October 5th
2005
KEY LARGO WASTEWATER TREATMENT DISTRICT
BOARD OF COMMISSIONERS

AGENDA

Wednesday, October 5, 2005 at 5:00 PM
98880 Overseas Hwy
Key Largo, FL 33037

Charles Brooks                  Chairman
Gary Bauman                    Vice Chairman
Andrew Tobin                   Secretary-Treasurer
Glenn Patton                   Commissioner
Claude Bullock                 Commissioner

Charles F. Fishburn            General Manager
Thomas Dillon                  District Counsel
Carol Walker                   Board Clerk

PLEASE TAKE NOTICE AND BE ADVISED, that if any interested person desires to appeal any decision of the KLWTD Board, with respect to any matter considered at this meeting, such interested person will need a record of the proceedings, and for such purpose, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. Persons with disabilities requiring accommodations in order to participate in the meeting should contact the Board Clerk at 305-451-5105 at least 48 hours in advance to request accommodations.

A. CALL TO ORDER

B. PLEDGE OF ALLEGIANCE

C. ROLL CALL

D. APPROVAL OF AGENDA WITH ANY ADDITIONS OR DELETIONS

E. PUBLIC COMMENT

F. COMMISSIONERS ROUND TABLE

G. COMMISSIONER ITEMS

1. Next Project (Commissioner Patton)  

KLWTD Agenda
October 5, 2005
H. BULK ITEMS
   2. Pending Payments List

I. ACTION ITEMS
   3. Sexton Cove/Lake Surprise Collection System Engineering Work Order

   4. Regional Treatment Plant Engineering Work Order

J. DISCUSSION ITEMS

K. STATUS REPORTS
   5. Weiler Engineering Status Report

L. ADJOURNMENT
KEY LARGO WASTEWATER TREATMENT DISTRICT

Agenda Request Form

Meeting Date: Oct. 5, 2005  Agenda Item No. 1

[ ] PUBLIC HEARING  [ ] RESOLUTION
[X] DISCUSSION  [ ] BID/RFP AWARD
[ ] GENERAL APPROVAL OF ITEM  [ ] CONSENT AGENDA

[ ] Other:

SUBJECT: Next Project

RECOMMENDED MOTION/ACTION: Discussion with approval of work order for Weiler Engineering to be set for the Oct. 19, 2005 meeting.

Approved by General Manager
Date: 9-30-05

<table>
<thead>
<tr>
<th>Originating Department: Commissioner Patton</th>
<th>Costs: Approximately $</th>
<th>Attachments:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Funding Source: MSTU Acct.</td>
<td></td>
</tr>
</tbody>
</table>

Department Review:
[X] District Counsel
[X] General Manager
[ ] Finance

Engineering [EC]
[X] Clerk

<table>
<thead>
<tr>
<th>Advertised:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td></td>
</tr>
<tr>
<td>Paper:</td>
<td></td>
</tr>
<tr>
<td>[X] Not Required</td>
<td></td>
</tr>
</tbody>
</table>

All parties that have an interest in this agenda item must be notified of meeting date and time. The following box must be filled out to be on agenda.

Yes I have notified everyone
Or
Not applicable in this case
Please initial one.

Summary Explanation/Background: Now that the north components project is funded and underway, the Board needs to direct Staff to identify and plan the next project and/or projects.

Resulting Board Action:
☐ Approved  ☐ Tabled  ☐ Disapproved  ☐ Recommendation Revised
KLWTD FUTURE PROJECTS

- Complete Collection Systems north of the Wastewater Treatment Plant
- Complete the Vacuum Collection Systems in the vicinity of Vacuum Station at MM 100.5
- Complete the Transmission Line to southern portion of Key Largo Wastewater Treatment District and connect commercial customers
- Complete the Collection Systems to the south of the Treatment Plant

C.F. Fishburn
KLWTD
9.30.05
KEY LARGO WASTEWATER TREATMENT DISTRICT

Agenda Request Form

Meeting Date: Oct. 5, 2005
Agenda Item No. 2

[ ] PUBLIC HEARING
[ ] RESOLUTION
[ ] DISCUSSION
[ ] BID/RFP AWARD
[X] GENERAL APPROVAL OF ITEM
[ ] CONSENT AGENDA

Other:

SUBJECT: Pending Payments list for Oct. 5, 2005

RECOMMENDED MOTION/ACTION: Motion to approve pending payments list for Oct. 5, 2005 contingent upon available funds.

Approved by General Manager
Date: 9-30-05

<table>
<thead>
<tr>
<th>Originating Department: Finance</th>
<th>Costs: $</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Funding Source:</td>
</tr>
<tr>
<td></td>
<td>Acct. #</td>
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</tbody>
</table>
| Department Review:            | Engineering
|                               | Clerk |
| General Manager:              |         |
| Finance                       |         |

Attachments: Will be provided at a latter date

<table>
<thead>
<tr>
<th>Advertised:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Date:</td>
<td></td>
</tr>
<tr>
<td>Paper:</td>
<td></td>
</tr>
<tr>
<td>[X] Not Required</td>
<td></td>
</tr>
</tbody>
</table>

All parties that have an interest in this agenda item must be notified of meeting date and time. The following box must be filled out to be on agenda.

Yes I have notified everyone or
Not applicable in this case

Please initial one.

Summary Explanation/Background: The District Finance Officer will E-Mail the Pending Payments list on Monday Oct. 3, 2005.

Resulting Board Action:
☐ Approved
☐ Tabled
☐ Disapproved
☐ Recommendation Revised
KEY LARGO WASTEWATER TREATMENT DISTRICT

Agenda Request Form

Meeting Date: Oct. 5, 2005

Agenda Item No. 3

[ ] PUBLIC HEARING
[ ] DISCUSSION
[X] GENERAL APPROVAL OF ITEM
[ ] RESOLUTION
[ ] BID/RFP AWARD
[ ] CONSENT AGENDA

Other:

SUBJECT: Sexton Cove/Lake Surprise, etc. Collection System Engineering Work Order proposed by CPH Engineering

RECOMMENDED MOTION/ACTION: Approval

Approved by General Manager
Date: 9-30-05

Originating Department: General Manager Charles Fishburn

Costs: Approximately $579,000
Funding Source: County Grant and SRF Acct.

Department Review:
District Counsel
General Manager
Finance

Engineering [X] Clerk

Attachments:

Advertised:
Date:
Paper:
[X] Not Required

All parties that have an interest in this agenda item must be notified of meeting date and time. The following box must be filled out to be on agenda.

Yes I have notified everyone:

or

Not applicable in this case:

Please initial one.

Summary Explanation/Background: CPH Engineering has proposed a work order to provide engineering services required for the collection system in Sexton Cove/Lake Surprise/Ocean Isle Estates/Pamel Villa/Winston Waterways/Key Largo Campground. Staff has refined and reviewed this work order with CPH Engineers and recommends the scope of this proposal. The entire proposal is in the information package with this meeting book.

