



Finance/Personnel Committee

Regular Meeting

335 South Broadway
De Pere, WI 54115
www.deperewi.gov

Agenda

Tuesday, April 8, 2025

7:30 PM

Council Chambers and Virtual

Pursuant to Wisconsin Statute 19.84, Notice is hereby given to the public that a meeting of the **Finance/Personnel Committee** of the City of De Pere will be held on **April 8, 2025 at 7:30 PM** in the **COUNCIL CHAMBERS, 2ND FLOOR CITY HALL, 335 S. BROADWAY STREET. DE PERE.**

The Public or Members of the Finance/Personnel Committee, which may count toward an official quorum, may attend the meeting either in person in the Council Chambers or telephonically or electronically via video conferencing or other appropriate technological means. Telephonic or electronic access to the meeting is provided below:

Computer/smart phone accessing <https://www.gotomeet.me/DePere>

OR

You can also dial in using your phone.
United States (Toll Free): [1 866 899 4679](tel:18668994679)
United States: [+1 \(312\) 757-3117](tel:+13127573117)
Access Code: 154-883-285

This meeting may also be rebroadcast on TV throughout the week and available on demand at <https://deperewi.portal.civicclerk.com/>.

- I. Call to Order
 1. Roll Call
 2. Approval of the Minutes of the March 11, 2025 Regular Meeting of the Finance/Personnel Committee.
 3. Public Comment on Matters not on the Agenda. Comments made during the public comment period shall pertain only to matters under the jurisdiction of the Finance and Personnel Committee. §6-3(f) DPMC
 4. Consideration and Possible Action to Approve replacement of the Community Center water heater in the amount of \$8,672.01 from Unassigned Reserves.*
 5. Consideration and Possible Action on authorization to fund Emergency repairs for the Fire Station 1 sewer back-up.*

6. Consideration and Possible Action to use State FAP funding to purchase boat engines for Fire Department.*
7. Consideration and Possible Action on Approval of Tentative Agreement for changes to Collective Bargaining Agreement with De Pere Police Benevolent Association (1/1/2024-12/31/2026).*
8. Consideration and Possible Action on Approval of Tentative Agreement for changes to Collective Bargaining Agreement with De Pere Professional Firefighter's Association IAFF Local #141 (1/1/2024-12/31/2026).*
9. Cash and Investments Report for February 28, 2025.
10. Consideration and Possible Action on Award of contract to Avineon, Inc. for GIS Consulting Services.*
11. Consideration and Possible Action on the Termination of TID No. 16 in the City of De Pere.*
12. Consideration and Possible Action on the extension of TID No. 8 in the City of De Pere for One-Year for the purpose of funding the City of De Pere Affordable Housing Programs.*
13. Consideration and Possible Action on the Termination of TID No. 8 in the City of De Pere.*
14. Status Update on Downtown Redevelopment Projects.
15. Future agenda items.
16. Adjournment.

Any person wishing to attend this meeting who, because of disability, requires special accommodations should contact the Clerk's office at 339-4050 by Noon, the previous day so that arrangements can be made.

Agenda Sent To:

Alderspersons
City Administrator
Mayor
Department Heads
TV, Newspapers & Radio Stations
Kress Family Library
De Pere Chamber of Commerce
Mark Hank, Pages and Pours
David Lepp, De Pere Deacons
Terrie DuBois, St. Norbert College



City of De Pere, Wisconsin

I.2

Request for Finance/Personnel Committee **Action**

MEETING DATE: April 8, 2025
DEPARTMENT:
FROM: Amy Darnick, Administrative Assistant
SUBJECT: Approval of the Minutes of the March 11, 2025 Regular Meeting of the Finance/Personnel Committee.
RECOMMENDED ACTION: Motion to approve.

Minutes

ATTACHMENTS:
March 11, 2025- DRAFT



Finance/Personnel Committee

Regular Meeting

Minutes

335 South Broadway
De Pere, WI 54115
www.deperewi.gov

Tuesday, March 11, 2025

7:30 PM

335 S. Broadway, De Pere, WI 54115

I. Call to Order

1. Roll Call

Present: James Boyd, John Quigley, Devin Perock, Amy Kunding

Absent:

Excused: Pamela Gantz

Also present:

City Manager Larry Delo, Assistant City Attorney Eric Erdman, Development Services Director Dan Lindstrom, Parks Director Marty Kosobuski, Finance Director Pam Manley, Alderman Hansen, Amy Darnick, Human Resources Director Shannon Metzler-online & Police Chief Jeremy Muraski- online.

2. Approval of the minutes of the February 11, 2025 Regular Meeting of the Finance/Personnel Committee.

RESULT:	Passed
MOVER:	James Boyd
SECONDER:	Devin Perock
AYES:	James Boyd, John Quigley, Devin Perock, Amy Kunding
NAYS:	None

3. Public Comment on Matters not on the Agenda. Comments made during the public comment period shall pertain only to matters under the jurisdiction of the Finance and Personnel Committee. §6-3(f) DPMC

None

4. Consideration and Possible Action to Approve Unassigned Reserves to Fund the Ash Tree Replacement Program due to the NEW Tree Grant being put on hold. *

Parks, Recreation & Forestry Director Marty Kosobucki was here to speak on this agenda item.

We had a NEW tree Grant that was partially funded through US Forest Service. We were informed that funding was permanently on hold, which put our grant in a bad spot. At the time, they indicated they weren't going to fund any trees that were planted, and no trees would be funded in the forthcoming future. We received a call late yesterday that if we submitted our information yesterday, we could possibly receive funding for trees that were planted in 2024. We were informed that our information was accepted, and we should receive funding for those trees by the end of next week. NEW did confirm that future funding is permanently on hold. Our dilemma is that we have about 100 tree orders right now, so we need to make a decision if we are notifying the homeowners that we aren't able to honor those tree

orders or the city will move forward and pay for the trees. \$10,000 for the trees on order. We can cancel the orders if needed.

Motion is to not fund the future trees from the Ash Tree replacement program from unassigned reserves.

RESULT:	Passed
MOVER:	James Boyd
SECONDER:	Devin Perock
AYES:	James Boyd, John Quigley, Devin Perock, Amy Kunding
NAYS:	None

5. Consideration and Possible Action to Allow Tactical Emergency Medical Services (TEMS) Medics to Utilize Firearms When Deployed on SWAT Team.*

Chief Matzke was present to speak about this item. Jesse Belleau and Del Zuleger were present as well. This was brought in front of the Council and approved in 2022. This is to partner with the Sheriff's department to provide tactical medical providers embedded onto the SWAT team. In 2023 it changed that there are more integrated threats. It is important to embed the medical providers into the SWAT team. Medical providers would be on the team, in case someone were to get injured. Time is so important, the faster the care is provided, the better the outcome will be. If the Medical Team is at an event and the Law Enforcement Officers that were there protecting them were to get wounded, there wouldn't be protection against the medical providers. In 2023, the State of WI changed the law to allow them to carry firearms (when they are on a call with the SWAT Team). We are putting them in the best position to be successful and to not get harmed. When they aren't on the SWAT team anymore, their firearm would go back to the City, since it is owned by the City of De Pere.

Alderman Kunding asked if this would only be in certain types of calls. Chief Matzke responded that this is when the SWAT joint team in the County gets activated. They only carry those weapons once that team is activated because then they are under the authority and jurisdiction of the Sheriff.

RESULT:	APPROVED
MOVER:	James Boyd
SECONDER:	John Quigley
AYES:	James Boyd, Amy Kunding, John Quigley, Devin Perock

6. Consideration and Possible Action on request to accept proposal and increase bonding for Fire Department storage shed.*

Chief Matzke was present to speak on this item. This was requested in the 2024 budget, which was a request for a cold storage building. It isn't a shed they will be working out of. Equipment has gotten bigger within the last couple decades, and they would like to make sure to protect their equipment and increase the longevity.

We put this out for proposals, but because the zoning is governmental zoning since it is on the same grounds as our Fire Department any building built in the zoning area must have the same criteria or masonry on the outside and certain types of material used for it. Because of that certain criteria, the building costs were more than we were anticipating. We budgeted \$150,000 in the 2024 budget. RJM Construction has come in with the lowest bid. The entire project would be \$68,000 short of getting completed.

Larry mentioned that part of this cost would be bonded later this year. We need authorization to bond more money than what was approved in the original proposed budget.

Kundinger has a question on the area for the shed. This would be at station 2, not station 1.

RESULT:	APPROVED
MOVER:	James Boyd
SECONDER:	Devin Perock
AYES:	James Boyd, Amy Kundinger, John Quigley, Devin Perock

7. Consideration and Possible Action on revised Sale Option Terms with James C Cornell for a new facility along Millennium CT from Parcel ED-2313-1 to Parcel ED-2311.*

Development Services Director Dan Lindstrom is present to speak on this item. Item request is to relocate an option. Jim Cornell Plumbing is looking to do an expansion or relocation to their existing businesses. They have outgrown their current location. Last year a 3-year option was issued to them as they worked through their planning. Site 1 is the relocated option. Staff is requesting that relocation and request that the option price be the same. The existing conditions will remain the same. Staff recommends approval of this request. The City's obligations are to prepare a CMS and wetland delineation and isolated wetland fill permits.

RESULT:	APPROVED
MOVER:	James Boyd
SECONDER:	Amy Kundinger
AYES:	James Boyd, Amy Kundinger, John Quigley, Devin Perock

8. Consideration and Possible Action on revised proposed sale and development agreement terms with BCD Holdings, LLC for a proposed development of Parcels ED-2313-1, ED-2314, ED-2315, and a portion of ED-2311 to develop a 172,000-square-foot multi-phased warehouse and manufacturing facility.*

Development Services Director Dan Lindstrom was present to speak on this agenda item as well. Similar request was made back in December. A small wetland issue arose. We have a proposed concept which has multiple phases. Phase 1 will primarily be a warehouse which will allow Bedford paper to relocate and expand that site. Phase 2 is a future converting line. This project is large, that is why there are extra protections listed in the conditions. Staff has requested they comply with the buffering, the limit the light exposure and the burning requirements. Increased landscaping and buffering. Proposed conditions are for a 120,000-square foot warehouse. Proposed value of \$7 million. There won't be any bonding since it is a PAYGO percentage amount and that the land was already purchased.

RESULT:	APPROVED
MOVER:	Amy Kundinger
SECONDER:	Devin Perock
AYES:	James Boyd, Amy Kundinger, John Quigley, Devin Perock

9. Discussion and Possible Action on the current balance of Excess Stadium Tax funds.*

Finance Director Pam Manley is present to speak on this item. Alderperson Hansen had a request for an update on these funds. There are still 2 projects that are outstanding that haven't been completed yet. These projects were through Definitely De Pere. They plan to finish these 2 projects in early spring. \$634.53 for Public Art initiative and \$15,340.94 street scape projects. In addition to those projects, there were a couple of projects that came in under budget. We also continue to get additional funding every year from the State (when people go back and pay their sales tax that they were delinquent on) including

the tax and interest. This leaves a total of un-obligated funds of \$44,540.07. Director Manley's recommendation would be to use it on something to designate future funds.

City Manager Delo asked Director Manley if there were any restrictions on how the money could be used. Director Manley thought that it might have originally been bookmarked for tourism and economic development.

Aldersperson Hansen was present at the meeting. He wanted to bring this forward because the money has been sitting there since he started in 2017. The last big amount was used at Voyageur Park for the playground. He suggests that department heads bring forward some project ideas. Director Manley would like to have it decided on how to move forward and not have to come back each time.

Aldersperson Kunding said how about spending it on Personal Development, Economic Development or seeing best practices at other places.

Manager Delo recommended we go back and look at the restrictions on the funding to begin with.

Director Manley found the restrictions. It states they have to use it for property tax relief, tax levy supported debt relief or economic development.

Aldersperson Quigley said that of the funds that have been spent already, a lot of it has gone to playground equipment or public spaces. Could we use it towards the Parks Department?

Manager Delo stated that we could dedicate it towards parks, enhancements to Voyageur park, Riverwalk, etc. You would have to identify them in more detail.

Aldersperson Kunding thinks that it would be a good idea to get recommendations. There are other things that could be used and provide more engagement.

It is recommended that the City Manager incorporate the funds into a budget request on an annual basis as funds are available.

RESULT:	APPROVED
MOVER:	Amy Kunding
SECONDER:	James Boyd
AYES:	James Boyd, Amy Kunding, John Quigley, Devin Perock

10. Consideration and Possible Action on 2024 budget items carried forward to 2025.*

Finance Director Pam Manley was present to talk. This is a list of the items from 2024 that didn't get completed for the year they were there for. These were in the budget and department heads are requesting funds to be carried over to the 2025 budget and be completed in 2025.

RESULT:	APPROVED
MOVER:	James Boyd
SECONDER:	Amy Kunding
AYES:	James Boyd, Amy Kunding, John Quigley, Devin Perock

11. Consideration and Possible Action to Reclassify the Part-time Accountant position to Assistant

Finance Director position using unassigned reserves.*

Finance Director Pam Manley was present to speak about this item. We recently had our Accountant resign. We have a part-time position opening. As Director Manley is looking at the Finance department, there is a need for a full-time position. Now is the time to request and transition. This position would help back up the Finance Director in her absence. They would be more of an Accountant. Daily bank recon, tax collection, bank accounts, balance sheet, overseeing AP process, journal entries. This has been requested in the past by the prior Finance Director. She doesn't see the needs being met if we only hire a part-time employee. 50% general funds, 25% sewer, 25% water. This would then be added as a permanent position in the 2026 budget.

Alder Quigley asked what the salary would be coming in part way through the year.
Alder Kunding said that it would be a smart move to hire a full-time position.

RESULT:	APPROVED
MOVER:	Devin Perock
SECONDER:	James Boyd
AYES:	James Boyd, Amy Kunding, John Quigley, Devin Perock

12. Cash and Investments Report for January 31, 2025.

RESULT:	APPROVED
MOVER:	James Boyd
SECONDER:	John Quigley
AYES:	James Boyd, Amy Kunding, John Quigley, Devin Perock

13. Future agenda items.

Aldersperson Kunding- wanting an update about Front street or Shopko development.

14. Adjournment.

Mayor Boyd moved, seconded by Aldersperson Perock to adjourn the meeting at 8:20 PM. Upon vote, motion carried unanimously.

Respectfully Submitted,
Amy Darnick



City of De Pere, Wisconsin

I.4

Request for Finance/Personnel Committee **Action**

MEETING DATE: April 8, 2025
DEPARTMENT: Parks, Recreation & Forestry
FROM: Marty Kosobucki, Parks, Recreation and Forestry Director
SUBJECT: Consideration and Possible Action to Approve replacement of the Community Center water heater in the amount of \$8,672.01 from Unassigned Reserves.*
RECOMMENDED ACTION: Staff recommends approval of unassigned reserves

ATTACHMENTS:
Memo.CC Water Heater Emergency Repair

CITY OF DE PERE MEMO



To: Finance/Personnel Committee
From: Marty Kosobucki
Director of Parks, Recreation and Forestry
Date: April 8, 2025

RE: Funding for Replacement of Water Heater at Community Center

Staff is requesting authorization of unassigned reserves to fund the replacement of the water heater back in February of 2025.

On February 12, 2025, staff uncovered our water heater at the Community Center failed and was beyond repair. Our maintenance staff quickly consulted our HVAC consultant and obtained quotes. Once we obtained quotes, we consulted with the City Manager who authorized staff to move forward with the repairs and bring expenses forward once completed. The repairs have been completed, and total cost of repair was \$8,672.01.



City of De Pere, Wisconsin

I.5

Request for Finance/Personnel Committee Action

MEETING DATE: April 8, 2025
DEPARTMENT: Public Works
FROM: Thomas Blohowiak, Maintenance Supervisor
SUBJECT: Consideration and Possible Action on authorization to fund Emergency repairs for the Fire Station 1 sewer back-up.*
RECOMMENDED ACTION: Approval

ATTACHMENTS:

Memo for Personnel Committee for drain repair Station 1

CITY OF DE PERE MEMO



To: Honorable Mayor Boyd
Members of the Finance/Personnel Committee
From: Thomas Blohowiak, Maintenance Supervisor
Date: April 8, 2025
RE: **Consideration and possible action on authorization to fund Emergency repairs for the Fire Station 1 sewer back -up ***

The Station 1 Fire Department had a sewer drain back up in the truck garage. Staff called in Roto Rooter to try and clean the drainpipes. They tried jetting out the drainpipes from the garage drain and could not get 12 feet down the pipe. It was discovered the pipe was plugged in this area causing the backup. In order to fix the situation a section of the sewer drainpipe was removed and replaced as well as a section of sewer drainpipe was lined. To make these repairs a portion of the basement wall and concrete floor had to be removed. Some of the flooring that was removed also had asbestos glue under the tiles, so this had to be abated. The estimate of the final costs for these repairs will be approximately \$18,000. Since the repairs were not expected or budgeted for it was considered an emergency repair. The City Manager and Finance Director were consulted on this. Staff is recommending the emergency repairs be paid through unassigned reserves.

In addition, it was discovered through the repair process that the entire existing cast iron sewer drainpipes are in poor condition and need to be addressed. Staff will be budgeting for repairs in 2026 for the remaining sewer drainpipe. It is estimated the cost of these repairs will be approximately \$65,000.



City of De Pere, Wisconsin

I.6

Request for Finance/Personnel Committee **Action**

MEETING DATE: April 8, 2025
DEPARTMENT: Fire
FROM: Lea Taylor, Executive Assistant
SUBJECT: Consideration and Possible Action to use State FAP funding to purchase boat engines for Fire Department.*
RECOMMENDED ACTION: Approval

ATTACHMENTS:
20250402131034497

Memo



To: Honorable Mayor James Boyd
Members of the Common Council

From: Fire Chief Jack Mlnarik *JM*

Date: April 8, 2025

Re: Consideration to Use State FAP Funding to Purchase Boat Engines

On behalf of De Pere Fire Recuse, I respectfully request your consideration to apply funds received through the Wisconsin Emergency Medical Services Funding Assistance Program (FAP). The program was created in 1989 and passed as part of Act 102 with the intent to provide supplemental funding to qualified EMS providers for equipment and training.

Our department typically receives approximately \$9,000 annually from this program however, this year the state has provided a larger amount of \$156,673. Our organization is currently well equipped and trained with no priority medical equipment needs at this time.

In August of 2023, the Council approved a joint request to accept ownership of a retired federal boat through the federal government surplus equipment program. The boat was brought to De Pere and work began on repair and refurbishment.

The boat was placed in service for the 2024 season and staff training and operation was implemented. The boat is in good working condition; however, the collar and motors are working but nearing end of life. Collar replacement is scheduled for this year leaving the engines as the final major component to replace.



We have obtained several estimates to replace engines, associated gages and rigging, along with basic electronics. The attached estimates are as follows:

1) Dave's Sport and Marine (Yamaha)	\$39,846.38
2) Mr. Outboard (Mercury)	\$40,991.99
3) Bayside Outdoors (Suzuki)	\$45,571.00

We are requesting to purchase the engines and associated work from Dave's Sport and Marine in the amount of \$39,846.38. When the engines are upgraded, the asset should have a 30-year lifespan and today's replacement value would be in excess of \$300,000.

Thank you to all our city staff who put so much time and effort into the refurbishment thus far.

Thank you for your consideration. If you have any questions, please do not hesitate to ask.

DAVE'S SPORT & MARINE

N244 State Hwy 55
Kaukauna, WI 54130
Phone : 920-766-4410
Fax : 920-766-4587
www.davessportmarine.com



TO DE PERE FIRE
.....
.....
.....

DATE
PHONE
COUNTY
E-MAIL

		PRICE	AMOUNT
2025	YAMAHA F150XSA		\$15,020.44
	SER#		
2025	YAMAHA LF150XSA		\$15,606.94
	SER#		
	CONTROLS, CABLES, DISPLAY, ETC.		\$6,219.00
	LABOR 20 @150.00		\$3,000.00
	TITLE AND LICENCE FEES		
	SUB-TOTAL		\$39,846.38
	TAX	0.00%	\$0.00
	TOTAL		\$39,846.38
	PAYMENTS		
	AMOUNT DUE		\$39,846.38



QUOTE

Date: 3/13/2025 Sales Init: JJ

Cust First: City of DePere Cust Last: Fire Rescue Department

Phone: 920-445-4802 contact Fire Chief Alan Matzke

Boat Make/Model: 2000 Safeboat 23'

Eng. Make/Model: New Mercury 2025 150XL & 150CXL

PRODUCT: _____

PART #	DESCRIPTION	QTY	PRICE	LABOR	TOTAL
	SS Prop; SS Prop CXL	2	\$1,300.00		\$2,600.00
	Engine Harness	1	\$675.00	1.00	\$865.00
	Lowrance Eagle 9w/triple shot	1	\$749.99	2.40	\$1,205.99
1150F23ED	Mercury 150XL	1	\$10,890.00	13.00	\$13,360.00
1150F24ED	Mercury 150CXL	1	\$11,230.00		\$11,230.00
	Mercury SmartCraft Gauge Kit	1	\$1,087.00	3.10	\$1,676.00
	SeaStar Hydraulic Steering	1	\$2,067.00	8.00	\$3,587.00
	Fuel lines	40	\$4.00	1.00	\$350.00
	Key Switches	2	\$343.00	1.00	\$876.00
	Mercury Binnical Control /twins	1	\$988.00	7.00	\$2,318.00
	Miscellaneous Supplies	1	\$250.00		\$250.00
	SEA STAR TIE BAR	1	\$730.00	1.50	\$1,015.00
	J-BOX	1	\$73.00		\$73.00
	HUB KIT	2	\$227.00		\$454.00
	POWER TRIM CABLE	1	\$33.00	1.00	\$223.00
	SHIFT/THROTTLE	4	\$80.00	1.00	\$510.00
	Dealer service fee	1	\$399.00		\$399.00
	SUB TOTAL		\$33,391.99		\$40,991.99

TOTAL: \$40,991.99

Notes:

Fire department is looking for repower quote: Remove old engines/controls/cables/steering/ gauges. Install (2) New Mercury motors, install throttle/shift, install key switches, install Mercury smart craft gauges both motors, new fuel lines, install new seastar hydraulic steering system. remove old graph at helm / flush mount install new Lowrance graph at helm/ Water test

From:Charlie Fleck <charlie@baysideoutdoorsgb.com>
To:Alan Matzke <amatzke@deperewi.gov>

Good morning

Below is the quote for the repower and new electronic steering system installation as requested.

Twin Suzuki DF150APX5 outboards.....MSRP \$18,339 X2=\$36,678 after discount X2=\$29,800.
Dual Station Suzuki SPC 2.0 SMG4 Rigging Kit / Dual SS props & necessary comp.\$5773.
U-flex single station /dual ram Hydraulic/Electronic complete steering system.....\$6118.
Garmin 93SV w/Navionics + U.S. Inland Mapping.....\$1150.
Miscellaneous hardware.....\$250.00
Estimated labor to un-install and re-rig all components16hrs @ \$155. =\$2480
Total without tax\$45,571.

* Prices are subject to fluctuation up or down depending on current rebates and tariffs.

Please let me know if you have any questions.

Thank you

Charlie Fleck

President

(P) 920.661.9500

(F) 920.661.9506

1613 W. Deerfield Ave

Green Bay WI 54313

www.baysideoutdoorsgb.com

www.lynxlakeresort.com



City of De Pere, Wisconsin

I.7

Request for Finance/Personnel Committee Action

MEETING DATE: April 8, 2025
DEPARTMENT: Human Resources
FROM: Shannon Metzler, Human Resources Director
SUBJECT: Consideration and Possible Action on Approval of Tentative Agreement for changes to Collective Bargaining Agreement with De Pere Police Benevolent Association (1/1/2024-12/31/2026).*
RECOMMENDED ACTION: Motion to Approve Tentative Agreement and forward to the Common Council with a Ratifying Resolution.

The City of De Pere and the De Pere Police Benevolent Association have had a series of recent meetings and discussions concerning various language changes to multiple sections of the parties' Collective Bargaining Agreement for January 1, 2024, through December 31, 2026.

Additionally, the parties have come to a proposed agreement on wage increases for the years 2024, 2025, and 2026. The City's bargaining team is recommending approval of these language changes as shown in the attached Tentative Agreement, along with the wage increases, to be incorporated into a successor Collective Bargaining Agreement.

ATTACHMENTS:

City of De Pere Police 2024-2026 Tentative Agreement - March 14 2025(42418046.1)

**City of De Pere and
De Pere Police Benevolent Association
TENTATIVE AGREEMENT**

March 14, 2025

1. **Duration.** Amend the agreement to reflect a three-year term from January 1, 2024, to December 31, 2026, and amend the other dates as necessary in the agreement to reflect this term.
2. **Article 32 (Employment Separation).**

- A. Add language identifying the requirement that employees work the final day of employment, as follows.

Resignation. To resign in good standing, an employee shall submit his/her resignation in writing to the Chief of Police two (2) weeks in advance of the effective date of his/her resignation. The final two weeks of all notices shall be exclusive of any accrued paid time off taken unless for unavoidable circumstances, or if approval is obtained from the Chief after the resignation or retirement notice is received. Employees resigning or retiring from their position may not extend their final date of employment using unused paid time off (i.e. vacation, floating holiday, sick). The employee's last day of employment shall be defined as the last day the employee is physically at work unless there are extenuating circumstances as approved by the Human Resources Director. Employees who submit an irrevocable written notice at least 90 days before the employee's identified date of resignation or ~~their anticipated date of~~ retirement shall be awarded an additional three vacation days at the employee's current rate of pay to be paid out with the employee's last paycheck.

3. **Article 12 Salaries; Wage Schedule.**

- a. **Update Table.** Revise language so that hourly rate is also reflected in addition to the monthly rate in the wage schedules.
- b. **Wage increases.** Across the board wage increases effective the first full payroll after the specified date all as set forth below.

2024 – 5.0% as of January 1, 2024

2025 – 3.0% as of January 1, 2025

2026 – 2.0% as of January 1, 2026 and 1.0% as of July 1, 2026

4. **Article 8 (Hours of Work).**

- A. Add language concerning light duty and scheduling consistent with the City's process for light duty, as follows:

Temporary light duty assignments may be made available to employees who, because of injury, illness, or other medical condition, are temporarily unable to perform their regular assignments, but who are capable of performing alternative duty assignments.

Light duty may be granted upon proper submission of medical documentation of the employee's injury or illness by a licensed medical provider. The medical documentation should include the nature of the injury or illness and the duties the employee is not capable of performing. Temporary light duty is strictly temporary and normally will not exceed 60 days in duration; light-duty for matters related to pregnancy may last beyond the usual 60 day duration limitation in order to comply with the Pregnant Workers Fairness Act.

The availability of light duty assignments is exclusively determined by the Chief or their designee and is not intended to constitute a long-term assignment. The Chief or their designee reserves the right, as its sole discretion, to determine when light duty assignments are available, who is assigned, and how long any assignment will be available.

Employees with work-related injuries or illnesses will be given preference to light duty assignments over employees with non-work-related injuries or illnesses. No specific positions or assignments within the department are established for use as a temporary light duty assignment nor will any existing position be designated or utilized exclusively for employees on temporary light duty.

Light duty assignments will generally be assigned to day shift hours on a Monday-Friday schedule. Employees working light duty will maintain the regular 38.5-hour work week for salary purposes. Transition from a 6/3 rotation shift to the light duty schedule will be calculated to result in no net gain or loss of hours for employees. Non-shift personnel will maintain their regular 40-hour work week for salary purposes and will maintain their usual Monday-Friday schedule.

Employees with work-related injuries or illnesses will be allowed to work on holidays at the holiday pay rate if they were originally scheduled to work on their regular rotation on that holiday. Employees with non-work-related injuries or illnesses will not be allowed to work light duty on holidays when city hall is closed and shall use benefit time off.

If the employee returns to a temporary light duty assignment, the employee must make sure that he or she does not go beyond either the duties of the job or the physician's restrictions. If the employee's restrictions change at any time, he or she must notify his or her supervisor at once and give the supervisor a copy of the new medical release.

5. **Article 12 (Salaries).**

- A. Delete the following language on page 11 under Wage Schedule as this language is no longer followed by the parties:

~~Should the canine unit be kenneled or require boarding at a location other than the handler's residence, the aforementioned stipend shall be prorated for such time the canine unit is in the care of the handler.~~

6. **Article 18 (Wisconsin Retirement System).**

- A. Delete the following language on Page 15 concerning WRS contributions as it is no longer needed.

The City will pay the employer's share to the Social Security Fund, Retirement Fund, and the life insurance premiums according to the laws of the State and the United States. ~~and, in addition, will pay the employee's contribution to the Wisconsin Retirement Fund up to the following maximum amounts:~~

January 1, 2014 — \$115 biweekly
July 1, 2014 — \$90 biweekly
October 1, 2014 — \$65 biweekly
January 1, 2015 — No further contribution

7. **Article 27 (Alcohol and Controlled Substance Testing).** Update schedule of current drugs applicable to policy on Pages 14-15 of Exhibit B to CBA, as follows:

Exhibit B

B. Testing for Controlled Substances

The Employer has established its anti-drug program through this Policy and strictly prohibits the unlawful manufacture, distribution, dispensing, possession or unauthorized use of a controlled substance in the workplace. Further, any abnormal conduct that may create a reasonable suspicion that an employee is under the influence of a controlled substance is addressed in the Reasonable Suspicion Testing section described previously in this Policy.

For purposes of this Policy, the employer shall test for the following concentrations of alcohol or controlled substances, which shall be considered a positive test when using an EMT immunoassay drug screening test:

Alcohol	0.04%
Amphetamines	500 ng/ml
Barbiturates	200 ng/ml
Cocaine	150 ng/ml
Opiates	300 ng/ml
THC	100 ng/ml
PCP	25 ng/ml
Benzodiazepines	200 ng/ml
Methadone	300 ng/ml

Concentrations of alcohol or controlled substances at or above the following levels shall be considered a positive test result when performing a confirmatory GC/MS test on a urine specimen tested positive using a technological different initial screening method.

Alcohol	0.04%
Marijuana Metabolite*	15
Cocaine Metabolite**	150 100
Opiates	
Morphine***	300
Codeine	300
Phencyclidine	25
Amphetamines:	
Amphetamine	500 250
Methamphetamine	500

*Delta-9 tetrahydrocannabinol -9- carboxylic acid

**Benzoylcegonine

***25 ng/ml if immunoassay-specific for free morphine

The drug screen panel is subject to modification as required by the Federal Regulations referenced above.

8. **Article 35 (Grievance Procedure).** Modify Step 2 to state as follows:

(Step 2) If the grievance is not satisfactorily resolved at Step 1, the written grievance may be appealed and submitted to the Human Resources Director for the Finance Committee within five (5) calendar days of receipt of the Chief's decision.

9. **Memorandums of Understanding.** Extend the Canine Officer Schedule Memorandum of Understanding and incorporate the Community Policing MOU and the Association Meeting MOU as provided in each MOU.
10. **Housekeeping.** Update mutually agreed upon format and language changes of the contract for consistency purposes, including, but not limited to: capitalization, header format, hyphens, underscoring, numbering, update titles/names, etc., and remove any references to outdated information (that is, maintain relevant/most up-to-date information). For example, update, delete, or change position titles for Traffic Officer, Community Resource Officer to Community Police Officer and School Liaison Officer to School Resource Officer, and update names for signatures on the contract.
11. **Withdrawal with Prejudice of Pending Prohibited Practice Claim.** Immediately following ratification, the Union shall withdraw, with prejudice, the prohibited practice claim dated August 7, 2024 and any related claims and the Union covenants and commits to not filing any separate claims related to allegations in that claim.



City of De Pere, Wisconsin

I.8

Request for Finance/Personnel Committee Action

MEETING DATE: April 8, 2025
DEPARTMENT: Human Resources
FROM: Shannon Metzler, Human Resources Director
SUBJECT: Consideration and Possible Action on Approval of Tentative Agreement for changes to Collective Bargaining Agreement with De Pere Professional Firefighter's Association IAFF Local #141 (1/1/2024-12/31/2026).*

RECOMMENDED ACTION: Motion to Approve the Tentative Agreement and to forward to the Common Council with a Ratifying Resolution.

The City of De Pere and the De Pere Professional Firefighter's Association have had a series of recent meetings and discussions concerning the parties' Collective Bargaining Agreement for January 1, 2024, through December 31, 2026. Additionally, the parties have come to a proposed agreement on wage increases for the years 2024, 2025, and 2026. The City's bargaining team is recommending approval of the changes as shown on the attached Tentative Agreement, along with the approval of wage increases to be incorporated into a successor Collective Bargaining Agreement.

ATTACHMENTS:

City of De Pere Fire 2024-2026 Tentative Agreement - March 14 2025(42418169.1)

**City of De Pere and
De Pere Professional Firefighters' Association,
International Association of Firefighters (IAFF) Local #141
TENTATIVE AGREEMENT**

March 14, 2025

1. **Duration.** Amend the agreement to reflect a three-year term from January 1, 2024, to December 31, 2026, and amend the other dates as necessary in the agreement to reflect this term.
2. **Article 12 Salaries.**
 - a. **Wage increases.** Across the board wage increases effective the first full payroll after the specified date all as set forth below.

2024 – 5.0% as of January 1, 2024
2025 – 3.0% as of January 1, 2025
2026 – 2.0% as of January 1, 2026 and 1.0% as of July 1, 2026



City of De Pere, Wisconsin

I.9

Request for Finance/Personnel Committee Action

MEETING DATE: April 8, 2025
DEPARTMENT: Finance
FROM: Pamela Manley, Finance Director
SUBJECT: Cash and Investments Report for February 28, 2025.
RECOMMENDED ACTION: Review

I have attached a summary of the City's Cash and Investments for your information and review as of February 28th, 2025. I have also attached last year's monthly summary of the accounts, so you can see comparable activity throughout the course of the year for all accounts. The City's investment return through February was \$220,150.62. In February the City concluded tax collection paying just over \$15 million to the other taxing jurisdictions as part of the February tax settlement. A transfer was made from our LGIP account to our General Account for \$333,376.74 to cover additional ARPA purchases occurring in 2024. The Associated Bank Trust and Charles Schwab Investments both saw increases due to dividend/interest payments that were received. Feel free to contact me should you have any questions about this.

ATTACHMENTS:

Investment Summary-Feb. 2025, Yearly Summary-Feb. 2025, Yearly Summary-Dec. 2024

DE PERE CASH AND INVESTMENTS SUMMARY

FEBRUARY 28, 2025

CASH ACCOUNTS

CHECKING ACCOUNTS	BALANCE
CITY CHECKING	\$ 6,920,951.59
REAL & PPT TAX CHECKING	\$ 12,616,784.81
HEALTH CHECKING	\$ 536,579.01
DENTAL CHECKING	\$ 83,340.12
TOTAL CASH	\$ 20,157,655.53

INVESTMENTS

	JAN 1 BALANCE	BALANCE	INTERST AND APPRECIATION	RATE OF RETURN
LGIP	11,214,276.91	\$ 11,390,123.60	\$ 82,515.56	4.40%
ASSOCIATED BANK TRUST	5,319,990.57	\$ 5,377,179.54	\$ 57,188.97	6.45%
CHARLES SCHWAB INVESTMENTS	6,686,473.66	\$ 6,739,321.78	\$ 52,848.12	4.74%
MONEY MARKET	3,909,023.89	\$ 3,936,621.86	\$ 27,597.97	4.45%
TOTAL INVESTMENTS	27,129,765.03	\$ 27,443,246.78	\$ 220,150.62	

TOTAL CASH AND INVESTMENTS	\$ 47,600,902.31
-----------------------------------	-------------------------

NOTE: The City budgeted \$2,000,000 for general fund revenues in the 2025 Adopted Budget.

DE PERE CASH AND INVESTMENT YEARLY SUMMARY
FEBRUARY 28, 2025

	31-Jan-2025	28-Feb-2025	31-Mar-2025	30-Apr-2025	31-May-2025	30-Jun-2025
CHECKING ACCOUNTS						
CITY CHECKING	8,755,035.10	6,920,951.59	-	-	-	-
REAL & PPT TAX CHECKING	27,032,373.51	12,616,784.81	-	-	-	-
HEALTH CHECKING	474,815.36	536,579.01	-	-	-	-
DENTAL CHECKING	87,718.73	83,340.12	-	-	-	-
TOTAL CASH	\$ 36,349,942.70	\$ 20,157,655.53	\$ -	\$ -	\$ -	\$ -
INVESTMENTS						
LGIP	11,684,103.57	11,390,123.60	-	-	-	-
ASSOCIATED BANK TRUST	5,342,673.83	5,377,179.54	-	-	-	-
CHARLES SCHWAB INVESTMENTS	6,707,443.35	6,739,321.78	-	-	-	-
MONEY MARKET	3,923,499.08	3,936,621.86	-	-	-	-
TOTAL INVESTMENTS	\$ 27,657,719.83	\$ 27,443,246.78	\$ -	\$ -	\$ -	\$ -
TOTAL CASH AND INVESTMENTS	\$ 64,007,662.53	\$ 47,600,902.31	\$ -	\$ -	\$ -	\$ -

	31-Jul-2025	31-Aug-2025	30-Sep-2025	31-Oct-2025	30-Nov-2025	31-Dec-2025
CHECKING ACCOUNTS						
CITY CHECKING	-	-	-	-	-	-
REAL & PPT TAX CHECKING	-	-	-	-	-	-
HEALTH CHECKING	-	-	-	-	-	-
DENTAL CHECKING	-	-	-	-	-	-
TOTAL CASH	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
INVESTMENTS						
LGIP	-	-	-	-	-	-
ASSOCIATED BANK TRUST	-	-	-	-	-	-
CHARLES SCHWAB INVESTMENTS	-	-	-	-	-	-
MONEY MARKET	-	-	-	-	-	-
TOTAL INVESTMENTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL CASH AND INVESTMENTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

DE PERE CASH AND INVESTMENT YEARLY SUMMARY
DECEMBER 31, 2024

	31-Jan-2024	29-Feb-2024	31-Mar-2024	30-Apr-2024	31-May-2024	30-Jun-2024
CHECKING ACCOUNTS						
CITY CHECKING	8,658,164.85	6,546,435.65	4,338,133.91	3,966,560.48	1,415,991.35	2,392,194.50
REAL & PPT TAX CHECKING	15,641,771.63	6,514,236.72	1,000.00	1,000.00	1,000.00	1,000.00
HEALTH CHECKING	1,418,730.29	1,410,173.44	1,378,539.11	1,293,115.07	1,284,101.22	750,258.10
DENTAL CHECKING	86,128.58	87,106.05	86,124.74	87,017.04	89,457.87	89,789.67
TOTAL CASH	\$ 25,804,795.35	\$ 14,557,951.86	\$ 5,803,797.76	\$ 5,347,692.59	\$ 2,790,550.44	\$ 3,233,242.27
INVESTMENTS						
LGIP	17,866,153.79	17,658,776.95	18,936,797.56	19,341,730.48	20,398,737.41	20,438,939.67
ASSOCIATED BANK TRUST	5,132,918.84	5,127,445.37	5,145,143.67	5,140,481.49	5,170,236.11	5,193,827.26
CHARLES SCHWAB INVESTMENTS	6,446,202.84	6,430,877.60	6,439,451.41	6,448,746.66	6,472,755.90	6,498,760.90
MONEY MARKET	1,078,564.79	1,083,162.54	7,619,525.82	7,653,126.65	7,687,904.44	7,721,680.79
TOTAL INVESTMENTS	\$ 30,523,840.26	\$ 30,300,262.46	\$ 38,140,918.46	\$ 38,584,085.28	\$ 39,729,633.86	\$ 39,853,208.62
TOTAL CASH AND INVESTMENTS	\$ 56,328,635.61	\$ 44,858,214.32	\$ 43,944,716.22	\$ 43,931,777.87	\$ 42,520,184.30	\$ 43,086,450.89

	31-Jul-2024	31-Aug-2024	30-Sep-2024	31-Oct-2024	30-Nov-2024	31-Dec-2024
CHECKING ACCOUNTS						
CITY CHECKING	6,088,631.77	727,881.28	7,802,828.00	3,708,330.68	1,972,185.65	2,073,383.90
REAL & PPT TAX CHECKING	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	16,203,476.44
HEALTH CHECKING	1,011,765.80	956,627.05	918,795.55	857,501.63	824,097.82	701,634.09
DENTAL CHECKING	80,528.88	82,770.58	83,519.61	87,013.58	88,453.72	90,200.19
TOTAL CASH	\$ 7,181,926.45	\$ 1,768,278.91	\$ 8,806,143.16	\$ 4,653,845.89	\$ 2,885,737.19	\$ 19,068,694.62
INVESTMENTS						
LGIP	20,971,586.74	17,522,703.29	14,947,368.10	14,967,477.54	14,919,096.80	11,214,276.91
ASSOCIATED BANK TRUST	5,241,542.35	5,282,497.12	5,320,173.83	5,295,505.14	5,312,234.41	5,319,990.57
CHARLES SCHWAB INVESTMENTS	6,560,741.25	6,617,696.47	6,659,345.09	6,656,922.28	6,665,667.33	6,686,473.66
MONEY MARKET	7,756,736.36	7,791,951.07	7,824,800.74	7,857,010.73	7,887,021.96	3,909,023.89
TOTAL INVESTMENTS	\$ 40,530,606.70	\$ 37,214,847.95	\$ 34,751,687.76	\$ 34,776,915.69	\$ 34,784,020.50	\$ 27,129,765.03
TOTAL CASH AND INVESTMENTS	\$ 47,712,533.15	\$ 38,983,126.86	\$ 43,557,830.92	\$ 39,430,761.58	\$ 37,669,757.69	\$ 46,198,459.65



City of De Pere, Wisconsin

I.10

Request for Finance/Personnel Committee Action

MEETING DATE: April 8, 2025
DEPARTMENT: Development Services
FROM:
SUBJECT: Consideration and Possible Action on Award of contract to Avineon, Inc. for GIS Consulting Services.*
RECOMMENDED ACTION: Motion to Approve and forward to the Common Council for approval of Consultant Agreement.

ATTACHMENTS:

Memo - RFP - GIS Utility Network Migration - Finance and Personnel Committee - 040825,
RFP for GIS Consulting Services - Release 020525, Proposals - RFP - GIS Services - Top 3 for
FP Agenda - 040825

CITY OF DE PERE MEMO



To: James Boyd, Mayor
Finance and Personnel Committee Members
From: Kristen Vincent, GIS Manager
Date: March 28, 2025

RE: **Consideration and Possible Action to Award a Contract for GIS Consulting Services to Avineon, Inc.**

Summary

On February 5, 2025, the Development Services Department – GIS Division released for distribution a Request for Proposals (RFP) for qualified GIS services firms to assist the City with an ArcGIS Enterprise upgrade, Portal for ArcGIS Implementation, and Esri Utility Network migration. The purpose is to upgrade to a new required data model, phase out soon-to-be unsupported software, and streamline operations. Services provided will include:

- Task 1: Esri ArcGIS Enterprise Upgrade
- Task 2: Esri Portal Installation
- Task 3: Esri Utility Network Migration
- Task 4: Continuing Support for 6 Months

City staff received a total of 10 RFP responses from the following agencies:

- Argis Solutions, Inc.
- Avineon, Inc.*
- Cloudpoint Geospatial, Inc.
- DCSE, Inc.*
- ENTRUST Solutions Group
- Mi-Tech Services, Inc.
- Michael Baker International
- Pro-West & Associates
- SAM
- Timmons Group

A review team consisting of the GIS Manager and GIS Analyst completed an initial review of the proposals to identify the top 3 firms, underlined above with proposals included. A second review team consisting of the Interim City Attorney, Development Services Director, IT Director, and GIS Manager completed a review of those 3 firms. Reference checks and follow-up questions were also conducted with the top 2 firms, noted with an (*) above. Based on the content of the proposal and the ability to accomplish the desired tasks, the committee selected the proposal from **Avineon, Inc.** to move forward as the GIS consultant.

Timeline and Budget

Avineon, Inc. will provide GIS consulting services to the City of De Pere for an estimated 15 months. The proposal includes the costs of each task for a total of \$140,000, which includes accepting the optional services described in the proposal and is \$25,000 below the 2025 budgeted allocation.

Staff Recommendation

Recommend approval of the proposal from Avineon, Inc. for GIS services as outlined in the RFP and forward the recommendation to the Common Council for approval.



REQUEST FOR PROPOSALS: ESRI UTILITY NETWORK MIGRATION, PORTAL INSTALL, AND ARCGIS ENTERPRISE UPGRADE

**City of De Pere, Wisconsin
Development Services Department - GIS Division**

Issued: February 5, 2025

Proposals Due: March 7, 2025 by 5:00 P.M. CST

A. INTRODUCTION AND SUMMARY

Through this Request for Proposals (RFP), the City of De Pere (City) Development Services Department – GIS Division is seeking proposals from qualified professional Geographic Information Systems (GIS) services firms to provide assistance with an ArcGIS Enterprise upgrade, Portal for ArcGIS implementation, and Esri Utility Network migration.

The City has a robust GIS dataset with 30 feature datasets totaling over 600 feature classes that include a mix of production, reference, and archival data. The number of web services managed in ArcGIS Service Manager totals 85 (close to 50 are active services). There are also numerous hosted feature layers that reside solely in ArcGIS Online. The City has had an Esri Small Government Enterprise Agreement since 2018. There are currently 2 primary GIS editors (12 total ArcGIS Desktop users) and more than 50 ArcGIS online users with varying roles. The current GIS infrastructure is running on SQL Server 2022.

Submissions must be received by the Development Services Department – GIS Division at City Hall, 335 S. Broadway, De Pere, WI 54115 no later than 5:00 p.m. on March 7, 2025.

The City will award a contract to one (1) full-service firm to upgrade ArcGIS Enterprise from 10.9.1 to 11.3, implement Portal for ArcGIS, and perform an Esri Utility Network migration. The initial contract may be extended at the option of the City.

B. COMMUNITY OVERVIEW

The approximately 25,000 people who call the City of De Pere, Wisconsin home know that the community provides a high quality of life in the Greater Green Bay metropolitan area. The excellent schools, a dynamic downtown, successful business parks, and safe neighborhoods served by ample parks and natural areas have resulted in considerable loyalty and community pride among

residents. The residences, businesses, and commercial areas are connected with a transportation and green space network that accommodates cars, bikes, and pedestrians. The beautiful Fox River is the focal point of the City Center, and the Claude Allouez Bridge unites the two sides of our dynamic downtown. Whether you are on the east side or west side, historic buildings thoughtfully blend with new redevelopment to provide a mix of housing, employment, shopping, dining, and entertainment.

The City of De Pere is 12.77 square miles with sanitary sewer, storm sewer, and water serviced throughout. Future growth within this service area is also anticipated. The GIS Division models this extensive network with the current feature counts displayed in Appendix A.



C. SCOPE OF WORK

This RFP is to solicit for a qualified consultant who is expected to provide a wide range of GIS services to the City. The scope of work to be performed under this contract by the consultant is expected to include:

Phase 1: Esri ArcGIS Enterprise Upgrade

As part of this task, the consultant will work closely with the City to upgrade our ArcGIS Enterprise software from version 10.9.1 to 11.3.

Phase 1 tasks include:

1. Conduct a pre-upgrade meeting with the City's GIS Division and IT Department to understand the background of the City's GIS infrastructure and upgrade history.
2. Conduct the upgrade with timely communication throughout the process.
3. Ensure all existing data, applications, processes, etc. are functioning properly with City staff providing final approval that all systems are working properly.

Phase 1 deliverables include:

1. A document in PDF format describing the steps taken to perform the upgrade.
2. An action plan in PDF format detailing recommendations for a future upgrade schedule, in line with a City this size and consultant and Esri recommendations.

Phase 2: Esri Portal Installation

As part of this task, the consultant will work closely with the City to install Esri's ArcGIS Enterprise Portal ("Portal") based on the needs of the City, determine an editing/update workflow for City data, including utility data (Sanitary Sewer, Storm Sewer, and Water), and provide training on that workflow.

Phase 2 tasks include:

1. Conduct pre-installation meetings with the City to understand the needs of, and uses for, Portal with a focus on City utility data as it relates to Esri's Utility Network data model.
2. Conduct pre-installation meetings with the City to understand the overall needs of, and uses for, Portal with a focus on non-utility City GIS data.
3. Install Esri's Portal for ArcGIS, and ensure it is working properly.
4. Provide recommendations for a versioning & editing workflow to meet the City's needs for City utility data in the Utility Network, which may include automation workflows.
5. Provide recommendations for a versioning & editing workflow to meet the City's needs for non-utility City GIS data, which may include automation workflows.
6. Assist in the implementation of chosen recommendation(s).
7. Connect Portal to ArcGIS Online if deemed appropriate based on the City's needs.
8. Migrate all City web services from the ArcMap service runtime to the ArcGIS Pro service runtime for use in the Portal environment.

9. Conduct a minimum of three (3) training sessions with City staff on the versioning/editing/service workflows, including introducing users to ArcGIS Pro.

Phase 2 deliverables include:

1. A fully implemented Portal environment with all City web services compatible with ArcGIS Pro.
2. A detailed report in PDF format documenting the outcomes of the pre-installation meetings/focus group sessions with the various City stakeholder groups.
3. Recommendations in PDF format detailing the City's options for versioning and editing within the Portal environment.
4. A document in PDF format describing the steps taken to perform the Portal installation and service migration.
5. A detailed training guide in PDF format detailing how to perform the City's common tasks in ArcGIS Pro, specific to each department/stakeholder group.

Phase 3: Esri Utility Network Migration

With this task, the consultant will work closely with the City to migrate the City's Sanitary Sewer, Storm Sewer, and Water utility data to the Esri Utility Network, perform data cleanup, and provide user training.

Phase 3 tasks include:

1. Conduct pre-migration meetings with the City to understand the overall needs of implementing the Utility Network.
2. Provide recommendations for Utility Network features to implement with final determination to be made by the City. Special notes:
 - a. Including integration with Central Brown County Water Authority dataset. (Water)
 - b. Integration with EH Wachs valve turning device. (Water)
3. Conduct a data readiness analysis on all City Sanitary Sewer, Storm Sewer, and Water GIS data.
4. Assist the City in performing data cleanup in preparation for Utility Network migration.
5. Conduct the actual migration into the Utility Network.
6. Conduct a minimum of three (3) training sessions with City staff on the Utility Network structure, editing, and capabilities.

Phase 3 deliverables include:

1. The City's Sanitary Sewer, Storm Sewer, and Water GIS data fully implemented into the Utility Network on our server(s) with new web services created.
2. A detailed report in PDF format documenting the outcomes of the pre-installation meetings/focus group sessions with the various City stakeholder groups.
3. Recommendations in PDF format detailing the City's options for implementation and chosen features/customizations.

4. A document in PDF format describing the steps taken to perform the Utility Network migration.
5. A detailed training guide in PDF format detailing how to perform the City's common tasks in the Utility Network framework, specific to each department/stakeholder group.

