

## **Committee-of-the-Whole Agenda**

**6:30 p.m.**

**Tuesday, March 18, 2014**

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### **Mayor's Board Appointment**

Mayor's appointment of David Parker, Jr. to the Moline Housing Authority Board to fill the unexpired term of Jennifer Ainsworth to expire July 31, 2016.

### **Questions on the Agenda**

#### **Agenda Items**

- 1. A Licensing Agreement with Windstream KDL.** (Chris Mathias, Planning & Development)
- 2. Amendment to Chapter 35 - noise standards.** (Shawn Christ, Land Development Manager)
- 3. Budget Resolution for FY 2014.** (Kathy Carr, Finance Director)
- 4. Other**

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# Explanation

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## 1. Request from Windstream KDL, Inc. for a Licensing Agreement to Install Fiber-Optic Cable on Public Right-of-Way. (Chris Mathias, Planning & Development)

**Explanation:** Windstream KDL, Inc. wishes to install fiber-optic cable on public right-of-way along 38<sup>th</sup> Avenue, Moline. This cable is being relocated as part of the John Deere Road overpass construction project. The entire installation will be bored underground. The cable run will start in front of 3431 38<sup>th</sup> Avenue and run to the east a distance of 2,593 feet before heading south for 80 feet and crossing under 38<sup>th</sup> Avenue. The line will then run east 100 feet to the Deere Employees Credit Union property located at 3950 38<sup>th</sup> Avenue. Please see the attached plans for details. The applicant will also need a permit from the Illinois Department of Transportation for this project.

**Staff Recommendation:** Approval  
**Fiscal Impact:** \$560 application fee and \$30 annual fee to the City  
**Public Notice/Recording:** N/A  
**Goals Impacted:** Improved City Infrastructure and Facilities

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## 2. Amendment to Chapter 35, “Zoning and Land Development,” of the Moline Code of Ordinances – noise standards. (Shawn Christ, Land Development Manager)

**Explanation:** Staff and Plan Commission have determined the City’s noise ordinance is outdated. It is based on 1950s equipment, obsolete national standards, and cannot be administered using modern sound instruments. The attached technical review from Jon Mooney, an acoustical engineer with KJWW Engineering Consultants, recommends a Code update to reference current standards.

The Plan Commission researched and discussed this issue at its February 12 and February 26 meetings. The Commission recommends the current ordinance be repealed and replaced with a reference to the State of Illinois’ noise standards and specific local exemptions.

**Staff Recommendation:** Approval  
**Fiscal Impact:** N/A  
**Public Notice/Recording:** Public hearing notice published January 25.  
**Goals Impacted:** A Great Place to Live; Strong Local Economy

