



**CITY OF STURGEON BAY BOARD OF PUBLIC WORKS AGENDA  
TUESDAY, FEBRUARY 18, 2014  
6:00 P.M.  
COUNCIL CHAMBERS, CITY HALL – 421 MICHIGAN STREET  
BOB SCHLICHT, JR., CHAIRPERSON**

1. **Call to order.**
2. **Roll call.**
3. **Adoption of agenda.**
4. **Public comment on non-agenda items.**
5. **Consideration of: Maintenance Plan/Financing Options for Michigan Street.**
6. **Consideration of: Revised Street Plan for Marina View Subdivision.**
7. **Consideration of: “Old” Thorn Street options.**
8. **Consideration of: Design for Market Square Reconstruction.**
9. **Adjourn.**

**NOTE: DEVIATION FROM THE AGENDA ORDER SHOWN MAY OCCUR.**

Posted:

Date: 2-14-14

Time: 12:00

By: JM

EXECUTIVE SUMMARY

TITLE: Finance options for Michigan Street

BACKGROUND: At the February 4, 2014 meeting of the Board of Public Works, the Board directed the Finance/Purchasing and Building Committee to consider options for funding the Michigan Street project.

**Update:** A meeting of the Finance/Purchasing and Building Committee was held on February 11, 2014 at which time the Committee discussed the Michigan Street project and financing options.

The Finance/Purchasing and Building Committee recommends that the Board of Public Works to accept option #1, Micro Surface, in the amount of \$107,000, with the intent that option #1 be used to carry the City and SBU to such time that Option #5, Concrete Reconstruct, can be engineered and budgeted, with the hope to begin option #5 in 2016.

FISCAL IMPACT: Varies depending on the option

OPTIONS:

Construction Options:

- 1) Micro Surface (Budgeted) \$107,000
  - No budget adjustment required
  
- 2) 2" Asphalt Surface \$285,000
  - Complete in phases using the available \$107,000 in 2014 and budgeting in future years accordingly
  - Pay the first \$107,000 out of the capital budget and borrow the remaining project funds in the amount of \$178,000, scheduling the first debt payment in 2015
  - Defer other 2014 street maintenance projects to fund remaining \$178,000
  - Amend the budget and use fund balance to fund the remaining \$178,000
  
- 3) 4" Asphalt Surface \$575,000
  - Complete in phases using the available \$107,000 in 2014 and budgeting in future years accordingly
  - Pay the first \$107,000 out of the capital budget and borrow the remaining project funds in the amount of \$468,000 over a five year period, scheduling the first debt payment in 2015. [Note: Debt service impact to tax rate is 1.84% increase]
  - Defer other 2014 street maintenance and curb and gutter projects to fund remaining \$468,000
  - Amend the budget and use fund balance to fund the remaining \$468,000

- 4) Asphalt Reconstruct \$1,000,000

- Issue debt for the entire project over a ten year period, scheduling the first debt payment in 2015
- [Note: Debt service impact to tax rate is 2.12% increase]

5) Concrete Reconstruct \$2,100,000

- Issue debt for the entire project over a ten year period, scheduling the first debt payment in 2015
- [Note: Debt service impact to tax rate is 4.39% increase]

PREPARED BY: Valerie J. Clarizio 2/12/14  
 Valerie J. Clarizio Date  
 Finance Director/City Treasurer

PREPARED BY: Tony Depies 2/12/2014  
 Tony Depies Date  
 City Engineer

PREPARED BY: Marty Olejniczak 2/12/2014  
 Marty Olejniczak Date  
 Community Development Director

PREPARED BY: Stephen McNeil 2/12/14  
 Stephen McNeil Date  
 City Administrator

RECOMMENDATION

TO THE BOARD OF PUBLIC WORKS:

We, the Finance/Purchasing & Building Committee, hereby recommend to accept option #1 Micro Surfacing Michigan Street in the amount of \$107,000.

Respectfully submitted,  
FINANCE/PURCHASING & BUILDING  
COMMITTEE  
By: Joseph Stutting, Chairperson

RESOLVED, that the foregoing recommendation be adopted.

Dated: February 11, 2014

\*\*\*\*\*

Introduced by \_\_\_\_\_.

Moved by Alderperson \_\_\_\_\_ seconded by

Alderperson \_\_\_\_\_ that said recommendation be adopted.

Passed by the Council on the \_\_\_\_\_ day of \_\_\_\_\_, 2014.

## EXECUTIVE SUMMARY

**To:** Board of Public Works  
**DATE:** January 29, 2014  
**TITLE:** Maintenance Plan for Michigan St.

**BACKGROUND:** The 2014 budget includes \$82,000 for Slurry/Chip Sealing. In addition \$25,000 of asphalt maintenance is budgeted to resurface Michigan St. The seal coating process has been used for many years to extend the life of asphalt pavement on streets and parking lots. Today the process has evolved to use emulsified asphalt and a variety of aggregates to achieve the surface desired, but it is still used to extend the life of the existing pavement. In Sturgeon Bay the sub-soils are stable and have a very good bearing capacity and therefore a good "micro surface" treatment should extend the useful life of the Michigan St. pavement by about 10 years. The majority of the water main on Michigan St. has an expected life of another 25 - 30 years. Accordingly, the proposed plan for Michigan Street is to complete a micro surface treatment this year, then crack fill after 2 years, and install an asphalt overlay in 10 years +/- . This should extend the life of the road surface until the water main requires replacement.

