



TOWN OF ASHLAND CITY
Regularly Scheduled City Council Meeting
March 11, 2025, 6:00 PM
Agenda

Mayor: Gerald Greer

Council Members: Tim Adkins, Nicole Binkley, Chris Kerrigan, Michael Smith, Kevin Thompson, Tony Young

CALL TO ORDER

ROLL CALL

PLEDGE AND PRAYER

APPROVAL OF AGENDA

APPROVAL OF MINUTES

- [1.](#) February 11, 2025, Regularly Scheduled City Council Meeting Minutes

PUBLIC FORUM

REPORTS

- [2.](#) ATTORNEY: Jennifer Noe

UNFINISHED BUSINESS

- [3.](#) Award the Luxury Flooring Bid
- [4.](#) RESOLUTION 2025-13 - TCRS Hazardous Duty Supplemental Retirement Benefit

NEW BUSINESS

- [5.](#) ORDINANCE 634: Rezone 111 Boyd Street - 1st Reading
- [6.](#) ORDINANCE 635: Rezone 570 Main Street - 1st Reading
- [7.](#) ORDINANCE 636: Rezone 113 Ruth Drive - 1st Reading
- [8.](#) ORDINANCE 637: Standard Speed Limit in Ashland City
- [9.](#) ORDINANCE 638: Standards for approving speed bumps
- [10.](#) RESOLUTION 2025-14: Amending the Water and Sewer Department Rules and Regulations
- [11.](#) RESOLUTION 2025-15: Amend the wording on the dress code policy
- [12.](#) RESOLUTION: 2025-16 - Accepting the award for the vehicle expansion program
- [13.](#) Consulting Agreement for Budget Services
- [14.](#) Trademark Consent Agreement Summerfest
- [15.](#) Award the Belt Press Bid
- [16.](#) Permission to apply for THSO grant.
- [17.](#) Appointment of the Municipal Judge

SURPLUS PROPERTY NOMINATIONS

EXPENDITURE REQUESTS

OTHER

- [18.](#) Employee Appeal

ADJOURNMENT

Those with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting, should contact the ADA Coordinator at 615-792-6455, M-F 8:00 AM – 4:00 PM. The town will make reasonable accommodations for those persons.



TOWN OF ASHLAND CITY
Regularly Scheduled Workshop Meeting
February 04, 2025, 6:00 PM
Minutes

CALL TO ORDER

Mayor Greer called the meeting to order at 6:00 p.m.

ROLL CALL

Mayor Greer
Councilman Tim Adkins
Councilwoman Binkley
Vice Mayor Chris Kerrigan
Councilman Michael Smith
Councilman Kevin Thompson
Councilman Tony Young

APPROVAL OF AGENDA

A motion was made by Councilman Smith, Seconded by Councilman Thompson, to approve the agenda. All approved by voice vote.

PUBLIC HEARING

1. Advertisement for the Rezone Ordinance # 633
A motion was made by Councilman Smith, Seconded by Councilman Thompson, to close the public hearing. All approved by voice vote.

APPROVAL OF MINUTES

2. January 7, 2025, Workshop Meeting Minutes
A motion was made by Vice Mayor Kerrigan, Seconded by Councilman Thompson, to approve the January 7, 2025, minutes. All approved by voice vote.

PUBLIC FORUM

Judith Arndt – She has resided at 214 Stratton Boulevard going on 14 years. One of the things I would like is to have it renamed Stratton Super Speedway. It is horrible and the traffic is getting worse. About a month ago a van ran into my neighbor's house and hit the corner bedroom where their children slept. The Policeman investigating the accident came to my house because I have a doorbell camera, and he wanted to know if there was anything on the camera that they could use. I told him about speeding and what was going on and he responded we just have to do a better job. I understand that there were speed bumps installed on Skyview Dr and they would like to know if speed bumps can be put on Stratton Boulevard. There are children that walk up that street from the apartments to the top of Stratton and Bell in the morning and get off the bus and walk down in the afternoon. On Bell St there is a policeman there everyday at the long and skinnies to prevent people from driving around the school bus. You are not going to be able to control speeders with the policeman sitting there. Speed Bumps will slow them down. That is the reason I am here. We contacted Councilman Smith, and he advised and encouraged us to come down and present our case. That is all I have, Thank you.

REPORTS

3. ATTORNEY: Jennifer Noe - Requested an attorney client privilege meeting with Mayor and Council. She stated they could do it now or later and left it to the council to decide. The mayor asked if they wanted to do it now. Councilman Thompson asked if it would be short because there are a lot of people sitting and waiting for them. MS Noe advised she was not able to determine how short it would be, and they all agreed it was fine, and they would do it now.

RECESS FOR THE ATTORNEY CLIENT PRIVILEGE BEGAN AT 6:05 PM

RECESS FOR THE ATTORNEY CLIENT PRIVILEGE ENDED AT 6:55 PM.

When returning the mayor asked Attorney Noe if there was any other news she needed to add before we moved on with the agenda. Attorney Noe added that she had news that she had not shared with Allen, yet that Charles Moore passed away of Hidden Lakes. Councilwoman Binkley asked if the company sold prior to that, and Ms. Noe replied not to her knowledge, and it will probably be tied up in probate for a while.

UNFINISHED BUSINESS

16. ORDINANCE 633: Rezone Elizabeth and Willow Street (Amendment) - 2ND Reading
Mr. Nicholson stated that this is an amendment to ordinance 632 for a correction to the Group and the wrong letter on the property data.
17. Judge's Vacancy Discussion – Attorney Noe stated this was on the agenda last month. Since then, she has gone through our processes and moving forward, she thinks that we changed to not have general sessions jurisdiction that was effective on July 1, 2024. Judge Stinnett passed away in January of this year and General Sessions had already been taken away from that position. Moving forward it just be an appointment by this board and that would be for the remainder of his term. They would not have to run at the next general election. There are no cases and nothing to solidify my opinion, but I did get MTAS involved and got a 2nd opinion from them. There is a case pending in the Supreme Court on judge's jurisdiction and the court of appeals has ruled that they do not have to live in the city limits, something different may happen with the Supreme Court decision but as of now this is the last ruling, and she is going on what she thinks is the law and got the opinion of MTAS. She also spoke to the administrative office of the courts and they would not render any opinion on this. This is the job description for the board to approve at next week's meeting and we would then advertise the position. The requirements are the ones that are required by law, and we would then start taking applications. She only added that the person is in good standing with the board of professional responsibility. She does not think we want a judge that has had a lot of disbarments and suspensions. We could get it advertised after they approve it next week and it would have plenty of time to interview them at the March meeting. Mayor Greer addressed the resolution date being from January and it would be corrected to the February meeting date of February 11, 2025. City Recorder Mary Molepske indicated it is already changed for the meeting next week.

NEW BUSINESS

18. General Obligation Bond \$ 4,460,000.00 state report on debt – Mary Molepske stated that this is just for the knowledge of the council that the debt obligation has been completed and filed with the State. No action necessary.
19. Award the Luxury Flooring Bid on February 11, 2025.- Tammany Carter advised we will have the bid opening on February 10, 2025, and present them at the City Council meeting on February 11, 2025.
20. RESOLUTION 2025-06: Senior Center Closing April 9, 2025, to host GNRC Conference – Tammany Cater advised that GNRC is having a meeting and there are approximately 25 to 35 other senior center directors that attend. They will have topics and panels that will speak. We will provide a light breakfast snack and light lunch. We would need to close for the day and staff would still be needed so they would be there to help with the serving, but it will take up most of the center and would not allow us the time to meet the conference needs. Councilman Thompson asked if they needed volunteers and Tammany advised she was not sure yet.
21. Purchase of new Server for Police Department/ Delivery of old server to Austin Texas – Chief Ray advised the Police Department had to get a new server. Mayor Greer asked him to advise the council how this affects his department. Chief Ray advised it is used to back up the camera system and when the cameras cannot download the data from the police cars once the camera is full it just stops working. They have no control over the server going down They will have to hopefully recover what is in the old server and think they have found a place much closer in Georgia to take the old server to instead of Austin Texas. According to our IT department (Justin) this new server could be used for other things in the city and not just the police department. Chief Ray stated that the new server should arrive on the 10th of February.

22. TCRS hazardous duty Supplemental Retirement Benefit – Chief Ray advised this law was passed that TCRS comes and does a study with the department that will cost \$ 1500.00. They would then let the city know how much it would be to adopt this whether you want it or not. It will add \$ 500.00 to somebody's retirement to make it simple. This is only for the Fire and Police Departments. It will drop off when they turn 67 years old.
23. U.S. Geological Joint Funding Agreement – Mary Molepske stated that this is an electronic version of our standard joint-funding agreement between the U.S. Geological Survey lower Mississippi-Gulf Water Science Center and Town of Ashland City. This is a contract we sign every year. Attorney Jennifer Noe added that we have been signing them for approximately the last 10 years.
24. Traffic Court Contract - Defensive Driving Course - Joseph Nick Hunter Cynthia Hollingworth advised this is to renew the contract with Nick Hunter for 2 years.
25. CONTRACT: Ashland City Fire and New Channel 5 – Chief Noe stated that this is part of the recruitment retention grant that they have. It is a partnership with channel 5 and we have done this once before. This time it is different because we will also get apps like ESPN. They will include more than 100 apps that we will be on. We are hoping that this will help us reach more people interested in going through the recruiting class and coming and becoming volunteer or part-time firefighters. 100% paid for by the grant.
26. RESOLUTION 2025-07: VFEAT Grant-State Fire Marshal's Office - Firefighter PPE - \$35,160 – Received – paperwork is coming. – Chief Noe stated the grant was awarded and they got this money for rope and rescue equipment and PPE, and it is also 100% no match grant.
27. RESOLUTION 2025-08: Update Bereavement Leave Policy Violet Black stated that it was brought to her attention that 3 days or 24 hours stated in the policy and for the Fire Department it is one shift. The Firefighters were using 3 days and not 24 hours and it was causing a conflict in scheduling for the Fire Department because of how long they were taking off. They firefighters would take 3 days off and end up getting a week and a half off. The new policy changes that and they will take one day 24 hours and will get the regular time of being off 2 days before and 2 days after. It also has in it an employee who wishes to take time off for a death of a non-immediate family members or friend not defined within the sections would be allowed to take any accumulated leave as far as vacation time or comp time. They would not be allowed to use sick time for this leave. There is a requirement of providing an obituary notice of funeral home announcement for the leave.
28. RESOLUTION 2025-09: Update Ashland City Dress Code Policy – Violet Black stated with the changes and the new building he would like the dress code to make it a more professional appearance. It has been outlined better of appropriate and non-appropriate clothing for the workplace.
29. RESOLUTION 2025-10: Update Children in the Workplace Policy – Violet Black advised this is a new policy that we do not currently have in place. It grants families to visit a worksite, but employees cannot use this for sick children or childcare issues. They cannot stay all day; this is what sick days are provided for, and you can use them for child-related illness or care situations. Also, our insurance will not cover a child getting hurt in the workplace.
30. RESOLUTION 2025-12: Bicentennial Trail Grant Acceptance Letter – Anthony Clark stated this is a letter to accept the Multi-modal grant for \$ 618,569.40 for the Bicentennial Trail Grant. This money is to be used for overage on the project and it began over five years ago. TDOT found the Grant and they are paying 95% and the letter is asking for the Town of Ashland City covers 5% which equals \$ 30, 928.47.
31. Firework Bids - Choose award of the bid – Anthony Clark advised we received 2 bids for the Fireworks for Summerfest this year. They are very similar in terms of pricing. Option 1 is a difference of \$ 500.00 and would receive 114 more fireworks with the higher bid. This would be a 16-17-minute show. Option 2 is a difference of \$ 1,000.00 and would include 16 more

fireworks with the lower bid and would be a 20-minute show. They are very similar, and it will depend on how the board wants to look at them. Whether you want to stay with the company who have been doing them for the last couple of years or if you would like to go in a different direction. The name of the company who has done the show in the last couple of years is Impact Pyro. They are the least expensive in option 1 and option 2 they are higher than Pyro Shows.

32. Laser Encore Inc Contract – Anthony Clark advised this is a laser light show contract for Summerfest and the same company we used last year for the laser show. They were great to work with and did an amazing show. It was a great addition last year and he hopes the board will allow us to bring it back this year.

SURPLUS PROPERTY NOMINATIONS

NONE

EXPENDITURE REQUESTS

NONE

OTHER

33. Resolution 2025-11: Request to apply for Project Diabetes - Thrive 55 – Tammany Carter advised she just received this Friday and is still gathering information on the grant. The letter of intent needs to be submitted by March 7, 2025. She will miss the deadline waiting until the next council meeting. She wanted to get the board's approval so that if we qualify to apply for the grant, it has already gone before the board. The intension for the grant is to use the funds for Yoga, Pilates and some other fitness classes that are not evidence based on that they are not paid through our GNRC grant. We are currently paying those instructors through our budget. The grant will be provided for 2 years at \$ 15,000.00 - \$ 30,000.00. It is 100% State funded.
34. Drug Free Workplace Program – Violet Black stated this is a yearly application we fill out with workforce essentials. It keeps us in line with our drug-free workplace program and lowers our insurance rates. It is random drug testing each month.
35. **Councilman Thompson** added a question: In the Special called meeting from February 3, 2025, we had CEMC here and he discussed briefly the lights in town. Did we have a resolution for lighting on the streets?

Mayor Greer replied that he and Allen Nicholson will be meeting with Josh Gill next week. There are other options, and they will be meeting with him on Monday to discuss those options. He confirmed that we are currently working on a resolution for the issue.

ADJOURNMENT

A motion was made by Councilman Thompson, Seconded by Councilman Smith, to adjourn the meeting. All approved by voice vote and the meeting adjourned at 7:19 p.m.

MAYOR GERALD GREER

CITY RECORDER MARY MOLEPSKE



TCRS Hazardous Duty Supplemental Retirement Benefit

Public Chapter No. 919

Steven Cross, MTAS Fire Management Consultant
David Moore, MTAS Police Management Consultant
Donald Pannell, MTAS Fire Management Consultant
Jeff Stiles, MTAS Police Management Consultant

September 2024



Table of Contents

Introduction.....	3
Summary.....	3
Act Definitions.....	4
How is the Hazardous Duty Supplement Benefit Calculated.....	4
Service Retirement Allowance.....	4
Early Service Retirement Allowance.....	5
Alternate Defined Benefit Plan or Hybrid Plans.....	5
Funding the Hazardous Duty Supplement Benefit.....	5
Lump Sum Payment.....	5
Employer Contribution Rate Increase.....	6
Amortization.....	6
Eligibility for the Hazardous Duty Supplement Benefit.....	6
Retirement Eligibility.....	7
Political Subdivision Eligibility.....	7
Additional Provisions of the Act.....	8
Implementation Date.....	9
Conclusion.....	9
Questions or Assistance.....	10
Additional Resources.....	11

Introduction

In 2024, the Tennessee General Assembly took a significant step in addressing the unique challenges faced by Tennessee's public safety officers who are part of the Tennessee Consolidated Retirement System (TCRS) by unanimously passing House Bill 2683, now codified as Public Chapter 919. This legislation marks a pivotal moment in the state's approach to the retirement benefits of its law enforcement officers, firefighters, and correctional officers; individuals who dedicate their careers to protecting public safety and maintaining order. Recognizing the inherent risks and responsibilities associated with these roles, the General Assembly introduced the "hazardous duty supplemental benefit," a new optional provision designed to offer enhanced financial security to those who retire after years of service in these demanding and often dangerous public safety positions.



Public Chapter 919 is not just a routine amendment to the retirement system; it represents both a deliberate and thoughtful effort to acknowledge the sacrifices made by public safety officers. By implementing this law, Tennessee joins a growing number of states that are reevaluating the retirement benefits offered to public safety individuals serving in high-risk professions. This enhancement ensures that public safety employees' retirement compensation reflects the hazardous nature of their duties.

Summary

The Act was passed unanimously in the Tennessee State House of Representatives (92-0 vote) and the Tennessee State Senate (31-0 vote). The hazardous duty supplemental benefit introduced by this law provides a financial boost to specific eligible retirees, supplementing their standard retirement budget. These additional retirement funds are calculated based on their years of service and final compensation.

This benefit is particularly significant for public safety officers, whose careers are often marked by physical and psychological demands that can accelerate their departure from active service compared to other public sector employees. By offering this supplemental benefit, the state of Tennessee is taking proactive steps to ensure that these officers can retire with greater financial stability, recognizing the toll that years of hazardous duty can take on their health and well-being.

Public Chapter 919 represents a forward-thinking approach to public safety officer retirement benefits, aligning the state's retirement policies with the realities faced by those who serve in some of the most challenging and vital roles within our communities. Through this legislation, Tennessee not only honors the contributions of its public safety officers but also sets a new standard for retirement benefits that others may look to as a model.

Act Definitions

Many of the Tennessee Code Annotated have unique definitions associated with the specific law. The law defines "public safety officer" to include:

Full-time salaried employees of a political subdivision who is:

- Law Enforcement Officers: Sheriffs, deputies, police officers, chiefs of police, and other officers who work to prevent and solve crimes.
- Correctional Officers: Full-time workers who oversee prisoners.
- Firefighters: Full-time workers responsible for fighting fires and responding to emergencies.

How is the Hazardous Duty Supplement Benefit Calculated

The hazardous duty supplemental benefit under Tennessee's Public Chapter 919 is designed to provide additional financial support to public safety officers upon retirement, reflecting the risks associated with their careers. The calculation of this benefit is intricately linked to the officer's final average salary and the total number of years they have served in a qualifying role. The specifics of the calculation vary depending on the type of retirement and the retirement plan under which the officer is enrolled.

Service Retirement Allowance

For officers who retire under the standard service retirement allowance, the hazardous duty supplemental benefit is calculated by applying a percentage multiplier to their average final compensation. Specifically, the benefit equals 0.375% of the officer's average salary, multiplied by the total years the officer has served in a public safety role. This calculation reflects on the officer's entire career and provides a proportional increase in retirement benefits based on their tenure in hazardous duty positions.

Early Service Retirement Allowance

For officers who opt for early retirement, calculating the hazardous duty supplemental benefit includes a reduction factor to account for the early receipt of retirement benefits. In this situation, the benefit calculated as 0.375% of the officer's average salary is reduced by 0.4% for each month that the officer's retirement date precedes the normal service retirement age. This reduction is designed to balance the financial implications of an extended retirement period, ensuring that the benefit remains actuarially sound while still providing meaningful support to officers who retire early.

Alternate Defined Benefit Plan or Hybrid Plans

Officers enrolled in an alternate defined benefit plans or hybrid retirement plans, such as outlined in Tennessee Code Annotated §§ 8-35-255 and 8-35-256, will have their hazardous duty supplemental benefit calculated differently. The base benefit calculation of 0.375% of the officer's average final compensation multiplied by years of service remains the same. However, this benefit is then adjusted by an actuarially determined factor. The specific adjustment is set by the retirement board. It is designed to associate the supplemental benefit with the unique characteristics and funding mechanisms of these plans, ensuring a measure of fairness and sustainability across the different retirement systems.

The hazardous duty supplemental benefit specified in Public Chapter 919 is designed to recognize both the length of service and the specific retirement conditions of public safety officers. By incorporating these detailed calculations, the law provides a different approach that rewards long-term service while maintaining the financial integrity of the retirement system.

Funding the Hazardous Duty Supplement Benefit

To finance the hazardous duty supplemental benefit introduced by Public Chapter 919, local governments have several options to manage the associated costs. These options provide flexibility in how the increased pension liability is addressed, allowing local governments to choose the method that best suits their financial situation. The three primary funding methods are as follows:

Lump Sum Payment

The local government can opt to cover the entire cost of the supplemental benefit through a one-time, lump sum payment. This approach requires the local government to pay the full amount of the increased pension liability upfront, immediately addressing the financial obligation without the need for future payments. While this option demands significant financial resources at the outset, it eliminates the need for ongoing adjustments to the retirement system and can be advantageous if the government has sufficient funds available.

Employer Contribution Rate Increase

Alternatively, the local government may choose to increase **its** employer contribution rate to the retirement system for the upcoming fiscal year. Under this method, the local government spreads the cost of the supplemental benefit over the course of the next fiscal year (July 1 - June 30). This incremental increase in contributions allows the government to manage the financial impact more gradually, rather than requiring a large immediate outlay. It can be a practical solution for governments that prefer to integrate the cost into their annual budgeting process.

Amortization

The third option allows the local government to amortize the unfunded accrued liability associated with the supplemental benefit over a period of up to ten years. By spreading the payments over a longer timeframe, this method reduces the immediate financial burden, making it easier for local governments to manage their cash flow and budgetary constraints. However, it also means that the government will be making payments over a prolonged period, which could include interest and other carrying costs. This option is particularly useful for local governments that need to balance long-term financial commitments with other fiscal responsibilities.

Each potential funding method provides differing approaches to managing the financial responsibilities associated with the hazardous duty supplemental benefit. The choice of method depends on the local government's financial health, cash reserves, and long-term budgeting strategies. Ultimately, these options are designed to ensure that the supplemental benefits are fully funded while allowing local governments to choose a payment plan that aligns best with their fiscal capabilities.

Eligibility for the Hazardous Duty Supplement Benefit

Public Chapter 919 establishes specific criteria that public safety officers in Tennessee must meet to qualify for the hazardous duty supplemental benefit. This benefit is designed to provide additional financial support to officers who have dedicated a substantial number of years of service in hazardous roles. The eligibility requirements are thorough, ensuring that only those who meet these strict standards are eligible to receive this benefit. The key eligibility criteria are as follows:

Retirement Eligibility

The first requirement is that the officer must be eligible to retire under the rules set by the Tennessee retirement system. This means that the officer must meet all the general conditions for retirement, such as reaching the appropriate age or completing the necessary years of service, as outlined in the state's retirement plan. A public safety officer cannot qualify for the hazardous duty supplemental benefit without meeting these minimum retirement criteria.

Service Duration

The officer must have completed at least 20 years of creditable service, specifically as a public safety officer. This requirement ensures that the benefit is reserved for those who have devoted a significant portion of their careers to roles that involve considerable risk, such as law enforcement, firefighting, or corrections. The 20-year service threshold underscores the intent to reward an officer's long-term commitment to public safety.

Type of Retirement

Officers must retire under standard retirement conditions, meaning they must receive a service retirement allowance or an early service retirement allowance. Disability retirements do not qualify for the hazardous duty supplemental benefit. This distinction is important because the supplemental benefit is intended to reward officers who complete their service careers under normal circumstances rather than those who retire due to injury or illness.

Political Subdivision Eligibility

Should the public entity or political subdivision employer consider offering this TCRS retirement enhancement, it must take formal legislative action to offer supplemental hazardous duty benefits to its eligible officers.

Political Subdivision's Role

The local government entity that employs public safety officers, such as a city or county, plays a vital role in the process. The governing body must pass a resolution to authorize an actuarial study to determine the financial impact of implementing the hazardous duty supplemental benefit. This study is essential to understanding the long-term costs associated with the benefit. In addition, the local government must agree to take on the financial responsibility for these costs, ensuring that the state does not bear the burden.

Funding Requirements

After the benefit is implemented, the local government's retirement system must remain at least 70% funded. This condition is in place to maintain the financial health and long-term sustainability of the retirement system and prevent it from becoming underfunded due to the additional benefit. An important note, the cost of providing the hazardous duty supplemental benefit must be covered entirely by the local government, with no financial assistance from the state. This ensures that the local government is fully accountable for the financial commitments it makes to its officers.

In all cases, these eligibility requirements are in place to ensure that the hazardous duty supplemental benefit is both fair and financially sustainable. They balance the need to reward dedicated public safety officers with the practical considerations of maintaining a healthy retirement system at the local government level.

Additional Provisions of the Act

Public Chapter 919 includes several important provisions that outline how the hazardous duty supplemental benefit is managed and maintained over time. These included provisions ensure that the benefit remains fair, consistent, and aligned with broader retirement policies. Some key additional provisions are as follows:

Cost-of-Living Adjustments (COLA)

Retired officers who qualify for the hazardous duty supplemental benefit are entitled to receive regular adjustments to their benefit to account for inflation. These adjustments are intended to maintain the purchasing power of the benefit over time as the cost-of-living increases. These COLA adjustments are calculated separately from the officer's main retirement allowance. This separation ensures that the supplemental benefit is specifically adjusted for inflation, providing additional financial security for retired officers.

Duration of the Benefit

The hazardous duty supplemental benefit becomes active based on the officer's retirement timeline. Specifically, the benefit starts either on the officer's retirement date or when the officer turns 60 years old, whichever comes later. This timing ensures that officers receive the benefit when they are most likely to need it during retirement. The benefit continues to be paid out until one of two conditions is met: either the officer passes away, or the officer reaches the full retirement age as defined by the Social Security Act. This provision sets clear parameters for the duration of the benefit, ensuring it is provided during the officer's retirement years but not indefinitely.

Non-Retroactivity

The hazardous duty supplemental benefit is designed to apply only to those retiring after the effective date and future retirees who meet the eligibility criteria outlined in the law. This means that officers who retired before the law was enacted or before the benefit was made available are not eligible to receive it for past years. The non-retroactivity clause ensures that the benefit is implemented fairly and consistently when the law takes effect, avoiding the complexities and financial burdens that could arise from retroactively applying the benefit to past retirees.

These additional provisions are crucial in maintaining the integrity and sustainability of the hazardous duty supplemental benefit. They provide clear guidelines on how the benefit is adjusted for inflation, when it begins and ends, and to whom it applies, ensuring that the benefit serves its intended purpose without creating undue financial strain on the retirement system or local governments.

Implementation Date

The provisions of Public Chapter 919 were signed into law on May 3, 2024, and will take effect on January 1, 2025. This effective date is purposely chosen to give local governments plenty of time to prepare for the new retirement benefits. During this period, local governments must assess their current retirement systems, conduct necessary actuarial studies, and make financial adjustments to accommodate the hazardous duty supplemental benefit. This preparation phase is critical to ensuring a smooth transition to the new benefits structure and maintaining local retirement systems' financial health.

Conclusion

Public safety officers provide vital public safety services to the public at large. The job brings many significant inherent hazards that can cause serious physical and emotional injuries, including death. Public Chapter 919 represents a significant improvement in the retirement benefits offered to Tennessee's public safety officers. By introducing and passing the hazardous duty supplemental benefit, legislators acknowledge the inherent risks and challenges faced by law enforcement, firefighting, and corrections officers. This new benefit ensures that those who have dedicated their careers to protecting the public are appropriately compensated in retirement for the hazards they endured during their service. The passage of this bill underscores Tennessee's commitment to honoring and supporting the men and women who serve on the front lines, safeguarding the welfare of its citizens.

Questions or Assistance

Please contact the following MTAS staff with questions or for assistance.

