIFIED IN THIS
FIGURE THAT PROVIDES ADDITIONAL INFORMATION

TITLE

FILE No. 08387584H018
REV. 0
PLOT DATE 06/14/2009

FIGURE
R9.3.2-9

PROJECT

TURKEY POINT UNITS 6 & 7
PROJECT



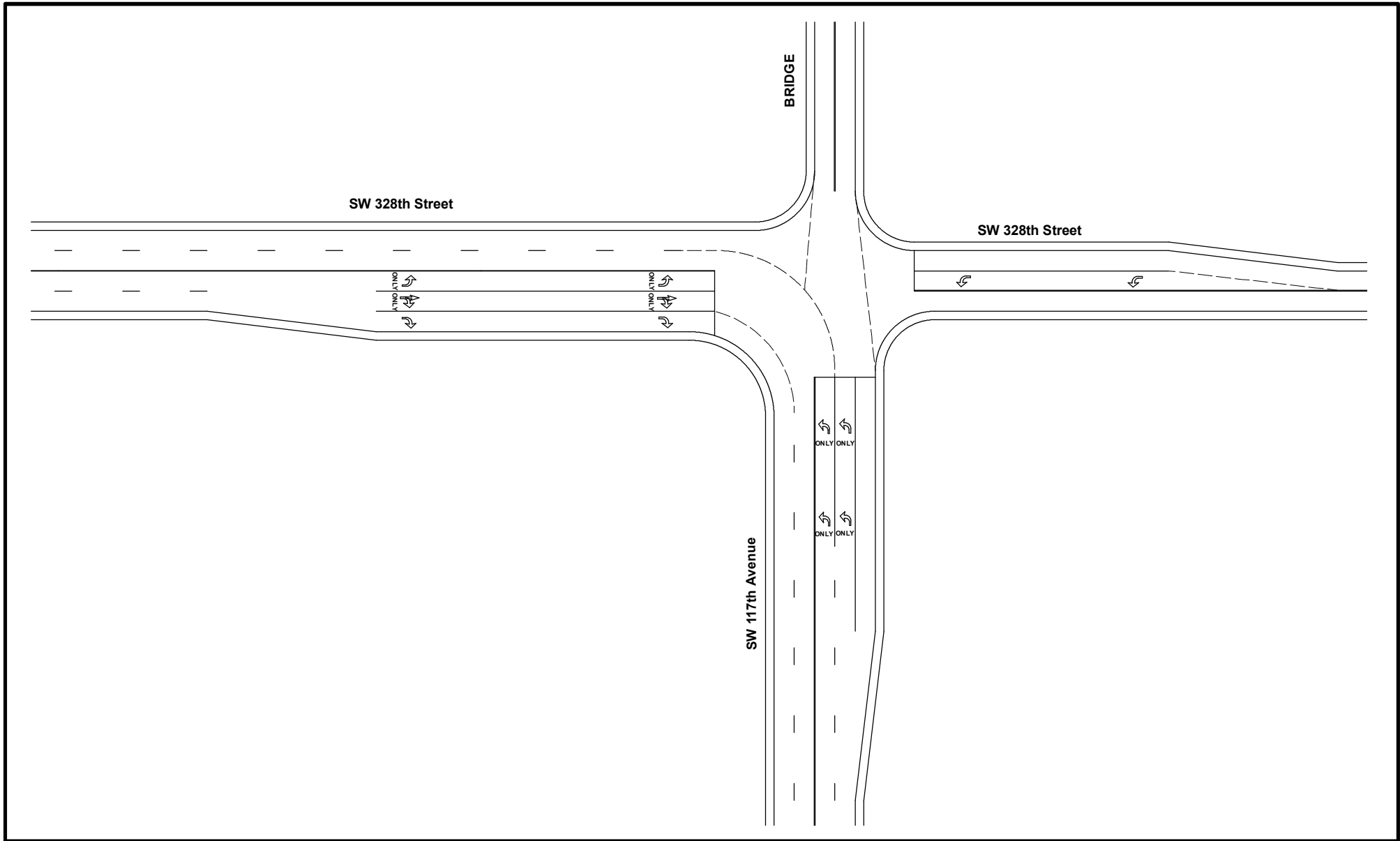
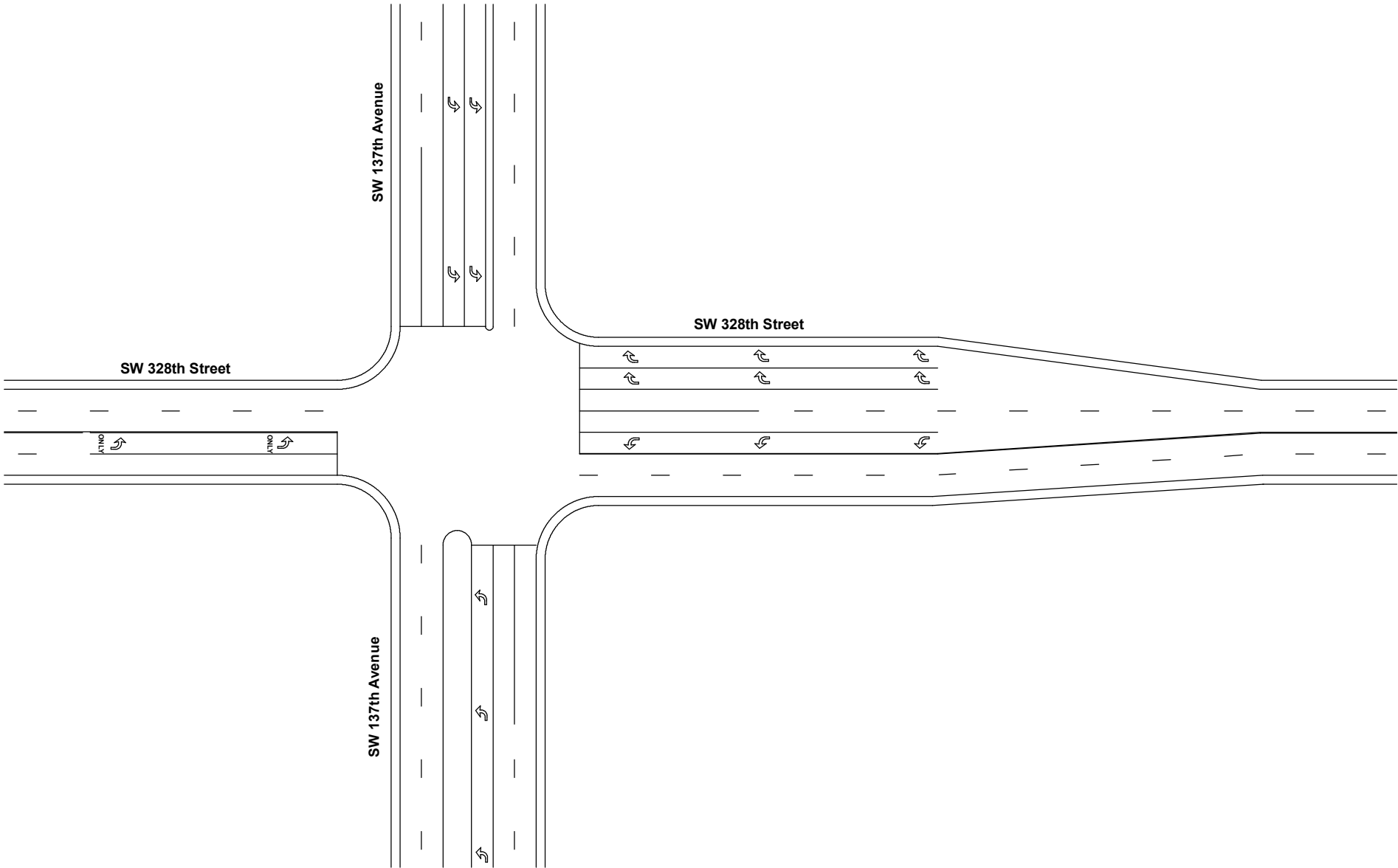