The micro surface plan installs more than a slurry seal but less than a chip seal in 2014. This means that the aggregate will develop a thickness of 3/8" after an initial leveling course is applied. The aggregate in a slurry seal is fibrous material and cement but the aggregate proposed for Michigan St. uses a mixture of small stone chips (all less than 3/8"), sand and cement. By replacing the fine aggregate with the courser mixture we will get more thickness and a better wear surface than the previously applied slurry seal material. There won't be loose stones that occur with a chip seal. The material is thinner around the utility manholes so that drainage remains unchanged and there is less need to adjust utilities, gutters and inlets. A "tack" coat will be applied to insure that we have a good bond to the existing surface. With a leveling course, the cost is estimated at \$4.25 per sq. yd. The resulting road surface will be entirely black.

A second option is to remove 2" from the existing surface and apply a 2" thick asphalt overlay at a cost of about \$11 or \$12 per square yard. The 2014 budget noted above (\$107,000), will fund approximately 8,700 sq. yards of pavement (from near 4<sup>th</sup> Ave to S. 10<sup>th</sup> Ave). The remaining street would be resurfaced in 2015 and/or 2016.

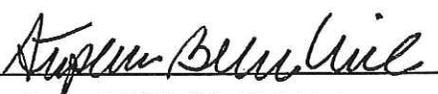
Ultimately neither repair option will extend the life of the current asphalt to the entire 30 years. There will be a need to complete at least one micro-surfacing and one overlay, and a crack filling after each new surface treatment, to get the pavement of Michigan Street to last the desired 30 years. So either option can be chosen but micro surfacing first improves the ride on the entire street this year and delays the more costly repairs to a future date.

**FISCAL IMPACT:** The 2014 budget includes \$107,000 to resurface Michigan St. Option 2 will require that the 2015 and 2016 budget include funds to complete the surface removal and paving of the remainder of Michigan St. The life-cycle cost of overlaying and then micro-sealing is also more expensive than micro-surfacing and then overlaying because the more expensive project is completed first instead of ten years from now.

**RECOMMENDATION:** Proceed with the micro-surface as planned in the 2014 budget.

**SUBMITTED BY:**   
Anthony Depies, City Engineer

**REVIEWED BY:**   
Marty Olejniczak, Community Development Director

**REVIEWED BY:**   
Stephen McNeil, City Administrator

2009 Micro-Surfing in Greenway II with steel  
slag. Check texture. MDR # 274-1004. 105K yd in  
total.



# The Right Recommendations Estimated Life Extension

<b>Treatment</b>	<b>Good Condition (PCI=80)</b>	<b>Fair Condition (PCI=60)</b>	<b>Poor Condition (PCI=40)</b>
<b>Fog Seal</b>	3 - 5	1 - 3	1 - 2
<b>Chip Seal</b>	7 - 10	3 - 5	1 - 3
<b>Slurry Seal</b>	7 - 10	3 - 5	1 - 3
<b>Micro-surfacing</b>	8 - 12	5 - 7	2 - 4
<b>Thin HMA</b>	10 - 12	5 - 7	2 - 4

## Addendum to Executive Summary

**Title:** Revised Street Plan for Marina View Subdivision

This addendum provides additional information regarding the proposed revised street plan for Thorn Street within the Marina View Subdivision.

### A. Timeline

The following is a chronology of the events related to the subdivision:

November 20, 2012 – Common Council approves amendment to the subdivision code. Sidewalks are shifted from “Improvements that may be at subdivider’s expense” to the list of “Improvements at subdivider’s expense” as follows:

*Concrete sidewalks to conform to specifications established by the city along all streets within the area being platted, unless the common council determines a street (or portion thereof) is exempted due to factors including but not limited to right-of-way width, topography, and density of development.*

November 21, 2012 – Plan Commission reviews and recommends approval of the preliminary plat of Marina View Subdivision. Among the conditions are:

- Establish an easement for a future pedestrian/bicycle path through the property.
- Sidewalks may be required along Thorn Street depending on the future use of the property.

December 4, 2012 – Council approves the preliminary plat with same conditions as Plan Commission.

February 20, 2013 - Plan Commission reviews the proposed subdivision improvements designed by the subdivider, including the design for Thorn Street. The design included grass swales (ditches) to handle the storm water and did not include sidewalks. The proposed future pedestrian easement along the east edge of the subdivision was identified at this time. It was still unclear during review of the plans whether the lots would be developed with residences or not. Plan Commission recommends approval of the proposed subdivision improvements.

March 5, 2013 – Common Council approves the recommendation of the Plan Commission for the design of the subdivision improvements, but adds a condition “*that the developer provides assurance that if any residential property is created that a sidewalk or acceptable replacement to a sidewalk will be installed*”.

August 21, 2013 – Plan Commission reviews and grants conditional use approval for an 8-unit apartment building on lot 1 of the proposed subdivision plat. The Plan Commission requires that a pedestrian easement and walkway be established from the end of Thorn Street to the future waterfront walkway easement at the east edge of the subdivision. The approval of the residential development triggers the sidewalk condition added by the Common Council. However, a sidewalk is not required by the Plan Commission with the thinking that the walkway from the end of Thorn Street could serve as an acceptable replacement to a sidewalk.

