VILLAGE OF MCFARLAND *NOTICE OF PUBLIC MEETING*

Public Utilities Committee

Tuesday, December 8, 2020 **6:00 PM** **McFarland Municipal Center**
Community Room

AGENDA

You are invited to this meeting through a Zoom webinar. The Public is strongly encouraged to watch and participate in these meetings remotely through either the webinar or telephone options listed below.

PLEASE CLICK THE LINK BELOW TO JOIN THE ZOOM WEBINAR:
https://us02web.zoom.us/j/83020440893
Or by Telephone: +1 (312) 626-6799
Webinar ID: 830 2044 0893

1. CALL TO ORDER, ROLL CALL.

2. PUBLIC APPEARANCES.

3. APPROVAL OF MINUTES.
   a. Discussion and action regarding the minutes from the Public Utilities meeting held on November 17, 2020.

4. BUSINESS.
   a. Discussion and action to make a recommendation to the Village Board regarding the award of contract for the 2021 Eastside Sanitary Sewer Interceptor project.

   b. Discussion and action to make a recommendation to the Village Board regarding a contribution to a wetland mitigation bank authorized by the Wisconsin Department of Natural Resources for the Eastside Interceptor Sanitary Sewer Project.

   c. Discussion regarding special assessment methodology regarding the 2021 Eastside Sanitary Sewer Interceptor project.

   d. Discussion and action to make a recommendation to the Village Board regarding Ordinance #2020-24: an ordinance creating Section 47-246 of the McFarland Municipal Code establishing an alternative special assessment process for storm or sewer interceptor construction.

   e. Discussion and action to make a recommendation to the Village Board to consider a proposal to conduct maintenance at Well #3.

   f. Presentation of the Public Works Monthly Report.

5. SCHEDULE NEXT MEETING DATE.

a. Tuesday January 19, 2021 at 6:00 p.m.

6. ADJOURNMENT.

This meeting notice constitutes an official meeting of the above referenced group and was posted in accordance with all applicable laws related to Open Meetings Law. It is possible that members of and possibly a quorum of members of other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals. For additional information or to request this service, contact the McFarland Municipal Center at (608) 838-3153 or cassandra.suettinger@mcfarland.wi.us.

VILLAGE OF MCFARLAND

Public Utilities Committee Minutes

Tuesday November 17, 2020 – 6:00 P.M.

1. CALL TO ORDER, ROLL CALL

   The meeting was called to order by Village Trustee and Chairperson Eric Kryzenske at 6:00 p.m.

   Members present: Village Trustee Carolyn Clow, Chris Fredrick, Marc Nielsen, Mary Pat Lytle, Pauline Boness, Chris Reynolds

   Staff present: Jim Hessling (Director of Public Works), Aimee Irwin (Assistant to the Director), Lee Igl (Streets & Utilities Superintendent), Andrew Bremer (Community & Economic Development Director)

2. PUBLIC APPEARANCES

   None.

3. APPROVAL OF MINUTES
   a. Discussion and action regarding the minutes from the Public Utilities Committee held on October 20, 2020.
      - Motion by Eric Kryzenske to approve the minutes as presented. Seconded by Pauline Boness. Motion passed 7-0-0

4. BUSINESS
   a. Discussion and possible action to make a recommendation to the Village Board regarding Ordinance 2020-22, An Ordinance Amending Various Sections of the McFarland Municipal Code Including Chapter 47 Public Utilities, Chapter 56 Subdivisions, and Chapter 62 Zoning Relating to the Provisions of Storm and Sanitary Sewer Service.
      - Andrew Bremer reviewed the updated policy from previously presented at the October meeting. Revisions were regarding authorization of the use of private septic and well systems within the Village. Bremer stated that the exceptions within the ordinance are not being changed but wording is being added for cross referencing within other sections.
      - Committee members discussed the proposed policy. Chris Fredrick mentioned to members that there could be issues in the future with any new residences to the east of the Village given the 12 month timeframe to connect to Village utilities.
      - Motion by Pauline Boness to recommend to the Village Board approval of Ordinance 2020-22, An Ordinance Amending Various Sections of the McFarland Municipal Code. Seconded by Mary Pat Lytle. Motion passed 7-0-0.

b. Presentation and discussion regarding current meter reading process and future options.

- Aimee Irwin provided a brief summary including that the current meter reading process needs to be reviewed due to equipment becoming obsolete and for increased functionality of the meter reading software. Irwin also stated that over half of the ERTs currently in the system are 50W. These ERTs continue to fail causing the need for visual reads or meter replacements. Staff provided information to the committee seeking direction for the future of meter reading along with how to handle the 50W ERT failure. Steve Dauster of Midwest Meter reviewed the provided PowerPoint presentation. The presentation reviewed the current software and equipment and various options for the future meter reading for the utility. Madi Hawkinson of Midwest Meter provided a sample view of the Beacon software which is one of the options for future meter reading. The Orion Reading software is hosted on Google Chrome which allows data to download once reconnected to Wi-Fi. The Beacon software is a cloud based software which allows for access anywhere.
- Pauline Boness asked how the utility would transition away from mobile drive-by reading. Steve Dauster recommends that the utility would move towards a hybrid option to keep the mobile reads in the system but move the other half to the new equipment to allow for the possibility of a fixed reading system in the future. Carolyn Clow asked if the utility would need to utilize two software programs at the same time during the transition. Dauster stated that once the future direction is chosen, the utility would only have one software. Chris Reynolds asked what the lifespan the Beacon software has. Dauster responded as the software is cloud based it can be updated routinely but there would be an ongoing subscription fee. Marc Nielsen asked what the estimated subscription cost would be per month. Dauster responded that the subscription fee is about $5,000 per year. Carolyn Clow asked if pricing could be provided to the committee in full details with the future options that are available for the utility. Dauster stated this information could be compiled. Erik Kryzenske asked what staff's plan is regarding the 50W ERTs. Jim Hessling explained that given the pandemic, staff are replacing the ERTs as they fail if the resident is willing to allow staff in for replacement along with screening the residents.
- Chris Fredrick asked if there are other vendors available for meter reading and equipment. Jim Hessling responded that yes other vendors are out there and staff provided information from Midwest Meter given history with the Village. Fredrick recommended staff gather information about possible alternative vendors. Fredrick and Mary Pat Lytle recommend the top of the line option has a cost benefit analysis including staff hours and equipment costs. Carolyn Clow asked if staff had a replacement schedule

in mind. Jim Hessling responded that a schedule has not been concretely developed and there are companies that will come in and complete the change out process if necessary.

c. Discussion and action to make a recommendation to the Village Board regarding the conventional rate case for test year 2021 for submission to the Public Service Commission.
    - This item was conducted out of order and completed first under business.
    - Jodi Dobson with Baker Tilly stated that the handout included with the packet is the same handout provided at the October meeting suggesting a 36% increase. Also included with the packet is the complete rate case file that would be filed with the Public Service Commission (PSC).
    - Carolyn Clow asked what the next steps would be for the rate case. Jodi Dobson stated that if the committee recommends approval then the Village Board would review and approve if applicable. After approval the rate case would be filed with PSC which will review the rate case, likely seek additional data or ask questions about the information presented. The PSC then will recommend any changes they see necessary. Dobson stated that the PSC review process would likely last six months.
    - Marc Nielsen asked how the current rates will be increased with the overall rate increase suggested of 36%. Jodi Dobson stated that the 36% is the overall recommended increase and the PSC will recommend how each rate area would increase (base and usage) based on their findings. Marc Nielsen also commented that it was the wish of the committee to absorb credit card charges within the rates structure. Jodi Dobson stated that the rate file could be adjusted with additional information regarding current customers utilizing this payment method and likely the PSC will use comparison data from similar sized municipalities for their recommendations.
    - Motion by Eric Kryzenske recommending approval of the conventional rate case for test year 2021 to the Village Board on the condition that the application is updated to include the credit card charges within the rate structure. Seconded by Carolyn Clow. Motion passes 7-0-0.

d. Presentation on recent sewer cleaning conducted by Green Bay Pipe & TV.
    - Lee Igl provided a summary of the sewer cleaning that was recently completed for approximately one-third of the Village. Igl also presented a short video example of the sewer televising that was conducted.
    - Mary Pat Lytle asked if the concerns found in the provided video leads to increased transport and cost to MMSD. Igl responded that yes these deficiencies cause increased transport. Pauline Boness asked what could have caused the pipe separation that was shown. Igl stated that several items may have caused the separation such as freeze and thaw or poor road conditions at onset of construction. Marc Nielsen asked if we could

accelerate the completion of the remaining part of the Village. Igl stated the plan is to begin the next portion early in 2021.

e. Discussion and possible action to make a recommendation to the Village Board regarding a sewer repair on Highland Drive.
    - Jim Hessling provided background regarding a possible sewer repair on Highland Drive. This concern was found during Green Bay Pipe and TV's recent sewer cleaning and televising. It is estimated to cost between $20,000 to $30,000. Lee Igl reviewed the video of the pipe on Highland Drive.
    - Chris Reynolds asked how often the utility is completing repairs such as the one under consideration. Jim Hessling stated this is the first known correction action that could be taken that he is aware of. Pauline Boness asked Berquist if it would be more advantageous to replace the pipe over lining and if tree roots could damage the lining. Berquist stated that the lining is structurally sound on its own and provides good protection against roots. Chris Fredrick asked if any upsizing will be occurring in the near future for this pipe. Berquist responded that this area is set with the only upsizing occurring on Exchange Street. Berquist also added that the lining as a 25 year lifespan and a is a cost effective approach to the concern. Carolyn Clow asked about the estimated cost for the lining. Igl responded that staff are gathering final cost estimates but overall estimate is $20,000 to $30,000 with the work being completed in one day. Berquist added that if the Village was to replace the road and pipe that this would be an estimated cost of $100,000. Chris Fredrick asked if completing the lining in this area would damage other areas of the system downstream. Berquist responded that the other portions of the system appear to be in good shape and he would not anticipate additional required changes in the near future.
    - Motion by Chris Fredrick to recommend to the Village Board the lining of the pipe on Highland Drive. Seconded by Pauline Boness. Motion was amended by Chris Fredrick for the lining not to exceed $30,000. Pauline Boness agreed to this amendment. Motion passed 7-0-0.

f. Presentation of the Public Works Monthly Report from the Director.
    - Jim Hessling provided an update on public works activities in the Village for the month of October 2020.

5. SCHEDULE NEXT MEETING DATE
    a. Tuesday December 8, 2020.
6. ADJOURNMENT
    a. Motion to adjourn by Mary Pat Lytle at 7:48 p.m. Seconded by Chris Fredrick. Motion passed 7-0-0.

Introduction provided by committee member Christopher Reynolds via email received 11/19/2020:

“I have been a public servant for the 40 years of my professional career. I can't help myself , I have to be involved in a level of government in some way. Considering the current dysfunction of the federal and state governments, why not local government where decisions directly affect people's lives. I have been fully retired for about two years, and lived in McFarland for the past four years. As a volunteer committee member I hope I can contribute in some way. Thanks for this opportunity, to help advise the village on important infrastructure issues.”

Respectfully submitted by Aimee Irwin

VILLAGE OF
McFarland

VILLAGE BOARD SUMMARY SHEET

MEETING DATE: **Tuesday, December 8, 2020**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT:

AGENDA ITEM: **Discussion and action to make a recommendation to the Village Board regarding the award of contract for the 2021 Eastside Sanitary Sewer Interceptor project.**

PREVIOUS ACTION:
The Public Utilities Committee approved the Eastside Sanitary Sewer Project final design plans and authorized the project for bid on September 15, 2020.

ISSUE SUMMARY:
The Eastside Sanitary Sewer Interceptor Project will enable the Village to handle future developments in areas such as undeveloped property south of County Highway MN, west of County Highway AB, and north of Elvehjem Road. The sewer pipe allows wastewater to flow from smaller sewer pipes and will direct it to a lift station or wastewater treatment plant. The project plans were approved and authorized for bid by the committee during September's meeting.

Town & Country Engineering received 34 requested sets of plans, specifications and bidding documents from general contractors, subcontractors and material suppliers. Of the bids received, the low bidder is BKS Excavating, Inc. Bid results were reviewed by Town & Country and their recommendation would be to award contract to BKS Excavating, Inc.

FINANCIAL/BUDGET IMPACT:
Total project costs are outlined as follows:

- $300,115 Base Bid (Interceptor)
- $228,538 Base Bid (Paved Path) – Costs are to be split between Fund 400 (Capital Projects) and 605 (Utilities).
- $20,400 Supplemental
- $25,000 Railroad Crossing
- $25,725 Wetland Mitigation
- $62,000 Design Engineering
- $41,000 Bidding and Construction Administration

- $28,500 Inspection/Project Management
- $55,000 Contingency (~10%)
- $786,278 Total Expense

Total project costs are offset by the following project revenues:

- $62,000 Fund 605 (2020) - For Design Engineering this year.
- $676,000 Fund 605 (2021) - For interceptor and a 50% share in the paved path costs.
- $100,000 Fund 400 (2021) - For a 50% share in the paved path costs.
- $838,000 Total Revenue

The project as presented is thus far within approved budgetary parameters.

VILLAGE PLAN REFERENCE:
2018 McFarland East Basin Utility Service Study - Project as proposed here was studied and recommended as a result of this work.

ORDINANCE REFERENCE:
None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:
Recommendation to the Village Board should be to award contract to BKS Excavating, Inc. of Edgerton in an amount of $549,053 including the base bid and supplemental bid, and approving total project costs at $786,278 which includes a 10% contingency and remaining support expenses.

ATTACHMENTS:
1. Recommendation Ltr
2. MC 168 CURRENT SET

TOWN & COUNTRY ENGINEERING, INC.

December 3, 2020

Village of McFarland
5915 Milwaukee Street
McFarland, WI 53558

Attention: Mr. Matthew Schuenke, Village Administrator

Subject: Analysis of Bids and Recommendation for Award of Contracts; 2021 East Side Sewer Extension; Village of McFarland

Bid Deadline: December 3, 2020 at 10 a.m. local time

Ladies and Gentlemen:

The purpose of this letter is to analyze the bids received for the 2021 East Side Sewer Extension project and to recommend award of a contract. This project involves installation of new 12-inch interceptor sanitary sewer, recreational/maintenance asphalt path construction, 30-inch steel casing boring under the railroad and supplemental items for property corner replacement, excavation for and placement of trench stabilization stone, geotextile trench fabric, excavation and disposal of bad subbase below subgrade, and temporary timber access matting.

The pre-bid estimate for the base bid, including allowance, was $554,493.00. Thirty-four general contractors, subcontractors, and material suppliers requested sets of the plans, specifications and bidding documents. Eight contractors submitted bids.

A summary of the bids is as follows:

Contractor	Base Bid (Including Allowance)	Supplemental Bid Total
BKS Excavating, Inc.	$528,653.00	$20,400.00
Parisi Construction Co. Inc.	$633,864.00	$114,087.00
Advance Construction Inc.	$659,063.20	$57,064.00
G-Pro Excavating LLC	$701,088.50	$107,296.00
E & N Hughes Co. Inc.	$711,469.45	$50,131.00
Forest Landscaping & Construction, Inc	$837,691.50	$76,540.00
Maddrell Excavating, LLC	$854,860.25	$42,430.00
Woleske Construction Company	$860,204.00	$48,020.00

BKS Excavating had hand-written in an additional amount for the railroad insurance and flagging item, and Woleske Construction had mathematical errors. These items have been corrected as shown above and in the attached bid tabulation. These may be waived as minor informalities, and we so recommend.

The low bidder, using the base bid and supplemental bid is BKS Excavating, Inc. of Edgerton, Wisconsin. BKS Excavating, Inc. has worked for four years, but also existed prior to that time for decades as GMS Excavating. The name change was part of an effort to work as a non-union company, and personnel is largely the same. BKS/GMS is an experienced utility contractor that has completed a similar work for other nearby communities, including Deerfield and Jefferson. We have worked with them on multiple projects and found them capable of completing this type of project. While there have been issues with on-time completion, I have spoken directly with the owner today who assured me that this would be the only project they work on this winter. The schedule for this project is quite achievable, and the 2nd low bidder adds over $100,000 more in cost.

The bid prices are slightly lower than the original budget, and significantly lower than the other bidders. I have also reviewed the BKS bid with their owner to confirm they have not missed anything in their pricing. We recommend that BKS Excavating, Inc. be awarded a contract for the base bid, plus the supplemental bids for a total of $549,053.00.

This will be a unit price contract. That is, the contractor will be paid for the work actually performed on the basis on the unit prices bid. This means that the final line item costs could be either greater than or less than the bid totals. Also, unexpected conditions are sometimes encountered which result in increased project costs. Therefore, it would be wise to continue to carry the recommended 10% contingency.

If you have any questions with respect to our thoughts on this matter, I am available at your convenience to discuss them with you.

Very truly yours,
TOWN & COUNTRY ENGINEERING, INC.

Brian Berquist

Brian Berquist, P.E.
President

BRB:sai
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BID TABULATION

Project: 2021 East Side Sewer Extension; Village of McFarland

Engineer's Project Number: MC 168 Bid Deadline: December 3, 2020 at 10 a.m. local time

ITEM NO.	DESCRIPTION OF WORK	BID QUANT.	BID UNITS	PRE-BID ESTIMATE UNIT PRICE	PRE-BID ESTIMATE AMOUNT	BKS Excavating, Inc. UNIT PRICE	BKS Excavating, Inc. AMOUNT	Parisi Construction Co. Inc. UNIT PRICE	Parisi Construction Co. Inc. AMOUNT
BASE BID									
Utility Work									
1.	12" PVC SDR 35 Sanitary Sewer	2,028	lin. ft.	$ 90.00	$ 182,520.00	$ 96.00	$ 194,688.00	$ 120.00	$ 243,360.00
2.	8" PVC SDR 35 Sanitary Sewer	27	lin. ft.	$ 65.00	$ 1,755.00	$ 100.00	$ 2,700.00	$ 135.00	$ 3,645.00
3.	Boring and Installation of 30-Inch Steel Casing Pipe	1	lump sum	$ 75,000.00	$ 75,000.00	$ 73,000.00	$ 73,000.00	$ 75,000.00	$ 75,000.00
4.	48" Sanitary Manhole Masonry	64	vert. ft.	$ 350.00	$ 22,400.00	$ 350.00	$ 22,400.00	$ 400.00	$ 25,600.00
5.	Sanitary Manhole Castings	7	each	$ 800.00	$ 5,600.00	$ 450.00	$ 3,150.00	$ 750.00	$ 5,250.00
6.	External Manhole Chimney Seals	7	each	$ 500.00	$ 3,500.00	$ 450.00	$ 3,150.00	$ 500.00	$ 3,500.00
7.	24" RCP CL III Storm Sewer	32	lin. ft.	$ 75.00	$ 2,400.00	$ 54.00	$ 1,728.00	$ 100.00	$ 3,200.00
8.	12" RCP CL III Storm Sewer	44	lin. ft.	$ 65.00	$ 2,860.00	$ 40.00	$ 1,760.00	$ 55.00	$ 2,420.00
9.	6" D.I. CL 52 Storm Sewer	48	lin. ft.	$ 80.00	$ 3,840.00	$ 50.00	$ 2,400.00	$ 80.00	$ 3,840.00
10.	24" RCP Apron Endwalls	4	each	$ 1,800.00	$ 7,200.00	$ 1,200.00	$ 4,800.00	$ 2,100.00	$ 8,400.00
11.	12" RCP Apron Endwalls	6	each	$ 980.00	$ 5,880.00	$ 1,100.00	$ 6,600.00	$ 1,700.00	$ 10,200.00
12.	Relocate Existing Hydrant	1	lump sum	$ 5,500.00	$ 5,500.00	$ 3,000.00	$ 3,000.00	$ 4,500.00	$ 4,500.00
13.	Clay Check Dam	15	each	$ 500.00	$ 7,500.00	$ 300.00	$ 4,500.00	$ 300.00	$ 4,500.00
Street Work									
14.	Ditch Regrading	1	lump sum	$ 2,000.00	$ 2,000.00	$ 3,000.00	$ 3,000.00	$ 1,400.00	$ 1,400.00
15.	Clearing and Grubbing	1	lump sum	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 43,000.00	$ 43,000.00
16.	Excavation to Plan Subgrade	1	lump sum	$ 40,000.00	$ 40,000.00	$ 9,500.00	$ 9,500.00	$ 38,000.00	$ 38,000.00
17.	Truncated Dome Panels	60	sq. ft.	$ 15.00	$ 900.00	$ 50.00	$ 3,000.00	$ 45.00	$ 2,700.00
18.	12" Gravel Screenings Shoulder	4,523	lin. ft.	$ 2.00	$ 9,046.00	$ 3.00	$ 13,569.00	$ 3.00	$ 13,569.00
19.	5" Thick Concrete Sidewalk and Aprons	343	sq. ft.	$ 8.00	$ 2,744.00	$ 7.00	$ 2,401.00	$ 8.00	$ 2,744.00
20.	Remove and Replace 30" Concrete Curb & Gutter (< 50-foot sections)	40	lin. ft.	$ 40.00	$ 1,600.00	$ 70.00	$ 2,800.00	$ 50.00	$ 2,000.00
21.	3" Type 5 LT Asphalt Path (8 feet wide)	446	ton	$ 95.00	$ 42,370.00	$ 95.00	$ 42,370.00	$ 98.00	$ 43,708.00
~~22.~~	~~Construct At-Grade Path Crossing at Railroad~~								
23.	0.75" Crushed Aggregate Base Course	798	ton	$ 20.00	$ 15,960.00	$ 17.00	$ 13,566.00	$ 20.00	$ 15,960.00
24.	3" Breaker Run	1,178	ton	$ 15.00	$ 17,670.00	$ 17.00	$ 20,026.00	$ 20.00	$ 23,560.00
25.	Permanent Pavement Markings	1	lump sum	$ 12,000.00	$ 12,000.00	$ 6,000.00	$ 6,000.00	$ 4,500.00	$ 4,500.00
26.	Permanent Signage	1	lump sum	$ 1,000.00	$ 1,000.00	$ 4,500.00	$ 4,500.00	$ 2,500.00	$ 2,500.00
27.	Sawcutting Existing Concrete and Asphalt Pavements	36	lin. ft.	$ 3.50	$ 126.00	$ 4.00	$ 144.00	$ 3.00	$ 108.00
28.	Wetland Seeding and Restoration	2,402	sq. yds.	$ 15.00	$ 36,030.00	$ 4.50	$ 10,809.00	$ 4.00	$ 9,608.00
29.	Topsoil Restoration, Seeding, Fertilizing & Mulching	3,273	sq. yds.	$ 4.00	$ 13,092.00	$ 4.00	$ 13,092.00	$ 4.00	$ 13,092.00
30.	Erosion Control	1	lump sum	$ 7,500.00	$ 7,500.00	$ 20,000.00	$ 20,000.00	$ 10,000.00	$ 10,000.00
31.	Traffic Control	1	lump sum	$ 1,500.00	$ 1,500.00	$ 15,000.00	$ 15,000.00	$ 4,000.00	$ 4,000.00
32.	Railroad Insurance and Flagging Allowance	1	lump sum	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00
	TOTAL BASE BID				$ 554,493.00		$ 528,653.00		$ 633,864.00

