AGENDA SUMMARY
TAVARES CITY COUNCIL
DATE OF MEETING: March 20, 2013

AGENDA TAB NO. 8
SUBJECT TITLE: Council Approval of the Collective Bargain Agreement between the City of Tavares and the Police Benevolent Association

OBJECTIVE:

To present and seek approval of the proposed Collective Bargaining Agreement (CBA) for the Police Union and MOU for the Dispatchers between the City of Tavares and the Police Benevolent Association (PBA).

SUMMARY:

Over the last several months, the members of the management negotiations team representing the City (Councilmember Norm Hope, City Administrator John Drury, and Police Chief Stoney Lubins) have met with representatives of the Police Benevolent Association (Officer Sean Dison, Detective Billy Harper, Officer Jason Baugh, Officer Karl Grogan) along with Steve Micciche and others from the Central Florida PBA for the purpose of negotiating a union contract (attached). Those negotiations have concluded, and union members have approved the agreement. The contract is now being brought to the City Council for approval.

Previously, the City Council voted to contract out its Communications Center needs with the Lake County Sheriff's Office who provides this service for Clermont and other cities in Lake County. This decision has resulted in the lay-off of eight Tavares Dispatcher positions effective April 1, 2013. The PBA and City management team have negotiated an MOU on how those departing employees will be treated too (see attached) for Councils approval.

It should be noted that The Sheriff's communications center that will be dispatching for Tavares will be located in the County's Emergency Operations Center which, according to the most recent construction schedule update, may not be available until May 31. The City may extend the layoff date for some of its dispatchers (who voluntarily want to) beyond April 1 in order to coincide with the EOC completion date. Any cost to extend will be covered by funds previously set aside to pay the Sheriff for the City's contracted communications center needs.

The management team believes that all parties bargained in good faith and a fair and equitable contract and MOU have been negotiated.

OPTIONS:

Option 1: City Council accepts the proposed Collective Bargaining Agreement and MOU as presented and authorizes the execution of both agreements.

Option 2: City Council rejects the proposed Collective Bargaining Agreement and/or MOU and directs the management team to proceed in a different direction.

STAFF RECOMMENDATION:

Move to accept the proposed Collective Bargaining Agreement and MOU (between the City of Tavares and Police Benevolent Association) and MOU as presented and authorize the City Administrator, Mayor, Police Chief, and Councilmember Hope to sign the agreement on behalf of the City of Tavares.

FISCAL IMPACT:

The City developed and approved a budget to operate the Police Department in this fiscal year prior to a Police Union being formed. The fiscal impact of the proposed Collective Bargaining Agreement is estimated to be $12,000.00 above that previously approved budget. The City also budget for the departure of the Dispatching employees. The only increase to that which was previously budgeted is the 30 days of health insurance coverage that the city would pay while they transition to other coverage. The 30 day health care coverage is estimated to cost $3,506.00. These two costs will be paid for out of the Police Budget by deferring the hiring of the vacant Police Officer position until the fall.

LEGAL SUFFICIENCY:

The City Attorney has reviewed the proposed Collective Bargain Agreement and MOU and finds them both legally sufficient.

COLLECTIVE BARGAINING AGREEMENT

BETWEEN

FLORIDA POLICE BENEVOLENT ASSOCIATION, INC.

AND

CITY OF TAVARES

Effective Dates: **to September 30, 2014**

Collective Bargaining Agreement
between Florida Benevolent Association Inc.
and
City of Tavares

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ARTICLE I: RECOGNITION AND INTENT

Section 1.1: Parties.

This Agreement (hereinafter "Agreement," "CBA" or "Contract") is entered into by and between the City of Tavares (hereinafter, "Employer" or "City") and the Florida Police Benevolent Association, Inc. (hereinafter, the "PBA" or "Union").

Section 1.2: Recognition.

The City hereby recognizes the Union as the exclusive bargaining representative for all employees in the unit certified by the Public Employees Relations Commission certification in Case No. RC1803.

Section 1.3: Entire Agreement.

This Agreement which becomes effective upon execution by all parties constitutes the entire Agreement and understanding between the parties and, subject to applicable law, shall not be modified, altered, changed or amended in any respect except on mutual agreement set forth in writing and signed by authorized representatives of both parties.

Section 1.4: Effect of Laws and Ordinances.

17 In the event that any of the provisions of this Agreement shall be held in violation
18 of any federal or state law as applied to this specific Agreement, such determinations
19 shall not in any way affect the remaining provisions of this Agreement, unless otherwise
20 provided by law.

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ARTICLE 2: DECLARATION OF PRINCIPALS

Section 2.1: Gender Reference

The use in this Agreement of the designation "he" in referring to any employee shall mean "he" or "she" wherever used and is used for convenient purposes only.

30 **ARTICLE 3:** **UNION SECURITY AND CHECKOFF**

31 **Section 3.1: Dues.**

32 The Employer will deduct bi-weekly Union dues from the paychecks of those Unit
33 members who authorize such deduction in writing in the manner allowed by law.
34 Deductions will begin the second pay period after the Employer receives such written
35 authorization. No deduction shall be allowed for payment of initiation fees, assessment
36 or fines.

37 **Section 3.2: Amount.**

38 The Union will notify the City Director of Human Resources (hereinafter "HRD")
39 as to the amount of dues. This notice must state the biweekly amount in dollars and
40 cents for each individual member. The City shall charge the deduction as soon as
41 practically consistent with its normal bookkeeping procedures, but no less than thirty
42 (30) days after the change is certified to the HRD, so long as the certification is legally
43 sufficient.

44 **Section 3.3: Remittance.**

45 With written instructions provided by the Union and a written authorization from
46 the unit member acceptable to the City, the City will deduct Union members' dues by
47 way of bi-weekly payroll deduction. Payroll-deducted Union dues will be provided to the

Union by direct deposit to the Union's account. Direct deposits will cease upon written notice, next payroll following written notice from the employee of same.

Section 3.4: Recourse.

If there is an amount deducted in excess of what is authorized by the unit member, the City will reimburse the member provided a timely grievance is filed if the excess deduction was made as a result of a mistake by the City; otherwise, the member shall have recourse only against the Union.

Section 3.5: Minimum Pay.

No deduction shall be made from the pay of any payroll period in which the member's net earnings for that payroll period, after other authorized or legally required deductions, are less than the amount of dues to be checked off.

Section 3.6: Withdrawal.

Any member can stop payroll deduction by giving written notice to the Employer and the Union. The Employer shall stop the deductions thirty (30) days after receipt of written notice from the member.

Section 3.7: Indemnity.

The Union will indemnify, defend, and hold the City harmless against any and all claims, demands, or suits or other forms of liability that shall arise out of, or by reason of action taken or not taken by the City on account of payroll deductions of Union dues.

ARTICLE 4: UNION BUSINESS AND SERVICES

Section 4.1: Representation and Notice.

The Union shall be represented by its designated officials. The Union shall notify the HRD in writing of the names of its representatives, as well as any designated substitutes. The City is not required to deal with any employee as a representative of the Union except its designated officials.

Section 4.2: Activities.

A. The Union Representatives, or designees, shall carry out their activities ~~in~~ on behalf of the PBA, including investigating or settling grievances, during their non-working hours unless they obtain prior permission from the Chief, or his designee, so long as there is no interference with the work activities of the member or the mission of the Department. When the Union Representative, or his designee, is engaging in such activities while on duty, there shall be no loss of pay. When the Union Representative, or his designee, is engaging in such activities when they are off duty, they shall not be entitled to pay.

B. The Union Representative, or his designee, shall be allowed to communicate official Union business to members in non-work areas during non-working time so long as it does not interfere with Departmental operation.

C. The PBA may designate bargaining unit members to serve on its Contract Negotiations Committee (CNC). Unit members serving on the CNC who are not on their regularly scheduled shifts during negotiations shall not be compensated by the City. Members of the PBA CNC who are on their regularly scheduled shifts during negotiations shall suffer no loss of pay or benefits for such time in actual negotiation sessions subject to approval by the Police Chief. No more than three (3) such members shall be so paid.

Section 4.3: Time.

It is expected that the investigation and processing of grievances, ~~may~~ shall occur either on duty or off-duty, of by those involved.; if on duty unit members shall be suffer no loss of pay subject to the approval of the Police Chief.

Section 4.4: Visitation.

The Chief, or his designee, shall permit one authorized non-employee Agent of the Union access to the Police Department to handle grievances arising under this Agreement. The Agent designed to have access to the Department shall first obtain the permission from the Chief, or his designee, which will normally be the ranking officer on duty at the station at the time, before coming into any working area, and may, at the option of the Chief, or his designee, be accompanied by a managerial employee in the

event the Union agent needs to visit a particular area of a station. The Agent will not in any way interfere with the work of employees or the operations of the Department. If, during a visit, the Agent wishes to have a private conversation with an employee, the Chief, or his designee, will allow the same consistent with his determination of operational needs and will designate the place the conversation with occur. Authorization shall not be unreasonably withheld.

Section 4.5: Solicitation and Distribution.

Except as modified by this Agreement, the Union, its members, agents, representatives and all persons acting on its behalf, including the Employer's employees covered by this Agreement, are strictly prohibited by law and this Agreement from soliciting any of the Employer's employees, for Union purposes, during the work time of any employee involved, and from distributing Union literature in any work area. "Work time" is any time, exclusive of breaks.

Section 4.6: Time-Off Without Loss of Pay.

With respect to disciplinary proceedings under the City Personnel Rules and Regulations or this Agreement, bargaining unit members who participate in such proceeding, including a PBA representative of the unit member, if any, shall be treated the same as all other City employees with respect to time off and pay.

Section 4.7: Bulletin Boards.

The City agrees to set aside space for a bulletin board (not to exceed 30" by 24") to be provided by the Union for its use in informing its membership as to official Union business. It is however, agreed and understood that materials to be posted and emails regarding official Union business, if such materials are derogatory, abusive, or critical about any person, or City policy, practice, employees or officials are intemperate in language and/or are not related to legitimate Union business, will be removed. The bulletin board may not be used for any political purpose or to support or oppose any political candidate or issue; provided however, it may be used for internal elections held by the Union among its membership.

Section 4.8: Information.

A. The City shall provide the Union a copy of the names, rank and rate of pay of bargaining unit members, upon written request by the Union, but not more often than twice a year.

B. The City shall furnish the Union and its members upon written request, a copy of all rules, regulations and policies applicable to the bargaining unit employees.

C. Any impact on wage, hours or terms and conditions of employment shall be the subject of bargaining prior to implementation.

D. The City shall make available to all members of the bargaining unit upon written request, all City-rules, regulations, and policies applicable to the bargaining unit members.

Section 4.9: Contract Orientation

Within thirty (30) days after ratification and approval of this Agreement by the parties, the City will schedule meetings with all bargaining unit members for the purpose that the City and PBA hold contract orientation.

ARTICLE 5: MANAGEMENT RIGHTS

Section 5.1: Functions of Management.

Management Rights.--It is the right of the public employer to determine unilaterally the purpose of each of its constituent agencies, set standards of services to be offered to the public, and exercise control and discretion over its organization and operations. It is also the right of the public employer to direct its employees, take disciplinary action for proper cause, and relieve its employees from duty because of lack of work or for other legitimate reasons. However, the exercise of such rights shall not preclude employees or their representatives from raising grievances, should decisions on the above matters have the practical consequence of violating the terms and conditions of any collective bargaining agreement in force or any civil or career service regulation.

ARTICLE 6: GRIEVANCE AND ARBITRATION

Section 6.1: Grievance.

A grievance is defined as a difference between the City and any unit member or the PBA involving an alleged violation or misapplication of a provision of this Agreement. When an Article or Section in this contract references or incorporates the City Personnel Rules and Regulations, a claimed violation, misapplication or misinterpretation of the PRR shall be subject to this Article. All grievances for disciplinary matters involving one or more shifts of unpaid suspension, or termination, may be appealed through the following steps.

Section 6.2: Grievance Procedure.

Whenever a grievance as specified in Section 6.1 arises between the City and the unit members or the Union, the matter will be handled in accordance with the following procedure.

Step 1: Within five (5) working days after the act or occurrence which gives rise to the grievance, or the member knew or should have known of such act or occurrence, whichever first occurs, the grievant shall meet to discuss the grievance with the member's immediate supervisor in an attempt to resolve same.

Step 2: If the grievance is not settled in Step 1 above, the grievant shall reduce to writing the grievance, sign said grievance and provide copies to the Chief of Police or his designee within ten (10) days of the act or occurrence which gave rise to the grievance.

The written grievance must include:

a. A statement of grievance and a summary of the facts on which the grievance is based.

b. The remedy requested.

A copy of the grievance form is hereby adopted and placed in the appendices.

Within five (5) calendar days of receipt of the written, signed grievance, the Chief, or his designee, and the Union Representative, or his designee, shall meet to discuss the grievance. Upon conclusion of the meeting, if the grievance is denied, the Chief or his designee shall include the reason(s) for the denial.