FIGURE R9.3.2-10	PROJECT TURKEY POINT UNITS 6 & 7 PROJECT	LEGEND REFERENCES	
	TITLE CONCEPTUAL INTERSECTION PLAN FOR SW 328TH STREET AND SW 117TH AVENUE		



FILE No. 08387584H020
REV 0
PLOT DATE 6/12/2009

PROJECT

TURKEY POINT UNITS 6 & 7 PROJECT

TITLE

CONCEPTUAL INTERSECTION PLAN FOR SW 328TH STREET AND SW 137TH AVENUE

LEGEND

REFERENCES



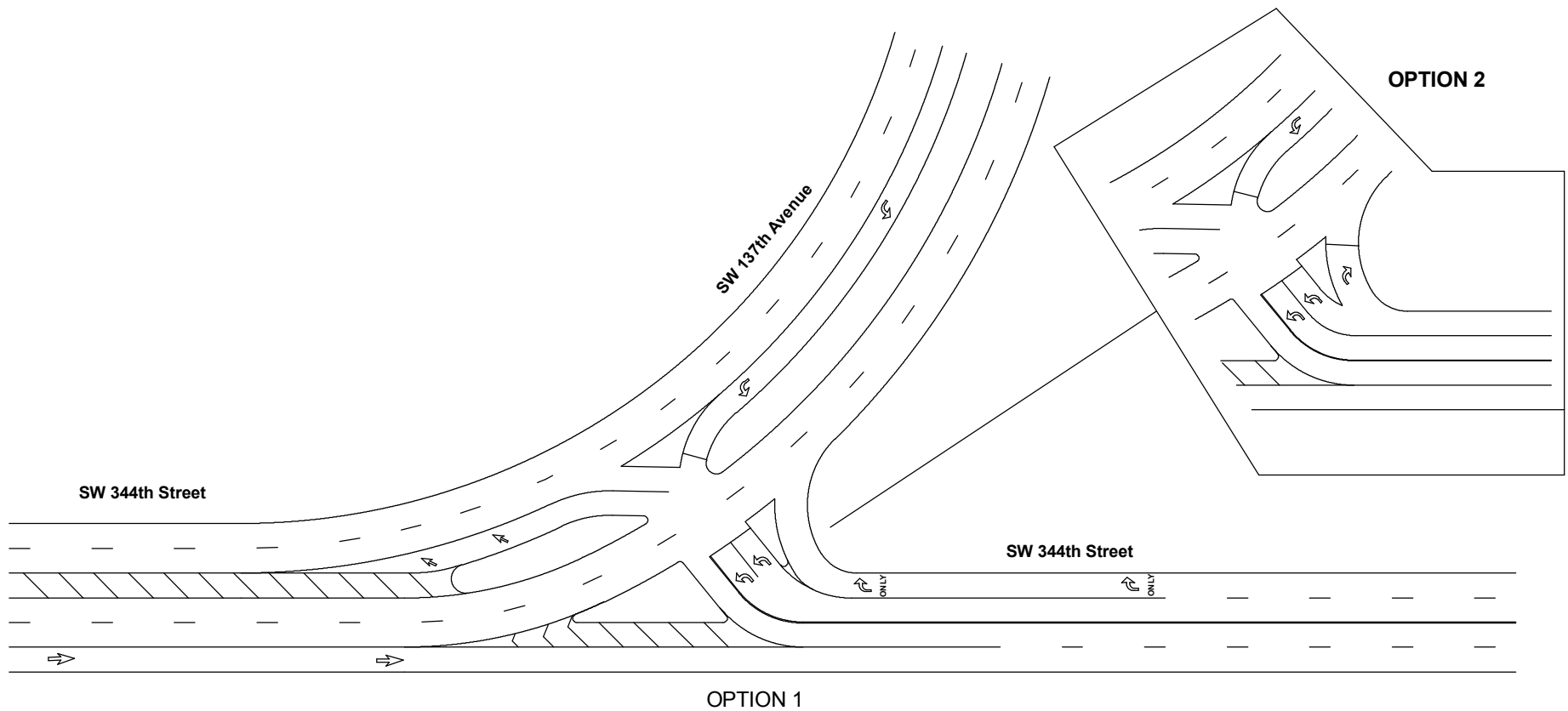


FIGURE
R9.3.2-12

FILE No. 08387584H021
REV 0
PLOT DATE 6/12/2009

PROJECT

**TURKEY POINT UNITS 6 & 7
PROJECT**

TITLE

**CONCEPTUAL INTERSECTION PLAN FOR
SW 344TH STREET AND SW 137TH AVENUE (WEST)**

LEGEND

Option 1 - Right lane traveling west on 344th Street designated as right-turn only nearing intersection.

Option 2 - Right lane traveling west on 344th Street allows both right and left turns.