## B. Options for Pedestrian Improvements

There are several possibilities that have been put forth regarding the amount, type, and location of pedestrian facilities serving Thorn Street. These include:

1. *Easement & Walkway from end of Thorn Street down to future waterfront walkway.* This matches the Plan Commission's condition of approval of the apartment on Lot 1. It improves the pedestrian circulation by providing an outlet at the end of Thorn Street and access to downtown via the eventual waterfront walkway. Drawbacks include that there would be no sidewalk along Thorn Street under this option and there is no guarantee the overall waterfront walkway will happen.
2. *Option 1 + Sidewalk on one side of Thorn Street.* Under this option the road could be tipped to drain to one side with sidewalk on the other. If the sidewalk is continued along existing Thorn Street, it would need to be located on the south side of the street unless additional right-of-way is acquired.
3. *Option 1 + sidewalk on both sides of Thorn Street.* This will require easements outside of the right-of-way due to the approved design of Thorn Street with ditches for stormwater management, unless the street plan is revised.
4. *Option 1 + extend the walkway back to Nautical Drive within the waterfront walkway easement.* This option allows for a pedestrian route connecting the two public streets – Thorn and Nautical. The developer has stated his opposition to this idea (see attached correspondence). He feels the entire waterfront walkway should be acquired before the segment through the marina is dedicated and constructed.

Threshold Trigger - Any of the above options could include a threshold trigger for installing the required improvements. Once a certain number of dwelling units are constructed the improvements would be required to be installed. While it appears likely that the lots in Marina View Subdivision will be residentially developed, there is still a chance that uses such as boat storage or other non-residential uses could be developed that would not need sidewalks.

## C. Legal Issues

The City Attorney has considered a couple of ideas for creative special assessing or developer exactions and offers the following:

*If sidewalk is installed on one side of the existing portion of Thorn Street, can the typical special assessment be divided amongst the owners of both sides?* No. Only the owners of the frontage receiving the sidewalk can be assessed for the cost. The Council has the option of reducing or eliminating such assessment, but it cannot apply the balance to the other side of the street. Improvements made ordinarily must directly contact a property to be subject to a special assessment. A sidewalk installed across the street will not be considered a benefit to owners who received no sidewalk.

*Can the City require the developer of Marina View Subdivision to pay for off-site improvements such as sidewalk along the existing portion of Thorn Street or a portion of the waterfront walkway?* While exactions and/or off-site improvements are technically possible for new developments, the City needs to be very cautious. The required improvements must relate

specifically to the development and be roughly proportionate to the impact of the development. Where an improvement "benefits" adjoining properties (e.g. sidewalks on existing Thorn St), it will be more difficult to require the developer to pay for that improvement. In addition, the Council has already approved the subdivision improvements without requiring any exactions or off-site improvements. Hence, attempting to add such requirements at this time likely would be grounds for a lawsuit.

**D. Curb and gutter**

One possibility for including sidewalk(s) in the design of Thorn Street is to change the plans to include curb and gutter. The stormwater management plan is based upon swales (ditches) and bio-infiltration areas to absorb water and filter out pollutants before discharging into the bay. Curb and gutter on Thorn Street will necessitate a complete re-do of the stormwater management plan and require storm sewer. A detention pond or other facilities might be needed. The impact to the lots and development potential is not known. The increase in costs are also not known, but the developer has indicated the increase would force him not to complete the subdivision (see email correspondence). The Council approved the current design for Thorn Street last year. It is staff's opinion that the Council should make its decision regarding the pedestrian (sidewalk) improvements and let the developer figure out how to accommodate such improvements into the street design rather than dictate curb and gutter as the solution.

Prepared by: Marty Olejniczak  
Marty Olejniczak  
Community Development Director

2/13/2014  
Date

Prepared by: Tony Depies  
Tony Depies  
City Engineer

02/13/2014  
Date

Reviewed by: Stephen McNeil  
Stephen McNeil  
City Administrator

2/13/2014  
Date



## Olejniczak, Marty

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**From:** dan schott <danandrew11@gmail.com>  
**Sent:** Wednesday, February 05, 2014 3:38 PM  
**To:** Olejniczak, Marty; City Sturg Bay Martin Martin Olejniczak; Depies, Tony; info  
**Subject:** Thorn St

Marty & Tony

In reference to the proposed extension of Thorn St, as we discussed we currently have an agreement with the City as to the street and sidewalks, we do not want to do all the sidewalks and all the neighbors have objected to the walks. The cost to us for all these sidewalks and storm sewer is a project killer, we can not justify the tens of thousands of dollars to have 3 lots to build on (in addition to what we already have available to build on, it would be better to just build bigger buildings and have one lot off of the end of Thorn St and then combine all the other land into one lot with one big building off of Nautical (add on to the building we are currently building), not what we want to do.

In your comments as to our allowing the City to install the River walk on our property only and not going from Skipper Buds along the water front to sawyer park (thru Bay Marine and Roen property) and entering off Nautical and exiting up Thorn St is out of the question.

We could agree to a sidewalk on the south side of Thorn, tilt the pavement to the north with a drainage ditch along the north side of the pavement and an agreement to allow a sidewalk on lot 3 to join Thorn to the future River Walk when it is installed by the City.

I do not believe it is prudent to go to the Council unless you know you can get this approved by a majority. I will be back in May and if you request I would appear before the Council at a meeting. If the Mayor want to put this on the agenda please be advised that we will not be there.

Thank You

Daniel Schott  
Marina View Apartments LLC

## Executive Summary

**Title:** Revised Street Plan for Marina View Subdivision

**Background:** The preliminary plat for Marina View Subdivision was approved by the Plan Commission and Common Council in 2012. This development extends Thorn Street and creates lots fronting on it. The engineering and design for the subdivision improvements were approved in early 2013. The extension of Thorn Street is expected to occur during the 2014 construction season. However, a revised street plan has been submitted for Council approval for two reasons.

