



Board of Public Works

Regular Meeting

335 South Broadway
De Pere, WI 54115
<http://www.de-pere.org>

Agenda

Monday, January 9, 2017

7:30 PM

De Pere City Hall Council Chambers

Pursuant to Wisconsin Statutes 19.84, Notice is hereby given to the public that a meeting of the **Board of Public Works** of the City of De Pere will be held on **January 9, 2017** at **7:30 PM** in the **De Pere City Hall Council Chambers**, 335 S. Broadway Street, De Pere, WI 54115.

This meeting can be viewed LIVE at www.depere.tv. This meeting is also rebroadcast on TW Cable Channel 4 and AT&T U-verse Channel 99 throughout the week and available on demand at www.depere.tv.

I. Call to Order

1. Roll Call

II. Public Comment

III. Items

1. Approval of the Board of Public Works December 12, 2016 Meeting Minutes.
2. Consider City Engineer Parking & Traffic Recommendations.
3. Consider Green Bay Metropolitan Sewerage District Lease Agreement.*
4. Consider Stormwater Management Plan Review.

IV. Future Agenda Items

V. Adjournment

***Items with an asterisk require City Council approval.**

Any person wishing to attend this meeting who, because of disability, requires special accommodations should contact the Clerk-Treasurer's office at 339-4050 by Noon, Monday January 9, 2017 so that arrangements can be made.

Agenda Sent To:

Mayor

Alderpersons

Department Heads

TV, Newspapers & Radio Stations

Kress Family Library

De Pere Chamber of Commerce

Definitely De Pere

Patrick Wrenn, St. Norbert College

Notice is hereby given that a majority of the members of the Common Council of the City of De Pere may attend this meeting to gather information about a subject (s) over which they have decision-making responsibility.

City of De Pere, Wisconsin

**Request For Board of Public Works Action**

MEETING DATE: January 9, 2017

DEPARTMENT: Public Works

FROM: Pam Denis

SUBJECT: Approval of the Board of Public Works December 12, 2016 Meeting Minutes.

ATTACHMENTS:

- Board of Public Works December 12, 2016 Draft Meeting Minutes (PDF)



Board of Public Works

Regular Meeting

335 South Broadway
De Pere, WI 54115
<http://www.de-pere.org>

Draft Minutes

Monday, December 12, 2016

7:30 PM

De Pere City Hall Council Chambers

I. Call to Order

The meeting was called to order at 7:30 PM by Mayor Michael J. Walsh

Attendee Name	Title	Status	Arrived
James Boyd	Aldersperson	Present	
Dan Carpenter	Aldersperson	Present	
Ryan Jennings	Aldersperson	Present	
Dean Raasch	Aldersperson	Present	
Michael J. Walsh	Mayor	Present	

Others present were Scott Thoresen, Director of Public Works, Eric Rakers, City Engineer and Debbie Zierson, Recording Secretary.

II. Public Comment

None

III. Items

- Approval of Board of Public Works November 7, 2016 Meeting Minutes.

Aldersperson Carpenter moved to approve the Board of Public Works November 7, 2016 meeting minutes, Aldersperson Jennings seconded the motion. Upon vote, the motion passed.

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Dan Carpenter, Aldersperson
SECONDER:	Ryan Jennings, Aldersperson
AYES:	Boyd, Carpenter, Jennings, Raasch, Walsh

- Consider 2016 - 2017 Sewer Rate Study.*

Joe Zegers the Finance Director, Dave Maccoux and Kyle Pockat from Schenk Consulting Firm spoke with the Board in reference to the Sewer Rate Study. Joe, Dave and Kyle went through the highlights of the study and explained the rate increase. They took questions from the Board in reference to the Sewer Rate Study.

Aldersperson Boyd made a motion to approve the Sewer Rate increase by 4.95%, seconded by Aldersperson Raasch. Upon vote, the motion passed.