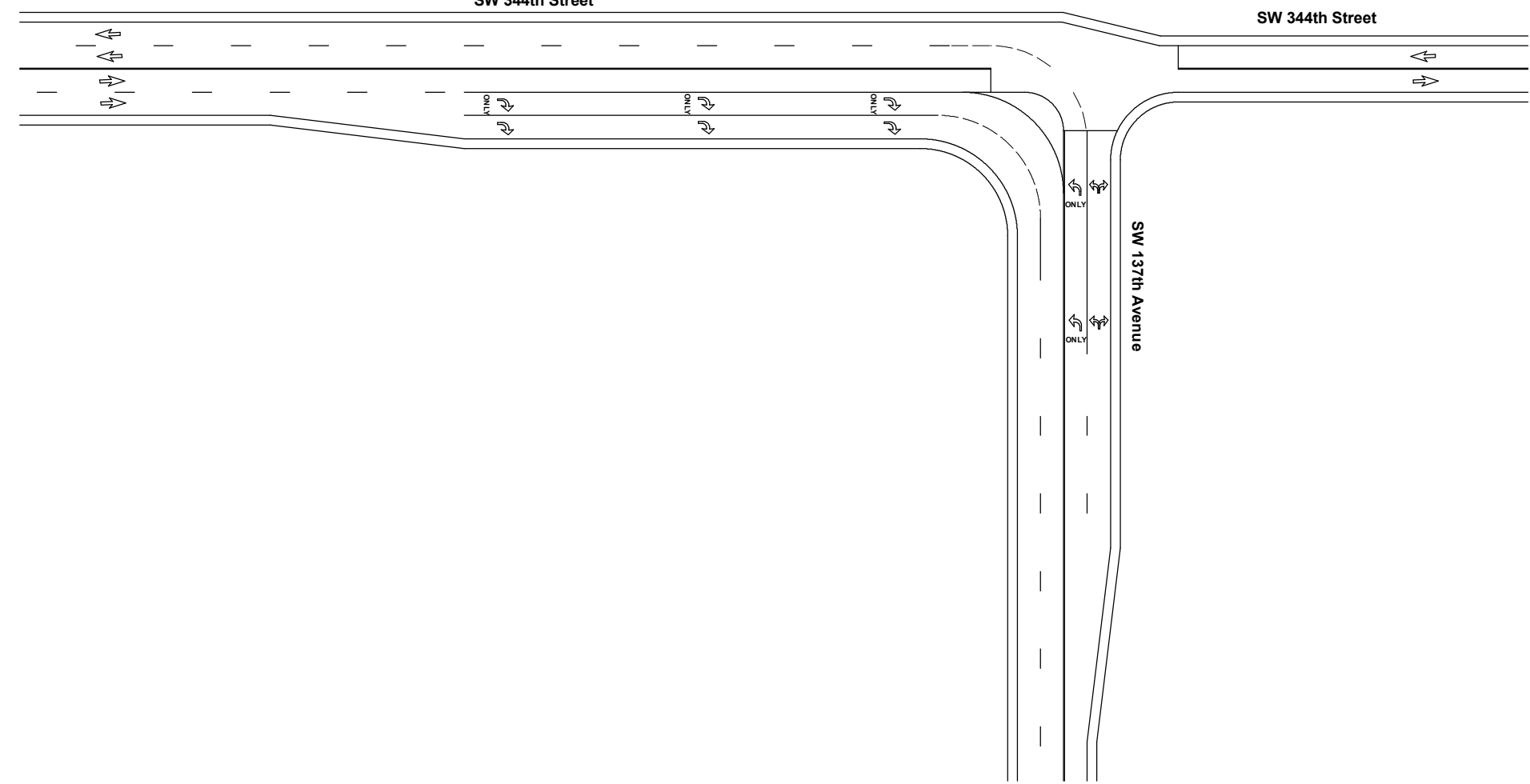
REFERENCES



SW 344th Street

SW 344th Street

SW 137th Avenue



PROJECT

**TURKEY POINT UNITS 6 & 7
PROJECT**

TITLE

**CONCEPTUAL INTERSECTION PLAN FOR
SW 344TH STREET AND SW 137TH AVENUE (EAST)**

LEGEND

REFERENCES



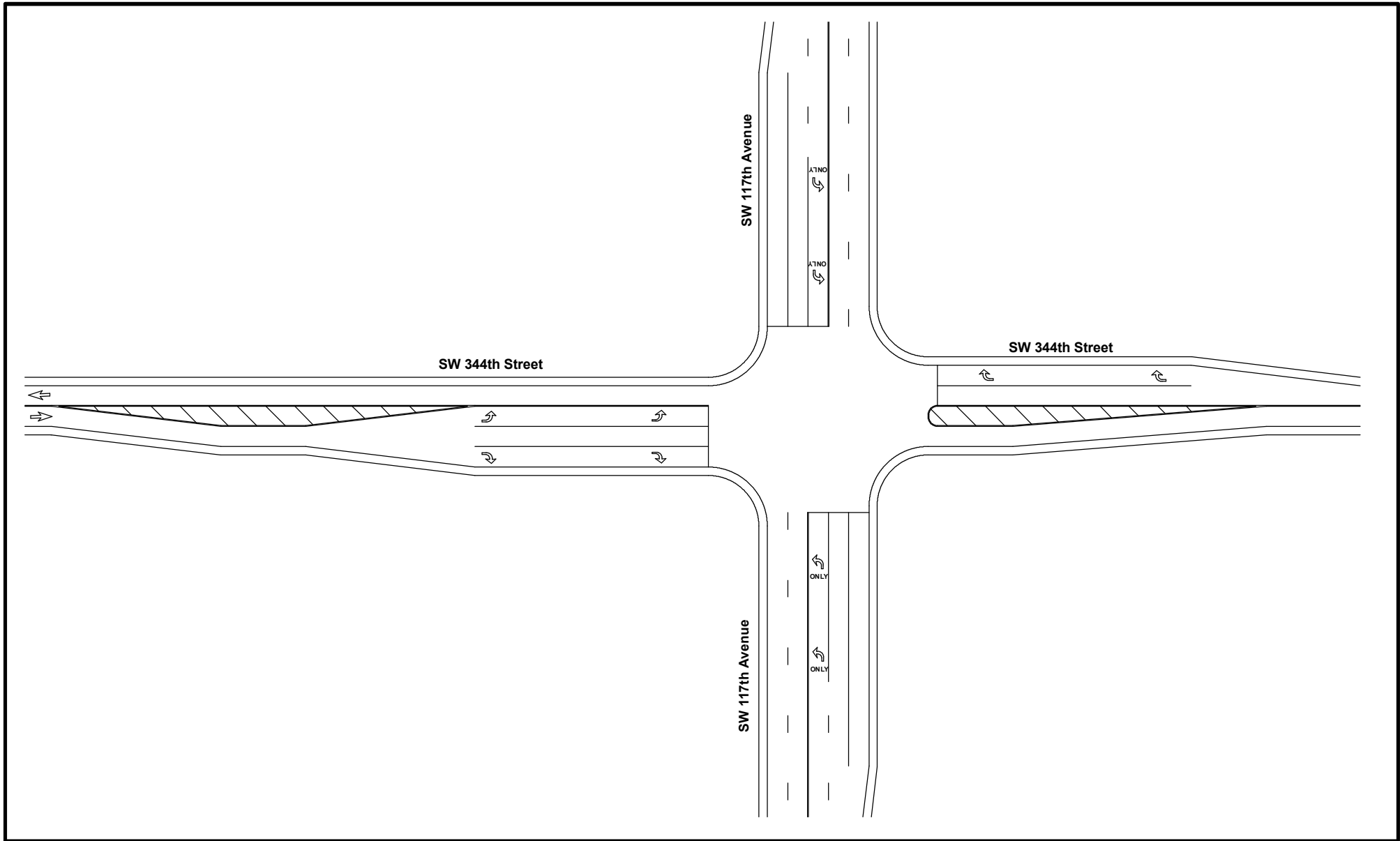
FILE No. 08387584H022

REV 0

PLOT DATE 6/12/2009

FIGURE

R9.3.2-13



