FPL-032R

January 23, 2015

Ms. Karin Smith
Section Leader
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, FL 33416-4680

RE: Florida Power & Light Company – Turkey Point Plant
Water Use Permit Application
Cooling Canal Augmentation Project

Dear Ms. Smith:

Florida Power & Light Company (FPL) is requesting authorization from the South Florida Water Management District (SFWMD) to access the District's right of way, connect to the L-31E canal, and seasonally transfer excess stormwater (above the 254 cubic feet per second required for the Comprehensive Everglades Restoration Project (CERP) Biscayne Bay Coastal Wetlands restoration project) from the L-31E canal to the Turkey Point Plant to aid in reducing temperature and salinity in the Cooling Canal System (CCS).

On August 28, 2014 the SFWMD issued EO No. 201-078-DAO-WU/ROW/ERP (Attachment A) allowing for the temporary installation and removal of piping and pumping systems for transfer of water from the L-31E Canal to the CCS. In accordance with the conditions of the EO, FPL diverted surface water from the L-31E Canal which would have otherwise been discharged to tide via the S-20F, S-20G, and S-21A coastal structures and was in excess of the flows reserved for protection of fish and wildlife (Rule 40E-10.061, F.A.C.). Withdrawals were terminated on October 15, 2014.

In lieu of requesting another EO for short-term coverage, FPL is requesting a recurring annual diversion of water from the L-31E under the SFWMD Consumptive Water Use Program. FPL proposes to utilize a similar design (Attachment B) and comply with conditions consistent with those that were approved under EO No. 201-078-DAO-WU/ROW/ERP. Enclosed are the applicable SFWMD Water Use Application Forms and supporting documentation (Attachments C and D) and a check for the Water Use Permitting fee of $6,200.

The proposed work is necessary for the continued safe and reliable operation of the Turkey Point Plant. FPL appreciates your expedited review of the enclosed drawings and details. Please contact me at 561-691-2808 (Matthew.Raffenberg@fpl.com) or Stacy Foster at 561-691-7065 (stacy.foster@fpl.com) if you have any questions.

Sincerely,

Stacy M. Foster for MJR

Matthew J. Raffenberg
Director of Environmental Licensing and Permitting

Attachments: Attachment A – SFWMD EO No. 201-078-DAO-WU/ROW/ERP
Attachment B – CCS Augmentation Construction Drawings
Attachment C – Water Use Permit Application and Supporting Documents
Attachment D – Water Use Supplemental Form F and Supporting Documents

ATTACHMENT A

SFWMD EO No. 201-078-DAO-WU/ROW/ERP

BEFORE THE GOVERNING BOARD OF THE
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

SFWMD No. 2014-078-DAO-WU/ROW/ERP

IN RE:

EMERGENCY FINAL ORDER ISSUED TO FLORIDA POWER AND LIGHT FOR THE PURPOSE OF AUTHORIZING TEMPORARY PUMP INSTALLATION AND WATER WITHDRAWAL ALONG AND FROM THE L-31E CANAL SYSTEM; MIAMI-DADE COUNTY, FLORIDA

/

EMERGENCY FINAL ORDER

The Executive Director of the South Florida Water Management District (District), pursuant to Sections 120.569 and 373.119(2), Florida Statutes (Fla. Stat.), after considering the recommendations of District staff and being otherwise fully appraised of the matter, issues the following Emergency Order (Order) containing Findings of Fact, Ultimate Facts and Conclusions of Law:

FINDINGS OF FACT

1. The District is a public corporation of the State of Florida, existing pursuant to Chapter 25270, Laws of Florida, 1949, and operating pursuant to Chapter 373, Fla. Stat., and Title 40E, Florida Administrative Code (Fla. Admin. Code), as a multi-purpose water management district with its principal office at 3301 Gun Club Road, West Palm Beach, Florida. The District has the power and duty to protect Florida's water resources and to administer and enforce the provisions of Chapter 373,

Fla. Stat., and the rules promulgated there under, Title 40E, Fla. Admin. Code. The District has jurisdiction over the matters addressed in this Order.

2. Florida Power and Light (FPL) is a subsidiary of NextEra Energy, Inc. As a regulated utility, FPL is granted an exclusive franchise by the Public Service Commission to provide reliable and cost-effective electric service to customers, including critical infrastructure, within its service territory in Florida. FPL's service territory covers all or parts of 35 Florida counties and serves approximately nine million customers.

3. The customers particularly at issue in this matter are those residing in Miami-Dade and Broward counties. In these counties, FPL provides electrical service to two million customer accounts, including critical infrastructure.

4. FPL owns and operates the electric power generating facility known as the Turkey Point Power Plant (Turkey Point) that is the subject of this emergency authorization request.

5. Turkey Point is located in unincorporated southeast Miami-Dade County, east of Florida City and the City of Homestead. The Turkey Point site covers approximately 11,000 acres. Turkey Point is located approximately 25 miles south of Miami and about nine miles east of Florida City. Properties adjacent to Facility are almost exclusively undeveloped land. Turkey Point is bordered to the east by Biscayne Bay and Card Sound. A Turkey Point location map is attached and incorporated as Exhibit A.

6. Turkey Point consists of five steam electric generating units: three fossil fuel-fired units (Units 1, 2, and 5) and two nuclear units (Units 3 and 4). Units 1 and 2

constructed in the late 1960s each have a continuous generating capacity of approximately 404 megawatts (MW). Operations of units 1 and 2 are on a standby basis and not routinely in service. Unit 5 has a continuous generating capacity of approximately 1150 MW. Units 3 and 4 each have continuous generating capacity of approximately 820 MW.

7. Units 3, 4, and 5 are certified under Florida's Power Plant Siting Act (PPSA). Units 1 and 2 pre-date the PPSA and are not certified.

8. FPL owns and operates a cooling canal system ("CCS"), an approximately 5,900-acre network of unlined canals at Turkey Point, to provide cooling water. Construction of the CCS was completed in 1973, and the CCS was closed from the surface waters of both Biscayne Bay and Card Sound. The CCS facilities pre-date the PPSA and are not certified. Under routine operations, there are no active surface water inflows utilized to maintain CCS water levels, temperature, or salinity.

9. The L-31E Canal system is of particular import to FPL's emergency authorization request. The L-31E Canal system is part of the Central and Southern Florida Flood Control Project (C & SF Project) for which the District is the designated local sponsor pursuant to Section 373.1501, Fla. Stat. As local sponsor, the District operates C&SF Project components, including the L-31E Canal system and the surface water flow to tide from the associated basins consistent with the guidance provided in the United States Army Corps of Engineers Master Water Control Manual, East Coast Canals, Volume 5.

10. The L-31E Canal system is a borrow canal and levee system that stretches north – south both intercepting water as it flows eastward to tide in southeast

Dade County and providing storm surge protection. A map depicting the L-31E Canal system is attached and incorporated as Exhibit B. The L-31E Canal runs parallel to the South Central Biscayne Bay and across several drainage basins, six of which are named for the associated major east-west canals: Canal 100 (C-100), C-1, C-102, C-103, North Canal and Florida City Canal. This canal network and coastal levee system is operated for several C & SF Project purposes, including reducing the potential for flood and storm surge damage as well as limiting saline water intrusion. Water from the L-31E is discharged to Biscayne Bay at several coastal structures, as depicted on Exhibit B.

11. Operation of the C & SF Project coastal structure gates in this canal network controls the quantity and timing of water discharged into this portion of Biscayne Bay. Overall, these surface water inflows comprise the largest input of fresh water to Biscayne Bay in this area.

12. In the 1990's the U.S. Army Corps of Engineers and the District developed the Comprehensive Everglades Restoration Program (CERP) which was approved by Congress in the Water Resources Development Act of 2000 (WRDA 2000). A component of CERP includes the Biscayne Bay Coastal Wetlands Phase 1 Project. This project component aims to restore the overland sheetflow in an area of up to 11,000 acres, and to improve the ecology of Biscayne Bay, including its freshwater and saltwater wetlands, nearshore bay habitat, marine nursery habitat, and the oyster reef community.

13. Implementation of the Biscayne Bay Coastal Wetlands Phase 1 Project will impound and redistribute freshwater runoff from the existing canal discharges into

the coastal wetlands adjoining Biscayne Bay to provide a more natural and historical overland flow pattern through existing coastal wetlands and tidal creeks. This redistribution of freshwater runoff will improve the temporal and spatial distribution of inflows to Biscayne Bay.

14. The WRDA 2000 requires that water be reserved from allocation as an assurance that each CERP project component will meet its goals and objectives. Water is to be reserved consistent with the objectives and information contained within the *Central and Southern Florida Project Comprehensive Everglades Restoration Plan Biscayne Bay Coastal Wetlands Project Phase I Final Integrated Project Implementation Report and Environmental Impact Statement* (PIR) and other sources of information.

15. To this end, the District conducted technical studies identifying water to be reserved for the protection of fish and wildlife within the western near-shore portion of Central Biscayne Bay, engaged in rule development, and adopted the Nearshore Central Biscayne Bay reservation rule and associated implementation rules. (Exhibit C) The location of the Nearshore Central Biscayne Bay as well as the associated; Project canal system is depicted in Figure 3-1 of the attached and incorporated Exhibit C.

16. The determination of the amount of water needed for protection of fish and wildlife in the Nearshore Central Biscayne Bay reservation rule is based on meeting a year-round salinity target for the nearshore area of central Biscayne Bay of 20 (practical salinity scale) given in the PIR. More detailed analyses were performed to determine the locations and quantities of surface water for the reservation rules. This information is contained in the District's Technical Document to Support a Water Reservation Rule

for the Comprehensive Everglades Restoration Plan Biscayne Bay Coastal Wetlands Project (July 2013).

17. Rule 40E-10.061, Florida Administrative Code, is the water reservation rule for the Nearshore Central Biscayne Bay. Pursuant to this rule, surface water flowing into the Nearshore Central Biscayne Bay, as derived from various and listed contributing canal reaches, is reserved from allocation. Figure 3-4A depicts surface water flow from the C-102 + Military + C-103 Canal through S-21A + S-20G + S-20F into Biscayne Bay during the Wet Season and is the relevant reservation for this Order; the reserved Target Flow to the Bay is 504 acre-ft / day or 254 cubic feet per second (cfs).

18. On August 27, 2014, FPL requested the District issue an Emergency Order for temporary authorization to utilize the District's right of way and to divert and use water, above that reserved in Rule 40E-10.061, F.A.C., from the L-31E Canal System to help moderate unusually high temperatures and salinity that are occurring in the CCS. A copy of FPL's request and related correspondence between FPL and the Nuclear Regulatory Commission is attached and incorporated as Composite Exhibit D. In summary, FPL seeks to divert water that is available, above the water reserved by Rule 40E-10.061, F.A.C., which would otherwise be discharged to tide via the S-20F,S-20G and S-21A coastal structures. District staff reviewed and considered FPL's request, the District's right of way, the infrastructure proposal, historic data, District statutory authorizations and rules, and the potential water availability and provided input to the District's Executive Director.

19. In support of their emergency authorization request, FPL provided the following information which is contained in Composite Exhibit D and summarized below:

a. United States Nuclear Regulatory Commission (NRC) Operating Licenses for Turkey Point and CCS Temperature Requirements: Turkey Point Power Plant Units 3 & 4 operate under a license from the Nuclear Regulatory Commission. The original operating license included a requirement that the maximum allowed CCS water temperature on the intake or inlet side of Units 3 & 4 cannot exceed 100°F. During July 2014, numerous factors contributed to higher than usual inlet temperatures in the CCS that approached 100°F. Also, during July – August, intake temperatures approached 102°F. After analysis, FPL requested and received temporary approval from the NRC to temporarily deviate from the water temperature requirement as is pursued a permanent change to the plant's operating license. In parallel, FPL submitted and received (August 8, 2014) approval for a License Amendment Request (LAR) that permanently increases the CCS intake water temperature limit from 100°F to 104°F. (Composite Exhibit D) This LAR is conditioned such that if the NRC license limit is exceeded and certain conditions met, both Turkey Point Units 3 and 4 will be required to commence shut down within 12 hours which could impact grid reliability. If Units 3 and 4 were required to shut down, an important piece of FPL's power generation portfolio will not be available to meet the current and anticipated high electricity demand, potentially impacting electrical service to more than 2 million customer accounts in Miami-Dade and Broward Counties, including critical infrastructure.

b. CCS Temperatures and Record-Breaking Power Demand: Peak demand for electric generation in south Florida is directly related to high temperatures and humidity which generally occur in the summer and early fall. Beginning in July 2014, Turkey Point's CCS experienced higher than usual temperatures as well as record breaking electricity demand. By the end of July, CCS Plant intake temperatures exceeded 100°F and have continued to exceed 100°F during afternoon peaks, recently reaching a high of 102°F, as depicted in Composite Exhibit D.

c. Factors Contributing to CCS Temperatures: A number of factors are contributing to higher than usual temperatures in the CCS. These factors include: high summer temperatures; significantly less rainfall in the vicinity of Turkey Point, including rainfall at the CCS; elevated salinity; and an algae bloom.

i. Temperature Data: For the Miami-Dade and Broward areas, the average high in September is 89°F and in October it is 86°F. CCS temperatures exceeded 100°F during July and August, 2014.

ii. Rainfall, Evaporation, Salinity, and Seepage Data: FPL reports typical annual rainfall at Turkey Point totals range between 50 inches to 75 inches. Normally, summer rainfall is effective in moderating the CCS water temperature and salinity. In 2013, the annual rainfall accumulation at Turkey Point measured at the CCS was less than 20 inches. As of the end of May, 2014, there had been less than 3 inches of rain at the rain station within the CCS. Although additional rainfall has occurred in June and July, the

overall rainfall remains less than 26 inches at the CCS, compared to 40 inches at the Miami Airport during the same timeframe. Moreover, FPL data indicates that the high evaporation, averaging 34 MGD, and losses to groundwater, averaging 12 MGD, have resulted in more water leaving the CCS than is being provided from the aquifer or rainfall and ultimately concentrating salinity in the CCS. FPL reports the CCS salinity has reached levels near 90 ppt, compared to historic levels of approximately 60 ppt.

iii. Algae Bloom: FPL indicates the above described conditions have allowed an algal bloom in the CCS to persist and affect Plant operations. The algae concentration, prior to treatments beginning mid-summer, was as high as 1.8 million cells per milliliter, far exceeding the historic average values of 50,000 cells per milliliter. Recent FPL treatments have reduced the algae concentrations. However, the turbidity associated with the algae bloom has caused unusual amounts of solar energy to be absorbed in the CCS, thereby increasing CCS temperatures. FPL reports effective treatment of the algae will require the salinity to be reduced to bring the dead algae out of suspension, which is necessary to reduce CCS temperatures and, thereby, restore the heat exchange capacity of the CCS. Detailed information concerning the CCS algae bloom are contained in Composite Exhibit D, particularly the correspondence between FPL and the NRC.

d. FPL's Request for Temporary, Emergency Water Supply: In summary, FPL requests an immediate, temporary emergency authorization from the District to allow FPL to access the District's right of way, connect to the L-31E canal, and conditionally withdraw stormwater from the L-31E Canal, and convey this water to the CCS with above-ground piping. Composite Exhibit D contains the design details for FPL's request. FPL's proposed operational plan synchronizes the volumes and rates of its northern and southern pumping operations so as to avert dewatering of wetlands adjacent to the L-31E canal. A portion of the proposed infrastructure involves temporary installation of pipes across wetlands.

