

September 4, 2012

**BOARD ACTION/DISCUSSION ITEMS
SEPTEMBER 2012 – NOVEMBER 2012**

PRIORITY*	PROJECT/ISSUE	TYPE OF ACTION	TIMING**
<i>AS NEEDED</i>			
H	Update on wastewater treatment capacity evaluation/steering committee	Status Report	As needed
H	Acquisition/Growth Strategy Activities	Status Report	As needed
H	Jordan Creek Wastewater Plant	Status Report	As needed
<i>WITHIN 45 DAYS</i>			
H	2013-2022 Capital Plan- Preliminary	Presentation	September (B)
H	Wynnewood Estates Main Wastewater Pumping Station Replacement, Design Phase. <i>Capital Project & Professional Services Authorizations</i>	Approval	September(B)
<i>WITHIN 75 DAYS</i>			
H	2013 Budget Assumptions	Presentation/Discussion	October (B)
9/24/12	September Board Meeting		
10/8/12	October Workshop Meeting		
* H – High M – Medium L – Low			** (W) – Workshop (B) – Board (W/B) - Either

LEHIGH COUNTY AUTHORITY
WORKSHOP AGENDA
Monday, September 10, 2012 – 12:00 PM

INITIAL ITEMS *(Collectively 5 Minutes)*

1. **Identify items for September Board Meeting**

- *Review Board Discussion items, September 2012 – November 2012*

ACTION/DISCUSSION ITEMS

1. **Water Main Replacement Project – Oakland Park (UMT)** *(Approval)*

This project consists of the installation of 4500' of new 8" ductile iron water mains within five separate roads in the Oakland Park development. Construction will be completed by December 31; however, final restoration will not occur until May 2013. Board approval is requested for the Construction Phase of this project which includes a Capital Project Authorization Amendment, a Professional Services Authorization and construction contract award **(Salmon)**.

INFORMATION ITEMS

1. **Education and Training**

Pat Mandes	PIX Pretreatment Conference – Bethlehem, PA	9/14
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OTHER ITEMS

1. ***None.***

**Lehigh County Authority**

1053 Spruce Street * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

MEMORANDUM

Date: September 4, 2012

To: Board of Directors & Management Staff
From: Emily Gerber
Re: Water Main Replacement Project
Oakland Park

MOTIONS /APPROVALS REQUESTED:

No.	Type of Approval	Item	Amount
1	Funding	<u>Capital Project Authorization – Amendment No.1</u> Construction Phase	\$899,106.00
2 **	Contract	<u>Contract Award: Construction Phase</u> <ul style="list-style-type: none">• Doli Construction Corporation	\$676,416.00
3 **	Contract	<u>Professional Services Authorization</u> Construction Inspection Services <ul style="list-style-type: none">• Keystone Consulting Engineers, Inc.	\$63,240.00

(**) Included in the Capital Project Authorization

PROJECT OVERVIEW: *(See attached location map)*

Approximately 4,500' of cast iron pipe (CIP) will be replaced with ductile iron pipe (DIP) in the Oakland Park residential development in Upper Macungie Township. The streets included in the project area are all or portions of Fir Road, Cottonwood Street, Elm Road, Bastian Lane and Maple Circle. These areas were selected because the CIP still in use has experienced multiple water main breaks in recent years. At least sixteen different water main leaks have occurred in Oakland Park since 1998 and fourteen of those breaks were in the areas identified for replacement.

Typical trench construction methods will be used to install the new mains in new locations and the existing water mains will be abandoned in place. The 65 properties within the project area will have new service laterals (public portion only) and curb boxes installed. During various stages of construction, customers will experience temporary, short term water outages.

CONTRACTOR SELECTION PROCESS:*Construction Contractor*

The construction work for this project was advertised on August 2, 2012. A mandatory Pre-Bid Meeting was held on August 14th with representatives from sixteen different firms in attendance. Bids were opened on August 30th and nine firms submitted bids as shown below:

Bidder	Base Bid Amount	Placement
Doli Construction Corporation	\$676,416.00	1
Pact Construction	\$682,277.50	2
Bellview Pump LLC	\$724,925.00	3
Livengood Excavators, Inc.	\$734,302.43	4
Michael F. Ronca & Sons, Inc.	\$743,000.00	5
Delaware Valley Utility Contractors	\$777,492.50	6
Joao & Bradley Construction Co.	\$788,131.00	7
Mazzuca Enterprises, Inc.	\$874,540.00	8
Pioneer Construction	\$881,895.00	9
Anrich, Inc.	No Bid Submitted	
G.E.C. Services, Inc.	No Bid Submitted	
Penn Quaker Site Contractors	No Bid Submitted	
RGC Development	No Bid Submitted	
Scheuermann Excavating, Inc.	No Bid Submitted	
Wexcon, Inc.	No Bid Submitted	

We have reviewed all submittals for conformance to the contract documents and we recommend award of this construction contract to Doli Construction Corporation in the amount of \$676,416.00. This award is conditioned upon the timely receipt of properly executed Contract Agreements and Payment Bonds by the contractor as well as a thorough internal review of their references.