- Marc Alley, UT CTAS
Fire Management Consultant
Marc.Alley@tennessee.edu
423.715.4072
- Steven Cross, UT MTAS
Fire Management Consultant
Steven.Cross@tennessee.edu
931.548.6827
- David Moore, UT MTAS
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- Donald Pannell, UT MTAS
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901.233.1434
- Jeff Stiles, UT MTAS
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865.243.5447

RESOLUTION 2025-13

A RESOLUTION OF THE TOWN OF ASHLAND CITY, TENNESSEE, TO APPROVE THE EXPENDITURE OF \$ 1500.00 TO PERFORM A STUDY TO LOOK AT TCRS AZARDOUS DUTY SUPPLEMENTAL RETIREMENT BENEFIT CHANGES PER PUBLIC CHAPTER 919 FOR THE POLICE AND FIRFIGHTERS.

WHEREAS in 2024, the State of Tennessee General Assembly addressed the unique challenges faced by Tennessee's public safety officers who are part of the Tennessee consolidated retirement system (TCRS) by unanimously passing House Bill 2683, now codified as Public Chapter 919; and

WHEREAS the legislature proposed changes to TCRS to benefit public safety officers; and

WHEREAS the local government may choose to increase its employer contribution rate to the retirement system for the upcoming physical year for public safety officers pursuant to the new legislation.; and

WHEREAS a study is necessary to determine the effect the new law would create if the Town opted to increase their employer contribution rate to public safety officers.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE, to approve the expenditure of \$1500.00 for the cost associated with the study to look at the TCRS – Hazardous Duty Supplemental Retirement Benefit for Police and Firefighters.

We, the City Council, meeting in Regular Session on this the 11th day of March 2025, move for the adoption of the Resolution as set out above.

Attest:

Mayor GERALD GREER

City Recorder MARY MOLEPSKE

ORDINANCE NO. BL2012-284

An Ordinance amending Chapter 12.13 of the Metropolitan Code pertaining to the use of speed cushions as part of the neighborhood traffic management program.

BE IT ENACTED BY THE COUNCIL OF THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY:

Section 1. That Chapter 12.13 of the Metropolitan Code is hereby amended by adding the following new Section 12.13.120:

12.13.120 – Use of speed cushions as a traffic calming program device.

A. Notwithstanding any provision of the Metro neighborhood traffic management program guidelines to the contrary, upon the determination by the chief traffic engineer that a neighborhood meets the standards for neighborhood traffic management, the department of public works shall install rubber speed cushions upon any residential public street within the neighborhood for which a written petition on a form prescribed by the chief traffic engineer, and signed by not less than fifty-five percent (55%) of the resident homeowners having ingress and egress to such street, is submitted to the department of public works requesting the installation of the speed cushions.

B. Such speed cushions shall be installed in addition to, or in lieu of, other traffic calming devices recommended by the chief traffic engineer.

Section 2. This Ordinance shall take effect from and after its passage, the welfare of The Metropolitan Government of Nashville and Davidson County requiring it.

Sponsored by: Bruce Stanley

**Amendment No. 1
To
Ordinance No. BL2012-284**

Madam President:

I move to amend Ordinance No. BL2012-284 by amending Section 1 as follows:

1. By deleting the designation "Chapter 12.13" and substituting in lieu thereof the designation "Chapter 12.12".

2. By deleting the section number "12.13.120" and substituting in lieu thereof the section number "12.12.200".

Sponsored by: Bruce Stanley

LEGISLATIVE HISTORY	
Introduced:	October 16, 2012
Passed First Reading:	October 16, 2012
Referred to:	Budget & Finance Committee Public Works Committee Traffic, Parking and Transportation Committee
Amended:	November 13, 2012
Deferred to December 18, 2012:	November 13, 2012
Deferred Indefinitely:	December 18, 2012
Withdrawn:	August 18, 2015

RESOLUTION NO. RS2004-415

A resolution requesting the Metropolitan Public Works Department and the Metropolitan Police Department to look into the feasibility of placing signs in Neighborhood Traffic Calming Project Areas that indicate the amount of the fine that can be assessed for speeding in those areas.

WHEREAS, the Metropolitan Public Works Department has been working on different ways of implementing traffic calming in certain residential areas in order to reduce vehicles from speeding; and

WHEREAS, the Metropolitan Police Department has also been working with the City and neighborhoods to crack down on individuals that are violating the traffic laws; and

WHEREAS, other cities have implemented the idea of placing signs in residential areas that show a sliding scale of fees, indicating that people that are caught driving at a progressively higher speed through a neighborhood will be assessed higher fines; and

WHEREAS, such signs posted on residential streets serve to remind drivers that speeding through those neighborhoods can lead to expensive fines; and

WHEREAS, such signs, if placed in appropriate areas, can serve as a sound way of promoting traffic calming.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY:

Section 1. That the Metropolitan Council hereby goes on record as requesting the Metropolitan Public Works Department and the Metropolitan Police Department to review the feasibility of placing signs in Traffic Calming Project Areas that indicate the amount of fines that can be imposed if individuals are caught speeding in those areas.

Section 2. The Metropolitan Public Works Department and the Metropolitan Police Department are further requested to respond to the Council within ninety (90) days from the adoption of this Resolution as to the feasibility of taking the action requested in Section 1.

Section 3. The Metropolitan Clerk is directed to send a certified copy of this Resolution to the Director of the Metropolitan Public Works Department and the Chief of Police of the Metropolitan Police Department.

Section 4. This Resolution shall take effect from and after its adoption, the welfare of the Metropolitan Government of Nashville and Davidson County requiring it.

Sponsored by: Jim Shulman, Lynn Williams

LEGISLATIVE HISTORY	
Referred:	Public Works Committee Public Safety Committee
Introduced:	August 3, 2004
Adopted:	August 3, 2004
Returned Unsigned by Mayor:	August 12, 2004

Memphis Requirements

402.3 - Eligibility Requirements

All of the following criteria should be satisfied for a street to be considered eligible for speed hump installation.

A. Petition

1. A petition from the residents and business owners documenting that at least 75 percent of all households and businesses in the project area (which includes streets that traffic may be diverted to) support the installation of speed humps on the identified street. All residents within the project area should be presented the opportunity to sign the petition. The project area will be defined by the City Engineer.
2. A verification statement from the contact person confirming that the signatures on the speed hump petition are valid and represent at least 75 percent of the households/businesses adjacent in the project area.
3. A statement from the neighborhood association endorsing speed hump installation on the project street. The statement must be presented at a meeting of the neighborhood association or organization.

ORDINANCE NO. 634

AN ORDINANCE TO AMEND THE OFFICIAL ZONING MAP OF THE TOWN OF ASHLAND CITY, TENNESSEE, BY REZONING PARCEL 005.00 OF CHEATHAM COUNTY TAX MAP 055C, GROUP S, LOCATED AT 111 BOYD STREET

WHEREAS, said portion of property requested to be rezoned from R-3, Residential District, to R-4 PUD, Residential District, is located in the corporate limits of the Town of Ashland City; and

WHEREAS, the Ashland City Municipal Planning Commission forwarded the request to the Mayor and Council on February 03, 2025, with a recommendation for approval.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE:

SECTION 1. Pursuant to provisions of Sections 13-7-201 to 13-7-204, Tennessee Code Annotated, the property described herein is rezoned as follows:

The parcel included on Tax Map 055C, Group S, Parcel 005.00, located at 111 Boyd Street be rezoned from R-3 (Medium-Density Residential) district to the R-4 PUD (High-Density Residential Planned Unit Development), as taken from the records of the Assessor of Property of Cheatham County, Tennessee as of February 2025. This area to be zoned R-4 PUD is marked with a red "X" and shown on the map below.

SECTION 2. This ordinance shall be effective 20 days after its final passage, the public welfare requiring it.

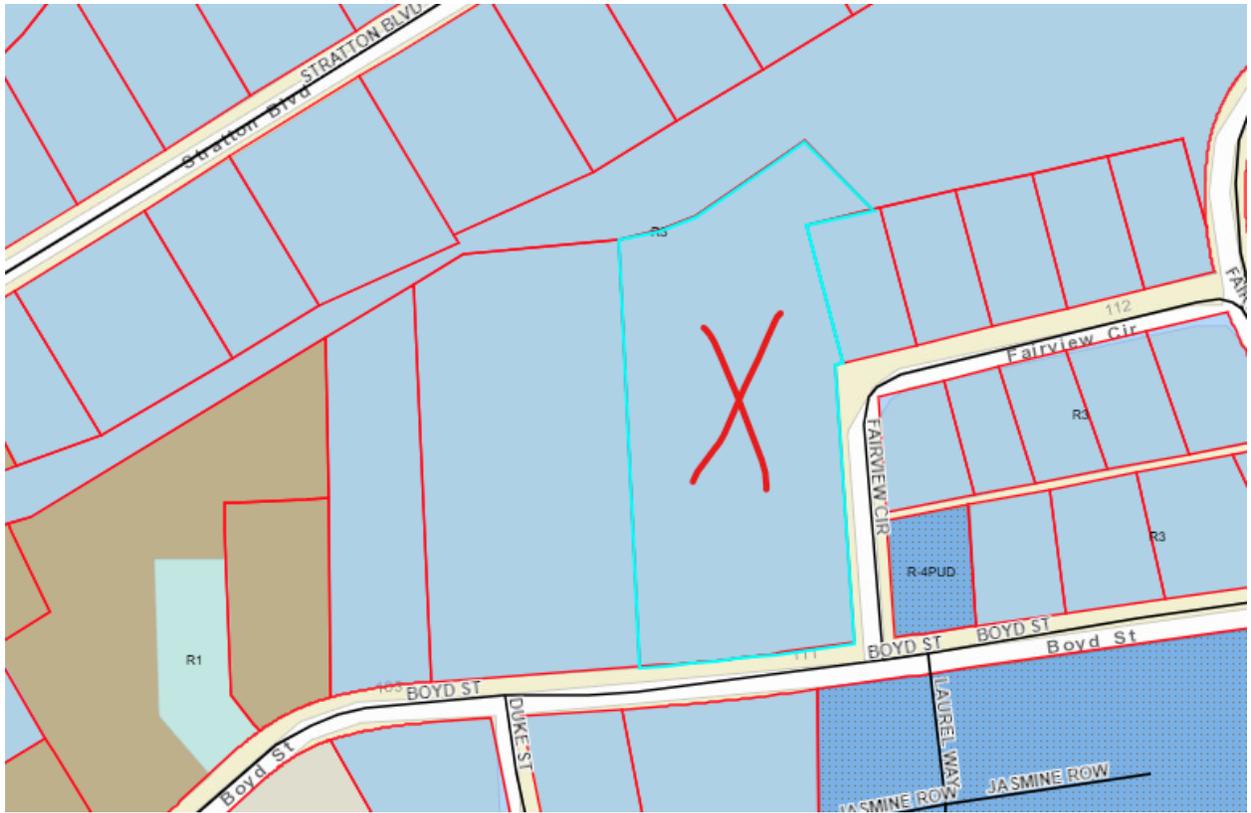
Approved by the Planning Commission at the regularly called meeting on February 03, 2025.

First Reading:
Second Reading:

ATTEST:

Mayor

City Recorder



ORDINANCE NO.

AN ORDINANCE TO AMEND THE OFFICIAL ZONING MAP OF THE TOWN OF ASHLAND CITY, TENNESSEE, BY REZONING PARCEL 004.01 OF CHEATHAM COUNTY TAX MAP 055F, GROUP H, LOCATED AT 570 S MAIN ST

WHEREAS, said portion of property requested to be rezoned from R-3 PUD, Medium-Density Residential Planned Unit Development, to R-3, Medium-Density Residential District, is located in the corporate limits of the Town of Ashland City; and

WHEREAS, the Ashland City Municipal Planning Commission forwarded the request to the Mayor and Council on February 03, 2025, with a recommendation for approval.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE:

SECTION 1. Pursuant to provisions of Sections 13-7-201 to 13-7-204, Tennessee Code Annotated, the property described herein is rezoned as follows:

The parcel included on Tax Map 055F, Group H, Parcel 004.01 located at 570 S Main Street be rezoned from R-3 PUD (Medium-Density Residential Planned Unit Development) to the R-3 (Medium-Density Residential District), as taken from the records of the Assessor of Property of Cheatham County, Tennessee as of February 2025. This area to be zoned R-3 is marked with a red "X" and shown on the map below.

SECTION 2. This ordinance shall be effective 20 days after its final passage, the public welfare requiring it.

Approved by the Planning Commission at the regularly called meeting on February 03, 2025.

First Reading:
Second Reading:

ATTEST:

Mayor

City Recorder



ORDINANCE NO.

AN ORDINANCE TO AMEND THE OFFICIAL ZONING MAP OF THE TOWN OF ASHLAND CITY, TENNESSEE, BY REZONING PARCEL 020.00 OF CHEATHAM COUNTY TAX MAP 055C, GROUP L, LOCATED AT 113 RUTH DRIVE

WHEREAS, said portion of property requested to be rezoned from R-3 DOD, Medium-Density Residential Downtown Overlay District, to C-2 DOD, Commercial Highway Service Downtown Overlay District, is located in the corporate limits of the Town of Ashland City; and

WHEREAS, the Ashland City Municipal Planning Commission forwarded the request to the Mayor and Council on February 03, 2025, with a recommendation for approval.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE:

SECTION 1. Pursuant to provisions of Sections 13-7-201 to 13-7-204, Tennessee Code Annotated, the property described herein is rezoned as follows:

The parcel included on Tax Map 055C, Group L, Parcel 020.00 located at 113 Ruth Drive be rezoned from R-3 DOD (Medium-Density Residential Downtown Overlay District) to the C-2 DOD (Commercial Highway Service Downtown Overlay District), as taken from the records of the Assessor of Property of Cheatham County, Tennessee as of February 2025. This area to be zoned C-2 DOD is marked with a red "X" and shown on the map below.

SECTION 2. This ordinance shall be effective 20 days after its final passage, the public welfare requiring it.

Approved by the Planning Commission at the regularly called meeting on February 03, 2025.

First Reading:
Second Reading:

ATTEST:

Mayor

City Recorder



Agency Name:

1. In the preceding fiscal year, did your agency receive both:

- a. \$25,000,000 or more in annual gross revenues from federal funds, **and**
- b. 80% or more of annual gross revenues in federal funds?

Yes No

If no, this form is complete. Please sign and return.

If yes to both 1(a) and 1(b), please complete the following statement:

2. The public has access to information about the compensation of the highly compensated executives in the subrecipient's organization (including the parent organization, all branches, and all affiliates worldwide) from periodic reports filed under (*select one*):

- section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m (a), 78o (d)); or
- section 6104 of the Internal Revenue Code of 1986; or
- the public does not have access from either source.

Signature

Printed Name and Title

Date



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

BUREAU OF PLANNING
SUITE 700, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-5376

BUTCH ELEY
DEPUTY GOVERNOR &
COMMISSIONER OF TRANSPORTATION

BILL LEE
GOVERNOR

February 12, 2025

JT Smith
Ashland City Town
233 Tennessee Waltz Parkway, Suite 103
Ashland City, TN 37015

Dear 5310 Applicant,

TDOT's Office of Mobility and Accessible Transportation is pleased to inform you that your agency's application for funding under the Federal Transit Administration's Section 5310 Program has been selected for award. TDOT is prepared to recommend that the Federal Transit Administration fund the following requested vehicles:

Quantity	Project	Project Type	Service Area
1	12+2 Cutaway Bus	Expansion Vehicle	Rural - 104 Ruth Drive; Ashland City 37015

To confirm your award, complete the attached TDOT FFATA Questionnaire and return it as a response to this letter. Please anticipate receiving further correspondence from our office. Contracts for awards and collection of local matches will be initiated once the grant has been executed through the Federal Transit Administration. Your cooperation in this matter is greatly appreciated. If you have any questions, please contact Samantha Deal by email at Samantha.M.Deal@tn.gov or (615) 532-7460.

Sincerely,


Preston Elliott
Deputy Commissioner/Chief
Bureau of Planning

RESOLUTION 2025-16

A RESOLUTION OF THE TOWN OF ASHLAND CITY, TENNESSEE, TO APPROVE THE THRIVE 55+ SENIOR CENTER TO ACCEPT THE AWARD OF THE TRANSPORTATION ENHANCED MOBILITY OF SENIORS AND INDIVIDUALS WITH DISABILITIES GRANT.

WHEREAS the mobility management is intended to build coordination among existing transportation service providers with the result of expanding the availability of service; and

WHEREAS the grant award letter has been received, and the town agrees to pay 10% (\$ 11,609.00) of the purchase amount for the vehicle; and

WHEREAS the senior center will keep an annual Transportation Operating Budget for the entire transportation program; and

WHEREAS the senior center will keep and explain all sources of operating revenue including grants, donations, and local fund-raising projects to support the program.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE, approve the acceptance of the award of TDOT’s office of Mobility and Accessible Transportation Grant for Thrive 55+ Center.

We, the City Council, meeting in Regular Session on this the 11th day of March, 2025 move for the adoption of the Resolution as set out above.

Voting in Favor _____

Voting Against _____

Attest:

Mayor GERALD GREER

City Recorder MARY MOLEPSKE

RESOLUTION NO. 2023- 01

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ASHLAND CITY
AMENDING THE WATER AND SEWER DEPARTMENT RULES AND
REGULATIONS FOR UTILITY USERS WITH THE TOWN OF ASHLAND CITY**

Town of Ashland City
Water and Sewer Department
Rules and Regulations

The Town of Ashland City will provide utility services to all qualified customers in the Ashland City service area. These rules and regulations are written to ensure understanding by all Town of Ashland City customers that desire utility service.

1. **Application for service:** Each prospective customer desiring utility service is required to complete and sign an “Application for Service” form. ~~Two (2) identifications are required, with one being the customer’s Social Security card~~ A valid state issued ID is required. Applications received before 12:00 noon will receive service by 4:00 p.m. of the same working day. Applications received after 12:00 noon will receive service by 12:00 noon of the next working day. Although this procedure will be followed as closely as possible, occasions may occur that require a variation from the regular service policy.
2. **Service Charge:**
 - A. Service charges will be administered to all new customers, present customers transferring to a different location, customers desiring to change names on accounts, and contractors during construction process. Service charges must be paid before any utility service is supplied. ~~An additional fee will be charged for customers wishing to turn on service(s) after normal working hours.~~
 - B. Contractors ~~usage of a hydrometer~~ will not be charged for services that are not being used during construction if the utility account is in the construction company’s name. ~~All services will be charged when the utility account is set up under the occupant’s name.~~
3. **Customer’s Service Standards:** All wiring, piping, and any other utility related connections must conform to the Utility Department’s requirements; service lines and plumbing must be kept in good and workable condition; and accepted modern standards of National and Tennessee State Codes must be followed. For example, Contractors must have all water boxes and yokes to grade before service will be read into customer’s name and known leaks must be repaired before service will be rendered by the City.
4. **Billing:**
 - A. Bills will be rendered monthly and shall be paid by the ~~30th~~ 20th of the month or service will be disconnected. FAILURE TO RECEIVE A BILL WILL NOT RELEASE CUSTOMER FROM PAYMENT OBLIGATION.
 - B. 60 days after account is closed if payment is not received this debt will be turned over to a Collection Agency.
5. **Discontinuance of Service by City Utilities:**
 - A. The utility may refuse to connect or may discontinue service for the violation of any of its rules and regulations or for making false applications or contracts by the customer.
 - B. Services will not be connected if a previous bill is owed the Utility. ~~A minimum of 75% (amount over \$200.00) has to be paid before services can be connected.~~
 - C. Services may also be discontinued to customer for the theft or destruction of any utility service or the appearance of theft device on the premises of customer or any form of tampering that

damages the utility service. Additional charges for tampering may be administered before service is restored.

6. **Cut-off for Non-payment:** The City Utilities requires payment in cash, money order, cashier's check, ~~Visa or Mastercard~~ debit or credit card when services have been discontinued for payment violation.
7. **Reconnection charge:** Whenever service has been discontinued by the City, as provided above, or a trip is made for the purpose of discontinuing service, a reconnection charge will be collected by the City before service is restored. A reconnection fee will be charged a customer when the cut-off leaves the Office with the customer's name on the list to disconnect. ~~An additional fee will be charged for reconnects for non-payment after 4:00 p.m.~~ Reconnect fee is stated on the reverse of bill. Reconnection by the customer is considered tampering with the meter and customer will be issued a court citation. ~~We do not offer after hours connection.~~
8. **Termination of Service by Customer:** Customers who wish to terminate service must give a one (1) day notice to that effect.
9. **Adjustments to Utility Service Accounts:** The city will make normal adjustments on customer accounts when routine errors occur. Other adjustments will be made on the following basis:
 - A. **Water leaks:** ~~Adjustments for leaks on the customer side of the meter will be limited to one billing period adjustment for any one (1) leak. Only one (1) water leak adjustment will be allowed in any twelve (12) month period. Adjustments will be considered ONLY if the leak caused the bill to be five (5) times an average bill. Adjustments will be regulated by City Ordinance. A signed plumber affidavit showing proof of repair will be required before any adjustment can be issued. Leaks are covered by ServLine if you enroll in coverage.~~
 - B. **Sewer Leak:** ~~Adjustments: Sewer bills will be adjusted to an average annual bill when a leak occurs in the water system of the customer and the leak does not enter the sewer system. An example of this would be a pipe leak on the customer's property. Water leaks that enter into the sewer system, such as a faucet leak, will be adjusted on the same basis as a water leak. Sewer adjustments are also limited to two (2) consecutive billing periods per leak. Leaks are covered by ServLine if you enroll in coverage.~~
 - C. **Swimming Pools:** There will be one (1) adjustment per calendar year for filling of swimming pools. The adjustment will be for sewer only and will not be adjusted below the average annual bill of the customer. The adjustment will be based on the capacity of water in gallons held by the pool.
10. **Bad Check Policy:** When financial institutions return checks to the City for insufficient funds or closed accounts the City will levy a service charge for the amount of the check and ~~require the check to be picked up by a specified date. Customers with insufficient fund checks will be allowed ten (10) days from notification to pick up before a service(s) is discontinued. Service(s) will be discontinued immediately on checks returned on accounts closed. (Bad check service charge is shown on reverse of bill.)~~ add it back to the account. A letter will be mailed, the account will be flagged, and service will be disconnected if the balance has not been paid by the 20th of the month.
11. Customers with a contractor or customer installed S.T.E.P. system will be required to pay a monthly maintenance fee. If the system requires other than routine maintenance due to grease in the system, the customer will be billed for the service.

In accordance with Title VI, we do not discriminate based on race, color, or national origin in Federal or State Programs.

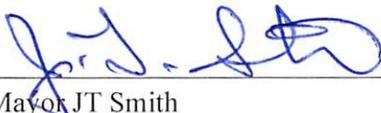
NOW, THEREFORE BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE, that the Water and Sewer Regulations updates and changes, is hereby approved and adopted, and shall replace any previously adopted sections of the Rules and Regulations and shall become effective immediately following passage of this resolution.

Adopted this 10th day of January, 2023.

Voting in Favor 7

Voting Against 0

Attest:



Mayor JT Smith



City Recorder Alicia Martin, CMFO

RESOLUTION 2025-14

A RESOLUTION OF THE TOWN OF ASHLAND CITY, TENNESSEE, AMENDING THE WATER AND SEWER DEPARTMENT RULES AND REGULATIONS FOR UTILITY USERS WITH THE TOWN OF ASHLAND CITY.

Town of Ashland City
Water and Sewer Department
Rules and Regulations

The Town of Ashland City will provide utility services to all qualified customers in the Ashland City Service area. These Rules and Regulations are written to ensure understanding by all Town of Ashland City customers that desire utility service.

1. **Application for Service:** Each prospective customer desiring utility service is required to complete and sign an "Application for Service" form. A valid State issued I.D. is required. Applications received before 12:00 noon will receive service by **4:00 PM** 3:00 P.M. on the same working day.
Applications received after 12:00 noon will receive service by 12:00 noon on the next working day. Although this procedure will be followed as closely as possible, occasions may occur that require a variation from the regular service policy.
Connection fees:
Owner's: Fifty Dollars (\$ 50.00)
Renter's: One Hundred Dollars (\$100.00)
2. **Service Charge:**
 - A. Service charges will be administered to all new customers, present customers transferring to a different location, customer desiring to change names on accounts, and contractors during a construction process. Service charges must be paid before any utility service is supplied.
 - B. Contractor's usage of a hydrometer will not be charged for services that are not being used during construction if the utility account is in the construction company's name.
3. **Customer Service standards:** All wiring, piping, and any other utility related connections must conform to the Utility Departments requirements; service lines and plumbing must be kept in good and workable condition; and accepted modern standards of National and Tennessee State Codes must be followed. For Example, Contractors must have all water boxes and yokes to grade before service will be read into customer's name and known leaks must be repaired before service will be rendered by the city.
4. **Billing:**
 - A. Bills will be rendered monthly and shall be paid by the **twentieth (20)** of the month or service will be disconnected. FAILURE TO RECEIVE A BILL WILL NOT RELEASE ANY CUSTOMER FROM PAYMENT OBLIGATION.
 - B. Sixty (60) days after an account is closed, if payment is not received this debt will be turned over to a collection agency.
5. **Discontinuation of service by City utilities:**
 - A. The utility may refuse to connect or may discontinue Service for violation of any of its Rules and Regulations and/or for making false applications or contracts by the customer.
 - B. Services will not be connected if a previous bill is owed to the utility.
 - C. Services may also be discontinued to customers for theft or destruction of any utility service or the appearance of theft device on the premises of customer or any form of tampering that damages the utility services. Additional charges for tampering WILL be administered and will vary depending on the size of the meter between \$260.00 and \$6700.00. The cost of the register is an additional \$ 81.65 before the service is restored.
6. **Cut-off for Non-Payment:** The City Utility requires payment in cash, money order, cashier's check, debit, or credit card when services have been discontinued for a payment violation.

