

**To:** Mayor Jacque and City Council Members  
**Cc:** Mick Michel, City Administrator  
**From:** John F. Wandsnider, PE – Public Works Director/City Engineer  
**Date:** February 15, 2023  
**Subject:** Public Works Report: January 12 – February 14, 2023

Things have been operating well, for the most part, over the last month or so in the Public Works Department.

**Next Week is EWeek!**

I am blessed, once again, to be able to partner with the James Kennedy Public Library to sponsor a program to help with this important cause for the citizens of the City of Dyersville and surrounding communities. The week of Presidents Day was chosen because both Presidents Washington and Lincoln were involved in engineering and land surveying. Below is our promo:

**Tuesday, February 21: Engineers Week presents Rumble Table Construction Challenge from 4:00- 6:00 pm.** For National Engineers Week the library will be hosting a building challenge! This year participants will be trying to build structures using the library's buildables (Legos, Lincoln Logs, Magnatiles, etc.) to create a structure capable of lasting a round on a rumble table- a device that simulates earthquakes! Farmtek Engineer Danielle Will and City Engineer of Dyersville John Wandsnider will be on site to help answer questions about the creations and general engineering! Ages 7 and up. Engineers Week is February 19-25, 2023. Founded by the National Society of Professional Engineers in 1951, Engineers Week is dedicated to ensuring a diverse and well-educated future engineering workforce by increasing understanding of, and interest in, engineering and technology careers.

**Operation and Maintenance of Fleet, Highways, Streets, Alleys, Parks, Trails, Rivers, Creeks, etc.**

Mike Maahs and TJ Vorwald continue to do a great job with the operations and maintenance of Dyersville's streets system. After a bit of a lull in winter precipitation, we have had two straight weeks with a Snow Emergency. Hopefully winter is not going out like a lion, as they say...

As was the case the last two weeks, Snow Emergency declarations have historically been tied to the National Weather Service's declaration of a 'Winter Storm Warning' in our area (usually based on predictions of 6 or more inches of snow, or blizzard conditions□). The ability to declare a Snow Emergency has been very helpful, not only for much greater efficiency and effectiveness during heavier snow-removal operations, but also in providing fully cleared streets and parking areas after the storm is over.

Of the 500 tons of salt planned for this season, we estimate that we have used about 200 tons to-date.

As time and conditions allow, we have also been filling put holes and repairing and maintaining equipment. A number of dead or downed trees needed to be dealt with as well.

Public Works has also been helping to remodel the Police Department's garage.

**Operation and Maintenance of Drinking Water and Wastewater Disposal Systems**

The drinking water source, storage, treatment, and distribution systems are serving the City well, thanks to the excellent work of Terry Recker and Joe Reicher. There were several water meter service calls due to people moving. Also some electrical repairs and building maintenance were needed here-and-there. The Water report was not ready in time for this report – it will be included next month.

The wastewater collection, pumping, treatment, and disposal systems are operating well, thanks to the excellent work of Tim Herbers and JoAnn Woodward, with help from Joe. Please refer to the below reports for the last two months from Wastewater Operations.

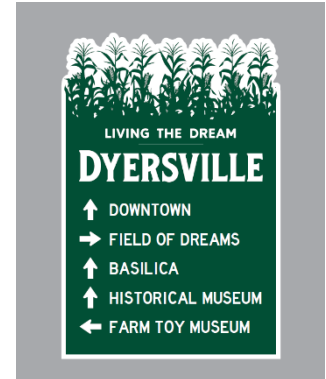
### **Status of Improvement Projects – ‘In-House Design’**

#### **5<sup>th</sup> Avenue NE - Dyersville East Rd (Added 2/23)**

We attempted a low-cost, temporary fix on a 2,000-foot long portion of this road from Fairway Dr. to Golf Course Rd. Although the fix held up well, structurally, it was never as smooth as expected (and as compared with the rest of Dyersville East Rd. The City is persuing grant funding through Dubuque County’s Rural County Transportation Program (RCTP) to help wot offset costs for a resurfacing of this important arterial road.

#### **Wayfinding Signs Project (Added 12/22, though in-progress for years)**

We have done some back-and-forth review and tweaking on the nearly 30 different sign locations. These have to be absolutely perfect because once they are made, we can’t change them without having to make a new one. We are very close. We had also forwarded an earlier draft to the Iowa DOT Central Office for their review and approval and just heard back from them today. They have given approval on a majority of the plan, but require some adjustments to the signs along US 52. We plan to make those adjustments and solicit quotes in the coming week or so.



#### **Hwy 52/136 Manhole Replacement at 2<sup>nd</sup> Avenue (Added November, 2021)**

We continue to study this problem to identify the best solutions.

#### **Downtown Businesses Accessibility – (Added June, 2021)**

Working toward including recommendations into the sidewalk program.

#### **Legacy Square – Stage (Added Spring 2021)**

Project is set to be constructed next spring.

### **Status of Improvement Projects – ‘Outside Design’**

#### **20 West Industrial Park, Phase III Rise Grant App. (Added August, 2022)**

Draft plans and specs for Contract B (RISE) were submitted to the City of Dyersville and DEDC for review in November. **After minor revisions, plans will be submitted to Iowa DOT for a 30 day review.** Local bid date is anticipated to be in **April**. Construction could begin in **June**. Completion is set for October 2023. Origin will provide and administer construction admin and observation as required during construction.