Construction Inspection Services

A RFP for construction inspection services was sent out to six local engineering firms. We received proposals from five of those firms as shown below:

Firm	Hourly Rate	Overtime Rate	Inspection Costs	Other Costs	Estimated Project Cost
Keystone Consulting Engineers	\$62.00	N/A	\$63,240.00	\$0.00	\$63,240.00
ARRO	\$62.00	N/A	\$63,240.00	\$0.00	\$63,240.00
T&M Associates	\$77.00	N/A	\$78,540.00	\$300.00	\$79,840.00
Barry Isett Associates	\$64.00	\$75.00	\$67,920.00	\$16,984.00	\$84,904.00
Spotts, Stevens McCoy	\$85.00	N/A	\$86,700.00	\$8,450.00	\$95,150.00

*Project Cost is based on a maximum of 1020 inspection hours, 240 of which could be considered overtime

While both Keystone Consulting Engineers (KCE) and ARRO had the same hourly rate for inspection services, we recommend award of this contract to KCE in the not-to-exceed amount of \$63,240.00. KCE will bill LCA based upon actual time charged for inspection services. Since KCE is Upper Macungie Township's engineer, there will be certain synergies and economies by having a single entity responsible for both LCA water main and township infrastructure inspections.

PROJECT TIMELINE:

Construction is anticipated to begin as early as the first week in October. All water main installation, testing and service initiation as well as temporary paving must be completed by December 31, 2012. Permanent paving and lawn/driveway final restoration will not be completed until May 2013. Project completion is expected on or before June 30, 2013.

FUTURE WATER MAIN REPLACEMENT PROJECTS:

A decision will be made by the end of the year as to which areas should be replaced in 2013. A separate project for that work will be structured similarly to this year's project but with a projected construction start date in late spring or early summer.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	<u>W-10-1</u>	BUDGET FUND:	<u>WATER CAPITAL - CLD</u>
PROJECT TITLE:	<u>Water Main Replacement Project</u>	PROJECT TYPE:	
	<u>Upper Macungie Township</u>	<input checked="" type="checkbox"/>	Construction
	<u>Oakland Park development</u>	<input type="checkbox"/>	Engineering Study
		<input type="checkbox"/>	Design
		<input checked="" type="checkbox"/>	Amendment
AMOUNT THIS AMENDMENT:	<u>\$899,106.00</u>		
TOTAL COST ESTIMATE:	<u>\$944,006.00</u>		

DESCRIPTION AND BENEFITS

This project will replace segments of cast iron water main in Upper Macungie Township. The segments to be replaced are all in the Oakland Park development, totaling approximately 4500 linear feet. The segments are as follows: 1374' along Fir Road, 856' along Cottonwood Street, 965' along Elm Road, 1091' along Bastian Lane and 186' in the cul-de-sac of Maple Circle. All of these areas have experienced multiple water main and service line leaks in recent years, some causing extensive right-of-way damage.

This authorization accounts for award and construction and will take the project through completion.

Previous Authorizations

Design Phase	\$	44,900.00
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Requested this Authorization

Construction Phase

Payroll	\$	29,000.00
Contract	\$	676,416.00
Inspection Services	\$	63,240.00
Nuclear Compaction Testing	\$	7,500.00
Miscellaneous Costs	\$	12,000.00
Contingency (15%)	\$	110,950.00

Total Construction Phase	\$	899,106.00	Total Requested
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\$	944,006.00	Projected Project Total
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REVIEW AND APPROVALS

<u>Project Manager</u>	<u>Date</u>	<u>General Manager</u>	<u>Date</u>
<u>Capital Works Manager</u>	<u>Date</u>	<u>Chairman</u>	<u>Date</u>



Lehigh County Authority

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PROFESSIONAL SERVICES AUTHORIZATION

Professional: Keystone Consulting
Engineers, Inc.
6235 Hamilton Boulevard
Suite 100
Wescosville, PA 18106

Date: September 4, 2012

Requested By: Emily Gerber
Approvals
Department Head: _____
General Manager: _____

Description of Services (Work Scope, Steps, Check Points, etc.):

Keystone Consulting Engineers, Inc. (KCE) will provide construction inspection and observation services for the Water Main Replacement Project in the Oakland Park residential development in Upper Macungie Township. Work will begin once the selected contractor, Doli Construction Corporation, starts mobilization efforts at the site and will continue throughout the entire project.

Tasks to be performed by KCE's inspector include, but are not limited to:

- Attend project meetings
- Act as on-site liaison for LCA with the contractor, regulators and customers
- Conduct on-site observations of work and ensure materials installed meet LCA, township and regulatory requirements
- Witness pressure and leakage tests
- Flush and sample new water mains with LCA personnel assistance
- Provide LCA with reports and project updates
- Review monthly payment applications and provide LCA with the approved quantities for payment
- Maintain marked up set of plans as record drawings
- Maintain list of punchlist items to be completed prior to Final Completion

This authorization is based on a maximum of 1020 inspection hours at a cost of \$62.00 per hour. No overtime or administrative costs will be billed to LCA for this project.