Resulting Board Action:
☐ Approved  ☐ Tabled  ☐ Disapproved  ☐ Recommendation Revised
KEY LARGO WASTEWATER TREATMENT DISTRICT
Agenda Request Form

Meeting Date: Oct. 5, 2005
Agenda Item No. 4

[ ] PUBLIC HEARING
[ ] DISCUSSION
[X] GENERAL APPROVAL OF ITEM
[ ] Other:

SUBJECT: Regional Treatment Plant Engineering Service Work Order

RECOMMENDED MOTION/ACTION: Approval

Approved by General Manager
Date: 9-30-05

| Originating Department: General Manager Charles Fishburn |
| Costs: Approximately $742,000 |
| Funding Source: County Grant and SRF Acct. |
| Attachments: |

| Department Review: |
| District Counsel |
| General Manager |
| Finance |

| Engineering EC |
| Clerk |

| Advertised: |
| Date: |
| Paper: |
| [X] Not Required |

All parties that have an interest in this agenda item must be notified of meeting date and time. The following box must be filled out to be on agenda.

Yes I have notified everyone
or
Not applicable in this case

Summary Explanation/Background: Arcadis and MWH have proposed the engineering for the Regional Treatment Plant, and Deep Injection Wells. Staff has refined the proposal with Arcadis/MWH and recommends the proposed scope of work included in the information package.

Resulting Board Action:
☐ Approved  ☐ Tabled  ☐ Disapproved  ☐ Recommendation Revised
KEY LARGO WASTEWATER TREATMENT DISTRICT

Agenda Request Form

Meeting Date: Oct. 5, 2005  Agenda Item No. 5

[ ] PUBLIC HEARING  [ ] RESOLUTION
[x] DISCUSSION  [ ] BID/RFP AWARD
[ ] GENERAL APPROVAL OF ITEM  [ ] CONSENT AGENDA

[ ] Other:

SUBJECT: Projects Status Report

RECOMMENDED MOTION/ACTION: No action required

Approved by General Manager
Date: 9-30-05

Originating Department: Weiler Engineering

Costs: $
Funding Source:
Acct. #

Attachments: Will be provided at a latter date.

Department Review:
[ ] District Counsel
[X] General Manager
[ ] Finance

Engineering EC
[ ] Clerk

Advertised:
Date: ____________
Paper: ____________
[X] Not Required

All parties that have an interest in this agenda item must be notified of meeting date and time. The following box must be filled out to be on agenda.

Yes I have notified everyone ____________
Or
Not applicable in this case ____________:
Please initial one.

Summary Explanation/Background: The District Engineer will review the status of the District's Capital Projects. Commissioners will receive the report by E-mail Monday Oct. 3, 2005.

Resulting Board Action:
☐ Approved  ☐ Tabled  ☐ Disapproved  ☐ Recommendation Revised
Memo

To: K LWTD Board
From: Carol Walker, CMC
CC: Staff
Date: October 5, 2005
Re: TAB 2

The attached is the pending payments list for October 5, 2005 TAB 2
CONSOLIDATED CASH BALANCE FORWARD  $ 629,404.94

Administration & Operations
Cash Balance A&O Account Forward  $ 96,194.70
Plus: MSTU Draw #11  45,334.25
Less: BellSouth - Rollover Lines & Office Line  110.28
       Sprint - Cell Phones  153.27
       PRMG - SRF Loan Appl. & Misc.  749.13
       GSC - Assessment Roll Development  450.00
       FMIT - Quarterly Insurance Premium  12,396.00
       Upchurch, W, W & M - Mediation Fee  2,433.33
       MC Court Reporters - Haskell Settlement Meeting  137.50
       Heidi Herzog - Clerk Vacation Coverage  277.50
       Toshiba - Copier Expense  468.76
       Chris Sante - Office Rent (October)  2,450.00
       Comcast - Cable Service  31.28
       Office Depot - MS Office (2@$500), Printer ($300), Misc.  2,963.88
       Nissan - Truck Lease  219.00
       Tom Dillon - Legal Services  1,281.50
       Premier Global Service - CPH Conference Calls (2)  93.86
       Federal Express - Deliveries  226.57
       VISA - Pipe Insp. Camera ($6,500), Fuel, Misc.  7,819.17
       Paychex - September Fee  100.12
       FKEC - Office Electric (3 mos. "B" / 1 mo. "A")  619.00
Sub-total invoices  32,890.18  12,444.07

Cash Balance A&O Account If All Paid  $ 108,636.77
Memo: MSTU Draw #12 Submitted 9/7/05 $65,288

Key Largo Park
Cash Balance KLP Account Forward  $ (32,878.93)
Less: Weiler Engineering - September  3,022.29
Cash Balance KLP Account If All Paid  $ (35,901.22)
Memo: MC Cesspit Draw #1 Submitted 7/22/05 $ 17,484

Key Largo Trailer Village
Cash Balance KLTV Account Forward  $ (422,622.20)
Less: Tom Dillon - Legal Services  6,786.00
Weiler Engineering - September  5,656.78
Haskell - August  367,282.77
Sub-total invoices  379,727.55
Cash Balance KLTV Account If All Paid  $ (802,349.75)
Memo: FEMA Draw #8 Submitted 7/20/05 $ 933,518
DCA Cesspit Draw #1 Submitted 7/22/05 $ 654,049
FEMA Draw #9 (Final) Submitted 8/02/05 $ 8,373

North Key Largo Development
Cash Balance KLNC Account Forward  $ 988,711.37
Less: Tom Dillon - Legal Services  994.00
Weiler Engineering - September  2,583.15
Cash Balance KLNC Account If All Paid  $ 985,134.22

CONSOLIDATED CASH BALANCE IF ALL PAID  $ 255,522.02

NOTE: A TOTAL OF $1,678,892 REQUESTED FOR REIMBURSEMENT IS OUTSTANDING

Approved for payment:

Charles Brooks, Chairman
Andrew Tobin, Secretary
Memo

To:        KLWTD Board
From:      Carol Walker, CMC
CC:        Staff
Date:      October 5, 2005
Re:        TAB 2 and TAB 3

The attached is additional information for TAB 3 and TAB 4
Commercial Connections
Along US-1 Corridor

Includes hotels, RV parks, Trailer Parks, Marinas, Etc. that have existing WWTPs and collection system.

1383 EDUs (based on flow, where 167 GPD = 1 EDU)

- This represents the minimum number of EDUs. Actual number of EDUs will be larger, depending on definitions adopted by KLWTD. Could be as much as double this number.