Step 3: If the grievance is not settled in Step 2 above, within five (5) calendar days of receipt of the Chief's or his designee's response in Step 2, the Union shall notify the City Administrator in writing of its appeal of the grievance to Step 3. Within ten (10) calendar days of delivery of the written notice of appeal to Step 3, the City Administrator or his designee shall meet to discuss the grievance with the Union Agent. The City

Administrator shall respond in writing within ten (10) calendar days after the meeting. If the grievance is denied, the City Administrator shall include the reason(s) for denial.

The City Administrator may make written notification to the PBA, for an extension of an additional ten (10) days if so desired of the time limit set forth in this Step.

The unit member grievant shall be entitled to be present at any meeting held under Step 2 or Step 3.

Section 6.3: Arbitration.

If the grievance is not resolved through above steps, the grievance may be submitted to binding arbitration by the Union. Arbitration proceedings must be initiated by serving of a written request for arbitration by the Union within twenty (20) calendar days after the City Administrators response. Submission to the arbitrator shall be based exclusively on the written grievance as submitted in Steps 2 and 3 of the grievance procedure and shall include a copy of this Agreement.

The arbitrator selected shall decide the dispute and such decision shall be final and binding on the parties and the employees. The expenses of the arbitrator shall be borne equally by the parties; and, each party shall be responsible for its own attorneys'

fees, and any court reporting services it wishes to use, in any arbitration proceeding. On-duty personnel shall suffer no loss of pay.

The jurisdiction of the arbitrator is limited and confined to determining whether there has been a violation of the terms of this Agreement. The arbitrator shall in no way alter, amend, or modify the terms of this Agreement.

The time limits set forth are to be considered of the essence of the grievance and arbitration procedure and failure of the member or the Union to meet any time limit set forth therein shall be irrefutable and conclusively deemed to constitute waiver of the grievance and acceptance of the City's position. The time limits may be extended in writing by mutual consent of the parties.

A. Within twenty (20) calendar days from receipt of the notice of the intent to invoke arbitration, the Union shall request a list of seven (7) arbitrators from the Federal Mediation and Conciliation Service, all of whom must reside in the State of Florida. The Union shall supply the City with a copy of the list of arbitrators. The Union and the City will alternately eliminate one at a time from said list of names of persons until only one remains, and that person will be the arbitrator. The City and the Union will alternate in the right to first strike names in successive arbitrations.

B. As promptly as possible after the arbitrator has been selected, he should conduct a hearing between the parties and consider the grievance. The decision of the arbitrator will be served upon the member or members aggrieved the City and the Union in writing. It shall be the obligation of the arbitrator to make his best effort to rule within twenty-one (21) business days after the hearing.

Section 6.4: Grievances by Non-Union Member.

When the Union refuses to process a grievance for a unit member because of the unit member's non-membership in the Union, the member shall have the right to process a grievance through the normal city procedures offered to all non-union city employees. under this Agreement, but cannot require arbitration of the grievance unless the law requires otherwise, in which event, the member shall have all the rights and assume all the burdens, limitations and obligations, including financial obligations, of the Union under this Article and any other Article that may apply to his grievance. The member will not be entitled to any other grievance process.

Section 6.5: General.

A. Each grievance shall be arbitrated in a separate proceeding unless the parties mutually agree otherwise.

B. The filing of a grievance shall in no way interfere with the right of the City to proceed to carry out its management responsibilities, subject to the final resolution of the grievance.

C. The PBA shall have the right to bring a joint grievance on behalf of bargaining unit members in its own name, concerning disputes relating to the interpretation or application of this Agreement affecting two or more unit members. Such grievances shall be initiated at Step of this procedure.

Section 6.6: Time Off/Pay.

Step 1 of the grievance procedure shall be carried out during the member's work hours at a time and place designated by the Chief based on operational needs, and the member shall lose no pay. The City shall determine when Steps 2 and 3 shall be processed, and if the Step or Steps, including Arbitration, are processed during their scheduled working hours, neither the Union Representative nor the grievant shall lose pay. Unit member witnesses, other than grievant, whom the City Administrator may at his option choose to interview shall lose no pay if interviewed during their working hours, and if interviewed after or before such hours, shall be paid for such time as if they were performing other work for the City. Otherwise, the City shall not be

268 responsible to pay any Union representative, officer or agent of the Union for any time
269 spent processing grievance matters, but will allow one such person plus the grievant per
270 grievance reasonable time off with pay for said activities upon reasonable prior notice if
271 in management's opinion work requirements will allow such absence.

272 In the event of a sustained disciplinary action involving a suspension [without
273 pay], the member may utilize available personal leave in lieu of a non-working unpaid
274 suspension.

275 **Section 6.7: Discipline Dispute Resolution Process - (DDRP).**

276 In cases involving alleged policy violations in an administrative investigation,
277 which may lead to discipline, a member may request a discipline dispute resolution
278 meeting (DDRM) at any time prior to final acceptance of discipline or a final decision by
279 the Chief or prior to filing a formal grievance. The meeting shall be held with a designate
280 police manager and include the member, member's representative and/or counsel

281 The purpose of the meeting will be to discuss potential discipline and/or
282 administrative charges to determine if a consensus resolution can be reached on the
283 appropriate charge(s) and discipline, if any.

284 If the parties reach a consensus, that consensus shall be reduced to writing by
285 the police manager and implemented. The investigation and grievance process shall be

286 considered as complete. Should the parties not agree on a resolution, the matter will
287 progress as if no meeting had been held. Nothing discussed at the meeting shall be
288 held against the member if a resolution is not implemented.

289 The PBA shall be notified of any final resolution in all such cases handled by the
290 DDRP. If the PBA is not represented at any such DDRM, then the decision will not be
291 precedent setting.

292

ARTICLE 7: PBA/MANAGEMENT MEETINGS

The City and the PBA shall meet and confer on matters of mutual interest upon the request of either but not more often than once a quarter, unless both parties agree to meet more often. Such special meetings shall be held on a date and at a time and place mutually agreeable to the parties. Meetings held under this Section shall not be considered collective bargaining under the Public Employees Relations Act. Issues related to grievances shall not be discussed. The Police Chief shall be responsible to coordinate these meetings with the PBA Representatives.

ARTICLE 8: INSURANCE

Health and Life

8.1 The City and each Unit Member shall share in the cost of Health insurance which shall be determined annually by the fiscal year budget approved by the City Council. The insurance costs for Fiscal Year 2013 are as follows:

HMO	Employee Share	City Share
Employee only	5%	95%
Dependents	70%	30%

PPO	Employee Share	City Share
Employee only	11%	89%
Dependents	33%	67%

8.2 In the event that during the life of this Agreement, the City desires to reduce the current health or life benefits and/or increase the cost of dependent health insurance premiums, the City shall advise the PBA in writing. The PBA shall have the option of negotiating the terms of the City's proposal. If the parties fail to reach negotiated agreement on these changes, the PBA may submit any unresolved issues to

the City Council fifteen (15) days prior to the anticipated date that the changes would have occurred. City Council shall make the final determination of the unresolved issues.

8.3 The City shall provide life insurance in the amount of one and one-half (1 ½) times the member's annual base salary, at no cost to the member.

8.4 The health, vision, dental care and life insurance plans offered the bargaining unit shall cost no more nor have lesser benefits than those offered any employee of the City.

Disability Insurance

8.5 The City shall continue to provide short and long term disability to all unit members in accordance with the City's current policy and practice.

ARTICLE 9: STRIKES

The Union and bargaining unit members shall not promote, sponsor, engage in, or condone any work stoppage, boycott, slow-down, strike, disruption of City operations, or other withholding of limitation of services and shall abide with F.S. §447.505.

ARTICLE 10: HOLIDAYS

Section 10.1: Days Observed.

A. For bargaining unit members not on a 24/7 shift and especially who work a Monday thru Friday schedule, when a holiday falls on Saturday or Sunday, the Friday preceding or Monday following shall be designated a substitute holiday and observed as the official holiday. For those members who work a 24/7 shift the holiday date is the observed holiday

B. The observed holidays are:

January 1	New Year's Day
January – Third Monday	Martin Luther King, Jr. Day
May – Last Monday	Memorial Day
July 4	Independence Day
September – First Monday	Labor Day
November 11	Veterans Day
November – Fourth Thursday	Thanksgiving Day
November – Fourth Friday	Day after Thanksgiving
December 24	Christmas Eve
December 25	Christmas Day
December 31	New Year's Eve

C. In addition to the above, each unit member shall be awarded one (1) personal leave day each calendar year; to be taken at the member's request which shall not accrue.

Section 10.2: Eligibility for Holiday Pay

A. A member must be on an approved leave for or work the normal schedule of hours, on the regularly scheduled working day immediately prior to and immediately following a holiday, in order to qualify for the holiday time or pay. Absences not approved in advance, including sick call in, may not be approved depending on whether the member's excuse and verification of the reason for the absence are acceptable to management, which, may at its option, require a doctor's excuse as well as any other evidence it deems necessary.

B. All members receive holiday pay except those members scheduled to work on a holiday who fail to do so. When a member works on a scheduled holiday, the member shall also receive time and one half (1 ½) his straight time.

C. When a member is scheduled to work on a holiday but fails to do so, the member will not receive holiday pay even if the member is otherwise eligible for holiday pay.

Section 10.3: Holiday Pay.

Unit members shall receive pay for the number of hours regularly scheduled at their straight time hourly rate for each observed holiday in which they do not work, unless they were scheduled to work on a holiday and failed to do so.

ARTICLE 11: ASSIGNMENT DURING DISABILITY

Any bargaining unit member assigned to a less strenuous position, due to health or disability, shall continue to receive all compensation and fringe benefits, including accumulation of seniority attached to his normally assigned position. The Police Chief shall have the discretion, but not the obligation, to assign any employee to a less strenuous position. In making any such assignment, the Police Chief shall make all reasonable efforts to assign work that is Police Department related where available.

ARTICLE 12: VACATION

Section 1. VACATION LEAVE

A. ACCRUAL RATES FOR VACATION LEAVE

All bargaining unit members accrue vacation at the rates outlined in the schedule below.

1. Accrual Rate for employees on twelve (12)-hour shifts.

YRS OF SERVICE	ACCRUAL/MONTH	ACCRUAL/YEAR
Date of hire through 3 years	8 hours	96 hours
3 years to 5 years	10 hours	120 hours
5 years +	12 hours	144 hours

2. Vacation leave accrues during any pay period in which a member works or is compensated (e.g., while on vacation, sick leave, etc.).

3. Vacation leave does not accrue in any pay period that a member is on a leave of absence, suspension, military leave, or other absence without pay for the entire pay period.

4. Maximum accrual for all bargaining unit employees is 240 hours.

B. ELIGIBILITY

Bargaining unit members are eligible to take vacation leave after completing six months of service.

C. CONDITIONS AND LIMITATIONS

1. Vacation leave selection and scheduling will be in accordance with existing Department practice. A member must request and have prior approval from his supervisor to utilize vacation leave, using the appropriate form.

2. Vacation leave will not be routinely approved by call-in in lieu of sick leave for the date of absence

3. Vacation leave is generally authorized for an entire shift or more; however, less than one work day/work shift, but no less than one-half hour, may be taken if requested and authorized in advance. Accrued vacation may be authorized for

421 extended absence for serious health conditions, if the accrued sick leave balance
422 has already been exhausted, and other eligible reasons in accordance with the
423 Family and Medical Leave.

424 4. Vacation leave will not be approved in advance of accrual earned.

425 5. If no other accrued leave is available (i.e., sick leave, administrative
426 leave), vacation leave may be used to supplement Workers' Compensation wage
427 benefits provided the total income from the wage benefits and vacation used does not
428 exceed 100% of the member's regular gross pay.

429 D. HOLIDAYS WHILE ON VACATION LEAVE

430 Holidays which occur during the period selected by the member for vacation will
431 not be charged against vacation accrual balances. The holiday will be charged against
432 holiday leave regularly due the member; i.e., the member will not receive both holiday
433 and vacation pay for the holiday.

434 E. DEATH IN FAMILY DURING VACATION LEAVE

435 When bereavement leave occurs within a vacation period, the vacation period can be
436 extended to cover this period and such time charged to bereavement leave as
437 authorized, or the vacation leave will be reduced accordingly, as requested by the
438 member.

F. PAYMENT OF VACATION LEAVE BALANCE UPON SEPARATION OR DEATH

After six months of employment, bargaining unit members will be eligible for payment of accumulated vacation leave in cases of separation from City employment in good standing (layoff, resignation, retirement). A member who separates with less than six months' service or who is terminated during or at the conclusion of the probationary period is not eligible for payment of accumulated vacation leave, unless specifically authorized by the City Administrator.

In the event of a non-probationary employee's death, his beneficiary shall be paid for accumulated vacation leave.

ARTICLE 13: SICK LEAVE

A. ELIGIBILITY

All bargaining unit members are eligible to accrue and access sick leave following 30 days of service. Sick leave shall be used only with the approval of the supervisor, and shall not be authorized prior to the time it is earned and credited to the employee.