TITLE

CONCEPTUAL INTERSECTION PLAN FOR SW 344TH STREET AND SW 117TH AVENUE

REFERENCES



FPL

R9.3.2-14

REV. 0

PLOT DATE

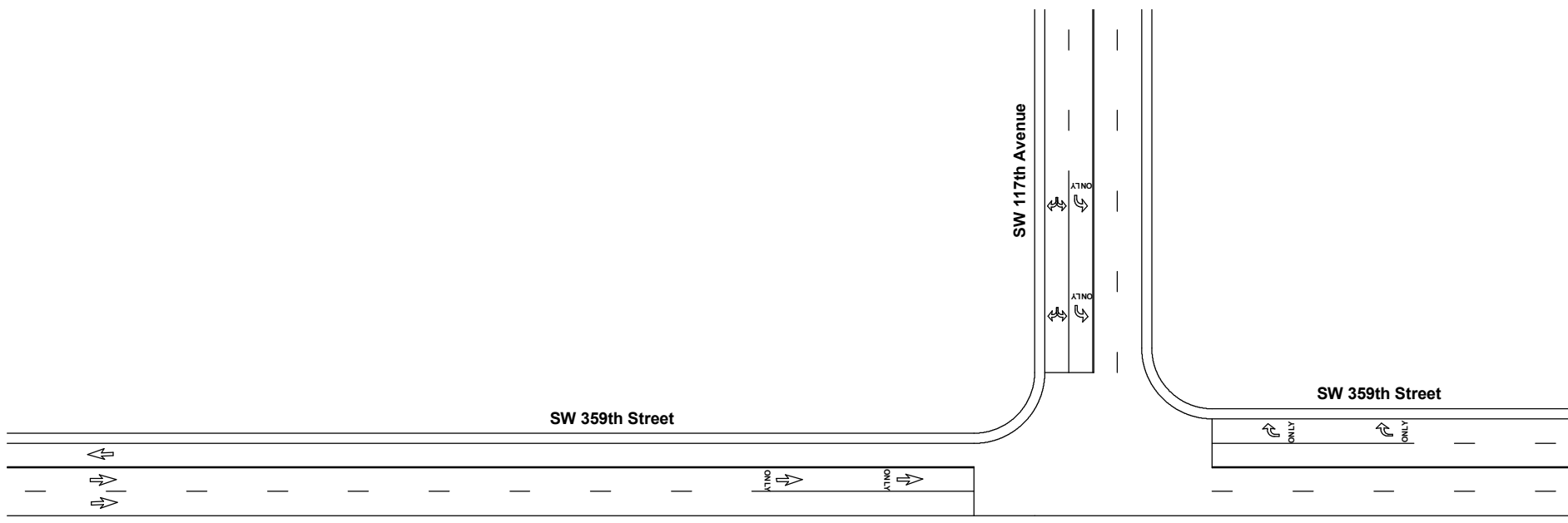
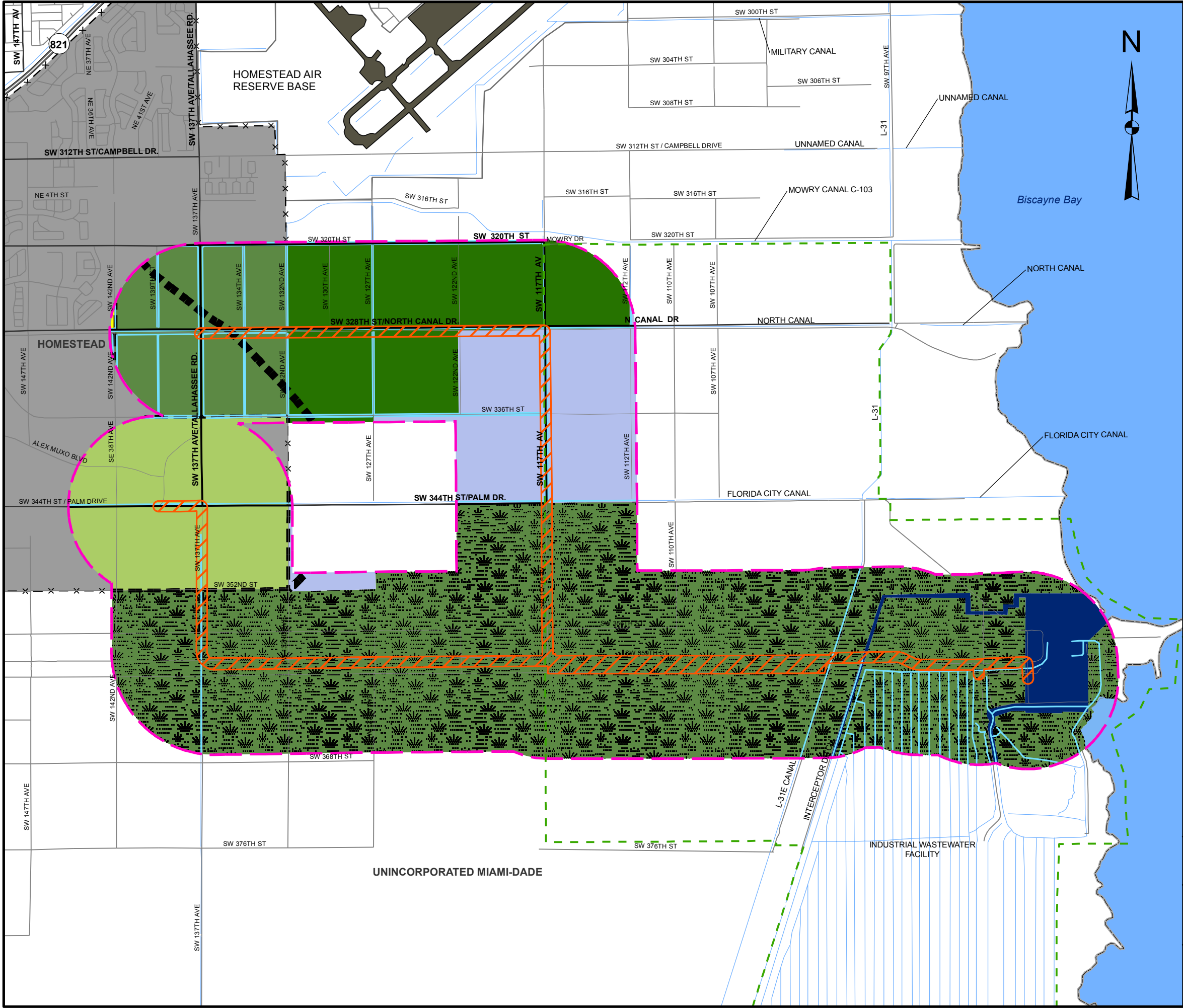


FIGURE R9.3.2-15	PROJECT TURKEY POINT UNITS 6 & 7 PROJECT	LEGEND REFERENCES	
	TITLE CONCEPTUAL INTERSECTION PLAN FOR SW 359TH STREET AND SW 117TH AVENUE		

