Jon,

I thought you might be interested in this document describing the LED street light conversion project in Asheville, NC. They had great success and saved over \$600,000 in electrical costs. Their ROI was about 5 years. Interesting that they created a Green CIP program around the project.

Also, I asked Sonia to set up a time for us to meet and discuss ideas for sustainability moving forward.

Troy

Troy Moon Environmental Programs Manager City of Portland, ME 207-874-8467 (office) 207-874-8816 (fax)

From:	Michael Forcillo
То:	jgrondin@gapps.portlandmaine.gov
Date:	Wednesday, February 10, 2016 12:22:59 PM
Attachments:	Redzone Business Services.docx
	Redzone Camden Wifi .docx

I wanted to share the following current Redzone news with you directly.

Media Advisory - Important Maine Broadband News & Business Developments (2 Press Releases Attached)

<u>Topics</u> Municipal Broadband Projects Fiber Alternative High Speed Broadband for Business

*Video News Media Package Available on Request

Best Regards,

Michael



Michael L. Forcillo / Vice President mforcillo@redzonewireless.com

Redzone Wireless, LLC. 207-593-7276 41 Mechanic St, Suite 219 Camden, ME 04843 http://www.redzonewireless.com



From:	Troy Moon
То:	Jeff Levine
Cc:	Jeremiah Bartlett; Brendan T O"Connell
Subject:	Re: GPCOG LED Streetlights conversion study
Date:	Thursday, March 24, 2016 2:18:17 PM
Attachments:	LED-Street-Light-Energy-Efficiency-Case-Study-Final-9-3-11docx

Looking at the entry I see it is for \$100,000 in FY17 and another \$450,000 in FY18. I am curious what went into these numbers. At first glance it doesn't sound like enough money. (One option for funding the project would be an energy savings performance contract that would not hit the CIP)

I've talked to a variety of people in the government and private sectors who are very enthusiastic about street light conversions and see a lot of opportunity, which makes me question Ian's analysis. However, it is good to have a thoughtful approach and consider what down sides there might be. I've attached a case study from Asheville, NC who had a very successful conversion project. Locally, East Brown Cow Property Management has changed all of their outdoor lighting to LED and is very happy with the results. The Midcoast Regional Redevelopment Authority switched 650 lights over to LED and is saving almost 80% on lighting costs.

The next step in our case would be to begin to understand the scale of our project -- how many lights and of what variety do we have? Which ones do we own / which do we lease from CMP. Maybe you guys have that already, Jeremiah.

Troy

On Thu, Mar 24, 2016 at 1:10 PM, Jeff Levine <<u>jlevine@portlandmaine.gov</u>> wrote: Brendan- I assume you have seen this?

https://me-portland.civicplus.com/AgendaCenter/ViewFile/Item/2213?fileID=8516

Jeff Levine, AICP Director Planning & Urban Development Department 389 Congress Street 4th Floor Portland, Maine 04101 Phone (207)874-8720 Fax (207)756-8258 http://www.portlandmaine.gov/planning @portlandplan

On Thu, Mar 24, 2016 at 1:03 PM, Troy Moon <<u>thm@portlandmaine.gov</u>> wrote: There is no GPCOG study regarding street lights.

On Thu, Mar 24, 2016 at 7:28 AM, Jeremiah Bartlett <<u>jbartlett@portlandmaine.gov</u>> wrote:

Hi Brendan - I don't have it, and would really like a copy myself. I've copied Troy

Moon to see if he can provide a lead.

Thanks, Jeremiah

Jeremiah J. Bartlett, PE, PTOE Transportation Systems Engineer Department of Public Works City of Portland, Maine <u>jbartlett@portlandmaine.gov</u>

On Wed, Mar 23, 2016 at 5:37 PM, Brendan T O'Connell <<u>boconnell@portlandmaine.gov</u>> wrote: Do either of you have a copy of this study or might be able to point me in the right direction of who may have it?

Brendan T O'Connell Finance Director City of Portland P: (207) 874 8642 F: (207) 874 8652

Troy Moon Sustainability Coordinator City of Portland, ME <u>207-756-8362</u>

Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362

From:	Yevgeniy Lapin
To:	Troy Moon
Subject:	Articled on LED lights and a bit about Kansas smart city kiosks
Date:	Monday, August 8, 2016 10:36:33 AM
Attachments:	Smart city.docx

Here is the document:

--Yevgeniy Lapin Arkhangelsk, Russian Federation The Energy and Sustainability Committee passed the benchmarking ordinance and they gave us the green light for our Street Light RFP. I need to reschedule our meeting next Tuesday because I need to join Councilor Hinck at a meeting with some property owners.

Troy

On Sep 26, 2016 12:31 PM, "Jennifer Puser Brennan" <<u>jpuser@gpcog.org</u>> wrote:

So, what happened at the Council meeting while I was gone?

From: Troy Moon [mailto:thm@portlandmaine.gov]Sent: Friday, September 16, 2016 4:49 PMSubject: Energy and Sustainability Committee 9/21/2016

Please find the agenda for the Energy and Sustainability Committee meeting to be held on September 21. Please note that the meeting will begin at 6 PM this month. The full package is available on the committee web page at: <u>http://www.portlandmaine.gov/586/Energy-Sustainability-Committee</u>

Have a great weekend.

--

Troy Moon

Sustainability Coordinator City of Portland, ME

207-756-8362

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Good luck! Will the full council take it up next?

Sent from my Verizon 4G LTE Droid

On Sep 26, 2016 2:00 PM, Troy Moon <thm@portlandmaine.gov> wrote:

The Energy and Sustainability Committee passed the benchmarking ordinance and they gave us the green light for our Street Light RFP. I need to reschedule our meeting next Tuesday because I need to join Councilor Hinck at a meeting with some property owners.

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From:	Troy Moon
To:	Jennifer Puser Brennan
Subject:	Re: Energy and Sustainability Committee 9/21/2016
Date:	Monday, September 26, 2016 5:20:31 PM

Yes, first read on Oct. 5, public hearing and vote on the 17th.

On Mon, Sep 26, 2016 at 2:54 PM, Jennifer Puser Brennan <<u>jpuser@gpcog.org</u>> wrote: Good luck! Will the full council take it up next?

Sent from my Verizon 4G LTE Droid On Sep 26, 2016 2:00 PM, Troy Moon <<u>thm@portlandmaine.gov</u>> wrote:

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Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362

From:	Troy Moon
To:	Fitzgerald, Matt
Subject:	Street Light RFP
Date:	Wednesday, October 5, 2016 8:11:30 AM
Attachments:	RFP xx17 Street Lighting (draft checklisted 08.29.16).docx

Here is the street light RFP. Let's touch base on this, CPRC and Waste Zero today.

--Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362 Nathan,

Quick question - how are you guys funding payment to Realterm Energy? Are you funding them in a distinct budget line or through an energy savings performance contract?

Troy

--

Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362 I am planning a distinct budget line item.

Nathan

On Oct 5, 2016, at 5:46 PM, Troy Moon <thm@portlandmaine.gov<<u>mailto:thm@portlandmaine.gov</u>>> wrote:

Nathan,

Quick question - how are you guys funding payment to Realterm Energy? Are you funding them in a distinct budget line or through an energy savings performance contract?