20. Temporary installation of the pipes within wetlands, as shown in Exhibit D, will have only minimal or insignificant individual or cumulative adverse impacts on the water resources of the District. Based on the design proposed in Exhibit D, FPL's proposed, temporary installation qualifies for an exemption from the requirement to obtain an environmental resource permit pursuant to subsection 373.406(6), Florida Statutes.

21. Water levels in the L-31E Canal system, the proposed water supply source, are influenced by the operation of coastal canal structures. Operation of the S-20F, S-20G and S-21A are performed consistent with guidance from the United States Army Corps of Engineers regulation schedule and Master Water Control Manual, East Coast Canals, Volume 5. Under normal operating conditions for April 30 – October 15 the S-20F, S-20G, and S-21A structures are operated in the "high range" meaning discharges to tide are conditionally made when stages upstream of the structure

including stages within the L-31E Canal are 2.2 ft. NGVD or higher and the gates are closed when headwater stages drop to 1.8 ft NGVD.

22. Operational records of the District show combined average daily flow from the C-102, Military, C-103 canals through Structures S-21A, S-20G, and S-20F, respectively, into this portion of Biscayne Bay are 481 cfs during the month of August (1993 – 2013) and 620 cfs for the month of September (1993 - 2013), with daily combined flows ranging from 0 to more than 3,000 cfs during these months.

23. The combined reserved target flow for structures S-21A, S-20G, and S-20F is 254 cfs suggesting that there is a reasonable expectation that daily flows exceeding the reservation target flows will occur during the months of August and September.

24. Based on FPL's request and the above-described facts, the Executive Director of the District has considered this matter and finds that an emergency exists and the emergency measures proposed herein are necessary to protect the public health, safety or welfare.

ULTIMATE FACTS AND CONCLUSIONS OF LAW

25. Section 373.119(2), Fla. Stat., and Rule 28-106.501, Fla. Admin. Code, authorize the Executive Director of the District, in the event of an emergency requiring immediate action to protect the public health, safety or welfare, with the concurrence of the Governing Board, and without prior notice, to issue an order reciting the existence of such an emergency and requiring that such action be taken as deemed necessary. Section 120.569, Florida Statutes, also authorizes issuance of emergency authorizations. Moreover, the District is authorized, in summary, to regulate

connections and use of the District's rights of way, use of water, construction of new diversion facilities, initiation of new water uses, diversion and withdrawal facilities pursuant to a variety of statutes. (*e.g.*: §§373.083, 373.085, 373.086, 373.1501, 373.171, 373.219, Florida Statutes) The proposed activities are exempt from the requirement to obtain an environmental resource permit pursuant to subsection 373.406(6), Florida Statutes.

26. As to right of way matters, Rules 40E-6.451 and 40E-6.481, Fla. Admin. Code, further provide an emergency exists when immediate action is necessary to protect lives or property.

27. Pursuant to statutory authorizations, FPL's request and supporting documents, and the facts described herein, the Executive Director finds that an emergency exists requiring immediate action necessary to protect the public health, safety, or welfare. The Executive Director also finds the wetland impacts identified in Exhibit D and authorized by this Order qualify for a Section 373.406(6), Fla. Stat., exemption.

28. The action authorized by this Emergency Order is appropriate to address this emergency situation.

29. The L-31E Canal system is part of the C&SF Project for which the District is the designated local sponsor pursuant to Section 373.1501, Fla. Stat. Pursuant to Sections 373.085 and 373.086, Fla. Stat., the District is authorized to operate the C&SF Project, including the S-20 Structure and the L-31E Canal system.

ORDER

Based upon the Findings of Fact, Ultimate Facts and Conclusions of Law, the Executive Director orders FPL is authorized to undertake the following, temporary actions in accordance with the conditions stated herein:

30. Temporary Utilization of District Right of Way:

a. Authorized Facilities and Installation: FPL is authorized to install the infrastructure depicted in Exhibit D on the District's L-31E Canal right of way. The design details, including facility description and location, authorized by this Order are contained in the attached and incorporated Exhibit D. To the extent the information contained in Exhibit D conflicts with the terms and conditions of this Emergency Order, this Emergency Order shall control. FPL shall install, operate, and maintain the temporary withdrawal facilities and associated equipment in accordance with this Order. Any deviations from the design schematics identified in Exhibit D shall be presented to the District for approval prior to installation of the modified design. These facilities are temporarily authorized for the purpose of diverting and use water from the L-31E Canal system to help meet its cooling water needs pursuant to the following conditions.

b. Right of Way Installation Conditions:

i. Installation Coordination: Prior to commencement of construction or utilization of the District's right of way and, again, upon completion of the installation of the authorized facilities, FPL is required to contact the District's Field Representative, Mike Worley of the District's Homestead Field Station, (954)410-7383, and schedule a pre-construction

meeting and final inspection. The District's Homestead Field Station Superintendent is authorized to make field changes to installations or operations described herein to better achieve the District's objectives; such changes shall be subsequently documented in writing and communicated by the District to FPL.

ii. Site Security: The pumps at both the north and south pumping sites shall be manned continuously throughout the entire time the pumps are deployed pursuant to this Order. The south pumping site shall be manned by a pump operator provided by the pump manufacturer.

iii. Right of Way Conditions: FPL is required to comply with all Right of Way conditions contained in the body of this Order and attached and incorporated Exhibit E.

31. Temporary Water Withdrawal Authorization:

a. Authorization to Withdraw and Use Water, if available, from the L-31E Canal System:

i. Water Availability Restriction: FPL is prohibited from withdrawing and using water from the L-31E Canal system that is reserved for fish and wildlife by Rule 40E-10.061, F.A.C., for the Nearshore Central Biscayne Bay. The only water available for the purpose of this Order is that water which would otherwise be discharged to tide from either the S-20F, S-20G, and S-21A structures and is in excess of the flows reserved for protection of fish and wildlife in Rule 40E-10.061, F.A.C. This available surface water may, temporarily, be withdrawn and used within FPL's

cooling canal system in accordance with the conditions as set forth herein. There are no assurances provided by this Order that water will be available for FPL's withdrawal and use on any given day.

ii. District's Daily Determination of Water Availability and FPL Pump Operation: On a daily basis, the District will determine the amount and timing that FPL may operate the pumps and facilities authorized herein to withdraw water from the L-31E Canal system. Only when the combined flows to tide through coastal structures S-20F, S-20G, and S-21A exceed 254 cfs will the District determine the amount and timing water available for a FPL pump operation. The rate and volume of a potential FPL withdrawal, if any, shall be determined by the District, no later than 10:00 a.m., each day and for the duration of this Order. The District's daily determination of water availability shall cover a 24 hour period and last until no later than 9:59 a.m. the next day. In the event the District does not provide any written direction to FPL in accordance with this paragraph, then FPL shall cease all pumping until further notice.

iii. Communication of Water Availability Determination: The District's Operation Control Center will communicate its daily water availability determination to FPL by e-mail, to the FPL's designated contact(s): Matthew Raffenberg, or his designee, at Matthew.Raffenberg@fpl.com. The District's Operation Control Center may be contacted 24 hours a day, 7 days a week at: 561-682-6116 and

occ@sfwmd.gov. FPL may not commence any daily withdrawal operations prior to this District communication confirming water availability.

iv. Monitoring and Reporting: FPL shall monitor and report the amount of water diverted from the L-31E Canal system to its cooling canal system. When FPL withdraws water, then FPL must generate a daily report including the following detailed information: (1) the water availability determination for each day as provided by the District's Operational Control Center, (2) identification of which pump(s) were used over the course of the day; (3) time on and time off, per pump; (4) RPM setting, per pump, if variable; (5) calculated volume of water pumped, per pump; and (6) cumulative log flows at each pump station. In addition, the report shall include hourly stage data for the L-31E Canal measured at TPSW-1 and TPSW-2 for the weekly reporting period, whether or not the pumps operated. Water quality grab samples consisting of conductivity, turbidity, total kjedahl nitrogen, nitrate nitrite as N, phosphorus, ortho phosphorus, ammonia, and TRPH (total recoverable peteroleum hydrocarbons, also known as Florida Petroleum Residual Organic or "FL-PRO") shall be collected prior to initiation of pumping pursuant to this Order and once a week thereafter for the duration of this Order. These samples shall be collected at TPSW-1 and TPSW-2. FPL shall make the sampling logs and lab reports available upon request. The report shall reference this Order and be submitted by noon, Tuesday of each week for all withdrawals occurring during the preceding week. (The preceding week

reporting period is considered Monday at 1:00 a.m. through Sunday midnight.) The report shall be e-mailed to both the District's Assistant Executive Director, Len Lindahl at llindahl@sfwmd.gov and Terrie Bates, Division Director -- Water Resources, at tbates@sfwmd.gov. Upon Executive review of the weekly report, conference calls may be required. Additionally, the District may request available monitoring data at any time and FPL shall provide the same within two hours of the District's request.

v. Special Pump Station Criteria:

(a) The District may require FPL to terminate pumping at any time. Upon receipt of any oral or written request from the District to terminate pumping, FPL must cease pumping within two (2) hours.

(b) FPL shall wirelessly coordinate the pumping at both stations to assure that, from a non-flow condition, the north station pumps shall be started first. The south station pumps shall be started within 5 minutes of the north station pumps start, with an equivalent flow. Similarly, when pump operation ceases, the south station pumps shall cease first and the north station pumps shall cease within 5 minutes.

vi. Pump Requirements:

(a) Pump On / Off Switches: Each pump authorized pursuant to this Order shall be equipped with an operable,

remote pump operational device prior to initiating pump operations.

(b) Pump discharge curves: Pump discharge curves used in determining rates of discharge while pumps are operating, as deployed in the field, shall be provided to the District prior to pump operation for the purpose of calculating flow rates and volumes.

(c) Totalizing Hour Meters: FPL shall install totalizing hour meters at each pump authorized by this Order and such meters shall be available for periodic District inspection and verification.

32. Section 373.406(6), F.S., Exemption Conditions:

a. No permanent fill shall be placed in the wetland area described in Exhibit D.

b. All activities which qualify for the subject exemption shall be conducted and operated using appropriate best management practices and in a manner which does not cause a violation of water quality standards, pursuant to Chapter 62-302, Florida Administrative Code.

c. The District's determination that the proposed temporary placement of pipes, pumps, and associated infrastructure qualifies as an exempt activity may be revoked if the installation is substantially modified from that described in Exhibit D, if the basis for the exemption is determined to be materially incorrect, or if the installation results in violation of state water quality standards. Any

changes made in the construction plans or location of the project may necessitate a permit from the District. Therefore, FPL is advised to contact the District before beginning any work in wetlands or surface waters which is not specifically described in Exhibit D.

d. Upon termination of this Order, all pipes, mats, other materials and equipment shall immediately be removed from the wetland to allow the wetland vegetation to recover.

33. Immediate Facility Removal and Reinstallation:

a. Prior to a Storm Event: FPL shall remove the temporary withdrawal facilities authorized by this Order located within the District's right of way within 24 hours of receipt of notice from the District. The temporary withdrawal facilities should be maintained and secured so as to not impede the District's ability to make flood control releases in advance of a storm event.

b. After a Severe Storm Event: FPL shall notify the District of its intent to reinstall the temporary withdrawal facilities in the District's right-of-way at least three (3) business days before such reinstallation is scheduled to occur.

34. All documents, plans, and reports required by this Order shall be submitted to Len Lindahl via email at llindahl@sfwmd.gov and Terrie Bates via email at tbates@sfwmd.gov.

35. Miscellaneous Conditions:

a. This Order authorizes FPL to take actions under Chapter 373, Fla. Stat., as provided herein. This Order does not relieve FPL from the requirements to obtain any other federal, state, or local authorizations.

b. This Order does not constitute a water use or right-of-way permit or grant any legal right to water as set forth in Chapter 373 Fla. Stat., and associated District rules and regulations over the water intercepted and stored under this Order.

c. This Order does not convey any property right to FPL, nor any rights and privileges other than those specified in this Order. This Order shall not be construed as an abandonment or any other such impairment or disposition of the District's property rights.

d. This Order shall not be construed as a substitute for, or waiver of, any right-of-way, surface water management, water use, or other permits required of FPL under the District's rules and regulations.

e. FPL shall insure that harmful impacts to the water resources, off-site land uses, or existing legal uses of water do not occur as a result of this Order. In the event such harmful impacts result from actions authorized by this Order, FPL shall implement all actions, as directed by the District, to cease such harmful impacts and, if necessary, to mitigate such impacts. Failure to comply with this requirement shall be considered a violation of this Order.

f. Failure to comply with the terms of this Order shall constitute a violation of a District Order under Chapter 373, Fla. Stat., and enforcement proceedings may be brought in any appropriate administrative or judicial forum.

g. The District reserves the right to initiate appropriate legal action, to impose civil penalties, and collect attorney's fees and costs to enforce the terms of this Order.

h. This Order may be modified or amended at any time, as appropriate for the protection of the public health, safety, and welfare and the water resources of south Florida by the Governing Board, Executive Director, or Executive Director's designee.

i. The Executive Director or Executive Director's designee may require FPL to remove all or part of the authorized facilities and cease withdrawal and / or use activities under this Order at any time.

j. The District's immunity from liability under Section 373.443, Florida Statutes, for any damages that might result from the activities authorized under this Order, shall not be diminished by the terms of this Order, or any activities taken pursuant to this Order.

k. Failure to comply with the conditions contained within this Order shall constitute a violation of a District Order under Chapter 373, Florida Statutes, and enforcement proceedings may be brought in any appropriate administrative or judicial forum.

l. If the District petitions or sues for enforcement of the terms of this Order, the District reserves the right to initiate appropriate legal action, to impose civil penalties and collect attorney's fees and costs.