7. **Reconnection Charge:** Whenever Service has been discontinued by the city, as provided above, or a trip is made for the purpose of discontinuing service, a reconnection charge will be collected by the city before service is restored. A reconnection fee will be charged to the customer when the cut-off leaves the office with the customer's name on the list to disconnect services. The reconnection fee is listed on the reverse side of the bill. Reconnection by the customer is considered tampering with the meter and the customer will be issued court citation. We do not offer after-hours connection.
8. **Termination of service by the customer:** Customers who wish to terminate services must give one (1) day notice prior to the termination date.
9. **Adjustments to the Utility Service Accounts:** The city will make normal adjustments to customer accounts when routine errors occur. Other adjustments will be made on the following basis:
 - A. **Water Leaks:** Leaks are covered by ServLine if you enroll in the coverage.
 - B. **Sewer Leak:** Leaks are covered by ServLine if you enroll in the coverage.
 - C. **Swimming Pools:** There will be one (1) adjustment per calendar year **and only one billing cycle** for the filling of swimming pools. The customer is responsible for contacting our water department and advise them of the days they are going to be filling their pool. The adjustment will be for sewer only and will be adjusted based on a 5-month average of their sewer costs. The customer will then receive a portion of the cost credited but not the entire bill. **(or delete the adjustment in it's entirety.)**
**** The city will not be held accountable for any leaks in the plumbing of the pool resulting in a high-water bill and will not adjust the bill for this reason.**

10. **Bad Check Policy:** When Financial institutions return checks to the city for insufficient funds or closed accounts, the city will levy a service charge for the check and add it back to the account. A letter will be mailed, the account will be flagged, and service will be discontinued if the balance is not paid by the twentieth (20th) of the month.
11. **Sending Meters out to be checked:** If a customer requests a meter to be sent out and checked to ensure it is working properly and the meter is deemed to be in proper working order, the customer will be charged the amount of the testing fees. Testing fees are \$ 70.00.
12. Customers with a contractor of customer installed S.T.E.P. system will be required to pay a monthly maintenance fee. If the system requires more than routine maintenance due to grease in the system, the customer will be billed for the additional service.

In accordance with title VI, we do not discriminate based on race, color, or national origin in Federal of State programs.

NOW, THEREFORE BE IT RESOLVED BY THE MAYOR AND THE COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE, that the Water and Sewer Regulations updates and changes is hereby approved and adopted and shall replace any previously adopted sections of the Rule and Regulations and shall become effective immediately following the passage of this Resolution.

Adopted this _____ day of _____, 2025.

Voting in favor _____ Voting Against _____

 MAYOR GERALD GREER
 MOLEPSKE

CITY RECORDER MARY

CONSULTING AGREEMENT FOR BUDGET SERVICES

This AGREEMENT made and entered into this the ____ day of February, 2025 by and between the Town of Ashland City, hereafter referred to as the “Town”, and Kellie Reed, hereafter referred to as Consultant, to provide for the terms of professional services to be rendered by Consultant to the Town and compensation therefor, together with requisite terms and conditions, mutual obligations, rights and duties of both parties.

WITNESSETH:

NOW, THEREFORE, in consideration of the mutual promises as set forth in this agreement the Town and Consultant do agree as follows, to wit:

1. Consultant shall on an as need basis shall provide accounting services in which she will work with the Interim Finance Director Jamie Winslett and any additional staff in which Mayor Gerald Greer and/or Chief of Staff Allen Nicholson directs her to work with for preparation of the annual budget process. This includes but is not limited to the following: projection of the current fiscal year budget, preparing spreadsheets, working with staff to teach them the budget preparation process, meeting with staff as needed for budget discussions, preparing materials for budget presentations.
2. The term of this agreement between the parties shall be for a term of not to exceed six (6) months; however, either party may request termination of this agreement for any reason by giving the other party thirty (30) days written notice.
3. Compensation of services shall be at an as needed basis, but will be scheduled in advance in order to accommodate the needs of both parties. Compensation shall be at an hourly rate of fifty dollars (\$50.00) per hour.

4. The Town and Consultant agree that Consultant is an independent contractor with respect to the services provided pursuant to this agreement. Nothing in this agreement shall be considered to create the relationship of employer and employee between the parties hereto. Consultant shall not be entitled to any benefits accorded to Town employees by virtue of the services provided under this agreement. The Town shall not be responsible for withholding or otherwise deducting federal income tax or social security or for contributing to the state insurance program, otherwise assuming the duties of an employer with respect to Consultant. Consultant shall provide the Town with a W-9 and will receive a non-employee compensation 1099.
5. The Consultant shall indemnify, defend and hold harmless the Town, its employees, agents, and officials, from and against any and all claims, losses or liability, or any portion thereof, including, but not limited to attorney's fees and cost, arising from injury or death to persons, including but not limited to injuries, sickness, diseases or death to Consultant, or damage to property occasioned by a negligent act, omission or failure of the Consultant.
6. The Consultant agrees to maintain confidential information in which may be obtained and protect it from unauthorized disclosures. The obligations of confidentiality shall not apply to information that: is or becomes publicly available through no breach of this agreement by the Town or is required to be disclosed by law, regulation, or court order.

WITNESS the hands of the duly authorized parties on the day and date hereafter written.

TOWN OF ASHLAND CITY, TENNESSEE

CONSULTANT

BY: _____
MAYOR GERALD GREER

BY: _____
CITY RECORDER MARY MOLEPSKE

APPROVED AS TO FORM AND LEGALITY:

JENNIFER NOE, CITY ATTORNEY

TRADEMARK CONSENT & COEXISTENCE AGREEMENT

This Trademark Consent & Coexistence Agreement (“Agreement”), effective as of February __, 2025 (“Effective Date”), is entered into by and between Milwaukee World Festival, Inc. (“MWF”), on the one hand, and the Town of Ashland City, Tennessee (“Ashland City”), on the other. MWF and Ashland City are at times referred to herein individually as a “Party” and collectively as the “Parties.”

RECITALS

WHEREAS, since 1968, MWF has hosted “Summerfest,” a widely known annual music and entertainment event spanning several summer weekends and taking place in Milwaukee, Wisconsin.

WHEREAS, since 1999 MWF’s Summerfest has enjoyed the distinction of being the “world’s largest music festival,” which in recent years draws more than a half million attendees annually.

WHEREAS, MWF owns incontestable U.S. Trademark Registration Nos. 1771580 and 0940211 for the trademark SUMMERFEST covering summer entertainment festival services and clothing, and has continuously used the SUMMERFEST trademark for such services and goods for over 50 years.

WHEREAS, for about twenty years, Ashland City has been hosting an annual 3-day family-friendly entertainment event in Ashland City, Tennessee featuring rides and games, food, vendor and non-profit entity booths, and live music from local bands on select evenings (“Ashland City Services”) under the name “Summerfest.”

WHEREAS, as further set forth below, the Parties agree that in view of the distinct differences in their respective festivals and target markets, the Parties can coexist in using the Summerfest name with certain parameters without a likelihood of consumer confusion;

NOW THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the Parties agree as follows:

COVENANTS

1. Terms of Coexistence.

1.1 The Parties agree that in view of the differences between their festival offerings along with the distinct locations in which they operate, consumer confusion is unlikely to result from the Ashland City’s use of the Summerfest name, and that such confusion risk would be further mitigated by Ashland City’s addition of the terms “Ashland City” immediately preceding the “Summerfest” term.

1.2 Ashland City hereby agrees, as a limit and restriction upon its use of the Summerfest name, that after the 2025 calendar year, it will add “Ashland City” ahead of the term

“Summerfest” in advertising and marketing materials for the Ashland City Services such that the name of Ashland City’s festival shall become “Ashland City Summerfest.”

1.3 Ashland City further agrees not to seek trademark registration of any mark including the Summerfest term.

1.4 Ashland City further agrees that its use of the Summerfest/Ashland City Summerfest name will be exclusively used in connection the annual summer festival in Ashland City, Tennessee, and that such festival shall not charge admission for any musical act nor pay any musical performer more than \$10,000 for any performance.

1.5 Ashland City further agrees that it will not expand its use of the Summerfest/Ashland City Summerfest name outside of the above-described use without seeking the express written consent of MWF.

1.6 Each Party agrees that it will not represent or suggest that any of its products or services originate from, are sponsored by, or are affiliated with the other Party. Each Party agrees not to use its respective festival name in any manner that might falsely suggest a connection or affiliation with the other Party, nor will it adopt or use any logo, stylization, or branding for its marks that is confusingly similar to the branding then in use by the other Party.

1.7 Subject to the foregoing provisions, MWF consents to and agrees that Ashland City has the right to use the Summerfest name in connection with the Ashland City Services in 2025, and the Ashland City Summerfest name in 2026 and beyond.

2. Cooperation in the event of Actual Confusion. In the unlikely event that either Party becomes aware of any actual consumer confusion, and the same is attributed to the simultaneous use of the Summerfest term as permitted by this Agreement, the Parties shall take commercially reasonable steps to address the confusion and prevent its future occurrence.

3. Term. This Agreement shall continue in full force and effect for as long as each Party continues to use its respective Summerfest name in connection with its respective summer festival. If either party ceases use of the Summerfest name for more than two consecutive years, the Agreement shall terminate.

4. Assignment of Rights. In the event MWF agrees to sell, transfer, or otherwise assign its business as a whole or the trademarks at issue herein to an unrelated or unaffiliated individual or entity, MWF shall provide notice of this Agreement to any such buyer and such buyer shall be bound by all terms and obligations under this Agreement.

5. Representations and Warranties. Each Party represents and warrants to the other Party that: (a) the performance of this Agreement will not conflict with any of the Party’s existing obligations under any other agreement; and (b) the execution of this Agreement by its representative whose signature is set forth at the end hereof has been duly authorized by all necessary corporate action of the Party, and such representative is the appropriate party to sign and agree to all terms and conditions contained herein.

6. Relationship of the Parties. The relationship between the Parties is solely that of parties to a coexistence agreement. Nothing contained in this Agreement shall be construed as creating any agency, partnership, joint venture, or other form of joint enterprise, license, employment, or fiduciary relationship between the Parties.

7. Entire Agreement. This Agreement constitutes the entire agreement of the Parties with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings and agreements, whether written or oral, with respect to each subject matter.

8. No Waiver. No provision of this Agreement shall be deemed waived, amended, or modified by any Party, unless in writing and signed by the Party against whom such waiver, amendment, or modification will be enforced and no waiver by either Party of any default or breach shall be deemed as a waiver of prior or subsequent defaults or breaches of the same or other provisions of this Agreement.

9. Informed Consent. The Parties acknowledge that they have been represented by independent legal counsel of their own choice throughout all of the negotiations which preceded the execution of this Agreement or that they have had a full and fair opportunity to consult with such counsel and to make whatever investigation or inquiry they may deem necessary or desirable in connection with the subject matter of this Agreement prior to the execution hereof and the delivery and acceptance of the consideration specified herein.

10. Construction. No Party, nor any of the Parties' counsel, shall be deemed the drafter of this Agreement for purposes of interpreting any provision hereof in any judicial or other proceeding that may arise between or among them.

11. Severability. If any covenant, condition or other provision herein contained is held to be invalid, void or illegal by any court of competent jurisdiction, the same shall be deemed severable from the remainder of this Agreement and shall in no way affect, impair or invalidate any other covenant, condition or other provision herein contained. If such covenant, condition or other provision shall be deemed invalid due its scope or breadth, such covenant, condition or other provision shall be deemed valid to the extent of the scope or breadth permitted by law.

12. Headings. Titles and captions contained in this Agreement are inserted only as a matter of convenience and are for reference purposes only. Such titles and captions are intended in no way to define, limit, expand, or describe the scope of this Agreement or the intent of any other provision hereof.

13. Governing Law. This Agreement shall in all respects be interpreted, enforced, and governed by and under the laws of the State of Wisconsin. Any action arising out of or relating to this Agreement shall be commenced and maintained in a federal or state court situated in the County of Milwaukee, Wisconsin, and all Parties irrevocably consent to the non-exclusive personal jurisdiction of such courts, and agree that such courts provide a convenient forum for any such litigation.

14. Binding. This Agreement shall be binding upon and inure to the benefit of the Parties hereto, their successors, assigns, and affiliates, each of their respective officers, directors, agents, employees and representatives.

15. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Agreement delivered by facsimile, e-mail, or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

Milwaukee World Festival, Inc.

Town of Ashland City, TN

By: _____

By: _____

Title: _____

Title: _____

RESOLUTION 2025-09

A RESOLUTION OF THE TOWN OF ASHLAND CITY, TENNESSEE, TO UPDATE SECTION IX, MISCELLANEOUS POLICIES: DRESS CODE OF THE PERSONNEL POLICIES AND PROCEDURE MANUAL GOVERNING EMPLOYMENT WITH THE TOWN OF ASHLAND CITY

WHEREAS a public employee of the Town of Ashland City, you are expected to maintain a standard of dress which reflects good taste. The kind of work determines the clothing you should wear, and your attire should meet accepted professional standards and safety regulations. Your supervisor can council you on appropriate attire for your job and your department. In several departments, uniforms are issued for wear. This uniform policy immediately identifies you as a Town of Ashland City employee. You are expected to wear your uniform neatly and in accordance with departmental standards.

WHEREAS the list of appropriate Slacks/Skirts/Dresses/ Shirts/ Shoes are listed in detail in the attached policy change.

WHEREAS the list of inappropriate Slacks/Skirts/Dresses/ Shirts/ Shoes are listed in detail in the attached policy change.

WHEREAS if an employee comes to work in inappropriate dress, he or she will be required to go home, change into conforming attire and return to work. Hourly paid staff members will not be compensated for any work time missed because of failure to comply with designated workplace attire and grooming standards.

WHEREAS if the problem continues the employee will be subject to corrective action.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE, approves the updated Dress Code Policy.

We, the City Council, are meeting in Regular Session on this the 11th day of February, 2025 move for the adoption of the Resolution as set out above.

Voting in Favor _____

Voting Against _____

Attest:

Mayor

City Recorder

ASHLAND CITY DRESS CODE

As a public employee of The Town of Ashland City, you are expected to maintain a standard of dress which reflects good taste. The kind of work that you do determines the clothing you should wear, and your attire should meet accepted professional standards and safety regulations. Your supervisor can counsel you on appropriate attire for your job and your department. In several departments, uniforms are issued for wear. This uniform immediately identifies you as a Town of Ashland City employee. You are expected to wear your uniform neatly and in accordance with departmental standards.

Appropriate	Inappropriate
Slacks/Skirts/Dresses	
<ul style="list-style-type: none"> • Khakis or corduroys • Jeans (must be clean and free of excessive bleaching, rips, tears and fraying; may not be excessively tight or revealing) • Leggings must have a long top that covers the pelvic area • Skorts, Capris • Skirts, Dresses (knee length) NO shorter than 3 inches above the knee 	<ul style="list-style-type: none"> • Sweatpants, leggings, exercise wear • Shorts, low-rise or hip-hugger pants or jeans • Skorts, Skirts, Dresses (above the knee) Any shorter than 3 inches above the knee
Shirts	
<ul style="list-style-type: none"> • Polo collar knit or golf shirts • City logo wear • Only T-shirts with Ashland City Promo • Short-sleeved blouses or shirts • Turtlenecks • Jackets or sweaters 	<ul style="list-style-type: none"> • T-shirts or sweatshirts • Beachwear • Sleeveless blouses or shirts • Exercise wear • Crop tops, clothing showing midribs, spaghetti straps
Shoes	
<ul style="list-style-type: none"> • Casual, low-heeled, open-back shoes (e.g., mules, sling backs) • Sandals, Athletic shoes 	<ul style="list-style-type: none"> • flip-flops

If an employee comes to work in inappropriate dress, he or she will be required to go home, change into conforming attire and return to work. Hourly paid staff members will not be compensated for any work time missed because of failure to comply with designated workplace attire and grooming standards. If the problem continues the employee will be subject to corrective action.

RESOLUTION 2025-17

A RESOLUTION OF THE TOWN OF ASHLAND CITY, TENNESSEE, TO UPDATE SECTION IX, MISCELLANEOUS POLICIES: AMENDING THE WORDING ON THE DRESS CODE POLICY IN THE PERSONNEL POLICIES AND PROCEDURE MANUAL GOVERNING EMPLOYMENT WITH THE TOWN OF ASHLAND CITY

WHEREAS a public employee of the Town of Ashland City, you are expected to maintain a standard of dress which reflects good taste. The kind of work determines the clothing you should wear, and your attire should meet accepted professional standards and safety regulations. Your supervisor can council you on appropriate attire for your job and your department. In several departments, uniforms are issued for wear. This uniform policy immediately identifies you as a Town of Ashland City employee. You are expected to wear your uniform neatly and in accordance with departmental standards.

WHEREAS the skirt or skort policy should ready no shorter than 3 inches above the knee to be acceptable and anything shorter than 3 inches above the knee is in violation of the dress code policy;

WHEREAS the leggings can only be acceptable and worn if the top is long enough to cover the pelvic area.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE, approves the updated Dress Code Policy.

We, the City Council, are meeting in Regular Session on this the 11th day of February, 2025 move for the adoption of the Resolution as set out above.

Voting in Favor _____

Voting Against _____

Attest:

Mayor

City Recorder



February 25, 2025

Gerald Greer, Mayor
Town of Ashland City
P.O. Box 36, 101 Court Street
Ashland City, Tennessee 37015

Dear Mayor Greer:

Subject: Receipt of Proposals
WWTP Improvements – Sludge Belt Filter Press
CEC Project 190-150

Two (2) proposals were received on December 13, 2024 by Civil and Environmental Consultants, Inc. (CEC) in response to the Request for Proposals (RFP) for Sludge Press Equipment initially issued on November 13th, 2024 and revised on December 5th, 2024. The RFP was by invitation sent to three (3) manufacturers' representatives of wastewater equipment in the region. The entire RFP was included in the electronic invitation. The proposals were reviewed by five individuals - three (3) individual Engineers with CEC and the Ashland City Public Works Director and Assistant Director. A summary of the proposal evaluation is attached, with the proposers listed alphabetically from left to right and includes the respective ranking based on the project team evaluation. The highest ranking proposal was the one showing the best overall compliance with the requirements of the RFP of the proposals received.

This is not a contractual obligation on the part of Ashland City and, thus, no action is required by the Board. It is, however, completion of a competitive selection process for the Sludge Belt Filter Press for the proposed Wastewater Treatment Plant. CEC recommends design of the sludge dewatering system to be based on the Alfa-Laval Proposal.

By copy of this letter, CEC is transmitting all proposals and a copy of the Evaluation and Ranking and the Cost Evaluation to Mr. George Davis, RD State Engineer, for his review and acceptance.

Please call me at 615-333-7797 should you have any questions.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Ricky Oakley, P.E.
Principal

Enclosures: Sludge Dewatering System Proposals – Evaluation and Ranking

cc: George Davis, USDA RD State Office (w/enclosure)
Clint Biggers, Public Works Director
Billy Harris, Assistant Public Works Director/Chief Wastewater Operator

Town of Ashland City WWTP
Sludge Dewatering System Proposals - Evaluation and Ranking

Criterion	Scoring	Alfa-Laval	Komline-Sanderson
	% of Score	Ranking	Ranking
Capital Cost	75	1	2
Schedule	15	2	1
Design Calculation	10	1	1
Experience*	-	-	-
Equipment Drawings*	-	-	-
Electric Loads*	-	-	-
Recommended Spare Parts*	-	-	-
Maintenance Considerations*	-	-	-
Warranties*	-	-	-
References*	-	-	-
Weighted Average Rank		1.15	1.75
*Items were stipulated and held no weighted value			

Cover Letter

Included in our package:

- Priced Quotation
- Proposed Schedule
- Design/Process Calculations
- Reference list detailing our experience with the proposed unit
- Equipment list with cut sheets for auxiliary equipment
- Corporate profile showing our more than 40 years of experience manufacturing BFP's
- Equipment layout in PDF and CAD
- Maintenance chart
 - Electrical Loads
 - Recommended spare parts
 - No special maintenance considerations need to be considered
- Warranty information
- Details on technical support and ease of operation
- Clearance
 - Recommend a minimum of 3 feet to be provided around the front, back, and one side.
 - The other side should have a clearance equal to the width of the machine for maintenance, which for a GRS-2 is 11'-3/4"
 - Our proposed unit fits in the room based on the drawings shown in the RFQ
- Existing Serpentix conveyor would not require modifications in the location shown on the drawings.

If you have any questions or concerns, please contact our local representative Clint Curl at The TDH Co.

We appreciate the opportunity to work with you on this project.

Sincerely,

Michael Garcia E.I.T
Applications Engineer

Brian Komline
VP, Sales

Quotation

December 10th , 2024

Bid Date: December 13th, 2024 5 PM (Central Time)

To: Civil & Environmental Consultants, Inc.

Reference: Town of Ashland City, TN WWTP
CEC Project Number 190-150
Komline-Sanderson Quotation No. MWT-9545
Addendum #1

Dear Kaleb Huling,

Komline-Sanderson is pleased to provide the following quotation, which includes addendum #1:

Process/Service Conditions

Material Being Processed:	Aerobically Digested SBR
Processing Temperature:	Ambient
Plant Power:	3 Ph, 60Hz, 480 Volts
Motor Characteristics:	TEFC
Electrical Enclosures:	NEMA 4X
Elevation Above Sea Level:	Less Than 1,000 Feet

Kompress Belt Filter Press - Equipment Description

1. K-S Kompress® Belt Filter Press Model GRS-2 Series III

One (1) Komline-Sanderson Kompress Belt Filter Press, Model GRS-2 Series III, two (2) meter active width, with fabricated carbon steel channel framing, hot dipped galvanized.

The Kompress Belt Filter Press is equipped with a gravity dewatering zone with Roto-Kone® and Roto-Trak® plows; an adjustable wedge zone; a pressure/ shear drum zone; a 3 HP variable speed belt drive; belt wash stations with built-in nozzle cleaning brushes; hydraulically controlled belt steering and belt tensioning devices; detectors for required alarm conditions and safety stop cords; nylon coated carbon steel drums and idlers; rubber covered carbon steel drive rolls and type 316 stainless steel perforated drum, wash headers, filtrate collection trays and washwater containment and collection boxes. Integral frame mounted hydraulic power unit as described below. Belt drive is a variable frequency speed controlled A.C. motor.

2. Sludge Conditioner

One (1) Sludge Conditioner.

The sludge conditioner is an in-line type, with polymer injection ring, adjustable non-clog venturi type mixer and press mounted feed box/flocculation tank with inlet distributor to the press, all wetted parts of type 316 stainless steel or polyethylene.

3. Hydraulic Power Unit

One (1) Hydraulic Power Unit with 5 gallon type 316 stainless steel reservoir, press frame mounted.

The hydraulic power unit for belt steering and tensioning power is complete with an integral press frame mounted 5 gallon type 316 stainless steel reservoir, all system controls and a 2 HP drive.

4. Belt Washwater Booster Pump

One (1) Belt Washwater Booster Pump Goulds G&L Model eSH-F 1 ½ x2 ½ - 8 with 7.5 HP 3500 RPM drive

The belt washwater booster pump is an end suction centrifugal type, 316L stainless steel construction, complete with mechanical seal, coupling, guard and base, each pump rated to boost 80 gpm from 40 psig to 85 psig.

5. Electrical Control Panel

One (1) Main Electrical Control Panel in NEMA 4X type 304 stainless steel enclosure for floor stand mounting.

The main electrical control panel is arranged for manual and automatic system operation with VFD controller, operator controls and indicator lights for the press belt drive. A.C. starter, operator controls and indicator lights for the washwater pump and hydraulic power unit drive. Operator controls and indicator lights only as required will be included for the sludge feed pump, polymer feed system, and cake discharge conveyor system. A programmable controller will be included to provide the necessary system start-up and shutdown sequencing and interlocking, alarm circuits and indications, fail-safe controls and remote inputs and outputs required of the specifications. Panel includes the required OIT. Panel will be UL labeled. A 3/60/480 volt power feed is required to the panel.

6. Polymer Mix and Feed System

One (1) Polymer Mix and Feed System, Polyblend for liquid emulsion.

7. Spare Parts

The following spare parts shall be furnished for the belt filter press:

- One complete set of dewatering belts.
- One complete set of discharge blades.
- One complete set of sludge containment seals.
- One press roller bearing of each different size used.
- One oil filter for the hydraulic power unit.

Notes

- 1 The belt press will be shipped complete with all intraunit wiring and piping. Erection will require only bolting to the prepared foundation, connection of external piping and wiring and installation of the filter belt. The control panel will be shipped complete with all intraunit wiring. Again, erection requires only securing the panel to the floor and making the required external wiring connections.
- 2 Initial lubricants and chemicals are not furnished by K-S.

- 3 The belt press is arranged for mounting within a curbed concrete drainage basin. Note that grating should be furnished and installed between the curbing and the belt press sides by the installing contractor.
- 4 Interconnecting wiring and conduit are not furnished by K-S except that the belt filter press drives and controls will be wired by K-S to a junction panel on the belt press.
- 5 Interconnecting piping, valves and fittings are not included in this quotation except that on the on the belt press, the filtrate collection trays and washwater containment and collection boxes will be piped to discharge into the curbed drainage basin on the floor underneath the unit. The washwater system requires contractor piping to a single washwater header located on the belt press unit.
- 6 Anchor bolts are not furnished by K-S.
- 7 Contractor to check interface of press discharge (which is 2'-0" above the bottom of the press leg pads) with conveyor belt height and adjust press mounting pad height and/or conveyor height to suit.
- 8 Komline-Sanderson will provide start-up and testing supervision, as noted below under "Site Services," however performance test labor, chemicals, test equipment and laboratory services are to be contractor supplied.
- 9 The electrical control panel contains the specified operator controls for the sludge feed pump and polymer feed system, but does not contain the associated variable frequency controller, SCR controller, and motor starter for these items which are to be furnished by others and located elsewhere.
- 10 The proposed electrical control panel contains the required sludge flow rate indicator but does not contain associated flow sensing element and transmitter which are to be furnished by others.
- 11 No special tools are required for maintenance or disassembly of the belt filter press / gravity belt thickener.
- 12 Purchased equipment such as electric motors, valves, etc. will be furnished with manufacturer's standard finish.

Exclusions

The Following equipment, material and services are excluded from the Komline-Sanderson Scope of Supply unless specifically mentioned in this quotation:

- Any delivery point rigging, offloading or storage.
- Certified equipment tests.

- Any structural steel, platforms, guards, handrails, gratings, supports, piping, valves, weirs, flexible connections, anchor bolts, starters, panel boards, field painting, insulation, or electrical work or material other than that specifically mentioned in this quotation.

Field Assembly, Erection, Installation

All equipment will be delivered as fully assembled as possible. When certain items must be delivered partially disassembled because of shipping limitations or other special conditions, field assembly will be the responsibility of the customer. This will normally consist of joining sections by mechanical means such as with bolts, nuts and screws. Equipment installation is the responsibility of the customer. K-S supervision is available at our per diem rate plus travel and living expenses, to supervise field assembly, and/or installation, if required.

Site Services

Komline-Sanderson shall furnish the services of a technician for a period of eight (8) days to be covered in two (2) trips to the job site to check the installation, supervise the start-up, supervise performance testing if required by the specifications, and provide operator instruction for the items included in our scope of supply. Additional service is available at our portal to portal per diem rate in effect at the time of service delivery, plus living and travel expenses. The current per diem supervision rate is One Thousand, Five Hundred, Ninety Five dollars (\$1,595.00) plus living and travel expenses.

