



A G E N D A
CITY OF WAUPUN BOARD OF PUBLIC WORKS AND
FACILITIES COMMITTEE
Waupun City Hall – 201 E. Main Street, Waupun WI
Wednesday, November 09, 2022 at 4:30 PM

The Waupun Board of Public Works and Facilities Committee will meet in-person, virtual, and teleconference. Instructions to join the meeting are provided below:

To Join Zoom Meeting

<https://us02web.zoom.us/j/83430608522?pwd=N1pSZ05zUStFdVEybWxwSHcyc2JyUT09>

Meeting ID: 834 3060 8522

Passcode: 630201

By Phone: (312) 626-6799 US (Chicago)

CALL TO ORDER

ROLL CALL

PERSONS WISHING TO ADDRESS THE BOARD OF PUBLIC WORKS--*State name, address, and subject of comments.*
(2 Minutes)

No Public Participation after this point.

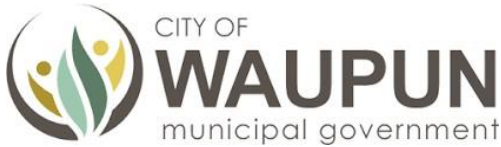
FUTURE MEETINGS AND GATHERING INVOLVING THE BOARD OF PUBLIC WORKS

CONSIDERATION - ACTION

1. Approve minutes of the September 13, 2022 meeting.
2. An ordinance to amend chapter six of the municipal code of the city of Waupun entitled “traffic code”
3. 2023 1 Ton Flatbed Purchase
4. 2023 259D3- W CAT Skid Loader
5. 2023 Grapple bucket
6. Temporary easement from the dead end of Summer Ave. extending East for approximately 450’

ADJOURNMENT

Upon reasonable notice, efforts will be made to accommodate disabled individuals through appropriate aids and services. For additional information, contact the City Clerk at 920-324-7915.



MINUTES—CITY OF WAUPUN BOARD OF PUBLIC WORKS & FACILITIES

Tuesday, 13-September-2022 – City Council Chambers

CALL TO ORDER

Chairman Peter Kaczmarki called the meeting to order at 4:30 PM

ROLL CALL

Roll call was taken:

Alders—Peter Kaczmarki, Mike Matoushek, William Langford

Citizens—Dale Heering (absent with notification), Ryan Mielke, Dave Rens, Gregg Zonnefeld

Ex-officio—DPW Director Jeff Daane, Recreation Director Rachel Kaminski, City Administrator Kathy Schlieve

PERSON WISHING TO ADDRESS THE BOARD OF PUBLIC WORKS & FACILITIES COMMITTEE

There were no guests for public comment portion of the meeting.

FUTURE MEETINGS AND GATHERINGS OF THE BOARD OF PUBLIC WORKS & FACILITIES COMMITTEE

Next meeting will be on Tuesday, October 11 at 4:30PM. Be advised of a potential date change for the November meeting due to Election Day.

CONSIDERATION - ACTION

1. Approve minutes of the August 10th, 2022 Board of Public Works & Facilities Meeting.
Minutes of the August 10 meeting were presented. Motion (Rens/Matoushek) to approve minutes as presented.
MOTION CARRIED (6-0)
2. Review ordinance to amend chapter six of the municipal code of the city of Waupun entitled "Traffic Code"
DPW Director Jeff Daane requests approval for creating a handicapped parking zone for Zoellner Park as part of the Newton Avenue reconstruction. Motion (Langford/Matoushek) to approve recommending amendment to City Council. **MOTION CARRIED (6-0).**
3. Radar Speed Sign
DPW Director Daane shared options for the purchase of a solar radar speed sign for the cost of \$3,852.90. The sign could be relocated, and the sign also collects data. A Wal-Mart grant was secured for \$2,000 of the cost. Motion (Zonnefeld/Rens) to approve the expenditure of \$1,852.90. **MOTION CARRIED (6-0).**
4. Flooding concerns – 736 Fern Street
Jake Wojahn appeared before the Board of Public Works regarding basement flooding at 736 Fern Street. This has occurred four times in the last couple of years. Water appears to be flowing from adjacent properties. He is seeking assistance to assist in alleviating this issue. The BPW requests to have estimates to come from the homeowner and the city engineer and will reconnect on the issue with more information.
5. Sidewalk Replacement program
The crews are wrapping up their project with concrete this week, with restoration work to follow. ADA compliance has been a challenge to meet required code, and as a result curbing had to be addressed as well. Cost increases have been the net result. Roughly 40 curb ramps were planned, but because of these overruns less areas have been replaced.
6. Update on South Madison Street project
Things continue to progress on the project. West side curb and sidewalk have been completed, east side is in progress. October 1st is the contracted date with the state to be completed. Residents should be able to get back in their driveways late next week.

ADJOURNMENT

Motion (Matoushek/Mielke) to adjourn the meeting of the BPW at 5:08PM. **MOTION CARRIED (6-0)**

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gregg Zonnefeld". The signature is written in a cursive style with a long horizontal stroke extending to the right.