36. Termination: This Order shall terminate on the earliest of: (1) failure to receive Governing Board concurrence at their next regularly scheduled meeting, (2) October 15, 2014, or (3) at any time upon written notice from the District's Executive Director or the Executive Director's designee.

37. Required Facility Removal: Within 30 days of termination of this Order, FPL shall remove all temporary withdrawal facilities and associated infrastructure authorized by this Order, including the pipes buried under 344th Avenue. Moreover, FPL shall properly restore the right-of-way to the District's satisfaction. In the event of failure to so comply within the specified time, the District may remove the temporary withdrawal facilities and associated infrastructure authorized by this Order and associated equipment and FPL shall be responsible for all removal and restoration costs.

38. A Notice of Rights attached hereto as Exhibit F.

39. This Order shall take effect upon execution by the Executive Director of the District and shall expire as provided herein. This Order is subject to the Governing Board's concurrence at its next regularly scheduled Governing Board meeting.

DONE AND SO ORDERED in West Palm Beach, Florida, on this 28th day of August, 2014.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
By its Executive Director

Blake C. Guillory, P.E.
Executive Director

Attested:

District Clerk/Assistant Secretary
August 28, 2014

Legal Form Approved:

8/28/14
Elizabeth D. Ross, Esq.

ATTACHMENT B

CONSTRUCTION DRAWINGS

LEGEND

- Temporary Cooling Canal Augmentation Pipeline & Equipment
- Area of Temporary Wetland Impact

TABLE 1 - TEMPORARY WETLAND IMPACT ACREAGE[1]

Wetland ID	Habitat Type	Acreage
HW	510 - Canal	0.04
P	612 - Mangrove Swamps	0.32
R	510 - Canal	0.04
	641 - Freshwater Marshes	0.03
	6411 - Marsh Sawgrass	0.02
	Grand Total	**0.45**

NOTES

PRELIMINARY DRAWINGS: THESE DRAWINGS ARE NOT FINAL FORM, BUT ARE BEING TRANSMITTED FOR AGENCY REVIEW

[1]SEE ATTACHED SHEETS FOR DETAIL

REFERENCE

PIPELINE ROUTE, TAYLOR ENGINEERING INC., 2014
TEMPORARY WETLAND IMPACTS, GOLDER ASSOCIATES INC., 2014

CLIENT
FPL

PROJECT
FPL TURKEY POINT
COOLING CANAL
FRESHWATER RECHARGE

TITLE
PROJECT OVERVIEW MAP

CONSULTANT
Golder Associates

YYYY-MM-DD	2015-01-20
PREPARED	NRL
DESIGN	NRL
REVIEW	KAB
APPROVED	KAB

PROJECT	CONTROL	Rev.	FIGURE
1412354	001	0	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

1 in
0

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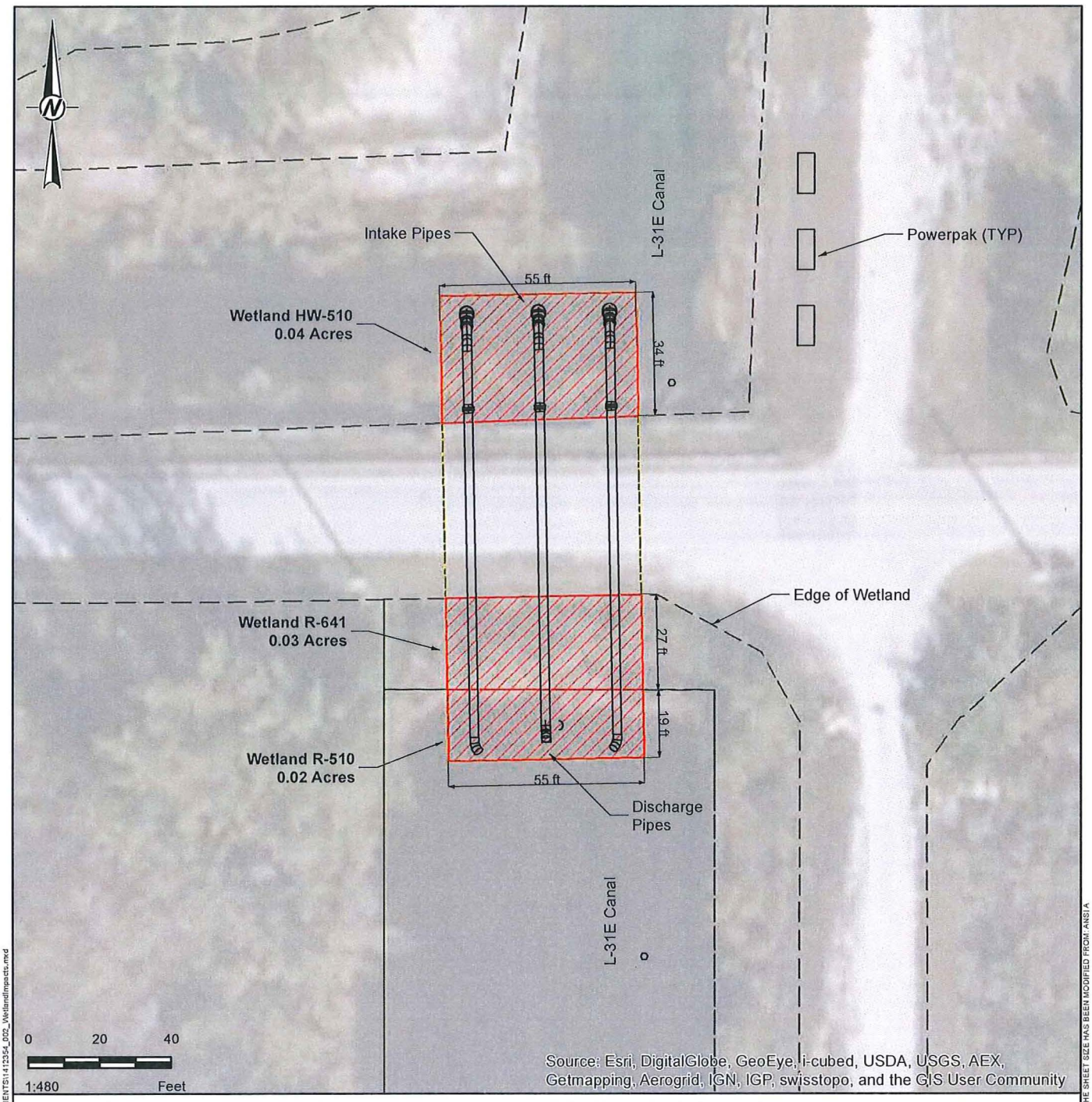

LEGEND

- Temporary Cooling Canal Augmentation Pipeline & Equipment
- Wetland Line
- Area of Temporary Disturbance
- Limits of Temporary Construction Matting
- Area of Temporary Wetland Impact

TABLE 1 - TEMPORARY WETLAND IMPACT ACREAGE

Wetland ID	Habitat Type	Acreage
HW	510 - Canal	0.04
P	612 - Mangrove Swamps	0.32
R	510 - Canal	0.04
	641 - Freshwater Marshes	0.03
	6411 - Marsh Sawgrass	0.02
	Grand Total	**0.45**

NOTES

PRELIMINARY DRAWINGS: THESE DRAWINGS ARE NOT FINAL FORM, BUT ARE BEING TRANSMITTED FOR AGENCY REVIEW

REFERENCE

PIPELINE ROUTE, TAYLOR ENGINEERING INC., 2014
TEMPORARY WETLAND IMPACTS, GOLDER ASSOCIATES INC., 2014

CLIENT
FPL

PROJECT
FPL TURKEY POINT
COOLING CANAL
FRESHWATER RECHARGE

TITLE
INTAKE SYSTEM
TEMPORARY WETLAND IMPACTS

CONSULTANT
Golder Associates

YYYY-MM-DD	2015-01-21
PREPARED	NRL
DESIGN	NRL
REVIEW	KAB
APPROVED	KAB

PROJECT	CONTROL	Rev.	FIGURE
1412354	002	0	2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

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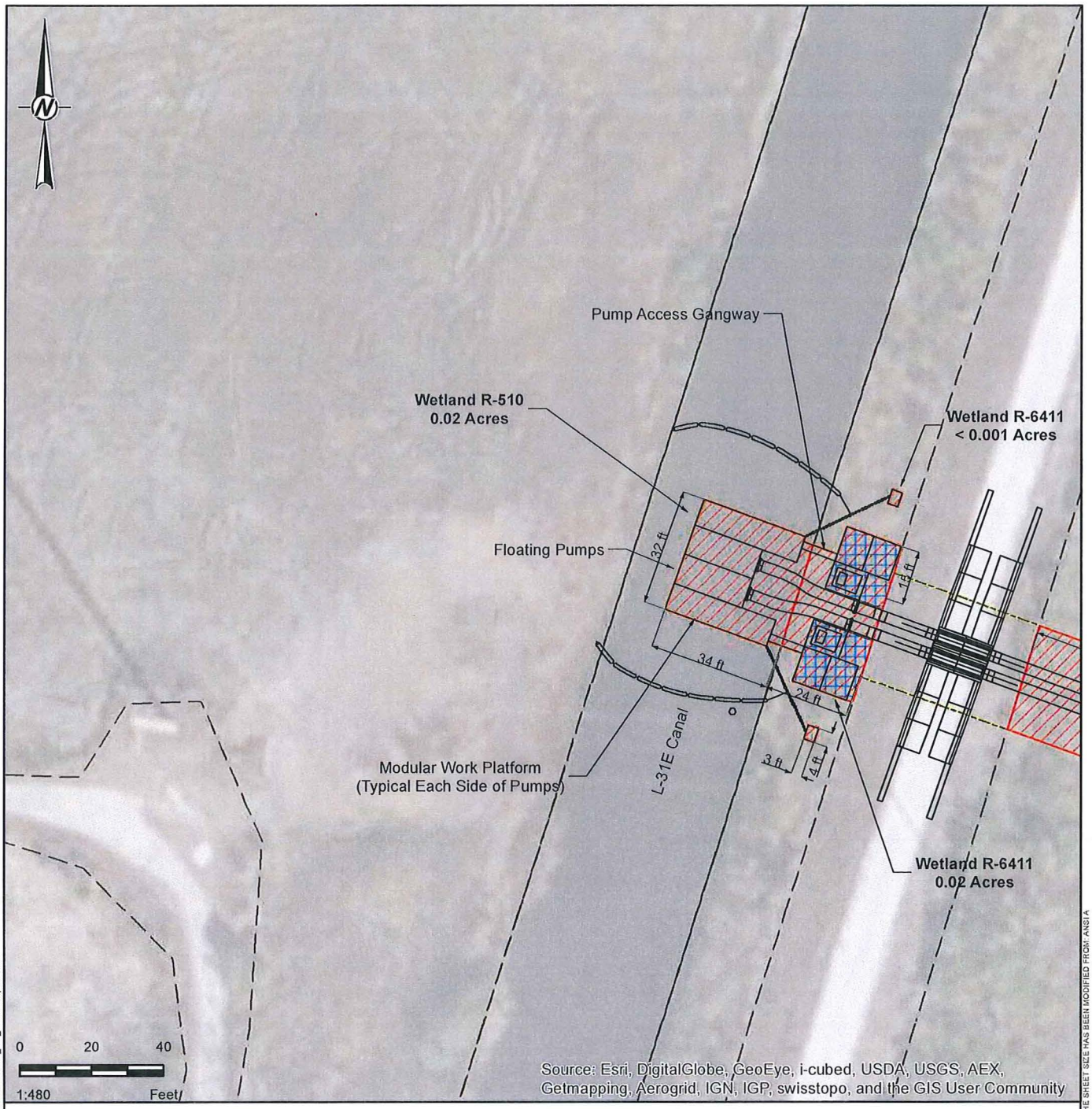

LEGEND

- Temporary Cooling Canal Augmentation Pipeline & Equipment
- Wetland Line
- Area of Temporary Disturbance
- Limits of Temporary Construction Matting
- Area of Temporary Wetland Impact

TABLE 1 - TEMPORARY WETLAND IMPACT ACREAGE

Wetland ID	Habitat Type	Acreage
HW	510 - Canal	0.04
P	612 - Mangrove Swamps	0.32
R	510 - Canal	0.04
	641 - Freshwater Marshes	0.03
	6411 - Marsh Sawgrass	0.02
	Grand Total	**0.45**