The first reason for the revised street plan is that after the preliminary plat and original street plan were approved, staff became aware of a discrepancy involving the location of the existing right-of-way for Thorn Street. The existing part of Thorn Street was created many years ago with poor description. The surveyor for Marina View Subdivision had it placed northerly from its current location. Obviously, the new portion of Thorn Street needs to line up with the existing portion. An independent survey of Thorn Street was completed by Mau & Associates. Although that surveyor agreed there was no clear-cut answer, the conclusion was that existing Thorn Street ended southerly of where it was shown on the plat of Marina View Subdivision. Therefore, the street location for the new portion of Thorn Street needed to be shifted in order to line up.

The second reason that the street plan is back before the Council is that the Council's approval of the original street plan included a condition *"that the developer provides assurance that if any residential property is created that a sidewalk or acceptable replacement to a sidewalk will be installed"*. The subdivision will have residential property since the Plan Commission recently approved an apartment building on one of the lots fronting on Thorn Street. So the developer (Dan Schott) is proposing, and the Plan Commission has required, that a pedestrian easement and 8-ft wide walkway be included from the end of the cul-de-sac to the easterly edge of the plat. This allows for a future connection to the planned waterfront walkway. However, the developer only wants to construct this walkway if the entire waterfront walkway happens. The council must decide if that proposal meets the condition for the sidewalk.

**Considerations:** The revised location for the right-of-way of the new portion of Thorn Street includes a tighter curve and reverse curve in order to avoid the existing garage on Lot 7 of the plat. The design still complies with the requirements of the subdivision ordinance. There is a jog in the right-of-way at the property line. However, this should not impact the location of the actual roadway. Staff prefers this arrangement because it has less impact on the existing apartment development and there is likelihood that additional right-of-way can be acquired on the north side when that area develops due to the location of the existing water main.

The street design for Thorn Street has not changed. It is proposed to have 28 feet of asphalt pavement with 2-ft shoulders on each side. The street is not planned to have curb and gutter. The change of location for the right-of-way does not impact that design. It is noted that if a sidewalk is required by the city, either the cross-section needs to be revised or the sidewalk needs to be located outside the right-of-way within an easement. The city has the authority to have sidewalks on both sides of the street, one side, or none.

The existing part of Thorn Street is being reconstructed by the city in conjunction with the planned extension. The Board of Public Works is considering whether sidewalks are needed on

the existing portion. If a sidewalk is required on one side or both sides of the existing Thorn Street, it makes sense to also require that on the new portion. However, a petition signed by the abutting property owners along Thorn Street was submitted requesting that sidewalks not be required on Thorn Street.

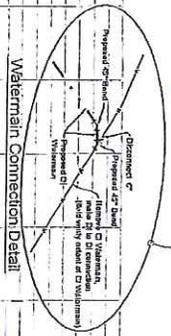
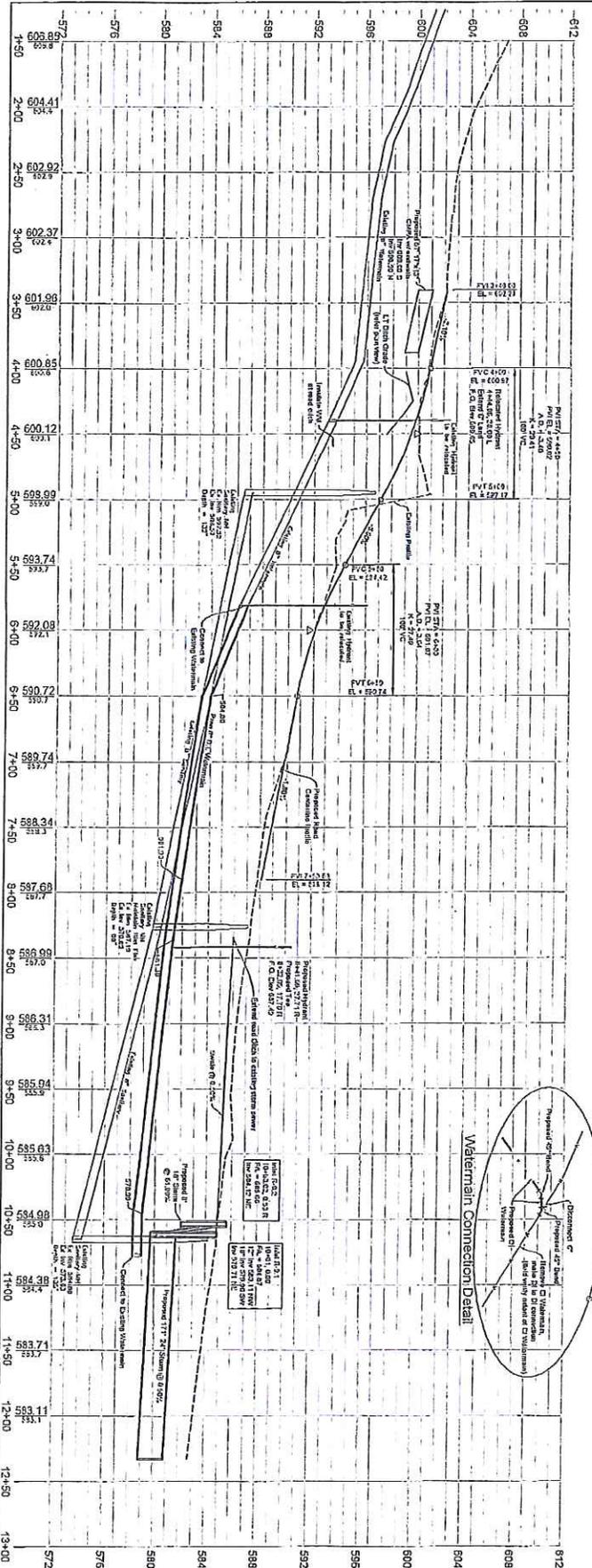
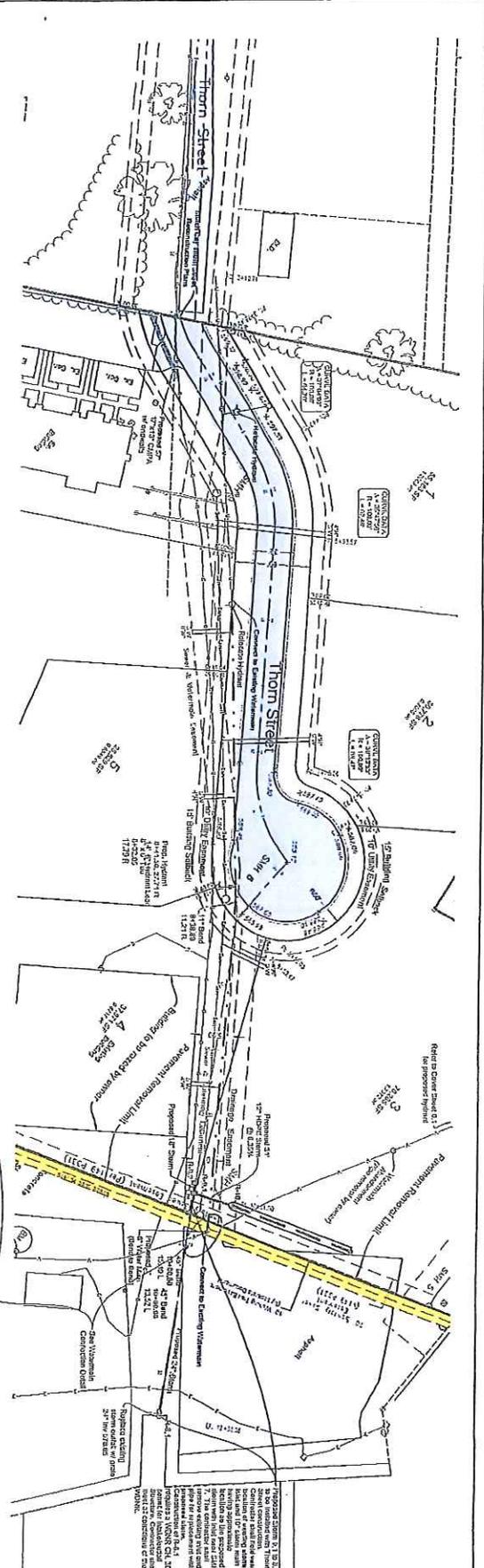
**Recommendation:** The revised location of the right-of-way should be approved. Regarding the revised street design, the council needs to determine whether the intent of their previous motion is met via the proposed pedestrian walkway leading from the end of the cul-de-sac while considering the wishes of the existing property owners and needs of future residents.