Gregg Zonnefeld, BPW Clerk



AGENDA SUMMARY SHEET

MEETING DATE: November 9, 2022

TITLE: An ordinance to amend chapter six of the municipal code of the city of Waupun entitled "traffic code"

AGENDA SECTION: Consideration/Action

PRESENTER: Jeff Daane

DEPARMTENT GOAL(S) SUPPORTED <i>(if applicable)</i>	FISCAL IMPACT	

ISSUE SUMMARY

The City has been approached to add a stop sign at the intersection of Sommerville St. and Rounsville St. This intersection is currently uncontrolled. The stop sign would be placed on Sommerville St. and traffic traveling West would need to stop.

This request comes in as traffic at that location has increased over the past few years. Many students are dropped off at the end of Rounsville St. Soccer has used the City area at the end of Rounsville St. for parking during the fall soccer season. This location is used for different event parking for Celebrate Waupun, Truck-N-Show, football games to list a few.

STAFF RECCOMENDATION:

Recommend to council for final approval adding a stop sign at Sommerville St. and Rounsville St.

ATTACHMENTS:

- Ordinance
- Police Report

RECOMMENDED MOTION:

1. Recommend to Council an ordinance to amend chapter six of the municipal code of the city of Waupun entitled "Traffic code" to add a stop sign on Sommerville St. at Rounsville St.
2. Do nothing and leave the intersection as is.



AGENDA SUMMARY SHEET

MEETING DATE: November 9, 2022

TITLE: 2023 1 Ton Flatbed Purchase

AGENDA SECTION: Consideration/Action

PRESENTER: Jeff Daane

DEPARTMENT GOAL(S) SUPPORTED <i>(if applicable)</i>	FISCAL IMPACT	
	Truck Waiting on updated quote \$7,806 Total	Bed with hoist

ISSUE SUMMARY

The City will be replacing a 1999 Flatbed truck. The order window is only open for 3 days in November. We are waiting on final pricing from the dealer.

STAFF RECCOMENDATION:

As long as the price comes with in our equipment budget amount. Move forward with the purchase.

ATTACHMENTS:

Ewald state price quote

Madison Struck and Equipment quote

RECCOMENDED MOTION:

1. Approve the ordering of a 2023 Ford 1 Ton Flatbed with hoist upon City Council adopting the 2023 budget November 9th.



A Complete Line
Of
Truck Equipment

2410 S. Stoughton Road
Madison, WI 53716-2898

Telephone (608) 222-5591
Wisconsin (800) 259-7453
FAX (608) 222-3644

To: **City Of Waupun**
Address: 201 E. Main ST.
City: Waupun, WI
Attention: **Jeff Daane**
Telephone #: 920-324-7918 office
Fax #: 920-324-7939

Date: 10/31/22
Delivery:
Dealer:
P. O. #:
Shop 324-7936
Terms: **NET ON DELIVERY, unless specified**

Quantity	QUOTE GOOD FOR 30 DAYS			PRICE EACH
One	Knapheide PVMX- 11' 3" X 96" Platform Body with 5" structural steel longrails 3" steel "self-cleaning" crossmembers on 12" centers 2" nominal dense yellow pine floor, CCA treated, tongue in groove 12 gauge high strength steel side & end rails with 2" X 4" stake pockets FMVSS clearance lights mounted in rubber grommets Electrodeposition primer, complete Immersion (Dipping), finish painted black 10 Gauge Steel Floor Overlay			
One	Crysteel LB 510 SA electric/hydraulic hoist with push button controls Not Installed FOB Madison, WI			
	TOTAL			\$7,806.00
<p>The quoted price includes ONLY what is described above. It is your responsibility to review the specifications.</p>				
Chassis Make	CA: 84"	Trans:	Subtotal	
Customer Signature and Date	Salesman		Tax 5.5%	
	Kurt Schadewalt		F.E.T. 12%	
			TOTAL	



Ewald Automotive Group

Scott Kussow | 262-567-5555 | skfleet@ewaldauto.com

Vehicle: [Fleet] 2022 Ford Super Duty F-350 DRW (F3H) XL 4WD Reg Cab 169" WB 84" CA (Complete)

Quote Worksheet

	MSRP
Base Price	\$46,200.00
Dest Charge	\$1,795.00
Total Options	\$7,474.00
Subtotal	\$55,469.00
Subtotal Pre-Tax Adjustments	\$0.00
Less Customer Discount	(\$7,187.00)
Subtotal Discount	(\$7,187.00)
Trade-In	\$0.00
Subtotal Trade-In	\$0.00
Taxable Price	\$48,282.00
Sales Tax	\$0.00
Subtotal Taxes	\$0.00
Subtotal Post-Tax Adjustments	\$0.00
Total Sales Price	\$48,282.00

Comments:

2023 Ford F350 Regular Cab 4wd C&C 84" CA to your specs as detailed, (similar to '22 order). Registration fees are not included. Delivery can not be anticipated due to current market conditions.

2023 Model year ordering due to open up on 11/14, final order date 12/16. Subject to approved allocation by Ford.

State Contract # 505ENT-M21-VEHICLES-03.

Dealer Signature / Date

Customer Signature / Date

This document contains information considered Confidential between GM and its Clients uniquely. The information provided is not intended for public disclosure. Prices, specifications, and availability are subject to change without notice, and do not include certain fees, taxes and charges that may be required by law or vary by manufacturer or region. Performance figures are guidelines only, and actual performance may vary. Photos may not represent actual vehicles or exact configurations. Content based on report preparer's input is subject to the accuracy of the input provided.