Project: 2021 East Side Sewer Extension; Village of McFarland
Engineer's Project Number: MC 168 Bid Deadline: December 3, 2020 at 10 a.m. local time

ITEM NO.	DESCRIPTION OF WORK	BID QUANT.	BID UNITS	PRE-BID ESTIMATE UNIT PRICE	PRE-BID ESTIMATE AMOUNT	BKS Excavating, Inc. UNIT PRICE	BKS Excavating, Inc. AMOUNT	Parisi Construction Co. Inc. UNIT PRICE	Parisi Construction Co. Inc. AMOUNT
SUPPLEMENTAL BID ITEMS									
S1.	Property Corner Replacement	1	each	$ 600.00	$ 600.00	$ 300.00	$ 300.00	$ 800.00	$ 800.00
S2.	Excavation for and Placement of Trench Stabilization Stone	222	cu. yd.	$ 25.00	$ 5,550.00	$ 20.00	$ 4,440.00	$ 105.00	$ 23,310.00
S3.	Geotextile Trench Fabric	1,000	lin. ft.	$ 10.00	$ 10,000.00	$ 1.00	$ 1,000.00	$ 21.00	$ 21,000.00
S4.	Excavation and Disposal of Bad Subbase Below Subgrade	370	cu. yd.	$ 20.00	$ 7,400.00	$ 18.00	$ 6,660.00	$ 22.10	$ 8,177.00
S5.	Temporary Timber Access Matting	1,000	lin. ft.	$ 45.00	$ 45,000.00	$ 8.00	$ 8,000.00	$ 60.80	$ 60,800.00
	TOTAL OF SUPPLEMENTAL BID				$ 68,550.00		$ 20,400.00		$ 114,087.00

Project: 2021 East Side Sewer Extension; Village of McFarland
Engineer's Project Number: MC 168 Bid Deadline: December 3, 2020 at 10 a.m. local time

ITEM NO.	DESCRIPTION OF WORK	BID QUANT.	UNITS	Advance Construction Inc. UNIT PRICE	Advance Construction Inc. AMOUNT	G-Pro Excavating LLC UNIT PRICE	G-Pro Excavating LLC AMOUNT	E & N Hughes Co. Inc. UNIT PRICE	E & N Hughes Co. Inc. AMOUNT
BASE BID									
Utility Work									
1.	12" PVC SDR 35 Sanitary Sewer	2,028	lin. ft.	$ 100.00	$ 202,800.00	$ 157.00	$ 318,396.00	$ 139.90	$ 283,717.20
2.	8" PVC SDR 35 Sanitary Sewer	27	lin. ft.	$ 120.00	$ 3,240.00	$ 202.00	$ 5,454.00	$ 116.00	$ 3,132.00
3.	Boring and Installation of 30-Inch Steel Casing Pipe	1	lump sum	$ 139,750.00	$ 139,750.00	$ 82,200.00	$ 82,200.00	$ 78,169.00	$ 78,169.00
4.	48" Sanitary Manhole Masonry	64	vert. ft.	$ 334.00	$ 21,376.00	$ 574.00	$ 36,736.00	$ 541.00	$ 34,624.00
5.	Sanitary Manhole Castings	7	each	$ 392.00	$ 2,744.00	$ 525.00	$ 3,675.00	$ 826.00	$ 5,782.00
6.	External Manhole Chimney Seals	7	each	$ 300.00	$ 2,100.00	$ 350.00	$ 2,450.00	$ 435.00	$ 3,045.00
7.	24" RCP CL III Storm Sewer	32	lin. ft.	$ 90.00	$ 2,880.00	$ 65.00	$ 2,080.00	$ 114.00	$ 3,648.00
8.	12" RCP CL III Storm Sewer	44	lin. ft.	$ 85.00	$ 3,740.00	$ 50.00	$ 2,200.00	$ 91.00	$ 4,004.00
9.	6" D.I. CL 52 Storm Sewer	48	lin. ft.	$ 92.00	$ 4,416.00	$ 85.00	$ 4,080.00	$ 99.00	$ 4,752.00
10.	24" RCP Apron Endwalls	4	each	$ 930.00	$ 3,720.00	$ 740.00	$ 2,960.00	$ 1,145.00	$ 4,580.00
11.	12" RCP Apron Endwalls	6	each	$ 682.00	$ 4,092.00	$ 550.00	$ 3,300.00	$ 998.00	$ 5,988.00
12.	Relocate Existing Hydrant	1	lump sum	$ 3,000.00	$ 3,000.00	$ 3,200.00	$ 3,200.00	$ 3,220.00	$ 3,220.00
13.	Clay Check Dam	15	each	$ 240.00	$ 3,600.00	$ 250.00	$ 3,750.00	$ 430.00	$ 6,450.00
Street Work									
14.	Ditch Regrading	1	lump sum	$ 22,000.00	$ 22,000.00	$ 10,000.00	$ 10,000.00	$ 4,168.00	$ 4,168.00
15.	Clearing and Grubbing	1	lump sum	$ 25,000.00	$ 25,000.00	$ 19,000.00	$ 19,000.00	$ 14,260.00	$ 14,260.00
16.	Excavation to Plan Subgrade	1	lump sum	$ 54,200.00	$ 54,200.00	$ 48,000.00	$ 48,000.00	$ 44,263.00	$ 44,263.00
17.	Truncated Dome Panels	60	sq. ft.	$ 15.00	$ 900.00	$ 55.00	$ 3,300.00	$ 46.00	$ 2,760.00
18.	12" Gravel Screenings Shoulder	4,523	lin. ft.	$ 1.10	$ 4,975.30	$ 1.50	$ 6,784.50	$ 1.85	$ 8,367.55
19.	5" Thick Concrete Sidewalk and Aprons	343	sq. ft.	$ 10.00	$ 3,430.00	$ 10.00	$ 3,430.00	$ 9.80	$ 3,361.40
20.	Remove and Replace 30" Concrete Curb & Gutter (< 50-foot sections)	40	lin. ft.	$ 75.00	$ 3,000.00	$ 70.00	$ 2,800.00	$ 70.00	$ 2,800.00
21.	3" Type 5 LT Asphalt Path (8 feet wide)	446	ton	$ 99.15	$ 44,220.90	$ 90.00	$ 40,140.00	$ 105.00	$ 46,830.00
~~22.~~	~~Construct At-Grade Path Crossing at Railroad~~								
23.	0.75" Crushed Aggregate Base Course	798	ton	$ 18.00	$ 14,364.00	$ 20.00	$ 15,960.00	$ 36.50	$ 29,127.00
24.	3" Breaker Run	1,178	ton	$ 15.00	$ 17,670.00	$ 20.00	$ 23,560.00	$ 26.00	$ 30,628.00
25.	Permanent Pavement Markings	1	lump sum	$ 4,375.00	$ 4,375.00	$ 5,000.00	$ 5,000.00	$ 5,031.00	$ 5,031.00
26.	Permanent Signage	1	lump sum	$ 3,240.00	$ 3,240.00	$ 2,000.00	$ 2,000.00	$ 3,726.00	$ 3,726.00
27.	Sawcutting Existing Concrete and Asphalt Pavements	36	lin. ft.	$ 5.00	$ 180.00	$ 3.00	$ 108.00	$ 3.50	$ 126.00
28.	Wetland Seeding and Restoration	2,402	sq. yds.	$ 6.00	$ 14,412.00	$ 5.00	$ 12,010.00	$ 6.95	$ 16,693.90
29.	Topsoil Restoration, Seeding, Fertilizing & Mulching	3,273	sq. yds.	$ 6.00	$ 19,638.00	$ 5.00	$ 16,365.00	$ 8.80	$ 28,802.40
30.	Erosion Control	1	lump sum	$ 10,000.00	$ 10,000.00	$ 9,650.00	$ 9,650.00	$ 15,964.00	$ 15,964.00
31.	Traffic Control	1	lump sum	$ 10,000.00	$ 10,000.00	$ 2,500.00	$ 2,500.00	$ 3,450.00	$ 3,450.00
32.	Railroad Insurance and Flagging Allowance	1	lump sum	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00
	TOTAL BASE BID				$ 659,063.20		$ 701,088.50		$ 711,469.45

Project: 2021 East Side Sewer Extension; Village of McFarland
Engineer's Project Number: MC 168 Bid Deadline: December 3, 2020 at 10 a.m. local time

ITEM NO.	DESCRIPTION OF WORK	BID QUANT.	BID UNITS	Advance Construction Inc. UNIT PRICE	Advance Construction Inc. AMOUNT	G-Pro Excavating LLC UNIT PRICE	G-Pro Excavating LLC AMOUNT	E & N Hughes Co. Inc. UNIT PRICE	E & N Hughes Co. Inc. AMOUNT
SUPPLEMENTAL BID ITEMS									
S1.	Property Corner Replacement	1	each	$ 750.00	$ 750.00	$ 250.00	$ 250.00	$ 1,000.00	$ 1,000.00
S2.	Excavation for and Placement of Trench Stabilization Stone	222	cu. yd.	$ 37.00	$ 8,214.00	$ 68.00	$ 15,096.00	$ 30.50	$ 6,771.00
S3.	Geotextile Trench Fabric	1,000	lin. ft.	$ 7.00	$ 7,000.00	$ 14.00	$ 14,000.00	$ 3.00	$ 3,000.00
S4.	Excavation and Disposal of Bad Subbase Below Subgrade	370	cu. yd.	$ 30.00	$ 11,100.00	$ 35.00	$ 12,950.00	$ 28.00	$ 10,360.00
S5.	Temporary Timber Access Matting	1,000	lin. ft.	$ 30.00	$ 30,000.00	$ 65.00	$ 65,000.00	$ 29.00	$ 29,000.00
	TOTAL OF SUPPLEMENTAL BID				$ 57,064.00		$ 107,296.00		$ 50,131.00

BID TABULATION

Project: 2021 East Side Sewer Extension; Village of McFarland

Engineer's Project Number: MC 168 Bid Deadline: December 3, 2020 at 10 a.m. local time

ITEM NO.	DESCRIPTION OF WORK	BID QUANT.	BID UNITS	Forest Landscaping & Construction, Inc UNIT PRICE	Forest Landscaping & Construction, Inc AMOUNT	Maddrell Excavating, LLC UNIT PRICE	Maddrell Excavating, LLC AMOUNT	Woleske Construction Company UNIT PRICE	Woleske Construction Company AMOUNT
BASE BID									
Utility Work									
1.	12" PVC SDR 35 Sanitary Sewer	2,028	lin. ft.	$ 185.00	$ 375,180.00	$ 150.00	$ 304,200.00	$ 220.00	$ 446,160.00
2.	8" PVC SDR 35 Sanitary Sewer	27	lin. ft.	$ 120.00	$ 3,240.00	$ 200.00	$ 5,400.00	$ 320.00	$ 8,640.00
3.	Boring and Installation of 30-Inch Steel Casing Pipe	1	lump sum	$ 68,000.00	$ 68,000.00	$ 210,000.00	$ 210,000.00	$ 113,000.00	$ 113,000.00
4.	48" Sanitary Manhole Masonry	64	vert. ft.	$ 400.00	$ 25,600.00	$ 550.00	$ 35,200.00	$ 310.00	$ 19,840.00
5.	Sanitary Manhole Castings	7	each	$ 600.00	$ 4,200.00	$ 500.00	$ 3,500.00	$ 590.00	$ 4,130.00
6.	External Manhole Chimney Seals	7	each	$ 540.00	$ 3,780.00	$ 350.00	$ 2,450.00	$ 210.00	$ 1,470.00
7.	24" RCP CL III Storm Sewer	32	lin. ft.	$ 100.00	$ 3,200.00	$ 90.00	$ 2,880.00	$ 18.00	$ 576.00
8.	12" RCP CL III Storm Sewer	44	lin. ft.	$ 85.00	$ 3,740.00	$ 75.00	$ 3,300.00	$ 18.00	$ 792.00
9.	6" D.I. CL 52 Storm Sewer	48	lin. ft.	$ 75.00	$ 3,600.00	$ 45.00	$ 2,160.00	$ 22.00	$ 1,056.00
10.	24" RCP Apron Endwalls	4	each	$ 1,750.00	$ 7,000.00	$ 900.00	$ 3,600.00	$ 1,000.00	$ 4,000.00
11.	12" RCP Apron Endwalls	6	each	$ 1,640.00	$ 9,840.00	$ 650.00	$ 3,900.00	$ 1,000.00	$ 6,000.00
12.	Relocate Existing Hydrant	1	lump sum	$ 3,468.00	$ 3,468.00	$ 2,100.00	$ 2,100.00	$ 500.00	$ 500.00
13.	Clay Check Dam	15	each	$ 400.00	$ 6,000.00	$ 225.00	$ 3,375.00	$ 150.00	$ 2,250.00
Street Work									
14.	Ditch Regrading	1	lump sum	$ 41,000.00	$ 41,000.00	$ 15,000.00	$ 15,000.00	$ 40,000.00	$ 40,000.00
15.	Clearing and Grubbing	1	lump sum	$ 19,500.00	$ 19,500.00	$ 25,000.00	$ 25,000.00	$ 14,000.00	$ 14,000.00
16.	Excavation to Plan Subgrade	1	lump sum	$ 48,000.00	$ 48,000.00	$ 95,000.00	$ 95,000.00	$ 22,000.00	$ 22,000.00
17.	Truncated Dome Panels	60	sq. ft.	$ 40.00	$ 2,400.00	$ 40.00	$ 2,400.00	$ 44.00	$ 2,640.00
18.	12" Gravel Screenings Shoulder	4,523	lin. ft.	$ 3.00	$ 13,569.00	$ 0.75	$ 3,392.25	$ 3.00	$ 13,569.00
19.	5" Thick Concrete Sidewalk and Aprons	343	sq. ft.	$ 10.00	$ 3,430.00	$ 10.00	$ 3,430.00	$ 44.00	$ 15,092.00
20.	Remove and Replace 30" Concrete Curb & Gutter (< 50-foot sections)	40	lin. ft.	$ 50.00	$ 2,000.00	$ 70.00	$ 2,800.00	$ 44.00	$ 1,760.00
21.	3" Type 5 LT Asphalt Path (8 feet wide)	446	ton	$ 120.00	$ 53,520.00	$ 95.00	$ 42,370.00	$ 110.00	$ 49,060.00
~~22.~~	~~Construct At-Grade Path Crossing at Railroad~~								
23.	0.75" Crushed Aggregate Base Course	798	ton	$ 24.00	$ 19,152.00	$ 16.00	$ 12,768.00	$ 18.00	$ 14,364.00
24.	3" Breaker Run	1,178	ton	$ 26.00	$ 30,628.00	$ 16.00	$ 18,848.00	$ 12.00	$ 14,136.00
25.	Permanent Pavement Markings	1	lump sum	$ 5,000.00	$ 5,000.00	$ 400.00	$ 400.00	$ 6,000.00	$ 6,000.00
26.	Permanent Signage	1	lump sum	$ 5,500.00	$ 5,500.00	$ 1,800.00	$ 1,800.00	$ 3,000.00	$ 3,000.00
27.	Sawcutting Existing Concrete and Asphalt Pavements	36	lin. ft.	$ 6.00	$ 216.00	$ 6.00	$ 216.00	$ 4.00	$ 144.00
28.	Wetland Seeding and Restoration	2,402	sq. yds.	$ 4.00	$ 9,608.00	$ 3.00	$ 7,206.00	$ 3.00	$ 7,206.00
29.	Topsoil Restoration, Seeding, Fertilizing & Mulching	3,273	sq. yds.	$ 8.50	$ 27,820.50	$ 5.00	$ 16,365.00	$ 3.00	$ 9,819.00
30.	Erosion Control	1	lump sum	$ 16,000.00	$ 16,000.00	$ 15,000.00	$ 15,000.00	$ 18,000.00	$ 18,000.00
31.	Traffic Control	1	lump sum	$ 13,500.00	$ 13,500.00	$ 800.00	$ 800.00	$ 11,000.00	$ 11,000.00
32.	Railroad Insurance and Flagging Allowance	1	lump sum	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00
	TOTAL BASE BID				$ 837,691.50		$ 854,860.25		$ 860,204.00

Project: 2021 East Side Sewer Extension; Village of McFarland
Engineer's Project Number: MC 168 Bid Deadline: December 3, 2020 at 10 a.m. local time

ITEM NO.	DESCRIPTION OF WORK	BID QUANT.	BID UNITS	Forest Landscaping & Construction, Inc UNIT PRICE	Forest Landscaping & Construction, Inc AMOUNT	Maddrell Excavating, LLC UNIT PRICE	Maddrell Excavating, LLC AMOUNT	Woleske Construction Company UNIT PRICE	Woleske Construction Company AMOUNT
SUPPLEMENTAL BID ITEMS									
S1.	Property Corner Replacement	1	each	$ 450.00	$ 450.00	$ 1,000.00	$ 1,000.00	$ 100.00	$ 100.00
S2.	Excavation for and Placement of Trench Stabilization Stone	222	cu. yd.	$ 45.00	$ 9,990.00	$ 35.00	$ 7,770.00	$ 10.00	$ 2,220.00
S3.	Geotextile Trench Fabric	1,000	lin. ft.	$ 5.00	$ 5,000.00	$ 2.00	$ 2,000.00	$ 2.00	$ 2,000.00
S4.	Excavation and Disposal of Bad Subbase Below Subgrade	370	cu. yd.	$ 30.00	$ 11,100.00	$ 18.00	$ 6,660.00	$ 10.00	$ 3,700.00
S5.	Temporary Timber Access Matting	1,000	lin. ft.	$ 50.00	$ 50,000.00	$ 25.00	$ 25,000.00	$ 40.00	$ 40,000.00
	TOTAL OF SUPPLEMENTAL BID				$ 76,540.00		$ 42,430.00		$ 48,020.00

2020 EAST SIDE SEWER EXTENSION

Village of McFarland, Wisconsin

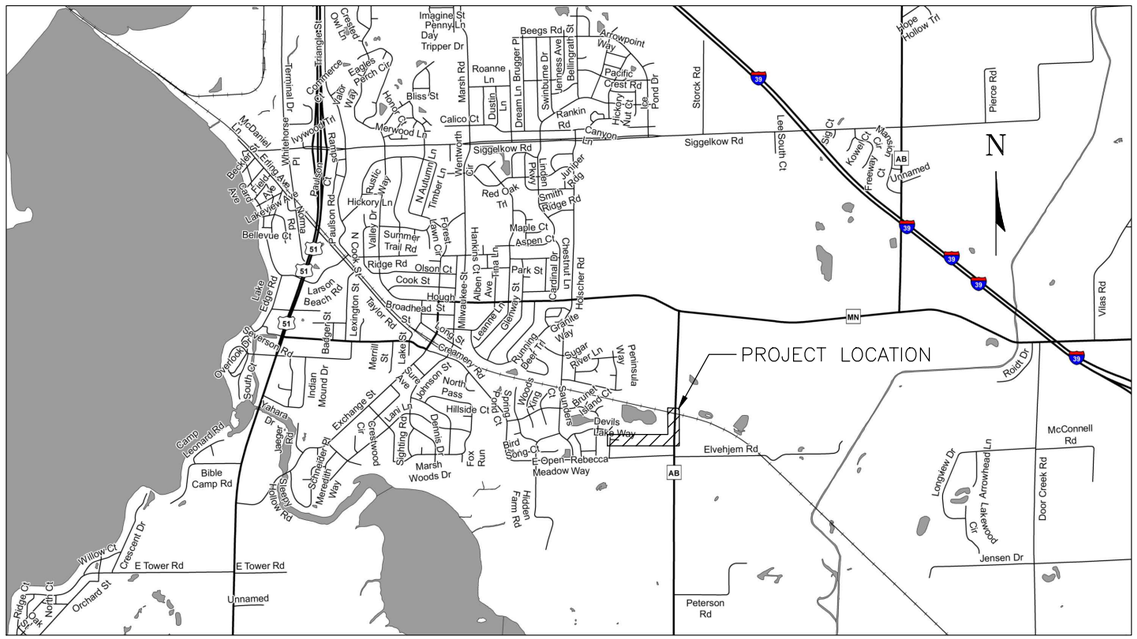
MEMBER ONE CALL SYSTEMS INTERNATIONAL

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

WIS. STATUTE 182.0175 (1974)
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE.