Phase 4: Continuing Support

The consultant will provide support to the City for six (6) months post-implementation for matters involving Tasks 1-3.

Throughout the entire project, the consultant shall be in regular communication with the City, including, at minimum, weekly project meetings with appropriate City parties, determined by the current phase of the project.

D. SUBMITTAL QUESTIONS

All questions shall be submitted in written form to the contact information provided below by 5:00 p.m. Central Time on Friday, February 14, 2025. Answers will be provided via the City website as part of an addenda to the RFP as they become available. Multiple addenda may be released.

E. MINIMUM QUALIFICATIONS

The firm must meet the following minimum qualifications in order to be considered. Submissions that do not meet these requirements will not be reviewed.

1. The firm must be a current Esri Business Partner having completed Enterprise upgrades, Portal implementations, and Utility Network migrations under that status.
2. The firm must assign staff to the project that have prior experience completing the tasks listed in *C. Scope of Work*.
3. A minimum of one (1) staff member on the project must be a certified GISP (GIS Professional).

F. SUBMISSION REQUIREMENTS

The City wishes to evaluate each proposal under the same uniform review standards. Proposals for this project should be organized in the following order and contain all of the following information: Respondent shall submit one (1) electronic copy in PDF format through the City's online portal or email to the contact listed below. In order to be considered, proposals must be received no later than 5:00 p.m., Central Time, Friday, March 7, 2025 and delivered to:

Kristen Vincent
GIS Manager

kvincent@deperewi.gov

or

[\[De Pere, WI\] RFP Application \(seamlessdocs.com\)](https://seamlessdocs.com)

Proposals should include all of the following:

1. **Qualifications and Experience:** This section shall include the firm's name, area of expertise, a brief history of the firm, size, number of office locations, and business address of the office responsible for the contract. The name, address, and telephone number of the contact person responsible for their submittal shall be included. In addition, the following shall be included:
 - a) Proof of ESRI Partner Status, including dates that status has been held.
 - b) General description of firm's history providing GIS services.
 - c) Summary of experience in ArcGIS Enterprise version upgrades, including number of years performing upgrades and number of upgrades completed in the last three (3) years.
 - d) Summary of experience in Portal for ArcGIS implementations, including conducting user trainings, number of years performing implementations, and number of implementations completed in the last three (3) years.
 - e) Summary of experience in Utility Network migrations from the ArcMap/geometric network environment, including conducting user trainings, number of years performing migrations, and number of migrations completed in the last three (3) years.
2. **Technical Approach:** Description of the firm's technical approach to complete the GIS tasks required as described in the scope of work.
 - a) Provide your understanding of this project and requirements as depicted in this document and identify key issues from the consultant's perspective.
 - b) Provide a description of how your firm will manage and implement all phases of this project, including the firm's approach and methodology to planning, organization, and management. Include how this approach is expected to achieve good results for this project.
 - c) Address all scope of work issues and indicate how the consulting firm will go about assisting and coordinating the project with the City.
3. **Project Staff:** Description of the following:
 - a) Brief biographical summaries of related experiences for staff members working on the project including their experience with similar ArcGIS Enterprise upgrades, implementing Portal for ArcGIS, and Utility Network migrations from geometric networks.
 - b) Organizational chart.
 - c) Resumes for key project personnel assigned to this project. Indicate the project manager who will be responsible for ensuring the project success.
4. **Budget:** Description of the following:
 - a) Rates for Phase 1

- b) Rates for Phase 2 broken down as follows:
 - 1. Implementing Portal for the Utility Network
 - 2. Implementing Portal for all other GIS data
 - c) Rates for Phase 3 broken down as follows:
 - 1. Sanitary Sewer data migration and implementation
 - 2. Stormwater data migration and implementation
 - 3. Water data migration and implementation
 - d) Rates for Task 4
5. **Municipal Experience and Knowledge:** Demonstrate knowledge of GIS and utility GIS data as it relates to municipal government systems and goals.
 6. **References:** Project summary of relevant GIS experience and contact information for three (3) recent (completed within the past three years) client references with name, email address, and phone number for each.

G. SELECTION PROCESS

The following describes the anticipated general review process.

1. Proposal review.
2. Interviews (if necessary).
3. Staff recommendation to the Finance and Personnel Committee.
4. Common Council approval of the selected consulting services firm.
5. Finalize/execute service contract.

H. SELECTION CRITERIA

The selection process will involve the following primary steps. Applicants should carefully examine the entire RFP, any addenda, and all related materials and data referenced in the RFP. Applicants should become fully aware of the nature of the work and the conditions while performing the work. Each of the following review criteria will be taken into consideration by the review committee in the evaluation of the proposals. The proposal evaluation will be weighted as shown below:

Selection Criteria	Points
Project Understanding and Approach	30
Interviews and References	20
Pricing	20
Qualifications and Experience	20
Quality and Completeness of Submission	10
Total	100

The selection team will recommend a GIS consulting services proposal and firm to the Common Council based on the Selection Criteria.

The Common Council reserves the right to reject any and all proposals and select a GIS consulting services firm of their choosing. When a selection decision is made, the City expects to enter negotiations with the selected firm to complete a service contract. Upon approval and execution of a service contract, all other competing firms will be notified of the selection in writing. The City is committed to a cooperative working relationship with the selected GIS consulting services firm.

I. TENTATIVE TIMELINE

The following is the conceptual timeline for the process (subject to change):

Release of Request for GIS Consulting Services	February 5, 2025
Written questions submitted to kvincent@deperewi.gov	February 14, 2025, 5:00 p.m.
Reponses to questions available	February 21, 2025
Submission deadline	March 7, 2025, 5:00 p.m.
Follow Up Information and Interviews	Week of March 24, 2025
Presentation of Proposals to Finance/Personnel Committee	April 8, 2025
Recommendation to Common Council	April 15, 2025
Anticipated project start	Week of April 28, 2025

J. De Pere Resource Links & Attachment

City of De Pere:

<https://www.de-pere.org/>

DIME – De Pere Interactive Mapping Engine: This resource can be used to visualize scope of sanitary sewer and stormwater data, services to be transferred to the ArcGIS Pro runtime, and City service area.

<https://www.deperewi.gov/maps>

A sample consultant agreement is attached for reference.

K. STATEMENT OF RIGHTS AND UNDERSTANDING

The City reserves, and may, in its sole discretion, exercise any and all of the following rights and options with respect to this RFP:

1. To accept, reject, or negotiate modifications to, any and all proposals;
2. Submission of a proposal does not bind the City to any action or any applicant;
3. To issue clarifications and propose addenda;
4. To modify any timeline;
5. To negotiate with one or more applicants;
6. To select any submission as the basis for negotiations and to negotiate with applicants for amendments or modifications to their submission;
7. To conduct investigations with respect to the qualifications of each applicant;

8. All materials submitted in response to this RFP become the property of the City;
9. Any proposal/response submitted in conjunction with this request will become public record;
10. The City is not responsible for costs associated with preparing proposals, or for cost incurred before a formal notice to proceed is issued if a contract is awarded;
11. No legal liability is assumed or shall be implied with respect to the accuracy or completeness of this RFP. This RFP has been prepared by the City and does not purport to be all-inclusive or to contain all of the information a prospective applicant may desire. No legal liability is assumed or shall be implied with respect to the accuracy or completeness of this RFP.

APPENDIX A:

Current feature counts (though continuously updating) of primary utility data are shown below. Please note: This list is not all inclusive, but rather, contains the major features of the City's utility data to demonstrate scope.

1. Sanitary Sewer Features
 - a. Abandoned Gravity Mains – 67 total features
 - b. Abandoned Manholes – 57 total features
 - c. Fittings – 555 total features
 - d. Force Mains – 29 total features
 - e. Gravity Mains – 2,736 total features
 - f. Lateral Lines – 406 total features
 - g. Lateral Points – 399 total features
 - h. Manholes – 2,592 total features
2. Storm Sewer Features
 - a. Abandoned Gravity Mains – 108 total features
 - b. Abandoned Manholes – 7 total features
 - c. Catch Basins – 4,156 total features
 - d. Discharge Points – 568 total features
 - e. Fittings – 1,005 total features
 - f. Force Mains – 1 total feature
 - g. Gravity Mains – 7,531 total features
 - h. Lateral Lines – 440 total features
 - i. Lateral Points – 429 total features
 - j. Manholes – 2,636 total features
3. Water System Features
 - a. Abandoned Lateral Points / Curb Stops – 7 total features
 - b. Abandoned Pressurized Mains – 1,079 total features
 - c. Abandoned System Valves – 262 total features
 - d. Fittings – 4,440 total features
 - e. Hydrants – 1,399 total features
 - f. Lateral Lines – 1,934 total features
 - g. Lateral Points / Curb Stops – 7,832 total features
 - h. Pressurized Mains – 6,479 total features
 - i. System Valves – 2,318 total features
 - j. Water main breaks (active and inactive) – 762 total features

**AGREEMENT FOR SERVICES BETWEEN THE
CITY OF DE PERE AND _____ (CONSULTANT NAME)
(Project Name)**

THIS AGREEMENT made and entered into this ____ day of _____, 2024, by and between the City of De Pere, a Wisconsin municipal corporation ("City"), and _____ ("Consultant").

WITNESSETH

WHEREAS, the City is in need of _____ (project description) _____; and

WHEREAS, the Consultant has available and offers to provide qualified personnel and facilities necessary to accomplish the work within the required timeframe.

NOW THEREFORE, City and Consultant agree as follows:

I. DESCRIPTION OF PROJECT

The project is as described in the ____ (date) ____ City Request for Proposals (Exhibit A) and Consultant's Proposal thereto dated ____ (date) ____ (Exhibit B), both of which are attached hereto and incorporated by reference. If a conflict exists between Exhibit A and Exhibit B, the terms of Exhibit A shall prevail. If there is a conflict between the terms and conditions of Exhibit A and this Agreement, the terms of this Agreement shall prevail. No standard terms or conditions of Consultant's Proposal are incorporated into this Agreement unless such term is specifically written into the Agreement.

If, during the course of performing the work, City and Consultant agree that it is necessary to make changes in the project as described in the exhibits, such changes will be incorporated into this Agreement only by written amendment, signed by the parties.

II. SCOPE OF CONSULTING SERVICES

Consultant agrees to perform those services described in Exhibits A and B. Any change to the scope of services as identified therein shall be defined in writing and authorized by both parties prior to performing such work. Such writing shall include the scope of work to be done, schedule for commencing and completing the work and the basis for compensation for such work.

III. SCOPE OF CITY SERVICES

City agrees to provide the Consultant items such as existing plans, standard specifications, and other information concerning the project that may be applicable in the design of the project, as are available.

IV. AUTHORIZATION, PROGRESS, AND COMPLETION

In signing this Agreement, the City grants the Consultant specific authorization to proceed with the work described herein.

For special services, the authorization by the City shall be in writing and shall include the definition of the work to be done, the schedule for commencing and completing the work, and the basis for compensation for the work, all as agreed upon by the City and the Consultant.

V. OWNERSHIP AND FORM OF DOCUMENTS

All documents created, maintained or received during the course of this Agreement, including those in electronic form, shall be deemed the property of City and Consultant shall not be considered the owner of any such document nor shall the Consultant retain any common law, statutory, or other right therein, including copyright, patent, or trademark. To that end, Consultant agrees to and hereby does assign and transfer to City all rights, title, and other interests in such drawings, specifications, or other documents, which rights shall include copyright, trademark, or patent rights therein, unless City fails to pay Consultant for such drawings, specifications and other documents, in which case the ownership and all rights shall revert to the Consultant.

City hereby grants Consultant a non-exclusive license to use the documents created pursuant to this Agreement, including any standard details used herein.

Consultant acknowledges that, as the Consultant to City, a Wisconsin municipality, Wis. Stats. §19.36(3) applies to it and records produced by it pursuant to this contract are subject to the public records law to the extent they would otherwise be if maintained by the City. Consultant agrees that, within 10 business days of a written request of City, it shall forward to City any such contract or records maintained by Consultant as are requested by City. Such records shall be in the format requested by City provided that such records are kept and maintained in that format. City shall reimburse Consultant for its reasonable costs incurred in complying with this paragraph.

Consultant further agrees to indemnify the City from all costs City incurs should Consultant fail to comply with these requirements.

VI. AUDITOR ACCESS

Consultant shall, upon request of City or its auditors, provide access to and furnish the auditors with copies of requested records, reports and any other documentation in its possession or custody pertaining to financial transactions, records or other financial information held by Consultant in conjunction with or related to Consultant's obligations under this Agreement.

VII. CONFIDENTIALITY OF INFORMATION

Consultant understands that, during the course of work under this contract, Consultant may become privy to confidential information of City. Consultant shall maintain the confidentiality of all information specifically designated confidential by City unless withholding such information would violate the law, create a significant harm to the public, or create a risk of significant harm to the public.

VIII. TIME FOR COMPLETION

The parties hereto agree that time is of the essence in completion of the project. Should Consultant encounter any circumstances, which, in the Consultant's opinion, will delay their response time, Consultant shall so inform the City as soon as the delay in response time is known.

IX. COMPENSATION

The City agrees to pay, and the Consultant agrees to accept, compensation as identified in Exhibit B, to be paid in a lump sum at the conclusion of the work. Payment to the Consultant is due upon receipt of invoice by the City. Compensation for special services shall be as agreed upon by the City and Consultant and set forth in the written authorization for special services.

X. RESPONSIBILITY OF CONSULTANT

The Consultant is employed to render a professional service only, and any payments made to the Consultant are compensation solely for such services rendered and recommendations made in carrying out the work. The Consultant shall follow the practice of its profession to make findings, opinions, factual presentations, and professional advice and recommendations, consistent with the standard of care expected of professionals in the industry performing similar services on projects of like size and complexity.

XI. NON-DISCRIMINATION

The Consultant agrees that, in performing under this Agreement with the City, it will not discriminate against any employee, applicant for employment or any other person or member of the public on the basis of age, race, creed, color, disability, marital status, sex, national

origin, ancestry, arrest record, conviction record, military service, use or non-use of lawful products off the employer's premises during nonworking hours, declining to attend a meeting or to participate in any communication about religious matters or political matters, or any other basis provided under Wis. Stats. §111.321.

XII. INSURANCE

A. The Consultant shall maintain during the life of the Agreement, the following minimum public liability and property damage insurance to cover claims for injuries, including accidental death, as well as from claims for property damages which may arise from the performance of work under the Agreement as stated below:

1. Comprehensive general liability insurance, including personal injury liability, blanket contractual liability and broad form property damage liability. The combined single limit for bodily injury and property damage shall not be less than \$1,000,000; with additional umbrella liability insurance coverage for a total of not less than \$5,000,000.
2. Automobile bodily injury and property damage liability insurance covering owned, non-owned, rented and hired cars. The combined single limit for bodily injury and property damage shall be not less than \$1,000,000.
3. Statutory workers compensation and employers' liability insurance as required by the state having jurisdiction.

B. Consultant shall also maintain professional liability insurance covering damages to City resulting from errors and omissions of the Consultant. The limit of liability under said policy shall be \$1,000,000 or the total consultant's fee on the project, whichever is greater.

C. Proof of Insurance. The Consultant shall furnish the City with a Certificate of Insurance and additional insured endorsement countersigned by a Wisconsin Resident Agent or Authorized Representative of the insurer indicating that the Consultant meets the insurance requirements identified above. The Certificate of Insurance shall include a provision prohibiting cancellation of said policies except upon 30 days' prior written notice to the City and shall name the City as an additional insured under Consultant's general and professional liability policies for the specific contract or project covered. A copy of the Certificate of Insurance and endorsement shall be delivered to the City prior to execution of the agreement for final approval.

XIII. ALLOCATION OF RISKS

To the fullest extent permitted by law, the Consultant shall indemnify and hold harmless the City, City's officers, directors, partners, and employees from and against any and all costs, losses, and damages (including, but not limited to all fees and charges of engineers, architects,

attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by the negligent acts or omissions of Consultant or Consultant's officers, directors, partners, employees, and Consultant's Consultants in the performance and furnishing of Consultant's services under this Agreement.

To the fullest extent permitted by law, Consultant's total liability to City and anyone claiming by, through or under City for any cost, loss or damages caused in part by the negligence of Consultant or Consultant's subcontractor and in part by the negligence of City or any other negligent entity or individual, shall not exceed the percentage share that Consultant's or Consultant's subcontractor negligence bears to the total negligence of City, Consultant and all other negligent entities and individuals.

XIV. SUBCONTRACTS

The Consultant shall obtain the written consent of the City prior to subcontracting any portion of the work to be performed under this project. The Consultant shall be responsible to the City for the actions of persons and firms performing subcontract work.

XV. ASSIGNMENT

This Agreement is binding on the heirs, successors, and assigns of the parties hereto. This Agreement is not to be assigned by either the City or Consultant without the prior written consent of the other.

XVI. INTEGRATION

This Agreement represents the entire understanding of the City and Consultant as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This Agreement may not be modified or altered except in writing signed by both parties.

XVII. JURISDICTION

This Agreement shall be administered and interpreted under the laws of the State of Wisconsin. Jurisdiction of litigation arising from this Agreement shall be in that state. If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said laws, but the remainder of this Agreement shall be in full force and effect.

XVIII. SUSPENSION OF WORK

The City may suspend, in writing, all or a portion of the work under this Agreement in the event unforeseen circumstances beyond the control of the Consultant make normal progress in the performance of the work impossible. The Consultant may request that work be

suspended by notifying the City, in writing, of circumstances which are interfering with normal progress of the work. If agreed, the time for completion of the work shall be extended by the number of days the work is suspended. In the event that the period of suspension exceeds 90 days, the terms of this Agreement are subject to renegotiation and both parties are granted the option to terminate work on the suspended portion of the project in accordance with Article XIX.

XIX. TERMINATION OF WORK

The City may terminate all or a portion of the work covered by this Agreement for its convenience. Either the City or the Consultant may terminate work in the event the other party fails to perform in accordance with the provisions of this Agreement. Termination of this Agreement is accomplished by 15 days prior written notice from the party initiating termination to the other. Notice of termination shall be delivered by certified mail with receipt for delivery returned to the sender.

In the event of termination, the Consultant shall perform such additional work as is necessary for the orderly filing of documents and closing of the project. The additional time for filing and closing shall not exceed 10 percent of the total time expended on the completed portion of the project prior to the effective date of termination.

The Consultant shall be compensated for the completed portion of the work on the basis of work actually performed prior to the effective date of termination plus the work required for filing and closing. Charges for the latter work are subject to the 10 percent limitation described in this Article.

XX. MEDIATION

All claims, disputes and other matters in question between the parties of this Agreement arising out of or relating to this Agreement or breach thereof, which are not disposed of by mutual agreement of the parties, shall be subject to mediation as a condition precedent to the institution of legal proceedings by either party. If such claim, dispute or other matter involves a lien arising out of the Consultant's services, the Consultant may proceed in accordance with applicable law to comply with a lien notice and filing deadlines prior to resolution of the matter by mediation.

The City and Consultant shall attempt to resolve claims, disputes and other matters in question between them by mediation. A request for mediation shall be filed in writing with the other party to this Agreement. The request may be made concurrently with the filing of a civil action, but mediation shall proceed in advance of legal proceedings.

The parties shall share the mediator's and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon.

Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

XXI. NOTICES

Any notification required or needed under the contract shall be sent via First Class Mail to the following:

If to City:

If to Consultant:

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

(COMPANY NAME)

CITY OF DE PERE, WISCONSIN

By: _____
Name: _____

By: _____
James G. Boyd, Mayor

By: _____
Name: _____

By: _____
Carey E. Danen, City Clerk

Response to De Pere, Wisconsin for Esri Utility Network Migration, Portal Install, and ArcGIS Enterprise Upgrade



Avineon, Inc.
8401 Greensboro Drive, Suite 510, McLean, Virginia 22102
(703) 671-1900
www.avineon.com

Revised March 28, 2025

RESTRICTION ON DISCLOSURE AND USE OF DATA

This proposal includes confidential and proprietary data that may not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this proposal without the prior written permission of Avineon, Inc.

March 7, 2025

Ms. Kristen Vincent
GIS Manager
City of De Pere
335 South Broadway
De Pere, Wisconsin 54115
kvincent@deperewi.gov

Re: Esri Utility Network Migration, Portal Install, and ArcGIS Enterprise Upgrade

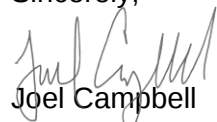
Dear Ms. Vincent:

Avineon, Inc. (Avineon) is pleased to provide our proposal to the City of De Pere (City or De Pere) to assist in your Esri Utility Network migration, Portal installation, and ArcGIS Enterprise upgrade. This proposal will provide the City with a team of expertly qualified professionals who have the skills required to support your needs.

Avineon was founded in 1992 and has over 33 years of experience providing innovative and high-quality GIS managed services, spatial intelligence, digital modernization, and engineering support solutions to our customers in the public and utility sector. We are a Gold-level Esri partner with extensive experience in managing ArcGIS Enterprise upgrades and Portal implementations for municipal customers. Additionally, we hold the Esri Utility Network Management specialty and employ Esri Certified Utility Network Professionals.

Thank you for the opportunity to submit this proposal to the City. If you have any questions or require further information, please contact Mr. Tyler Prah (tprah@avineon.com) or me at your earliest convenience.

Sincerely,



Joel Campbell
Senior Vice President
Avineon, Inc.
jcampbell@avineon.com

Contents

1. Qualifications and Experience 1

 Overview 1

 Firm’s Name 1

 Area of Expertise 1

 Brief History of the Firm 1

 Size..... 1

 Number of Office Locations..... 2

 Business Address of the Office Responsible for the Contract..... 2

 Contact Person Responsible for the Submittal 2

 1.a Esri Partner Status 3

 1.b Firm’s History Providing GIS Services 4

 1.c Experience in ArcGIS Enterprise Version Upgrades 5

 1.d Experience in Portal for ArcGIS Implementations 5

 1.e Experience in Utility Network Migrations 6

2. Technical Approach 7

 2.a Understanding of This Project and Requirements 7

 2.b Approach and Methodology 7

 2.b.1 Project Work Breakdown 8

 2.b.2 Project Initiation, Kickoff, and Planning 9

 2.c Scope of Work Issues and Coordination with the City10

 2.c.1 Phase 1: ArcGIS Upgrade10

 2.c.2 Phase 2: Esri Portal Installation11

 2.c.3 Phase 3: Utility Network Migration16

 2.c.4 Phase 4: Post Implementation Support.....21

 2.c.5 Phase 5: GIS Content Governance Standard Procedures (OPTIONAL)22

3. Project Staff24

 3.a Summary of Staff Experience24

 3.b Organizational Chart.....25

 3.c Resumes for Key Personnel25

4. Budget32

 4.a Rates for Phase 132

 4.b Rates for Phase 232

 4.c Rates for Phase 332

 4.d Rates for Phase 432

 4.e Rates for Phase 5 (Optional)32

5. Municipal Experience and Knowledge.....33

6. References37

A. Questions and Answers A-1



1. Qualifications and Experience

Overview

Firm’s Name

Avineon, Inc.

Area of Expertise

Avineon specializes in delivering spatial intelligence, digital modernization, and engineering support services. We have over 33 years of successful experience in government, utility, and commercial programs, with one hundred percent customer satisfaction ratings.

Avineon’s spatial intelligence solutions include strategic planning, software development, landbase and facilities data capture and improvement, data conflation, database development, and data maintenance. In addition, Avineon provides complete solutions to our customers from design to implementation. We also offer managed GIS support services to dozens of municipal customers and have supported numerous ArcGIS Enterprise upgrades, Portal installations, and Utility Network migrations.

Brief History of the Firm

Avineon was founded as a Delaware corporation by its current CEO, Karlu Rambhala, in 1992. The company has offered GIS services since its inception and has spent over three decades developing the GIS domain expertise necessary to successfully support De Pere’s professional GIS consulting needs. We have a 100 percent successful record of performance at some of the nation’s premier local government agencies and utilities. A more detailed history of Avineon’s experience in providing GIS services is presented in *Section 1.b* below.

Size

The resources of Avineon’s production and management staff are among the most widely respected in the GIS industry. We currently employ a full-time staff of more than 1,100 professional, technical, and support personnel, over 600 of whom are dedicated to performing geospatial information services. We also have several Utility Network certified employees, two of whom are located in the United States and are planned resources for this effort.

This large group of seasoned personnel gives Avineon the ability to take on GIS projects of substantial size and responsibility and expand as needed to meet the City’s requirements. From small customizations to manage your workflows to large scale data improvement or migration projects, Avineon is the knowledgeable and affordable choice. We have **100% of the expertise necessary to support De Pere’s Esri Utility Network migration, Portal install, and ArcGIS Enterprise upgrade** in house without the need for subcontractor support.



Number of Office Locations

Avineon’s headquarters are in McLean, Virginia and we have offices in Saint Petersburg, Florida; Traverse City, Michigan; Banner Elk, North Carolina; Canada; Belgium; France; the Netherlands; the United Kingdom; India; and the Middle East. This project will be managed and staffed from our offices in Saint Petersburg, Florida and Traverse City, Michigan.



Avineon is a global GIS solutions provider with large business capabilities and small business agility.

Business Address of the Office Responsible for the Contract

This project will be managed and staffed from our offices in the United States. Street addresses and phone numbers for Avineon’s U.S. facilities are provided below.

Headquarters	Saint Petersburg, Florida
Avineon, Inc. 8401 Greensboro Drive, Suite 510 McLean, Virginia 22102 Phone: 703-671-1900	Avineon, Inc. 400 Carillon Parkway, Suite 200 St. Petersburg, Florida 77316 Phone: 703-671-1900
Traverse City, Michigan	Banner Elk, North Carolina
Avineon, Inc. 310 W. Front Office Street, Suite 225 Traverse City, Michigan 49684 Phone: 703-671-1900	Avineon, Inc. 397 Shawneehaw Avenue Banner Elk, North Carolina 28604 Phone: 703-671-1900

Contact Person Responsible for the Submittal

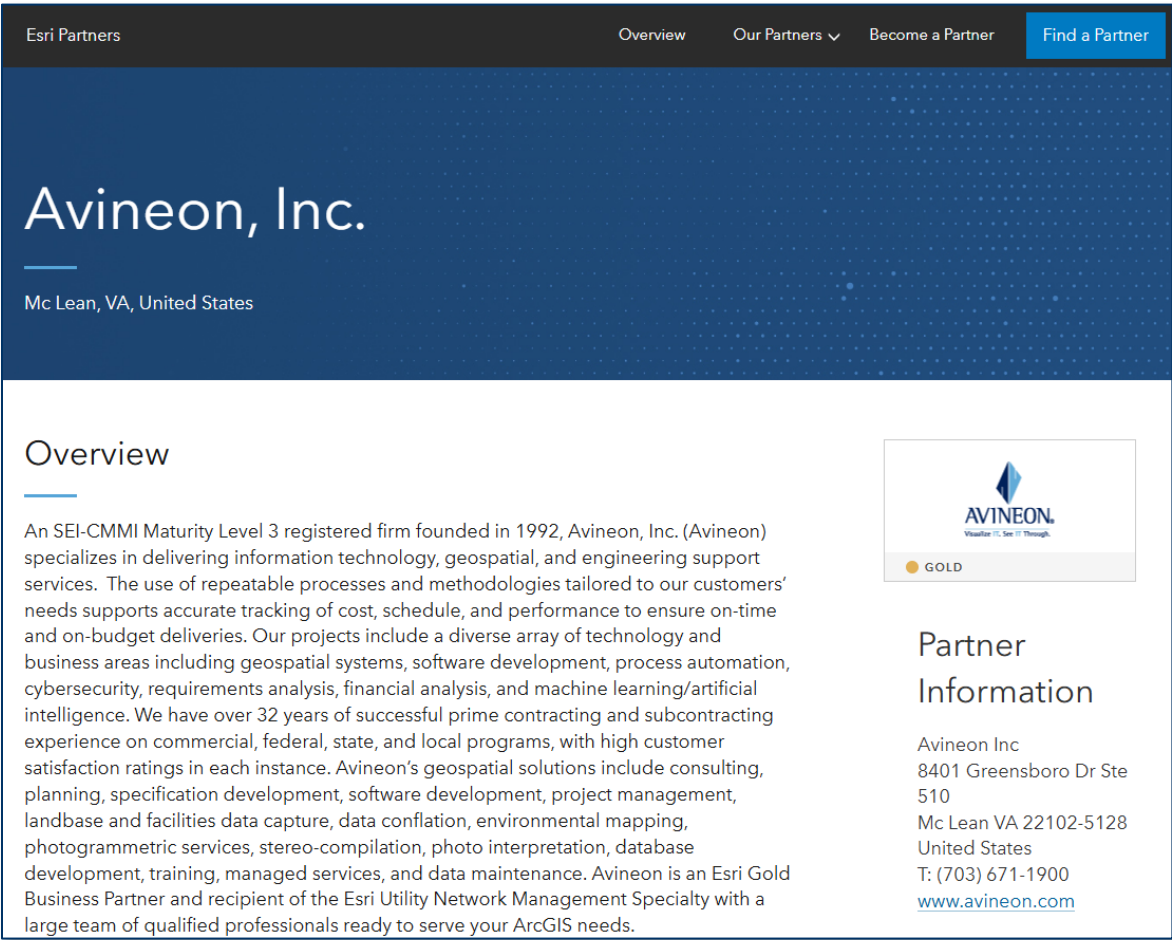
Mr. Tyler Prah
Business Development Manager
tprah@avineon.com
Telephone: 727-551-4242

1.a Esri Partner Status

Avineon is an **Esri Gold Partner** and has been an Esri partner for more than 23 years, which also makes us a **Cornerstone Partner**. Avineon holds the **Utility Network Management Specialty** as a vendor and currently has **five Utility Network certified staff resources** on our team. Avineon also holds the **Parcel Management Specialty** from Esri. We have been engaged in utility GIS and parcel management throughout our corporate history. Our parcel experience includes digitizing, conflation, updates to land records, planimetric features, and supporting customers in implementing ArcGIS Pro and Parcel Fabric. Additionally, Avineon received the **State and Local Government Specialty** for our expertise and substantial experience in working with local, state, county, and city governments.



Proof of our partner status may be obtained by searching Avineon at <https://www.esri.com/en-us/about/partners/find-partner> or visiting <https://www.esri.com/partners/avineon-inc-a2T70000000TNKzEAO>. A screenshot of the Avineon business partner status from that page is presented below.



1.b Firm's History Providing GIS Services

Avineon has delivered GIS projects since the 1990's when many customers still maintained paper maps. An early example of Avineon's utility GIS experience was Columbia Gas (now NiSource) to provide comprehensive GIS implementation and data conversion services. The project involved the digital mapping of a multi-state service territory with over 21,000 maps covering a geographic area of 6,900 square miles with 30 thousand miles of pipeline. We have continued this relationship to the present day as we recently supported NiSource on a multi-state conflation project to align the company's entire GIS network dataset to a commercial landbase with regular updates. This longstanding relationship is evidence of Avineon's commitment to customer satisfaction and has been reproduced at other customers over the years including Richmond, Virginia; Traverse City, Michigan; San Jose Water Company, California; San Francisco Public Utility Commission, California; Morganton, North Carolina; Mammoth Community Water District, California; Medina County, Ohio; Columbus, Ohio; and Stevens Point Public Utility, Wisconsin.

In 1998, seeing a lack of consistency and quality from other offshore vendors, Avineon opened our own facility in Hyderabad, India, enabling us to incorporate internal best practices and offer reliable, lower-cost services to our North American and European customers without the use of subcontractors. Avineon is unique among our U.S.-based competitors in having direct control over the allocation of our offshore team. Since 1998, Avineon's India office has successfully delivered projects to over 300 clients in the Asia Pacific region and added a second location in Kakinada, India.

Shortly after opening in India, Avineon began European operations with an office in the United Kingdom to offer local support to our customers there. In the two decades since, we have expanded to include offices in France, Belgium, and the Netherlands staffed by more than 100 GIS professionals.

Over the years, Avineon has also grown through acquisition. In 2002, Avineon purchased the assets of AGRA Baymont, Inc., a GIS data services provider for over 20 years at the time, to establish our Florida office. In 2018, we opened our Michigan office by acquiring InfoGeographics, Inc. In 2020, we purchased Tensing International B.V. in the Netherlands, adding over 60 high-caliber GIS consultants and developers with expertise in ArcGIS and Safe Software FME. In March 2022, Avineon acquired Highland Mapping, Inc. to open offices in North Carolina with over 70 GIS managed services customers. Finally, in 2024, Avineon acquired the assets of North Point Geographic Solutions, LLC, a Minnesota based-GIS services company that expanded our presence in the Midwest U.S. In all cases, Avineon retained virtually all of the acquired companies' personnel.

The acquisition of Highland Mapping and founding of Avineon's GIS managed services practice may be of particular interest to De Pere. With our hands-on administration of over 70 managed services clients either on their own premises, in the cloud, or in a hybrid atmosphere, we provide piece of mind that their systems will be running when they need it most. We have also assisted many of them with ArcGIS Enterprise upgrades, Portal installations, and, most recently, Utility Network migrations.

1.c Experience in ArcGIS Enterprise Version Upgrades

Avineon has supported version upgrades and implementation of Esri's server technology since the initial release of ArcGIS Server at version level 9.0 in 2004. ***In the last three years, Avineon has performed more than 180 upgrades for our clients.***

Avineon provides a service offering that we call *Managed Services*. These customers, many of whom utilize ArcGIS Enterprise, receive one ArcGIS upgrade annually through this program. Today, we have 72 clients active in Avineon's *Managed Services* program.

1.d Experience in Portal for ArcGIS Implementations

In the last three years, Avineon has implemented and upgraded 88 Portal configurations for our clients.

Avineon has supported Portal implementation alongside ArcGIS Server since the initial release in 2015. As with many of the ArcGIS offerings, it has evolved since the first version and our team has grown with it. As the core content management component for publishing, sharing, and viewing content, the role of Portal has become critically important for many organizations.

Avineon's approach to implementing Portal begins with understanding each client's needs and aligning them with the most relevant configuration and trainings. In addition to implementing Portal user and group management, Avineon recommends and regularly configures the Esri Enterprise [Web GIS Disaster Recovery \(WebGISDR\) tool](#) to export the components of your ArcGIS Enterprise organization to a backup file that can later be used to restore your organization in the event of hardware failure or data loss. The file includes your portal items and settings; hosted web layers; federated and hosting server settings; and, if using ArcGIS Data Store, your hosted feature layer data and hosted scene layer caches.

Each implementation is complemented by an architecture diagram and multi-page *Administrator Guide* containing the specific deployment configurations, security, and standards that is created during the configuration. Avineon provides in depth administrator training sessions which can be recorded for reference.

Additionally, Avineon offers GIS governance consulting for Portal administration and content management. Our consultants have presented several conference workshops to help customers better understand the importance of Implementing a governance framework for maintaining consistency, security, and compliance in geodata creation and distribution. It defines the standards and processes for managing the Esri Enterprise Portal and ensuring that content is used securely and authoritatively. Additionally, it governs the behaviors related to content requests, creation, modification, and access.

Without proper governance, Enterprise content can quickly become inconsistent and disorganized, leading to duplicate and outdated information across different silos. This lack of standardization undermines trust and, in many cases, results in content being shared inappropriately, creating potential security risks.

Based on this experience, Avineon has proposed an optional task to support the development of GIS content governance to complement the Portal implementation. More details are provided in *Sections 2 and 4*.

1.e Experience in Utility Network Migrations

In the last three years, Avineon has implemented 10 Utility Network migrations for our clients.

Avineon has been working with Esri to support product changes that help make the jump to the Utility Network and ArcGIS Pro easier for editors, integrators, users, and system maintenance. Our team is on top of emerging trends. After participating in the *Early Adopter* program, we recently implemented the newly released Migration Toolset for the ArcGIS Utility Network for several clients. Using the toolset, our team jumpstarts Utility Network migration projects with an immediate transformation of existing data into a simplified Utility Network model. Demonstrating this tangible version of the Utility Network builds early foundational understanding of Utility Network concepts that are rooted in real data. Stakeholders are more engaged in the design process and can make modeling decisions more quickly and confidently. Additionally, the Migration Toolset enhances the data quality assessments which identify critical targets for source data cleanup and automations to bulk clean and transform during the full migration.

In addition to Utility Network migrations, in the past three years, Avineon has helped more than 30 clients transition from ArcMap to ArcGIS Pro. In many cases, the clients are not ready for a full-scale transformation to Utility Network but want to leverage the modern toolsets within ArcGIS Pro. Migrations from ArcMap to Pro require significant technical considerations as well as process changes. Our proven methodology ensures that ArcGIS Pro is configured to support existing data but also move toward better data governance and streamlined workflows by leveraging modern configurations with *Attribute Rules*, *Editing Templates*, and *Arcade*. Our approach ensures our customers receive appropriate training, have time to practice new skills, understand the benefits of the new system, and are supported through their adoption journey.

In our experience, the governance, change management, and training aspects of Utility Network migrations are the most challenging piece for clients. Therefore, we have adapted our approach to building and delivering training plans so that we can adjust as needed to be certain that each editor or user gets the specific attention they need for their journey to Pro and the Utility Network.

In the past three years, Avineon has delivered over 72 unique custom training projects for our clients.

2. Technical Approach

2.a Understanding of This Project and Requirements

Our team is highly experienced in executing projects of a similar nature and size and we have established a proven methodology for success. The transformation to Enterprise and Utility Network intertwines modernization across technology, data, and people. Our approach focuses on all three components during each phase, and we will run Phase 1 and 2 for Enterprise \ Portal in parallel with Phase 3: Utility Network Data Migration.

We also understand that adopting the Utility Network and Esri Enterprise and Portal are more than a technological upgrade, it is a cultural transformation that requires employees to adopt new mindsets about data usage, collaboration, and decision-making.

Below are key issues based on our past experience that we will address during each phase:

- **Misunderstanding the End State:** If technology does not align with end-users' workflows, it becomes a barrier, causing inefficiencies, manual workarounds, underused features, and poor ROI—undermining modernization goals. *Avineon will ensure the design phases accurately capture the technical requirements for the architecture and data as well as the business processes and use cases.*
- **Learning Curve:** Stakeholders need time to understand new concepts and gain hands-on experience. Without this, they may make poor design decisions, resulting in a subpar product and increased resistance to adoption. *Avineon will provide a comprehensive training and support plan that begins at project kickoff and provides hands-on training and practice well before go-live.*
- **Migrating Poor Data:** The Utility Network requires high-quality data for effective subnetwork tracing, connectivity, and associations. Migrating poor data will result in a low-quality dataset and hinder project success. *Avineon will provide early feedback and recommendations to improve data quality at the source, through bulk processes during migration and through ongoing post implementation steps.*
- **Governance:** The implementation of an upgraded platform with Portal as well as entirely new workflows for data management requires new standards and processes or the system will become at-risk. *Avineon will provide best practice governance recommendations during each phase and through the Administration trainings so that the City is ready to sustain the system after go-live.*

Our approach to successful implementation is detailed in the following sections.

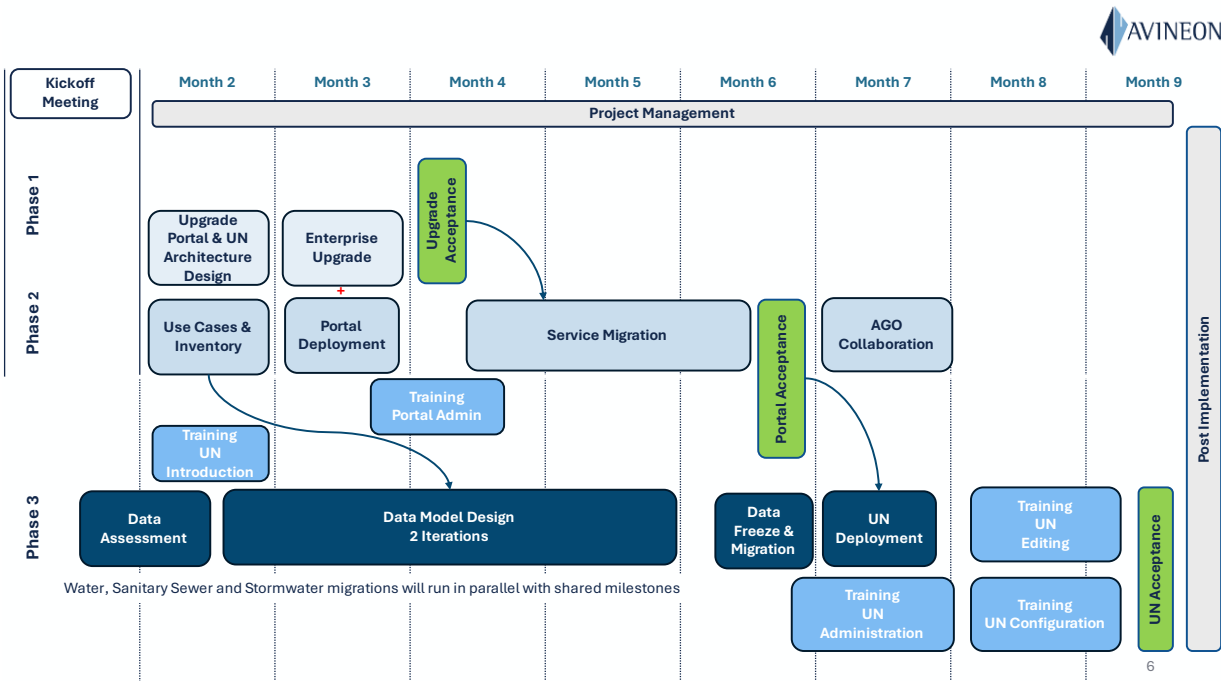
2.b Approach and Methodology

Avineon's key elements for success include our proactive approach, clear and consistent communication and focus on quality. Our project approach breaks down the large phases into a series of achievable milestones, designed to build "wins" into each step of the project. Our goal is that stakeholders experience a compounding effect of understanding, confidence, and momentum so that the end technology and data transformation meet the City's goals.

2.b.1 Project Work Breakdown

The Enterprise upgrade, Portal installation, and Utility Network migration are heavily intertwined. Phases will run in parallel to ensure cohesive design, deployment, and training.

- **Planning:** Avineon will conduct remote design meetings within each phase to review the City’s organizational goals, systems, data, and use cases. These design sessions will build upon one another and guide the design of the data, processes, and systems envisioned for a successful Portal and Utility Network implementation. Results will then be used to determine how the City’s **people** can leverage **technologies** and follow **processes** that enable the City to reach its goals.
- **Phases 1 and 2:** Avineon proposes that Phases 1 and 2 for the upgrade and Portal deployment be planned at the same time and (if possible) completed as a single phase. Avineon will conduct an architecture review with the City to consider advantages and risks of performing both phases at one time. A single deployment would minimize downtime of the production system and streamline the deployment; however, the City will have the opportunity to review both options and determine the best approach.
- **Phase 3: Utility Network Migration:** Water, sanitary sewer, and stormwater workstreams will run in parallel with the Enterprise tasks. Each utility will follow the same timeline with shared milestones (data validation, design, modeling, migration, training and go-live). Avineon will engage the specific utility SMEs during each component.
- **Project Management:** Our detailed project management approach is outlined below. Key milestones are summarized in the following timeline graphic. Avineon anticipates the project can be completed in eight to nine months. The baseline schedule will be agreed upon with the City prior to the kickoff.



2.b.2 Project Initiation, Kickoff, and Planning

During the initiation phase, Avineon will focus on building a strong partnership with the City. Our project manager will work with the City's project manager to develop a consistent communication plan and baseline project schedule to ensure expectations are understood and communicated.

2.b.2.1 *Initiation Tasks*

- Perform **Project Initiation** including financial setup, creation of the project artifacts, project and stakeholder registry, and onboarding of the Avineon project team.
- Development of the **Project Baseline** which identifies the detailed work breakdown assigning tasks, dates, and resources.
- **Information Gathering:** The City should be prepared to provide a copy of its data and/or any relevant documents prior to kickoff (if possible). Avineon will prepare for the kickoff by reviewing the materials and identifying any early opportunities, questions, or risks.
- **Project Kickoff:** Avineon will create an agenda and conduct the project kickoff remotely with key City stakeholders to ensure alignment on the goals, timing, scope, and expectations. Avineon will provide a recording, minutes, and action items following the kickoff.
- The Avineon Project Manager will establish a **Communications Cadence and Status Reporting Guidelines** to agree upon the format and cadence for communication frequency, channels, and stakeholders. This plan also addresses the reporting mechanisms, templates, and tracking requirements.
- Avineon will work with the City's project manager to define the **Scope Management Plan** to detail the agreed upon steps and timelines for:
 - Submission, review, and approval of deliverables
 - Invoicing guidelines and definition of milestone and percentage complete
 - Defining how scope changes will be reviewed and managed to avoid the risk of scope creep (i.e., uncontrolled growth of the project scope)
 - Outlines communication of change and documentation and notification of impact to scope, schedule, and budget

2.b.2.2 *Ongoing Project Management Tasks*

Throughout the project phases, the Avineon project manager will be responsible for managing the scope, schedule, and budget through the following tasks:

- Manage the day-to-day activities, tasks, and resources necessary to complete each project phase.
- Monthly Project Reporting, summarizing key milestone achievements for the last 30 days and providing a high-level preview for the next 30 and 60 days.
- Support executive presentations and briefings as needed to summarize key achievements and any risks or decisions.
- Coordinate and lead meetings including team meetings, discovery assessments, stakeholder meetings, and planning workshops. Coordinate with the City to schedule and conduct these activities.

- Provide financial management for all activities, solutions, and work products to the City throughout the project life cycle.
- Coordinate milestone invoicing and deliverable tracking and acceptance.

2.c Scope of Work Issues and Coordination with the City

2.c.1 Phase 1: ArcGIS Upgrade

Avineon understands the City would like to upgrade the existing Enterprise production deployment and then add Enterprise Portal and Utility Network capability. We highly recommend the City adopt Esri Enterprise version 11.3 and follow Esri guidelines.

Avineon proposes that Phases 1 and 2 for the Upgrade and Portal deployment be planned together and then run as a single phase. If the City is amenable to this option, the Architecture Design sessions will be combined. During the architecture review with the City Avineon will outline advantages and risks of performing both phases at one time. A single deployment would minimize downtime of the production system and streamline the deployment; however, the City will have the opportunity to review both options and determine the best approach.

Avineon will use our proven approach and well-defined upgrade checklist to ensure a smooth process with minimal downtime.

2.c.1.1 Upgrade Planning

For the upgrade, the City will provide an inventory of active services and dependent applications for testing and validation post-upgrade. Avineon will conduct a pre-upgrade meeting with the City's GIS Division and IT Department.

- Understand the background of the City's GIS infrastructure and upgrade history.
- Considerations for current capacity, performance
- Option to combine the Architecture for the Phase 2: Portal and Utility Network within the Enterprise
- Recommendations for future application of patches or upgrades
- Draft the upgrade checklist including specific steps and responsibilities for the upgrade:
- List of key contacts for support during the window
- Remote access and permission validation
- Software downloads
- Pre-installation IT tasks including backup of servers, databases
- Validation of licensing, SSL certificates
- Service accounts, permissions, and security check
- Installation order of operations
- Testing responsibilities, contacts, and timing to validate services and dependent applications

2.c.1.2 Perform Upgrade

If the upgrade is performed separately from Phase 2, Avineon expects to complete the upgrade using remote access during regular business hours and anticipates the upgrade portion can be completed within 2 days assuming all pre-requisites are in place.

Avineon will work through the Upgrade Checklist in coordination with the City and our team will conduct the upgrade with timely communication throughout the process.

Following the upgrade and within the time window agreed upon, the City will follow the checklist and inventory to validate and ensure all existing data, applications, processes, etc. are functioning properly with City

The City will provide approval immediately so that the system may be re-engaged for use.

2.c.1.3 Phase 1 Deliverables

- Upgrade Checklist document in PDF format describing the steps taken to perform the upgrade as well as a shared online upgrade checklist that can be managed throughout the process.
- An action plan in PDF format detailing recommendations for a future upgrade schedule, in line with a city of De Pere's size and Avineon/Esri recommendations.
- Upgrade of one production system to 11.3.

2.c.2 Phase 2: Esri Portal Installation

2.c.2.1 Enterprise Design and Planning

Avineon will plan the deployment of Portal, Data Store, and Utility Network within the newly upgraded Enterprise environment to align with Esri best practices:

[Logical reference architecture for Network Management System | ArcGIS Architecture Center](#)

Avineon will hold architecture design meetings with the City IT staff. These sessions may be combined with Phase 1 planning, if possible, to provide a cohesive design and plan. The combined team will Review the use of Portal for Utility GIS data including:

- System and licensing requirements
- Performance and configuration for Utility Network branch versioning and service-based editing
- Support for future Utility Network phases:
- Access for utility related integration and data collection use cases
- Capability to host a Utility Network test/training database for each utility.
- Discuss third party applications, automated jobs, and any known downstream version dependencies.
- Review requirements for Portal with a focus on non-Utility GIS data and content.
- Identify use cases for County data collaboration
- Identify use cases for ArcGIS online sharing or use of a Portal-to-Portal collaboration
- Consider "soft go live" opportunities, if possible, to allow for graduated testing and acceptance.

Avineon will provide options for the server deployment. To ensure a robust implementation of an enterprise deployment tailored for a production Utility Network, it is recommended to configure an additional ArcGIS Server dedicated specifically to Utility Network feature services alongside the ArcGIS Enterprise base deployment. ArcGIS Utility Network Server is licensed as ArcGIS GIS Server and configured as the Utility Network server meant for publishing Utility Network feature services.

2.c.2.2 Enterprise Design Diagram

Avineon will document the production design specifications and draft a visual diagram (Visio or similar) to present to and share with the City team. This diagram focuses on the Esri Enterprise software. The diagram will address:

- DNS/SSL specifications
- Networking/port/firewall specifications
- Esri Server specifications (FQDN, Name, IP, OS, CPU, DISK) with associated software assignments
- File server, backup location and / or automation server requirements (if applicable)

A sample architecture diagram with dedicated Utility Network server tier is presented on the following page.



2.c.2.3 Enterprise Deployment Checklist

Avineon will draft the upgrade checklist including specific steps and responsibilities for the Enterprise Portal deployment:

- List of key contacts for support during the window
- Method of direct access and administrator level credentials to perform the installation and configuration.
- Pre-Installation tasks to be performed by the City
- Installation and configuration to be performed by Avineon
- Post-Installation test steps, assignments, and dates
- Process for approval of the environment

The City will ensure the ArcGIS Enterprise Portal implementation meets all required criteria prior to deployment. The City is responsible for ensuring that any downstream dependencies are not impacted by the Portal and Utility Network deployment.

2.c.2.4 Enterprise Portal Installation

The City will be responsible for the following prior to the installation:

- Ensure all servers are deployed according to the system requirements.
- Perform any server backups prior to the upgrade.
- Establish networking protocols within the server environment and validate communication between public and private networks.
- Provide the SSL certificate and domain name (e.g., maps.organization.com).
- Ensure all relevant accounts are created prior to the installation.
- Ensure all software and licenses are available. Access to MyEsri.com to download the appropriate software installations and license files.
- Schedule all stakeholders so they are available for training and testing to occur immediately after the installation.
- Credentials and administrative access to the system.
- IT support contact with availability during the deployment window.

