To: Honorable Mayor and Members of Town Council

Through: David L. Corliss, Town Manager

From: Mark Marlowe, P.E., Director of Castle Rock Water

Title: Resolution Approving a Software License, Subscriptions, and System Maintenance Agreement Between Harris Computer NorthStar and the Town of Castle Rock

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Executive Summary

The purpose of this memorandum is to seek approval from Town Council for a Resolution (see **Attachment A**) to purchase new customer billing and customer portal software from Harris Computer NorthStar for $410,000. The current customer billing system is called Billmaster. This is a SQL based application that was purchased from Data West Utility Technologies in July 2009. In 2015, Data West was acquired by Harris Computer Systems Inc. and was merged into their NorthStar Utilities Solutions division. Even though Billmaster will be supported for the foreseeable future, there are no plans for development or enhancements to bring this application to a web based software or to support new Microsoft server operating systems or security patches.

Billtrust is the current customer portal that was launched in January 2014. At that time, it was selected as a one stop solution for customers to set up an online account, go paperless, view and print 12 months of statements and make payments 24/7 via mobile applications and an Interactive Voice Response (IVR) phone system. They also provide our print and mail services for monthly statements.

Over the last two years, staff has evaluated and received multiple demonstrations on these three utility billing systems: (1) Harris Computer NorthStar, (2) Tyler Technologies Muni and (3) Tyler Technologies Incode. We will discuss in further detail the system of choice, Harris Computer NorthStar, and the features of this system that will enhance the customer's overall experience, eliminate inefficiencies, automate processes that are done manually today, and improve overall staff productivity and customer service levels.

Notification and Outreach Efforts

Upon selection and approval of a new billing system, an official outreach plan will be established. This will include email blasts, newsletters, Town Talk, social media, statement messaging, and individualized phone conversations if needed to ensure a smooth transition and experience for our customers.

History of Past Town Council, Boards & Commissions, or Other Discussions

On January 27, 2021, staff made a presentation to CRW Commission on the new billing system software options. Commission recommended XX to XX that Council approve a Resolution to purchase new customer billing and customer portal software from Harris Computer NorthStar for $410,000.

Discussion

Castle Rock Water staff and DoIT staff spent the last two years conducting vendor demonstrations, evaluating the software systems from a compatibility and security standpoint, and creating a wish list of what features would be desired from a new billing system from a staffing and a customer perspective. DoIT staff will conduct a full security evaluation review on the platform of choice prior to purchase. DoIT staff has already provided tentative approval based on preliminary NorthStar communication and a strong RiskRecon report. Our biggest test and challenge to all the vendors was if they could accommodate our four tiered water budget rate structure, stormwater calculations and the annual Average Winter Monthly Consumption (AWMC) reset. While they all said they could, Tyler Technologies and NorthStar were the only two to go the extra mile and conduct a proof of concept. Staff found all three processes with NorthStar to be much more straight forward, streamlined and user friendly.

Pricing was also provided by all three vendors. The table below shows preliminary pricing from the vendors.

Vendor	One Time Costs	Annual Recurring Costs
Harris Computer NorthStar	$410,000	$45,375
Tyler Technologies Muni	$185,512	$20,408
Tyler Technologies Incode	$180,666	$27,361

Although the one-time costs for NorthStar are significantly higher than both Tyler Technologies products, that variance in costs is made up in their annual per transaction fee for taking online payments for the Utility Billing Online Portal and functionality which is not included in the annual recurring costs listed in the table above. For example, they charge $1.25 per transaction every time a customer makes an online payment via the customer portal. This is in addition to the per transaction fee we are charged for our actual payment processor. In 2020, we took approximately 163k online payments. At $1.25 per transaction that would have equated to approximately $204k in fees. This amount will just continue to get larger each year due to more accounts and further customer online adoption. This structure is not financially feasible for a utility of our size but more so for Tyler's average customers who are only processing 20k to 50k transactions a year.

The annual recurring costs for both Tyler Technologies products are set to increase at 3% each year. The NorthStar annual recurring costs are made up of annual maintenance and support and annual subscription service for the SilverBlaze online portal. They are looking at locking an annual increase for 3 years and then administering a cap of 3% thereafter on the annual maintenance and support fees. We are currently working with the vendor to have this same 3-year increase lock and 3%

cap thereafter on the SilverBlaze subscription fee as well. The SilverBlaze subscription pricing is based on number of accounts but they have indicated they will not be increasing every year as we bring on new accounts.

Based on the one-time cost coupled with the recurring costs per year and the overall added features listed below that we don't currently have today, staff is recommending Harris Computer NorthStar as the vendor of choice. Outlined below is a few of the areas of the business and customer interaction that would be enhanced with the NorthStar billing system and online customer portal. Although Tyler Technologies software had similar functions in some areas, it fell short compared to the complete package with Harris Computer's NorthStar software.

Edocs Workflow Management: This is a workflow management tool within the NorthStar system which is much like DocuSign that is used throughout the Town today. This functionality would streamline and automate the movement of billing adjustments, leak adjustments, lien processing, bulk water applications and any other account specific correspondence. The smart forms or account management documents would reside within the accounts rather than on a shared drive for easy access and reference. This tool would allow staff to go completely paperless with these types of transactions and approvals. This would also reduce paper costs and reduce staff processing time.

Meter Services Mobile Service Orders: Today all service orders are created, printed and handed to the technicians. With mobile service orders from NorthStar technicians would receive their service orders electronically in the field via an I-phone, I-pad or an android device. Technicians will have more options and capabilities in the field such as creating and closing service orders, attaching pictures directly to an account, capturing audit information and transferring service orders to other technicians. We are averaging about 800 service orders per month with 4 technicians. This system will also integrate with GIS for mapping purposes.