FILE No. 08387584H024

REV 0

PLOT DATE 6/12/2009



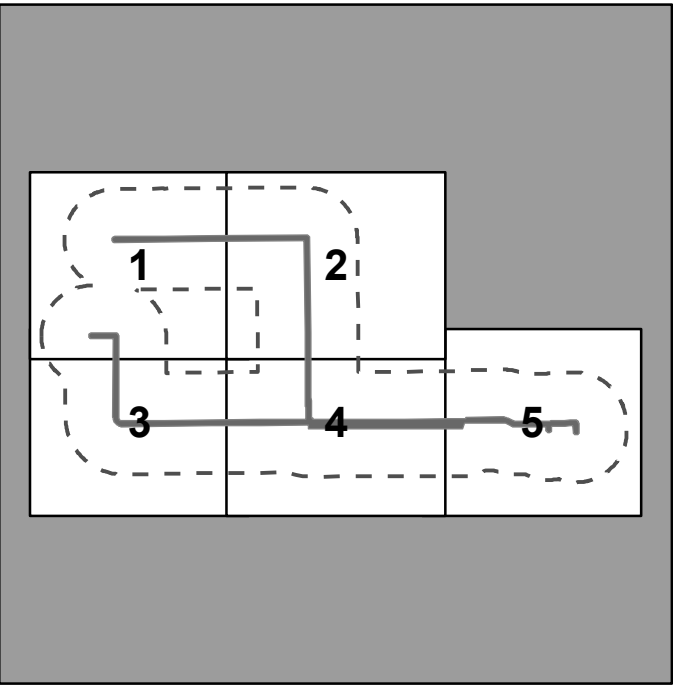
CODE - LEVEL 3 DESCRIPTION

155 - OTHER LIGHT INDUSTRIAL
170 - INSTITUTIONAL
183 - RACE TRACKS
214 - ROW CROPS
215 - FIELD CROPS
221 - CITRUS GROVES
222 - FRUIT ORCHARDS
241 - TREE NURSERIES
243 - ORNAMENTALS
320 - SHRUB AND BRUSHLAND
422 - BRAZILIAN PEPPER
510 - CANAL
511 - DITCHES
530 - RESERVOIRS
531 - OPEN WATER
534 - RESERVOIRS < 10 ACRES

CODE - LEVEL 3 DESCRIPTION

612 - MANGROVE SWAMPS
612 / 618 - MANGROVE SWAMPS / WILLOW AND ELDERBERRY
612-A - MANGROVE HEADS
612-B - DWARF MANGROVES
617 - MIXED WETLAND HARDWOODS
617 / 641 - MIXED WETLAND HARDWOODS / FRESHWATER WATER
617-P - MIXED WETLAND HARDWOODS - PLANTED
619 - EXOTIC WETLAND HARDWOODS
641 - FRESHWATER MARSHES
650 - NON-VEGETATED MUD FLAT
740 - DISTURBED LANDS
743 - UPLAND SPOIL AREAS
743-WET - WETLAND SPOIL AREAS
744 - FILL AREAS / ROADWAYS
814 - ROADS AND HIGHWAYS
831 - ELECTRIC POWER FACILITIES

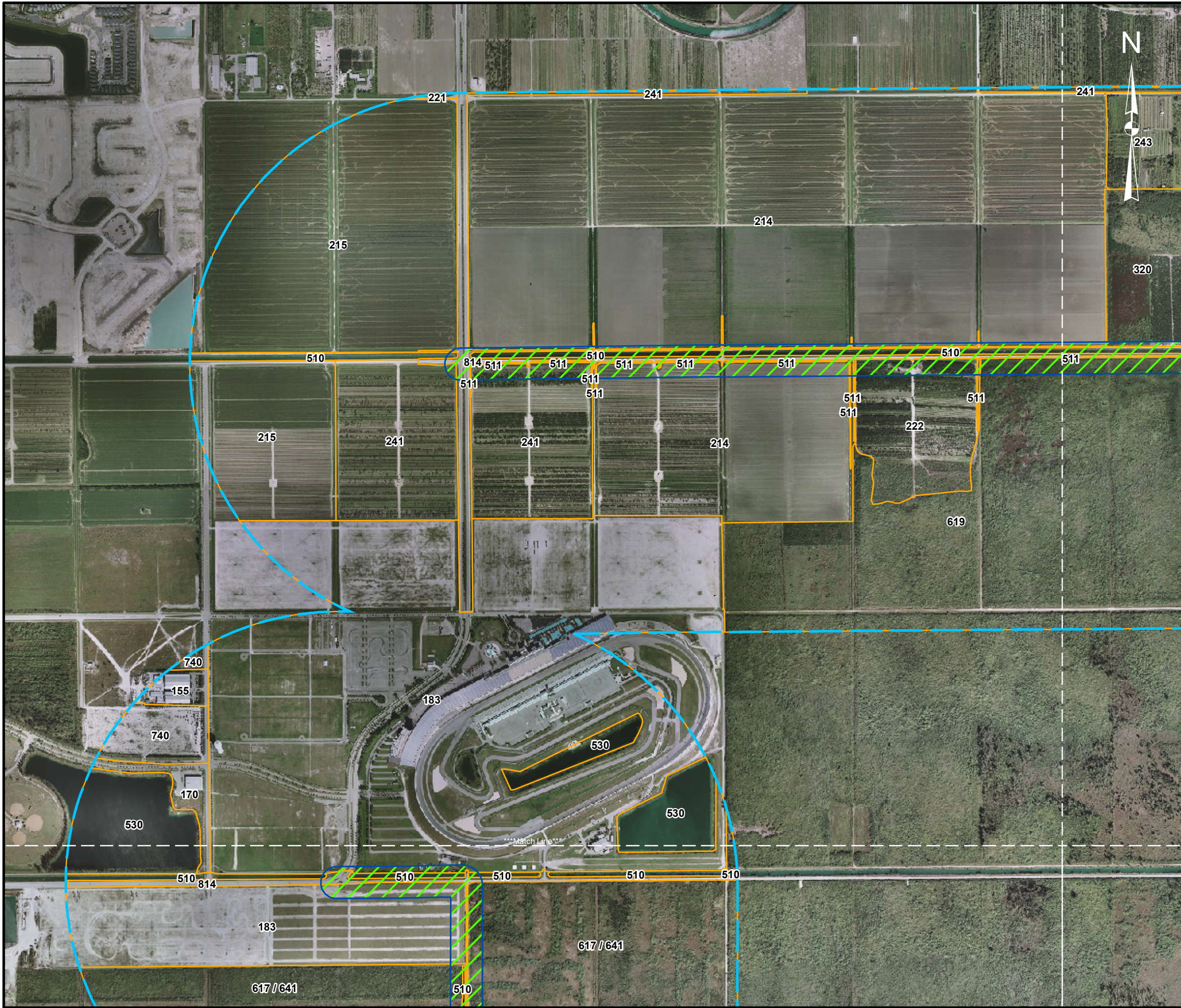
AREA MAP



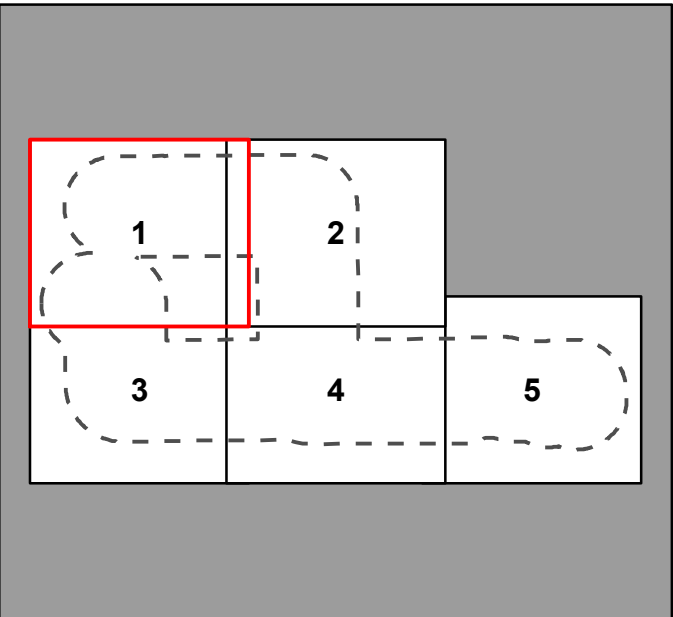
REFERENCES

1. Land Use / Vegetation, SFWMD, 2004.

PROJECT	TURKEY POINT UNITS 6 & 7 PROJECT	
TITLE	ROADWAY IMPROVEMENT CORRIDOR LAND USE / VEGETATION LEGEND	
	FILE No.	08387584H007
	REV.	0
	PLOT DATE	6/12/2009
		FIGURE R9.3.7-1