2.c.2.5 Enterprise Portal Deployment

Avineon will install and configure one new Esri Enterprise environment:

- Ensure all software and access is present for installation.
- Coordinate with IT for operating system backups.
- Perform Portal backup using the Esri Web GIS Disaster Recovery (WebGISDR) utility and copy content directories.
- Installation and configurations:
 - Portal
 - Portal Web Adapter
 - Data Store
- If not previously installed, install ArcGIS Pro on the database server.
- Configure automated Portal Backup using the WebGISDR utility.

The following components will already have been upgraded as detailed in Phase 1:

- ArcGIS Server
- ArcGIS Server Web Adapter
- SQL Database

Avineon will perform one round of functional testing to Esri software that has been deployed as designed.

- Ensure the automated Portal Backup is running as designed.
- Ensure *Identity* and *User Authentication* are working as planned (administrator and one test user).
- Ensure a view only test service can be published and shared to a test group.
- Ensure an edit test service can be published and data updated in the relational Data Store.

2.c.2.6 *Training and Testing*

To achieve successful deployment, the identified GIS administrator should be trained in managing ArcGIS Enterprise environment. Avineon has extensive experience providing customized training to our customers and will customize the training necessary to support implementation for the City.

2.c.2.7 *Portal Administrator Guide*

Avineon will draft a high-level *Administrator Guide* that includes the architecture design and list configuration, credentials, and URLS for the installed components. This document is designed as a quick reference for the newly installed components of the system and will not include comprehensive “how to” use the system document or provide recommendations on best practices, content management, etc. Refer to the Esri help center for additional information if needed.

2.c.2.8 *Conduct Administrator Training*

Avineon will provide up to two hours of screenshare knowledge transfer. The City will ensure the designated GIS administrator is available as part of the pre-installation checklist. The training will address:

- Architecture and configuration of the ArcGIS Enterprise production and test environments
- Publishing services to the test environment

2.c.2.9 *User Acceptance Testing*

- This task focuses on ensuring that the Enterprise deployment is configured and approved.
- User acceptance testing will be conducted within 10 business days after the upgrade to ensure the systems are working appropriately.
- The City is responsible for testing all items outside of the Enterprise such as desktop workflows, access and integrations work correctly post-upgrade.

- The City will confirm a small number of power users and set of tests to verify the system. Testers should include key power users in Portal that can easily confirm various workflows with data, services, maps, and applications.
- The City will perform testing within the designated window and provide one round of feedback that summarizes all critical issues for discussion and prioritization.
- Avineon and the City will mutually agree on any critical bug fixes and resolve those prior to scheduling the live conversion.
- The City will approve the user acceptance testing revisions and sign off (critical issues only) within the agreed timeframe.

2.c.2.10 Phase 2 Deliverables

- Architecture design and system specifications for one production environment
- Pre-Upgrade and pre-installation checklist
- Deployment of one ArcGIS Enterprise production environment
- Draft *Administrator Guide*
- Conduct up to two hours of remote ArcGIS Enterprise training.
- Support as the City performs testing (five days).
- Resolve any critical and mutually agreed upon issues.

2.c.3 Phase 3: Utility Network Migration

2.c.3.1 Source Data Assessment

The first task is a comprehensive review of existing data with a focus on quality and completeness. The data review will help direct the focus of the discovery workshops.

The City will provide Avineon with all relevant data records, both GIS and tabular data, to include the following GIS layers and information:

- Utility geodatabases and ArcMap document(s)
- Relevant feature classes falling outside of the utility data
- Sample field workflow data and documents (e.g., inspections)
- List of use cases for each utility
- Stakeholders and roles of organization staff impacted by the Utility Network migration

Avineon will use the newly release Esri Migration Toolset to analyze the current datasets and convert to a streamlined Utility Network model. The toolset will quantify the errors in the source data. Example checks include:

- Duplicate or coincident features
- Null or blank attributes (e.g., diameter, material, etc.)
- Connectivity: overshoots, undershoots
- Lines that are not split at intersections or that do not have associated endpoint features

2.c.3.2 Data Readiness Assessment and Recommendations

The outcome of this task is the *Data Readiness Assessment* which will list a summary of errors and the critical targets for source data cleanup and automations to bulk clean and transform during the full migration.

Avineon will provide a remote presentation of the results of the source data validation:

- A first look at a potential feature class mapping for the source data feature classes to the target Utility Network feature classes.
- Highlight key recommendations for appropriate source data clean up and approach to the migration:
 - Identify where the data is best corrected:
 - In your current environment on the source data
 - During the migration process (programmatically)
 - After the move to the Utility Network with ArcGIS Pro tools
 - Proposed automations that can be utilized to address errors in the data transformation process.

If requested, Avineon will provide estimates to perform data cleanup as a manual process in either ArcMap or ArcGIS Pro.

2.c.3.3 Training: Introduction to Utility Network

Avineon will provide one remote training session designed to introduce the City's core project team to the Utility Network data model in the context of the City's data. Avineon will use the preliminary transformation to the simplified Utility Network model from the source data assessment task. Demonstrating this tangible version of the Utility Network builds early foundational understanding of Utility Network concepts that are rooted in real data.

This session will cover an overview of Utility Network core data components and terminology so that the City can better understand the future state prior to the design sessions.

2.c.3.4 Design Sessions

By the start of this task, the stakeholders will have a foundational understanding of the Utility Network concepts and future state which will keep them more engaged and provide better modeling decisions.

Avineon proposes the remote Design sessions below and will work with the City point of contact to draft the agenda and invite appropriate stakeholders. These sessions will be designed to define requirements that impact the current project to migrate to version 1 of the Utility Network. These sessions may be conducted onsite if the City prefers. The budget indicates the cost estimate to add the onsite travel.

- Editing Workflow Requirements (one per utility)
 - Workflows for data editing, maintenance of utility GIS data including data automations, ID generation, editing rules, and editing templates
 - Digitization and symbology requirements
 - Configuration of ArcGIS Pro for field and layer visibility
 - Identify risks and process or skill gaps that can be addressed throughout the project using our communication and training plans to staff transition confidently.
- Downstream Dependencies (one per utility)
 - Operational drivers for utility including capital projects, maintenance plans, and asset management
 - Field operations

- Meter data management
- Customer information system

After these sessions, Avineon will provide meeting recordings. To the extent that any requirements identified are outside of this scope of work, Avineon will work with the City to provide options for a future Phase 2 Utility Network deployment.

2.c.3.5 *Digitizing Standards*

Digitizing standards are important to define prior to the migration of the data into the Utility Network. Standards define how the City will manage assets and provide white space for clarity in reading maps. Standards help determine where stacked lines and devices are offset to provide visualization of all features.

Specifying digitizing standards ahead of migration can lead to data cleanup automation within the migration process and/or a modified rule base and feature templates to support quality in the final editing process.

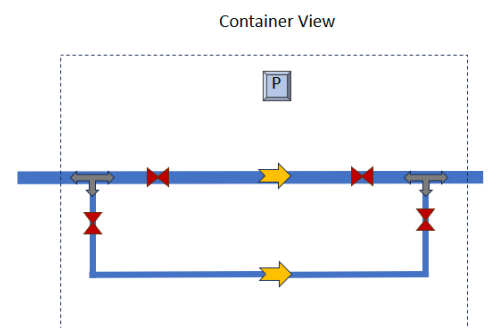
A digitizing standards meeting will take place to determine how the City would like to digitize in 2D with offsets on vertical coincidence. Avineon will review any existing standards and document the future Utility Network digitizing standards in the existing format or Avineon's standard template.

2.c.3.6 *Data Model: Iteration 1*

Avineon will propose a draft version of the Utility Network Data Model for each utility. Our first iteration will be based on the Esri Essentials Utility Network model as well as our own experience in Utility Network design. Avineon assumes this project is the foundational version of the Utility Network and will contain the following configuration (per utility).

- Define asset groups, asset types, and attribution.
- Up to three simple attribute rules such as ID Generation, Copy Feature to support abandonment of assets, etc.
- One Containment Association per utility such as Water Pressure Reducing Station or Sewer Lift Station and associated Pre-Set template (if applicable)
- Up to two group editing templates such as Hydrant-Lateral for Water.
- One subnetwork tier per utility (System Tier – e.g., Distribution); this may be a subset of the network as it requires clean data.

Example Containment Association for Water



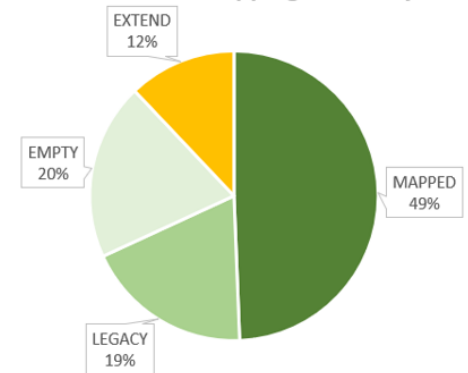
Avineon will create a logical mapping of the feature classes, fields, and domains. The intent of this first Iteration is to define 75%-80% of the model. Avineon will perform the following data modeling tasks:

- Prepare data modeling spreadsheets (source data/Utility Network model).
- Capture the initial data transformations in the data model spreadsheets.
- Configure the Utility Network model in FME workbench.
- Develop the initial Utility Network file geodatabase (FGDB).

- Conduct a recorded review meeting and deliver Iteration 1 draft to the City:
 - Data modeling spreadsheets
 - FGDB (and asset package if applicable)
 - Pro project with basic symbology (will not include editing configurations)
 - Proposed Pro project configuration for layer and field visibility and aliases

The City will review the proposed mappings and provide feedback within 10 business days to inform Iteration 2. The review may take up to one full day of City resource time to complete.

Source Field Mapping Summary



2.c.3.7 Data Model: Iteration 2

Iteration 2 is designed to solidify 90-95% of the detailed data model and editing design. After this iteration, the data model will not undergo significant changes.

- Conduct follow-on data modeling workshops (if needed) for refinement.
- Configure one subnetwork tier per utility; this may be a subset of the network as it requires clean data.
- Identify final Pro project configuration for layer and field visibility and alias, symbology
- Conduct a review meeting and deliver Iteration 2 draft to the City:
- Data modeling spreadsheets
- FGDB (and asset package if applicable)
- Pro project configured with layer and field configurations
- Data modeling spreadsheets
- FGDB (and asset package if applicable)
- Pro project configured with attribute rules, layer and field configurations, editing templates, and up to two *Group Templates* per utility

2.c.3.8 Go-Live Transition Period

Avineon proposes a soft transition to the Utility Network. The transition phase provides more time for training and streamline the testing and approval process. Practicing skills, maintaining data and validating the workflows concurrently will build higher confidence and better overall adoption at the end of the project.

Avineon will draft the Go-Live Checklist in coordination with the City. This document is intended to outline the steps, dates and responsibilities covering the critical path and “soft go live” timeline to move from the approved data model through training and testing to go-live. The final schedule will consider the impacts for downtime, resource demands and availability:

- Finalization of the model
- Freeze the data from edits in the current system
- Three week freeze to accomplish the following:
 - Week 1: Perform the full migration
 - Week 2: Deploy to production
 - Week 3: Perform *Editing Fundamental Training*

After the training, the City will handle all future edits in the newly implemented system. This begins the user acceptance testing phase.

- The City will practice workflows using real edits, which will help validate processes and identify any necessary configuration changes for advanced training.
- By managing ongoing data needs during training and testing, we avoid a large backlog of edits after go-live.
- The City can immediately view and resolve errors in the Utility Network, allowing them to establish standard operating procedures (SOPs) for quality management.
- Staggering the second round of advanced training allows time to fully absorb editing skills before tackling more advanced topics.
- UAT feedback can be incorporated into the advanced training, such as creating new group templates or making configuration changes. The team will learn to apply these changes on their own.

After testing, the system will be live, eliminating the need for another round of migration or sign-off.

2.c.3.9 *Training and Testing*

As defined in the *Go-Live Checklist*, Avineon will provide a series of training sessions. These sessions will be performed in the City's Utility Network and with examples from the City's specific configuration and data. In addition to the training, Avineon will support the City's staff as they learn new skills by holding weekly office hours. This engagement process will be conducted during the soft go-live and help streamline the user acceptance testing.

Avineon will create an *End User Guide* for the training sessions that highlight key steps with an example for each utility. Each training session will be two to three hours and will cover instructor lead learning as well as hands on practice using the guide. The training sessions will be run jointly for all utilities.

User acceptance testing will be performed during the same time span. Avineon anticipates that the transition and go live phase will span six consecutive weeks. Should the City require additional time, a change order may be agreed upon.

Training Sessions and Timeline

- Training 1
 - Overview of Service Editing and Branch Versioning
 - ArcGIS Pro Setup and Configuration
- Training 2
 - Editing Fundamentals
 - Data Quality and Error Resolution
 - *City is editing latest data – Remove Data Freeze
- UAT and Skill Practice
 - Office Hour/Review Feedback
- UAT and Skill Practice
 - Office Hour / Review Feedback
- Training 3
 - Advanced Concepts

- Incorporate Configuration Changes
- Training 4
 - Subnetworks and Tracing

2.c.3.10 *User Acceptance Testing: Utility Network Configurations*

- The *Editing Guide* will outline the specific workflows to be tested.
- The City will confirm one or two power users as user acceptance team members. These should be key editors/administrators who have attended training.
- A set of tabular test cases will be delivered and tracked in spreadsheet form.
- Avineon will conduct a user testing kick-off to ensure the testers understand the testing, acceptance process, and how to report feedback.
- The City will perform testing in the production environment and provide one round of feedback that summarizes all critical issues for discussion and prioritization.
- Avineon will provide two remote office hours (one each week) to provide testing support.
- Avineon and the City will mutually agree on any critical bug fixes related to the data processing, attribute rules, and editing workflows. Avineon does not expect to perform data model or transformation changes as part of the testing. Avineon expects to resolve any issues within five business days.
- The City will approve the user acceptance testing revisions and sign off (critical issues only) within the agreed upon timeframe.

2.c.3.11 *Utility Network Administrator Guide and Training*

Avineon will provide a remote (up to two hour) session on the configuration of Utility Network in the Esri Enterprise environment using the *Utility Network Administrator Guide*.

2.c.3.12 *Phase 3 Deliverables*

- Digitizing Standards Document
- Two Iterations of Data Model (Spreadsheets, File Geodatabase, and Pro Project)
- Go-Live Checklist
- End User Guide with workflows for the configurations (one guide comprehensive of all utilities)
- Four end user training sessions (remote) up to three hours each
- Test Cases (Tabular), Two Office Hour Sessions
- One *Utility Network Administrator Guide* and training (up to two hours)

2.c.4 *Phase 4: Post Implementation Support*

Avineon will provide post-implementation warranty support during the six-month period following go-live or the last data deliverable, whichever is later. Support requests will be initiated by the City using the Avineon support ticket system.

The deliverables will perform in accordance with the applicable acceptance criteria, documentation, and other specifications set forth at the time of the City's acceptance of such deliverable and for one month following such acceptance (the "Warranty Period"). Avineon will correct, repair, and/or replace, at no cost any defect, malfunction, or nonconformity that prevents such deliverable or software from conforming and performing as so warranted and that occurs during such Warranty Period, provided that Avineon's sole obligation under this warranty

shall be to carry out such remedial services. The foregoing warranty is exclusive and in lieu of all other warranties or conditions express or implied, including but not limited to implied warranties of fitness for a particular purpose, implied warranties of merchantability, implied warranties of merchantable quality, and any other warranties arising by statute or otherwise in law from a course of dealing or use of trade.

2.c.5 Phase 5: GIS Content Governance Standard Procedures (OPTIONAL)

Implementing a governance framework is crucial for maintaining consistency, security, and compliance in geodata creation and distribution. It defines the standards and processes for managing the Esri Enterprise Portal and ensuring that content is used securely and authoritatively. Additionally, it governs the behaviors related to content requests, creation, modification, and access. Without proper governance, Enterprise content can quickly become inconsistent and disorganized, leading to duplicate and outdated information across different silos. This lack of standardization undermines trust and, in many cases, results in content being shared inappropriately, creating potential security risks.

If selected, this task should be conducted in parallel with the design and implementation tasks. By completing this task, the City will ensure that the use of the Enterprise Portal meets the following standards:

- Documented and enforceable standards and behaviors.
- Users are added and removed appropriately.
- Data is easily searched and identified as authoritative by end users.
- Content is trusted and is shared between departments.
- Change requests follow an established change process.
- Process to successfully promote content from development to production, and to identify and archive content as it is no longer used.
- Self-service and productivity are encouraged across the GIS footprint.

This task would be performed prior to the service migration for the Portal to guide the organization, publishing and sharing of migrated services, applications, and hosted data within the Enterprise Portal.

- It does not include standards, processes or management for data or processes outside of the Portal such as (but not limited to) SDE Enterprise databases, automations, integrations, file or imagery storage.
- It does not cover processes for monitoring, disaster recovery or further administration of the underlying technology or software.
- The City is responsible for implementing the recommended SOPs and training the appropriate stakeholders.

2.c.5.1 Enterprise Content Management Standard Operating Procedures (SOP)

Avineon will draft the SOP document to specify processes and assigned responsibilities:

- Standards for content naming, metadata, tagging and categorization so that content is consistent and easily understood and searched

- Assignment of roles and responsibilities
- Definition of content security and privilege so that different levels of users may be engaged at the appropriate level across departments and organizations
- Tiered privilege for users and groups with defined onboarding processes
- Request and approval process to support content generation, updates and promotion to production
- Audit and archiving processes

The City will provide a point of contact to provide input and make key decisions during the development of the SOPs.

2.c.5.2 Implementation of Standards and Template

Avineon will implement the following standards within the Portal so that the City may have a template “recipe” of the best practice:

- Creation of headless administrator content owner account
- Creation of project or department group
- Assignment of up to ten named users with assigned roles and permissions to illustrate best practices
- Publication of one example template including one feature class of hosted data, published service, web map, and simple configured map application to illustrate the standards for naming, categorization, tagging and metadata

2.c.5.3 Review and Approval

Avineon will present the SOP document to the City in a remote meeting and incorporate any feedback to the processes directly in the document during the review meeting.

After the meeting, Avineon will provide the document for the City to review. The City will either provide a single round of comments or provide signature approving the document within 10 business days. Avineon will resolve any comments within 5 business days and then the City will approve the final SOP with document signature.

2.c.5.4 Phase 5 Deliverables (Optional)

- Enterprise Content Management SOP review meeting and document
- Publication of one example template

3. Project Staff

3.a Summary of Staff Experience

As a strategic service partner, Avineon's technical team is specialized and organized around practice areas for ArcGIS Enterprise and utility GIS. Within these teams, key staff develop deep expertise in the subject areas.

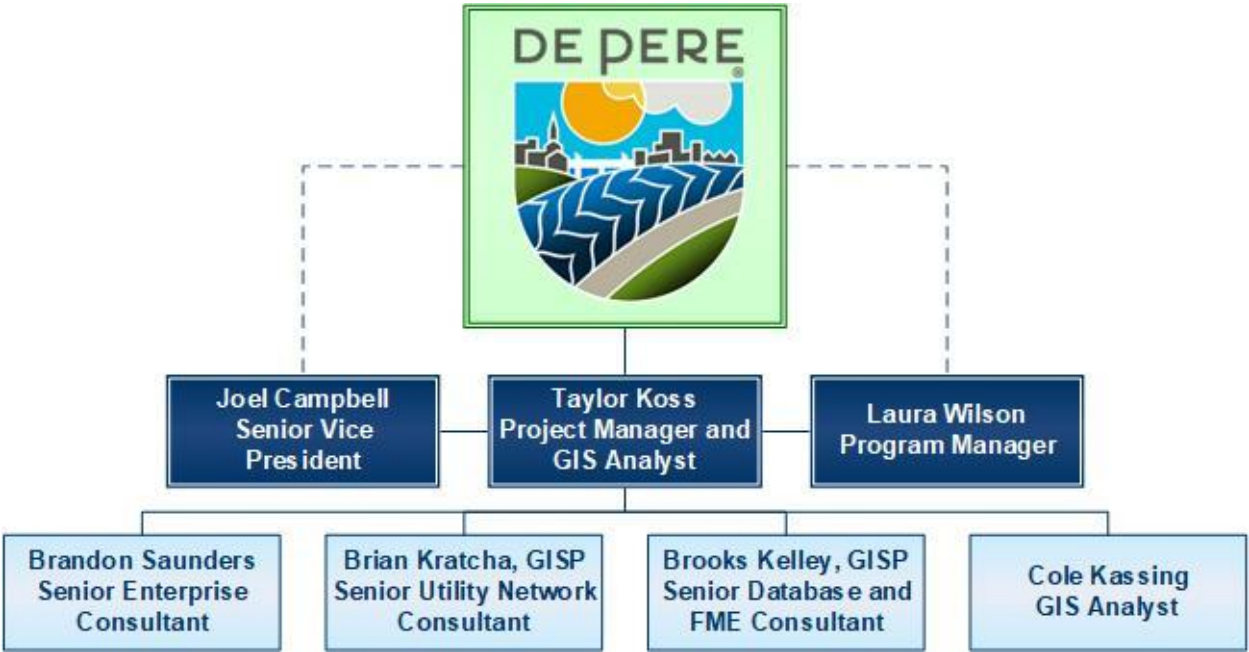
The table below provides a representative sample of the Avineon staff available from our U.S. offices. We anticipate that the City's Esri Utility Network migration, Portal installation, and ArcGIS Enterprise upgrade would be performed entirely from our domestic offices. Your stakeholders can draw on the collective decades of experience offered by our staff, ensuring that you can apply industry best practices to your operations.

Name	Qualifications	Areas of Expertise
Kent Rothrock (26 years experience)	MA Geography; BS Recreation Management	Director of Technical Services, strategic planning, workflow consulting, governance, data management, database design, SQL Server management, automation, and integrations
Laura Wilson, PMP (26 years experience)	BS Geology; Project Management Professional (PMP); AWS Certified Cloud Practitioner; AWS Partner Certification (Cloud Economics); Azure AI Fundamentals	Director of PMO, project and program management, workflow consulting, governance, change management, application development, and integrations
Anil Jayavarapu, PMP (25 years experience)	MS Civil Engineering; PMP; Certified Process Professional (CPP); SAFe Agilist; Esri Utility Network Professional Certification	Utility Network Program Lead, strategic planning, workflow consulting, utility data modeling, governance, program management, and integrations
Brandon Saunders (18 years experience)	MA Geography; BS Geography; GIS Certificate	ArcGIS Enterprise design and deployment, automations, integrations, web applications, and administrator training
Taylor Koss (Nine years experience)	BS Geography, Florida State University; BS Environmental Studies, Florida State University; FAA Commercial UAV Pilot Certificate	Project management, use case mapping, Utility Network training, GIS analyst and data cleanup
Brooks Kelley (30 years experience)	MA Geography and GIS; BS Computer and Information Science; BA Geography; Certified GIS Professional (GISP) ; FME Certified Professional	GIS enterprise system planning, design, development, deployment, and implementation of GIS systems and applications; Utility Network migrations with FME

Name	Qualifications	Areas of Expertise
Cole Kassing (Nine years experience)	BS Geographic Information Systems, Southern Illinois University	Data collection, quality assessment, data cleanup and AGO configurations and performing training and testing
Brian Kratcha (23 years experience)	BS Geography; Esri Utility Network Professional Certification; Esri ArcGIS Desktop Associate; Certified GIS Professional (GISP)	Utility Network technical lead, data modeling, Utility Network migrations, data quality assessments, Utility Network training and administration

3.b Organizational Chart

Avineon takes great care when organizing a project team and strives to assemble a team that fully meets the specific demands of each undertaking. Our proposed team for the De Pere Esri Utility Network migration, Portal installation, and ArcGIS Enterprise upgrade is depicted in the diagram below. **Brian Kratcha and Brooks Kelley are certified GISPs (GIS Professionals)** as required by the RFP.



3.c Resumes for Key Personnel

Resumes for Avineon’s key personnel are enclosed on the following pages.

Laura Wilson, PMP
Program Manager

EXPERIENCE

Ms. Laura Wilson is a certified Project Management Professional (PMP) with over 25 years of technical experience in GIS including 10 years as a developer and 15 years leading projects and portfolios for successful GIS implementations and enterprise digital transformations. Her extensive consulting and project management experience includes GIS strategy development, Enterprise and cloud implementation and migrations, database design and modeling, data transformation, custom application development, and system integrations.

SELECTED PROJECTS

- Project Management Office Director and Delivery Manager, Avineon – Responsible for overseeing and aligning project management activities with organizational goals. Established and implemented project management best practices and standards to ensure consistency, efficiency, and quality across the project delivery team.
- Program Manager, Mammoth Community Water District (MCWD): Utility Network migration for water and sanitary sewer, enterprise deployment and training.
- Program Manager, City of Torrance, California: Digital transformation for GIS with Enterprise and data governance.
- Program Manager, Medina County, Ohio: Utility Network migration for water and sanitary sewer, Enterprise upgrade and training.
- Program Manager, North Carolina State University: Water distribution migration to ArcGIS Pro.
- Program Manager, Pitt County, North Carolina: Enterprise implementation and migration.
- Technical Architect and Senior Project Manager, SUEZ North America – AWS Migration executed in six months to successfully re-host Enterprise GIS platform (1,000 users) from Esri cloud managed services to SUEZ-owned AWS.
- Technical Architect and Senior Project Manager, NC State University Office of the University Architect, Utility GIS Strategy and Implementation – Discovery and collection of functional requirements to move all utilities to Enterprise GIS (water, stormwater, sewer, electric, natural gas, and fiber). Developed strategic plan outlining prioritized rollout, recommendations for asset ID strategy with Assetworks (AIM).
- Technical Architect and Senior Project Manager, McCarran Airport (Las Vegas), Enterprise Cloud Migration
- Technical Architect and Senior Project Manager, Lower Neches Valley Authority – Cloud AWS Enterprise and SCADA integration

EDUCATION, CERTIFICATIONS, AND TRAINING

- Bachelor of Science Geology, University of North Carolina Chapel Hill
- Project Management Professional (PMP) Certification, 2014: PMP #1699600
- Microsoft Azure Accreditation: AI Fundamentals
- AWS Partner Accreditations: Technical & Cloud Economics

TECHNICAL SKILLS

- Esri Enterprise Systems Cloud and System Architecture
- Application Development and Database Design

Taylor Koss
Project Manager and GIS Analyst

EXPERIENCE

Mr. Taylor Koss is a Project Manager with nine years of experience in the field. His strong technical background allows him to wear multiple hats within a project. Mr. Koss is adept at managing project scope, schedule and budget and all day-to-day aspects of projects including internal resource management, financial management and client communications. He specializes in Utility Network, Enterprise Implementations and Land Records (Parcel Topology / Parcel Fabric). His diverse experience includes performing utility data cleanup with ArcGIS software, running QA/QC on geospatial data, editing/correcting geospatial attributes to support Utility Network, and reviewing a variety of source documents.

SELECTED PROJECTS

- Project Manager, City of Lawrenceville, Georgia: Electric Utility Network migration with Enterprise deployment and training.
- Project Manager, Newnan Utilities, Georgia: Utility Network Migration for water and sanitary sewer with Enterprise deployment and training.
- Project Manager, Various ArcGIS Enterprise Upgrade and Migration Projects: Loxahatchee River District (FL), Midland County (MI), Bloomfield Township (MI), City of Superior/Douglas County (MN), Burke County (NC), Caldwell County (NC), Union County (NC), City of Harrisonburg (VA), and Southeastern Wisconsin Regional Planning Commission (WI).
- GIS Analyst, Eversource – Consolidate GIS Electric Utility data symbology and stored displays. Update and create Symbology Dashboard in ArcGIS Online. Find and Document all current state and future state GIS use cases and dependencies using Model Manager. Train users on ArcFM and ESRI for editing/versioning data.
- GIS Analyst, Dominion Energy Virginia – Setup ArcGIS Accelerators on ArcGIS Enterprise. Deployed Model Manager and Metrics as well as created Dashboards to display GIS Use Cases and Dependencies.
- GIS Technician, Los Angeles Department of Water and Power (LADWP) – Supported LADWP's priority clean-up project. Performed gas data cleanup using Esri ArcGIS and Smallworld software. Ran QA/QC on geospatial data. Edited and corrected geospatial attributes of utility networks. Reviewed and analyzed construction, engineering, and historical documentation. Created Online Web Maps, Web Applications, and Dashboards using ArcGIS Online. Used ArcGIS to create and manage Utility Networks.
- GIS Technician, City of Alameda – Provided services related to Alameda's parcel clean-up project. Performed gas data cleanup using Esri ArcGIS and Smallworld software. Ran QA/QC on geospatial data. Reviewed and analyzed construction, engineering, and historical documentation. Created Online Web Maps, Web Applications, and Dashboards using ArcGIS Online. Used ArcGIS to create and manage Utility Networks.

EDUCATION, CERTIFICATIONS, AND TRAINING

- Bachelor of Science in Geography, Florida State University, December 2014
- Bachelor of Science in Environmental Studies, Florida State University, December 2014
- FAA Commercial UAV Pilot Certificate, January 2017

Brandon Saunders
Senior Enterprise Consultant

EXPERIENCE

Mr. Brandon Saunders is an experienced Senior GIS Consultant responsible for implementing, upgrading, and migrating ArcGIS Enterprise environments, automations, and workflow consultation for local government for more than 18 years. He is also experienced in workflow consultation for various state, county, and municipal governments. In his previous roles, he was responsible for maintaining parcel data and related land records information, road centerline data collection and maintenance, development of ArcGIS Online organizational sites, and maintenance of enterprise-level database environment.

SELECTED PROJECTS

- Senior Enterprise Consultant, City of Morganton, North Carolina: Utility Network design and Enterprise implementation.
- Senior Enterprise Consultant, University of North Carolina, Chapel Hill: Utility Network design/implementation and managed services
- Senior Enterprise Consultant, Various ArcGIS Enterprise Upgrade and Migration Projects: City of Stevens Point Utilities (WI), Franklin County (NC), Burke County (NC), Caldwell County (NC), Union County (NC), Davidson County (NC), City of Hickory (NC), and Randolph County (NC).
- GIS Specialist, Davidson County Building Inspections Department – ArcGIS Workforce/Navigator project. Pulled daily inspections out of work order database, processed the inspections, and emailed a daily route to the correct inspector.
- GIS Specialist, Highland Mapping – Deployed and configured AWS instances with ArcGIS Server for custom web applications for Martin County, Duplin County, Stokes County, Bladen County, Hertford County, and Swain County.
- GIS Specialist, Watauga County – Upgraded and migrated ArcGIS Server from 10.1 to 10.8.1.
- GIS Specialist, Highland Mapping – Developed automated jobs for custom database integration and data sharing between agencies and networks for Alamance County, Moore County, Davidson County, Watauga County, Duplin County, Bladen County, and Town of Boone.

EDUCATION, CERTIFICATIONS, AND TRAINING

- Master of Arts in Geography, Appalachian State University, 2010
- Bachelor of Science in Geography, Appalachian State University, 2007
- GIS Certificate, Appalachian State University, 2007

TECHNICAL SKILLS

- SQL Server and ArcSDE implementation
- ArcGIS Pro and ArcGIS Server

Brian Kratcha, GISP
Senior Utility Network Consultant

EXPERIENCE

Mr. Brian Kratcha has over 23 years of experience in geospatial applications. He began his career working for various municipal and state agencies and utilities before becoming a consultant some 18 years ago. He has advanced knowledge of the Esri platform including specialty in Utility Network conversion projects for electric, stormwater, water, and sanitary sewer utilities.

SELECTED PROJECTS

- Senior Utility Network Consultant, City of Morganton, North Carolina: Utility Network for electric: design, migration, and training.
- Senior Utility Network Consultant, University of North Carolina, Chapel Hill: Utility Network for electric: design, migration, and training.
- Senior Utility Network Consultant, City of Columbus, Ohio: Utility Network for electric: design, migration, and training.
- Senior Utility Network Consultant, Town of Boone, North Carolina: Utility Network for water: design, migration, and training.
- Senior Utility Network Consultant, Stevens Point Public Utility (Wisconsin): Utility Network for water (pilot).
- Senior GIS Consultant, POWER Engineers – Worked on multiple Utility Network conversion projects for electric, stormwater, and irrigation utilities including work for Connexus, Turlock Irrigation District, and CenterPoint Energy. Configured FME workbenches for Utility Network conversions. Created Python scripts for GIS data validation.
- Senior Geographic Information Systems Analyst, Power System Engineering (PSE) – Created and led the GIS practice area. Worked with more than 150 clients to develop new or improve existing GIS applications for electric, fiber, and gas utilities. Architected, installed, and managed ArcGIS Enterprise/ArcGIS Online for PSE clients and internal staff.
- IS Data Service Professional/Geo Editor, Wisconsin Department of Transportation – Used LCM and Oracle Developer to maintain state-wide road centerlines for WISLR Program.
- GIS Coordinator, City of Marshfield – Built parcel, street centerline, address, sanitary sewer, and zoning data layers. Administered MS SQL Server. Supervised GIS intern and trained city personnel and the city's Common Council on GIS. Designed sanitary sewer and parcel data models.
- CAD/GIS Operator and Engineering Aide, City of Beloit – Developed and maintained citywide GIS using ArcGIS, ArcSDE, and AutoCAD. Administered Cityworks Database and evaluated software, hardware, and GPS equipment. Mapped city assets including storm, sanitary, and water utility systems using GPS equipment, sewer televising equipment, and as-built drawings. Created map books for the sanitary and storm water maintenance staff.

EDUCATION, CERTIFICATIONS, AND TRAINING

- Bachelor of Science in Geography, University of Wisconsin-Platteville, 2001
- Esri ArcGIS Desktop Associate 19-001
- Esri ArcGIS Utility Network Specialty 20-001
- Safe Software FME Academy – (13) Badges

Brooks E. Kelley, GISP
Senior Database and FME Consultant

EXPERIENCE

Mr. Brooks Kelley is a Certified Geographic Information System Professional (GISP) and FME Certified Professional with over 25 years of experience in the GIS industry. He specializes in spatial data modeling and enterprise-level design. He is responsible for GIS enterprise system planning, design, development, deployment, and implementation of GIS systems and applications for our clients, both public and commercial.

SELECTED PROJECTS

- Senior Database and FME Consultant, Mammoth Community Water District (MCWD): Utility Network migration for water and sanitary sewer, enterprise deployment, and training.
- Senior Database and FME Consultant, Medina County, Ohio: Utility Network migration for water and sanitary sewer, Enterprise upgrade, and training.
- Senior Database and FME Consultant, San Jose Water (California): FME workbench migrations.
- Senior Database and FME Consultant, Eastern Band of Cherokee Indians (North Carolina): Redline field application.
- Data Modeling Team Lead, EPCOR – Designed standardized Utility Network geodatabases for municipal water, wastewater, and recycled water systems across three states. Also, developed the migration mapping strategy for the new Utility Network-based model.
- Migration Lead, The National Gas Company of Trinidad and Tobago – Worked with Esri Consulting Services to develop a new Utility Network model for the NGC's transmission gas system. Also, developed the migration mapping strategy to move their existing data into the new Utility Network-based model and oversaw the migration and QA/QC of this data.
- Data Modeling Team Lead, Eversource - Implement a consolidated core GIS (Esri ArcGIS and ArcFM) platform for electric distribution and landbase across four operating regions using Esri's geometric network and a read-only lab environment using Esri's Utility Network. Previously, each region used diverse GIS platforms based on ArcFM and Smallworld.
- Senior Database Specialist/Programmer, Eastern Municipal Water District – Conducted needs assessment, specification development, and implementation for a Standby Tax Assessment Reporting System (STARS). Replaced two existing systems by leveraging GIS and other enterprise systems to increase the efficiency and accuracy of the county's standby tax assessment and collection processes.
- Technical Lead, U.S. General Services Administration - Designed and implemented repeatable processes using Safe Software's FME Desktop and FME Server to ingest, standardize, QC, and validate federally-owned facilities source AutoCAD plan files before loading them into IBM's TRIRIGA facilities management platform.

EDUCATION, CERTIFICATIONS, AND TRAINING

- Master of Arts in Geography and GIS, West Virginia University
- Bachelor of Science in Computer and Information Science, University of Maryland
- Bachelor of Arts in Geography, West Virginia University
- Certified GIS Professional (GISP)
- FME Certified Professional

Cole Kassing GIS Analyst

EXPERIENCE

Mr. Cole Kassing is a GIS Analyst with Avineon. Specializing in geographic information systems, global positioning systems, and custom cartography, Mr. Kassing utilizes his education in GIS from Southern Illinois University to assist clients across many sectors, including federal, state, and local governments as well as utility companies, non-profit organizations, and planning and environmental firms.

SELECTED PROJECTS

- GIS Analyst, City of Morganton, North Carolina: Utility Network for electric: design, migration, and training.
- GIS Analyst, Mammoth Community Water District (California): Utility Network migration for water and sanitary sewer, enterprise deployment, and training.
- GIS Analyst, Medina County, Ohio: Utility Network migration for water and sanitary sewer, Enterprise upgrade, and training
- GIS Analyst, Stevens Point Public Utility (Wisconsin): Water data quality and editing
- GIS Analyst, City of Fountain Inn Natural Gas – GPS collection of over 300 miles of natural gas pipelines, 1,000 valves, and other infrastructure. Created ArcGIS Collector apps for field collection and viewing of system infrastructure, creating 12 specific Survey 123 apps for field inspections and reporting. Developed ArcGIS Online web maps and dashboards for analysis and viewing of natural gas system.
- GIS Analyst, City of Fountain Inn Public Works – Management of sanitary sewer database with over 60 miles of pipeline and 1,500 manholes. Managed City zoning and City limits datasets. GPS collection of sanitary sewer infrastructure and City-owned walking trails.
- GIS Analyst, City of Spartanburg Streets and Storm Water – GPS collection of over 5,000 storm water system features and data points. Storm Water yearly billing database management. Mapped and maintained finished work order reports.
- GIS Analyst, City of Mauldin Public Works – GPS collection and management of over 2,500 storm water data points and 15 miles of pipeline. Database management of sanitary sewer system with over 2,500 manholes and 96 miles of pipeline.
- Utility Network Migration and Data Reviewer Analysis – Working for several different clients to parse their data through the data reviewer process identifying data features that need to be modified in order to be migrated to the Utility Network platform. Currently working with water, sewer, and stormwater datasets.
- Field Maps Application Design, Testing, and Training – Working with several customers to develop ArcGIS Online Field Maps Mobile Applications to collect data in the field. Mobile applications include environmental health, utility feature collection, and feature inspection. Also involved in the testing of these applications and training of staff for usage in the field.
- Lead Application Tester - Central Hudson Gas & Electric – Tested a new work management application used by an electric company to monitor outages and assets during storms.

EDUCATION, CERTIFICATIONS, AND TRAINING

- Bachelor of Science in Geographic Information Systems, Southern Illinois University, 2013

4. Budget

4.a Rates for Phase 1

Avineon’s firm fixed price for completion of Phase 1 is \$7,500.00.

4.b Rates for Phase 2

Avineon will perform these tasks jointly. Line-item pricing has been provided as requested in the RFP but Avineon’s prices assume both tasks will be completed together.

Task	Budget
Implementing Portal for the Utility Network	\$8,500.00
Implementing Portal for All Other GIS Data	\$6,000.00

4.c Rates for Phase 3

Avineon will perform these tasks jointly. Line-item pricing has been provided as requested in the RFP but Avineon’s prices assume all three tasks will be completed together.

Task	Budget
Sanitary Sewer Data Migration and Implementation	\$25,000.00
Stormwater Data Migration and Implementation	\$17,000.00
Water Data Migration and Implementation	\$60,000.00

The above prices assume Phase 3 tasks will be performed remotely. At the City’s option, select meetings will be conducted onsite in De Pere for an additional fee of \$2,500.00. The exact timing and duration of onsite tasks will be agreed upon during project initiation.

4.d Rates for Phase 4

Post implementation support will be billed in monthly intervals of \$1,000.00 each for six months for a total fixed price of \$6,000.00.

4.e Rates for Phase 5 (Optional)

Avineon’s firm fixed price for the optional *GIS Content Governance Standard Procedures* is \$7,500.00.

5. Municipal Experience and Knowledge

Avineon has partnered with over 140 state and local government clients, including nearly 50 municipalities and over 80 counties throughout the U.S. alone, not to mention our experience with municipal governments throughout Europe. The table below provides a sampling of the depth of relevant experience available through Avineon. As demonstrated in the table, Avineon has experience with clients from a variety of government and industry sectors around the world. Such broad experience is invaluable in establishing a proven process for understanding and analyzing the needs of individual clients such as the City of De Pere.

Customer	Scope of Work
Mammoth Community Water District (MCWD) Mammoth Lakes, California	Avineon worked with MCWD to perform data assessment, planning, and implementation for migration to the Esri Utility Network for water and sewer. Avineon has completed the design tasks for data assessment, data quality review, stakeholder interviews, and use cases. Avineon has processed the initial migration and is preparing the adoption and production implementation schedule and resource requirements.
City of Alameda, California	Avineon developed a Five-Year GIS Strategic Plan to optimize data management, staffing, department collaboration, and GIS use for decision-making. This included interviews with 17 departments, risk and gap assessments, and recommended projects. Additional Alameda projects supported by Avineon include: • Multi-tier ArcGIS 10.9 Enterprise design and deployment in Azure • Platinum managed services for Enterprise environment • Ad hoc GIS services • Fiber network mapping into Esri's Communications Data Management Model for Utility Network • NG911 addressing • Web viewer configurations (citywide, parks, community development, public safety, planning-building-transportation)
Medina County, Ohio	Utility Network migration for water and sanitary sewer. ArcGIS Enterprise upgrade and training.
Pitt County, North Carolina	ArcGIS Enterprise implementation and migration.
City of Lawrenceville, Georgia	Electric Utility Network migration with ArcGIS Enterprise deployment and training.
Newnan Utilities, Georgia	Utility Network migration for water and sanitary sewer with ArcGIS Enterprise deployment and training.
City of Morganton, North Carolina	Utility Network for electric: design, migration, and training.
University of North Carolina, Chapel Hill	Utility Network for electric: design, migration, and training.
Town of Boone, North Carolina	Utility Network for water: design, migration, and training.

Customer	Scope of Work
North Carolina State University Raleigh, North Carolina	Developed a five-year GIS strategic plan to help the University modernize and increase adoption in its GIS investment. Interviewed 18 departments and assessed GIS data, applications, standards, workflows, and staff skills. The strategic plan outlines 15 key projects with an estimated timeline and budgetary estimates. Since adoption of the plan, Avineon key personnel have led engagements for: - Gathering requirements for migration of CAD to GIS for utilities (water, sewer, stormwater, chilled water, steam, gas, electric, and fiber) - Migration of water distribution from CAD to GIS (ArcMap) with editor training - Migration of water distribution from ArcMap to Pro including editor training
City of Torrance, California	Performed a GIS data and technology assessment and developed a <i>Geodata Migration and Governance Plan</i>. The plan outlines critical risks to systems, data, and staffing that hinder the modernization to ArcGIS Pro and Enterprise 11.3. Avineon also developed an <i>Implementation Roadmap</i> that prioritizes opportunities for the next 12 months. Each initiative includes design, deployment, and training in ArcGIS Pro as well as implementation of the new governance and change management standards and behaviors. Avineon is currently executing the following roadmap items: - Designed and installed Enterprise 11.3 for test and production. - Migration of waste management operations from paper to GIS. - Development of code enforcement integration with Accela and dashboard for city manager.
City of Columbus, Ohio	Avineon conducted a data assessment, planning, and implementation to migrate electric utility data and workflows to the Esri Utility Network and ArcGIS Pro. This included data review, quality assessment, stakeholder interviews, gap analysis, and mapping of current electric data to the Utility Network model. The primary migration was completed to estimate the schedule, resources, and training needed for Utility Network production implementation. In the second phase, Avineon is assisting the City with integrating a new outage management system, which includes identifying risks, dependencies, and opportunities for improvement.
City of Dothan, Alabama	Avineon developed a <i>GIS Data Governance Assessment and Plan</i> to identify risks, opportunities, and governance recommendations for the City's goal of a modern, well-managed GIS. The plan outlined a prioritized roadmap to establish ArcGIS Enterprise, restructure master data, implement standards and procedures, and train City staff for the migration to ArcGIS Pro.
Stevens Point Public Utilities, Wisconsin	ArcGIS Enterprise cloud migration, Enterprise managed services, enterprise data management support, web and mobile mapping support, and Utility Network Planning and Migration
City of Superior, Douglas County, Wisconsin	ArcGIS Enterprise and Portal support and application development support

Customer	Scope of Work
Emmet County, Michigan	ArcGIS Parcel Fabric migration and support, ArcGIS Pro training, and Enterprise managed services
REGIS (Grand Rapids, Michigan)	ArcGIS Enterprise and Portal administration support, ArcGIS Pro training
Southeast Wisconsin Regional Planning Commission (SEWRPC)	ArcGIS Enterprise administration support and application development support
City of Columbus, Ohio	Utility Network for electric: design, migration, and training.
Eastern Municipal Water District, California	Design and implementation of Standby Tax Assessment Reporting System (STARS) for tax assessment and collection processes
City of Pasadena, California Water and Power	Ongoing support for GIS operations. Evaluation of ArcFM to ArcGIS Utility Network, data mapping from geometric network to utility network data model, and related analysis.
Muskegon County, Michigan	GIS program full implementation from inception for a medium sized county government encompassing ArcGIS Enterprise/Geocortex implementation with web and mobile applications.
Michigan Area Council of Governments	Delivered guidance, implementation, and ongoing support for an enterprise ArcGIS/Geocortex based GIS system to server internal and external needs.
Antrim County Road Commission, Michigan	GIS program full implementation from inception with planning, system/data design, and ArcGIS Enterprise implementation with web and mobile applications.
Interlochen Center for the Arts, Michigan	GIS program full implementation from inception for facilities management operations with envisioned extended use for students, faculty, visitors, concert attendees, etc.
Michigan Stormwater, Asset Management, and Wastewater (SAW) Grant Projects (38)	Statewide grant program support targeted for better asset management of sanitary and stormwater utilities with 38 Michigan local government clients. Built a repeatable program supporting NASSCO compliant geodatabase, data development, field applications, and asset management application tools.
Michigan Enhanced 911 Grant Projects (5)	Statewide grant program support targeted for more accurate and complete addressed road centerline and address points with five Michigan county clients. Built a repeatable program based around NENA NG911 standards which included geodatabase design, data development, and addressing tools.
Southeast Michigan Council of Governments	Multiple efforts for guidance and services centered around upgrades and improvements for an ArcGIS Enterprise based database encompassing the seven largest counties in Michigan.
The Regional Municipality of York, Canada	ArcGIS Enterprise/Geocortex Essentials application development support and FME integrations for multiple web mapping applications maintained by York Region, including a community information application (C-Info) that was developed and deployed from inception.



Customer	Scope of Work
City of Concord, California	Specification and application development for four applications related to capital improvements and private/commercial developments projects in the City (two public facing, two internal facing) using Web AppBuilder for ArcGIS and Story Maps.
National Guard, Camp Grayling, Michigan	Designed and implemented an ArcGIS Enterprise based geodatabase server and data repository for the Michigan National Guard along with focused services to support Camp Grayling, one of the primary training facilities in the Midwest.
City of Traverse City, Michigan	Provided guidance and technical services to implement ArcGIS Enterprise and help build and enhance the GIS Program along with training and ad-hoc support.

Our mission is to enable municipal clients to take advantage of the wealth of geospatial capabilities available today, make more informed decisions, and develop new ways of doing business that leverage geospatial technology while planning for the future.



6. References

Profiles of similar projects previously performed by Avineon are presented below. We encourage the City to contact our references for confirmation of Avineon’s qualifications and commitment to customer satisfaction.

Project Profile	
Client:	North Carolina State University
Project Title:	GIS Strategic Plan
Contact:	David Wynne GIS Project Manager, Campus Planning and Strategic Investment Administrative Services Building III 2601 Wolf Village Way, Suite 300 Raleigh, North Carolina 27607 919-513-1253 dswynne@ncsu.edu
Period:	2015, Ongoing project work through 2025
Brief Description:	In 2025, Avineon completed the water distribution utility migration from ArcGIS to Pro which included a data quality assessment and recommendations, configuration of Pro attribute rules, and configuration of ArcGIS Data Reviewer. Avineon conducted multiple hands-on training sessions for editing workflows. Avineon developed a Five-Year GIS Strategic Plan to help the University modernize and increase adoption in its investment in GIS. Our team interviewed 18 departments and assessed GIS data, applications, standards, workflows, and staff skills. The strategic plan outlines 15 key projects with an estimated timeline and budgetary estimates. Since the adoption of the plan, Avineon key personnel have led engagements for: • Gathering functional requirements for migration of CAD to GIS for utilities (water, sewer, stormwater, chilled water, steam, gas, electric, and fiber) • Migration of water distribution from CAD to GIS (ArcMap) with editor training • Migration of water distribution editing from ArcMap to Pro including editor training

Project Profile	
Client:	City of Torrance, California
Project Title:	ArcGIS Enterprise Implementation with Geodata Governance and Migration Plan
Contact:	Agustin (Augie) Preciado IT Manager – Application and Analytics - CIT Department 3031 Torrance Boulevard Torrance, California 90503 310-618-2861 APreciado@TorranceCA.Gov
Period:	2024 – Ongoing
Brief Description:	Beginning in 2024 and continuing into 2025, Avineon performed a GIS data and technology assessment and implementation designed to meet the City’s objectives to modernize GIS and reduce legacy technical debt. After reviewing the current GIS administration processes, enterprise data, replication, and maintenance, Avineon developed a Geodata Migration and Governance Plan with implementation roadmap. The plan summarizes critical risks to systems, data, and staffing that hindered the modernization to ArcGIS Pro and Enterprise 11.3. The roadmap prioritizes opportunities for the next 12 months. Each initiative includes design, deployment, and training as well as implementation of the new governance and change management standards and behaviors. Avineon is currently executing the following roadmap items: • Designed and installed Enterprise 11.3 for test and production • Migration of waste management operations from paper to GIS • Design and development of code enforcement integration to Accela • Planning stage for Parcel Fabric, utility migration to Pro, Portal implementation and governance, and migration of all GIS services

Project Profile	
Client:	Medina County Sanitary Engineers (Ohio)
Project Title:	Utility Network Water and Sewer Migration
Contact:	Kyle Waun GIS Manager 791 West Smith Road Medina, Ohio 44256 330-723-9586 kwaun@ohmedinaco.org
Period:	2024
Brief Description:	Medina County Sanitary Engineers (MCSE) selected Avineon to migrate legacy water and sewer source data from Esri geometric network models to Esri Utility Network Foundations data models for use in ArcGIS Pro. Avineon performed an ArcGIS Enterprise upgrade from v10.8.1 to v11.3 to enable new advancements in the platform and enable the hosting of Utility Network data in the Enterprise installation. In addition to deploying the Utility Network water and sewer asset packages to ArcGIS Enterprise 11.3, Avineon published related services to Portal for ArcGIS and assisted with web map and app reconfiguration. Key tasks included: • Source data quality assessments, presentation of results, and data quality issues reconciliation • Utility Network data modeling and discovery sessions/workshops • Initial water/sewer data conversions into Utility Network data models • Training (ArcGIS Pro and Utility Network data models review and configuration and editing) • Testing (functional, integration, and user acceptance) • Utility Network data model revisions (as applicable) • Final water/sewer data conversions into Utility Network data models • Deliver Utility Network FGDBs and asset packages for water and sewer

Project Profile	
<i>Client:</i>	Mammoth Community Water District
<i>Project Title:</i>	Utility Network Migration
<i>Contact:</i>	Justin Mulbay GIS Manager 1315 Meridian Blvd Mammoth Lakes, California 93546 760-934-2596, ext. 286 jmulbay@mcwd.dst.ca.us
<i>Period:</i>	2024 – 2025
<i>Brief Description:</i>	Avineon lead the migration of legacy water and sewer source data (Esri geometric network models) to Esri Utility Network and performed a digital transformation to move production editing to ArcGIS Enterprise 11.x with ArcGIS Pro. This project supported the organizational goals to adopt a modern GIS framework and establish standards and best practices and provided in-depth custom training to ready the team to fully sustain production utility management and maintenance within ArcGIS Enterprise and Utility Network.