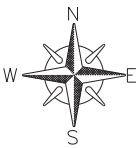
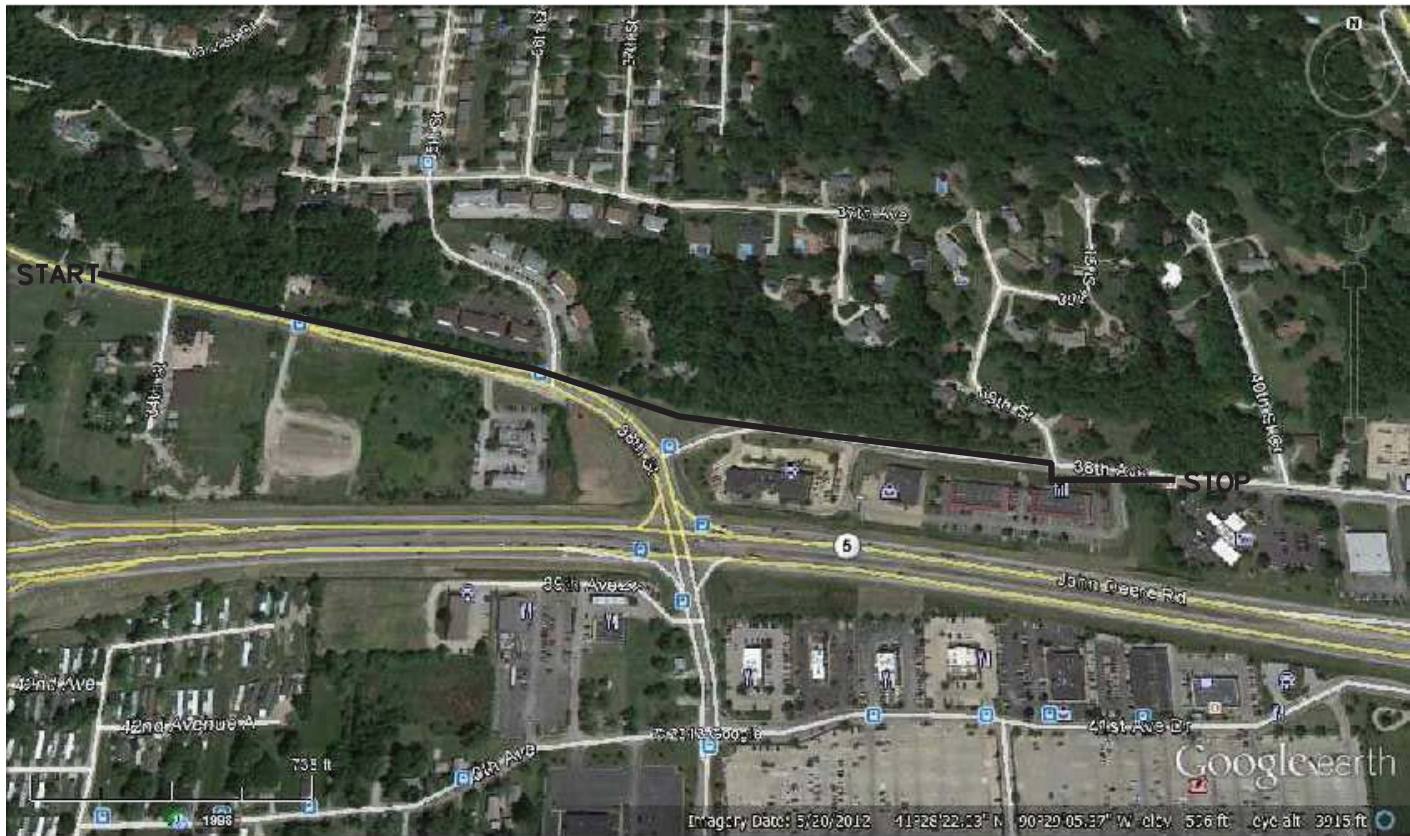
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## 3. A Resolution amending Budget Resolution #1187-2013 by authorizing changes to various line items in the budget for FY 2014. (Kathy Carr, Finance Director)

**Explanation:** Budget amendments are compiled periodically throughout the fiscal year and presented to City Council for approval. These amendments are proposed to reflect recent changes to the current budget that avoid any adverse affect to the City’s legal budgetary compliance.

**Staff Recommendation:** Approval  
**Fiscal Impact:** Sound Financial Management  
**Public Notice/Recording:** N/A  
**Goal Impacted:** Financially Strong City

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718642396  
 38TH AVE RELOCATION  
 38TH AVE & 34TH ST  
 MOLINE, ILLINOIS  
 61265

WINDSTREAM ILLINOIS  
 3765 LEWINGTON DR.  
 HOFFMAN, ILLINOIS  
 60152

THIS PRINT AND DESIGN ARE THE SOLE PROPERTY OF WINDSTREAM ILLINOIS. NO REPRODUCTION OR TRANSMISSION IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, IS PERMITTED WITHOUT THE WRITTEN PERMISSION OF WINDSTREAM ILLINOIS. A SPREADSHEET REQUEST.

REV	DATE	DESCRIPTION	ENG	BRN	IS

**CONSTRUCTION NOTES**

IDOT  
 DISTRICT 2  
 819 DEPOT AVENUE  
 DIXON, ILLINOIS  
 61021-3546  
 815-284-2271

MID AMERICAN ENERGY  
 1-800-799-4443

ROCK ISLAND COUNTY  
 EAST MOLINE TWP

DRAWINGS NOT TO SCALE

FOLLOW ALL OSHA SAFETY PRECAUTIONS

PLACE CABLE @ MINIMUM DEPTH 48"

**GENERAL LOCATION PLAN**

JOB: 718642396  
 PROJECT: DOT RELOCATION 38TH AVE  
 LOCATION: MOLINE, ILLINOIS  
 61265

**PROJECT INFORMATION:**

TOTAL AERIAL SURVEYED FOOTAGE: 297'

TOTAL UG SURVEYED FOOTAGE: 3143'