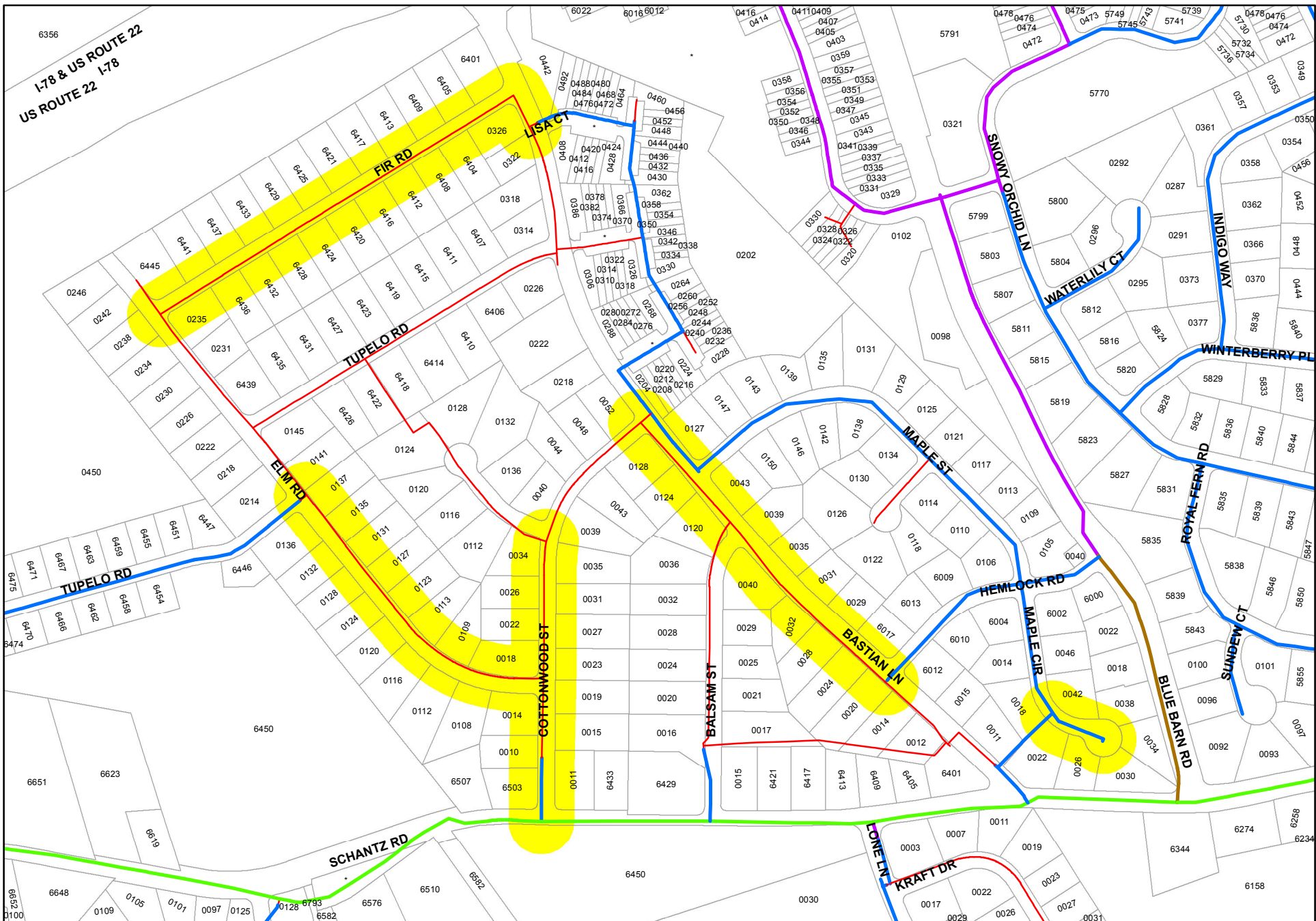
Cost Estimate (not to be exceeded without further authorization) : \$63,240.00

Time Table and Completion Deadline : On or before June 30, 2013 (Final Completion)

(For Authority Use Only)

Authorization Completion :

Approval : _____ **Actual Cost:** _____ **Date:** _____



LEHIGH COUNTY AUTHORITY
 PO Box 3348, Allentown, PA 18106
 610-398-2503
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OAKLAND PARK

Water Main Replacement Project

Central Lehigh Division, Upper Macungie Township

Existing Water Mains	6 inch or smaller		16 inch	
	8 inch	10 inch	12 inch	42 inch

Project Areas

1 inch = 400 feet

This map is provided as a courtesy by LCA and may not reflect actual system information. LCA assumes no liability for any decisions made or not made based on the data shown on this map or any other information given. Map created 8/1/2012.