Project Profile	
<i>Client:</i>	Town of Boone, North Carolina
<i>Project Title:</i>	Utility Network Planning and Implementation
<i>Contact:</i>	Chris Miller GIS Coordinator 828-268-6216 chris.miller@townofboone.net
<i>Period:</i>	2024
<i>Brief Description:</i>	The Town of Boone, North Carolina has approximately 14,000 residents and serves Appalachian State University. The Town desired to move from 10.8.1 ArcMap to 10.9.1 with ArcGIS Pro and the Utility Network. Avineon worked with the Town to review the existing data and design an appropriate water Utility Network data model. Avineon utilized Esri's Data Reviewer to perform a data quality assessment and identify data gaps and suggested clean-up activities such as snapping of laterals, setting default



	material and size, and generally ensuring the connectivity and standards for the Utility Network data model would be achieved prior to the migration. Avineon performed a test migration to the new Utility Network model and then worked with the Town to refine the model and the migration workflow to increase the quality of the resulting Utility Network. Avineon developed the ArcGIS Pro project and attribute rules for managing editing workflows and maintaining data quality and provided hands on editor training and end user documentation. Avineon also provides enterprise managed services for the Town of Boone ArcGIS Enterprise environment. This includes ensuring the environment has adequate backups, optimizing performance, installing key patches, and an annual version upgrade.
--	---

Addendum A: Questions and Answers

On March 18, 2025, subsequent to submission of Avineon's proposal, the City submitted a series of questions to Avineon via electronic mail, to which Avineon replied on March 19, 2025. The City's questions (in **bold**) and Avineon's responses (in normal text) are reproduced below and hereby incorporated into Avineon's proposal.

1. Is data migration included in your proposal?

a. Migrating our web services

Yes. Avineon plans to migrate and republish the existing services in a new Pro project.

b. Migrating all data from our Enterprise database into Portal (utility and non-utility data)

Yes. Avineon will update the existing SDE database to enable Pro to publish to the new Portal. Portal will be the default data connection for users.

c. Integration with WACHs valve turner

Yes. Avineon assumes this will be a service published in Portal and that no other customization is required.

d. Central Brown County Water Authority data integration (a stand-alone water dataset)

Yes. This is included in our plan for design and deployment.

e. Connection to ArcGIS Online, if deemed appropriate

Yes. This is included in our plan for design and deployment.

f. If not, can you please provide updated pricing to include those services?

Not applicable. Data migration is included in Avineon's proposal as indicated above.

2. Also, can you please identify if any of your references are similar in size to De Pere (25,000 population)?

Avineon selected these references intentionally based on the contextual circumstances and technology similarities; the overall project experiences are very similar to the proposed approach for De Pere, despite the spectrum of organization size and population served.

- NCSU's campus operates similarly to a town/city of 30k population
- City of Torrance, California - population 140k
- Medina County Sanitary Engineers, Ohio - population 184k
- Mammoth Community Water District, California - population 8k
- Town of Boone, North Carolina - population 20k

3. Will the City be responsible for all data cleanup tasks?

No, not entirely. Avineon will work with the City to review and understand options for the data cleanup tasks following the data assessment. In many cases, bulk cleanup can be performed during the migration process using tools Avineon has developed. Additionally, in many cases, data cleansing tasks are used as part of the training plan and activities. This

helps to continue building City user confidence in the new solution. If there are needs for additional data cleanup and the City does not have capacity, additional cleanup support from Avineon could be discussed.

REQUEST FOR PROPOSAL FOR CONSULTING SERVICES FOR

Esri Utility Network Migration, Portal Install and ArcGIS Enterprise Upgrade

Response File

March 7, 2025



PROPOSAL for the CITY OF DE PERE, WI

Submitted by:

DCSE Inc.

23461 S. Pointe Drive, Suite 300

Laguna Hills, CA 92653



CONTENTS

Contents	1
Cover Letter	1
1. Qualifications and Experience.....	2
1.1 ESRI Partner Status.....	2
1.2 General Description of Firm’s History Providing GIS Services	3
1.3 Summary of Experience	3
1.3.1 ArcGIS Enterprise (including Portal).....	3
1.3.2 Utility Network.....	4
2. Technical Approach.....	6
2.1 Project Understanding	6
2.2 Methods of Approach	8
2.2.1 Project Kick-off	8
2.2.2 Phase 1 Method of Approach	9
2.2.3 Phase 2 Method of Approach	9
2.2.4 Phase 3 Method of Approach	11
2.2.5 Phase 4: Continuing Support.....	14
2.3 Project Management Approach.....	14
2.3.1 Agile Methodology.....	14
2.3.2 Collaboration with the City of De Pere	14
2.3.3 Key Project Management Deliverables.....	15
3. Project Staff.....	17
3.1 Brief Biographical Summaries	17
3.2 Organizational Chart	20
4. Budget	21
5. Municipal Experience and Knowledge.....	23
6. References	24
APPENDIX A – Resumes	25

COVER LETTER

Ms. Kristen Vincent - GIS Manager
The City of De Pere
Development Services Department - GIS Division
335 S Broadway St
De Pere, WI 54115

RE: *Response to Request for Proposals: Esri Utility Network Migration, Portal Installation, and ArcGIS Enterprise Upgrade*

Dear Ms. Vincent,

DCSE is pleased to submit this proposal in response to the City of De Pere's RFP for Esri Utility Network Migration, Portal Installation, and ArcGIS Enterprise Upgrade. With our proven expertise in GIS consulting, ArcGIS Enterprise upgrades, Portal for ArcGIS implementations, and Utility Network migrations, we are confident in our ability to successfully execute this project and deliver a seamless transition to the City's upgraded GIS infrastructure.

As an Esri Business Partner with extensive experience working with municipalities, we understand the complexities of migrating legacy systems to the Utility Network while maintaining data integrity and optimizing workflows. Our team of certified GIS professionals, including Esri-certified specialists and GISP professionals, will work closely with the City to ensure that the transition is efficient, minimizes downtime, and enhances overall system capabilities. Our approach includes:

- A phased implementation covering ArcGIS Enterprise upgrade, Portal installation, and Utility Network migration.
- Comprehensive training to equip City staff with the skills needed to manage the new system.
- Ongoing support for six (6) months post-implementation to address any technical challenges.

We are excited about the opportunity to collaborate with the City of De Pere and contribute to the advancement of its GIS infrastructure. We welcome the chance to discuss our proposal further and answer any questions you may have. Please feel free to contact us at your convenience.

We also confirm that we have received all addenda, including the questions and answers posted on 2/19. We look forward to the possibility of working with the City of De Pere on this important project.

Very truly yours,



Masoud Hoseyni, Ph.D.
President
mhoseyni@dcse.com
Direct: (949) 465-3407 Cell: (310) 383-8959

1. QUALIFICATIONS AND EXPERIENCE

1.1 ESRI PARTNER STATUS

DCSE is an **Esri Gold Business Partner**. We have been in partnership with Esri for over 27 years. Several awards have marked our partnership with Esri:

- Esri IMGIS Conference 2022 Award for Utility Network Implementation.
- Esri 2006 Foundation Partner of the Year.
- Esri featured our MapLibrary product at their 22nd and 23rd User Conferences (UC) for hosting Map Gallery content and awarded it the People's Choice Award.
- Esri User Conference 1992 - Winner of the Most Analytical Solution Using Dynamic Segmentation Toolbox.

Our Esri specialties at DCSE include:

- ArcGIS Utility Network Management Specialty.
- ArcGIS System Ready Specialty.
- ArcGIS Marketplace Provider Award.

More information about our partnership with Esri can be found at [Esri's official partner page](#).

Figure 1-1 below shows DCSE's award history and the type of awards respectively.

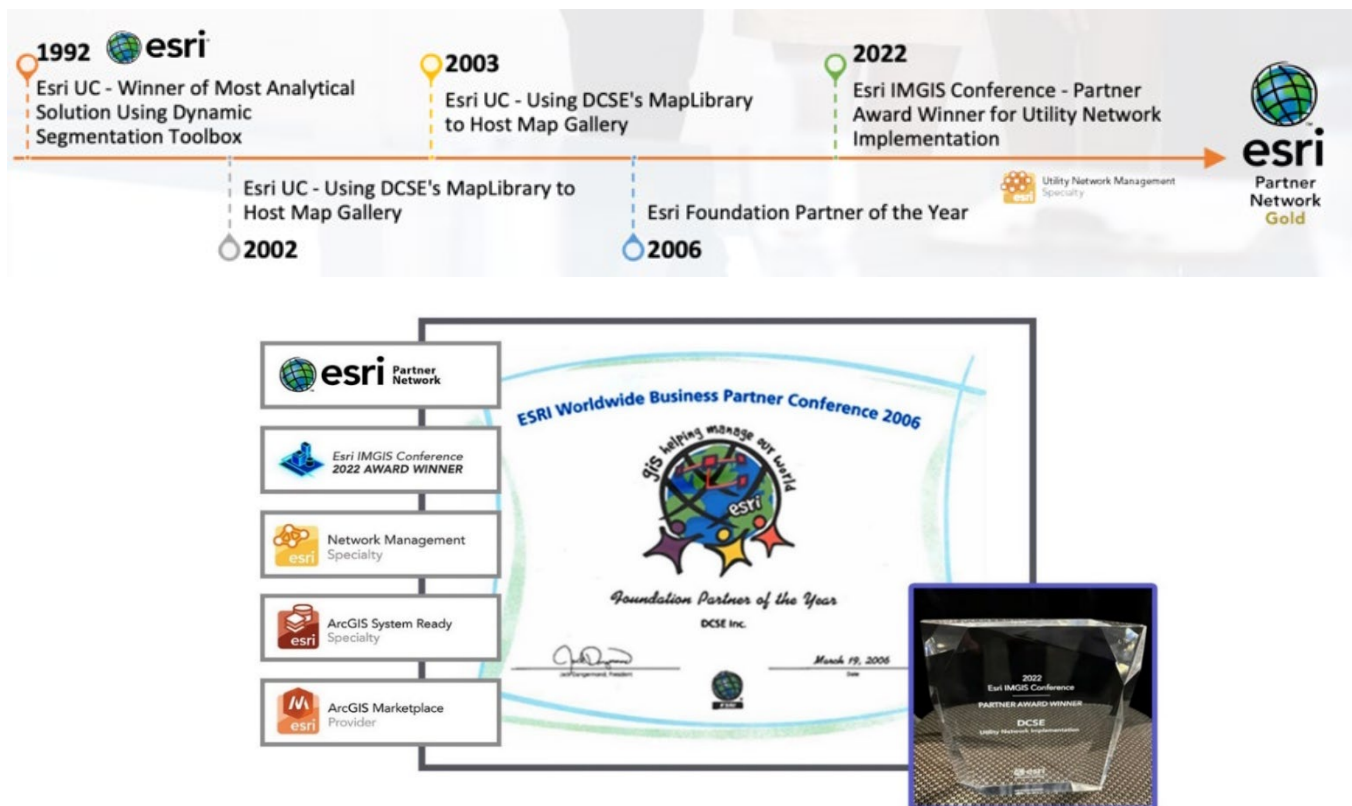


Figure 1-1 DCSE's Awards at a Glance

1.2 GENERAL DESCRIPTION OF FIRM'S HISTORY PROVIDING GIS SERVICES

We have provided comprehensive GIS solutions for over 300 cities, municipalities, and water & wastewater authorities for more than three decades, covering data conversion, Utility Network migration, enterprise GIS implementation, data development, application development, and integration with enterprise systems such as asset management, SCADA, and hydraulic modeling. Our services also include field data collection, web mapping, and GIS and remote sensing-based water and groundwater management solutions to forecast demands, allocate water budgets, and support emergency planning. Additionally, we offer training, technical support, and resource planning, enabling agencies to efficiently manage and optimize their GIS systems.

Table 1-1 Company Information

DCSE, Inc. Corporate & Contact Information	
Legal Name	DCSE, Inc.
Type of Organization	C-Corporation
State of Incorporation	California
Number of Years in Business	35
Number of Employees	30
D&B Duns #	78-173-8661
Corporate Office Address	23461 S. Pointe Drive, Suite 300 Laguna Hills, CA 92653
Business Office Address	23461 S. Pointe Drive, Suite 300 Laguna Hills, CA 92653
Phone / Fax	(949) 465-3400 / (949) 586-8141
Contact Person	Masoud Hoseyni, President
Contact	mhoseyni@dcse.com (949) 465-3407

1.3 SUMMARY OF EXPERIENCE

1.3.1 ArcGIS Enterprise (including Portal)

Over the past decades, we have successfully implemented **ArcGIS Enterprise** solutions for more than 100 agencies, ensuring seamless integration, security, and performance optimization. Our work includes configuring **ArcGIS Portal** with secure access, user roles, and content-sharing capabilities to enhance collaboration. We have also deployed and configured **Web Adaptors** for both ArcGIS Portal and ArcGIS Server, enabling secure communication and integration with enterprise authentication systems. Our team has performed numerous **ArcGIS Server** installations and upgrades, optimizing service performance and reliability for critical GIS applications. Additionally, we have extensive experience in configuring and managing **ArcGIS Data Store**, ensuring efficient storage and accessibility of hosted feature layers, relational data, and large-scale spatial analytics. We follow industry best practices, including pre-upgrade assessments, compatibility testing, and post-upgrade validation, to ensure smooth transitions between versions.

In the last three (3) years alone, DCSE has completed over 15 ArcGIS Enterprise implementations and/or upgrades, supporting clients in migrating to the latest Esri technology while optimizing their GIS

environments. Our team is proficient in both on-premises and cloud-hosted deployments, ensuring that organizations leverage the full capabilities of ArcGIS Enterprise.

Table 1-2 below highlights a selection of relevant projects completed by DCSE in recent years.

Table 1-2 Select ArcGIS & Portal Experience

Project	ArcGIS Enterprise	ArcGIS Portal	ArcGIS Server	Training & Support
LAWA (Los Angeles World Airports) - Upgrade from 11.1 to 11.3 version of ArcGIS Enterprise environment	✓	✓	✓	✓
Irvine Ranch Water District - Implementation of 10.9 ArcGIS Enterprise	✓	✓	✓	✓
San Bernardino Municipal Water Department - Implementation of 11.1 ArcGIS Enterprise across multiple servers with live monitoring using ArcGIS Monitor. Upgrade to 11.3 in progress.	✓	✓	✓	✓
Moulton Niguel Water District - ArcGIS Enterprise Upgrade to 10.9.1	✓	✓	✓	✓
Contra Costa Water District - Implementation of 10.8 ArcGIS Enterprise	✓	✓	✓	✓
Santa Clarita Valley Water Agency - Hosting ArcGIS Server Feature Services on a DMZ server with advanced firewall and security configurations			✓	✓
City of Simi Valley Water System - Upgrading ArcGIS Enterprise to 10.5	✓	✓	✓	✓
City of Providence - Upgrading ArcGIS Enterprise to 11.3	✓	✓	✓	✓

1.3.2 Utility Network

As an **Esri Network Management Specialty Partner**, DCSE has extensive experience in Utility Network migration from Geometric Network and GIS integration for water, wastewater, and storm agencies, with **Esri-certified** experts leading the migration process.

The matrix shown in Table 1-3 provides a summary of the relevant Utility Network projects completed by DCSE in recent years, along with ongoing efforts. For most agencies, we have set up separate production and development environments, both in the Cloud or on-premises.

Table 1-3 – Select UN Experience

Project	Data & Integration Assessment	Data Migration	System Integrations	Training & Support
Irvine Ranch Water District (Utility Network: Water Pilot Complete – Full Migration in Progress for Water & Wastewater)	✓	✓	✓	✓
San Bernardino Municipal Water Department (Utility Network: Water & Sewer)	✓	✓	✓	✓
Santa Clarita Valley Water Agency (Utility Network: Water – Vertical Assets)	✓	✓	✓	✓
City of Long Beach (Utility Network: Recycled Water)	✓	✓	✓	✓
Elsinore Valley Municipal Water District (Utility Network: Wastewater – Pilot Complete)	✓	✓	✓	✓
Soquel Creek Water District (Utility Network: Water – Pilot Complete)	✓	✓	✓	✓
Providence Water (Utility Network: Water)	✓	✓	✓	✓
Greenville Water (Utility Network: Water Pilot Complete – Full Migration in Progress)	✓	✓		✓
Golden State Water Company (Utility Network: Water – Full Migration in Progress)	✓	✓	✓	✓
Moulton Niguel Water District (Utility Network: Recycled Water – Full Migration in Progress)	✓	✓		✓
City of Salem (Utility Network: Water, Sewer, Irrigation & Storm)	✓			
City of Thousand Oaks (Utility Network: Water)	✓			

DCSE also offers several solutions to streamline Utility Network integration for your agency:

- [GeoMerge](#) Add-in for ArcGIS Pro (available on Esri's Marketplace) synchronizes data across spatial and non-spatial databases.
- [Public Notification Tool](#) connects Utility Networks to customer information systems, enabling network tracing and automated notification letters.
- Vertical Asset Integration – Expertise in asset hierarchy and extending Utility Network Asset Packages for CMMS data.
- 3D Utility Network Capabilities – Uses schematics, AI-powered drones, and sensors to create 3D models and digital twins, enhancing system visualization and decision-making.

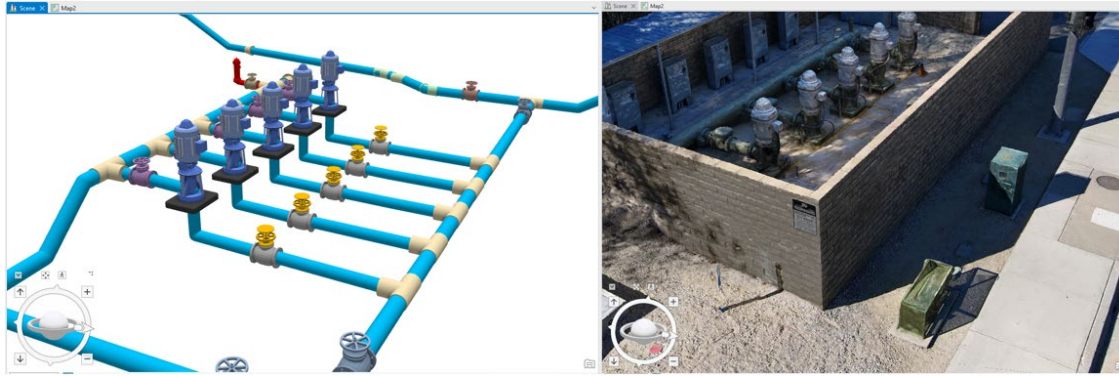


Figure 1-2 Utility Network in 3D

In addition to our substantial work with our clients, we have hosted multiple webinars on Utility Network on the following topics: migration, functionality, applications, and maintenance. The links below will give you access to a few of our webinar sessions on Utility Network.

- [Utility Network Functionalities](#)
- [Utility Network Capabilities for Water Systems: Study & Demo \[Pt. 1\]](#)
- [Utility Network Capabilities for Water Systems: Study & Demo \[Pt. 2\]](#)
- [Utility Network in ArcGIS Pro Editing, QC, Containment, Network Diagrams](#)
- [Utility Network on the Web Experience Builder](#)
- [Utility Network in 3D & Interactive Slice](#)
- [Public Notification and Utility Network Isolation](#)
- [GeoMerge for ArcGIS Pro - Utility Network Data with Enterprise Systems](#)

Also, we encourage you to view the following videos showcasing some of our recent sample works related to Utility Network, Asset Hierarchy, and 3D (digital twin) incorporation in UN systems.

[GEAR Overview](#)

[Treatment Plant 3D UN](#)

[Recycled System 3D UN](#)

2. TECHNICAL APPROACH

2.1 PROJECT UNDERSTANDING

The City of De Pere maintains a robust GIS system, comprising 30 feature datasets with over 600 feature classes. The current ArcGIS Enterprise environment is version 10.9.1, operating on SQL Server 2022, and includes 85 ArcGIS services, with nearly 50 active services. Additionally, there are numerous hosted feature layers in ArcGIS Online, supporting a broad range of municipal operations. The City has had an Esri Small Government Enterprise Agreement since 2018, which has provided a foundation for GIS advancements.

This project will upgrade ArcGIS Enterprise to version 11.3, establish Portal for ArcGIS for streamlined data management, and migrate the City's utility data (Sanitary Sewer, Storm Sewer, and Water) to the Esri Utility Network. The migration will enhance operational efficiency, improve data accuracy, and support future growth.

Key considerations for this project include:

- Ensuring compatibility with existing GIS infrastructure while upgrading to ArcGIS Enterprise 11.3.
- Seamlessly implementing Portal for ArcGIS to optimize web-based GIS functionalities and enable efficient data management.
- Migrating the Utility Network with minimal disruption to City operations, ensuring accuracy in data modeling and compliance with industry standards.
- Training staff to use the upgraded system effectively, leveraging ArcGIS Pro for data editing and analysis.
- Providing post-implementation support to resolve any technical issues and optimize performance.

We recognize that the City requires a **full-service GIS consultant** capable of executing these tasks while maintaining clear communication, efficient project management, and adherence to Esri best practices. Our team is prepared to collaborate with the **GIS Division and IT Department** to ensure a smooth transition and long-term success of this initiative. The key issues that need to be addressed in this project include:

- **ArcGIS Enterprise Software Version** - Selection of the targeted ArcGIS Enterprise and Portal: The key question to address is whether ArcGIS Enterprise 11.3 is the best upgrade option or if it would be more beneficial to wait for ArcGIS Enterprise 11.5, which is expected to be released soon.
- **Choice of ArcGIS Enterprise upgrade Tools** - Esri has different approaches to deployment of ArcGIS Enterprise including single and multi-machine deployment. The options for upgrade will be different depending on how 10.9.1 was deployed. This needs to be verified.
- **Upgrade or Install a New Environment** - Should a parallel environment be set up with the desired ArcGIS Enterprise version or should the existing environment be upgraded? Setting up the parallel environment will require migration of data, feature services, and applications to the new environment.
- **Upgrade of Annotations** – Annotations, such as feature linked annotation, need to be upgraded if used in the current 10.9.1 environment. All annotation classes need to be updated to function properly in ArcGIS Enterprise 11.3. Additionally, the link between infrastructure feature classes and related annotation classes must be re-established, as ArcGIS Enterprise 11.3 now relates feature-linked annotations using Global IDs instead of Object IDs. Since the Utility Network (UN) migration reorganizes data into different feature classes, these relationships must also be reconfigured to ensure proper linkage between annotation classes and infrastructure features.
- **Tracing in Geometric Network** – If tracing is currently used then the upgrade to ArcGIS 11.3 (or other future versions) needs to be delayed until Utility Network dataset is available since geometric network is not supported in ArcGIS 11.3 or ArcGIS Pro.
- **Choice of Utility Network Data Model** - There are currently three approaches available to migrating water, sewer, and storm. These include UN Foundation (Expanded), UN Essentials data models as well as the use of Minimum Deployment (UN Migration Tools). The capability of each of these options should be discussed and understood to select the best approach for each facility type. For example, the UN Migration Tools require configuration in the following areas:
 - Rule Based Editing
 - Emergency Valve Isolation Tracing

- Directional Devices
- Industry Specific Symbology and Editing Templates
- Pressure Zone Subnetworks
- Industry Specific Attribute Rules

On the other hand, UN Foundation Expanded data model includes all of the above capabilities.

- **Merging Updated Data while Utility Network data is being worked on** - The City is continuing to edit the GIS data while the Utility Network Project is on-going. When and how would the change data be merged with the Utility Network data be converted.
- **Utility Network Architecture Environment** - Esri's recommended architecture for Utility Networks differs from traditional Geometric Network data management and publishing. This will require the City to adjust to the existing environment, including adding new servers, to follow the best management practices of the Utility Network data maintenance.
- **Wachs Valve Data Integration** – Wachs valve exercising machines collect data related to exercising of valves. The key data includes, date of exercising, number turns, direction of turn, and the maximum torque applied. The torque profile can also be collected indicating at which point the valve is loosened and turned. How and what to store in the Utility Network data structure needs to be addressed prior to integration and data modeling.

2.2 METHODS OF APPROACH

This project includes four phases as outlined in the RFP.

- Phase 1: Esri ArcGIS Enterprise Upgrade
- Phase 2: Esri Portal Installation
- Phase 3: Esri Utility Network Migration
- Phase 4: Continuing Support

Each project phase and its scope of work are outlined in the RFP. This section details DCSE's approach for each phase and the corresponding tasks.

2.2.1 Project Kick-off

DCSE will initiate the project with a kickoff meeting to align project goals, introduce team members, and establish collaboration with the City's team. We will familiarize the project team with our method of managing the project and share information with respect to accessing our Project Teams site. This task will focus on all three phases of the project. We will briefly discuss the best practices for setting up ArcGIS Server and ArcGIS Portal in support of Utility Network. We will also discuss Esri's Network Management Release policy since it impacts the versions of ArcGIS Pro, ArcGIS Server, and ArcGIS Enterprise to use. We will discuss starting Phase 3 of the project in parallel with Phases 1 and 2.

The deliverables of this task will include the following:

- Project kick-off Meeting Minutes containing the following discussions:
 - Project Teams site access and contact information.
 - ArcGIS Pro, Server, and Enterprise version selection based on Esri's Network Management Release recommendations.

- Best practices for Utility Network architecture, including decisions on installing, upgrading, or a hybrid approach
- Review of the overall project schedule and feasibility of Starting Phase 3 in parallel to Phase 1 and 2.
- Recommendations for upgrading the existing system or installing parallel software and migrating data

2.2.2 Phase 1 Method of Approach

The goal of this phase is to upgrade the existing ArcGIS Server to version 11.3.

2.2.2.1. Task 1.1 – Discovery Meeting

DCSE will conduct a pre-upgrade discovery meeting with the City's GIS Division and IT Department to understand the background of the City's GIS infrastructure and upgrade history. This meeting will confirm the installation and/or upgrade plan. The deliverables of this task will include the following:

- Upgrade and Installation Plan including the existing (prior to upgrade) and future (post upgrade and installation) plan. This will include ArcGIS Server, Portal for ArcGIS, and ArcGIS Pro among other items.

2.2.2.2. Task 1.2 – Conduct the Upgrade

This task will cover the upgrade of the ArcGIS Server (and installation of new software requirements) with timely communication throughout the process and ensuring all existing data, applications, processes are working and tested. A structured upgrade plan will be followed to minimize downtime and ensure a seamless transition. Post-upgrade validation will be conducted to verify system stability and performance.

2.2.2.3. Task 1.3 – City Acceptance Testing and Approval

DCSE will guide City staff in testing the environment, identifying issues, and reporting findings. The DCSE team will provide support throughout the process, addressing any issues until City acceptance is achieved. A structured testing plan will ensure all functionalities are validated and any necessary adjustments are made efficiently.

The deliverables of this task will include the following:

- A document outlining issues identified and resolved during User Acceptance Testing (UAT).
- A document in PDF format describing the steps taken to perform the upgrade.
- An action plan in PDF format detailing recommendations for a future upgrade schedule, in line with a City this size and consultant and Esri recommendations.

2.2.3 Phase 2 Method of Approach

As part of this task, DCSE will work closely with the City to install Esri's ArcGIS Enterprise Portal ("Portal") based on the needs of the City, determine an editing/update workflow for City data, including utility data (Sanitary Sewer, Storm Sewer, and Water), and provide training on that workflow. Our understanding is that the workflows identified in the RFP in this task are related to post Utility Network upgrade.

2.2.3.1. Task 2.1 – Discovery Meeting

Conduct pre-installation meetings with the City to understand the needs of, and uses for, Portal with a focus on City utility data as it relates to Esri's Utility Network data model.

2.2.3.2. Task 2.2 - Pre-Installation Meeting

Conduct pre-installation meetings with the City to understand the overall needs of, and uses for, Portal with a focus on non-utility City GIS data. The deliverables of this task include:

- A detailed report in PDF format documenting the outcomes of the pre-installation meetings/focus group sessions with various City stakeholder groups.

2.2.3.3. Task 2.3 – Installation

Install Esri's Portal for ArcGIS, and ensure it is working properly. The deliverables of this task include:

- A document in PDF format describing the steps taken to perform the Portal installation and service migration.

2.2.3.4. Task 2.4 – Workflows and Versioning Recommendations for Utility Network

DCSE will provide recommendations for a versioning and editing workflow tailored to the City's utility data needs in the Utility Network, including potential automation workflows for efficiency and data integrity. The deliverables of this task include:

- Recommendations in PDF format outlining versioning and editing options within the Utility Network environment.

2.2.3.5. Task 2.5 – Workflows and Versioning Recommendations for Non-Utility Data

DCSE will provide recommendations for a versioning and editing workflow to support the City's non-utility GIS data, including potential automation workflows for efficiency and data integrity. The deliverables of this task include:

- Recommendations in PDF format detailing the City's options for versioning and editing within the Portal environment.

2.2.3.6. Task 2.6 – Assist in Implementation of the Chosen Recommendations from Tasks 2.4 and 2.5

Assist in the implementation of chosen recommendation(s).

2.2.3.7. Task 2.7 – Connect Portal to ArcGIS Online

If deemed beneficial by City stakeholders, DCSE will assist in integrating Portal with ArcGIS Online to enhance data sharing while avoiding redundancies.

2.2.3.8. Task 2.8 – Migrate all web services to ArcGIS Pro

The objective in this task is to migrate all City web services from the ArcMap service runtime to the ArcGIS Pro service runtime for use in the Portal environment. This process will involve reviewing existing services, ensuring compatibility, and optimizing performance in the ArcGIS Pro environment.

- A fully implemented Portal environment with all City web services compatible with ArcGIS Pro.

2.2.3.9. Task 2.9 - Provide Training

Conduct a minimum of three (3) training sessions with City staff on the versioning/editing/service workflows, including introducing users to ArcGIS Pro. All training sessions will be recorded and accompanied by PowerPoint slides for reference. The deliverables of this include:

- A detailed training guide in PDF format detailing how to perform the City's common tasks in ArcGIS Pro, specific to each department/stakeholder group.
- Training Recordings and slides
- Hands-on exercises for staff to practice the new skills

2.2.4 Phase 3 Method of Approach

DCSE adopts a holistic approach to Utility Network migration, prioritizing data, users, workflows, and integrations. We understand that enterprise GIS is a continually evolving system, and we ensure that all integrations and business systems remain functional throughout the migration process. Our method emphasizes quality control and adherence to industry standards for Utility Network migration projects, as depicted in Figure 2-1.

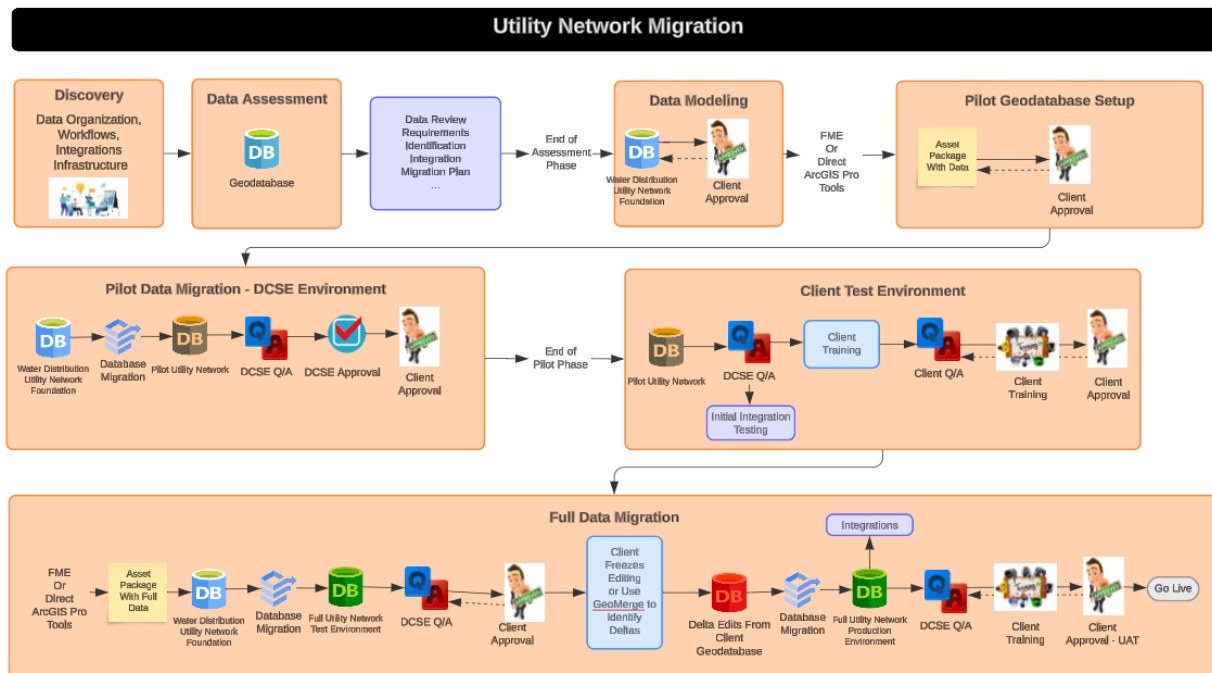


Figure 2-1 Typical UN Migration Workplan

2.2.4.1. Task 3.1 - Conduct Pre-migration Meetings with the City

DCSE will meet with City stakeholders to define key requirements, identify potential challenges, and outline initial steps for Utility Network implementation. Discussions will focus on data readiness, versioning, network rules, integration with existing systems, and the high-level migration strategy. The deliverable for this task will include:

- Meeting agenda and notes summarizing key discussions and initial findings.
- High-level migration plan outlining major steps and dependencies.

2.2.4.2. Task 3.2 - Provide Recommendations for Utility Network Features to Implement

DCSE will assess the City's data and operational needs to determine the most suitable Utility Network asset package for implementation. We will evaluate the UN Foundation Expanded and UN Foundation Essentials data models, considering their alignment with the City's infrastructure, integration requirements, and long-term GIS strategy. Additionally, we will assess whether the Minimum Deployment (UN Migration Tools) is the right approach for efficiently transitioning from the existing dataset to the Utility Network model, especially for the storm drain system. Currently, we believe the UN Foundation Expanded models are the ideal choice for the City's sewer and water systems, while the Minimum Deployment (UN Migration Tools) approach is best suited for the storm drain system.

Our analysis will focus on data compatibility, connectivity rules, and functional capabilities to ensure the selected asset package supports seamless integration with the Central Brown County Water Authority dataset and EH Wachs valve-turning devices. Based on this assessment, we will provide recommendations tailored to the City's needs, refining them with City input before finalizing the implementation strategy.

2.2.4.3. Task 3.3 - Data Readiness Assessment

A comprehensive data assessment will be conducted to evaluate the integrity, accuracy, and usability of the Sanitary Sewer, Storm Sewer, and Water datasets. This will involve running a series of validation checks using ArcGIS Data Reviewer, Python scripts, SQL queries, and network connectivity tools in ArcGIS Desktop and ArcGIS Pro.

The assessment will focus on detecting errors that could impact Utility Network functionality, such as topology violations, missing attributes, connectivity issues, and inconsistent asset classifications. Any discrepancies found will be flagged and documented in a report that outlines required data cleanup efforts before migration. To ensure a high level of data quality, the following validation checks will be performed:

- **Geometry Checks:** Identify invalid geometries such as self-intersecting lines, duplicate vertices, or slivers that could disrupt network connectivity.
- **Spatial Coincidence Checks:** Ensure assets are correctly aligned, such as pipes snapping to manholes and valves being placed at proper junctions.
- **Network Connectivity Checks:** Validate that all assets are properly connected within the network and that there are no gaps or disconnected features.
- **Unique ID Checks:** Confirm that all assets have unique identifiers, and that duplicate IDs are identified.
- **Domain Consistency Checks:** Ensure attributes conform to predefined domains to maintain data standardization and avoid invalid values.
- **Attribute Completeness Checks:** Verify that all essential attributes, such as lifecycle status, subtype, ownership, and integration fields, are populated.

For the Sanitary Sewer and Storm Sewer systems, additional checks will be performed:

- **Flow Direction Validation:** Confirm that sewer and stormwater pipes have correctly assigned flow direction based on gravity and pump configurations.
- **Invert Elevation Consistency:** Ensure that upstream inverts are higher than downstream inverts, preventing erroneous reverse flows.

- **Structures classifications:** Split manholes. Elevated manholes. Drop manholes. Junction structures.

2.2.4.4. Task 3.4 - Data Cleanup

Using the results of the City's data assessment, DCSE will collaborate with City staff to develop and implement targeted data adjustment approaches for Utility Network migration. Our focus will be on resolving connectivity, geometry, and domain-related issues that do not require an as-built review.

DCSE will correct misaligned features, ensure proper snapping for connectivity, and adjust geometric inconsistencies to align with Utility Network requirements. Where attributes are already populated, we will refine domain assignments as needed, while the City will be responsible for addressing any attribute gaps. After data adjustments, DCSE will send the updated dataset back into the City's environment so that future edits during the project duration are made on the adjusted data, minimizing efforts to reconcile delta data into the final Utility Network.

2.2.4.5. Task 3.5 - Conduct Migration

2.2.4.5.1. Data Model Design

The City's existing GIS data structure will be analyzed and mapped to Esri's Utility Network model to ensure accurate representation of Sanitary Sewer, Storm Sewer, and Water networks. This includes configuring asset packages, domains, subtypes, connectivity rules, and attribute validations to support network functionality and future integrations.

- Asset Packages & Domains: For Water and Sewer, the Esri Utility Network Foundation Expanded Water and Sewer Asset Packages will likely serve as the foundation unless the discovery phase identifies a more suitable option. These packages will be customized with adjusted domains to accommodate City-specific asset classifications and domain requirements. For Storm, the Minimum Deployment (UN Migration tools) will likely be the method for migration unless the discovery phase identifies a more suitable option.
- Data Mapping & Migration Strategy: Existing GIS data will be mapped to the Utility Network using ArcGIS Data Loading Tools, with each field carefully analyzed to ensure it is correctly assigned to the appropriate schema element.
- Integration Considerations: The schema will retain crucial application-specific fields necessary for integration with asset management, work order, and hydraulic modeling systems, ensuring seamless interoperability.

By the end of this phase, the schema will be configured, validated, and documented, ensuring it meets both Esri best practices and the City's operational needs. The deliverables for this sub-task is the following:

- Data Schema Report detailing domains, subtypes, and data mapping strategy.

2.2.4.5.1. Full UN Migration for Water, Sewer, and Storm

This task involves a sequence of approval and testing processes leading to the operational deployment of the Utility Network. It begins with the City approving the full Utility Network data in a test environment, followed by User Acceptance Testing (UAT) to verify the City's data, projection setup, and the editing and maintenance configurations and tools for the Utility Network. The necessary

infrastructure for the GIS system and potential third-party integrations will then be used to establish the production environment, either on-premises or cloud-based. The deliverable for this task will be the following:

- Final & Full Utility Networks in Production Environment for Water, Sewer, and Storm

2.2.4.6. Task 3.6 – Training and Documentation

DCSE will provide five (5) training sessions on the Utility Network structure, editing, and capabilities. Documentation will be provided for each session, covering key concepts and including hands-on tutorials and assignments.

2.2.5 Phase 4: Continuing Support

The objective for this phase is to ensure that City staff receive ongoing support and guidance following the completion of Phases 1-3. This will include structured post-implementation sessions to address any questions, troubleshoot issues, and refine workflows. After the initial support period, assistance will transition to an as-needed basis for the remainder of the six-month support term.

2.2.5.1. Planned Support Structure

Month 1-2: Structured Support Period (16 hours total)

- Twice-weekly check-in meetings (1 hour each, 16 total) to address issues, questions, and help as City staff work with the new system.

Month 3-6: As-Needed Support Period (10 hours total)

- Technical assistance for workflow clarifications and troubleshooting.
- Typically, we will aim to schedule support sessions within three (3) business days of a request.

Any additional support hours needed, whether within or beyond the six-month support period, can be negotiated separately outside the scope of this project.

2.3 PROJECT MANAGEMENT APPROACH

At DCSE, we follow an Agile project management methodology, ensuring that all project phases are delivered efficiently, transparently, and collaboratively. Our Microsoft Teams-based workflow enables seamless communication between our team and the City of De Pere's project stakeholders, ensuring alignment at every step.

2.3.1 Agile Methodology

Our project is managed using an Agile framework, which includes:

- Sprint-based execution to ensure incremental progress and adaptability.
- Internal daily standups with DCSE project team.
- Weekly check-ins with the City staff to address potential roadblocks.
- Visual planning tools to track project progress and report key action items.
- Continuous feedback loops to ensure quality control and alignment with the City's objectives.

2.3.2 Collaboration with the City of De Pere

- We will leverage Microsoft Teams for centralized communication and documentation. A sample project Site in Microsoft Teams is shown in Figure 2-2.

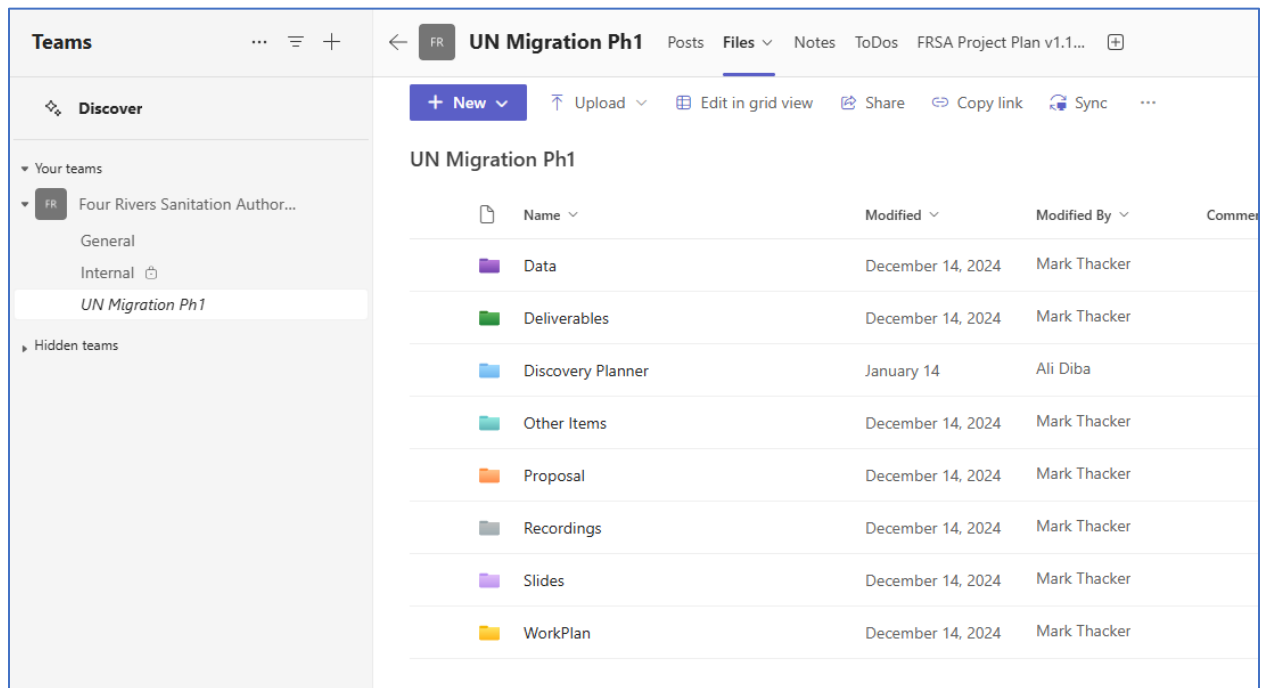


Figure 2-2 – UN Project Managed and Shared with the City Staff in Microsoft Teams

- The City's GIS and IT teams will be involved in sprint planning to ensure priorities are met.
- Live dashboards and visual reports will be shared at each scrum meeting for complete transparency.
- The client-side project manager will receive real-time updates on tasks, risks, and milestones.

2.3.3 Key Project Management Deliverables

- Project Roadmap: A high-level timeline outlining major phases and milestones.
- Sprint Plans & Reports including detailed tracking of tasks, blockers, and progress.
- Monthly Status Reports: Sent to stakeholders for review and feedback. Sample report is shown in Figure 2-3.
- Final Project Review: A comprehensive post-implementation assessment.

Our Agile-driven approach ensures a structured, transparent, and adaptable execution, delivering value at every stage of the project

DCSE
23461 S. Pointe Drive, Suite 300
Laguna Hills, CA 92653
949-465-3400



PROJECT STATUS REPORT

PROJECT SUMMARY

REPORT DATE	PROJECT NAME	PREPARED BY
October 28th, 2024	Clear Water: GIS Consulting Services - Utility Network Conversion	Ali Diba / Haritha Vendra

STATUS SUMMARY

TASK	PROGRESS	ANTICIPATED WORK NEXT REPORTING PERIOD	SHOWSTOPPERS
1 - System Evaluation & Recommendations			
1.1 - Project Initiation & Kick off Meeting	100% Completed	NA	
1.2 - Assessment Workshops	100% Completed	NA	
1.3 - Documentation & Reports	92% Completed	Waiting on review and feedback from CW. DCSE will incorporate the comments and finalize the subtask.	
2 - Utility Network Conversion Transition Plan			
2.1 - Infrastructure Upgrade Plan	80% Completed	Waiting on review and feedback from CW. DCSE will incorporate the comments and finalize the subtask.	
2.2 - Existing Data Review	100% Completed		
2.3 - Utility Network Asset Package Update	80% Completed		
2.4 - Integrations and Data Dependencies Plan	50% Completed		
2.5 - Sprint Plan	100% Completed	Provide CW with the Sprint Plan draft documentation.	
2.6 - Pilot Migration & Testing	100% Completed		
3 - Full System Implementation			
3.1 - Data Clean up, Migration, and Utility Network Configurations	90% Completed		In Progress
3.2 - ArcGIS Environment Set Up - Production Environment			
3.3 - Deployment of Utility Network - Production environment			

TASK	PROGRESS	ANTICIPATED WORK NEXT REPORTING PERIOD	SHOWSTOPPERS
3.4 - Integrations & Data Dependencies For Production Environment			
3.5 - Training & Documentation	95% Completed		Started documentation and training for Admin activities. CIB Editor - 5 training sessions completed
3.6 - System monitoring and Support post U/N go-live			

SCHEDULE

Schedule has remained unchanged since last update. CW is considering upgrading to Cityworks 23.x and while we are trying to minimize schedule changes, it depends on the assumptions we made on the optional task. We will update this document if needed based on our discussions with CW on the Cityworks 23.x upgrade assumptions.

Figure 2-3 – Sample Monthly Project Status Report

3. PROJECT STAFF

Below is a concise overview of our staff's qualifications and areas of expertise. For a more comprehensive understanding of each team member's experience and specific contributions to various projects, please refer to **Appendix A - Resumes**.

3.1 BRIEF BIOGRAPHICAL SUMMARIES

ALI DIBA, PH. D, P.E. [Principal-in-Charge]

Dr. Ali Diba has over 30 years of experience managing GIS-based enterprise solutions for water and wastewater utilities. At DCSE, he has led multiple Utility Network implementations, overseeing project execution, coordinating with stakeholders, and ensuring that deployments align with utility operations and business objectives. Dr. Diba has managed large-scale transitions to Esri's Utility Network, including data migration, network configuration, and integration with enterprise asset management systems such as Maximo, Cityworks, and Oracle CC&B. He has also supervised efforts to extend Utility Network models to include vertical assets like pump stations and treatment plants, improving asset visibility and operational efficiency. Notable projects under his leadership include:

- **San Bernardino Municipal Water Department** – Oversaw Utility Network migration for water and sewer.
- **Santa Clarita Valley Water Agency** – Oversaw the development of the GIS Enabled Asset Registry (GEAR) to manage vertical assets within Utility Network for water. As well as the development of an Enterprise Data Warehouse using Microsoft Azure Synapse, integrating operational, SCADA, Customer Information, AMI/AMR, Water Quality, and Water Resources data.
- **Irvine Ranch Water District** – Overseeing Utility Network migration for water and sewer.
- **Providence Water** – Overseeing implementation of Utility Network for water along with integrations (including Cityworks)
- **Elsinore Valley Municipal Water District** – Oversaw EVMWD's Maximo & CIS GIS integration.

Dr. Diba will oversee all aspects of this project, ensuring it is completed on schedule and meets quality expectations.

HARITHA VENDRA, P.E., GISP, M.S. [Project Manager / UN Specialist]

Ms. Haritha Vendra brings over 20 years of experience in GIS, specializing in Utility Network migrations and GIS project management for water and wastewater systems. She holds an **Esri Utility Network Specialty** certification as well as a **Geographic Information Systems Professional (GISP)** certification and has played a key role in multiple transitions to Utility Network. Her expertise also includes GIS database administration, version management, and performance optimization, with a strong background in Oracle and MS-SQL Server. Notable projects include:

- **San Bernardino Municipal Water Department** – Technical Lead in implementation of Utility Network for water and sewer and coordinating integrations.
- **City of Long Beach** – Technical Lead in implementation of Utility Network for recycled- water.

- **Providence Water** – Technical Lead in implementation of Utility Network for water and coordinating integrations (including Cityworks)
- **Irvine Ranch Water District** – Technical Lead in implementation of Utility Network for water and sewer and coordinating integrations.
- **City of Los Angeles (Bureau of Sanitation)** - Enterprise GIS Upgrade

Ms. Vendra will oversee the Utility Network technical implementation for this project, ensuring smooth deployment and seamless integration with existing systems.