Troy

--Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362

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Thanks -

We're launching our RFP this weekend. Can you send me the names addresses of your respondents? Realterm and TEN have reached out to me already so I have their info.

Troy

On Wed, Oct 5, 2016 at 6:28 PM, Nathan Poore <<u>npoore@falmouthme.org</u>> wrote: I am planning a distinct budget line item.

Nathan

On Oct 5, 2016, at 5:46 PM, Troy Moon <<u>thm@portlandmaine.gov</u><mailto: <u>thm@portlandmaine.gov</u>>> wrote:

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Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362

Hi Troy,

They are on our web site. The web page address for everything about our project including contact infor for consultants will be available. The launch and link will be at the end of our presentation. Let me know if you can't make it and I will send you the presentation with the link.

Nathan

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= <u>Troy Moon</u> <u>Sustainability Coordinator</u> <u>City of Portland, ME</u>

207-756-8362

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From:	Troy Moon
To:	Nathan Poore
Subject:	Re: street light project - budget question
Date:	Thursday, October 6, 2016 12:28:45 PM

Thanks again - you have done a great service for Maine towns with your leadership on this issue!

On Thu, Oct 6, 2016 at 11:22 AM, Nathan Poore <<u>npoore@falmouthme.org</u>> wrote: Hi Troy,

They are on our web site. The web page address for everything about our project including contact infor for consultants will be available. The launch and link will be at the end of our presentation. Let me know if you can't make it and I will send you the presentation with the link.

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Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362 Hi Troy,

This is the link to all the information we have that can be of assistance re street light conversion. There are links to the four vendors that submitted proposals to our four community collaboration.

http://www.falmouthme.org/finance/streetlight-conversion-process

Good luck!

Nathan

From: Troy Moon [mailto:thm@portlandmaine.gov] Sent: Thursday, October 06, 2016 12:29 PM To: Nathan Poore Subject: Re: street light project - budget question

Thanks again - you have done a great service for Maine towns with your leadership on this issue!

On Thu, Oct 6, 2016 at 11:22 AM, Nathan Poore <<u>npoore@falmouthme.org</u>> wrote: Hi Troy,

They are on our web site. The web page address for everything about our project including contact infor for consultants will be available. The launch and link will be at the end of our presentation. Let me know if you can't make it and I will send you the presentation with the link.

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Hi Troy,

Please meet Steve Lenkauskas, City Electrician and LED street light expert in Cambridge (cc'd).

Steve – please meet Troy Moon, Sustainability Director in Portland, ME. Portland is ready to move on a LED street light project and I told him that you had great experience, not only in getting the work done but also saving astounding amounts of energy.

Hope you guys get a chance to talk 😊

From: Troy Moon [mailto:thm@portlandmaine.gov]
Sent: Tuesday, October 25, 2016 3:17 PM
To: Rasmussen, Susanne <srasmussen@cambridgema.gov>
Subject: streetlight contact

Hi Susanne,

It was great to see you in Toronto! You mentioned that you could put me in touch with the gentleman who is in charge of your streetlights in Cambridge. I would love to chat with him to learn more about how the LED program has worked for you guys.

Thanks,

Troy

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Thanks, Susanne.

Steve, I would love to chat with you. I have some time Friday afternoon or Monday afternoon. Let me know if you have any time then for a call.

Troy

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Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362 Troy,

Monday afternoon works best, my direct line is 617-349-4949. I look forward to talking with you.

Steve

From: Troy Moon [mailto:thm@portlandmaine.gov]
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To: Rasmussen, Susanne <srasmussen@cambridgema.gov>
Cc: Lenkauskas, Steve <slenkauskas@CambridgeMA.GOV>
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Sounds good. I'll give you a call around 2 on Monday afternoon.

Troy

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Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362

From:	Jim Schriver
To:	Troy Moon
Cc:	patrick.regan; Greg Brown; joe.statler; mike.schneider; rob.campbell
Subject:	Street Light development minutes
Date:	Thursday, April 20, 2017 1:45:07 PM
Attachments:	D2 Meeting Minutes.City of Portland.2017-04-13.pdf

Hi Troy –

Here are the minutes from our meeting last Thursday. We've tried to clearly show the action items for everyone involved. If you have any questions or if you recall a topic which we've omitted, please let me know.

Our next meeting is tentatively scheduled for 2pm Thursday April 27^{th} – I'll touch base with you when you're back in the office on Monday to confirm the details. I'll also give you an update on our anticipated discussion with CMP regarding the buyback.

Looking forward to seeing you next week! Talk with you soon -

Regards, Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 Cell: 412-992-1397 jim.schriver@tenconnected.com https://www.tenconnected.com/ Chris –

As I was going through my notes of last week's meeting, I jotted down a note to myself to send you an electronic copy of the meeting minutes from our April 13 meeting with Troy...

Here are those notes - let me know if you have any questions -

Thanks, Jim 412-992-1397

From: Jim SchriverSent: May 1, 2017 9:04 AMTo: Christopher Branch <cbranch@portlandmaine.gov>Subject: thanks

Chris – it was great meeting you last week – thanks for your time in our meeting on Thursday.

Greg and I (and the rest of the TEN Connected team) are excited to be working with the City of Portland, and look forward to a successful completion of your lighting efficiency/Smart City project.

I appreciated the many insights you shared with us – there are a lot of moving parts with a project like this, and its really helpful to get the inside scoop as much as possible.

I also greatly appreciated your willingness to share your contacts up at Lewiston. I'll be reaching out to David Jones in the next few business days to see how Lewiston has fared with owning their own street lights for quite a while. It will be good to get his perspective on how that process has gone for them.

From several comments you and Troy made, it looks like we'll be tapping into Kevin and Jeremiah's knowledge in the next few weeks... if you'd prefer to let them communicate directly with Greg and me, just let me know. Otherwise, we'd be happy to work through you for any requests... whatever makes sense for you.

Thanks again for your time... we'll be talking soon -

Regards, Jim Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

From:	Jim Schriver
To:	Troy Moon (thm@portlandmaine.gov)
Cc:	Greg Brown; rob.campbell; mike.schneider; joe.statler
Subject:	minutes - Portland 4-27-17 meeting
Date:	Thursday, May 4, 2017 5:07:42 PM
Attachments:	D3 Meeting Minutes.City of Portland.2017-04-27.pdf

Troy -

Sorry it took several days to compile and edit, but here are the meeting minutes from our meeting last Thursday 4-27. The format is the same as before, with the latest information highlighted to provide for easy reading. The various action items are called out in the right-hand columns with some estimated dates for completion.

If you think we've omitted any topics, please let us know. If you are comfortable with the content as-is, I can send to Chris, John, and Brendan, unless you'd prefer to forward it yourself.

Thanks - talk with you soon -

Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

From:	Christopher Branch
To:	Bartlett, Jeremiah; Kevin Thomas
Subject:	Fwd: Introduction to RapidFlow - traffic analysis technology
Date:	Monday, May 15, 2017 3:21:59 PM
Attachments:	invite.ics

Confirmation on the TEN meeting on the RapidFlow technology related to the Street Light Replacement.