B. SICK LEAVE ACCRUAL RATES

Sick leave accrual for full-time employees shall be earned in accordance with the following schedule:

SCHEDULE	ACCRUAL/YEAR	MAXIMUM ACCRUAL
8 hours/per month	96 hours	No Maximum

467

468 C. AUTHORIZED USES OF SICK LEAVE

469

470 Sick Leave may be used for the following reasons:

471

472 a) Legitimate illness of member, member's spouse, or

473 child(ren).

474 b) Non-job related accident/injury preventing performance of

475 member's duties; or to supplement Workers' Compensation wage benefits

476 in the event of a compensable on-the-job injury/accident, provided the

477 combined income from Workers' Compensation wage benefits and sick

478 leave does not exceed 100% of regular gross pay.

479 c) Medical, dental, psychological, optical, chiropractic, or

480 Employee Assistance Program (EAP) appointment, treatment, or

481 examination of member or member's spouse, or child(ren).

482 d) Additional bereavement leave upon approval of the Police

483 Chief.

484 e) Family and Medical leave

3. Computing Sick Leave

The minimum charge for sick leave is one-half hour; additional charged time will be to the nearest one-half hour.

D. PROOF OF ILLNESS AND NOTIFICATION REQUIREMENTS

1. It is the member's responsibility to personally notify supervision (unless incapacitated) at least one hour prior to the beginning of the work shift if the member will be absent due to illness. Unless the member receives prior authorization, as in the case of an extended, verified illness or an approved Family and Medical Leave due to illness, it is the member's responsibility to report in this manner for each day of absence due to illness.

2. A member who is absent from work for more than three work days/shifts due to illness, may be required by his supervisor to provide medical verification of the illness from the treating physician in order to receive sick leave benefits. If requested verification is not received by the due date for time sheets, the absence will be unpaid. A physician's statement may also be required for members who:

(a) take excessive sick leave, either on separate days or on continuous days in any given time period;

(b) demonstrate a pattern of absenteeism;

(c) call in sick on a day or days when vacation leave was denied;

d) take sick leave as soon as it is accrued (i.e. one day at a time as soon as it is earned) or

(e) are frequently absent the day before and/or the day after a scheduled day off or a holiday.

Sick leave charged following a member's notice of resignation and occurring prior to the date of separation must be verified by a physician's statement certifying the illness in order to be compensated.

522 3. Frequent and/or excessive absences charged to sick leave without
523 medical verification; evidence of malingering; a pattern of sick leave usage; use
524 of sick leave for false claims of illness or injury; falsification of proof to receive
525 payment of sick leave; and/or failure to comply with rules and regulations
526 governing sick leave; may result in denial of sick leave pay and/or disciplinary
527 action, including dismissal.

528

529 4. Sick leave does not accrue in any pay period that a member is on a
530 leave of absence, suspension, or other absence without pay for the entire pay
531 period with the exception of military leave. Unit Members on military leave will
532 accrue sick leave for the first 17 days of leave.

533

534 E. HOLIDAYS WHILE ON SICK LEAVE

535

536 Holidays which occur during a period in which the member is absent on
537 approved sick leave shall not be charged against sick leave. The holiday will be
538 charged against holiday leave regularly due the member; i.e., members will not
539 receive both holiday and sick leave pay for the holiday.

540

541 F. DEATH IN FAMILY WHILE ON SICK LEAVE

542

543 When bereavement leave occurs while a member is on approved sick
544 leave, the time off work for bereavement purposes will be charged to
545 bereavement leave as authorized.

546

547 G. PAYMENT OF SICK LEAVE UPON SEPARATION OR DEATH

548

549 1) The following provisions apply to payment of accumulated sick leave
550 upon termination, retirement, or death:
551 a) Accrued and unused sick leave shall be paid at 25% to the
552 employee upon separation of employment. Upon the death of an
553 employee, accrued and unused sick leave shall be paid at 25% by
554 the payroll method in place at the time of death.

555

556

b) Members who are terminated during or at the end of the probationary period are not eligible for payment of sick leave.

2. The use of sick leave to extend the member's separation date is prohibited.

ARTICLE 14: BEREAVEMENT LEAVE, FML AND OTHER LEAVES

Section 1: BEREAVEMENT LEAVE

A. Bargaining unit members are eligible for bereavement leave with pay in the event of the death of an immediate family member. Immediate family includes spouse, and the following biological, adoptive, or "step" relatives: child(ren), parents, brothers, sisters, grandparents, and grandchild(ren) of both the member and the member's spouse.

B. Up to three scheduled work days will be granted to a bargaining unit member for a local memorial service. If the memorial service is out of state, the employee will be paid for up to five (5) days regular time. If additional time is needed the additional days may be charged to vacation leave balances or accrued sick leave upon approval of the Police Chief.

C. Supporting documentation of the death (e.g., newspaper obituary, death certificate, etc.) and documentation of immediate family relationship may

583 be required by the Police Chief or designee in order for the member to receive
584 this benefit.

585 -Section 2: FAMILY AND MEDICAL LEAVE (FML)

586

587 Family Medical Leave will be granted to bargaining unit members in
588 accordance with the FMLA and the City's existing policies and procedures
589 implementing the FMLA.

590 Section 3: MILITARY LEAVE

591

592 Military Leave shall be granted to bargaining unit members in accordance
593 with applicable law.

594

595

ARTICLE 15: HOURS OF WORK AND WORK SCHEDULE

Section 15.1: Basic Work Schedule.

A. The basic work schedule for road patrol shall be a minimum of six 12 hour shifts and one 8-hour shift, for a total of seven shifts for 80 hours within one pay period. Unit members assigned to Criminal Investigations Division shall maintain 8 hour shifts or 10 hour shifts as determined between the bargaining unit member and his supervisor. With the concurrence of police management, CID unit members shall have the ability to alter normally posted shifts as needed to complete their assigned investigations, provided that any modified shift shall normally be for a 10 hour or 8 hour, uninterrupted shift.

B. For the purpose of this Agreement, a shift means the time during which a unit member is scheduled on duty.

C. Except as provided in this Agreement, or in declared emergencies, a unit member shall not be required to adjust the scheduled hours, shift, or days off from those scheduled with less than ten (10) calendar days advanced written notice, unless minimum staffing levels are compromised on a given shift.

Section 15.2: Overtime

613 A. Unit members are to report all hours worked. Overtime will be authorized
614 or directed by Police management and administered according to the provisions of this
615 Agreement.

616 B. All unit members shall be paid time and one-half their regular hourly rate
617 of pay for all hours in excess of their normally scheduled shifts. Unit members shall
618 have the option to select pay or defer the payment by selecting compensatory time for
619 overtime worked. The maximum compensatory time balance permitted for members is
620 240 hours. Any compensatory time over the maximum not used by December 31st of
621 each year shall be paid out. Unit members may also cash out up to thirty-six (36) hours
622 of compensatory time each calendar year.

623 C. For the purposes of overtime, paid leave used for a scheduled vacation
624 and sick leave shall be included in the computation.

625 D. Members shall be required to work overtime when assigned unless
626 excused by the Police Chief or his designee. A member desiring to be excused from
627 overtime work assignments shall submit a request to the immediate supervisor who
628 shall determine whether the excuse is acceptable.

629 **Section 15.3: Assignment of Overtime.**

The Police Chief or designee shall assign overtime as necessary based on availability and fiscal considerations.

Overtime shall be scheduled in accordance with departmental rules, regulations and directives, and administered in accordance with the provisions of this Agreement. Unit members shall be offered the opportunity to work any overtime prior to any work offered non-bargaining unit personnel. It is understood that the Police Department may utilize Reserve Officers to work shifts when assigned unit members are unavailable. Fifty percent (50%) of such work shall first be offered to unit members. Should unit members decline to work an additional shift, Reserve Officers shall have the opportunity to do so. When overtime is authorized, the most senior qualified member shall be offered the overtime first and in descending order the next most senior qualified member. Should no member respond or volunteer to work the overtime, the least senior qualified member shall be assigned to work.

Section 15.4: Off-Duty Employment – Non- Law Enforcement.

Any unit may voluntarily accept and be employed to work, non- law enforcement related off-duty in any occupation that is not prohibited by state or federal law and approved by the Police Chief. Approval shall not be unreasonably withheld.

Section 15.5 Court Appearances and Job-Related Appearances

Unit members required to appear in court or at a job-related subpoena appearance, at a time falling outside of their regular assigned work hours shall be compensated for actual time worked, or a minimum of three (3) hours of pay, whichever is greater. A unit member required to appear more than once during the day, will be compensated an additional three (3) hour minimum provided the second subpoena requires his appearance one (1) hour or more after the release from the first subpoena.

ARTICLE 16: Extra Time Provisions

Section 16.1: Standby Duty On-Call Status

A. Standby duty on-call time is defined as periods of time in which the member is ordered or required by the Police Department to be readily accessible by telephone, paging device or other electronic device and not performing actual work, but in readiness to perform actual work when the need arises.

B. Such standby on-call time shall be compensated at the rate of $10.00 per day, when the member has been scheduled to work within the 24 hours and is now off work.

Section 16.2: Call Back Time

A. A unit member called back to work after his regular working hours shall be compensated for actual time worked. However, the member shall receive a minimum equivalent to two (2) hours of straight time pay or compensatory time at the member's option. A unit member, who has been notified to report back to work under this section, will report for duty within sixty (60) minutes from the time so notified.

Section 16.3: Attendances

A. Unit members required by the Police Department to attend training sessions outside of their regularly scheduled hours, shall be compensated at the rate of time and one-half (1 ½) for the time spent training.

B. Unit members ordered to attend any meeting while in an off-duty status, shall be compensated as in 16.2 A.

678 **ARTICLE 17:** **WAGES**

679 **Section 17.1:**

680 A. For FY 2012-13, All bargaining unit members shall receive a two and one-
681 half percent (2 ½%) across the board wage increase, effective October 1, 2012.

682 B. Wages shall be reopened at the discretion of the union.

683 **Section 17.2: Traffic Homicide**

684 Unit members who are assigned as Traffic Homicide investigators shall receive twenty-
685 five dollars assignment pay per pay period, as of the effective date of this contract. This
686 assignment pay shall not constitute a property right in the assignment. Unit members,
687 who are no longer designated Traffic Homicide investigators, shall not receive the
688 assignment pay; provided that they are no longer performing the duties and
689 responsibilities of an investigator. Mere changes in titles or name designations shall not
690 result in assignment pay loss.

691 **Section 17.3: FTO**

692 Any unit member working as a Field Training Officer (FTO) shall receive one extra hour
693 of pay for each shift of training.

694 **Section 17.4: CID**

695 Unit members who are assigned to work in CID as investigators shall be compensated
696 twenty-five dollars per pay period as of the effective date of this contract.

ARTICLE 18: CONTINUOUS EMPLOYMENT (Seniority)

Section 18.1: Definition.

Continuous employment (seniority) shall be both on a City-wide and as a sworn member of the Tavares Police Department and shall commence from the employee's initial date of hire with the City and as a member of the Tavares Police Department, respectively. It shall continue until broken as provided in Section 19.3 below. When two or more unit members start work in the Tavares Police Department on the same day, their police seniority shall be based on their position on the new hire eligibility list.

Section 18.2: Benefits.

The earning or accrual of benefits shall be based on the City-wide seniority as provided in the City rules unless a particular benefit, benefit plan or this agreement specifically provides otherwise. Sworn police seniority shall be used for the purposes of layoffs, recall, and vacation/comp time leave and holiday preference

Section 18.3: Loss of Continuous Service.

City and Police seniority shall be lost upon the happening of one or more of the following events:

A. Resignation.

B. Termination in accordance with the City regulations.

C. Retirement.

D. Receiving an authorized leave of absence.

E. Lay-off for more than six (6) continuous months.

In addition, sworn seniority will also be lost if a member is promoted or is transferred to a position outside the Police Department, but if into another position within the City, the City seniority shall continue to accrue.

Section 18.4: Vacation/Comp Time/Holiday Leave

When more than one (1) bargaining unit member seeks to use vacation/comp/holiday time for the same period and is in the same squad or section, the member with the most sworn seniority will be given preference.

Section 18.5: Layoff and Recall.

Layoff and recall shall be in accordance with the below provisions:

A. Layoff

728 In the event of a layoff for any reason, members shall be laid off in the inverse
729 order of their sworn seniority. All initial probationary members must be laid off prior to
730 laying off non-probationary members.

731 B. Recall

732 1. Members in layoff status will retain recall rights for twelve (12) months and
733 shall have preference to work over applicants on eligibility lists. Recall will be made by
734 certified mail to the last address in the member's record, along with any address on file
735 with the Union. The member must, within seven (7) calendar days of the certified
736 receipt date, notify the City of his intention to return to work. Said member must return
737 to work within thirty (30) days of receiving the notice.

738 2. Members shall be called back starting with the most senior sworn member
739 notified first and then in descending order of seniority thereafter. Members who return
740 from layoff status shall receive the current rate of pay for the pay grade and step he
741 held at the time of layoff. Unit members may accept any position for which they have
742 previously held.