Summary

- WWTP site costs - $17.6 M
- Force Main costs - $4.8 M
- Lake Surprise area - $6.8 M
- Largo Gardens area - $4.5 M
- Design & Permitting - $1.8 M

SBR 5BR

<table>
<thead>
<tr>
<th>Cost Item</th>
<th>15%</th>
<th>5%</th>
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</thead>
<tbody>
<tr>
<td>742,000</td>
<td>208,000</td>
<td>5%</td>
</tr>
<tr>
<td>579,000</td>
<td>23,000</td>
<td>5%</td>
</tr>
<tr>
<td>31.3 M</td>
<td>1.7 M</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

TOTAL: $35.5 M

Note: A 15% ($5 M) contingency fund on construction costs should be budgeted.
Memo

To:    KLWTD Board
From:  Carol Walker, CMC
CC:    Staff
Date:  October 5, 2005
Re:    TAB 3

The attached is the maps that are referred to in the Collection System Design Scope Section 1 – General on page 1 of the additional information for TAB 3 in your Info Package.
Memo

To: KLWTD Board
From: Carol Walker, CMC
CC: Staff
Date: October 5, 2005
Re: TAB 5

The attached is the status report from Weiler Engineering for TAB 5.
Key Largo Wastewater Treatment District
Engineering Status Report
Period Ending 09/30/05

Key Largo Park

Trenching continued in the Key Largo Park and vacuum main was placed on Lauderdale Drive. ADB brought in a sub, Pabone Engineering, to excavate and lay pipe.

The new style Airvac pits were received. Bill Mouldin, the Airvac field representative, arrived for his four week service period. Clint Hawn of Airvac also came down to observe the new style pits being installed. One was installed, but several failed the pre-placement pressure test and a number of others failed visual inspection by the Airvac representatives. Installation of the new pits was put on hold while the problem is being investigated. Installation of the old style pits is being carried on.

Key Largo Trailer Village

Cleanup and restoration continued in September. The transition from the HDPE pipe used in the US 1 crossing to the PVC used throughout the rest of the project was accomplished and the run of three 10-inch pipes from US 1 into the vacuum tank at the WWTP site began.

KLTV Treatment Plant

Work at the treatment plant progressed with the piping in of the vacuum pump skid and other components of the vacuum pump station. Coatings were applied to the administration/motor control center building. The electrical and plumbing work progressed throughout the month.

Ted Hortenstein of Brown and Caldwell worked on the wastewater treatment plant Operation and Maintenance Manual in September. He has the Fluidyne and miscellaneous equipment information in hand and was expecting delivery of the Airvac manuals shortly. He is also contacting the Florida Rural Water Association to request a copy of their guidance document for preparation of Operation and Maintenance Manuals.

Prepared for the K LWTD Board by:
Ed Castle, Project Manager
Submittals for coatings and miscellaneous deliverables were received in September. WEC pointed out the Brown and Caldwell that the anchors for the Fluidyne tanks needed to be designed for the combined wind and buoyancy loads rather than each one separately. As a result, the anchors are being beefed up. The new anchors will be galvanized as specified for the miscellaneous metals rather than epoxy coated as proposed.

**Lake Surprise Project**

Design of the north component force main progressed in September. Several conference calls were held with CPH staff, District staff and WEC staff. CPH continued the hydraulic modeling of the force main system. The 30% design of the force main was submitted at the end of September and is currently under review by WEC and District staff.

The CPH proposal for the design of the collection systems for the Lake Surprise basin and the Largo Gardens basin was revised and pricing was negotiated. An acceptable scope and price for the design of the tow collection basins was reached and is recommended for approval. The pricing for the survey was too high, and that pricing is still under negotiation.

Through several conferences with Arcadis, MWH, WEC and District staff, the scope of work for the design and permitting of the wastewater treatment plant achieved an acceptable degree of detail. Both specific technical assumptions and level of effort by the designers was submitted. The position of Arcadis/MWH has been that they can not accurately provide their pricing until further details of the work are designed. After consultations with all parties and with District Counsel, it was decided to change the form of the proposed work authorization to an hourly task with a not-to-exceed total. It was also agreed that after the conceptual design stage was completed, the not-to-exceed pricing would be revisited with the intent of looking for reductions in cost.

**Haskell Pay Applications**

Payment of Haskell Pay Application No. 23 was submitted in September, but a number of adjustments were needed. As a result, the application was not approved by WEC until the end of the month. Pay Application No. 23 is now complete and will be submitted on the Payments Pending list for the October 3rd Board meeting.

**Regulatory Compliance Issues**

The Environmental Resources Permit has been provided to WEC. With the exception of final certifications and approval for use, this should complete the permitting processes.

*Prepared for the KLWTD Board by:*

*Ed Castle, Project Manager*
**Project Team Meetings and Actions**

Ed Castle attended the scheduled Board meetings on September 7th and 21st. He also met with KLWTD staff on those dates prior to the Board meetings. He also attended the construction progress meetings for Key Largo Park on and also attended the weekly District Staff meetings either in person or by telephone. He also attended design review conference calls with CPH and District staff.

Ed Castle and Dave Gile of WEC performed construction inspection throughout the period.
Memo

To:        KLWTD Board
From:      Carol Walker, CMC
CC:        Staff
Date:      October 5, 2005
Re:        TAB 1

The attached additional information for TAB 1.
<table>
<thead>
<tr>
<th>Description</th>
<th>HOT SPOTS</th>
<th>EDU'S</th>
<th>COST (MILLIONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KLTV &amp; KLP Current Projects</td>
<td>4, 27</td>
<td>1000</td>
<td>$13</td>
</tr>
<tr>
<td>North Components include Regional Treatment Plant &amp; Transmission Line</td>
<td>2, 19</td>
<td>2500</td>
<td>$35-38</td>
</tr>
<tr>
<td>Complete Collection Systems north of the Wastewater Treatment Plant</td>
<td>7, 15, 29</td>
<td>3500</td>
<td>$28-35</td>
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<tr>
<td>Complete the Vacuum Collection Systems in the vicinity of Vacuum Station at MM 100.5</td>
<td>17</td>
<td>300</td>
<td>$3-4</td>
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<tr>
<td>Complete the Transmission Line to southern portion of Key Largo Wastewater Treatment District and connect commercial customers</td>
<td></td>
<td>2000</td>
<td>$8-10</td>
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<tr>
<td>Complete the Collection Systems to the south of the Treatment Plant</td>
<td>5, 9, 20, 21, 24</td>
<td>4000</td>
<td>$35-40</td>
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<tr>
<td>TOTALS</td>
<td>2, 4, 7, 9, 12, 15, 17, 19, 20, 21, 24, 27, 29</td>
<td>13,300</td>
<td>$122 - $140</td>
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</table>