MAX KETABI, M.S. [Assistant Project Manager / UN Specialist]

Mr. Max Ketabi is a GIS professional with a decade of experience in GIS planning, land development, photogrammetry, and geospatial analysis. He holds an **Esri Utility Network Specialty Certification** and has played a key role in multiple transitions to Utility Network. Notable projects include:

- **Greenville Water** – Technical Lead in implementation of Utility Network for water.
- **Golden State Water Company** – Technical Lead in implementation of Utility Network for water.
- **West County Wastewater** – Project Manager for GIS data development for the sewer system.
- **Moulton Niguel Water District** – Technical Lead in implementation of Utility Network for recycled water.
- **San Bernardino Municipal Water Department** – 3D-Modeling Task Lead for the implementation of Utility Network for water and sewer.

Mr. Ketabi will oversee the work of other GIS analysts for this project and assist with data assessments and team coordination.

AZAAD HAMIDI [ArcGIS Enterprise Specialist]

Mr. Hamidi, an ArcGIS Enterprise Specialist, is a lead technical support specialist at DCSE, providing daily client support, troubleshooting, documentation, and upgrade assistance for GIS solutions. His expertise includes GIS troubleshooting, ArcGIS Enterprise implementation and upgrades, web application debugging, SSRS reporting, MS SQL development, stored procedures, and Windows application maintenance for GIS environments. Notable projects include:

- **Los Angeles World Airports** - Upgrade from 11.1 to 11.3 version of ArcGIS Enterprise environment
- **Contra Costa Water District** - Implementation of 10.8 Enterprise environment
- **San Bernardino Municipal Water Department** - implementation of 11.1 and 11.3 ArcGIS Enterprise across multiple servers with live monitoring using ArcGIS Monitor
- **Irvine Ranch Water District** - Implementation of 10.9 ArcGIS Enterprise
- **Santa Clarita Valley Water Agency** - Hosting ArcGIS Server Feature Services on a DMZ server with advanced firewall and security configurations

For this project, Mr. Hamidi will implement ArcGIS Enterprise upgrades and handle installations.

LATHA PALAKUR, M.S. [Senior GIS Analyst]

Ms. Latha Palakur brings over 20 years of GIS experience, with a focus on geodatabase design, scripting/automation, application development, and Utility Network. She is well-versed in ArcGIS Desktop applications, ArcGIS Pro, Server, Online, Portal technologies, Python, and AutoCAD. She is also instrumental in product documentation, testing, and training. Notable projects include:

- **San Bernardino Municipal Water Department** – Support & Documentation for implementation of Utility Network for water and sewer.
- **Providence Water** – Support & Documentation for implementation of Utility Network for water.
- **Elsinore Valley Municipal Water District** – Support & Documentation for implementation of Utility Network for sewer.
- **El Toro Water District** – Support & Documentation for Enterprise Geodatabase Development and Data Conversion/Digitization for water and sewer.

Ms. Palakur will be responsible for Utility Network schema design, data mapping, training and documentation.

CHRIS JOHNSON B.S. [GIS Developer / Integrations]

Mr. Johnson, with over a decade of software development experience, specializes in custom solutions for municipalities, focusing on GIS web applications, system integrations, and automation. Proficient in Python, HTML/JavaScript, SQL Server, and PostgreSQL, he has extensive experience configuring dashboards and integrating Esri products with third-party systems. His expertise also includes cloud computing and asset management tools. Notable projects include:

- **San Gabriel Valley Water Company** – Implementer of ESRI Lead Service Line Inventory Solution and third-party integrations.
- **Irvine Ranch Water District** – Automation support for data publishing and MMPKs (Mobile Map Packages) creation.
- **San Bernardino Municipal Water Department** – Automation support for the implementation of Utility Network for water and sewer.

For this project, Mr. Johnson will provide integration support and identify opportunities to automate data migration, schema updates, and repetitive workflows.

MARK THACKER, B.A. [Project Communications]

Mr. Thacker is a seasoned project manager with a strong background in Agile project management and leadership across multicultural and cross-functional teams. His expertise spans large-scale project delivery, transformation of ERP products to SAAS models, and the development of teams focused on continuous improvement. With experience in the USA, UK, Hong Kong, India, and Australia, he specializes in strategy, stakeholder engagement, risk management, and delivering results through strong leadership and a client-focused approach.

Mr. Thacker will support project planning, resource management, risk mitigation, and stakeholder communication.

MASOUD HOSEYNI PH.D. [Project Administration/Finance]

Dr. Hoseyni has extensive experience in project administration, financial oversight, and resource management for large-scale technology initiatives. As President of DCSE, he has managed teams of engineers and software developers, overseeing budgeting, contract management, and operational support for GIS, database management, and software engineering projects. His expertise ensures efficient project coordination, financial planning, and compliance throughout the engagement.

Dr. Hoseyni will be responsible for overseeing budgeting, contract management, and invoicing, ensuring financial efficiency and compliance.

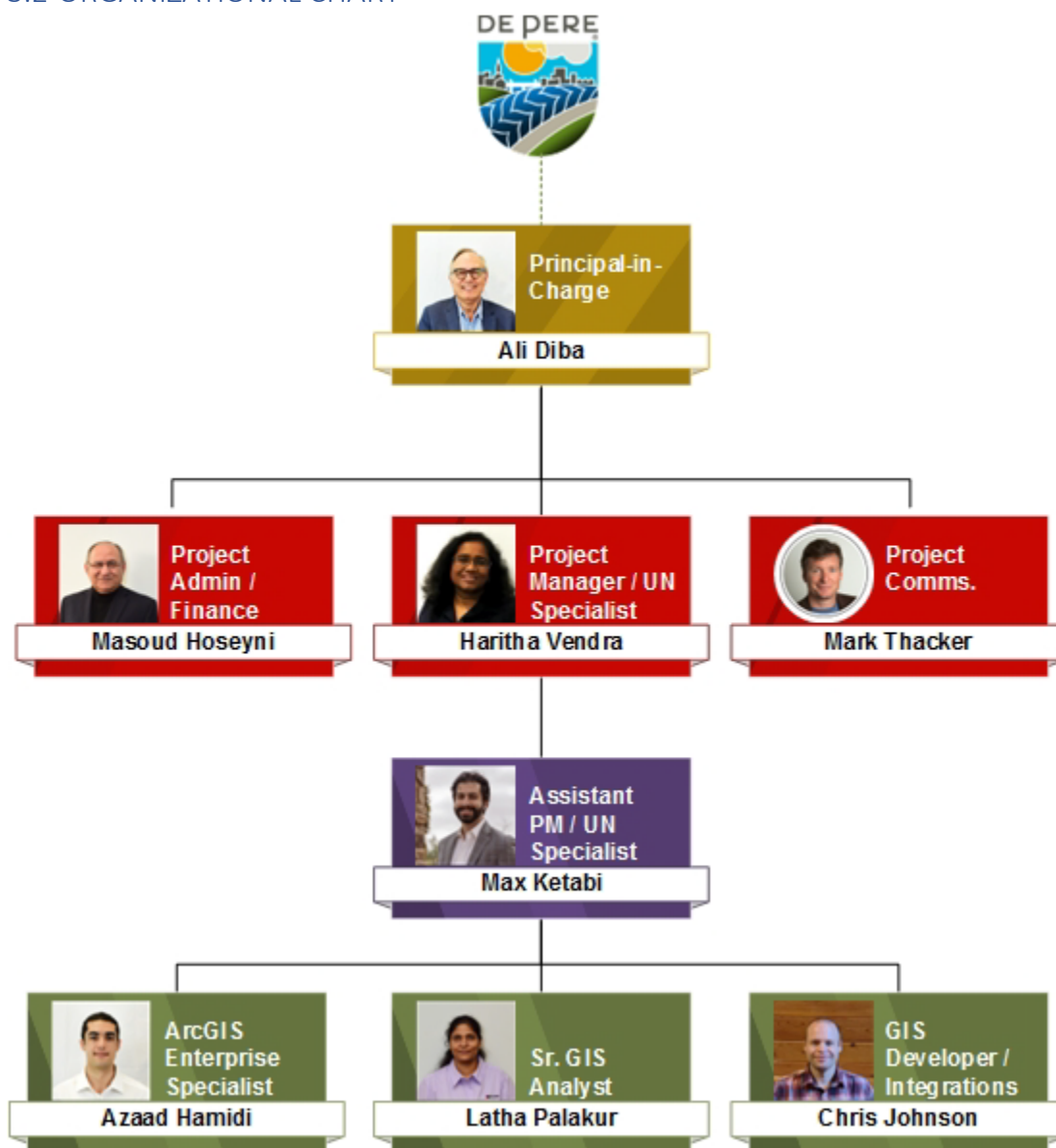
3.2 ORGANIZATIONAL CHART

Figure 3-1 Project Organizational Chart

4. BUDGET

Below is our proposed budget and timeline for the various project phases.

Table 4-1 – Cost Breakdown per Phase

<i>RFP Indicator</i>	<i>Phase</i>	<i>Labor Cost</i>
	Project Kick-off	\$2,460
a	Phase 1 - Esri ArcGIS Enterprise Upgrade	\$19,400
b	Phase 2 - Esri Portal Installation	\$16,600
1	<i>Implementing Portal for the Utility Network</i>	<i>\$8,300</i>
2	<i>Implementing Portal for all other GIS data</i>	<i>\$8,300</i>
c	Phase 3 - Esri Utility Network Migration *	\$71,560
1	<i>Sanitary Sewer data migration and implementation</i>	<i>\$29,900</i>
2	<i>Stormwater data migration and implementation</i>	<i>\$15,200</i>
3	<i>Water data migration and implementation</i>	<i>\$26,460</i>
d	Phase 4 - Continuing Support **	\$5,000
Total		\$115,020

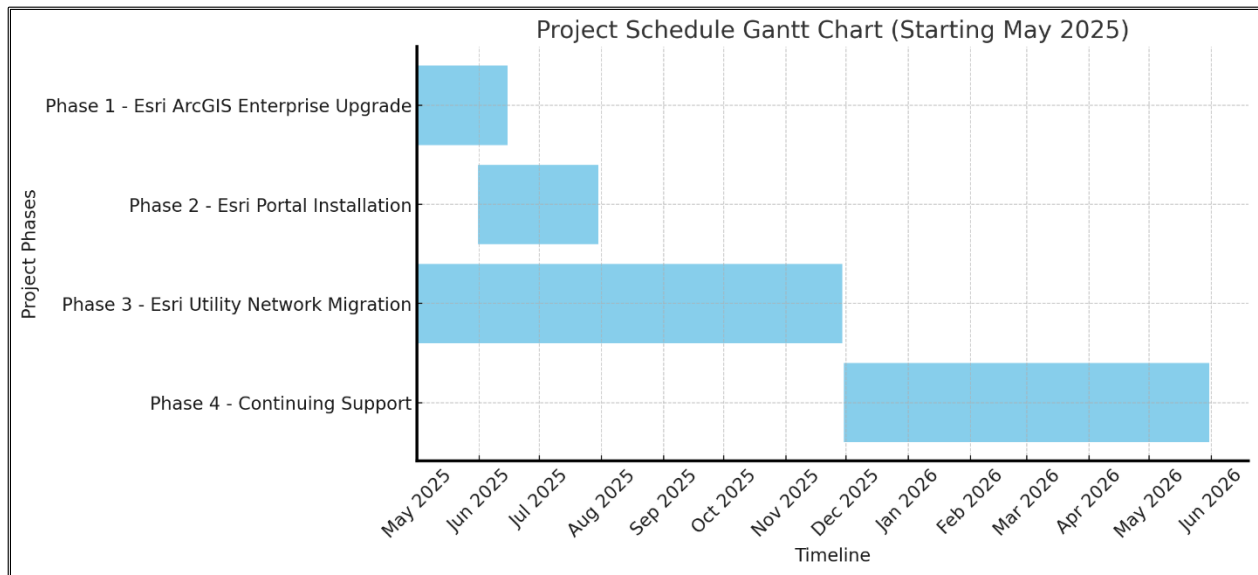
* It is assumed that Esri's UN Foundation Expanded model will be used for Water and Sewer, while the Esri's Minimum Deployment (UN Migration Tools) will be used for Storm.

** Total of 26 hours assumed. Any additional support hours needed, whether within or beyond the six-month support period, can be negotiated separately outside the scope of this project.

Table 4-2 - Detailed Cost Breakdown

Task #	Task Name	Principal In Charge	PM	Assistant PM	Project Admin/Comms	Sr. GIS Analyst	GIS Developer/ Enterprise Specialist	GIS Analyst	Total Labor Hours	Labor Cost
		\$240	\$200	\$180	\$180	\$160	\$160	\$120		
	Project Kick-off	2	2	2	5	0	2	0	13	\$2,460
1	Phase 1 - Esri ArcGIS Enterprise Upgrade	20	26	10	12	8	26	0	102	\$19,400
1.1	Discovery Meeting	8	8	8	8	8	0	0	40	\$7,680
1.2	Conduct the Upgrade	8	8	1	0	0	16	0	33	\$6,260
1.3	City Acceptance Testing and Approval	4	10	1	4	0	10	0	29	\$5,460
2	Phase 2 - Esri Portal Installation	10	30	4	10	7	21	10	92	\$16,600
2.1	Discovery Meeting	4	4	2	4	0	0	0	14	\$2,840
2.2	Pre-Installation Meeting	4	4	0	4	0	4	0	16	\$3,120
2.3	Installation	0	4	0	0	0	4	0	8	\$1,440
2.4	Workflows and Versioning Recommendations for Utility Network	1	4	0	0	0	2	0	7	\$1,360
2.5	Workflows and Versioning Recommendations for Non-Utility Data	1	4	0	0	0	0	0	5	\$1,040
2.6	Assist in Implementation of the Chosen Recommendations	0	2	0	2	2	0	0	6	\$1,080
2.7	Connect Portal to ArcGIS Online	0	2	0	0	2	4	0	8	\$1,360
2.8	Migrate all web services to ArcGIS Pro	0	1	1	0	3	2	10	17	\$2,380
2.9	Provide Training	0	5	1	0	0	5	0	11	\$1,980
3	Phase 3 - Esri Utility Network Migration	15	72	66	0	90	10	214	467	\$71,560
3.1	Conduct pre-migration meetings with the City	4	8	2	0	0	0	0	14	\$2,920
3.2	Provide recommendations for Utility Network features to implement	4	8	8	0	0	0	0	20	\$4,000
3.3	Data Readiness Assessment	1	3	3	0	10	0	20	37	\$5,380
3.4	Data Cleanup	1	3	3	0	0	0	24	31	\$4,260
3.5	Conduct Migration	4	40	40	0	80	10	160	334	\$49,760
3.6	Training and Documentation	1	10	10	0	0	0	10	31	\$5,240
4	Phase 4 - Continuing Support	0	16	10	0	0	0	0	26	\$5,000
	Total	47	146	92	27	105	59	224	700	\$115,020

Table 4-3 - Schedule (Assuming Phase 3 starts alongside Phase 1&2)



5. MUNICIPAL EXPERIENCE AND KNOWLEDGE

DCSE has over three decades of experience providing GIS solutions for more than 300 cities, municipalities, and water authorities, with a deep understanding of municipal government systems and goals. Most of our clients are public agencies like yours, giving us direct insight into the unique challenges municipalities face in managing GIS and utility infrastructure. We have worked with agencies across the U.S., including the City of Los Angeles, Honolulu, Central Arizona Water Conservation District, City of Providence, Golden State Water, Long Beach Utilities, and Pasadena, among many others.

By partnering with numerous agencies, we understand the critical need for accurate utility data, seamless system integrations, and efficient workflows. Our expertise in GIS data conversion, geodatabase migration, enterprise deployments, and cloud-based GIS solutions ensures that municipalities have scalable, future-ready GIS environments tailored to their operational needs. We focus on cost-effective, innovative solutions that align with municipal goals, helping cities improve data management, streamline workflows, and optimize resource allocation for water and wastewater systems.

Summary of our key qualifications for this project:

- Developed Utility Networks for over a dozen agencies, with ongoing projects.
- Integrated with 20+ enterprise system vendors, including CMMS, SCADA, permitting, and utility billing, automating data synchronization.
- Esri Gold Partner, beta-testing Utility Network technologies, as well as ArcGIS Enterprise and ArcGIS Pro new functionalities.
- Expert in Utility Network deployment, migrating GIS data to enterprise systems and configuring access based on privileges.
- Multiple Professional Engineers and Esri-certified Utility Network experts in the team.

6. REFERENCES

Below is a selection of project references along with their contact information.

Table 6-1 – Utility Network Projects

Utility Network Project	Project	Contact
San Bernardino Municipal Water Department	<u>Description:</u> Utility Network Implementation for Water, Sewer, and Recycled + Enterprise Implementation <u>Hardware/Software:</u> ArcGIS Utility Network Management Release 11.1 <u>Completion Date:</u> 12/2024	<u>Name:</u> Julie Abinto, GIS Coordinator <u>Address:</u> 1350 South E Street, San Bernardino, CA 92408 <u>Email:</u> julie.abinto@sbmwd.org <u>Phone:</u> (909) 522-3408
City of Long Beach Water Department	<u>Description:</u> Utility Network Migration of Recycled Water <u>Hardware/Software:</u> ArcGIS Utility Network Management Release 11.3 <u>Completion Date:</u> 5/2024	<u>Name:</u> Jeff Evans, Business Systems Specialist <u>Address:</u> 1800 E Wardlow Rd, Long Beach, CA 90807 <u>Email:</u> Jeff.Evans@lbwater.org <u>Phone:</u> (562) 570-2359
Elsinore Valley Municipal Water District	<u>Description:</u> Utility Network Sewer Pilot Project <u>Hardware/Software:</u> ArcGIS Utility Network Management Release 11.1 <u>Completion Date:</u> 6/21	<u>Name:</u> Anthony Vazquez, GIS Specialist II <u>Address:</u> 31315 Chaney Street, Lake Elsinore, CA 92530 <u>Email:</u> avazquez@evmwd.net <u>Phone:</u> 951-674-3146 X8261
Irvine Ranch Water District	<u>Description:</u> Utility Network Implementation for Water, Sewer, and Recycled + Enterprise Implementation <u>Hardware/Software:</u> ArcGIS Utility Network Management Release 11.3 <u>Completion Date:</u> Pilot Complete – Full Migration in Progress	<u>Name:</u> Josephine Shih, GIS Supervisor <u>Address:</u> 15600 Sand Canyon Ave., Irvine, CA 92618 <u>Email:</u> shih@irwd.com <u>Phone:</u> (949) 453-5564

APPENDIX A – RESUMES



ALI DIBA PH.D., P.E.

P: 949.465.3400 || E: alidiba@dcse.com

■ Principal-In-Charge



■ PROJECT EXPERIENCE OVERVIEW

- Dr. Diba has worked with over 50 agencies, both public and private in the California region in addressing all aspects of data management and systems integration in the GIS environment.
- Fluent in Esri technology, including Utility Network, ArcGIS Enterprise, ArcGIS mobile applications, and Map SDKs.
- Experienced agile technology implementer.

■ EDUCATION

- **Ph.D., Water Resources System Engineering** - *University of California Los Angeles, 1997*
- **Engineering Degree (Water Resources Systems Engineering)** - *University of California - Los Angeles, June 1995*
- **M.S., Water Resources System Engineering** - *University of California Los Angeles, 1995*
- **B.S., Structural Engineering** - *University of California - Los Angeles, June 1979*

■ SUMMARY

Dr. Diba offers extensive experience in managing the development of decision support and GIS-enabled asset management-related systems. Substantial experience in managing Geographic Information System (GIS) applications with extensive experience in implementing Esri's Utility Network architecture. Designed and implemented several Geographic Information Systems to access large-scale Utility Network databases in a service-oriented architecture environment.

Lead architect for graphical database interfaces using .NET, Python, JavaScript, and Esri technologies for web applications. Designed integrated applications delivering intelligent mapping with backend database support. Experienced with Java, C#, and databases like MS SQL, Oracle, Postgres, and SQLite. Extensive knowledge of AMS and CMMS systems, including Maximo, Infor, Lucity, Hansen, and CityWorks. Recently architected an AI/ML framework for predictive maintenance solutions.

■ SELECTED PROJECTS

▪ **Santa Clarita Valley Water Agency – Development of an Asset Registry for Linear and Vertical Assets using ArcGIS Utility Network**

Acted as the principal architect to develop an asset register for managing linear and vertical assets by extending the Utility Network to manage vertical assets. The system developed was called GEAR which stood for GIS Enabled Asset Registry and included interfaces for both GIS and Engineering/Operations staff to manage the assets in the system.

▪ **San Bernardino Municipal Water District – Water & Sewer Utility Network Migration**

Dr. Diba served as the Executive Lead for the San Bernardino Municipal Water District's Utility Network implementation. In this role, he provided strategic oversight and direction for the Utility Network development, ensuring alignment with organizational goals and stakeholder objectives. His responsibilities included executive-level project planning, resource allocation, and high-level coordination with district leadership to secure critical support and approvals.

▪ **Central Arizona Water Conservation District – GIS Modernization: Custom Web App Builder Widget Development**

Acted as project manager for this project, which involved the development of widgets that provided functions by user role and could enable internal employees outside of IT to build their own maps and queries. The Web App Builder Widgets provide functionality that upgraded their existing viewers to template-based, web-enabled configurable mapping applications integrated seamlessly across all departments within the District.

- **Metropolitan Water District of Southern California - *Enterprise GIS***
Helped to deploy the Metropolitan Water District (MWD) of Southern California enterprise GIS system. MWD, one of the world's largest water agencies, needed a user-friendly, Web-based enterprise GIS solution that allowed all employees to access spatial data easily and more efficiently. They selected DCSE's and Spatial Wave's (DCSE's sister company) *Mapplet.NET*, *Mapplet Light* and *MapLibrary* software. As a result, there has been increased productivity across the organization by using on-demand GIS query, visualization, and mapping capabilities that quickly and efficiently generate high-stakes water resources management information
- **City of Los Angeles, Bureau of Sanitation (*Multiple Projects*)**
 - ***SANSTAR***: Project manager and implementer of the LA Bureau of Sanitation SANSTAR 311 ticket management system. The system includes a mobile solution developed by DCSE that processes 3500 tickets a day, using more than 100 trucks and drivers.
 - ***GIS Technology Assessment Study***: Project manager and major contributing author of the LA Bureau of Sanitation GIS Technology Assessment Study. This report produced a plan and budget to implement GIS throughout the organization.
- **Elsinore Valley Municipal Water District – *Maximo/CIS***
Project manager and major contributing author of the EVMWD's integrated Maximo and CIS system for performing customer requests and asset management in an integrated and GIS enabled mobile solution.
- **South Coast Water District - *Enterprise GIS Deployment & Integration***
Principal-in-Charge of the Enterprise GIS Deployment for South Coast Water District which involved integrations between GIS, CMMS, Document Management, Field GIS and Field Hardware.
- **Eastern Municipal Water District - *EGIS & Field***
Project manager and major contributing author of the EVMWD's integrated Maximo and CIS system for performing customer requests and asset management in an integrated and GIS-enabled mobile solution.
- **Orange County Water District - *WRMS Modernization***
Principal-in-Charge of the WRMS Oracle Modernization project for OCWD. WRMS Modernization included development of many spatially enabled user interfaces for input, export, and reporting of hydro geologic and water quality information related to OCWD's service area. This application uses state-of-the-art technology by integrating GIS and tabular data stored in WRMS.



HARITHA VENDRA P.E., GISP, M.S.

P: 949.465.3400 || E: hvendra@dcse.com

■ **Project Manager/Utility Network Specialist**



■ REGISTRATIONS & CERTIFICATIONS

- **Registered Civil Engineer – California #C 85404**
- **Certified Geographic Information Systems Professional - GISP Certificate #90290**
- **ArcGIS Utility Network Specialty 20-001**

■ EDUCATION

- **M.S., Civil Engineering – Water Resources**
University of Texas, Arlington – 2001
- **B.S., Civil Engineering**
- Osmania University (Hyderabad, India) – 1996

■ AFFILIATIONS

- **American Water Works Association (AWWA) – CA-NV Section**

■ SUMMARY

Ms. Vendra has over 22 years of experience in Geographic Information Systems, with a strong focus on the latest Utility Network technology for Water, Wastewater, and Storm Drain systems. She holds an ArcGIS Utility Network Specialty certificate. She is highly skilled in using GIS and CAD software for design and analysis and has worked with over 60 municipal agencies on data conversion, migration, and workflow designs. Additionally, she has presented several papers at conferences on Utility Network & Enterprise GIS Development.

■ EXPERIENCE SUMMARY

■ **San Bernardino Municipal Water District – Water & Sewer Utility Network**

Ms. Vendra was the lead on Utility Network development for San Bernardino Municipal Water District. Her responsibilities consisted of data migration, Utility Network configuration, 3D coordinate assignment, and project management and coordination.

■ **Long Beach Utilities – Recycled Water Utility Network**

Ms. Vendra led Utility Network development for Long Beach Utilities, overseeing data migration, schema updates, network configuration, deployment to an enterprise cloud environment, and staff training.

■ **Irvine Ranch Water District – GIS Conversion & Utility Network**

DCSE converted Irvine Ranch Water District's GIS for basemap, potable water, wastewater, and recycled water from legacy formats to a Geodatabase. Ms. Vendra led data analysis, migration planning, Geodatabase design, editing tool specifications, and assisted with GIS SDE setup. Following a successful Utility Network pilot, she now leads the district-wide Utility Network migration for IRWD's potable water, recycled water, and wastewater systems. Ms. Vendra oversees key tasks for successful migration, including data cleansing, network topology configuration, asset alignment, and quality control implementation.

■ **Elsinore Valley Municipal Water District – Sewer Utility Network**

Ms. Vendra led Utility Network development for Elsinore Valley Municipal Water District, handling data migration, configuration, 3D data development, and topology error correction. She also deployed the network on ArcGIS Enterprise and set up web apps for network tracing.

■ **Santa Clarita Valley Water Agency – Utility Network Migration for Vertical Assets**

Ms. Vendra is currently leading the Utility Network migration for vertical assets at Santa Clarita Valley Water Agency, managing tasks such as data cleansing, network topology configuration, asset alignment, and quality control implementation.



MAX KETABI MGIS

P: 949.465.3400 || E: mketabi@dcse.com

■ Utility Network Specialist



■ EDUCATION

- **Master's Degree, Geographic Information Systems (MGIS)** - Penn State University - 2023
- **Graduate Certificate, Geospatial Intelligence Analytics (GEOINT)** - Penn State University - 2018
- **Certificate, Geographic Information Systems** - California State University, Fullerton - 2015
- **B.A., Political Science** - California State University, Fullerton, 2015

■ CERTIFICATIONS & REGISTRATIONS

- **ArcGIS Utility Network Associate 2024**
- **FAA Part 107, U.S. Commercial Drone Pilot**
- **United States Geospatial Intelligence Foundation (USGIF) GEOINT Collegiate Certificate**

■ SUMMARY

Mr. Ketabi is an experienced Geographic Information Systems (GIS) professional and FAA-certified drone pilot with a strong background in utility GIS, environmental planning, land development, photogrammetry, and GIS project management. Below are a few sample GIS projects that he has managed and/or participated in.

■ SELECTED PROJECT EXPERIENCE

▪ **Greenville Water - Utility Network Implementation**

Mr. Ketabi is managing the technical implementation of the Utility Network migration for the agency's water system, which serves over 200,000 customers. His responsibilities include overseeing schema design, data assessment, data cleaning, trace configurations, and quality control measures, as well as supervising the work of DCSE junior analysts.

▪ **San Bernardino Municipal Water District - Utility Network & 3D Modeling**

DCSE successfully completed work on the Utility Network for San Bernardino Municipal Water Department's water and sewer systems. Mr. Ketabi assisted the project team with data readiness assessment, quality control, and 3D modeling of four stations within the network.

▪ **Santa Clarita Valley Water Agency – Utility Network Migration for Linear and Vertical Assets & 3D Modeling**

Mr. Ketabi is currently leading the linear effort for the Utility Network migration at Santa Clarita Valley Water Agency, overseeing key tasks such as data cleaning, network topology configuration, asset alignment, and implementing quality control measures. He has also produced multiple models to support the vertical system migration, contributing to the Utility Network migration for both linear and vertical assets.

▪ **City of Glendora – GIS Support for Integrated Water Master Plan & Water Rate Study**

For this project, DCSE was subcontracted to adjust model pipes, nodes, and related attributes, plus geocode and plot meters, laterals, and pipe breaks from various sources. Mr. Ketabi managed the project, overseeing DCSE's junior GIS analysts to ensure accurate GIS data delivery.

▪ **West Valley Water District – Fire Flow Test Application Configuration via Field Maps**

Led by Mr. Ketabi, DCSE managed a project to integrate Fire Flow Testing into ArcGIS Field Maps, automating data collection and enhancing hydrant schema integrity. Phases included Discovery, Design, Development, and Testing, introducing features for viewing previous tests, symbolizing tested hydrants, and auto-calculating head pressure. This streamlined process improved efficiency and decision-making in fire flow testing.



LATHA PALAKUR M.S.

P: 949.465.3400 || E: lpalakur@dcse.com

■ Senior GIS Specialist



■ EDUCATION

- **M.S., Computer Applications -**
University of Madras
1996
- **B.S., Computer Science**
- University of Madras
1993

■ TECHNICAL SKILLS

- ArcGIS
- Desktop ArcObjects
- ArcGIS Enterprise
- AGOL
- SQL, PL/SQL
- Java
- Perl
- Javascript
- SDE and AutoCAD
- SAP Crystal Reports
- C, C++
- Visio
- VB, VBScript
- ASP
- MS Access
- Python
- Oracle

■ SUMMARY

Ms. Palakur has over 20 years of experience in GIS – specifically with Geodatabase Design, Scripting, Application Development, Geometric & Utility Networks. She is skilled with ArcGIS technologies, Python, and AutoCAD, and has substantial expertise in database application development with Oracle and MS SQL Server. Ms. Palakur also plays an essential role in product documentation, testing, and training.

■ SELECTED PROJECTS

■ **San Bernadino Municipal Water Department – Utility Network Migration**

Ms. Palakur supported the Utility Network development for San Bernardino Municipal Water District (water and sewer). Her tasks included quality control, data mapping, Utility Network configuration, error identification, and assisting with project coordination.

■ **Elsinore Valley Municipal Water District – Utility Network Migration**

Ms. Palakur supported the EVMWD Sewer pilot Utility Network development, contributing to the Geodatabase data model based on the Sewer Utility Network Foundation and extending it to meet the District's database requirements.

■ **City of Costa Mesa – Storm GIS Updates**

DCSE completed migrating the City's existing Storm GIS into an LGIM format geodatabase. Additionally, the existing GIS was checked against as-builts, updating missing data such as pipe attributes and appurtenance elevations. This GIS data was linked to the Storm model data and updated with modeling results for various scenario years.

■ **City of Chino – Storm Drain GIS Data Development**

DCSE supported the City's Master Plan project with Storm Drain GIS Data Development. Ms. Palakur handled Geodatabase design, ensuring compliance with Esri LGIM format, and facilitated model linking, field assessments, as-built linking, and CMMS integration. She also oversaw the offshore GIS team's operations and conducted quality control for the Storm Drain GIS data and map deliverables.

■ **Long Beach Utilities – Recycled Water Utility Network**

Ms. Palakur supported the Long Beach Utilities Recycled Water Utility Network development, contributing to the Geodatabase data model based on the ESRI Water Utility Network Foundation and extending it to meet the utility's specific database requirements. She also assisted with data clean-up, quality control, training, and documentation.



AZAAD HAMIDI

P: 949.465.3400 || E: ahamidi@dcse.com

ArcGIS Enterprise Specialist



EDUCATION

- **B.S., Computer Science** –
*California State University,
San Marcos, 2020*

TECHNICAL SKILLS

Languages

- Python
- Visual Basic
- C++
- C#
- Java (JDK)
- Javascript
- SQL

Operating Systems

- Windows Server
2012R2, 2016, 2019
- MS Dos
- UNIX
- MacIntosh

Databases

- Windows Server
2012R2, 2016, 2019
- MS Dos
- UNIX

Application Software

- SQL Server
Management Studio
- MS Visual Studio
- MS Office Suite

GIS

- ArcGIS Pro Map
Creation &
Management
- Implementation of
Portal for ArcGIS
- Publishing Feature
Services & Web Maps
to Portal

SUMMARY

As one of DCSE/Spatial Wave's main technical support specialists, Mr. Hamidi provides assistance, troubleshooting, documentation and upgrade assistance to users of DCSE and Spatial Wave's software suite. Experience includes providing GIS-related troubleshooting, implementation and upgrade of ArcGIS Enterprise and other GIS environments, the debugging and testing of web applications, SSRS, developing reports, MS SQL development, writing Stored Procedure and the development and maintenance of Windows Applications related to GIS.

PROJECTS EXPERIENCE

ArcGIS Enterprise (Multiple Clients & Projects)

Implementation and upgrading of ArcGIS Enterprise for multiple projects:

- ✓ **Los Angeles World Airports (LAWA):** Upgrade from 11.1 to 11.3 version of ArcGIS Enterprise environment
- ✓ **Contra Costa Water District (CCWD):** Implementation of 10.8 Enterprise environment
- ✓ **San Bernardino Municipal Water Department (SBMWD):** Implementation of 11.3 ArcGIS Enterprise across multiple servers with live monitoring using ArcGIS Monitor
- ✓ **Irvine Ranch Water District (IRWD):** Implementation of 10.9 ArcGIS Enterprise
- ✓ **Santa Clarita Valley Water Agency (SCVWA):** Hosting ArcGIS Server Feature Services on a DMZ server with advanced firewall and security configurations

Technical Support Specialist: Spatial Wave (Multiple Clients & Projects)

- ✓ Evaluating client needs, developing configurations supporting business processes
- ✓ IT Support for technical issues involving Spatial Wave's core product business applications and systems and multiple clients' technological environments
- ✓ Remote monitoring and management system alerts and notifications, responding accordingly through service tickets
- ✓ System documentation maintenance and review
- ✓ Testing and troubleshooting final system setups
- ✓ Providing training and end-user support during and after client product suite implementation processes
- ✓ Remotely analyzing and resolving issues relating to product suite

Field Mapplet (Multiple Clients & Projects)

Worked as lead testing and implementation of DCSE/Spatial Wave's Field Mapplet product, an GIS-enabled mobile computing solution that integrates with an organization's tabular, document and GIS databased environments.

City of Los Angeles, Department of Sanitation—SANSTAR

Mr. Hamidi was key in testing and reporting of a comprehensive data management system that effectively tracked and managed the waste management programs and activities of Sanitation Department of the City of Los Angeles, improving the overall effectiveness of the City's mobility-related plans to streamline the City's 311 reports and requests.

Maximo Linear Asset Synchronization

Mr. Hamidi worked as lead implementation and custom configuration of Spatial Wave automated synchronization tool GeoMerge, to establish Linear Asset Synchronization between Maximo and GIS-enabled solutions and GIS database environments.



MASOUD HOSEYNI PH.D.

P: 949.465.3400 || E: mhoseyni@dcse.com

■ Project Administrator/Finance



PROJECT EXPERIENCE OVERVIEW

- Actively involved in projects assisting utility companies, municipalities and industrial plants to comply with local/federal regulations.
- Managed multiple projects involving development of Enterprise GIS and Database Management Systems for many utilities and municipalities.

EDUCATION

- **Ph.D., Mechanical Engineering –**
University of California, Los Angeles, 1991
- **Degree of Engineers, Chemical Engineering–**
University of California, Los Angeles, 1982
- **M.S., Chemical Engineering -** *University of California, Los Angeles, 1981*
- **B.S., Chemical Engineering- AMUT,**
1977

SUMMARY

Dr. Hoseyni has extensive experience in managing development of large-scale database applications providing data content to inter/intranet applications. He has substantial experience in management of Geographic Information (GIS) applications in the Microsoft Windows and the Unix environment. Dr. Hoseyni, in his capacity as president, has been managing a team of engineers and software developers at DCSE providing database management, GIS, and software engineering expertise.

SELECTED PROJECTS

▪ City of Los Angeles, Bureau of Sanitation (*Multiple Projects*)

Served as program manager for the development of a comprehensive data management system to effectively track/manage the waste management programs and activities of SRCRD for the City and assisted in achieving a citywide 70% recycling rate. Dr. Hoseyni was also the project manager in developing an implementation plan for enterprise GIS for the Bureau of Sanitation.

▪ Santa Clara Valley Water District - *Water Resources Information System (WRIS)*

Project manager for the implementation/deployment of a new WRIS system for District business needs. Major components include well permit processing/registration, water production facility registration, managing water production and revenue collection, storing and maintaining well-related data, groundwater level and quality data tracking, and groundwater modeling. The system has also integrated with District's SCADA, LIMS, PeopleSoft and GIS applications.

▪ Irvine Ranch Water District- *MWDOC's South County Reliability Study, IRWD Conveyance Alternative:*

As project manager, the main objective of this study was to determine IRWD's excess water source and transmittal capacity, which may be utilized to transmit water to South County without any adverse impact on its own distribution system. It also assessed the excess capacity as a function of time over the next 10-15 years, considering IRWD's service area growth and/or land use changes.

▪ Con Edison of New York – *System Emission Monitoring & Reporting Code*

Dr. Hoseyni was the chief designer and project manager for the implementation of a Web-based system for Con Edison to acquire, monitor, analyze and report the NOx and Sox emission from their electric generating units. SEMARC has been in operation since 1995 and has undergone 3 major upgrades during this time.

▪ Valencia Water Company (Now part of SCVWA)– *Water Budget-based Tire Rate Implementation*

Served as architect of Water Budget-based Tired rate System for the Company. The web-based system calculated daily water budget for each customer and provides a dashboard for the VWC's staff to manage the system and respond to customer requests such as variance requests. The system won the full support of the CPUC and has been in operation for over two years.



MARK THACKER

P: 949.465.3400 || E: mthacker@dcse.com

■ Project Communications



■ EDUCATION

- **B,A, Business Studies, Business Administration & Management –**
University of West London, 1990

■ AWARDS

- **CES Innovation Award**
- **KickStarter Award**
- **Maximizing Leadership Skills**
- **Lean Startup Methodology**

■ EXPERTISE

- **Business Technology Consulting**
- **Leadership & Team Management**
- **Financial Management**
- **Project Planning**
- **Risk Management**
- **Resource Management**
- **QA & Quality Management**
- **Software Development**

■ SUMMARY

Mr. Thacker's extensive industry experience is a testament to his proficiency in delivering exceptional results across various domains, underscored by his strong emphasis on effective project management practices & proven leadership capabilities in multicultural & cross-functional team environments. Notable experience includes:

- ✓ Large-scale project delivery based on Agile methodologies (Scrum/Kanban), emphasizing iterative development & close collaboration with stakeholders.
- ✓ Successful delivery of transformative initiatives, such as transitioning ERP products from traditional models to SAAS Models.
- ✓ Building & leading cross-functional teams, fostering a culture of continuous learning and development.
- ✓ Global Project experience working with teams in USA, UK, Hong Kong, India & Australia

■ PROJECTS EXPERIENCE

▪ **DCSE/Spatial Wave (Multiple Clients & Projects)**

As a Senior Consultant at DCSE & President of Spatial Wave, Mr. Thacker brings a wealth of expertise in strategic development, leveraging data-driven insights, & analysis to drive project delivery. His multifaceted roles & responsibilities encompass the following:

Project Leadership and Management: Mr. Thacker excels in overseeing critical project implementations, guiding projects from inception to completion. He embraces Agile methodologies, fosters collaboration among team members, & prioritizes effective communication channels to ensure project success.

Stakeholder Engagement: Recognizing the importance of stakeholder involvement, Mr. Thacker adopts a Client-Centric Approach to actively engage stakeholders throughout the project lifecycle.

Risk Management: Mr. Thacker implements proven strategies to safeguard project outcomes, developing comprehensive contingency plans, & diligently monitoring project progress to address emerging issues promptly.

Result-Oriented Leadership: At the helm of project delivery efforts, Mr. Thacker demonstrates result-oriented leadership. His decisive actions, strategic insights, & commitment to client success inspire confidence & drive teams towards achieving tangible outcomes within a culture of accountability & empowerment.



CHRIS JOHNSON

P: 949.465.3400 || E: cjohnson@dcse.com

■ GIS Developer/Integrations



■ EDUCATION

- **B.S., Finance –**
*University of Illinois,
Urbana-Champaign,
2003*

■ CERTIFICATIONS

- **ESRI ArcGIS Desktop Associate 10.1**
- **ESRI Web Application Developer Associate 10.1**

■ TECHNICAL SKILLS

- **Programming Languages**
(Adobe Flex, Python, Html/JavaScript, Objective-C, C#, Visual Basic)
- **ESRI ArcGIS Desktop, ArcGIS Pro, Scene**
- **Esri Model Builder**
- **ArcGIS Enterprise, Portal for ArcGIS, ArcGIS Server, ArcGIS Online**
- **ArcGIS Dashboards, Web App Builder**

■ SUMMARY

Mr. Johnson is a GIS developer with 10 years of experience of working with multiple utility companies. At DCSE and Spatial Wave, Mr. Johnson provides web development services, enterprise integrations, GIS automations, QA, reporting and data analysis for multiple clients.

■ PROJECTS EXPERIENCE

▪ **San Bernardino Municipal Water District – Water & Sewer Utility Network**

Mr. Johnson played a key role in post-migration support, using tools like GeoMerge to synchronize delta data into the Utility Network. He developed automation workflows to streamline data updates and created web applications to enhance data access and visualization. His coordination with cross-functional teams ensured that these tools aligned with operational needs and integrated smoothly into the Utility Network.

▪ **San Gabriel Valley Water Company – Lead Service Line Inventory Solution**

Mr. Johnson assisted San Gabriel Valley Water Company (SGVWC) with implementing the ESRI Lead Service Line Inventory solution and integrated this solution with DCSE/Spatial Wave's Field Mapplet, a GIS-enabled and mobile-based workflow and asset management solution.

He wrote scripts to synchronize Lead Service Line Inventory data between Field Mapplet and ArcGIS Online. Scripts run on a scheduled task to bring data from Field Mapplet to ArcGIS Online. Mr. Johnson wrote scripts to assist in preparing client data for use with the Lead Service Solution. He also modified the ESRI solution web applications and dashboards to meet SGVWC's needs.

▪ **Irvine Ranch Water District – Automation**

Mr. Johnson created a python script to publish enterprise Sewer, Water and Reclaimed Water GIS data to ArcGIS Online for Irvine Ranch Water District (IRWD). The script pre-processes the data first to modify certain attributes before publishing. Then, it publishes the layers as Feature Services, Raster Tile Layers and Vector Tiles.

After the data was published, he created multiple web maps and web applications in ArcGIS Online for use internally by the District, or by the public. He created a separate python script to automate the process of creating Tile layers and publishing them to ArcGIS Portal, where they are incorporated into Web Maps. These web maps are used by Spatial Wave/DCSE's GIS system viewing solution Mapplet.

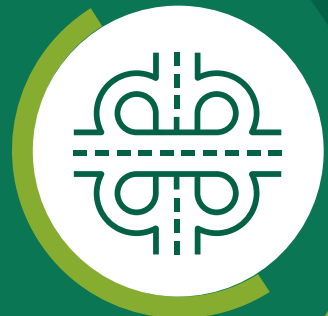
Mr. Johnson created a tool to automate the process of creating MMPKs (Mobile Map Packages) from GIS Data which are used by Field Mapplet. All of these scripts above run on a schedule task, create detailed log files and sending an email after completion.



TIMMONS GROUP

ENGINEERING | DESIGN | TECHNOLOGY

Esri Utility Network Migration, Portal Install, and ArcGIS Enterprise Upgrade



PREPARED FOR

City of De Pere, WI
Development Services Department
GIS Division
335 S. Broadway
De Pere, WI 54115

SUBMITTED BY

Ally Kennedy, Principal
7053 Celebration Park Ave, Suite 300
Richmond, VA 23225
804.433.2998
ally.kennedy@timmons.com

March 5, 2025

City of De Pere, WI
Development Services Department – GIS Division
City Hall
335 S. Broadway
De Pere, WI 54115
kvincent@deperewi.gov

RE: Esri Utility Network Migration, Portal Install, and ArcGIS Enterprise Upgrade

To Kristen Vincent and the Selection Team:

The City is seeking qualified professional Geographical Information Systems (GIS) services firms to provide assistance with an ArcGIS Enterprise upgrade, Portal for ArcGIS implementation, and Esri Utility Network migration.

Timmons Group has more than 30 years of geospatial-based technology solutions consulting experience for industry and government. Our staff includes more than 200 GIS professionals with a broad range of subject-matter experts across all areas of IT and GIS technologies.

Our team provides unmatched value to our clients – this case is no exception.

- We are an engineering company that knows Utilities and GIS, we are not a GIS company that knows GIS (first) and Utilities (second).
- Timmons Group has provided GIS services to utilities for more than 30 years.
- Our passion is for “wet utilities” (water/sewer/wastewater/combined).
- We are 1 of 23 companies in the United States certified by Esri in the Utility Network (UN) (Network Management Specialty Partner).
- We are 1 of 18 companies in the United States certified by Esri in ArcGIS Cloud Services.
- Our Project Manager (Drew Puzycki) and our UN Lead (Isabel Seigler) have each been certified by Esri in the ArcGIS Utility Network, encompassing 2 of 55 Utility Network certified staff in the United States.
- We have implemented Trimble Cityworks AMS and PLL for more than 150 clients across North America.
- We have integrated dozens of systems with our UN data models, including Trimble Cityworks, Lucity, InfoWater, WaterGEMS, Neptune, Munis, Cogsdale, WEX, Wincam, GraniteNet, Billmaster, SpryCIS, WACHS, 811, Esri and custom SQL and Python scripts.
- Our clients are winning UN awards for our work with them.
- In 2023, we won the Integrations award for our UN implementations at the IMGIS conference. This is a celebrated win for Indio Water Authority and Timmons Group.

We appreciate your consideration and hope to work with you on this important project. If you have any questions, please contact me at 804.433.2998 or at ally.kennedy@timmons.com.

Sincerely,



Ally Kennedy | Principal



VertiGIS™



Table of Contents

SECTION 1 Qualifications and Experience..... 1

Who We Are 1

Contact Information 2

Esri Partner Status 2

History Providing GIS Services 4

Experience in ArcGIS Enterprise Version Upgrades..... 4

Experience in Portal for ArcGIS Implementations 6

Experience in Utility Network Migrations From the ArcMap/Geometric Network Environment..... 7

SECTION 2 Technical Approach..... 10

Phase 0: Project Initiation and Management..... 10

Phase 1: Esri ArcGIS Enterprise Upgrade 11

Phase 2: Esri Portal Installation..... 11

Phase 3: Esri Utility Network Migration 16

Phase 4: Continuing Support..... 21

Project Understanding 21

Keys to Success 21

Approach and Methodology to Planning, Organization, and Management..... 22

Scope of Work Issues..... 24

Project Schedule 25

SECTION 3 Project Staff 29

Biographical Summaries..... 29

Organizational Chart..... 31

Resumes..... 32

SECTION 4 Budget 44

SECTION 5 Municipal Experience and Knowledge 45

Utility Clients 46

Utility Network Clients..... 50

SECTION 6 References 53

SECTION 1 Qualifications and Experience

WHO WE ARE

Headquarters Location:
7053 Celebration Park Ave
Suite 300
Richmond, VA 23225



Our Utility Network Services

UN Migration
Data Readiness Assessment
Data Cleanup
UN Implementation / Migrations
Systems Integration
Training
ArcGIS Enterprise

Our Team

- 200+ IT, GIS Staff, & Industry Leaders
- UN Certified Staff
- GIS Analysts & Developers
- Utility SMEs
- Asset Management SMEs
- Data Analysts, Architects, and Engineers

Utility Network Advantages

- Modern Architecture
- Increased data / network integrity and fidelity
- Advanced tracing capabilities
- Enhanced modeling
- Diagramming
- Increased collaboration capabilities
- Security
- Integrations
- ArcGIS Pro editing

Recent UN Customers

- EPCOR, AZ
- Indio Water Authority, CA
- Rogers Water Utility, AR
- Pennichuck Water Works, NH
- St. Johns County Utility, FL
- Orange Water and Sewer Authority (OWASA), NC
- Salt Lake City Public Utilities, UT
- Lynchburg, VA
- City of St Charles, IL
- City of Gresham, OR
- City of Sacramento, CA
- Mission Springs Water District (MSWD), CA
- City of Columbus, OH
- MetroConnects, VA
- Alexandria, VA
- Eastern Municipal Water District (EMWD), CA

WHO WE ARE

Timmons Group was established in 1953 and has 20 office locations. Currently, we have more than 1,000 staff members, 200 of which are technology professionals focused on GIS services for Utilities and Asset Management. We have a dedicated team of 15 staff that are focused on Utility Network migrations and integrations.

We are an engineering company that knows Utilities and GIS, not a GIS company that knows GIS and Utilities. We have well-defined, proven processes for UN Migration Planning, Data Readiness, Implementation, and Systems Integration.

We are a system integrator, so our Utility Network implementations are not standalone implementations; we integrate other systems with the Utility Network, including:

- Cityworks (Asset Management)
- Lucity/Central Square (Asset Management)
- InfoWater (Hydraulic Modeling Software)
- WaterGEMS (Hydraulic Modeling Software)
- Neptune Water Meter software
- Munis (Utility Billing)
- Cogsdale (Utility Billing)
- WEX (Fleet Management)
- Wincam (Sewer Inspection Software)
- GraniteNet (Sewer Inspection Software)
- Billmaster (CIS)
- Esri Field Maps
- Esri Dashboards and Web Maps
- SpryCIS
- WACHS (Value Maintenance)
- 811 (call before you dig)
- Python Scripts
- SQL Stored Procedures



2023 Infrastructure
Management & GIS Conference
Utility Network Implementation Award



ArcGIS Cloud Services
Specialty



State and Local
Government
Specialty



Network Management
Specialty



CONTACT INFORMATION



Ally Kennedy
Principal



7053 Celebration Park Ave
Suite 300
Richmond, VA 23225



ally.kennedy@timmons.com



804.433.2998

ESRI PARTNER STATUS

Timmons Group has been providing GIS services using the Esri Platform since 1989. We have been an Esri Business Partner for more than 30 years and are currently an Esri **Gold Partner**. We have more than 200 IT/GIS staff, so our bench is deep enough to be able to respond to the County's request for services quickly.

Our Specialty designations, as well as the numerous staff certifications in Esri software, further prove our understanding of and commitment to **industry standards and best practices around schema, domains, and relationships**.

We serve as a Beta-test site for many of Esri's software releases, which enables us to understand the upcoming Esri GIS platform changes and their impact on our clients. Our Gold Partnership and Network Management, ArcGIS Hub, and ArcGIS System Ready designations mean we are up to date on the latest Esri technology and updates and that Esri has evaluated our company and confirmed that we follow best practices when deploying and configuring Esri technology.