NOTES

PRELIMINARY DRAWINGS: THESE DRAWINGS ARE NOT FINAL FORM, BUT ARE BEING TRANSMITTED FOR AGENCY REVIEW

REFERENCE

PIPELINE ROUTE, TAYLOR ENGINEERING INC., 2014
TEMPORARY WETLAND IMPACTS, GOLDER ASSOCIATES INC., 2014

CLIENT
FPL

PROJECT
FPL TURKEY POINT
COOLING CANAL
FRESHWATER RECHARGE

TITLE
DISHCARGE SYSTEM
TEMPORARY WETLAND IMPACTS

CONSULTANT
Golder Associates

YYYY-MM-DD	2015-01-21
PREPARED	NRL
DESIGN	NRL
REVIEW	KAB
APPROVED	KAB

PROJECT	CONTROL	Rev.	FIGURE
1412354	002	0	3

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

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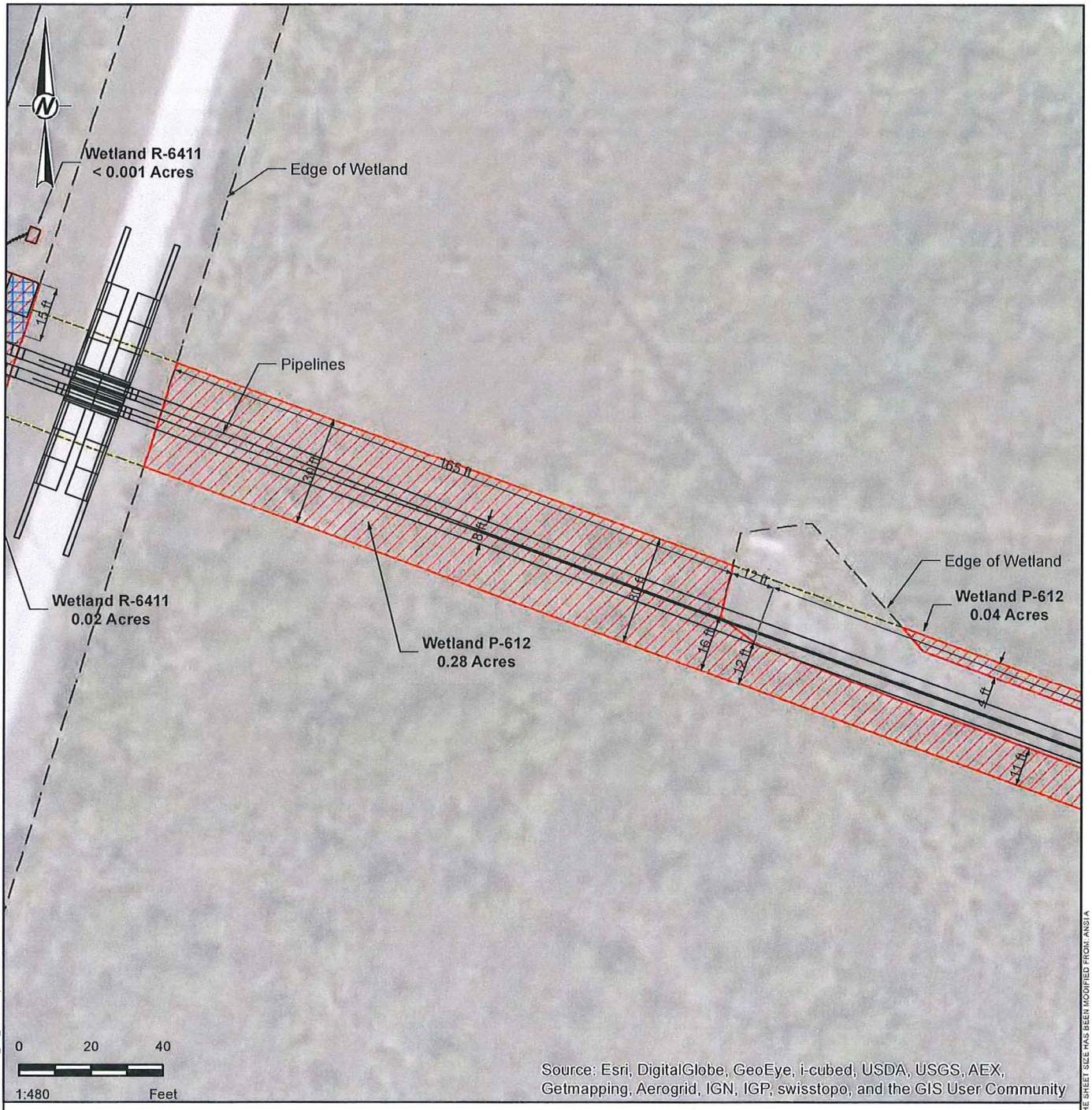

LEGEND

- Temporary Cooling Canal Augmentation Pipeline & Equipment
- Wetland Line
- Area of Temporary Disturbance
- Limits of Temporary Construction Matting
- Area of Temporary Wetland Impact

TABLE 1 - TEMPORARY WETLAND IMPACT ACREAGE

Wetland ID	Habitat Type	Acreage
HW	510 - Canal	0.04
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	641 - Freshwater Marshes	0.03
	6411 - Marsh Sawgrass	0.02
	Grand Total	**0.45**

NOTES

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REFERENCE

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TEMPORARY WETLAND IMPACTS, GOLDER ASSOCIATES INC., 2014

CLIENT
FPL

PROJECT
FPL TURKEY POINT
COOLING CANAL
FRESHWATER RECHARGE

TITLE
DISHCARGE SYSTEM
TEMPORARY WETLAND IMPACTS

CONSULTANT
Golder Associates

YYYY-MM-DD	2015-01-21
PREPARED	NRL
DESIGN	NRL
REVIEW	KAB
APPROVED	KAB

PROJECT	CONTROL	Rev.	FIGURE
1412354	002	0	4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

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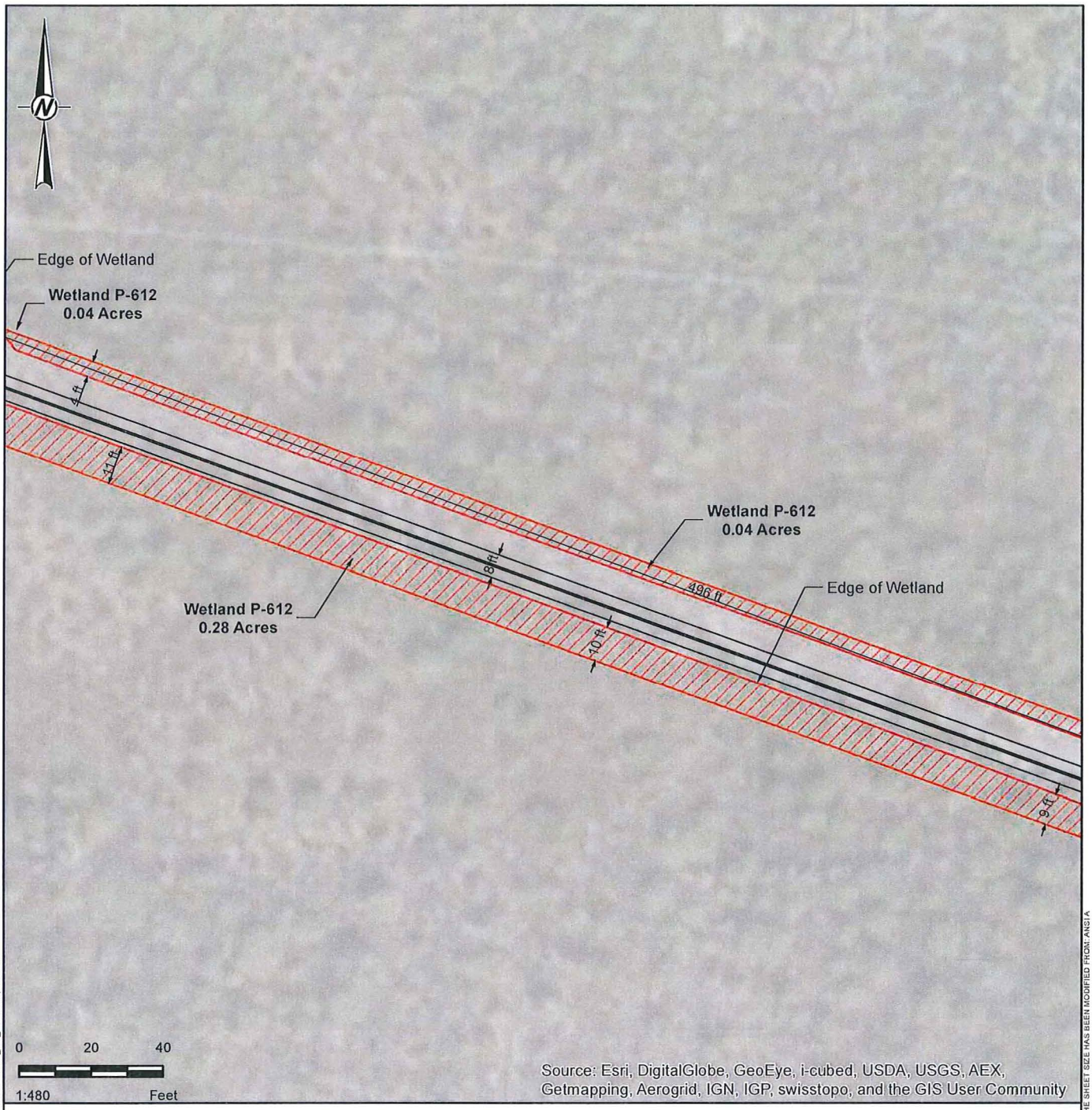

LEGEND

- Temporary Cooling Canal Augmentation Pipeline & Equipment
- Wetland Line
- Area of Temporary Disturbance
- Limits of Temporary Construction Matting
- Area of Temporary Wetland Impact

TABLE 1 - TEMPORARY WETLAND IMPACT ACREAGE

Wetland ID	Habitat Type	Acreage
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P	612 - Mangrove Swamps	0.32
R	510 - Canal	0.04
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	Grand Total	**0.45**

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TEMPORARY WETLAND IMPACTS, GOLDER ASSOCIATES INC., 2014

CLIENT
FPL

PROJECT
FPL TURKEY POINT
COOLING CANAL
FRESHWATER RECHARGE

TITLE
DISHCARGE SYSTEM
TEMPORARY WETLAND IMPACTS

CONSULTANT
Golder Associates

YYYY-MM-DD	2015-01-21
PREPARED	NRL
DESIGN	NRL
REVIEW	KAB
APPROVED	KAB

PROJECT	CONTROL	Rev.	FIGURE
1412354	002	0	5

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

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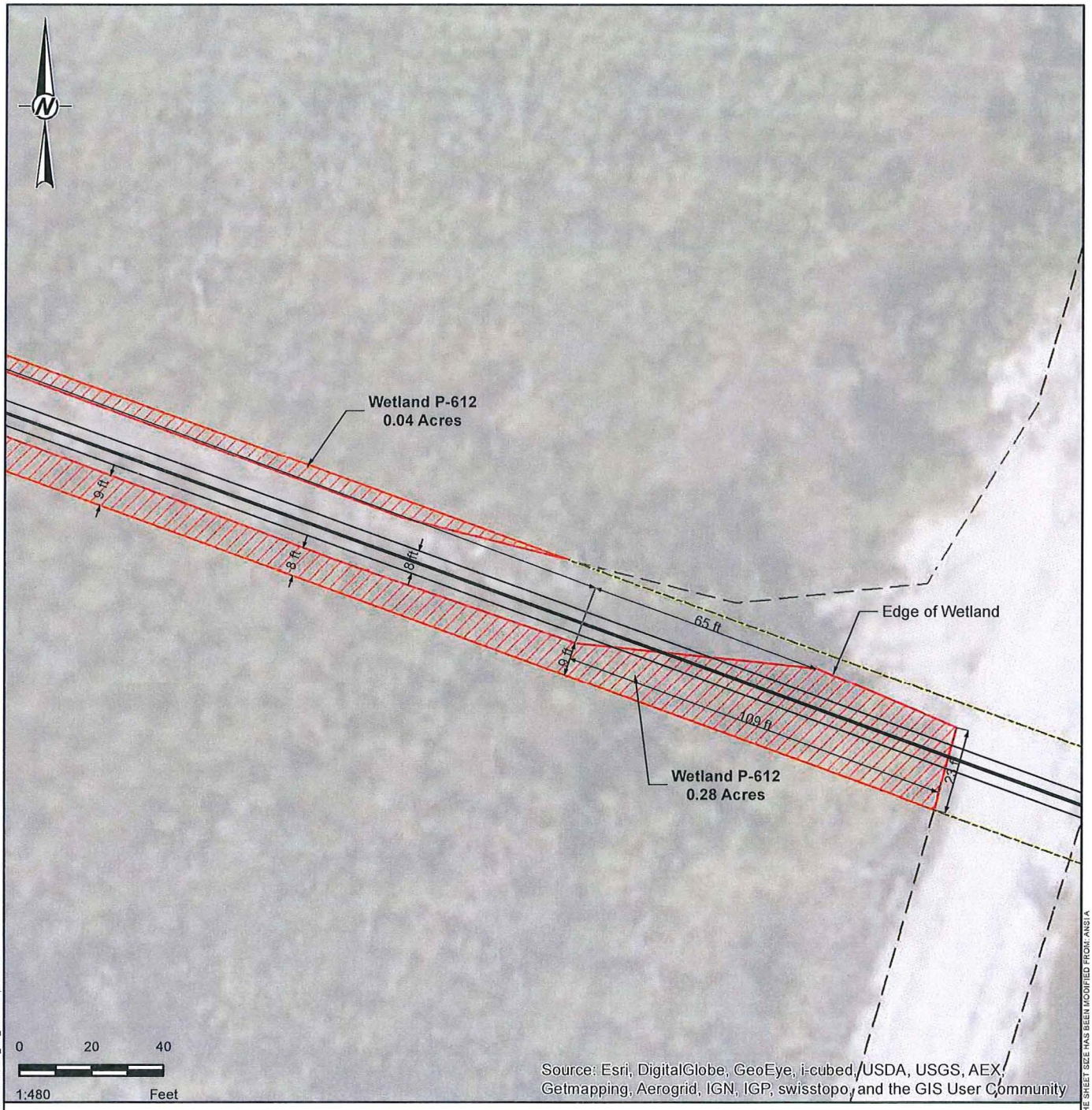

LEGEND

- Temporary Cooling Canal Augmentation Pipeline & Equipment
- Wetland Line
- Area of Temporary Disturbance
- Limits of Temporary Construction Matting
- Area of Temporary Wetland Impact

TABLE 1 - TEMPORARY WETLAND IMPACT ACREAGE

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	Grand Total	**0.45**

NOTES

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REFERENCE

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TEMPORARY WETLAND IMPACTS, GOLDER ASSOCIATES INC., 2014

CLIENT
FPL

PROJECT
FPL TURKEY POINT
COOLING CANAL
FRESHWATER RECHARGE

TITLE
DISHCARGE SYSTEM
TEMPORARY WETLAND IMPACTS

CONSULTANT
Golder Associates

YYYY-MM-DD	2015-01-21
PREPARED	NRL
DESIGN	NRL
REVIEW	KAB
APPROVED	KAB

PROJECT	CONTROL	Rev.	FIGURE
1412354	002	0	6

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A
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LEGEND

- Temporary Cooling Canal Augmentation Pipeline & Equipment
- Wetland Line
- Area of Temporary Disturbance
- Limits of Temporary Construction Matting
- Area of Temporary Wetland Impact

TABLE 1 - TEMPORARY WETLAND IMPACT ACREAGE

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	Grand Total	**0.45**

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TEMPORARY WETLAND IMPACTS, GOLDER ASSOCIATES INC., 2014

CLIENT
FPL

PROJECT
FPL TURKEY POINT
COOLING CANAL
FRESHWATER RECHARGE

TITLE
DISHCARGE SYSTEM
TEMPORARY WETLAND IMPACTS

CONSULTANT
Golder Associates

YYYY-MM-DD	2015-01-21
PREPARED	NRL
DESIGN	NRL
REVIEW	KAB
APPROVED	KAB

PROJECT	CONTROL	Rev.	FIGURE
1412354	002	0	7

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A
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ATTACHMENT C

WATER USE PERMIT APPLICATION

WATER USE PERMIT APPLICATION

South Florida Water Management District
P.O. Box 24680, West Palm Beach, Florida 33416-4680
(561) 686-8800 www.sfwmd.gov/ePermitting

SECTION I – CONTACT INFORMATION

WATER USE PERMIT # (if application is for renewal or modification): _____

If necessary, attach additional sheets if there are multiple applicants, owners, agents, etc.