Engineering Submittals

Komline-Sanderson will submit for customer's approval, drawings and certified specifications including, if applicable, mechanical equipment specifications, K-S

standard mechanical installation drawings including loads and points, electrical drawings consisting of control panel layouts, schematics and interconnection diagrams, and electrical cut sheets.

The submittal does not include engineering calculations, process and instrumentation diagrams or any other engineering information not listed above.

Any changes to drawings involving additional engineering time may result in additional cost to the customer and may delay shipment.

Shipping Schedule

Engineering submittals: Four (4) to six (6) weeks after order acceptance.

Equipment shipment: Twenty (20) to Twenty-Six (26) weeks after return of approved engineering submittal.

Estimated elapsed time from order acceptance to shipment of equipment, subject to Komline-Sanderson's receipt of approved drawings, 2 weeks after customer's receipt of the engineering submittal: Twenty-Six (26) to Thirty-Four (34) weeks.

The quoted shipping schedule is based on Komline-Sanderson's current production schedule. Customer changes to engineering submittals, increased lead times for critical items due to factors beyond Komline-Sanderson's control and other orders received by Komline-Sanderson prior to acceptance of this quotation may extend the shipping times quoted.

Transport and delivery are subject to any restrictions or regulations imposed by local, state and national governmental agencies or authorities.

Weight

The weight of the heaviest piece of equipment is approximately Twelve (10.5) tons. Total weight is approximately Fourteen (11.5) tons

Installation, Operation and Maintenance Manuals

Three (3) sets of operation and maintenance manuals and one (1) USB-A flash drive shall be provided in English.

Safety

Equipment Operation

Komline-Sanderson will provide safety instructions relating to the safe operation and maintenance of our equipment. The purchaser has the responsibility for insuring that this information is reviewed, understood, and implemented by all personnel involved in the use or maintenance of our product.

Hazardous Conditions

If areas of any plant site or installation in which Komline-Sanderson personnel will be required to work in the course of providing site services contain concentrations of toxic or otherwise hazardous materials that could endanger human safety or health, the purchaser shall provide appropriate instruction and personal protective equipment.

Guarding & Access

The quoted equipment includes guarding devices and warning labels designed for operating the equipment from safe access points which are defined as points of operation from the ground (floor) level and from any permanently installed platforms, walkways, ladders and stairs included in Komline-Sanderson's scope of supply or identified as requirements in this quotation. Komline-Sanderson makes no representation with respect to the adequacy of guarding or other safety devices for equipment access from any point other than the safe access points identified above.

All guards and safety devices provided with the equipment must be in place and in good working condition when operating the equipment. As required by OSHA and NIOSH regulations, lock out procedures and other worker protection safety procedures and equipment must be used on all occasions when the equipment is accessed from safe access points and from other locations when required for equipment maintenance, cleaning, etc.

Komline-Sanderson assumes no liability for injuries, loss or damage resulting from use or operation of the equipment without guards and other safety devices, improper access to the equipment including failure to follow lock out procedures and other safety procedures as required by OSHA or NIOSH, or changes in equipment access resulting from modifications to or the addition of access equipment or devices by others.

Equipment Warranty

Parts found to be defective in material or workmanship under normal use and service within twelve (12) months after start-up/acceptance, not to exceed eighteen (18) months after shipment, will be repaired or replaced without charge F.O.B. original point of shipment, the responsibility of Komline-Sanderson being limited to the cost of the defective parts. (An additional four (4) year warranty (total of five years) as described above will be provided for the frame, the rolls, and their coatings and the roll bearings.) Decomposition by chemical action and wear caused by the presence of abrasive materials shall not constitute defects. See also "Guarantee" in our "Terms and Conditions" attached hereto.

Performance Guarantee

The proposed equipment will meet the performance criteria stated in the Engineer's specifications provided that those performance requirements can be achieved in standard laboratory bench scale performance testing procedures. This performance guarantee is valid only if performance testing is witnessed by a Komline-Sanderson service representative. If, due to circumstances beyond Komline-Sanderson's control, K-S cannot witness the performance testing within the supervision time scope defined in this offering, any additional time and expenses required for K-S to witness the performance testing will be for the customer's account. This guarantee is valid only if this quotation is signed by an Officer of Komline-Sanderson Corporation.

Buy American Certification

Consistent with the provisions of the American Recovery and Reinvestment Act of 2009 ("ARRA") Section 1605 relating to the identification and supply of American-made Iron, Steel and Manufactured Goods, Komline-Sanderson certifies that any Komline-Sanderson quotation or bid submitted in connection with the above-referenced project will reflect the best, good faith efforts of Komline-Sanderson to identify domestic sources of iron, steel, and manufactured goods for every component contained in the bid where such American-made components are available on the schedule and consistent with the deadlines prescribed in or required by the bid solicitation.

Komline-Sanderson further certifies that, based on the definition of "Manufactured Good" as defined in the OMB Guidelines of April 3, 2009 at 176.70(a)(2)(ii) and 176.140(a), the equipment being quoted or bid by Komline-Sanderson in connection with this project meets the Buy American requirements of ARRA Section 1605.

Price

We will supply the above for:\$433K

The above price is FOB shipping point.

Prepaid truck freight to the job site is included.

The above price is for shipment in the fourth quarter of 2025

Price(s) quoted is/are exclusive of any local, State or Federal sales or manufacturer's taxes of any sort and such taxes and/or charges pertaining thereto are to be borne by the purchaser.

Validity of Quotation

Prices are valid for One hundred and Twenty (120) days from the date of quotation.

Terms of Payment

Net thirty (30) days from date of invoice.

Conditions of Sale

See attached Komline-Sanderson's "Terms and Conditions," which are hereby made part of this quotation.

If you have any questions regarding this quotation, please do not hesitate to contact us or our representative:

The TDH Company
3225 Shallowford Rd, Suite 410
Marietta, GA 30062

Attn: Clint Curl
Phone: 770-509-1808
Cell 678.983.6795
Email: ccurl@tdhco.com

We wish to thank you for giving us the opportunity to submit this quotation, and trust that it will meet with your favorable consideration.

Yours truly,

Michael Garcia

Michael Garcia E.I.T
Applications Engineer
908-234-1000 x336

Brian Komline

Brian Komline
VP, Sales Wastewater & Process
908-234-1000 x317

Komline-Sanderson Terms and Conditions

DEFINITIONS

K-S- Komline-Sanderson Corporation
Purchaser- Party issuing purchase order
Owner- Party ultimately owning the equipment

CONTROLLING PROVISIONS

The terms and conditions set forth herein constitute the entire agreement between the parties. The selling price is based on the terms and equipment in the K-S quotation. The K-S acknowledgment of purchase order confirms the quoted price, terms, and equipment. The acknowledgment does not recognize any other price, terms, or equipment contained in the purchase order which conflict with the K-S quotation, unless specifically noted in the acknowledgment or otherwise confirmed in writing.

1. **ACCEPTANCE**- Acceptance of purchase order is indicated only by the acknowledgment of purchase order. Commencement of performance by K-S does not constitute acceptance.
2. **QUOTATIONS**- Unless otherwise stated by K-S the price contained herein is firm, subject to acceptance within 30 days. Typographical or clerical errors in quotations are subject to correction by K-S.
3. **TERMS OF PAYMENT**- All invoices will be dated day of shipment. Unless otherwise stated by K-S, payment terms are net 30 days from date of each invoice. Interest at the lawful maximum rate on sums past due and related collection fees will be added to the delinquent amount and paid by Purchaser. If at any time in the judgment of K-S the financial condition of the Purchaser does not justify continuance of production or shipment, K-S may require adequate assurance of performance.
4. **TAXES**- Prices on the products specified herein are exclusive of any city, state, federal, and foreign excise taxes, duties, and customs, including, but not necessarily limited to taxes on manufacture, sales, receipts, gross income, occupation, use, and similar taxes. If any are imposed they are to be paid by the Purchaser. Whenever applicable, Purchaser shall provide K-S with tax exemption documentation acceptable to the taxing authorities.
5. **SHIPMENT**- Unless otherwise stated, all prices are F.O.B. K-S shipping point. Method and route of shipment are at the discretion of K-S, unless purchaser supplies explicit instructions. Identification of the goods to the contract shall occur as each shipment is placed in the hands of the carrier.
Cost of unloading equipment and any demurrage charges on shipments to Purchaser are to be borne by Purchaser. In order to maintain scheduled shipment dates K-S reserves the right to ship equipment less certain 'buy-out' items. These items, when available from the manufacturer, will be shipped to the job site for installation by Purchaser. The installation and fit up, if necessary, will be for the account of Purchaser.
6. **DELIVERIES**- Statements as to expected dates of shipment from factory represent the best judgment of K-S and are based upon prompt receipt of all necessary information, including but not limited to, the return of approved drawings.
7. **DELAYS**- K-S will not be liable for any delay in the performance of order or contracts or in the delivery or shipment of goods, or for any damages suffered by Purchaser by reason of such delay nor shall the order be subject to cancellation, when such delay is directly or indirectly caused by, or in any manner arises from, fires, floods, accidents, riots, acts of God, war, governmental interference or embargoes, strikes, labor difficulties, shortage of labor, fuel, power, materials or supplies, transportation delays, or any other cause or causes (whether or not similar in nature to any of these hereinbefore specified) beyond the control of K-S.
It is not feasible for K-S to hold equipment within its facilities beyond the scheduled completion date. If Purchaser cannot accept delivery on the scheduled delivery date, K-S will, if circumstances permit, arrange for storage of the equipment for a reasonably limited period of time provided that Purchaser remits full payment for the equipment plus cost of storage. Risks incident to storage shall be assumed by Purchaser.
8. **GUARANTEE**- K-S warrants that the material and workmanship going into the K-S Product is of good quality and in conformity with the best commercial practice.
Unless otherwise stated parts found to be defective in material or workmanship under normal use and service within one (1) year after shipment will be repaired or replaced without charge F.O.B. original point of shipment, the responsibility of K-S being limited to the cost of the defective parts. Decomposition by chemical action and wear caused by the presence of abrasive materials or caused by improper use or maintenance of K-S equipment or associated system components shall not constitute defects. In no event shall K-S be liable for consequential or special damages, or for transportation, installation, adjustment, or other expenses which may arise in connection with such replacement or repair. THIS WARRANTY IS

Quotation- Offer to sell by K-S
Purchase Order- Acceptance of order
Acknowledgment- Confirmation by K-S of terms of agreement

EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

Equipment may be returned for credit or replacement only after written K-S authorization and shipping instructions.

9. **PATENTS**- K-S agrees to defend, at its own expense, any suit brought against Owner on a complaint that any product furnished on this order constitutes an infringement of a patent, provided that K-S is notified in writing of such suit within 10 days after service of process therein on Owner, and all papers therein are delivered to K-S and K-S is given the authority, information, and assistance to defend against the suit. K-S agrees to pay all damages and costs awarded therein against Owner from a final judgement following the exhaustion of all rights of appeal. The foregoing states the entire liability of K-S for patent infringement. Purchaser and/or Owner shall hold K-S harmless for any expense or loss resulting from infringement of patents or trademarks arising from compliance with Purchaser's and/or Owner's designs or specifications.
10. **SERVICE**- The price quoted is for machinery and equipment. Service, if included in the quotation is an obligation to the Owner and will be rendered only after full payment of purchase price by the Purchaser.
11. **CANCELLATION**- Cancellation or suspension of order will be accepted only upon terms which reimburse K-S for costs incurred plus normal mark-up, and must be agreed to in writing by an officer of K-S.
12. **EQUIPMENT CHANGES**- Changes in equipment design or specifications quoted by K-S will be made only with the consent of K-S and on terms acceptable to K-S.
13. **CLAIMS**- After K-S has delivered the equipment to the carrier, the carrier is responsible for its safe and complete delivery to the Purchaser or Owner. It is consignee's responsibility to inspect and accept these goods and promptly report to the carrier and K-S any shortages, damages, or other problems that might arise that will unfavorably influence the installation and/or operation of this equipment. Any of these conditions must also be noted on the carriers receipt.
14. **CODES**- K-S equipment and accessories are all designed in good faith with the intent of complying with applicable domestic codes existing at time of quotation. K-S shall not be responsible for any failure to comply with such codes which results from non-conforming location, operation, use, or maintenance of the equipment or from alteration of the equipment not authorized by K-S, or from any option or accessory to the equipment which was available to the Purchaser or Owner but omitted at his direction, or from any design or instructions furnished by Purchaser or by Owner. Any liability to K-S for violations of codes shall be limited to modifications or replacement of the equipment so that it complies with the codes. K-S shall not be liable for any fines, penalties, or consequential damages. The K-S price does not include the cost of inspection, permits, or fees related to verifying compliance with codes, regulations, standards, or specifications.
15. **BACK CHARGES**- Back charges will not be accepted by K-S unless they have been approved in advance in writing by an officer of K-S.
16. **INDEMNIFICATION**- Purchaser shall indemnify and hold K-S harmless from all damages, liability, and expense (including reasonable attorney's fees) arising out of claims or law suits of third parties based on or involving the equipment or its use, handling, or operation.
17. **LIMITATION OF LIABILITY**- K-S's liability, howsoever arising with respect to any of the obligations which it may have assumed by reason of its performance of the work, is specifically limited as provided herein, and in no event shall K-S, its employees, agents, and/or subcontractors be liable for any special, indirect, or consequential damages whatsoever, including without limitation, any delays or loss of time in putting the system into operation, or any delays or loss of time to other parts of Owner's plant, or loss of production, profits, products, chemicals, utilities, etc. Under no circumstances shall K-S's total liability for any cause including without limitation tort, performance guarantee, contract warranty (expressed or implied), strict liability, or otherwise arising out of this Agreement, exceed the lesser of the actual loss, harm, or damage, or 15% of the original purchase price of the involved equipment or system sold by K-S to this purchaser.
18. **ARBITRATION**- Any controversy or claim arising out of or relating to this agreement or the performance or breach thereof that cannot be settled by the officers of each party shall be settled by arbitration in accordance with the then current rules and procedures of the American Arbitration Association-International Centre of Dispute Resolution. K-S shall have the right and option, in its sole discretion, to pursue arbitration in either the New Jersey regional office of AAA-ICDR, located at Somerset County, New Jersey, USA or in a AAA-ICDR office located in any jurisdiction in which Purchaser may be located.

Komline-Sanderson Terms and Conditions

DEFINITIONS

K-S- Komline-Sanderson Corporation
Purchaser- Party issuing purchase order
Owner- Party ultimately owning the equipment

CONTROLLING PROVISIONS

The terms and conditions set forth herein constitute the entire agreement between the parties. The selling price is based on the terms and equipment in the K-S quotation. The K-S acknowledgment of purchase order confirms the quoted price, terms, and equipment. The acknowledgment does not recognize any other price, terms, or equipment contained in the purchase order which conflict with the K-S quotation, unless specifically noted in the acknowledgment or otherwise confirmed in writing.

1. **ACCEPTANCE**- Acceptance of purchase order is indicated only by the acknowledgment of purchase order. Commencement of performance by K-S does not constitute acceptance.
2. **QUOTATIONS**- Unless otherwise stated by K-S the price contained herein is firm, subject to acceptance within 30 days. Typographical or clerical errors in quotations are subject to correction by K-S.
3. **TERMS OF PAYMENT**- All invoices will be dated day of shipment. Unless otherwise stated by K-S, payment terms are net 30 days from date of each invoice. Interest at the lawful maximum rate on sums past due and related collection fees will be added to the delinquent amount and paid by Purchaser. If at any time in the judgment of K-S the financial condition of the Purchaser does not justify continuance of production or shipment, K-S may require adequate assurance of performance.
4. **TAXES**- Prices on the products specified herein are exclusive of any city, state, federal, and foreign excise taxes, duties, and customs, including, but not necessarily limited to taxes on manufacture, sales, receipts, gross income, occupation, use, and similar taxes. If any are imposed they are to be paid by the Purchaser. Whenever applicable, Purchaser shall provide K-S with tax exemption documentation acceptable to the taxing authorities.
5. **SHIPMENT**- Unless otherwise stated, all prices are F.O.B. K-S shipping point. Method and route of shipment are at the discretion of K-S, unless purchaser supplies explicit instructions. Identification of the goods to the contract shall occur as each shipment is placed in the hands of the carrier.
Cost of unloading equipment and any demurrage charges on shipments to Purchaser are to be borne by Purchaser. In order to maintain scheduled shipment dates K-S reserves the right to ship equipment less certain 'buy-out' items. These items, when available from the manufacturer, will be shipped to the job site for installation by Purchaser. The installation and fit up, if necessary, will be for the account of Purchaser.
6. **DELIVERIES**- Statements as to expected dates of shipment from factory represent the best judgment of K-S and are based upon prompt receipt of all necessary information, including but not limited to, the return of approved drawings.
7. **DELAYS**- K-S will not be liable for any delay in the performance of order or contracts or in the delivery or shipment of goods, or for any damages suffered by Purchaser by reason of such delay nor shall the order be subject to cancellation, when such delay is directly or indirectly caused by, or in any manner arises from, fires, floods, accidents, riots, acts of God, war, governmental interference or embargoes, strikes, labor difficulties, shortage of labor, fuel, power, materials or supplies, transportation delays, or any other cause or causes (whether or not similar in nature to any of these hereinbefore specified) beyond the control of K-S.
It is not feasible for K-S to hold equipment within its facilities beyond the scheduled completion date. If Purchaser cannot accept delivery on the scheduled delivery date, K-S will, if circumstances permit, arrange for storage of the equipment for a reasonably limited period of time provided that Purchaser remits full payment for the equipment plus cost of storage. Risks incident to storage shall be assumed by Purchaser.
8. **GUARANTEE**- K-S warrants that the material and workmanship going into the K-S Product is of good quality and in conformity with the best commercial practice.
Unless otherwise stated parts found to be defective in material or workmanship under normal use and service within one (1) year after shipment will be repaired or replaced without charge F.O.B. original point of shipment, the responsibility of K-S being limited to the cost of the defective parts. Decomposition by chemical action and wear caused by the presence of abrasive materials or caused by improper use or maintenance of K-S equipment or associated system components shall not constitute defects. In no event shall K-S be liable for consequential or special damages, or for transportation, installation, adjustment, or other expenses which may arise in connection with such replacement or repair. THIS WARRANTY IS

Quotation- Offer to sell by K-S
Purchase Order- Acceptance of order
Acknowledgment- Confirmation by K-S of terms of agreement

EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

Equipment may be returned for credit or replacement only after written K-S authorization and shipping instructions.

9. **PATENTS**- K-S agrees to defend, at its own expense, any suit brought against Owner on a complaint that any product furnished on this order constitutes an infringement of a patent, provided that K-S is notified in writing of such suit within 10 days after service of process therein on Owner, and all papers therein are delivered to K-S and K-S is given the authority, information, and assistance to defend against the suit. K-S agrees to pay all damages and costs awarded therein against Owner from a final judgement following the exhaustion of all rights of appeal. The foregoing states the entire liability of K-S for patent infringement. Purchaser and/or Owner shall hold K-S harmless for any expense or loss resulting from infringement of patents or trademarks arising from compliance with Purchaser's and/or Owner's designs or specifications.
10. **SERVICE**- The price quoted is for machinery and equipment. Service, if included in the quotation is an obligation to the Owner and will be rendered only after full payment of purchase price by the Purchaser.
11. **CANCELLATION**- Cancellation or suspension of order will be accepted only upon terms which reimburse K-S for costs incurred plus normal mark-up, and must be agreed to in writing by an officer of K-S.
12. **EQUIPMENT CHANGES**- Changes in equipment design or specifications quoted by K-S will be made only with the consent of K-S and on terms acceptable to K-S.
13. **CLAIMS**- After K-S has delivered the equipment to the carrier, the carrier is responsible for its safe and complete delivery to the Purchaser or Owner. It is consignee's responsibility to inspect and accept these goods and promptly report to the carrier and K-S any shortages, damages, or other problems that might arise that will unfavorably influence the installation and/or operation of this equipment. Any of these conditions must also be noted on the carriers receipt.
14. **CODES**- K-S equipment and accessories are all designed in good faith with the intent of complying with applicable domestic codes existing at time of quotation. K-S shall not be responsible for any failure to comply with such codes which results from non-conforming location, operation, use, or maintenance of the equipment or from alteration of the equipment not authorized by K-S, or from any option or accessory to the equipment which was available to the Purchaser or Owner but omitted at his direction, or from any design or instructions furnished by Purchaser or by Owner. Any liability to K-S for violations of codes shall be limited to modifications or replacement of the equipment so that it complies with the codes. K-S shall not be liable for any fines, penalties, or consequential damages. The K-S price does not include the cost of inspection, permits, or fees related to verifying compliance with codes, regulations, standards, or specifications.
15. **BACK CHARGES**- Back charges will not be accepted by K-S unless they have been approved in advance in writing by an officer of K-S.
16. **INDEMNIFICATION**- Purchaser shall indemnify and hold K-S harmless from all damages, liability, and expense (including reasonable attorney's fees) arising out of claims or law suits of third parties based on or involving the equipment or its use, handling, or operation.
17. **LIMITATION OF LIABILITY**- K-S's liability, howsoever arising with respect to any of the obligations which it may have assumed by reason of its performance of the work, is specifically limited as provided herein, and in no event shall K-S, its employees, agents, and/or subcontractors be liable for any special, indirect, or consequential damages whatsoever, including without limitation, any delays or loss of time in putting the system into operation, or any delays or loss of time to other parts of Owner's plant, or loss of production, profits, products, chemicals, utilities, etc. Under no circumstances shall K-S's total liability for any cause including without limitation tort, performance guarantee, contract warranty (expressed or implied), strict liability, or otherwise arising out of this Agreement, exceed the lesser of the actual loss, harm, or damage, or 15% of the original purchase price of the involved equipment or system sold by K-S to this purchaser.
18. **ARBITRATION**- Any controversy or claim arising out of or relating to this agreement or the performance or breach thereof that cannot be settled by the officers of each party shall be settled by arbitration in accordance with the then current rules and procedures of the American Arbitration Association-International Centre of Dispute Resolution. K-S shall have the right and option, in its sole discretion, to pursue arbitration in either the New Jersey regional office of AAA-ICDR, located at Somerset County, New Jersey, USA or in a AAA-ICDR office located in any jurisdiction in which Purchaser may be located.

Process Calculations & Equipment Recommendation Sludge Dewatering Equipment

Project: Ashland City WWTP

Date: 12/9/24

Engineer: Civil & Environmental Consultants, Inc.

K-S Project No: MWT-9545

Process Conditions

Type of Sludge	Aerobically Digested SBR
Sludge Feed Concentration	1.5%
Operation Time	14 hours Per Week [A]
Solids Loading Requirement	19,600 LB/Week [A]

Equipment Sizing

Solids Loading Rate	1400 LB/HR
Expected Cake Solids	14-16% TS*
Polymer Demand (Active)	8 lb./ton DS

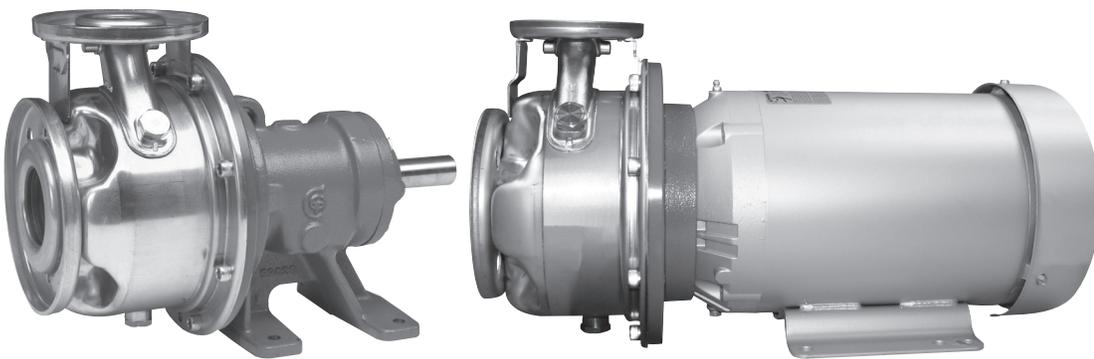
*Cake solids can be narrowed down after bench scale testing at our laboratory.