Prepared by: Marty Olejniczak 1-30-14  
Marty Olejniczak, Community Development Director Date

Reviewed by: Tony Depies 1-30-14  
Tony Depies, City Engineer Date

Reviewed by: Stephen McNeil 1-30-14  
Stephen McNeil, City Administrator Date

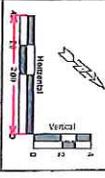




**NOTES:**  
 1. ALL DIMENSIONS TO FACE UNLESS OTHERWISE NOTED.  
 2. ALL DIMENSIONS ARE IN FEET AND INCHES.  
 3. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 4. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 5. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.

**LEGEND**

Proposed 12" Watermain	Proposed 6" Watermain	Proposed 4" Watermain	Proposed 2" Watermain
Proposed 12" Sewer	Proposed 6" Sewer	Proposed 4" Sewer	Proposed 2" Sewer
Proposed 12" Storm	Proposed 6" Storm	Proposed 4" Storm	Proposed 2" Storm
Proposed 12" Gas	Proposed 6" Gas	Proposed 4" Gas	Proposed 2" Gas
Proposed 12" Electric	Proposed 6" Electric	Proposed 4" Electric	Proposed 2" Electric
Proposed 12" Fiber Optic	Proposed 6" Fiber Optic	Proposed 4" Fiber Optic	Proposed 2" Fiber Optic
Proposed 12" Telephone	Proposed 6" Telephone	Proposed 4" Telephone	Proposed 2" Telephone
Proposed 12" Cable TV	Proposed 6" Cable TV	Proposed 4" Cable TV	Proposed 2" Cable TV
Proposed 12" Fire Alarm	Proposed 6" Fire Alarm	Proposed 4" Fire Alarm	Proposed 2" Fire Alarm
Proposed 12" Security	Proposed 6" Security	Proposed 4" Security	Proposed 2" Security
Proposed 12" Data	Proposed 6" Data	Proposed 4" Data	Proposed 2" Data
Proposed 12" Other	Proposed 6" Other	Proposed 4" Other	Proposed 2" Other



**Marina View Subdivision**  
 City of Sturgeon Bay, Door County, WI  
 For: Marina View Apartments, LLC  
 & Sturgeon Bay Marina.com LLC  
**IMPROVEMENT PLANS**  
 Thorn Street  
 Sta 3+58.09 to 12+69.79

**DAVEL ENGINEERING & ENVIRONMENTAL, INC.**  
 CIVIL ENGINEERING CONSULTANTS  
 1811 Hudson Street, Sturgeon Bay, WI 54982  
 Ph: 920-691-1833 Fax: 920-693-9955  
 www.davel.com

DATE: 08/23/2014  
 TIME: 3:11 PM

EXECUTIVE SUMMARY

**DATE:** February 10, 2014

**TITLE:** Design for Market Square Reconstruction

**BACKGROUND:** One of the capital projects in the approved 2014 budget is the reconstruction of Market Square. This project, in addition to replacing the asphalt, includes several changes to improve drainage, circulation, and landscaping. The proposed design was developed by City staff and was approved by the Waterfront Design Review Board.