1. **APPLICANT** (Complete legal name in which permit should be issued)
   NAME: Florida Power & Light Company
   If applicant is a business, provide a contact person: Matthew Raffenberg
   ADDRESS: 700 Universe Boulevard
   CITY, STATE, ZIP: Juno Beach, Florida 33408
   PHONE: (561) 691-2808 CELL PHONE: (561) 573-5888
   EMAIL ADDRESS: Matthew.Raffenberg@fpl.com
   Applicant is: ☒ Owner ☐ Lessee* ☐ Other (explain)_____
   *Attach copy of current lease, or written authorization from property owner

2. **OWNER** (If different than applicant)
   NAME: same as above
   ADDRESS: _____
   CITY, STATE, ZIP: _____
   PHONE: (_____) _____ CELL PHONE: (_____) _____
   EMAIL ADDRESS: _____

3. **AGENT OR CONSULTANT**
   NAME: Karl Bullock COMPANY NAME (if applicable): Golder Associates Inc.
   ADDRESS: 6026 NW 1st Place
   CITY, STATE, ZIP: Gainesville, Florida 32607
   PHONE: (352) 336-5600 CELL PHONE: (352) 222-6961
   EMAIL ADDRESS: Karl_Bullock@golder.com

4. **COMPLIANCE CONTACT** (Person responsible for sending compliance reports to the District)
   NAME: Stacy Foster
   ADDRESS: 700 Universe Boulevard
   CITY, STATE, ZIP: Juno Beach, Florida 33408
   PHONE: (561) 691-7065 CELL PHONE: (772) 285-5653
   EMAIL ADDRESS: Stacy.Foster@fpl.com

Incorporated by reference in rule 40E-2.101 (F.A.C.)
Form 1379 (2014-07)

SECTION II – APPLICATION INFORMATION

Refer to the Applicant's Handbook for permit application guidance, located online at www.sfwmd.gov. If any fields are not applicable for the proposed use, write N/A in the field.

1. **TYPE OF APPLICATION:** ☒ New ☐ Modification ☐ Renewal
   If this application is for a modification, please describe the modification request and the reason the modification is necessary. _____

2. **REQUESTED PERMIT DURATION:** ☒ 20 years ☐ _____ years (up to 20 years)
   ☐ I qualify for a duration greater than 20 years, per Florida Statute 373.236

3. **PROJECT NAME:** Turkey Point Cooling Canal Augmentation **COUNTY:** Miami-Dade

   PHYSICAL ADDRESS: L31E Canal North Intake (approximate) - 25°26'53.78" N, 80°20'59.51" W
   L31E Canal South Intake (approximate) - 25°26'04.84" N, 80°21'09.76" W

4. **RELATED PERMITS** (for projects other than Public Supply)
   - ☐ Environmental Resource Permit (ERP) Permit/Application No(s): N/A - EO No. 2014-078-DAO-WU/ROW/ERP
   - ☐ Right of Way (ROW) Permit/Application No(s): N/A - EO No. 2014-078-DAO-WU/ROW/ERP
   - ☐ Diversion and Impoundment (D&I) Permit/Application No(s): N/A - EO No. 2014-078-DAO-WU/ROW/ERP

SECTION III – USE CATEGORY

Please check all applicable water use categories associated with this permit application and complete the associated supplemental form(s) indicated. Refer to District rules 40E-21.651for water use type definitions.

Water Use Category	Supplemental Form
☐ **Agricultural** (e.g., crops, livestock, nursery, aquaculture, pasture)	Form A
☐ **Commercial / Industrial** (e.g., service business, food and beverage production, cooling and heating, commercial attraction, manufacturing, chemical processing, power generation, aquifer remediation, mining)	Form B
☐ **Landscape / Recreation** (e.g., irrigation of parks, cemeteries, landscaped areas, golf courses, athletic fields, playgrounds)	Form C
☐ **Dewatering** (e.g., water use or removal associated with construction or excavation)	Form D
☐ **Public Supply** (e.g., public or privately owned water utility)	Form E
☒ **Diversion and Impoundment** (diversion or extraction of water). Independent Secondary users should use the applicable supplemental form based on type of water use.	Form F

Incorporated by reference in rule 40E-2.101 (F.A.C.)
Form 1379 (2014-07)

SECTION IV – SOURCES OF WATER

SUMMARY OF GROUNDWATER (WELL) FACILITIES

Well Name or Number	N/A					
Map Designation						
Existing or Proposed						
Date of Proposed Construction						
Date Installed if Existing						
Diameter (in)						
Total Depth (ft)						
Cased Depth (ft)						
Screened Interval (ft)						
Pumped or Flowing						
Pump Type (see Instructions)						
Pump Intake Depth (ft bls)						
Pump or Flow Capacity (GPM)						
Working Valve if Artesian (yes, no or not applicable)						
Status (see Instructions)						
Purpose (see Instructions)						
Elevation of the Wellhead (ft NGVD - see Instructions)						
Water Use Accounting Method (see Instructions)						
Date Last Calibrated (ATTACH calibration report)						
Planar Coordinates (if known - see instructions)						
Section / Township / Range						

Incorporated by reference in rule 40E-2.101 (F.A.C.)
Form 1379 (2014-07)

Instruction for Completing Groundwater (Wells) Section

Well Name or Number: The Applicant's designation of the well. How do you refer to it?

Map Designation: This is how the well is labeled on the map submitted with the application. This may be the same as Well Name or Number, but does not necessarily have to be.

Existing or Proposed: If the well is proposed, enter the date of expected operation. If it is an existing well, enter the date it was installed if you know it.

Diameter: Outside diameter of the well casing.

Total Depth: Total length in feet between the land surface and the bottom of the well.

Cased Depth: The length in feet from the land surface to the bottom of the well casing.

Screened Interval: The distance in feet below land surface to the top and bottom of the well screen, if the well is so equipped.

Pumped or Flowing: Does the well produce water as a result of natural artesian flow, or is it pumped?

Pump Type: This is the type of pump that has been installed for the well (typical choices are as follows):

Centrifugal	Diesel turbine	Axial flow	Windmill
Submersible	Jet	Suction	Other (specify)
Electric turbine	Hydraulic	Portable	

Pump Intake Depth: Location of the pump depth in feet below land surface. The pump may be on the surface or down inside the well.

Pump or Flow Capacity: The amount of water the pump can produce in gallons per minute (GPM).

Working Valve: If the well is artesian, does it have a working valve to control the flow?

Status:
Primary
Secondary (i.e. a production well that is rotated)
Standby (i.e. used for freeze protection or emergency)
Monitor
Injection (i.e. A/C, pool heat exchange, etc.; sometimes used only periodically)
Recharge (i.e. same as above)

Purpose: What will the water be used for (typical choices are as follows):

Dairy	Irrigation	Air Conditioning	Swimming Pool Heating
Monitor	Aquaculture	Freeze Protection	Irrigation/Lake Recharge
Livestock	Bottled Water	Mining/Dewatering	Aquifer Storage and Recovery
Industrial	Other (specify)	Public Water Supply	Aquifer Remediation and Recovery

Elevation of the Wellhead: This is the elevation of the top of the finished well at the ground surface.

Planar coordinates: The Florida State Plane System (Planar Coordinates) should be submitted if you have a land survey which identifies the location of the well in terms of those measurements. If you do not know what these are, it is not necessary to include them.

Section / Township / Range: The section, township and range in which the pump is located.

SUMMARY OF SURFACE WATER (PUMP) FACILITIES

Pump Name or Number						
Map Designation						
Surface Water Source	L31E Canal N	L31E Canal N	L31E Canal N	L31E Canal S		
Local Drainage District (if applicable)	Unknown	Unknown	Unknown	Unknown		
Existing or Proposed	Existing	Existing	Existing	Existing		
Date of Proposed Installation	N/A	N/A	N/A	N/A		
Date Installed if Existing						
Pump type - specifications attached **(for list see Instructions)**	Model - Godwin HAF 30 AX Type - Axial/Diesel	Model - Godwin HAF 30 AX Type - AxialDiesel	Model - Godwin HAF 30 AX Type - AxialDiesel	Model - Rain For Rent FP900 Type - AxialDiesel		
Pump Capacity (GPM)	25,500 GPM	25,500 GPM	25,500 GPM	48,500 GPM		
Pump Horsepower	238 hp	238 hp	238 hp	Unknown		
Pump Diameter (inches)	30 in.	30 in.	30 in.	36 in.		
Pump Intake Elevation ~~(feet NGVD)~~ (feet NAVD)	-7 ft.	-7 ft.	-7 ft.	-4 ft.		
Status (see Instructions)	Primary	Primary	Primary	Primary		
Purpose (see Instructions)	Other - Augmentation	Other - Augmentation	Other - Augmentation	Other - Augmentation		
Two way pump? (yes / no)	No	No	No	No		
Water Use Accounting Method (see Instructions)	Totalizing Meter	Totalizing Meter	Totalizing Meter	Totalizing Meter		
Date Last Calibrated (ATTACH calibration report)						
Planar Coordinates (if known - see instructions)	Unknown	Unknown	Unknown	Unknown		
Section / Township / Range	29/57S/40E	29/57S/40E	29/57S/40E	29/57S/40E		

Incorporated by reference in rule 40E-2.101 (F.A.C.)
Form 1379 (2014-07)

Instructions for Completing Surface Water (Pumps) Section

Pump Name or Number: The Applicant's designation of the pump. How do you would refer to it?

Map Designation: This is how the pump is labeled on the map submitted with the application. This may be the same as Pump Name or Number, but does not necessarily have to be.

Surface Water Source: This is the name of the water body from which the pump withdraws water (e.g. SFWMD C-51, Lake Worth Drainage District Canal E-3, Un-named canal, onsite lake).

Local Drainage District: If the project is located in a local drainage or "298" district, such as Lake Worth Drainage District, Indian Trails Water Control District, etc., please identify it.

Existing or Proposed: If the pump is proposed enter the date of expected operation. If it is an existing pump, enter the date it was installed if you know it.

Pump Type: Typical choices are:

Centrifugal	Diesel	Turbine	Axial	Flow	Submersible
Suction	Electric turbine	Hydraulic	Other (specify)		

Pump Capacity: The amount of water the pump can produce in gallons per minute (GPM).

Pump Horsepower: Horsepower rating of the pump.

Pump Diameter: Size of the intake opening of the pump, in inches.

Pump Intake Elevation: The elevation from which the pump can produce water without cavitating.

Status:
Primary
Secondary (i.e. a production pump that is rotated)
Standby (i.e. used for freeze protection or emergency)

Purpose: What will the water be used for (typical choices are as follows):

Dairy	Irrigation	Air Conditioning	Swimming Pool Heating
Aquaculture	Freeze Protection	Irrigation/Lake Recharge	Mining/Dewatering
Livestock	Industrial	Aquifer Storage and Recovery	
Aquifer Remediation and Recovery		Other (specify)	

Two way pump: Can the pump be used for both intake of irrigation water and discharge of storm water?

Flow Measurement Method: Describe how the amount of water produced by the pump will be measured as per Section 4.1.1. of the Applicant's Handbook.

Date Last Calibrated: When was the flow measurement method last calibrated? ATTACH the calibration report.

Planar coordinates: The Florida State Plane System (Planar Coordinates) should be submitted if you have a land survey which identifies the location of the pump in terms of those measurements. If you do not know what these are, it is not necessary to include them.

Section / Township / Range: The section, township and range in which the pump is located.

SUMMARY OF SURFACE WATER (CULVERT) FACILITIES

Culvert Name or Number	N/A					
Map Designation						
Surface Water Source						
Local Drainage District (if applicable)						
Existing or Proposed						
Date of Proposed Construction						
Date installed if Existing						
Culvert type (for list see Instructions)						
Culvert length (Feet)						
Culvert Cross-section						
Culvert Diameter (inches)						
Culvert Height (inches)						
Culvert Width (inches)						
Invert Elevation (Feet NGVD)						
Type of Control Device (for list see Instructions)						
Status (see Instructions)						
Purpose (see Instructions)						
Two way culvert? (yes / no)						
Water Use Accounting Method (see Instructions)						
Date Last Calibrated (if known)						
Planar Coordinates (if known - see instructions)						
Section / Township / Range						

Incorporated by reference in rule 40E-2.101 (F.A.C.)
Form 1379 (2014-07)

Instructions for Completing Surface Water (Culverts) Section

Culvert Name or Number: The Applicant's designation of the culvert. How do you refer to it?

Map Designation: This is how the culvert is labeled on the map submitted with the application. This may be the same as Culvert Name or Number, but does not necessarily have to be.

Surface Water Source: This is the name of the water body from which the culvert withdraws water (e.g. SFWMD C-51, Lake Worth Drainage District Canal E-3, Un-named canal, onsite lake).

Local Drainage District: If the project is located in a local drainage or "298" district, such as Lake Worth Drainage District, Indian Trails Water Control District, etc., please identify it.

Existing or Proposed: If the culvert is proposed enter the date of expected operation. If existing, enter the date it was installed (if known).

