

Public Works Committee

Tuesday, March 9, 2021

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/88486424842>

Or by Telephone: +1 (312) 626-6799

Webinar ID: 884 8642 4842

1. CALL TO ORDER, ROLL CALL.
2. PUBLIC APPEARANCES.
 - a. This is an opportunity for members of the public to address the Village Board. Please remember this is a virtual meeting conducted through the Zoom online meeting platform. Zoom meeting attendees wishing to address the board may do so using the Question and Answer feature within the Zoom online meeting platform. You may state your name, address, and provide your comments to the board for their consideration. Members of the public who are present in person and wish to address the board should fill out a public comment form and turn into the meeting chairperson. Members of the public may speak during public appearances or during their selected agenda item as they designate on the public comment form. Please adhere to the 3-minute time limit. Additionally, you may send your public comments to aimiee.irwin@mcfarland.wi.us to be included as part of the meeting.
3. APPROVAL OF MINUTES.
 - a. Discussion and action regarding the minutes from the Public Works meeting held on January 12, 2021.
 - b. Discussion and action regarding the minutes from the joint Public Works and Public Utilities meeting held on February 16, 2021.
4. BUSINESS.
 - a. Discussion and action to make a recommendation to the Village Board regarding the creation of a Traffic Management Request Policy as Chapter 1 of the Public Works Policy Manual.
 - b. Discussion and action to make a recommendation to the Village Board regarding the creation of a Street Light Policy as Chapter 2 of the Public Works Policy Manual.
 - c. Discussion and action to make a recommendation to the Village Board regarding 2021 Street Paving and Stormwater Projects and authorize the projects for bidding.

- d. Discussion regarding planning future street paving projects.
 - e. Presentation of the Public Works Monthly report.
5. SCHEDULE NEXT MEETING DATE.
- a. Tuesday, April 13, 2021 at 6:00 p.m.--Joint meeting with Public Utilities
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 Works Committee Minutes

Tuesday January 12, 2021 – 6:00 P.M.

1. CALL TO ORDER, ROLL CALL

The meeting was called to order by Village Trustee and Committee Chairperson Carolyn Clow at 6:00 p.m. This meeting was held via Zoom.

Members present: Village Trustee Justin Rupert, Marv Meyers, Jerry Adrian, Rich Whipple, Chris Fredrick, Peter Robinson

Staff present: Jim Hessling (Director of Public Works/Utilities), Lee Igl (Public Works Superintendent), Aimee Irwin (Assistant to the Director), Brian Berquist (Town & Country Engineering), Tim Stieve ((Town & Country Engineering)

2. PUBLIC APPEARANCES

None

3. APPROVAL OF MINUTES

- a. Discussion and action regarding the minutes from the Public Works meeting held on November 10, 2020.
 - a. Motion by Jerry Adrian to approve minutes as presented. Seconded by Marv Meyers. Motion passed 7-0-0

4. BUSINESS

- a. Discussion and action to make a recommendation to the Village Board regarding the creation of a Traffic Management Request Policy as Chapter 1 of the Public Works Policy Manual.
 - Lee Igl provided background regarding the updated draft policy for Traffic Management requests. This policy was previously discussed at the October and November Public Works meetings.
 - Carolyn Clow asked what the current notification process is for stop sign requests. Lee Igl stated there is not currently a notification to nearby residents.
 - Carolyn Clow reviewed the history for a policy regarding Traffic Management requests in that the policy would provide direction for staff and not all requests would need to go through committee.
 - Committee members discussed their viewpoints regarding the petition portion of the policy. Carolyn Clow recommended that after a request is received that staff compile a list of identified locations for petition signature. Rich Whipple asked if data was gathered about other community processes regarding these requests. Jim Hessling stated that both Cottage Grove and Sun Prairie follow the provided policy in that a petition is required.

- Motion by Carolyn Clow recommending to the Village Board the Traffic Management Request Policy as Chapter 1 of the Public Works Policy Manual. Seconded by Justin Rupert. Motion passed 6-1 with Carolyn Clow opposed.
- b. Discussion and action to make a recommendation to the Village Board regarding the creation of a Street Light Policy as Chapter 2 of the Public Works Policy Manual.
- Lee Igl reviewed the updated draft policy document as recommended by the Village Board for further committee review.
 - Committee members discussed the updated policy. Peter Robinson, Jerry Adrian, and Carolyn Clow provided grammatical corrections to the policy. Committee members also reviewed the request form and recommended adding language as to the petition parameters and a hyperlink to the policy.
 - Motion by Carolyn Clow recommending to the Village Board the Street Light Policy with suggested edits. Seconded by Marv Meyers. Motion passed 6-1 with Carolyn Clow opposed.
- c. Discussion and action to schedule public information meetings regarding the Exchange Street project.
- Tim Stieve provided background regarding the upcoming Exchange Street Project. The project would involve full street reconstruction, sidewalk, sanitary sewer, water main and storm sewer improvements. Construction is set to begin in 2024. The Village was awarded project funding and therefore will need to follow the DOT design process. Included in this process is the scheduling of Public Information Meetings to gather public input.
 - Carolyn Clow asked what would be the topic for the first Public Information Meeting. Tim Stieve stated a presentation of an overview of the project would be provided followed by public input. Committee members asked what type of Environmental Study would need to be completed as well as if any study would need to be done regarding the Indian Mounds. Town and Country stated that the extent of an Environmental Study would be determined but an archeological study would need to be completed.
 - The committee suggested a joint meeting with the Public Utilities Committee to be held on February 16, 2021 beginning at 6:00 p.m. The first order of business would be the Public Information Meeting for the Exchange Street project.
- d. Presentation of the Public Works Monthly Report.
- Jim Hessling provided an update on public works activities in the Village for the month of November and December 2020 including the public works building renovations progress, public works staff

vacancy, compost drop off site, MMSD Salt Saver program, snow events, recent water main breaks, and staff trainings or meetings

5. SCHEDULE NEXT MEETING DATE

- a. Tuesday February 16, 2021 at 6:00 p.m.

6. ADJOURNMENT

- a. Motion by Marv Meyers to adjourn at 7:31 p.m. Seconded by Chris Fredrick. Motion passed 7-0-0.

Respectfully submitted by Aimee Irwin

Joint Public Utilities/Public Works Committee Meeting Minutes (DRAFT) February 16, 2021

1. CALL TO ORDER, ROLL CALL. Meeting was called to order at 6:00 p.m. via Zoom by Village Trustee Justin Rupert. Roll call: Rupert, Trustee Eric Kryzenske, Trustee Carolyn Clow, Chris Fredrick, Marc Nielsen, Mary Pat Lytle, Christopher Reynolds, Pauline Boness (arrived at 7 p.m.), Jerry Adrian, Peter Robinson.

Staff present: Matt Schuenke, Village Administrator; Jim Hessling, Public Works Director; Lee Igl, Streets and Utilities Superintendent; and Phil McDade, public works staff. Also, Brian Berquist and Tim Stieve, both of Town & Country Engineering, consultants for the village.

2. PUBLIC APPEARANCES. None.

3. BUSINESS.

a. Public Information Meeting regarding Exchange Street project. The Exchange Street project involves a total reconstruction of the street from Sleepy Hollow Road to its intersection with Farwell and Bashford streets, according to Berquist. Work would include a new road, as well as new underground water, sewer, and stormwater utility lines and services. The project length is approximately 4,200 feet, or 8/10ths of a mile. The village has secured a \$1.18 million grant from the Wisconsin Department of Transportation and the Federal Highway Administration to help offset the cost of the project. Total construction project cost is \$4.8 million. The project would include curb and gutter replacement, bicycle lanes, sidewalk replacement on the south side of the street, and the potential of a sidewalk constructed on the north side of the street. In addition, postal service boxes are likely to be consolidated in groups of four or more, rather than replaced in their original location. Between 13 and 15 trees along Exchange Street have been initially identified as possibly needing to be cut down for the project, and that number could increase or decrease based on selected design. Local traffic, including access in and out of driveways on the street, will be maintained during the construction project. Final design plans would likely be done in May of 2023, with construction beginning in the spring of 2024.

Questions and concerns raised by residents:

- Debra Kloth, 6417 Exchange St.: Will electrical and other utility lines be buried as part of the project? Schuenke, village administrator: The village hopes to coordinate work with utilities serving the village on burying electrical and utility lines, and the village has told utility companies its preference is to have them buried as part of the project.
- Monica Belle, 6116 Exchange St.: Would the width of the road differ depending on the installation of a sidewalk on the north side of the street? Berquist: The current street is 43 feet wide; the project envisions a road width of 47 feet. The Exchange Street right-of-way – the width of the street where the village can make public improvements – is 66-feet wide, and the remaining portions of the right-of-way beyond the 47-foot-wide street would encompass bicycle lanes, street parking, grassy terrace areas, and sidewalks.
- Natalie Santini, 6112 Exchange St.: It appears my front lawn will be cut in two with the sidewalk; how do you balance private property vs. what the community wants? Do we even have a say in this? I would hate to lose trees for a sidewalk. Schuenke: The village plans to work within the current available 66-foot-wide right-of-way, and has no plans to acquire private property for the

project. Input from citizens during these hearings will be helpful in guiding the village's decision regarding sidewalks, he said.

- Dawn DeFoer, 6409 Exchange St.: Impressed with the thought that's gone into the project. I'd like to see power lines buried on the street. Appreciates the desire to keep tree loss to a minimum. Exchange Street has lots of children walking on it to and from nearby schools, and anything to slow down traffic on the street, such as bump-outs shown near crosswalks, would be appreciated. Also highlighted current storm-water drainage challenges on Exchange Street near its intersection with Jaeger Road.
- Tiffany Dahl, 6216 Exchange St.: Said her questions about trees had been answered.
- James Kaufman, 6509 Exchange St.: Will there be any additional charge to individual property owners for sidewalk additions? Shuenke: No.
- Debra Kloth, 6417 Exchange St.: Will trees be planted on the new terrace between the street and a new sidewalk on the north side of Exchange Street? Schuenke: Yes, absolutely, at appropriate distances apart for new plantings.
- Stephanie Bolle, 6116 Exchange St.: When was the last time the centerline of Exchange Street was identified? Berquist: That will be identified through a survey as the project progresses.

Questions from committee members:

- Marc Nielsen: Will residents be able to plant trees before construction begins if they know they will be losing a tree because of the construction? Berquist: Yes, just contact Town & Country Engineering to coordinate.
- Carolyn Clow: Can you explain the prolonged planning process for this, with construction not slated until 2024? Berquist: Accepting state and federal grant money to help offset the project cost requires a rigorous set of checks and balances with state and possibly federal transportation officials. Issues such as Native American and historic sites near the street corridor may need to be thoroughly investigated. Ten-foot wide vehicle lanes, as the initial project design envisions, likely needs state Department of Transportation assessment and approval, as normal lane width is 11 feet.
- Clow: Are sidewalks required on both sides of the street? Berquist: The village would have to work with Wisconsin DOT to see if not building a sidewalk on the north side of the street would impact overall funding of the project. The Exchange Street project scored high on the competitive grant rankings for street projects funded by the Department of Transportation because it lacked a sidewalk on one side, and the DOT has a strong preference for urban road improvements to include pedestrian sidewalks and bike paths on both sides of the road. A decision by the village to not include a sidewalk on one side of the street would "need to be made soon," he said.
- Nielsen: Will there be upgrades of street lights as part of the project. Schuenke. Yes, street light improvements are included.
- Chris Fredrick: Urged village staff to have discussions with the McFarland School District to make sure long-term improvements on Exchange Street align with the district's long-term designs for the area.
- Jerry Adrian: Urged that project managers put in place caution areas during the project near the two school entrances on Exchange Street. Berquist said that would be done.

b. Discussion and action to make a recommendation to the Village Board regarding the award of contract for the County Highway MN project. Stieve said the village received 10 bids for the project, which will improve County Highway MN from its intersection with Holscher Road moving east to North Peninsula Way. The bid package included work on the road itself, plus alternate bids for four related, optional projects. Town & Country Engineering recommended that the village award the contract to S & L Underground, Inc., of Lodi, for \$510,401.17 for road improvements and alternate bids for pedestrian improvements (alternate bid 1) and parking areas (alternate bid 3). Boness motioned, Adrian seconded, to recommend to the village board acceptance of the road construction bid and alternate bids 1 and 3 for \$510,401.17 to S & L Underground, Inc., of Lodi. Motion approved 10-0-0.

c. Discussion regarding asset management. Hessling gave an overview of what the village currently has and uses along with what other communities use. Committee members discussed asset management with Hessling, Igl, and Berquist, with an emphasis on using GIS (Geographic Information System) mapping to inventory items such as: village roads and road conditions; utility infrastructure; and trees and other park amenities. There was no action taking by the joint committee on this agenda item.

d. Presentation of the Public Works Monthly report. Hessling said all staff had moved back into the Public Works building on Terminal Drive after work done on the building this summer and fall. Solar panels are now installed, and plan to be authorized soon for use. Village staff have been working on tree-trimming, and have worked on four snowfall events in January.

4. SCHEDULE NEXT MEETING DATE.

- a. Public Works Committee: Tuesday, March 9, 2021 at 6:00 p.m.
- Public Utilities Committee: Tuesday, March 16, 2021 at 6:00 p.m.

5. ADJOURNMENT. Adrian moved, Boness seconded, to adjourn the meeting. Motion approved 10-0-0; meeting adjourned at 8:35 p.m.


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Tuesday, March 9, 2021

SECTION: Business

DEPARTMENT: Administration

CONTACT: Lee Igl, Streets/Utilities Superintendent

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding the creation of a Traffic Management Request Policy as Chapter 1 of the Public Works Policy Manual.

PREVIOUS ACTION:

Motion by the Public Works Committee was made at its January 21, 2021 meeting recommending the Traffic Management Request Policy to the Village Board. At the Village Board's meeting on January 25, 2021, the motion was made to refer the policy back to the Public Works Committee to work on revisions. The revisions identified by the Village Board were additional work to clean up problematic references, review the petition section and create standards for decision making that include acceptance by the neighborhood, and create a more direct appeal process to go through the Village Board.

ISSUE SUMMARY:

Enclosed is the revised draft to create Chapter 1 of the Public Works Policy Manual for Traffic Management Requests. Public Works reviewed and revised the draft over three meetings and had motioned action to the Village Board in January 2021. The policy addresses resident requests such as speed reduction, stop signs, no parking signs, etc. Previously, requests of this nature were reviewed by the Police and Public Works Departments with occasional recommendation from a Traffic Engineer. The policy will establish the procedure and a policy for making these requests and how the requests will be handled. The Village Board recommended additional review at its January 25, 2021 meeting and the enclosed policy incorporates those recommendations.

FINANCIAL/BUDGET IMPACT:

None.

VILLAGE PLAN REFERENCE:

None.

ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommendation to the Village Board to approve the presented Traffic Management Policy as Chapter 1 of the Public Works Policy Manual.



ATTACHMENTS:

1. Chapter 1 - Traffic Management Request Policy 03042021 mgs

CHAPTER 1 Traffic Management Request Policy

SECTION 1.01 Purpose

To establish guidelines to efficiently and effectively evaluate and respond to public requests for traffic management including but not limited to street signs, speed limit, and parking control within the Village.

SECTION 1.02 Procedure

- (a) Staff will utilize the Manual on Uniform Traffic Control Devices (“MUTCD”) as a guide in making decisions relating to applicable traffic management requests (“Requests”).
- (b) Requests for conceptual or routine additions, maintenance, repair, relocation, etc. shall be addressed as follows:
 - (1) Requests for conceptual or routine additions, maintenance, repair, relocation, etc. may be received verbally, via email, letter or phone call, or via the Application. For example, if someone calls to report that a stop sign has fallen down, action will be taken based upon that Request, and the submission of an Application will not be required. Additionally, individuals may inquire as to conceptual traffic management requests with Staff before submitting an application to better understand the parameters of such a request. Staff will provide preliminary response regarding compliance to Section 1.02(c)(3)(i).
 - (2) Requests for conceptual or routine additions, maintenance, repair, relocation, etc. will generally be evaluated and resolved by Staff, unless any of the preclusions of Section 1.02(~~bc~~)(3)(~~ii~~) exist.
- (c) Requests shall be provided as follows:
 - (1) All Requests shall be submitted via an official Traffic Management Request Form (“Application”). The form will be submitted, as per instructions, to the Police Department (“Police”). The Application will be formatted by Staff and at a minimum contain the following information to be supplied by the Applicant:
 - (i) Name.
 - (ii) Address.
 - (iii) Contact information including telephone number and email address.
 - (iv) Information about the request including a description of the issue, location, and suggested resolution.

~~(v) **Petitions.** The following types of Requests will require a petition to be filed before a final decision will be made by Staff or Committee. The petition must have 60% approval from property owners (one signature per property owner) within the defined proximity as follows:~~

Commented [MS1]: The Village Board requested that the Committee consider a notification rather than a Petition. The Petition language is deleted in favor of the Notification language that has been added. The Committee is free to discuss the method it prefers as part of its recommendation. See below for alternative language on notification.

- ~~a. **New or additional Stop Sign(s):** approval signatures from 60% of all property owners within a 500-foot radius of the sign intersection.~~
- ~~b. **No Parking:** approval signatures from 60% of all property owners in a 250-foot radius in all directions of the sign location.~~
- ~~c. **Speed limit sign:** approval signatures from 60% of all property owners in a 500-foot radius of the sign location.~~
- ~~d. **Traffic calming signs and devices:** approval signatures from 60% of all property owners in a 500-foot radius of sign location.~~

(2) Upon receipt of an Application, the Police Department shall forward a copy to the Public Works Department (“Public Works”).

~~(X) Any Application received shall require notice to each person owning property within 300 feet of the proposed Request. The notice shall be distributed by Public Works and will include a copy of the Application while also providing individuals the opportunity to respond with their feedback.~~

Commented [MS2]: This language is proposed in lieu of a petition. Instead of requiring a petition, then once a request is filed a copy of the request is mailed to those in proximity giving them a chance to provide input if they want.

(3) Police and Public Works will jointly evaluate the Request, and make one of the following determinations:

- (i) Under the following criteria, the Application will be considered administratively by Staff when:
 - 1. The Request is clearly in compliance with the MUTCD and does not contain any of the preclusions listed in Section 1.02(b)(3)(i).
 - 2. The Request is clearly not defined nor recommended in the MUTCD, but may have merit due to other circumstances and does not contain any of the preclusions listed in Section 1.02(b)(3)(i)(1)-(4). Example: the addition of a School Zone warning sign.
 - 3. The Request is, in the opinion of Staff, emergent in nature but may otherwise require Committee review. In these situations Staff will handle the situation with temporary solutions to the degree possible, and refer the Request to the Committee for review of possible permanent solutions.

4. The Request would be considered normal, obvious, everyday course of business situations. Example: a new roadway is opened up, requiring the addition of a stop sign or other traffic control sign.
- (ii) Under the following criteria, the Application will be forwarded to the Public Works Committee (“Committee”) for consideration when:
1. The Request requires approval due to the financial implications per the Fiscal Policy Manual.
 2. The Request is clearly not defined or recommended in the MUTCD, but may have merit due to other circumstances and contain one or more of the preclusions found in this section.
 3. The Request is clearly supported by the MUTCD, but may contain one or more of the preclusions found above in this section.

SECTION 1.03 Committee Referral

(a) Committee Referral

- (1) Upon determination that the Application will require review by the Committee, Staff shall forward the Request to the Committee along with their recommendation(s).
- (2) In most situations, the recommendations of Public Works and Police should be in line with the MUTCD. As noted; however, situations may exist that would suggest a course of action not in compliance with these recommendations. In these situations, the reasons for this and any supporting data or information should be included with the Staff recommendation(s).
- (3) As part of its review, Staff may also consult a Traffic Engineer in order to study the Application and present their recommendations to the Committee as appropriate.