----- Forwarded message ------

From: **Jim Schriver** <jim.schriver@tenconnected.com> Date: Fri, May 12, 2017 at 1:20 PM Subject: Introduction to RapidFlow - traffic analysis technology To: "Troy Moon (thm@portlandmaine.gov)" <thm@portlandmaine.gov>, "Christopher Branch (cbranch@portlandmaine.gov)" <cbranch@portlandmaine.gov>, "Greg Barlow (gjb@rapidflowtech.com)" <gjb@rapidflowtech.com>, "rob.campbell" <rob.campbell@tensaves.com>

Troy and Chris -

Below is the web-link and dial-in number for the call with Greg Barlow from RapidFlow... the CMU spin-off

The goal of the meeting is to:

- * Provide brief introduction to RapidFlow and what they do
- * Provide an overview of the technology (Phaenon) they are proposing to pilot in Portland
 - * Describe its general purpose, what benefits it provides
 - * Outline how it works (at a high level)
 - * Discuss specifics of mounting, installation

* Confirm scope and duration of pilot, and define responsibilities for elements of cost or operation

* Answer any questions from the Portland team (general or specific)

Looking forward to the conversation -

Jim

[https://storage.googleapis.com/switch_static/UC/common/UberConference_by_Dialpad.png]

Greg Barlow has invited you to a conference call:

Rapid Flow / City of Portland May 30, 2017 at 1:00PM (EDT - America/New_York)

Ways to Join

Go to: <u>https://www.uberconference.com/rapidflowtech</u> or just call <u>716-293-6768</u> and use PIN 23500.

Add to my calendar:

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<<u>http://www.uberconference.com/icsdownload/4508572050915328</u>> | iCal

<<u>http://www.uberconference.com/icsdownload/4508572050915328</u>> | Yahoo

<http://www.uberconference.com/yahoocalendar/4508572050915328>

[Facebook]<<u>https://www.uberconference.com/social/facebook</u>>

[Twitter]<<u>https://www.uberconference.com/social/twitter</u>>

[LinkedIn]<<u>https://www.uberconference.com/social/linkedin</u>>

[Google+]<<u>https://www.uberconference.com/social/google-plus</u>>

UberConference by Dialpad 100 California Street San Francisco, CA 94111 <<u>https://www.uberconference.com/?utm_source=db_n&utm_</u> medium=email&utm_term=trial-email-2&utm_campaign=dp-us-in-trial&utm_content=dpfooter-link>

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Christopher C. Branch, P.E. Director Portland Public Works 55 Portland Street Portland, Maine 04101 (207) 874-8801 cbranch@portlandmaine.gov

From:	Jeremiah Bartlett
To:	Christopher Branch
Cc:	Kevin Thomas
Subject:	Re: Introduction to RapidFlow - traffic analysis technology
Date:	Monday, May 15, 2017 3:25:03 PM

I can be there until 1:30, 1:45 or so. Development Review starts at 1:30, but I will let them know I will be running late.

Jeremiah J. Bartlett, PE, PTOE Transportation Systems Engineer Department of Public Works City of Portland, Maine <u>jbartlett@portlandmaine.gov</u>

On Mon, May 15, 2017 at 3:21 PM, Christopher Branch <<u>cbranch@portlandmaine.gov</u>> wrote:

Confirmation on the TEN meeting on the RapidFlow technology related to the Street Light Replacement.

----- Forwarded message ------

From: Jim Schriver <jim.schriver@tenconnected.com>

Date: Fri, May 12, 2017 at 1:20 PM

Subject: Introduction to RapidFlow - traffic analysis technology

To: "Troy Moon (<u>thm@portlandmaine.gov</u>)" <<u>thm@portlandmaine.gov</u>>, "Christopher Branch (<u>cbranch@portlandmaine.gov</u>)" <<u>cbranch@portlandmaine.gov</u>>, "Greg Barlow (<u>gjb@rapidflowtech.com</u>)" <<u>gjb@rapidflowtech.com</u>>, "rob.campbell" <<u>rob.campbell@tensaves.com</u>>

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Ways to Join Go to: <u>https://www.uberconference.com/rapidflowtech</u> or just call <u>716-293-6768</u> and use PIN 23500.

Invited Participants <u>jim.schriver@tenconnected.com</u><mailto:<u>jim.schriver@tenconnected.com</u>>, Greg Barlow

Add to my calendar:

Google <<u>http://www.uberconference.com/googlecalendar/4508572050915328</u>> | Outlook <<u>http://www.uberconference.com/icsdownload/4508572050915328</u>> | iCal <<u>http://www.uberconference.com/icsdownload/4508572050915328</u>> | Yahoo <<u>http://www.uberconference.com/yahoocalendar/4508572050915328</u>> |

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Christopher C. Branch, P.E. Director Portland Public Works 55 Portland Street Portland, Maine 04101 (207) 874-8801 cbranch@portlandmaine.gov

From:	Jim Schriver
To:	Troy Moon (thm@portlandmaine.gov)
Subject:	touch base - street light project
Start:	Thursday, May 18, 2017 11:00:00 AM
End:	Thursday, May 18, 2017 11:30:00 AM
Location:	i"ll call you

Troy - thanks; just a handful of items to cover:

- Follow-up from CMP meeting
 Sample lights; you should have received gear from 2 manufacturers; other two coming late May and early June
 Discussion on Decoratives: I can try to prepare a benefit/cost summary for Retrofit versus New Fixtures
 Interactive Kiosks: discuss Portland's interest
 WiFi: any prelim prep discussions for Wifi via Redzone
 Cameras possible inclusion of surveillance cameras via Redzone proposal

Talk with you in the morning -

Jim

From:	Jim Schriver
To:	Troy Moon (thm@portlandmaine.gov)
Subject:	wifi update - Redzone
Date:	Tuesday, May 23, 2017 3:52:13 PM

Troy -

I spoke with Redzone wireless yesterday. I discussed both the Portland street light project (with wifi components) and the existing Redzone service which has experienced some problems recently...

I can fill you in with more details during our call tomorrow, but I wanted to see if you would be available for a prep call with them next Thurs June 1st at 10am. The primary goal would be to prep for the June 13th meeting with you and others on the Portland team, but I also asked them to address the concerns regarding the ongoing Redzone service.

Does next Thurs at 10am work for you? Should take 30-45 minutes...

Please let me know - thanks

Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/ June 1 at 10 is good for me.

Troy

On Tue, May 23, 2017 at 3:52 PM, Jim Schriver <<u>jim.schriver@tenconnected.com</u>> wrote: Troy -

I spoke with Redzone wireless yesterday. I discussed both the Portland street light project (with wifi components) and the existing Redzone service which has experienced some problems recently...

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Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362 Troy -

Good morning... hope you had a good weekend and Father's Day...

I have not yet completed my notes from last week - it is a daunting task! I've begun work on the critical components, but haven't typed up everything.

A few things I'd like to share with you early this week, or possibly discuss:

1. CMP Sales Agreement: BShur spoke with Rich Hevey last week; they agreed on a path forward together, and BShur will mark up the CMP-provided contract and get that back to Rich within a few days; we've collectively agreed to continue to push for a July 1 close... (not sure 7/1 will happen, but we're trying to keep pushing)

2. Baxter Blvd: You expressed some possible interest in doing a complete replacement of the wooden poles and cobraheads at Baxter Blvd; a quick count of lights last week showed about 66 lights (50 on water side, 11 on other side, plus 5 on street up by the parking lot; this assumes we just retrofit the 10 decorative globes in the parking lot, which seem fine except for surface rust on the bases - see pic below)

* If this is of interest, I'd like to explore how this might affect the buy-back cost; if we ask CMP to simply remove them, it might cost less than the regular buy-back

* We could provide a rough budgetary cost for this, if you want to suggest looking at an Esplanade or Hallbrook fixture, on a Salem or Hallbrook pole (see below for pics)

3. WiFi meeting: could we discuss next steps for the WiFi project sometime today or tomorrow? If the larger project is cancelled, we may not need the Rredzone meeting scheduled for the 28th - it doesn't seem like we need to convince Jon J to not do the larger project; should we proceed to defining what WiFi elements to include in the Street Light project?