SHEET INDEX



NO SCALE

LEGEND

UNDERGROUND TELE. — · · — UT — · · — UT — · · — UT —
UNDERGROUND CATV. — UCATV —
UNDERGROUND ELEC. — UE — UE — UE — UE — UE — UE —
OVERHEAD — OH — OH — OH —
EXISTING GAS — G — G — G — G — G —
PROPERTY LINE
EXISTING WATER MAIN — WM — WM — WM — WM —
EXISTING SANITARY SEWER — SAN — SAN — SAN —
EXISTING STORM SEWER — STM — STM — STM —
EXISTING FENCE LINE — x — x — x — x — x — x — x —
SAWCUT xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
NEW STORM SEWER
NEW WATER MAIN
NEW SANITARY SEWER

NEW ITEMS:
WATER VALVE, CURB STOP, HYDRANT, MANHOLE, CURB INLET, ENDWALL, CAUTION GAS WARNING

EXISTING ITEMS:
FLAG POLE, MAILBOX, POWER POLE, LIGHT POLE, LAMP POST, PULL BOX, WATER VALVE, CURB STOP, HYDRANT, WELL, MONITORING WELL, TRACER WIRE, SANITARY MANHOLE, SANITARY VALVE, CLEANOUT, STORM MANHOLE, CURB INLET, CIRCULAR INLET, SQUARE INLET, ENDWALL, STUMP, DECID. TREE (RELATIVE SIZE SHOWN), EVERGREEN, SHRUB OR HEDGE, SIGN, CATV. PED., TELE. PED., ELEC. PED., GAS VALVE, STREET SIGN, IRON PIPE, IRON ROD

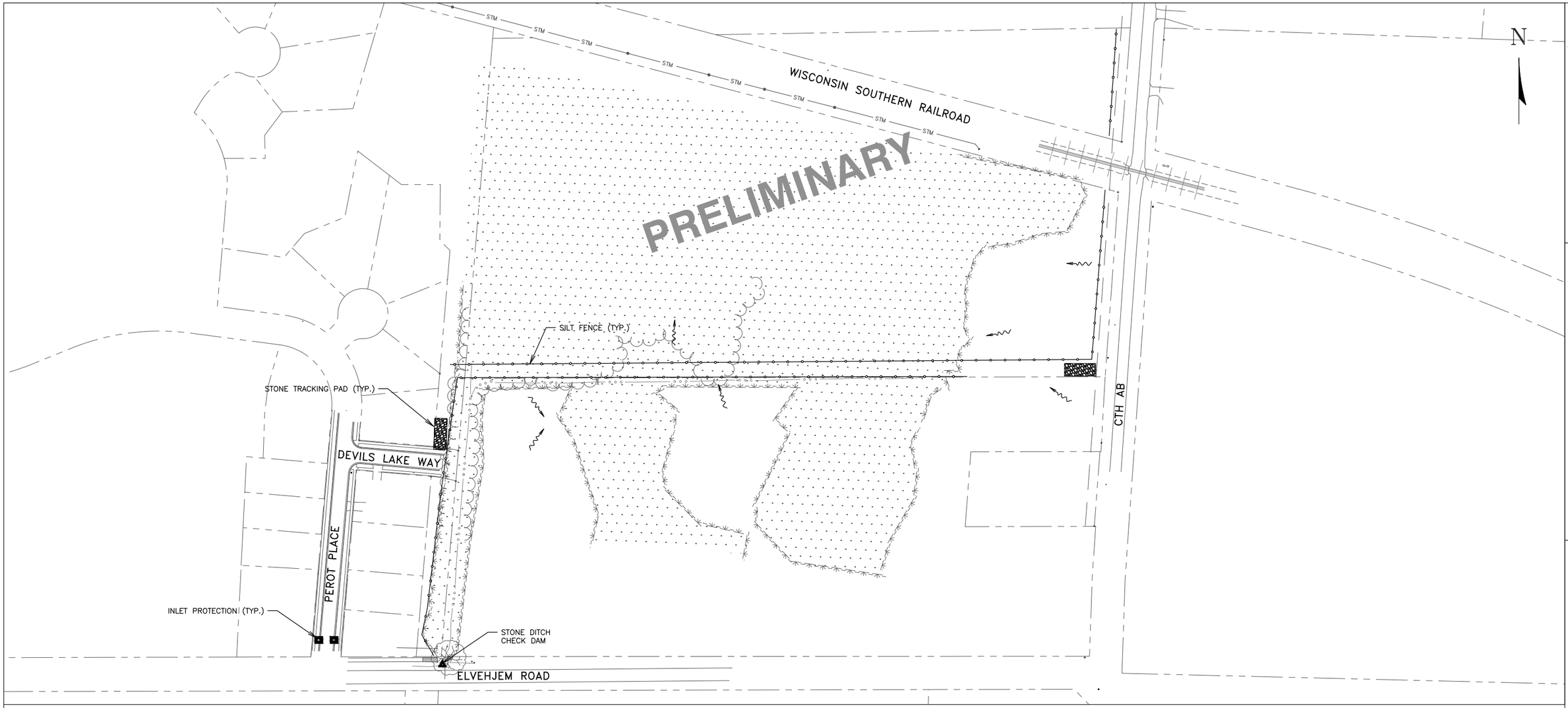
NOTES: 1.) EXISTING FEATURES AND LABELS ARE SHOWN WITH SCREENED, LIGHTER LINES.
2.) NEW CONCRETE IS SHOWN SHADED IN PLAN VIEWS
3.) CONCRETE REMOVALS ARE SHOWN BY CROSS-HATCHING

2912 Marketplace Drive
Suite 103
Madison, WI 53719
(608) 273-3350
www.tcengineers.net
TOWN & COUNTRY ENGINEERING, INC.

DATE | BY | REVISIONS | SHEET

2020 EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
REV. DATE:
PROJECT NO.: MC 168
DRAWING FILE: MC 168 DETAILS.DWG
DATE: 10-28-20



EROSION CONTROL NOTES:

- LOCATIONS MARKED WITH "■" TO RECEIVE INLET FILTER PROTECTION DURING CONSTRUCTION. ALL NEW STREET INLETS MUST ALSO RECEIVE INLET FILTER PROTECTION.
- CONSTRUCT A STONE CHECK DAM IN GUTTER LINE AT ALL LOCATIONS MARKED WITH "▲"
- SURFACE FLOW DIRECTION IS INDICATED WITH ~~~
- SILT FENCE INSTALLATION IS INDICATED WITH —o—o—
- POST WDNR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED, THE SITE IS STABILIZED, AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
- KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
- SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE WDNR AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
- THE CONTRACTOR IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
- INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
- WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION, AND PRESERVE TOPSOIL.
- REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS AT http:dnr.wi.gov/topic/stormwater/standards/const_standards.html.
- INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD CONSTRUCTION ENTRANCE(S) PRIOR TO ANY LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD STONE TRACKING PAD AND TIRE WASHING #1057 FOR ROCK CONSTRUCTION ENTRANCE(S).
- INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
- STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.
- NOTIFY THE OWNER IF DEWATERING IS SCHEDULED TO OCCUR IN AREAS OF SOIL AND/OR GROUNDWATER CONTAMINATION, OR IF DEWATERING WILL OCCUR FROM A HIGH CAPACITY WELL (70 GPM OR MORE). DEWATER ONLY AFTER THE APPROPRIATE WDNR DEWATERING DISCHARGE PERMIT HAS BEEN OBTAINED.
- INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
- REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
- INSTALL AND MAINTAIN FILTER SOCKS IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS #1071.
- IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
- IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH, TACKIFIER, AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS, OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE. OCTOBER 15 THROUGH COLD WEATHER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.
- STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
- SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY THE OWNER. SEPARATE SWEPT MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATELY.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST PER WDNR TECHNICAL STANDARD DUST CONTROL ON CONSTRUCTION SITES #1068.
- PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL.
- COORDINATE WITH THE OWNER TO UPDATE THE LAND DISTURBANCE PERMIT TO INDICATE THE ANTICIPATED OR LIKELY DISPOSAL LOCATIONS FOR ANY EXCAVATED SOILS OR CONSTRUCTION DEBRIS THAT WILL BE HAULED OFF-SITE FOR DISPOSAL. THE DEPOSITED OR STOCKPILED MATERIAL NEEDS TO INCLUDE PERIMETER SEDIMENT CONTROL MEASURES (SUCH AS SILT FENCE, HAY BALES, FILTER SOCKS, OR COMPACTED EARTHEN BERMS).
- FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS I, II OR III TYPE A EROSION CONTROL MATTING. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT'S WIDOT PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD NON-CHANNEL EROSION MAT #1052.
- FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED AREAS, PROVIDE CLASS I, II, OR III TYPE B EROSION CONTROL MATTING. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT'S WIDOT PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
- MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
- INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES (SUCH AS TEMPORARY SEDIMENT BASINS, DITCH CHECKS, EROSION CONTROL MATTING, SILT FENCING, FILTER SOCKS, WATTLES, SWALES, ETC.), OR AS DIRECTED BY THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE WDNR REMEDIATION AND WASTE MANAGEMENT REQUIREMENTS FOR HANDLING AND DISPOSING OF CONTAMINATED MATERIALS. SITE-SPECIFIC INFORMATION FOR AREAS WITH KNOWN OR SUSPECTED SOIL AND/OR GROUNDWATER CONTAMINATION CAN BE FOUND ON WDNR'S BUREAU OF REMEDIATION AND REDEVELOPMENT TRACKING SYSTEM (BRRTS) PUBLIC DATABASE AT: http://dnr.wi.gov/botw/

TOWN & COUNTRY ENGINEERING, INC.
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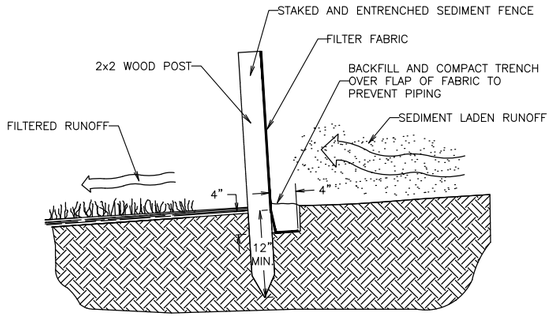
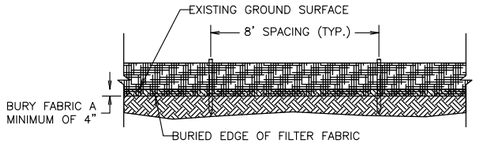
EROSION CONTROL PLAN AND GENERAL NOTES

2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.: MC 168
DRAWING FILE: SHEETS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10-28-20
REVISIONS:
SCALE: 0 25 50 100
SHEET: 1

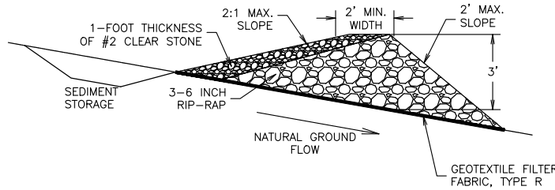


CROSS–SECTION OF A PROPERLY INSTALLED SEDIMENT FENCE

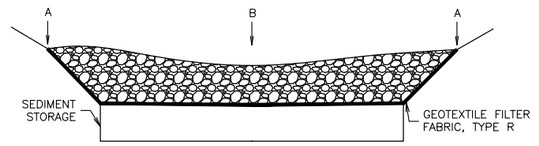


SEDIMENT FENCE DETAIL

DETAIL
SEDIMENT FENCE

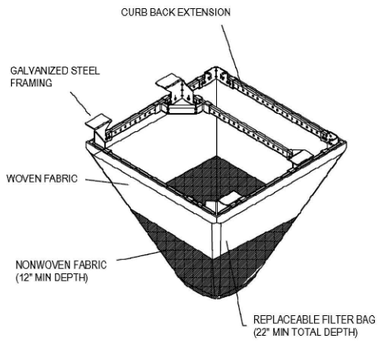


SECTION VIEW



FRONT VIEW

DETAIL
STONE CHECK DAM



GENERAL NOTES:

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

FRAMED INLET PROTECTION SHALL BE COMPLIANT WITH ALL ASTM STANDARD D8057–17 REQUIREMENTS, INCLUDING:

A. BYPASS OVERFLOW THAT MEETS OR EXCEEDS INLET DESIGN FLOW
B. FRAME AND BAG STRONG ENOUGH TO HANDLE FULL SEDIMENT LOAD.

INSTALLATION NOTES:

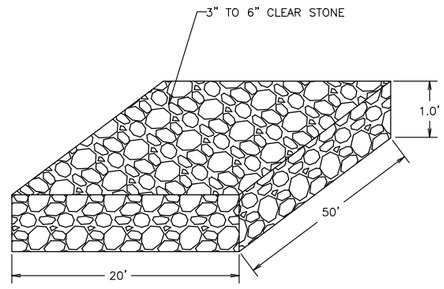
NO PART OF INLET PROTECTION SHALL BE PROJECTING ABOVE THE GRATE.

FOR COMBINATION INLETS, PROTECTION SHALL CAPTURE RUNOFF ENTERING BOTH GRATE AND CURB OPENING.

A DUAL FABRIC FILTER BAG, WITH NON–WOVEN BOTTOM AND WOVEN TOP SHALL BE USED.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

DETAIL
INLET PROTECTION - FRAMED (W/ CURB BOX)



NOTE:

– ON STREET SURFACES CRUSHED AGGREGATE BASE STONE SERVES AS TRACKING PAD.

DETAIL
CLEAR STONE TRACKING PAD

PRELIMINARY

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TOWN & COUNTRY ENGINEERING, INC.

STANDARD CONSTRUCTION DETAILS
EROSION CONTROL

2020 EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.: MC 168
DRAWING FILE: MC 168 DETAILS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10–28–20
REVISIONS:
SCALE: N.T.S.
SHEET: 2

SHEET: 1

0 25 50 100

SCALE:

DATE: 10-28-20

REVISIONS:

CHECKED BY: T.J.S.

DRAWN BY: J.R.K.

SHEET LONG

DRAWING NO.:

PROJECT NO.: MC 168

2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

TRAFFIC CONTROL PLAN

TOWN & COUNTRY ENGINEERING, INC.
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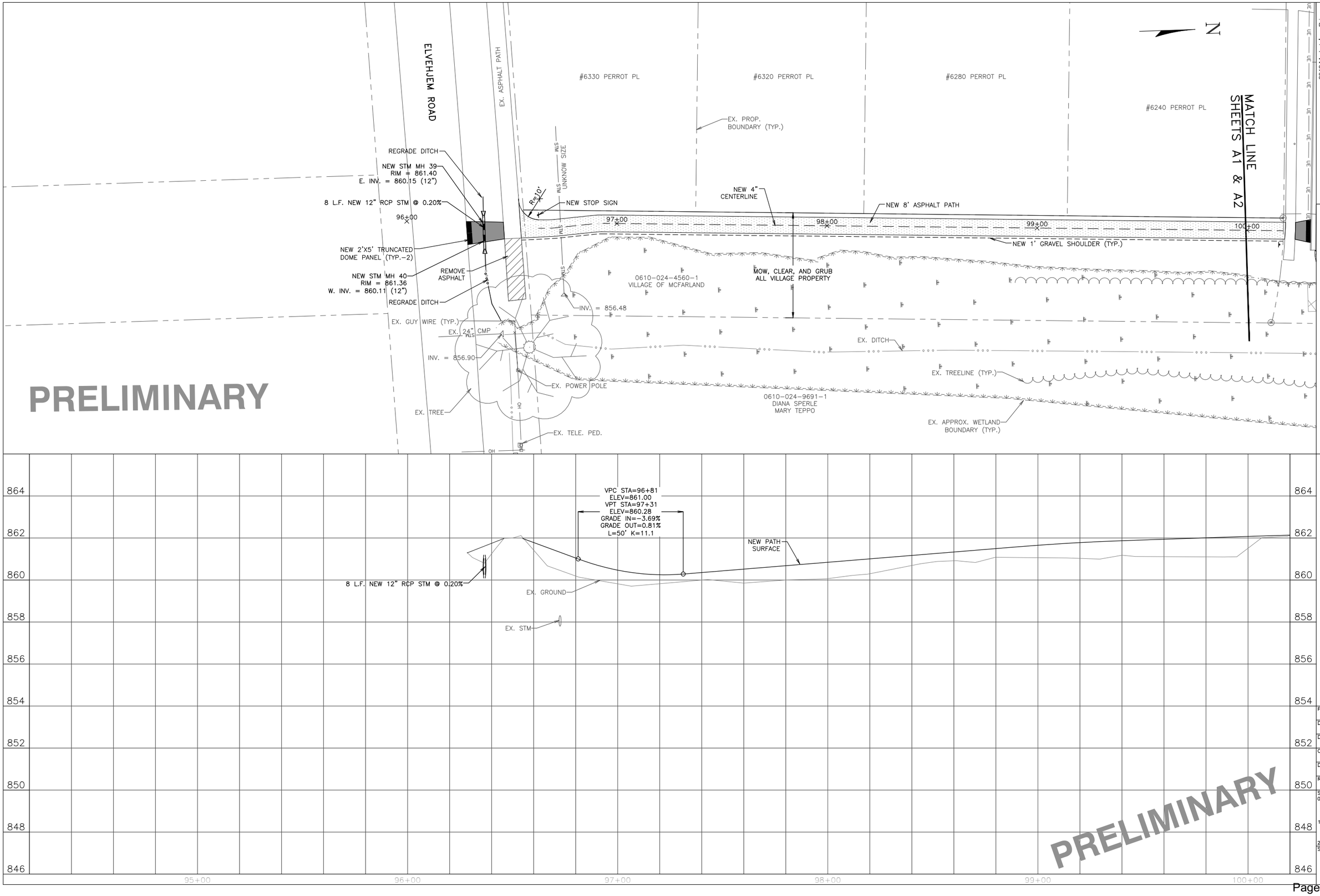

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PLAN & PROFILE

Station 96+00 To Station 100+20

2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.:	MC 168
DRAWING FILE:	MC 168 SHEETS.DWG
DRAWN BY:	J.R.K.
CHECKED BY:	T.J.S.
DATE:	10-28-20
REVISIONS:	
SCALE: HORIZONTAL	0 5 10 20
VERTICAL	1 2
SHEET:	A1

PRELIMINARY

PRELIMINARY

PERROT PL

TBM 29

DEVILS LAKE WAY

EX. SAN 10" PVC

EX. 6" WM

#6180 PERROT PL

#6240 PERROT PL

#6280 PERROT PL

MATCH LINE SHEETS A1 & A2

0610-024-4545-1
VILLAGE OF MCFARLAND

EX. TREELINE (TYP.)

NEW SAN MH-1
STA. 102+30.13/6.60L

57 L.F. NEW WHITE EDGE LINE

NEW 4" CENTERLINE

NEW 8' ASPHALT PATH

INSTALL CLAY CHECK DAM EVERY 100 L.F. OF PIPE TRENCH

NEW 2'X5' TRUNCATED DOME PANEL (TYP.-4)

101+00

102+00

R=30'

180 L.F. NEW 12" PVC SAN @ 0.20%

NEW STM ENDWALL 1
S. INV. = 858.83 (24")

19 L.F. NEW 24" RCP STM @ 1.09%

NEW STM ENDWALL 3
S. INV. = 859.40 (24")

13 L.F. NEW 24" RCP STM @ 0.40%

NEW TURN AHEAD SIGN (TYP.-2)

WETLAND DISTURBANCE
31,742 SQ. FT.

NEW STM ENDWALL 2
N. INV. = 858.49 (24")

NEW STM ENDWALL 4
N. INV. = 859.30 (24")

0610-024-9502-1
UTTERBACK LTD PARTNERSHIP

103+00

NEW 12" PVC SAN

NEW 30' EASEMENT BOUNDARY

NEW 1' GRAVEL SHOULDER (TYP.)

MATCH LINE SHEETS A2 & A3

EX. PROP. BOUNDARY (TYP.)

EX. APPROX. WETLAND BOUNDARY (TYP.)

CORE & BOOT EX. MANHOLE

NEW ASPHALT

NEW STOP SIGN (TYP.-2)

EX. SAN MH 19
RIM = 860.68
N. INV. = 849.64 (12")(NEW)
W. INV. = 849.64 (10")

0610-024-9691-1
DIANA SPERLE
MARY TEPPO

VPC STA=98+92
ELEV=861.59
VPT STA=99+42
ELEV=861.88
GRADE IN=0.81%
GRADE OUT=0.34%
L=50' K=105.4

NEW PATH SURFACE

VPC STA=100+04
ELEV=862.09
VPT STA=102+04
ELEV=861.57
GRADE IN=0.34%
GRADE OUT=-0.86%
L=200' K=167.5

VPC STA=102+13
ELEV=861.50
VPT STA=102+63
ELEV=861.83
GRADE IN=-0.86%
GRADE OUT=2.16%
L=50' K=16.6

VPC STA=102+73
ELEV=862.05
VPT STA=103+23
ELEV=862.25
GRADE IN=2.16%
GRADE OUT=-1.37%
L=50' K=14.2

EX. GROUND

NEW 24" RCP STM

NEW 24" RCP STM

EX. SAN MH 19
RIM = 860.68
N. INV. = 849.64 (12")(NEW)
W. INV. = 849.64 (10")

NEW SAN MH-1
RIM = 861.58
S. INV. = 850.00 (12")
E. INV. = 850.00 (12")

180 L.F. NEW 12" PVC SAN @ 0.20%

NEW 12" PVC SAN

PRELIMINARY

99+00 100+00 101+00 102+00 103+00 104+00

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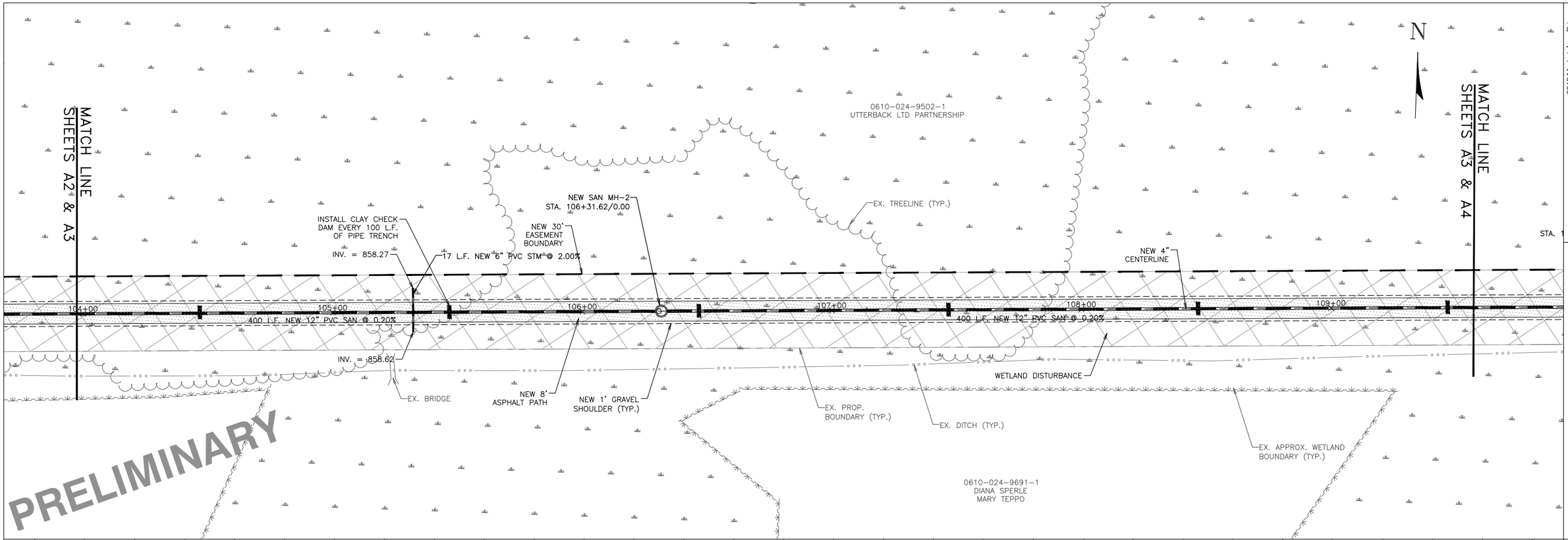
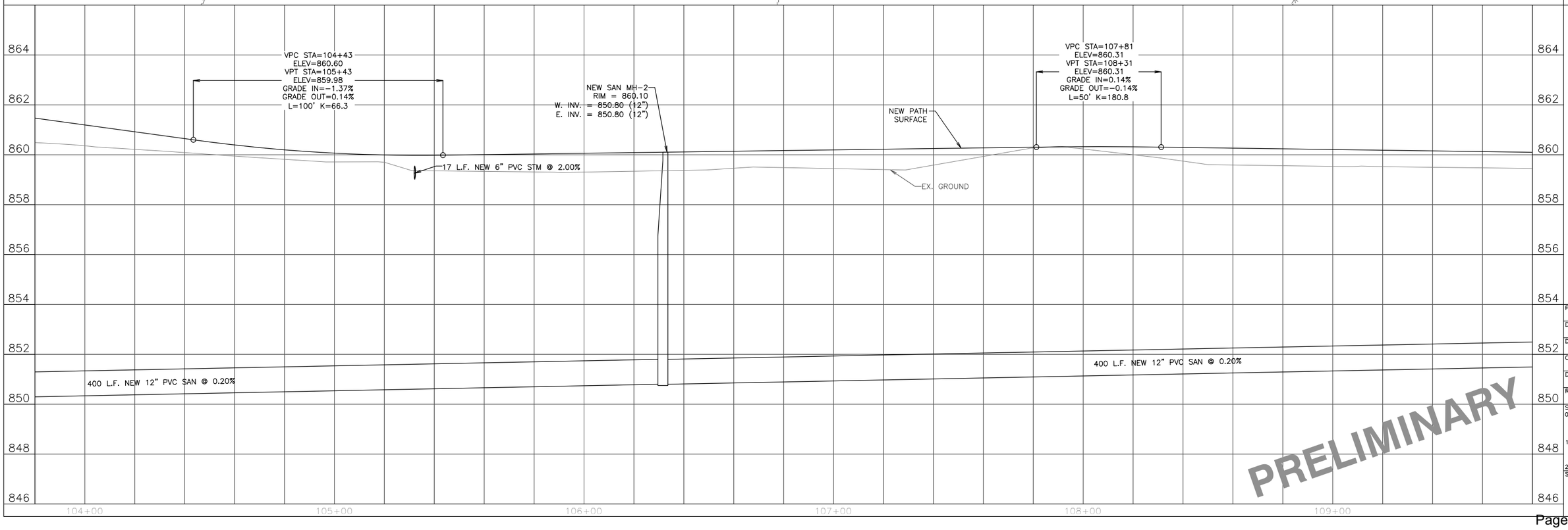
PLAN & PROFILE