The following are the major changes/improvements to the design:

1. **The existing flat parking area will be sloped from the elevation of the existing sidewalk on the east side down to the alley elevation.** This change will prevent the ponding of water that currently occurs and improve drainage. It also will improve pedestrian circulation by eliminating the "hill" that must be climbed to enter City Hall and the need for a guard rail and steps by the alley.
2. **Landscaped islands will be installed in the middle of the parking area and along the edges by the sidewalk and by the alley.** This change will beautify the space, reduce its current "sea of asphalt" character, provide shade and allow the City's parking area to comply with the City's design standards. Smaller trees have been chosen along the alley due to the utility lines, with larger trees planned for the central islands.
3. **Stormwater management is improved.** The new grading plan allows much of the stormwater to be captured at the long landscaped island. An underground infiltration chamber will lessen the amount of water flowing off the site. The discharge will be to the storm sewer in Nebraska Street. This will lessen the amount of water in the alley, which has been prone to flooding through the years.
4. **Entrances widened to 24 feet.** The current entrance width does not allow for vehicles to enter and exit at the same time. The wider entrance width will improve this situation.
5. **Alley width is reduced.** The existing alley is much wider than typical, since it served as the access route for fire trucks when the fire station was located there. The new plan reduces the width to more closely match a standard alley. It is still wider than the typical alley and should allow cars to pass each other and the private parking stalls on the west side of it to be accessible. By reducing the current width of the alley, the landscaped islands could be accommodated in the parking lot without eliminating parking stalls. In fact, the total number of parking spaces increases by four spaces under the new plan.

The Board of Public Works is requested to review the plan so that construction can begin. Construction will take approximately 6 weeks and is anticipated to be completed by the first week of June in time for the beginning of the farmers' market season.

**FISCAL IMPACT:** The adopted City capital budget is \$200,000 for this project. The project is being funded 75% through the parking lot maintenance reserve fund and 25% through the park improvements reserve fund.

**RECOMMENDATION:** Approve the design of the reconstruction of Market Square.

**SUBMITTED BY:** Marty Olejniczak 2/10/14  
Marty Olejniczak  
Community Development Director  
Date

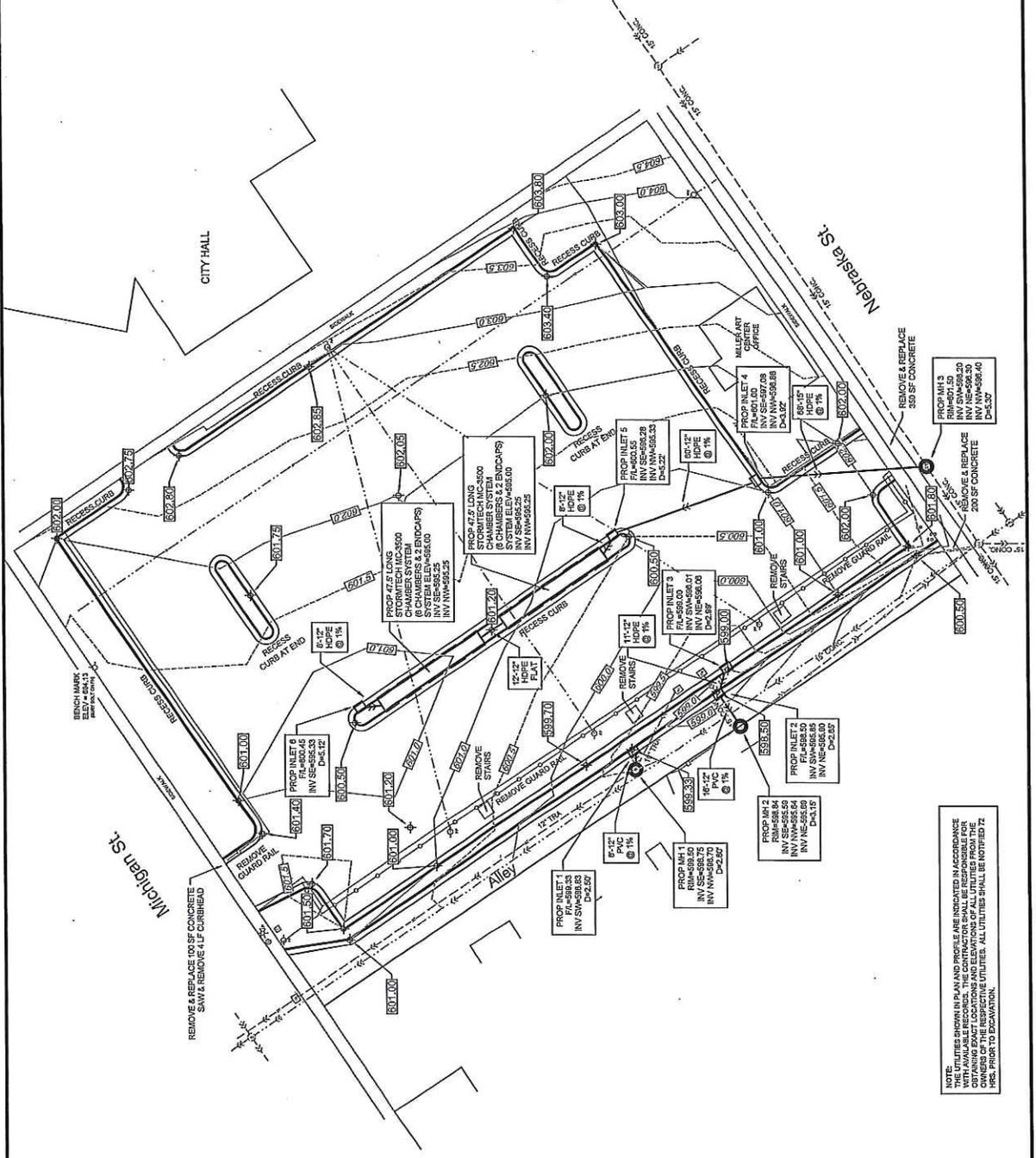
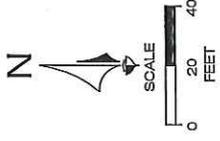
**REVIEWED BY:** Anthony Depies 2/10/2014  
Anthony Depies  
City Engineer  
Date