Here are the pics and graphics mentioned above:

[cid:image002.jpg@01D2E8E8.C057EC50] [cid:image003.jpg@01D2E8E8.C057EC50]

Thanks - let me know if you'd like to talk later -

Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

From:	Jim Schriver
To:	Julianne Sullivan
Cc:	<u>Troy Moon</u>
Subject:	RE: Info
Date:	Monday, June 19, 2017 5:36:47 PM
Attachments:	Smart-City-Media Preso June2017.pdf

Julie and Troy –

Here is a copy of that Smart City Kiosk presentation... let me know if you have any questions.

Regarding other cities and how they use the Smart City data... are you specifically asking about the kiosks, or any Smart City component?

Thanks, Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

From: Julianne Sullivan [mailto:jas@portlandmaine.gov]
Sent: June 19, 2017 12:16 PM
To: Jim Schriver <jim.schriver@tenconnected.com>
Cc: Troy Moon <thm@portlandmaine.gov>
Subject: Info

Hi Jim - great to meet you last week with Troy. Would you please send me the presentation you referenced as well as anything else you have on how your client cities are using the data gathered from their "smart" initiatives?

Thank you!!

Julie Sullivan Senior Advisor to the City Manager tel 207.756.8363 <u>www.portlandmaine.gov</u>

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and/or the media if requested.

From:	Jim Schriver
To:	Troy Moon (thm@portlandmaine.gov); mike.schneider; Pat Bresnahan
Subject:	Cobra Head analysis
Start:	Friday, June 30, 2017 11:30:00 AM
End:	Friday, June 30, 2017 12:00:00 PM
Location:	Go-To-Meeting (see link below)

Troy -

Thanks for your flexibility on the time for this...

Mike and Pat have compiled a nice comparison of the 4 major brands they've recommended for the largest portion of your Street Light project - the Cobra Heads. After you've had a chance to see and feel the 4 vendor's products, this comparison will help you look at the selection from a number of other angles:

* Initial acquisition cost

* Light output

* Ongoing operational costs

* Relative energy efficiency

We'll present the document, explain the calculations, then answer any of your questions. We'll provide you with a soft copy you can save or share with others -

We should be able to run through this in 30 minutes...

Below is the webinar and dial-in info... thanks

Jim

Cobra Head Analysis Fri, Jun 30, 2017 11:30 AM - 12:00 PM EDT

Please join my meeting from your computer, tablet or smartphone. https://global.gotomeeting.com/join/888332197

You can also dial in using your phone. United States: +1 (571) 317-3122

Access Code: 888-332-197

First GoToMeeting? Try a test session: https://care.citrixonline.com/g2m/getready

From:	Jim Schriver
To:	Troy Moon (thm@portlandmaine.gov)
Subject:	FW: potential LED light pilot project
Date:	Monday, July 31, 2017 1:56:50 PM
Attachments:	image004.png

Troy - we've been approved for the Cedar/Casco lighting pilot project...

We'll reach out to On-Target today to get a quote and get it scheduled. Does Portland have funds to pay for this out of your operating budget? Should we send you a quote for the work? Or will you fold this under the Street Light project?

Let me know at your convenience -

Thanks, Jim

From: Daniels, Stephen [mailto:Stephen.Daniels@cmpco.com] Sent: July 31, 2017 1:45 PM To: Jim Schriver <jim.schriver@tenconnected.com> Cc: Perkins, Rhonda <Rhonda.Perkins@cmpco.com> Subject: RE: potential LED light pilot project

Hi Jim,

We approve the location for the LED pilot project on the nine (9) poles you selected. We would like for you to coordinate this directly with your contractor (On Target) but to keep us informed as to planned start and completion of the lighting change over. The billing and payment for this pilot project work should just be between the City of Portland, TEN, and your contractor. There is no need for CMP to be part of the billing and payment process for the pilot. As a reminder your contractor must install the approved fusing for each light in this pilot project. Please contact me with any questions or concerns. Thanks Steve

[cid:image001.jpg@01D30A03.214B50C0]

Stephen G. Daniels, CEM Manager, Sales 205 Center Road, Fairfield, ME 04937 Office 207-453-3365 Cell 207-314-1086 Fax 207-629-4931 stephen.daniels@cmpco.com<<u>mailto:stephen.daniels@cmpco.com</u>>

[cid:image002.jpg@01D30A03.214B50C0]

In the interest of the environment, please print only if necessary and recycle.

From: Jim Schriver [mailto:jim.schriver@tenconnected.com] Sent: Monday, July 31, 2017 10:21 AM To: Daniels, Stephen Cc: Perkins, Rhonda Subject: RE: potential LED light pilot project

Steve – Good morning – hope you had a good weekend...

Question: in order to expedite the process (assuming CMP is able to approve this request) may I reach out to On-Target this week and request a quote for this work? I assume it will take them 4-5 business days to turn this around, so I wanted to get started.

Let me know if you would prefer I wait until you give the formal approval -

Thanks –

Jim

From: Daniels, Stephen [mailto:Stephen.Daniels@cmpco.com] Sent: July 28, 2017 9:16 AM To: Jim Schriver <jim.schriver@tenconnected.com<<u>mailto:jim.schriver@tenconnected.com</u>>> Cc: Perkins, Rhonda <Rhonda.Perkins@cmpco.com<<u>mailto:Rhonda.Perkins@cmpco.com</u>>>; Troy Moon (thm@portlandmaine.gov<<u>mailto:thm@portlandmaine.gov</u>>) <thm@portlandmaine.gov<<u>mailto:thm@portlandmaine.gov</u>>> Subject: RE: potential LED light pilot project

Thanks Jim, we'll review this and get back to you. Steve

[cid:image001.jpg@01D30A03.214B50C0]

Stephen G. Daniels, CEM Manager, Sales 205 Center Road, Fairfield, ME 04937 Office 207-453-3365 Cell 207-314-1086 Fax 207-629-4931 stephen.daniels@cmpco.com<<u>mailto:stephen.daniels@cmpco.com</u>>

[cid:image002.jpg@01D30A03.214B50C0]

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From: Jim Schriver [mailto:jim.schriver@tenconnected.com]
Sent: Thursday, July 27, 2017 5:07 PM
To: Daniels, Stephen
Cc: Perkins, Rhonda; Troy Moon (thm@portlandmaine.gov<<u>mailto:thm@portlandmaine.gov</u>>)
Subject: RE: potential LED light pilot project

Steve -

Here is a modified request... with only 1-for-1 replacement of existing cobra head lights for LED cobra head lights. This new approach only requires 9 lights installed...

[cid:image003.jpg@01D30A03.214B50C0]

The location of each pole is noted on the attached map. There will be 5 new lights on Casco and 4 lights along Cedar Street.