Timmons Group has recently received the following awards from Esri:

2023 Utility Network Implementation Award

Timmons Group received a Utility Network Implementation Award at the 2023 Esri Infrastructure Management & GIS Conference (IMGIS) in October 2023. The award was presented in recognition of Timmons Group's successful implementations of Esri's ArcGIS Utility Network technology and integrations with other enterprise software. Timmons Group is one of 15 global Esri partners that received an achievement award at the conference and only one of two engineering firms to be recognized.



2023 Infrastructure
Management & GIS Conference
Utility Network Implementation Award



esri Partner Network
Gold



State and Local
Government
Specialty



ArcGIS Hub
Specialty



Network Management
Specialty



ArcGIS Cloud Services
Specialty



ArcGIS Utility
Network
SPECIALTY



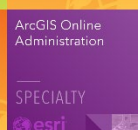
Web
Application
Developer
Certified



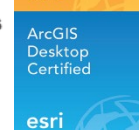
Enterprise
Administration
Certified



Enterprise
System
Design
Certified



ArcGIS Online
Administration
SPECIALTY



ArcGIS
Desktop
Certified



Enterprise
Geodata
Management
Certified

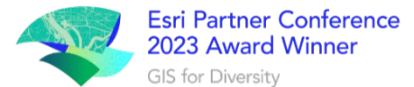
2021 Fostering Engagement Award

Timmons Group received the Fostering Engagement Award at the 2021 Esri Partner Conference. The award is for compelling use of Esri technology to drive user engagement, a feat made possible by the firm's accomplishments throughout our applications of GIS technology. Timmons Group's technology practice has always used Esri's technology to facilitate user engagement. The pandemic fundamentally changed how many companies and organizations work. In 2020, our engineering practices used Esri's technologies to engage with the community on proposed engineering projects. Instead of using presentations and public meetings, we are now using ArcGIS Hub, StoryMaps, and Survey123 to engage with citizens in a richer way. While the firm has been using StoryMaps for our GIS applications for years, StoryMaps became an especially important tool through the pandemic as they provided a platform for government agency project information usually disseminated at public meetings.



2023 GIS for Diversity Award

Timmons Group received a GIS for Diversity Award at the 2023 Esri Partner Conference (EPC) in March 2023. This award was presented as recognition of Timmons Group's investment in leveraging Esri ArcGIS technology to support diversity, equity, inclusion, and belonging for client's projects. Since 1989, Timmons Group has used Esri ArcGIS technology in support of clients' business objectives. In addition to the firm's investment in taking measurable action to advance diversity and inclusion in the workplace, Timmons Group implements DEI-centric projects with clients, including those that address underserved communities through improvements in multimodal transportation, broadband access, and utility bill forgiveness.



Proof of Status

Timmons Group has been an Esri Partner since 1991. Our Esri Partnership page is located here:

<https://www.esri.com/partners/timmons-group-a2T70000000TNguEAG>. For your convenience, a screenshot of the page is below.

The screenshot shows the Esri Partners page for Timmons Group. The page is titled "Esri Partners" and includes a navigation bar with "Overview", "Our Partners", "Become a Partner", and "Find a Partner". The main content area is divided into three sections: Overview, Services, and Partner Information.

Overview

Timmons Group's mission is to achieve unparalleled understanding of our clients, their businesses and their visions resulting in unrivaled customer service and shared success. We have provided our clients with three decades of proven geospatial solutions and services. Smarter data leads to smarter decisions, which means that whatever challenges you face, turning data into actionable information is key. At Timmons Group, our subject matter experts are driven by the desire to solve complex problems and maximize impact using smarter data. Timmons Group maintains a strong business partner relationship with Esri and has been a recipient of several partner awards including:

- Esri Business Partner of the Year
- Esri Foundation Partner of the Year
- Fostering Engagement (2021) - <https://bit.ly/3lgsp8J>
- Diversity in GIS (2023) - <https://bit.ly/3JH88m7>

Our professional staff offers the expertise and ability to design and execute innovative solutions that push us to the forefront of our industry. We are a solution development firm focused on discovering, architecting, designing, delivering, and supporting web applications, progressive web applications, and native mobile application for our clients. Learn more: <https://www.timmons.com/technology>

Services

Overview: <https://www.timmons.com/gis>

- Utility Network Design/Migration
- Utility Network Data Readiness Assessments
- VertiGIS Implementations
- ArcGIS API for Javascript 3.x to 4.x re-writes
- Roads & Highways Consulting/Implementations
- ArcGIS Hub Implementations
- GIS Strategic Planning
- Organizational Change Management
- Custom Application Development
- ArcGIS Enterprise Design/Implementations

Partner Information

Timmons Group
1001 Boulders Pkwy
North Chesterfield VA 23225-5522
United States
T: (804) 200-6405
<https://timmons.com/gis>

Program

esri Partner Network Gold

Specialties

- ArcGIS Cloud Services Specialty
- Network Management Specialty
- State and Local Government Specialty

HISTORY PROVIDING GIS SERVICES

Timmons Group is a well-established 1000+ person professional consulting firm providing information technology and engineering consulting services to state, local, tribal, federal, and private clients throughout the US since 1953. Its geospatial and information technology services include: requirements definition, strategic planning, implementation planning, infrastructure design, database design, data model development, application development, data conversion, field data collection, web development, system integration, and implementation.

Timmons Group is a national leader in innovative technology products and services. Inspired by its clients' visions, its client service teams solve technology challenges in imaginative and cost-effective ways. Its extensive experience providing GIS application solutions for a variety of clients enables Timmons Group to offer clients an excellent mix of experience and proven processes for the design and development of projects to support anticipated business solutions, increased systems integration, and increased service reliance.

The Geospatial Services Division employs a broad range of subject-matter experts across all areas of information technology and geospatial technologies. Timmons Group offers more than 200 GIS professionals – from GIS technicians to our database managers, programmers, systems engineers, consultants, and project managers, its award-winning team has the unique ability to understand each client's vision and create a solution tailored to each client's mission-critical business requirements.

EXPERIENCE IN ARCGIS ENTERPRISE VERSION UPGRADES

Summary of Experience

ArcGIS Enterprise

Timmons Group has performed dozens of ArcGIS Enterprise implementations and, as an Esri Gold-Level Business Partner, we are expert in the wide range of Esri GIS products. In addition, Timmons Group routinely performs migrations between software platforms. Our relationship with Esri means that we are aware of Esri's direction for future product development, so we can make certain that our clients are implementing products and solutions that meet their current needs and position them for the future. We have been implementing ArcGIS Server for 20 years and we have implemented ArcGIS Enterprise since 2016. In the past three years, we have upgraded ArcGIS Enterprise for the following:

Client	Project Name
EPCOR	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
Indio Water Authority	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
Rogers Water Utility	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Implementation
Pennichuck Water Works	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
St. Johns County Utility	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
City of Lynchburg, VA	Utility Network Migration and ArcGIS Enterprise Upgrade
Orange Water and Sewer Authority (OWASA)	Utility Network Migration, ArcGIS Enterprise Upgrade (previously implemented by Timmons Group) and Cityworks Reconfiguration
Albemarle County Service Authority (ACSA)	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration

Salt Lake City Public Utilities	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
City of St Charles, IL	Utility Network Migration and ArcGIS Enterprise Upgrade
Prince George, Canada	Utility Network Migration and ArcGIS Enterprise Upgrade
City of Gresham, OR	Utility Network Migration and ArcGIS Enterprise Upgrade
City of Sacramento, CA	Utility Network Migration and ArcGIS Enterprise Upgrade
City of Columbus, OH	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
MetroConnects	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
City of Alexandria, VA	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
City of Twin Falls, ID	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
Town of Greece, NY	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
Eastern Municipal Water District (EMWD)	Utility Network Migration and ArcGIS Enterprise Upgrade
Forsyth County, GA	Utility Network Migration, ArcGIS Enterprise Upgrade and Cityworks Reconfiguration
Disneyland	ArcGIS Enterprise Upgrade (previously implemented by Timmons Group)
Anchorage Water and Wastewater Utility (AWWU)	Utility Network Migration and ArcGIS Enterprise Upgrade
Arizona Independent Redistricting Commission (IRC)	ArcGIS Enterprise Upgrade
California Department of Transportation (Caltrans)	ArcGIS Enterprise Upgrade
Chesterfield County, VA	ArcGIS Enterprise Upgrade
City of Fredericksburg, VA	ArcGIS Enterprise Upgrade
City of Los Angeles PW BSL	ArcGIS Enterprise Upgrade
City of Mobile, AL	ArcGIS Enterprise Upgrade
City of Rogers, AR	ArcGIS Enterprise Upgrade
City of Forest Grove, OR	ArcGIS Enterprise Upgrade
Forsyth County, GA	ArcGIS Enterprise Upgrade
City of Fremont, NE	ArcGIS Enterprise Upgrade
Gerald Ford International Airport	ArcGIS Enterprise Upgrade
Gwinnett County, GA	ArcGIS Enterprise Upgrade
City of Hallandale Beach, FL	ArcGIS Enterprise Upgrade
City of Killeen, TX	ArcGIS Enterprise Upgrade
City of Minot, ND	ArcGIS Enterprise Upgrade
Mid-Region Council of Governments (MRCOG)	ArcGIS Enterprise Upgrade

North Carolina State University	ArcGIS Enterprise Upgrade
Orange County, VA	ArcGIS Enterprise Upgrade
Philadelphia Gas Works	ArcGIS Enterprise Upgrade
Port of Tampa Bay	ArcGIS Enterprise Upgrade
Skagit Public Utility District	ArcGIS Enterprise Upgrade
Town of Smithtown, NY	ArcGIS Enterprise Upgrade
Spotsylvania County, VA	ArcGIS Enterprise Upgrade
Virginia State Board of Elections	ArcGIS Enterprise Upgrade

EXPERIENCE IN PORTAL FOR ARCGIS IMPLEMENTATIONS

We have been implementing ArcGIS Server for 20 years and we have implemented ArcGIS Enterprise since 2016. In the past three years, we have implemented ArcGIS Enterprise for the following:

Client	Project Name
Mission Springs Water District (MSWD)	Utility Network Migration, ArcGIS Enterprise Implementation, Cityworks Implementation, Cloud Design/Implementation, and Managed Services
Disneyland	Utility Network Migration, ArcGIS Enterprise Implementation, Cloud Design/Implementation, and Managed Services
Philadelphia Gas Works	ArcGIS Enterprise Implementation, Cloud Design/Implementation, and Managed Services
Port of Tampa Bay	ArcGIS Enterprise Implementation, Cloud Design/Implementation, and Managed Services
City of Mobile, AL	ArcGIS Enterprise Implementation, Cloud Design/Implementation, and Managed Services
Arizona Voter Redistricting	ArcGIS Enterprise Implementation
California Department of Transportation	ArcGIS Enterprise Implementation
City of Rogers, AR	ArcGIS Enterprise Implementation
City of Fremont, NE	ArcGIS Enterprise Implementation
Gerald International Airport	ArcGIS Enterprise Implementation
City of Minot, ND	ArcGIS Enterprise Implementation
Orange County, VA	ArcGIS Enterprise Implementation
Orange Water and Sewer Authority (OWASA)	ArcGIS Enterprise Implementation

EXPERIENCE IN UTILITY NETWORK MIGRATIONS FROM THE ARCMAP/GEOMETRIC NETWORK ENVIRONMENT

Summary of Experience

Esri has been providing advanced capabilities to utilities through its Geometric Network (GN) software for many years. The primary feature used by most clients has been topological, or occasionally upstream/downstream tracing. However, Esri has recently introduced the Utility Network (UN), which significantly enhances network capabilities. Timmons Group recognizes several benefits of implementing UN, including enhanced analysis, diagramming, containment, and collaboration capabilities. The modern architecture of UN also supports increased collaboration and streamlined data security. Administering UN is made possible through Esri's latest ArcGIS Pro software and ArcGIS Portal. Additionally, UN enforces a high level of data integrity and can be integrated with other business systems via feature services. Timmons Group offers a range of services related to the Utility Network, including migration planning, organizational change management, data readiness assessments, data cleanup, UN implementations and migrations, systems integration (including Cityworks), training, ArcGIS Enterprise designs/implementations and upgrades, cloud migrations, and managed services.

Migrations Performed

Timmons Group Utility Network Projects							
Client	Utilities	Services					
		Data Readiness	UN Planning	Data Cleanup	ArcGIS Enterprise	UN Imp.	Systems Integration
EPCOR	Water Sewer Reuse	✓	✓		✓	✓	Cityworks
Indio Water Authority	Water	✓			✓	✓	Cityworks InfoWater Neptune KPI Cayenta
Anchorage Water and Wastewater Utility (AWWU)	Water Sewer	✓	✓		✓		
Rogers Water Utility	Water Sewer	✓		✓	✓	✓	Cityworks
Alderwood Water and Wastewater District (AWWD)	Water Sewer	✓			✓	✓	Cityworks
Pennichuck Water Works	Water	✓			✓	✓	Cityworks MUNIS WEX
St. Johns County Utility	Water Sewer Reuse	✓	✓	✓	✓	✓	Cityworks InfoWater Field Maps Cogsdale
City of Lynchburg, VA	Water Combined Sewer Storm Sewer	✓			✓	✓	Lucity

Timmons Group Utility Network Projects							
Client	Utilities	Services					
		Data Readiness	UN Planning	Data Cleanup	ArcGIS Enterprise	UN Imp.	Systems Integration
Orange Water and Sewer Authority (OWASA)	Water Sewer Reclaim	✓	✓		✓	✓	Cityworks WEX WinCam
Disneyland	Water, Sewer, Storm, Electric, Comp.Air, Gas, Steam, Chilled	✓	✓	✓	✓	✓	
Salt Lake City Public Utilities	Water Sewer Storm				✓	✓	Cityworks
Albemarle County Service Authority (ACSA)	Water Sewer	✓	✓		✓		Cityworks BillMaster WaterGEMS InfoWater GraniteNet
Prince George, Canada	Water	✓	✓		✓	✓	Cityworks
City of St Charles, IL	Water Sewer Storm Electric	✓			✓	✓	
City of Gresham, OR	Sewer Storm	✓			✓	✓	Lucity
City of Sacramento, CA	Water Combined Sewer/Storm Sewer	✓	✓	✓	✓		Cityworks Customer Care & Billing GraniteNet DigSmart, Maintenance Connection
Mission Springs Water District (MSWD)	Water Sewer	✓			✓	✓	Cityworks GraniteNet
City of Columbus, OH	Water Combined Sewer/Storm Electric	✓			✓	✓	Cityworks
MetroConnects	Sewer	✓			✓	✓	Cityworks
Alexandria, VA	Sewer Storm Combined Sewer/Storm	✓			✓	✓	Cityworks GraniteNet

Timmons Group Utility Network Projects							
Client	Utilities	Services					
		Data Readiness	UN Planning	Data Cleanup	ArcGIS Enterprise	UN Imp.	Systems Integration
Eastern Municipal Water District (EMWD)	Water Sewer Recycled Water				✓	✓	Maximo Hydromapper Cayenta
Twin Falls, ID	Water	✓	✓		✓		Cityworks
Town of Greece, NY	Sewer Storm	✓			✓	✓	Cityworks
Forsyth County, GA	Water Sewer	✓			✓	✓	Cityworks
24 Clients	>50	19	9	4	24	20	37

SECTION 2 Technical Approach

PHASE 0: PROJECT INITIATION AND MANAGEMENT

Project Initiation sets the stage for downstream activities and tasks. This is the time to better define the overall goal of the project and what stakeholders hope to gain from the effort. During initiation, it is important to define who will be working on the project and their respective roles, as well as who will make business decisions and establish priorities for what ends up in the application. Project initiation tasks are typically not time-intensive but are especially important to the success of the project. By having clearly defined roles, the project team can minimize inefficiencies and streamline the requirements-gathering and decision-making process.

On notice to proceed, we will convene at an internal Timmons Group team meeting to make certain that the entire project team understands the overall goals of the City's project and what the project schedule is. Our Project Manager will be in contact with the City Project Manager to discuss the kick-off meeting agenda and project schedule. Timmons Group will draft a kick-off meeting agenda for the City to review and edit. Our Project Manager will also provide a detailed project plan to include phases, tasks, task dependencies, and task durations before the kick-off meeting.

Kick-off Meeting

The Project Manager will organize the kick-off meeting, which will include participation from key project stakeholders and client staff. This meeting will focus on team introductions, scope review, schedule overview, and next steps. The following will be created, modified, and then finalized:

Project Repository – Timmons Group will set up a project repository within Teamwork.com to store project deliverables, status reports, project management documents, and other project files.

Project Schedule – After the kick-off meeting, we will make any necessary adjustments to the project plan. This may include the identification of new tasks, modifications to dependencies, or changed task durations.

Project Management Plan – This project will involve significant interaction with the City so it will be important to have an effective communication plan that clearly lays out the roles, responsibilities, and methods for sharing information throughout the project.

Training Plan – A key deliverable of this project will be the documentation and training efforts needed to support successful knowledge transfer that will enable the City staff to administer and maintain new processes and technology on their own at the end of the project. We will develop an initial, high-level approach to explain how a detailed training plan and training materials will be developed to make certain that the City personnel are trained and ready to adopt the responsibilities of operating, administering, and maintaining the new system.

Status Report Template – We will develop a status report template after the kick-off meeting to make certain that the City will receive comprehensive project updates with relevant information in a format that best meets your needs.

Ongoing Project Management

After the initial kick-off meeting, there will be regular Project Management tasks conducted throughout the project including proactively updating the Project Management Plan and hosting weekly status calls.

PHASE 0 DELIVERABLES

1. Kick-off Deck (.pptx)
2. Project Management Plan (.docx and .pdf)
3. Weekly Status meeting and accompanying reports (.docx)
4. Project collaboration site (teamwork.com)
5. Training Plan (.docx and .pdf)

PHASE 1: ESRI ARCGIS ENTERPRISE UPGRADE**Task 1.1: GIS Infrastructure Discovery**

We start with a Discovery to build shared understanding of detailed requirements and desired outcomes. The steps that follow Discovery are flexible based on what we learn and what the City needs. The purpose of Discovery is to document every relevant component of the current GIS so that all capabilities and functionality are accounted for in the upgrade.

Timmons Group will work with the City to review the current system architecture. This will include the servers currently in place and the various software configurations in place for these servers. The goal is to make certain that Timmons Group, to the best extent possible, captures the current system configuration and dependencies of the City's GIS prior to finalizing the technical design and implementing a new GIS infrastructure.

If there is a dependency that prevents the existing ArcGIS Server from being used with the ArcGIS Enterprise deployment (with Portal), then a new deployment will be done, rather than upgrading the existing ArcGIS Enterprise components. Regardless, the deployment of the Portal component will be tied to the upgrade or new deployment of the ArcGIS Server. For this reason, we have grouped the deliverables for Phases 1 and 2 together below.

Task 1.2: Non-Utility Discovery**Non-Utility GIS Workflows**

Our workflow discovery process begins with a request for any SOPs or documentation of GIS workflows, integrations, scripts, and pain points. We then proceed into stakeholder workshops to find out how the users, editors, and administrators interact with the GIS and ways to maintain and improve those processes. This can include editing, reporting, and QAQC workflows. The goal is to identify pain points that could be improved or streamlined to increase efficiency and reduce clicks.

Data Model Overview

Timmons Group will do a high-level overview of the non-utility datasets to highlight any that might need more attention during migration. For example, annotation and dimension datasets require specific upgrade processes to be used properly in ArcGIS Pro. The outcome of this step these items included in the ArcGIS Enterprise upgrade/deployment step-by-step process document.

PHASE 2: ESRI PORTAL INSTALLATION

Timmons Group will deploy ArcGIS Enterprise 11.3. We will discuss with City IT personnel to make certain that the ArcGIS Enterprise infrastructure design is approved during the Technical Design Task. The solution will take into account the needs of the downstream Utility Network as well as non-utility dataset.

The City will be responsible for acquiring any needed licenses.

Task 2.1: Technical Design

Step 1: Design Architecture

Timmons Group will create a system architecture design document with the City to make certain that system specifications will adequately meet the performance and security needs.

Step 2: Design Software Components

A mature and robust enterprise GIS comprises many different software solutions. In this step of the project, the goal is to take the documented software solutions from earlier phases of the project and align them with the proposed design. If needed for connection between ArcGIS Online and Portal, Distributed Collaboration will be part of the design.

Task 2.2: Build Infrastructure

This is a City task. If the physical infrastructure needs to be built still, Timmons Group will be available for consultation should the City have questions.

Task 2.3: Software Installation and Configuration

Step 1: Configure ArcGIS Portal

Summary

As the heart of the new environment, ArcGIS Portal will be deployed in a base and distributed configuration. Our team will build the necessary ArcGIS Portal instance(s) required for the new environment. We will target the GIS platform 11.3. Proper deployment of the ArcGIS Portal product will benefit the City by aligning the system with the baseline of the ArcGIS platform, aligning to the ArcGIS product roadmap, and supporting future integrations.

Security

Security will be implemented per the technical design created in the earlier task. Depending on the final design and other City IT resources we may leverage the following components to properly authenticate and authorize ArcGIS Portal users. If available from the City, Enterprise logins via HTTPS/SAML will use the City's Federated Identity Management platform. A typical security pattern is summarized below:

Summary System Security	
Security Control	Description
Authentication	Single Sign-On (SSO) via SAML integration with Enterprise Identity Management System
User Store	Enterprise Identity Management System
Role Store	Built-in
User Provisioning	Enterprise Identity Management System
GIS Services Access	Federated security to GIS Portal groups
GIS Portal Access	Portal for ArcGIS: Domain Accounts and RBAC via group membership

Federation

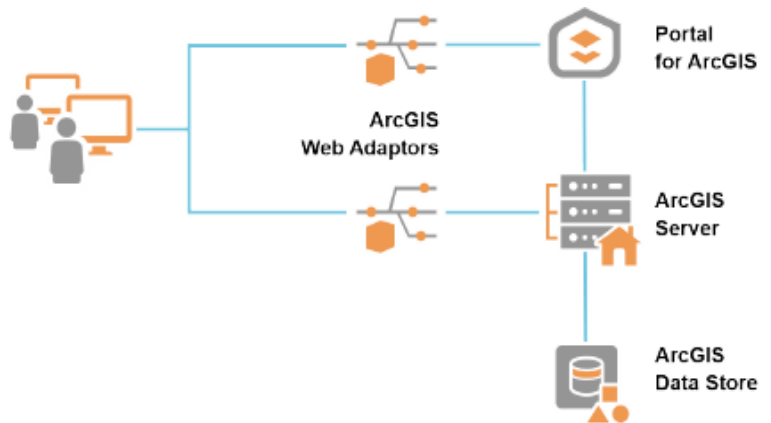
ArcGIS Server instances will be federated with Portal. With federated ArcGIS Servers, the portal's security store controls all access to the ArcGIS Server instance. This provides a convenient sign-on experience but also impacts how access and administration of the federated server(s) are controlled.

Deployment

ArcGIS Enterprise workflows and functionality are enabled by four software components. This configuration is the base ArcGIS Enterprise deployment. Each component performs critical functions that support the requirements of the ArcGIS Enterprise deployment. Components are individually installed and configured to function together. This base deployment is the foundation for the ArcGIS Enterprise implementation. Where possible, our team will leverage automation to configure the ArcGIS Enterprise components. Also, we recommend the use of DNS CNAMEs (aliases) for ArcGIS Enterprise deployments as well as database server connection strings. This will aid the organization in the future by making future ArcGIS Enterprise upgrades easier by avoiding the use of hostnames or FQDN's in the configuration of Enterprise. Additionally, the DNS CNAMEs for the database server connection strings eliminate the need for repairing data source connections in the event the DBMS changes or is migrated to another server.

Critical steps to successfully deploy the ArcGIS Enterprise solution include, but are not limited to, the following:

- Component Communication
- HTTPS Encryption, Domain Certificates
- Component installation (Portal, Server, Data Store, Web Adaptor(s))
- Licensing
- Data and Content Store for required Relational and Spatiotemporal Data Stores
- Configuration Store, and Component Directories configuration and location
- Server Federation and Hosting Server(s)
- Data Registration
- Identity Stores and System Authentication and Authentication Methods
- Membership Levels, User Privileges, Roles
- Backup/Restore processes and considerations for software updates
- Creation of Portal Groups and member assignment



If we need to transfer items from ArcGIS Online to the Portal, we will do that during this Task. Leveraging tools such as ArcGIS Online Assistant and/or custom scripts developed in Python using the ArcGIS API for python will assist us in this process.

Step 2: Configure ArcGIS Server

Our team will build the necessary ArcGIS Server instances for the new environment. We will target the GIS platform 11.3.

Step 3: Configure RDBMS

Timmons Group will install and configure the RDBMS per the technical design specifications.

Step 4: Data Migration & Service Upgrades

If needed, Timmons Group will work with the City to determine the best data migration strategy. If an in-place upgrade is selected, data migration is unlikely to be necessary.

Once the discovery phase is complete and the future state architecture is determined we can detail a data migration plan. This task will include but may not be limited to the following:

- Determine which data sources need to be migrated and where they need to be migrated to in the future state architecture
- Backup enterprise geodatabases and restore to future state environment
- Automate SQL processes when applicable
- Configure DNS CNAMEs for any new RDBMS deployments. Use as source for any new data source connections within the Enterprise GIS software

- Establish Traditional or Branch Versions within enterprise geodatabase as needed
- Set requisite geodatabase privileges where applicable
- Establish DBMS logins and align to existing GDB users, as appropriate

Regardless of Data Migration, the services will need to be upgraded to ArcGIS Pro Runtime. This can be done with a command line utility from the ArcGIS Server machine.

Task 2.4: Testing, Final Documentation, and Training

Step 1: System Testing

Proper system testing is required to make certain that the proposed solution meets all expectations and performance criteria established by the City.

Step 2: Final System Documentation

Our process involves documenting system configurations as we build/configure, so this task is focused on finalizing the system documentation that is created throughout the project.

Step 3: Training / Knowledge Transfer

City staff will have shadowed our technical staff throughout the system design, build, configuration, and testing. Therefore, by the end of the project, the City's staff will have a solid understanding of the final system configurations. This training task is considered a "refresher course" and a review of the final system documentation.

Task 2.5: Legacy System Deprecation/Cleanup

Timmons Group will provide support in assisting the City in deprecating legacy servers, applications and data. Timmons Group will work with the City during the Design phase to fully itemize what components of the current state deployment will need to be deprecated as well as formalize a plan to document when and how legacy servers, applications and data will be deprecated. This phase will likely include but not be limited to the following:

- Determine what data sources on systems can be permanently removed
- Removal of data sources no longer needed
- Removal of legacy software components no longer needed
- Removal of legacy applications no longer needed

Once the non-utility editors have transitioned to ArcGIS Pro for editing, the geodatabase could be upgraded to the current version. This should not be done until that point, so that editing can continue in ArcMap even with ArcGIS Enterprise 11.3 in place.

Task 2.6: Editing and Versioning Recommendations

Timmons Group will create recommendations for utility and non-utility GIS editors to streamline editing workflows. This will likely involve the discussions around branch versioning, attribute rules, contingent values, and group editing templates. These will all be created in collaboration with the City's GIS editors. The outcomes of these recommendations, after discussion with City staff, will be documented in the department-specific User Workflow Guides that are delivered with Training.

At this time, it is not expected that Timmons Group will be implementing these recommendations as part of this project.

Task 2.7: ArcGIS Pro and Portal Training

Timmons Group will conduct training on ArcGIS Pro and Portal for the GIS editors. This will cover introductory topics, aimed at users who are comfortable with ArcMap, including topics like branch versioning, new editing tools and workflows, how to interact with Portal items from ArcGIS Pro. There will be two 2-hour training sessions for editors. Additionally, one 2-hour session will be provided for GIS administrators. This will cover items like the consequences and outcomes of

different versioning methods, Portal administration, publishing services and their properties, and how to configure and maintain advanced editing tools.

Timmons Group will provide, alongside training, User Workflow Guides. This will cover topics relevant for ArcMap to ArcGIS Pro migration, excluding Utility Network. (UN editors will receive a different workflow guide in Phase 3.) There will be 3 Workflow Guides intended for the following stakeholder groups:

1. GIS: for Administration and Editing
2. IT: for Maintenance and Administration
3. Planning, Economic Development, and Public Works: for Accessing data in the Portal via ArcGIS Pro

The graphic below shows a Table of Contents from a recent User Workflow Guide we delivered.

1	Overview
2	Creating Maps
2.1	Creating a New Project
2.2	Import a Map from Portal
2.3	Create a map from an existing map (Recommended method)
2.4	Generating a New Map within a Pre-existing Project
2.5	Adding Data to a Map
2.6	Customizing maps
3	Review Attribute Rule Configurations & Contingent Attribute Values
3.1	Calculation Attribute Rules
3.2	Validation Attribute Rules
4	Manage Versions
4.1	Create New Version
4.2	Reconcile and Post a Version
4.3	Delete a Version
4.4	View Historical Versions
5	Create Features
5.1	Create New Feature from Existing Feature Template
5.2	Copy and Paste Features
5.3	Editing Templates
6	Edit Features
6.1	Edit Attributes
6.2	Edit Geometry

6.3	Flip a line
7	Delete Features.....
8	CAD
8.1	Add CAD Data to Map
8.2	Create Features using Copy and Paste
9	Publishing Feature Services
10	Turning off Services.....
10.1	Stop Services
10.2	Restart Services
11	Overwrite Services
12	Delete Services
13	Creating or Modifying Attribute Rules
13.1	Restarting Service after Attribute Rules or Data Model changes are complete ..
13.2	Common Issues
Appendix A – Attribute Rules	
Ready to Use Rules.....	
Appendix B – Source File.....	

PHASE 1 & 2 DELIVERABLES

1. Summary notes from Discovery meetings (.pdf)
2. Step-by-step documentation of the Upgrade and/or Portal installation and service migration (.pdf)
3. ArcGIS Enterprise recommendations for upgrade cadence and frequency (.docx and .pdf)
4. GIS Architecture Diagram (.svg)
5. A fully implemented Portal environment with all City web services compatible with ArcGIS Pro.
6. ArcGIS Pro and Portal User Workflow Guide, including recommendations for versioning and editing (.docx and .pdf)
7. Department-specific User Workflow Guides (.docx and .pdf)
8. PowerPoints from each training session (.pptx)
9. Recordings from each training sessions (.mp4)

PHASE 3: ESRI UTILITY NETWORK MIGRATION

Task 3.1: Discovery

The purpose of Discovery is to document every relevant component of the current GIS so that all functionality is accounted for in the migration. The GIS software, including extensions and add-ins, will be documented along with the licensing currently available to the City. Our team will explore integrations to make certain that their current functionality and how they tie into the GIS is fully understood; this includes EH Wachs and the Central Brown County Water Authority dataset.

The outcome of Discovery is a Business Requirements Excel file that lists out the high-level needs of the City with respect to the UN implementation.

GIS Workflows

Our process begins with a request for any SOPs or documentation of GIS workflows, integrations, scripts, and architecture diagrams. It then proceeds into stakeholder workshops to find out how the users, editors, and administrators interact with the GIS and ways to maintain and improve those processes.

Timmons Group will review existing GIS Data Workflows. This means any standardized or documented workflows that editors use consistently. This can include editing, reporting, and QAQC workflows. The goal is to identify pain points that could be improved or streamlined to increase efficiency and reduce clicks.

Data Model Discovery

The data model design task starts with workshops with the City GIS editors, users, and subject matter experts. The agenda will include the collection of specific requirements for editing following the deployment of the revised data model. The primary purpose of the data model workshops will be to review the existing data model to make certain that only useful items and data are migrated into the UN.

Migration Plan

Following the Discovery sessions, Timmons Group will finalize the pathway to the Utility Network. There are 3 primary options: the Essentials pathway, the Expanded pathway, and the [Migration Toolset](#). At this point, Timmons Group and the City will collaboratively decide which pathway will lead to the desired destination.

Task 3.2: UN Data Readiness Assessment

Timmons Group will deliver a database readiness assessment report prior to UN migration, testing, and deployment. The database readiness assessment will detail, at a minimum, data quality issues that will need to be resolved prior to migration for subnetwork functionality (tracing) and will also include data recommendations that may not prevent migration but would optimize data workflow and performance within the UN.

The discovery phase determines business needs and project goals that will inform how the data is migrated. This list of business needs will be used to generate the data quality checks that are run on the data to generate the database readiness assessment report. These checks will be run using Esri's Data Reviewer extension. The output of this task will be a geodatabase containing features that have problems as categorized below:

- Cutback checks
- Domain checks
- Duplicate geometry
- Invalid geometry
- Multiple lines
- Path closes on self
- Valency checks
- Connectivity checks
- Orphan features
- Unique IDs
- Others as discussed during discovery meetings

We will create a document, the Data Cleanup Plan, which contains a brief description of what correction should be done to resolve each error type. It also details which of these corrections Timmons Group can automate as part of the data migration process. Any items that are not automatable, City staff will be responsible for correcting.

The readiness report will include:

- Excel Report quantifying the data quality
- .rbj files or file geodatabase (if no Data Reviewer license) to guide data editors to data that needs correction
- Data Cleanup Plan (Word document) explaining each check type and "severity" rankings to guide the City's prioritization of data correction
- Data Reviewer training, if necessary

Task 3.3: Data Model Design & Editing Tools

The goal of this task is to architect UN data models that meet the City's needs, as well as prepare editing tools to increase efficiency in GIS workflows. As mentioned in Task 1, the steps here will be impacted by the decision point reached at the end of Discovery. Individual steps to follow the Expanded pathway will not be the same as ones using the Migration Toolset pathway; regardless, the City will arrive at Utility Networks that meet the business needs and honor the desired functionality.

Database Design

Timmons Group will make certain that the enterprise geodatabases are set up with the appropriate schema (database admins, data owners, etc.) to make certain that the UN has the appropriate security protections. It is recommended that the geodatabase owner is "sde" (not "dbo") and that the data owner is a different user.

Data Model Design

Data modeling starts with template Utility Network data models from Esri that Timmons Group has customized for smoother integrations. We will take the source data model review from the Discovery phase and use it to build a Migration Matrix; this shows how every feature class, field, and domain value in the source data will migrate to the Utility Networks, as well as how those Utility Networks are further customized for the City's needs.

Data Model Design will include creating service territory polygons for each Network. This will also involve configuring the:

- Structure and utility domains
- Tiers and subnetworks
- Network rules
- Subtypes (asset groups)
- Domains
- Associations
- Attachments, as necessary
- Terminals, as necessary

Timmons Group will provide the data model development materials to the City for feedback and review iteratively, first as a migration mapping Excel and then as a geodatabase.

Quality Assurance

Timmons Group uses Peer Review QA; this approach means a different Analyst than the one who created the customized data model will review it, ensuring that the proper fields, domains, and other UN properties have been properly applied as discussed and documented. This approach is also used for QA of the Data Migration output.

Editing Tools

Timmons Group will configure the UN to ensure the highest possible data quality using Attribute Rules, Contingent Values (CVs), and complex editing templates. Our team will configure Calculation and Validation Attribute Rules to ensure data quality; these will be the tools that the existing Attribute Assistant functionality will be migrated to, as well as where the unique IDs are generated. We will present a list of common rules and work with the City to expand it to meet business needs.

Group editing templates will be configured per the needs discussed during the workshops. Any edit templates currently configured with the Water Geometric Network Editing and Analysis add-in will be migrated to these group editing templates. This often involves items like hydrant and meter/service connection editing templates to streamline editing. These templates will be designed and documented at this stage but not built until the UN is deployed in the DEV environment.

We recommend holding off on UN Diagrams until after the UN is in use and everyone in the City is comfortable with it.

Data Model Documentation

Following the customization of the UN data models, data dictionaries will be provided. They will show the final asset groups, domain values, domain assignments, fields, and network rules. Attribute rules and CVs will be provided to the City as CSV files (as well as implemented within the database).

Task 3.4: Data Migration

As noted in Task 3, the individual steps of the Data Migration can change based on which pathway is chosen at the end of Discovery. The paragraphs below summarize the Expanded and Essentials pathways.

Data Migration

Timmons Group will use Safe Software's FME product to migrate the data from the current database(s) to the customized UN databases. Most of the migration logic will have been documented in the previous phase as part of the data model customization process. As changes must occur to that logic, the City will be consulted and informed. The migration process can enhance and enrich the data mid-migration; for example, if a feature needs an attribute created based on a feature that intersects it, that can be added by the tools.

Quality Assurance

Timmons Group creates FME workbenches to review the number of features entering the ETL process and number exiting. The output of this is a Conversion Report Excel file that documents the outcome and is provided to the City.

Geodatabase Versioning

Following migration approval, Timmons Group will move the draft migrations from file geodatabase into the DEV enterprise geodatabases in the City's environment and enable global IDs, editor tracking, branch versioning, and replica tracking.

Migration Documentation

Timmons Group will share the FME Workbenches that are created to migrate the data with the City, as well as updated Migration Matrices and Data Dictionaries.

Named Trace Configurations

Following deployment of the UNs to the DEV environment, Timmons Group will configure up to three Named Trace Configurations per utility. These make it quick and easy to re-run traces that are used often. Additionally, Named Trace Configurations are required for users who want to run Trace operations in web applications or on mobile devices using Field Maps. Timmons Group staff will provide guidance from our past clients and discuss with City staff the types and properties of the saved Traces.

Task 3.5: Integrations

Timmons Group's approach to Integrations is to start exploring them during the Discovery phase of the project, to make certain that we understand the current functionality, expected future functionality, and the requirements to keep the solutions in alignment. We will create a Reconfiguration Plan during Discovery that will outline the expected path and workflows to support the integrations.

Central Brown County Water Authority dataset

Timmons Group will migrate the Central Brown County Water Authority dataset into the UNs and make certain that the ownedby and maintby attributes are set appropriately, for the City's reference. It is not anticipated that this will cause any substantial change to the structure or functionality of the UNs. This will be done at the same time as the rest of the data migration processes but is acknowledged as a requirement in this Task.

EH Wachs

Timmons Group will make certain that a service is published for EH Wachs' integration with the water UN and/or ArcGIS Online. During the data modeling phase, any data model requirements of this integration will be explored and documented to make certain that it is compatible.

Task 3.6: Training, Testing, and Go-Live

Timmons Group Testing

Testing will be conducted on the DEV environment. Timmons Group will conduct system testing and functional testing prior to user acceptance testing (UAT) to make certain that the system is ready for use. Should changes be required to the data as the result of a failed test, the City will make those changes and Timmons Group will retest. Should changes be required to the infrastructure, data model, or the editing tools as the result of a failed test, the Timmons Group team will make those changes and re-test.

Once Timmons Group has passed the agreed-on test scripts, the City will receive training to prepare staff members to conduct their testing.

Training

Once the migration is deployed to the DEV environment and tested by Timmons Group, we will provide training focused on desktop (ArcGIS Pro) editing, UN-compatible web applications, and UN administration. These focused training sessions will align with the User Workflow Guide that Timmons Group will provide. Following these trainings, the City team will be empowered to use the Test Scripts to make certain that full functionality of the implementation in the DEV environment so that the solution can be approved for Go-Live.

City Testing

The City will conduct testing following the test scripts that Timmons Group provided. It is likely that the City will have additional tests to perform, particularly regarding integrations/other software that uses the GIS. Timmons Group will amend the data model, migration workflow, and editing tools based on the City's feedback. Once the City passes the tests, Go-live approval should proceed.

Go-Live

Following successful UAT on DEV, an editing freeze will occur in the current production environment. The data will be extracted from the current production database and used in the final iteration of the migration tool. We will then load the UN data to the production environment, with all editing tools in place. Feature services will be published and editing maps re-sourced to the production environment. UAT scripts will be followed to make certain that functionality is still present and stable in this final environment. Cityworks will be reconfigured in Production to make certain that all functionality continues as expected. This Go-Live process and regression testing is expected to take between 3-5 days. Timmons Group will work through the weekends to minimize downtime. Following successful Go-Live, the existing servers and databases that are no longer used can be decommissioned.

PHASE 3 DELIVERABLES

1. The City's Sanitary Sewer, Storm Sewer, and Water GIS data fully implemented into the Utility Network on City server(s) with new web services created.
1. Discovery Session notes (.pdf)
2. Business Requirements (.xlsx)
3. Migration Plan (.docx and .pdf)
4. Reconfiguration Plan (.docx and .pdf)
5. Migration Matrix: one per utility (.xlsx)
6. Attribute Rules worksheet (.xlsx)
7. Group Editing Templates worksheet (.xlsx)
8. Data Dictionary, one per utility (.pdf, .xlsx, .html)
9. FME Migration Workbench, one per utility (.fmw)

10. Conversion Reports, one per utility (.xlsx)
11. Implementation Plan: a document that lists the steps taken to perform the Utility Network migration. (.xlsx and .pdf)
12. Template Editing map (.mapx)
13. Publishing map (.mapx)
14. Training Agenda (.docx)
15. User Workflow Guide: a guide for editors and admins to use, edit, and maintain the UN and associated workflow tools. Includes documentation of chosen customization and features (.docx and .pdf)
16. PowerPoints from each training session (.pptx)
17. Recordings from each training sessions (.mp4)
18. Test Scripts (.xlsx)

PHASE 4: CONTINUING SUPPORT

Timmons Group will provide support to the City for six months post go-live for matters involving Tasks 0-3, above. Teamwork.com will be used to track open tickets. It is expected that the weekly status calls will taper off to bimonthly or monthly at this point.

PROJECT UNDERSTANDING

Timmons Group understands that the primary goals of this project are to:

1. Establish a full base deployment of ArcGIS Enterprise (including Portal), with an emphasis on supporting Utility Network
2. Move all GIS editors to ArcGIS Pro and deprecate ArcMap usage
3. Implement Utility Network for Sanitary Sewer, Storm Sewer, and Water datasets
4. Empower City users to maintain and administer the solutions

KEYS TO SUCCESS

A key component of any successful project is collaboration. While Timmons Group can provide Subject Matter Experts in GIS, UN, IT infrastructure, and even utilities, it is only through collaboration with the City's own SME and data owners that a project thrives. We will require City staff's time for discovery sessions, review of current data model, feedback on our migration plans, review of deliverables, to name a few. We have successfully implemented UNs at localities that did not participate very much in the process, but those are much less tailored to their individual business needs.

Timmons Group builds in plenty of time for City staff's review and feedback, with the understanding that the day-to-day also must be completed. We do not expect full-time support from any City staff for this project.

APPROACH AND METHODOLOGY TO PLANNING, ORGANIZATION, AND MANAGEMENT

Management Approach

Timmons Group provides the following Project Management services throughout the duration of each project:

- Perform Business meeting(s) (in person or conference calls)
- Develop, in cooperation with the client Project Manager, a detailed Project Plan and Schedule
- Proactively manage and update Project Plan and Schedule, as required, throughout the duration of the Project. Project Plan and Schedule modifications will be facilitated on common agreement between the client and the team Project Manager
- Coordinate project events with the client Project Manager and team members
- Author, edit, review, and distribute project documentation and technical reports, as required
- Facilitate in-process review meetings with the client Project Manager and end-users as scheduled, and appropriate, throughout the duration of the project
- Perform miscellaneous project administration (e.g., internal project updates), and
- Anticipate problem areas then propose and facilitate solutions

Project Plan

Each project is defined and managed by a Project Plan. Our Project Plan is based on a proven template and includes the project scope, schedule, deliverables, and fee. The project plan is based on the requested scope of work and our team's proposed response, refined through negotiations with the client. The Project Plan is a living document that can evolve, though mutual agreement of the client and Timmons Group, as the project progresses.

Issue/Action Item Management

During the project, the Project Manager will maintain a detailed issue/ action item tracking log. This will include issue details, issue status, issue assignments, and issue resolution details. Action items will be tracked in a similar fashion. The client Project Manager is encouraged to contribute issue/action items to the list. This list will be presented to the client Project Manager on a periodic basis, as agreed to by the client and team Project Manager, using the Project Progress Report (see below). This is normally done as part of a regularly scheduled project status report work process.

Risk Management

Risk Management is a fundamental project management element for Timmons Group projects. It is critical to ensure a level of contingency preparation should a risk become a reality. During the risk management process, likely risks associated with the implementation of the project are identified, along with their project impact and mitigation strategies.

Risks:

Project Risks and Impediments		Risk/Probability					Mitigation	
	Probability	99						
		75						
		50						
		25						
		10						
		1	2	3	4	5		
		Impact						
	Probability	99						
		75						
		50						
		25						
		10						
		1	2	3	4	5		
		Impact						

Change Management

During the project, changes to the project plan may be required. Our change management process is designed to address these changes head-on, document them, and ensure they are reflected in an updated set of tasks. In some cases, the proposed change will affect schedule, costs, and scope. Should this occur, the Change Management Process will be used to manage expectations and clearly convey and document the impacts of such decisions on project scope, deliverable, schedule, and cost.

Project Communication Tools

We have a proven project communications process and plan that keeps your staff fully informed of the project progress. The project team uses a variety of project management tools throughout the project lifecycle, including:

- Microsoft Project – for schedule management
- Web-based Project Portal – for client communications and project document storage
- Secure FTP project folder or Dropbox folder – for data and program transfers
- Secure test environments – for software and data review and acceptance
- BitBucket / GIT – for application code management
- Pivotal Tracker – for application and data issue/bug tracking

Project Communications Processes

Shown below is a summary table of our project communications/reporting methods followed by details of each method.

Reporting Method/ Responsibility	Focus	Participants
Project Kick-off Meeting Responsibility: Project Manager	Establish the necessary Project Management protocols to be adhered to by team members. The Meeting will focus on: Team introductions Deliverables Overview Roles and Responsibilities Project Schedule and Milestones	Project Manager and Key Stakeholders
Project Website Responsibility: Project Manager	This website will provide a repository for project documents, project status, and issue tracking. Project staff assigned to this project will have the ability to access, post, and edit on the site.	Project Manager
Weekly Project Team Coordination Responsibility: Project Manager	Weekly report of work in progress including completed tasks; planned tasks; and anticipated conflicts. Our Project Manager will review these reports and meet with the project team members to determine and schedule the required actions.	Project Manager
Weekly Status Reports Responsibility: Project Manager	Each report will detail significant progress made during the previous time period; activities planned for the current time period; and project issues that require resolution	Project Manager and occasional technical staff as needed
Monthly Milestone Meetings Responsibility: Project Manager	Overall project direction, performance, and progress.	Project Manager and Key Stakeholders
Project Change Control Process Responsibility: Project Manager	A change management process that provides a structured, planned approach to identifying, approving, and implementing changes affecting schedule, costs, and scope	Project Manager

Project Kick-off Meeting

On notice to proceed, we convene a project kick-off meeting. This meeting is orchestrated by the Project Manager and includes participation from Key project stakeholders and client staff. The meeting focuses on:

- Team introductions
- Deliverables Overview
- Roles and Responsibilities
- Project Schedule and Milestones

Weekly Project Coordination Meetings

Project team members provide our Project Manager with weekly status reports detailing the work in progress, including completed tasks; planned tasks; and anticipated conflicts. Our Project Manager reviews these reports and meets with the project team members to determine and schedule the required actions. Discussion topics are logged and made available to all team members.

Project Schedule Coordination

Project scheduling and task management is proactively monitored using Microsoft Project software. Project schedules, tasks, deliverables, and milestones are continuously monitored and adjusted as required. An updated project schedule are made available to all interested parties.

Project Progress Report

Our Project Manager provides the client's Project Manager with a written weekly or bi-weekly status report, the frequency of which depends on the client's needs. Each report details significant progress made during the previous month; activities planned for the current month; and project issues requiring resolution.

SCOPE OF WORK ISSUES

The Technical Approach above has been organized in the way that Timmons Group see as most effective and efficient. All component of the scope from the RFP will be supported, though Phase 1 and 2 will likely be executed as one task.

Our approach to coordination is laid out in both [Phase 0](#) and the [Approach And Methodology To Planning, Organization, And Management](#) section.