Data Version: 17867. Data Updated: Nov 2, 2022 6:50:00 PM PDT.



AGENDA SUMMARY SHEET

MEETING DATE: November 9, 2022

TITLE: 2023 259D3- W CAT Skid Loader

AGENDA SECTION: Consideration/Action

PRESENTER: Jeff Daane

DEPARMTENT GOAL(S) SUPPORTED <i>(if applicable)</i>	FISCAL IMPACT	
	\$76,600	

ISSUE SUMMARY

The City will be replacing a 1996 Bobcat Skid Loader. By getting the order in soon we can avoid any more price increases. This skid loader will be purchased through the government purchasing agency Sourcewell

List price is \$97,550

Sourcewell discount \$20,480

Fabick discount \$470

STAFF RECCOMENDATION:

ATTACHMENTS:

Fabick price quote using Sourcewell pricing

RECCOMENDED MOTION:

1. Approve the ordering of a 2023 CAT 259D3-W Skid Loader upon City Council adopting the 2023 budget November 9th.



www.fabickcat.com

October 18, 2022

Jeff Daane
City of Waupun
Po Box 232
Waupun, WI 53963-0232

We are pleased to quote the following for your consideration:

(1) New Caterpillar 259D3-W Skid Steer Loader, 2023 model

The following factory and dealer options are included:

- * Operating Weight: 8,900 lbs.
- * Cat C3.3 74 H.P. Engine
- * Operating Capacity: 2,900 lbs.
- * Joystick Pilot Control
- * 2 Speed Travel
- * 15.7 In. Bar Tracks
- * Rear Lights
- * Seat Belt, 2"
- * 120V Block Heater
- * Lights, LED
- * Enclosed Cab with Heat and A/C
- * Advanced Display with Rear Camera
- * On-Demand Cooling Fan
- * Hydraulic Quick Coupler
- * Air Suspension Heated Seat
- * Door, Cab, Glass
- * Radio, Am/Fm, Bluetooth
- * 80" Bolt on Tooth Bucket

* Warranty: Powertrain + Hydraulics + Tech Extended Service Coverage out to a total of 60 Months or 2500 Hours, whichever comes first.

List Price: \$97,550.00
Less Sourcewell: \$20,480.00
Less Fabick: \$470.00

Final Sale Price: \$76,600.00

We believe the equipment as quoted will exceed your expectations. On behalf of Fabick Cat, thank you for the opportunity to quote Caterpillar machinery.

Sincerely,
Alex Egelhoff
Territory Manager
Cell: 262-422-4586
alex.egelhoff@fabickcat.com

Milwaukee
11200 West Silver Spring Rd.
Milwaukee, WI 53225-3118
414/461-9100 Tel
414/461-8899 Fax

Power Systems
11200 West Silver Spring Rd.
Milwaukee, WI 53225-3118
414/461-9100 Tel
414/615-2101 Fax

Madison
1111 Applegate Rd.
PO Box 259040
Madison WI 53725-9040
608/271-6200 Tel
608/271-1410 Fax

Eau Claire
7860 Partridge Rd.
PO Box 1088
Eau Claire, WI 54702-1088
715/874-5100 Tel
715/874-5182 Fax

Power Systems
7877 Partridge Rd. (Cty EE)
PO Box 1088
Eau Claire, WI 54702-1088
715/874-5100 Tel
715/874-5151 Fax

LaCrosse
1620 Carol Court
La Crosse, WI 54601-3056
608/783-4891 Tel
608/781-3222 fax

Superior
111 Moccasin Mike Rd.
Superior, WI 54880-4358
715/398-9696 Tel
715/398-9695 Fax

Green Bay
600 Hansen Rd.
PO Box 19976
Green Bay, WI 54307-9176
920/498-8000 Tel
920/499-4844 Fax

Power Systems
2700 South Broadway
PO Box 19976
Green Bay, WI 54307-9176
920/498-8000 Tel
920/499-0890 Fax

Wausau
9601 Christie Ln.
PO Box 350
Schofield, WI 54476-0350
715/359-6220 Tel
715/359-5550 Fax

Marquette
US Highway 41 West
PO Box 638
Marquette, MI 49855-0638
906/475-4191 Tel
906/475-4054 Fax



AGENDA SUMMARY SHEET

MEETING DATE: November 9, 2022

TITLE: 2023 Grapple bucket

AGENDA SECTION: Consideration/Action

PRESENTER: Jeff Daane

DEPARTMENT GOAL(S) SUPPORTED <i>(if applicable)</i>	FISCAL IMPACT	
	\$24,615	

ISSUE SUMMARY

The City staff currently use pallet forks with clams on to load brush from the bins and after storm damage. Staff then have to change to a standard bucket to load leaves and smaller brush that has fallen through the wide pallet fork opening.

This bucket will help with this process and allow staff to clean up more efficiently after weather events. This will be purchased through Sourcewell government cooperative purchasing program.