Please review this modified request and let us know if you have any questions, or need us to make any changes. If no changes are required, we'll reach out to On-Target to get a quote and leadtime for the work.

Thanks again for your help -

Regards, Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

From: Daniels, Stephen [mailto:Stephen.Daniels@cmpco.com] Sent: July 27, 2017 3:01 PM To: Jim Schriver <jim.schriver@tenconnected.com<<u>mailto:jim.schriver@tenconnected.com</u>>> Cc: Perkins, Rhonda <Rhonda.Perkins@cmpco.com<<u>mailto:Rhonda.Perkins@cmpco.com</u>>>; Troy Moon (thm@portlandmaine.gov<<u>mailto:thm@portlandmaine.gov</u>>) <thm@portlandmaine.gov<<u>mailto:thm@portlandmaine.gov</u>>> Subject: RE: potential LED light pilot project

Jim, Yes, please resubmit for locations with existing lights that will be replaced with LEDs. Thanks Steve

[cid:image001.jpg@01D30A03.214B50C0]

Stephen G. Daniels, CEM Manager, Sales 205 Center Road, Fairfield, ME 04937 Office 207-453-3365 Cell 207-314-1086 Fax 207-629-4931 stephen.daniels@cmpco.com<<u>mailto:stephen.daniels@cmpco.com</u>>

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Steve -

Good morning... as promised, here is a summary of our request on behalf of the City of Portland.

The two streets that Portland has identified for the pilot are CEDAR STREET and CASCO STREET. They are located close to each other (see the attached map).

We looked at both streets by both walking them and by using Google street view to confirm pole placement. I've attempted to place dots on the attached map so we know where the CMP poles are located.

There are a total of 11 poles on these two streets -5 on Casco and 6 on Cedar. While this number is a little higher than we expected, we were hoping that CMP would still be willing to proceed with a pilot.

A summary of our request is as follows: 11 new LED light fixtures, roughly 40 watts each, and 3 new brackets to be placed on poles

[cid:image004.png@01D30A03.214B50C0]

The City will provide, or pay for, the fixtures, the brackets, and the qualified labor to install them. If it is acceptable to CMP, TEN Connected would probably request a quote from On-Target, and after receipt of a purchase order, they would install the equipment as their work schedule allows, but probably in the next 2-4 weeks.

Does this sound acceptable? Are there any elements we are missing?

As soon as you are able to confirm that our approach is sound, we will proceed to contact On Target about getting a quote. If you'd like us to modify any portion of this, please let me know.

Thanks again for your willingness to help the City with this pilot – I look forward to your reply –

Best regards, Jim

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From:	Troy Moon
To:	Jim Schriver
Subject:	Re: FW: potential LED light pilot project
Date:	Monday, July 31, 2017 2:05:29 PM

Yes - I will charge it to the streetlight capital money I have. That is good news! Let's get started.

On Mon, Jul 31, 2017 at 1:56 PM, Jim Schriver <<u>jim.schriver@tenconnected.com</u>> wrote: Troy – we've been approved for the Cedar/Casco lighting pilot project...

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Steve –

Here is a modified request... with only 1-for-1 replacement of existing cobra head lights for LED cobra head lights. This new approach only requires 9 lights installed...

[cid:image003.jpg@01D30A03.214B50C0]

The location of each pole is noted on the attached map. There will be 5 new lights on Casco and 4 lights along Cedar Street.

Please review this modified request and let us know if you have any questions, or need us to make any changes. If no changes are required, we'll reach out to On-Target to get a quote and leadtime for the work.

Thanks again for your help –

Regards, Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

From: Daniels, Stephen [mailto:<u>Stephen.Daniels@cmpco.com</u>] Sent: July 27, 2017 3:01 PM To: Jim Schriver <<u>jim.schriver@tenconnected.com</u><mailto:<u>jim.schriver@</u>tenconnected.com>>> Cc: Perkins, Rhonda <<u>Rhonda.Perkins@cmpco.com</u><mailto:<u>Rhonda.Perkins@cmpco.</u> com>>; Troy Moon (thm@portlandmaine.gov<mailto:thm@portlandmaine.gov>) <<u>thm@portlandmaine.gov</u><mailto:thm@portlandmaine.gov>>> Subject: RE: potential LED light pilot project

Jim,

Yes, please resubmit for locations with existing lights that will be replaced with LEDs. Thanks Steve

[cid:image001.jpg@01D30A03.214B50C0]

Stephen G. Daniels, CEM Manager, Sales 205 Center Road, Fairfield, ME 04937 Office <u>207-453-3365</u> Cell <u>207-314-1086</u> Fax <u>207-629-4931</u> <u>stephen.daniels@cmpco.com</u><mailto:<u>stephen.daniels@cmpco.com</u>>

[cid:image002.jpg@01D30A03.214B50C0]

In the interest of the environment, please print only if necessary and recycle.

From: Jim Schriver [mailto:jim.schriver@tenconnected.com] Sent: Thursday, July 27, 2017 9:21 AM To: Daniels, Stephen Cc: Perkins, Rhonda; Troy Moon (<u>thm@portlandmaine.gov</u><mailto: <u>thm@portlandmaine.gov</u>>) Subject: RE: potential LED light pilot project

Steve – Good morning... as promised, here is a summary of our request on behalf of the City of Portland.

The two streets that Portland has identified for the pilot are CEDAR STREET and CASCO STREET. They are located close to each other (see the attached map).

We looked at both streets by both walking them and by using Google street view to confirm pole placement. I've attempted to place dots on the attached map so we know where the CMP poles are located.

There are a total of 11 poles on these two streets -5 on Casco and 6 on Cedar. While this number is a little higher than we expected, we were hoping that CMP would still be willing to proceed with a pilot.

A summary of our request is as follows: 11 new LED light fixtures, roughly 40 watts each,

and 3 new brackets to be placed on poles

[cid:image004.png@01D30A03.214B50C0]

The City will provide, or pay for, the fixtures, the brackets, and the qualified labor to install them. If it is acceptable to CMP, TEN Connected would probably request a quote from On-Target, and after receipt of a purchase order, they would install the equipment as their work schedule allows, but probably in the next 2-4 weeks.

Does this sound acceptable? Are there any elements we are missing?

As soon as you are able to confirm that our approach is sound, we will proceed to contact On Target about getting a quote. If you'd like us to modify any portion of this, please let me know.

Thanks again for your willingness to help the City with this pilot – I look forward to your reply –

Best regards, Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

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Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362 Troy -

Thanks for the time this week... I thought we made a lot of progress.

In the spirit of keeping us on the same page, with a project that has a lot of moving parts and seems to evolve each day, I thought I'd provide a recap of recent activity and upcoming action items.