Station 99+80 To Station 104+20

2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.: MC 168
DRAWING FILE: MC 168 SHEETS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10-28-20
REVISIONS:
SCALE: HORIZONTAL 0 5 10 20, VERTICAL 1 2
SHEET: A2





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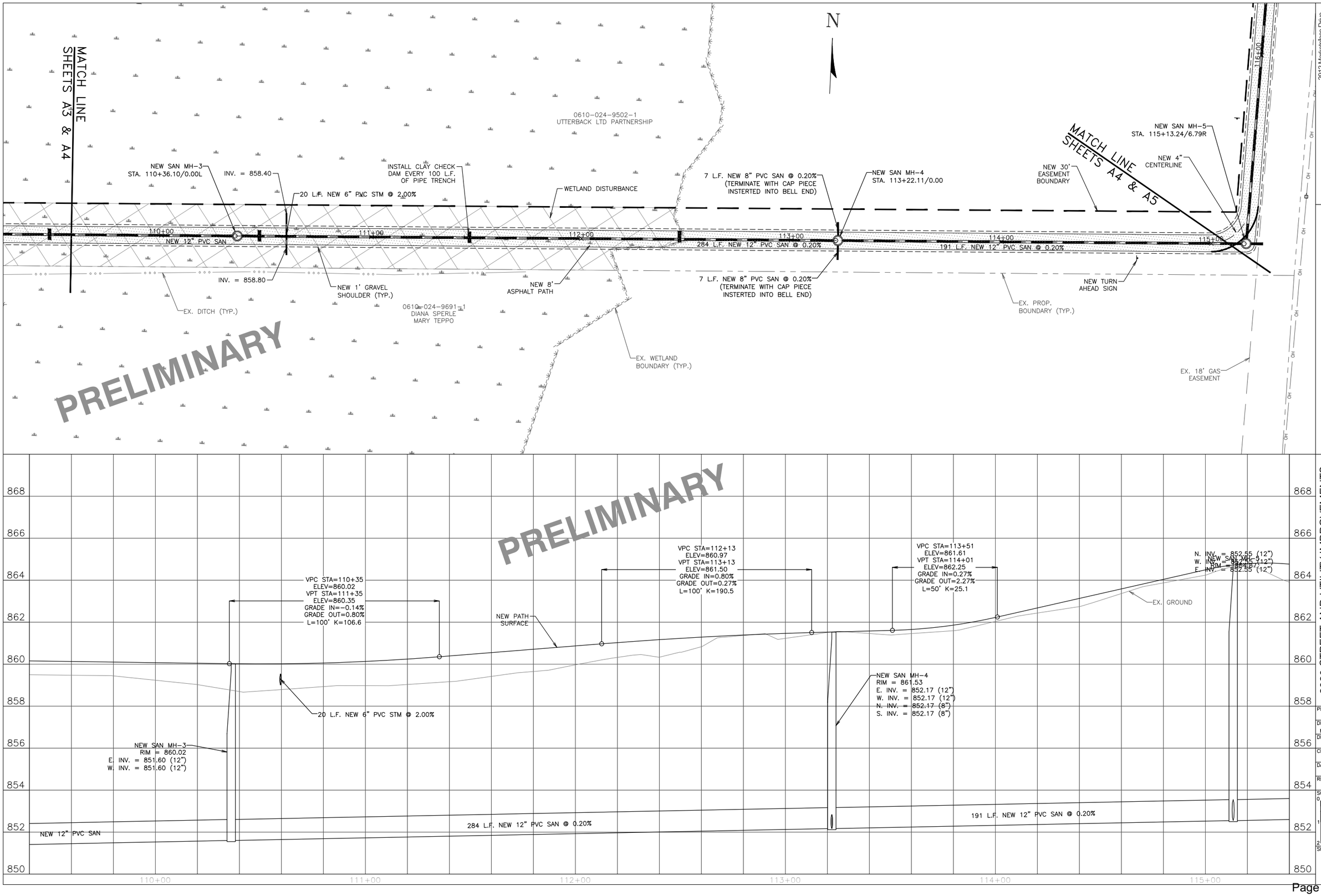
PLAN & PROFILE

Station 103+80 To Station 109+80

2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.:	MC 168
DRAWING FILE:	MC 168 SHEETS.DWG
DRAWN BY:	J.R.K.
CHECKED BY:	T.J.S.
DATE:	10-28-20
REVISIONS:	
SCALE: HORIZONTAL	0 5 10 20
VERTICAL	1 2
SHEET:	A3



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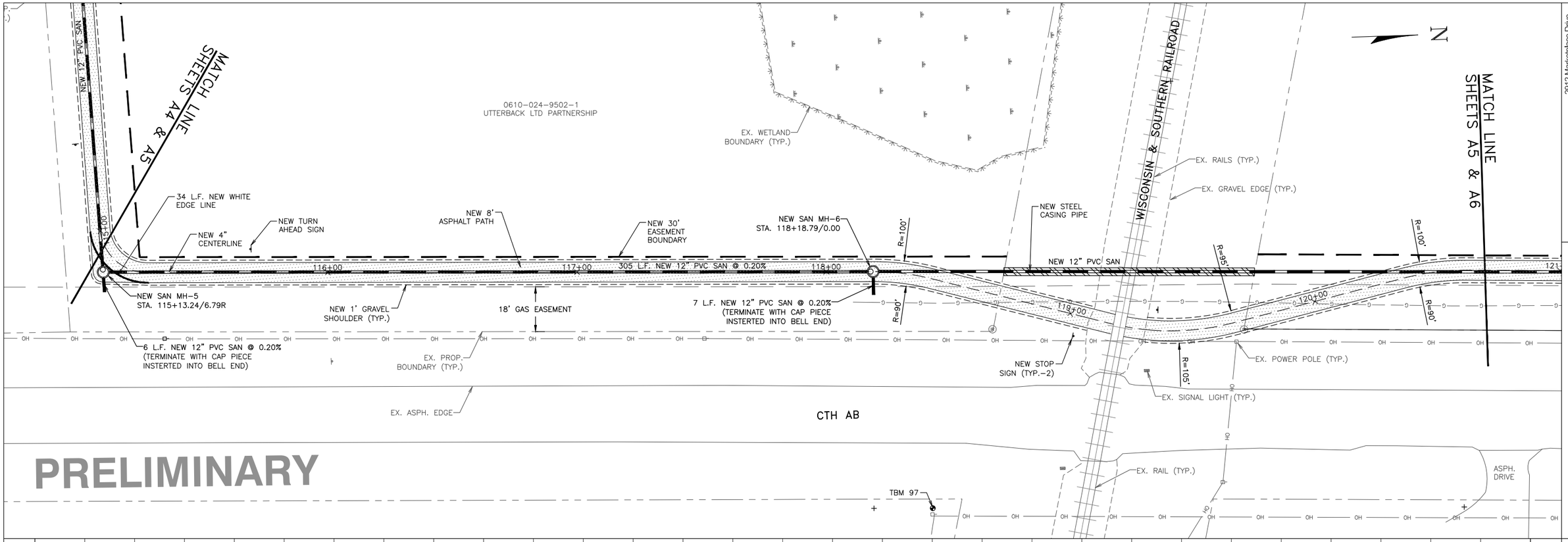
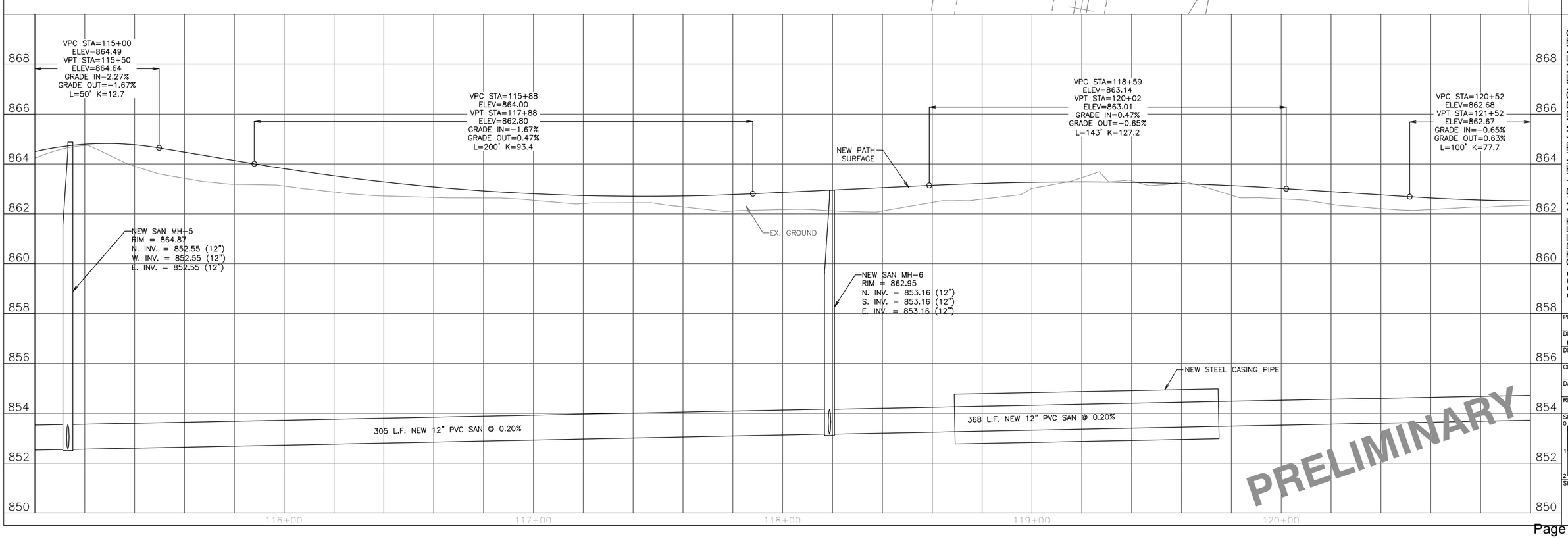
PLAN & PROFILE

Station 109+40 To Station 115+40

2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.: MC 168
DRAWING FILE: MC 168 SHEETS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10-28-20
REVISIONS:
SCALE: HORIZONTAL 0 5 10 20, VERTICAL 1 2
SHEET: A4





PRELIMINARY

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PLAN & PROFILE

Station 115+00 To Station 120+00

2020 STREET AND UTILITY IMPROVEMENTS

EAST SIDE SEWER EXTENSION

Village of McFarland, Wisconsin

PROJECT NO.:	MC 168
DRAWING FILE:	MC 168 SHEETS.DWG
DRAWN BY:	J.R.K.
CHECKED BY:	T.J.S.
DATE:	10-28-20
REVISIONS:	
SCALE: HORIZONTAL	0 5 10 20
VERTICAL	1 2
SHEET:	A5

PRELIMINARY

MATCH LINE
SHEETS A5 & A6

0610-024-9502-1
UTTERBACK LTD PARTNERSHIP

EX. PROP. BOUNDARY (TYP.)

0610-024-8071-1
UTTERBACK LTD PARTNERSHIP

N

PRELIMINARY

NEW 1' GRAVEL SHOULDER (TYP.)
NEW 8' ASPHALT PATH
NEW 4" CENTERLINE
END OF PHASE ONE
STUB END W/CAP
NEW 30' EASEMENT BOUNDARY
FUTURE ROW BOUNDARY (TYP.)
R=100'
R=90'
121+00
122+00
123+00
125+00
126+00
368 L.F. NEW 12" PVC SAN @ 0.20%
194 L.F. NEW 12" PVC SAN @ 0.20% PHASE TWO
158 L.F. NEW 12" PVC SAN @ 0.21% PHASE TWO
18' GAS EASEMENT
NEW SAN MH-8
STA. 123+96.44/0.00
PHASE TWO
EX. POWER POLE (TYP.)

CTH AB

ASPH. DRIVE
ASPH. DRIVE

VPC STA=120+52
ELEV=862.68
VPT STA=121+52
ELEV=862.67
GRADE IN=-0.65%
GRADE OUT=0.63%
L=100' K=77.7

NEW PATH SURFACE

NEW SAN MH-7
RIM = 862.96
N. INV. = 853.91 (12")
S. INV. = 853.91 (12")

END OF PHASE ONE

NEW SAN MH-8
RIM = 862.64
S. INV. = 854.30 (12")
W. INV. = 854.30 (12")

NEW SAN MH-9
RIM = 868.43
E. INV. = 854.63 (12")
N. INV. = 854.63 (12")

PROPOSED SURFACE
EX. GROUND

194 L.F. NEW 12" PVC SAN @ 0.20%
158 L.F. NEW 12" PVC SAN @ 0.21%
NEW 12" PVC SAN

870
868
866
864
862
860
858
856
854
852

121+00
122+00
123+00
124+00
125+00
126+00

PRELIMINARY

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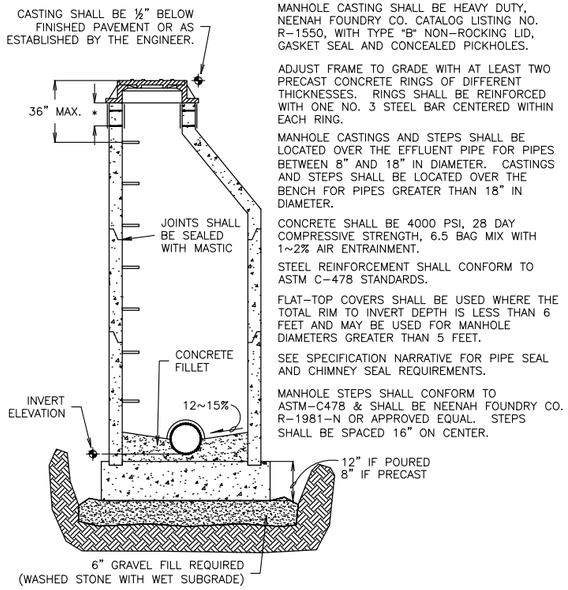
PLAN & PROFILE

Station 120+60 To Station 126+60

2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.: MC 168
DRAWING FILE: MC 168 SHEETS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10-28-20
REVISIONS:
SCALE: HORIZONTAL 0 5 10 20
VERTICAL 1 2
SHEET: A6



NOTES:

MANHOLE CASTING SHALL BE HEAVY DUTY, NEENAH FOUNDRY CO. CATALOG LISTING NO. R-1550, WITH TYPE "B" NON-ROCKING LID, GASKET SEAL AND CONCEALED PICKHOLES.

ADJUST FRAME TO GRADE WITH AT LEAST TWO PRECAST CONCRETE RINGS OF DIFFERENT THICKNESSES. RINGS SHALL BE REINFORCED WITH ONE NO. 3 STEEL BAR CENTERED WITHIN EACH RING.

MANHOLE CASTINGS AND STEPS SHALL BE LOCATED OVER THE EFFLUENT PIPE FOR PIPES BETWEEN 8" AND 18" IN DIAMETER. CASTINGS AND STEPS SHALL BE LOCATED OVER THE BENCH FOR PIPES GREATER THAN 18" IN DIAMETER.

CONCRETE SHALL BE 4000 PSI, 28 DAY COMPRESSIVE STRENGTH, 6.5 BAG MIX WITH 1~2% AIR ENTRAINMENT.

STEEL REINFORCEMENT SHALL CONFORM TO ASTM C-478 STANDARDS.

FLAT-TOP COVERS SHALL BE USED WHERE THE TOTAL RIM TO INVERT DEPTH IS LESS THAN 6 FEET AND MAY BE USED FOR MANHOLE DIAMETERS GREATER THAN 5 FEET.

SEE SPECIFICATION NARRATIVE FOR PIPE SEAL AND CHIMNEY SEAL REQUIREMENTS.

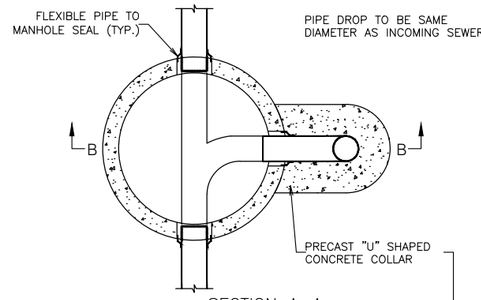
MANHOLE STEPS SHALL CONFORM TO ASTM-C478 & SHALL BE NEENAH FOUNDRY CO. R-1981-N OR APPROVED EQUAL. STEPS SHALL BE SPACED 16" ON CENTER.

* A MINIMUM OF 3" TO A MAXIMUM OF 9" OF ADJUSTING RINGS SHALL BE USED TO ADJUST THE MANHOLE CASTING TO THE FINISHED GRADE. ALL RINGS SHALL BE SEALED TOGETHER USING MASTIC AND ALL JOINTS SHALL BE BACK PLASTERED INSIDE AND OUT WITH CEMENT MORTAR.

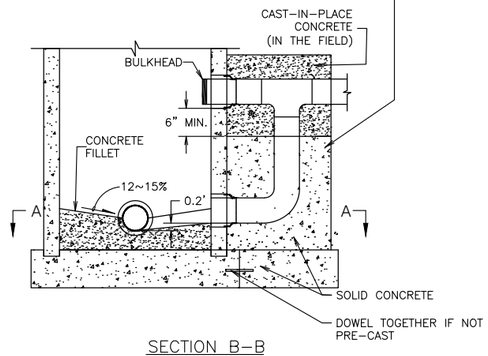
DETAIL
MANHOLE

NOTE:

PIPE DROP TO BE SAME DIAMETER AS INCOMING SEWER

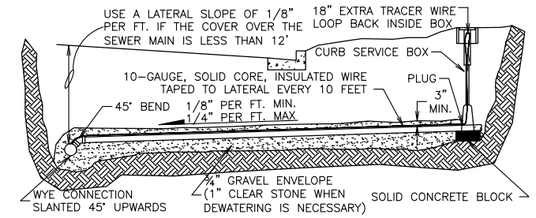


SECTION A-A



SECTION B-B

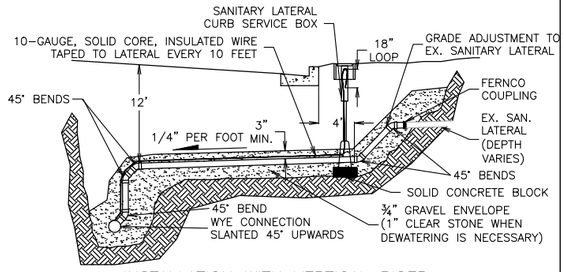
DETAIL
DROP MANHOLE ENTRANCE



STANDARD INSTALLATION

NOTES:

1. CONSTRUCT LATERALS IN CONFORMANCE WITH CHAPTER SPS 382 OF THE WISCONSIN ADMINISTRATIVE CODE.
2. LATERAL SLOPE SHALL BE ¼" PER FOOT WHERE SUFFICIENT COVER EXISTS.
3. CONTRACTOR SHALL VERIFY SIZE, DEPTH, AND LOCATION OF EXISTING LATERALS.
4. WHERE LATERALS ARE NOT IMMEDIATELY CONNECTED TO BUILDING SEWERS THE ENDS OF THE LATERALS SHALL BE MARKED BY POSITIONING 4"x4" BOARDS VERTICALLY FROM THE ENDS OF THE LATERALS TO AT LEAST 2' ABOVE THE GROUND SURFACE.
5. THE LOCATION OF ALL SEWER LATERALS CROSSING UNDER THE CURB & GUTTER SHALL BE MARKED BY STAMPING AN "S" IN THE TOP OF THE CURB OVER THE LOCATION OF THE SEWER LATERAL.

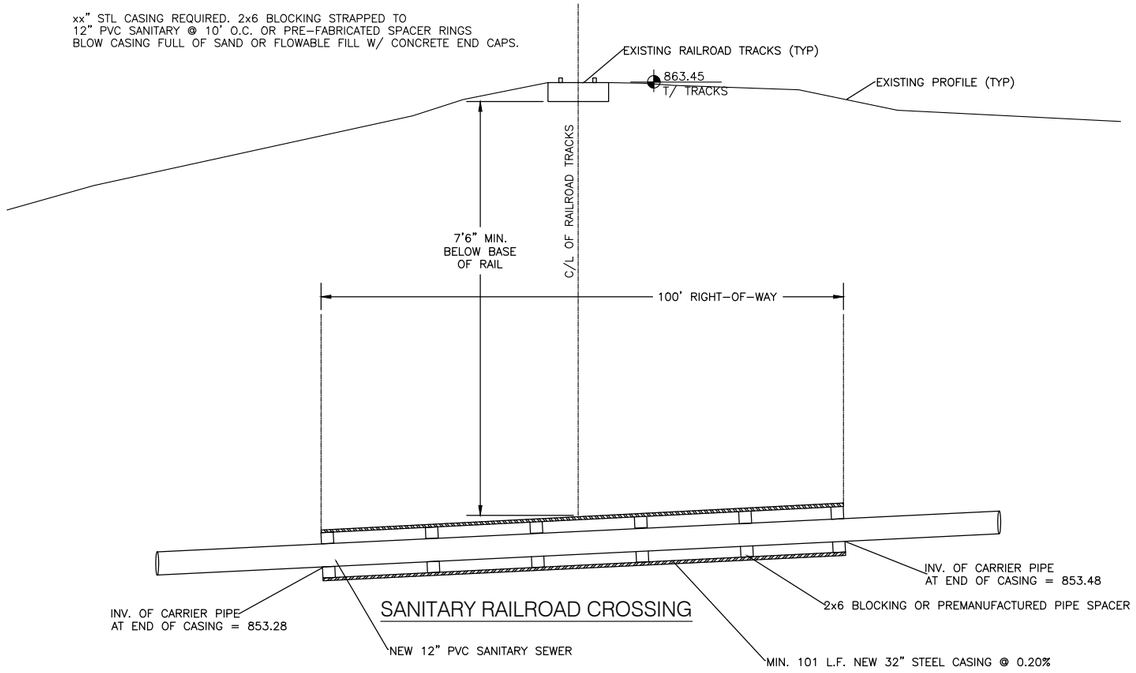


INSTALLATION WITH VERTICAL RISER

DETAIL
SANITARY SEWER LATERAL

CONSTRUCTION NOTE:

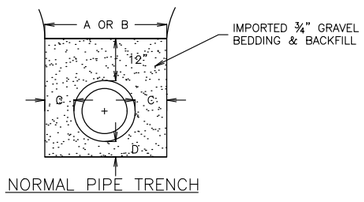
ALL OVER EXCAVATED AREAS SHALL BE BACKFILLED WITH COMPACTED CRUSHED STONE AT MINIMUM OF 1:1 SIDE SLOPE UP TO THE TOP OF PIPE FROM END OF CASING TO WHERE NATIVE MATERIAL IS ENCOUNTERED.