743

744

ARTICLE 19: Educational Reimbursement

19.1 In the event that the City establishes any college tuition reimbursement program in its annual budget, the Unit Members will participate on the same basis as any other city employee.

ARTICLE 20: AGENCY ASSIGNED VEHICLES

20.1 Unit members shall not be required to use their personal vehicle in the performance of their sworn job functions.

20.2 Except as provided in this Article, vehicles issued by the City to bargaining unit members shall be administered and regulated in Police Department Standard Operating Procedure.

20.3 All unit members shall be assigned a vehicle if they reside within a 15 mile radius from the Police Department at such time as there are a sufficient number of vehicles available. Such vehicle sufficiency shall be determined by the Police Chief.

20.4 Any officer on an extended leave, who is assigned a take-home vehicle, shall park the vehicle at the Police Department.

20.5 Unit members are not required to drive an unsafe vehicle. A unit member shall immediately report an unsafe vehicle to his immediate supervisor.

ARTICLE 21: GUN PURCHASE PROGRAM

21.1 The City shall maintain the Gun Purchase Program in accordance with Police Department GO 09-11 (9/28/09) with the following exceptions:

A. Unit member, who have successfully completed their initial probation, shall be permitted to purchase up to two (2) weapons approved by the Police Chief every three (3) years, as measured from the date of the first purchase.

B. There will be an $800 limit per weapon. Cost of a weapon exceeding the limit shall be the responsibility of the unit member. Unit members shall be allowed up to twenty-six (26) pay periods within the same fiscal year of request in which to reimburse the City for the advancement of the cost of the weapon(s). Said reimbursement shall be through payroll deductions and begin with the payroll following the date of purchase.

ARTICLE 22: PREVAILING RIGHTS

22.1 All working conditions, benefits and privileges enjoyed by bargaining unit members and known to the City which are not specifically provided for or abridged by this Agreement shall continue under conditions which they have previously been granted.

ARTICLE 23: DRUG TESTING

23.1 Drug testing of bargaining unit members shall be in accordance with Section 112.0455, Florida State Statutes, the Drug-Free Workplace Act.

23.2 All unit members are designated special risk for drug testing purposes. Special risk means employees who are required as a condition of employment to be certified under Chapter 943, Florida Statutes.

ARTICLE 24: WORKING OUT OF CLASSIFICATION

24.1 A unit member assigned to duties of a higher classification during their shift shall be paid for an additional dollar per hour for every hour they remain in that higher classification

ARTICLE 25: EQUIPMENT, UNIFORMS, AND CLOTHING ALLOWANCE

Section 25.1: Uniforms.

Unit members shall wear uniforms as determined by the Chief. When a uniform is required, no other clothing except underwear shall be worn without permission of the Chief. The City agrees to provide all unit members with two (2) sets of uniforms.

Section 25.2: Initial Issue.

The Department shall determine and provide the clothing, footwear, and other related items that make up the uniform. The footwear allowance shall be $100 per issued pair of footwear per year, per unit member.

Section 25.3: Replacement.

A. Unit members shall be responsible to maintain in good serviceable condition the initial issue provided.

Section 25.4: Maintenance.

Unit members shall be responsible for maintenance of the Uniform and all items issued to them for their use by the City, and shall come to work in clean, neat and undamaged uniforms and other clothes.

Section 25.5: Clothing Allowance.

830 Unit members assigned as Detectives in CID shall receive a clothing allowance
831 in the amount of $600 net per year to be paid $300 on October and $300 on April 1. Unit
832 members transferring into CID shall be given their first $300 upon transfer. Unit
833 members shall be issued and maintain one class A uniform to include one short sleeve
834 shirt and one long sleeve shirt.

835

836

Article 26

OFF-DUTY Details

26. 1 – General

Off-duty employment per Florida Statute 30.2905 shall be administered and regulated in accordance with Tavares Police Department's rules, regulations and policies.

26. 2 – Minimum Rates

When off-duty officers are requested by outside entities, the minimum hourly rate paid to the member by the City will be at least $30.00 an hour and on observed holidays at least $40.00 an hour.

26. 3 – Holiday Pay

The minimum hourly rate paid off-duty employees providing services for outside entities for the following nine (9) holidays shall be forty dollars ($40.00) per hour: 1) New Year's Day; 2) Memorial Day; 3) Easter 4) Independence Day; 5) Labor Day; 6) Thanksgiving Day; 7) Christmas Eve; 8) Christmas Day; and 9) New Year's Eve.

26.4 – Availability

All Off-Duty details shall be first made available to bargaining unit members.

ARTICLE 27 PENSION AND RETIREMENT

27.1 The City shall maintain the current Tavares Police Officers' Pension Trust Fund as currently exists as codified in City Ordinance Chapter 15, Pensions and Retirement, Article IV, of the Code of Ordinances of the City of Tavares. Upon ratification and approval of this Agreement by the parties, all substantive changes to the Pension Trust Fund shall be as a result of the collective bargaining process, unless required by State Statutes.

27.2 The bargaining unit members shall contribute 12.80% of their salary into the Pension Trust Fund.

ARTICLE 28: PATROL MINIMUM MANNING

28.1 For the safety and protection of the Citizens of Tavares and of the officers in the Police Department, a minimum manning for Patrol shall be established.

28.2 There shall be no less than three (3) officers assigned and available working each shift that are primary designated to respond to calls. In the event that the total drops below the minimum manning in any one shift, the Police Administration shall take the necessary steps to temporarily assign another law enforcement officer to the shift to bring up the minimum required level.

ARTICLE 29: SAVINGS CLAUSE

29.1 In the event that any provision of this Agreement should be rendered or declared invalid by any court action or by reason of any existing or subsequently enacted legislation, the remaining parts and/or provisions of this Agreement shall remain in full force and effect.

29.2 Any provision or portion of this Agreement rendered invalid by the courts or legislation shall require the parties to meet within a reasonable amount of time to negotiate changes to the invalid provision(s).

ARTICLE 30: DURATION

This contract shall remain in full force and effect through midnight September 30, 2014, and shall automatically renew itself for periods of one (1) year unless either party delivers to the other written notice of its intent to terminate or modify this contract not less than ninety (90) calendar days before September 30, 2014, or not less than ninety (90) calendar days prior to September 30 in any year of an automatic extension under this Article.

_____	_____
Florida Police Benevolent Assoc., Inc	City Administrator
Date: _____	Date: _____
_____	_____
Name	Police Chief
Date: _____	Date: _____
_____	_____
Name	City Council Member
Date: _____	Date: _____
_____	_____
Name	Mayor
Date: _____	Date: _____

EXHIBIT A
PBA COLLECTIVE BARGAINING AGREEMENT
GRIEVANCE FORM

Step 1 2 3 Class Action(circle appropriate step)

Employee's Name/PBA_____ Class Title_____

Employee # _____ Department_____

Business Telephone _____ Division_____

Unit _____

NATURE OF GRIEVANCE

(involving interpretation or application of specific provisions of the Collective Bargaining Agreement)

_____

_____

_____

_____

DATE ACT OR CONDITION OCCURRED: _____Day of _____, 20__.

ARTICLE and SECTION OF AGREEMENT: (which has allegedly been violated)

REMEDY: _____

IS PBA REPRESENTATION DESIRED ☐ Yes ☐ No

If so, name of representative:_____

Representatives Business Telephone:_____

FOR Class Action GRIEVANCES ONLY - I have been designated by the following named employees to act as spokesperson and be responsible for processing the above grievance in their behalf:

SIGNED_____ Date Submitted _____

SUBMITTED TO: Name_____ Class Title_____

(If space is insufficient to write complete information, attach a separate sheet.)

Managements response:
(Attached reason for Denial)

__ Grievance accepted in whole.
__ Grievance accepted in part.
___ Grievance rejected.

Managers Signature: _____

Date Delivered to Grievant:_____

Copy

Unit Member
PBA

EXHIBIT B

MEMORANDUM OF UNDERSTANDING

BETWEEN

THE CITY OF TAVARES and

FLORIDA POLICE BENEVOLENT ASSOCIATION, INC.

The City of Tavares (herein referred to as "City") and the Florida Police Benevolent Association, Inc. (herein referred to as "Union") hereby entered into a Memorandum of Understanding pertaining to the Communications Officers currently represented by the Union in PERC Certification RC 1803.

The City and the Union acknowledge that prior to the beginning of fiscal year 2012-2013, the City elected to outsource its public safety dispatch services to the Lake County Sheriff's Office, effective March 31, 2013. The parties acknowledge that all City Communication Officer positions will be eliminated as of that date.

As a result of the City's decision to outsource the above services, the parties met on March 6, 2013 to bargain over the impact of that decision.

The purpose of this MOU is to memorialize the separation benefits agreed to by the City and the Union for those Communications Officer positions:

Communications Officers who remain employed until March 31, 2013 shall receive a retention bonus in the gross amount of $4500 (from which standard employment taxes shall be deducted) to be paid in the final check on April 12, 2013.

Communications Officers who remain employed until March 31, 2013 shall receive 100% of accrued sick time, accrued vacation, and compensatory time to be paid in the final check on April 12, 2013.

Communications Officers, who remain employed until March 31, 2013, upon separation, are eligible to access the City's Healthcare program through COBRA. For such employees, the City shall continue to pay its current share of the employee's healthcare costs for those employees who elect COBRA coverage for a period of 30 days after which time the employee shall be responsible for paying full cost of COBRA coverage. The employees shall be responsible for all COBRA premiums not paid by the City.

In the event that the current tentative collective bargaining agreement is approved by Council which includes a 2.5% COLA retroactive to October 1, 2012, Communications Officers

continuously employed from October 1, 2012 through March 21, 2013 shall receive this 2.5% COLA increase.

The City agrees not to contest an application for unemployment compensation made by an Communications Officer whose position is eliminated as of March 31, 2013.

All monies owed as a result of this MOU shall be paid in the Communications Officers last paycheck or on April 12, 2013, whichever occurs first.

For the City:

_____

Mr. John Drury, City Administrator

For the Union:

_____

Stephen A. Micciche, Chief Negotiator

AGENDA SUMMARY
TAVARES CITY COUNCIL
DATE OF MEETING: March 20, 2013

AGENDA TAB NO. 9
SUBJECT TITLE: Continuation of Wind Turbine Feasibility Study

OBJECTIVE: To consider the continuation of the Wind Turbine feasibility study by approving a contract in the amount of $19,400 to collect wind data, produce financial payback reports and conduct environmental studies for the potential use of wind as an augmentation to electricity at Woodlea Waste Water and Reclamation Facility.

SUMMARY: The monthly electrical bill for the City Waste Water Plant is approximately $15,000 or $180,000 annually. Given sufficient wind, wind turbines can be installed to augment electrical use thereby reducing the electric bill. Previously staff contacted Florida State University to assist with wind turbine augmentation and they referred the City to Wind Turbine Companies, the Florida Energy Office, and WECC (Wayne Hildreth).

Through these experts staff learned that there are two beginning steps involved in the process to determine wind potential for a given area. **Step one (1)** is the Preliminary Wind Resource Assessment and **Step two (2)** is the Site Wind Data Collection and Management and Detailed Wind Resource Study. The City Council instructed staff to begin the steps towards evaluating wind turbine potential.
At the City Council meeting of July 6, 2011, The Council authorized the expenditure of $9,500 to have WECC conduct a Preliminary Wind Resource Assessment (see enclosed report) and to install the Meteorological Tower for step 2. The conclusions and recommendations (page 15) saw a "potential to yield a lower lifetime cost of energy than the city is currently paying" by augmenting with wind power. They recommended the installation of a tower, a year-long study of wind output to determine project viability, and if viable to pursue other requisite environmental studies.

Staff budgeted in the FY 2013 current budget, $20,000 for step two (2) the wind study. Staff has negotiated a scope of work (see attached) with WECC in the amount of $19,400 for the following:

1. Collect data quarterly from the tower over a period of one year.
2. Compute the expected annual energy production from the wind.
3. Develop a high level financial analysis on revenues, costs, debt and payback using those wind turbine generators that best fit the site.
4. Sighting of the wind turbine location.
5. Three environmental reports (Shadow Flicker, Noise, and Zone of Visual Influence).

Previously, Council had requested that staff seek grant or private funding to pay for step 2, the wind study. Staff and WECC have contacted various agencies seeking support to pay for this study. The most viable grant option for study work is the Rural Energy for America (REAP) Grant program, which will pay up to $50,000 for feasibility studies. This grant can be used to reimburse for studies already performed.

Should the Council approve moving forward with the wind study, Staff will apply for the REAP grant to recoup costs expended to date along with the $19,400 to complete the one-year wind resource analysis using on-site data.

Once the wind project is proven viable, there are financing strategies that are designed to minimize the large municipal funding outlay for renewable wind energy projects, and provide reimbursement for monies expended taking the necessary steps to reach project viability. These strategies include the establishment of public/private partnerships, financing through Government Capital, who can loan capital costs with no payment for the first year to enable the wind turbine generator energy production savings to be applied, and other federal loan guarantee programs.