Smart Forms: As growth continues in Castle Rock so does the amount of new accounts that are being added into the billing system each year. For the past two years we have been averaging approximately 450 water service transfers per month. This requires a final read and a move in and move out whenever a property transfers ownership. Currently this is a labor intensive manual process to move in and move out owners, tenants and landlords. NorthStar would streamline this process using their "smart forms" capability. Customers would fill out a form online and send to staff for approval. Once it is approved it would automatically create a service order to obtain a final read and add the title company information. We estimate this could be a time savings of approximately 75 hours per month. The other vendors we looked at would still require the same manual intensive process we do today.

Real Time Reconnections: We perform monthly disconnections of water service due to non-payment. This is also a labor intensive process today for both staff and the customer. NorthStar will auto generate the service order for reconnection of service based on a sufficient payment made by the customer and this is all done in real time. A customer pays their payment to get reconnected and an automated email goes to Meter Services to reconnect service. Currently the customer has to call us with a confirmation number and staff manually creates the email to Meter Services and manually creates a

service order for reconnection. This automated feature was not available with the other vendors we evaluated.

Flags and Alerts: Flagged customers and alerts are carried from one platform to another with NorthStar. If a customer has a cash only account due to repeated non-sufficient funds, it will not allow them to make a checking account payment for reconnection. Today, unless they come into the office to pay with cash, the online portal will allow them to continue making payments via checking account thus creating additional non-sufficient payments for reconnection. This feature is not available amongst the other vendors we evaluated.

Call Tracking: NorthStar provides phone call tracking at the account level. While on a phone call, a Customer Service Representative (CSR) can select a pick list of pre-defined reasons for the call. This information can be used to target outreach surrounding common questions, concerns, etc. Today we are only able to use the system to track the number of calls and the duration of the call, not the reason for the call. No other vendors were able to provide this useful outreach tool.

Password Resetting: With NorthStar, the CSR will be able to assist the customer with resetting their passwords. Today the customer has to reset their own password which can become frustrating for the CSR and the customer. The other vendors listed above do not have this feature.

Americans with Disabilities Act (ADA) and Language Options: NorthStar is ADA compliant and offers multiple language options such as Spanish and French, just to name a few. Today we do not have either of these features for our customers to utilize.

Account Set Up Options: With NorthStar the customer can search the customer portal for their account even if they don't know their account number. They can search on address or name combination when setting up a new account. Today they have to have a token number and account number to set up a new account online. This streamlines this process for the customer experience. With Tyler Technologies, the customer has to know their account number and the amount of their last payment. The conversion of active online account holders will transfer to NorthStar automatically with only the need for them to reset their password.

Backflow Cross Connection Database: Currently the backflow cross connection database information is maintained in a software called XC2 which currently resides outside the main billing system with no interface. NorthStar already has the functionality built in to maintain the cross connection program. We would only need to convert the data and forms.

NorthStar Online Customer Portal: There are a host of new online customer portal options that we do not have today including the following.
- Payments are real time versus today we have a 24-hour lag. This is important for timing of disconnections and reconnections.
- Expanded payment options such as PayPal, Venmo, and Amazon Pay. Today we offer checking account and debit/credit card options.

- Auto pay is more flexible with scheduling as customers can set a day on each month such as the 15th. Today the only option is on the due date which is the last day of the month.
- We can make it mandatory to get a phone number and email so we have these for outreach and emergency situations. Today they don't have to input a phone number, and we have found that to be an issue in an emergency situation.
- Consumption dashboard overlays consumption with local weather station data so the customer can look at their usage compared to these patterns.
- Transaction history is available on a dashboard side by side for month to month and year over year comparisons.
- Supports multiple web browsers and supports both android and apple products.

Budget Impact

One-time setup and implementation cost for NorthStar is $410,000 which includes business analysis and workshops, project management, installation, configurations, conversion, integration of existing interfaces, testing, validation, workshops, and training (see **Attachment B**). The 2020 budget is $350k which will be carried over to 2021 during the 1st quarter 2021 budget amendment. The 2021 budget is $195k. Annual recurring costs are estimated at $45k per year.

There are two options for hosting the software, either internally by Town DoIt staff or externally with NorthStar. CR Water and DoIt staff are meeting with NorthStar staff on XX to evaluate each of these options. If we decide to have NorthStar host the system, it would be an additional $49k per year, which is not included in the annual recurring costs in the table below. However, they are offering a 3-year increase lock and a 3% cap thereafter. The optional NorthStar hosting of $49k per year includes the hosting services (from Amazon AWS), the 3rd party software for the hosted environments (MS SQL, VM Ware, etc.) as well as the technical services to maintain the environments (index defragmentation, backups, integrity validation, space management, patch management, file system maintenance, etc.). For efficiencies there is a benefit to having the software vendor who is most familiar with their software perform some of these tasks. There are risks to the Town assuming responsibility and liability for security issues around maintaining these environments. A major security breach could cost well in excess of $49k not to mention the impact to public perception and trust.

Department	Description	Account #	2020 Budget	2021 Budget	Annual Recurring Costs
Customer Billing	Software	210-4221-442-70-43	$87,500	$48,750	$11,344
		211-4321-443-70-43	$87,500	$48,750	$11,344
		212-4421-444-70-43	$87,500	$48,750	$11,344
		213-4521-445-70-43	$87,500	$48,750	$11,344
		Total	$350,000	$195,000	$45,376

Staff Recommendation

Staff recommends moving forward with NorthStar business intelligence system and online customer portal.

Proposed Motion

"I move to approve the above Resolution as introduced."

Attachments

Attachment A: Resolution
Attachment B: Proposal from NorthStar