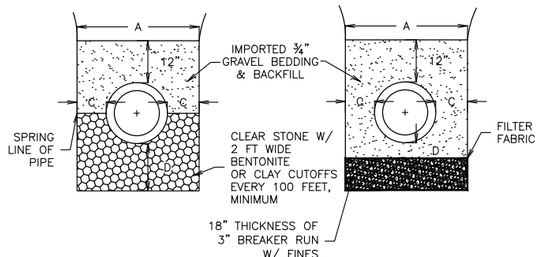
SANITARY RAILROAD CROSSING

DIMENSIONS:

A: OUTSIDE DIAMETER OF PIPE PLUS 24" MAXIMUM, EXCEPT NEED NOT BE LESS THAN 36". TRENCH SHIELDS NARROWER THAN 4 FEET INSIDE WIDTH WILL NOT BE REQUIRED UNLESS SPECIFICALLY REQUIRED IN THE PROJECT SPECIFICATIONS.
B: FOR ROCK, OUTSIDE DIAMETER OF PIPE PLUS 18" MAXIMUM, EXCEPT NEED NOT BE LESS THAN 36".
C: MINIMUM – 6"
D: MINIMUM 4" BELOW BARREL AND 3" BELOW BELL.



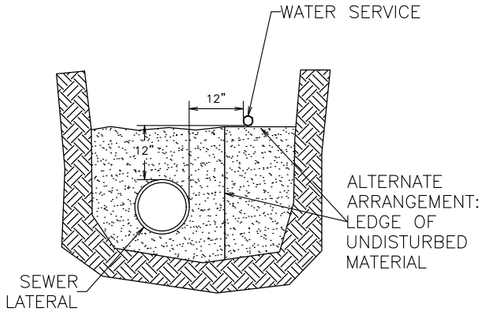
NORMAL PIPE TRENCH



WET TRENCH WITH SUMP DEWATERING

UNSTABLE TRENCH

DETAIL
TRENCH WIDTH AND BEDDING



DETAIL
JOINT TRENCH INSTALLATION

PRELIMINARY

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(608) 273-3350
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STANDARD CONSTRUCTION DETAILS
SANITARY SEWER

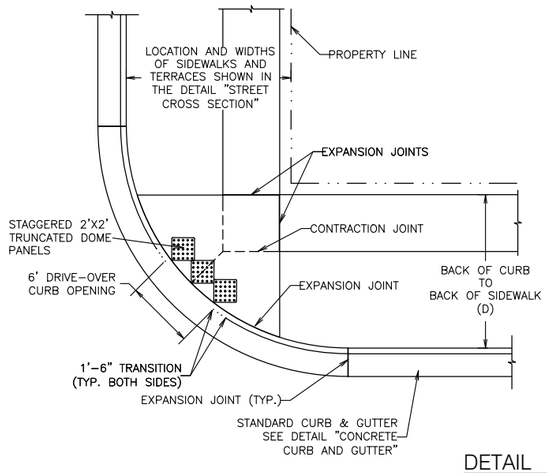
2020 EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.:	MC 168
DRAWING FILE:	MC 168 DETAILS.DWG
DRAWN BY:	J.R.K.
CHECKED BY:	T.J.S.
DATE:	10-28-20
REVISIONS:	
SCALE:	N.T.S.
SHEET:	A7

NOTES:
TRUNCATED DOME PANELS MUST TOUCH ONE CORNER TO RADIUS OF BACK OF CURB. IF MORE THAN ONE IS USED THEY MUST TOUCH OR OVERLAP. DOMES SHALL BE ALIGNED WITH CROSS WALK DIRECTION.

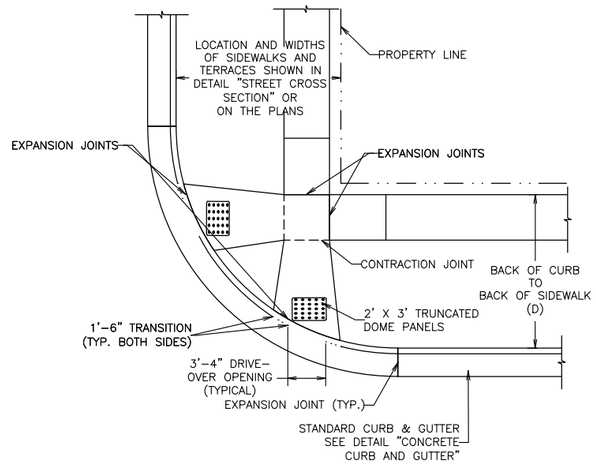
TYPE 1 CURB RAMP

– FOR USE WHEN THE DISTANCE FROM THE BACK OF THE CURB TO THE BACK OF THE SIDEWALK (D) IS LESS THAN 12 FEET.

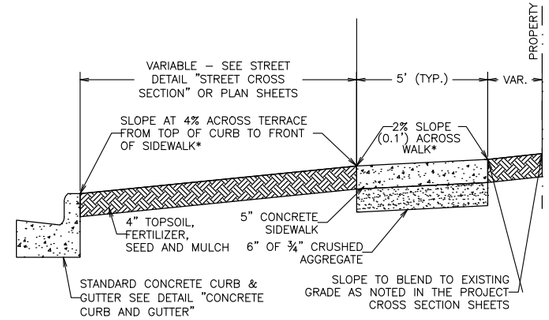


TYPE 2 CURB RAMP

– FOR USE WHEN THE DISTANCE FROM THE BACK OF THE CURB TO THE BACK OF THE SIDEWALK (D) IS GREATER THAN OR EQUAL TO 12 FEET.

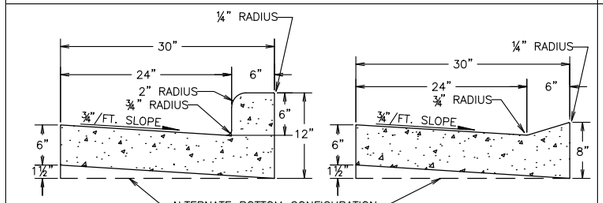


DETAIL
CURB RAMP



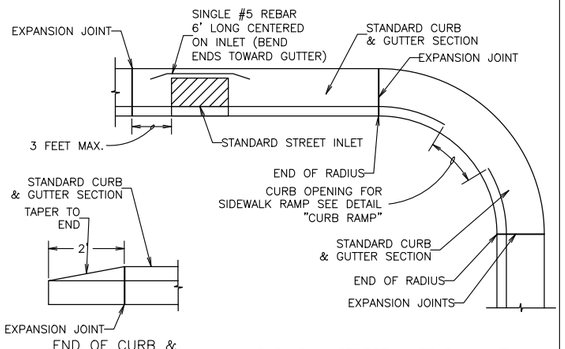
* WHERE PLAN CROSS SECTIONS CONFLICT WITH THIS DETAIL THE PLAN CROSS SECTIONS SHALL GOVERN.

DETAIL
SIDEWALK - TERRACE SECTION



STANDARD CURB & GUTTER CROSS SECTION DIMENSIONS

DRIVE–OVER CURB & GUTTER CROSS SECTION DIMENSIONS

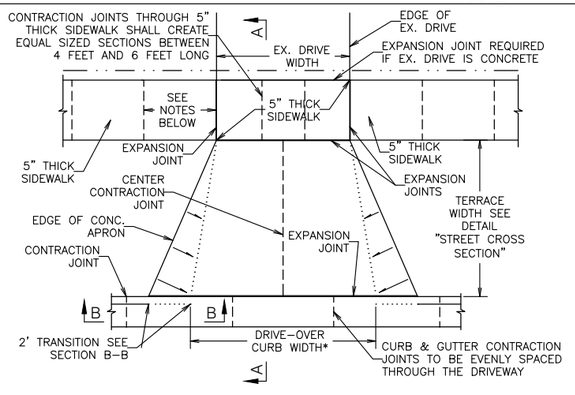


END OF CURB & GUTTER DETAIL

RADIUS & STREET INLET PLAN VIEW

NOTES:
1.) CONTRACTION JOINTS SHALL BE PLACED EVERY 6 TO 12 FEET AND AT LOCATIONS SHOWN IN THE CURB RAMP AND DRIVEWAY DETAILS.
2.) EXPANSION JOINTS SHALL BE PLACED AT EVERY END OF RADIUS, 3 FEET ON ONE SIDE OF EACH STREET INLET AND AT INTERVALS NOT TO EXCEED 300 FEET.

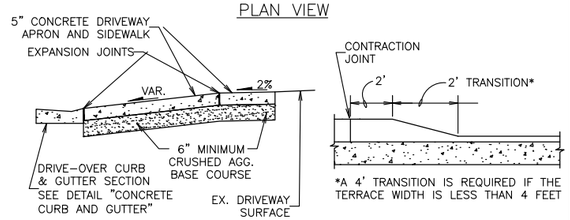
DETAIL
CONCRETE CURB AND GUTTER



NOTES: – 5" THICK WALK WIDTH SHALL BE EQUAL TO THE EX. DRIVE WIDTH OR A MINIMUM OF 12' CENTERED ON THE EX. DRIVE. THE DRIVE–OVER CURB WIDTH SHALL BE EQUAL TO THE 5" THICK WALK WIDTH PLUS 2', CENTERED ON THE EX. DRIVE.

– CONTRACTION JOINTS IN 5" THICK SIDEWALKS SHALL BE PLACED EVERY 5'. EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT TO EXCEED 96 FEET.

PLAN VIEW

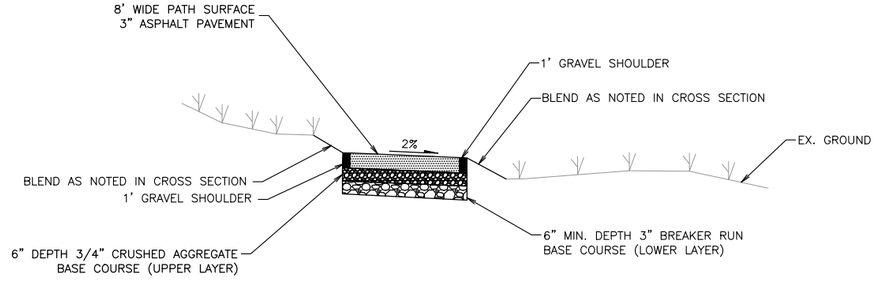


SECTION A–A

SECTION B–B

*A 4' TRANSITION IS REQUIRED IF THE TERRACE WIDTH IS LESS THAN 4 FEET

DETAIL
DRIVEWAY



NOTE: AGGREGATE BASE COURSE TO EXTEND 1 FOOT BEYOND ASPHALT EDGE ON EACH SIDE

DETAIL ###
PEDESTRIAN PATH

PRELIMINARY

TOWN & COUNTRY ENGINEERING, INC.
2912 Marketplace Drive
Suite 103
Madison, WI 53719
(608) 273-3350
www.tcengineers.net

STANDARD CONSTRUCTION DETAILS
STREET IMPROVEMENTS

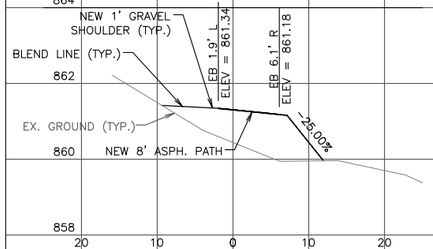
2020 EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.:	MC 168
DRAWING FILE:	MC 168 DETAILS.DWG
DRAWN BY:	J.R.K.
CHECKED BY:	T.J.S.
DATE:	10–28–20
REVISIONS:	
SCALE:	N.T.S.
SHEET:	A8

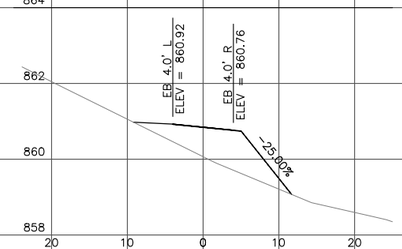
PRELIMINARY

EXISTING CONTOURS ARE DENOTED BY LIGHTER LINES.
FINISHED CONTOURS ARE DENOTED BY DARKER LINES.
DRIVE OVER CURB ELEVATIONS ARE LABELED AT FULL CURB HEIGHT.

96+73



98+00



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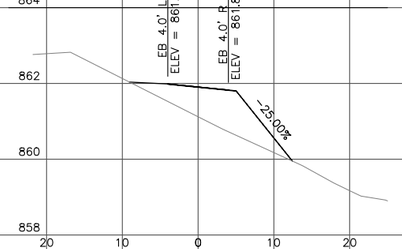

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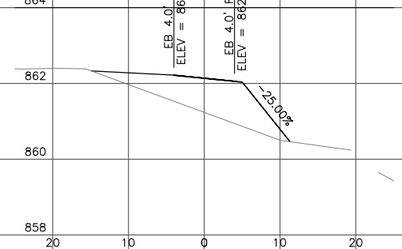

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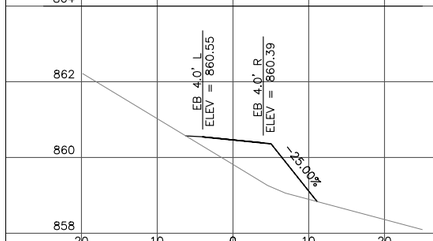

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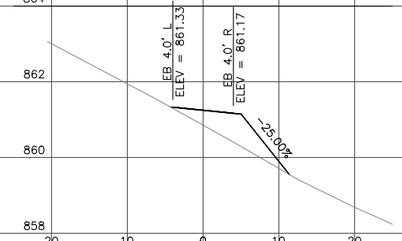

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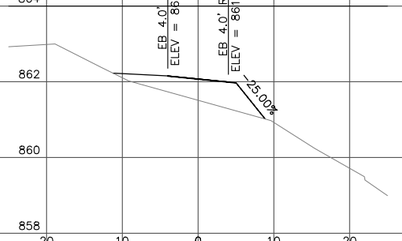

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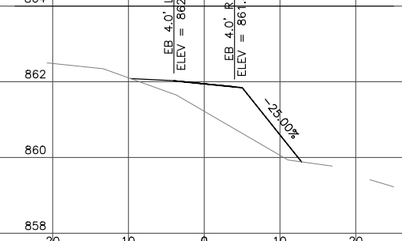

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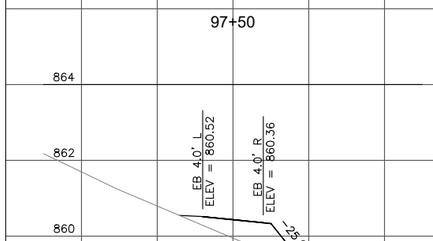

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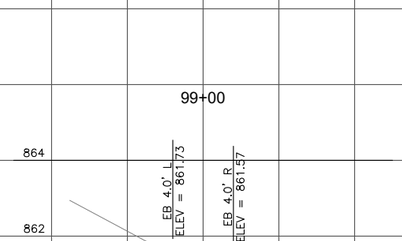

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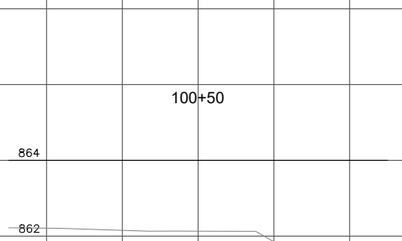

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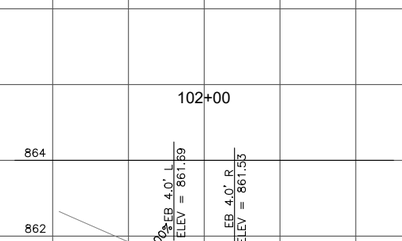

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CROSS SECTIONS
PATH
Station 96+66 To Station 102+00

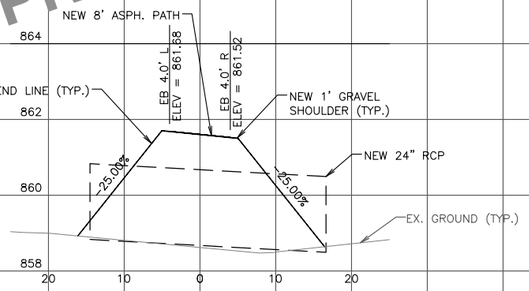
2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.: MC 168
DRAWING FILE: MC 168 SHEETS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10-28-20
REVISIONS:
SCALE: HORIZONTAL 0 2.5 5 10
VERTICAL 1 2
SHEET: X1

PRELIMINARY

EXISTING CONTOURS ARE DENOTED BY LIGHTER LINES.
FINISHED CONTOURS ARE DENOTED BY DARKER LINES.
DRIVE OVER CURB ELEVATIONS ARE LABELED AT FULL CURB HEIGHT.

102+50



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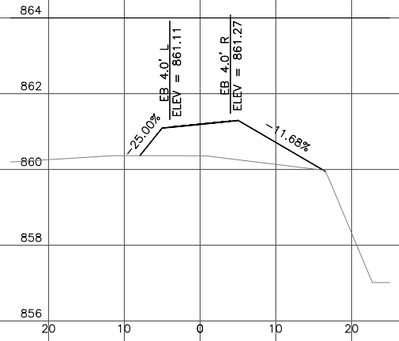

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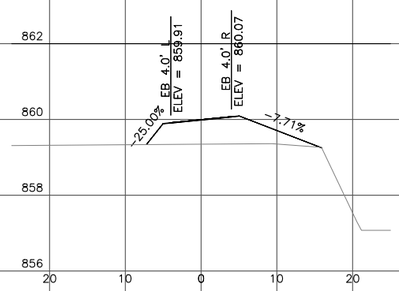

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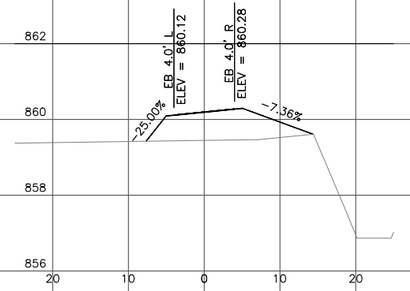

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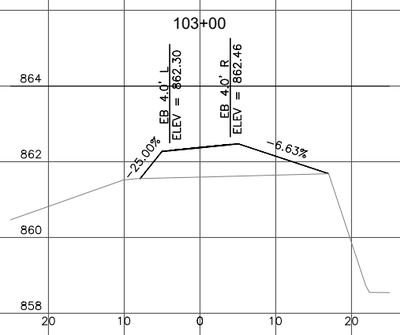

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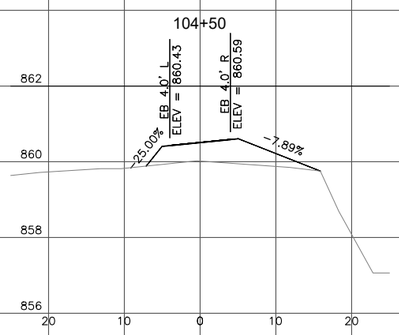

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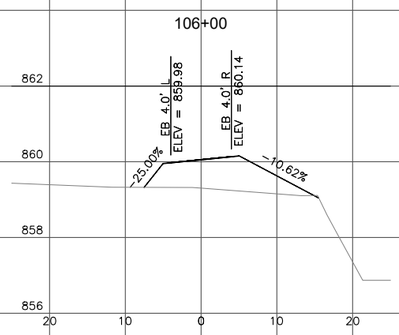

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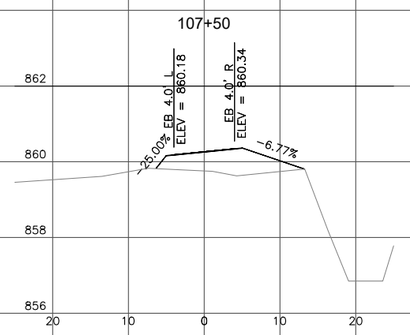

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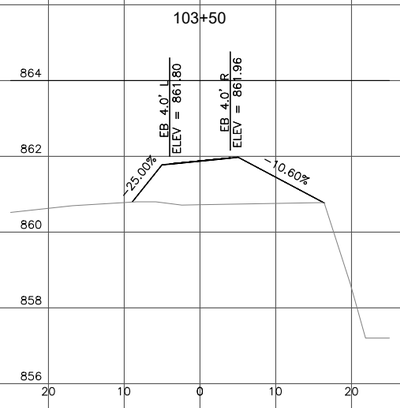

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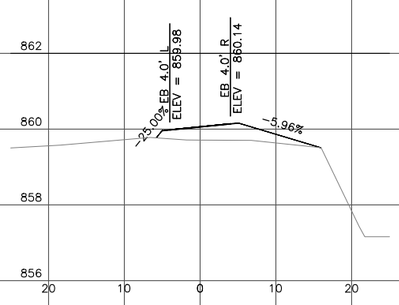

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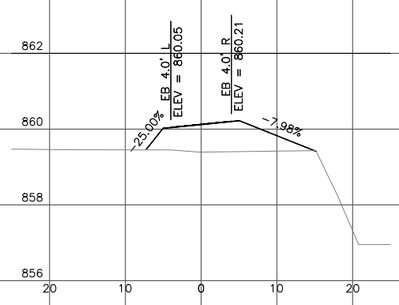

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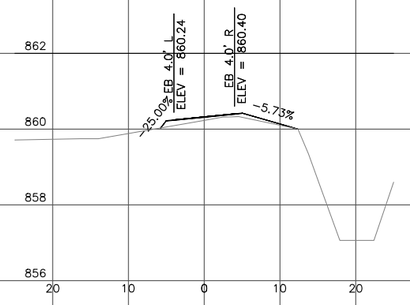

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CROSS SECTIONS
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Station 102+50 To Station 108+00

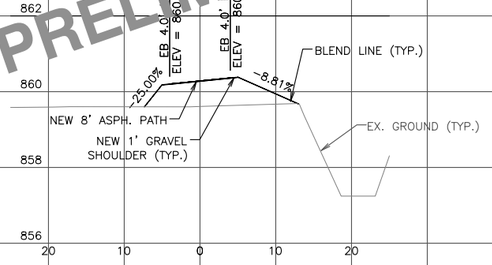
2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.: MC 168
DRAWING FILE: MC 168 SHEETS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10-28-20
REVISIONS:
SCALE: HORIZONTAL 0 2.5 5 10
VERTICAL 1 2
SHEET: X2

PRELIMINARY

EXISTING CONTOURS ARE DENOTED BY LIGHTER LINES.
FINISHED CONTOURS ARE DENOTED BY DARKER LINES.
DRIVE OVER CURB ELEVATIONS ARE LABELED AT FULL CURB HEIGHT.