STAFF RECOMMENDATION:

ATTACHMENTS:

Purchase agreement

RECOMMENDED MOTION:

1. Approve the order of the Grapple bucket after final budget approval by City council November 9th.



JOHN DEERE

Customer Purchase Agreement/Commitment to Lease for John Deere Construction, Utility and Forestry Products and Compact Construction Equipment - US ("Purchase Agreement")

PURCHASER/LESSEE ("PURCHASER") NAME AND ADDRESS ("First Signer")

NAME (First, Middle, Last or Business Entity)
CITY OF WAUPUN
STREET or RR
██████████ 201 E. Main St.
CITY WAUPUN STATE WI ZIP CODE 53963 COUNTY
PHONE NUMBER EMAIL ADDRESS

PURCHASER/LESSEE (ALSO "PURCHASER") NAME AND ADDRESS ("Second Signer")

NAME (First, Middle, Last)
STREET or RR
CITY STATE ZIP CODE COUNTY
PHONE NUMBER EMAIL ADDRESS

DEALER NAME AND ADDRESS

DEALER NAME Dealer Account No.:
STREET or RR
CITY STATE ZIP CODE Date of Order
DEALER ORDER NO. TRANSACTION TYPE:
PURCHASER TYPE MARKET USE CODE
Add purchaser to Mailing List (Check One or More)
 Construction CCE Utility Forestry Government
PURCHASER IS: Purchaser Acct.:
 Business Individual
 SOCIAL SECURITY IRS TAX ID NO EIN
NO.:

EXTENDED WARRANTY PURCHASED: Yes No (Purchaser Initials) LOCATION OF FIRST WORKING USE: STATE COUNTY CODE
County City

JOHN DEERE PROTECT™ SERVICE PLAN PURCHASED Yes No (Purchaser Initials)

QTY	NEW	DEMO	RENT	USED	EQUIPMENT (Model, Size, Description)	Hours of Use	PIN or Serial Number	Delivered Cash Price	
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GEM GRAPPLE BUCKET CUTOUT SIDES			\$23,415.00	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	W/CAT FUSION COUPLER				
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FREIGHT			\$1,200.00	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SORCEWELL PRICING				
								(1) TOTAL CASH PRICE	\$24,615.00

QTY	TRADE-IN (Model, Size, Description)	Hours of Use	PIN OR SERIAL NUMBER	AMOUNT
				(2) TOTAL TRADE-IN ALLOWANCE
				(3) BALANCE (1-2) \$24,615.00
				(4) SALES TAX RATE % \$0.00
				(5) ADDITIONAL FEES
				(6) SUBTOTAL (3 & 4 & 5) \$24,615.00
				(7) RENTAL APPLIED
				(8) CASH WITH ORDER
				(9) BALANCE DUE (6-(7 & 8)) \$24,615.00

ACKNOWLEDGMENTS: Purchaser offers to sell, transfer, and convey the item(s) listed as "Trade In" to the Dealer at or prior to the time of delivery of the above product(s); as a "trade in" to be applied against the cash price. Purchaser represents that each "trade-in" item shall be free and clear of all security interests, liens, and encumbrances at the time of transfer to the Dealer except to the extent shown below. The price to be allowed for each "trade in" item is listed on this document. The Purchaser promises to pay or otherwise satisfy the Balance Due (line 9) shown hereon in cash, or to execute a Retail Installment Contract, Rental Purchase Option Contract, Lease Agreement or other security agreement for the Balance Due for the Equipment, plus additional charges shown hereon, on or before delivery of the Equipment ordered hereon. Despite delivery of the Equipment to the Purchaser, title to the Equipment shall not pass to the Purchaser until the Balance Due is paid or is otherwise satisfied in full for Equipment purchases. For Equipment leases and rentals, title to the Equipment shall not pass to the Purchaser. The Purchaser and the Dealer agree that this Purchase Agreement is not a security agreement and that delivery of the Equipment to the Purchaser pursuant to this Purchase Agreement will not constitute possession of the Equipment by the Purchaser as a debtor, for the purposes of the purchase money security provisions in any statutes relating to personal property security or its equivalent. Purchaser understands that its rights in connection with this transaction are limited as set forth in this Purchase Agreement.

The Purchaser(s) and the Dealer acknowledge that while this document is defined herein as a "Purchase Agreement" it serves as both a purchase agreement for the Equipment and/or a commitment to lease the Equipment. In addition, the defined term "Purchaser" extends to and includes both a purchaser of the Equipment and/or a lessee of the Equipment. Furthermore, this Purchase Agreement is deemed to constitute a "Purchase Order" or a "Customer Purchase Order for John Deere Construction, Utility and Forestry Products and Compact Construction Equipment" for the purposes of any other John Deere documents, including without limitation, any dealer terms schedules.



AGENDA SUMMARY SHEET

MEETING DATE: November 9, 2022

TITLE: Temporary easement from the dead end of Summer Ave. extending East for approximately 450'

AGENDA SECTION: Consideration/Action

PRESENTER: Jeff Daane

DEPARMTENT GOAL(S) SUPPORTED <i>(if applicable)</i>	FISCAL IMPACT
	Estimate \$1,000 for easement plus project cost to be determined

ISSUE SUMMARY

The City has been able to engage the Owner of the farm field that has water draining into the City. The property owner has agreed to allow City to acquire a temporary easement that would sunset when a development would happen to the north. At that time a full storm water review would need to be done by the developer and any storm water issues would need to be addressed.