Thirteen of 45 Hot Spots in Master Plan

CFF 10/04/05
<table>
<thead>
<tr>
<th>Service Area Phase</th>
<th>Project Description</th>
<th>ADF (mgd)</th>
<th>WWTP Design Capacity (mgd)</th>
<th>EOU</th>
<th>Unknown Systems</th>
<th>WWTP Capacity (mgd)</th>
<th>Total Project Cost Collection, Transmission &amp; Treatment</th>
<th>Annual O &amp; M</th>
<th>Total Annual Cost ($)</th>
<th>Annual ($)</th>
<th>Monthly ($/EUD)</th>
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<tbody>
<tr>
<td>1</td>
<td>Lake Surprise/Sexton Cove, Ocean Isle Estates, and area adjacent to U.S. 1 1</td>
<td>0.125</td>
<td>0.165</td>
<td>0.210</td>
<td>858</td>
<td>385</td>
<td>389</td>
<td>$11,000,000</td>
<td>40,000</td>
<td>$11,000,000</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Key Largo Trailer Village, Large Gardens, Hibiscus Park, and area adjacent to U.S. 1 1</td>
<td>0.121</td>
<td>0.164</td>
<td>0.202</td>
<td>904</td>
<td>385</td>
<td>905</td>
<td>$10,500,000</td>
<td>40,000</td>
<td>$10,500,000</td>
<td></td>
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<tr>
<td>3</td>
<td>Cross Key Waterway Estates, Large Sound Park, Anglers Park Shores, south Creek Village, and area adjacent to U.S. 1 1</td>
<td>0.104</td>
<td>0.145</td>
<td>0.250</td>
<td>776</td>
<td>958</td>
<td>1,194</td>
<td>$9,750,000</td>
<td>40,000</td>
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<tr>
<td>6</td>
<td>Remainder of PAED 1920 - Stillwater Point, Paradise Point Cove, Riviera Village, Key Largo, Mobile Home Sites, Large City, also includes the construction of the first phase of the regional wastewater transmission and treatment facility</td>
<td>0.314</td>
<td>0.366</td>
<td>0.410</td>
<td>1,720</td>
<td>2,359</td>
<td>232</td>
<td>1,460</td>
<td>1.50</td>
<td>1.50</td>
<td>$11,500,000</td>
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<tr>
<td>7</td>
<td>Port Largo, Key Largo Beach, Key Largo, Ocean Shores, Silver Lake Park, Holiday Homes, Buttonwood Shores, Buttonwood Cove, Lee Lagoon, Point Pleasant, Sunset Cove</td>
<td>0.188</td>
<td>0.65</td>
<td>0.98</td>
<td>1,210</td>
<td>5,469</td>
<td>191</td>
<td>1,677</td>
<td>1.50</td>
<td>1.50</td>
<td>$11,100,000</td>
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<td>8</td>
<td>Bahia Mar Estates, Palmilla Villas, Weston Waterworks</td>
<td>0.042</td>
<td>0.62</td>
<td>0.92</td>
<td>314</td>
<td>6,783</td>
<td>63</td>
<td>1,740</td>
<td>1.50</td>
<td>1.50</td>
<td>$3,500,000</td>
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<td>9</td>
<td>Prater’s Cove, Rock Harbor Estates, Marion Park, Rock Harbor Manor, Harbor Shores, Estates</td>
<td>0.153</td>
<td>0.61</td>
<td>0.99</td>
<td>599</td>
<td>5,825</td>
<td>63</td>
<td>2,190</td>
<td>1.50</td>
<td>1.50</td>
<td>$6,450,000</td>
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<tr>
<td>10</td>
<td>Bay Haven, Lime Grove Estates, Sunrise Point, Aitocai Casa Court, Seven Aces, Sunset Gardens, Davis Creek</td>
<td>0.005</td>
<td>0.058</td>
<td>0.16</td>
<td>656</td>
<td>17,178</td>
<td>120</td>
<td>1,989</td>
<td>1.50</td>
<td>1.50</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>5A</td>
<td>De筈alatia Hands Ocean Park, Palma Bula, Sherrill Park, Hammer Pond Park Community WWTP and connect into Regional System 1</td>
<td>0.035</td>
<td>0.171</td>
<td>0.206</td>
<td>661</td>
<td>7,859</td>
<td>912</td>
<td>2,201</td>
<td>1.50</td>
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<tr>
<td>11</td>
<td>Old Tavernier</td>
<td>0.148</td>
<td>0.319</td>
<td>0.522</td>
<td>1,187</td>
<td>9,325</td>
<td>110</td>
<td>3,111</td>
<td>0.73</td>
<td>0.73</td>
<td>$11,100,000</td>
</tr>
<tr>
<td>12</td>
<td>Biscayne Waterway, Key Largo Park</td>
<td>0.800</td>
<td>1.376</td>
<td>1.59</td>
<td>267</td>
<td>9,353</td>
<td>100</td>
<td>2,351</td>
<td>2.26</td>
<td>2.26</td>
<td>$5,600,000</td>
</tr>
<tr>
<td>13</td>
<td>Biscayne Shores, Twin Lakes</td>
<td>0.040</td>
<td>0.436</td>
<td>0.49</td>
<td>63</td>
<td>9,680</td>
<td>54</td>
<td>2,405</td>
<td>2.25</td>
<td>2.25</td>
<td>$2,100,000</td>
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<tr>
<td>14</td>
<td>Existing WWTPs</td>
<td>0.374</td>
<td>1.79</td>
<td>2.06</td>
<td>2,746</td>
<td>12,435</td>
<td>240</td>
<td>2,425</td>
<td>2.25</td>
<td>2.25</td>
<td>$9,200,000</td>
</tr>
</tbody>
</table>

Community wastewater collection and treatment system will serve the Hot Spot area initially, until regional system becomes available to serve the area.

2Flow concentrations maintained at 1998 levels as the scale of implementation over the 20-year planning period is unknown.

Wastewater flows in this regional service area are projected to increase about 9-12% over the 20-year planning period 1998 - 2018.