**REVIEWED BY:** Bob Bordeau 2/11/2014  
Bob Bordeau  
Public Works  
Date

**REVIEWED BY:** Stephen McNeil 2/10/14  
Stephen McNeil  
City Administrator  
Date



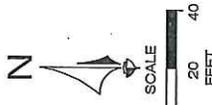
2014  
City Hall Parking Lot  
Site Plan



NOTE:  
THE UTILITIES SHOWN IN PLAN AND PROFILE ARE INDICATED IN ACCORDANCE WITH AVOID PRACTICES AND ELEVATIONS OF ALL UTILITIES FROM THE OWNERS OF THE RESPECTIVE UTILITIES. ALL UTILITIES SHALL BE NOTIFIED 72 HRS. PRIOR TO EXCAVATION.

2014  
 City Hall Parking Lot  
 Parking Layout, Traffic Control, Trees

PROPOSED  
 124 spaces

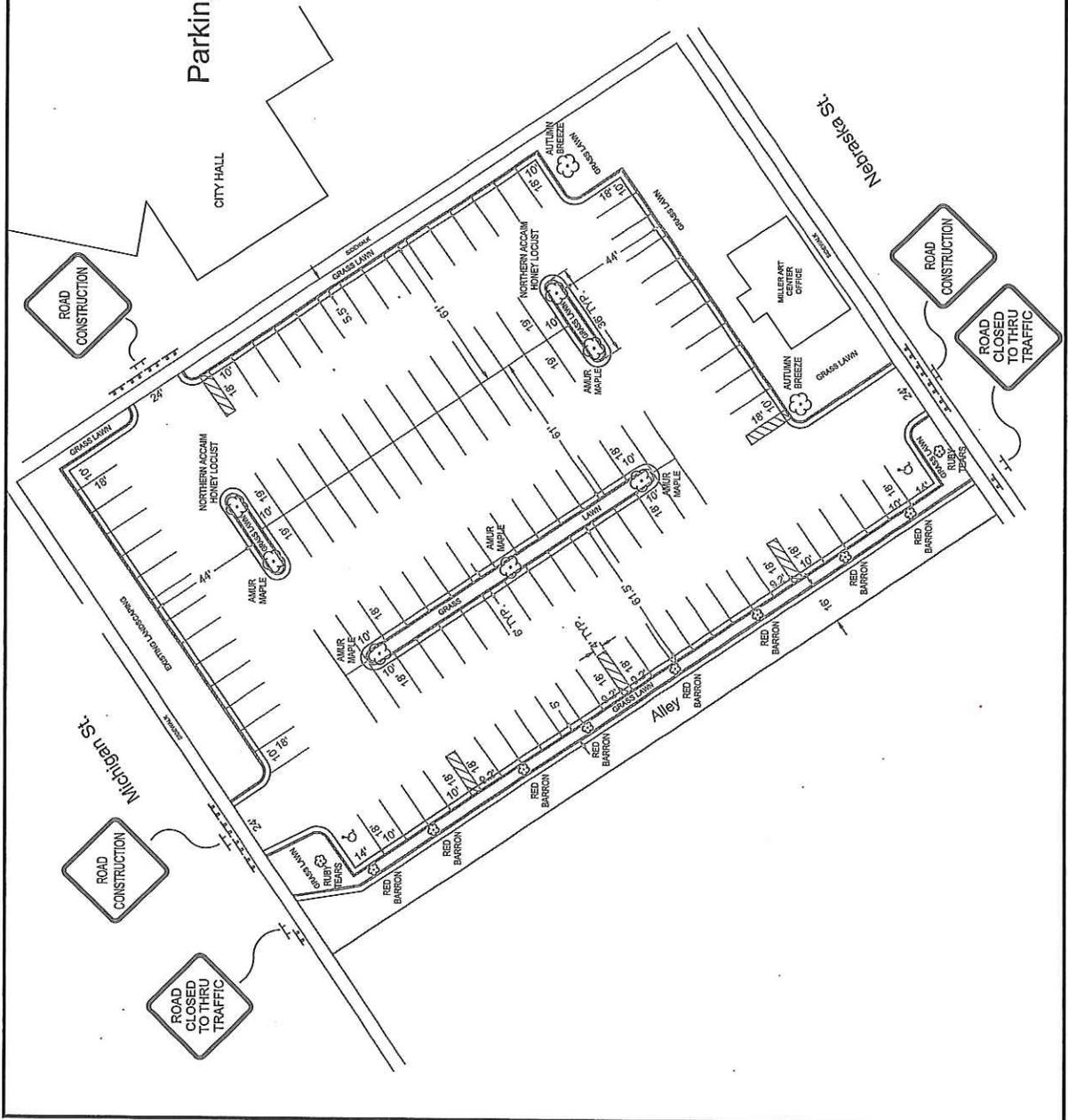


LEGEND

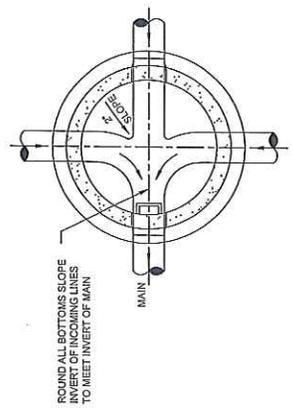
- SIGN
- TYPE "H" BARRICADE (TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS) REQUIRED FOR NIGHTTIME USE
- ⊗ PROPOSED STANDARD SIZED TREE (BY OTHERS)
- ⊗ PROPOSED DWARF TREE (BY OTHERS)