Once the project is proven economically viable, a number of additional required studies must be initiated to include, but not limited to, wildlife, wetlands, geotechnical, archaeological and interconnection. These costs can be reimbursed through financing.

The year-long wind study has four collection data reporting timeframes to be performed quarterly over 12 months. Should this study reveal that there is insufficient wind capability in any of these quarterly reports, then the study will be stopped at that point and no further funds will be committed.

Should the study prove favorable, a successful wind turbine program will reduce energy costs for many years to come and demonstrate the city's leadership in the role of environmental stewardship.

OPTIONS:

1. **Approve** $19,400 from the Contractual Service budget to fund WECC continuing contract to complete the Site Wind Data Collection & Management and Detailed Wind Resource Study.
2. Do **not** approve $19,400 from the Contractual Service budget to fund WECC study.

STAFF RECOMMENDATION: Move to **approve** $19,400 from the Contractual Service budget to fund WECC Site Wind Data Collection & Management and Detailed Wind Resource Study.

FISCAL IMPACT:

Waste Water Fund 401-35-01-535.34-10 "Contractual Services" has $20,000 budgeted for this study.

LEGAL SUFFICIENCY: This meets legal sufficiency

Scope & Proposal

For

City of Tavares

Tavares, Florida

Date Prepared: February 20, 2013
Prepared by: Brian Wiley
Proposal #: 2013005

Consultant: Wayne Hildreth
hildreth@wind-consulting.com

This proposal expires in 30 days.

INTRODUCTION

The **City of Tavares, Florida (Tavares)** has requested that WECC LLC (WECC) provide a quote for the **Site Wind Data Collection & Management, and a Detailed Wind Resource Study** for their Tavares, Florida Waste Water Treatment Plant (WWTP) location.

The following is a description of the tasks and materials necessary for the **Site Wind Data Collection & Management, and a Detailed Wind Resource Study**, the information it provides and the benefit to **Tavares**. In the case where a step reveals a circumstance that places the project's success at risk, such as low wind resource, or identification of a possible negative impact on the environment, WECC will stop work, notify **Tavares** and make appropriate recommendations.

SECTION I MAIN PROPOSAL SUMMARY

Site Wind Data Collection & Management – WECC will manage the collection of data from the met tower for a period of 12 months. This management includes making summary wind data available to Tavares upon request.

Detailed Wind Resource Study – A clear understanding of the quantity and quality of the wind resource available at the site is necessary to estimate the amount of energy that will be generated by the wind turbine. Financial institutions require a 'bankable' detailed wind resource study, and most turbine manufacturers require the same as a prerequisite for guaranteeing wind turbine generator energy output and to warrant equipment. In order to accomplish this, onsite wind measurements must be performed for a minimum of 12 months.

In this task, WECC will analyze the measured wind data from the client's onsite meteorological tower and create a longer-term wind statistic at the measured site; WECC has developed the WECC-MCP method to accomplish this. Measure Correlate Predict (MCP) is a technique to correlate the measured data with longer-term wind data sources (like airports, NCAR/NCEP) and then to predict/create a longer-term wind data series from the measured data. The longer-term data series is used to compute expected annual energy production and capacity factor for the proposed wind project. Specific analysis will include: average annual wind speed at potential hub heights; the Weibull parameters/co-efficient used in the analysis; the wind shear exponent; a Wind Resource Map that will graphically display the energy available in the wind over the entire area allowing for the selection of potential sites. A Wind Rose and Energy Rose will be created that will graphically show the wind speed and wind energy for each sector. The wind resource map will aid in siting the turbine(s) and the annual energy production will aid in the financial assessment. A high level financial analysis will include revenue assumptions, total estimated investment, debt assumptions, production tax credit and/or REC effects, and an estimate of equity payback.

Preliminary Wind Resource Reports will be produced quarterly for a period of one year with the final report including the following Environmental Reports:

Environmental Reports (Noise, Shadow, ZVI) – Consideration of the effect of a wind turbine on the environment is necessary. It is accomplished through several studies: Shadow Study; Noise Study; Zone of Visual Influence.

Shadow Flicker Study – This study measures the amount of time each day a nearby home or occupied building will be in the shadow of the moving blades of the wind turbine. This information is used in the siting of the wind turbine to avoid or minimize the amount of time in the shadow flicker.

Noise Study – This study predicts the decibel level due to a wind turbine. It compares the level of sound at various locations near the turbine site. Specifically, noise level contours centered at the wind turbine tower base will be predicted based on data available in WECC's wind turbine database. If data is not available for the specified turbine model, generic data will be substituted. This information is used in the siting of the wind turbine to minimize the effect, if any, the turbine's noise will have on surrounding locations.

Zone of Visual Influence – This study computes the percentage of area from which the wind turbine will be visible, within a given radius around the turbine. This could be used to assist in siting the turbine as governed by local ordinances.

Project Schedule and Deliverables

Deliverables	Due Date
Site Wind Data Collection & Management	Quarterly after tower installation.
Detailed Wind Resource Study	Quarterly after tower installation.

Point of Contact

Company	Contact	Email	Phone
City of Tavares	**Brad Hayes**	**bhayes@tavares.org**	**352-742-6485**

Accounts Payable Point of Contact

Name	Phone	Fax	Email

SECTION II – CONDITIONS, NOTES AND TERMS

General Conditions:
Any additional work outside this scope of work document will require additional professional fees and will be completed only following written approval.

Notes and Exclusions:

This proposal does not include: Any services not described in the scope document; any exclusions per scope document; or any applicable taxes.

Tavares is to provide WECC the Latitude/ Longitude coordinates of the proposed site and the site dimensions and boundaries.

All payments to WECC are to be paid by check or wire, drawn on a U.S. bank.

The balance for each quarterly study and data collection and management ($4,850) will become due when each study is submitted to the **City of Tavares**. The full balance of the payment will be due upon submission of all reports required under this contract. The **City of Tavares** is ultimately responsibility for payment to WECC.

SECTION III – PROPOSAL SUMMARY

February 20, 2013

To: **Brad Hayes**
City of Tavares, Florida

We propose these costs to **Tavares** per our scope of work document and terms & conditions enclosed with this proposal.

	Unit Price	Total
Site Wind Data Collection & Management	**12 @ $450**	**$5,400**
Detailed Wind Resource Study	**4 @ $3,500**	**$14,000**
Total		**$19,400**

This proposal does not include : Any services not described in scope document. Exclusions are as per scope document. Any applicable taxes.

This proposal expires in 30 days.

City of Tavares, Florida

(Signature)

(Name)

(Title)

(Date)

WECC LLC

(Signature)

Brian Wiley
Chief Financial Officer
(904) 333-4238

This official certifies that they have the authority to obligate **City of Tavares** funds and ensure invoice payment. WECC LLC is authorized to commence with this proposal subject to credit approval, and acceptance of our terms & conditions.

Preliminary Wind Resource Assessment

For: City of Tavares, Florida

Location: Tavares Wastewater Treatment Plant

August 18, 2011

Prepared by:

Brian Wiley
Chief Resource Analyst
WECC, Technology Center for Wind Studies
wileyb@wind-consulting.com

Disclaimer: WECC LLC (WECC) prepared this preliminary wind resource assessment based on 8 years of data from the Leesburg Regional Airport, 11 years 8 months of data from Orlando International Airport, 8 years of data from The Villages Weather Station, 30 years 2 months of data from NARR grid-point (28.923N, 81.573W) and 30 years 2 months of data from NARR grid-point (29.013N, 81.869W), obtained from the National Climatic Data Center (NCDC). This 'preliminary feasibility assessment' is provided solely to provide decision-makers with a vehicle to understand the localized wind statistic and the potential annual energy production using wind energy for this project; essentially this report is an initial planning tool.

WECC prepared the preliminary financial analysis based on data provided by the City of Tavares, information from turbine manufacturers and conservative industry assumptions.

Additional economic, environmental and ecological studies would also be required to determine the viability and potential impact of a wind project at the Tavares site.

The views and recommendations outlined in this document represent the viewpoint solely of WECC.

The analysis presented in this document was conducted with utmost care. Steps were taken to control the quality of the input data through data review and cleansing. However, WECC will not be held responsible for any damages or liabilities resulting from the subsequent application or use of the data/analyses contained in this report for other purposes than the intended initial planning tool.

Proprietary Document: This document has been prepared and provided exclusively for the use of City of Tavares, Florida and their constituency. Any reproduction, copying or distortion of this document, in whole or in part, or the disclosure or resale of any of the contents herein to any other person is not permitted or licensed except with the written approval of WECC.

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Abbreviations and Acronyms

AGL	Above Ground Level
FAA	Federal Aviation Administration
IRR	Internal Rate of Return
kW	Kilowatt
kWh	Kilowatt hour
LAP	Leesburg Regional Airport
MCP	Measure Correlate Predict Extrapolation Method
MW	Megawatt
MWh	Megawatt hour
NARR	North American Regional Reanalysis
NCAR	National Center for Atmospheric Research
NCDC	National Climatic Data Center
NCEP	National Centers for Environmental Prediction
NPV	Net Present Value
NOAA	National Oceanic and Atmospheric Administration
NREL	National Renewable Energy Laboratory
NTIA	National Telecommunications and Information Administration
OIA	Orlando International Airport
VWS	The Villages Weather Station
WTG	Wind Turbine Generator
WWTP	Wastewater Treatment Plant

1. Executive Summary

A preliminary wind resource assessment was conducted to evaluate the wind resource and site conditions at the Tavares Wastewater Treatment Plant in Tavares, Florida and to compare the impact of production and project financial outcomes of four potential wind turbine generators (WTG): the GE 1.6-100, Pioneer Wind P-1650-82LM, Nordex N100/2500, and the Vergnet GEV HP.

A WindPRO model was constructed, combining height contour data, surface roughness information and the representative wind data from two nearby airports, a private weather station and two NARR data points to create a wind statistic for the Tavares Wastewater Treatment Plant site. The resulting wind statistic was then utilized to perform energy calculations and to create a wind resource map for the area. The wind resource map will continue to be utilized in conjunction with siting issues and concerns at the proposed site, e.g., setbacks, terrain constraints, etc.

Energy production calculations were performed for the layout using the WindPRO model developed and the Wind Atlas Analysis and Application Program (WAsP). A generic loss value of 10% for uncertainty and losses was assumed for this analysis and was deducted from the gross energy output predictions.

The results of this analysis reveal that a moderate to low wind resource exists at the proposed WWTP site. However, at least one of the WTGs examined is financially viable for this project based upon the size and output of the WTG, current and projected cost of energy, and higher WTG hub height. Moreover, four of the five data points utilized in this analysis are in excess of 20 km distant from the proposed site and extrapolated to the hub height specified for each WTG. Lastly, the financial model used for this analysis was based solely on debt with the City of Tavares owning the wind project without considering other debt models or sources of funding that can be developed to make the project more financially attractive.

For the above reasons and because the Tavares WWTP project could become the first utility-grade WTG project in the State of Florida, WECC recommends that a meteorological tower be placed at the proposed site for year-long data collection and quarterly MCP analysis. During the course of onsite wind resource data collection other financial models will be developed and compared, and sources of funding pursued that will invariably increase the financial appeal of the project.

2. Introduction: Tavares Wastewater Treatment Plant Site

Figure 1: Overhead image of Wastewater Treatment Plant with proposed WTG sites.

WECC conducted a preliminary wind feasibility assessment at the request of the City of Tavares to determine local measured wind conditions at their Tavares Wastewater Treatment Plant site and conduct a WTG comparative analysis to provide WTG specific information on energy production using a variety of WTG configurations. The WWTP site area is depicted in Figure 1 with the proposed turbine installations indicated by the yellow pushpin within the Figure.

The Tavares WWTP site center is at approximate coordinates: 28.7868N, 81.7578W. The site is located on the property of the wastewater treatment plant, adjacent to the aeration basins. To the west of the property is a managed-care facility. North of the facility is a proposed recreational complex. East of the facility is empty land with trees south of the site. A potential interconnect is located approximately 300m from the site along Woodlea Road. The WWTP is approximately 550m away across Woodlea Road. The WWTP uses just over 1,955 MWh of electricity per year according to billing information provided by the City. Given this level of energy demand the WWTP site can support a utility-scale WTG from a 'behind the meter' electrical interconnection standpoint. In a 'behind the meter' installation the WTG is interconnected to the facility directly and will provide power primarily to the facility with the possibility to net meter any excess generation back to the grid.