Recommended Equipment:

One (1) GRS-2-Meter Series III Kompres

Location	Address	City	State	Country	Contact	Phone Number	Quantity	Model	Application/Sludge Type	Actual Start-up Date	Job Number
BAR HARBOR WWTP		BAR HARBOR,	ME	USA	JEFF VANTRUMP	207-288-3555	(1)	GRS-2 SERIES III	WASTE ACTIVATED SLUDGE	10/31/97	S 3452
NORTH WWTP		WOODSTOCK,	IL	USA	ANNE GEORGE	815-338-4300	(1)	GRS-2 SERIES III	AEROBICALLY DIGESTED PRIMARY & WAS	12/19/97	S 3474
UNITED WATER	2700 S. BELMONT AVENUE	INDIANAPOLIS,	IN	USA	MIKE WILSON	317-639-7167	(4)	GRS-2 SERIES III	COMBINED PRIMARY & WAS	11/21/97	S 3483
MUNDELEIN WWTP		MUNDELEIN,	IL	USA	ROGER WILKERSHEIM	847-949-3275	(1)	GRS-2 SERIES III	ANAEROBICALLY DIGESTED PRIMARY & WAS	1/15/99	S 3484
ROWLETT CREEK WWTP	1600 LOS RIOS BLVD., HWY 544	PLANO,	TX	USA	BRENT LORANCE	972-424-2722	(1)	GRS-2 SERIES III	RAW PRIMARY & THICKENED WAS	9/26/97	S 3510
KIEL WWTF	100 EAST PARK AVENUE	KIEL,	WI	USA	CHRIS AUGUST	920-894-2909 X105	(1)	GRS-2 SERIES III	WASTE ACTIVATED SLUDGE	3/27/98	S 3515
WATERBURY WPCF	210 MUNICIPAL ROAD	WATERBURY,	CT	USA	CARL NIGHTLY	203-574-8265	(3)	GRS-2 SERIES III	PRIMARY & SECONDARY WASTE ACTIVATED SLUDGE	6/3/99	S 3524
UNITED WATER	2700 S. BELMONT AVENUE	INDIANAPOLIS,	IN	USA	MIKE WILSON	317-639-7167	(4)	GRS-2 SERIES III	COMBINED PRIMARY & WAS	10/30/98	S 3541
JEFFERSON CITY WPCP	401 OLD MOKANE ROAD	JEFFERSON CITY,	MO	USA	CLARA HAENCHEN	573-634-6502	(2)	GRS-2 SERIES III	GRAVITY THICKENED PRIMARY & SECONDARY TRICKLING FILTER SLUDGE	7/23/99	S 3550
MARTINSVILLE WWTP	995 ROGERS ROAD	MARTINSVILLE,	IN	USA	DALLAS PINCHER	765-342-2342	(1)	GRS-2 SERIES III	AEROBICALLY DIGESTED WAS	5/21/99	S 3596
UNITED WATER	2700 S. BELMONT AVENUE	INDIANAPOLIS,	IN	USA	MIKE WILSON	317-639-7167	(4)	GRS-2 SERIES III	COMBINED PRIMARY & WAS	6/18/99	S 3608
NEWPORT WWTP	465 LISEGA BOULEVARD	NEWPORT,	TN	USA	CHRIS ARCHER	423-625-2848	(2)	GRS-2 SERIES III	AEROBICALLY DIGESTED SLUDGE	1/18/00	S 3611
CRAWFORDSVILLE WWTP	515 BLUFF STREET	CRAWFORDSVILLE,	IN	USA	TOM MITCHELL	765-364-5170; F-5189	(1)	GRS-2 SERIES III	ANAEROBICALLY DIGESTED PRIMARY & WAS	7/21/00	S 3612
WILLINGBORO MUA	72 IRONSIDE COURT	WILLINGBORO,	NJ	USA	DAVE FLEMING	609-877-4962	(1)	GRS-2 SERIES III	ANAEROBICALLY DIGESTED PRIMARY & TRICKLING FILTER SLUDGE	10/16/00	S 3645
LOGANSPORT WWTP	1400 WEST WABASH RIVER ROAD	LOGANSPORT,	IN	USA	BRIAN DEWITT	574-753-6231	(2)	GRS-2 SERIES III	THICKENED PRIMARY & WAS	1/24/00	S 3651
CITY LIGHT AND WATER	1901 JONES ROAD	PARAGOULD,	AR	USA	LISA ELLINGTON	870-239-7795	(1)	GRS-2 SERIES III	AEROBICALLY DIGESTED SLUDGE	9/13/02	S 3688
DEER CREEK WWTP	20600 NORTH PORTLAND	OKLAHOMA CITY,	OK	USA	KEN TWIBELL	405-348-8236	(1)	GRS-2 SERIES III	RAW PRIMARY & THICKENED WAS	10/19/01	S 3691
CAROL STREAM WWTP	245 CUHN ROAD	CAROL STREAM,	IL	USA	ROGER MADDEN	630-653-5499	(2)	GRS-2 SERIES III	WASTE ACTIVATED SLUDGE	7/13/01	S 3728
TWO RIVERS WRA		MONMOUTH BEACH,	NJ	USA	MICHAEL GIANFORTE	732-229-8578	(1)	GRS-2 SERIES III	THICKENED WASTE ACTIVATED SLUDGE	4/24/03	S 3731

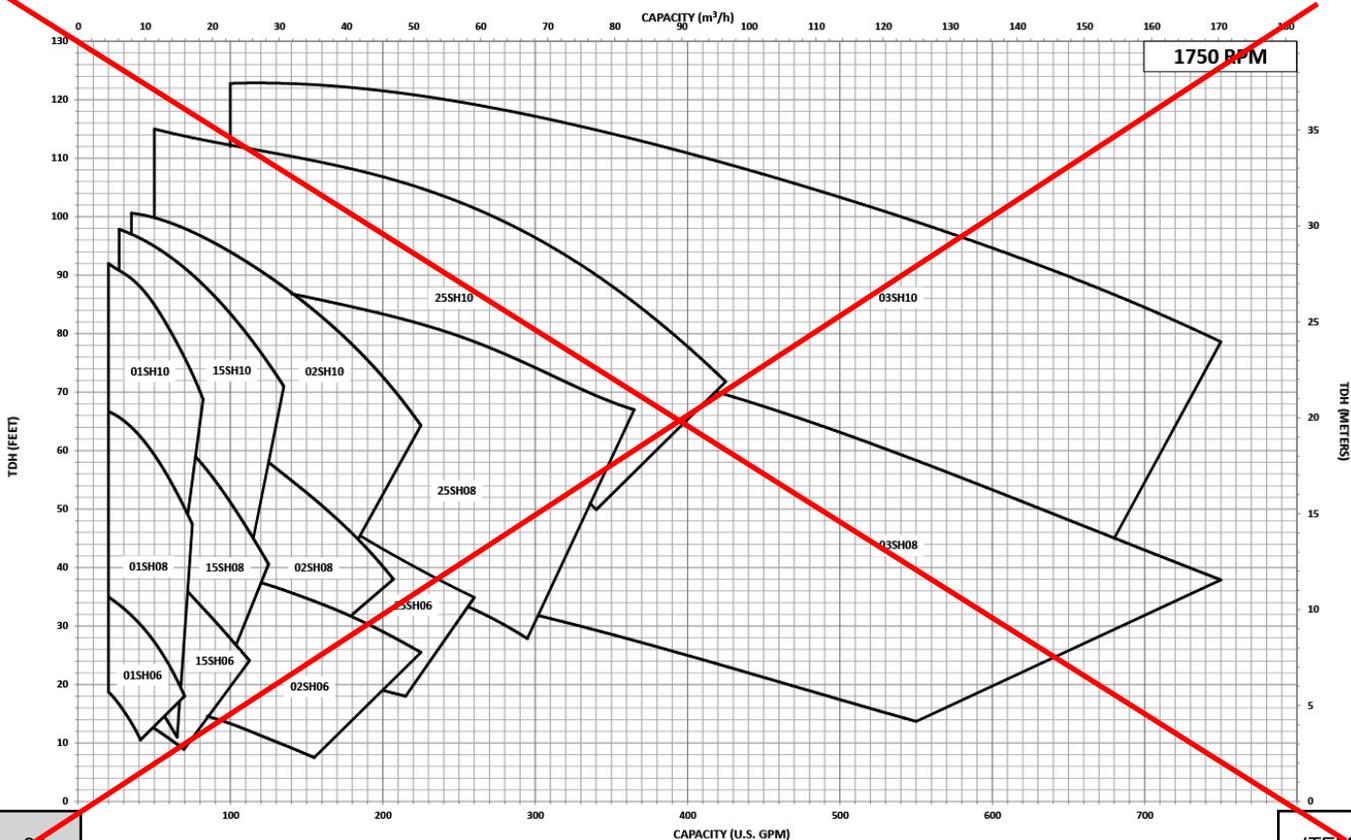
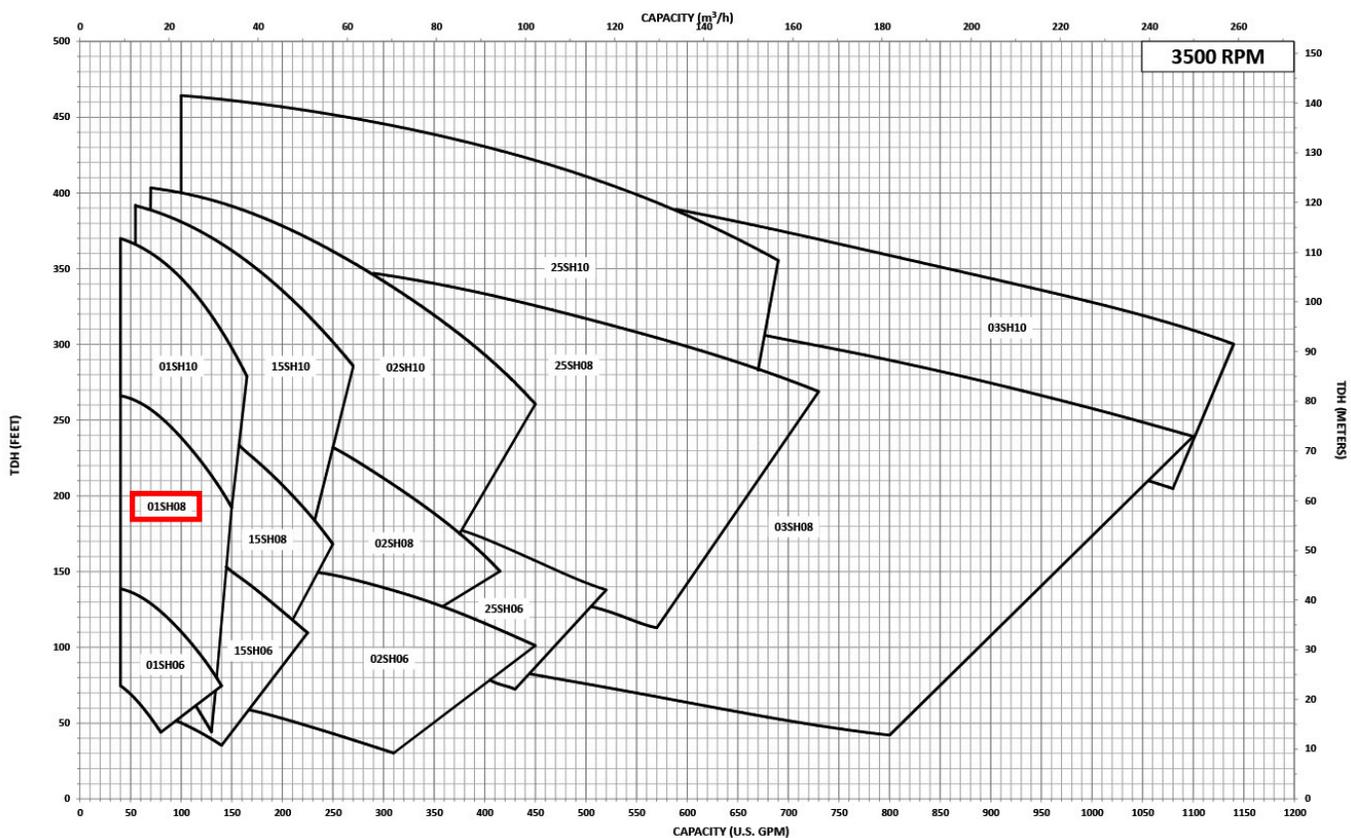
LAGRANGE WWTP		LAGRANGE,	IN	USA	MIKE MOORE	260-463-2042	(1)	GRS-2 SERIES III	AEROBICALLY DIGESTED OXIDATION DITCH SLUDGE	11/7/02	S 3761
PARK CITY WWTP		PARK CITY	KS	USA	RANDALL HARRIS	316-838-4748	(1)	GRS-2 SERIES III	AEROBICALLY DIGESTED MUNI SLUDGE & WATER PLANT LIME SLUDGE	10/17/02	S 3780
SOUTHEAST WWTP		BLOOMINGTON,	IL	USA	TOM ANDERSON	309-820-7502	(1)	GRS-2 SERIES III	ANAEROBICALLY DIGESTED PRIMARY & WAS	8/19/05	S 3796
MIDWAY SEWER DISTRICT WWTP		DES MOINES,	WA	USA	TIM CAMPBELL	206-824-2760	(1)	GRS-2 SERIES III	ANAEROBICALLY DIGESTED PRIMARY & WAS	12/6/02	S 3798
SKOWHEGAN WPCF	225 WATER STREET	SKOWHEGAN,	ME	USA	BRENT DICKEY	207-474-6909	(1)	GRS-2 SERIES III	CO-SETTLED PRIMARY & WAS	12/12/03	S 3808
SOUTH MESQUITE WWTP		MESQUITE,	TX	USA	DON FISHER	972-222-2277	(1)	GRS-2 SERIES III	PRIMARY & WASTE ACTIVATED SLUDGE	4/26/04	S 3836
ZANESVILLE WWTP	1730 MOXAHALA AVE.	ZANESVILLE,	OH	USA	TED ANSEL	740-455-0641	(1)	GRS-2 SERIES III	WASTE ACTIVATED SLUDGE	3/9/07	S 3892
DEER CREEK/CHISHOLM CREEK WWTP	20800 N. PORTLAND PIKE	EDMUND	OK	USA	ROBERT FAULKNER	405-348-2836	(1)	GRS-2 SERIES III	PRIMARY AND WASTE ACTIVATED SLUDGE	3/3/06	S 3910
CLAREMONT WWTF		CLAREMONT,	NH	USA	ROB LAURICELLA	603-543-0680	(2)	GRS-2 SERIES III	PRIMARY/SECONDARY MIXTURE	6/1/07	S 3938
MIDDLETOWN WWTF		MIDDLETOWN,	NY	USA	PAT ROLLING	845-405-1303	(1)	GRS-2 SERIES III	PRIMARY SLUDGE	6/15/07	S 3944
DOWNERS GROVE WWTP		DOWNERS GROVE	IL	USA	MARK MAJEWSKI	630-969-0664 X141	(1)	GRS-2 SERIES III		3/21/09	S 3991
GRAND CHUTE-MENASHA WWTP		NEENAH	WI	USA	JIM KIRK	920-858-2897	(2)	GRS-2 SERIES III		8/12/11	S 4018
FLORENCE TOWNSHIP WWTP		FLORENCE	NJ	USA	JOE DIFILIPPO, DAN LEBAK	609-499-2518	(1)	GRS-2 SERIES III		10/27/10	S 4039
JUMPING BROOK WTP		NEPTUNE	NJ	USA	MIKE CANNON	908-670-3773	(1)	GRS-2, SERIES III	WATER PLANT	5/10/12	S 4065
READINGTON-LEBANON SEWAGE AUTHORITY	OLD ROUTE 28	WHITEHOUSE STATION	NJ	USA	KEVIN KEATING	908-534-6171	(1)	GRS-2 SERIES III		1/14/16	S 4121



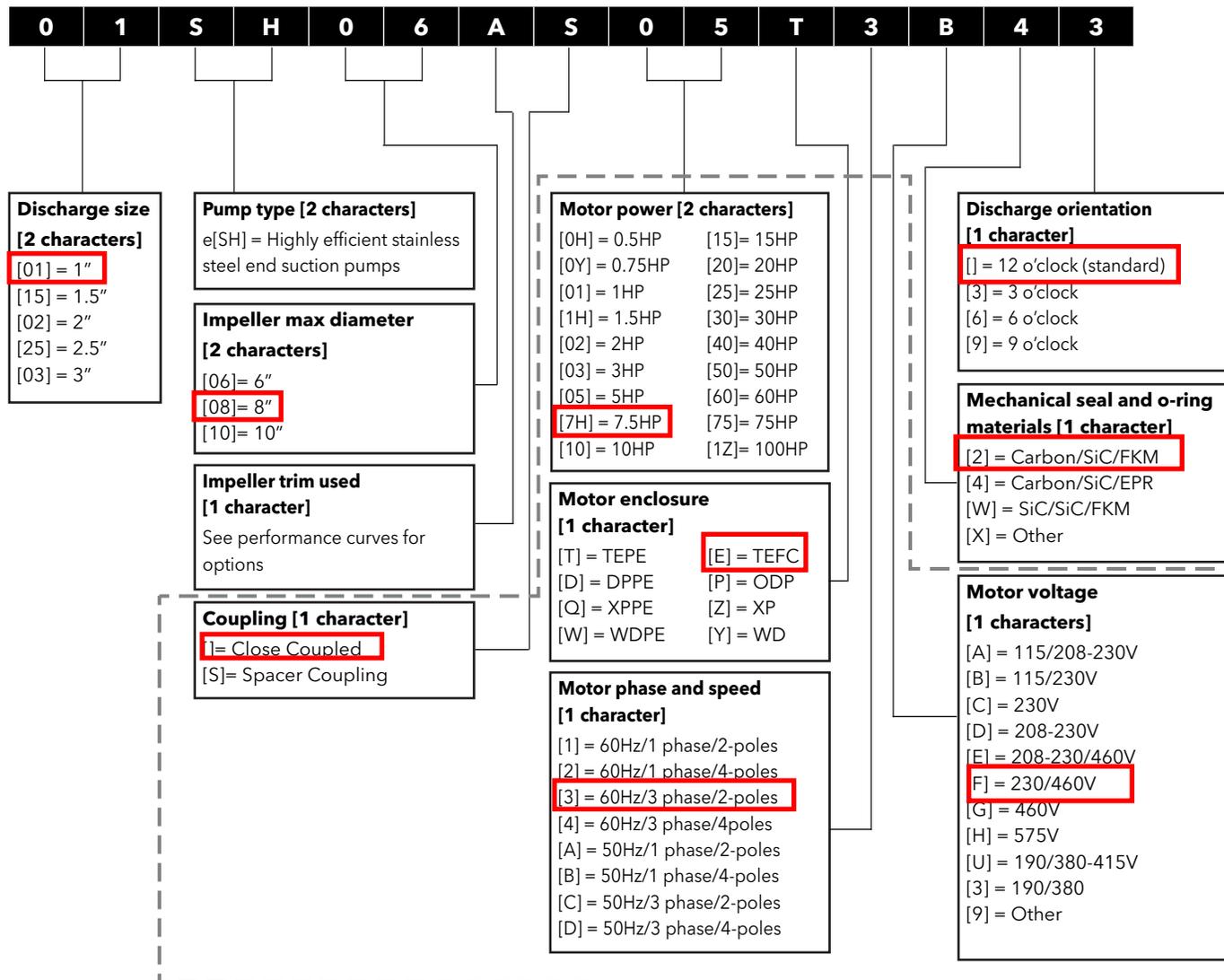
e-SH

316 STAINLESS STEEL END SUCTION CENTRIFUGAL PUMPS
EQUIPPED WITH NEMA PREMIUM EFFICIENT MOTORS

PERFORMANCE COVERAGE AT 60 HZ, 2-POLES AND 4-POLES



e-SH SERIES PRODUCT NUMBERING SYSTEM



NOTE: For bareshaft pump, replace characters 8-13 by "FRM2" for 7/8" Imp. Bore or "FRM3" for 1 1/4" Imp. Bore
 For frame mounted pump, replace characters 9-13 by "FRM2" for 7/8" Imp. Bore or "FRM3" for 1 1/4" Imp. Bore

EXAMPLES

Close Coupled Pump

01SH06A05T3B43

Series e-SH, 1"x2"x6", used with impeller trim "A", 5HP motor, TEPE enclosure, 60 Hz / 3 phase / 2-poles, 115/230V, with mechanical seal C/SiC/EPR, discharge oriented at 3 o'clock.

Bareshaft Pump

01SH06AFRM24

Bare pump, series e-SH, 1"x2"x6", used with impeller trim "A", that will use an S-frame, with mechanical seal C/SiC/EPR.

Frame Mounted Pump with Motor (e-SHF)

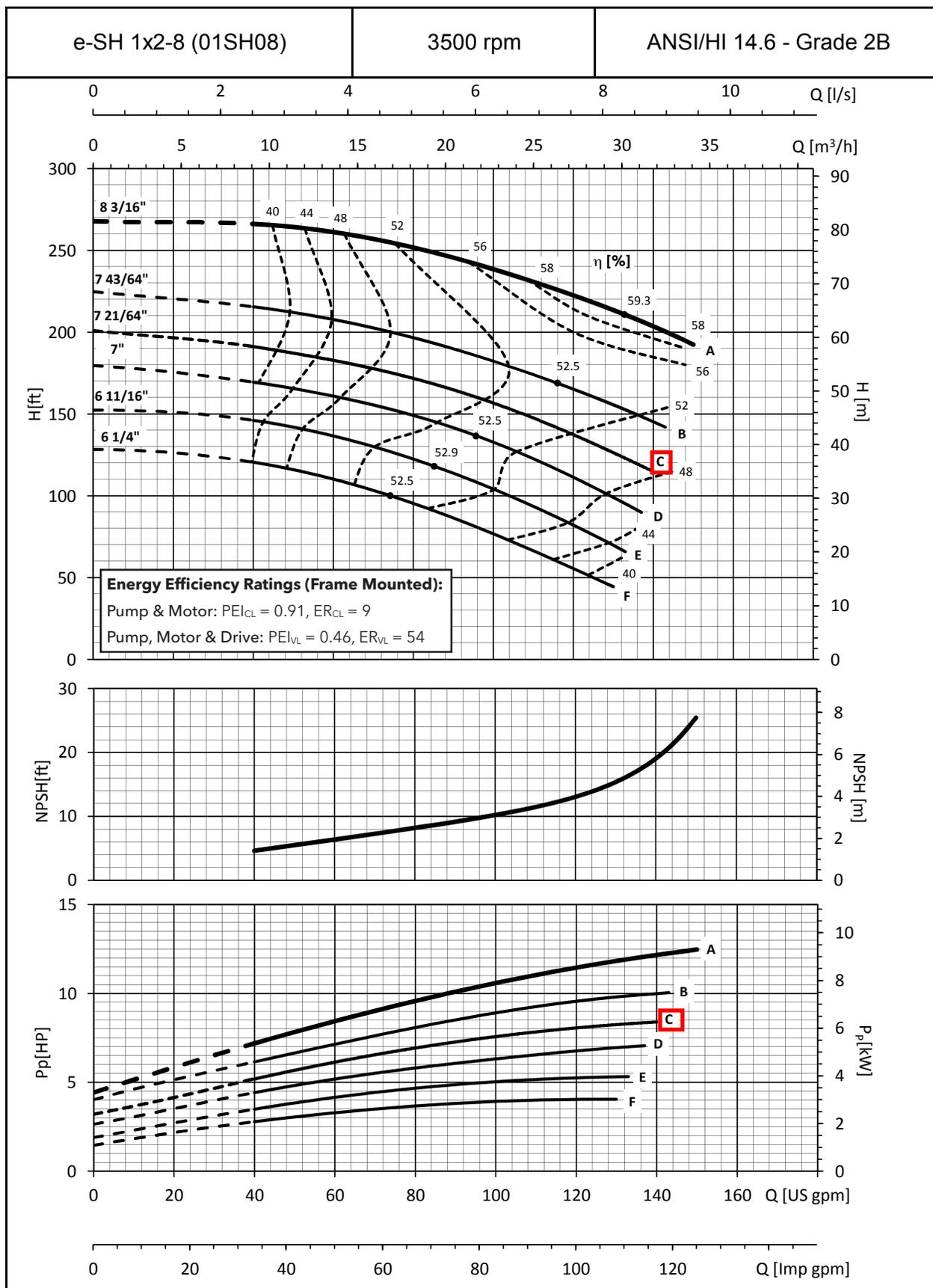
01SH06ASFRM243 - "motor catalog number"

Frame mounted pump with motor, series e-SH, 1"x2"x6", used with impeller trim "A", spacer coupling, with mechanical seal C/SiC/EPR, discharge oriented at 3 o'clock

Frame Mounted Pump w/o Motor

01SH06ASFRM24 - "base plate catalog number"

Frame mounted pump, series e-SH, 1"x2"x6", used with impeller trim "A", spacer coupling, with mechanical seal C/SiC/EPR.



e-SH SERIES STANDARD IMPELLER TRIMS

e-SH S-Group

Impeller Code	Pump Size							
	1x2-6 01SH06	1½x2½-6 15SH06	2x2½-6 02SH06	2½x3-6 25SH06	1x2-8 01SH08	1½x2½-8 15SH08	2x2½-8 02SH08	1x2-10 01SH10
Diameter (in)								
A	6 ¹ / ₁₆	6¾	6 ⁹ / ₁₆	7 ⁵ / ₃₂	8 ³ / ₁₆	8¼	8¼	9 ⁴¹ / ₆₄
B	5 ²⁹ / ₃₂	6 ³ / ₈	6 ³ / ₁₆	6 ²⁷ / ₃₂	7 ⁴³ / ₆₄	7 ¹³ / ₁₆	7¾	8 ¹³ / ₁₆
C	5 ³⁵ / ₆₄	6 ¹ / ₁₆	5 ¹³ / ₁₆	6½	7 ²¹ / ₆₄	7	7½	8 ²¹ / ₃₂
D	5 ²³ / ₆₄	5 ⁵ / ₈	5½	6 ¹⁹ / ₆₄	7	6¾	7 ³ / ₁₆	8 ³ / ₁₆
E	4 ⁶¹ / ₆₄	5 ⁵ / ₁₆	5 ¹ / ₈	5¾	6 ¹¹ / ₁₆	6 ⁷ / ₁₆	6 ⁷ / ₈	8
F	6 ¹ / ₁₆	4 ¹¹ / ₁₆	4 ¹³ / ₁₆	5½	6¼	6 ¹ / ₈	6 ³ / ₁₆	7¾
G		4 ³ / ₈	4 ⁷ / ₁₆					7 ¹³ / ₆₄
H		4 ³ / ₁₆						

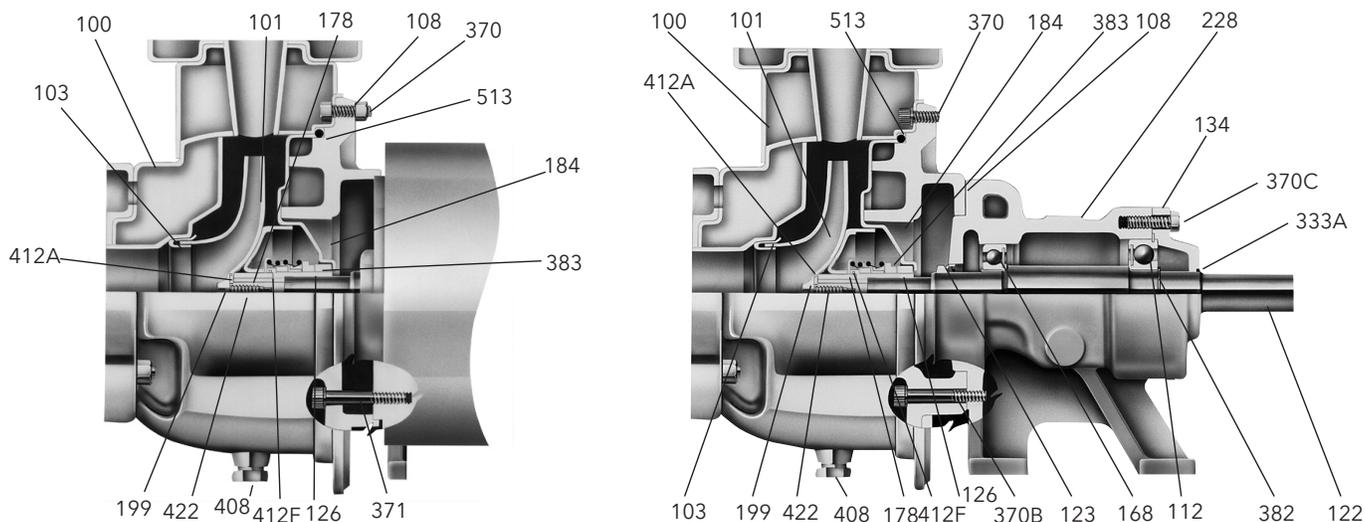
eSH M-Group (140JM, 180JM & 210JM)