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	James Boyd, Aldersperson
SECONDER:	Dean Raasch, Aldersperson
AYES:	Boyd, Carpenter, Jennings, Raasch, Walsh

- Consider Master Agreement for Wisconsin Technology Networking LLC*

Scott Thoresen, Director of Public Works, spoke with the Board and took questions from the Board, in reference to the Wisconsin Technology Networking LLC Agreement. Director Thoresen explained the agreement would allow the City to have some control of

Wisconsin Technologies facilities within the City's right of way. Director Thoresen answered questions about the agreement and the use of the right of way.

Mayor Walsh made a motion to approve the Master Agreement for Wisconsin Technology Networking, LLC, seconded by Alderperson Carpenter. Upon vote, the motion passed.

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Michael J. Walsh, Mayor
SECONDER:	Dan Carpenter, Alderperson
AYES:	Boyd, Carpenter, Jennings, Raasch, Walsh

4. Consider Amending Chapter 82 De Pere Municipal Code Regarding Solid Waste/Curbside Recyclable Collection*

Scott Thoresen, Director of Public Works, spoke with the Board and took questions from the Board, in reference to amending Chapter 82 of the De Pere Municipal Code regarding Solid Waste/Curbside Recyclable Collection. Director Thoresen explained that the Ordinance was created in 2016 in order to build dumpster enclosures in Nicolet Square. The bids came in above the budgeted amount for the project. Therefore, the Board and Common Council rejected the bids and directed staff to rebid in 2017. Director Thoresen explained the Ordinance needed to be revised so that the Nicolet Square common collection services would go into effect for December 31, 2017.

Alderperson Raasch made a motion to approve the amendment of Chapter 82 De Pere Municipal regarding solid waste/curbside recyclable collection for Nicolet Square, seconded by Alderperson Boyd. Upon vote 3 ayes, with Alderperson Jennings nay, the motion passed.

RESULT:	ADOPTED [4 TO 1]
MOVER:	Dean Raasch, Alderperson
SECONDER:	James Boyd, Alderperson
AYES:	James Boyd, Dan Carpenter, Dean Raasch, Michael J. Walsh
NAYS:	Ryan Jennings

5. Consider Street Light in the 1000 Block of Twilight.

Eric Rakers, City Engineer, spoke with the Board about considering the extra street light in the 1000 block of Twilight. Engineer Rakers stated that the Engineering Department had sent out surveys and did not receive any responses.

Mayor Walsh made a motion not to install the extra street light in the 1000 block of Twilight, seconded by Dean Raasch. Upon vote, the motion passed.

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Michael J. Walsh, Mayor
SECONDER:	Dean Raasch, Alderperson
AYES:	Boyd, Carpenter, Jennings, Raasch, Walsh

6. Consider Repeal 2 -Hour Restriction for Parking on the 400 Block of the South Side of Grant Street.*

Eric Rakers, City Engineer, spoke with the Board about repealing the 2 Hour Parking Restriction on the south side of the 400 block of Grant Street.

Mayor Walsh made a motion to repeal the 2 Hour Parking Restriction on the south side of the 400 block of Grant Street, seconded by Alderperson Raasch. Upon vote, the motion passed.

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Michael J. Walsh, Mayor
SECONDER:	Dean Raasch, Alderperson
AYES:	Boyd, Carpenter, Jennings, Raasch, Walsh

IV. Future Agenda Items

None

V. Adjournment

Mayor Walsh made a motion to adjourn the meeting, the motion was seconded by Alderperson Raasch. Upon vote, the motion passed and the meeting was adjourned at 8:39 p.m.

Respectfully submitted,
Pam Denis

City of De Pere, Wisconsin

**Request For Board of Public Works Action**

MEETING DATE: January 9, 2017

DEPARTMENT: Public Works

FROM: Eric Rakers

SUBJECT: Consider City Engineer Parking & Traffic Recommendations.