SITE KEY



LEGEND

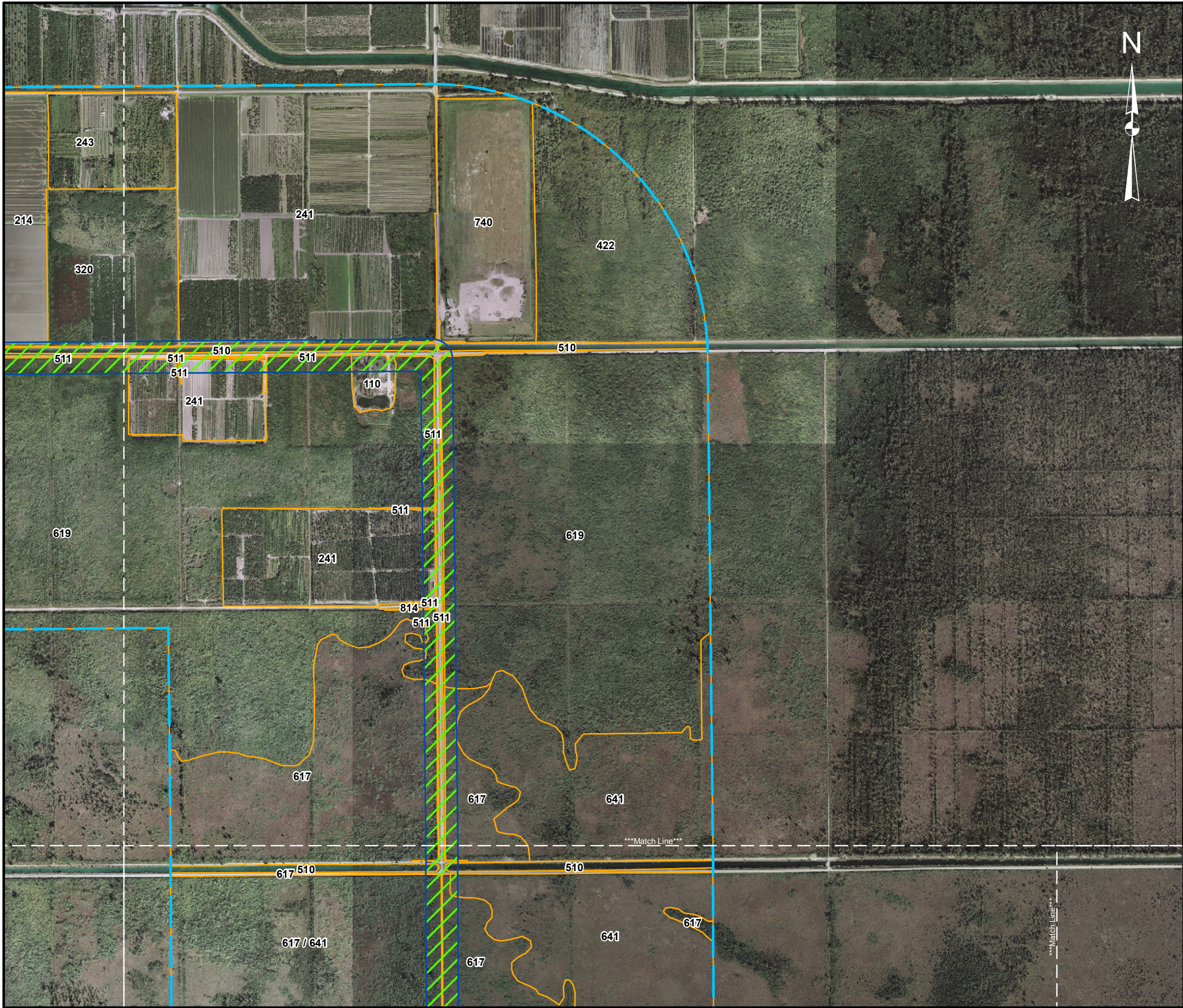
- Turkey Point Units 6 & 7 Site
- Roadway Improvement Corridor
- Roadway Improvement Corridor 0.5 Mile Area
- Land Use / Vegetation

REFERENCES

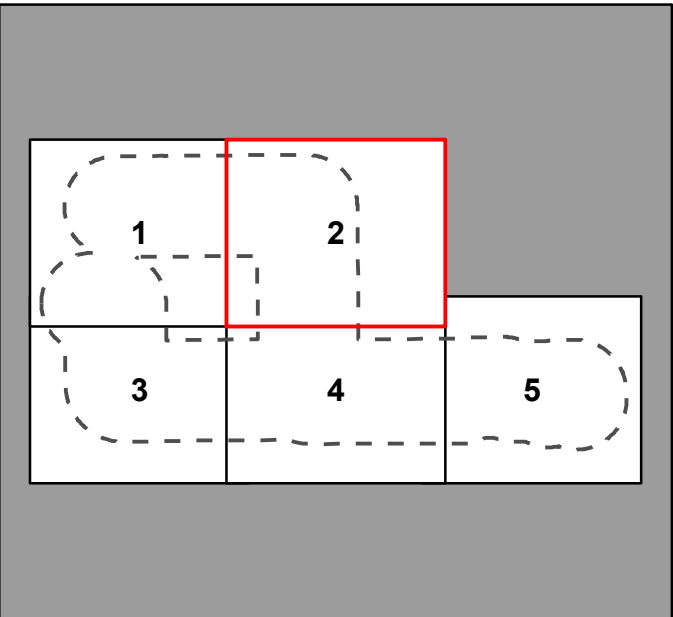
- Land Use / Vegetation, SFWMD, 2004.
- Imagery, Miami-Dade County, 2007.