Here is my list - please feel free to add to it or suggest corrections:

Updates:

* A draft of the Bill of Sale between CMP/Portland for the buyback has been finalized and verbally agreed to by CMP. It was sent to Michael Goldman and is waiting for his approval before we set a closing date. It has been confirmed that the City has the money reserved to pay the ~ \$600k to CMP without using any of the Street Light project funding

* The project has been split into 2 phases, roughly \$4M and \$4M, to help the City manage its debt levels and maintain its good ratings. Phase 1 will commence as soon as we can get the contracts signed, and construction will happen in the fall of 2017 and might spill into the first month or two of 2018. Phase 2 will likely be July 2018 thru December 2018

Action items:

- * Send pilot project pictures to Troy (done; if we find any more good ones, we'll send next week)
- * Send Brendan a copy of the lighting savings spreadsheet (done)
- * Confirm BoA's ability to provide the same aggressive rate on just phase 1 of the project (done)

* Define activities in Phase 1 and Phase 2; consider various factors (maximize savings, execute the 'low-hanging-fruit', equipment leadtimes, etc)

- * Determine how much of the cobra head project to execute in phase 1
- * Determine how much of the decoratives (or non-cobraheads) for phase 1
- * Determine what portions of Smart City to execute in phase 1
- * Contact BoA to set up contract for \$4M financing for phase 1
- * Get Project on City Council meeting agenda for Sept 18th

* Determine what materials to prepare for Sept 18th meeting - summary sheet of the project, or a full-blown presentation by Jon or Troy, supported by TEN Connected?

- * Confirm final costs and leadtimes on LED fixtures, make a vendor selection by 9/8
- * Define choices for decoratives by major category or geography (Old Port, Congress Street, etc)
- * Set up demo installation in September to help aide decision-making for decoratives:
- * What is the standard, by neighborhood? What is the approach for dark-sky compliance?
- * Green teardrops: screw-in LED lamp, or retrofit kit, or new fixture
- * Black Town & Country: screw in LED lamp, or new fixture? Can we rehab any fixtures?
- * Black Spring City fixtures and poles in Old Port: 2 sockets per pole, glass globe; retrofit or replace?
- * Wooden poles on Baxter Blvd add LED or replace everything?
- * Nautical lights on Eastern Prom and waterfront: upgrade or replace?

What else am I missing? Lets talk early next week and make sure we're not missing anything -

Thanks - have a great weekend -

Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

From:	Troy Moon
To:	Michael Goldman; Nancy English
Subject:	Fwd: Street Lighting Project Draft Resolution Language.docx
Date:	Monday, September 25, 2017 7:29:41 AM
Attachments:	Street Lighting Project Draft Resolution Language.docx

Nancy,

Here is a draft resolution that might be useful to create the council order for the street light project

------ Forwarded message ------From: rob.campbell <<u>rob.campbell@tensaves.com</u>> Date: Tue, Sep 12, 2017 at 2:39 PM Subject: Street Lighting Project Draft Resolution Language.docx To: Troy Moon <<u>thm@portlandmaine.gov</u>> CC: Jim Schriver <<u>jim.schriver@tenconnected.com</u>>

Good afternoon Troy,

As promised, please find attached, some recommended draft resolution language for your upcoming council meeting to:

- approve a resolution to enter into a contract with TCS.

- approve a resolution to enter into a financing agreement with the Bank of America to fund the project through a tax-exempt municipal lease.

I hope you find this helpful.

Best regards,

Rob

Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362 Troy -

Our engineering team has requested information about two projects that will likely fall into Phase 1 of the Street Light project (Payson Park field lights, Deering Oaks fountain lights)

Could you pass this along to the appropriate person, or help us find someone who could answer these questions?

1. Regarding Payson Park softball field:

* can someone define which level of play occurs here? Is it high school baseball / softball? College level? Junior High?

* Are there any plans available which show the electrical infrastructure and lighting as originally designed?2. Regarding Deering Oaks pond fountain:

* Can the City share any drawing or documents that outline the existing lighting system, the mounting hardware, and the electrical infrastructure that supports it?

* If no drawings are available, how many physical fixtures are currently deployed to light the fountain? Is the fixture type and wattage known?

* Is there an estimated depth of that pond? At its deepest point? What is the approximate depth where the fountain is located?

* Are there snapping turtles known to inhabit the pond? (precautions on system wiring will be taken if turtles are suspected)

* When the fountain lighting was installed, was the pond drained, or was the equipment installed while the pond was full?

Thanks in advance - let me know if you have any questions -

Regards, Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/ Ethan,

Can you or someone on your staff get back to Jim Schriver at TEN Connected with the info they are requesting about the Payson Ballfield and the Deering Oaks Fountain? \hat{A}

------ Forwarded message ------From: **Jim Schriver** <<u>jim.schriver@tenconnected.com</u>> Date: Tue, Sep 26, 2017 at 2:11 PM Subject: request for info - parks To: "Troy Moon (<u>thm@portlandmaine.gov</u>)" <<u>thm@portlandmaine.gov</u>>

Troy -

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Thanks in advance - let me know if you have any questions -

Regards, Jim

Jim Schriver

TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PAÂ 15233 412-429-8888, ext 131Â (O) 412-992-1397 (C) https://www.tenconnected.com/

--

Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362

Hi Ethan,

I see Ethan Hipple is on vacation. Can you respond here? ------ Forwarded message ------From: **Troy Moon** <<u>thm@portlandmaine.gov</u>> Date: Tue, Sep 26, 2017 at 2:13 PM Subject: Fwd: request for info - parks To: Ethan Hipple <<u>ehipple@portlandmaine.gov</u>>, Jim Schriver <<u>jim.schriver@tenconnected.com</u>>

Ethan,

Can you or someone on your staff get back to Jim Schriver at TEN Connected with the info they are requesting about the Payson Ballfield and the Deering Oaks Fountain? \hat{A}

------ Forwarded message ------From: **Jim Schriver** <jim.schriver@tenconnected.com> Date: Tue, Sep 26, 2017 at 2:11 PM Subject: request for info - parks To: "Troy Moon (thm@portlandmaine.gov)" <thm@portlandmaine.gov>

Troy -

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Thanks in advance - let me know if you have any questions -

Regards, Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PAÂ 15233 412-429-8888, ext 131Â (O) 412-992-1397Â (C) https://www.tenconnected.com/

Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362

Troy Moon Sustainability Coordinator City of Portland, ME 207-756-8362

From:	Ethan Hipple
To:	Ethan Owens
Subject:	Fwd: request for info - parks
Date:	Tuesday, September 26, 2017 4:28:40 PM

Can you please get back to them? Thanks ------ Forwarded message ------From: "Troy Moon" <<u>thm@portlandmaine.gov</u>> Date: Sep 26, 2017 1:13 PM Subject: Fwd: request for info - parks To: "Ethan Hipple" <<u>ehipple@portlandmaine.gov</u>>, "Jim Schriver" <<u>jim.schriver@tenconnected.com</u>> Cc:

Ethan,

Can you or someone on your staff get back to Jim Schriver at TEN Connected with the info they are requesting about the Payson Ballfield and the Deering Oaks Fountain? \hat{A}

----- Forwarded message ------From: **Jim Schriver** <<u>jim.schriver@tenconnected.com</u>> Date: Tue, Sep 26, 2017 at 2:11 PM Subject: request for info - parks To: "Troy Moon (<u>thm@portlandmaine.gov</u>)" <<u>thm@portlandmaine.gov</u>>

Troy -

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Thanks in advance - let me know if you have any questions -

Regards, Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PAÂ 15233 412-429-8888, ext 131Â (O) 412-992-1397Â (C) https://www.tenconnected.com/

--

Troy Moon Sustainability Coordinator City of Portland, ME <u>207-756-8362</u> Brendan –

Good morning... with Troy being out, I wanted to touch base and see if everything went OK with the first reading of the Council last night. Is there anything you or Jon need from TEN Connected in regards to the Street Light project?