The City has a current plan that could help with some of the storm water runoff issues at this location. This easement would allow us to do a portion of the work in the worst area.

The City currently has an 18" storm pipe that dead ends on Summer Ave. We would extend this and add a Manhole along with an endwall. We would then add a drainage swale to try and catch a good portion of the water flow during heavy rain events.

Estimated cost of the easement work is \$1,000. There will need to be some engineering staking needed and city staff will do the work. We are going to try and use a manhole we have in the yard to help keep overall project cost down.

STAFF RECCOMENDATION:

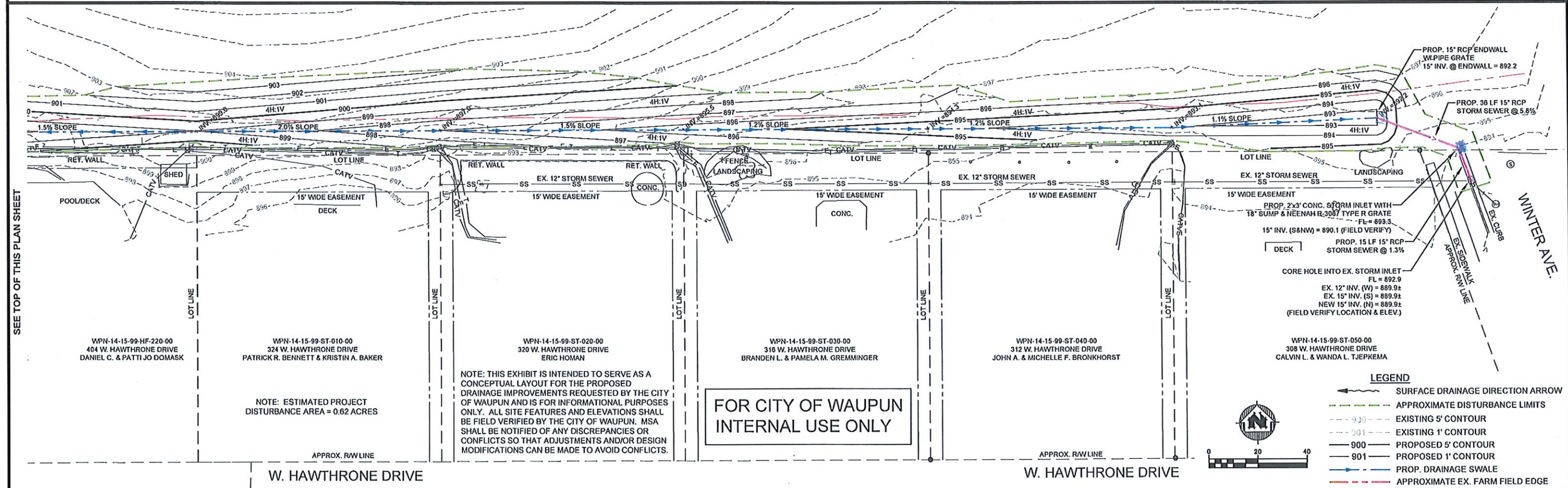
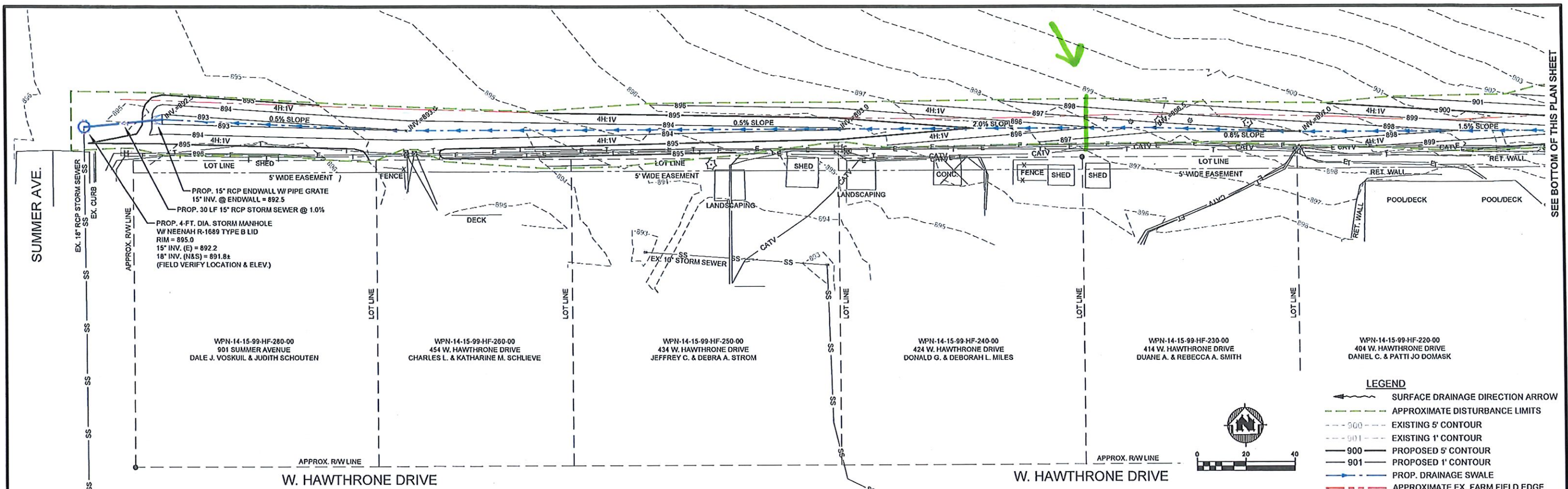
Approve the acquisition of a temporary easement to control water runoff into the City