PROJECT	TURKEY POINT UNITS 6 & 7 PROJECT	
TITLE	ROADWAY IMPROVEMENT CORRIDOR LAND USE / VEGETATION Sheet 1 of 5	
	FILE No. 08387584H006	FIGURE R9.3.7-1
	REV. 0	
	PLOT DATE 6/12/2009	



SITE KEY



LEGEND

- Turkey Point Units 6 & 7 Site
- Roadway Improvement Corridor
- Roadway Improvement Corridor 0.5 Mile Area
- Land Use / Vegetation

REFERENCES

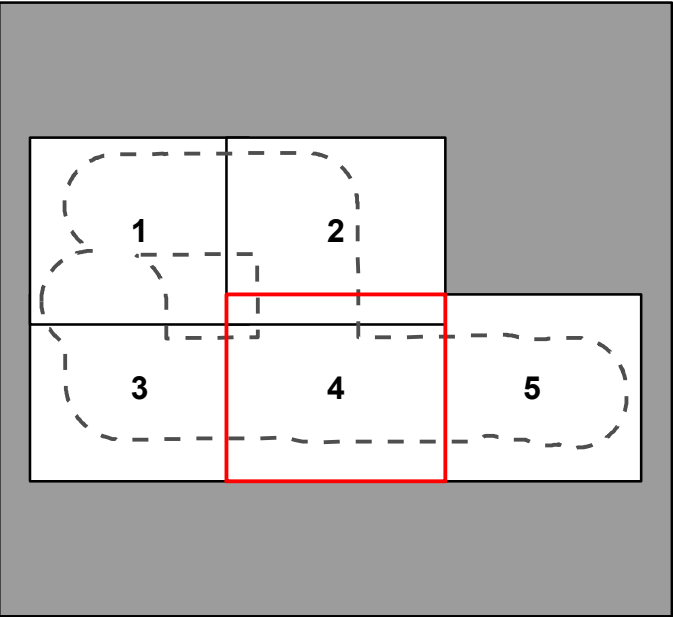
- Land Use / Vegetation, SFWMD, 2004.
- Imagery, Miami-Dade County, 2007.



PROJECT	TURKEY POINT UNITS 6 & 7 PROJECT	
TITLE	ROADWAY IMPROVEMENT CORRIDOR LAND USE / VEGETATION Sheet 2 of 5	
	FILE No. 08387584H006	FIGURE R9.3.7-1
	REV. 0	
	PLOT DATE 6/12/2009	



SITE KEY



LEGEND

- Turkey Point Units 6 & 7 Site
- Roadway Improvement Corridor
- Roadway Improvement Corridor 0.5 Mile Area
- Land Use / Vegetation

REFERENCES

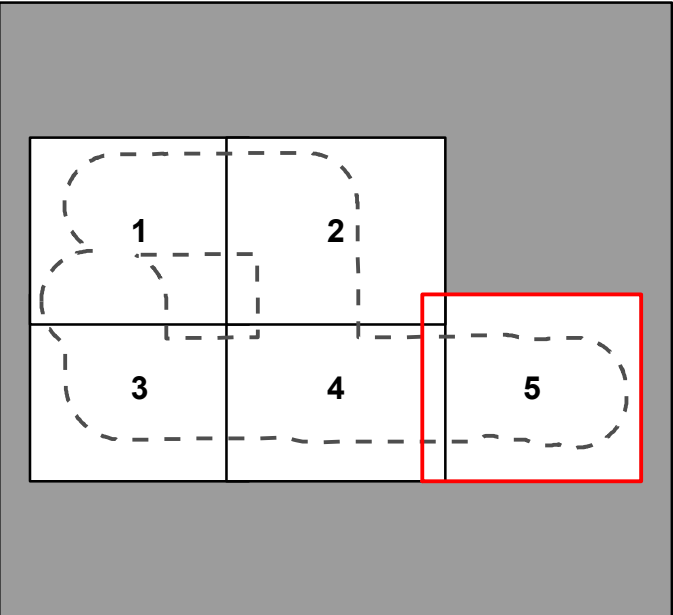
- Land Use / Vegetation, SFWMD, 2004.
- Imagery, Miami-Dade County, 2007.



PROJECT	TURKEY POINT UNITS 6 & 7 PROJECT	
TITLE	ROADWAY IMPROVEMENT CORRIDOR LAND USE / VEGETATION Sheet 4 of 5	
	FILE No. 08387584H006	FIGURE R9.3.7-1
	REV. 0	
	PLOT DATE 6/12/2009	



SITE KEY



LEGEND

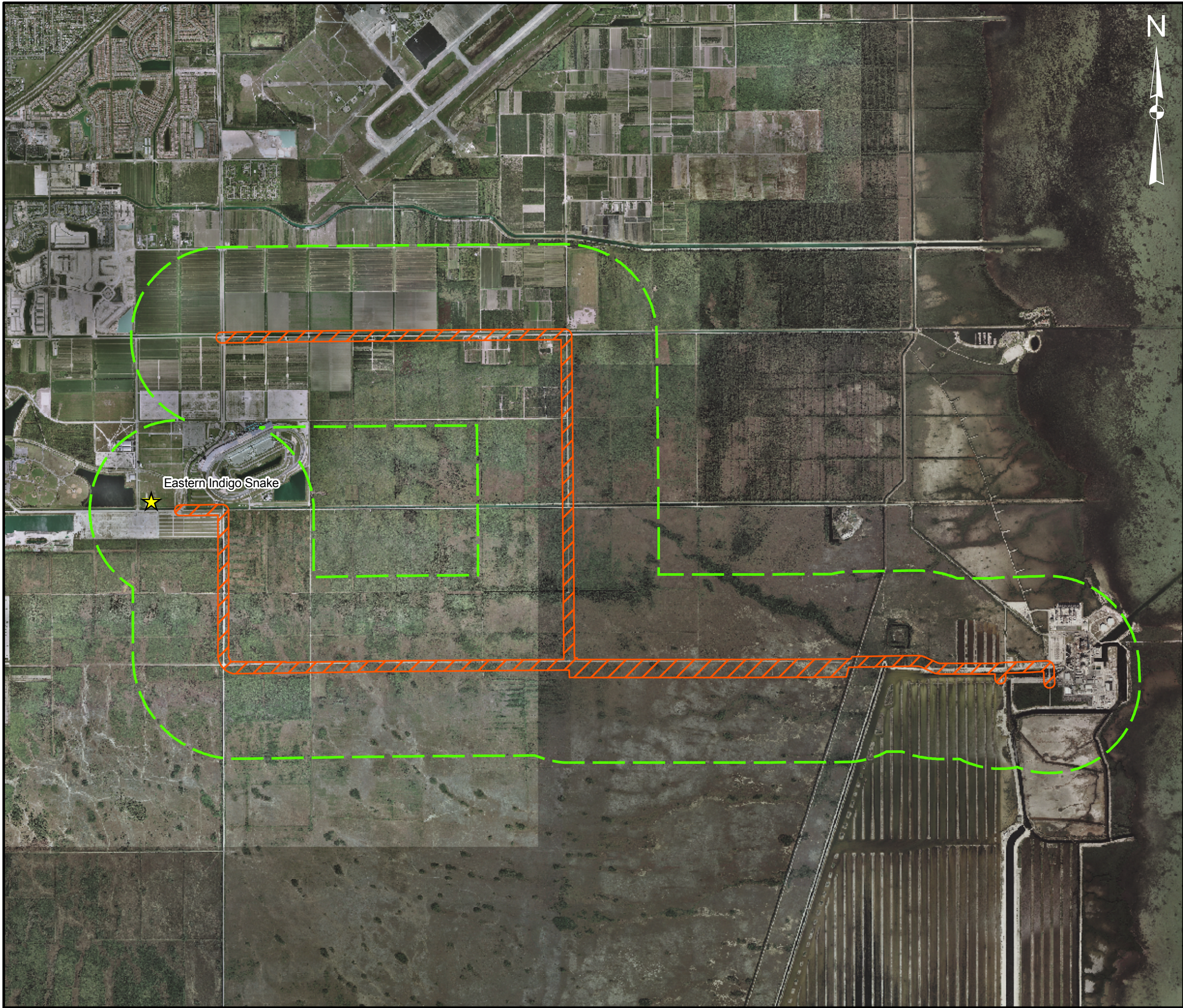
- Turkey Point Units 6 & 7 Site
- Roadway Improvement Corridor
- Roadway Improvement Corridor 0.5 Mile Area
- Land Use / Vegetation

REFERENCES

- Land Use / Vegetation, SFWMD, 2004.
- Imagery, Miami-Dade County, 2007.