Impeller Code	Pump Size				
	1½x2½ -10 15SH10	2x2½-10 02SH10	2½x3-8 25SH08	2½x3-10 25SH10	3x4-8 03SH08
Diameter (in)					
A	9 ⁷ / ₈	9 ⁷ / ₈	9 ¹ / ₁₆		9 ¹ / ₁₆
B	9½	9½		9 ¹⁵ / ₁₆	
C	9 ³ / ₁₆	9 ¹ / ₈	8½	9 ⁹ / ₁₆	8 ⁷ / ₁₆
D	8 ⁷ / ₈	8 ¹³ / ₁₆	8¼	9¼	8 ¹ / ₁₆
E	8 ⁹ / ₁₆	8 ³ / ₁₆	7 ⁷ / ₈	8¾	7 ¹¹ / ₁₆
F	8¼	7 ¹⁵ / ₁₆			
G		7 ¹¹ / ₁₆	7 ¹ / ₈		7 ¹ / ₈
H			6 ¹¹ / ₁₆		
J					6½
K					6
L					5½

e-SH M-Group (254JM-365TCZ)

Impeller Code	Pump Size					
	1½x2½ -10 15SH10	2x2½-10 02SH10	2½x3-8 25SH08	2½x3-10 25SH10	3x4-8 03SH08	3x4-10 03SH10
Diameter (in)						
A	9 ⁷ / ₈	9 ⁷ / ₈	9 ¹ / ₁₆	10 ³ / ₈	9 ¹ / ₁₆	10 ⁵ / ₈
B	9½	9½	8¾	9 ¹⁵ / ₁₆	8 ¹¹ / ₁₆	10¼
C	9 ³ / ₁₆	9 ¹ / ₈	8½	9 ⁹ / ₁₆	8 ⁷ / ₁₆	9 ¹³ / ₁₆
D	8 ⁷ / ₈	8 ¹³ / ₁₆	8¼	9¼	8 ¹ / ₁₆	9 ⁷ / ₁₆
E	8 ⁹ / ₁₆	8 ³ / ₁₆	7 ⁷ / ₈	8¾	7 ¹¹ / ₁₆	9 ¹ / ₁₆
F	8¼	7 ¹⁵ / ₁₆	7½		7½	8 ¹¹ / ₁₆
G		7 ¹¹ / ₁₆	7 ⁷ / ₈		7 ¹ / ₈	
H			6 ¹¹ / ₁₆		6¾	
J			6½		6½	
K					6	
					5½	

PUMP CROSS-SECTION AND MAIN COMPONENTS



MATERIALS OF CONSTRUCTION

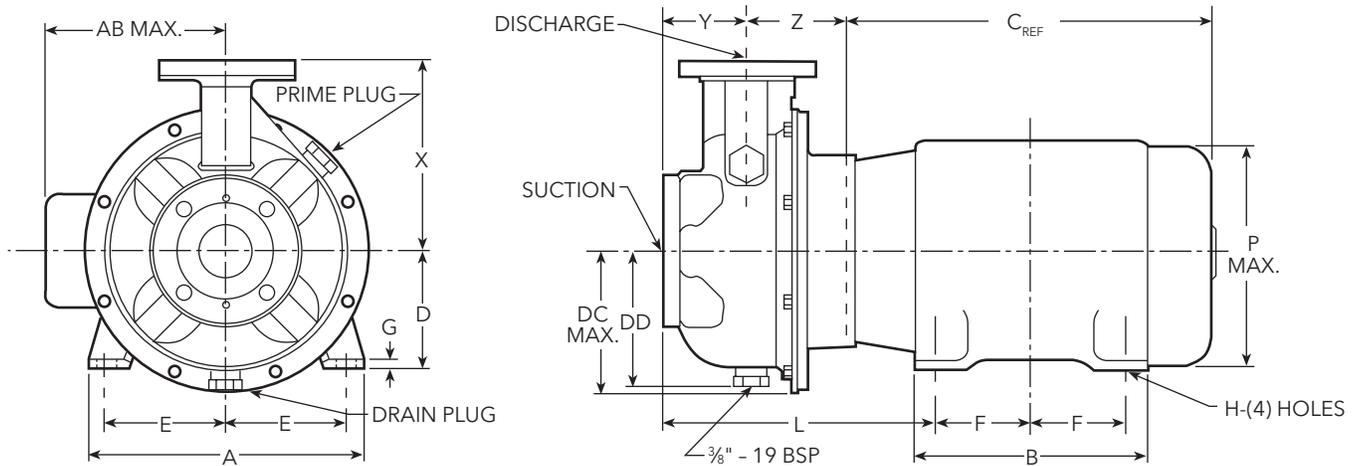
Item No	Name	Material	Reference Standards
100	Casing	Stainless steel 316L	EN 10088-1-X2CrNiMo17-12-2 (1.4404)
101	Impeller (01SH06, 01SH08, 01SH10, 1XSH06, 1XSH08, 1XSH10, 02SH08, 02SH10)	Stainless steel 316L	EN 10088-1-X2CrNiMo17-12-2 (1.4404)
	Impeller (02SH06, 2XSH06, 2XSH08, 2XSH10, 03SH08, 03SH10)	Stainless steel CF8M	ASTM A744
103	Wear ring	Stainless steel 316L	EN 10088-1-X2CrNiMo17-12-2 (1.4404)
108	Adapter	Gray cast iron class 20B	ASTM A48
112	Ball bearing (outboard)	Steel	
122	Pump shaft	Steel grade 1213	ASTM A108
123	Deflector	Buna-N	ASTM D2000
126	Shaft sleeve	Stainless steel 316	ASTM A276
134	Bearing cover	Gray cast iron class 20B	ASTM A48
168	Ball bearing (inboard)	Steel	
178	Impeller key	Steel	AISI 316L
184	Seal housing	Stainless steel 316L	EN 10088-1-X2CrNiMo17-12-2 (1.4404)
193	Grease fitting (M-group only)	Steel	
199	Impeller washer	Stainless steel CF8M	ASTM A744
228	Bearing frame	Gray cast iron class 20B	ASTM A48 Class 20
333A	Lip seal (1XSH10, 02SH10, 2XSH08, 2XSH10, 03SH08, 03SH10)	Steel/Buna-N	
	V-ring (01SH06, 01SH08, 01SH10, 1XSH06, 1XSH08, 02SH06, 02SH08, 2XSH06)	Buna-N	ASTM D2000
370	Casing bolt with nut (casing to adapter)	Stainless Steel	ASTM F593/F594
370B	Hex head cap screw (adapter to bearing frame)	Steel	SAE J429 Grade 5
370C	Hex head cap screw (bearing frame to cover)	Steel	SAE J429 Grade 6
371	Hex head cap screw (adapter to motor)	Steel	SAE 1200
382	Retaining ring	Steel	
383	Mechanical seal	See Chart	
408	Drain plug - 3/8 BSP	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)
412A	O-ring, impeller	FKM (standard version)	ASTM D2000
412F	O-ring, shaft sleeve	FKM (standard version)	ASTM D2000
422	Impeller Stud	Carbon steel	ASTM A307
423	O-ring	FKM (standard version)	ASTM D2000

MOTOR SIZING

Pump Size	3500 RPM				1750 RPM			
	Trim	Maximum HP draw	Motor Selection using SF = 1	Motor Selection using SF = 1.15	Trim	Maximum HP draw	Motor Selection using SF = 1	Motor Selection using SF = 1.15*
			Rated HP	Rated HP			Rated HP	Rated HP
01SH06	A	5.2	7½	5	A	0.7	¾	¾
	B	4.1	5	5	B	0.6	¾	½
	C	3.1	5	3	C	0.4	½	½
	D	2.7	3	3	D	0.4	½	½
	E	2.0	2	2	E	0.3	½	½
01SH08	A	12.5	15	15	A	1.6	2	1½
	B	10.0	10	10	B	1.2	1½	1½
	C	8.4	10	7½	C	1.1	1½	1
	D	7.1	7½	7½	D	0.9	1	1
	E	5.3	7½	5	E	0.7	¾	¾
	F	4.1	5	5	F	0.5	½	½
01SH10	A	22.7	25	20	A	2.9	3	3
	B	17.4	20	20	B	2.1	3	2
	C	14.6	15	15	C	1.8	2	2
	D	12.1	15	15	D	1.5	1½	1½
	E	11.0	15	10	E	1.4	1½	1½
	F	10.1	15	10	F	1.3	1½	1½
	G	7.4	7½	7½	G	1.0	1	1
15SH06	A	9.7	10	10	A	1.1	1½	1
	B	7.4	7½	7½	B	0.9	1	1
	C	6.4	7½	7½	C	0.8	1	¾
	D	5.3	7½	5	D	0.7	¾	¾
	E	4.3	5	5	E	0.5	½	½
	F	2.9	3	3	F	0.4	½	½
	G	2.5	3	3	G	0.3	½	½
	H	2.2	3	2	H	0.3	½	½
15SH08	A	17.5	20	20	A	2.2	3	2
	B	14.6	15	15	B	1.9	2	2
	C	10.7	15	10	C	1.4	1½	1½
	D	9.5	10	10	D	1.2	1½	1
	E	8.2	10	7½	E	1.1	1½	1
	F	7.0	7½	7½	F	0.9	1	1
15SH10	A	32.2	40	30	A	4.2	5	5
	B	27.6	30	25	B	3.8	5	5
	C	24.9	25	25	C	3.5	5	5
	D	22.7	25	20	D	3.2	5	3
	E	20.2	25	20	E	2.9	3	3
	F	18.3	20	20	F	2.6	3	3
02SH06	A	17.7	20	20	A	2.3	3	2
	B	14.2	15	15	B	1.8	2	2
	C	11.5	15	10	C	1.5	1½	1½
	D	9.5	10	10	D	1.3	1½	1½
	E	7.6	10	7½	E	1.0	1	1
	F	5.9	7½	7½	F	0.8	1	¾
	G	4.5	5	5	G	0.6	¾	½

e-SH CLOSE COUPLED S-GROUP - DIMENSIONS AND WEIGHTS

(All dimensions in inches and weights in lbs. Do not use for construction purposes.)



Pump	Pump Size	150 lb. Flange		DC Max.	DD	X	Y	Z	Dimensions "L" (Motor Frame Size)				Weight (lbs.)		
		Suction*	Discharge*						143/145	182/184	213/215	254/256			
01SH06	1 x 2 - 6	2	1	5	4 ⁵ / ₈	6 ³ / ₈	3 ³ / ₈	3 ⁷ / ₈	9 ⁷ / ₈	10 ¹ / ₂	11 ¹ / ₂	-	36.5		
01SH08	1 x 2 - 8			5 ⁵ / ₈	5 ¹ / ₄	7 ¹ / ₈			10 ¹ / ₂	11 ³ / ₈	12 ³ / ₈	12 ⁷ / ₈	49.2		
01SH10	1 x 2 - 10			6 ⁷ / ₈	6 ¹ / ₄	8 ⁷ / ₈			4	10 ³ / ₄	11 ³ / ₈	12 ³ / ₈	12 ⁷ / ₈	66	
15SH06	1 ¹ / ₂ x 2 ¹ / ₂ - 6	2 ¹ / ₂	1 ¹ / ₂	5	4 ⁵ / ₈	6 ³ / ₈	3 ¹ / ₄	3 ⁷ / ₈	9 ³ / ₄	10 ³ / ₈	11 ³ / ₈	-	37.7		
15SH08	1 ¹ / ₂ x 2 ¹ / ₂ - 8			5 ⁵ / ₈	5 ¹ / ₄	7 ¹ / ₈			10 ³ / ₄	11 ³ / ₈	12 ³ / ₈	12 ⁷ / ₈	48.2		
02SH06	2 x 2 ¹ / ₂ - 6		2	2	5	4 ⁵ / ₈	7 ¹ / ₈		4	3 ⁷ / ₈	10 ¹ / ₂	11 ¹ / ₈	12 ¹ / ₈	12 ⁵ / ₈	37.9
02SH08	2 x 2 ¹ / ₂ - 8				10 ¹ / ₂	11 ¹ / ₈					12 ¹ / ₈	12 ⁵ / ₈	54.6		
25SH06	2 ¹ / ₂ x 3 - 6		3	2 ¹ / ₂	6	5 ³ / ₄	7 ¹ / ₈		4	3 ⁷ / ₈	10 ⁵ / ₈	11 ³ / ₈	12 ³ / ₈	12 ⁷ / ₈	61.8

* For use with ANSI class 150 mating flanges.

NOTE:

1. Pumps shipped in vertical discharge as standard. For other orientations, remove casing bolts, rotate discharge to desired position, and tighten ³/₈ - 16 bolts to 20 ft./lbs., ⁷/₁₆ - 14 bolts to 20 ft./lbs.
2. ALL dimensions in inches.
3. Motor dimensions may vary with motor manufacturer.
4. Not for construction purposes.

Dimensions Determined by JM Motor Frame

JM Frame	A	AB Max.	B	D	E	F	G	C Max.	H Dia.	P Max.	Motor Wt. (lbs.)
143JM	6 ¹ / ₂	5 ³ / ₄	6	3 ¹ / ₂	2 ³ / ₄	2	1 ¹ / ₈	11 ³ / ₁₆	11 ¹ / ₃₂	7 ³ / ₁₆	50
145JM						2 ¹ / ₂					54
182JM	8 ⁵ / ₈	6 ⁷ / ₈	6 ¹ / ₂	4 ¹ / ₂	3 ³ / ₄	2 ¹ / ₄	3 ³ / ₁₆	13 ⁴ / ₅	13 ¹ / ₃₂	8 ⁵ / ₈	76
184JM						2 ³ / ₄					101
213JM	9 ¹ / ₂	8 ² / ₅	8	5 ¹ / ₄	4 ¹ / ₄	2 ³ / ₄	3 ³ / ₁₆	15 ¹⁴ / ₂₅	17 ¹ / ₃₂	10 ⁷ / ₂₅	134
215JM						3¹/₄					109
254TCZ	11 ¹ / ₂	10 ² / ₅	11 ¹ / ₂	6 ¹ / ₄	5	4 ¹ / ₈	7 ¹ / ₈	20 ¹ / ₂₀	17 ¹ / ₃₂	13 ¹³ / ₅₀	276
256TCZ						5					298

Motor Frame Selections

Motor Frame	Motor Horsepower							
	3500 RPM				1750 RPM			
	1 PH		3 PH		1 PH		3 PH	
	ODP*	TEFC*	ODP*	TEFC*	ODP*	TEFC*	ODP*	TEFC*
143JM	-	-	-	-	-	-	1	1
145JM	2	2	2-3	2	1-1 ¹ / ₂	1-1 ¹ / ₂	1 ¹ / ₂ -2	1 ¹ / ₂ -2
182JM	3	3	5	3	2	2-3	3	3
184JM	5	5	7 ¹ / ₂	5	3	-	5	5
213JM	7 ¹ / ₂	-	10	7¹/₂	5	-	7 ¹ / ₂	7 ¹ / ₂
215JM	10	-	15	10-15	-	-	-	-
254TCZ	-	-	20	15**	-	-	-	-
256TCZ	-	-	25	20	-	-	-	-

* Premium efficiency where required by Department of Energy regulations.

** Frame size for 208-230/460 Voltage TEPE motor.

PROPOSAL

POLYBLEND® POLYMER BLENDING SYSTEM

UGSI Chemical Feed, Inc.

SALES REPRESENTATIVE

Komline-Sanderson - OEM
Michael Garcia
12 Holland Ave
Peapack, NJ 07977
Tel: (908) 234-1000
Email: mjgarcia@komline.com



Note: Picture may not exactly match proposed equipment

SECTION 1

COMMERCIAL PROPOSAL Polyblend® Polymer Feed System

- Scope of Work by UGSI Chemical Feed, Inc.
- Scope of Work by Buyer
- Specification Clarifications and Deviations
- Manufacturers Services
- Schedule
- Proposal Validity
- Payment Terms
- Taxes
- Warranty
- Terms and Conditions
- Proposal Acceptance



UGSI CHEMICAL FEED

A cleanwater¹ Company

SCOPE OF WORK BY UGSI CHEMICAL FEED, INC. ('SELLER')

The following equipment and services are included in Seller's scope of work. All equipment will be manufactured in accordance with Seller's standard equipment specifications and installed in a non-hazardous area.

No.	<u>Item Description</u>	<u>Qty.</u>
1.	Polyblend® MM601-PC-N-3-A-A Polymer Activation System, including: <ul style="list-style-type: none">• Patented UGSI Mixing Chamber with Brass Impeller• Constant Speed: 1/2 HP, 3450 RPM, 115/230 V, 1 PH, 60 Hz (Wash-Down)• 36.40" x 26.00" x 47.35" Stainless Steel Frame	1
2.	Dilution Water Inlet, including: <ul style="list-style-type: none">• 1" PVC Piping for 600 GPH of Flow• Solenoid Valve: 1"• Diaphragm Check Valve: 3/4" PVC• Globe Valve: 3/4" SS• Flowmeters: 5 GPM• Primary and Secondary Dilution	1
3.	Polymer Pump, including: <ul style="list-style-type: none">• 3.0 GPH, Progressive Cavity Pump w/ Mechanical Seal, 316SS Rotor, & Viton Stator• 1/2" PVC Piping for 3.0 GPH Progressive Cavity Polymer Pump	1
4.	Calibration Column, including: <ul style="list-style-type: none">• Calibration Cylinder Kit	1
5.	Solution Outlet, including: <ul style="list-style-type: none">• 1 1/2" Static Mixer	1
6.	Electrical Control Panel, including: Skid-Mounted Electrical Control Panel, including: [A CONTROLS] <ul style="list-style-type: none">• On-Off-Remote" switch• "Run" indicator light• "Pump Stroke Frequency" display• "Pump Flow Rate" display• Remote Start contact• "Run" output contact• "Loss of Water Flow" output contact• 120/60/1 Power Supply	1

UGSI CHEMICAL FEED

A cleanwater¹ Company

SCOPE OF WORK BY BUYER

1. Equipment unloading and installation.
2. Chemical supply.
3. All civil works and concrete pad for equipment.
4. Anchor bolts & anchorage calculations.
5. Electric power to control panel as specified above in scope of supply.
6. All interconnecting piping, including from neat polymer storage to pump suction and from polymer feed system to point of application.
7. Water supply piping water connection – 25 psid at capacity specified above in scope of supply above.
8. Valves, fittings, appurtenances not specifically listed under Scope of supply by UGSI Chemical Feed, Inc.
9. Remote installation of control panel and interconnecting wiring from remote-mounted control panel to junction box, etc.
10. All Electrical conduit, wiring, electrical material, etc. from control panel to plant SCADA, etc.
11. Decks, stairs and mezzanines not specifically listed under Scope of Supply by UGSI Chemical Feed, Inc.
12. Room ventilation, air conditioning or lighting.
13. Videotaping {unless a videotape agreement is signed}.
14. Any translation services for documents or operator training.
15. Equipment handling at port of entry, including any customs duties/fees, port charges, federal, state or local taxes.
16. All taxes, fees, lien waivers, bonds and licenses.
17. Any items not explicitly listed under Scope of Supply by UGSI Chemical Feed, Inc.

SPECIFICATION CLARIFICATIONS AND DEVIATIONS

Specification Section	Item	Explanation

MANUFACTURER'S SERVICES – NOT INCLUDED

UGSI Chemical Feed, Inc. will provide 0 trip/0 day for Installation Inspection, System Start-up, and Operator Training.

FIELD SERVICES

Should additional services be required for work beyond Seller's Scope of Work, Buyer may purchase such services from Seller at a standard rate of \$1,800 per eight (8) hour day. For international sale, please consult factory if any field services are required beyond Seller's Scope of Work.

DESIGN SUBMITTALS AND OPERATION & MAINTENANCE MANUALS AS FOLLOWS

(English Only)

Submittals: Electronic Copy
O&M Manuals: Electronic Copy

SHIPPING TERMS

FOB Factory: Full freight allowed to project site.

UGSI CHEMICAL FEED

A cleanwater¹ Company

A. PROCESS DESIGN CRITERIA

Polymer Pump Capacity (Maximum): 3.0 GPH
Water Flow Rate (Maximum): 601 GPH

B. PROCESS DESCRIPTION

Polyblend[®] Polymer Feed Systems are designed to prepare and deliver a homogeneous liquid polymer solution to a process application point or intermediate storage tank through either a batch or continuous operation. The system is designed to handle new polymer developments, ultra-high molecular weights, different charge densities, and even totally new chemistries.

Our proprietary designs use shear velocities designed for optimum initial wetting followed by dissolution to utilize the full polymer activation and provide maximum economy and value in the use of polymers. Sufficient mixing and wetting energy intensity are created and controlled through two-stages of mechanical mixing (Fig. 1). As polymer and water are introduced into the first stage of the mix chamber, the high-shear agitation created by the motor-driven impeller ensures proper activation during initial wetting of the polymer and prevents unwanted agglomerations. The solution shall undergo a tapered mixing intensity slope as it exits the initial high shear zone and passes through a second zone, isolated by a baffle. The second stage offers longer, low-shear mixing for dissolution and to minimize polymer fracture.

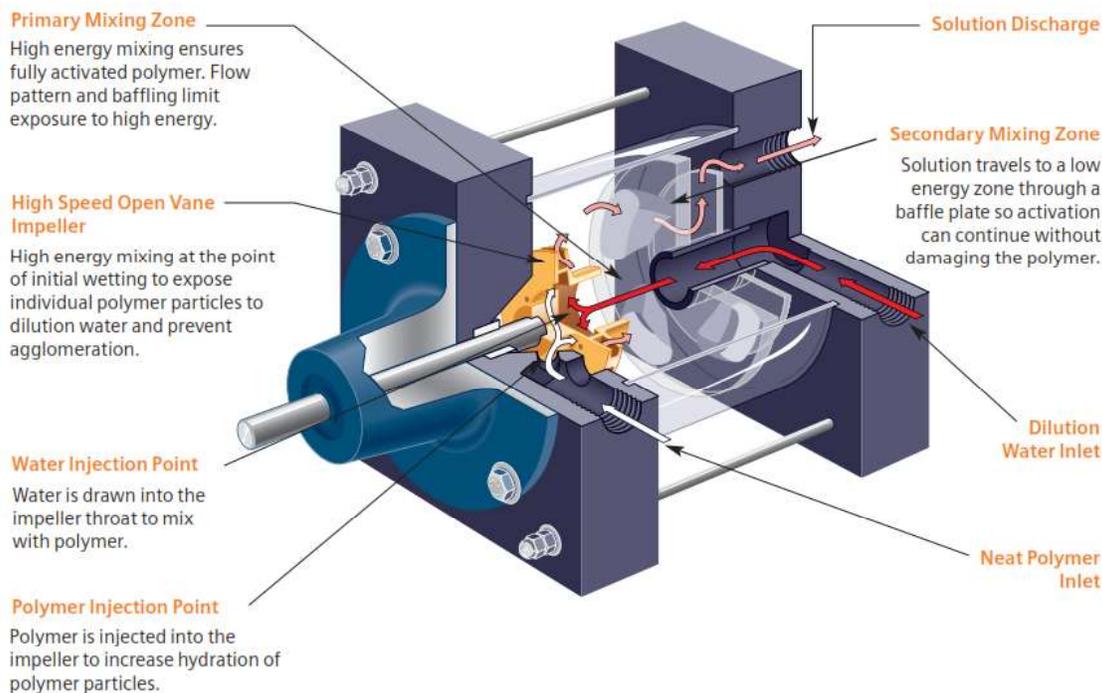


Figure 1. Isometric drawing of the mix chamber showing the unique high- and low-energy mixing zones and the liquid connection points.

Once initiated by either a local switch or a remote contact, the Polyblend[®] system opens a solenoid valve that allows water to flow through the unit. Once proper water flow is detected,

the mixing chamber and polymer metering pump are activated. Solution concentration is determined through adjustments to the polymer feed rate and dilution water flow rates. The polymer feed rate is controlled by manual adjustment or by a 4-20 mA input signal, depending on the control strategy. Dilution water shall be split into two streams. Primary water flow shall supply the mixing chamber. Secondary water flow shall be used to post dilute the activated polymer stream. These two streams shall be completely blended by a static mixer prior to exiting the unit. If water flow is interrupted, the unit ceases operation until proper flow is restored.

Upon exiting the mix chamber, the now homogenous polymer solution is ready for further dilution, if required by process demands, prior to being fed to the process application point.

C. MAJOR SYSTEM COMPONENTS

The Polyblend® Polymer Feed System is completely pre-assembled, piped, wired and factory tested prior to shipping to the job site. Following are the major system components. **Additional details are provided in the attached equipment specifications.**

1. Mix Chamber

The transparent design of the mix chamber provides quick visual indication of polymer feed and performance. The mixing chamber shall include a stainless-steel injection check valve with quick disconnect design.

Parameter	Value
Construction	Acrylic, PVC
Impeller Type	Brass
Impeller Speed, RPM	3450
Maximum Capacity, gal/hr	2400
Drive Type	Direct Drive
Drive Motor	Constant Speed: 1 HP, 3450 RPM, 120/240 V, 1 PH, 60 Hz (Wash-down)
Power Requirements	120/60/1

2. Dilution Water Control

The polymer feed system shall have an electric solenoid valve for on/off control of total dilution water flow. Each stream shall have a rate control valve for isolation of or throttling of water flow and a sensor to confirm sufficient water flow for proper operation.

Parameter	Value
Flowmeter Type	Rotameter
Sensor Type	Differential Pressure Switch
Valve Type	Globe

3. Polymer Pump

The polymer pump supplies neat emulsion polymer to the mix chamber for activation and dilution. Reliable polymer feed is required for precise control of solution concentration. The pump flow rate is controlled manually via potentiometer or automatically via 4-20 mA input signal.

Parameter	Value
Quantity	1
Type	Progressive Cavity
Material (Rotor/Stator)	316SS/Viton
Suct. x Disch., inches	½ x ½
Flow Capacity, gal/hr	3.0 GPH
Discharge Pressure, psi	100
Drive Motor	½ HP, TEFC
Power Requirements	120/60/1 Main incoming power is converted to 230/60/3 via Variable Frequency Drive (VFD)

4. Electrical Control Panel

The Polyblend® Polymer Feed System includes a complete pre-wired electrical control system. If the controls are remote mounted, a local junction box is provided on the polymer feed system equipment skid.