(b) Committee Review

- (1) The Committee will review the Application, Staff report, Traffic Engineer recommendations, and public comment as applicable and available to make its decision on the Request. In doing so the Committee will adhere to the standards contained within the MUTCD as is practical and possible.
- (2) In the event that the action taken by the Committee on the Request necessitates a revision to Village Ordinance, the Committee shall recommend action to the Village Board for final decision.

(c) Final Disposition of the Request

- (1) Upon determination of a final disposition of an Application, Staff shall inform the Applicant of the disposition and what, if any, action will be taken.

SECTION 1.04 Requests for Federal, State, and/or County Highways

- (a) Applications pertaining to Federal and/or State roadways will be referred to the Wisconsin Department of Transportation (“WisDOT”) for review and recommendation. The Village will consider Applications within these roadways that fall within its jurisdiction based upon the findings of WisDOT.
- (b) Applications pertaining to County roadways will be referred to Dane County Highway and Transportation (“Dane County”) for review and recommendation. The Village will consider Applications within these roadways that fall within its jurisdiction based upon the findings of Dane County.

SECTION 1.05 Appeal Process

- ~~(a) Upon receiving notification of the final disposition, the Applicant may appeal to the Committee if action was taken by Staff that the Applicant does not feel properly addresses their Application.~~
- (b) Upon receiving notification of the final disposition, the Applicant may appeal to the Village Board if action was taken by ~~Staff the Committee~~ that the Applicant does not feel properly addresses their Application. Decision by the Village Board is final.
- (c) The Applicant is responsible for the preparation and presentation of any and all evidence, documentation, or testimony they feel supports their Application.

Commented [MS3]: The Village Board requested appeals come directly to them and no Committee intervention.

Committee Adopted:

Village Board Adopted:

Revised: None.



**VILLAGE OF
McFarland
SUMMARY SHEET**

MEETING DATE: Tuesday, March 9, 2021

SECTION: Business

DEPARTMENT: Administration

CONTACT: Lee Igl, Streets/Utilities Superintendent

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding the creation of a Street Light Policy as Chapter 2 of the Public Works Policy Manual.

PREVIOUS ACTION:

The Public Works Committee made the following motion at its January 21, 2021 meeting: Motion by Carolyn Clow recommending to the Village Board the Street Light Policy with suggested edits. Seconded by Marv Meyers. Motion passed 6-1 with Carolyn Clow opposed. The Village Board made the following motion at its January 25, 2021 meeting: Motion by President Czebotar, second by Trustee Clair Utter, to refer the Street Light Policy as Chapter 2 of the Public Works Policy Manual back to the Public Works Committee to review the issues identified for additional revision and consideration. Motion carries 6-0-0 by acclamation.

ISSUE SUMMARY:

Enclosed is an updated and revised copy of Chapter 2 of the Public Works Policy Manual regarding a Street Light Policy. The Board reviewed the revised policy at its January 25, 2021 meeting and requested additional review by the Public Works Committee. The Village Board discussed concerns with the 75% petition requirement and creating a more simplified process with criteria to use for decision making. Staff has revised the policy to incorporate the Village Board's concerns.

FINANCIAL/BUDGET IMPACT:

None

VILLAGE PLAN REFERENCE:

None.

ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommendation to the Village Board to approve the provided Street Light Policy.

ATTACHMENTS:

1. Chapter 2 - Streetlight Policy 03042021 mgs

CHAPTER 2 Streetlight Policy

SECTION 2.01 Purpose

This policy is to guide the Village Board, Departments, Staff, and the general public in the request and review process for the additional installation of street lighting, in the right of way, on public Village streets, or cul-de-sacs.

SECTION 2.02 System ~~Standards~~Process

- (a) **New Installation.** For new streets and developments, the street lighting plan will be provided through the energy provider with location and spacing to be approved by the Director of Public Works, Village Engineer, and/or designee.
- (b) **Reconstruction.** Additional street lighting will be reviewed by the Director of Public Works, Village Engineer, and/or designee to determine if additional lighting is needed and will be reviewed on the following basis:
 - (1) Maturity of trees restricting current lighting.
 - (2) High crime area reported by Police.
 - (3) Additions of sidewalks or multi-use paths.
 - ~~(4) Response from petition.~~
- (c) **Spacing standards.** Standard spacing for streetlights are 300 ~~to 400~~ feet pole to pole.

SECTION 2.03 Request Process

- (a) **Initial Consultation.** ~~Street lighting requests~~ ~~Requests~~ for conceptual or routine additions, maintenance, repair, relocation, etc. may be received by Village Staff verbally, via email, letter, or phone call. Individuals are encouraged to meet with Village ~~may inquire as to conceptual street lighting requests with~~ Staff before submitting the official requests to better understand the parameters that may be applicable to their ~~of such a~~ request.
- (b) **Residential Request.** After the initial consultation (if applicable), an individual will be requested to complete an application which at a minimum will contain the following: ~~petition receiving approval from at least 75% of the property owners (one vote per property owner) within a 300-foot radius feet of the purposed streetlight. The following conditions shall apply as part of the review:~~
 - (1) Name.
 - (2) Address.

Commented [MS1]: The Village Board requested that the Committee consider a notification rather than a Petition. The Petition language is deleted in favor of the Notification language that has been added. The Committee is free to discuss the method it prefers as part of its recommendation. See below for alternative language on notification.

- (3) ~~Contact information including telephone number and email address.~~
- (4) ~~Information about the request including a description of the issue, location, and suggested resolution.~~

~~A signed petition or request does not guarantee the addition of street lighting.~~

- ~~(i) Maturity of trees restricting current lighting.~~
- ~~(ii) High crime area reported by Police.~~
- ~~(iii) Additions of sidewalks or multi-use paths.~~
- ~~(iv) Response from petition.~~

(c) **Notice.** ~~Any application received shall require notice to each person owning property within 300 feet of the proposed request. The notice shall be distributed by Public Works and will include a copy of the application while also providing individuals the opportunity to respond with their feedback.~~

Commented [MS2]: This language is proposed in lieu of a petition. Instead of requiring a petition, then once a request is filed a copy of the request is mailed to those in proximity giving them a chance to provide input if they want.

(d) **Review.**

(1) The Director of Public Works, Village Engineer, and/or designee will review the request and petition in order to make the final decision on adding street lighting based on:

~~(e) **Internal Request:**~~

Commented [MS3]: All requests will be handled through the preceding section.

- ~~(1) Internal requests from the Village Board, Departments, and/or Staff will be reviewed by the Director of Public Works, Village Engineer, and/or designee.~~
- ~~(2) The Public Works Department will send out a notification to all residents within 300 feet of the purposed streetlight.~~
- ~~(3) The Director of Public Works, Village Engineer, and/or designee will make a final decision based on:~~
 - ~~(i) Maturity of trees restricting current lighting.~~
 - ~~(ii) High crime area reported by Police.~~
 - ~~(iii) Additions of sidewalks or multi-use paths.~~
 - ~~(iv) Response from petition.~~

SECTION 2.04 **Appeal Process**

- (a) All requests denied at the Staff review level may be appealed to the Village Board ~~Public Works Committee for consideration as a recommendation to the Village Board~~ for action. Decision by the Village Board is final.

Commented [MS4]: The Village Board requested appeals come directly to them and no Committee intervention.

Committee Adopted:

Village Board Adopted:

Revised: None.


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Tuesday, March 9, 2021

SECTION: Business

DEPARTMENT: Administration

CONTACT: Jim Hessling, Public Works Director

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding 2021 Street Paving and Stormwater Projects and authorize the projects for bidding.

PREVIOUS ACTION:

None.

ISSUE SUMMARY:

As part of the current plan set for the 2021 Street and Storm Sewers Project, this project will encompass a handful of smaller projects into one bid package to attract more bidders and improve construction pricing. The work includes pulverizing/resurfacing Renee Court from Lewis Lane to Exchange Street, multiple large pavement patches throughout the Village, improvements to the pedestrian bridge/culvert south of Larson Beach Road, and storm sewer repairs on Lake Edge Road and in the Lani Lane/Pheasant Run area. We are requesting Committee approval to go to bid with this work.

FINANCIAL/BUDGET IMPACT:

Funds allocated in the 2021 budget for this work is broken out as listed:

Street maintenance work - \$300,000

Storm sewer work - \$86,750

VILLAGE PLAN REFERENCE:

ORDINANCE REFERENCE:

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommendation to the Village Board to authorize 2021 paving projects for bidding.

ATTACHMENTS:

1. MC 181 CURRENT SET

2021 STREET AND STORM SEWER IMPROVEMENTS

RENEE COURT, PHEASANT RUN, LAKE EDGE ROAD, TAYLOR-FARWELL STORM SEWER

Village of McFarland, Wisconsin

2912 Marketplace Drive
Suite 103
Madison, WI 53719
(608) 273-3350
www.tceengineers.net

DATE	BY	REVISIONS

2021 STREET AND STORM SEWER IMPROVEMENTS
Renee Court, Pheasant Run, Lake Edge Road,
Taylor-Farwell Storm Sewer
Village of McFarland, Wisconsin

PROJECT NO.: MC 181
DRAWING FILE: MC 181 DETAILS.DWG
DATE: 2-17-21
DRAWN BY: J.C.A.
CHECKED BY: T.J.S.
REV. DATE:

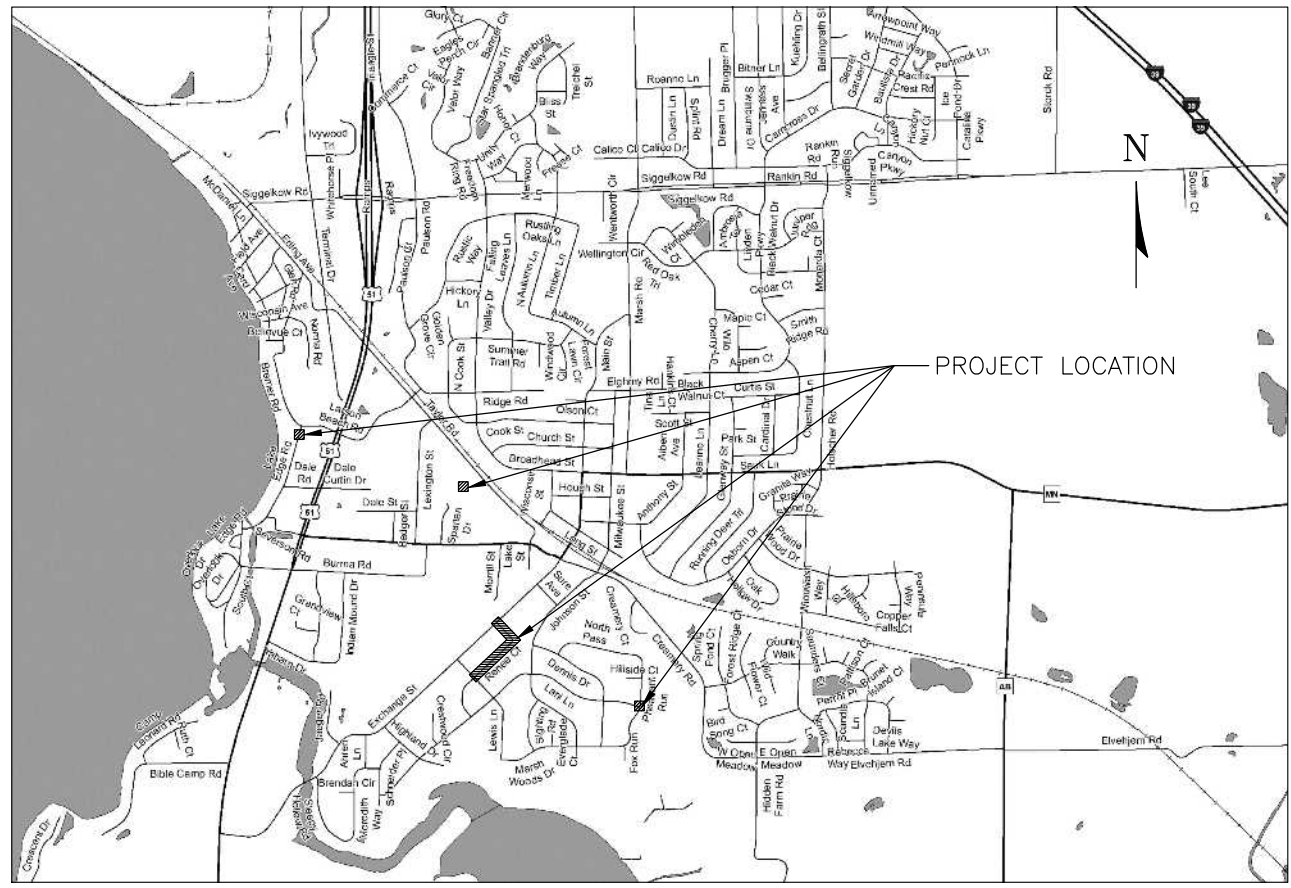
MEMBER
ONE CALL SYSTEMS INTERNATIONAL

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	
SHEET NO.	SHEET DESCRIPTION
1	EROSION CONTROL PLAN
2	EROSION CONTROL NOTES & STANDARD CONSTRUCTION DETAILS
3	PLAN & PROFILE - RENEE COURT LEWIS LANE TO STATION 16+80
4	PLAN & PROFILE - RENEE COURT STATION 16+40 TO EXCHANGE STREET
5	CROSS SECTIONS - RENEE COURT STATION 11+28 TO STATION 16+08
6	CROSS SECTIONS - RENEE COURT STATION 16+73 TO STATION 20+45
7	PLAN & PROFILE - PHEASANT RUN & LAKE EDGE RD
8	PLAN & PROFILE - TAYLOR-FARWELL STORM SEWER
9	STORM SEWER - STANDARD CONSTRUCTION DETAILS
10	STREET IMPROVEMENTS - STANDARD CONSTRUCTION DETAILS



NO SCALE

LEGEND

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

SAWCUT ————XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

NEW STORM SEWER ————
 NEW WATER MAIN ————
 NEW SANITARY SEWER ————

NEW ITEMS:

⊗ WATER VALVE ⊙ CS CURB STOP ⦿ HYDRANT ⊕ MANHOLE ▨ CURB INLET ▭ ENDWALL ⚠ GAS WARNING

EXISTING ITEMS:

—○— FLAG POLE —□— MAILBOX —□— POWER POLE —○— LIGHT POLE —□— LAMP POST —□— PULL BOX

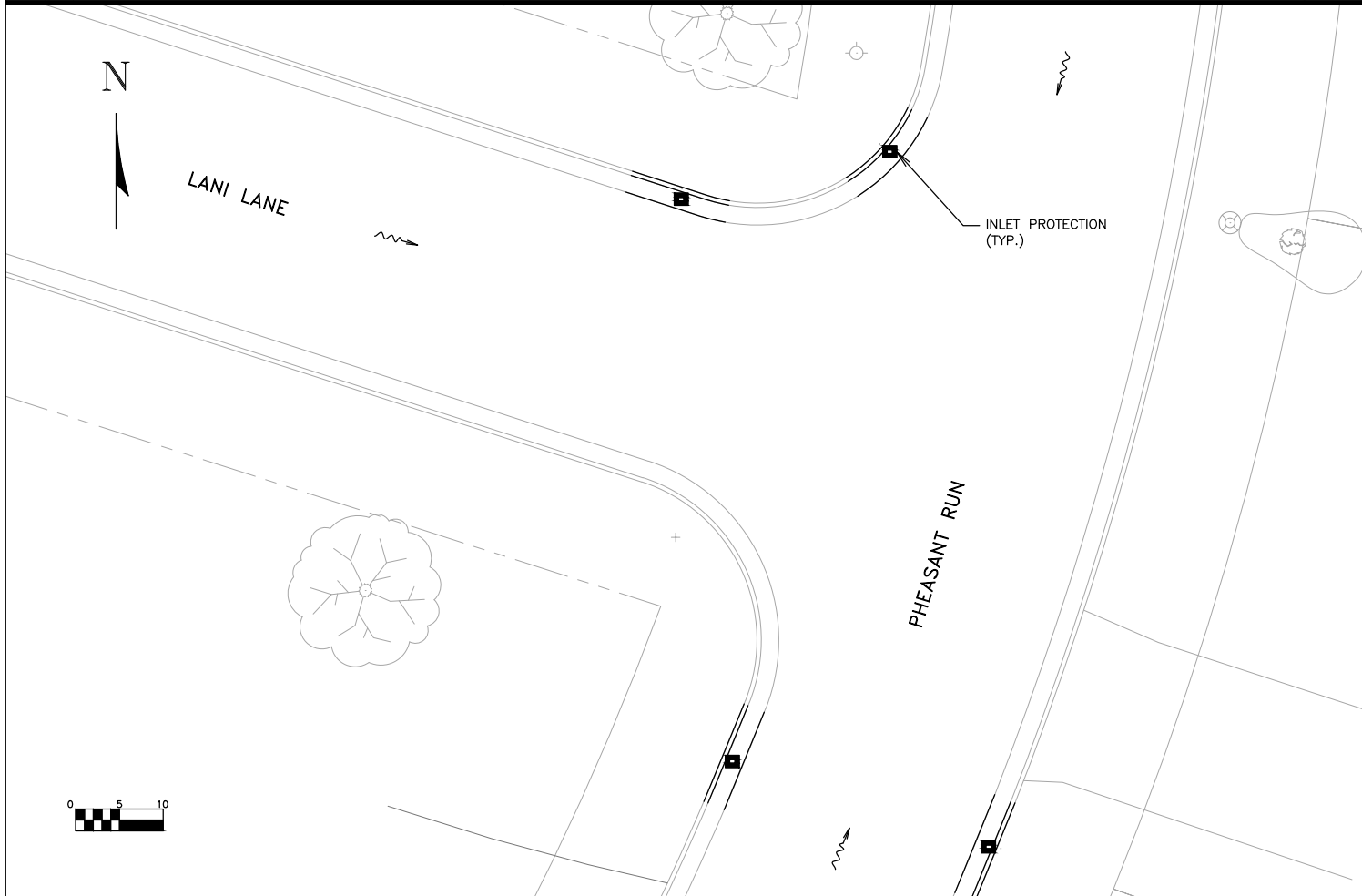
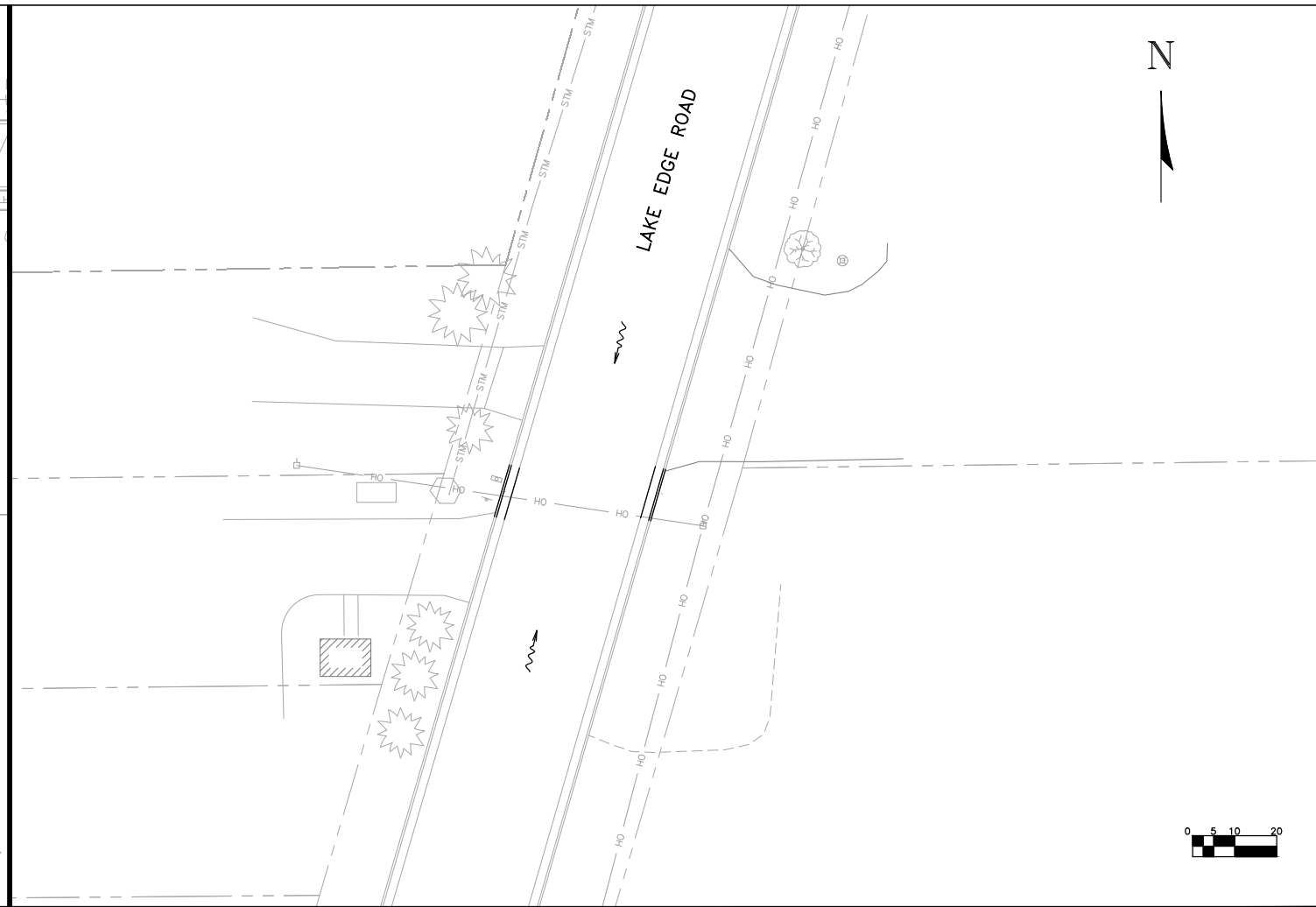
⊗ WATER VALVE ⊙ CS CURB STOP ⦿ HYDRANT ⊕ WELL ⊕ MONITORING WELL ⊕ TRACER WIRE