PROJECT	TURKEY POINT UNITS 6 & 7 PROJECT	
TITLE	ROADWAY IMPROVEMENT CORRIDOR LAND USE / VEGETATION Sheet 5 of 5	
	FILE No. 08387584H006	FIGURE R9.3.7-1
	REV. 0	
	PLOT DATE 6/12/2009	

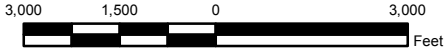


LEGEND

- ★ FNAI Species Occurrences
- ▨ Roadway Improvement Corridor
- ▬ Roadway Improvement Corridor 0.5 Mile Area

REFERENCES

1. Imagery, Miami-Dade County, 2007.
2. Species Occurrences, FNAI, 2008.



PROJECT	TURKEY POINT UNITS 6 & 7 PROJECT	
TITLE	ROADWAY IMPROVEMENT CORRIDOR FNAI SPECIES OCCURRENCES	
	FILE No. 08387584H025	FIGURE R9.3.7-2
	REV. 0	
	PLOT DATE 6/12/2009	



LEGEND

■ Proposed Crocodile Underpasses (Approximate Locations)

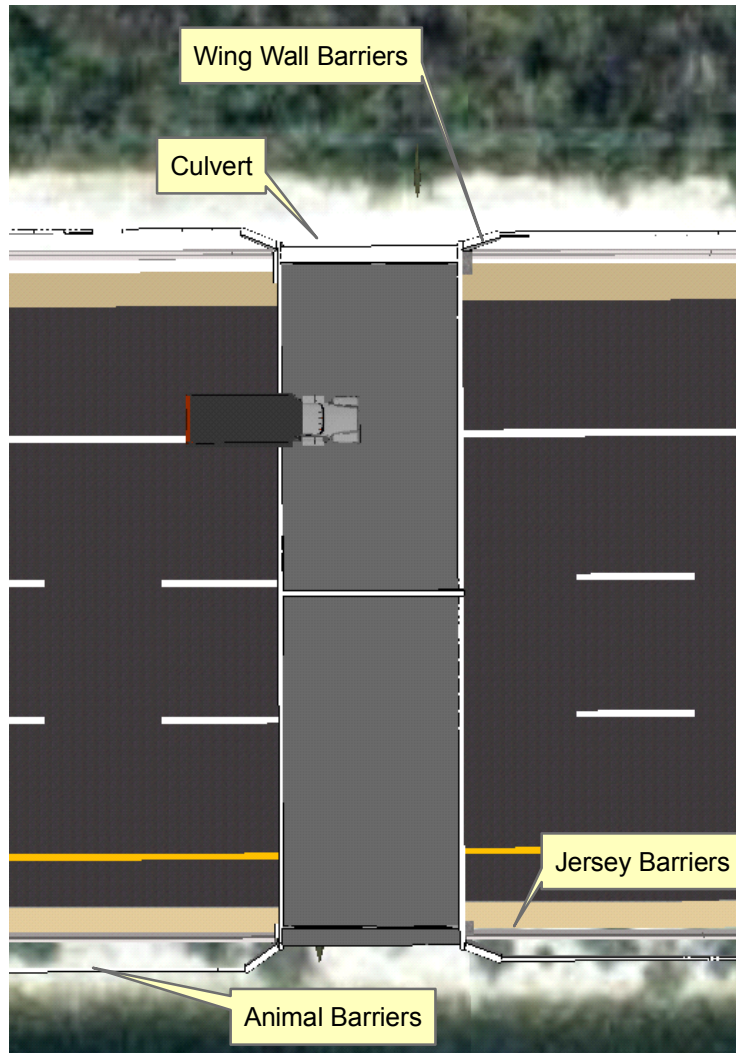


REFERENCES

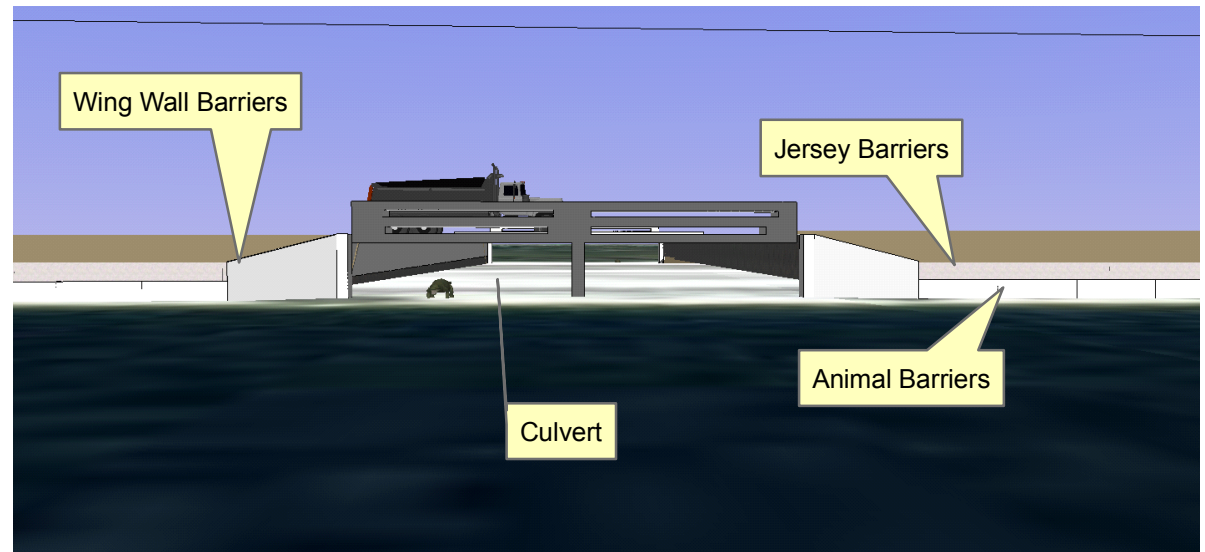
1. Imagery, Miami-Dade County, 2007.

PROJECT	TURKEY POINT UNITS 6 & 7 PROJECT	
TITLE	CONCEPTUAL CROCODILE ACCESS ROAD UNDERPASS LOCATIONS	
	FILE No. 08387584H009	FIGURE R9.4.4-1
	REV. 0	
	PLOT DATE 6/12/2009	

OVERHEAD VIEW



FRONT VIEW



PROJECT
**TURKEY POINT UNITS 6 & 7
PROJECT**

TITLE
**CONCEPTUAL CROCODILE
ACCESS ROAD UNDERPASS**

PROJECT

TITLE

FILE No. 08387584H008

REV. 0

PLOT DATE 6/12/2009

FIGURE

R9.4.4-2