Thus, the 1.79 mgd ADF would be about 1.96 mgd in 2018, and the 1.99 mgd WWTP flow would be about 2.25 mgd in 2018.
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Wastewater Service Area</th>
<th>Hot Spot Area Name</th>
<th>Area Rank by Region</th>
<th>Rank for Entire Keys</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>PAED 19/20</td>
<td>Tavernier/Key Largo Regional</td>
<td>Lake Surprise/Sexton Cove, Ocean Isle Estates, and adjacent area on U.S. 1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>PAED 18</td>
<td>Tavernier/Key Largo Regional</td>
<td>Key Largo Trailer Village, Largo Gardens, Hibiscus Park, and area adjacent to U.S. 1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>23</td>
<td>PAED 18</td>
<td>Tavernier/Key Largo Regional</td>
<td>Cross Key Waterway Estates &amp; Largo Sound Park/Anglers Park Shores/South Creek Village and area along U.S. 1</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>21</td>
<td>PAED 16</td>
<td>Tavernier/Key Largo Regional</td>
<td>Area A, Wynken, Blyken &amp; Nod</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>20</td>
<td>PAED 15</td>
<td>Tavernier/Key Largo Regional</td>
<td>Harris Ocean Park, Palma Sola, Sherrill Park, Hammer Point Park, and along U.S. 1</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>19</td>
<td>Plantation Key</td>
<td>Islamorada Regional</td>
<td>Area A - Eastern end of Plantation Key including Plantation Key Colony/Kahiki Harbor/Edenaire/Taverneror/Tropical Atlantic Shores</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>24</td>
<td>PAED 19/20</td>
<td>Tavernier/Key Largo Regional</td>
<td>Remainder of PAED 19/20 - Stillwright Point/Paradise Point Cove, Riviera Village, Key Largo Mobile Home Sites, Largo City</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>22</td>
<td>PAED 17</td>
<td>Tavernier/Key Largo Regional</td>
<td>Port Largo, Key Largo Beach, Key Largo Ocean Shores, Silver Lake Park, Holiday Homesites, Buttonwood Shores, Buttonwood Cove, Lazy Lagoon, Point Pleasant Sunset Cove</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>Lower Matecumbe</td>
<td>Lower Matecumbe</td>
<td>Safety Harbor, Toll Gate Shore, Port Antigua, White Marlin Beach, Matecumbe Sandy Beach, Lower Matecumbe Beach</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>23</td>
<td>PAED 18</td>
<td>Tavernier/Key Largo Regional</td>
<td>Bahia Mar Estates/Pamela Villa/Winston Waterways</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>22</td>
<td>PAED 17</td>
<td>Tavernier/Key Largo Regional</td>
<td>Pirate's Cove, Rock Harbor Estates, Marion Park, Rock Harbor Manor, Harbor Shores, El Dorado</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>21</td>
<td>PAED 16</td>
<td>Tavernier/Key Largo Regional</td>
<td>Bay Haven, Lime Grove Estates, Sunrise Point, Abode Casa Court, Seven Acres, Sunset Gardens, Dove Creek Entire Study Area</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>17</td>
<td>Upper Matecumbe</td>
<td>Islamorada Regional</td>
<td>Entire Study Area</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>20</td>
<td>PAED 15</td>
<td>Tavernier/Key Largo Regional</td>
<td>Old Tavernier</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>22</td>
<td>PAED 17</td>
<td>Tavernier/Key Largo Regional</td>
<td>Sunset Waterways, Key Largo Park</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>23</td>
<td>PAED 18</td>
<td>Tavernier/Key Largo Regional</td>
<td>Bermuda Shores, Twin Lakes</td>
<td>16</td>
<td>29</td>
</tr>
<tr>
<td>19</td>
<td>Plantation Key</td>
<td>Islamorada Regional</td>
<td>Venetian Shores</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>18</td>
<td>Windley Key</td>
<td>Islamorada Regional</td>
<td>Entire Study Area</td>
<td>18</td>
<td>32</td>
</tr>
<tr>
<td>19</td>
<td>Plantation Key</td>
<td>Islamorada Regional</td>
<td>Treasure Harbor, Plantation Ridge Coral Shores</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>19</td>
<td>Plantation Key</td>
<td>Islamorada Regional</td>
<td>Indian Waterways, Indian Harbor, Plantation Key, Lysiloma, Key Heights, Vacation Village, Aargood Heights, Pearl City</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>19</td>
<td>Plantation Key</td>
<td>Islamorada Regional</td>
<td>Remainder of Plantation Key</td>
<td>21</td>
<td>38</td>
</tr>
</tbody>
</table>
Potential WWTP Sites
Key Largo
PAED 17
(S.A. 22)

HOT SPOTS
17 20 24

1840 RESIDENTIAL EQU'S
1272 COMM. EQU'S
3112 TOTAL EQU'S.

Legend
- Boundary of Potential Hotspot
- Potential WWTP Site (Large)
- Potential Vacuum Station Site or WWTP Site (Small)
- Parcel

KLP 100,5MM TREATMENT PLANT

PONT LARGO

0 3000 Feet

June 2000
### APPENDIX E-2

#### Combinations of Study Areas Significant in Formulating Master Plan Recommendations

<table>
<thead>
<tr>
<th>Study Area Combinations</th>
<th>Wastewater System Design Flow (mgd)</th>
<th>Monthly Cost per EDU by Combining (REDU/Mo)</th>
<th>Weighted Study Area Monthly Cost per EDU (REDU/Mo)</th>
<th>Cost Savings by Combining</th>
<th>% Savings</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>Stock Island, Boca Chica</td>
<td>0.30</td>
<td>127</td>
<td>85</td>
<td>No +60</td>
<td>Effluent disposal by shallow injection wells for both individual study areas and combination of study areas. If effluent disposal were by deep injection wells for combination of study areas, combination cost would increase by $4,000,000, or 49 percent greater than weighted monthly cost.</td>
</tr>
<tr>
<td>2, 3</td>
<td>Boca Chica, Bay Point</td>
<td>0.41</td>
<td>118</td>
<td>101</td>
<td>No +17</td>
<td></td>
</tr>
<tr>
<td>3, 4</td>
<td>Bay Point, Lower Sugarmound</td>
<td>0.22</td>
<td>133</td>
<td>121</td>
<td>No +10</td>
<td></td>
</tr>
<tr>
<td>1, 2, 5, 6, 7</td>
<td>Stock Island, Boca Chica, Bay Point, Lower Sugarmound, Upper Sugarmound, Cudjoe, Summariland</td>
<td>1.27</td>
<td>147</td>
<td>100</td>
<td>No +47</td>
<td>Effluent disposal by shallow injection wells for individual study areas. For combinations Florida Statute requires effluent disposal by deep injection wells. Deep injection wells increase annual costs by $43,000, or about $3,000/Mo.</td>
</tr>
<tr>
<td>3, 4, 5, 6, 7</td>
<td>Bay Point, Lower Sugarmound, Upper Sugarmound, Cudjoe, Summariland</td>
<td>0.71</td>
<td>119</td>
<td>110</td>
<td>No +8</td>
<td>Effluent disposal by shallow injection wells for both individual study areas and combination of study areas. If effluent disposal were by deep injection wells for combination of study areas, combination cost would increase by $100,000, or 10 percent greater than weighted monthly cost.</td>
</tr>
<tr>
<td>5, 6, 7</td>
<td>Upper Sugarmound, Cudjoe, Summariland</td>
<td>0.49</td>
<td>112</td>
<td>107</td>
<td>No +5</td>
<td></td>
</tr>
<tr>
<td>5, 6</td>
<td>Upper Sugarmound, Cudjoe</td>
<td>0.33</td>
<td>102</td>
<td>102</td>
<td>-0</td>
<td></td>
</tr>
<tr>
<td>6, 7</td>
<td>Cudjoe, Summariland</td>
<td>0.41</td>
<td>105</td>
<td>102</td>
<td>No +3</td>
<td></td>
</tr>
<tr>
<td>9, 10</td>
<td>Ramrod, Little Torch, Big Pine</td>
<td>0.81</td>
<td>112</td>
<td>115</td>
<td>Yes +2</td>
<td>Effluent disposal by shallow injection wells for both individual study areas and combination of study areas. If effluent disposal were by deep injection wells for combination of study areas, combination cost would increase by $110,000, or 10 percent greater than weighted monthly cost.</td>
</tr>
<tr>
<td>9, 10</td>
<td>Ramrod, Little Torch, Big Pine</td>
<td>0.72</td>
<td>137</td>
<td>131</td>
<td>No +4</td>
<td></td>
</tr>
<tr>
<td>16, 17, 18, 19</td>
<td>Lower Matecumbe, Upper Matecumbe, Wadley, Plantation</td>
<td>1.49</td>
<td>80</td>
<td>79</td>
<td>No +1</td>
<td>Wastewater treatment plant within service area. Effluent disposal by shallow injection wells for individual study areas. For combinations Florida Statute requires effluent disposal by deep injection wells. Deep injection wells increase annual costs by $43,000, or about $4,000/Mo.</td>
</tr>
<tr>
<td>17, 18, 19</td>
<td>Upper Matecumbe, Wadley, Plantation</td>
<td>1.29</td>
<td>73</td>
<td>74</td>
<td>Yes -1</td>
<td>Wastewater treatment plant within service area. Effluent disposal by shallow injection wells for individual study areas. For combinations Florida Statute requires effluent disposal by deep injection wells. Deep injection wells increase annual costs by $43,000, or about $4,000/Mo.</td>
</tr>
<tr>
<td>20, 21, 22, 23, 24</td>
<td>Tavernier (PAED 15), Rock Harbor (PAED 14), PAED 17, PAED 18, PAED 19/20</td>
<td>2.06</td>
<td>70</td>
<td>79</td>
<td>Yes -11</td>
<td>Wastewater treatment plant within service area. Effluent disposal by shallow injection wells for individual study areas. For combinations Florida Statute requires effluent disposal by deep injection wells. Deep injection wells increase annual costs by $43,000, or about $3,000/Mo.</td>
</tr>
<tr>
<td>20, 21</td>
<td>Tavernier (PAED 15), Rock Harbor (PAED 14), PAED 17, PAED 18, PAED 19/20</td>
<td>2.06</td>
<td>85</td>
<td>79</td>
<td>No +8</td>
<td>Wastewater transmitted out of Keys to Miami-Code</td>
</tr>
<tr>
<td>20, 21, 22, 23, 24</td>
<td>Tavernier (PAED 15), Rock Harbor (PAED 14), PAED 17, PAED 18, PAED 19/20, Ocean Reef Club</td>
<td>2.38</td>
<td>112</td>
<td>79</td>
<td>No +42</td>
<td>Wastewater transmitted to Ocean Reef Club. Effluent disposal by shallow injection wells for individual study areas. For combinations Florida Statute requires effluent disposal by deep injection wells. Deep injection wells increase annual costs by $43,000, or about $2,000/Mo.</td>
</tr>
<tr>
<td>17, 18, 19</td>
<td>Upper Matecumbe, Wadley, Plantation</td>
<td>3.35</td>
<td>68</td>
<td>77</td>
<td>Yes +12</td>
<td>Wastewater Treatment Plant within service area. Effluent disposal by shallow injection wells for individual study areas. For combinations Florida Statute requires effluent disposal by deep injection wells. Deep injection wells increase annual costs by $468,000, or about $18,000/Mo.</td>
</tr>
</tbody>
</table>