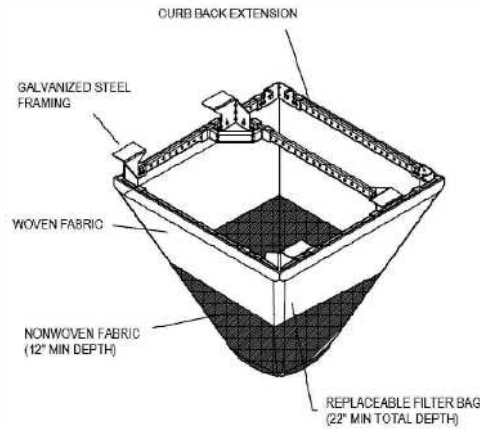
⊕ SANITARY MANHOLE ⊕ SANITARY VALVE ⊕ CLEANOUT ⊕ STORM MANHOLE ▨ CURB INLET ⊕ CIRCULAR INLET

▨ 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





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:

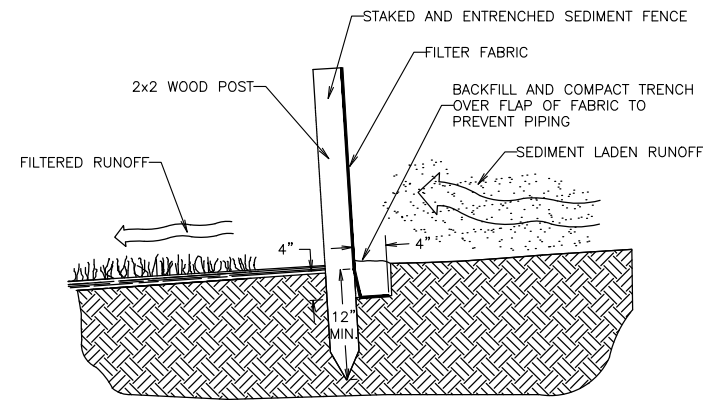
NO PART OF INLET PROTECTION SHALL BE PROJECTING ABOVE THE GRATE.

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

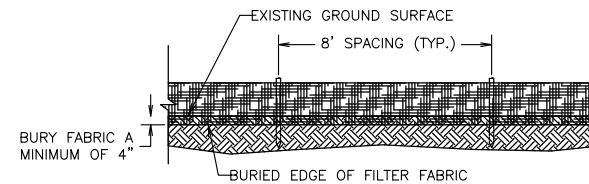
A DUAL FABRIC FILTER BAG, WITH NON-WOVEN BOTTOM AND WOVEN TOP SHALL BE USED.

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.

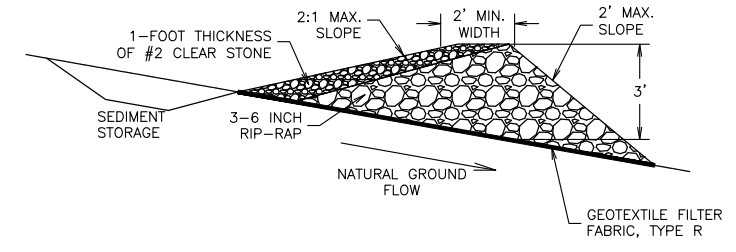
DETAIL
INLET PROTECTION - FRAMED (W/ CURB BOX)



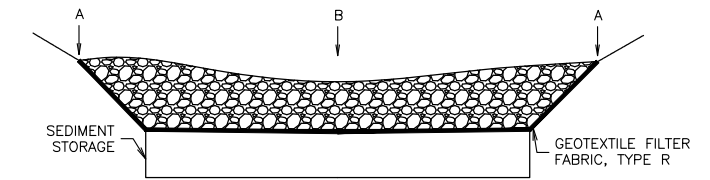
CROSS-SECTION OF A PROPERLY INSTALLED SEDIMENT FENCE



DETAIL
SEDIMENT FENCE



SECTION VIEW



FRONT VIEW

DETAIL
STONE CHECK DAM

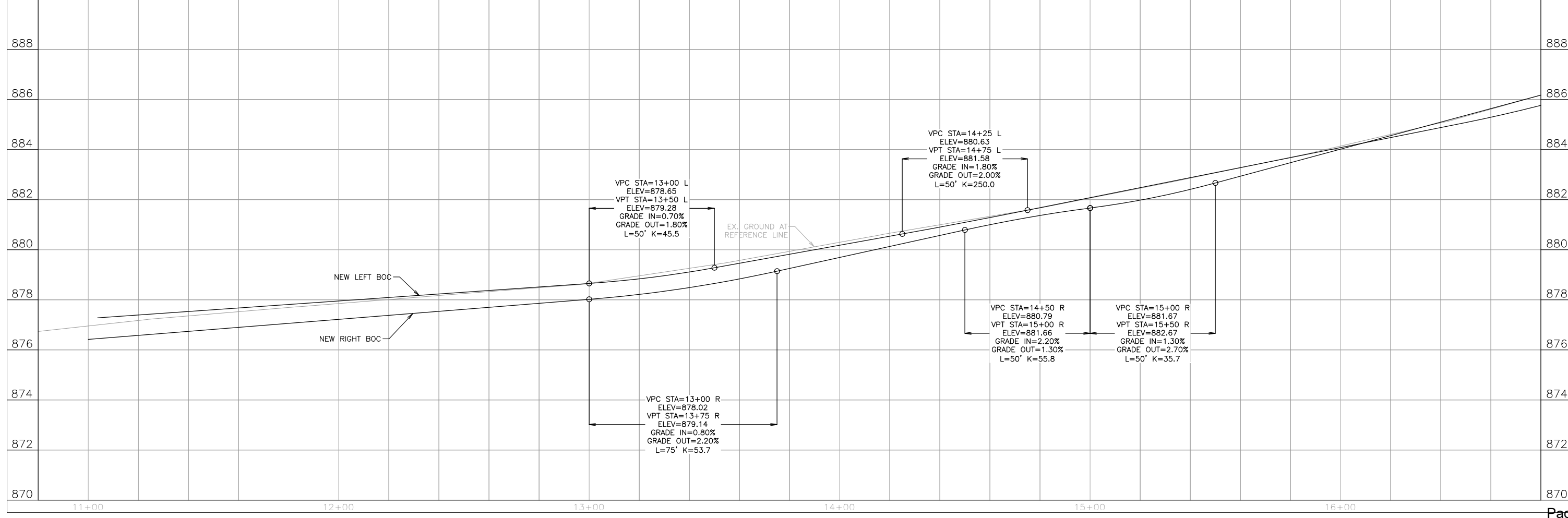
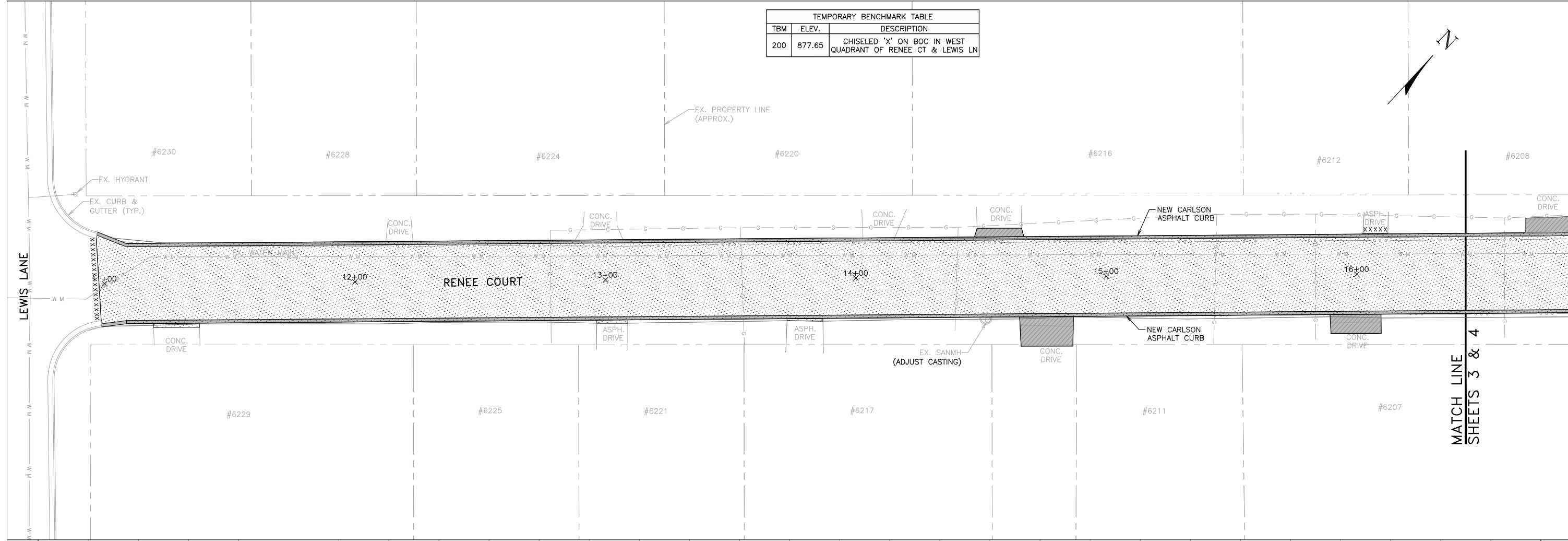
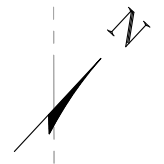
EROSION CONTROL NOTES:

- 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
- 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.
- PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. LIMIT PUMPING RATES TO EITHER (A) THE SEDIMENT BASIN/TRAP DESIGN DISCHARGE RATE, OR (B) THE BASIN DESIGN RELEASE RATE WITH THE CORRECTLY-FITTED HOSE AND GEOTEXTILE FILTER BAG. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DE-WATERING #1061.
- 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.

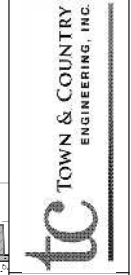
- REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
- INSTALL AND MAINTAIN FILTER SOCKS IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM 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 SWEEP 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/>

PROJECT NO.:	MC 181
DRAWING FILE:	MC 181 DETAILS.DWG
DRAWN BY:	J.C.A.
CHECKED BY:	T.J.S.
DATE:	2-17-21
REVISIONS:	
SCALE:	N.T.S.
SHEET:	2

TEMPORARY BENCHMARK TABLE		
TBM	ELEV.	DESCRIPTION
200	877.65	CHISELED 'X' ON BOC IN WEST QUADRANT OF RENEE CT & LEWIS LN



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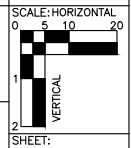


PLAN & PROFILE
RENEE COURT
Station 10+80 To Station 16+80

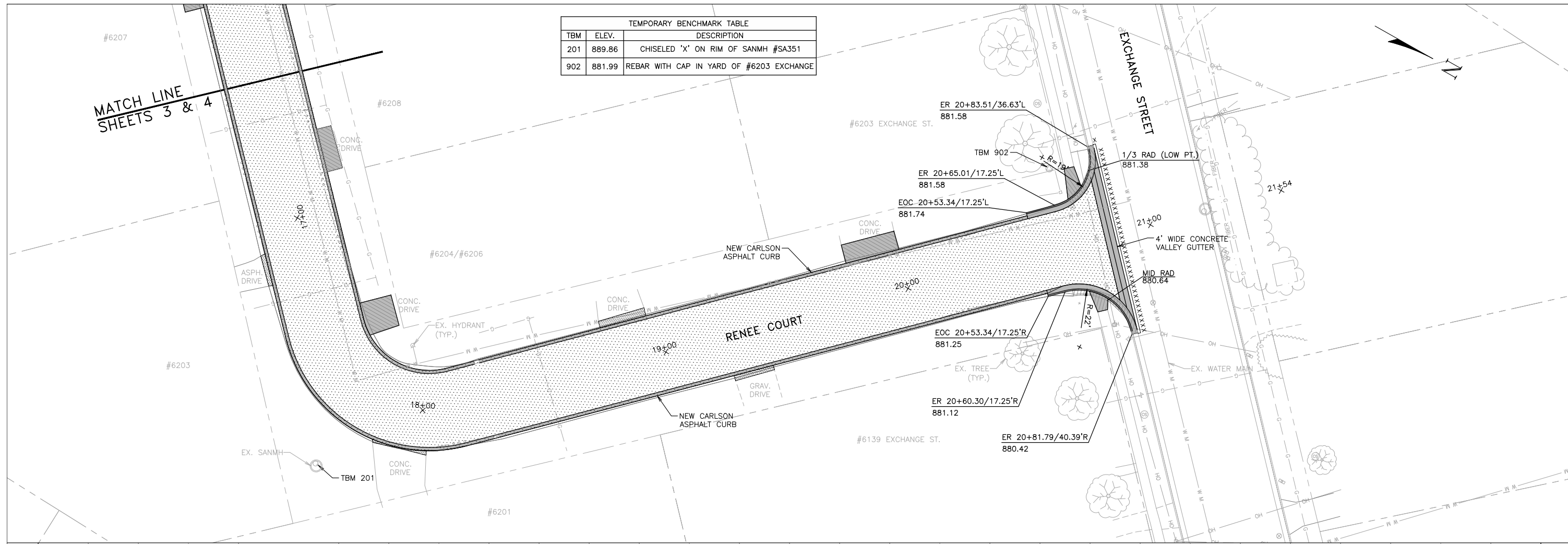
2021 STREET AND STORM SEWER IMPROVEMENTS
Renee Court, Pheasant Run, Lake Edge Road,
Taylor-Farwell Storm Sewer
Village of McFarland, Wisconsin

PROJECT NO.: MC 181
DRAWING FILE: MC 181 SHEETS.DWG
DRAWN BY: J.C.A.
CHECKED BY: T.J.S.

DATE: 2-17-21
REVISIONS:



SHEET: 3

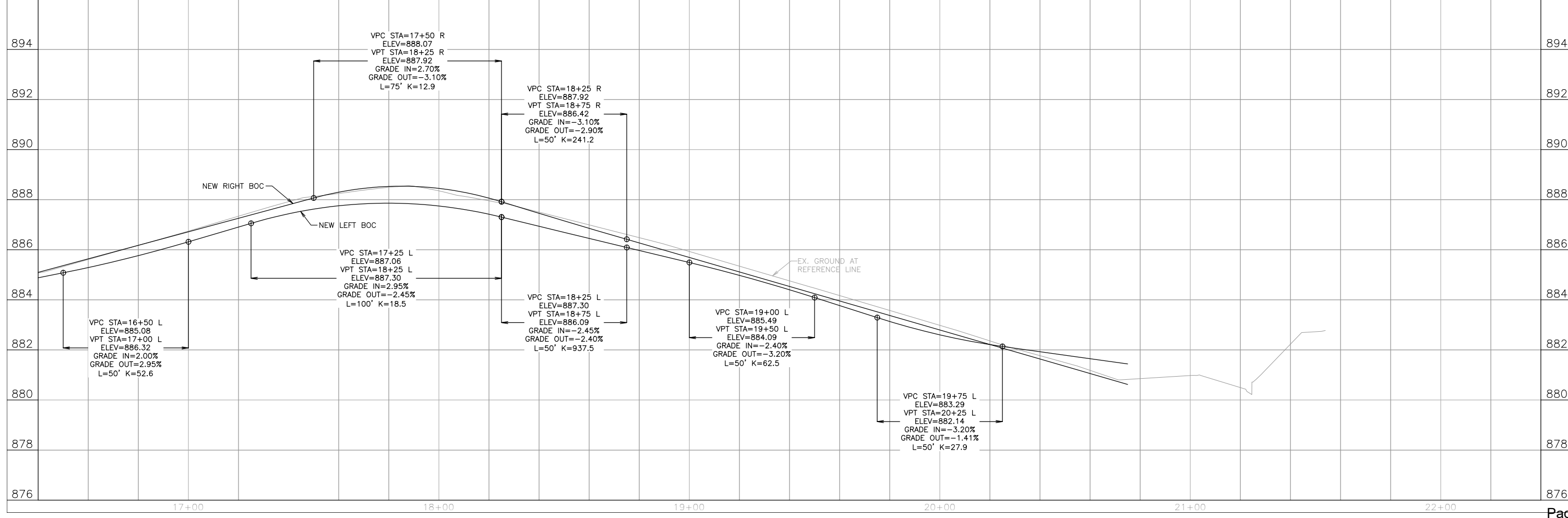


TEMPORARY BENCHMARK TABLE		
TBM	ELEV.	DESCRIPTION
201	889.86	CHISELED 'X' ON RIM OF SANMH #SA351
902	881.99	REBAR WITH CAP IN YARD OF #6203 EXCHANGE