TOTAL SURVEYED MILES: 0.1146

**CONTACT NAMES AND NUMBERS:**

PROJECT MANAGER:  
 ANDRES BRAVO 847-345-4024

WINDSTREAM ILLINOIS

DRAFTER:  
 ESTWAN JACKSON, (CELL) 317-640-0320

**DRAWING LIST:**

SHEET	DESCRIPTION	SHEET	DESCRIPTION	SHEET	DESCRIPTION
C01	COVER SHEET				
C02	GENERAL LOCATION PLAN				
C03	BILL OF MATERIALS				
C04	LEGEND AND GENERAL NOTES				
1 - 5	CONSTRUCTION DRAWINGS				

**DRAWING STATUS**

DATE	DESCRIPTION	DRAFTER	SET
	FOR CONSTRUCTION	EJ	1

DESIGNED BY: E. JACKSON  
 DRAWN BY: E. JACKSON  
 SCALE: NTS  
 DATE DRAWN: 1/23/2014  
 FILE NAME: CONSTRUCTION DRAWINGS  
 PROJECT NUMBER: 718642396  
 SHEET: C2 TOTAL SHT: C4

December 16, 2013

Mr. Shawn M. Christ, AICP, CFM  
Land Development Manager, Zoning Administrator  
City of Moline Planning & Development  
619 16th Street  
Moline, Illinois 61265

Subject: Technical Review of Moline's Noise Code  
KJWW #13.0860.00

Dear Shawn,

I have completed a technical review of Moline's Noise Code. These are my findings and recommendations.

Following is Section 35-5409 of the City of Moline's zoning code:

***SEC. 35-5409. NOISE.***

*(a) The requirements of this section shall apply in all zoning districts.*

*(b) The sound pressure level, to be measured as described in subsection (d), below, shall not exceed the following decibel levels in the designated octave bands within the designated zoning districts:*

<i>Sound Level, In Decibels</i>	<i>Agriculture, Business, and Industrial Districts</i>	<i>Office Conservation and Residential Districts</i>
<i>Octave Band, Cycles Per Second</i>		
<i>0 to 75</i>	<i>73</i>	<i>58</i>
<i>76 to 150</i>	<i>69</i>	<i>54</i>
<i>151 to 300</i>	<i>65</i>	<i>50</i>
<i>301 to 600</i>	<i>61</i>	<i>46</i>
<i>601 to 1,200</i>	<i>55</i>	<i>40</i>
<i>1,201 to 2,400</i>	<i>48</i>	<i>33</i>
<i>2,400 to 4,800</i>	<i>41</i>	<i>26</i>
<i>Over 4,800</i>	<i>35</i>	<i>20</i>

*(c) Objectionable sounds of an intermittent nature which are not easily measured shall be controlled so as not to become a nuisance to adjacent uses.*

*(d) The sound levels shall be measured with a sound level meter and associated octave band filter as prescribed by the American Standards Association.*

## Technical Interpretation of the Code

This code appears to be from the 1950's or early 1960's. It references the American Standards Association which became the American National Standards Institute (ANSI) in 1969. The quality of instrument is not specified.

**KJWW recommends updating the code to reference the latest version of ANSI Standard S1.4 Specification for Sound Level Meters and specify a Type 1 or Type 2 grade instrument.**

The octave band frequencies listed in the code were used until about 1960 ( Crocker and Price, p143) and were officially replaced by a 1000 Hz based octave band filter system with the adoption of Standard S1.11 in 1966. The 0 to 75 cycle per second (Hertz, Hz) octave band would have been measured with a 20 to 75 Hz low pass filter and there would have been no capability for measurements below 20 Hz. The Over 4800 cycle per second octave band would have been measured with a 4800 to 10,000 Hz high pass filter and there would have been no capability allowing measurements above 10,000 Hz.

**KJWW recommends updating the noise code to the newer standard octave bands.**

Paragraph (b) calls for measurement of "*sound pressure level...in the designated octave bands*" which is interpreted to mean the un-weighted octave band sound pressure level. The use of the term "sound pressure level" instead of "sound level" is further indication that the measurements are to be un-weighted (i.e., "linear" or "LIN" selected instead of "A," "B," or "C" filtered).

**KJWW recommends updating the code to call for un-weighted octave band sound pressure level measurements.**

Paragraph (b) also uses the phrase "*shall not exceed.*" Sound meters in the 1950's did not have the capability to register maximum levels. The normal meter procedure was to watch the needle of the indicator dial for a few moments and to visually estimate the average position of the needle during the test. This type of measurement is best estimated by an L50 (i.e. level exceeded 50% of the time) setting on a modern meter.