#### **1<sup>st</sup> Avenue Bridge – Repair or Replacement (Added May, 2022)**

Awaiting further evaluation

#### **3rd Avenue SW Bridge (Added to list in February, 2022)**

Awaiting further evaluation

#### **Field of Dreams Stormwater Wetland and Mitigation (Added to list in April, 2020)**

Project substantially complete. Temporary erosion control seeding has been placed. Permanent bluegrass seeding has been completed both north and south of Beltline Rd. Native seeding was performed in late November 2022. A live streaming camera of the site is available for viewing at:

<https://video.nest.com/live/G4AGPm8tkR>

#### **Dyersville East Road Water and Sewer Extension 2020 (Added to list March, 2020)**

Contract B Water Main construction is wrapping up. Construction will be starting in March or April on Contract C Water Pumping Station. Construction for Contract D Lift Station and Linear Sewer Onsite is

underway. Work has started on the Sanitary Sewer and Force Main (EDA Contract). Contract E has been awarded to Top Grade Excavating and they anticipate starting construction the 1<sup>st</sup> quarter of 2023.

Heritage Trail Pavement Extension (Added to list January, 2020)

**Preconstruction meeting is being scheduled. Anticipate construction beginning in April and lasting through May.**

SE Collection System Diversion and SE Water Booster Pumping Facility

Wrapping up final project paperwork. Final close-out items are in the works.

Bear Creek Restoration (SRF Sponsored Project)

The Contractor will perform summer mowing and vegetation management in 2022 and 2023 for maintenance. Typical prairie seeding takes 3 years to be fully established with intended growth of flowers and grasses. A video camera is mounted near 3rd St. with a public video link for anyone to monitor.

<https://www.senserashsystems.com/public/embed/M78018326A93>

Respectfully submitted,

John F. Wandsnider, PE - Public Works Director / City Engineer

Email: [jwandsnider@cityofdyserville.com](mailto:jwandsnider@cityofdyserville.com) cell: 563-587-9131

# Memorandum

**To:** Mayor, City Council Members and City Administrator  
**From:** Wastewater Operator  
**Date:** January 13, 2023  
**Subject:** **Wastewater Operations – December 2022**

## **Influent Flows**

Total Treated for Month 13,309,000 Gallons  
Average Flow per Day 429,000 Gallons  
Maximum Daily Flow 576,000 Gallons  
Average Influent Biochemical Oxygen Demand 313 mg/l  
Plant loading pounds per day of 1214 lbs. plant design loading 2400 lbs. per day  
Average Influent Total Suspended Solids 342 mg/l.  
Plant loading pounds per day 1319 lbs. plant design loading 3600 lbs. per day.  
Average Influent Total Nitrogen 44.6mg/l  
Plant loading pounds per day 186.46lbs.  
Average Influent Phosphorous 8.235mg/l.  
Plant loading pounds per day 34.35 lbs.

## **Effluent Testing**

C.B.O.D. Monthly Average	2.75 mg/l	Limit - 25 mg/l
T.S.S. Monthly Average	2.50 mg/l	Limit - 30 mg/l
Ammonia Monthly Average	.23 mg/l	Limit – 13 mg/l
Total Nitrogen	9.5 mg/l	Suggested Limit 10mg/l
Phosphorus	0 mg/l	Suggested Limit 1 mg/l
E-coli	Not required	Limit 126 MPN

**Sewer Call Outs** – 0 for the month at the Treatment Plant.  
Total for the year – 9

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**To:** Mayor, City Council Members and City Administrator  
**From:** Wastewater Operator  
**Date:** February 15, 2023  
**Subject:** **Wastewater Operations –**

## **Influent Flows**

Total Treated for Month 14,723,000 Gallons  
Average Flow per Day 474,000 Gallons  
Maximum Daily Flow 607,000 Gallons  
Average Influent Biochemical Oxygen Demand 319 mg/l  
Plant loading pounds per day of 1318 lbs. plant design loading 2400 lbs. per day  
Average Influent Total Suspended Solids 369 mg/l.  
Plant loading pounds per day 1481 lbs. plant design loading 3600 lbs. per day.  
Average Influent Total Nitrogen 54 mg/l  
Plant loading pounds per day 231 lbs.  
Average Influent Phosphorous 11 mg/l.  
Plant loading pounds per day 50 lbs.

## **Effluent Testing**

C.B.O.D. Monthly Average	2.2 mg/l	Limit - 25 mg/l
T.S.S. Monthly Average	2.6 mg/l	Limit - 30 mg/l
Ammonia Monthly Average	0 mg/l	Limit – 13 mg/l
Total Nitrogen	9.9 mg/l	Suggested Limit 10mg/l
Phosphorus	0 mg/l	Suggested Limit 1 mg/l
E-coli	Not Required mg/l	Limit 126 MPN

**Sewer Call Outs** – 0 for the month at the Treatment Plant.  
Total for the year –0

Joann and I have been working on plant maintenance and DNR paperwork when we are not out plowing or treating streets.

We both have been studying to pass our wastewater grade test exams. Hopefully to complete these before we come into warmer weather. We have been in contact with McQueen Equipment on the rental of a sewer jetter truck for main line cleaning of the system due this spring/summer. Also have been working on updates to West linden and Main lift stations to get the system back up to date.

We were also going to check in on where we are at technology wise. Without the use of up to date computers it is very difficult to do our day to day operations at the plant and

while out in the system. We have patiently been waiting, but 2+ years is getting excessive. Having only one out dated computer in the office and only one Ipad for 2 people really slows down production. So, hopefully moving forwards we can get some new technology coming our way since the town is growing.