The electrical control system, as a minimum, shall include the following switches and alarms:

- 'On-Off-Remote" switch
- 'Run" indicator light
- 'Pump Stroke Frequency" display
- 'Pump Flow Rate" display
- Remote Start contact
- 'Run" output contact
- 'Loss of Water Flow" output contact

5. Instrumentation and Miscellaneous Accessories

The polymer feed system shall include the following instrumentation and accessories:

- System pressure gauge
- Polymer pump calibration column
- Polymer pump pressure gauge for PC/Gear Pump only.
- Polymer pump pressure relief valve for PC/Gear Pump only.
- Union connection for dilution water flowmeters
- Post dilution static mixer
- Stainless steel open frame equipment skid with integral anchor and lifting lugs

D. SYSTEM FEATURES & ADVANTAGES

The Polyblend® Polymer Feed System offers maximum value measured by performance and reliability as well as capital, installation, maintenance, and operating costs. This is illustrated by the following system advantages:

1. Superior Polymer Activation

The mechanical mixing provided in the mix chamber provides higher activity polymer than processes utilizing hydraulic mixing. Polymer activation is further increased relative to other systems using other mechanical mixing designs by applying two unique mixing stages. The motor-driven impeller on the first stage creates high enough mixing energy to ensure optimal activation and prevention of fisheye formation. Mixing intensity decreases as the solution enters the second stage for longer, low-shear mixing, enhancing dissolution while reducing splintering of the long polymer molecular chains. The better activity of the polymer solution means substantially lower neat polymer consumption than hydraulic (non-mechanical) and single-stage mixing type polymer feed systems, and a reduction in chemical use and cost in the process.

2. Post-Dilution Optimizes Polymer Activation and Increases System Capacity

Post-dilution is required to optimize the activation of emulsion polymers. Inverting (breaker) surfactant included in emulsion polymer products can be best utilized when polymer solution concentration becomes as high as possible (ANSI/AWWA Standard B453-96). Therefore, it is recommended to make up emulsion polymer solution at 1% concentration in the mix chamber, followed by post-dilution down to feed concentration, 0.5% for dewatering and 0.25% for clarification processes. Another benefit of having a post-dilution is doubling the system capacity. As plant loads increase and operating requirements change, an increased demand for polymer solution is often realized. Each Polyblend® M Series Polymer Feed System is designed with integral post dilution controls and mixing capabilities. This effectively increases the equipment operating capacity without affecting the footprint or operating power requirement.

3. Transparent Mix Chamber

The mix chamber is constructed of custom-milled PVC endplates fastened around a 1/4" thick acrylic housing. This combination of materials offers outstanding resistance to damage from chemicals, corrosion, and accidental impact without sacrificing the benefits of a clear chamber. The transparent housing enables instantaneous verification of mixer operation and polymer feed that would otherwise be unavailable for a mix chamber utilizing opaque materials of construction.

4. Customizable Pump and Control Configurations

In addition to the standard diaphragm-type polymer feed pump, a range of both progressive cavity and gear pumps are available if necessary based on polymer type or desired based on customer preference. Similarly, in addition to the standard control package utilizing 'On-Off-Remote' operation, options for more complex and configurable controls, including necessary instrumentation and valving, are available. A programmable microcontroller is applicable where more indications of flow, percent dilution, and other functions need to be displayed. This is especially effective when it is necessary to assure consistent solution

concentrations are maintained in the holding tank. This highest degree of control is most useful where precise control of consistent solution concentrations is required, either from 4-20 mA signal or local control. The Polymer Dosage Controller offers a system with unmatched activation flexibility.

5. Open Frame Equipment Skid

Each complete Polyblend® M Series Polymer Feed System is skid-mounted. The type 304 stainless steel skid construction provides superior structural strength, chemical compatibility, and corrosion resistance. Use of an open frame design for the skid and a simple equipment layout facilitates access to each system component from multiple sides for easy inspection and maintenance. Custom-design skid configurations and equipment layouts are available and can utilize wall-mounted systems in addition to the standard floor-mounted arrangement.

6. Reliable Performance and Robust Construction

The robust construction of the Polyblend® Polymer Feed System allows the feed, dilution, and mixing components to be subjected to minimum stress, lowering the maintenance requirements.

7. Factory Tested

Each complete system is pre-assembled, piped, and wired at the factory, allowing for thorough factory testing of not just each component, but of the entire system prior to shipment. At a minimum, a factory quality technician shall operate and calibrate the polymer pump, verify calibrations for flow meters, pressure gauge, and other instrumentation, and test the complete control system prior to running the unit in automatic mode.

8. Minimum Installation Cost and Time

Most parts for the Polyblend® M Series Polymer Feed Systems are inventoried at the factory, reducing lead times for shipment to as little as one week in some cases. By skid-mounting the system, installation is quick and straightforward, with minimum time and cost, and water line, neat polymer feed, activated polymer solution and electrical connections are all predetermined and are clearly indicated. Onsite construction is limited to providing a concrete equipment pad to mount the system to and completing the system connections.

9. Proven Track Record

The Polyblend® Polymer Feed System has been available for over three decades. This system is a fully developed, mature product supported by an extensive list of successful installations.

E. UTILITY AND CONNECTION REQUIREMENTS

Utility and connection requirements for PolyBlend® Polymer Feed System are as follows:

Parameter	Value
Power Requirement	120V, 1 phase, 60 Hz, 25 Amp
Signal Connection	4-20 mA (polymer feed pump)
Water Requirement	1" Inlet, 601 gph, 25 psid
Polymer Inlet Connection	½" Inlet (at pump suction)
Solution Outlet Connection	1 ½" Outlet

POLYBLEND®

DYNABLEND™

POLYMER FEED SYSTEMS



SOLUTIONS THAT WORK



Emulsion Polymer Activation Technologies



Polyblend® M Series

POLYBLEND®

Mechanical Mixing

- Highly efficient mixing process leads to polymer savings
- Excels at handling high molecular weight polymers
- Quantifies the energy input and relates it to G value. This is important for high molecular weight polymers or polymers with a tight tolerance for activation.
- Low maintenance cost
- Wide variety of size options
- Large installation base

Polyblend® Mechanical Activation (Emulsion Polymer)		
Series	Water Flow Rate GPH/(LPH)	Polymer Output Range
PB Series	1.6 - 1200 / (6 - 4540)	0.005 - 8 / (0.015 - 30.2)
M-Low Series	3 - 120 / (11.4 - 454.2)	0.5 - 2.5 / (1.5 - 9.5)
MM-Series	240 - 3200 / (912 - 22,800)	0.5 - 660 / (1.5 - 2508)
M-Series	240 - 12,000 / (912 - 45,600)	0.5 - 660 / (1.5 - 2508)

Achieve Greater Savings with Two-Stage Mixing

cleanwater1's industry-leading emulsion polymer activation technologies use two-stage mixing to achieve superior results. We frequently see higher polymer savings with two-stage mixing compared to single-stage mixing. Optimizing mixing energy ensures consistent performance. This allows us to handle new polymer developments, ultra-high molecular weights, different charge densities and new chemistries. Our compact size and open-frame designs enable easy installation, access, and maintenance in confined spaces. Control options range from simple manual to full PLC-based automatic control with complete SCADA interface.

DYNABLEND™

Hydraulic Mixing

- Performs well with wide range of molecular weight polymers
- No moving parts in the mixing chamber
- Low operating cost
- Low maintenance cost
- Multiple mixing chamber sizes
- Highly reliable



Dynablend™

Dynablend™ Hydraulic Activation (Emulsion Polymer)		
Series	Water Flow Rate GPH/(LPH)	Polymer Output Range
Miniblend™	12 - 1200 / (45 - 4543)	0.0125 - 5 / (.05 - 18.9)
L4	12 - 1200 / (45-4543)	0.125 - 20 / (.05 - 75.7)
L6	180 - 3000 / (681 - 11,356)	0.125 - 20 / (.05 - 75.7)
L8	360 - 6000 / (1363 - 22,712)	1.5 - 300 / (5.7 - 1135)
L12	900 - 21,000 / (3407 - 79,494)	1.5 - 300 / (5.7 - 1135)

Komline-Sanderson Corporate Profile

Since its incorporation in 1946, Komline-Sanderson Corporation has provided the highest quality equipment for applications including process/production filtration, drying, wastewater treatment, sludge processing, and air pollution control. The company and its subsidiaries supply equipment to a diverse group of customers around the world including the municipal wastewater and electric power utilities, and a broad range of industrial clients.

Corporate headquarters are located at 12 Holland Avenue, Peapack, New Jersey 07977, USA.

BUSINESSES

Biosolids, Sludge, and By-Products Drying

Komline-Sanderson's Thermal Products Group supplies drying equipment and systems for municipalities and industrial clients.

Thermal Processing: Drying, Heating, and Cooling

The company's line of indirect dryers/processors is used extensively by many chemical, food, pharmaceutical, and metallurgical industries. Applications include drying, heating, cooling, reacting, melting, tempering, solvent stripping, crystallizing, sterilizing, calcining, roasting, and cooking. These processes are applied to pastes, cakes, granules, or powders.

Wastewater Treatment Products

Komline-Sanderson's Wastewater Treatment Products Group provides quality wastewater treatment and sludge processing equipment and systems for water and wastewater treatment plants.

Municipal wastewater treatment systems primarily involve the separation of biosolids from wastewater.

Since the mid-1950's Komline-Sanderson has also offered a quality line of plunger-type pumps to facilitate the transfer of sludge through various stages of the waste treatment system, feed belt filter presses, and pump thickened sludge.

To determine the equipment best suited to the particular conditions of each application, the company offers laboratory and on-site pilot testing services.

Process Filtration Products

Komline-Sanderson provides a superior line of specialty filtration equipment for a variety of applications in chemicals, food, pharmaceutical, and other industrial processes. The manufacturing operations of numerous industries use this equipment, which includes rotary drum filters, horizontal vacuum filters, and specialized system controls and instrumentation.



Komline-Sanderson

12 Holland Av
908-234-1000
800-225-5457

Peapack, NJ 07977-0257
Fax: 908-234-9487
info@komline.com
www.komline.com

Komline-Sanderson designs and manufactures filtration equipment to separate valuable liquids and solids from process slurries. The liquid and solid products of this separation can either be subjected to further manufacturing processes or dried and packaged as marketable items. Komline-Sanderson's filtration equipment is applied extensively to the food processing and pharmaceutical industries. Within the food industry, the company's filtration systems are used extensively in corn processing: producing corn syrup, sugars, starch, and gluten feed meal. Pharmaceutical applications include the primary separation of liquids and solids from fermentation broths. Products from this process are used as the base for pharmaceutical drugs.

Rotary Atomizers

Komline-Sanderson is a leading supplier of rotary atomizers, with installations in North America, South America, Europe, and Asia. These atomizers are used for Flue Gas Treatment at electric power plants and municipal waste incinerators, and spray drying applications. The key component in the system is a direct drive high speed motor using state of the art frequency inverter technology.

Filter Fabrics

Modern industry annually demands large quantities of replacement filter media. Komline-Sanderson's Filter Fabrics Group supplies this market, providing replacement media for a variety of filters and belt presses.

OPERATIONS

Komline-Sanderson operates its businesses out of the company's corporate headquarters in Peapack, New Jersey USA and through subsidiaries, affiliates, and agents worldwide.

The company markets its products in Europe through Komline-Sanderson Ltd, a wholly-owned subsidiary with offices in Halstead, Essex, England.

CORPORATE RESOURCES

Manufacturing Capabilities

Komline-Sanderson maintains its own integrated manufacturing facilities in Peapack, New Jersey, USA, with over 85,000 square feet (7,900 square meters) of shop area housing a wide array of machinery and automated equipment for metal preparation, forming, machining, fabrication (ASME and PED code certified for welding pressure vessels), finishing, and mechanical assembly. The facility also houses an electrical shop for the manufacture and assembly of instrumentation panels and motor control centers. The company's Filter Fabrics operation is located in Sparta, NJ. In addition to its own manufacturing facilities, Komline-Sanderson utilizes company-certified fabricators for the manufacture of K-S components and equipment worldwide.

Laboratories and Pilot Test Facilities

Komline-Sanderson's Technical Center is located in Peapack, New Jersey. The 8,400 square foot (780 square meters) facility is equipped to run both bench and pilot scale liquid / solids separation and thermal processing tests to demonstrate the performance of K-S products and develop process design criteria for scaling up to commercial plants. The Technical Center is also used to support the Company's research and development programs. In addition to on-site testing, Komline-Sanderson maintains rental equipment which is available for testing and small production runs at the customer's facility.



Kompress® Maintenance Chart GRS-2

Item	Period	Material/Cost	Labor
Grease Bearings	Every Six Months	2 Tubes	1 hour
Change Gear Box Oil	Every Six Months	5 Gallons	1 hour
Change Hydraulic Unit Fluid	Once a Year	5 Gallons Hydraulic fluid and Filter	1 hour
Belts	Replace at 2,000 hours	\$3,700.00	2 hours
Scraper Blades	Replace at 8,000 hours if needed	\$160.00	2 hours
Gravity Zone and Wedge Seals	Replace at approx. 8,000 hours if needed	\$340.00	4 hours

Notes:

24 h/wk operation would be 1,200 h/yr.

35 h/wk operation would be 1,800 h/yr.

40 h/wk operation would be 2,000 h/yr.

Polymer = 8-10 lbs active/DT of 3-4 lbs neat/DT at about \$1.75 lb.

Average electrical use is 10 Amps at 480V.

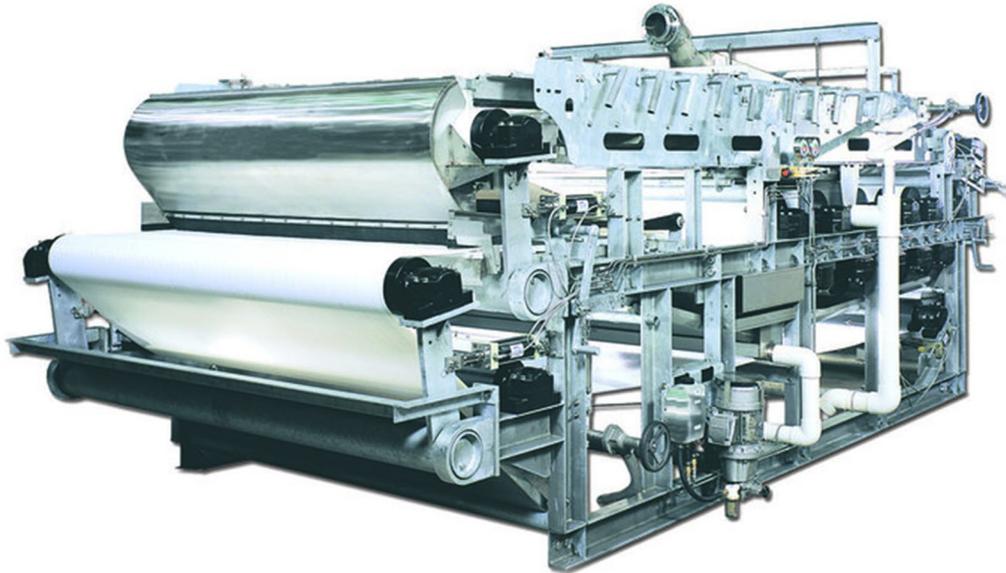
Operational washwater requirements are 80 gpm @ 85 psi.

Komline-Sanderson shall furnish the services of a technician for a period of eight (8) days to be covered in two (2) trips to the job site to check the installation, supervise the start-up, supervise performance testing if required by the specifications, and provide operator instruction for the items included in our scope of supply. Additional service is available at our portal to portal per diem rate in effect at the time of service delivery, plus living and travel expenses. The current per diem supervision rate is One Thousand, Five Hundred, Ninety Five dollars (\$1,595.00) plus living and travel expenses. Our electrical, service, and engineering departments are available to answer any of your questions and assist with troubleshooting.

Our belt filter press needs a minimum flow of 70 GPM in total. The feed pump (not provided by KS) should have a VFD (also not provided by KS). The VFD allows you to alter the flow rate to our unit, we provide a touch screen with operator controls for the pump. An HMI touch screen is provided for ease of use.

Project Name: Ashland City, TN WWTP

Alfa Laval AS-H Belt Press G3 200 (Klampsess®) for Sludge Dewatering



Alfa Laval Reference No. 0986097 Rev 2
February 13, 2025
Quote Validity: 120 days from original bid date of December 13, 2024

Prepared by:

Brian Ayres
Applications Engineer
Brian.Ayres@alfalaval.com

Alfa Laval, Inc.
804-222-5300
5400 International Trade Drive
Richmond, VA 23231

Prepared for:

Clint Biggers
Public Works Director

Town of Ashland City
Ashland City, TN



February 13, 2024

PROJECT NAME Ashland City, TN WWTP
ALFA LAVAL REFERENCE 0986097 Rev 2

Dear Mr. Biggers,

Thank you for your enquiry. On behalf of Alfa Laval and our local representative Bar Environmental, we are pleased to enclose our proposal for **One (1) Alfa Laval AS-H Belt Press G3 200 (Klampress®)**, 2.0 Meter Belt Filter Press (BFP) for the **Ashland City, TN WWTP** project for dewatering of sludge based on RFP – Sludge Dewatering Equipment, CEC Project 190-150 and Addenda 1.

The Alfa Laval AS-H Belt Press G3 is the next generation dewatering belt filter press that was developed from tried-and-true Klampress design. It is suitable for all municipal biosolids and residual sludge types and a wide variety of industrial solid / liquid separation applications. It incorporates variable energy mixing, flocculation, gravity drainage and pressure filtration within a single mechanical framework. The G3 belt press offers the versatility of a wide size range (up to 3 meters) and extensive modular options to meet individual process requirements. In summary...

- Flexible design – easily upgraded and reconfigured as your needs change
- High precision variable-orifice polymer mixer
- High volume, high cake solids performance
- Low maintenance, operator friendly design features
- Alfa Laval offers unrivalled 24-hour service agreements.

As requested, we have included the scope of supply and applicable process guarantees based on the defined influent sludge parameters. Technical details along with dimensional drawing for the proposed belt press including weights, are enclosed in the proposal.

Alfa Laval recommends the described equipment per the outlined technical specifications, and additional clarifications for greater understanding of the offer. We trust that we have interpreted the specifications of this project correctly and shall be pleased to provide any additional information which may be required in support of our proposal.

Note: Kindly indicate our Quotation Reference in your Purchase Order/ Letter of Acceptance/ Sales Contract and all our correspondences if the order is confirmed to us.

Best Regards
Mark Schlitzkus

Mark Schlitzkus
Regional Sales Manager
Alfa Laval Inc.

CC: Joe Sanford, P.E. | BAR Environmental



CONTENTS

1. [BASIS OF DESIGN](#)
2. [PROPOSAL](#)
3. [REFERENCES](#)
4. [COMMERCIAL TERMS](#)
 - 3.1 Pricing
 - 3.2 Payment Terms
 - 3.3 Delivery Time
5. [ALFA LAVAL](#)
6. [BELT FILTER PRESS – G3 – GENERAL DESCRIPTION](#)
7. [ELECTRICAL ASSEMBLY AND CONTROLS](#)
8. [SERVICE](#)
9. [TERMS & CONDITIONS OF SALE](#)



1. BASIS OF DESIGN.

General Data

Sludge Origin:	Municipal Wastewater Treatment Plant
Sludge Type:	Thickened aerobic sludge from SBR
Duty:	Dewatering

Sizing Data

Operating Times

Hours per Day:	16
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Capacity per Unit

Hydraulic (gpm):	163
Solids (lbs./hr.):	1,225

Number of units

Operating:	1
Standby:	0

Feed Solids

Range (%):	1.5
Design (%):	1.5

Estimated Polymer Consumption:

Expected Dosage (lbs./dT):	Estimated at 22 – 24 active
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Estimated BFP Performance

Cake Solids (%):	Estimate 15-17%
Expected Recovery (%)	Estimate 95%

Other Parameters

Installed Power (HP)	3
Specific Power Consumption (kW/gpm)	0.014
kW / day @ max power	13.0



2. PROPOSAL

2.1. One (1) Alfa Laval AS-H Belt Press G3 200 (Klampsess®), will come complete and include the following scope of supply:

- Components fabricated of the finest corrosion-resistant material
 - the frame will be carbon steel, hot dipped galvanized
 - chicane rods and holders shall be carbon steel galvanized
 - all sheet metal components will be Type 316L stainless steel
- Rollers. See description under 5.4.4 below
 - Eight (8) pressure rollers
 - Perforated roller
- Bearings greased lubricated
- Two (2) dewatering belts
- Hydraulic actuated belt alignment and positioning system
- Hydraulic power unit
 - One-gallon reservoir
 - Hydraulic oil pump and drive motor
 - Other parts to make a complete operational system
- Belt wash system
 - Washwater requirements
 - 80 GPM at minimum of 85 PSI at the BFP
- Power requirements
 - One (1) 3 HP BELT DRIVE UNIT
 - One (1) 1 HP HYDRAULIC UNIT

2.2. One (1) Main Control Panel, which will have the following scope of supply:

- One (1) Enclosure, NEMA 4X, 304SS, wall mount enclosure
- One (1) Main disconnect breaker with operating handle
- One (1) Control power transformer
- One (1) 480V surge suppressor
- One (1) 120V surge suppressor
- One (1) Allen Bradley, power flex 525, 5HP VFD, 480VAC with fuse protection and line reactors (BELT DRIVE)
- One (1) Motor starters Non-reversing, IEC, 1HP rated with circuit protection (HPU)
- One (1) Motor starters Non-reversing, IEC, 10HP rated with circuit protection (WWBP)
- One (1) 24VDC power supply
- One (1) Allen Bradley, CompactLogix L30ER controller with I/O as required.
- One (1) Unmanaged ethernet switch
- Three (3) Chromalox PID controller with window kit
- One (1) Alarm horn
- One (1) Elapsed time meter
- One (1) Ground bar
- One (1) Internal cooling fan
- One (1) Panel heater with thermostat
- One (1) Alarm horn
- LOT of Pilot Operators, terminal blocks, relays, dry contacts, and supplementary circuit protection as required



2.3. One (1) Inline, Non-clog, Variable Orifice Mixer

- Complete with an injection manifold system and a four-port vortex polymer injection ring.

2.4. One (1) Washwater Booster Pump

- 10 HP Motor TEFC
- Mounted on Steel Baseplate

2.5. One (1) Polymer Blending System

- Velodyne Veloblend VM Series Liquid polymer blending system
- 0.5 – 7.0 GPH Neat Polymer Pump
- 200 – 2,000 GPH Dilution Pump

2.6. One (1) Lot Spare Parts, which shall be provided as follows:

- One (1) set of filter belts
- Two (2) sets of doctor blades
- Two (2) sets of rubber seals for the gravity zone & wash box
- One (1) set of bearings of each size used

2.7. Service time as follows:

- One (1) Field Service Engineer,
- up to eight (8) days, @ 10 hr./day, with up to three (3) round trips, per unit for start-up, commissioning, and training.
- Any additional service time resulting from non-Alfa Laval-warranty delays, will be charged at the rate in effect at the time of service.

2.8. Freight: this shall be DDP jobsite, Incoterms 2020

2.9. Also included with pricing:

- Warranty: Per the enclosed Alfa Laval's Standard Terms & Condition of Sale. Alfa Laval reserves the right to review operating and maintenance records to ensure compliance.

Each unit is warranted to be free from defects in materials and workmanship for a period of twelve months after successful completion of Acceptance Testing, beneficial use, or for a period not to exceed eighteen months from shipment, whichever occurs first. Alfa Laval reserves the right to review operating and maintenance records to ensure compliance.

- Electronic Submittal and O&M Manual

2.10. Dimensioned drawing (See Appendix A)



2.11. Notes of Clarification

- Technical submittal documentation shall be per Alfa Laval's (and /or sub-supplier) standards, delivered electronically, in English language. Additional documentation requirements shall incur extra engineering cost, material cost and delivery time.
- The enclosed quotation is a binding quotation. All scope of supply modifications / additions requires prior agreement by both parties and written acknowledgement by Alfa Laval.

2.12. Escalation Charges:

- In the event that delivery of equipment cannot be made on the scheduled delivery date agreed upon between Alfa Laval and Purchaser and as evidenced by the terms of the contract, due to Purchaser delay, Alfa Laval reserves the right to assess reasonable escalation charges to the project at the rate of 1% per month of the contract value for material price escalation for each month that the project is delayed.
- Given the current volatility in steel prices over the past twelve months, Alfa Laval has made this offer based upon shipment of the offered products contained herein within the schedule dictated above. Should the projected shipment schedule fall outside this period for any reason, pricing shall be subject to review and revision.

2.13. Exclusions from this quotation:

- All mechanical & electrical Installation, contractor shall remain responsible for meeting all relevant electrical codes
- Pipes, valves, and fittings...etc.
- Associated equipment, i.e., sludge macerators, feed pumps, cake conveyors, and centrate tanks etc.
- Measuring instruments between belt filters and associated equipment
- Lab services for the performance test and start up
- Noise abatement enclosures
- Odor control equipment
- Inspection and access platforms or ladders
- Utilities and consumables (polymer, power, water, and other consumables required during testing, start-up and commissioning)
- Detailed or project specific related engineering
- Offloading at jobsite
- Storage and Handling charges
- Storage and handling fees
- Detailed or project specific related engineering
- Duties, taxes, bonds...etc.



3. REFERENCES

3.1. Fairfax Water, VA

- 2 Machine installations
- Contact: Jeff Williams
- Phone: 571-355-2231

3.2. Lake Hefner, OK

- 4 Machine installations
- Contact: William Waller
- Phone: 405-919-1382

3.3. Draper, OK

- 5 Machine installations
- Contact: Sonny Massey
- Phone: 405-919-1562

3.4. Lafayette, LA

- 2 Machine installations
- Contact: Ray Fusilier
- Phone: 337-291-5926

3.5. WSSC Potomac, VA

- 5 Machine installations
- Contact: Dinesh Bahaduringh
- Phone: 240-472-6481



4. COMMERCIAL TERMS

4.1. Pricing

Item	Description	Qty.	Unit Price	Extended Price
1	Belt Filter Press G3 200 (2.0m BFP)	1	Included	Included
2	Set of Controls	1	Included	Included
3	Set of Ancillaries	1	Included	Included
4	Commissioning	1 LOT	Included	Included
5	Freight, DDP	1	Included	Included
6	Washwater Booster Pump	1	Included	Included
7	Polymer Blending System	1	Included	Included
Total Price				\$365,300.00

4.1. Recommended Spare Parts and Prices:

- Set of Belts: \$5,536.12
- Set of Doctor Blades: \$1,019.38
- Set of Rubber Seals: \$436.92
- Bearings (ea.): \$1,144.93

4.2. Payment Terms, per specification or our standard

- 10% with PO, N10 days
- 10% upon Alfa Laval Submittal Delivery, N30 days
- 75% upon delivery or availability to deliver should owner encounter delays, N30 days
- 5% upon acceptance or beneficial use, whichever comes first, N30 days, but not later than 120 days from shipment.

4.3. Taxes

Sales tax is excluded from quoted price and remains the customer's responsibility. Per state / federal legal obligation, Alfa Laval will pay applicable taxes; said taxes are charged and invoice to customer's account as actual.