PROJECT STATUS REPORT	
Project Name	<<project name here>>
Report Date	<<report date>>
Report Period	<<report period>>
Submitted To	<<client project manager>>
Submitted By	<<TG project manager>>
Other	<<other notes>>

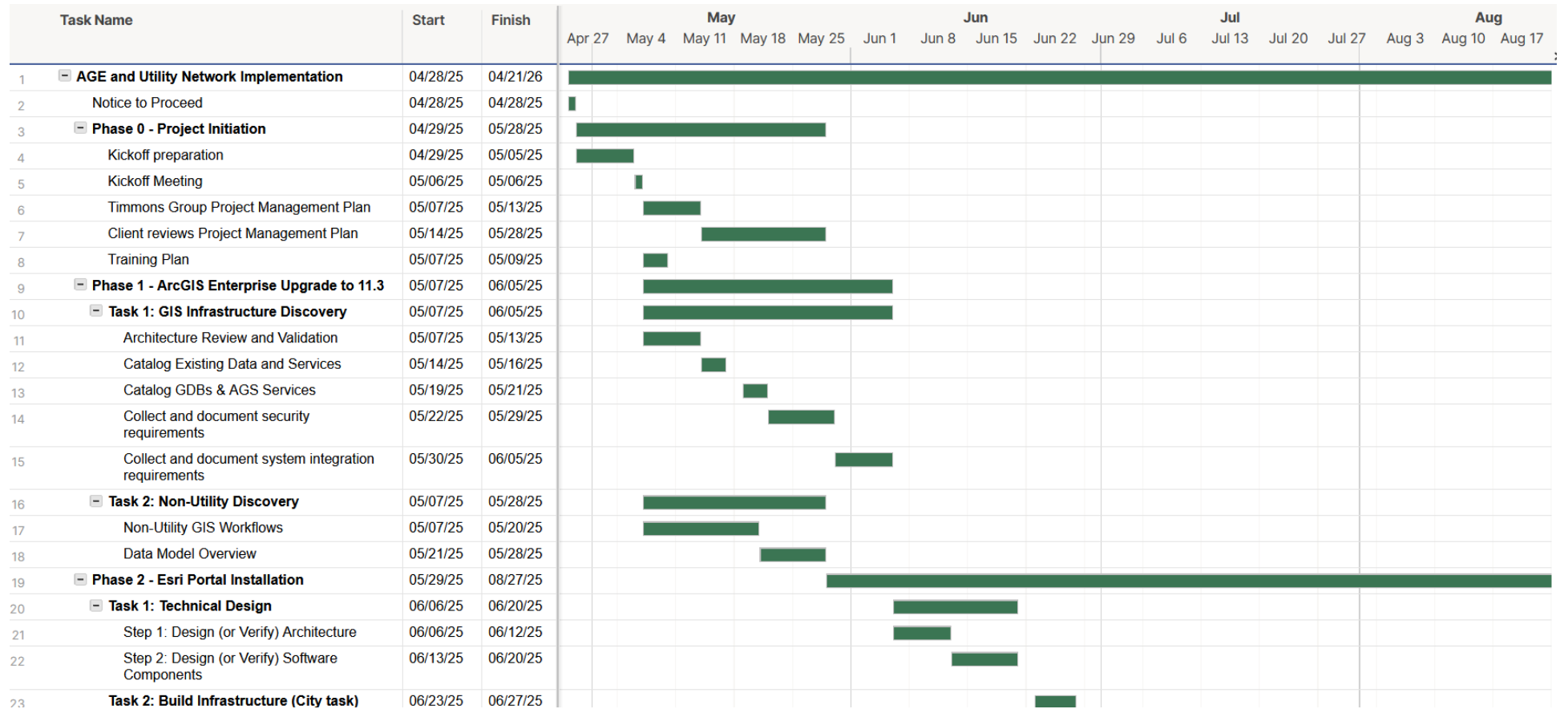
Summary of accomplishments since last report
▪ <<item>> ▪ <<item>> ▪ <<item>> ▪ <<item>>

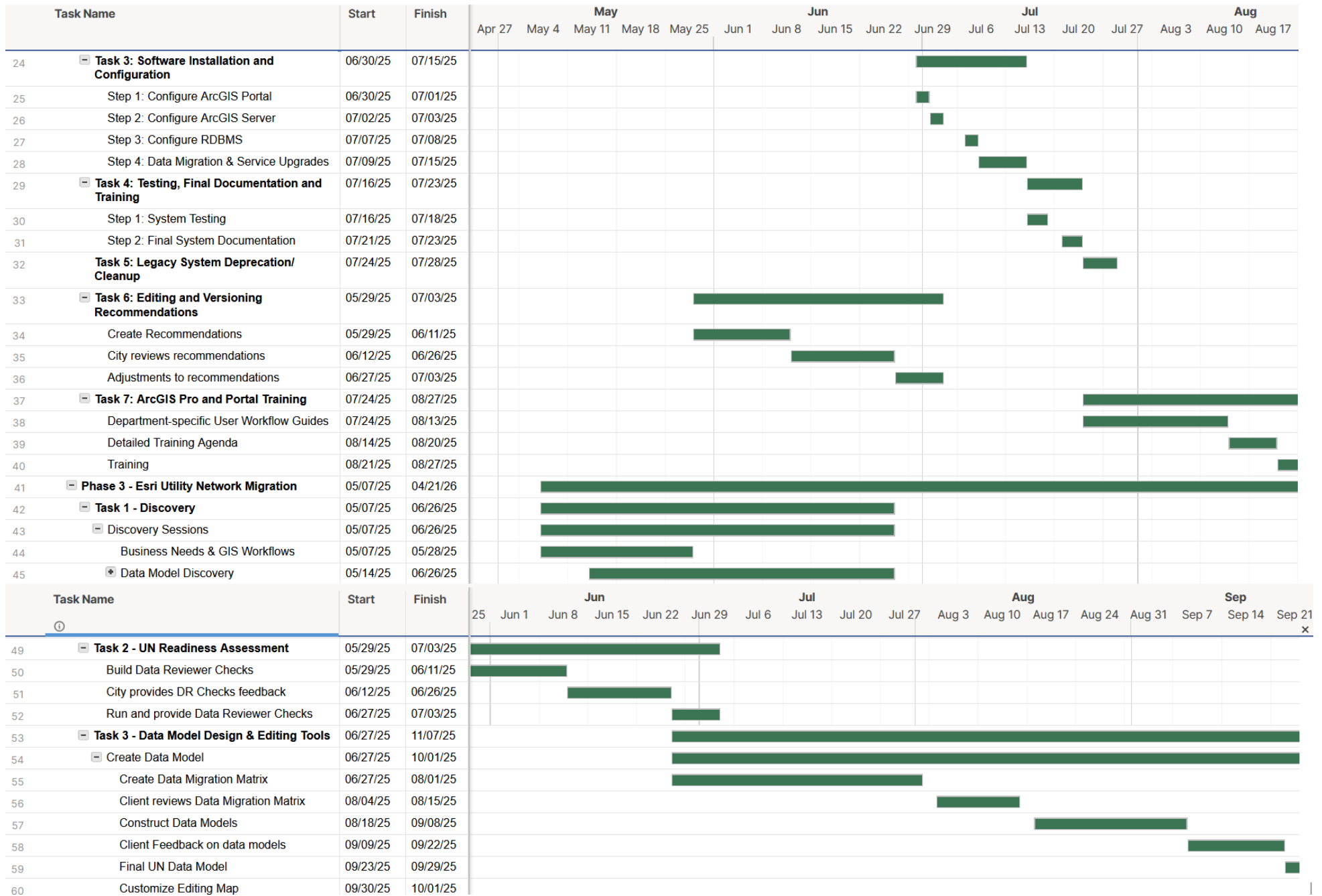
Summary of items to accomplish next
▪ <<item>> ▪ <<item>> ▪ <<item>> ▪ <<item>>

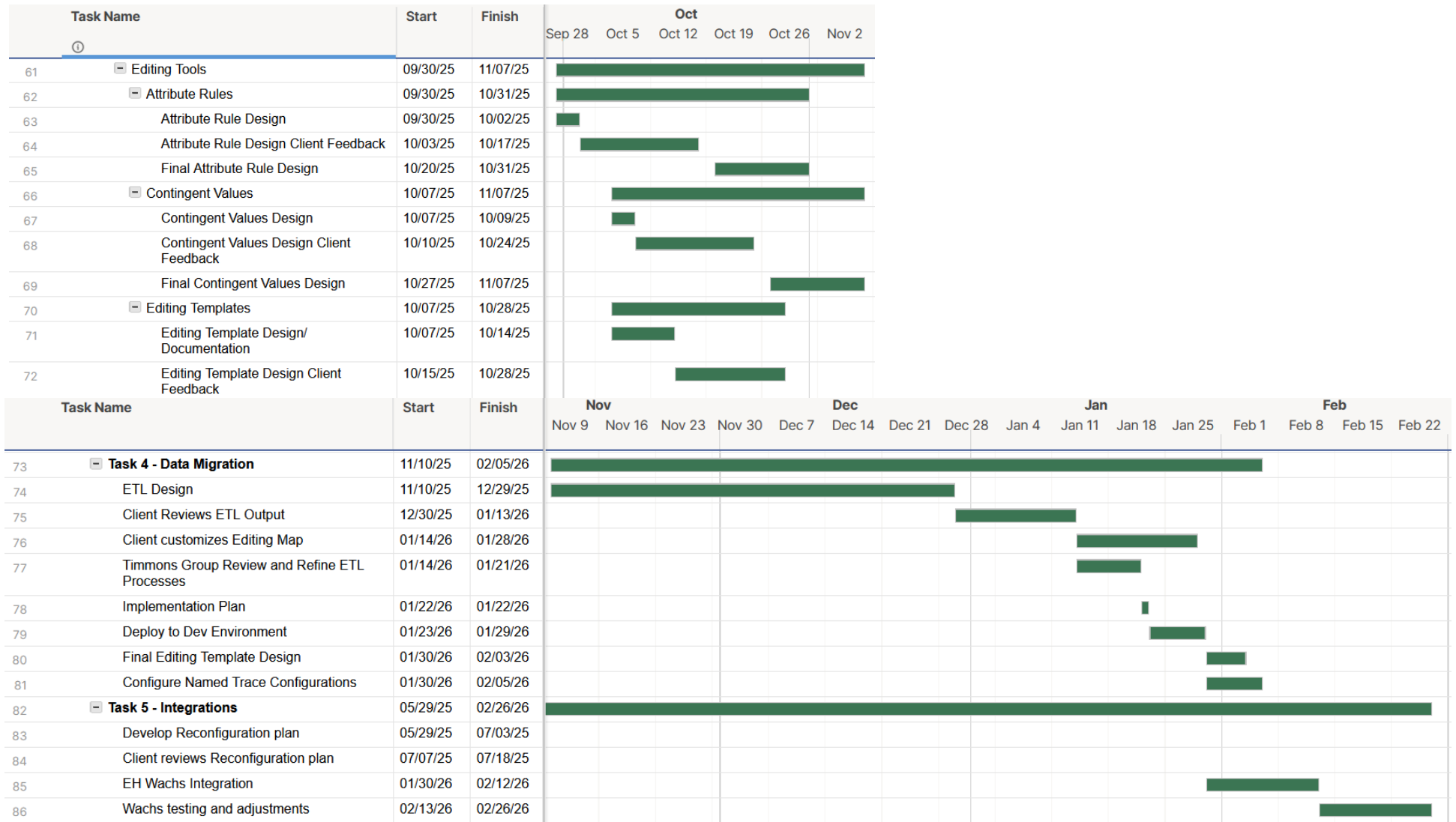
Outstanding issues, action items, other comments
▪ <<item>> ▪ <<item>> ▪ <<item>> ▪ <<item>>

PROJECT SCHEDULE

The proposed timeline is laid out in a Smartsheet linked [here](#) and below as static images.







Task Name	Start	Finish	Feb Mar Apr											
			b 1	Feb 8	Feb 15	Feb 22	Mar 1	Mar 8	Mar 15	Mar 22	Mar 29	Apr 5	Apr 12	Apr 19
87 Task 6 - Testing, Training, and Go-Live	02/06/26	04/21/26												
88 Training and Testing	02/06/26	04/10/26												
89 Write Test procedures	02/06/26	02/12/26												
90 Client reviews test procedures	02/13/26	02/26/26												
91 Timmons Group Testing & adjustments	02/13/26	02/19/26												
92 Editor Workflow Guide	02/06/26	02/19/26												
93 Training	02/20/26	03/05/26												
94 End User testing	03/06/26	04/03/26												
95 Adjustment per testing outcomes	03/13/26	04/10/26												
96 Go-Live	04/13/26	04/21/26												
97 Go-live decision	04/13/26	04/13/26												
98 Editing Freeze	04/14/26	04/20/26												
99 Final ETL process	04/14/26	04/16/26												
100 Cityworks reconfiguration	04/17/26	04/17/26												
101 Smoke Testing	04/20/26	04/20/26												
102 Go live	04/21/26	04/21/26												

SECTION 3 Project Staff

BIOGRAPHICAL SUMMARIES



Drew Purzycki, GISP

PROJECT MANAGER

Drew is a Senior Technical Analyst with 7 years of experience in spatial analysis, enterprise database management, and GIS applications. With a strong background in Esri's Utility Network, he specializes in data modeling, migration, and integration, leveraging tools such as Python, FME, and ArcGIS Pro to optimize GIS workflows. Drew has led and contributed to numerous large-scale Utility Network implementations and migrations for municipalities and organizations across the country.



Ally Kennedy, GISP

PRINCIPAL IN CHARGE

Ally is the Leader of Timmons Group's Geospatial Utilities Team. She has experience in Esri GIS schema development, scripting, QA/QC practices, and data conversion including using ETL tools to populate geodatabases. Her expertise includes leading Timmons Group's Utility Network projects, managing and consulting on numerous utility mapping, addressing, Next Generation 911, and tax parcel projects; writing Arcade script to configure Attribute Rules and pop-ups; managing multiple GIS professionals; overseeing local government data maintenance projects; and presenting at GIS conferences.



Isabel (Izzy) Seigler

UN SPECIALIST

Isabel is a Technical Analyst III in Timmons Group's Geospatial Utilities Group. Isabel performs tasks related to mapping, data development, data analysis, and data quality control based on defined parameters. She is experienced with a variety of utility editing workflows, specifically for Utility Network.



Bryan Chase

UN SPECIALIST

Bryan is a Technical Analyst II in Timmons Group's Geospatial Utilities Group. Bryan performs tasks related to data modeling, data migration, and training end users. He has both supported and led Utility Network projects.



Matt Moore

ARCGIS ENTERPRISE LEAD

Matt performs tasks related to systems management/administration, web administration, database administration and development, and applications development. Matt has worked on many systems architecture design, development, and implementation projects for federal, state, and local governments throughout the US. He is well versed in implementing Enterprise systems and has worked on projects using both custom and COTS applications.

Matt is an expert on System Architecture and Esri Capacity Planning. He has DOT experience designing and implementing Enterprise Systems with all of our on-call DOT clients including, Nevada, Caltrans, Georgia, Iowa, and Wyoming. He understands R&H and GIS architecture and how DOTs implement these systems effectively to ensure performance and up time. Matt is often requested by name by clients for whom he has previously solved problems. His ability to tackle a problem with little foreknowledge and rapidly reach a satisfactory resolution is unparalleled.



Trae Timmerman

ARCGIS ENTERPRISE SPECIALIST

Trae is a spatially minded, team oriented, professional with a strong grasp of foundational and advanced concepts which apply to geospatial technologies and related enterprise system administration and implementation.

ORGANIZATIONAL CHART



RESUMES

Drew Purzycki, GISP

PROJECT MANAGER

Drew is a Senior Technical Analyst with 7 years of experience in spatial analysis, enterprise database management, and GIS applications. With a strong background in Esri's Utility Network, he specializes in data modeling, migration, and integration, leveraging tools such as Python, FME, and ArcGIS Pro to optimize GIS workflows. Drew has led and contributed to numerous large-scale Utility Network implementations and migrations for municipalities and organizations across the country.

KEY SKILLS:

- Holds ArcGIS Utility Network Certification (<https://tinyurl.com/mr2p7p2n>)
- ArcGIS 10.x / Pro
- Make (previously Integromat)
- Python / PyScripter IDE
- ArcGIS Server Manager
- ModelBuilder
- Survey123
- ArcGIS Online suite

SELECT PROJECT EXPERIENCE:

Utility Network Migration, Salt Lake City, UT. UN Specialist and Technical Lead.

Timmons Group was selected to migrate Salt Lake City's water, storm, and sewer data into the Esri Utility Network, modernizing their workflows to allow ArcGIS Pro editing, and integrating with other systems throughout the City that are in varying stages of upgrade. As a technical lead, Drew led the data model customization, migration, deployment, and training for the UN.

Utility Network Implementation, Prince George, BC, Canada. Project Manager and Utility Network Lead. Prince George is aware of the need to migrate out of ArcMap to ArcGIS Pro and potentially to the Utility Network. The successful outcome of this project will be a scope and budget for a UN migration plan as well as the deployment of a Data Readiness assessment so they can begin correcting their data. Drew ensured that the quick project timeline stayed on track through weekly status calls and thorough back and forth communication with the city. Drew also managed the development of the subsequent migration and implementation of the Water UN after Prince George decided to continue working with Timmons Group to execute the implementation plan.

Utility Network Implementation, Walt Disney Parks and Resorts US, Disneyland, CA. Project Manager and Utility Network Lead. Timmons Group was selected to support the Disneyland Resorts (DLR) Utilities department in a multi-phased GIS Utility Network implementation. Timmons Group was tasked in Phase 3 to refine the existing data model, develop a Utility Network Migration Plan, Migrate CAD/PDF as-built data into the GIS environment, and design integrations with additional systems outside of GIS, as well as identifying and developing numerous Web and Mobile applications for use by the DLR team. Drew led the development and implementation of the various applications built in Portal, such as the Data Error Dashboard, offline mobile maps, and the new Disney Portal hub built in Experience Builder.

GIS Data Model Migration, City of Columbus, OH. UN Specialist. Timmons Group is migrating the City of Columbus's water, storm, sewer, combined sewer-storm, and electric to the Utility Network to ensure ongoing capabilities, particularly around tracing workflows. This project involves data readiness assessment, data modeling, data migration, reconfiguration of Cityworks for the UN, and deployment of multiple Experience Builder applications to replace existing WAB tracing applications. It will cumulate in training and testing, before Go-Live. As the UN Lead for wet utilities, Drew is leading data modeling workshops, customizing the data model, and writing the migration workbenches for wet utilities. He will also lead user and admin trainings.



**YEARS OF
EXPERIENCE:** 7

EDUCATION:

Bachelor of Arts in
Geography,
Millersville University,
2016

CERTIFICATIONS:

Esri ArcGIS Utility
Network Specialty

Geographic
Information System
Professional

ArcGIS Pro Associate

Utility Network Migration Services, City of Lynchburg, VA. Utility Network Lead. Timmons Group was selected to migrate the City's Water, Sanitary Sewer, and Stormwater GIS to the Esri Utility Network model. Our team worked with the City to architect a new data model, based on the Utility Network model, that meets the City's business needs. Timmons Group then built an automated ETL process that migrated each dataset to the new data model. Following data conversion, manual data clean-up occurs on an as-needed basis. Timmons Group migrated the finalized data and integrations to the agreed-on environment for testing and training prior to final go-live. Drew designed the data models and migrations for the new Combined Sewer-Storm UN, as well as the Water UN, prior to implementing both solutions for the city. Drew also created Combined Sewer-Storm UN tracing configurations to be able to trace both networks individually and across combined assets.

Sewer/Storm UN Migration, City of Alexandria, VA. Utility Network Lead. The City of Alexandria GIS Program requires assistance in migrating to the Esri Utility Network (UN). The goal is to migrate Sanitary Sewer and Stormwater from the geometric network to the Utility Network and ArcGIS Pro. Additionally, the City would benefit from an ArcGIS Enterprise Upgrade to 11.1 and migration off of VertiGIS applications. Drew created a Combined Sanitary-Stormwater UN to be custom-fit to the city's Sanitary assets, as well as a separate Stormwater UN data model. Drew also wrote an Integrations Reconfiguration Plan to document the various applications that would be affected by the migration to the UN, and the necessary actions to take to reconfigure each one.

Customer Data Integration & Visualization, Renewable Water Resources, Greenville, SC. Senior Technical Analyst. ReWa has asked Timmons Group to help determine income appropriate sewer rates for lower income areas within their community. Timmons Group created a common data model for the migration of all billing data, based on the largest data model. This data model was enhanced to hold fields necessary for geo-enrichment and Timmons Group provided a data dictionary. All billing data was then migrated into the new data model using FME. All features were then geocoded to give them spatial geometry and then enriched with income-related census data. Timmons Group created summaries for each Sewer Basin, provided by ReWa. FME or Python tools were created to automate the outcomes of the geocoded and enriched dataset. Timmons Group built a VertiGIS dashboard to visualize the basins with summary data created with the Sewer Basin features. All tools created for this project have been documented and training was provided for ReWa staff to ensure their ability to run, update, and maintain the FME workbench(es), any Python scripts, and the VertiGIS dashboard. The data model, migrated data, and the VertiGIS dashboard were pushed to the production environment from the test and development environments. Drew used FME Form to join the various billing exports together into a standardized schema to then analyze against census data. The outputs were then statistically summarized by ReWa's WRRF Basins, Subdistricts, and census tracts.

Utility Network Migration, St Johns County, FL. Utility Network Specialist. Timmons Group is working with St. Johns County to migrate their water, sewer, and reuse data to the Utility Network. This started with designing a Utility Network (UN) data model tailored to SJC's needs and developing tools to enhance GIS workflow efficiency. From there, data migration tasks occurred, where Timmons Group created detailed migration plan and data dictionaries, using Safe Software's FME to migrate data to the new UN database while maintaining data integrity and incorporating necessary customizations. In the next task, advisory support was offered for Cityworks reconfiguration, rebuilding maps and applications for ArcGIS Online and Portal for ArcGIS and repairing or rewriting existing automated processes while deploying new ones as needed. Training sessions, supported by Workflow Guide documents, will prepare SJC staff for their testing and eventual system operation. On successful UAT, final migration and deployment of the UN data to the production environment will occur. Drew customized the data models, built the FME migration workbenches, trained the client, and deployed the UN.

Cityworks & GIS Implementation, Alderwood Water and Wastewater District (AWWD), Snohomish County, WA. Senior Technical Analyst. Timmons Group assisted AWWD with the implementation of an Asset Management/Computerized Maintenance and Management System (CMMS) and a Right of Way Permit System to improve the organization's overall performance. The project involved the implementation of Cityworks' AMS and PLL products as well as the delivery of as-needed GIS services. Drew was responsible for the creation of the migration matrices and data models for AWWD's water, sewer, and vertical assets. He also built the FME workbenches to migrate each utility's data to the UN and implemented the solutions into AWWD's environment.

Ally Kennedy, GISP

PRINCIPAL IN CHARGE

Ally is the Leader of Timmons Group's Geospatial Utilities Team. She has experience in Esri GIS schema development, scripting, QA/QC practices, and data conversion including using ETL tools to populate geodatabases. Her expertise includes leading Timmons Group's Utility Network projects, managing and consulting on numerous utility mapping, addressing, Next Generation 911, and tax parcel projects; writing Arcade script to configure Attribute Rules and pop-ups; managing multiple GIS professionals; overseeing local government data maintenance projects; and presenting at GIS conferences.

KEY SKILLS:

- Leads Timmons Group's Utility Network projects – holds ArcGIS Utility Network Certification (<https://tinyurl.com/mr245atd>)
- Certified as an FME Professional
- Writes Arcade script to configure Attribute Rules
- Manages multiple GIS professionals

SELECT PROJECT EXPERIENCE:

Utility Network Migration, Salt Lake City, UT. Utility Network Lead. Timmons Group was selected to migrate the Salt Lake City GIS utility data into the Esri Utility Network, modernizing their workflows to allow ArcGIS Pro editing, and integrating with other systems throughout the City that are in varying stages of upgrade. Given the complexity of their environment, and other IT projects running in parallel to this GIS utility data Utility Network Migration effort, Timmons Group is facilitating with multiple departments within the City. Ally's role on this project was as technical lead. She led onsite discovery workshops, coordinated team members work, and lead the customization and deployment of the UN.

Cityworks Services and Utility Network Implementation, Rogers Water Utilities, Rogers, AR. Project Manager. As prerequisites of a Cityworks AMS and PLL implementation, this project created a utility network data model from the existing CAD data, exported to a file geodatabase. This included customization of the data model, migration of the CAD-extracted data, and training of the end users. Ally oversaw the Utility Network lead and carried out Project Management tasks.

Utility Network Data Migration, Pennichuck Water Works (PWW), NH. Utility Network Lead. Timmons Group was selected to migrate PWW's water network data from Esri's Geometric Network data model into the new Utility Network data model to enable new data management and analysis capabilities and keep its Esri implementation current. The Utility Network implementation must support existing business workflows and applications, including work tracking with Cityworks CMMS and reading customer information from Munis. Ally's role on this project was as technical lead; she coordinated team members' work, lead discovery sessions, and guided Utility Network deployment.

Utility Network Migration Services, City of Lynchburg, VA. Utility Network Lead. Timmons Group was selected to migrate the City's Water, Sanitary Sewer, and Stormwater GIS to the Esri Utility Network model. Our team worked with the City to architect a new data model, based on the Utility Network model, that meets the City's business needs. Timmons Group then built an automated ETL process that migrated each dataset to the new data model. Following data conversion, manual data clean-up occurred on an as-needed basis. Timmons Group migrated the finalized data and integrations to the agreed-on environment for testing and training prior to final go-live. Ally met with the client to discuss business and data needs. She guided other Utility Network specialists on the team through the data readiness assessment and data modeling and migration processes, providing insight and guidance as necessary and meeting with the client for weekly status meetings.



YEARS OF EXPERIENCE: 10

EDUCATION:

Bachelor of Arts, Biology, Minor in Spanish, University of North Carolina, 2015

CERTIFICATIONS:

Certified ArcGIS Desktop Associate

Esri ArcGIS Utility Network Certified

FME Certified Professional

Geospatial Information Systems Professional (GISP)

TECHNICAL SKILLS:

ArcGIS Desktop

ArcGIS Pro

ArcGIS Online

ArcPy

Portal for ArcGIS

FME Desktop & Server

ArcGIS Utility Network

ArcGIS Data Reviewer

Utility Network Data Readiness and Migration Strategic Plan, Orange Water and Sewer Authority (OWASA), Carrboro, NC. Utility Network Lead and Project Manager. Timmons Group examined OWASA's current architecture and documented GIS integrations with other business systems. This included stakeholder meetings and interviews to ensure we had a full understanding of the system. We then made recommendations for changes to the ArcGIS Enterprise deployment for it to support the Utility Network performantly. Our team assisted with the software implementation of these recommendations and reviewed and documented current GIS editing workflows and procedures. These were considered when making recommendations for the Utility Network Migration Plan. Further, Timmons Group conducted a GIS Data Readiness Assessment to guide OWASA's editors through data corrections prior to the Utility Network migration. Finally, we created the Utility Network Migration Plan document that included the documentation of the current state as well as recommendations for the migration project, including budget, schedule, and integration considerations. Ally met with the stakeholders to review the current state of the GIS and made recommendations for the Utility Network future-state. She managed the system architect on the project as well as the schedule, scope, and budget.

Utility Network Migration Preparation, St. Johns County (SJC), FL. Utility Network Lead. SJC requires an advanced GIS geodatabase within the Operations, Engineering, and Administration divisions, and uses the Esri ArcGIS Enterprise geodatabase for storing, editing, providing, and managing geospatial layers, attributes, and records, along with advanced automated-update and quality-control features. This enterprise system and its business function applications are part of the digital transformation of both SJC Utilities and the utility industry. Improvements and business solutions within the system and applications continue to be developed. SJC Utilities recognizes the business case to continue to maintain these systems for both efficient performance and new functionality for business cases that encourage mobility, collaboration, information automation, and intelligent analytics. Timmons Groups provided a Data Readiness and Assessment Report, conducted Data Preparation and Cleanup, configured ArcGIS Pro Functionality, implemented Data Review rules, automated GIS feature editing, and developed a Utility Network Migration Plan. Ally's role on this project was as technical lead. This included guide Data Assessment configuration, answering technicians' questions as the data was corrected, and writing the Utility Network Migration Plan.

Utility Network Migration Plan, EPCOR, Phoenix, AZ. Utility Network Lead. Timmons Group (prime vendor) and Avineon (subcontractor) developed an implementation plan, costs, and project schedule for a later project to migrate from Esri's Local Government Information Model and ArcMap to Esri's Utility Network and ArcGIS Pro. The Timmons Group team reviewed EPCOR's existing GIS organizational, system architecture, and process management documents, including standard operating procedures for GIS and asset management activities. The application of tier groups, subnetworks, network categories, network attributes, and associations were reviewed, and recommendations were made for the future data model to result in the best possible out-of-the box functionality across desktop, web, and mobile applications. The team documented EPCOR's current state and evaluated and defined its future state. This culminated in a Migration Plan, including scope, schedule, and budget for a Utility Network implementation project. Ally met with the stakeholders to review the current state of the GIS and created the future state recommendations for the database, migration methods, and UN-specific data needs.

Utility Network Implementation and Cityworks AMS Reconfiguration, Indio Water Authority, Indio, CA. Utility Network Lead and Project Manager. Timmons Group migrated Indio's Water Distribution geodatabase from Geometric Network to the Esri Utility Network. In addition, we were tasked with reconfiguring Indio Water's Cityworks AMS solution to use Utility Network, including modifying Cityworks business processes to further create a more effective and efficient workflow. This project included customization and implementation of the UN, as well as updating integrations, and training Indio's GIS staff. Ally met with stakeholders to review specific data model and business needs, customized the data model, created the FME workspaces migration, updated scripts to keep the integrations functional, deployed the Utility Network to the enterprise environments, trained the client, and managed the invoicing, schedule, and status meetings.

Utility Network RoadMap, City of Sacramento, CA. Project Manager. Timmons Group is assisting City staff with the development and planning of a RoadMap to guide its Information Technology (IT), Department of Utilities (DOU), and their contractors for planning, budgeting, and scheduling of the migration from the existing Local Government Information Model (LGIM) data model to a fully functioning Utility Network to minimize system disruptions and downtime to users. Ally served as the project manager, organizing resources, discovery sessions, and status calls. She also was the senior UN lead, reviewing recommendations and deliverables.

Isabel (Izzy) Seigler

UTILITY NETWORK SPECIALIST

Isabel is a Technical Analyst III in Timmons Group's Geospatial Utilities Group. Isabel performs tasks related to mapping, data development, data analysis, and data quality control based on defined parameters. She is experienced with a variety of utility editing workflows, specifically for Utility Network.

KEY SKILLS:

- Holds ArcGIS Utility Network Certification (<https://tinyurl.com/3wm9vufc>)
- Utility Network Data Modeling
- Utility Network Data Readiness / ArcGIS Data Reviewer
- Data Literacy (R Studio)
- Environmental Science

SELECT PROJECT EXPERIENCE:

Utility Network Migration, City of Gresham, OR. Utility Network Data Readiness. The City of Gresham is aware of the need to move ArcGIS Pro and the Utility Network. The goal of the project is to move all stormwater and wastewater processes to these new solutions. Timmons Group is providing data readiness assessment, data modeling, utility network migration, training, testing, and implementation to the City. Isabel created Data Reviewer Rules during the data clean up phase. She created the data model, ETL migrations and editing tools for Sewer and stormwater utilities. She deployed the Utility Network to their test environment and is in the process of testing functionality before the final go-live.

Utility Network Data Migration, Pennichuck Water Works (PWW), NH. Analyst. Timmons Group was selected to migrate PWW's water network data from Esri's Geometric Network data model into the new Utility Network data model to enable new data management and analysis capabilities and keep its Esri implementation current. The Utility Network implementation must support existing business workflows and applications, including work tracking with Cityworks CMMS and reading customer information from Munis. Isabel created Data Reviewer Rules during the Assessment phase that found errors in the data that need to be cleaned before migrating to the Utility Network. She created the ETL migration and deployed the Utility Network.

ArcGIS Pro & Utility Network Implementation, EPCOR, Phoenix, AZ. Analyst. Timmons Group (prime vendor) and Avineon (subcontractor) implemented Utility Network for EPCOR's water, wastewater, and reuse water GIS data. Our team met with the EPCOR team and gathered project requirements and business needs to further inform the customization of the Utility Network data models, migration processes, and workflow tools. Timmons Group also provided recommendations and advice to guide the procurement and installation of servers and software for the Utility Network environment. The Utility Network was customized, populated, and implemented for 8 Networks and within four environments (Dev, Test, UAT, and Prod). Finally, EPCOR's staff was trained on using and managing the UN. Isabel created the FME workspaces for the water and non-potable migration, deployed the Utility Network to the testing environments, and made updates to the data model and FME workspaces per testing outcomes.

Utility Network Feasibility Study, Albemarle County Service Authority, (ACSA), Albemarle County, VA. GIS Analyst. ACSA is aware of the need to move off of ArcMap and to ArcGIS Pro and the Utility Network. The goal of this project is to create a scope, schedule, and budget for the UN implementation project from an assessment of the current state. This includes GIS network architecture, editing workflows, integrations, data model, and data quality. Isabel created Data Reviewer checks as part of the data readiness assessment phase.

Utility Network Migration Services, City of Lynchburg, VA. Analyst. Timmons Group was selected to migrate the City's Water, Sanitary Sewer, and Stormwater GIS to the Esri Utility Network model. Our team worked with the City to architect a new data model, based on the Utility Network model, that meets the City's business needs. Timmons Group then built an automated ETL process that migrated each dataset to the new data model. Following data conversion, manual data clean-up occurs on an as-needed basis. Timmons Group migrated the finalized data and integrations to the agreed-on



YEARS OF EXPERIENCE: 3

EDUCATION:

Virginia Commonwealth University, Environmental Studies, 2021

CERTIFICATIONS:

ArcGIS Utility Network Associate

TECHNICAL SKILLS:

ArcGIS 10.x / Pro

Data Reviewer

environment for testing and training prior to final go-live. Isabel created Data Reviewer checks as part of the data readiness assessment phase.

Utility Network Data Readiness and Migration Strategic Plan, Orange Water and Sewer Authority (OWASA), Carrboro, NC. Analyst. Timmons Group examined OWASA's current architecture and documented GIS integrations with other business systems. This included stakeholder meetings and interviews to ensure we had a full understanding of the system. We then made recommendations for changes to the ArcGIS Enterprise deployment for it to support the Utility Network performantly. Our team assisted with the software implementation of these recommendations and reviewed and documented current GIS editing workflows and procedures. These were considered when making recommendations for the Utility Network Migration Plan. Further, Timmons Group conducted a GIS Data Readiness Assessment to guide OWASA's editors through data corrections prior to the Utility Network migration. Finally, we created the Utility Network Migration Plan document that included the documentation of the current state as well as recommendations for the migration project, including budget, schedule, and integration considerations. Isabel created Data Reviewer checks as part of the data readiness assessment phase.

Utility Network Migration and Cityworks Reconfiguration, Forsyth County, GA. Analyst. Timmons Group started our Utility Network engagement with Forsyth County, GA with a Data Readiness Assessment in late 2024. This allowed their editors to begin data corrections while the Utility Network Implementation project was just kicking off in early 2025. Timmons Group led discovery workshops with GIS utility stakeholders, including Cityworks users, to document business needs, current workflows, and to discuss the current data model. Following discovery, the Utility Network data models were customized to fit the County's needs and FME workbenches were built to migrate data from the source data into them. Cityworks was reconfigured to use the new data model and feature services. Following the data modeling, migration, and configuration of editing tools, test procedures will be written, and County staff will receive ArcGIS Pro and UN training. Cityworks will also be tested to ensure that all functionality and work order history is preserved, prior to Go-Live in early 2026. Isabel is the lead Analyst on this project. She created data reviewer checks and led discovery sessions during the data readiness phase. And she will be creating the Utility Network data model, ETL migrations, and editing tools. She will deploy the test environment and conduct the final Go-Live implementation.

Utility Network Migration Preparation, St. Johns County (SJC), FL. Analyst. SJC requires an advanced GIS geodatabase within the Operations, Engineering, and Administration divisions, and uses the Esri ArcGIS Enterprise geodatabase for storing, editing, providing, and managing geospatial layers, attributes, and records, along with advanced automated-update and quality-control features. This enterprise system and its business function applications are part of the digital transformation of both SJC Utilities and the utility industry. Improvements and business solutions within the system and applications continue to be developed. SJC Utilities recognizes the business case to continue to maintain these systems for both efficient performance and new functionality for business cases that encourage mobility, collaboration, information automation, and intelligent analytics. Timmons Groups is providing a Data Readiness and Assessment Report, conducting Data Preparation and Cleanup, configuring ArcGIS Pro Functionality, implementing Data Review rules, automating GIS feature editing, and developing a Utility Network Migration Plan. Isabel created Data Reviewer checks as part of the data readiness assessment phase and helped support GIS Technicians in the Data Cleanup process. She also created Attribute Rules on necessary feature classes so that the functionality of the data in ArcMap would be the same in ArcGIS Pro.

Utility Network Migration, City of Twin Falls, ID. Lead Analyst. Timmons Group is migrating the City of Twin Falls' water to the Utility Network to ensure ongoing capabilities, particularly around tracing workflows. This project involves discovery, data readiness assessment, architecture advisory support, and editing tools. This will prepare the city for the data modeling and migration process for the Utility Network. Isabel is the lead Analyst on this project. She created data reviewer checks and led discovery sessions during the data readiness phase. She has created editing tools to streamline editing in the utility Network. And she will be creating the Utility Network data model, ETL migrations, and editing tools. She will deploy the test environment and conduct the final Go-Live implementation.

Utility Network RoadMap, City of Sacramento, CA. UN Data Readiness Specialist. Timmons Group is assisting City staff with the development and planning of a RoadMap to guide its Information Technology (IT), Department of Utilities (DOU), and their contractors for planning, budgeting, and scheduling of the migration from the existing Local Government Information Model (LGIM) data model to a fully functioning Utility Network to minimize system disruptions and downtime to users. Isabel configured the Data Reviewer checks for the City staff to correct their data in preparation for the UN.

Bryan Chase

UTILITY NETWORK SPECIALIST

Bryan is a Technical Analyst II in Timmons Group's Geospatial Utilities Group. Bryan performs tasks related to data modeling, data migration, and training end users. He has both supported and led Utility Network projects.

KEY SKILLS:

- ArcGIS 10.8/ ArcGIS Pro
- Survey123
- ArcGIS Online suite

SELECT PROJECT EXPERIENCE:

GIS Utility Network Migration, Salt Lake City, UT. GIS Specialist. Timmons Group was selected to migrate the Salt Lake City GIS utility data into the Esri Utility Network, modernizing their workflows to allow ArcGIS Pro editing, and integrating with other systems throughout the City that are in varying stages of upgrade. Given the complexity of their environment, and other IT projects running in parallel to this GIS utility data Utility Network Migration effort, Timmons Group is facilitating with multiple departments within the City. Bryan's role was to create the ETL in ArcGIS Data Interoperability Workbench, which transforms the data from the old format to the Utility Networks. Bryan was also responsible for customizing the data models within Utility Network environments, while identifying and fixing errors in their data, to prepare for the unique needs of the client and their data.

Utility Network Migration Services, City of St. Charles, IL. Technical Analyst II, Lead. St. Charles was aware of the need to move their water, storm, and sewer data to ArcGIS Pro and the Utility Network. The goal of the first phase of projects was to move all water processes to these new solutions. Timmons Group also completed the data readiness assessment and data modeling tasks to thoroughly assess these databases. Bryan was responsible for customizing the data models within Utility Network environments to prepare for the unique needs of the client and their data, and created the data model migration matrixes, editing templates, and ETL that detailed how data would be transferred and transformed into the various Utility Network datasets and feature classes. Bryan also oversaw the St. Charles Water Utility Network migration as the lead analyst and successfully oversaw the migration from local database to the live production Water Utility Network Enterprise Geodatabase.

UN Implementation, Orange Water and Sewer Authority (OWASA), Orange County, NC. Technical Analyst. Timmons Group was selected to migrate OWASA's existing data from Esri's geometric network to Esri's current data model, the Utility Network (UN). Our team met with the OWASA team and gathered project requirements and business needs to further inform the customization of the Utility Network data models, migration processes, and workflow tools. Timmons Group also trained OWASA's staff on using and managing the UN. Bryan was responsible for creating the migration matrix to be used for OWASA data migration, customizing the Asset Packages used to migrate their utilities data to the ArcGIS Utility Network. Bryan also created documents to better aid the client in making data modeling decisions to customize the functionality of their UN further and reduce errors in their data.

ArcGIS Pro & Utility Network Implementation, EPCOR, Pheonix, AZ. GIS Technician. Timmons Group (prime vendor) and Avineon (subcontractor) implemented Utility Network for EPCOR's water, wastewater, and reuse water GIS data. Our team met with the EPCOR team and gathered project requirements and business needs to further inform the customization of the Utility Network data models, migration processes, and workflow tools. Timmons Group also provided recommendations and advice to guide the procurement and installation of servers and software for the Utility Network environment. The Utility Network was customized, populated, and implemented for 8 Networks and within four environments (Dev, Test, UAT, and Prod). Finally, EPCOR's staff was trained on using and managing the UN. Bryan aided in the creation and editing of the UN Training Script to be delivered to the client at the end of the project, to aid in training client in the use and capabilities of the ArcGIS Utility Network.



**YEARS OF
EXPERIENCE:** 2

EDUCATION:

Bachelor of Science,
Environmental
Studies, Randolph-
Macon College, 2021

Associates of
Science, J. Sargeant
Reynolds Community
College, 2019

TECHNICAL SKILLS:

ArcGIS 10.8/ ArcGIS
Pro

Survey123

ArcGIS Online suite

Utility Network Implementation, Walt Disney Parks and Resorts US, Disneyland, CA. GIS Technician. Timmons Group was selected to support the Disneyland Resorts (DLR) Utilities department in a multi-phased GIS Utility Network implementation. Timmons Group was tasked in Phase 3 to refine the existing data model, develop a Utility Network Migration Plan, Migrate CAD/PDF as-built data into the GIS environment, and design integrations with additional systems outside of GIS, as well as identifying and developing numerous Web and Mobile applications for use by the DLR team. Bryan digitized utility information from CAD and PDF files as well as lead data cleanup efforts on a holistic scale.

Utility Network Implementation Consulting Services, City of Prince George, BC. GIS Specialist. Prince George is aware of the need to migrate out of ArcMap to ArcGIS Pro and potentially to the Utility Network. The successful outcome of this project will be a scope and budget for a UN migration plan as well as the deployment of a Data Readiness assessment so they can begin correcting their data. In addition, Timmons Group will create the UN data model and Data Migration Matrix. Bryan is responsible for analyzing current state of the Prince George data model to prepare for migration, meeting with various client stakeholders who will interact with the data, and noting their needs and uses to keep in mind during the migration process.

Engineering GIS Support, City of Fayetteville, NC. GIS Technician. Timmons Group is providing assistance with QA/QC of the City's asset database, general mapping and data needs, uploading of the geodatabase to SDE, and other GIS support services as needed. Bryan performs a QA/QC review of the surveyed data in the ROW database. He looks for adherence to the approved schema/domain, accuracy in survey values, and prepares recommendations for the team to fix any issues based on the County's needs.

Utility Network RoadMap, City of Sacramento, CA. Technical Analyst II. Timmons Group is assisting City staff with the development and planning of a RoadMap to guide its Information Technology (IT), Department of Utilities (DOU), and their contractors for planning, budgeting, and scheduling of the migration from the existing Local Government Information Model (LGIM) data model to a fully functioning Utility Network to minimize system disruptions and downtime to users. Bryan aided in customizing the solutions that will aid in the City's migration to the ArcGIS Utility Network.

GIS Support, Henrico County, VA. Technical Analyst II, Lead. Henrico's Stormwater division needed to update its GIS from both a data model and data perspective. This included the digitization of more than 150 plans. Timmons Group updated the Henrico Stormwater GIS data model to accommodate new business needs. We then digitized 155 plans that needed to be added to the GIS from past projects. In addition, some historical data that was known to be in error was corrected. Henrico Stormwater now has an updated data model that contains a more complete view of the stormwater projects within their area of interest. Bryan's work consisted of analyzing Henrico County's old data models, identifying gaps and improvements that could be made, and after consulting with various Henrico stakeholders, cross-environment implementation of those models. Bryan also created a new *standards of digitization* guide to enable current and future digitizing techs working on the project to digitize the engineering plans into the County's GIS system to a high level of accuracy, with multiple QA/QC procedures in place, both at Timmons Group and Henrico County.

CWDG Grant Tracking, National Association of State Foresters (NASF), Washington, DC. GIS Technician. Timmons Group was selected to work with the NASF after the USFS received Bipartisan Infrastructure Law (BIL) funding to implement the National Cohesive Wildland Fire Strategy locally through the Community Wildfire Defense Grant (CWDG) program, necessitating the creation of capabilities for robust progress tracking. Grants under this program will support hazardous fuels reduction projects by communities, local governments, and NGOs. Our project focuses on tracking these activities, mapping project locations, funding recipients, investments, and aligning them with core priorities. It aims to provide situational awareness, support grant administration decision-making, integrate data with NextGen Fuels effort, facilitate a combined view of local, state, and federal activities, and enable visualization of the national fuels management picture. Key tasks include defining data elements/models, digitizing paper submissions, hosting tracking database, developing reporting dashboards, and providing ongoing support and maintenance. Bryan created the data model used as the base of the CWDG GDB environment that is used in the Grant Tracking Dashboard. This required an analysis of the grant applications, the data they contained, and how to best join that data to current federal spatial assets for cartographic needs in the dashboard.

Matt Moore

ARCGIS ENTERPRISE LEAD

Matt performs tasks related to systems management/administration, web administration, database administration and development, and applications development. Matt has worked on many systems architecture design, development, and implementation projects for federal, state, and local governments throughout the US. He is well versed in implementing Enterprise systems and has worked on projects using both custom and COTS applications.

Matt is an expert on System Architecture and Esri Capacity Planning. He has DOT experience designing and implementing Enterprise Systems with all of our on-call DOT clients including, Nevada, Caltrans, Georgia, Iowa, and Wyoming. He understands R&H and GIS architecture and how DOTs implement these systems effectively to ensure performance and up time. Matt is often requested by name by clients for whom he has previously solved problems. His ability to tackle a problem with little foreknowledge and rapidly reach a satisfactory resolution is unparalleled.

KEY SKILLS:

- Consults clients on managed services and cloud service offerings
- Consults on numerous custom application development projects
- Consults on R&H architecture, security, and enterprise deployment patterns
- Delivers consulting services via project discoveries and needs assessments
- Provides GIS industry best practices for local, state, and federal governments, and NGOs.
- Provides consulting and recommendations on using technology to solve business process / workflow challenges
- Plans and manages integration of GIS with other information technology systems
- Implements technical solutions and designs for enterprise GIS systems
- Deploys and manages server infrastructure in Cloud environments
- Develops scripts as needed to automate GIS workflows
- Manages Relational Database Management Systems (SQL Server/Postgres/PaaS offerings)
- Manages Active Directory as needed for Cloud environments
- Builds and manages web servers in Apache and Microsoft IIS

SELECT PROJECT EXPERIENCE:

Utility Network Data Readiness and Migration Strategic Plan, Orange Water and Sewer Authority (OWASA), Carrboro, NC. Systems Architect. Timmons Group examined OWASA's current architecture and documented GIS integrations with other business systems. This included stakeholder meetings and interviews to ensure we had a full understanding of the system. We then made recommendations for changes to the ArcGIS Enterprise deployment for it to support the Utility Network performantly. Our team assisted with the software implementation of these recommendations and reviewed and documented current GIS editing workflows and procedures. These were considered when making recommendations for the Utility Network Migration Plan. Further, Timmons Group conducted a GIS Data Readiness Assessment to guide OWASA's editors through data corrections prior to the Utility Network migration. Finally, we created the Utility Network Migration Plan document that included the documentation of the current state as well as recommendations for the migration project, including budget, schedule, and integration considerations. As part of the overall UN migration plan, Matt documented the future state architecture to support the Utility Network deployment. This documentation included network diagrams, solution design, and a step-by-step implementation plan that included all the necessary tasks from building servers to supporting the solution to final data migration efforts.



YEARS OF

EXPERIENCE: 20

EDUCATION:

Bachelor of Science,
Geography,
Information
Technology focus, Old
Dominion University,
2004

CERTIFICATIONS:

AWS Certified Cloud
Practitioner

Esri Certified
Enterprise System
Design Associate

Esri Enterprise
Geodata Management
Professional

TECHNICAL SKILLS:

Esri Enterprise
System Design, AWS
Services, ArcGIS
Online, Python, SQL
Server / Oracle, IIS
10x, 8.x, 7.x, 6.x,
Apache Tomcat 2.2,
2.4, PHP, HTML,
JSON, SSL & PKI
Deployment, XML,
Action Script,
Deployment of .NET
and JavaScript web
applications

Schema Consolidation and Utility Network Migration Planning, Anchorage Water and Wastewater Utility (AWWU), Anchorage, AK. Systems Architect. As a subcontractor to NSGIS, Timmons Group completed geodatabase schema consolidation planning and UN Migration Planning to assist AWWU in migrating various components of its Esri GIS to newer generations. Timmons Group examined the multiple GIS data schemas in use at AWWU, identified the duplication and redundancies, and created a roadmap for consolidating or removing unnecessary ones. Timmons Group presented a report estimating the effort necessary to make the changes to the database, as well as to dependent applications. As part of the overall UN migration plan, Matt spent time documenting future state architecture to support the Utility Network deployment. This documentation included network diagrams, solution design, and a step-by-step implementation plan that included all the necessary tasks from building servers to supporting the solution to final data migration efforts.

Utility Network Migration Plan, EPCOR, Phoenix, AZ. Systems Architect. Timmons Group (prime vendor) and Avineon (subcontractor) developed an implementation plan, costs, and project schedule for a later project to migrate from Esri's Local Government Information Model and ArcMap to Esri's Utility Network and ArcGIS Pro. The Timmons Group team reviewed EPCOR's existing GIS organizational, system architecture, and process management documents, including standard operating procedures for GIS and asset management activities. This background information helped the team engage with EPCOR staff and laid the foundation for topics addressed in the discovery workshops. The team facilitated these workshops and assisted EPCOR staff with reviewing and applying modeling concepts for the chosen domain networks (water, wastewater, and natural gas) with associated asset groups and types. The application of tier groups, subnetworks, network categories, network attributes, and associations were reviewed and configured in the data model to result in the best possible out-of-the box functionality across desktop, web, and mobile applications. The team documented EPCOR's current state and evaluated and defined its future state. As part of the overall UN migration plan, Matt documented the future state architecture to support the Utility Network deployment. This documentation included network diagrams, solution design, and a step-by-step implementation plan that included all the necessary tasks from building servers to supporting the solution to final data migration efforts.

ArcGIS Pro & UN Implementation, EPCOR, Phoenix, AZ. System Architect. EPCOR contracted with Timmons Group (prime vendor) and Avineon (subcontractor) to implement the UN for their water, wastewater, and reuse water GIS data. Our team met with the EPCOR team and gathered project requirements and business needs to inform the customization of the UN data models, migration processes, and workflow tools. Timmons Group also provided recommendations and advice to guide the procurement and installation of servers and software for the UN environment. Matt performed a complete review of the current state GIS Enterprise documenting servers, configuration, and primary workflows for the organization. Following the current state review, a GIS System Design document was delivered that outlined and diagrammed future state recommendations for the enterprise GIS to support the addition of the UN.

Utility Network Implementation and Cityworks AMS Reconfiguration, Indio Water Authority, Indio, CA. Systems Architect. Indio Water has selected Timmons Group for the migration of its Water Distribution geodatabase from Geometric Network to the Esri Utility Network model. Moving to the Utility Network platform will position Indio Water to effectively manage its water distribution assets into the future. Matt worked directly with Indio Water upgrading its ArcGIS Enterprise deployment to version 10.9.1. This effort included proper documentation of the existing deployment, developing an upgrade plan, and performing all steps documented in the upgrade plan. This upgrade was focused on supporting the deployment of the latest version of the Utility Network.

UN Migration Plan, AWWU, Anchorage, AK. Systems Architect. As a subcontractor to NSGIS, Timmons Group completed Geodatabase Schema Consolidation Planning and UN Migration Planning to assist the Anchorage Water and Wastewater Utility (AWWU) in migrating various components of its Esri GIS to newer generations. Timmons Group examined the multiple GIS data schemas in use at AWWU, identified the duplication and redundancies, and created a roadmap for consolidating or removing unnecessary ones. A report estimating the necessary effort to make the changes to the database, as well as to dependent applications was prepared and presented by Timmons Group to AWWU. Matt performed a complete review of the current state GIS Enterprise documenting servers, configuration, and primary workflows for the organization. Following the current state review, a GIS System Design document was delivered that outlined and diagrammed future state recommendations for the enterprise GIS to support the addition of the UN.

Trae Timmerman

ARCGIS ENTERPRISE SPECIALIST

Trae is a spatially minded, team oriented, professional with a strong grasp of foundational and advanced concepts which apply to geospatial technologies and related enterprise system administration and implementation.

SELECT PROJECT EXPERIENCE:

Utility Network Implementation, Orange Water and Sewer Authority (OWASA), Orange County, NC. System Architect. Timmons Group was selected to migrate OWASA's existing data from Esri's geometric network to Esri's current data model, the Utility Network. Previous efforts, including a Utility Network migration plan, the design/build of ArcGIS Enterprise, and a Utility Network data readiness assessment, had already been completed. This project builds on those efforts. Additionally, Timmons Group reconfigured Cityworks so that it would continue to function with the new Utility Network data model. As a System Architect, Trae developed and executed a detailed implementation plan for the ArcGIS Enterprise upgrade and provided architectural recommendations to support the Utility Network implementation.