ATTACHMENTS:

Map of proposed work
Storm Sewer Capacity-Area North of Hawthorne Drive

RECCOMENDED MOTION:

1. Approve the City to work with MSA on a temporary easement for storm water swale work.



NOTE: THIS EXHIBIT IS INTENDED TO SERVE AS A CONCEPTUAL LAYOUT FOR THE PROPOSED DRAINAGE IMPROVEMENTS REQUESTED BY THE CITY OF WAUPUN AND IS FOR INFORMATIONAL PURPOSES ONLY. ALL SITE FEATURES AND ELEVATIONS SHALL BE FIELD VERIFIED BY THE CITY OF WAUPUN. MSA SHALL BE NOTIFIED OF ANY DISCREPANCIES OR CONFLICTS SO THAT ADJUSTMENTS AND/OR DESIGN MODIFICATIONS CAN BE MADE TO AVOID CONFLICTS.

FOR CITY OF WAUPUN
INTERNAL USE ONLY

PRELIMINARY

PROJECT NO.	SCALE	AS SHOWN	NO.	DATE	REVISION	BY
00212056	AS SHOWN					
PROJECT DATE	DRAWN BY:	JL				
F.B.:	CHECKED BY:	ML				

MSA
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
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201 Corporate Drive Beaver Dam, WI 53916
(920) 887-4242 (800) 552-6330
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W. HAWTHORNE DRIVE DRAINAGE IMPROVEMENTS
CITY OF WAUPUN, FOND DU LAC COUNTY, WISCONSIN

GRADING PLAN

FILE NO.	00212056
SHEET	1



PROFESSIONAL SERVICES

More ideas. Better solutions.®

MEMO

To: Dick Flynn, Director of Public Works, City of Waupun
From: Uriah Monday, PE, CFM, MSA Professional Services
Subject: Storm Sewer Capacity – Area North of Hawthorne Drive
Date: October 22, 2015

This memorandum documents the findings of a study of the drainage area tributary to the trunk storm sewer flowing down Autumn Avenue. The 50.2-acre study area is generally bounded by Hawthorne Drive on the north, Winter Avenue on the east, Summer Avenue on the west, and Bittersweet Lane on the south. The storm sewer system also collects runoff from agricultural lands behind the residential lots on the north side of Hawthorne Drive. A map of the area entitled “Storm System Overview” is attached to this memo which demonstrates the extents of the watershed boundary. It can be seen that while much of the agricultural area is able to drain either along side lot lines or is directed toward dead-end streets at Winter Avenue and Summer Avenue, some of the runoff area (about 2.2 acres) is directed to a low area behind 434 West Hawthorne Drive. At this location, there are two small drains that capture runoff; however, some flooding has been reported during heavy rains.

A hydrologic analysis to determine flow rates and runoff volumes from this watershed to each of the storm sewer segments was conducted using HydroCAD software. Additionally, a determination of the storm sewer system capacity from the location behind 434 West Hawthorne, within Hawthorne Drive itself, and down Autumn Avenue was included in the analysis. The analysis determined that system has 10-year capacity within most of Autumn Avenue and within all of Hawthorne Avenue including the inlets behind 434 Hawthorne, and 5-year capacity from Edgewood Drive down to the system outlet.

These findings indicate that the flooding at 434 Hawthorne is likely not the result of pipe backups; rather, it is more likely a case of insufficient inlet capacity. The inlet appears to consist of a grate set in the “bell” end of an upturned 18” storm sewer pipe, with a rim elevation of 892.5. Calculations based on a similar Neenah Foundry inlet grate (Type R-4370-5) determined that:

- Ponding depth over the grate is approximately 1.5-inches for a 1-year storm event
- Ponding depth over the grate is approximately 4-inches for a 10-year storm event
- During a 100-year storm event or during frozen ground conditions, ponding depth over the grate would need to reach a foot or more (in this case, before ponding became this deep, runoff would flood the backyard and run between homes out to the street)

It is noted that a low area exists in the farm field northwesterly of the reported problem location. While the ground in this area appears to be lower than the backyard at the location of the drain, the outlet/overflow point from the low area is not well defined or readily apparent. It is possible that

Offices in Illinois, Iowa, Minnesota, and Wisconsin

2901 International Lane, Suite 300, Madison, WI 53704-3133

(608) 242-7779 (800) 446-0679

FAX: (608) 242-5664 WEB ADDRESS: www.msa-ps.com

Page 1 of 2 00212079 Hawthorne Dr Storm Sewer Commentary Memo to Dick Flynn 102215.docx

MEMO

October 22, 2015

overflow from this area may contribute to the backyard location during very heavy rains or snowmelt conditions.