(1) Weighted study area monthly cost per EDU is calculated as the sum of products of the monthly cost per EDU for the study area times the EDUs for the study area, divided by the sum of the EDUs for all study areas being combined.

(2) For purposes of comparing alternatives, costs are considered significantly different if they differ by more than 10 percent.

(3) * denotes savings by combining, + denotes additional cost by combining.
Memo

To: KLWTD Board
From: Carol Walker, CMC
CC: Staff
Date: October 5, 2005
Re: TAB 2

The attached is the pending payments list for October 5, 2005 TAB 2
## Consolidated Cash Balance Forward

### Administration & Operations

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Balance A&amp;O Account Forward</td>
<td>$ 96,194.70</td>
</tr>
<tr>
<td>Plus: MSTD Draw #11</td>
<td>45,334.25</td>
</tr>
<tr>
<td>Less: BellSouth - Rollover Lines &amp; Office Line</td>
<td></td>
</tr>
<tr>
<td>Sprint - Cell Phones</td>
<td>110.28</td>
</tr>
<tr>
<td>PRMG - SRF Loan Appl. &amp; Misc.</td>
<td>153.27</td>
</tr>
<tr>
<td>GGG - Assessment Roll Development</td>
<td>749.13</td>
</tr>
<tr>
<td>FMIT - Quarterly Insurance Premium</td>
<td>450.00</td>
</tr>
<tr>
<td>Upchurch, W. W. &amp; M - Mediation Fee</td>
<td>13,306.00</td>
</tr>
<tr>
<td>MC Court Reporters - Haskell Settlement Meeting</td>
<td>2,433.33</td>
</tr>
<tr>
<td>Heidi Herzog - Clerk Vacation Coverage</td>
<td>137.50</td>
</tr>
<tr>
<td>Toshiba - Copier Expense</td>
<td>277.50</td>
</tr>
<tr>
<td>Chris Sante - Office Rent (October)</td>
<td>468.79</td>
</tr>
<tr>
<td>Comcast - Cable Service</td>
<td>2,450.00</td>
</tr>
<tr>
<td>Office Depot - MS Office ($@500), Printer ($300), Misc.</td>
<td>2,963.88</td>
</tr>
<tr>
<td>Nissan - Truck Lease</td>
<td>219.03</td>
</tr>
<tr>
<td>Tom Dillon - Legal Services</td>
<td>1,281.50</td>
</tr>
<tr>
<td>Premier Global Service - CPH Conference Calls (2)</td>
<td>93.86</td>
</tr>
<tr>
<td>Federal Express - Deliveries</td>
<td>226.57</td>
</tr>
<tr>
<td>VISA - Pipe Ins. Camera ($8,500), Fuel, Misc.</td>
<td>7,819.17</td>
</tr>
<tr>
<td>Paychex - September Fee</td>
<td>100.12</td>
</tr>
<tr>
<td>FKEC - Office Electric (3 mos. &quot;B&quot; / 1 mo. &quot;A&quot;)</td>
<td>619.00</td>
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<tr>
<td><strong>Sub-total invoices</strong></td>
<td>32,850.18</td>
</tr>
<tr>
<td><strong>Cash Balance A&amp;O Account If All Paid</strong></td>
<td>$ 108,838.77</td>
</tr>
<tr>
<td><strong>Memo:</strong> MSTD Draw #12 Submitted 9/11/05 $65,288</td>
<td></td>
</tr>
</tbody>
</table>

### Key Largo Park

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Balance KLP Account Forward</td>
<td>$(32,878.93)</td>
</tr>
<tr>
<td>Less: Weiler Engineering - September</td>
<td>3,022.29</td>
</tr>
<tr>
<td><strong>Cash Balance KLP Account If All Paid</strong></td>
<td>$(35,901.22)</td>
</tr>
<tr>
<td><strong>Memo:</strong> MC Cesspit Draw #1 Submitted 7/22/05 $17,404</td>
<td></td>
</tr>
</tbody>
</table>

### Key Largo Trailer Village

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Balance KLTV Account Forward</td>
<td>$(422,622.20)</td>
</tr>
<tr>
<td>Less: Tom Dillon - Legal Services</td>
<td>6,788.00</td>
</tr>
<tr>
<td>Weiler Engineering - September</td>
<td>5,659.78</td>
</tr>
<tr>
<td>Haskell - August</td>
<td>367,282.77</td>
</tr>
<tr>
<td><strong>Sub-total invoices</strong></td>
<td>379,727.55</td>
</tr>
<tr>
<td><strong>Cash Balance KLTV Account If All Paid</strong></td>
<td>$(802,349.75)</td>
</tr>
<tr>
<td><strong>Memo:</strong> FEMA Draw #8 Submitted 7/20/05 $933,518</td>
<td></td>
</tr>
<tr>
<td>DCA Cesspit Draw #1 Submitted 7/22/05 $854,049</td>
<td></td>
</tr>
<tr>
<td>FEMA Draw #9 (Final) Submitted 8/2/05 $8,373</td>
<td></td>
</tr>
</tbody>
</table>