City Engineer Parking and Traffic Recommendations**December Review via E-Mail****Parking Items:**

1. Restrict Parking on the east side of Third Street just south of Stewart Street.
 - Staff received request to restrict parking (approximately 2 vehicles from the intersection) on the east side of Third Street, just south of Stewart Street. This section of Third Street is 36 feet wide, with one lane in each direction and a parking lane on the east side. There is a bus stop at this location. Due to a change in the area, there is a high demand for parking with vehicles regularly parked at the bus stop. When vehicles are parked at this location, buses need to stop in traffic. Third Street is a collector street and this situation could cause a safety concern.

Recommendation:

- Staff recommends restricting parking on the east side of Third Street from Stewart Street to 70 feet south.



City of De Pere, Wisconsin

**Request For Board of Public Works Action**

MEETING DATE: January 9, 2017

DEPARTMENT: Public Works

FROM: Scott Thoresen

SUBJECT: Consider Green Bay Metropolitan Sewerage District Lease Agreement.*

The Municipal Service Center (MSC) currently does not have adequate indoor storage for vehicles and equipment resulting in vehicles and equipment to have to be stored outside. The storage of equipment outside causes maintenance issues and damages from the outdoor environment. In addition, the indoor storage at the MSC has become really congested resulting in staff having to shuffle around equipment on a regular basis in order to access equipment on any given day. Ultimately, there are future plans to expand the MSC so that all equipment can be stored inside but funding the expansion of the MSC is not a City priority at this time. In the meantime, staff has the opportunity to lease space to store vehicles and equipment indoors at the Green Bay Metropolitan Sewerage District's (GBMSD) facility in De Pere. The lease would be from January 18, 2017 to June 30, 2017 in the amount of \$1,000. The intent for this short term lease is to determine if utilizing the GBMSD's facility will be beneficial for the City with storage needs. The City has sufficient funding for the lease agreement under outside services in the "Machinery & Equipment" program. Staff recommends approves entering into a lease agreement with the GBMSD.

ATTACHMENTS:

- GBMSD Lease Agreement (PDF)

Lease Agreement

This Commercial Lease Agreement ("Lease") is made and effective January 3, 2017, by and between Green Bay Metropolitan Sewerage District ("Landlord") and the City of De Pere ("Tenant"). Landlord is the owner of land and improvements commonly known and numbered as 315 Leonard Street De Pere, WI 54115 described as follows (the "De Pere Facility"): Landlord makes available for lease a portion of the Building designated as De Pere Facility Solids Building located at 315 Leonard Street De Pere, WI 54115 (the "Leased Premises").

Landlord desires to lease the Leased Premises to Tenant, and Tenant desires to lease the Leased Premises from Landlord for the term, at the rental and upon the covenants, conditions and provisions herein set forth.

THEREFORE, in consideration of the mutual promises herein, contained and other good and valuable consideration, it is agreed:

1. Term.

A. Landlord hereby leases the Leased Premises to Tenant, and Tenant hereby leases the same from Landlord, for an "Initial Term" beginning January 18, 2017 and ending June 30, 2017. Landlord shall use its best efforts to give Tenant possession as nearly as possible at the beginning of the Lease term. If Landlord is unable to timely provide the Leased Premises, rent shall abate for the period of delay. Tenant shall make no other claim against Landlord for any such delay.

B. Tenant may renew the Lease for one extended term of January to June. Tenant shall exercise such renewal option, if at all, by giving written notice to Landlord not less than ninety (90) days prior to the expiration of the Initial Term and Landlord, if agreed, will allow for an additional renewal of the Lease. The renewal term shall be at the rental set forth below and otherwise upon the same covenants, conditions and provisions as provided in this Lease.

2. Rental.

A. Tenant shall pay to Landlord during the Initial Term rental of One Thousand Dollars and no/100 (\$1,000.00) annual rent per year, payable at the beginning of the Lease Term. Payment shall be due in advance on the first day of the lease term to Landlord at 2231 N. Quincy Street Green Bay, WI 54302 or at such other place designated by written notice from Landlord or Tenant.