The second attached map entitled "Storm System Problem Location" shows the area in more detail, and outlines both a short-term solution and a long-term solution as follows:

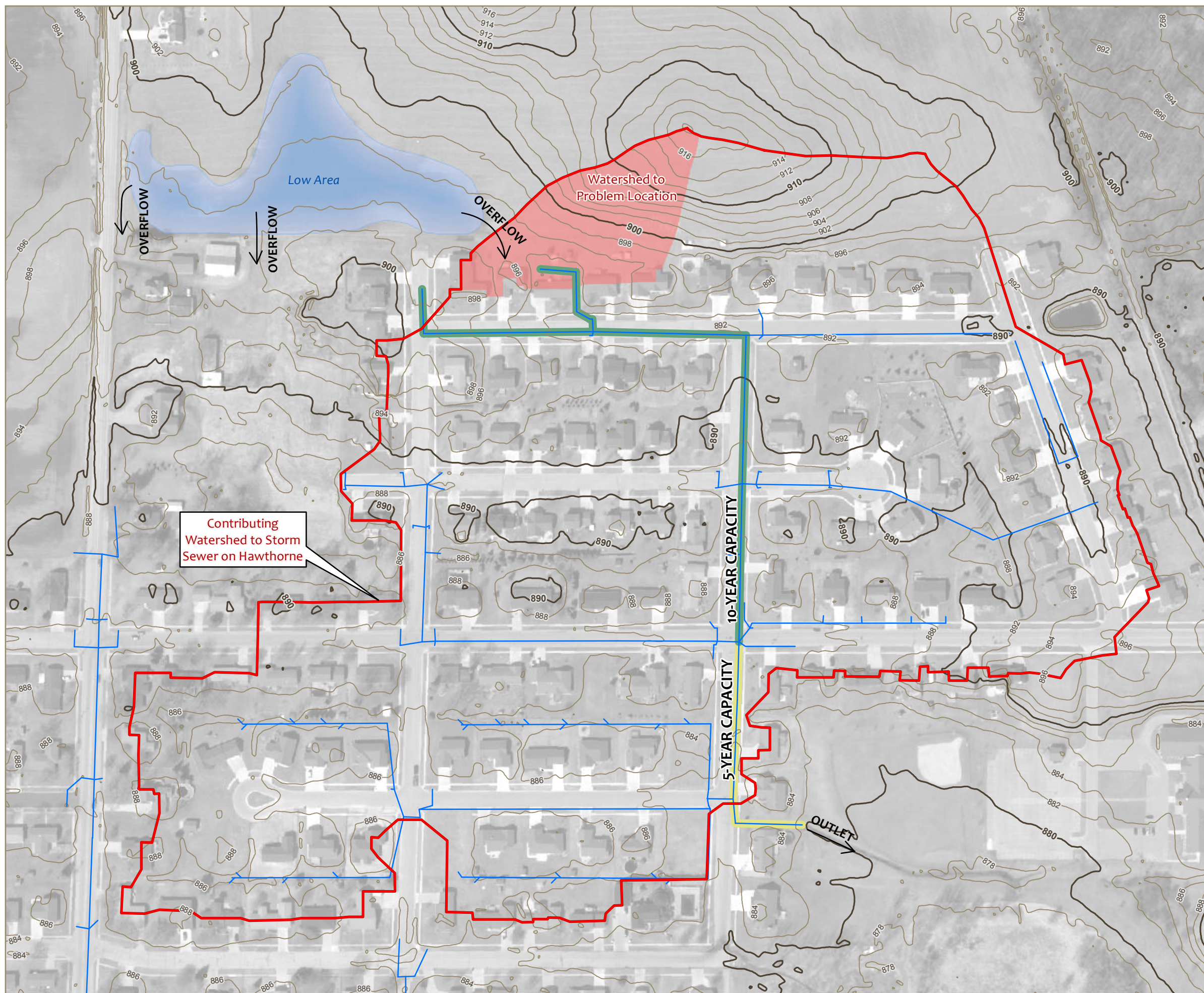
- The short-term solution would be to eliminate the need for water to pond over a grate, by extending the pipe toward the field line and allowing water to enter the open end of the pipe (similar to a culvert). If the invert of the pipe was set to elevation 891.0, with a low area excavated along with grading to redirect flow to its location, a 10-year runoff event would be limited to an elevation of approximately 892. This elevation is half a foot lower than the existing grate elevation, and is at least a foot lower than the ground elevation at the home. A precise cost estimate has not been determined here, due to some uncertainty with regard to pipe length, grading extents, etc.; however it is likely that the required effort could be conducted by City crews or a privately-hired general contractor for less than \$10,000.
- The long-term (future) solution would be triggered if/when the land to the north is developed. As a condition of development, the development grading plan could be required to construct a ditch or swale parallel with the rear lot line that would convey runoff toward the end of Summer Avenue which could then be directed into an extension of the sewer on Summer Avenue. A precise cost estimate has not been determined as costs would be borne by any party developing the property.

STORM SYSTEM OVERVIEW

HAWTHORNE AVENUE SYSTEM

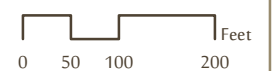
LEGEND

-  Contributing Watershed to Storm Sewer on Hawthorne 50.2 acres
-  Watershed to Problem Location 2.2 acres
-  Low Area
-  Existing Storm Lines
- Trunk Line Capacity
 -  10-year
 -  5-year



DATA SOURCES:
EXISTING STORM SEWER PROVIDED BY THE CITY.
CONTOURS PROVIDED BY THE COUNTY.