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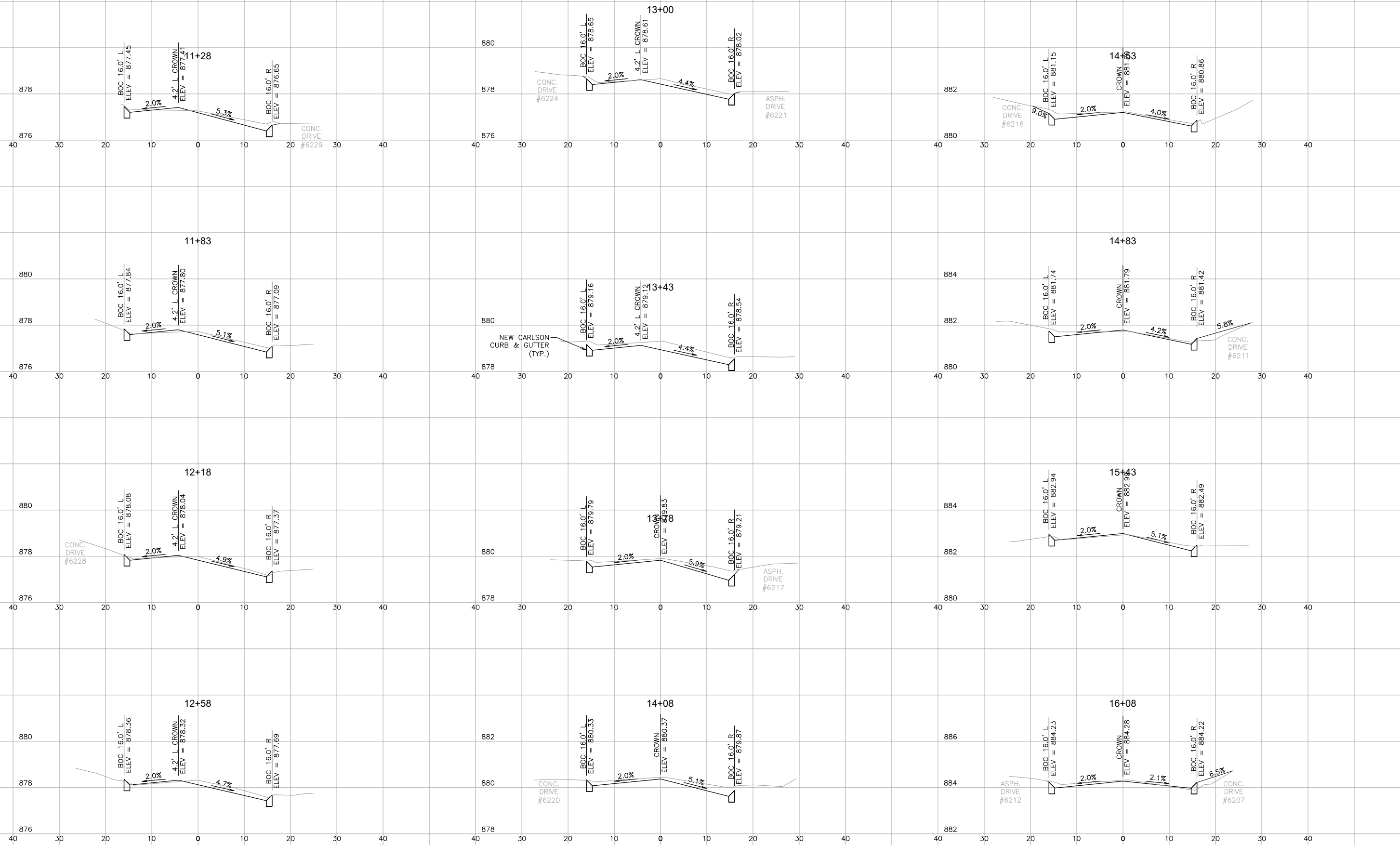
PLAN & PROFILE
 RENEÉ COURT
 Station 16+40 To Station 22+40



2021 STREET AND STORM SEWER IMPROVEMENTS
 Renee Court, Pheasant Run, Lake Edge Road,
 Taylor-Farwell Storm Sewer
 Village of McFarland, Wisconsin

PROJECT NO.: MC 181
 DRAWING FILE: MC 181 SHEETS.DWG
 DRAWN BY: J.C.A.
 CHECKED BY: T.J.S.
 DATE: 2-17-21
 REVISIONS:
 SCALE: HORIZONTAL 1"=50'
 VERTICAL 1"=10'
 SHEET: 4

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



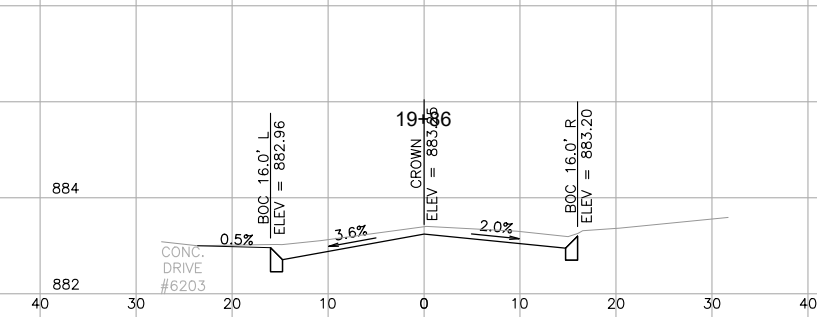
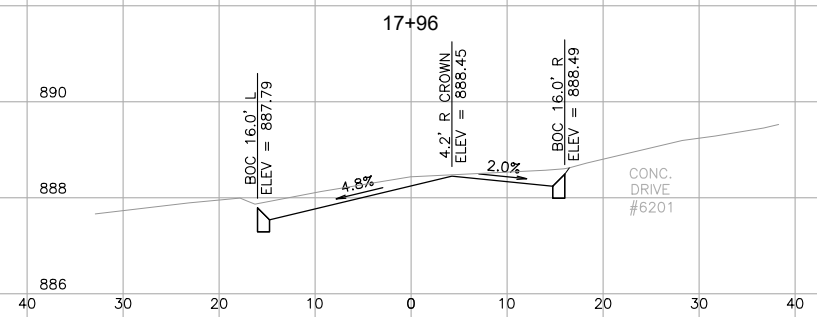
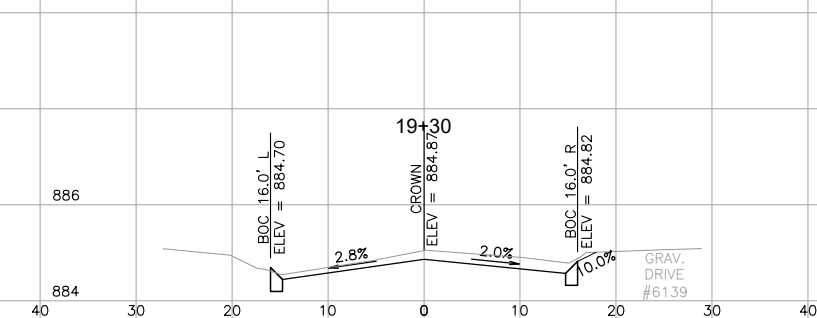
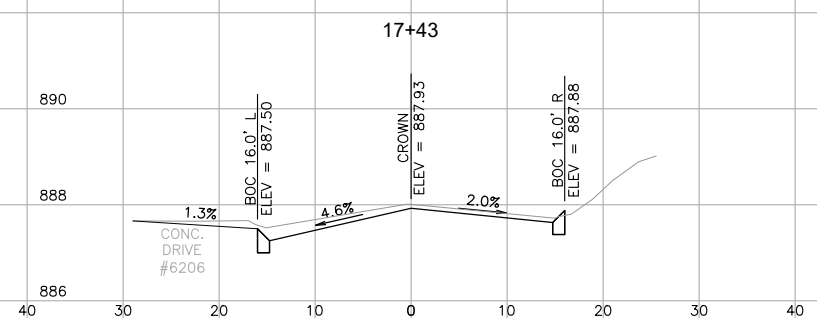
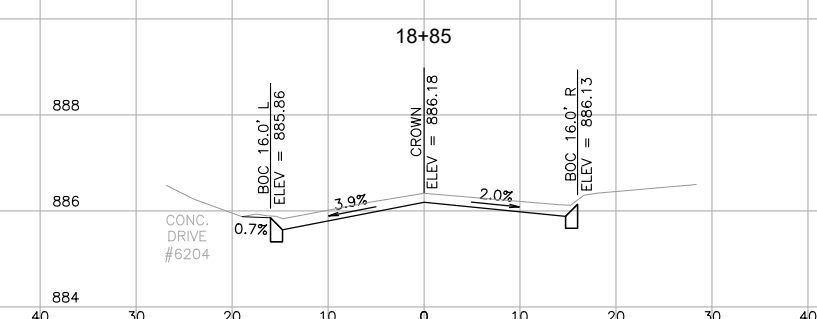
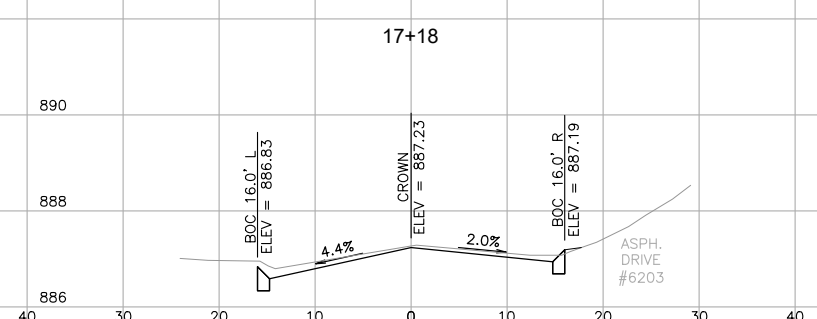
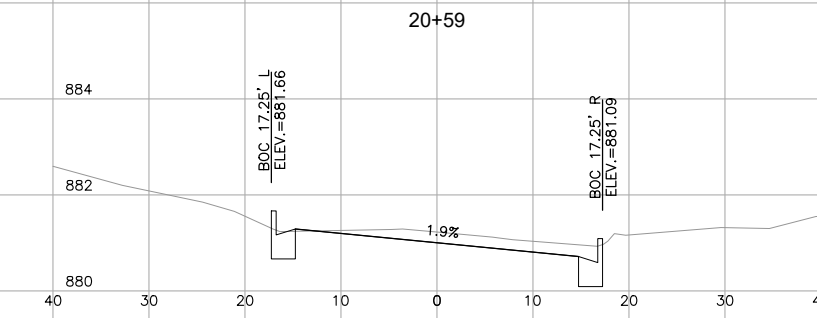
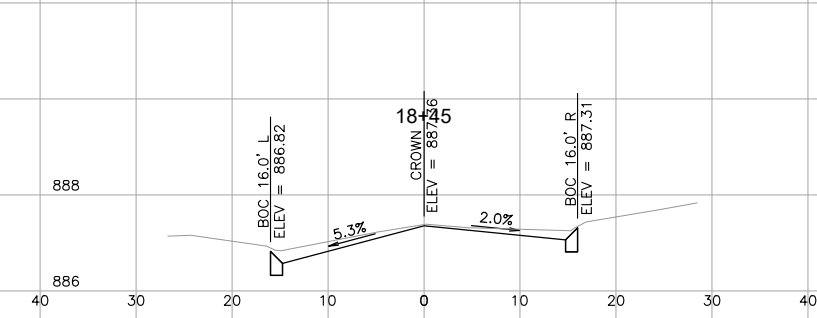
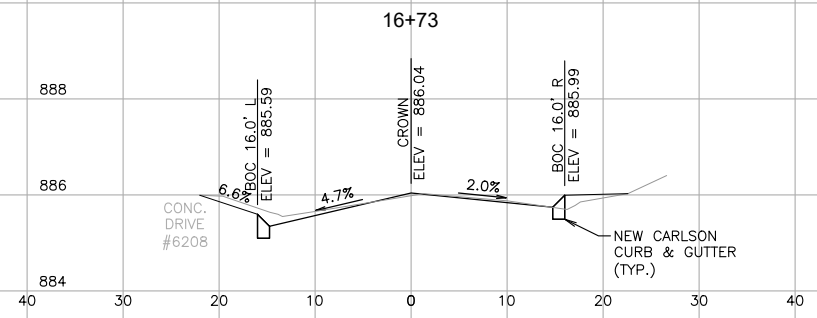
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CROSS SECTIONS
RENEE COURT
 Station 11+28 To Station 16+08

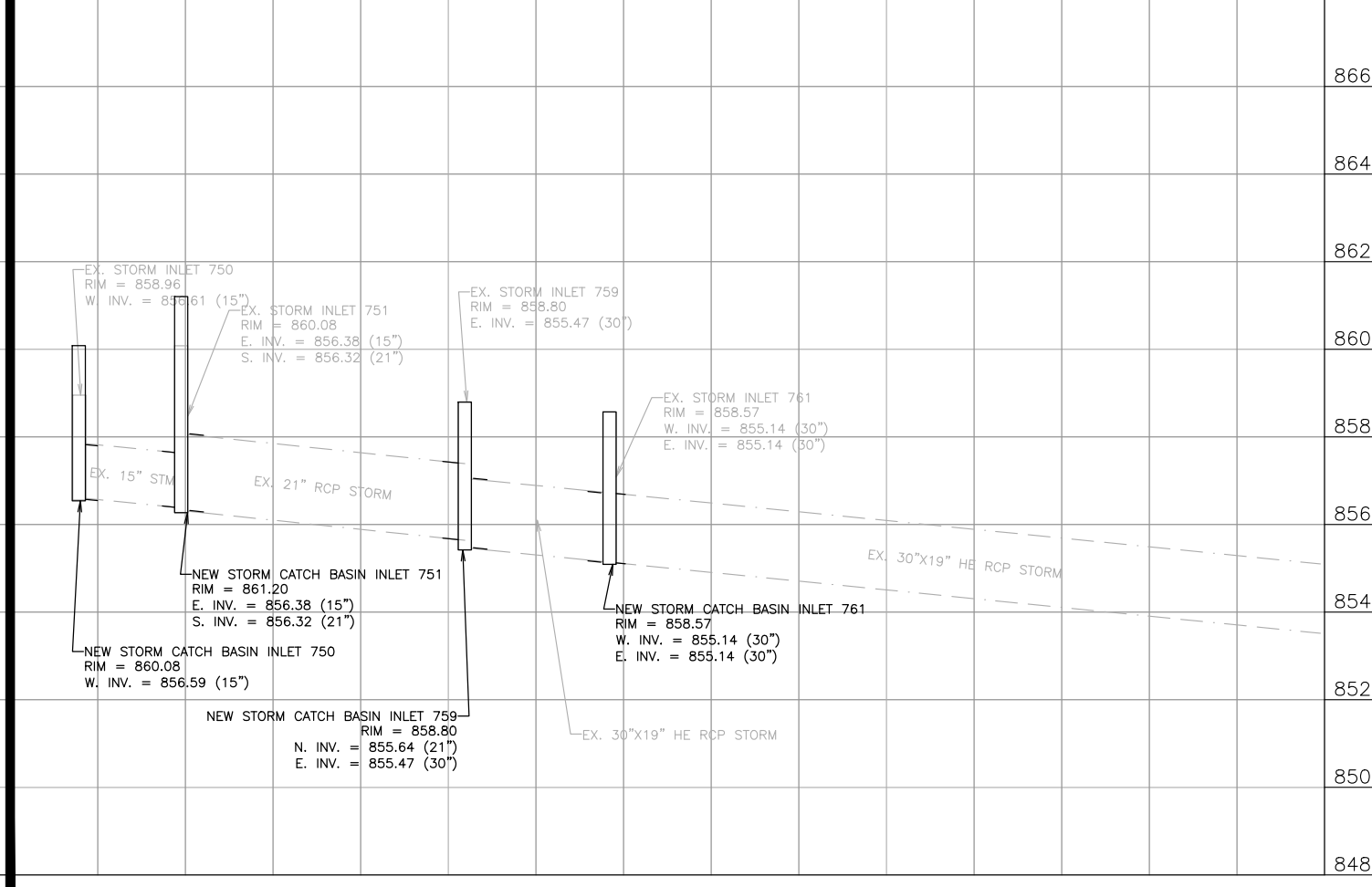
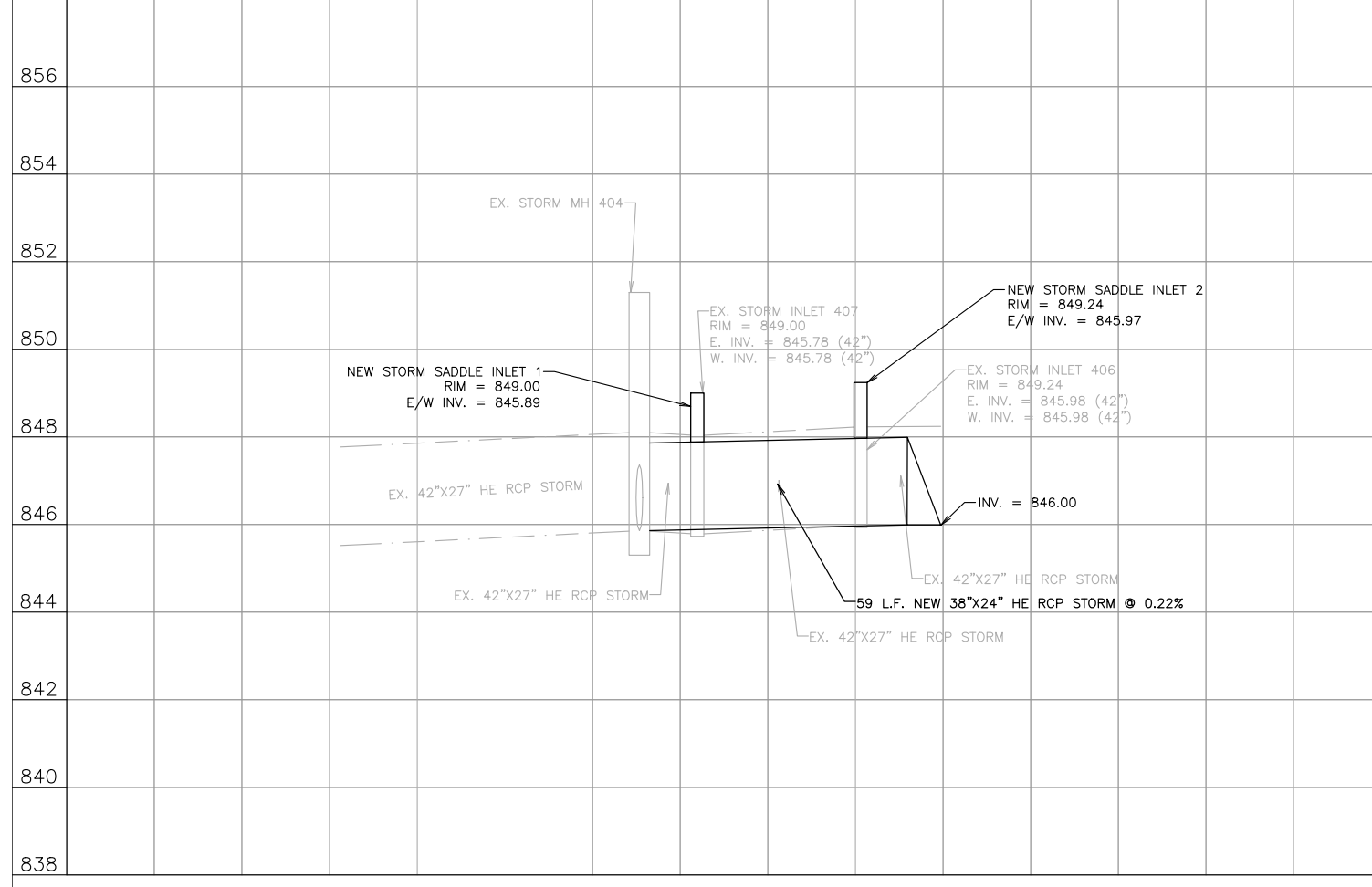
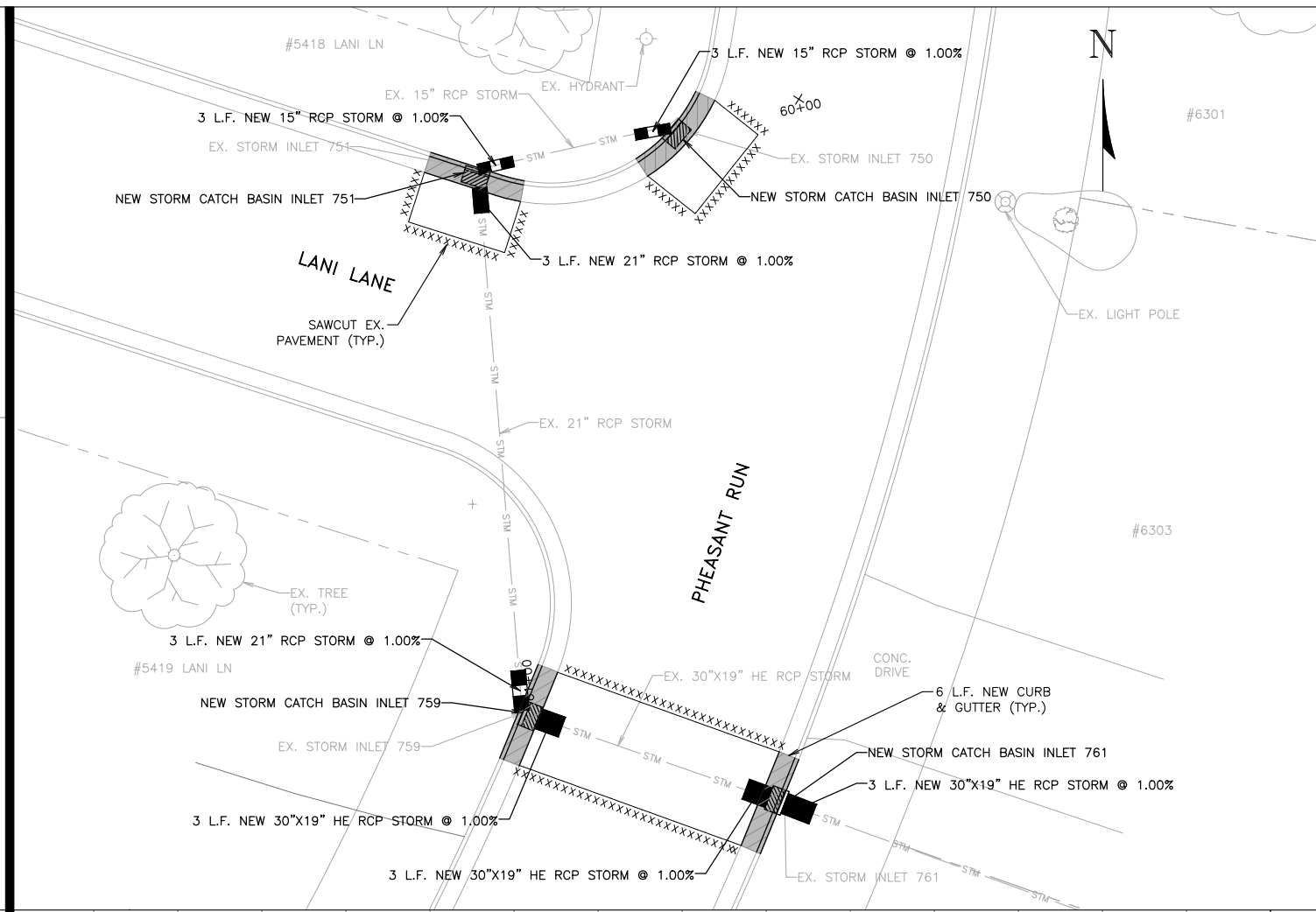
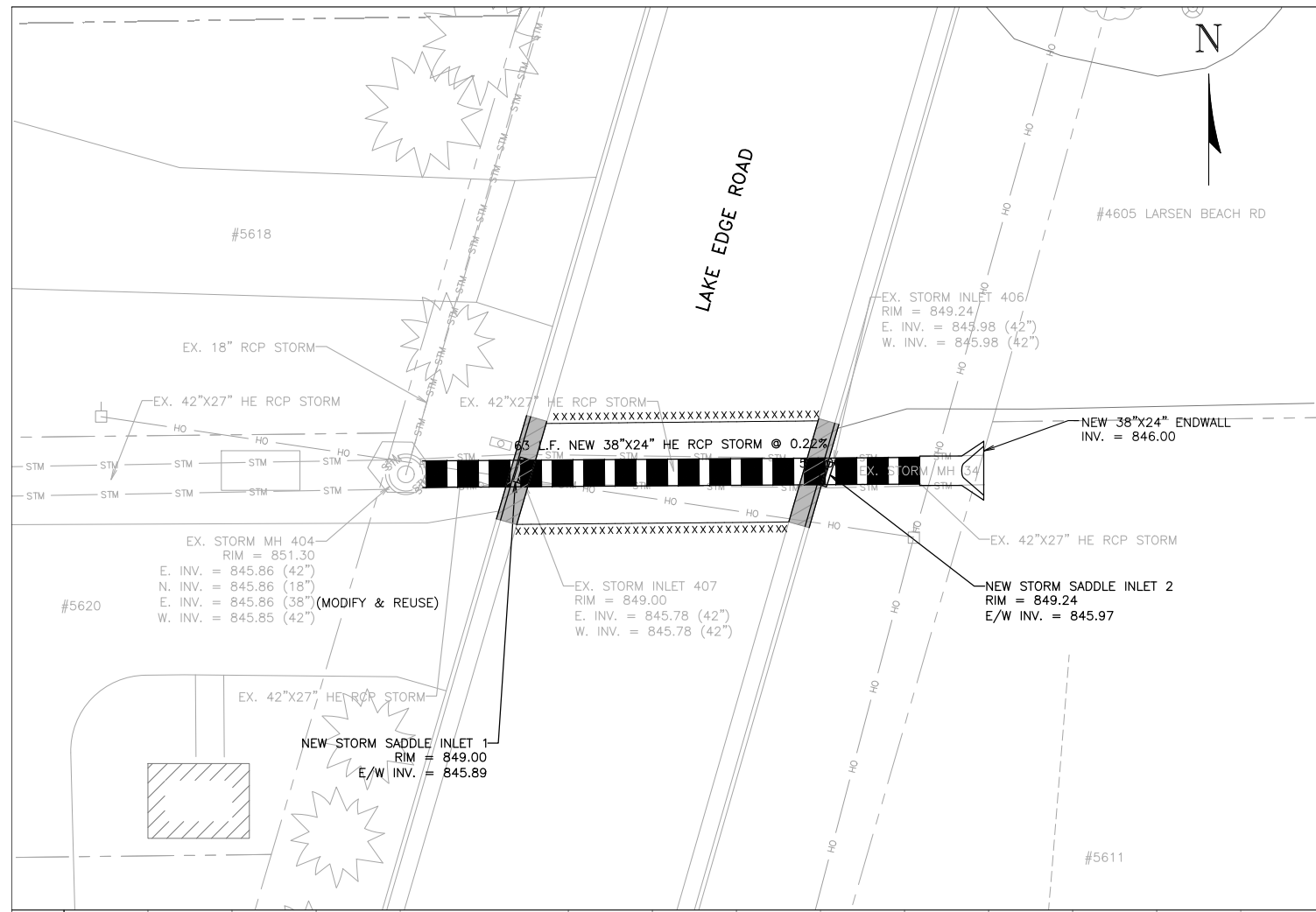
2021 STREET AND STORM SEWER IMPROVEMENTS
 Renee Court, Pheasant Run, Lake Edge Road,
 Taylor-Farwell Storm Sewer
 Village of McFarland, Wisconsin