B. The rental for any renewal lease term, if created as permitted under this Lease, shall be Annual Rent in Renewal Term per year payable at the beginning of the Lease Term.

3. Use

Notwithstanding the forgoing, Tenant shall not use the Leased Premises for the purposes of storing, manufacturing or selling any explosives, flammables or other inherently dangerous substance, chemical, thing or device except such storage as may be incidental to the keeping of the vehicles and equipment on the Leased Premises as provided in Section 6 Alterations and Improvements herein.

4. Sublease and Assignment.

Tenant shall not have any right, without Landlord's consent, to assign this Lease to a corporation or other entity with which Tenant may merge or consolidate, to any subsidiary of Tenant, to any corporation under common control with Tenant, or to a purchaser of substantially all of Tenant's assets. Except as set forth above, Tenant shall not sublease all or any part of the Leased Premises, or assign this Lease in whole or in part without Landlord's consent.

5. Repairs.

During the Lease term, Tenant shall make, at Tenant's expense, all necessary repairs to the Leased Premises. Repairs shall include such items as routine repairs of floors, walls, ceilings, and other parts of the Leased Premises damaged or worn through normal occupancy, except for major mechanical systems or the roof, subject to the obligations of the parties otherwise set forth in this Lease.

6. Alterations and Improvements.

Tenant, at no time, shall have the right, without Landlord's written consent, to remodel, redecorate, and make additions, improvements and replacements of and to all or any part of the Leased Premises during all times as Tenant is a Tenant during the Lease Term. Tenant shall have the right to place personal property, trade fixtures, equipment and other temporary installations in and upon the Leased Premises, limited to: storage of three (3) automobiles, four (4) leaf loaders, and two (2) sweepers at the Leased premises. All personal property and equipment, as indicated above, shall remain Tenant's property free and clear of any claim by Landlord. Tenant shall move such personal property and equipment into the Leased Premises in a time period of not more than seven (7) days from the beginning of the Lease Term and remove such personal property and equipment in a time period of not more than seven (7) days before the end of the Lease Term. Tenant shall minimize site access and removal requests during the Lease Term. Tenant has the right to remove the same at any time during the term of this Lease provided that all damage to the Leased Premises caused by such removal shall be repaired by Tenant at Tenant's expense.

7. Property Taxes.

Landlord shall pay, prior to delinquency, all general real estate taxes and installments of special assessments coming due during the Lease term on the Leased Premises, and all personal property taxes with respect to Landlord's personal property, if any, on the Leased Premises. Tenant shall be responsible for paying all personal property taxes with respect to Tenant's personal property at the Leased Premises.

8. Insurance.

A. If the Leased Premises or any other part of the Building is damaged by fire or other casualty resulting from any act or negligence of Tenant or any of Tenant's agents, employees or invitees, rent shall not be diminished or abated while such damages are under repair, and Tenant shall be responsible for the costs of repair not covered by insurance.

B. Landlord shall maintain fire and extended coverage insurance on the Building and the Leased Premises in such amounts as Landlord shall deem appropriate. Tenant shall be responsible, at its expense, for fire and extended coverage insurance on all of its personal property and equipment located in the Leased Premises.

C. Tenant and Landlord shall, each at its own expense, maintain a policy or policies of comprehensive general liability insurance with respect to the respective activities of each in the Building with the premiums thereon fully paid on or before the Lease Term, such insurance to afford minimum protection of not less than \$1,000,000 combined single limit coverage of bodily injury, property damage or combination thereof. Tenant shall provide Landlord with current Certificates of Insurance evidencing Tenant's compliance with this Paragraph. Landlord shall not be required to maintain insurance against thefts, with regard to Tenant's personal property and equipment, within the Leased Premises or the Building.

9. Utilities.

Landlord shall pay all charges for water, sewer, gas, electricity, telephone and other services and utilities on the Leased Premises during the term of this Lease unless otherwise expressly agreed in writing by Landlord. Tenant shall not use any equipment or devices that utilizes excessive electrical energy or which may, in Landlord's reasonable opinion, overload the wiring or interfere with electrical services to other tenants.