108+50



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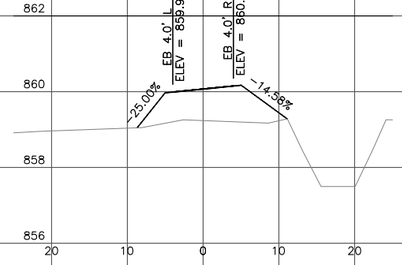

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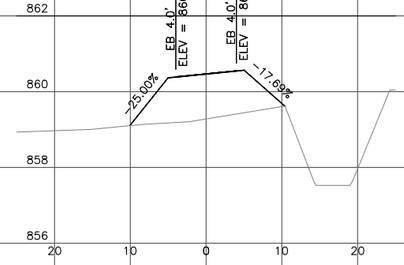

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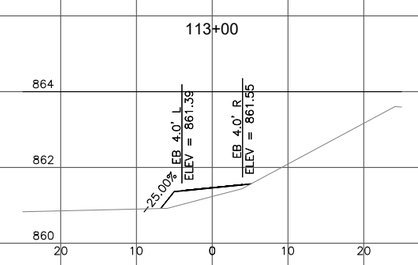
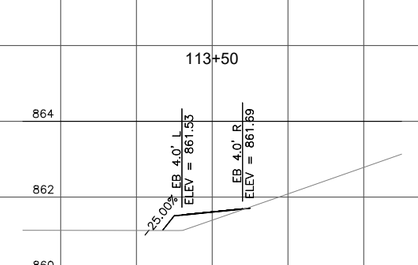


109+00

110+50

112+00

113+50



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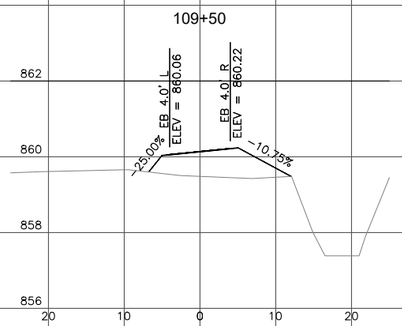
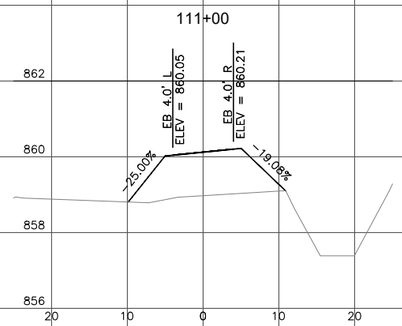


111+00



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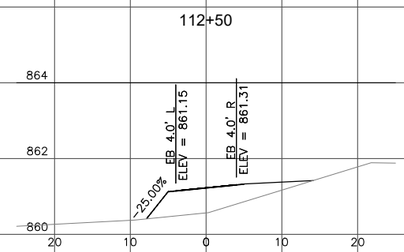
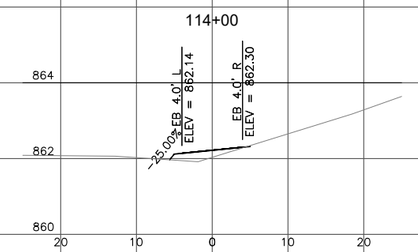


114+00



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TOWN & COUNTRY ENGINEERING, INC.

CROSS SECTIONS
PATH
Station 108+50 To Station 114+00

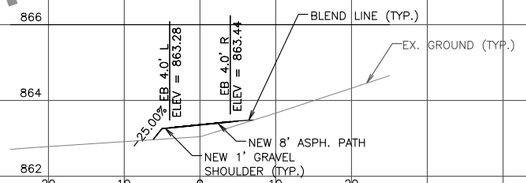
2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.: MC 168
DRAWING FILE: MC 168 SHEETS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10-28-20
REVISIONS:
SCALE: HORIZONTAL 0 2.5 5 10
VERTICAL 1 2
SHEET: X3

PRELIMINARY

EXISTING CONTOURS ARE DENOTED BY LIGHTER LINES.
FINISHED CONTOURS ARE DENOTED BY DARKER LINES.
DRIVE OVER CURB ELEVATIONS ARE LABELED AT FULL CURB HEIGHT.

114+50



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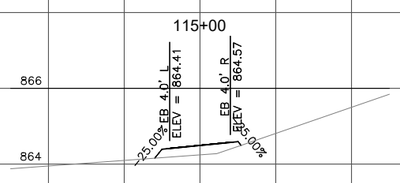

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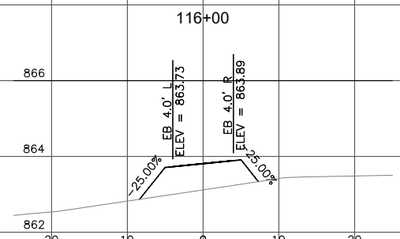

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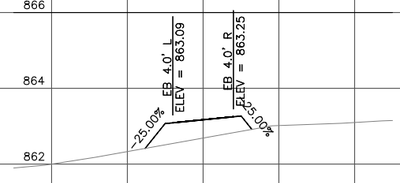

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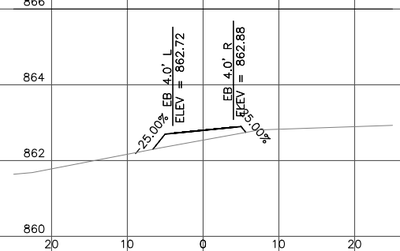

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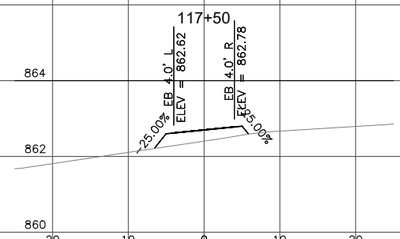

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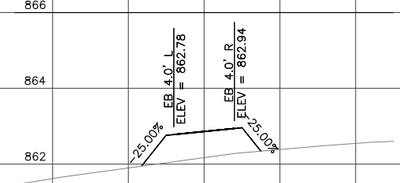

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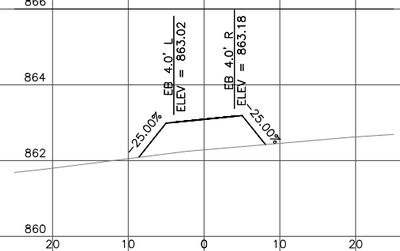

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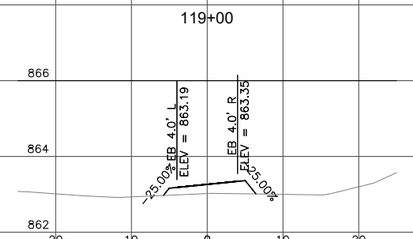

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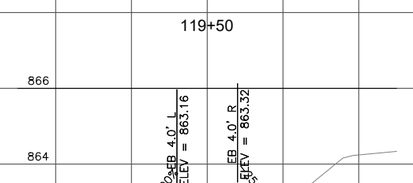

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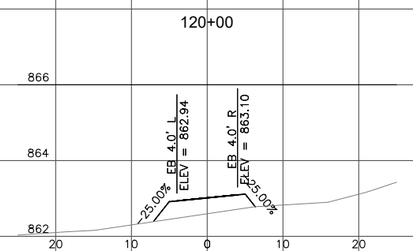

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CROSS SECTIONS
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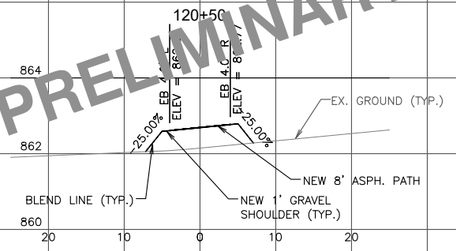
Station 114+50 To Station 120+00

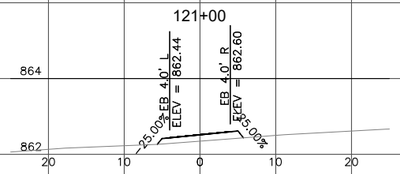
2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

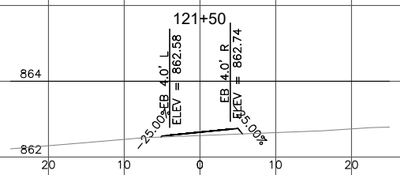
PROJECT NO.: MC 168
DRAWING FILE: MC 168 SHEETS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10-28-20
REVISIONS:
SCALE: HORIZONTAL 0 2.5 5 10
VERTICAL 1 2
SHEET: X4

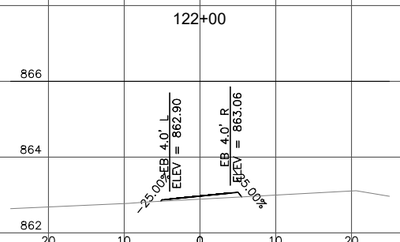
PRELIMINARY

EXISTING CONTOURS ARE DENOTED BY LIGHTER LINES.
FINISHED CONTOURS ARE DENOTED BY DARKER LINES.
DRIVE OVER CURB ELEVATIONS ARE LABELED AT FULL CURB HEIGHT.









2912 Marketplace Drive
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TOWN & COUNTRY ENGINEERING, INC.

CROSS SECTIONS
PATH
Station 120+50 To Station 122+00

2020 STREET AND UTILITY IMPROVEMENTS
EAST SIDE SEWER EXTENSION
Village of McFarland, Wisconsin

PROJECT NO.: MC 168
DRAWING FILE: MC 168 SHEETS.DWG
DRAWN BY: J.R.K.
CHECKED BY: T.J.S.
DATE: 10-28-20
REVISIONS:
SCALE: HORIZONTAL 0 2.5 5 10
VERTICAL 1 2
SHEET: X5

VILLAGE OF
McFarland

VILLAGE BOARD SUMMARY SHEET

MEETING DATE: **Tuesday, December 8, 2020**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT: **Jim Hessling, Public Works Director**

AGENDA ITEM: **Discussion and action to make a recommendation to the Village Board regarding a contribution to a wetland mitigation bank authorized by the Wisconsin Department of Natural Resources for the Eastside Interceptor Sanitary Sewer Project.**

PREVIOUS ACTION:
None.

ISSUE SUMMARY:
Since its inception, the design of the Eastside Sanitary Sewer Inceptor would impact area wetlands through easement provided on the Utterback Property. This is allowed via a permit through the DNR. Since the project design was accepted and proceeding to bid, Engineering Staff have been working with the DNR on the permitting process. The project has been reviewed by DNR and Army Corp of Engineer Staff, and recommended for approval noting 0.23 acres of permanent wetland impact and 0.49 acres of temporary wetland impact. They are broken into two categories in either case with one being wet meadow and the other as forested wetland. All of the permanent impacts will require mitigation and only the forested wetland temporarty impacts will require mitigation.

Mitigation of these impacts will be accomplished through the purchase of Wetland Mitigation Bank Credits based upon the direction and requirement of the DNR. A wetland mitigation bank is a system of establishing wetland compensatory mitigation "credits" at a wetland bank site. Credits can be sold to permittees whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. More information on this is available throug the DNR's website at https://dnr.wisconsin.gov/topic/Wetlands/mitigation/banking.html. We were directed to the Willow Drive Wetland Mitigation Bank for the wet meadow impact and Bass Creek Wetland Mitigation Bank for the forested wetland impact. DNR will be hosting a public information hearing on the project and its impacts on the wetlands after which the Village will need to fulfill its obligation to acquire the credits in order to receive the permit.

FINANCIAL/BUDGET IMPACT:
The cost of the credits to Willow Drive is $16,625 and to Bass Creek is $9,100 according to

formulas established by the DNR. These have been included in projects estimates to date and are also part of the final budget for the project included within the previous agenda item.

VILLAGE PLAN REFERENCE:
None.

ORDINANCE REFERENCE:
None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:
Presented for approval to make a recommendation to the Village Board to acquire the mitigation credits from Willow Creek in an amount of $16,625 and Bass Creek in an amount of $9,100.

ATTACHMENTS:
None

VILLAGE OF
McFarland

VILLAGE BOARD SUMMARY SHEET

MEETING DATE: **Tuesday, December 8, 2020**

SECTION: **Business**

DEPARTMENT: **Administration**

CONTACT:

AGENDA ITEM: **Discussion regarding special assessment methodology regarding the 2021 Eastside Sanitary Sewer Interceptor project.**

PREVIOUS ACTION:

ISSUE SUMMARY:
Enclosed is an updated summary of a potential cost sharing arrangement for the Eastside Sanitary Sewer Interceptor Project. The document has been updated from when previously presented to the committee on September 15, 2020. The spreadsheet incorporates bid results as received by Town & Country Engineering for the project as well as other discussion items since originally developed. Brian Berquist with Town & Country Engineering will be present to review the enclosed summary and answer questions for the committee.

FINANCIAL/BUDGET IMPACT:

VILLAGE PLAN REFERENCE:

ORDINANCE REFERENCE:

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

ATTACHMENTS:
1. East Side Sewer Service Cost Sharing - ERU method 12-3-2020

Potential Lift Station 2 Sewer Interceptor Extension (Countrywood Interceptor)
Village of McFarland
Estimated Cost Sharing Arrangement (Using Dwelling Units)
12/3/2020

Notes:
1. Incremental oversizing is to a 12-inch sanitary sewer from 8-inch sanitary sewer, 50% of path costs are paid by General Fund
2. Dwelling unit count is assumed at 0.3 ac/dwelling unit, except for Utterback (North of RR) which is based on draft final plat.
3. It is estimated that half of the area within these parcels will be served by the 2021 east side sewer extension. The remaining portion is anticipated to be served by a parallel village utility to the west.
4. 10% of the remaining subbasins of E and F because that is estimated to be the amount developed in the next 25 years.
5. This is based on the Phase 1 East Side Sewer Extension Estimate as detailed in the attached estimate = $ 582,283
6. There is a significant amount of wetland area within these parcels. It is anticipated that wetland area within this parcel will not be developable or served by sewer. As a result, the sewer service area for this parcel shown is the estimated acreage outside of the WDNR Wetland Inventory layer.
7. MMSD sewer charges are NOT included in these figures.
8. Village impact fees for Library and Water System are NOT included in these figures.

Total Project Costs =	$745,512
Assessable Project Costs =	$582,283
Projected Dwelling Units =	512
Cost per Dwelling Unit =	$1,137.27

		Potential Users							
	Total Base Cost (without oversizing)	Sperle & Teppo	Utterback Limited Partnership (South of RR Corridor)[6]	Utterback Limited Partnership (North of RR Corridor)	Utter[3]	Vennevoll	Elvehjem Acres[6]	10% of the Remainder of Subbasin E[4]	10% of the Remainder of Subbasin F[4]	(incremental oversizing and 50% path)[1]
Approx. Sewer Service Area		18.00	4.01	19.81	23.62	35.87	18.39	10.03	14.67	
Estimated Dwelling Unit Count[2]		60	13	97	79	120	61	33	49	
Service Area, %		12.5%	2.8%	13.7%	16.4%	24.8%	12.7%	6.9%	10.2%	
Estimated Charges[5]		**$68,236**	**$14,785**	**$110,315**	**$89,844**	**$136,473**	**$69,374**	**$37,530**	**$55,726**	**$163,229**

VILLAGE OF
McFarland

VILLAGE BOARD SUMMARY SHEET

MEETING DATE: **Tuesday, December 8, 2020**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT: **Jim Hessling, Public Works Director**

AGENDA ITEM: **Discussion and action to make a recommendation to the Village Board regarding Ordinance #2020-24: an ordinance creating Section 47-246 of the McFarland Municipal Code establishing an alternative special assessment process for storm or sewer interceptor construction.**

PREVIOUS ACTION:
The topic of cost recovery for the Eastside Interceptor Project was last discussed by the Committee at its meeting on September 15th.

ISSUE SUMMARY:
Enclosed within your packet is an ordinance to create a new section of the code that provides for a process to determine special assessments for the construction of interceptor sewers. This could apply to either sanitary and storm sewers. Once adopted, the process generally is as follows to establish the assessment for this purpose:

1. Village Board directs the Public Utilities Committee to prepare the assessment report for the Project.
2. Village Staff will prepare the assessment report and present to the Committee for review and consideration to make a recommendation to the Board.
3. The Board will host a public hearing on the assessment report prior to taking final action on the recommendation from Committee.
4. A Class 1 notice is required for the public hearing and can be issued once the assessment report has been prepared and submitted to Committee.

This type of assessment has been discussed related recently to the Eastside Sanitary Sewer Interceptor which is nearing construction beginning early next year. The project will construct a larger sanitary sewer main from Devils Lake Way to just north of the railroad tracks on County Highway AB. The cost for this pipe will be paid initially by the Santiary Sewer Utility which through the application of the assessment the utility will be paid back over time. The assessement methodology establishes the formula to calculate the costs applied to each dwelling unit to be assessed. The funding formula will vary from project to project and the previous item will be discussed as a sort of final draft for this project before we finalize this at our next

meeting in January as the assessment report.

FINANCIAL/BUDGET IMPACT:
The cost implications of recovering expenses for the project are detailed in the previous agenda item. Preparation of the agenda item will ensure our ability to apply this mechanism in the future as might be needed for such projects.

VILLAGE PLAN REFERENCE:
None.

ORDINANCE REFERENCE:
The Village could alternatively establish a simple "connection fee" as it has done previously like with the lift station on Holscher Road. However, the Village has the authority to adopt its own special assessment ordinance that provides flexibility in how the assessment is established and applied. The approach presented as prepared by the Village Attorney provides protection to the Village as it 1) fits within the general statutory authorization; and 2) because it is a special assessment, in the event it were successfully challenged, the Village would have the ability to redo the process and reassess the parcels under the Statutes. The enclosed ordinance provides a process with less ambiguity which helps in its administration and tracking over time.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:
Recommendation of approval to the Village Board to adopt Ordinance #2020-24 as presented for the creation of an alternative process for special assessments of interceptor construction.

ATTACHMENTS:
1. 2020-24 Special Assessments on Utility Interceptors

ORDINANCE 2020-24

AN ORDINANCE CREATING SECTION 47-246 OF THE McFARLAND MUNICIPAL CODE ESTABLISHING AN ALTERNATIVE SPECIAL ASSESSMENT PROCESS FOR STORM OR SEWER INTERCEPTOR CONSTRUCTION.

Purpose: To establish a method for levying special assessments for the construction of new sewer interceptors to recover costs initially funded by the Village and to collect those assessments as connection fees charged to future users of the facilities.

Sponsor: Village Administrator

Recommended Referral: Public Utilities Committee

Public Hearing: Not Required

WHEREAS, the Village ordinances currently contemplate the financing of public sewer extensions either by developer contributions or special assessments levied against the benefitted parcels; and

WHEREAS, the Village Board finds that customary assessment practices when applied to the construction of interceptor mains designed to serve future customers in a large area may result in significant financial burdens to individual property owners and may discourage development; and

WHEREAS, the Village Board has determined that it is reasonable and appropriate to establish an alternative assessment process which allows the Board to allocate the cost of interceptor construction to individual users, and to defer collection of assessments until individual customer connections are made; and

WHEREAS, §66.0701 of the Wisconsin Statutes authorizes the Village to charge the cost of installing public improvements to the property benefitted and make assessments therefor in the manner determined by the Village Board;

NOW, THEREFORE, the Village Board of the Village of McFarland, does ordain as follows:

Section 1. Section 47-246 of the McFarland Municipal Code is created to read as follows:

47-246 – Special Assessments for Sewer Interceptor Construction.

(a) *Definition*. As used in this section, the term "interceptor" shall mean a a storm or sanitary sewer pipe intended primarily to serve a defined area of land and which is designed to provide service through connections with local public mains, and is not intended to allow direct connection by individual customers. "Interceptor" includes a pipe that provides incidental benefits to existing customers only in the form of increased flows, system redundancy or similar improvements to system capacity.

(b) *Special Assessments Authorized.* As a complete alternative to any other methods authorized by this Code or state statutes, the Village Board may elect to levy and collect special assessments to recover all or any part of the cost of construction of public sewer interceptors as provided in this section.

(c) *Method of Procedure.* The following procedure shall apply to special assessments levied under this section:

1. The Village Board shall direct the Public Utilities Committee or the Village Engineer to determine the geographical area which will be specially benefitted by availability of service resulting from the construction of the proposed new interceptor.

2. The Public Utilities Committee shall prepare and submit to the Village Board a report analyzing the per connection cost of the interceptor taking into account the following factors:

a. The maximum number of residential units contemplated to be constructed on each benefitted parcel under the current comprehensive plan, Village zoning ordinances, any applicable neighborhood plans and other applicable land use regulations taking into account physical limitations on each property such as wetlands, easements and topographical conditions.

b. The number and types of commercial, industrial or institutional uses contemplated to be constructed on the benefitted parcels.

c. An appropriate multiplier to equate the estimated sewer usage by non-residential uses to a single residential customer.

d. The total number of connections anticipated during the period beginning with the completion of the interceptor construction and extending one-half of the anticipated useful life of the interceptor as determined by the Village Engineer.

3. The report shall include an estimate of the total assessment to be collected from each benefitted parcel based on the anticipated number and type of connections anticipated within the period described in subpar. 2.d.

4. The Village Board shall hold a public hearing on the report and the proposed assessments. Notice of the hearing shall be provided by publication of a class 1 notice, and a copy of the notice shall be sent by first class mail to the owner of each parcel proposed to be assessed.

5. The Board shall consider the comments made at the public hearing, and may adopt a resolution assessing a residential equivalency unit (REU) charge to be paid at the time of each new connection served by the interceptor in an amount estimated to recover the total portion of the costs to be assessed, as determined by the Board, of the interceptor from all assessed parcels.

(d) *Deferral of Assessments*. Assessments levied under this section shall be deferred until such time as payment of connection charges become due as provided in subd. 5 or such other time as the Village Board determines as part of the assessment resolution.

(e) *Payment as Connection Fee*. The applicant for connection of sanitary sewer service to serve a parcel assessed under this section shall pay, in addition to the standard fee provided in Appendix A, the REU charge established under subd. 5. for each REU determined by the Community and Economic Development Director to be served by the connection. The determination of the Director may be appealed to the Public Utilities Committee, which shall have the authority to affirm or modify the determination of the Director. The determination of the Committee may be appealed as provided in §66.0701, Wis. Stats. State Law Reference – Wis. Stats. §§66.0701, 66.0715, 66.0821.

Section 2. Section 47-159 of the McFarland Municipal Code is amended to read as follows:

Sec. 47-159. - Connection fees.

For each connection of a building sewer to a public sewer within the Village there shall be paid a connection charge. Such connection charge shall be assessed to the person seeking the connection and shall be paid as a condition precedent to the actual connection. The connection charge shall be the sum of the following:

(a) The standard connection charge established by the Village Board from time to time and provided in Appendix A to this Code; and

(b) Any deferred assessment for interceptor construction levied on the parcel pursuant to Section 47-246 of this Code.

Section 3. This ordinance shall take effect the day after its enactment.

The above and foregoing Ordinance was duly adopted at a regular meeting of the McFarland Village Board on the 14th day of December 2020.

APPROVED:

Brad Czebotar, Village President

ATTEST:

Cassandra Suettinger, Village Clerk-Treasurer

ORDINANCE 2020 –24	
MOTION	SECOND
ACTION	DATE
Adopted	
Referred	
Tabled	
Withdrawn	
Defeated	
Published	
INDIVIDUAL VOTING RECORD	
Brassington -	Kryzenske -
Clow -	Rupert -
Czebotar -	Utter -
Flaherty -	
VOTING RESULTS	
Motion Carried	
Motion Defeated:	

VILLAGE OF
McFarland

VILLAGE BOARD SUMMARY SHEET

MEETING DATE: **Tuesday, December 8, 2020**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT: **Jim Hessling, Public Works Director**

AGENDA ITEM: **Discussion and action to make a recommendation to the Village Board to consider a proposal to conduct maintenance at Well #3.**

PREVIOUS ACTION:
The Public Utilities Committee has been advised of this in the past.
This work is recommended by the our WI DNR representative as part of our Sanitary Survey which was conducted in July 2019.