Utility Network RoadMap, City of Sacramento, CA. System Architect. Timmons Group is assisting City staff with the development and planning of a RoadMap to guide its Information Technology (IT), Department of Utilities (DOU), and their contractors for planning, budgeting, and scheduling of the migration from the existing Local Government Information Model (LGIM) data model to a fully functioning Utility Network to minimize system disruptions and downtime to users. As a System Architect, Trae provided architectural recommendations to support the Utility Network implementation.

Managed Services, Philadelphia Gas Works, Philadelphia, PA. Cloud Engineer. Timmons Group is providing managed services for PGW's cloud environment, including ensuring business continuity for PGW GIS staff, providing defined support downtime to ensure that critical components receive timely updates, and clearly defining roles and responsibilities of both PGW and Timmons Group in supporting and maintaining the hardware and software required by PGW's GIS ArcGIS Enterprise. As a Cloud Engineer, Trae provided on-call support for multi-tier, highly available ArcGIS Enterprise deployment and supporting infrastructure hosted in AWS.

GIS Cloud Managed Services, City of Mobile, AL. System Architect and Cloud Engineer. Timmons Group managed and supported the city's existing GIS cloud-hosted site on Amazon Web Services (AWS). The project was divided into two phases: Upgrades/Onboarding and Maintenance. In Phase One, the team conducted a discovery process, developed a technical design and upgraded migration plan, upgraded ArcGIS Enterprise, and carried out testing, final documentation, and onboarding. Additionally, a Well-Architected Framework Review was performed. In Phase Two Maintenance, our team will continue to work hands-on with the City to plan and execute ongoing operations and maintenance of the new GIS environment. Our team will continue to leverage the online project portal for centralized documentation, task tracking, and management and support constant communication across multiple discussion threads when needed. As a System Architect in Phase 1, Trae conducted a discovery process, developed a technical design and upgraded migration plan, upgraded ArcGIS Enterprise, and carried out testing, final documentation, and onboarding. As a Cloud Engineer in Phase 2, Trae provided on-call support for multi-tier, highly available ArcGIS Enterprise deployment and supporting infrastructure hosted in AWS.



YEARS OF EXPERIENCE: 7

EDUCATION:

Bachelor of Science, Environmental Spatial Analysis, University of North Carolina, Oakwood, GA

CERTIFICATIONS:

Esri Enterprise System Design Professional

Esri Enterprise Geodata Management Professional

AWS Certifies Solutions Architect – Associate

Esri Enterprise Administration Professional

TECHNICAL SKILLS:

Windows and Active Directory, Debian and RedHat based Enterprise Linux

Network Architecture and Network/Application Load Balancers

AWS and Azure

ArcGIS Enterprise (Windows, Linux, Kubernetes)

Enterprise GIS Refresh, Orange County, VA. System Architect. Orange County previously did a CIP Plan project with Timmons Group and received a Scope, Schedule, and Budget to refresh/upgrade their GIS. This project implemented those recommendations. This involved deploying ArcGIS Enterprise 11.1+, implementing and enhancing workflow improvements like Attribute Rules and branch versioning, integrating a copy of the telecom data into the enterprise gdb, and some staff training. Orange County can now move forward, taking advantage of recent Esri innovations. This will give them more efficient editing workflows, one single source of truth for FiberLync data, and an increased functionality of their parcel data. As a System Architect, Trae developed and executed a detailed implementation plan for the ArcGIS Enterprise migration and upgrade.

GIS Database Migration, Gwinnet County, GA. Systems Analyst / Administrator. Gwinnett County has recognized a critical need to enhance its GIS capabilities through a comprehensive GIS Database Migration Plan. Timmons Group will perform thorough discovery and assessment of existing architecture to capture the current system configuration and dependencies of the County's GIS prior to finalizing the GIS Database Migration Plan. Timmons Group will take all the information collected during the discovery phase and develop a comprehensive project and migration plan to migrate existing databases, users, roles, and protocols from Oracle 19c to Server 2022. The project deliverable will be a comprehensive GIS database migration plan (document) which will position the county to migrate confidently while minimizing risk and maximizing efficiency. As a System Architect, Trae developed and executed a detailed DBMS migration plan used to migrate enterprise geodatabases from Oracle 19c to SQL Server 2022.

Road and Highways LRS Operations and Maintenance Support, Henrico County Department of Public Works, VA. System Architect. Timmons Group is supporting DPW's Roads and Highways LRS implementation. Tasks include updating LRS documentation and training DPW staff so that they can properly correct data anomalies and load new data into the production LRS. We are also providing as-needed, ad hoc services. As System Architect, Trae provided on-call enterprise GIS support and troubleshooting.

ArcGIS, UN, Cityworks Complete Deployment, Mission Springs Water District (MSWD), CA. System Architect and Cloud Engineer. The MSWD project aims to modernize the district's GIS infrastructure and asset management capabilities. The project involves configuring a turn-key cloud-hosted ArcGIS Enterprise environment, migrating MSWD's GIS data into the Esri Utility Network, and implementing Trimble Cityworks AMS. The project also includes migrating existing CMMS/EAM system functions and providing comprehensive staff training. The project is divided into two phases. Phase 1 focuses on deploying the cloud environment and asset management software (Cityworks) to support the new MSWD treatment plant. Phase 2 will deliver the remaining scoped services. As a System Architect, Trae conducted a discovery process, developed a technical design, and an implementation plan. As a Cloud Engineer, Trae deployed AWS Infrastructure using CloudFormation, and installed and configured ArcGIS Enterprise using PowerShell DSC deployment automation.

Enterprise GIS Support Services, Alaska Department of Transportation and Public Facilities (AKDOT&PF), Juneau, AK. System Architect. Timmons Group is helping to maintain ADOT&PF's Roads & Highways route network, developing as-needed custom GIS maps and visualization applications, performing geodatabase integration and troubleshooting, and providing as-needed technical support and GIS documentation. As System Architect, Trae provided on-call enterprise GIS support and troubleshooting, and he provided guidance on architecture and database administration best practices.

GIS Services 3-Year On-Call Support, Iowa Department of Transportation, Ames, IA. System Architect. Timmons Group is providing enterprise GIS support services, including project management and administration, Esri GIS/FME/VertiGIS technical support services, system and application support, including maintaining system performance, monitoring system health, diagnosing and resolving technical issues, and implementing software upgrades and patches. Staff support includes guidance and training on GIS software tools, workflows, and best practices. As System Architect, Trae provided on-call enterprise GIS support and troubleshooting and helped to devise future state architectural design for multi-tier, highly available ArcGIS Enterprise deployments.

SECTION 4 Budget

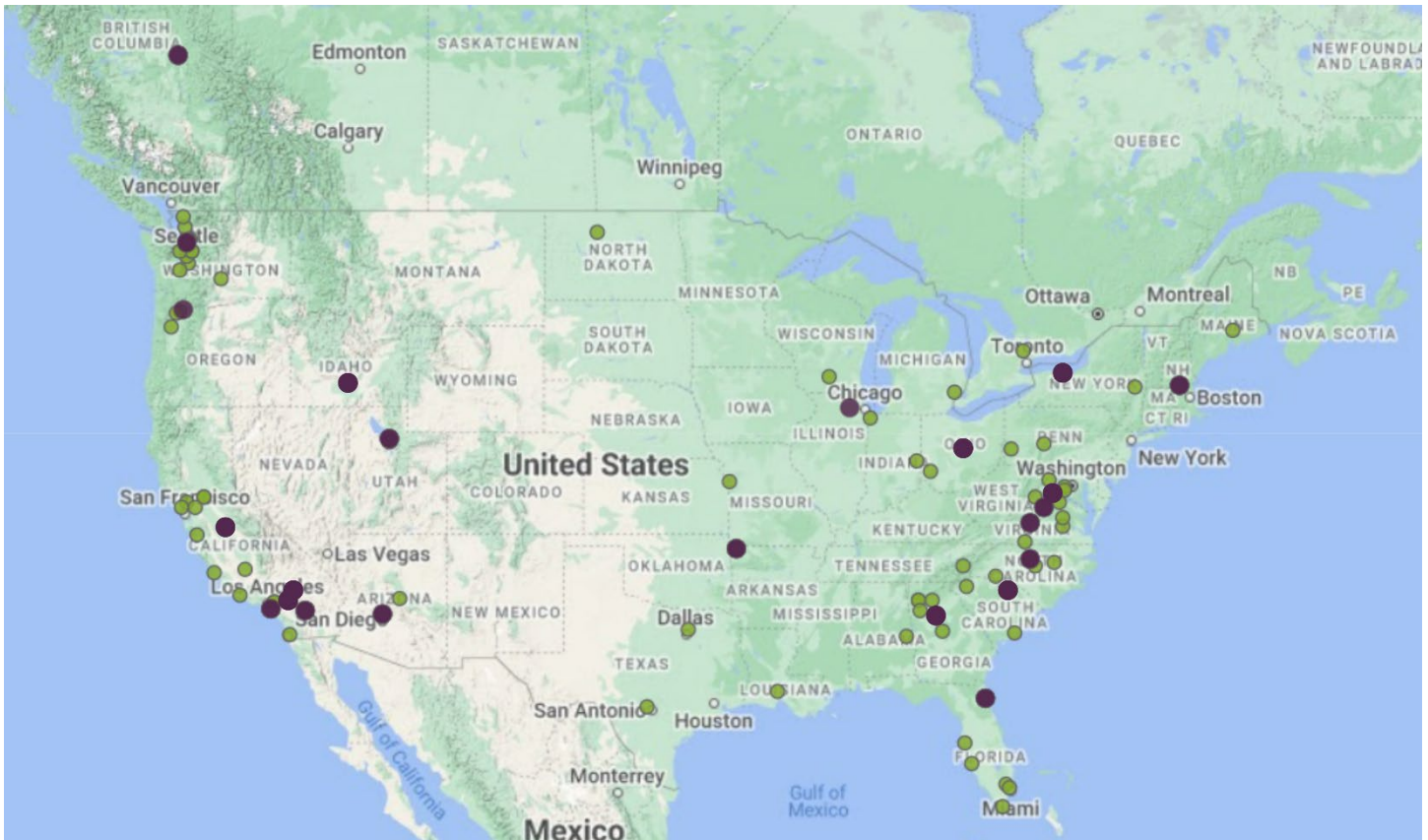
Our prices below assume concurrent migration and implementation of all three Utility Networks.

Phase	Rate
Phase 1: Esri ArcGIS Enterprise Upgrade	\$12,800
Phase 2: Esri Portal Installation	
1. Implementing Portal for the Utility Network	\$2,560
2. Implementing Portal for all other GIS data	\$12,440
Phase 3: Esri Utility Network Migration	
1. Sanitary Sewer data migration and implementation	\$41,160
2. Stormwater data migration and implementation	\$41,160
3. Water data migration and implementation	\$54,880
Phase 4: Continuing Support	\$0
Total	\$165,000

SECTION 5 Municipal Experience and Knowledge

Timmons Group has worked with hundreds of municipalities and utility authorities across the US. Timmons Group has extensive experience in GIS and utility GIS data as it relates to municipal utilities. Our team specializes in enterprise data management, solutions development, enterprise asset management, permitting solutions, and cloud implementations tailored to the needs of municipal utilities. We have deep expertise in the ArcGIS Utility Network, helping municipalities modernize their GIS infrastructure to improve network modeling, data accuracy, and operational efficiency. Our GIS strategic planning services ensure that utilities have a clear roadmap for leveraging geospatial technology to enhance decision-making and service delivery.

Beyond GIS, we provide seamless integration with enterprise business systems commonly used by municipal utilities, including Cityworks EAM, Cityworks PLL, InfoWater, WaterGEMS, Neptune, Munis, Cogsdale, WEX, WinCan, GraniteNet, Billmaster, SpryCIS, WACHS, and 811. These integrations enable utilities to streamline workflows, enhance asset management, optimize field operations, and improve customer service. The map below shows a subset of our municipal/utility clients, and the purple dots represent Utility Network clients.



UTILITY CLIENTS

Project Names	Client Name	Size of Utility	Type of Utility
GPS Data Conflation	Fairfax County Water Authority	2,000,000	Water
GIS Field Asset QC Program	Mount Pleasant Waterworks	90,000	Water
Drawing and GIS	Loudoun Water	325,000	Water
Master GIS Contract; GIS Managed Services & Cloud Migration	Philadelphia Gas Works	500,000	Gas
GIS Ad-Hoc Services; UN Implementation & Cityworks AMS Re-Configuration	Indio Water Authority	25,500	Water
ArcGIS Pro & Utility Network; Utility Network Plan	EPCOR	2,000,000	Water, Sewer, Reuse
GIS Field Inventory Pilot	Southside Electric Cooperative, Inc.	48,000	Electric
Fiber Project; Joint Use Design Additional Services	Shenandoah Valley Electric Cooperative	100,000	Electric
GIS RoadMap	Associated Electric Cooperative, Inc.	935,000	Electric
UN Data Readiness and AGE; UN Implementation	Orange Water and Sewer Authority	83,000	Water, Sewer
Utility Network Data Migration; Cityworks AMS & PLL	Pennichuck Water Works	29,000	Water
Utility Network Migration Services; UN Post Go-Live Training	City of Lynchburg, VA	79,000	Water, Combines, Sewer/Storm/Sewer
GIS Master Contract; Workflow/Data Quality Tools; Data Migration; Ad-Hoc Consulting Services; Update GIS Data Quality & Standards; On-Call Services; Editing Practices; UN Migration Preparation; Cityworks Support	St. Johns County, FL	306,000	Water, Sewer, Reuse

Dominion Joint Use Design Services; Padmount Transformer Inspection; Survey Point Location; Shoreline GIS Database Pilot; GIS System Project; Transformer Inspection	Dominion Energy	4,500,000	Energy
Utility Data Editing; Utility Network RoadMap	City of Sacramento	528,000	Water, Combined, Sewer/Storm
System Admin Services	City of Fredericksburg, VA	28,000	Water, Sewer
Schema Consolidation & UN Migration; GIS Utility Services Term Contract	Anchorage Water and Wastewater Utility	240,000	Water, Sewer
GIS Architecture & Facilities; ArcGIS Enterprise Server & Data; UN Implementation	Walt Disney Parks and Resorts U.S.	46,000	Water, Sewer, Storm, Electric, Compressed Air, Natural Gas, Steam, Chilled
ArcGIS Pro Migration	Henrico County, VA	334,000	Water, Wastewater
ArcGIS Pro UN Migration	City of Alexandria, VA	155,000	Sewer and Storm
GIS Utility Network Migration	Salt Lake City, UT	204,000	Water, Wastewater
UN Migration Services	City of St. Charles, IL	32,000	Water, Sewer, Storm, Electric
UN Migration	City of Gresham, OR	111,000	Sewer, Storm
UN Feasibility Study; Cityworks Support	Albemarle County Service Authority	21,400	Water, Sewer
Cityworks Application Dev; Customer Data Integration & Visualization	Renewable Water Resources, SC	175,000	Water
GIS Data Model Migration	City of Columbus, OH	907,000	Water, Combined, Sewer/Storm, Storm, Electric
UN Implementation; Cityworks Upgrade; SPD Legacy Permit Data Migration; Parker & Taylors Data Migration; Cityworks Support	MetroConnects	100,000	Sewer

Water UN Migration	City of Twin Falls, ID	54,300	Water
Cityworks AMS Upgrade; Gas Improvement Process; Cityworks AMS	City of Richmond, VA	229,000	Water, Sewer, Stormwater
Strategic Consulting for Transportation; Strategic Consulting EAM; EAM System Architecture; AM & Business Consulting; GraniteNet & Cityworks Integration; As-Built Conversion	Fairfax County, VA	1,138,000	Sewer
Cityworks PLL Implementation; Cityworks Support & Maintenance; Cityworks/Portal Support & Maintenance; Cityworks/MUNIS Integration; Cityworks/MUNIS Integration AMS; Cityworks/MUNIS Integration Equipment; Cityworks/Munis Integration Materials; Cityworks/Munis Integration Utility	City of Auburn, AL	80,000	Water, Sewer
Cityworks Cayenta Integration; Cityworks/Cayenta Meter Change Type	Macon Water Authority	155,000	Water
GIS & Cityworks Upgrade; Cityworks Northstar Integration	Skagit Public Utility District (PUD)	70,000	Water
Cityworks AMS Utilities; Cityworks Server AMS Support	City of Petersburg, VA	33,000	Water, Wastewater
Cityworks/GIS Support and Maintenance; SW AMS/GIS Consulting; CW Fleetmind Integration; Cityworks Environmental Services; Cityworks Upgrade/Support; Bike & Pedestrian Plan Cityworks	City of Fayetteville, NC	208,000	Water, Sewer
Cityworks AMS Implementation; Support & Maintenance	Bartow County, GA	112,816	Water, Sewer
Cityworks AMS/PLL; Cityworks Maintenance; Cityworks & Portal Support	City of Winston-Salem, NC	251,000	Water, Sewer, Stormwater
Plant Maintenance Cityworks AMS; PM Support CIS; Cityworks Support; Plant Maintenance Configuration of Cityworks/AM; New Dev Asset Tracking/Support; Cityworks Data Audit/Support; Cityworks Backflow Prevention	Spotsylvania County, VA	146,000	Water, Sewer, Stormwater
Cityworks Server Upgrade; WO Labor Customization; Cityworks Support; Cityworks Upgrade 15.6.x; Cityworks 15.8 Upgrade	City of Harrisonburg, VA	51,000	Water, Sewer, and Stormwater

Cityworks AMS	City of Asheville, NC	93,000	Water, Sewer, Stormwater
Esri GIS & CW Assistance	Town of Holly Springs, NC	45,000	Water, Reclaim, Stormwater

UTILITY NETWORK CLIENTS

Timmons Group Utility Network Projects							
Client	Utilities	Services					
		Data Readiness	UN Planning	Data Cleanup	ArcGIS Enterprise	UN Imp.	Systems Integration
EPCOR	Water Sewer Reuse	✓	✓		✓	✓	Cityworks
Indio Water Authority	Water	✓			✓	✓	Cityworks InfoWater Neptune KPI Cayenta
Anchorage Water and Wastewater Utility (AWWU)	Water Sewer	✓	✓		✓		
Rogers Water Utility	Water Sewer	✓		✓	✓	✓	Cityworks
Alderwood Water and Wastewater District (AWWD)	Water Sewer	✓			✓	✓	Cityworks
Pennichuck Water Works	Water	✓			✓	✓	Cityworks MUNIS WEX
St. Johns County Utility	Water Sewer Reuse	✓	✓	✓	✓	✓	Cityworks InfoWater Field Maps Cogsdale
City of Lynchburg, VA	Water Combined Sewer Storm Sewer	✓			✓	✓	Lucity
Orange Water and Sewer Authority (OWASA)	Water Sewer Reclaim	✓	✓		✓	✓	Cityworks WEX WinCam
Disneyland	Water, Sewer, Storm, Electric, Comp.Air, Gas, Steam, Chilled	✓	✓	✓	✓	✓	
Salt Lake City Public Utilities	Water Sewer Storm				✓	✓	Cityworks

Timmons Group Utility Network Projects							
Client	Utilities	Services					
		Data Readiness	UN Planning	Data Cleanup	ArcGIS Enterprise	UN Imp.	Systems Integration
Albemarle County Service Authority (ACSA)	Water Sewer	✓	✓		✓		Cityworks BillMaster WaterGEMS InfoWater GraniteNet
Prince George, Canada	Water	✓	✓		✓	✓	Cityworks
City of St Charles, IL	Water Sewer Storm Electric	✓			✓	✓	
City of Gresham, OR	Sewer Storm	✓			✓	✓	Lucity
City of Sacramento, CA	Water Combined Sewer/Storm Sewer	✓	✓	✓	✓		Cityworks Customer Care & Billing GraniteNet DigSmart, Maintenance Connection
Mission Springs Water District (MSWD)	Water Sewer	✓			✓	✓	Cityworks GraniteNet
City of Columbus, OH	Water Combined Sewer/Storm Electric	✓			✓	✓	Cityworks
MetroConnects	Sewer	✓			✓	✓	Cityworks
Alexandria, VA	Sewer Storm Combined Sewer/Storm	✓			✓	✓	Cityworks GraniteNet
Eastern Municipal Water District (EMWD)	Water Sewer Recycled Water				✓	✓	Maximo Hydromapper Cayenta
Twin Falls, ID	Water	✓	✓		✓		Cityworks
Town of Greece, NY	Sewer Storm	✓			✓	✓	Cityworks
Forsyth County, GA	Water Sewer	✓			✓	✓	Cityworks

Timmons Group Utility Network Projects							
Client	Utilities	Services					
		Data Readiness	UN Planning	Data Cleanup	ArcGIS Enterprise	UN Imp.	Systems Integration
24 Clients	>50	19	9	4	24	20	37

SECTION 6 References

GIS Utility Network Migration

SALT LAKE CITY, UT

Salt Lake City aimed to modernize its GIS utility data by transitioning to the Esri Utility Network, enhancing workflows, enabling ArcGIS Pro editing, and integrating with various city systems undergoing upgrades. Timmons Group conducted a comprehensive readiness assessment, developed a new data model, and migrated existing utility data into an Esri UN-compliant format. Additionally, the team integrated critical systems with the new network and provided in-depth training to ensure city staff could efficiently manage and maintain the data using ArcGIS Pro. This migration not only modernized SLC's GIS infrastructure but also improved data accessibility, streamlined operations, and enhanced system interoperability across departments.

Client Reference & Contact

Salt Lake City, UT
Tamara Wambeam
 GIS and IT Administrator
 801.483.6746
tamara.wambeam@slcgov.com

Dates of Service

4/2023 – 2/2025

Utility Network Migration

GRESHAM, OR

The City's GIS Team maintains geospatial datasets for stormwater and wastewater utility assets that are used by City staff, including operations, engineers, and planners, to conduct analyses for hazardous spills into catch basins, perform upstream tracing for illegal discharges, and maintain data integrity. These data had been maintained using a geometric network, but as this technology will no longer be supported after March 2026, the City selected Timmons Group to migrate its stormwater and wastewater GIS data to Esri's ArcGIS Pro and Utility Network, allowing it to seamlessly continue supporting stakeholders' business needs. In preparation for the migration, Timmons Group is performing a GIS data readiness assessment to resolve errors and enable data migration to the Utility Network. Our team is also creating a Utility Network data model that meets the City's business needs and workflows and we will migrate the City's stormwater and wastewater utility GIS data to the new model in the City's enterprise geodatabase. We are preparing geospatial editing tools and templates for the City's data editors and training data editors on the new workflows.

Client Reference & Contact

Gresham, OR
Sara Hopkins, MS, GISP
 GIS Manager
 503.618.2319
sara.hopkins@greshamoregon.gov

Dates of Service

12/2023 – Ongoing

Utility Network Migration Services

CITY OF ST. CHARLES, IL

St. Charles is aware of the need to move to ArcGIS Pro and the Utility Network. The goal of the project is to move all water processes to these novel solutions. Timmons Group will also prepare Storm and Sewer data for this migration by undertaking the data readiness assessment and data modeling tasks for these utilities. St Charles will have transitioned to the Utility Network for their Water data and be positioned to do the same for sewer and storm. Bryan's role was to create the migration data model matrix that details how data will be transferred and transformed into the various Utility Networks.

Client Reference & Contact

City of St. Charles, IL

Eric Creighton

GIS Coordinator

630.762.7079

ecrighton@stcharlesil.gov

Dates of Service

10/2023 – 2/2025



City of De Pere, Wisconsin

I.11

Request for Finance/Personnel Committee **Action**

MEETING DATE: April 8, 2025
DEPARTMENT: Development Services
FROM:
SUBJECT: Consideration and Possible Action on the Termination of TID No. 16 in the City of De Pere.*
RECOMMENDED ACTION: Approval

ATTACHMENTS:

TID No 8 Extension TID No 8 Termination and TID 16 Termination 04032025

CITY OF DE PERE MEMO



To: Honorable Mayor James Boyd
Finance and Personnel Committee

From: Daniel Lindstrom, Development Services Director

Date: April 8, 2025

RE: **Consideration and Possible Action on the Termination of TID No. 16. in the City of De Pere***

Consideration and Possible Action on the extension of TID No. 8 for One-Year for the purpose of funding the City of De Pere Affordable Housing Programs.*

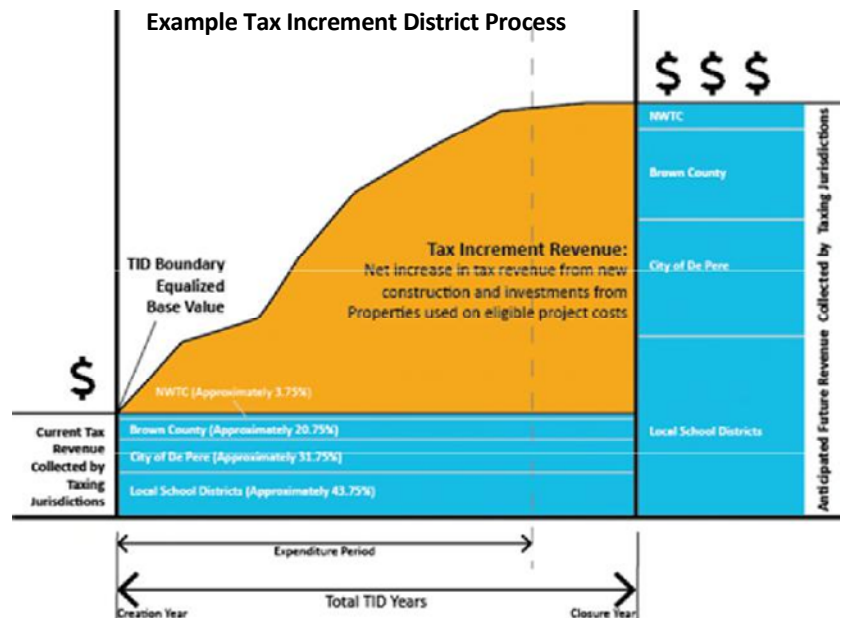
Consideration and Possible Action on the Termination of TID No. 8 in the City of De Pere*

The City has the authority to establish, extend, and terminate Tax Increment Districts (TIDs) to support economic development. This memo provides background on the closure of TID No. 16, as well as the affordable housing extension and termination of TID No. 8.

A TID must be terminated at the end of its maximum lifespan or when the tax increments collected exceed the approved project costs. Upon termination, the full property value within the TID is returned to the tax rolls for the overlying taxing jurisdictions, including the City, County, School District, and Technical College.

In the example provided, the blue column represents the increased property value subject to taxation upon the closure of the TID. While the TID is active, tax revenue for each overlying jurisdiction is limited to the base value of the TID property. Once terminated, all overlying taxing jurisdictions share the expanded tax base, allowing tax rates to be lowered while still generating the same revenue. Without the development facilitated by the TID, jurisdictions would only be able to tax the original base value. By partnering to encourage development, all overlying jurisdictions benefit from an increased tax base.

If the TID property value does not grow as anticipated, the municipality may not collect sufficient tax increments to cover its expenditures. In such cases, the municipality is responsible for any outstanding debts upon termination. Additionally, if tax increment revenue exceeds project costs at the time of termination, the municipality must redistribute surplus funds to the overlying taxing jurisdictions in proportion to their respective tax levies, excluding tax increment financing (TIF)



Part 1: TID No. 16 Termination

The City established Tax Increment District (TID) No. 16 as a rehabilitation and conservation TID on the east side of downtown on February 19, 2020. This single-use district was created to support the redevelopment of 123 N Broadway. However, due to the COVID-19 pandemic and the developer's decision to pivot toward the larger ShopKo redevelopment, the original project did not materialize.

Since then, the City has created TID No. 18 as an overlay TID, rendering TID No. 16 redundant. As all project costs have been fully paid, the district is now set to close.

Staff anticipate presenting the termination resolution to the Common Council on May 6, 2025. Because the termination occurs after April 15, the resolution will classify the effective termination year as 2026

Tax Incremental District (TID) Termination Timeframes						
Municipal Termination Resolution Adoption Date*	Termination Year	TID Removed from Tax/Assessment Roll	Last Year Tax Increment Received	Last Administrative Fee Due	Last TID Equalized Value Established	Last Annual Report Due to DOR
April 18, 2023 – April 15, 2024	2024	2024	2024 (for 2023 taxes)	April 18, 2023	August 15, 2023	July 1, 2024 (for 2023)
April 16, 2024 – April 15, 2025	2025	2025	2025 (for 2024 taxes)	April 15, 2024	August 15, 2024	July 1, 2025 (for 2024)
April 16, 2025 – April 15, 2026	2026	2026	2026 (for 2025 taxes)	April 15, 2025	August 15, 2025	July 1, 2026 (for 2025)
April 16, 2026 – April 15, 2027	2027	2027	2027 (for 2026 taxes)	April 15, 2026	August 15, 2026	July 1, 2027 (for 2026)
April 16, 2027 – April 18, 2028	2028	2028	2028 (for 2027 taxes)	April 15, 2027	August 15, 2027	July 3, 2028 (for 2027)
April 19, 2028 – April 17, 2029	2029	2029	2029 (for 2028 taxes)	April 18, 2028	August 15, 2028	July 2, 2029 (for 2028)
April 18, 2029 – April 15, 2030	2030	2030	2030 (for 2029 taxes)	April 17, 2029	August 15, 2029	July 1, 2030 (for 2029)
* Municipality must notify the Wisconsin Department of Revenue (DOR) by April 15 of the termination year. In some years the observance of Emancipation day affects the termination deadline.						

Staff Recommendations: (1) Prepare and submit the termination resolution to the Common Council for approval and submittal to the State and (2) Complete the final audit of TID No. 16 within 12 months of the termination resolution.

Part 2: TID No. 8 One-Year Affordable Housing Extension

The City established Tax Increment District (TID) No. 8 as an industrial TID on the west side on August 21, 2007, with a maximum lifespan extending to August 21, 2027. The district has generated sufficient revenue to cover all outstanding project costs and debt, allowing it to be extended and subsequently terminated.

Municipalities have the authority to extend the lifespan of a TID for two primary reasons: (1) to pay off existing debt, and/or (2) to allocate the final year of tax increment funding toward affordable housing. To proceed with an extension, the City must pass a resolution that (1) specifies the duration of the extension (typically up to 12 months) and (2) outlines how the funds will be used to improve housing stock. Following the resolution, the City may terminate the TID at any point. This affordable housing extension was incorporated into tax increment financing (TIF) law in 2009.

Before closing a TID, the municipality must adopt a resolution and provide documentation confirming that all project costs have been or will be paid. Upon receiving a copy of the municipal resolution, the Department of Revenue (DOR) is required to authorize the allocation of tax increments for one additional year. At least 75% of the tax increment must be used to support affordable housing initiatives, while up to 25% may be directed toward housing stock renewal programs.

The planned extension of TID No. 8 will allow the City of De Pere to receive tax increments for one additional year, until 2025, with an estimated \$319,150 allocated to City housing funds. The City has committed to allocating 100% of the funds to affordable housing projects.

Background on Affordable Housing Allocations

In 2022, the City received \$1,968,527 for affordable housing and general housing stock improvements. Municipalities are required by state law to identify their affordable housing needs and develop an action plan. Additionally, the City must define how the funds will be used in its affordable housing extension resolution.

In 2021, the City extended TID No. 6 and committed to allocating a minimum of 75% of the funds received for affordable housing initiatives, including:

After receiving the funds, the City may modify specific programs, provided that at least 75% of the funds remain allocated to affordable housing. In 2023, the City expanded the program by mandating that 100% of affordability funds be directed toward affordable housing projects. Two additional initiatives were added:

Staff Recommendation: Prepare and submit the affordable housing extension resolution to the Common Council for approval and subsequent submission to the state.

Part 3: TID No. 8 Termination:

The City established Tax Increment District (TID) No. 8 as an industrial TID on the west side on August 21, 2007, with a maximum lifespan extending to August 21, 2027. The district has generated sufficient revenue to cover all outstanding project costs and debt, allowing it to be extended and subsequently terminated.

Terminating TID No. 8 after April 15 will designate 2026 as the final year for tax collections. The City plans to utilize tax revenue generated from the 2024 increment in 2025 to pay off remaining debt and allocate tax revenue generated from the 2025 increment in 2026 to fund housing improvement programs.

Staff Recommendations: (1) Prepare and submit the termination resolution to the Common Council after the State approves the Affordable Housing Extension. (2) Complete the final audit of TID No. 8 within 12 months of the termination resolution.

Note: The termination resolution may be delayed by a few Common Council meetings to ensure the City follows the proper procedural steps.



City of De Pere, Wisconsin

I.12

Request for Finance/Personnel Committee Action

MEETING DATE: April 8, 2025
DEPARTMENT: Development Services
FROM: Daniel Lindstrom, Development Services Director
SUBJECT: Consideration and Possible Action on the extension of TID No. 8 in the City of De Pere for One-Year for the purpose of funding the City of De Pere Affordable Housing Programs.*
RECOMMENDED ACTION: Approval

ATTACHMENTS:

TID No 8 Extension TID No 8 Termination and TID 16 Termination 04032025

CITY OF DE PERE MEMO



To: Honorable Mayor James Boyd
Finance and Personnel Committee

From: Daniel Lindstrom, Development Services Director

Date: April 8, 2025

RE: **Consideration and Possible Action on the Termination of TID No. 16. in the City of De Pere***

Consideration and Possible Action on the extension of TID No. 8 for One-Year for the purpose of funding the City of De Pere Affordable Housing Programs.*

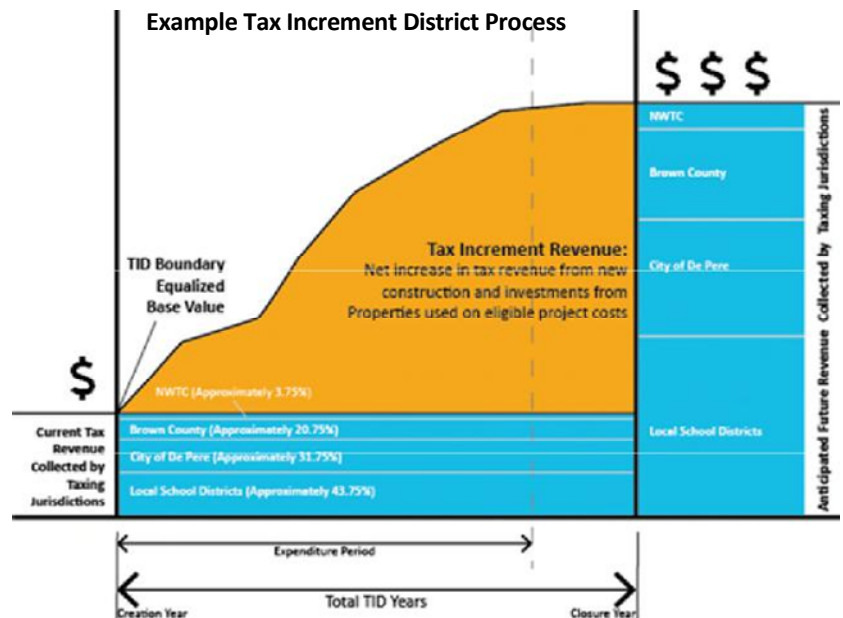
Consideration and Possible Action on the Termination of TID No. 8 in the City of De Pere*

The City has the authority to establish, extend, and terminate Tax Increment Districts (TIDs) to support economic development. This memo provides background on the closure of TID No. 16, as well as the affordable housing extension and termination of TID No. 8.

A TID must be terminated at the end of its maximum lifespan or when the tax increments collected exceed the approved project costs. Upon termination, the full property value within the TID is returned to the tax rolls for the overlying taxing jurisdictions, including the City, County, School District, and Technical College.

In the example provided, the blue column represents the increased property value subject to taxation upon the closure of the TID. While the TID is active, tax revenue for each overlying jurisdiction is limited to the base value of the TID property. Once terminated, all overlying taxing jurisdictions share the expanded tax base, allowing tax rates to be lowered while still generating the same revenue. Without the development facilitated by the TID, jurisdictions would only be able to tax the original base value. By partnering to encourage development, all overlying jurisdictions benefit from an increased tax base.

If the TID property value does not grow as anticipated, the municipality may not collect sufficient tax increments to cover its expenditures. In such cases, the municipality is responsible for any outstanding debts upon termination. Additionally, if tax increment revenue exceeds project costs at the time of termination, the municipality must redistribute surplus funds to the overlying taxing jurisdictions in proportion to their respective tax levies, excluding tax increment financing (TIF)



Part 1: TID No. 16 Termination

The City established Tax Increment District (TID) No. 16 as a rehabilitation and conservation TID on the east side of downtown on February 19, 2020. This single-use district was created to support the redevelopment of 123 N Broadway. However, due to the COVID-19 pandemic and the developer's decision to pivot toward the larger ShopKo redevelopment, the original project did not materialize.

Since then, the City has created TID No. 18 as an overlay TID, rendering TID No. 16 redundant. As all project costs have been fully paid, the district is now set to close.

Staff anticipate presenting the termination resolution to the Common Council on May 6, 2025. Because the termination occurs after April 15, the resolution will classify the effective termination year as 2026

Tax Incremental District (TID) Termination Timeframes						
Municipal Termination Resolution Adoption Date*	Termination Year	TID Removed from Tax/Assessment Roll	Last Year Tax Increment Received	Last Administrative Fee Due	Last TID Equalized Value Established	Last Annual Report Due to DOR
April 18, 2023 – April 15, 2024	2024	2024	2024 (for 2023 taxes)	April 18, 2023	August 15, 2023	July 1, 2024 (for 2023)
April 16, 2024 – April 15, 2025	2025	2025	2025 (for 2024 taxes)	April 15, 2024	August 15, 2024	July 1, 2025 (for 2024)
April 16, 2025 – April 15, 2026	2026	2026	2026 (for 2025 taxes)	April 15, 2025	August 15, 2025	July 1, 2026 (for 2025)
April 16, 2026 – April 15, 2027	2027	2027	2027 (for 2026 taxes)	April 15, 2026	August 15, 2026	July 1, 2027 (for 2026)
April 16, 2027 – April 18, 2028	2028	2028	2028 (for 2027 taxes)	April 15, 2027	August 15, 2027	July 3, 2028 (for 2027)
April 19, 2028 – April 17, 2029	2029	2029	2029 (for 2028 taxes)	April 18, 2028	August 15, 2028	July 2, 2029 (for 2028)
April 18, 2029 – April 15, 2030	2030	2030	2030 (for 2029 taxes)	April 17, 2029	August 15, 2029	July 1, 2030 (for 2029)
* Municipality must notify the Wisconsin Department of Revenue (DOR) by April 15 of the termination year. In some years the observance of Emancipation day affects the termination deadline.						

Staff Recommendations: (1) Prepare and submit the termination resolution to the Common Council for approval and submittal to the State and (2) Complete the final audit of TID No. 16 within 12 months of the termination resolution.

Part 2: TID No. 8 One-Year Affordable Housing Extension

The City established Tax Increment District (TID) No. 8 as an industrial TID on the west side on August 21, 2007, with a maximum lifespan extending to August 21, 2027. The district has generated sufficient revenue to cover all outstanding project costs and debt, allowing it to be extended and subsequently terminated.

Municipalities have the authority to extend the lifespan of a TID for two primary reasons: (1) to pay off existing debt, and/or (2) to allocate the final year of tax increment funding toward affordable housing. To proceed with an extension, the City must pass a resolution that (1) specifies the duration of the extension (typically up to 12 months) and (2) outlines how the funds will be used to improve housing stock. Following the resolution, the City may terminate the TID at any point. This affordable housing extension was incorporated into tax increment financing (TIF) law in 2009.

Before closing a TID, the municipality must adopt a resolution and provide documentation confirming that all project costs have been or will be paid. Upon receiving a copy of the municipal resolution, the Department of Revenue (DOR) is required to authorize the allocation of tax increments for one additional year. At least 75% of the tax increment must be used to support affordable housing initiatives, while up to 25% may be directed toward housing stock renewal programs.

The planned extension of TID No. 8 will allow the City of De Pere to receive tax increments for one additional year, until 2025, with an estimated \$319,150 allocated to City housing funds. The City has committed to allocating 100% of the funds to affordable housing projects.

Background on Affordable Housing Allocations

In 2022, the City received \$1,968,527 for affordable housing and general housing stock improvements. Municipalities are required by state law to identify their affordable housing needs and develop an action plan. Additionally, the City must define how the funds will be used in its affordable housing extension resolution.

In 2021, the City extended TID No. 6 and committed to allocating a minimum of 75% of the funds received for affordable housing initiatives, including:

After receiving the funds, the City may modify specific programs, provided that at least 75% of the funds remain allocated to affordable housing. In 2023, the City expanded the program by mandating that 100% of affordability funds be directed toward affordable housing projects. Two additional initiatives were added:

Staff Recommendation: Prepare and submit the affordable housing extension resolution to the Common Council for approval and subsequent submission to the state.

Part 3: TID No. 8 Termination:

The City established Tax Increment District (TID) No. 8 as an industrial TID on the west side on August 21, 2007, with a maximum lifespan extending to August 21, 2027. The district has generated sufficient revenue to cover all outstanding project costs and debt, allowing it to be extended and subsequently terminated.

Terminating TID No. 8 after April 15 will designate 2026 as the final year for tax collections. The City plans to utilize tax revenue generated from the 2024 increment in 2025 to pay off remaining debt and allocate tax revenue generated from the 2025 increment in 2026 to fund housing improvement programs.

Staff Recommendations: (1) Prepare and submit the termination resolution to the Common Council after the State approves the Affordable Housing Extension. (2) Complete the final audit of TID No. 8 within 12 months of the termination resolution.

Note: The termination resolution may be delayed by a few Common Council meetings to ensure the City follows the proper procedural steps.



City of De Pere, Wisconsin

I.13

Request for Finance/Personnel Committee Action

MEETING DATE: April 8, 2025
DEPARTMENT: Development Services
FROM: Daniel Lindstrom, Development Services Director
SUBJECT: Consideration and Possible Action on the Termination of TID No. 8 in the City of De Pere.*
RECOMMENDED ACTION: Approval

ATTACHMENTS:

TID No 8 Extension TID No 8 Termination and TID 16 Termination 04032025

CITY OF DE PERE MEMO



To: Honorable Mayor James Boyd
Finance and Personnel Committee

From: Daniel Lindstrom, Development Services Director

Date: April 8, 2025

RE: **Consideration and Possible Action on the Termination of TID No. 16. in the City of De Pere***

Consideration and Possible Action on the extension of TID No. 8 for One-Year for the purpose of funding the City of De Pere Affordable Housing Programs.*

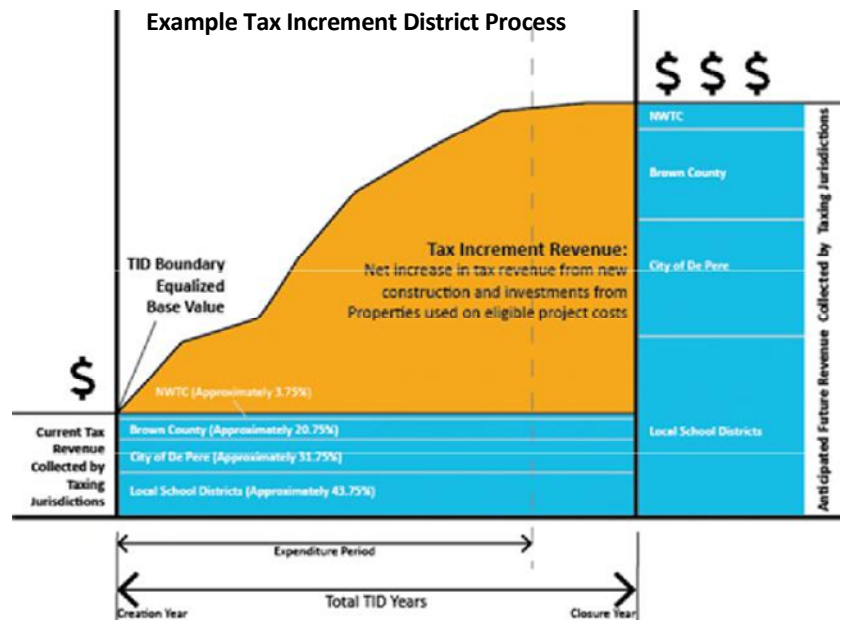
Consideration and Possible Action on the Termination of TID No. 8 in the City of De Pere*

The City has the authority to establish, extend, and terminate Tax Increment Districts (TIDs) to support economic development. This memo provides background on the closure of TID No. 16, as well as the affordable housing extension and termination of TID No. 8.

A TID must be terminated at the end of its maximum lifespan or when the tax increments collected exceed the approved project costs. Upon termination, the full property value within the TID is returned to the tax rolls for the overlying taxing jurisdictions, including the City, County, School District, and Technical College.

In the example provided, the blue column represents the increased property value subject to taxation upon the closure of the TID. While the TID is active, tax revenue for each overlying jurisdiction is limited to the base value of the TID property. Once terminated, all overlying taxing jurisdictions share the expanded tax base, allowing tax rates to be lowered while still generating the same revenue. Without the development facilitated by the TID, jurisdictions would only be able to tax the original base value. By partnering to encourage development, all overlying jurisdictions benefit from an increased tax base.

If the TID property value does not grow as anticipated, the municipality may not collect sufficient tax increments to cover its expenditures. In such cases, the municipality is responsible for any outstanding debts upon termination. Additionally, if tax increment revenue exceeds project costs at the time of termination, the municipality must redistribute surplus funds to the overlying taxing jurisdictions in proportion to their respective tax levies, excluding tax increment financing (TIF)



Part 1: TID No. 16 Termination

The City established Tax Increment District (TID) No. 16 as a rehabilitation and conservation TID on the east side of downtown on February 19, 2020. This single-use district was created to support the redevelopment of 123 N Broadway. However, due to the COVID-19 pandemic and the developer's decision to pivot toward the larger ShopKo redevelopment, the original project did not materialize.

Since then, the City has created TID No. 18 as an overlay TID, rendering TID No. 16 redundant. As all project costs have been fully paid, the district is now set to close.

Staff anticipate presenting the termination resolution to the Common Council on May 6, 2025. Because the termination occurs after April 15, the resolution will classify the effective termination year as 2026

Tax Incremental District (TID) Termination Timeframes						
Municipal Termination Resolution Adoption Date*	Termination Year	TID Removed from Tax/Assessment Roll	Last Year Tax Increment Received	Last Administrative Fee Due	Last TID Equalized Value Established	Last Annual Report Due to DOR
April 18, 2023 – April 15, 2024	2024	2024	2024 (for 2023 taxes)	April 18, 2023	August 15, 2023	July 1, 2024 (for 2023)
April 16, 2024 – April 15, 2025	2025	2025	2025 (for 2024 taxes)	April 15, 2024	August 15, 2024	July 1, 2025 (for 2024)
April 16, 2025 – April 15, 2026	2026	2026	2026 (for 2025 taxes)	April 15, 2025	August 15, 2025	July 1, 2026 (for 2025)
April 16, 2026 – April 15, 2027	2027	2027	2027 (for 2026 taxes)	April 15, 2026	August 15, 2026	July 1, 2027 (for 2026)
April 16, 2027 – April 18, 2028	2028	2028	2028 (for 2027 taxes)	April 15, 2027	August 15, 2027	July 3, 2028 (for 2027)
April 19, 2028 – April 17, 2029	2029	2029	2029 (for 2028 taxes)	April 18, 2028	August 15, 2028	July 2, 2029 (for 2028)
April 18, 2029 – April 15, 2030	2030	2030	2030 (for 2029 taxes)	April 17, 2029	August 15, 2029	July 1, 2030 (for 2029)
* Municipality must notify the Wisconsin Department of Revenue (DOR) by April 15 of the termination year. In some years the observance of Emancipation day affects the termination deadline.						

Staff Recommendations: (1) Prepare and submit the termination resolution to the Common Council for approval and submittal to the State and (2) Complete the final audit of TID No. 16 within 12 months of the termination resolution.

Part 2: TID No. 8 One-Year Affordable Housing Extension

The City established Tax Increment District (TID) No. 8 as an industrial TID on the west side on August 21, 2007, with a maximum lifespan extending to August 21, 2027. The district has generated sufficient revenue to cover all outstanding project costs and debt, allowing it to be extended and subsequently terminated.

Municipalities have the authority to extend the lifespan of a TID for two primary reasons: (1) to pay off existing debt, and/or (2) to allocate the final year of tax increment funding toward affordable housing. To proceed with an extension, the City must pass a resolution that (1) specifies the duration of the extension (typically up to 12 months) and (2) outlines how the funds will be used to improve housing stock. Following the resolution, the City may terminate the TID at any point. This affordable housing extension was incorporated into tax increment financing (TIF) law in 2009.

Before closing a TID, the municipality must adopt a resolution and provide documentation confirming that all project costs have been or will be paid. Upon receiving a copy of the municipal resolution, the Department of Revenue (DOR) is required to authorize the allocation of tax increments for one additional year. At least 75% of the tax increment must be used to support affordable housing initiatives, while up to 25% may be directed toward housing stock renewal programs.

The planned extension of TID No. 8 will allow the City of De Pere to receive tax increments for one additional year, until 2025, with an estimated \$319,150 allocated to City housing funds. The City has committed to allocating 100% of the funds to affordable housing projects.

Background on Affordable Housing Allocations

In 2022, the City received \$1,968,527 for affordable housing and general housing stock improvements. Municipalities are required by state law to identify their affordable housing needs and develop an action plan. Additionally, the City must define how the funds will be used in its affordable housing extension resolution.

In 2021, the City extended TID No. 6 and committed to allocating a minimum of 75% of the funds received for affordable housing initiatives, including:

After receiving the funds, the City may modify specific programs, provided that at least 75% of the funds remain allocated to affordable housing. In 2023, the City expanded the program by mandating that 100% of affordability funds be directed toward affordable housing projects. Two additional initiatives were added:

Staff Recommendation: Prepare and submit the affordable housing extension resolution to the Common Council for approval and subsequent submission to the state.

Part 3: TID No. 8 Termination:

The City established Tax Increment District (TID) No. 8 as an industrial TID on the west side on August 21, 2007, with a maximum lifespan extending to August 21, 2027. The district has generated sufficient revenue to cover all outstanding project costs and debt, allowing it to be extended and subsequently terminated.

Terminating TID No. 8 after April 15 will designate 2026 as the final year for tax collections. The City plans to utilize tax revenue generated from the 2024 increment in 2025 to pay off remaining debt and allocate tax revenue generated from the 2025 increment in 2026 to fund housing improvement programs.

Staff Recommendations: (1) Prepare and submit the termination resolution to the Common Council after the State approves the Affordable Housing Extension. (2) Complete the final audit of TID No. 8 within 12 months of the termination resolution.

Note: The termination resolution may be delayed by a few Common Council meetings to ensure the City follows the proper procedural steps.