Culvert Type: Corrugated; Metal pipe; Reinforced concrete pipe; Steel pipe

Culvert Length: Distance between the ends of the culvert in feet.

Culvert Cross-section: Is the culvert round, elliptical, rectangular, or other?

Culvert Diameter: If the culvert is round, the inside diameter of the culvert, in inches.

Culvert Height: If the culvert is not round, the inside height of the culvert, in inches.

Culvert Width: If the culvert is not round, the inside width of the culvert, in inches.

Invert Elevation: The lowest elevation, referenced to NGVD, at which water will flow through the culvert.

Type of Control Device: What controls the flow of water through the culvert (typical choices are): Control gate; Flap gate; Flashboard riser; Gated riser; Screw gate; Slide gate; Valve; Other (specify)

Status: Primary; Secondary (i.e. a production pump that is rotated); Standby (i.e. used for freeze protection/ emergency)

Purpose: What will the water be used for (typical choices are as follows):

Dairy	Irrigation	Aquaculture	Freeze Protection	Mining/Dewatering
Livestock	Industrial	Irrigation/Lake Recharge	Other (specify)	

Two way culvert: Can the culvert be used for both intake of irrigation water and discharge of storm water?

Flow Measurement Method: Describe how the amount of water produced by the pump will be measured as per Section 4.1.1. of the Applicant's Handbook.

Date Last Calibrated: When was the flow measurement method last calibrated? *ATTACH the calibration report.*

Planar coordinates: The Florida State Plane System (Planar Coordinates) should be submitted if you have a land survey which identifies the location of the culvert in terms of those measurements. If you do not know what these are, it is not necessary to include them.

Section / Township / Range: The section, township and range in which the culvert is located.

SECTION V – EVALUATION OF RECLAIMED WATER FEASIBILITY

The applicant is required to evaluate the feasibility of utilizing reclaimed water. The feasibility analysis must be completed as outlined in the Applicant's Handbook, subsection 2.2.4.

❑ Feasibility analysis attached
☒ Not applicable (i.e. no lines in area, crop type restriction, already using reclaimed)
Explanation: No lines in area.

SECTION VI – SUMMARY OF REQUESTED WATER USE

Total the requested water use from each supplemental form (Agricultural, Irrigation, Commercial / Industrial, Public Water Supply, etc.) in the table below. If the multiple sources add up to more than 100%, please attach an operating plan with a detailed explanation.

Requested Amounts and Source(s) of Water				
Source 1 Name[1] L-31E Canal (MGY[2]/MGM[3])	Source 2 Name (MGY[2]/MGM[3])	Source 3 Name (MGY[2]/MGM[3])	Source 4 Name (MGY[2]/MGM[3])	Total Requested Water Use (MGY[2]/MGM[3])
Max. Avail. / Max. Avail.	/	/	/	/

[1] Provide the name of the water source. Examples include the Upper Floridan aquifer and the Biscayne aquifer.
[2] MGY = Million gallons per year of water to be withdrawn over a 12-month time period under a 1-in-10 year drought condition (i.e. 1,500,000 gallons each day/1,000,000 = 1.5 x 365 = 547.5).
[3] MGM = Maximum million gallons per month of water to be withdrawn in any single month under the 1-in-10 year drought condition.

SECTION VII – AQUIFER STORAGE AND RECOVERY *(complete if applicable)*

ASR Facility Name	Source of Stored Water[1]	Storage Aquifer Name	Recovery Water Destination	Estimated Demand Average/Maximum (MGD)	Estimated Injected Average/Maximum (MGD)
N/A				/	/
				/	/
				/	/
				/	/

[1] Aquifer Name, surface water body, water treatment plant name.

Please describe any projected increases or decreases (from historical average) in the amounts stored or recovered.

SECTION VIII – IMPACT EVALUATION

When determining whether the permit applicant has provided reasonable assurances that the conditions for issuance are met, the District will consider the projected impact of the proposed withdrawal, along with impacts from any existing legal uses and other pending applications for a water use permit. To provide these assurances, studies and/or impact evaluations may be required. Please refer to the Applicant's Handbook (subsection 3.3) for criteria regarding impact evaluations and attach your analysis, if applicable.

❑ Impact evaluation attached ☒ Not applicable - Refer to conditions under attached EO No. 2014-078-DAO-WU/ROW/ERP

SECTION IX – APPLICANT CERTIFICATION

I certify that to the best of my knowledge and belief that all of the information provided on this form and in any attachment to it is correct. I understand that any permit issued shall be subject to review and modification, enforcement action, or revocation, in whole or in part, for any material false statement in an application to continue, initiate, or modify a use, or for any material false statement in any report or statement of fact required of the permittee [Section 373.243(1), Florida Statutes]. With advance notice, I agree to provide District staff with proper identification entry to the project site for the purpose of performing analyses of the site for determining whether the conditions for issuance will be met. Further, if a permit is granted, I agree that, with advance notice, District staff with proper identification shall have permission to enter, inspect, observe, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications.

If applicable) I authorize _____ to act as my agent for permit application coordination.

MATTHEW J. RAPPENBERG	Stacy M. Wolf for MJR	1/23/15
APPLICANT'S NAME (*print or type*)	APPLICANT'S SIGNATURE	DATE
AUTHORIZED AGENT'S NAME (*print or type*)	AUTHORIZED AGENT'S SIGNATURE	DATE

SECTION X – APPLICANT CHECKLIST

Please make sure to include the following with the permit application submittal:

☒ Proof of Property Control (i.e. Deed, Lease) as per the Applicant's Handbook, subsection 2.1.1 (may be obtained via the applicable county Property Appraiser's website) - Refer to EO No. 2014-078-DAO-WU/ROW/ERP

☒ Application Fee (www.sfwmd.gov)

☒ Location/Site Map (refer to supplemental application forms for specific requirements) - Refer to Project Overview Map

☒ Supplemental Form(s) and associated supporting information (i.e. maps, calculations)- Refer to Supplemental Form F and Construction Drawings/Details

❑ Water Conservation Plan (if applicable)

❑ Diversion and Impoundment (D&I) Independent Secondary User – Letter from the D&I that demonstrates legal access, and that the use will not cause the D&I to exceed its permit allocation.

Incorporated by reference in rule 40E-2.101 (F.A.C.)
Form 1379 (2014-07)

High Flow Pump

FP900 Floating Pump

Overview:

The FP900is a self-contained floating pump station capable of producing high flows of water ideal in flood control and large dewatering projects. The 36inch two-stage high-efficiency axial flow pump provides for maximum flows up to 48,500 GPM and capable of producing a maximum head of 36 feet.

Features:

Frame is designed to be compatible with the standard intermodal high cube container (ISO 20), with a three part epoxy coating and polyethylene finish to withstand harsh environments. Flotation is accomplished with a one piece fiberglass tank filled with low density polyethylene foam for security.

Specs:

Maximum Flow	48,500 GPM
Maximum Head	35 feet
Pump Size	36"
Dry weight	
Footprint	240" x 102"
Fuel Tank	132 Gallon
Fuel Consumption	24 GPH @ 1,900 RPM

Accessories:

- Suction and Discharge Pipe and Fittings
- Fuel Nurse Tank

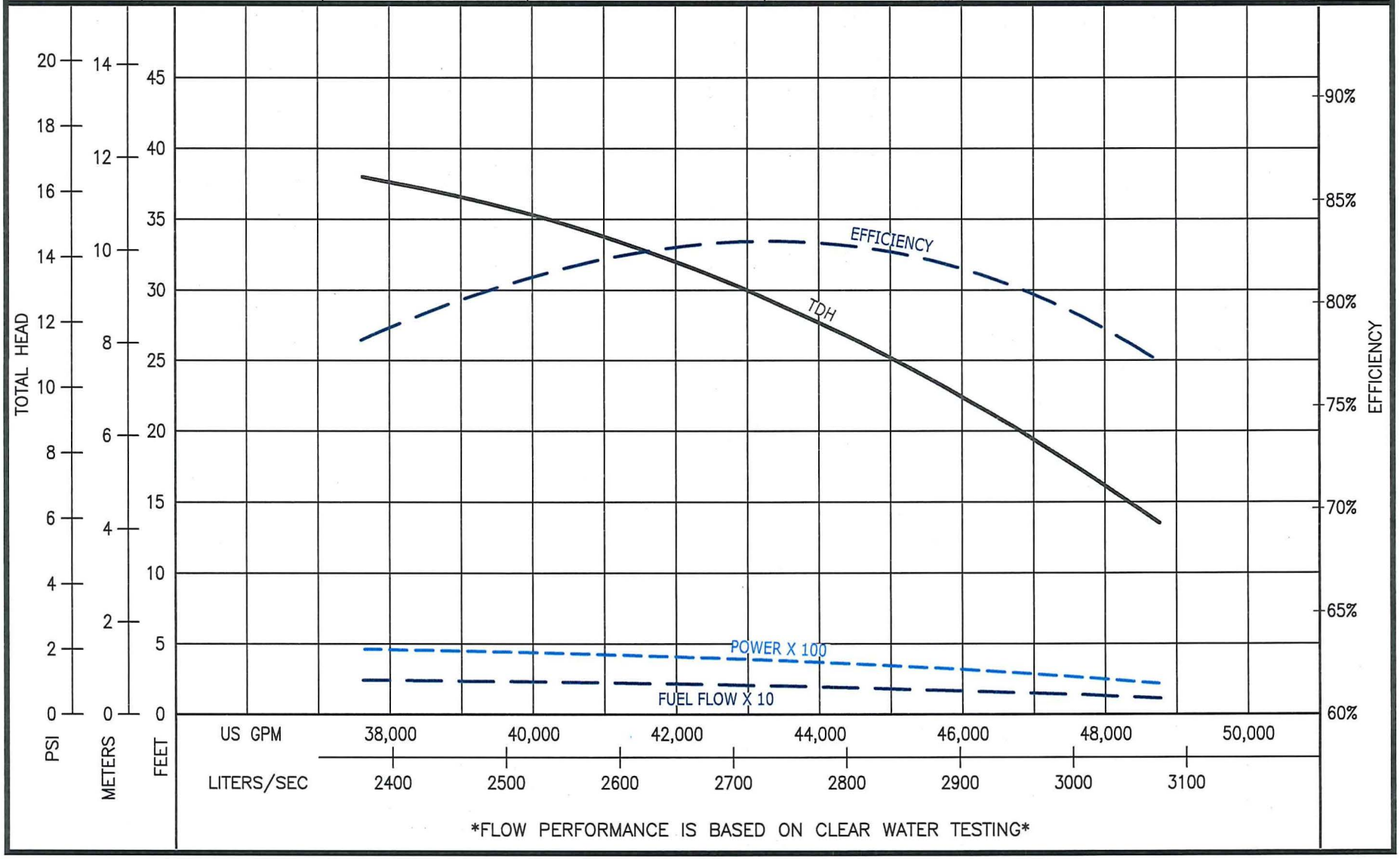
Liquid Ingenuity®
800-742-7246
rainforrent.com

Rain For Rent

CURVE: 01-0133-02-82

PUMP : FP-900

RPM	DISCHARGE	NO. OF STAGES	IMPELLER BLADES	IMPELLER DIA.	IMPELLER
480	36"	2	6	36"	304SS



FLOW PERFORMANCE IS BASED ON CLEAR WATER TESTING

MANUFACTURERS OF QUALITY PUMPS WORLD WIDE FOR OVER 45 YEARS
D&D Machine & Hydraulics, Inc.
HYDRAULIC SUBMERSIBLE PUMPS AND POWER UNITS

D&D Machine & Hydraulics, Inc.
10945 Metro Parkway SE
Fort Myers, Florida 33966-1202
239-275-7177 • Fax 239-275-5350
E-mail: marketing@ddpumps.com
www.ddpumps.com

Specifications for

D & D Model 30AX
30" Axial Flow Pumphead x 900D

General Description

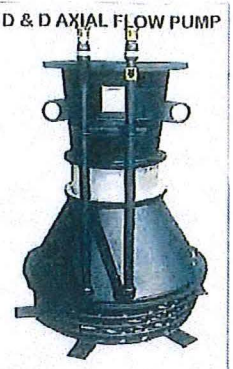
These specifications describe our **30" Hydraulically Driven Submersible Axial Flow Pump.** The pump is capable of flow capacities up to 25,500 GPM @ 5' TDH and 16,000 GPM @ 25' TDH.

Pumphead – 30" Axial Flow

- Vertical discharge, 30" size, with a stainless steel wear ring. Discharge with flange, 150#, AWS
- Cast bronze impeller
- Hydraulic motor requires 115 GPM @ 2,800 PSI
- Hydraulic oil lubricated bearing carrier
- Stainless steel pump shaft with radial contact bearings
- Viton o-ring, lip type and mechanical seals
- Vane-type hydraulic motor
- Pump Specs: 25,500 GPM @ 5' TDH
  16,000 GPM @ 25' TDH
- Weight: 1,500 Lbs.