NOTE:

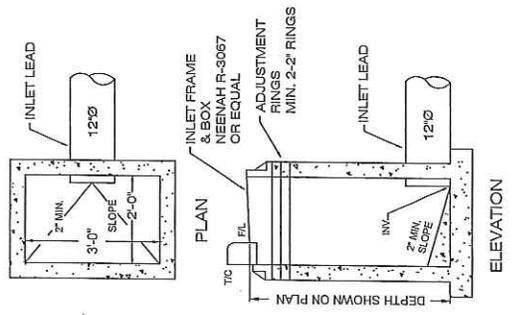
ALLEY ACCESS FOR 3RD AVE PROPERTIES TO BE MAINTAINED WHENEVER POSSIBLE DURING CONSTRUCTION



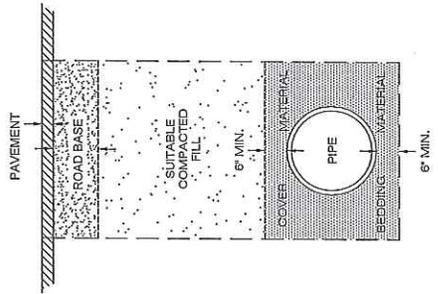
STANDARD PRECAST STORM MANHOLE  
NO SCALE



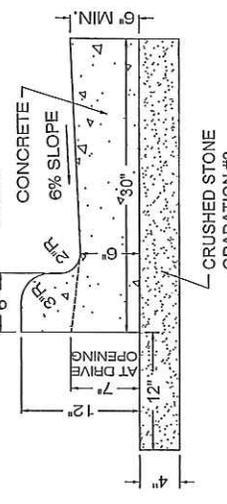
STORM SEWER INLET DETAIL  
NO SCALE



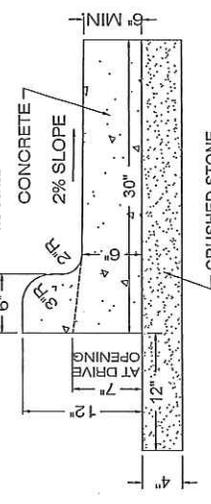
TRENCH DETAIL  
NO SCALE



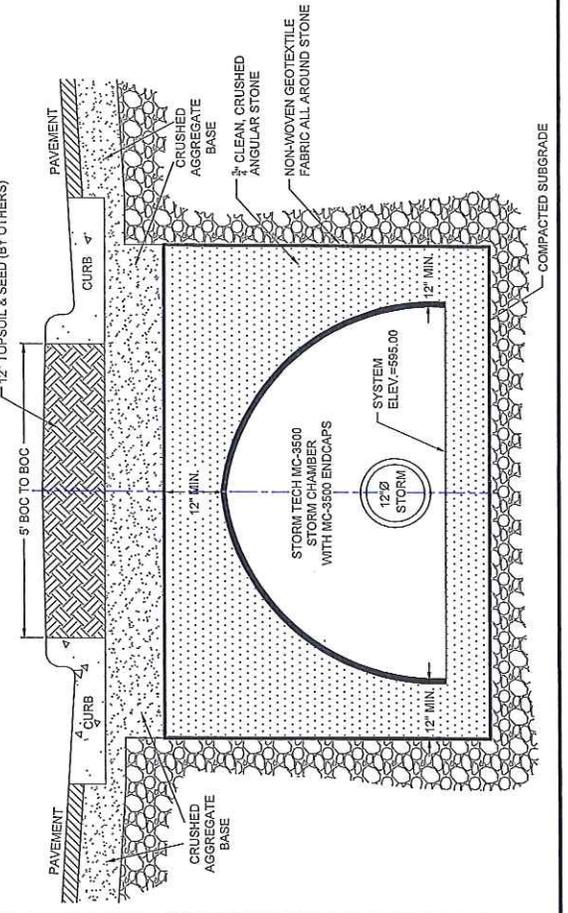
CURB DETAIL  
NO SCALE



RECESS CURB DETAIL  
NO SCALE



STORM CHAMBER DETAIL  
NO SCALE



LD & FRAME NEEHAH R-1500  
W/IRON PICKING TYPE 'B' LID  
& 6" MINIMUM THICKNESS

3" MIN. 12" MAX.  
ADJUSTING RINGS  
W/WATERS (OF LEGS OMITTED)  
PLASTIC (TYP.) OR EQUAL (TYP.)

M.H. STEPS 18" O.C. M.A.  
INDUSTRIES P81-PPE, ASTM C478

PRECAST M.H. SECTIONS

RUBBER GASKET JOINTS  
OR REIN. SEAL

INVERT SLAB CAST  
INTEGRALLY W/BOTTOM  
SECTION BY MANUFACTURER