ISSUE SUMMARY:
Maintenance of the underground pumping components at Well #3.

Under WI Administrative Code Chapter NR 810.13 System Maintenance, vertical turbine and submersible well pumps shall be removed and inspected on a regular basis and maintenance provided as needed. A frequency of once every ten years is recommended. This well is approaching about 13 years, since any kind of inspection has been performed. Some maintenance was performed at that time per the letter received from CTW.

The work proposed in this agenda item would help to meet this recommendation and more than likely uncover any deficient parts and improve reliability to our water system.

CTW the proposal provider, has been in business since 1972 and is well respected in the water well industry.

FINANCIAL/BUDGET IMPACT:

VILLAGE PLAN REFERENCE:

ORDINANCE REFERENCE:

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:
Staff recommends approval of this proposal

ATTACHMENTS:

1. McFarland #3
2. 2019 Sanitary Survey Report
3. 2019 Sanitary survey (waterworks) response letter to DNR
4. Follow up letter to 8 2 19 letter to the DNR

CTW Corporation
Wells - Pumps - Controls

November 17, 2020

MR. JIM HESSLING
McFARLAND WATER DEPT.
5915 MILWAUKEE ST.
McFARLAND,WI. 53558

Re: Well #3 service

Dear Mr. Hessling,

CTW Corporation is pleased to present the following proposal for providing service to the pump in Well #3. Our firm specializes in this service and we will strive to restore your equipment to its best efficiency possible.

The pump at Well #3 was serviced by CTW in 2008 and the column and shafting were replaced at that time. Currently, there is an issue with the standby power system that could be addressed with this service. I have prepared a service estimate based on the pump being a large diameter, four stage unit supported on 230' of eight inch column. Our basic service will consist of the following repairs:

- Remove well pump and evaluate components
- Inspect and identify the components with you before relocating to our shop for repair
- Install new bushings and wear rings in the pump assembly
- Replace line shaft bearings
- Remove stuffing box and install a new bushing and repack
- Install new airline
- Reinstall rebuilt assembly, disinfect, flush and collect two samples for bacterial analysis.

The above services are expected not to exceed a cost of $11,300. I believe our standard equipment will be able to be incorporated in the service work. This again is what we call a blind setup with no door in front of the well. While the site is difficult, the weather will allow the ground to freeze, minimizing access damage.

In addition, we offer a full range of additional services that may be of use to complete the project satisfactorily. Prior to performing any of these additional services we will obtain your approval.

- Televise well and provide an electronic copy $1500 max
- Brush and bail well $ 1950/ day
- Electric motor service $2500 Estimate
- Well treatment depending on condition $4000

Generally, this process may take two weeks at best and will vary with the condition of the equipment and additional services. Depending on the importance of the well this process can be expedited or a temporary pump can be installed. If well treatment is necessary, the schedule will be delayed at least five weeks for DNR approval. This may be an opportune time to look at this well for upgrades. The capacity of the pump is 560 gpm from our last test. The well report indicates it was tested at 1200 gpm. It might be wise to look at increasing the well pump capacity. We could run a pump to waste to see how the well performs and check for sand presence. This may be valuable information for the future if an upgrade is not pursued now. We appreciate the opportunity to present our services to your community and look forward to providing you with many years of dependable service from your well and pump.

Sincerely,

Thomas J. Goethel P.E., CTW Corporation

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
3911 Fish Hatchery Road
Fitchburg WI 53711-5397

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

July 19, 2019

PWS ID#: 11302412
McFarland Waterworks
McFarland, WI
MC - Dane County

Jim Hessling,
Director of Public Works
5115 Terminal Drive
McFarland, WI 53558-9426

Subject: Sanitary Survey Report and Notice of Noncompliance

Dear Jim Hessling:

The purpose of a sanitary survey is to evaluate the system's source, facilities, equipment, operation, maintenance, and management as they relate to providing safe drinking water. The sanitary survey is also an opportunity to update the Department's records, provide technical assistance, and identify potential risks that may adversely affect drinking water quality. This Sanitary Survey Report also serves as a Notice of Noncompliance.

On July 15, 2019, Dave Barkhahn conducted a sanitary survey of your water system, McFarland Waterworks. During the sanitary survey John Venturino and Mike Schulte were present. At the completion of the survey, you, John, and Mike were briefed on the preliminary findings. This report outlines the final findings, discusses problems that need to be addressed, and timelines for corrective action where appropriate.

A plan for corrective action, including a work schedule must be completed by September 2, 2019. A proposed corrective action plan and schedule is included below. Please contact me to discuss this before September 2, 2019. Depending on the type of corrective action you employ, you may need to obtain prior approval and submit additional plans to the Department.

System Summary
The Village of McFarland is located in central Dane County and is just south of the City of Madison. The water system is owned by the Village and began operation in 1941 for general use and fire protection. The present water system consists of three deep sandstone wells, two elevated storage tanks with a combined capacity of 1,250,000 gallons, and a distribution system consisting of 239,126 feet of water mains. At each well, chlorine is added for disinfection purposes and fluoride is added for dental health protection. Each well is equipped with natural gas engines and right-angle gear drives to operate the well pumps when electrical power is out. The engines are routinely operated.

Significant Deficiencies
During the sanitary survey, one significant deficiency was identified but has already been corrected - the second airline at well 3 was plugged. Significant deficiencies indicate noncompliance with one or more Wisconsin Administrative Codes and/or represent an immediate health risk to consumers.

Deficiencies

During the sanitary survey, four deficiencies were identified. Two deficiencies have already been corrected - the current water system map was submitted and the potential cross connection in one wellhouse was eliminated. Deficiencies are problems in the drinking water system that have the potential to cause serious health risks or represent long-term health risks to consumers. These deficiencies may indicate noncompliance with one or more Wisconsin Administrative Codes. Corrective action should be completed for these deficiencies as soon as possible.

Deficiency	Compliance Due Date	Code Citation
1. The system does not have a schedule/plan for capital improvements & infrastructure replacement.	08/19/2019	810.03, 810.13(1)(a)
2. One pump house is not adequately maintained.	10/19/2019	811.25

Discussion and Schedule for Correction of Deficiencies:

- A schedule is needed to routinely pull and inspect each well pump. It is not known when the pumps were last pulled. We recommend that each pump be pulled at least once every 10 years. Rehabilitation of the wells, upgrades to the distribution piping, replacement of the auxiliary engines, and upgrades to the well houses, could also occur at the same time that the pumps are pulled. Other equipment also needs to be routinely maintained or replaced. Equipment such as tripods and safety harnesses for entering confined spaces; and climbing harnesses and climbing devices for climbing the elevated tanks, also need to be upgraded or replaced. These upgrades and maintenance items are not being kept up with at the McFarland Water Utility. Please submit a schedule to me for pulling each well pump by August 19, 2019 and let me know the utility's plans for routinely scheduling such maintenance.

- It appears that the roof hatch at well 4 has been leaking for some time and water damage has occurred. The roof hatch is required to be water tight and repairs to the roof hatch and possibly the roof are now needed. This work should be done by October 19, 2019.

Recommendations

During the sanitary survey, four recommendations were identified. Recommendations are problems in the water system that hinder your public water system from consistently providing safe drinking water to consumers.

Recommendation
1. Sampling faucets and/or faucet locations are not appropriate for each type of sample.
2. The water system has not had a PSC rate case within the last 5 years.
3. A means to prevent pipe sweating is not provided at this facility.
4. The pump discharge piping at each well is not adequately protected from corrosion.

Discussion of Recommendations:

- Routine sampling for coliform bacteria at elevated tanks is recommended. There are sample taps in the pits at the base of both elevated tanks. It would be preferable to have the taps located above the floor elevation to make sampling easier and to avoid safety issues with possible confined spaces. A drain line that discharges to the sump pit in the valve vault would prevent excess water from collecting on the floor.

- Our records show that the last water rate increase for McFarland became effective October 10, 2010. We recommend that rates be reviewed at least every 5 years and adjusted as needed to keep up with rising costs of operating and maintaining a water system. The PSC records show that residential customers in McFarland pay $57.05 per quarter for using 18,750 gallons of water. The average price for all utilities in Dane County is $98.37 and the average price for all class C utilities in the state is $95.25 for using the same amount of water. If water rates are periodically adjusted customers are less shocked by the increases. Although current revenues from water rates and charges appear to cover water system costs, there are several things that have not been upgraded or properly maintained in the water system.

- Excessive moisture was apparent inside each well house. Water puddling on the floors has contributed to paint failure on the floors. The electrical control boxes, and possibly the controls themselves, also show signs of corrosion. A means for dehumidification would help reduce corrosion and prolong the life of all metal surfaces, including the electrical controls. High efficiency commercial dehumidifiers work well in pump houses, or the addition of air conditioning have been beneficial at other utilities.

- The discharge piping inside each well house has not been painted recently and the pipes are corroding. In addition to removing the moisture inside each well house, it is important to paint the pipes to help prevent corrosion and premature failure of the pipes and connections.

Non-conforming Features

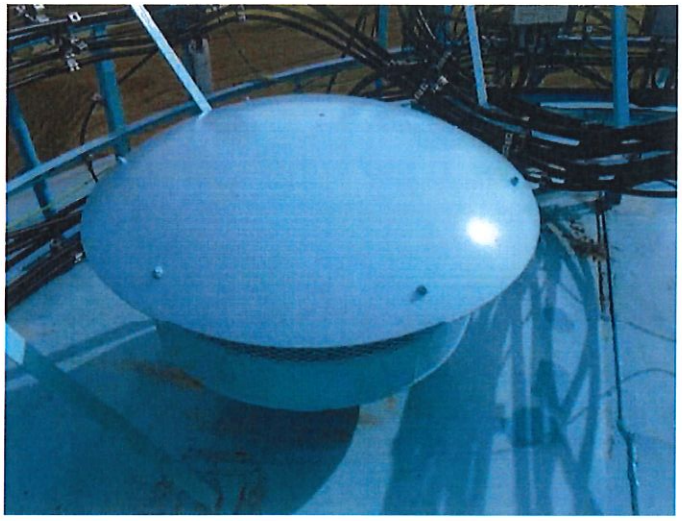
During the sanitary survey, seven nonconforming features were identified. Nonconforming features are things that existed in a water system before a code change became effective. These features were approved at the time of construction or installation but due to changes in the code, would not be approved for new installations. Correction of these features is not required until a health risk is identified, the feature causes problems with the operation of the water system, or major changes or remodeling occurs. The following items were identified as nonconforming features.

Non-conforming Deficiency	Current Code Citation
1. The overflow of one elevated storage facility is not brought down to within 12 to 24 inches of the ground surface and facing downward.	811.64(4)(a)
2. The vent on one elevated storage facility does not meet present code requirements.	811.64(8)(c)
3. The required sample taps are not installed in the well discharge piping.	811.37(5)(b)
4. Secondary containment is not provided for all chemicals.	811.39(3)(d)
5. The proper housing or a separate chemical room is not provided.	811.40(1)(L), 811.51(1), and 811.51(2)(a)
6. There is not at least one adequately sized well vent installed through the well pump casing, well seal, or concrete pump base at two wells.	811.36(1)
7. The pump base at one well is not adequate.	811.31(1)

Discussion of Non-conforming Features:

- The discharge of the overflow pipe on the Burma Road tank discharges horizontally, 42 inches above the splash pad. Current code requires the discharge to face downward and end 12-24 inches above the splash pad.

- The vent on top of the Holscher Road tank does not meet present code requirements. The current code requires skirted sides that totally cover the screen when viewing the vent cap from the side. The picture below is the vent as shown in the last inspection report from Dixon Engineering.



- Entry point sample taps are needed for the proper collection of inorganic, radiological, synthetic organic, and volatile organic samples. Entry point sample taps are needed at wells 1 and 3, after chemical addition. To obtain a water sample representing finished water quality, a water service lateral needs to be brought back into the buildings and fitted with a sampling faucet after being connected to the water main outside the buildings. All sampling faucets must be installed to terminate a minimum of 12 inches above the floor, have a down–turned smooth end spout, be constructed of metal, have a minimum spout diameter of 0.25 inches, and be located in an area accessible for sampling. The tap in the meter test room at well 4 can be used as an entry point tap when well 4 is running.

- Secondary containment for all chemical tanks is not provided. Secondary containment capable of holding the contents of each chemical tank is needed for all new chemical storage rooms. At new installations, secondary containment must be provided for the solution tank being used and all containers being stored.

- Separate chemical rooms with proper ventilation for all chemicals are now required at new installations. Separate chemical rooms are not provided at wells 1 and 3. Separate chemical rooms are recommended for chemical storage at all wells.

- Newly constructed wells are required to have vents with a minimum diameter of 2 inches. It appears the vents at wells 1 and 3 are undersized.

- Newly constructed wells are required to have concrete pump bases that are at least 12 inches above the pump station floor and the protective grouted casing must extend a minimum of one inch above the concrete pump base. The pump base at well 1 is not at least 12 inches high.

Water Quality Monitoring and Reporting

Your water system has an excellent record of compliance with monitoring and reporting requirements for the last four years. All samples were collected within the appropriate monitoring periods and the results were reported to the Department, as required. We appreciate your samplers' continued efforts in complying with these Safe Drinking Water Act requirements. There are no water quality concerns with the McFarland water system.

A review of Department records shows an excellent history of bacteriological sampling for the last 4-year period. At least 10 samples are now required from the distribution system each month. Records show that these samples have been collected each month. The required numbers of quarterly raw water samples have also been submitted. Samples were collected at 12 different locations throughout the distribution system and on different days throughout each month. No coliform positive samples were reported.

The fluoridation program for the McFarland water system has an excellent history of sample submission for the last 3-year period. All monthly split samples were collected and were submitted to the State Lab of Hygiene, as required. The average residual reported by the State Lab for the most recent twelve-monthly split samples submitted in the last year was 0.76 mg/L and the average residual reported by the operators was 0.71 mg/L for the same period. The operators' fluoride split sampling results compared favorably to those obtained by the State Lab of Hygiene. This shows that the operators are doing a good job when performing the fluoride residual tests and that the testing equipment used to run these analyses is functioning properly.

The monitoring requirements for McFarland for 2019 show that one Disinfection Byproduct sample is needed from the distribution system in the third quarter. This sample is required to be collected from site D11, 4802 Marsh Road, outside faucet. Routine coliform bacteria (10 distribution samples in each month and one raw water sample each quarter from each well) and monthly fluoride split samples are also needed.

Lead and Copper Monitoring

You are encouraged to have processes in place for flushing your system any time the water remains stagnant for an extended period and prior to anyone using the water, but do not perform either fixture or facility-wide flushing prior to the lead and copper sampling event. Flushing of the lines six hours before sample collection is not allowed by the Lead and Copper Rule. Home owners should be advised to remove and clean the aerators on a regular basis, but not prior to collecting the lead and copper samples. Samples should be collected under typical conditions, after the water sits for at least six hours.

We have been informed that the US EPA will be revising the Lead and Copper Rule. The Department is also stepping up state wide efforts to reduce consumer's exposure to any amount of lead coming from their drinking water. One part of the new rule will likely require utilities to have a more detailed inventory of their water system, including materials on the customer side of the curb box, and possibly including what materials are used inside each service. These requirements are also in our current codes (ss. NR 809.119 and 809.547(1)(b), Wisconsin Administrative Codes), but will likely be strictly enforced in the future. You should continue to collect materials information where possible during normal operations, including checking service line materials when reading meters or performing maintenance activities including meter replacements, complaints, cross connection inspections, and all construction activities. GIS systems are often capable of storing this type of information. In addition, the Department is asking all water systems to review their lead and copper sites to ensure that all sites are appropriate locations (kitchen or bathroom sinks) and that sites meet the required Tier criteria. We have reviewed your water system's lead and copper monitoring history. It appears that all sites used are appropriate. Currently, there are 27 lead/copper sites on the monitoring site plan and all site are Tier 3.

Homes with lead services are required to be included as Tier 1 sites if any part of the service is lead, including the gooseneck, the Utility portion, or the customer portion. To be classified as a Tier 1 site, the home must have a lead service line or have copper plumbing with lead solder and be constructed between January 1, 1983 and September 30, 1984. If the home was not built within this time, it should be classified as a Tier 3 site, if built prior to 1983. If lead is detected at levels greater than 15 µg/L in a home, we are asking that the homeowners be notified within 24 hours, even if the current code requirement is 30 days.

Your water system will be required to collect at least 20 lead and copper samples between June 1 and September 30, 2020. Let me know if you would like to make any changes to your monitoring sites before that time.

Required Reports, Records, and Utility Programs

It appears that the Village's cross connection control ordinance (Article II, Division 3, §47-60 through §47-67) is properly enforced. Residential, public authority, and multifamily residential services are inspected by utility personnel when meters are changed. Records are kept of each inspection. Public education materials are included with each CCR, each year. Commercial services are required to have inspections made and submit a report to the Utility. The required annual inspection summary reports have been submitted to the Department. These reports are required to be submitted before March 1 of each year. The 2018 summary report was received on February 27, 2019. The 2018 report shows that inspections were made at 10 residential, 208 commercial, and 12 public authority services. The frequency of inspections at commercial and public authority services meets the requirements for those types of services. Since fewer residential meters were changed, fewer cross connection inspections were also made. As long as all the residential services are inspected in a ten-year period, the requirements will be met. The Utility may want to change some residential meters sooner and make inspections so that all inspections won't be needed in a one- or two-year period.

It appears that the Village's private well abandonment and permitting ordinance (Article II, Division 2, §47-44 through §47-51) is also properly enforced. There are two known wells within the Village and they each have current permits. The Village's ordinance requires the proper abandonment of all unused, unsafe, or improperly constructed private wells located on premises served by the Village water supply. Current well operational permits are required to be kept on file for periodic review by Department personnel. As properties are annexed and served municipal water, the well owners should be notified of the requirements in the Village's ordinance.

Hydrant flushing and valve exercising programs are also required and it appears that the Utility has done a good job with these programs. System hydrants are typically flushed once per year and dead-end hydrants are typically flushed twice per year. About 1/3 of the valves are exercised each year. Excellent records of all hydrant and valve maintenance are kept.

The 750,000-gallon elevated tank on Holscher Road was last inspected on October 27, 2015. The inspection report from 2015 is on file. The 500,000-gallon elevated tank on Burma Road was last inspected on October 11, 2017. The inspection report is also on file. Detailed interior inspections of all water storage facilities are required at least once every five years. Inspection reports are also required to be submitted to the Department when the 5-year tank inspection is completed. In addition to the 5-year interior inspections, the screens on the vents and overflow pipes, as well as the integrity of the gaskets on the hatches, are required to be checked at least once per year and documented. We also recommend that the overflow screen be cleaned during the annual checks.

The monthly pumpage reports must be completely filled out and submitted to the Department on or before the tenth day of the following month. In the last 3½ years, it appears that all reports were filled out properly and all reports were submitted on time.

On October 23, 2018, America's Water Infrastructure Act (AWIA) was signed into law. Under the new law, municipal water systems serving more than 3,300 people will be required to develop or update risk and resilience assessments and emergency response plans (ERPs). The law includes components that the risk assessments and ERPs must address and establishes deadlines by which water systems are required to certify to EPA completion of the risk assessment and ERP. EPA's Water Security Division is currently working to develop the tools, resources, and procedures that water systems need to comply with AWIA. Water systems with populations between 3,300 and 50,000 will be required to conduct a risk and resilience assessment and submit certification of its completion to the EPA by June 30, 2021. Your utility will also be required to update an emergency response plan and certify completion to the EPA by December 30. 2021. The risk and resilience assessments will be required to be reviewed every 5 years and recertified to EPA. Then, within six months, your utility will be required to recertify that you have reviewed and revised the emergency response plan. You will be notified of the details of the requirements when they are available. EPA is also expected to publish guidance on the new requirements. For more information, go to: https://www.epa.gov/waterresilience/americas-water-infrastructure-act-2018-risk-assessments-and-emergency-response-plans .

Our records show that the Utility has distributed the required Consumer Confidence Reports (CCRs). All reports were complete, and it appears that the reports were properly distributed. The completed certification forms were also sent to this office. The CCRs must continue to be distributed before July 1 of every year. Please continue to send me copies of the final reports and the completed certification forms. A copy of the 2018 CCR and the completed certification form were received on June 3, 2019.

Certified Operator

Chapter NR 114, Wisconsin Administrative Code, specifies the requirements for certified waterworks operators. To be fully certified for the McFarland water system, the Utility must employ at least one person that is a grade 1 operator in Distribution (D), and Groundwater (G). An operator in training is given a grade T status until proper experience is obtained and reported. The water system must also designate the operator in charge. To maintain their certification, all operators must attend continuing education classes and submit their credits when renewing their certificates.

Our records show that Jim Hessling is the operator in charge. Jim has Grade 1 certification in D and G. Jim's certification is good until June 1, 2021 when he will need to renew with the proper number of continuing education credits. Our records also show that Brett Brandt, Jack Kelln, David Pospyhalla, John Venturino, Bradley Warren, and Mark Weber are certified at Grade 1 in subclasses D and G. David Pospyhalla also has Grade T certification in Iron Removal (I). Mike Schulte has Grade T certification in D and G. When Mike has the appropriate experience in each subclass he should submit the experience form and become fully certified as a Grade 1 operator.

Reviewable Projects

I would like to remind the utility that plans and specifications for any waterworks improvements or modifications must be prepared by a professional engineer registered in the State of Wisconsin and approved by this Department prior to installation or construction. This includes projects such as raising the pump base height at well 1, modifying the well vents at wells 1 and 3, and adding chemical rooms at wells 1 and 3. The requirements in Wis. Adm. Code § NR 108 should be reviewed prior to starting these and other projects to see if the projects are reviewable.

Improvements Since the Last Sanitary Survey

The previous sanitary survey pointed out problems with the gravel base washing out beneath the overflow of the Holscher Road elevated tank. John Venturino corrected the problem by framing up and pouring concrete around the storm water inlet drain. John did an excellent job with the project.

On March 3, 2017, the Village's Wellhead Protection Plan was approved (W-2017-0120). The approved plan is for existing wells 1, 3, and 4, and also for future well 5. The plan includes a copy of the Village's Wellhead Protection Ordinance.

A new Supervisory Control and Data Acquisition (SCADA) system was purchased and installed in 2018 to replace the antiquated control system. The new SCADA system can control the on/off operation of the well pumps, monitor pressures, and can graph trends of all pumps and water levels. The new system also monitors the operations of all lift stations.

Water System Security

We recommend that you conduct a daily security check of your entire drinking water system to ensure that doors are locked and that windows are secured.

System Summary Information

A water system summary is attached. Please review it for accuracy. If there are changes that need to be made, contact Dave Barkhahn at (608) 275-3300.

Capacity Development Evaluation
This sanitary survey serves as an evaluation of the capabilities of your water system. This system has been determined to have adequate technical, managerial, and financial capacity to provide safe drinking water. The ability to plan for, achieve, and maintain compliance with applicable drinking water standards has been demonstrated.