PROJECT NO.:	MC 181
DRAWING FILE:	MC 181 SHEETS.DWG
DRAWN BY:	J.C.A.
CHECKED BY:	T.J.S.
DATE:	2-17-21
REVISIONS:	
SCALE: HORIZONTAL	1" = 25' 5"
SCALE: VERTICAL	1" = 5'
SHEET:	5

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



PROJECT NO.:	MC 181
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DRAWN BY:	J.C.A.
CHECKED BY:	T.J.S.
DATE:	2-17-21
REVISIONS:	
SCALE: HORIZONTAL	1" = 20'
SCALE: VERTICAL	1" = 5'
SHEET:	6



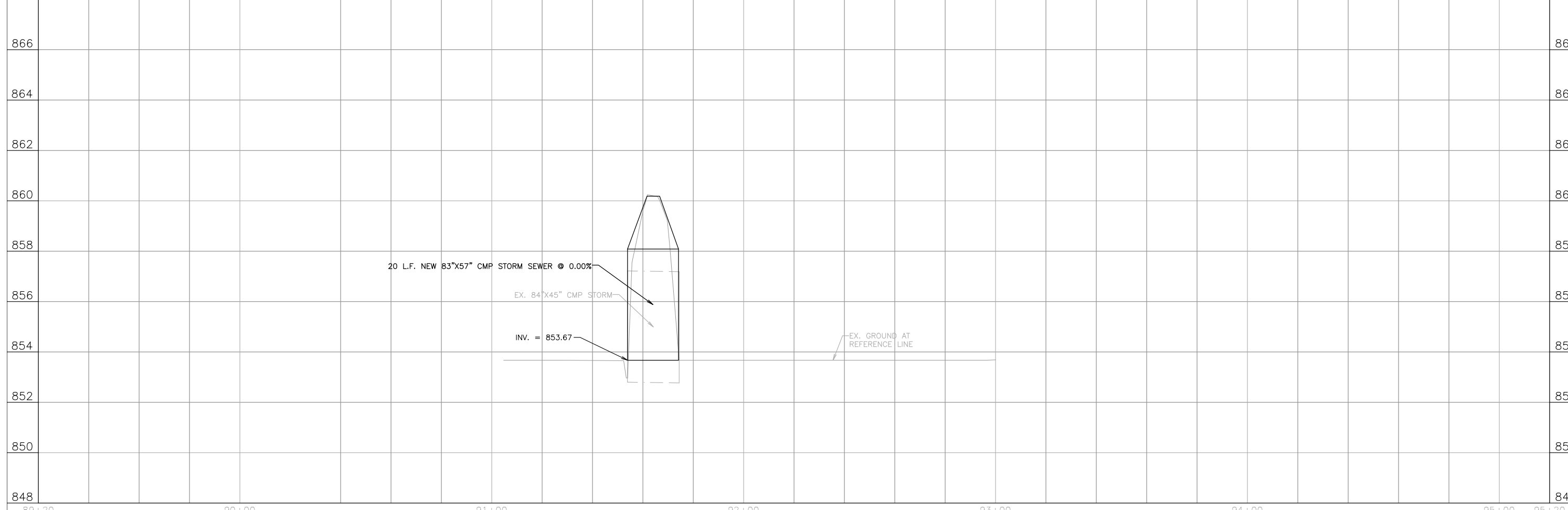
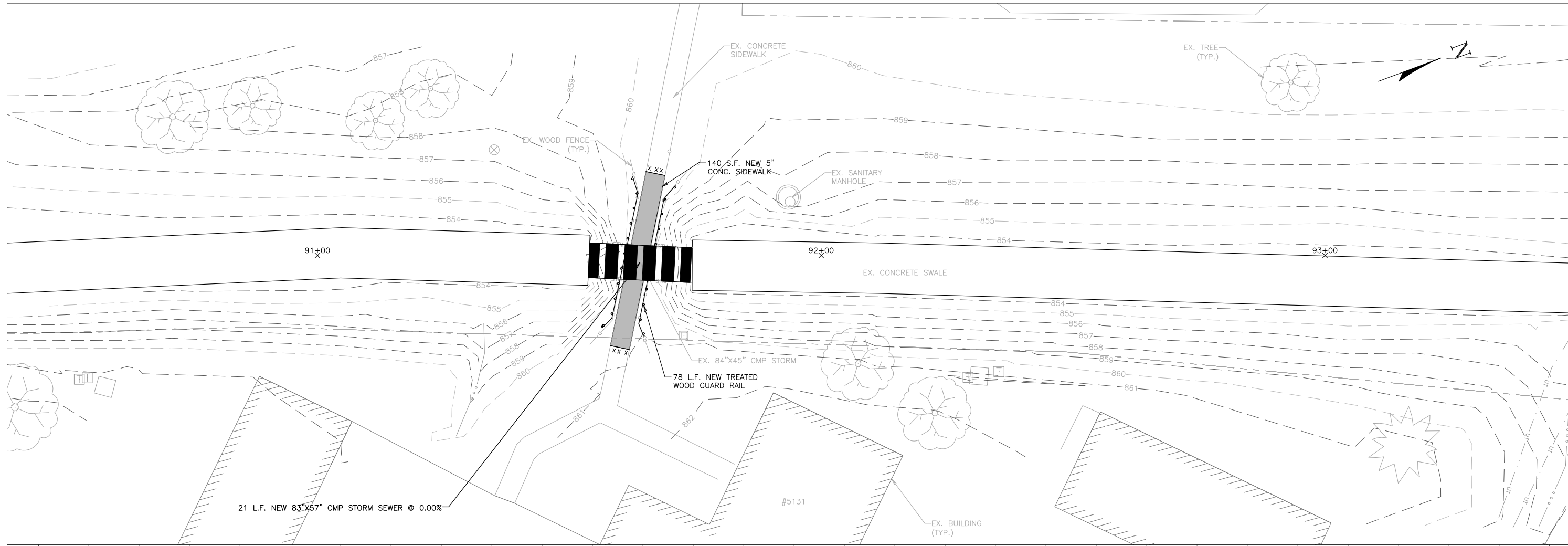
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TC TOWN & COUNTRY
ENGINEERING, INC.

PLAN & PROFILE
PHEASANT RUN & LAKE EDGE ROAD

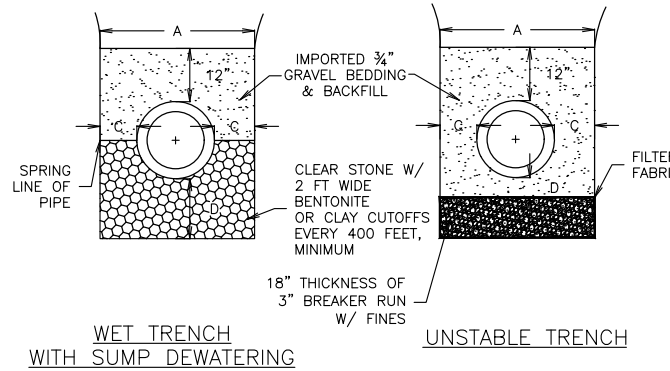
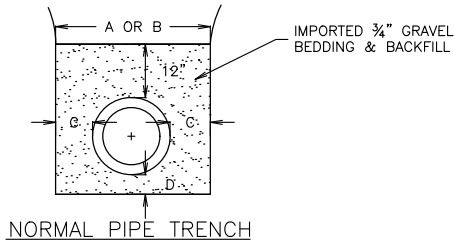
PROJECT NO.: MC 181
DRAWING FILE: MC 181 SHEETS.DWG
DRAWN BY: J.C.A.
CHECKED BY: T.J.S.
DATE: 2-17-21
REVISIONS:
SCALE: HORIZONTAL 0 2.5 5 10
VERTICAL 1 2
SHEET: 7

2021 STREET AND STORM SEWER IMPROVEMENTS
Renee Court, Pheasant Run, Lake Edge Road,
Taylor-Farwell Storm Sewer
Village of McFarland, Wisconsin

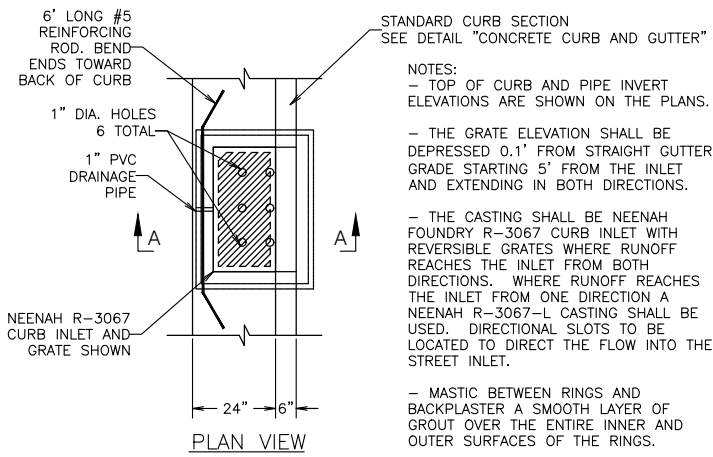


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DRAWN BY:	J.C.A.
CHECKED BY:	T.J.S.
DATE:	2-17-21
REVISIONS:	
SCALE: HORIZONTAL	1" = 25'
SCALE: VERTICAL	1" = 5'
SHEET:	8

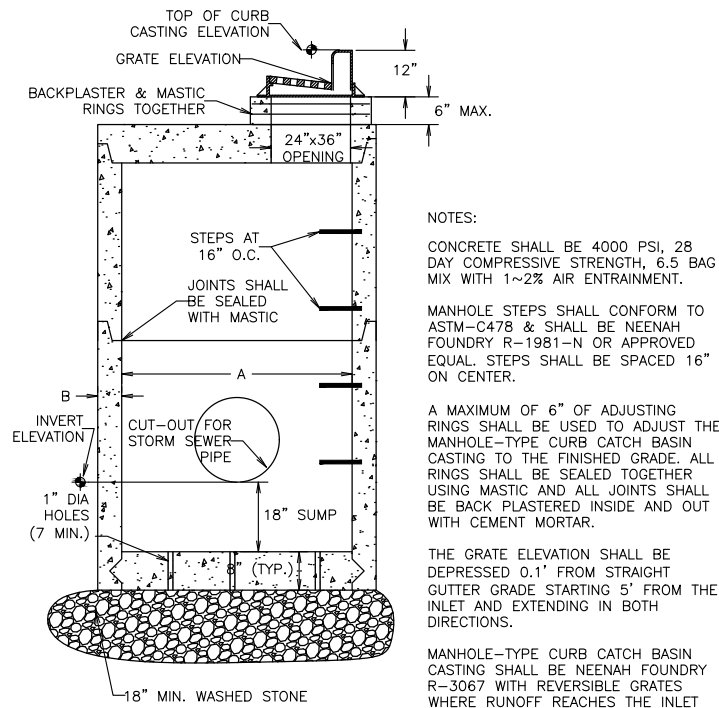
DIMENSIONS:
 A: OUTSIDE DIAMETER OF PIPE PLUS 24" MAXIMUM, EXCEPT NEED NOT BE LESS THAN 36". TRENCH SHIELDS NARROWER THAN 4 FEET INSIDE WIDTH WILL NOT BE REQUIRED UNLESS SPECIFICALLY REQUIRED IN THE PROJECT SPECIFICATIONS.
 B: FOR ROCK, OUTSIDE DIAMETER OF PIPE PLUS 18" MAXIMUM, EXCEPT NEED NOT BE LESS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



DETAIL
TRENCH WIDTH AND BEDDING

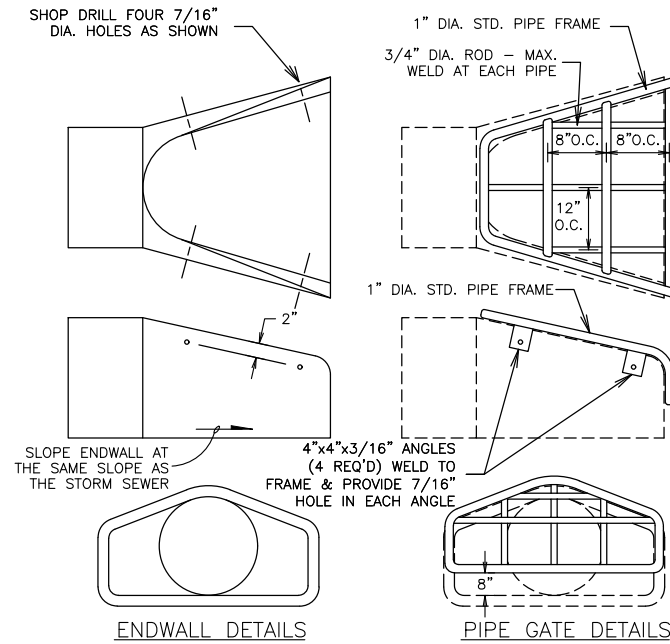


DETAIL
RECTANGULAR CATCH BASIN



MANHOLE SIZE	DIMENSION	
	A	B (MIN.)
48"	48"	5"
60"	60"	6"
72"	72"	7"
84"	84"	7"
96"	96"	9"