**KJWW recommends updating the code to call for an L50 measurement.**

No integration time is noted in the code; therefore, the standard 125 ms or "fast" integration time would have been assumed (Beranek, p802).

**KJWW recommends updating the code to specify a 125 ms or fast integration time.**

There is no measurement position specifically mentioned in the code; therefore it would have been assumed the measurement was to be taken at the property line of the noise source.

**KJWW recommends updating the noise code to specify measurements to be taken at the property line of the noise source.**

Therefore, it appears this code was intended to be enforced using measurements from a circa 1955, eight band, sound pressure level meter, with the "linear" filter and "fast" integration time selected. A typical instrument of that decade which could be used to enforce this noise code is the General Radio (GenRad or IET Labs), Type 1550-A, Octave Band Noise Analyzer (General Radio Company, 1951). There are no instruments built today which can be used to directly measure and enforce the octave band sound pressure levels within this code.

**KJWW recommends updating the noise code with the conversion of the octave band level values from the old octave band system to the newer octave band system.**

Figure 1. View of the Type 1550-A Octave-Band Noise Analyzer with cover removed to show panel.



### **Conversion of the Noise Code for use with Modern Test Equipment**

Modern octave band sound pressure level meters provide measurements using the new octave system whose bands are shifted higher in frequency from those in the old system. Because of this frequency shift, converting sound levels from the old system to the new system is dependent on the slope of noise versus frequency being measured. Allowing for noise having slopes of +/- 6 dB per octave, Moline's noise code translates to the following table. Noise sources exceeding these translated octave band sound pressure limits would have exceeded the old octave band limits.

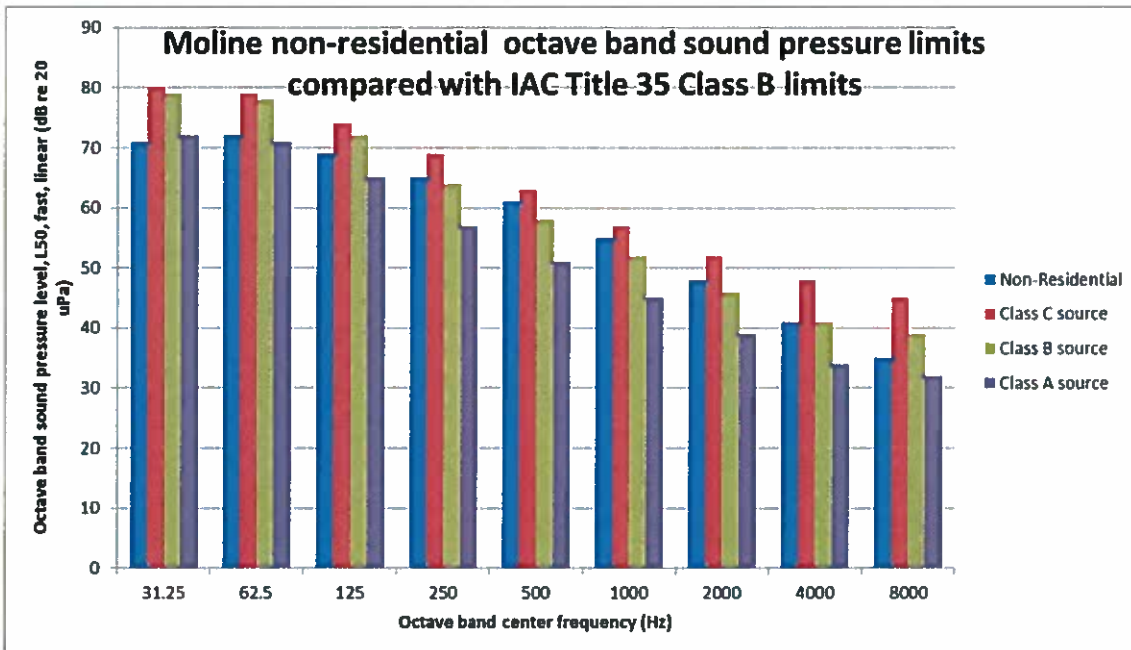
**KJWW recommends updating the noise code with the following table:**