3. Wind Data

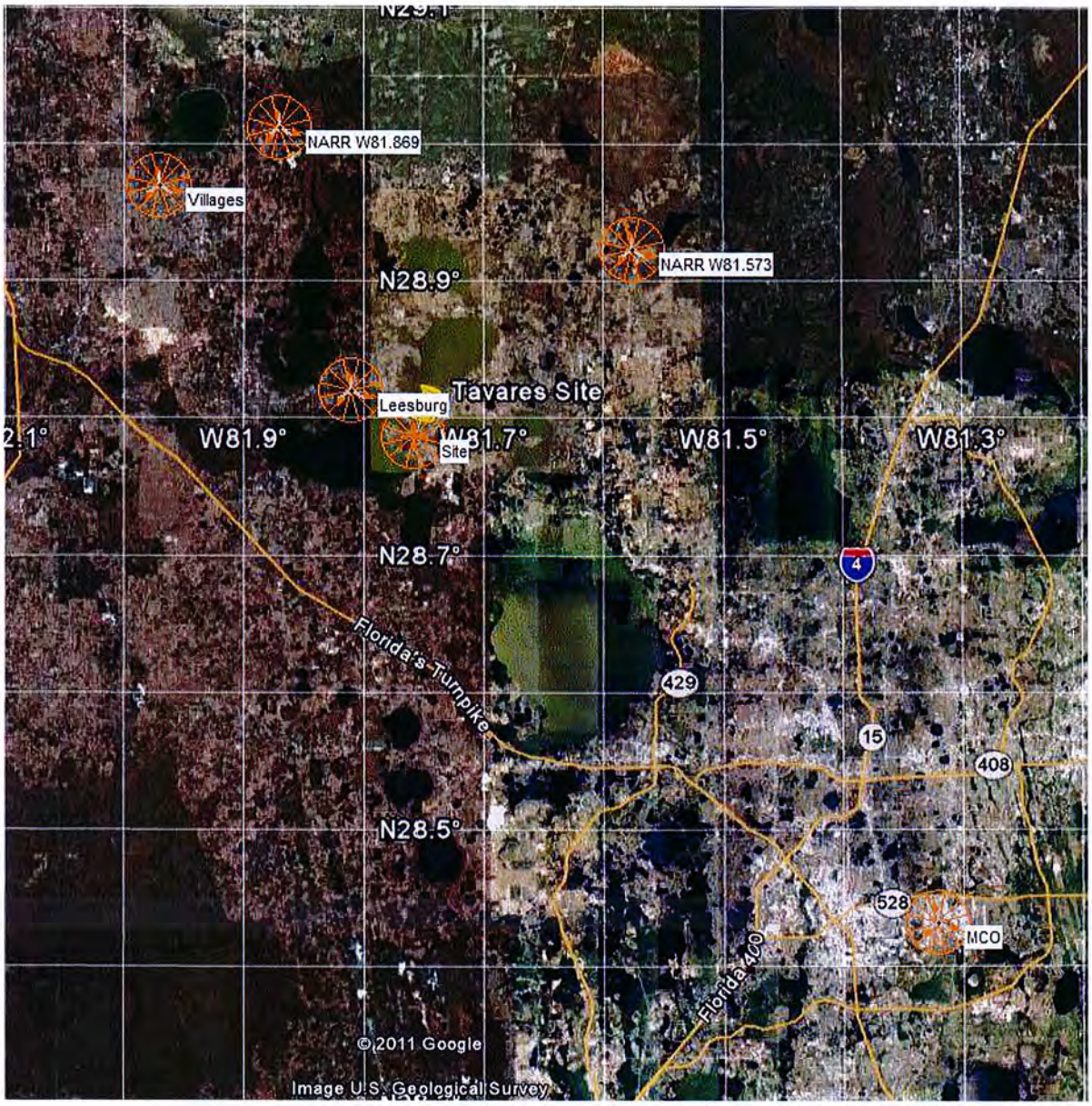


Figure 2: Satellite image of wind data locations.

WECC modeling techniques utilize WindPRO[1] and WAsP[2] to model the Tavares WWTP's wind resource and calculate gross energy production estimates. A Weibull[3] distribution curve fit was performed on

[1] WindPRO is a software package that models the output of WTGs, taking into account orography, topography, wind data sources and other variables to predict turbine output and aid in turbine siting and wind project planning.
[2] WAsP is a software package that interfaces with WindPRO to predict site wind resources.
[3] The Weibull distribution is a continuous probability distribution used to describe wind speed distributions as their natural distribution most closely matches the Weibull distribution.

local wind data for 12 wind direction sectors to describe a time-independent observed wind climate. The observed wind climate was then 'cleaned' of local roughness, orography (variation in elevation), and obstacles, to produce an area wind statistic. A wind statistic is a mathematical model describing the wind resource for a given region, for which the effects of the local surface roughness elements and terrain around the sites were removed. The wind statistic is commonly referred to as the 'pure' wind resource for a region. By using this 'pure' wind resource model and adding back in the surface roughness and terrain information for a specific site of interest, estimates of the wind resource for the new site are developed.

Five long-term wind data sources were explored for suitability: Leesburg Airport (LAP), Orlando International Airport (OIA), the Villages Weather Station (VWS) and two sets of modeled data from the North American Regional Reanalysis (NARR) and the National Centers for Environmental Prediction (NCEP).

These five data sources were weighted based on proximity to the site in addition to orographical and topographical similarity to the WWTP site. LAP is located the closest to the WWTP site at 6.29km distant, followed by NARR[4] grid-point 28.293N, 81.573W at 23.55km, NARR grid-point 29.013N, 81.869W at 27.41km, VWS at 29.05km, and finally OIA at 58.38km. Table 1 summarizes the data gathered from these sources.

Table 1: Sources of wind data and summary of wind speeds.

Data Source	Measurement Height [m AGL]	Distance from Site [km]	Measured Wind Speed [m/s]
Leesburg Regional Airport (LAP)	10	6.29	2.83
NARR[5], 28.293N, 81.573W	10 & 30	23.55	3.51, 4.22
NARR, 29.013N, 81.869W	10 & 30	27.41	3.38, 4.07
The Villages Weather Station (VWS)	10	29.05	2.39
Orlando International Airport (OIA)	10	58.38	3.26

The following methodology was used to assess the wind conditions and energy production:

[4] The North American Regional Reanalysis data was developed by the NCEP.

[5] NCAR/NARR is not measured data, but reanalysis of several datasets that include upper atmospheric data and measurements done by a variety of met towers in the specified NCAR/NARR grids.

a) Modeling of elevation and roughness at the data collection sites

b) Creation of a wind statistic (generalized regional wind) for each of the data collection sites

c) Modeling of elevation and roughness at the proposed wind turbine sites

d) Translation of the wind statistics to the proposed wind turbine site using local topography and roughness

e) Computation of estimated wind energy production and capacity factor[6] for the selected turbine options

WindPRO© and WAsP© modeling software were used to perform the analysis described above.

Appendix B shows a wind resource map for the WWTP site. The wind statistic was extrapolated to 60m. The result depicts a stable wind resource across the usable portion of the WWTP site with only minor variation, 0.1 m/s, across the entire mapped site.

[6] Capacity factor rates the energy production of a wind turbine as compared to the case where it is continuously running at nameplate capacity. In this way, it is a tool for judging the efficiency of the combination of wind turbine model and site.

4. Wind Energy

A wind statistic was created for the WWTP site using local data and terrain information along with the combined wind resource information from the five measurement locations from Table 1. The wind statistic was used at the proposed site to compute expected annual energy production.

The WTGs evaluated for comparative purposes in this analysis were the GE 1.6-100, Pioneer Wind P-1650-82LM, Nordex N100-2500, and Vergnet GEV HP. The specifications of these turbines, as well as the estimated production, are shown in Table 2 below for the WWTP site. The production estimates included here within Table 2 is for a single turbine located at the proposed site (as seen in Figure 1). This analysis compares how the different turbine power curves perform with the local wind profile specific to the WWTP site.

Table 2: Wind speed and energy output findings at WWTP Site.

Turbine	Hub Height [m]	Rotor Diameter [m]	Nameplate Capacity [kW]	Average Wind Speed at Hub Height [m/s]	Average Annual Energy Output [MWh]	Average Capacity Factor [%]
GE 1.6-100	100	100	1600	5.04	3,361	24.0
P-1650-82LM	80	82.4	1650	4.77	2,136	14.8
Nordex N100	100	99.8	2500	5.04	3,558	16.2
Vergnet GEV HP	70	62	1000	4.61	1,034	11.8

The total energy and capacity factors are estimates and include a 10% loss factor due to uncertainty and/or losses, as described below:

1. Uncertainties include: Wind statistics, terrain description, manufacturer's power curve, and the calculation method.

2. Losses include: Grid/transformer, unavailability WTG due to maintenance, blade degradation, high-wind hysteresis and operation mode losses.

None of the measurement locations was in the range of proposed hub heights. Thus, the wind shear was modeled according to the WAsP© profile algorithm. This wind shear was used to extrapolate the wind statistics to the 70-100m hub heights. The higher the hub height, the greater the uncertainty of the extrapolation is.

The wind resource available at the site is classified as Class 1/2 (see Appendix A).

5. Preliminary Financial Assessment of Wind Power

The following assumptions were utilized for this preliminary financial analysis.

Table 3: Financial Assumptions specific to the Tavares WWTP project

Total cost of procurement, installation, and commissioning per turbine	GE 1.6-100 - $3,492,800 Pioneer Wind P-1650-82LM - $3,638,250 Nordex N100-2500 - $5,092,500 Vergnet GEV HP - $3,545,000
Electricity Offset Rate, (with inflation)	9.3 cents per kWh in 2010
Inflation	3.0%
Life of project	25 years
Project Financing	Debt (100% @ 5.5%) or Grant
Taxes on profits	0%
Depreciation Method	MACRS
Annual Operations and Maintenance (O&M) Costs (with inflation)	GE 1.6-100 - $67,187 Pioneer Wind P-1650-82LM - $60,432 Nordex N100-2500 - $88,560 Vergnet GEV HP - $51,548
Annual Overhaul Sinking Fund	0.75% of total installation cost per year

All costs listed above are preliminary cost assumptions used for this financial assessment. To create budgetary estimates a detailed sizing and costing of each sub-component must be conducted once a WTG is selected. The cost figures used for the analysis are derived from DOE and general information provided by each turbine manufacturer.

The financial analysis assumes that the project is owned by the City of Tavares. The project is to be paid for with debt or through the identification of federal grant programs to offset a portion of the cost of the installation. The debt model assumes a commercial lending program available to municipalities allowing payback to commence one year after the project has begun operating; thus providing the WTG opportunity to generate energy savings before starting to payback. No incentives or RECs were included in the model as they would not apply given the municipality project ownership structure. The electricity offset rate uses the average rate for the last 12 months at the site.

With a 24% capacity factor, the GE 1.6-100 provides the best performance and offers the strongest possible return for this project, as the WTG is rated as a Class III[7] WTG designed for low wind conditions. With a 100m hub height , 100m rotor diameter and nameplate output of 1.6MWthis machine is specifically designed to take advantage of sites with a lower wind resource; however, the extended height of the WTG could present issues and will be discussed in the *Conclusion and Recommendations* section.

The Nordex N100 has a larger nameplate output of 2.5MW, the hub height and rotor diameter is roughly the same hub height and rotor diameter as the GE 1.6-100, but with a lower capacity factor of 16.2%, a higher total installed cost and with only slightly more annual energy production. Using the debt-only financial model results in a 20-year payback, which is roughly equal to the conservative life expectancy of a WTG does not make economic sense.

The Pioneer Wind P-1650-82LM is a Class III WTG with a lower hub height and rotor diameter as compared to the GE 1.6-100, but with a similar rated nameplate capacity output of 1.65MW yet it produces roughly 37% less energy at the site. This WTG has a higher installed cost than the GE 1.6-100 and a 23 year projected payback using the debt model.

The Vergnet GEV HP with a nameplate capacity of 1MW is a Class III WTG designed for a lower wind regime like at Tavares, and is one of the few WTGs made specifically for areas with a threat of cyclonic weather events. The GEV HP at a hub height of 70m and rotor diameter of 62m is designed so the nacelle and rotor can be lowered for a weather event or maintenance and then raised back to hub height utilizing an internal lifting device. Utilizing the debt model alone, high installation costs, a low capacity factor in the site's wind resource, and a payback that well exceeds the life expectancy of the WTG result makes the GEV HP a poor choice for this project.

[7] Wind Turbine Generator classification differs from IEC Wind Classifications (Appendix A) whereas Wind Turbine Generator classifications are determined by hub height and rotor diameter and the wind turbine generator is designed to operate efficiently within an IEC Wind Classification.

Table 4: Summary of financial results

	GE 1.6-100	P-1650-82LM	Nordex N100	Vergnet GEV HP
Total Installed Cost	$3,492,800	$3,638,250	$5,092,500	$3,545,000
Total Installed Size (kW)	1,600	1,650	2,500	1,000
Total Installed Cost per kW	$2,183	$2,205	$2,037	$3,545
Total Annual Energy Production (MWh)	3,361	2,136	3,558	1,034
Percentage of Facility Energy Provided (1,955 MWh/Year)	171.9%	109.2%	182.0%	52.9%
Simple Payback Period	15th Year	23rd Year	20th Year	>25 Years
Levelized Cost of Energy per kWh	$0.078	$0.122	$0.104	$0.236
Internal Rate of Return (IRR)	10.60%	1.55%	4.19%	-6.82%
Net Present Value (NPV) at 3% discount	$2,301,576	($464,240)	$540,093	($2,649,631)

Because this project is owned by a municipality and would typically be paid for with debt financing the project does not show the strong returns that could be expected from comparable privately-owned projects that are able to take advantage of federal tax incentives. Federal or state incentives or grants would invariably improve the financial viability of this project. Additionally, consideration should be given to comparing other financial models that may improve the attractiveness of this project.