### North Key Largo Development

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Balance KLNC Account Forward</td>
<td>988,711.37</td>
</tr>
<tr>
<td>Less: Tom Dillon - Legal Services</td>
<td>994.00</td>
</tr>
<tr>
<td>Weiler Engineering - September</td>
<td>2,583.15</td>
</tr>
<tr>
<td><strong>Cash Balance KLNC Account If All Paid</strong></td>
<td>$ 985,343.22</td>
</tr>
</tbody>
</table>

### Consolidated Cash Balance If All Paid

$ 255,522.02

---

**Note:** A total of $1,678,693 requested for reimbursement is outstanding.

Approved for payment:

---

Charles Brooks, Chairman
Andrew Tobin, Secretary
Memo

To: KLWTD Board
From: Carol Walker, CMC
CC: Staff
Date: October 5, 2005
Re: TAB 2 and TAB 3

The attached is additional information for TAB 3 and TAB 4
Commercial Connections
Along US-1 Corridor

Includes hotels, RV parks, Trailer Parks, Marinas, etc. that have existing WWTPs and collection system.

1383 EDUs (based on flow, where 167 GPD = 1 EDU)

- This represents the minimum number of EDUs. Actual number of EDUs will be larger, depending on definitions adopted by KLWTD. Could be as much as double this number.

Summary

- WWTP site costs - $17.6 M
- Force Main costs - $4.8 M
- Lake Surprise area - $6.8 M
- Largo Gardens area - $4.5 M
- Design & Permitting - $1.8 M

TOTAL: $35.5 M

Note: A 15% ($5 M) contingency fund on construction costs should be budgeted.
Memo

To:        KLWTD Board
From:      Carol Walker, CMC
CC:        Staff
Date:      October 5, 2005
Re:        TAB 3

The attached is the maps that are referred to in the Collection System Design Scope Section 1 – General on page 1 of the additional information for TAB 3 in your Info Package.
Memo

To: KLWTD Board
From: Carol Walker, CMC
CC: Staff
Date: October 5, 2005
Re: TAB 4

Please see attached additional information for TAB 4.
the services provided; if the services consist of a meeting or phone call, the names of the other participants; the time spent, rounded up to the nearest 0.1 hour. The District shall review and pay all invoices in accordance with applicable provisions of the Florida Prompt Payment Act (Section 218.70, et seq. Fla. Stat.).

5. Arcadis certifies that wage rates and other factual unit costs supporting the rates in Proposal Schedule B – Attachment C are accurate, complete, and current as of the date of the Proposal. The original contract price and any additions thereto will be adjusted to exclude any significant sums by which the District determines the contract price was increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs. All such contract adjustments must be made within 1 year following the end of the project.

IN WITNESS WHEREOF, the parties have executed this Work Authorization No. 1 on the dates opposite their names.

Arcadis G&M, Inc.

By: ___________________________ Date: ___________________________

Name: ___________________________

Its: ___________________________

Key Largo Wastewater Treatment District

By: ___________________________ Date: ___________________________

Name: Charles Brooks
Its: Chairman

By: ___________________________

Name: Andrew Tobin
Its: Secretary

Attest: ___________________________

District Counsel Endorsement

By: ___________________________ By: ___________________________

Name: Carol Walker Name: Thomas M. Dillon
Its: District Clerk Its: District Counsel
the services provided; if the services consist of a meeting or phone call, the names of the
other participants; the time spent, rounded up to the nearest 0.1 hour. The District shall
review and pay all invoices in accordance with applicable provisions of the Florida Prompt
Payment Act (Section 218.70, et seq. Fla. Stat.).

5. ARCADIS certifies that wage rates and other factual unit costs supporting the rates in
Proposal Schedule B – Attachment C are accurate, complete, and current as of the date of the
Proposal. The original contract price and any additions thereto will be adjusted to exclude
any significant sums by which the District determines the contract price was increased due to
inaccurate, incomplete, or noncurrent wage rates and other factual unit costs. All such
contract adjustments must be made within 1 year following the end of the project.

IN WITNESS WHEREOF, the parties have executed this Work Authorization No. 1 on the dates
opposite their names.

ARCADIS G&M, Inc.

By: ___________________________  Date: ___________________________

Name: William H. Lynch, PE
Its:  Vice President

Key Largo Wastewater Treatment District

By: ___________________________  Date: ___________________________

Name: Charles Brooks
Its:  Chairman

By: ___________________________

Name: Andrew Tobin
Its:  Secretary

Attest

District Counsel Endorsement

By: ___________________________

Name: Carol Walker
Its:  District Clerk

By: ___________________________

Name: Thomas M. Dillon
Its:  District Counsel
WORK AUTHORIZATION NUMBER 1
Under
Key Largo Wastewater Treatment District Consulting Agreement
With
ARCADIS G&M, Inc.

THIS WORK AUTHORIZATION NUMBER 1 is issued under and pursuant to that certain consulting agreement by and between the Key Largo Wastewater Treatment District ("District") and ARCADIS G&M, Inc. ("ARCADIS"), dated December 9, 2003.

WHEREAS, the District and ARCADIS entered into a master consulting agreement dated December 9, 2003 ("Consulting Agreement"), and

WHEREAS, in accordance with the Consultants’ Competitive Negotiation Act, Section 287.055, Fla. Stat. ("CCNA"), the District in 2005 issued requests for Statements of Qualifications of interested consultants with respect to the design of a new wastewater treatment plant and associated facilities ("the Project"), and

WHEREAS, after consideration of the statements of qualifications received from interested consultants, the District selected ARCADIS as the highest ranked firm for the Project, and

WHEREAS, the District and ARCADIS have negotiated a contract at compensation that the District believes to be fair, competitive, and reasonable after analysis of the cost of the professional services required as well as their scope and complexity;

NOW THEREFORE, in consideration of the premises and in further consideration of the premises below, the District does hereby authorize ARCADIS to proceed with the work described in the attached proposal, dated September 30, 2005 ("Proposal"), subject to the following terms and conditions:

1. The work shall be conducted under and in accordance with the consulting agreement dated December 9, 2003, as the same has been amended, except as expressly provided herein.

2. The basis of compensation for the work shall be the unit rates provided in the Proposal Schedule B – Attachment C, subject to a not-to-exceed amount of $742,400.00 for the Project. The parties acknowledge and agree that the amounts of time shown for various tasks and subtasks in Proposal Schedule B – Attachment C, are estimates, only, and that actual time spent on the various tasks and subtasks will likely vary from the amounts shown. However, in no event will that total compensation to ARCADIS exceed $742,400 without the District’s prior written authorization.