10 /2012

30" AXIAL FLOW PUMP
MODEL 30 x 1.0 x 900

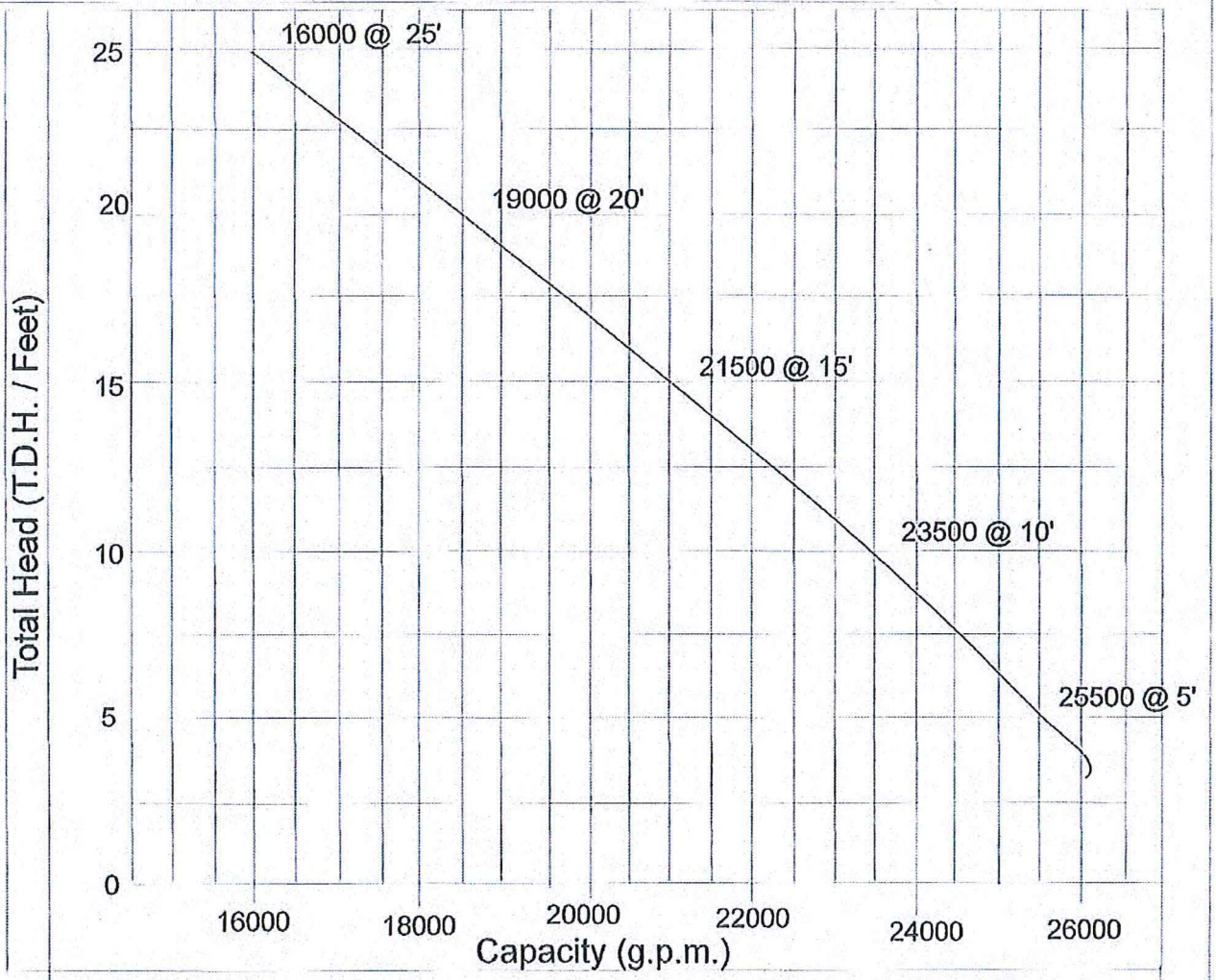


6090HF4852-225

Prop style	Speed	No. Vanes	Solids Dia.	Discharge	Weight
open	variable	3	not rec'd	30.00"	1500 Lbs.

Hydraulic Motor	Model	Displacement	Engine	Model	Bhp Cont'
Vane	37 A26	26 cu/in Rev	J.DEERE	6090HF4852-225	238 @ 1800

PTO pump	Model	Displacement	GPM req'd	Pressure	Hoses
Vane	VT6DDS	15.75 cu/in Rev	124	2800	#24p / #24r one each



NOTE--pumps can be chosen per specific g.p.m. at any head--need not perform the entire curve. Please consult factory for special requests.

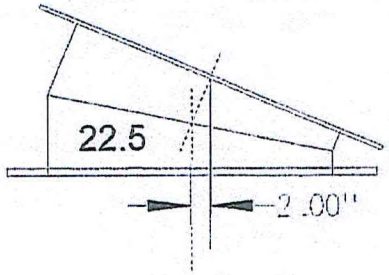
TEST CONDITIONS

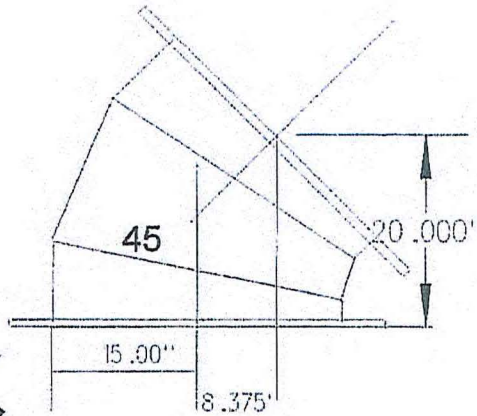
Water----------fresh
S. G.----------1.00
Temp----------70* F
Altitude----------Sea Level

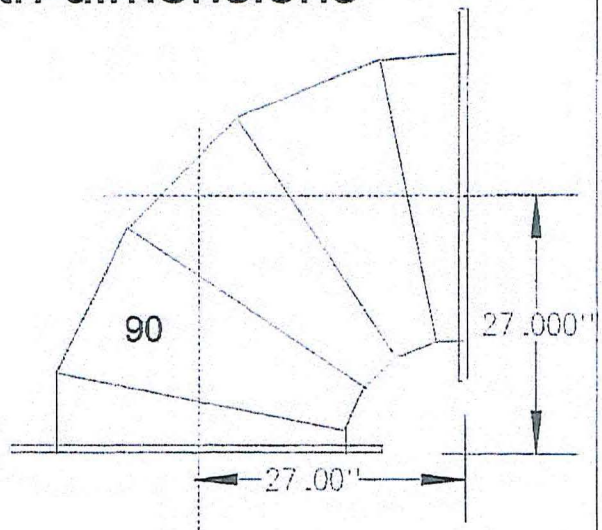
D&D Machine & Hydraulics, Inc.

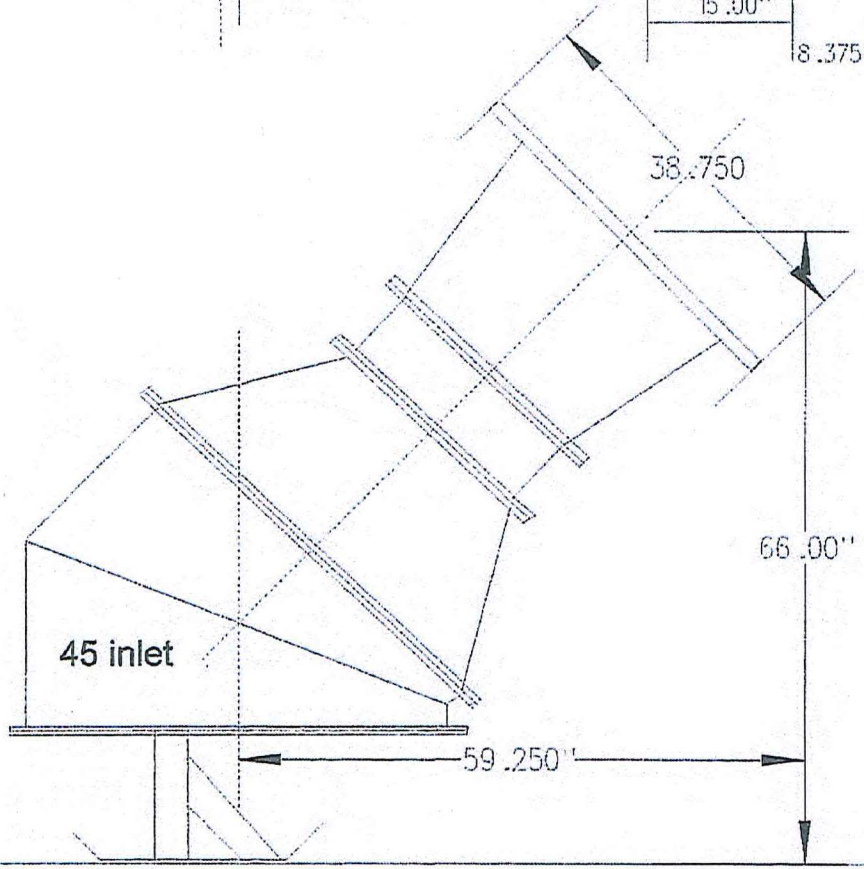
*Tests were conducted according to Hydraulic Institute ANSI / HI-1.6