For example, a single GE turbine installation that is able to take advantage of the federal Production Tax Credit (PTC) has a simple payback period of 12 years, a levelized cost of energy of 8.86 cents, an mIRR of 11.42% (compared to an mIRR for the original project of 7.82%), and an NPV of $2,279,303. A modified IRR was used in this calculation because the cash flows for the project change signs multiple times, causing the traditional IRR calculation to reset. The mIRR discounts positive and negative cash flows separately to avoid this problem. Thus, a public/private partnership arrangement could very well improve the potential returns and should be one of the options explored.

The GE 1.6-100 does potentially provide a lower levelized cost of energy than the facility is currently paying. In Figure 3 the base case, where power is purchased from Sumter Electric Cooperative, is illustrated as the blue line with the cost of energy inflating at a steady rate over the life of the project. The red line shows the GE 1.6-100. During the first 10 years of the project the cost of energy decreases

mildly while the WTG debt is serviced. After the debt has been satisfied the WTG begins to generate revenue for the City subject to negotiation with Sumter Electric Cooperative.

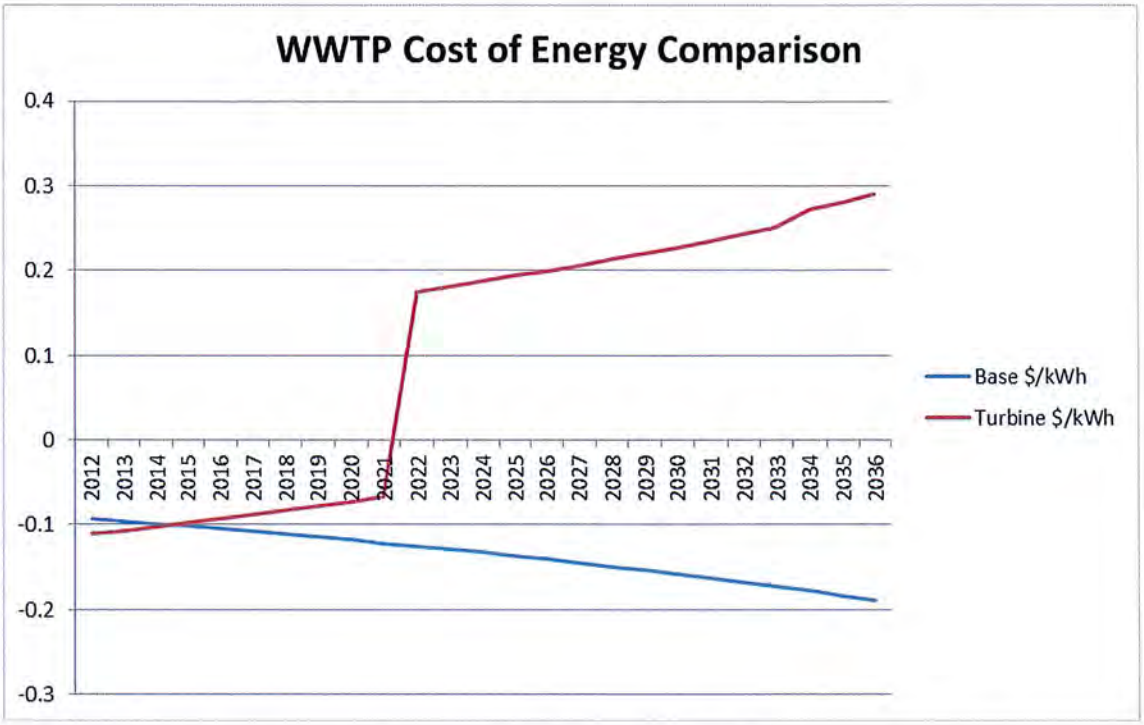


Figure 3: Cost of Energy comparison between GE 1.6-100 and Base Scenario where electricity is purchased from co-op.

6. Conclusions & Recommendations

Utilizing the GE 1.6-100 as the selected WTG for this project presents a few interesting barriers that must be overcome. First, with an extended blade tip at 425' sitting on a site of approximately 105' in elevation could present additional challenges in receiving FAA and NTIA approval, local resistance from a visual perception may prove more difficult, and GE is typically not open to providing their WTGs for single WTG installations, or 'one-off' projects. Moreover, this model will overproduce electric energy in relation to energy demand for the site though, which will require negotiation with Sumter Electric Cooperative to net meter the overproduction.

Although, the Florida Public Service Commission (PSC) requires investor-owned utilities to net-meter installations up to 2MW in size. Municipal utilities and cooperatives are required to offer net metering but no specific standards are in force at present. The requirement is for excess generation to be credited against the next month's bill at the retail rate with the excess at the end of 12 months paid back at the utility's avoided cost rate.

Given the proximity of an additional water treatment plant (centered at 28.783N, 81.754W) it might make sense to distribute power to both sites to take greatest advantage of the generation. Alternatively Sumter Electric Cooperative might be willing to aggregate billing for the City and net-meter against the total bill.

The wind resource statistic developed for the Tavares WWTP site utilized wind data from five locations within 59 km of the site; and, took into account the topography and orography of the WWTP site and surrounding the locations of the data origination points. This information was used to generate a wind statistic that was further utilized to generate a preliminary financial summary for the project. The wind regime for the WWTP site is moderate to low and is based on measurements taken from weather stations and grid points from 6 to 59 km distant.

Using the 'debt-only' financial model, the financial summary indicates that a single GE 1.6-100 installation has the potential to yield a lower lifetime cost of energy than the City is currently paying at the WWTP site.

Next Steps:

WECC recommends the installation of a single 60m or 80m meteorological tower be installed at the site and commencement of a year-long study to determine project viability. WECC will conduct quarterly MCP analyses, and if an acceptable correlation factor exists between the site measured data and long-term data used for correlation, project viability could very well accelerate project activity after the first quarter.

During the wind measurement campaign, WECC will work with the City of Tavares to explore a variety of financial models that could improve the financial performance of this project. Additionally, WECC recommends that a formal FAA/NTIA request be filed and that a desktop Preliminary Environmental Analysis (Avian and wetlands) be conducted simultaneous to the wind management campaign. The FAA/NTIA filing should occur immediately to eliminate or mitigate the potential risk to the project. Additional studies that will occur as part of the wind measurement campaign will include: Noise, shadow flicker and Zone of Visual Influence analysis to determine potential impacts, if any, placement of a WTG at the WWTP will have. Lastly, consideration should be given by the City of Tavares to commence efforts to properly inform the citizens of Tavares and interest groups about the benefits of wind power, and specific project and environmental information that will aid community acceptance of this project.

Appendix A. Wind Power Class Definitions

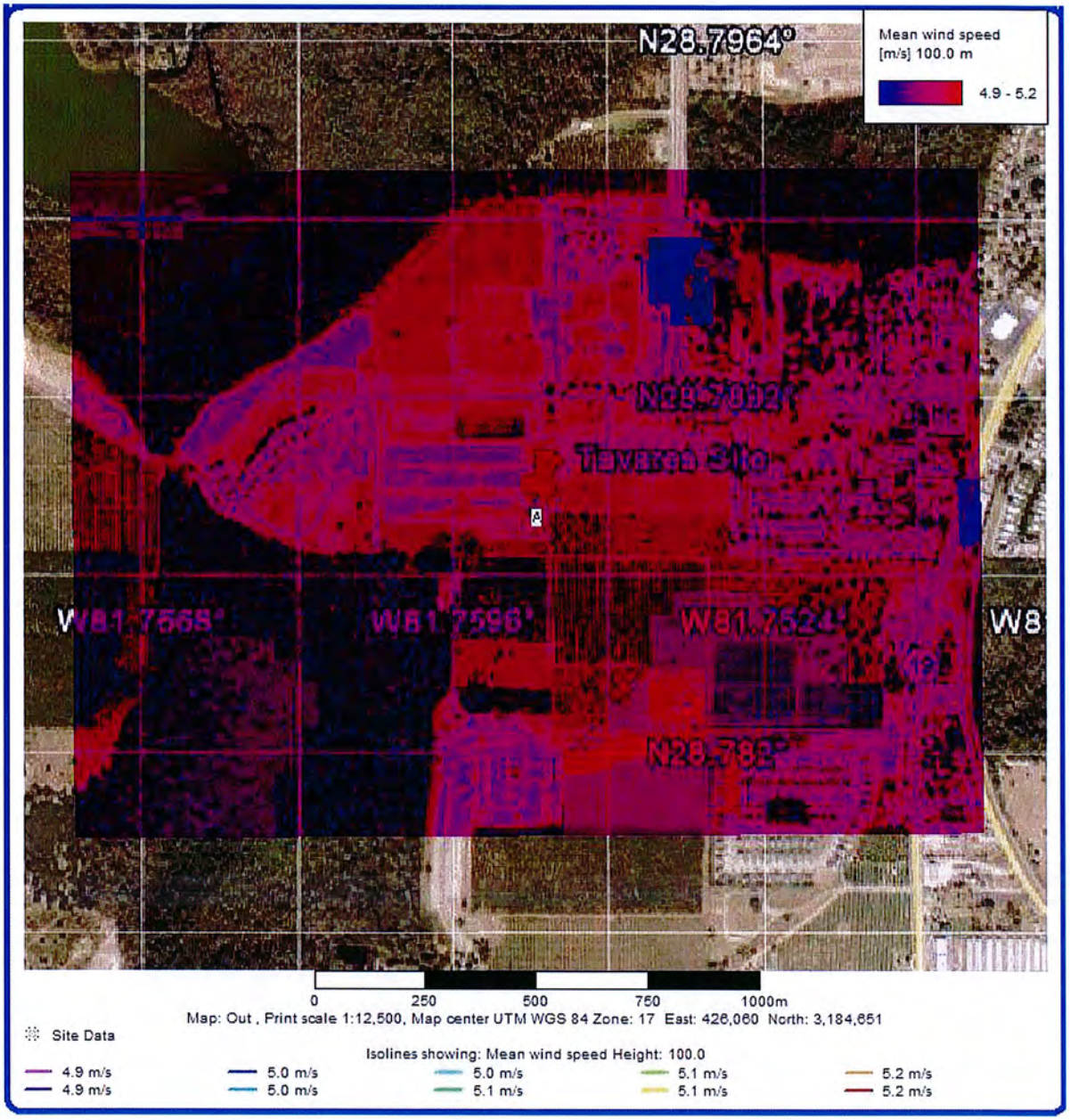
Table 5: National Renewable Energy Laboratory (NREL) Wind Power Class Definitions

Wind Power Class	10 m (33 ft.)		50 m (164 ft.) (a)	
	Wind Power Density (W/m^2)	Speed (b) m/s (mph)	Wind Power Density (W/m^2)	Speed (b) m/s (mph)
1	0	0	0	0
	100	4.4 (9.8)	200	5.6 (12.5)
2				
	150	5.1 (11.5)	300	6.4 (14.3)
3				
	200	5.6 (12.5)	400	7.0 (15.7)
4				
	250	6.0 (13.4)	500	7.5 (16.8)
5				
	300	6.4 (14.3)	600	8.0 (17.9)
6				
	400	7.0 (15.7)	800	8.8 (19.7)
7				
	1000	9.4 (21.1)	2000	11.9 (26.6)

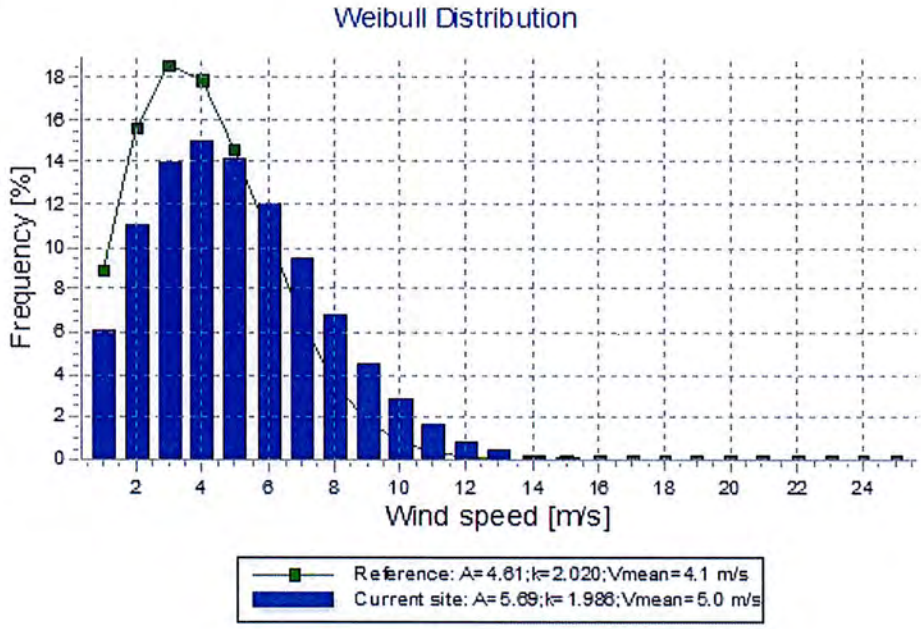
a. Vertical extrapolation of wind speed based on the 1/7 power law.
b. Mean wind speed is based on Rayleigh speed distribution of equivalent mean wind power density. Wind speed is for standard sea-level conditions. To maintain the same power density, speed increases 3%/1000 m (5%/5000 ft.) elevation.