3. To the extent that any provision of the Consulting Agreement is inconsistent with this Work Authorization, such provision shall not apply to this Project. Without limiting the generality of the foregoing, to the extent that Schedule B to the Consulting Agreement provides or implies that any work performed by ARCADIS shall be compensated on a lump sum basis, said Schedule B shall not apply to this Project.

4. ARCADIS shall invoice the District on a monthly basis for work performed during the preceding month. All invoices will be supported by narrative time sheets listing, with respect to each block of time: the name of the person providing the services; a brief description of
WORK AUTHORIZATION NUMBER 1

Under
Key Largo Wastewater Treatment District Consulting Agreement

With
Arcadis G&M, Inc.

THIS WORK AUTHORIZATION NUMBER 1 is issued under and pursuant to that certain consulting agreement by and between the Key Largo Wastewater Treatment District ("District") and Arcadis G&M, Inc. ("Arcadis"), dated December 9, 2003.

WHEREAS, the District and Arcadis entered into a master consulting agreement dated December 9, 2003 ("Consulting Agreement"), and

WHEREAS, in accordance with the Consultants' Competitive Negotiation Act, Section 287.055, Fla. Stat. ("CCNA"), the District in 2005 issued requests for Statements of Qualifications of interested consultants with respect to the design of a new wastewater treatment plant and associated facilities ("the Project"), and

WHEREAS, after consideration of the statements of qualifications received from interested consultants, the District selected Arcadis as the highest ranked firm for the Project, and

WHEREAS, the District and Arcadis have negotiated a contract at compensation that the District believes to be fair, competitive, and reasonable after analysis of the cost of the professional services required as well as their scope and complexity;

NOW THEREFORE, in consideration of the premises and in further consideration of the promises below, the District does hereby authorize Arcadis to proceed with the work described in the attached proposal, dated September 30, 2005 ("Proposal"), subject to the following terms and conditions:

1. The work shall be conducted under and in accordance with the consulting agreement dated December 9, 2003, as the same has been amended, except as expressly provided herein.

2. The basis of compensation for the work shall be the unit rates provided in the Proposal Schedule B – Attachment C, subject to a not-to-exceed amount of $742,400.00 for the Project. The parties acknowledge and agree that the amounts of time shown for various tasks and subtasks in Proposal Schedule B – Attachment C, are estimates, only, and that actual time spent on the various tasks and subtasks will likely vary from the amounts shown. However, in no event will that total compensation to Arcadis exceed $742,200 without the District’s prior written authorization.

3. To the extent that any provision of the Consulting Agreement is inconsistent with this Work Authorization, such provision shall not apply to this Project. Without limiting the generality of the foregoing, to the extent that Schedule B to the Consulting Agreement provides or implies that any work performed by Arcadis shall be compensated on a lump sum basis, said Schedule B shall not apply to this Project.

4. Arcadis shall invoice the District on a monthly basis for work performed during the preceding month. All invoices will be supported by narrative time sheets listing, with respect to each block of time: the name of the person providing the services; a brief description of
Memo

To:       KLWTD Board
From:     Carol Walker, CMC
CC:       Staff
Date:     October 5, 2005
Re:       TAB 5

The attached is the status report from Weiler Engineering for TAB 5.
Key Largo Wastewater Treatment District
Engineering Status Report
Period Ending 09/30/05

Key Largo Park

Trenching continued in the Key Largo Park and vacuum main was placed on Lauderdale Drive. ADB brought in a sub, Pabone Engineering, to excavate and lay pipe.

The new style Airvac pits were received. Bill Mouldin, the Airvac field representative, arrived for his four week service period. Clint Hawn of Airvac also came down to observe the new style pits being installed. One was installed, but several failed the pre-placement pressure test and a number of others failed visual inspection by the Airvac representatives. Installation of the new pits was put on hold while the problem is being investigated. Installation of the old style pits is being carried on.

Key Largo Trailer Village

Cleanup and restoration continued in September. The transition from the HDPE pipe used in the US 1 crossing to the PVC used throughout the rest of the project was accomplished and the run of three 10-inch pipes from US 1 into the vacuum tank at the WWTP site began.

KLTV Treatment Plant

Work at the treatment plant progressed with the piping in of the vacuum pump skid and other components of the vacuum pump station. Coatings were applied to the administration/motor control center building. The electrical and plumbing work progressed throughout the month.

Ted Hortenstine of Brown and Caldwell worked on the wastewater treatment plant Operation and Maintenance Manual in September. He has the Fluidyne and miscellaneous equipment information in hand and was expecting delivery of the Airvac manuals shortly. He is also contacting the Florida Rural Water Association to request a copy of their guidance document for preparation of Operation and Maintenance Manuals.

Prepared for the KLWTD Board by: Ed Castle, Project Manager
Submittals for coatings and miscellaneous deliverables were received in September. WEC pointed out the Brown and Caldwell that the anchors for the Fluidyne tanks needed to be designed for the combined wind and buoyancy loads rather than each one separately. As a result, the anchors are being beefed up. The new anchors will be galvanized as specified for the miscellaneous metals rather than epoxy coated as proposed.

**Lake Surprise Project**

Design of the north component force main progressed in September. Several conference calls were held with CPH staff, District staff and WEC staff. CPH continued the hydraulic modeling of the force main system. The 30% design of the force main was submitted at the end of September and is currently under review by WEC and District staff.

The CPH proposal for the design of the collection systems for the Lake Surprise basin and the Largo Gardens basin was revised and pricing was negotiated. An acceptable scope and price for the design of the tow collection basins was reached and is recommended for approval. The pricing for the survey was too high, and that pricing is still under negotiation.

Through several conferences with Arcadis, MWH, WEC and District staff, the scope of work for the design and permitting of the wastewater treatment plant achieved an acceptable degree of detail. Both specific technical assumptions and level of effort by the designers was submitted. The position of Arcadis/MWH has been that they can not accurately provide their pricing until further details of the work are designed. After consultations with all parties and with District Counsel, it was decided to change the form of the proposed work authorization to an hourly task with a not-to-exceed total. It was also agreed that after the conceptual design stage was completed, the not-to-exceed pricing would be revisited with the intent of looking for reductions in cost.

**Haskell Pay Applications**

Payment of Haskell Pay Application No. 23 was submitted in September, but a number of adjustments were needed. As a result, the application was not approved by WEC until the end of the month. Pay Application No. 23 is now complete and will be submitted on the Payments Pending list for the October 3rd Board meeting.

**Regulatory Compliance Issues**

The Environmental Resources Permit has been provided to WEC. With the exception of final certifications and approval for use, this should complete the permitting processes.

*Prepared for the KLWTD Board by:*
*Ed Castle, Project Manager*
Project Team Meetings and Actions

Ed Castle attended the scheduled Board meetings on September 7th and 21st. He also met with KLWTD staff on those dates prior to the Board meetings. He also attended the construction progress meetings for Key Largo Park on and also attended the weekly District Staff meetings either in person or by telephone. He also attended design review conference calls with CPH and District staff.

Ed Castle and Dave Gile of WEC performed construction inspection throughout the period.

Prepared for the KLWTD Board by:
Ed Castle, Project Manager