10. Signs.

Tenant shall have no right to place on the Leased Premises, any signs.

11. Entry.

Landlord shall have the right to enter upon the Leased Premises at reasonable hours to inspect the same, provided Landlord shall not thereby unreasonably interfere with Tenant's storage of personal property and equipment on the Leased Premises.

12. Building Rules.

Tenant will comply with the rules of the Building and or requests by Landlord from time to time and will cause all of its agents, employees, invitees and visitors to do so; all changes to such rules will be sent by Landlord to Tenant in writing.

13. Damage and Destruction.

Subject to Section 8 A. above, if the Leased Premises or any part thereof or any appurtenance thereto is so damaged by fire, casualty or structural defects that the same cannot be used for Tenant's purposes, then Tenant shall have the right within ninety (90) days following damage to elect by notice to Landlord to terminate this Lease as of the date of such damage. In the event of minor damage to any part of the Leased Premises, and if such damage does not render the Leased Premises unusable for Tenant's purposes, Landlord shall promptly repair such damage at the cost of the Landlord. In making the repairs called for in this paragraph, Landlord shall not be liable for any delays resulting from strikes, governmental restrictions, inability to obtain necessary materials or labor or other matters which are beyond the reasonable control of Landlord. Tenant shall be relieved from paying rent and other charges during any portion of the Lease term that the Leased Premises are inoperable or unfit for occupancy, or use, in whole or in part, for Tenant's purposes. Rentals and other charges paid in advance for any such periods shall be credited on the next ensuing payments, if any, but if no further payments are to be made, any such advance payments shall be refunded to Tenant. The provisions of this paragraph extend not only to the matters aforesaid, but also to any occurrence which is beyond Tenant's reasonable control and which renders the Leased Premises, or any appurtenance thereto, inoperable or unfit for occupancy or use, in whole or in part, for Tenant's purposes.

14. Default.

If default shall at any time be made by Tenant in the payment of rent when due to Landlord as herein provided, and if said default shall continue for fifteen (15) days after written notice thereof shall have been given to Tenant by Landlord, or if default shall be made in any of the other covenants or conditions to be kept, observed and performed by Tenant, and such default shall continue for thirty (30) days after notice thereof in writing to Tenant by Landlord without correction thereof then having been commenced and thereafter diligently prosecuted, Landlord may declare the term of this Lease ended and terminated by giving Tenant written notice of such intention, and if possession of the Leased Premises is not surrendered, Landlord may reenter said premises. Landlord shall have, in addition to the remedy above provided, any other right or remedy available to Landlord on account of any Tenant default, either in law or equity. Landlord shall use reasonable efforts to mitigate its damages.

15. Quiet Possession.

Landlord covenants and warrants that upon performance by Tenant of its obligations hereunder, Landlord will keep and maintain Tenant in exclusive, quiet, peaceable and undisturbed and uninterrupted possession of the Leased Premises during the term of this Lease.

16. Condemnation and or an Emergency.

If any legally, constituted authority condemns the Building or such part thereof which shall make the Leased Premises unsuitable for leasing, or Landlord requires the immediate removal of the Lease Premises for an Emergency, this Lease shall cease when the public authority takes possession or the Landlord declares and Emergency, and Landlord and Tenant shall account for rental as of that date. Such termination shall be without prejudice to the rights of either party to recover compensation from the condemning authority for any loss or damage caused by the condemnation. Neither party shall have any rights in or to any award made to the other by the condemning authority.

17. Notice.

Any notice required or permitted under this Lease shall be deemed sufficiently given or served if sent by United States certified mail, return receipt requested, addressed as follows:
If to Landlord to:

Green Bay Metropolitan Sewerage District,
 Attention: Thomas Sigmund, Executive Director
 2231 N. Quincy Street
 Green Bay, WI 54302

If to Tenant to:
 City of De Pere
 Attention: Al Luberd, Street Superintendent
 335 S. Broadway
 De Pere, WI 54115

Landlord and Tenant shall each have the right from time to time to change the place notice is to be given under this paragraph by written notice thereof to the other party.