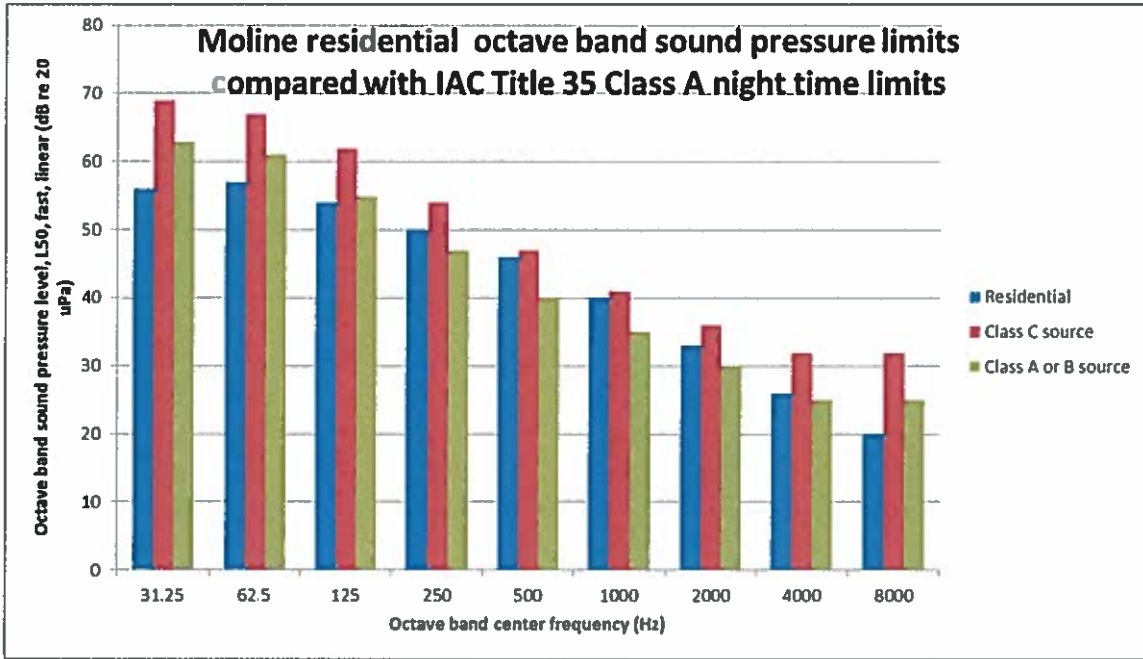
**Octave Band Sound Pressure Level, (dB re 20 uPa, L50, linear, fast)**

<b>Octave Band Center Frequency (Hz)</b>	<b>Agriculture, Business, and Industrial Districts</b>	<b>Office Conservation and Residential Districts</b>
<b>31.25</b>	<b>71</b>	<b>56</b>
<b>62.5</b>	<b>73</b>	<b>58</b>
<b>125</b>	<b>69</b>	<b>54</b>
<b>250</b>	<b>67</b>	<b>52</b>
<b>500</b>	<b>61</b>	<b>46</b>
<b>1000</b>	<b>55</b>	<b>40</b>
<b>2000</b>	<b>48</b>	<b>33</b>
<b>4000</b>	<b>41</b>	<b>26</b>
<b>8000</b>	<b>35</b>	<b>20</b>

**Comparison of Converted Octave Band Sound Pressure Levels with Illinois Administrative Code**

The following two figures compare Moline’s converted octave band sound pressure level limits with IAC Title 35. Moline’s code tends to follow state Class A levels toward the low and high frequency bands and state Class C levels near the center bands.





Please call or email with questions or to discuss this interpretation and recommendations. I will be glad to attend a Planning Commission meeting to discuss this further.

Sincerely,

Jon W. Mooney, PE  
Senior Engineer  
mooneyjw@kjww.com

JWM/jlm

[http://portal/Projects/13.0860.00/Correspondence/ltr.20131216.jonmoo.tech review of noise code with recommendations.docx](http://portal/Projects/13.0860.00/Correspondence/ltr.20131216.jonmoo.tech%20review%20of%20noise%20code%20with%20recommendations.docx)

**References**

Beranek, *Acoustical Measurements*, American Institute of Physics, NY, 1988

Crocker and Price, *Noise and Noise Control Engineering*, CRC Press, Cleveland, 1975

General Radio Company, *The General Radio Experimenter*, Volume XXVI No. 4, September, 1951

Illinois Administrative Code, TITLE 35: ENVIRONMENTAL PROTECTION, SUBTITLE H: NOISE, CHAPTER I: POLLUTION CONTROL BOARD, PART 901, SOUND EMISSION STANDARDS AND LIMITATIONS FOR PROPERTY LINE-NOISE-SOURCES





# MEMORANDUM

To: Lewis Steinbrecher, City Administrator

From: Kathleen Carr, Finance Director

Subj: 2014 Recommended Budget Amendments

Date: March 10, 2014

Budget amendments are compiled periodically throughout the fiscal year and presented to City Council for approval.