The next sanitary survey of your water system is scheduled to take place in 2022. Typically, you will be contacted prior to the survey to schedule a date that is convenient.

Required Action
Please respond by September 2, 2019 with notification that all deficiencies have been corrected, or that you agree to correct the deficiencies identified in this letter by the due dates, or with alternative dates for correcting these deficiencies. Please also consider correcting the non-conforming features and recommendations discussed in this letter.

Thank you for you and your staff's assistance during the sanitary survey. If you have any questions, you can reach me by phone at (608) 275-3300, by fax at (608) 275-3338, by e-mail at dave.barkhahn@wisconsin.gov, or by postal mail at the address on this letterhead.

Sincerely,

David Barkhahn
Public Water Supply Engineer

Encl.

cc: Bureau of Drinking Water/Groundwater - DG/5
Matt Schuenke, Village Administrator (email only)
Cassandra Suettinger, Village Clerk/Treasurer (email only)

Water System Summary Information
System ID: 11302412
System Name: MCFARLAND WATERWORKS
County: Dane
Type: Municipal Community
Basin: Rock River (lower)
Population: 8527
Service Connections: 0
Owner: JIM HESSLING
5115 TERMINAL DR
MCFARLAND, WI 53558
(608) 838-7287 Fax: (608) 838-6823 jim.hessling@mcfarland.wi.us
Date Security VA Complete: 05/03/2004
Date ERP Complete: 05/03/2004
Date ERP Last Exercised/Updated:
Emergency Phone: (608) 575-0115
Emergency Fax: (608) 838-7954
Emergency E-mail: police.chief@mcfarland.wi.us

Certified Operators

Name	Lic. #	Expires	Phone/Fax/E-mail	Certification
BRETT BRANDT	32875	05/01/2020	(608) 838-7287 bbrandt2479@yahoo.com	D-1, G-1
JAMES HESSLING	27118	06/01/2021	(608) 838-7287 jim.hessling@mcfarland.wi.us	D-1, G-1; plus OIC
JACK KELLN	35956	05/01/2022	(608) 838-7287 jack.kelln@mcfarland.wi.us	D-1, G-1
DAVID POSPYHALLA	32146	05/01/2021	(608) 219-8995 davidpospyhalla@gmail.com	D-1, G-1, I-T
MICHAEL SCHULTE	38215	05/01/2022	(608) 577-5080 mike.schulte@mcfarland.wi.us	D-T, G-T
JOHN VENTURINO	36847	02/01/2022	(608) 609-6338 johnventurino@gmail.com	D-1, G-1
BRADLEY WARREN	23016	01/01/2021	() -	D-1, G-1
MARK WEBER	33321	05/01/2022	(608) 838-7287 (608) 838-6823 mweber3370@yahoo.com	D-1, G-1

Affiliations

Name	Affiliation	Start Date	End Date	Primary?	Phone
JIM HESSLING	SAMPLER	12/04/2015		Y	608-838-7287
JIM HESSLING	OWNER	12/14/2018		Y	608-838-7287
CRAIG SHERVEN	EMERGENCY	06/02/2004		Y	608-575-0115
DAVE BARKHAHN	DNR_REP	07/05/2011		Y	608-275-3300
CASSANDRA SUETTINGER	PLAN_CON	04/13/2018		N	608-838-3153

Entry Points and Sources of Water (Basic Data)

Source ID	Name	WUWN	Status	Type	Source	Depth	Cased	Grouted
1	Well #1	BF498	Active	ENTRY PT/SOURCE	Ground Water Source	560	167	167
2		BF499	Perm Abandoned	ENTRY PT/SOURCE	Ground Water Source		60	60
3	Well #3	HJ137	Active	ENTRY PT/SOURCE	Ground Water Source	700	260	260
4	Well #4	AC718	Active	ENTRY PT/SOURCE	Ground Water Source	800	130	130
99	OLD WELL #3	BF500	Reconstructed Well	ENTRY PT/SOURCE	Ground Water Source	700		

Entry Points and Sources of Water (Misc. Data)

Source ID	Pump Cap.	Pump Type	Lube	Aux. Power?
1	500	Vertical_Turbine	Water	Yes
2		Vertical_Turbine	Water	No
3	1000	Vertical_Turbine	Water	Yes
4	1000	Vertical_Turbine	Water	Yes
99	560	Vertical_Turbine	Water	Yes

Storage

ID/Location	Type	Vol. (gal)	Firm Pumping Capacity (gpm)	Height to Overflow (ft.)	Overflow Elev. (sea-level, ft.)	Aux. Power?	Mfg.	Model
4901 Burma Road	ELEVATED TANK	500000		91	1047	No	CB&I	Spheroid
5107 Holscher Road	ELEVATED TANK	750000		113	1047	No	CB&I	Spheroid

Booster Stations

ID/Location	Type	Firm Pumping Capacity (gpm)	Aux. Power?

None

System Interconnects

ID/Location	Type	Capacity (gpm)	Metered?	Chemical Injection Capable?

None

Treatment Summary Data

Source ID	Type	Description	Begin	End	Objective(s)	Pump Model	Cap.	Stroke %	Speed %	Sol. Tank Cap.	Dil. Ratio
1	380	Fluoridation	01/01/1960		Other	LMI A171-150FS	10	60	53	30	0
1	421	Hypochlorination, Post	01/01/1960		Disinfection	LMI A141-150S	14	50	40	30	0
2	380	Fluoridation	01/01/1960	04/14/1998	Other						
3	380	Fluoridation	01/01/1960		Other	LMI A171-150FS	10	60	52	30	0
3	421	Hypochlorination, Post	01/01/1960		Disinfection	LMI A151-91SH	24	73	65	30	0
4	380	Fluoridation	01/01/1960		Other	LMI AA171-150FS	10	60	58	30	0
4	421	Hypochlorination, Post	01/01/1960		Disinfection	LMI A151-97SH	24	65	60	30	0
99	380	Fluoridation	01/01/1960	01/01/1996	Other						

System Evaluation Summary

Inspector/Reviewer	Date	Report Date	Type	Agency	Response Due	Response Recd
BARKHAHN, DAVE	07/15/2019	07/19/2019	SURVEY	DNR	09/02/2019	07/16/2019
BARKHAHN, DAVE	07/15/2016	07/22/2016	SURVEY	DNR	09/05/2016	08/18/2016
BARKHAHN, DAVE	06/05/2013	06/14/2013	SURVEY	DNR	07/29/2013	07/29/2013
STUNKARD, TOM	07/14/2010	07/28/2010	SURVEY	DNR	09/10/2010	09/09/2010
STUNKARD, TOM	11/29/2007	12/03/2007	ANNUAL	DNR		
STUNKARD, TOM	11/07/2006	11/29/2006	SURVEY	DNR	01/29/2007	01/22/2007
STUNKARD, TOM	11/03/2005	11/09/2005	ANNUAL	DNR		
STUNKARD, TOM	11/17/2004	12/01/2004	ANNUAL	DNR		
STUNKARD, TOM	11/06/2003	11/07/2003	ANNUAL	DNR		
STUNKARD, TOM	11/13/2002	11/25/2002	ANNUAL	DNR		
STUNKARD, TOM	11/27/2001	12/10/2001	SURVEY	DNR		
STUNKARD, TOM	11/15/2000	11/16/2000	ANNUAL	DNR		
STUNKARD, TOM	12/02/1999	12/16/1999	ANNUAL	DNR		
STUNKARD, TOM	12/15/1998	12/22/1998	ANNUAL	DNR		
STUNKARD, TOM	11/12/1997	11/25/1997	ANNUAL	DNR		
STUNKARD, TOM	11/26/1996	12/16/1996	SURVEY	DNR		
STUNKARD, TOM	11/21/1995	01/05/1996	ANNUAL	DNR		
STUNKARD, TOM	11/10/1994	11/14/1994	ANNUAL	DNR		
STUNKARD, TOM	11/11/1993	11/16/1993	ANNUAL	DNR		
	12/11/1991		SURVEY	DNR		

Bacteriological Sampling History

Year	Distribution Safe	Distribution Unsafe	Confirmed Unsafe	Missed Samples	Raw Safe	Raw Unsafe	Fecal Positive?
2019	66			0	6		N
2018	119			0	13		N
2017	108			0	12		N
2016	108			0	12		N
2015	108			0	12		N
2014	108			0	12		N
2013	108			0	13		N

Chemical Sampling History

Year	Sample Group	Source ID	Samples Taken	Missed Samples	MCL Violations
2019	NITRATE	3	1	0	0
2019	NITRATE	4	1	0	0
2019	FLUORIDE		7	0	0
2019	NITRATE	1	1	0	0
2018	NITRATE	3	1	0	0
2018	NITRATE	4	1	0	0
2018	FLUORIDE		12	0	0
2018	VOC		1	0	0
2018	NITRATE	1	1	0	0
2017	SOC	4	1	0	0
2017	IOC	1	1	0	0
2017	SOC	1	1	0	0
2017	FLUORIDE		16	0	0
2017	PBCU		20	0	0

Year	Sample Group	Source ID	Samples Taken	Missed Samples	MCL Violations
2017	IOC	3	1	0	0
2017	VOC		1	0	0
2017	IOC	4	1	0	0
2017	VOC	1	1	0	0
2017	RAD	3	1	0	0
2017	SOC	3	1	0	0
2017	VOC	4	1	0	0
2016	NITRATE	3	1	0	0
2016	NITRATE	4	1	0	0
2016	FLUORIDE		12	0	0
2016	VOC		2	0	0
2016	NITRATE	1	1	0	0
2015	NITRATE	3	1	0	0
2015	NITRATE	4	1	0	0
2015	FLUORIDE		12	0	0
2015	VOC	1	1	0	0
2015	VOC		1	0	0
2015	NITRATE	1	1	0	0
2014	RAD	4	1	0	0
2014	IOC	1	1	0	0
2014	RAD	1	1	0	0
2014	FLUORIDE		12	0	0
2014	PBCU		23	0	0
2014	VOC	3	1	0	0
2014	IOC	3	1	0	0
2014	VOC		1	0	0
2014	VOC	1	1	0	0
2014	IOC	4	1	0	0
2014	RAD	3	1	0	0
2014	VOC	4	1	0	0
2013	NITRATE	3	1	0	0
2013	NITRATE	4	1	0	0
2013	FLUORIDE		12	2	0
2013	VOC		1	0	0
2013	VOC	1	1	0	0
2013	VOC	4	1	0	0
2013	DBP		1	0	0
2013	NITRATE	1	1	0	0

Sample Group	Last Sampled
BACTI	2019
FLUORIDE	2019
HAA5	2007
IOC	2017
RAD	2017
PBCU	2017
NITRATE	2019
VOC	2018
SOC	2017
DBP	2013
TTHM	2007

MCL Violations

Source ID	Contaminant	Concentration	MCL	Units	Viol. Start	Viol. End	Continuing Operation?

None

Definitions

MCL = Maximum Contaminant Limit (as set by the Environmental Protection Agency (EPA))
BACTI = Bacteriological Sample
IOC = Sample for Inorganic Compounds
NITRATE = Nitrate Sample
PBCU = Lead and Copper Sample
RAD = Sample for Radioactivity
SOC = Sample for Synthetic Organic Compounds
VOC = Sample for Volatile Organic Compounds
FLUORIDE = Fluoride from Fluoridation
TTHM = Total Trihalomethane Sample

www.mcfarland.wi.us | 5915 Milwaukee St, McFarland, WI 53558 | 608.838.3153

August 2, 2019

Dave Barkhahn
WI DNR, Water Supply
3911 Fish Hatchery Road
Fitchburg, WI 53711-5397

RE: 2019 Sanitary Survey Report and Notice of Noncompliance

Dear Dave,

I'm in receipt of your sanitary survey letter dated July 19, 2019. I would like to take this opportunity to address the items listed in your report. Thanks for bringing these items to our attention.

Significant Deficiencies

As stated under Significant Deficiencies we have since capped the additional airline at well #3. Thanks for bringing this to our attention.
We have, as stated in your report, submitted a water system map and corrected the cross connection at well #4. The cross connection was the auxiliary motor cooling tube that was discharging on the floor. This has since been raised.

Deficiencies

1. The utility does not currently have a plan in place to address the capital and infrastructure improvement/replacements for our wells and their structures. We will be addressing this issue at our next utility meeting scheduled for August 20, 2019. After that meeting, I will give you an update on how we plan to address those issues.
2. It is my intention to get the roof hatch repaired at well #4 as part of the rehab of the other wells. We have since temporarily repaired the roof hatch and will make permanent repairs in the future.

Recommendations

1. The sample taps at both of our towers are as indicated, located in pits at the base of the towers. This location creates a confined space entry that takes three people to complete. It is my hope that the sample taps can be raised up out of the pits and reinstalled at a proper working level. This work will take place when the towers are taken out of service for possible inspections, various repairs or repainting.

2. The utility at its July 16, 2019 meeting, directed staff to start looking into a possible rate increase. We are currently compiling information for the utility to consider.

3. Pipe sweating is a natural component of pumping ground water in warm temperatures. The plan on correcting the issue at hand will be to add a dehumidifier at each well house. In planning for the future (as described under deficiencies 1), the electrical panels are corroded from the humidity and fluoride fumes that are present in the building. The panels will be replaced and at the same time that the wells are inspected, it is my hope that air conditioning will be installed to help keep the electrical components cool and dry along with keeping the building dry.

4. The piping at the well houses will be painted this fall to help prevent corrosion. We will start on this as soon as the weather allows and the pipe sweat diminishes.

Non-Conforming Deficiency

1. The over flow piping at the Burma Road water tower will be corrected. This will most likely happen when the tower is taken out of service for repainting.
2. The vent and associated screen at the Holscher Road tower will be replaced with the appropriate sized vent. At this time, I don't know if this will be a standalone project or will be coordinated when the tower is taken out of service for repainting.
3. The sample tap issue will be addressed at the time deficiency #1 is corrected.
4. Containment of the on-site chemical storage will be addressed at the time deficiency #1 is corrected. This will take a bit of planning and reconstruction of the well houses to accommodate this issue along with item #5 below.
5. Separate chemical rooms of sufficient size will be addressed at the time deficiency #1 is corrected. This will take a bit of planning and reconstruction of the well houses to accommodate this issue along with item #4 above.
6. The correct size of well vent piping will be addressed at the time deficiency #1 is corrected.
7. Pump base height at well #1 will be addressed.

Water Quality Monitoring and Reporting

As previously instructed we will now continue to take 10 coliform bacterial samples along with one fluoride sample per month. Other required samples will be taken as directed per our sampling schedule.
Lead and copper sampling for 2020 will be completed as required.

Required Reports, Records and Utility Programs

Current meter testing and replacement activities will start back up in the fall of 2019. We will also continue with performing cross connection inspections as these are done at the same time.

Staff has repaired a hatch gasket on the top of the Burma Road tower.

The McFarland Water Utility will start work on the emergency response plans as part of the America's Water Infrastructure Act that was recently signed into law. Guidance from the Wisconsin Rural Water Association will be asked upon to develop the plan.

Certified Operator

Once Mike Schulte has the required experience, usually a year or more, we will work to submit the necessary paperwork to move Mike to operator Grade 1 subclass G & D, groundwater and distribution.

Reviewable Projects

While we work to correct the deficiencies described in your report, we will have our engineering firm submit plans, which will be stamped by a registered engineer licensed to work in the State of Wisconsin.

Improvements Since Last Sanitary Survey

I would like to take this opportunity to let you know that I appreciate the compliments of John Venturino's work on the over flow pipe at the Holscher Tower. John takes pride in his work and it shows.

Water System Security

Staff presently looks at and checks doors and such as part of the daily rounds.

In closing, I hope that this letter covers and explains what the utility plans on doing to keep our system in great shape. I will be discussing this sanitary survey with the utility committee on August 20, 2019. In the meantime, if you have any questions or concerns, please feel free to contact me. I have attached my business card for your convenience.

Regards,

Jim Hessling
Director of Public Works

www.mcfarland.wi.us | 5915 Milwaukee St, McFarland, WI 53558 | 608.838.3153

August 21, 2019

Dave Barkhahn
WI DNR, Water Supply
3911 Fish Hatchery Road
Fitchburg, WI 53711-5397

RE: Follow up to the letter dated August 2, 2019 addressing the 2019 Sanitary Survey Report and Notice of Noncompliance

Dear Dave,

As reported in my letter to you dated August 2, 2019, here is a follow up on the items from the Sanitary Survey that was recently completed. The utility committee met last night and discussed the report.

The utility agrees to create a plan to address the capital and infrastructure improvement/replacements for our water system. I will be working on creating that plan. The plan will document the needs that are required to keep our water system running effectively while at the same time meeting the DNR's requirements.

As part of this plan, the utility will be looking in to what the actual cost of producing water at each well is. This will help us determine which one of our larger wells will be upgraded first. At the current time, it is anticipated that only one well will be inspected and upgraded per year.

When the maintenance/upgrade work starts, we will be pulling the pump, inspecting, and replacing its components as needed. Electrical upgrades along with replacement of the auxiliary stand by engines will be completed. Building modifications may also take place at that time.

The utility voted on and approved to move forward on a simplified rate increase. Staff will be submitting this proposal to the village board at an upcoming meeting for their approval.

In closing, I hope that this letter addresses our efforts that will be put forth to improve our water system. If you have any questions please feel free to contact me.

Regards,

Jim Hessling
Director of Public Works

cc: Matt Schuenke, Village Administrator, via e-mail
g:\public works\sanitary survey report waterworks\2019\follow up letter to 8 2 19 letter to the dnr.docx

VILLAGE OF
McFarland

VILLAGE BOARD SUMMARY SHEET

MEETING DATE: **Tuesday, December 8, 2020**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT: **Jim Hessling, Public Works Director**

AGENDA ITEM: **Presentation of the Public Works Monthly Report.**

PREVIOUS ACTION:

ISSUE SUMMARY:

FINANCIAL/BUDGET IMPACT:

VILLAGE PLAN REFERENCE:

ORDINANCE REFERENCE:

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

ATTACHMENTS:

1. November 2020 Public Works Directors report

PUBLIC WORKS COMMITTEE
December 15, 2020

PUBLIC UTILITIES COMMITTEE
December 8, 2020

Public Works Directors Report for November 2020

The following is information concerning events and activities of the Public Works Department along with the Water and Sewer Utilities for the previous month. This information is provided in brief to provide an overview of the highlights.

PW Complex

Staff moved back into the facility. Most work except the solar panels have been completed. Minor punch list items remain.

Vacancy

The department has an open position due to the departure of Mike Schulte. We thank Mike for his aid to the department.

Compost Drop Off Site

The site has been extremely busy due to the good fall weather we have been having. This time last year we had snow. The site is busy but manageable.

Snow

On Tuesday November 25, a partial crew was out plowing and salting the hills and corners of the village as needed.

Trucks into Service

The new van and pickup truck that arrived at the end of October have been placed into service.

MMSD Salt Saver Program

The partnership with MMSD regarding the Salt Saver pilot program began November 15, 2020. Our department received 20 emails regarding interest for the program prior to the start date. Currently paperwork is being reviewed and we hope to be able to issue rebates once review has been completed. Additional communications will be going out in The Lookout and a mailing to residential customers. MMSD sent a mailing to commercial customers for inspections by a trained service provider.

Meetings/Training/Seminars

All meetings were held by electronic means this month. Those meetings include:

- Parks and Rec PHMDC update - Larson
- WPRA eSports presentation - Larson
- APWA virtual conference - Igl, Irwin & Hessling
- APWA monthly board meeting - Igl & Hessling
- MAMSWaP meeting - Hessling
- Greater Madison Metropolitan Planning Organization - formerly MPO - Hessling

2020 WATER SYSTEM IMPACT FEES

Collected in Month	2020 Fees	2019 Fees	2020 Impact Fee Distribution		
			Tower	Main	Well
January	1,950.00	2,600.00	1,099.44	312.00	538.56
February	4,550.00	6,500.00	2,565.36	728.00	1,256.64
March	4,550.00	1,950.00	2,565.36	728.00	1,256.64
1st Quarter Total	**11,050.00**	**11,050.00**	**6,230.16**	**1,768.00**	**3,051.84**
April	10,402.00	10,400.00	5,864.76	1,664.32	2,872.92
May	1,950.00	1,950.00	1,099.44	312.00	538.56
June	3,250.00	9,100.00	1,832.40	520.00	897.60
2nd Quarter Total	**15,602.00**	**21,450.00**	**8,796.60**	**2,496.32**	**4,309.08**
July	3,900.00	1,950.00	2,198.88	624.00	1,077.12
August	2,600.00	650.00	1,465.92	416.00	718.08
September	1,950.00	1,300.00	1,099.44	312.00	538.56
3rd Quarter Total	**8,450.00**	**3,900.00**	**4,764.24**	**1,352.00**	**2,333.76**
October	1,950.00	7,151.00	1,099.44	312.00	538.56
November	9,101.00	6,500.00	5,131.72	1,456.00	2,513.28
December	-	7,150.00	-	-	-
4th Quarter Total	**11,051.00**	**20,801.00**	**6,231.16**	**1,768.00**	**3,051.84**

HISTORICAL WATER IMPACT FEE TOTALS

2020 Total	46,153.00		26,022.16	7,384.32	12,746.52
2019 Total	57,201.00		32,250.79	9,152.16	15,798.05
2018 Total	71,501.00		40,313.34	11,440.16	19,747.50
2017 Total	60,801.20		34,281.17	9,728.00	16,792.03
2016 Total	38,026.00		23,708.24	5,252.00	9,065.76
2015 Total	5,851.00		3,298.92	936.00	1,616.08
2014 Total	7,150.00		4,031.28	1,144.00	1,974.72
2013 Total	21,125.00		11,910.59	3,380.00	5,834.41
2012 Total	13,650.00		7,696.08	2,184.00	3,769.92
2011 Total	12,350.00		6,963.12	1,976.00	3,410.88
2010 Total	5,200.00		2,931.84	832.00	1,436.16
2009 Total	7,150.00		4,031.26	1,144.00	1,974.74
2008 Total	10,400.00		5,863.62	1,664.00	2,872.38
2007 Total	34,451.00		19,423.88	5,512.16	9,514.96
2006 Total	28,927.00		16,309.33	4,628.32	7,989.35
2005 Total	52,326.00		29,501.92	8,372.16	14,451.92
2004 Total	77,679.00		43,796.20	12,428.64	21,454.16
2003 Total	59,802.00		33,716.97	9,568.32	16,516.71
2002 Total	69,625.00		39,255.27	11,140.00	19,229.73
2001 Total	55,271.50		31,162.62	8,843.44	15,265.44
2000 Total	56,701.00		31,968.59	9,072.16	15,660.25
1999 Total	55,388.00		31,228.31	8,862.08	15,297.61
1998 Total	14,581.73		8,221.33	2,333.08	4,027.32
Grand Total	**$ 815,157.43**	**$ -**	**$ 461,864.67**	**$ 129,592.68**	**$ 223,700.08**

$650=	$366.48	$104.00	$179.52
$1300	$732.96	$208.00	$359.04

Tower= .56381, Main=.16, Well=.27619