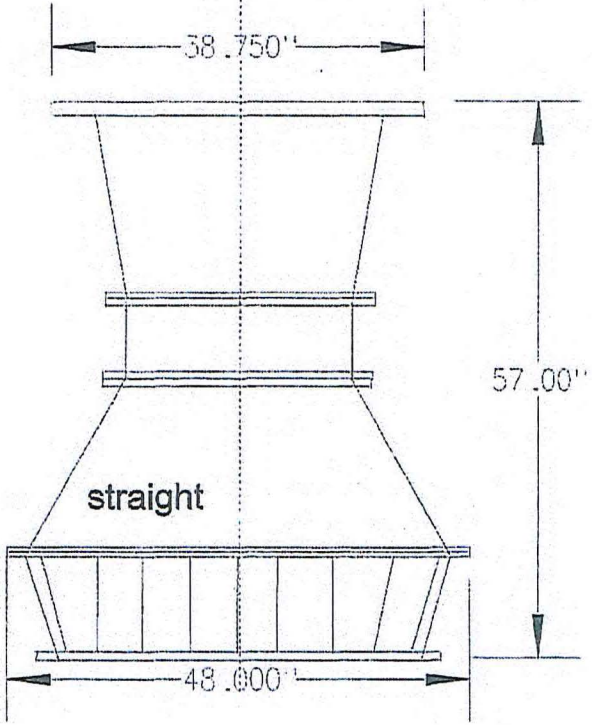
30" axial (scaled) with dimensions



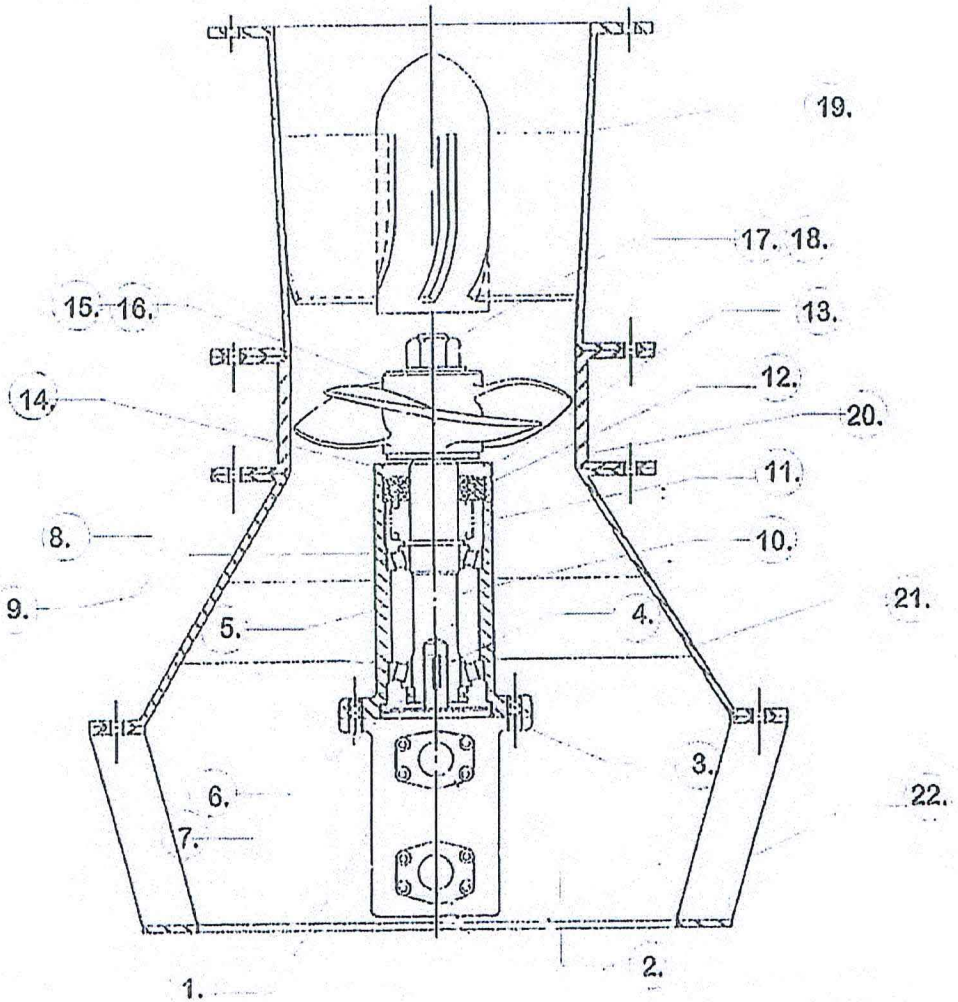






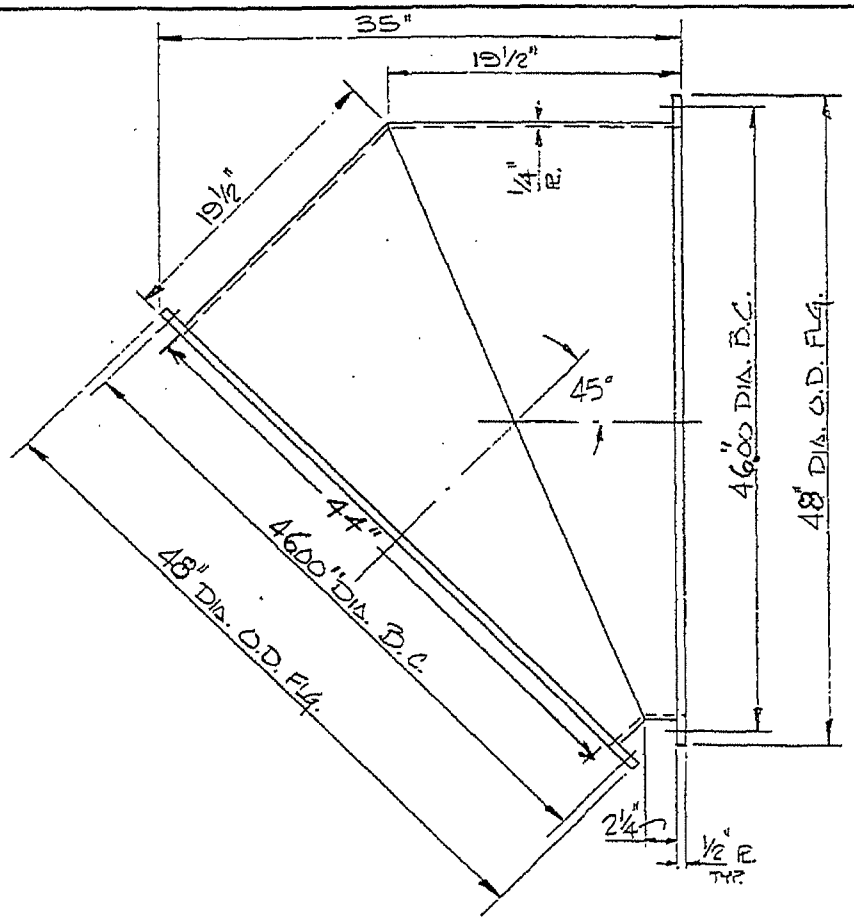


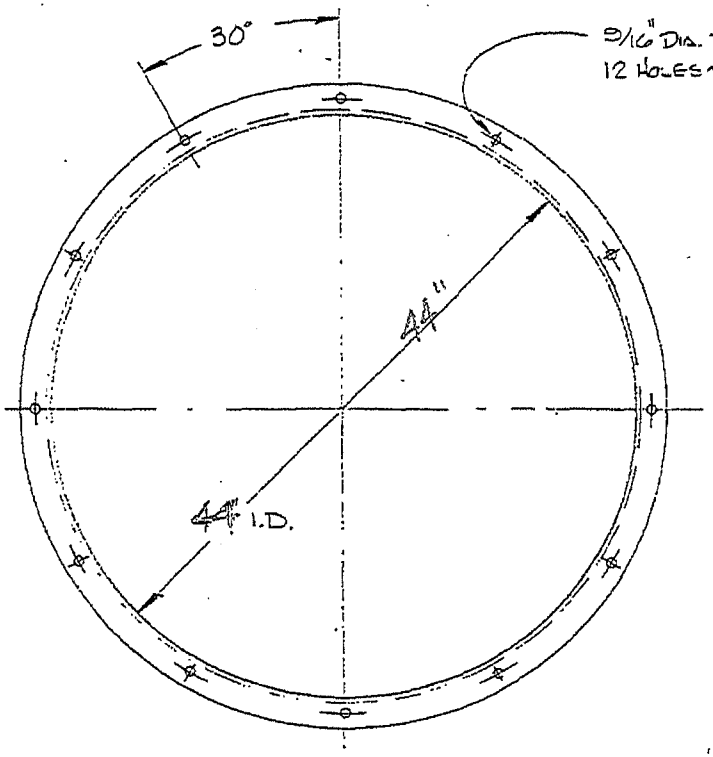
30" AXIAL PUMP PARTS



Item No.	Part Number	Description
1.	30A1001	hydraulic motor
2.	30A1002	port blocks (2)
3.	24/30A1003	o' ring seal
4.	30A1004	motor key
5.	30A1005	bearing carrier
6.	24/30A1006	lock nut (2)
7.	24/30A1007	lock washer
8.	24/30A1008	bearing cone (2)
9.	24/30A1009	bearing cup (2)
10.	24/30A1010	pump shaft
11.	24/30A1011	mech. seal assem
12.	24/30A1012	seal holder
13.	24/30A1013	o'ring seal
14.	24/30A1014	lip seal
15.	30A1015	bronze propeller
16.	24/30A1016	propeller key
17.	24/30A1017	flat washer,ss
18.	24/30A1018	nylock,ss
19.	30A1019	diffuser housing
20.	30A1020	wear ring
21.	30A1021	inlet bell housing
22.	30A1022	intake screen
23.	24/30A1023	quick coupler (R)
24.	24/30A1024	quick coupler (P)
25.	2430A1025	seal hld bolts (6)
	30 A 1021 OPT	intake housing 45*

10/2005





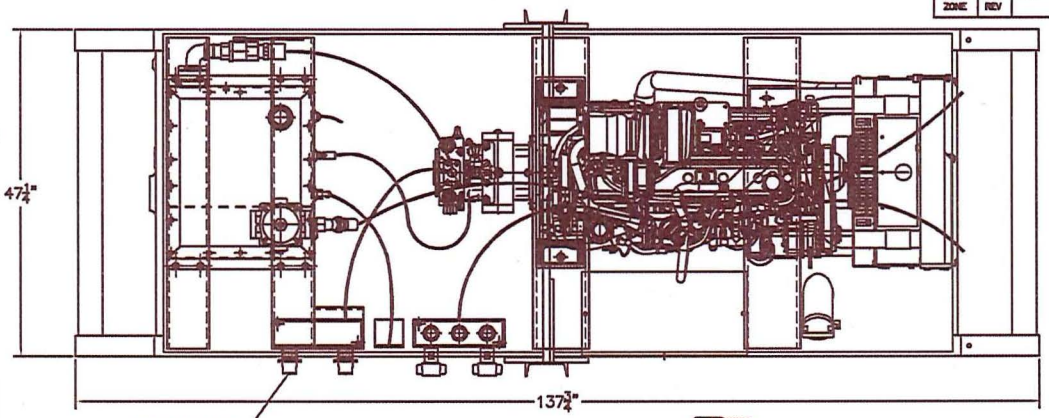
MAT'L – STEEL

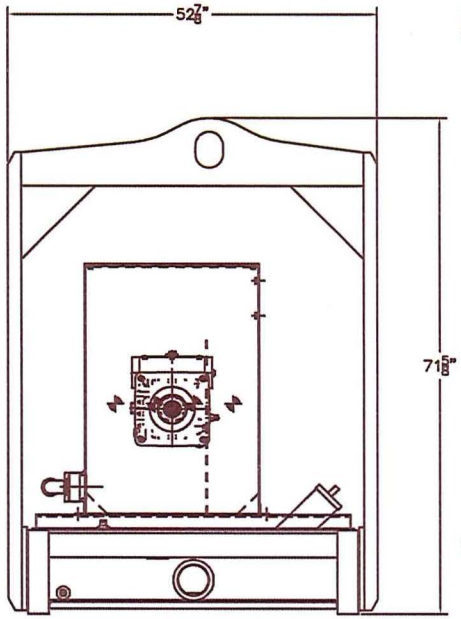
DD MACHINE SPECIALTIES, INC. – PUMP DEPT.		
SCALE: 3/16" = 1"	APPROVED BY:	DRAWN BY
DATE: 8-7-84		REVISED
30" AXIAL FLOW ~ 45° SUCTION ELBOW		
30AX1021OPT		DRAWING NUMBER 30AX

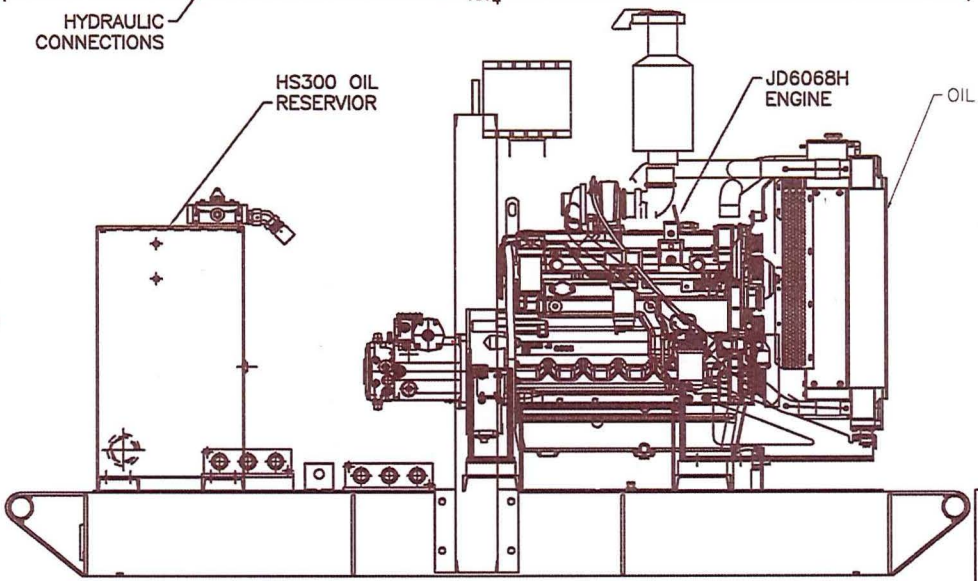
11 X 17 PRINTED ON NO. 1000H CLEARPRINT

* STANDARD 30" AXIAL

NOTES
1. DIMENSIONS IN INCHES
2. DO NOT SCALE DRAWING
3. DRAWING IS NOT FOR CONSTRUCTION
4. CONSULT FACTORY FOR CERTIFIED DIMENSIONS
5. APPROX. WEIGHT: 7500 LBS
6. FUEL CAPACITY: 175 GALLONS







REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

godwin pumps

84 Floodgate Road, Bridgeport, NJ 08014, USA
(856) 467-3636 • Fax (856) 467-4841

TITLE: HS300 POWER PACK
JD6068HF485
175 GAL SKID

CONTRACT# XXX

SIZE C | DWG NO. 2547 | REV —

SCALE 1/16 | SHEET 1 OF 1

DWG NO. 2547 REV —

SYMBOLS ETC. TO ANSI Y14

THIRD ANGLE PROJ.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE COATING
TOLERANCES ARE:
2-PLACE DECIMALS ± .03
3-PLACE DECIMALS ± .010
ANGLES
FRACTIONS 1/16

APPROVALS	DAY	MON.	YEAR
DRAWN BY D. STETSER	24	10	07
APPROVED BY X	X	X	X
ISSUED X	X	X	X

ATTACHMENT D

WATER USE SUPPLEMENTAL FORM F

WATER USE PERMIT APPLICATION
Diversion and Impoundment Use
Supplemental Form F

South Florida Water Management District
P.O. Box 24680, West Palm Beach, Florida 33416-4680 (561) 686-8800
www.sfwmd.gov/ePermitting

Diversion and Impoundment – Projects that divert surface water through a pump or operable water control structure, or divert a combination of surface and groundwater to a conveyance canal network system which the applicant has legal control to operate and maintain for the purposes of providing for the reasonable-beneficial demands of secondary users and consumptive and non-consumptive uses.

SECTION F1 – PARCEL/SITE INFORMATION

WATER USE PERMIT # (if application is for renewal or modification): _____

Parcel/Site Name (each non-contiguous parcel or field)	Acres Serviced	Section (s), Township, Range (S_/T_S/R_E)	County Parcel Identification Number (or attach digital GIS Shape file)
30-7029-001-0012	398.74	29/57S/40E	Refer to attached Project Overview Map and GIS shape file
30-7029-000-0010	17.96	29/57S/40E	Refer to attached Project Overview Map and GIS shape file
30-7029-001-0011	136.38	29/57S/40E	Refer to attached Project Overview Map and GIS shape file
TOTAL ACRES OWNED/LEASED	553.08		

Submit a map showing (if available, provide items A through C in a District-approved electronic format, e.g. ESRI shapefile, Autocad, DXF, KMZ, or compatible GIS file):

A. The project boundaries of the property owned or controlled by the permittee/applicant;
B. A north arrow and map scale;
C. Labeled landmarks such as canals, roads and political boundaries; and
D. The location of all secondary users of the system, including irrigated acreage and land use type.

Incorporated by reference in rule 40E-2.101 (F.A.C.)
Form 1386 (2014-07)

SECTION F2 – WATER USE INFORMATION

Please describe the operation by attaching the following information, as applicable (refer to the Applicant's Handbook, Section 2.3.2.C):

- ☒ The extent (length, cross sections and depth) of the canal network used to deliver the associated water - Refer to Const. Drawings/Details
- ☐ Land use classifications within the serviced area
- ☒ Surface water demands directly withdrawn for the system - Refer to EO No. 2014-078-DAO-WU/ROW/ERP
- ☐ Seepage Losses
- ☐ Water necessary to maintain groundwater elevations for the purpose of aquifer recharge and saltwater intrusion prevention
- ☐ Evaporation losses from the canal surfaces
- ☐ Established control elevations during one and 10 year drought events
- ☐ Copies of executed agreements with dependent secondary users
- ☒ Historic use (permit renewal with no changes) - Refer to EO No. 2014-078-DAO-WU/ROW/ERP
- ☒ Canal locations with established wet and dry season control elevations - Refer to EO No. 2014-078-DAO-WU/ROW/ERP and Project Overview Map

SECTION F3 – REQUESTED WATER USE

Complete the requested water use table below. Provide projected water amount for each use type and the associated water source(s).

Use Type	Source of Water (MGY[2]/MGM[3])		
	Source 1 Name[1] L31E (N) Canal	Source 2 Name _____	Source 3 Name _____
Secondary Users Total	Max. Avail. / Max. Avail.	/	/
Maintenance Demands Total	Max. Avail. / Max. Avail.	/	/
Total	Max. Avail. / Max. Avail.	/	/

[1] Provide the name of the water source. Examples include C 51, LWDD E-1

[2] MGY = Million gallons per year of water to be withdrawn over a 12-month time period under a 1-in-10 year drought condition (i.e. 1,500,000 gallons each day/1,000,000 = 1.5 x 365 = 547.5)

[3] MGM = Maximum million gallons per month of water to be withdrawn in any single month under the 1-in-10 year drought condition.

SECTION F4 – WATER CONSERVATION

Please refer to District specific water conservation requirements, in the Applicant's Handbook, Section 2.0.

Incorporated by reference in rule 40E-2.101 (F.A.C.)
Form 1386 (2014-07)

LEGEND

- Project Boundary
- Section Township & Range
- Parcels

REFERENCE

PROJECT BOUNDARY, FPL & GOLDER ASSOCIATES INC., 2014
PARCELS, MIAMI DADE COUNTY, 2014
SECTION TOWNSHIP & RANGE, FDEP

CLIENT
FPL

PROJECT
FPL TURKEY POINT
COOLING CANAL
FRESHWATER RECHARGE

TITLE
PROJECT OVERVIEW MAP

CONSULTANT
Golder Associates

YYYY-MM-DD	2014-12-22
PREPARED	NRL
DESIGN	NRL
REVIEW	KAB
APPROVED	KAB

PROJECT	CONTROL	Rev.	FIGURE
1412354	006	0	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

1 in

0

G:\PROJECTS\FPL\Turkey_Point\1412354_CoolingCanalEmergencyWetlandPermitting\02_MAP_DOCUMENTS\1412354_006_SurfaceWaterWithdrawlLoc.mxd