Let me know if there is anything we can do to help -

Thanks,

Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

From:	Ethan Owens
To:	jim.schriver@tenconnected.com; Ethan Hipple; Troy Moon; RW
Subject:	Portland Maine
Date:	Tuesday, October 3, 2017 2:05:40 PM
Attachments:	IMG_0562.JPG
	MuscoEstimate City of Portland (1).pdf

Good Morning, I will add what i can and find out what I don't know.

Our engineering team has requested information about two projects that will likely fall into Phase 1 of the Street Light project (Payson Park field lights, Deering Oaks fountain lights)

Could you pass this along to the appropriate person, or help us find someone who could answer these questions?

1. Regarding Payson Park softball field:

* can someone define which level of play occurs here? Is it high school baseball / softball? College level? Junior High? The lighting system and the poles are very old and none of the existing system can be used again. The level of play is normally high school and State Playoff games. Attached is a quote for Musco Lighting which we have used at two other locations and would prefer to use Musco at any new installations because of our experience with the product and the 25 yr warranty.

* Are there any plans available which show the electrical infrastructure and lighting as originally designed? ${f No}$

2. Regarding Deering Oaks pond fountain:

* Can the City share any drawing or documents that outline the existing lighting system, the mounting hardware, and the electrical infrastructure that supports it?

* If no drawings are available, how many physical fixtures are currently deployed to light the fountain? Is the fixture type and wattage known?

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* When the fountain lighting was installed, was the pond drained, or was the equipment installed while the pond was full?

Ethan Owens CPRP, CPSI, AOLCP

Parks Assistant Director, Athletic Facilities and Playground/Courts Manager City of Portland - Parks, Recreation and Facilities Management Dept. 212 Canco Road Portland, Maine 04103 ~ USA 207-808-5400 eowens@portlandmaine.gov

From:	Allison Carroll
То:	Amy Segal; Belinda Ray; Carol Hutchins; Chelsea Malacara; Colette Bouchard; Craig Lapine; Cynthia Loebenstein; Dory Waxman; Ethan Hipple; Jaime Parker; Meri Lowry; Michael Mertaugh; Nathan Robbins; Sally Deluca; Zack
	Anchors
Subject:	Workshop minutes
Date:	Wednesday, October 4, 2017 9:12:38 PM
Attachments:	PC Workshop Minutes 092017.pdf

Hello everyone,

Hope you're all having a great week. For those of you who missed the workshop, attached are the minutes. Of course, if you have any additional questions, feel free to ask Sally or Ethan.

Take care,

Alli Carroll

Executive Assistant City of Portland, Parks, Recreation & Facilities 212 Canco Road, Portland, Maine 04103 207.808.5428

"Portland, Maine. Yes. Life's good here."

Just read the workshop minutes. Bless you both. A million times over.

:-)

Belinda S. Ray City Council, District 1 City Hall 389 Congress Street Portland, ME 04101 BSR@portlandmaine.gov

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----- Forwarded message ------

From: Allison Carroll <acarroll@portlandmaine.gov> Date: Wed, Oct 4, 2017 at 9:12 PM Subject: Workshop minutes To: Amy Segal <amybellsegal12@gmail.com>, Belinda Ray <bsr@portlandmaine.gov>, Carol Hutchins <hutchins_carol@hotmail.com>, Chelsea Malacara <chelsea.foote@maine.edu>, Colette Bouchard <coletteb1821@gmail.com>, Craig Lapine <craig@cultivatingcommunity.org>, Cynthia Loebenstein <cloebenstein@yahoo.com>, Dory Waxman <mermaidst@gmail.com>, Ethan Hipple <ehipple@portlandmaine.gov>, Jaime Parker <Jaime@trails.org>, Meri Lowry <mnlowry@hotmail.com>, Michael Mertaugh <michaelmertaugh@gmail.com>, Nathan Robbins <npalmer.robbins@gmail.com>, Sally Deluca <sld@portlandmaine.gov>, Zack Anchors <zack.anchors@gmail.com>

Hello everyone,

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Take care,

Alli Carroll

Executive Assistant City of Portland, Parks, Recreation & Facilities 212 Canco Road, Portland, Maine 04103 207.808.5428

"Portland, Maine. Yes. Life's good here."

Ethan –

Thanks for the Deering Oaks pond light picture... do you know how many of those fixtures are currently installed? Pat Bresnahan (copied here) is with our engineering team and will reach out to you separately to ask a few more questions.

Also – thanks for the Musco Lighting quote. They usually have really good lighting products, so we'll reach out to Mike Berry and try to coordinate the details. Would you mind sending Mike an email letting him know that we're working with the City on the Lighting project, and that we're not some random company trying to scheme their way into some work!?!

Regarding the Payson Park location – we've been told there is some urgency to getting that project done. Can you share any additional insight about that? If you'd prefer to speak briefly on the phone, that is fine too – let us know when would be convenient –

Thanks again, Ethan -

Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/

From: Ethan Owens [mailto:eowens@portlandmaine.gov]
Sent: October 3, 2017 2:06 PM
To: Jim Schriver <jim.schriver@tenconnected.com>; Ethan Hipple <ehipple@portlandmaine.gov>; Troy Moon <thm@portlandmaine.gov>; RW <rbw@portlandmaine.gov>
Subject: Portland Maine

Good Morning,

I will add what i can and find out what I don't know.

Our engineering team has requested information about two projects that will likely fall into Phase 1 of the Street Light project (Payson Park field lights, Deering Oaks fountain lights) 1. Regarding Payson Park softball field:

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* Are there any plans available which show the electrical infrastructure and lighting as originally designed? **NO**

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Parks Assistant Director, Athletic Facilities and Playground/Courts Manager City of Portland - Parks, Recreation and Facilities Management Dept. 212 Canco Road Portland, Maine 04103 ~ USA 207-808-5400 eowens@portlandmaine.gov

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From:	Ethan Owens
To:	RW
Subject:	Fwd: Portland Maine
Date:	Friday, October 13, 2017 10:52:38 AM
Subject:	Fwd: Portland Maine

When you have a chance, please educate these guys on your DO lights.

Ethan Owens CPRP, CPSI, AOLCP Parks Assistant Director, Athletic Facilities and Playground/Courts Manager City of Portland - Parks, Recreation and Facilities Management Dept. 212 Canco Road Portland, Maine 04103 ~ USA 207-808-5400 <u>eowens@portlandmaine.gov</u>

------ Forwarded message ------From: **Jim Schriver** <<u>jim.schriver@tenconnected.com</u>> Date: Fri, Oct 13, 2017 at 10:46 AM Subject: RE: Portland Maine To: Ethan Owens <<u>eowens@portlandmaine.gov</u>> Cc: Pat Bresnahan <<u>pat.bresnahan@tensaves.com</u>>

Ethan -

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Thanks again, Ethan –

Jim

Jim Schriver

TEN Connected Solutions

1501 Reedsdale Street, Suite 401

Pittsburgh, PA 15233

412-429-8888, ext 131 (O)

412-992-1397 (C)

https://www.tenconnected.com/

From: Ethan Owens [mailto:eowens@portlandmaine.gov]
Sent: October 3, 2017 2:06 PM
To: Jim Schriver <jim.schriver@tenconnected.com>; Ethan Hipple
<ehipple@portlandmaine.gov>; Troy Moon <thm@portlandmaine.gov>; RW
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Ethan Owens CPRP, CPSI, AOLCP

Parks Assistant Director, Athletic Facilities and Playground/Courts Manager City of Portland - Parks, Recreation and Facilities Management Dept.