4.4. Estimated Delivery Time

- Submittals: 8 -12 weeks from fully executed PO
- Belt Filter Press: 22-26 weeks from release to manufacture.
- Commissioning and Final Completion: 8-12 weeks after installation.

4.5. Quotation Validity

- 120 days from original bid date of December 13, 2024

5. ALFA LAVAL

5.1. About us

Alfa Laval is a leading global provider of separation, heat transfer, and fluid handling technology. Founded in 1883 and for more than 130 years, we have built a global presence with service centers and partners in nearly 100 countries. This offers local expertise, supported by the global breadth and depth of Alfa Laval. With these as its base, Alfa Laval aims to help enhance the productivity and competitiveness of its customers in various industries all over the world. [Alfa Laval – Our Company.](#)



5.2. Wastewater Separation Technologies

We remain committed to being the technology leader in design innovations, delivering reduced power & polymer consumption, increased cake dryness, and increased capacity within the same footprint. [Alfa Laval - Municipal wastewater treatment](#)

- Decanter Centrifuge
- Belt Filter Press
- Gravity Belt Thickener
- Rotary Drum Thickener
- SBR / MBR / Pkg. Plants



5.3. Lab & Pilot Testing

Alfa Laval's DNA is to continuously bring value to our customers. Our state-of-the-art wastewater laboratory, located in the Houston, TX service center; allows Alfa Laval to analyze the optimal technology for your specific separation requirements. Additionally, Alfa Laval provides separation equipment available for on-site field testing and demonstration. These include decanter centrifuge, rotary drum filter, and belt press.





5.4. Always at Your Service:

- 24/7 Support
 - 75+ Authorized Service Providers
 - 4 - USA Service Centers -
 - Indianapolis US Parts Distribution Center
 - OEM Parts – 450,000+ Spare Parts in Stock
 - 50+ Field Technicians
- [Alfa Laval - Service and support in the USA](#)



5.5. Spare Parts

- **A smart choice**

Boost productivity and maximize uptime with quality genuine parts from Alfa Laval. With easy access to a broad range of long-lasting high-quality parts, you can lower your total cost of ownership and preserves the value of your equipment throughout its entire life cycle.



- **Available everywhere**

Through our global service network, you have easy access to our extensive genuine spare parts inventory through 11 major Alfa Laval distribution centers.

Alfa Laval maintains an extensive inventory of spare parts that supports our current product range as well as some legacy parts, which are up to 100 years old. Our parts inventory system contains specific information, such as technical details and availability, for more than 450,000 parts, and we have more than 50,000 unique items in stock.

The Americas are conveniently served through the American Distribution Center (AMDC), which is centrally located in Greenwood, IN, USA.

Alfa Laval AMDC
200 South Park Blvd
Greenwood, IN 46143

- **Unmatched quality**

Designed for durability, reliability and productivity, our parts deliver outstanding performance time and time again. Manufactured to precise specifications, Alfa Laval parts have proven performance in our material and test laboratories as well as in process lines around the world.

- **Traceability and certification**

Parts are continuously improved to meet the highest standards and comply with various certification requirements and regulations, such as REACH. [Alfa Laval - Spare parts](#)

6. ALFA LAVAL AS-H BELT PRESS G3 – GENERAL DESCRIPTION

See how it works in less than 3 min

[Alfa Laval AS-H Belt Press G3](#)

The Alfa Laval AS-H Belt Press G3 is considered the industry standard for superior value, performance and durability for sludge dewatering. The G3 belt press is designed for low polymer consumption, high throughput rates, and high solids content and is available in a wide size range and extensive modular options to meet individual process requirements.

6.1. Working Principle

Its operating principle is to condition the feed sludge with a polyelectrolyte and drain the flocculated sludge over an endless, horizontal porous filter belt. The thickened sludge is then sandwiched by a second filter belt before further dewatering by a series of decreasing diameter rollers. Final moisture removal is achieved by shear rollers arranged to give minimum 180-degree belt wrap in order to optimize dewatering.

6.2. Benefits

- Thorough uniform mixing of polymer into sludge
- Higher volumetric throughput and solids loading
- Higher cake dry solids
- Low power consumption
- Low polymer usage
- Better filtrate quality
- Low maintenance requirements
- Long life design
- Modular design allows upgrades to add more rollers in the pressure zone or an extended gravity zone

6.3. Features

- Available in 8 roller and 12 roller designs in the pressure section
- Extended gravity deck model for thinner sludges
- Open frame design allows for maximum access for normal maintenance
- Enclosed design available ensures any odors, aerosols and spillages are contained
- Adjustable wedge dewatering zone for process optimization
- Pre-installed hydraulic system for automatic belt tensioning and steering
- Lifetime rated bearings
- Radial grid and perforated roller to accelerate dewatering

6.4. Mechanical Requirements

6.4.1. Sludge Conditioning System

- Sludge/polymer mixer valve
 - Variable orifice, in-line polymer mixer that combines polymer and sludge instantly.



- Optimizes effectiveness and minimized polymer consumption.

6.4.2. Gravity Drainage Section

Even sludge distribution prior to two-stage high efficiency gravity drainage areas fitted with easy to operate and maintain sludge ploughs and precisely arranged support grid to optimize filtrate removal.



6.4.3. Pressure Section

- Adjustable wedge dewatering zone
 - Initiates application of pressure to the dewatering process.
 - Adjustable during operation.
- Radial pressure dewatering zone
 - Radial grid and perforated roller to prevent pressure-shock of sludge in the pressure zone.
- Full pressure dewatering zone
 - Optional number of pressure rollers depending on dewatering requirements.
 - Belt wrap of 180 degrees or greater maximizing cake dry solids



6.4.4. Roller design

- Specialized forged end construction.
- Rubber coated drive roller and thermoplastic nylon coated pressure rollers for corrosion resistance.

6.4.5. Bearings

- Lifetime rated bearings with triple labyrinth seal and specially designed shaft mounted splash guards.
- Extended lubrication cycle (every 6 months).



6.4.6. Belt Drive

- Input power to the drive roller shaft shall be supplied through an A.C., variable frequency drive unit. Speed shall be controlled through cyclical variation in motor current, which is operator set at the control panel. The drive roller speed reduction is obtained through a helical gear reducer.

6.4.7. Belt Alignment System

- Autosensing, hydraulic steering system.
- Continuous, smooth guidance control without the need for operator intervention.



6.4.8. Belt Tensioning System

- Pre-installed and press-mounted to minimize on site installation requirements.
- Hydraulically controlled and adjustable for continuous operation, reduced belt wear and optimum performance for a prolonged belt life.



6.4.9. Belt Wash System

- Efficient and continuous washing of top and bottom belts.
- Split spray bar option for easy removal and maintenance in rooms with limited space



6.4.10. Safety Features

- E-Stop: Trip Cord



7. ELECTRICAL ASSEMBLY AND CONTROLS

7.1. General Considerations

- The control panel shall accept a 460 VAC, 60 hertz, 3-phase power input. A main disconnect circuit breaker and operator mechanism shall be included. When the disconnect is in the open position, all power shall be removed from the control system. IEC rated motor starters shall be provided for the hydraulic unit and washwater pump. A VFD will be supplied for the belt drive. A control power transformer shall be included that will provide 120 VAC control power to the system. All logic functions for the system shall be performed by an industrial programmable logic controller (PLC) located in the control panel.
- Located on the front of the control panel shall be a CONTROL POWER OFF/ON switch. When in the ON position, the CONTROL POWER ON pilot light will be illuminated and control power shall be distributed to the control system. When in the OFF position, the control system shall be held de energized. Also located on the control panel shall be an EMERGENCY STOP pushbutton. It shall be an illuminated mushroom head style pushbutton that when depressed shall immediately de energize all moving equipment in the system. An alarm horn shall be included for audible alarm annunciation.

7.2. Programmable Logic Controller (PLC)

- The PLC shall be a modular type with discrete and analog capabilities. The CPU shall have 4K minimum RAM for user instructions. The unit shall have battery backed RAM and EEPROM backup. The PLC shall be an Allen Bradley CompactLogix or equal.

7.3. Variable Frequency Drive (VFD)

- The VFD shall be UL listed and shall be Allen Bradley Powerflex type or approved equal.

7.4. System Operation

- As a minimum, the following control pilot devices or functionality shall be located on the front of the control panel or available via an HMI screen:
 - HAND/OFF/AUTO MODE selector switch
 - HAND MODE indicator
 - AUTO MODE indicator
 - AUTO START pushbutton
 - AUTO STOP pushbutton
 - SYSTEM RESET pushbutton
 - ALARM SILENCE pushbutton
 - LAMP TEST pushbutton
 - PRESS READY indicator
 - DEWATERING OFF/ON selector switch
 - WASHDOWN CYCLE ON indicator
 - BELT INSTALLATION OFF/ON selector switch

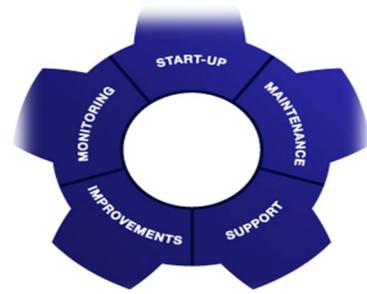


- WASHWATER PUMP START pushbutton
- WASHWATER PUMP STOP pushbutton
- WASHWATER PUMP RUNNING indicator
- HYDRAULIC PUMP START pushbutton
- HYDRAULIC PUMP STOP pushbutton
- HYDRAULIC PUMP RUNNING indicator
- BELT DRIVE START pushbutton
- BELT DRIVE STOP pushbutton
- BELT DRIVE RUNNING indicator
- BELT DRIVE SPEED controller (0-100%)
- CONVEYOR START pushbutton
- CONVEYOR STOP pushbutton
- CONVEYOR RUNNING indicator
- SLUDGE PUMP START pushbutton
- SLUDGE PUMP STOP pushbutton
- SLUDGE PUMP RUNNING indicator
- SLUDGE PUMP SPEED controller (0-100%)
- POLYMER PUMP START pushbutton
- POLYMER PUMP STOP pushbutton
- POLYMER PUMP RUNNING indicator
- POLYMER PUMP SPEED controller (0-100%)
- LOW WASHWATER PRESSURE indicator
- LOW HYDRAULIC PRESSURE indicator
- BELT MISALIGNED indicator
- BELT BROKEN indicator
- NO CAKE indicator
- EMERGENCY STOPPED indicator
- BELT DRIVE FAIL indicator

8. SERVICE

8.1. 360° Service Portfolio

Alfa Laval partners with you for the entire life cycle of your equipment – from start-up, through operation, monitoring and maintenance, all the way to reconditioning and eventual redesign. Our goal is to ensure that our equipment continuously gives you optimized process performance.



8.2. Alfa Laval Service Centers:

You can trust Alfa Laval service technicians to maintain your equipment in peak performance and minimize the risk of unscheduled production stops. Our local service centers are equipped with the tools and expertise to improve the performance of your equipment. Join us on a virtual tour of our state-of-the-art facilities.

[Alfa Laval - Houston service center](#)



8.3. Commissioning

Alfa Laval specialists commission equipment to ensure optimal performance. Services consist of installation review, performance checks, process optimization and operator training. The commissioning process ends with a handover or acceptance certificate and is often the first day of warranty.

Services consist of:

- installation review
- performance checks
- process optimization
- operator training



The commissioning process ends with a handover or acceptance certificate and is often the first day of warranty.

The commissioning:

- Enables trouble-free start-up and process fine-tuning.
- Advice on optimizing process conditions.
- Checks on surrounding components, systems and controls and optimization recommendations.
- Help to reduce maintenance costs with a customized proposal to optimize maintenance.

8.4. Preventive Maintenance

Highly experienced Alfa Laval specialists can formulate and implement an optimal maintenance plan for your equipment.

Service intervals are determined by various factors, including type of application as well as the usage and condition of the equipment.

The service can be performed on site or in the Alfa Laval Service Center located in Houston, Texas.

The preventive maintenance:

- Delivers peace of mind and operational reliability
- Secures maximum throughput
- Increases overall equipment lifetime and provides good cost control
- Maintains safe equipment operation

8.5. [Rebuilds and upgrades](#)

8.5.1. Repair

Alfa Laval specialists repair the equipment according to your needs, replacing unsafe or worn parts as required, and then reassemble the equipment.

- Minimizes downtime
- Maximizes production performance
- Extends the lifetime of equipment
- Prevents equipment from consequential damage and accidents

8.5.2. Equipment Upgrades

- There is a wide range of upgrade solutions available to ensure your Alfa Laval equipment features the latest technical developments.
- As operating conditions change over time, new challenges can call for a review of the current installations.
- Equipment Upgrades can also include control upgrades that improve equipment automation.



9. TERMS AND CONDITIONS OF SALES

These Terms and Conditions of Sale ("Terms and Conditions") apply to all quotations, orders, and contracts for Alfa Laval Inc. products (hereafter "Equipment") and associated services ("Services") As used in these Terms and Conditions, the word "Equipment" includes all hardware, parts, components, software and options.

1. **ACCEPTANCE:** Our sale to you is limited to and expressly made conditional on your assent to these Terms and Conditions and, if applicable, on the attendant quotation, both of which form a part of the contract between us and which supersede and reject all prior agreements, representations, discussions or negotiations, whether written or oral, with respect to this sale and any conflicting terms and conditions of yours, whether or not signed by you. Any terms and conditions contained in your purchase order or request for quotation or other form which are different from, in addition to, or vary from these Terms and Conditions are expressly rejected, shall not be binding upon us, and are void and of no force or effect. These Terms and Conditions may not be changed except by the written agreement of both parties.

2. **PRICES:** Unless otherwise specified in writing, all quoted prices are in U.S. Dollars and are firm for thirty (30) days from the date of offer. Prices quoted are exclusive of taxes, freight and insurance, and you agree to pay any and all sales, revenue, excise or other taxes (exclusive of taxes based on our net income) applicable to the purchase of Equipment. If you claim an exemption from any such taxes you shall provide us with a tax exemption certificate acceptable to the taxing authorities.

3. **DELIVERY; FORCE MAJEURE:** Dates for the furnishing of Services and/or delivery or shipment of Equipment are approximate only and are subject to change. Quoted lead times are figured from the date of receipt of complete technical data and approved drawings as such may be necessary. We shall not be liable, directly or indirectly, for any delay in delivery or failure to deliver caused by carriers or by labor difficulties, shortages, strikes or stoppages of any sort, or difficulties in obtaining materials from ordinary sources and suppliers. In addition, we shall not be liable for any such delays or for any failure to perform our obligations under an order or contract due to any one or more of the following events, whether foreseeable or not: war, hostilities, military operations, terrorism, riots, disorder, accidents, floods, storms, natural disasters, fires, acts of God, epidemics and/or pandemics (and specifically in relation hereto and notwithstanding anything else stated herein, whether or not outbreak of such epidemic or pandemic has occurred prior to acceptance of this order or execution of a contract for the Services), governmental, judicial or administrative decisions, decrees or orders, embargoes or blockades, or any causes beyond our reasonable control. Unless otherwise specifically agreed in writing by us, in no event shall we be liable for any damages or penalties whatsoever, or however designated, resulting from our failure to perform or delay in performing due to any of the causes specified in this paragraph 3.

4. **SHIPMENT, RISK OF LOSS, TITLE:** All sales are made F.O.B. Alfa Laval shipping point, unless otherwise noted. Duty, brokerage fees, insurance, packing and handling as applicable are not included unless otherwise noted. Our liability for delivery ceases upon making delivery of Equipment to the carrier at the shipping point in good condition. The carrier shall be your agent. Risk of loss shall pass to you upon such delivery. Regardless of the delivery term specified, we shall retain title to the Equipment until final payment thereof has been made.

5. **CREDIT AND PAYMENT:** Payment terms are thirty (30) days net, unless agreed otherwise by us in writing. *Pro rata* payments shall become due with partial shipments. Any discount period which may be granted by us begins on the invoice date and all payments are due 30 days after the invoice date. All payments shall be made without deduction, deferment, set-off, lien or counterclaim of any nature. All amounts due not paid within 30 days after the date such amounts are due and payable shall bear interest at the lesser of 1.5 percent per



month or the maximum rate of interest allowed by law. We reserve the right at any time to suspend credit or to change credit terms provided herein, when, in our sole opinion, your financial condition so warrants. Failure to pay invoices when such invoices are due and payable, at our election, shall make all subsequent invoices immediately due and payable irrespective of terms, and we may withhold all subsequent deliveries until the full account is settled. We shall not, in such event, be liable for delay of performance or nonperformance of contract in whole or in part subsequent to such event. We shall have the right to deduct from or set off against sums due you any sums due and owing to us from you under any other order or contract between us.

6. **SECURITY AGREEMENT:** You hereby grant us a security interest in the Equipment, including a purchase money security interest, and in such materials, proceeds and accessories thereof, to secure payment of the purchase price of the Equipment. You authorize us to file or record a purchase order or copy thereof or any UCC financing statement showing our interest in the Equipment in all jurisdictions where we may determine filing to be appropriate, and you agree to sign all such documents reasonably related thereto promptly following our request. You will not encumber the Equipment with any mortgage, lien, pledge or other attachment prior to payment in full of the price therefor.

7. **CANCELLATIONS AND CHANGES:** Orders which have been accepted by us are not subject to cancellation or changes in specification except upon prior written agreement by us and upon terms that will indemnify us against all losses resulting from or arising out of such cancellation or change in specifications. In the absence of such indemnification, we shall be entitled to recover all damages and costs of whatever nature permitted by the Uniform Commercial Code.

8. **DEFERRED SHIPMENT:** If shipment is deferred at your request, payment of the contract price shall become due when you are notified that the Equipment is ready for shipment. If you fail to make payment or furnish shipping instructions we may either extend the time for so doing or cancel the contract. In case of deferred shipment at your request, storage and other reasonable expenses attributable to such delay shall be payable by you.

9. **EQUIPMENT WARRANTY AND REMEDY:**

(a) For new Equipment only, we warrant to you that the Equipment that is the subject of this sale is free from defects in design (provided that we have design responsibility), material and workmanship. The duration of this warranty is twelve (12) months from start-up or eighteen (18) months from delivery to you, whichever occurs first (the "Warranty Period"). If you discover within the Warranty Period a defect in design, material or workmanship, you must promptly notify us in writing. Within a reasonable time after such notification, we shall repair, replace, or, at our option, refund you the price of the defective Equipment or part thereof.

(b) For repairs, parts and Services provided by us, we warrant to you that the repairs, parts and Services we provide to you will be free from defects in material and workmanship. The duration of this warranty is ninety (90) days from as applicable (i) the date the Equipment which required the repairs, parts or Services is returned to you by us, (ii) the date of your receipt of the part, or (iii) the date of completion of the repair or other Services, if performed at your facility. If during this ninety day period you discover a defect in the repairs, parts or Services you must promptly notify us in writing and we shall correct such defect with either new or used replacement parts or reperform the Services as applicable. If we are unable to correct the defect after a reasonable number of attempts, we will provide a refund of the price paid for the defective repair, parts or Services.

(c) All warranty service is subject to our prior examination and approval and will be performed by us at your facility or at service centers designated by us. All transportation to and from the designated service center will be at our expense. The remedies set forth above are your exclusive remedies for breach of warranty. Unless



otherwise agreed in writing by us, our warranty extends only to you and is not assignable to or assumable by any subsequent purchaser, in whole or in part, and any such attempted transfer shall render all warranties provided hereunder null and void and of no further force or effect.

(d) The warranties set forth above are inapplicable to and exclude any product, components or parts not manufactured by us or covered by the warranty of another manufacturer. We shall have no responsibility for defects, loss or damage to the extent caused by (i) normal wear and tear, (ii) your failure to follow all installation and operation instructions or manuals or to provide normal maintenance, (iii) repairs or modifications by you or by others not under our direct supervision, or (iv) a product or component part which we did not design, manufacture, supply or repair.

(e) **DISCLAIMER OF IMPLIED WARRANTIES.** THE WARRANTIES SET FORTH ABOVE AND IN SECTION 12 BELOW ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

10. **LIMITATION OF LIABILITY:** In no event shall we be liable, and you hereby waive any claims against us and release us from liability to you, for any indirect, special, punitive, incidental, or consequential damages whatsoever based upon breach of warranty, breach of contract, negligence, strict tort, or any other legal theory. In no circumstance, shall we be liable for, however such damages are characterized, loss of profits, loss of savings or revenue, loss of use of the Equipment or any associated equipment, cost of capital, cost of any substitute Equipment, facilities or services, downtime, or loss of prospective economic advantage. OUR AGGREGATE LIABILITY FOR FAILURE TO PERFORM, BREACH OF WARRANTY OR BREACH OF OTHER CONTRACTUAL OBLIGATIONS, NEGLIGENCE, STRICT TORT OR ANY OTHER LEGAL THEORY SHALL NOT EXCEED THE TOTAL PRICE PAID TO US FOR THE EQUIPMENT OR SERVICES THAT ARE THE SUBJECT OF ANY CLAIM BY YOU.

11. **OWNERSHIP:** All drawings, designs, specifications, data and other proprietary rights supplied by us (including without limitation in connection with the Equipment) have been prepared or assembled by us and are (and shall remain) exclusively our property, and upon our request you agree to execute any additional documents needed to give effect to the foregoing. Such drawings, designs and specifications have been furnished in order to provide full documentation and on the condition that they shall not be disclosed, reproduced or copied in any manner whatsoever, in whole or in part, except for your internal use as necessary, and upon the further condition that, as our sole property, they shall not be used for furnishing information and/or disclosed, in whole or in part, to others or otherwise for any purpose not specifically authorized in a writing signed by one of our corporate officers.

12. **PATENT INFRINGEMENT**

(a) We make no express or implied warranties of non-infringement with respect to the Equipment. We will, however, defend, indemnify and hold you harmless from any third party apparatus claims based upon an issued U.S. patent to the extent such claim relates to the Equipment supplied and sold to you; provided, however, that we undertake no indemnification in respect of third-party rights (i) where the alleged patent infringement is based upon or related to any method, process or design claims in third-party U.S. patents, any combination of the Equipment with other equipment not supplied by us, or any modifications of the Equipment made by you and not approved by us, or (ii) to the extent the alleged infringement is directly attributable to the negligence or intentional misconduct of you or otherwise for which you are obligated to indemnify us for under paragraph 12(c).



(b) We shall assume defense of a claim at our expense in accordance with these Terms and Conditions, provided you shall notify us within 30 days of your receipt of notice of an alleged third-party claim that you believe would entitle you to patent infringement indemnification pursuant to paragraph 12(a). You acknowledge and agree that we shall have the sole right to settle or otherwise compromise such a third-party claim, including but not limited to the right to either (i) modify the Equipment to avoid infringement if you are agreeable to the modification, (ii) repurchase the Equipment from you at a price equal to the then-current fair market value of the Equipment, or (iii) secure rights by assignment or license to permit continued use of the Equipment.

(c) If a third party charges us with patent infringement relating to Equipment sold by us to you, we shall have the right to either (i) modify the Equipment to avoid infringement if you are agreeable to the modification, (ii) repurchase the Equipment from you at a price equal to the then-current fair market value of the Equipment, or (iii) secure rights by assignment or license to permit continued use of the Equipment. If a third party charges us with patent infringement on the bases set forth in paragraph 12(a)(i) or (ii), you shall indemnify and hold us harmless for all expenses as well as any awards of damage assessed against us, and, without limiting any of our other rights and remedies available at law or in equity, we shall also have the right to modify or repurchase the Equipment or to secure rights for continued use by way of assignment or license as set forth in this paragraph.

13. **INSPECTION:** Upon prior written notice, you may make reasonable inspections of Equipment at our facility. We reserve the right to determine the reasonableness of the request and to select an appropriate time and location for such inspection. You agree to execute appropriate confidentiality provisions upon our request prior to visiting our facility. All costs of inspection shall be solely determined by us and shall be payable by you. No inspection or expediting by you at the facilities of our suppliers is authorized.

14. **SOFTWARE PROVISIONS:** If software is provided hereunder (whether such is integrated into the Equipment or otherwise operates alongside the same), you are hereby granted a non-exclusive, non-sublicensable, non-transferable, royalty free license to access and use such software as provided and as intended with our Equipment. Without limiting the foregoing, under the foregoing license you may specifically: (i) use our software in machine readable object code only and only with the Equipment provided; (ii) copy our software into any machine readable object code form solely for back up purposes in support of your use of our software on the Equipment provided in accordance with these Terms and Conditions; and (iii) create one additional copy of the software for archival purposes only. This license may only be assigned, sublicensed or otherwise transferred by you with our prior written consent. You hereby recognize and acknowledge that the software provided to you hereunder comprises valuable trade secret and/or copyright property of Alfa Laval (or its licensors) and you covenant that you will take adequate precautions against access to the software by, or disclosure of the software to, anyone not authorized hereunder to use or have access to the software as contemplated herein. The software is subject to the confidentiality obligations set forth below in paragraph 15.

15. **CONFIDENTIALITY:** Subject to any non-disclosure or confidentiality agreement already in effect between us, any drawings, data, software or other information exchanged between us is proprietary or confidential to us and shall not be used or disclosed by you without our prior written consent. Confidential information shall not be any information that (i) is known previously to you under no obligation of secrecy; (ii) becomes known to the public through no breach of an obligation of secrecy by you; or (iii) is independently developed by you without use or reference to any of the confidential information or materials provided to you by us.

16. **INAPPLICABILITY OF CISG:** The parties specifically agree that the United Nations Convention on Contracts for the International Sale of Goods shall not apply to any sale or order or the contract between us.



17. **GOVERNING LAW & VENUE:** These Terms and Conditions and any dispute or claim arising out of or related to an order or the contract between us shall be finally decided in accordance with the laws of the Commonwealth of Virginia, without giving effect to the provisions thereof relating to conflict of laws. You agree that the venue for any such dispute shall lie in the United States District Court for the Eastern District of Virginia, Richmond Division. In the event that federal jurisdiction cannot be established pursuant to 28 U.S.C. §§ 1331 or 1332, the venue for any such dispute shall lie in the Circuit Court of Henrico County, Virginia. You expressly submit and waive any objection to the sole and exclusive jurisdiction of such courts.

18. **GENERAL:** All previous agreements or understandings between us, either oral or written, with regard to the subject order, with the exception of a pre-existing non-disclosure agreement between us, are void and these Terms and Conditions constitute the entire agreement between us with respect to the matters addressed herein. Neither of us shall assign an order or contract to which these Terms and Conditions apply without the prior written consent of the other party, which consent shall not be unreasonably withheld. If any provision of these Terms and Conditions is held to be invalid or unenforceable, such holding shall not affect the validity or enforceability of any other provision herein. No waiver by either of us of any default or breach by the other party will operate as or be deemed a waiver of any subsequent default or breach.