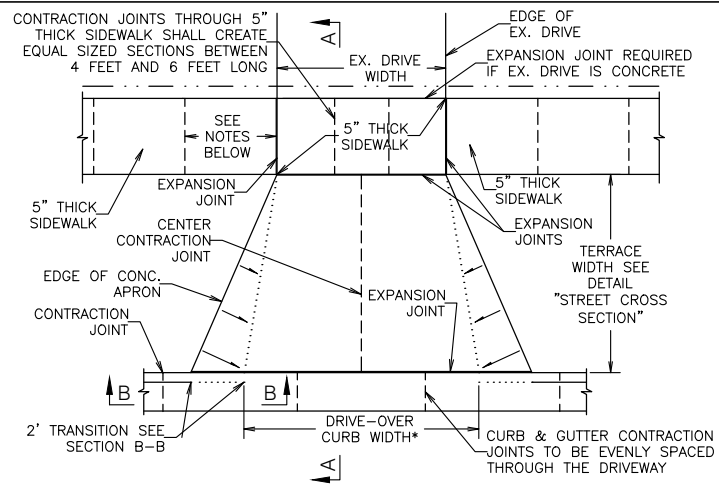
DETAIL
STORM SEWER MANHOLE CATCH BASIN



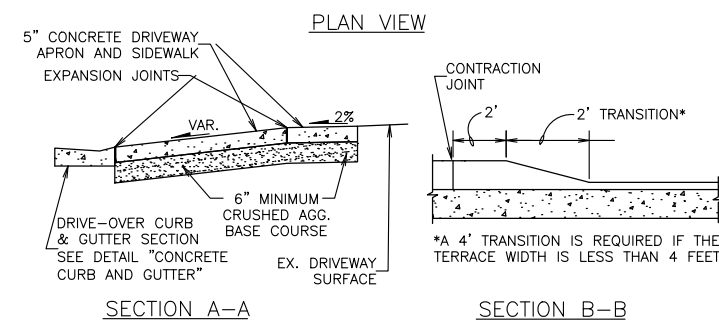
NOTES:
 - THE CONTRACTOR SHALL BOLT THE PIPE GATE TO THE CONCRETE ENDWALL WITH FOUR 3/8"x6" MACHINE BOLTS WITH NUTS ON INSIDE WALL.

PAINTING SPECIFICATIONS:
 - THE PIPE GATE SHALL RECEIVE THE FOLLOWING PREPARATION & PAINTING. THE FIRST COAT SHALL BE RUS-OLEUM X-60 RED BARE METAL PRIMER OR APPROVED EQUAL. THE SECOND COAT SHALL BE RUS-OLEUM 960 ZINC CHROMATE PRIMER OR APPROVED EQUAL. THE THIRD COAT SHALL BE RUS-OLEUM 1282 HIGH GLOSS METAL FINISH OR APPROVED EQUAL.

PREPARATION STEPS:
 1. BARE METAL SURFACES - TREAT WITH THE THREE-COAT PAINTING SYSTEM LISTED AFTER A THOROUGH SCRAPING, WIRE BRUSHING & CLEANING.
 2. EACH COAT OF PAINT SHALL BE APPLIED OVER THE ENTIRE GATE SURFACE.
 3. ALLOW 24-48 HOURS DRYING TIME AT 60° OR ABOVE BETWEEN COATS.



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.

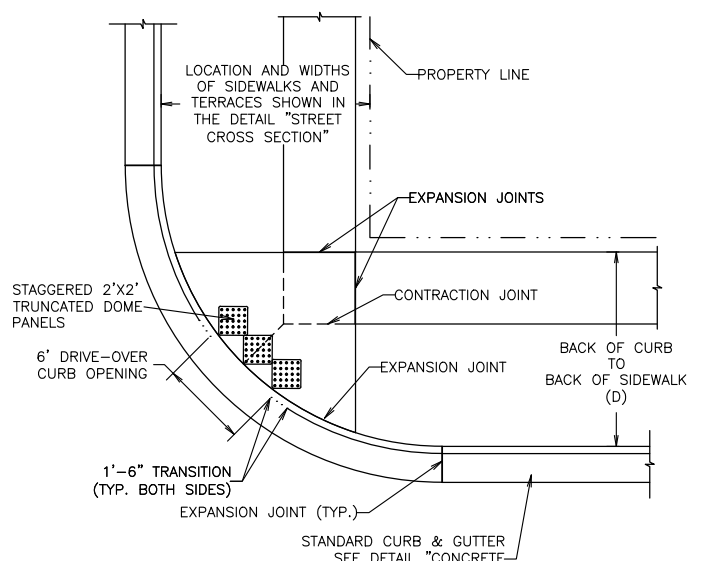


DETAIL DRIVEWAY

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

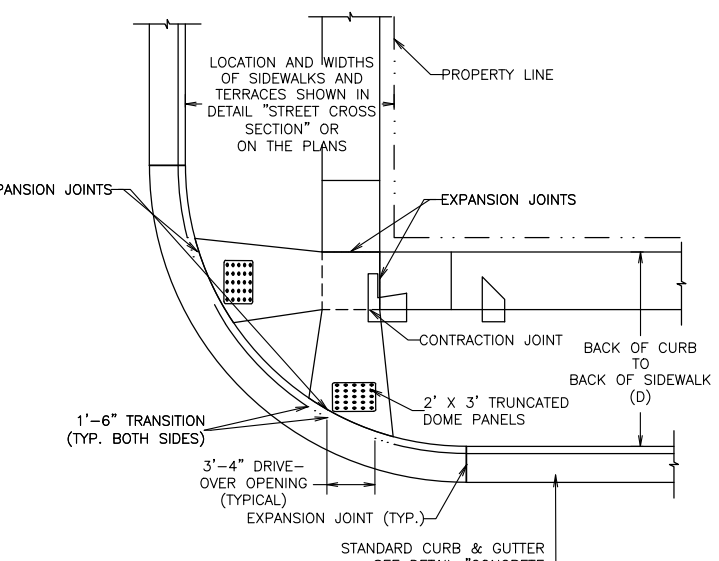
- FOR USE WHEN THE DISTANCE FROM THE BACK OF THE CURB TO THE BACK OF THE SIDEWALK (D) IS LESS THAN 12 FEET.



DETAIL CURB RAMP

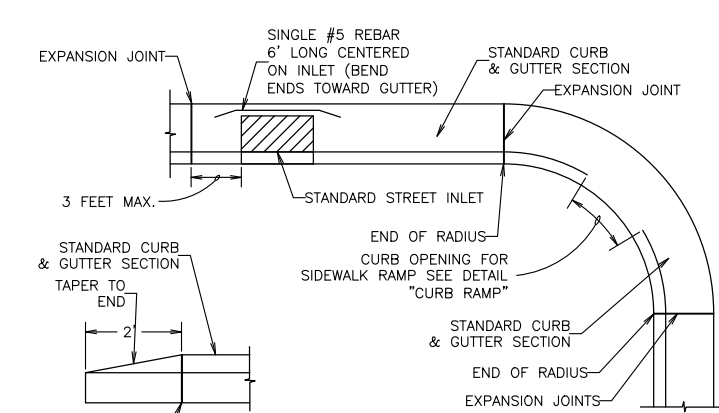
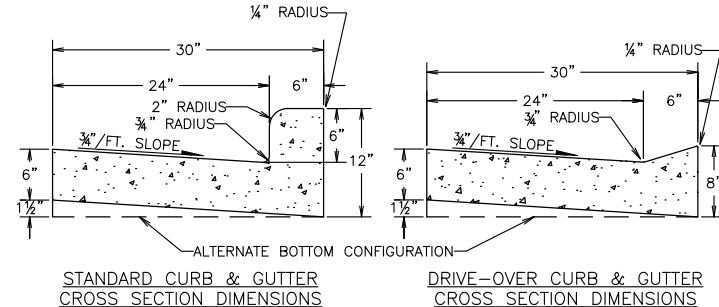
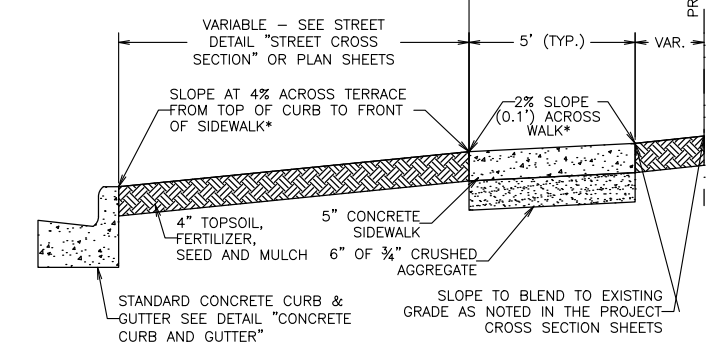
TYPE 2 CURB RAMP

- 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.



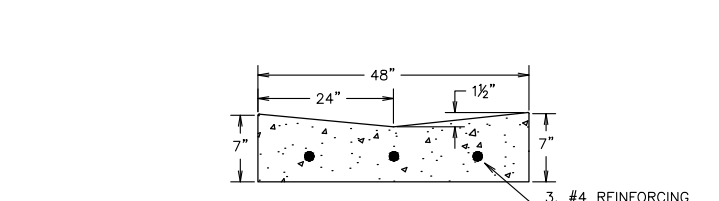
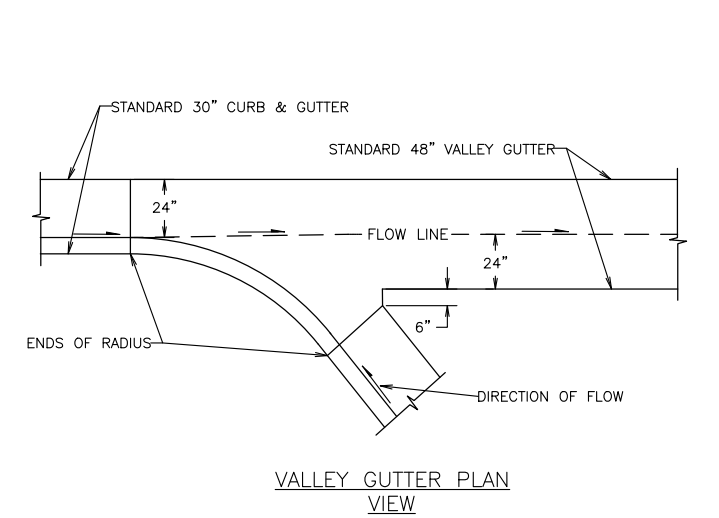
DETAIL CURB RAMP

DETAIL SIDEWALK - TERRACE SECTION

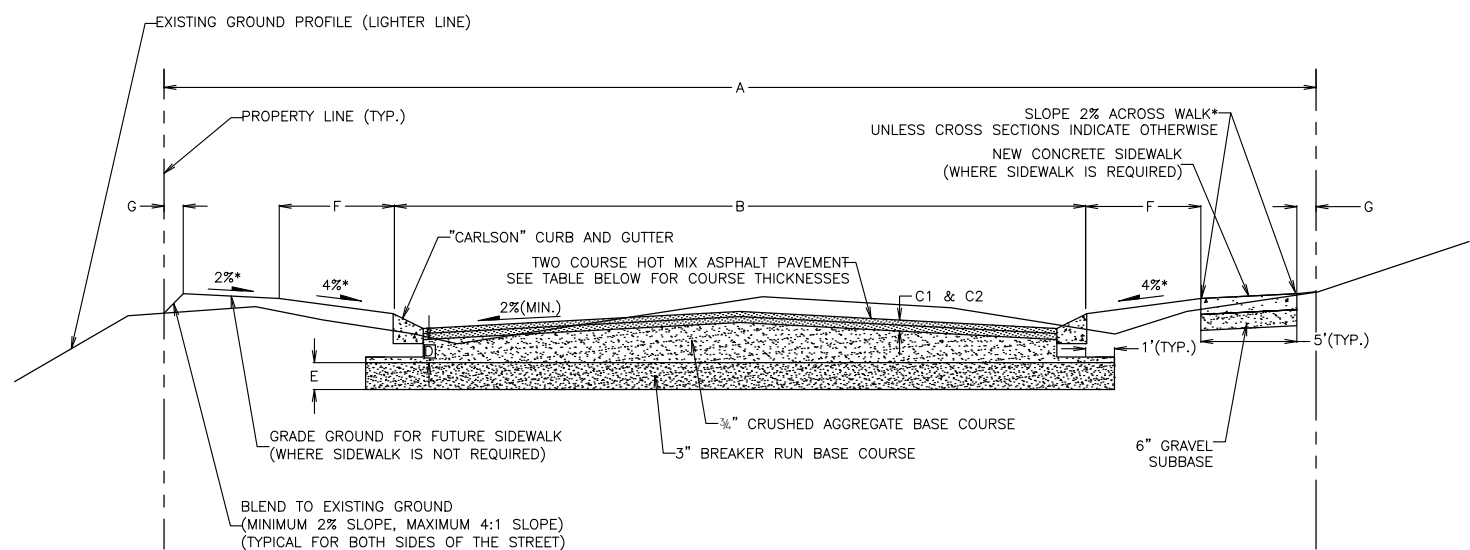


NOTES:
 1.) CONTRACTION JOINTS SHALL BE PLACED EVERY 6 TO 12 FEET AND AT LOCATIONS SHOWN IN THE CURB RAMP AND DRIVEWAY DETAILS.
 2.) EXPANSION JOINTS SHALL BE PLACED AT EVERY END OF RADIUS, 3 FEET ON ONE SIDE OF EACH STREET INLET AND AT INTERVALS NOT TO EXCEED 300 FEET.

DETAIL CONCRETE CURB AND GUTTER



DETAIL VALLEY GUTTER



	A	B	C1	C2	D	E	F	G
STREET NAME	RIGHT OF WAY WIDTH	CURB FACE TO CURB FACE WIDTH	LOWER COURSE THICKNESS	SURFACE COURSE THICKNESS	C.A.B.C. THICKNESS*	3" BREAKER RUN B.C. THICKNESS	TERRACE WIDTH	BACK OF WALK TO PROP. LINE
RENEE COURT			1 1/4"	1 1/2"				

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

NOTES:
 THE CROWN OF THE ROAD SHALL BE CREATED USING THE 3/4" CRUSHED AGGREGATE BASE COURSE. THE THICKNESS SHOWN IS THE MINIMUM THICKNESS REQUIRED AS MEASURED AT THE CONCRETE CURB & GUTTER SECTION.
 THE 3" BREAKER RUN BASE COURSE THICKNESS MAY NEED TO BE INCREASED DEPENDING UPON SUBGRADE CONDITIONS.

DETAIL STREET CROSS SECTION


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Tuesday, March 9, 2021

SECTION: Business

DEPARTMENT: Public Works

CONTACT: Jim Hessling, Public Works Director, Matt Schuenke, Village Administrator

AGENDA ITEM: Discussion regarding planning future street paving projects.

PREVIOUS ACTION:

This agenda item was discussed at the January 25, 2021 Village Board meeting. It was suggested that staff begin the process to bring some ideas/concepts/plan to the Public Works committee for review.

ISSUE SUMMARY:

Through the Wisconsin Information System for Local Roads program, known as WISLR, an initial setup and initial model run along with some entry-level assumptions, an EXAMPLE report was generated to show a “pavement only” analysis for what can be the start of a future projects list. (This EXAMPLE report is not intended to dictate what street work will happen when. It is only for illustration purposes). The WISLR tool only considers pavement and desired budgets, and is blind to sidewalks, Right-of-Way improvements, political/personal matters or any underground utility needs, but is useful for planning. As the Utility Committee sets their priority projects, the two lists can be cross-referenced to build-out the Village’s Capital Improvement Plan.

The WISLR system incorporates a series of road rating numbers known as Pavement Surface Evaluation and Rating (PASER). In the PASER system roads are visually inspected and given a numerical grade rating. Within this rating system of 1-10, with 1 being the worst and 10 being excellent condition, WISLR will provide a report on which streets need maintenance treatment. This list takes many things into consideration and when completed, the report might not reflect what actually needs to be completed. When assessed correctly, PASER ratings provide a basis for comparing the quality of roadway segments.

FINANCIAL/BUDGET IMPACT:

VILLAGE PLAN REFERENCE:

ORDINANCE REFERENCE:

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

ATTACHMENTS:



1. Asphalt-PASER Manual
2. 5 year Analysis Graphs
3. WISLR Analysis 3.5.2021

PASER Asphalt Roads Manual

RATING
10



RATING
7



RATING
4



RATING
1



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This manual is intended to assist local officials in understanding and rating the surface condition of asphalt pavement. It describes types of defects and provides a simple system to visually rate pavement condition. The rating procedure can be used as condition data for the Wisconsin DOT local road inventory and as part of a computerized pavement management system like PASERWARE.

The PASER system described here and in other T.I.C. publications is based in part on a roadway management system originally developed by Phil Scherer, transportation planner, Northwest Wisconsin Regional Planning Commission.

Produced by the T.I.C. with support from the Federal Highway Administration, the Wisconsin Department of Transportation, and the University of Wisconsin-Extension. The T.I.C., part of the nationwide Local Technical Assistance Program (LTAP), is a Center of the College of Engineering, Department of Engineering Professional Development, University of Wisconsin–Madison.

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Printed on recycled paper.

Pavement Surface Evaluation and Rating

PASER Manual

Asphalt Roads

Donald Walker, T.I.C. Director, *author*
Lynn Entine, Entine & Associates, *editor*
Susan Kummer, Artifax, *designer*

Pavement Surface Evaluation and Rating

Asphalt PASER Manual

A local highway agency's major goal is to use public funds to provide a comfortable, safe and economical road surface—no simple task. It requires balancing priorities and making difficult decisions in order to manage pavements. Local rural and small city pavements are often managed informally, based on the staff's judgment and experience. While this process is both important and functional, using a slightly more formalized technique can make it easier to manage pavements effectively.

Experience has shown that there are three especially useful steps in managing local roads:

1. Inventory all local roads and streets.
2. Periodically evaluate the condition of all pavements.
3. Use the condition evaluations to set priorities for projects and select alternative treatments.

A comprehensive pavement management system involves collecting data and assessing several road characteristics: roughness (ride), surface distress (condition), surface skid characteristics, and structure (pavement strength and deflection). Planners can combine this condition data with economic analysis to develop short-range and long-range plans for a variety of budget levels. However, many local agencies lack the resources for such a full-scale system.

Since surface condition is the most vital element in any pavement management system, local agencies can use the simplified rating system presented in this *Asphalt PASER Manual* to evaluate their roads. The PASER ratings combined with other inventory data (width, length, shoulder, pavement type, etc.) from the WisDOT local roads inventory (WISLR) can be very helpful in planning future budgets and priorities.

WISLR inventory information and PASER ratings can be used in a computerized pavement management system, PASERWARE, developed by the T.I.C and WisDOT. Local officials can use PASERWARE to evaluate whether their annual road budgets are adequate to maintain or improve current road conditions and to select the most cost-effective strategies and priorities for annual projects.

