## August Director Questions – Rachel

Q1 - Item 6 p.15 and 17. Check #1751 for $17,490 and #1807 for $ 2,475. I assume these payments are for 18-05.

Yes, this is for treatment plant SCADA migration. Work included effluent pump station screens, dewatering screens, and alarming.

Q2- Item 6, p.17 Check#1806 for $77,643. - Can we get more detail on what is covered in the annual Managed Services? e.g. the number of programming hours by Exceedio? Is it appropriate that this also be designated as 18-05?

No, I would not designate it as #18-05. This is for annual service on our network and includes:

$64,427.76 Manages services for two network sites, eight server devices, 2 server device Ruckus and Datto, 46 workstations, 10 printer devices, 29 Microsoft Office 365 Business Standard, 9 Microsoft Office 365 Business Basic, 1 Visio license, 33 Microsoft Office Enterprise Mobility & Security, 33 Security Awareness Training seats, 1 Datto Backup & Disaster Cloud Storage, 1 Admin Datto Backup server, 1 Plant Datto Backup Server, and 2 Cisco Advance Firewall MS64

$13,215.30 Manages services for 1 SCADA network site, 4 Server Devices, 5 Workstation device management, 1 Datto Backup Server, and 1 Datto Backup & Disaster Clout Storage.

Managed services include desktop support for staff (staff can call or email ticket), patching of all servers, laptops and desktops, network support for ethernet switches, wireless access points, security cameras and phones, management of remote access for SCADA and Business network, management of email, security updates and testing of network, support for printers. Admin to treatment plant site connection is managed and monitored along with all pump station site to site connections. Also includes addition and removal of users and devices.

Reclamation is billed separately for network services.

Comment on Item 14, pages 78, 79 and 80. Thank you for the new non-CIP Project Summaries. Very helpful.

A work-in-progress. It will get better as we incorporate comments from the Board.

Q3. Item 14, page 80. Can you have the Lean Six Sigma Project Description provide more detailed content for someone who is not familiar with it? I think I know what it is (a Quality Improvement Process with benchmark requirements/accomplishments).

**Lean Six Sigma** is a method that relies on a collaborative team effort to improve performance by systematically removing waste[1] and reducing variation. It combines lean manufacturing/lean enterprise and Six Sigma to eliminate the eight kinds of waste (muda): Defects, Over-Production, Waiting, Non-Utilized Talent, Transportation, Inventory, Motion, and Extra-Processing.

Six Sigma seeks to improve the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability in (manufacturing and business) processes. Together, Lean aims to achieve continuous flow by tightening the linkages between process steps while Six Sigma focuses on reducing process variation (in all its forms) for the process steps thereby enabling a tightening of those linkages. In short, Lean exposes sources of process variation and Six Sigma aims to reduce that variation enabling a cycle of iterative improvements towards the goal of continuous flow.

Lean Six Sigma is used to reduce process defects and waste, and to provide a framework for overall organizational culture change.[2] Through the introduction of Lean Six Sigma, employers hope to change the mindset of employees to one that focuses on growth and continuous improvement through process optimization. This change in culture and the mindset of an organization can potentially maximize efficiency and increase profitability.

Q4 - Item 19, page 94. Good call on requesting action in advance of a potential problem. My question is in regard to "vicinity". What amount of clearance from Cal AM's asbestos clay pipes and PG&E gas lines is needed?

We need to know the location and depth in order to prepare for it. If it's in the bid documents, the contractor will bid and not be able to ask for extra work money. They will pothole the utility and protect it as we pipe burst. At Hatton we did this and the water line was inches from our pipe. The same with gas pipes. Knowing where they are not only keeps us from hitting/damaging the line during construction but saves us money on change orders during construction.

If they placed their line within inches of ours, the rules for separation do not apply. Otherwise, we would be replacing our lines rather than rehabilitating them and we would have no place to go. It would cost us millions of dollars and it's because they came in later and put us in the position. Lines crossing ours have different requirements than ones parallel to us.

## Per the District's Standard Plans & Specifications (2019-03-07):

MAIN SEWERS

1.12 HORIZONTAL AND VERTICAL CLEARANCE REQUIREMENTS A minimum outside-to-outside horizontal clearance of five (5) feet shall be maintained between the sewer mains and structures and adjacent non-potable water and stormwater underground utility mains and structures. Provide eight (8) feet outside-to-outside separation from planter strips and six (6) feet separation from continuous sidewalk and concrete curbs, unless approved by the engineer. A minimum horizontal clearance of ten (10) feet shall be maintained between the sewer main and parallel water mains, unless approved in advance by the Engineer. A minimum vertical clearance between the sewer main and adjacent, non-potable water underground utility mains shall be six (6) inches. Pipe couplings are not allowed within the trench. Greater clearance may be required by the District.

1.13 WATER MAIN SEPARATION

A. New water mains and new lateral lines shall not be installed in the same trench as and shall be at least ten (10) feet horizontally from and one foot vertically above, any parallel pipeline conveying untreated sewage.

B. If crossing a pipeline conveying a fluid listed in subsection (A), a new water main shall be constructed no less than 45-degrees to and at least one foot above that pipeline. No connection joints shall be made in the water main within eight horizontal feet of the fluid pipeline.

C. The vertical separation specified in subsection (A) is required only when the horizontal distance between a water main and pipeline is less than ten (10) feet.

D. The minimum separation distances set forth in this section shall be measured from the nearest outside edge of each pipe barrel.

PRIVATE LATERALS

2.13 HORIZONTAL UTILITY CLEARANCE A minimum horizontal clearance of five (5) feet should be maintained between the private sewer and adjacent underground utility lines and concrete curbs. A minimum horizontal clearance of ten (10) feet should be maintained between the private sewer and parallel water mains or services

2.18 NEW UTILITIES CROSSING EXISTING SEWER MAINS AND PRIVATE LATERALS A. New utilities shall be installed with a minimum of 12-inches of clearance when crossing an existing sewer main or private lateral. B. If requested by the District, existing sewer main or private lateral shall be CCTV inspected prior to and after installation of new utility. C. If requested by the District, submit work plan and provide final clearance measurement of crossing utility.