CITY OF WAUPUN
FOND DU LAC COUNTY, WI

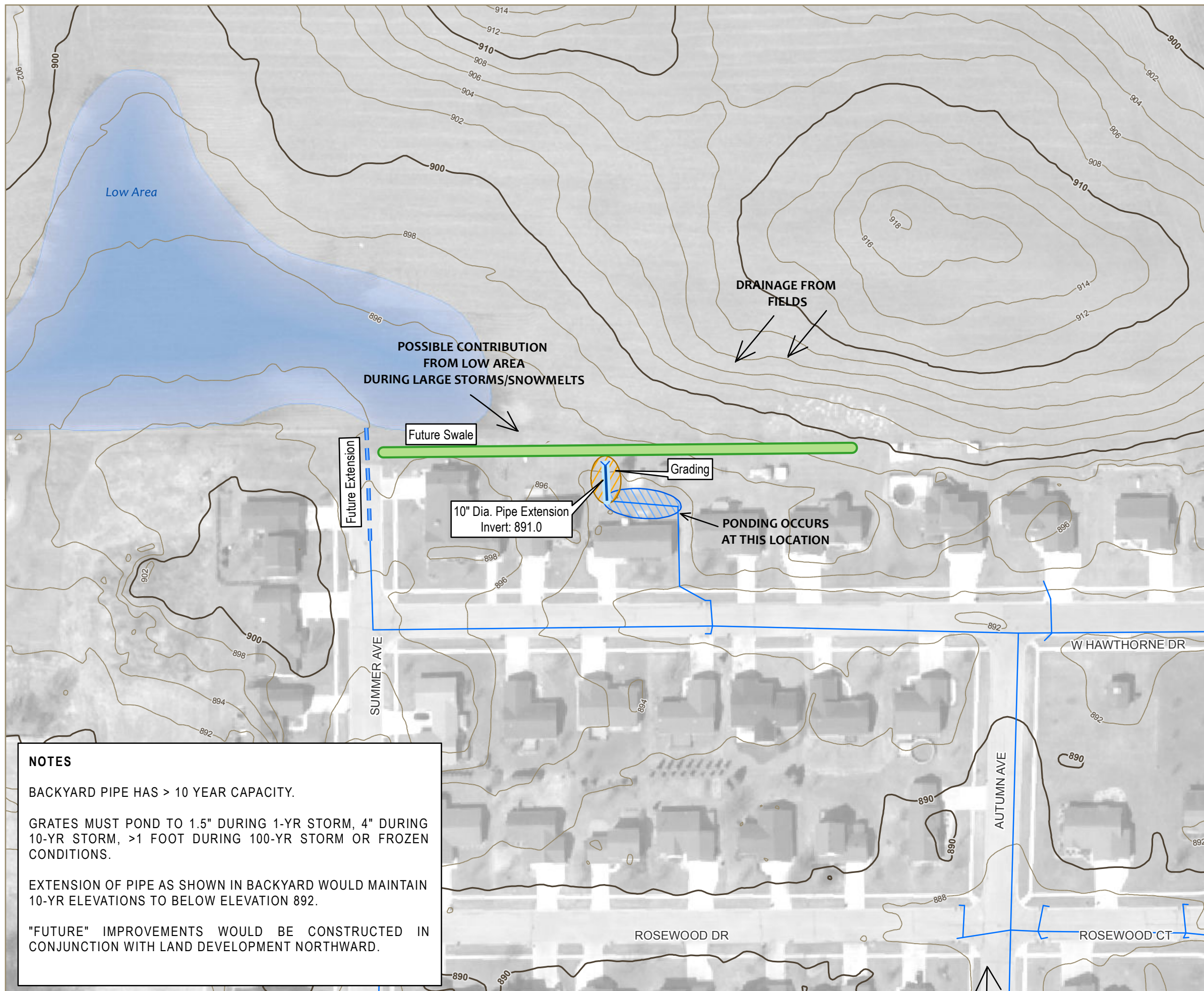


STORM SYSTEM PROBLEM LOCATION

HAWTHORNE AVENUE SYSTEM

LEGEND

-  Low Area
-  Ponding Location
-  Existing Storm Lines
-  Future Extension
-  Future Swale
-  Pipe Extension
-  Proposed Grading Location



NOTES

BACKYARD PIPE HAS > 10 YEAR CAPACITY.

GRATES MUST POND TO 1.5" DURING 1-YR STORM, 4" DURING 10-YR STORM, >1 FOOT DURING 100-YR STORM OR FROZEN CONDITIONS.

EXTENSION OF PIPE AS SHOWN IN BACKYARD WOULD MAINTAIN 10-YR ELEVATIONS TO BELOW ELEVATION 892.

"FUTURE" IMPROVEMENTS WOULD BE CONSTRUCTED IN CONJUNCTION WITH LAND DEVELOPMENT NORTHWARD.

DATA SOURCES:
EXISTING STORM SEWER PROVIDED BY THE CITY.
CONTOURS PROVIDED BY THE COUNTY.

CITY OF WAUPUN
FOND DU LAC COUNTY, WI