PASER Manuals for gravel, concrete, and other road surfaces, with compatible rating systems are also available (page 29). Together they make a comprehensive condition rating method for all road types. PASER ratings are accepted for WISLR condition data.

Asphalt pavement distress

PASER uses visual inspection to evaluate pavement surface conditions. The key to a useful evaluation is identifying different types of pavement distress and linking them to a cause. Understanding the cause for current conditions is extremely important in selecting an appropriate maintenance or rehabilitation technique.

There are four major categories of common asphalt pavement surface distress:

Surface defects

Raveling, flushing, polishing.

Surface deformation

Rutting, distortion—rippling and shoving, settling, frost heave.

Cracks

Transverse, reflection, slippage, longitudinal, block, and alligator cracks.

Patches and potholes

Deterioration has two general causes: environmental due to weathering and aging, and structural caused by repeated traffic loadings.

Obviously, most pavement deterioration results from both environmental and structural causes. However, it is important to try to distinguish between the two in order to select the most effective rehabilitation techniques.

The rate at which pavement deteriorates depends on its environment, traffic loading conditions, original construction quality, and interim maintenance procedures. Poor quality materials or poor construction procedures can significantly reduce the life of a pavement. As a result, two pavements constructed at the same time may have significantly different lives, or certain portions of a pavement may deteriorate more rapidly than others. On the other hand, timely and effective maintenance can extend a pavement's life. Crack sealing and seal coating can reduce the effect of moisture in aging of asphalt pavement.

With all of these variables, it is easy to see why pavements deteriorate at various rates and why we find them in various stages of disrepair. Recognizing defects and understanding their causes helps us rate pavement condition and select cost-effective repairs. The pavement defects shown on the following pages provide a background for this process.

Periodic inspection is necessary to provide current and useful evaluation data. It is recommended that PASER ratings be updated every two years, and an annual update is even better.

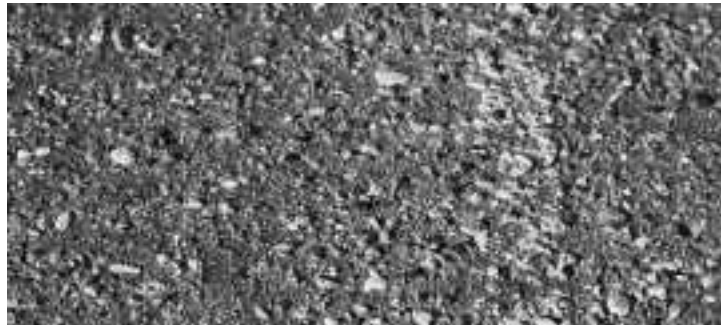
SURFACE DEFECTS

Raveling

Raveling is progressive loss of pavement material from the surface downward, caused by: stripping of the bituminous film from the aggregate, asphalt hardening due to aging, poor compaction especially in cold weather construction, or insufficient asphalt content. Slight to moderate raveling has loss of fines. Severe raveling has loss of coarse aggregate. Raveling in the wheelpaths can be accelerated by traffic. Protect pavement surfaces from the environment with a sealcoat or a thin overlay if additional strength is required.



◀ Slight raveling. Small aggregate particles have worn away exposing tops of large aggregate.



◀ Moderate to severe raveling. Erosion further exposes large aggregate.

Flushing

Flushing is excess asphalt on the surface caused by a poor initial asphalt mix design or by paving or sealcoating over a flushed surface. Repair by blotting with sand or by overlaying with properly designed asphalt mix.



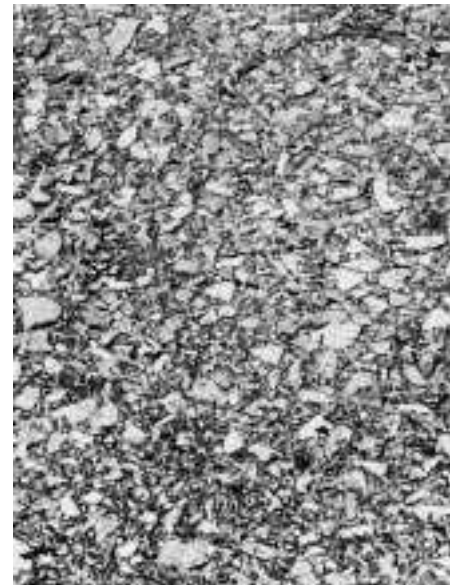
◀ Severe raveling and loss of surface material.

Polishing

Polishing is a smooth slippery surface caused by traffic wearing off sharp edges of aggregates. Repair with sealcoat or thin bituminous overlay using skid-resistant aggregate.

Polished, worn aggregate needs repair. ▼

▶ Flushing. Dark patches show where asphalt has worked to surface.



SURFACE DEFORMATION

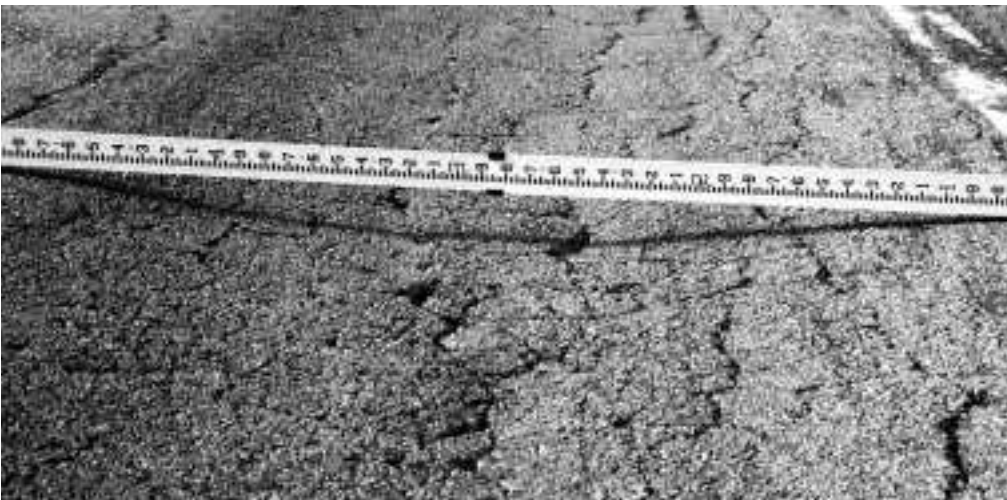
Rutting

Rutting is displacement of material, creating channels in wheelpaths. It is caused by traffic compaction or displacement of unstable material. Severe rutting (over 2") may be caused by base or subgrade consolidation. Repair minor rutting with overlays. Severe rutting requires milling the old surface or reconstructing the roadbed before resurfacing.

◀ Even slight rutting is evident after a rain.



◀ Severe rutting over 2" caused by poor mix design.



◀ Severe rutting caused by poor base or subgrade.

Distortion

Shoving or rippling is surfacing material displaced crossways to the direction of traffic. It can develop into washboarding when the asphalt mixture is unstable because of poor quality aggregate or improper mix design. Repair by milling smooth and overlaying with stable asphalt mix.

Other pavement distortions may be caused by settling, frost heave, etc. Patching may provide temporary repair. Permanent correction usually involves removal of unsuitable subgrade material and reconstruction.

▼ Heavy traffic has shoved pavement into washboard ripples and bumps.



► Severe settling from utility trench.



► Frost heave damage from spring break-up.

▼ Widely spaced, well-sealed cracks.



CRACKS

Transverse cracks

A crack at approximately right angles to the center line is a transverse crack. They are often regularly spaced. The cause is movement due to temperature changes and hardening of the asphalt with aging.

Transverse cracks will initially be widely spaced (over 50'). Additional cracking will occur with aging until they are closely spaced (within several feet). These usually begin as hairline or very narrow cracks; with aging they widen. If not properly sealed and maintained, secondary or multiple cracks develop parallel to the initial crack. The crack edges can further deteriorate by raveling and eroding the adjacent pavement.

Prevent water intrusion and damage by sealing cracks which are more than 1/4" wide.



◀ Sealed cracks, a few feet apart.



▲ Tight cracks less than 1/4" in width.



▲ Open crack – 1/2" or more in width.



▲ Water enters unsealed cracks softening pavement and causing secondary cracks.



▲ Pavement ravels and erodes along open cracks causing deterioration.

Reflection cracks

Cracks in overlays reflect the crack pattern in the pavement underneath. They are difficult to prevent and correct. Thick overlays or reconstruction is usually required.

►
Concrete joints reflected through bituminous overlay.



Slippage cracks

Crescent or rounded cracks in the direction of traffic, caused by slippage between an overlay and an underlying pavement. Slippage is most likely to occur at intersections where traffic is stopping and starting. Repair by removing the top surface and resurfacing using a tack coat.

►
Crescent-shaped cracks characteristic of slippage.



►
Loss of bond between pavement layers allows traffic to break loose pieces of surface.



Centerline crack (still tight). ▶



Edge cracking from weakened subbase and traffic loads. ▼



Longitudinal cracks

Cracks running in the direction of traffic are longitudinal cracks. Center line or lane cracks are caused by inadequate bonding during construction or reflect cracks in underlying pavement. Longitudinal cracks in the wheel path indicate fatigue failure from heavy vehicle loads. Cracks within one foot of the edge are caused by insufficient shoulder support, poor drainage, or frost action. Cracks usually start as hairline or vary narrow and widen and erode with age. Without crack filling, they can ravel, develop multiple cracks, and become wide enough to require patching.

Filling and sealing cracks will reduce moisture penetration and prevent further subgrade weakening. Multiple longitudinal cracks in the wheel path or pavement edge indicate a need for strengthening with an overlay or reconstruction.

▶ First stage of wheelpath cracking caused by heavy traffic loads.



▼ Load-related cracks in wheel path plus centerline cracking.



▼ Multiple open cracks at center line, wheelpaths and lane center.



Block cracks

Block cracking is interconnected cracks forming large blocks. Cracks usually intersect at nearly right angles. Blocks may range from one foot to approximately 10' or more across. The closer spacing indicates more advanced aging caused by shrinking and hardening of the asphalt over time. Repair with sealcoating during early stages to reduce weathering of the asphalt. Overlay or reconstruction required in the advanced stages.

▶
Large blocks, approximately 10' across.



▶
Intermediate-size block cracking, 1'-5' across with open cracks.



▲ **Extensive block cracking in an irregular pattern.**

▶
Severe block cracking – 1' or smaller blocks. Tight cracks with no raveling.



Alligator cracks

Interconnected cracks forming small pieces ranging in size from about 1" to 6". This is caused by failure of the surfacing due to traffic loading (fatigue) and very often also due to inadequate base or subgrade support. Repair by excavating localized areas and replacing base and surface. Large areas require reconstruction. Improvements in drainage may often be required.



◀ **Alligator crack pattern. Tight cracks and one patch.**



◀ **Characteristic "chicken wire" crack pattern shows smaller pavement pieces and patching.**



◀ **Open raveled alligator cracking with settlement along lane edge most likely due to very soft subgrade.**

PATCHES AND POTHOLES

Patches

Original surface repaired with new asphalt patch material. This indicates a pavement defect or utility excavation which has been repaired. Patches with cracking, settlement or distortions indicate underlying causes still remain. Recycling or reconstruction are required when extensive patching shows distress.

►
Typical repair of utility excavation. Patch in fair to good condition.



►
Edge wedging. Pavement edges strengthened with wedges of asphalt. Patch is in very good condition.



►
Extensive patching in very poor condition.





Potholes

Holes and loss of pavement material caused by traffic loading, fatigue and inadequate strength. Often combined with poor drainage. Repair by excavating or rebuilding localized potholes. Reconstruction required for extensive defects.



Small pothole where top course has broken away.



Multiple potholes show pavement failure, probably due to poor subgrade soils, frost heave, and bad drainage.



Large, isolated pothole, extends through base. Note adjacent alligator cracks which commonly deteriorate into potholes.

Rating pavement surface condition

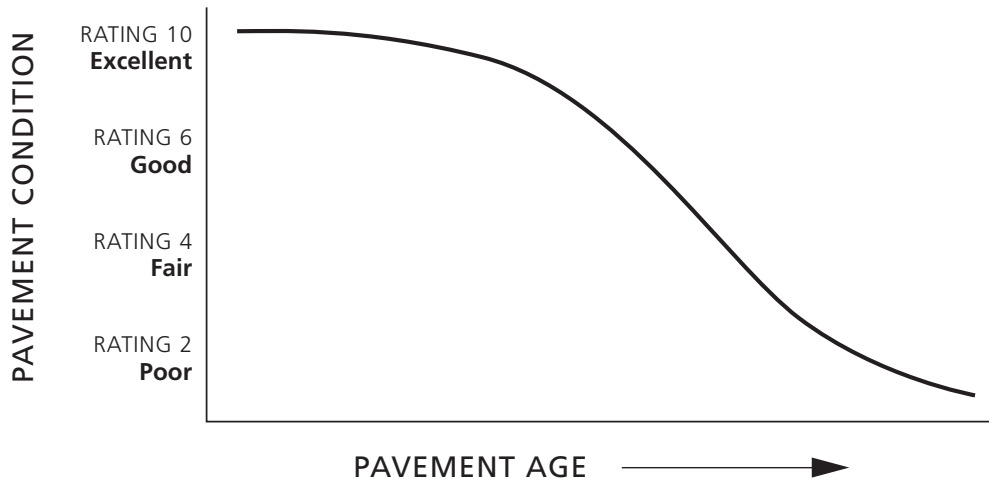
With an understanding of surface distress, you can evaluate and rate asphalt pavement surfaces. The rating scale ranges from **10–excellent** condition to **1–failed**. Most pavements will deteriorate through the phases listed in the rating scale. The time it takes to go from excellent condition (10) to complete failure (1) depends largely on the quality of the original construction and the amount of heavy traffic loading.

Once significant deterioration begins, it is common to see pavement decline rapidly. This is usually due to a combination of loading and the effects of additional moisture. As a pavement ages and additional cracking develops, more moisture can enter the pavement and accelerate the rate of deterioration.

Look at the photographs in this section to become familiar with the descriptions of the individual rating categories. To evaluate an individual pavement segment, first determine its general condition. Is it relatively new,

toward the top end of the scale? In very poor condition and at the bottom of the scale? Or somewhere in between? Next, think generally about the appropriate maintenance method. Use the rating categories outlined below.

Finally, review the individual pavement distress and select the appropriate surface rating. Individual pavements will **not** have all of the types of distress listed for any particular rating. They may have only one or two types.



In addition to indicating the surface condition of a road, a given rating also includes a recommendation for needed maintenance or repair. This feature of the rating system facilitates its use and enhances its value as a tool in ongoing road maintenance.

RATINGS ARE RELATED TO NEEDED MAINTENANCE OR REPAIR

Rating 9 & 10	No maintenance required
Rating 8	Little or no maintenance
Rating 7	Routine maintenance, cracksealing and minor patching
Rating 5 & 6	Preservative treatments (sealcoating)
Rating 3 & 4	Structural improvement and leveling (overlay or recycling)
Rating 1 & 2	Reconstruction

Rating system

Surface rating	Visible distress*	General condition/ treatment measures
10 Excellent	None.	New construction.
9 Excellent	None.	Recent overlay. Like new.
8 Very Good	No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40' or greater). All cracks sealed or tight (open less than 1/4").	Recent sealcoat or new cold mix. Little or no maintenance required.
7 Good	Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks (open 1/4") due to reflection or paving joints. Transverse cracks (open 1/4") spaced 10' or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.	First signs of aging. Maintain with routine crack filling.
6 Good	Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open 1/4"–1/2"), some spaced less than 10'. First sign of block cracking. Slight to moderate flushing or polishing. Occasional patching in good condition.	Shows signs of aging. Sound structural condition. Could extend life with sealcoat.
5 Fair	Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal and transverse cracks (open 1/2") show first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Some patching or edge wedging in good condition.	Surface aging. Sound structural condition. Needs sealcoat or thin non-structural overlay (less than 2")
4 Fair	Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (1/2" deep or less).	Significant aging and first signs of need for strengthening. Would benefit from a structural overlay (2" or more).
3 Poor	Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking (less than 25% of surface). Patches in fair to poor condition. Moderate rutting or distortion (1" or 2" deep). Occasional potholes.	Needs patching and repair prior to major overlay. Milling and removal of deterioration extends the life of overlay.
2 Very Poor	Alligator cracking (over 25% of surface). Severe distortions (over 2" deep) Extensive patching in poor condition. Potholes.	Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective.
1 Failed	Severe distress with extensive loss of surface integrity.	Failed. Needs total reconstruction.

* Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.

RATING 10 & 9

**EXCELLENT —
No maintenance required**

Newly constructed or recently overlaid roads are in excellent condition and require no maintenance.



▶
RATING 10
New construction.



▶
RATING 9
Recent overlay,
rural.



▶
RATING 9
Recent overlay,
urban.



RATING 8

**VERY GOOD —
Little or no maintenance required**

This category includes roads which have been recently sealcoated or overlaid with new cold mix. It also includes recently constructed or overlaid roads which may show longitudinal or transverse cracks. All cracks are tight or sealed.

◀
**Recent
chip seal.**



◀
**Recent
slurry seal.**

▼ **Widely spaced,
sealed cracks.**



▲ **New cold mix surface.**



RATING 7

GOOD —

Routine sealing recommended

Roads show first signs of aging, and they may have very slight raveling. Any longitudinal cracks are along paving joint. Transverse cracks may be approximately 10' or more apart. All cracks are 1/4" or less, with little or no crack erosion. Few if any patches, all in very good condition. Maintain a crack sealing program.

►
**Tight and sealed
transverse and
longitudinal cracks.
Maintain crack
sealing program.**



►
**Tight and sealed
transverse and
longitudinal cracks.**



►
**Transverse cracks
about 10' or more
apart. Maintain crack
sealing program.**





RATING 6

GOOD —
Consider preservative treatment

Roads are in sound structural condition but show definite signs of aging. Seal-coating could extend their useful life. There may be slight surface raveling. Transverse cracks can be frequent, less than 10' apart. Cracks may be 1/4–1/2" and sealed or open. Pavement is generally sound adjacent to cracks. First signs of block cracking may be evident. May have slight or moderate bleeding or polishing. Patches are in good condition.

◀ **Slight surface raveling with tight cracks, less than 10' apart.**



◀ **Transverse cracking less than 10' apart; cracks well-sealed.**

▼ **Large blocks, early signs of raveling and block cracking.**



▼ **Open crack, 1/2" wide; adjoining pavement sound.**



▼ **Moderate flushing.**



RATING 5

**FAIR —
Preservative maintenance
treatment required**

Roads are still in good structural condition but clearly need sealcoating or overlay. They may have moderate to severe surface raveling with significant loss of aggregate. First signs of longitudinal cracks near the edge. First signs of raveling along cracks. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Any patches or edge wedges are in good condition.

▼ Block cracking with open cracks.



► Moderate to severe raveling in wheel paths.



▼ Severe flushing.



▲ Wedges and patches extensive but in good condition.

Severe raveling with
▼ extreme loss of aggregate.



Load cracking and slight
▼ rutting in wheel path.



RATING 4

FAIR —
Structural improvement required

Roads show first signs of needing strengthening by overlay. They have very severe surface raveling which should no longer be sealed. First longitudinal cracking in wheel path. Many transverse cracks and some may be raveling slightly. Over 50% of the surface may have block cracking. Patches are in fair condition. They may have rutting less than 1/2" deep or slight distortion.