212 Canco Road Portland, Maine 04103 ~ USA

207-808-5400 eowens@portlandmaine.gov

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You bet, aisle get it done today

On Oct 13, 2017 10:52 AM, "Ethan Owens" <<u>eowens@portlandmaine.gov</u>> wrote: When you have a chance, please educate these guys on your DO lights.

Ethan Owens CPRP, CPSI, AOLCP Parks Assistant Director, Athletic Facilities and Playground/Courts Manager City of Portland - Parks, Recreation and Facilities Management Dept. <u>212 Canco Road Portland, Maine 04103 ~ USA</u> <u>207-808-5400 eowens@portlandmaine.gov</u>

------ Forwarded message ------From: **Jim Schriver** <<u>jim.schriver@tenconnected.com</u>> Date: Fri, Oct 13, 2017 at 10:46 AM Subject: RE: Portland Maine To: Ethan Owens <<u>eowens@portlandmaine.gov</u>> Cc: Pat Bresnahan <<u>pat.bresnahan@tensaves.com</u>>

Ethan –

Thanks for the Deering Oaks pond light picture... do you know how many of those fixtures are currently installed? Pat Bresnahan (copied here) is with our engineering team and will reach out to you separately to ask a few more questions.

Also – thanks for the Musco Lighting quote. They usually have really good lighting products, so we'll reach out to Mike Berry and try to coordinate the details. Would you mind sending Mike an email letting him know that we're working with the City on the Lighting project, and that we're not some random company trying to scheme their way into some work!?!

Regarding the Payson Park location – we've been told there is some urgency to getting that project done. Can you share any additional insight about that? If you'd prefer to speak briefly on the phone, that is fine too – let us know when would be convenient –

Thanks again, Ethan –

Jim

Jim Schriver

TEN Connected Solutions

1501 Reedsdale Street, Suite 401

Pittsburgh, PA_15233

<u>412-429-8888, ext 131</u> (O)

<u>412-992-1397</u> (C)

https://www.tenconnected.com/

From: Ethan Owens [mailto:eowens@portlandmaine.gov]
Sent: October 3, 2017 2:06 PM
To: Jim Schriver <jim.schriver@tenconnected.com>; Ethan Hipple
<ehipple@portlandmaine.gov>; Troy Moon <thm@portlandmaine.gov>; RW
<rbw@portlandmaine.gov>
Subject: Portland Maine

Good Morning,

I will add what i can and find out what I don't know.

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From:	Robert Weyer
To:	Ethan Owens
Cc:	jim.schriver@tenconnected.com; Ethan Hipple; Troy Moon
Subject:	Re: Portland Maine
Date:	Friday, October 13, 2017 2:16:04 PM

The current fountain lighting system is fed by 5 circuits. Each has a 20 amp breaker. The outer ring has 20 lights divided up by four of the circuits (five each). In the center of the fountain, the fifth circuit, has three lamps. So twenty three lamps total.

The lights all are 120 volt with 250 watt bulbs in the outer lights and 500 watt bulbs in the center lights. The outer lights were rated at 4800 lumens and the center lamps were 9800 lumens.

The depth of the pond where the fountain sits is three feet or less. The lights are raised on the bases(see the picture Ethan O. provided) we made so they are at the most about 8 " under the surface. These light must be submerged to operate due to the heat produced.

Before the pond was scraped out and the gravel base installed a couple of years ago I had seen one snapping turtle in the pond. None since.

The fountain lights are removed with the rest of the fountain for the winter. Removal is usually done in the first week of November and installation is done the first week of May. The pond is drained for several weeks spring and fall for removing/installing the fountain and duck house as well as cleaning of the pond bottom.

If you still need more information I may have a binder with further specs.

On Tue, Oct 3, 2017 at 2:05 PM, Ethan Owens <<u>eowens@portlandmaine.gov</u>> wrote: **Good Morning**, Leville dd arbetti een and find art arbet L denit langer

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From:	Jim Schriver
To:	Robert Weyer; Ethan Owens
Cc:	Ethan Hipple; Troy Moon; Pat Bresnahan
Subject:	RE: Portland Maine
Date:	Friday, October 13, 2017 2:29:36 PM

Robert –

This is great information – thank you...

I'll circle back with our engineering team to see if there are any further questions, but this should give us a great start –

Regards,

Jim

From: Robert Weyer [mailto:rbw@portlandmaine.gov]
Sent: October 13, 2017 2:16 PM
To: Ethan Owens <eowens@portlandmaine.gov>
Cc: Jim Schriver <jim.schriver@tenconnected.com>; Ethan Hipple <ehipple@portlandmaine.gov>; Troy Moon <thm@portlandmaine.gov>
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Dan Bouillier (dcbillportlandmaine.gov): Bob Tolliver Casey, Samuel RE: Portland, Maine, Approves Wi-FI-Enabled Lighting Project Wednesday, October 18, 2017 5:10:38 PM imaoc001.ong image002.png

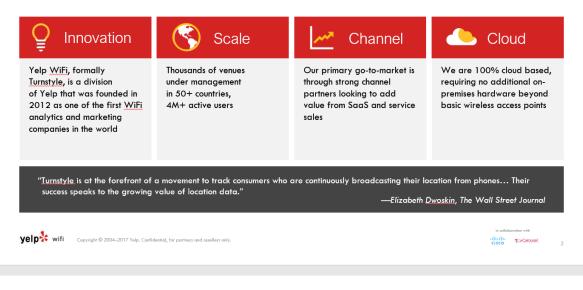
Hi Dan and Bob,

Hope all is well. I read this article the other day in the PPH and wanted to reach out to discuss WiFi technology partners involved.

Carousel recently launched with Yelp WiFi and I thought it might be a great fit for this initiative. Attached is a press release highlighting the free public WiFi initiative that London, Ontario implemented back in 2011. Below is a snip from a PPT "What is Yelp WiFi":

What is Yelp WiFi?

Leading provider of <u>WiFi</u>-based proximity marketing and analytics



Please let me know if you want to setup an engineering call to discuss further

Thank you !!!

Christopher M. Casey | Senior Account Executive Remote Office | Cape Elizabeth, ME 04107 c: 617-701-53986 ccasey@carouselindustries.com



From:	Jim Schriver
To:	Wardwell, Dana
Cc:	Troy Moon (thm@portlandmaine.gov)
Subject:	follow-up: Streetlight RFP
Date:	Thursday, November 9, 2017 5:12:40 PM

Dana -

During our discussion earlier this week, you asked about getting examples of other Street Light RFP's that Bangor could review.

I spoke with Troy Moon, Sustainability Coordinator for the City of Portland. They conducted an RFP process late last year, which finished in early 2017... and it would appear to provide all of the things Bangor was looking for.

Troy (copied here) has agreed to share any documents and insights with you. Please contact him directly and continue the conversation.

Let me know if you have any other questions -

Thanks - and good luck -

Jim

Jim Schriver TEN Connected Solutions 1501 Reedsdale Street, Suite 401 Pittsburgh, PA 15233 412-429-8888, ext 131 (O) 412-992-1397 (C) https://www.tenconnected.com/