<u>Account Number</u>	<u>Current Budget</u>	<u>Budget Adjustment</u>	<u>Revised Budget</u>
1) 120-1541-452.04-25 Contractual Repairs	\$8,350	\$10,710	\$ 19,060
120-1525-452.08-50 Park Contracts	\$925,000	\$226,775	\$1,151,775
120-0000-300.00-00 Reserves	\$194,745	\$237,485	\$ 432,230

Explanation: Carry over funds from 2013 budget to 2014 budget for Park and Cemetery projects: Siding to Chapel Mausoleum, storage shed and maintenance garage; Riverside Cemetery main entrance repair damage by vehicle collision; Green Valley Backstops; and Tennis Courts.

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2) 010-0841-432.08-05 Building Improvements	\$113,000	\$11,000	\$124,000
010-0000-300.00-00 Reserves	\$0	\$11,000	\$11,000

Explanation: Repairs to the EOC building to improve the humidity started in 2013 but will not be completed until 2014 (funds budgeted in 2013).

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3) 449-0845-432.03-61 Payment to Agencies	\$30,725	\$26,000	\$56,725
449-0000-300.00-00 Reserves	\$0	\$26,000	\$26,000

Explanation: To reflect the of unused 2013 SWAG Grant funds to the 2014 Sanitation Budget to be used for recycling and solid waste management activities.

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<b>Account Number</b>	<b>Current Budget</b>	<b>Budget Adjustment</b>	<b>Revised Budget</b>
4) 017-0728-492.03-11 Grant Administration	\$0	\$28,870	\$28,870
017-0728-492.04-77 Rehab Projects	\$0	\$139,130	\$139,130
017-0000-331.60-00 Grant Revenue	\$0	\$168,000	\$168,000
022-0708-492.03-31 Grant Administration	\$0	\$37,350	\$37,350
022-0708-492.04-25 Contractual Repairs	\$0	\$180,000	\$180,000
022-0000-331.30-00 Grant Revenue	\$0	\$217,350	\$217,350

Explanation: To reflect SFOOR and TRUST FUND Grants awarded to late to be included in the original 2014 budget.

5) 445-9966-415.03-22 Professional/Technical	\$83,480	\$26,095	\$109,575
445-0000-300.00-00 Professional Development	\$562,725	\$26,095	\$588,820

Explanation: To reflect transfer of funds from the 2013 budget to the 2014 budget for the purchase of a FireCom Wireless Communications System.

6) 010-0715-463.03-22 Professional/Technical	\$169,680	\$50,000	\$219,680
010-0000-300.00-00 Reserves	\$11,000	\$50,000	\$61,000

Explanation: Budgeted amount for Subdivision Code was not used in 2013, transfer fund to 2014 budget.

7) 010-0715-463.03-22 Professional/Technical	\$219,680	\$50,000	\$269,680
010-9955-481.10-98	\$534,360	(\$50,000)	\$484,360

Explanation: To reflect C.B. 4004-2014 Retail Recruitment Strategy

<b>Account Number</b>	<b>Current Budget</b>	<b>Budget Adjustment</b>	<b>Revised Budget</b>
8) 320-1840-433.08-30 Sanitary Sewer Contracts	\$1,980,000	\$190,000	\$2,170,000
320-0000-300.00-00 Reserves	\$0	\$190,000	\$190,000
510-9965-438.08-10 Street Contracts	\$0	\$79,000	\$79,000
510-0000-300.00-00 Reserves	\$220,000	\$79,000	\$299,000
310-1716-434-08-45 Water Contracts	\$1,115,000	\$20,000	\$1,135,000
310-0000-300.00-00 Reserves	\$975,425	\$20,000	\$995,425
320-1840-433-08-30 Sanitary Sewer Contracts	\$1,980,000	\$38,000	\$2,018,000
320-0000-300.00-00 Reserves	\$0	\$38,000	\$38,000
330-1971-433-08-35 Storm Water Projects	\$595,000	\$10,000	\$605,000
330-0000-300.00-00 Reserves	\$247,030	\$10,000	\$257,030

Explanation: Project work budgeted in 2013 but did not begin until 2014: 1180-Sanitary Sewer Replacement, 1185-64<sup>th</sup> Street Pump Station, 1178-Seal Coat Upgrades.

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