◀ **Longitudinal cracking; early load-related distress in wheel path. Strengthening needed.**

▼ **Slight rutting; patch in good condition.**



▼ **Extensive block cracking. Blocks tight and sound.**
◀ **Slight rutting in wheel path.**

RATING 3

POOR—

Structural improvement required

Roads must be strengthened with a structural overlay (2" or more). Will benefit from milling and very likely will require pavement patching and repair beforehand. Cracking will likely be extensive. Raveling and erosion in cracks may be common. Surface may have severe block cracking and show first signs of alligator cracking. Patches are in fair to poor condition. There is moderate distortion or rutting (1-2") and occasional potholes.

► **Many wide and raveled cracks indicate need for milling and overlay.**



► **2" ruts need mill and overlay.**



► **Open and raveled block cracks.**



**RATING 3**

POOR — (continued)

Structural improvement required

◀ **Alligator cracking.**
Edge needs repair
and drainage needs
improvement prior
to rehabilitation.

▼ **Distortion with patches**
in poor condition. Repair
and overlay.



RATING 2

**VERY POOR—
Reconstruction required**

Roads are severely deteriorated and need reconstruction. Surface pulverization and additional base may be cost-effective. These roads have more than 25% alligator cracking, severe distortion or rutting, as well as potholes or extensive patches in poor condition.



▶
Extensive alligator cracking. Pulverize and rebuild.



▲ **Patches in poor condition, wheelpath rutting. Pulverize, strengthen and reconstruct.**



▲ **Severe rutting. Strengthen base and reconstruct.**



▶
Severe frost damage. Reconstruct.



RATING 1

**FAILED —
Reconstruction required**

Roads have failed, showing severe distress and extensive loss of surface integrity.



Potholes from frost damage. Reconstruct.



Potholes and severe alligator cracking. Failed pavement. Reconstruct.



Extensive loss of surface. Rebuild.

Practical advice on rating roads

Inventory and field inspection

Most agencies routinely observe roadway conditions as a part of their normal work and travel. However, an actual inspection means looking at the entire roadway system as a whole and preparing a written summary of conditions. This inspection has many benefits over casual observations. It can be helpful to compare segments, and ratings decisions are likely to be more consistent because the roadway system is considered as a whole within a relatively short time.

An inspection also encourages a review of specific conditions important in roadway maintenance, such as drainage, adequate strength, and safety.

A simple written inventory is useful in making decisions where other people are involved. You do not have to trust your memory, and you can usually answer questions in more detail. Having a written record and objective information also improves your credibility with the public.

Finally, a written inventory is very useful in documenting changing roadway conditions. Without records over several years it is impossible to know if road conditions are improving, holding their own, or declining.

Annual budgets and long range planning are best done when based on actual needs as documented with a written inventory.

The Wisconsin DOT local road inventory (WISLR) is a valuable resource for managing your local roads. Adding PASER surface condition ratings is an important improvement.

Averaging and comparing sections

For evaluation, divide the local road system into individual segments which are similar in construction and condition. Rural segments may vary from

1/2 mile to a mile long, while sections in urban areas will likely be 1-4 blocks long or more. If you are starting with the WISLR Inventory, the segments have already been established. You may want to review them for consistent road conditions.

Obviously, no roadway segment is entirely consistent. Also, surfaces in one section will not have all of the types of distress listed for any particular rating. They may have only one or two types. Therefore, some averaging is necessary.

The objective is to rate the condition that represents the majority of the roadway. Small or isolated conditions should not influence the rating. It is useful to note these special conditions on the inventory form so this information can be used in planning specific improvement projects. For example, some spot repairs may be required.

Occasionally surface conditions vary significantly within a segment. For example, short sections of good condition may be followed by sections of poor surface conditions. In these cases, it is best to rate the segment according to the worst conditions and note the variation on the form.

The overall purpose of condition rating is to be able to compare each

segment relative to all the other segments in your roadway system. On completion you should be able to look at any two pavement segments and find that the better surface has a higher rating.

Within a given rating, say 6, not all pavements will be exactly the same. However, they should all be considered to be in better condition than those with lower ratings, say 5. Sometimes it is helpful in rating a difficult segment to compare it to other previously rated segments. For example, if it is better than one you rated 5 and worse than a typical 7, then a rating of 6 is appropriate. Having all pavement segments rated in the proper relative order is most important and useful.

Assessing drainage conditions

Moisture and poor pavement drainage are significant factors in pavement deterioration. Some assessment of drainage conditions during pavement rating is highly recommended. While you should review drainage in detail at the project level, at this stage simply include an overview drainage evaluation at the same time as you evaluate surface condition.



Urban drainage.
RATING:
Excellent

Good rural ditch and driveway culvert. Culvert end needs cleaning.

RATING: Good



Consider both pavement surface drainage and lateral drainage (ditches or storm sewers). Pavement should be able to quickly shed water off the surface into the lateral ditches. Ditches should be large and deep enough to drain the pavement and remove the surface water efficiently into adjacent waterways.

Look at the roadway crown and check for low surface areas that permit ponding. Paved surfaces should have approximately a 2% cross slope or crown across the roadway. This will provide approximately 3" of fall on a 12' traffic lane. Shoulders should have a greater slope to improve surface drainage.

A pavement's ability to carry heavy traffic loads depends on both the pavement materials (asphalt surfacing and granular base) and the strength of the underlying soils. Most soils lose strength when they are very wet. Therefore, it is important to provide drainage to the top layer of the subgrade supporting the pavement structure.

In rural areas, drainage is provided most economically by open ditches that allow soil moisture to drain laterally. As a rule of thumb, the bottom of the ditch ought to be at least one foot below the base course of the pavement in order to drain the soils. This means that minimum ditch depth should be about 2' below the center of the pavement. Deeper ditches, of course, are required to accommodate roadway culverts and maintain the flow line to adjacent drainage channels or streams.

You should also check culverts and storm drain systems. Storm drainage systems that are silted in, have a large accumulation of debris, or are in poor structural condition will also degrade pavement performance.

The T.I.C. publication, *Drainage Manual: Local Road Assessment and Improvement*, describes the elements of drainage systems, depicts them in detailed photographs, and explains how to rate their condition. Copies are available from the Transportation Information Center.

High shoulder and no ditch lead to pavement damage. Needs major ditch improvement for a short distance.

RATING: Fair



No drainage leads to failed pavement.

RATING: Poor



Planning annual maintenance and repair budgets

We have found that relating a normal maintenance or rehabilitation procedure to the surface rating scheme helps local officials use the rating system. However, an individual surface rating should not automatically dictate the final maintenance or rehabilitation technique.

You should consider future traffic projections, original construction, and

pavement strength since these may dictate a more comprehensive rehabilitation than the rating suggests. On the other hand, it may be appropriate under special conditions to do nothing and let the pavement fully deteriorate, then rebuild when funds are available.

Summary

Using local road funds most efficiently requires good planning and accurate identification of appropriate rehabili-

tation projects. Assessing roadway conditions is an essential first step in this process. This asphalt pavement surface condition rating procedure has proved effective in improving decision making and using highway funds more efficiently. It can be used directly by local officials and staff. It may be combined with additional testing and data collection in a more comprehensive pavement management system.

**Transportation
Information
Center
Publications**

Pavement Surface Evaluation and Rating (PASER) Manuals

Asphalt PASER Manual, 2002, 28 pp.

Brick and Block PASER Manual, 2001, 8 pp.

Concrete PASER Manual, 2002, 28 pp.

Gravel PASER Manual, 2002, 20 pp.

Sealcoat PASER Manual, 2000, 16 pp.

Unimproved Roads PASER Manual, 2001, 12 pp.

Drainage Manual

Local Road Assessment and Improvement, 2000, 16 pp.

SAFER Manual

Safety Evaluation for Roadways, 1996, 40 pp.

Flagger's Handbook (pocket-sized guide), 1998, 22 pp.

Work Zone Safety, Guidelines for Construction, Maintenance, and Utility Operations, (pocket-sized guide), 1999, 55 pp.

Wisconsin Transportation Bulletins

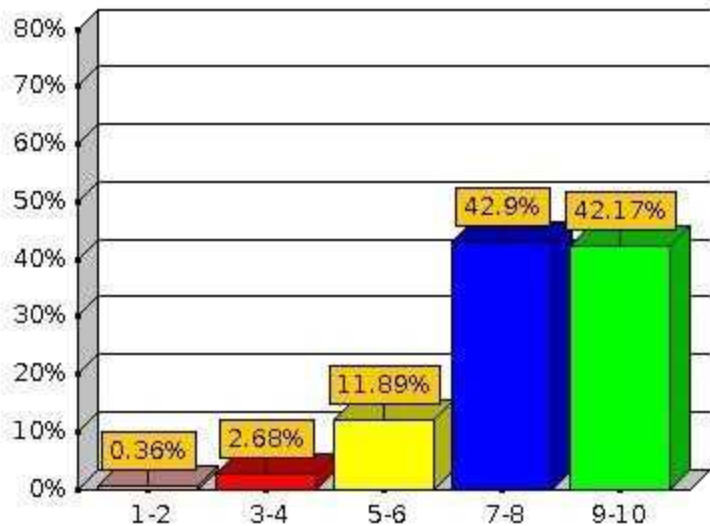
- #1 Understanding and Using Asphalt
- #2 How Vehicle Loads Affect Pavement Performance
- #3 LCC—Life Cycle Cost Analysis
- #4 Road Drainage
- #5 Gravel Roads
- #6 Using Salt and Sand for Winter Road Maintenance
- #7 Signing for Local Roads
- #8 Using Weight Limits to Protect Local Roads
- #9 Pavement Markings
- #10 Seal Coating and Other Asphalt Surface Treatments
- #11 Compaction Improves Pavement Performance
- #12 Roadway Safety and Guardrail
- #13 Dust Control on Unpaved Roads
- #14 Mailbox Safety
- #15 Culverts-Proper Use and Installation
- #16 Geotextiles in Road Construction/Maintenance and Erosion Control
- #17 Managing Utility Cuts
- #18 Roadway Management and Tort Liability in Wisconsin
- #19 The Basics of a Good Road
- #20 Using Recovered Materials in Highway Construction
- #21 Setting Speed Limits on Local Roads

PASER

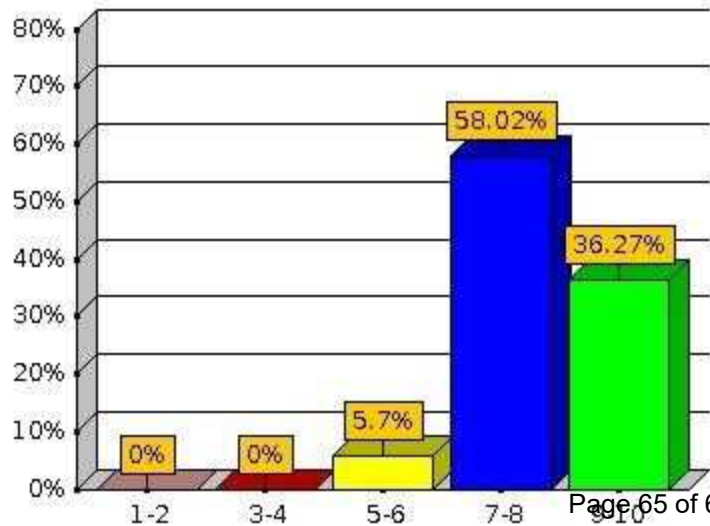
 **Transportation
Information Center**
University of Wisconsin–Madison

Asphalt Roads

Condition Before Plan



Condition After Plan



Village of McFarland

Example Wisconsin Information System for Local Roads (WISLR) Model Output

Approximately \$400k - \$500k Annual Budgets

3/5/2021

Notes:

1. This is just an example output from WISLR. The Village will almost certainly want/need to adjust this to accommodate other priorities.
2. WISLR does not do "first worst" ordering, but takes into account service level, degradation speed, previous work history, and other factors.
3. Model makes broad assumptions about curb repair and driveway aprons.
4. WISLR does not consider needs or costs for sidewalks or any underground work (storm sewer, water main, sanitary sewer).
5. Costs shown may need to be modified if storm sewer or water utility are charged for portions of work.

Year	Street	From	To	Rating	Action	Approx. Cost
2021	Renee Ct	Lewis Ln	Exchange St plus 1056 ft	5	Pavt. Rehabilitation	\$ 205,000
2021 Total						\$ 205,000
2022	Dale Rd	Lake Edge Rd	Crossover USH 51 plus 528 ft	5	Pavt. Rehabilitation	\$ 85,000
2022	Dale St	Badger St	Termini plus 528 ft	5	Pavt. Rehabilitation	\$ 73,000
2022	Larson Beach Rd	Crossover USH 51	Bremer Rd / Lake Edge Rd plus 422 ft	5	Pavt. Rehabilitation	\$ 66,000
2022	Marsh Rd	Red Oak Trl / Wellington Cir	Siggelkow Rd plus 739 ft	5	Pavt. Rehabilitation	\$ 203,000
2022 Total						\$ 427,000
2022	Morning Dove Dr	Hidden Farm Rd plus 422 ft	Country Walk / Spring Pond Ct plus 845 ft	5	Pavt. Rehabilitation	\$ 59,000
2022	Morning Dove Dr	Hidden Farm Rd	Bird Song Ct plus 422 ft	5	Pavt. Rehabilitation	\$ 59,000
2023	Severson St	Farwell St	USH 51 plus 422 ft	5	Pavt. Rehabilitation	\$ 66,000
2023	Yahara Dr	USH 51	Rivercrest Dr plus 581 ft	5	Pavt. Rehabilitation	\$ 81,000
2023	Bellevue Ct	Card Ave / Termini	Bremer Rd plus 211 ft	5	Pavt. Rehabilitation	\$ 27,000
2023	Bird Song Ct	Morning Dove Dr	Termini plus 158 ft	5	Pavt. Rehabilitation	\$ 22,000
2023	Black Walnut Dr	Black Walnut Ct / Leanne Ln plus 316 ft	Wild Cherry Ln plus 422 ft	5	Pavt. Rehabilitation	\$ 17,000
2023	Dale Rd	Crossover USH 51 plus 264 ft	Termini plus 634 ft	5	Pavt. Rehabilitation	\$ 51,000
2023	Dale Rd	Crossover USH 51	Termini plus 264 ft	5	Pavt. Rehabilitation	\$ 46,000
2023	Dale St	Badger St	Lexington St plus 317 ft	5	Pavt. Rehabilitation	\$ 28,000
2023 Total						\$ 456,000
2023	Farwell St	Severson St	Crossover USH 51 plus 528 ft	5	Pavt. Rehabilitation	\$ 55,000
2024	Glen Rd	Larson St	Lakeview St plus 422 ft	5	Pavt. Rehabilitation	\$ 39,000
2024	Glen Rd	Lakeview St	Wisconsin Ave plus 422 ft	4	Pavt. Rehabilitation	\$ 30,000
2024	Glen Rd	Erling Ave	Larson St plus 211 ft	4	Pavt. Rehabilitation	\$ 26,000
2024	Ivywood Trl	Terminal Dr	Termini plus 264 ft	5	Pavt. Rehabilitation	\$ 41,000
2024	Lakeview St	Bremer Rd	Termini plus 686 ft	3	Pavt. Rehabilitation	\$ 65,000
2024	Larson Beach Rd	Crossover USH 51 plus 422 ft	Bremer Rd / Lake Edge Rd plus 528 ft	5	Pavt. Rehabilitation	\$ 16,000
2024	Larson St	Glen Rd	Termini plus 528 ft	4	Pavt. Rehabilitation	\$ 64,000
2024	McFarland Ct	Terminal Dr	Termini plus 634 ft	4	Pavt. Rehabilitation	\$ 88,000
2024 Total						\$ 424,000
2025 Total						\$ 424,000

Year	Street	From	To	Rating	Action	Approx. Cost
2025	Norma Rd	Termini	Bremer Rd / Wisconsin Ave plus 898 ft	4	Pavt. Rehabilitation	\$ 140,000
2025	Osborn Dr	Running Deer Trl	Oak Hollow Dr plus 158 ft	5	Pavt. Rehabilitation	\$ 25,000
2025	Overlook Dr	Burma Rd / South Ct	South Ct plus 1373 ft	3	Pavt. Rehabilitation	\$ 107,000
2025	Paulson Rd	Termini	Siggelkow Rd / Triangle St plus 686 ft	4	Pavt. Rehabilitation	\$ 75,000
2025	Paulson Rd	Termini plus 686 ft	Siggelkow Rd / Triangle St plus 1478 ft	3	Pavt. Rehabilitation	\$ 86,000
2025 Total						\$ 433,000
2026	Severson St	Lake Edge Rd	Farwell St plus 106 ft	5	Pavt. Rehabilitation	\$ 15,000
2026	Siggelkow Rd	CTH AB / Siggelkow Rd plus 601 ft	Pierce Rd / Siggelkow Rd plus 1277 ft	5	Pavt. Rehabilitation	\$ 7,000
2026	South Ct	Overlook Dr	Termini plus 634 ft	4	Pavt. Rehabilitation	\$ 57,000
2026	Wild Flower Ct	Country Walk / Forest Ridge Ct	Termini plus 264 ft	5	Pavt. Rehabilitation	\$ 37,000
2026	Yahara Dr	Rivercrest Dr	Indian Mound Dr plus 422 ft	5	Pavt. Rehabilitation	\$ 59,000
2026	South Ct	Burma Rd	Overlook Dr plus 475 ft	3	Pavt. Rehabilitation	\$ 37,000
2026	Storck Rd	Siggelkow Rd	Termini plus 1478 ft	2	Pavt. Rehabilitation	\$ 205,000
2026 Total						\$ 417,000
2027	Wisconsin Ave	Bremer Rd / Norma Rd	Termini plus 318 ft	3	Pavt. Rehabilitation	\$ 28,000
2027	Marsh Rd	Eighmy Rd	Red Oak Trl / Wellington Cir plus 2693 ft	5	Pavt. Rehabilitation	\$ 488,000
2027	Marsh Rd	Eighmy Rd plus 2693 ft	Red Oak Trl / Wellington Cir plus 3274 ft	5	Pavt. Rehabilitation	\$ 82,000
2027 Total						\$ 598,000

EXAMPLE


McFarland
SUMMARY SHEET

MEETING DATE: Tuesday, March 9, 2021

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. February 2021 Public Works Directors report

PUBLIC WORKS COMMITTEE

March 9, 2021

PUBLIC UTILITIES COMMITTEE

March 16, 2021

Public Works Directors Report

for

February 2021

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

Waiting for the solar panels to be hooked up the utility provider Alliant Energy.

Watermain Break

The department assisted with a water lateral leak repair on February 5, along Lake Edge Drive.

Customer Freeze Up

Staff assisted in the thawing of pipes at a cluster of units at 5746 Lexington. Customer had meters in unheated area.

Snow

Staff worked snowfall events on:

February 4, received between 4-6 inches of snow

February 12/13, received about 4-6 inches of snow

February 22, received approximately 3 inches of snow

Sewer Reline

Emergency sewer main relining on Highland Drive was completed in February. There were no incidents with the install.

Eastside Interceptor Sewer

Work has commenced on the Eastside Interceptor project. Clearing and grubbing of wood and brush has been completed. The casing under the railroad tracks is in the process of being installed.

Meetings/Training/Seminars

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

- Diggers Hotline Utility Damage Prevention - Warren, Kelln, Pospyhalla, Warrenburg & Igl
- Public Service Commission Rate Increase Overview - Irwin
- MAMSWaP meeting - Hessling
- mPower Work Smarter with GIS-Based Asset & Work Management for Water and Wastewater Utilities- Irwin
- Supervisory Academy - UW Madison - Larson
- APWA Young Professionals meeting - Irwin
- APWA Webinar - The Road Ahead: Public Works and Infrastructure in the 117th Congress- Hessling
- APWA Webinar - Wastewater Recycling - Hessling
- APWA Webinar - Building for Resilience in Storm Water Drainage - Hessling
- APWA monthly board meeting - Igl & Hessling