*NOTE: Each wind power class should span two power densities. For example, Wind Power Class = 3 represents the Wind Power Density range between 150 W/m^2 and 200 W/m^2. The offset cells in the first column attempt to illustrate this concept.

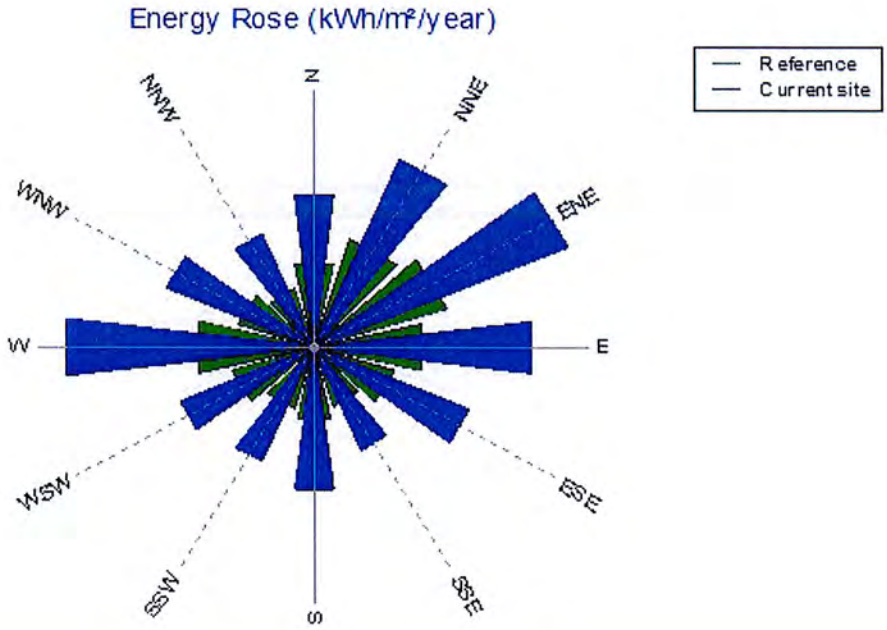
Appendix B. Wind Resource Map for Tavares WWTP Site



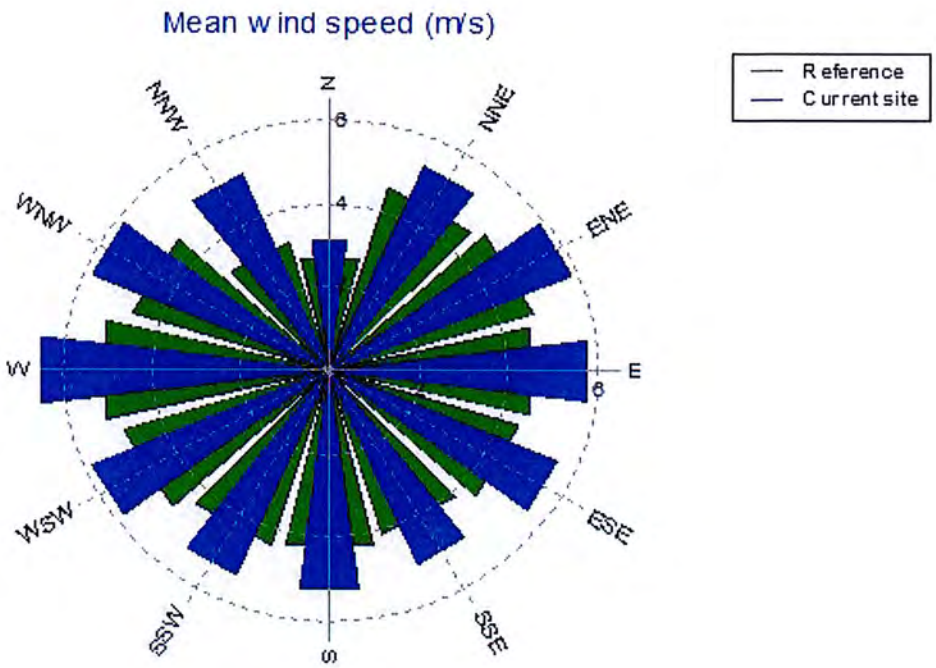
Appendix C. Wind Data Analysis



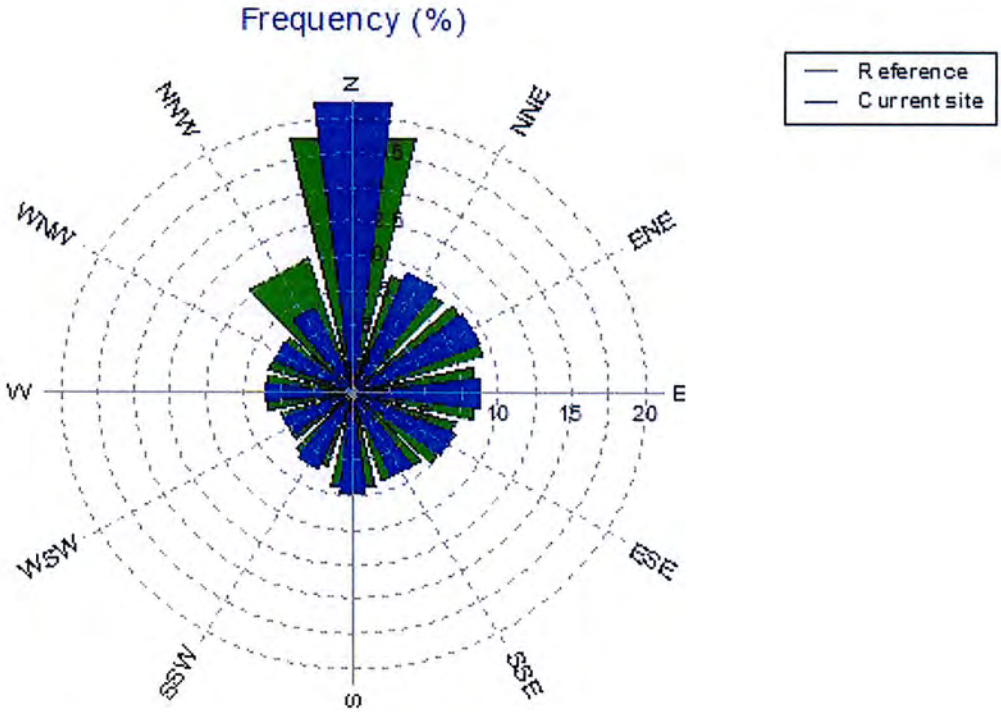
Weibull Distribution at WWTP Site



Energy Rose at WWTP Site



Wind Speed by Direction at WWTP Site



Wind Frequency by Direction at WWTP Site

AGENDA SUMMARY
TAVARES CITY COUNCIL
March 20, 2013

AGENDA TAB NO. 10
SUBJECT TITLE: Marketing vacant City Owned Property on Caroline Street

OBJECTIVE:

To obtain Council's approval to hire a real-estate broker to sell that surplus property located at Caroline Street East (see attached map).

SUMMARY:

On April 20th, 2011, Council considered a report that investigated possible sites for a new Public Works Facility. The Spray Field Property on East Caroline Street was considered and then eliminated as a possible site and designated as surplus property. At the June 1, 2011 Council meeting the Council voted to market the property for sale. Staff has marketed this property by word of mouth through the economic development department and contacted the assisted living facility next door who has no interest in the property at this time. Staff is recommending that the City hire a professional Real-estate company to sign the property for sale and market it for sale.

Attached is a map identifying the five (5) acre property.

OPTIONS:

1. That City Council moves to instruct staff to solicit proposals from real-estate firms to market and sell this property and bring a real-estate brokers contract back to Council for approval.
2. Keep marketing it by word of mouth through the economic development office and place a sign on the property.
3. Hold on to the property and wait for market values to go back up before selling it.

STAFF RECOMMENDATION:

That City Council moves to instruct staff to solicit proposals from real-estate firms to market and sell this property and bring a real-estate brokers contract back to Council for approval.

FISCAL IMPACT:

The sae of the property will pay for the real-estate fees.

LEGAL SUFFICIENCY:

Approved for legal sufficiency.

N
W E
S

CAROLINE STREET SPRAYFIELD PROPERTY

TAVARES
America's Seaplane City

CREATED BY CITY OF TAVARES GIS

MAP CREATED ON 02.28.13

AGENDA SUMMARY
TAVARES CITY COUNCIL
DATE OF MEETING: March 20, 2013

AGENDA TAB NO. 11
SUBJECT TITLE: Dragon Boat Festival Fire Works Fund Raising Request

OBJECTIVE: To authorize the Mayor to conduct his annual fundraising efforts for the annual Dragon Boat Festival Fire Works program and authorize the City to enter into a Fire Works Contract.

SUMMARY: The Rotary Club of Lake County Golden Triangle and Tavares Chamber of Commerce would each like to contribute $500 (total of $1,000) towards the annual Fireworks program that the city has, in the past, coordinated for the Tavares Rotary Club's annual Dragon Boat Festival which is scheduled for Friday and Saturday April 5th and 6th 2013. In addition, the Mayor seeks authorization to solicit additional donations for the remainder ($4,000) of the estimated $5,000 cost to put on a Fire Works display for this event at Wooton Park. The Mayor anticipates a donation from the Taiwanese Consulate or Sister City as well as area businesses and individuals to make up the $4,000.

The following three steps are necessary for a Council member to solicit funds for valid public city programs like, putting on a community fireworks program: 1) Approval from Council to solicit funding for a project 2) An agreement executed between the City and the donor and 3) Payment from the donor in the form of a check made out to the City. In addition, the city will need to enter into a contract with the Fire Works Company that delivers the fireworks program, appropriate the funding and authorize the reimbursement from donations of that appropriated funding.

OPTIONS:

1. Accept the $1,000 pledged donations from the Rotary Club and Chamber; authorize the Mayor to solicit additional funding for the Fireworks program; authorize the City Administrator to enter into a contract for Fireworks in the amount of $5,000 and appropriate the necessary funding and financial reimbursement mechanisms from donations for that appropriated funding.
2. Do not coordinate the Fireworks program for the Dragon Boat Festival.

STAFF RECOMMENDATION: That Council move to accept the $1,000 pledged donations from the Rotary Club and Chamber, authorize the Mayor to solicit additional funding for the Dragon Boat Festival Fireworks program, authorize the City Administrator to enter into a contract for Fireworks in the amount of $5,000 and appropriate the necessary funding and financial reimbursement mechanisms from donations for that appropriated funding.

FISCAL IMPACT: FY 13 budget expenses are increased by $5,000 and revenues are increased by $5,000 from the anticipated donations.

LEGAL SUFFICIENCY: This is legally sufficient.

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TAVARES

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AGENDA SUMMARY
TAVARES CITY COUNCIL
March 20, 2013

AGENDA TAB NO. 12

SUBJECT TITLE: City Administrator Report

OBJECTIVE:

To inform Council on city related matters.

SUMMARY: Will be presented at meeting

UPCOMING MEETINGS: (check with Susie Novack for any last minute changes)

- City Council Regular Meeting – April 3, 2013
- Code Enforcement Special Magistrate – March 26, 2013 – 5:00 p.m.
- Lake County League of Cities – April 12, 2013 – 11:30 a.m.
- Lake Sumter MPO – March 27, 2013 – 4 p.m. – MPO Board Room – 1616 South 14th Street, Leesburg, FL –
- Library Board – April 12, 2013 – 8:30 a.m. Library Conference Room
- Planning & Zoning Board – March 21, 2013 – 3 pm

OTHER EVENTS

2013

March 19-24 – Sunnyland Boat Show

April 5-6 – Dragon Boat Festival

April 13 – March of Dimes Walk

April 20 – Seaplane Fly In

April 26-27 – Planes, Trains, & BBQ

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TAVARES

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AGENDA SUMMARY
TAVARES CITY COUNCIL
March 20, 2013

AGENDA TAB NO.

SUBJECT TITLE: City Councilmembers Report

OBJECTIVE:

To inform Council on city related matters.

SUMMARY:

Council will be offered an opportunity to provide a report at the meeting.

OPTIONS:

N/A

STAFF RECOMMENDATION:

N/A

FISCAL IMPACT:

N/A

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