18. Waiver.

No waiver of any default of Landlord or Tenant hereunder shall be implied from any omission to take any action on account of such default if such default persists or is repeated, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated. One or more waivers by Landlord or Tenant shall not be construed as a waiver of a subsequent breach of the same covenant, term or condition.

19. Memorandum of Lease.

The parties hereto contemplate that this Lease should not and shall not be filed for record, but in lieu thereof, at the request of either party, Landlord and Tenant shall execute a Memorandum of Lease to be recorded for the purpose of giving record notice of the appropriate provisions of this Lease.

20. Headings.

The headings used in this Lease are for convenience of the parties only and shall not be considered in interpreting the meaning of any provision of this Lease.

21. Successors.

The provisions of this Lease shall extend to and be binding upon Landlord and Tenant and their respective legal representatives, successors and assigns.

22. Consent.

Landlord shall not unreasonably withhold or delay its consent with respect to any matter for which Landlord's consent is required or desirable under this Lease.

23. Performance.

If there is a default with respect to any of Landlord's covenants, warranties or representations under this Lease, and if the default continues more than fifteen (15) days after notice in writing from Tenant to Landlord specifying the default, Tenant may, at its option and without affecting any other remedy hereunder, cure such default and deduct the cost thereof from the next accruing installment or installments of rent payable hereunder until Tenant shall have been fully reimbursed for such expenditures, together with interest thereon at a rate equal to the lessor of twelve percent (12%) per annum or the then highest lawful rate. If this Lease terminates prior to Tenant's receiving full reimbursement, Landlord shall pay the unreimbursed balance plus accrued interest to Tenant on demand.

24. Compliance with Law.

Tenant shall comply with all laws, orders, ordinances and other public requirements now or hereafter pertaining to Tenant's use of the Leased Premises. Landlord shall comply with all laws, orders, ordinances and other public requirements now or hereafter affecting the Leased Premises.

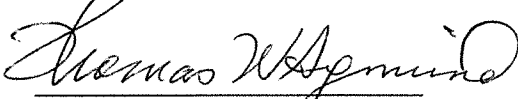
25. Final Agreement.

This Agreement terminates and supersedes all prior understandings or agreements on the subject matter hereof. This Agreement may be modified only by a further writing that is duly executed by both parties.

26. Governing Law.

This Agreement shall be governed, construed and interpreted by, through and under the Laws of the State of Wisconsin.

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

GREEN BAY METROPOLITAN SEWERAGE DISTRICT


By: Thomas W. Sigmund, P.E.
Its: Executive Director

CITY OF DE PERE

(Authorized Signatory)

By: _____

(Print Name)

Its: _____

(Individual's Title)

City of De Pere, Wisconsin

**Request For Board of Public Works Action**

MEETING DATE: January 9, 2017

DEPARTMENT: Public Works

FROM: Eric Rakers

SUBJECT: Consider Stormwater Management Plan Review.

The purpose for this discussion is to update the Board on the storm water management plan completed for the City and identify some of the long term challenges faced.

Background

In 2015, the City contracted with RA Smith National, Inc. to complete a storm water management plan. This plan was completed in 2016.

The purpose of the plan was to complete several tasks as related to the City's MS4 permit with the Wisconsin Department of Natural Resources (WDNR). These tasks included:

- Update the City's storm water quality model for existing conditions.
- Create a long-term plan for meeting the reduction of Total Phosphorous (TP) and Total Suspended Solids (TSS) to meet Total Maximum Daily Limits (TMDL) requirements for the receiving body of water.
- Prepare a storm water pollution prevention plan for the City's Municipal Service Facility.
- Field screening at all City-owned major storm sewer outfalls.

The challenge the City faces is the long term plan to address TP and TSS to meet WDNR mandated TMDL limits. Attached in your packet is the majority of the report as it pertains to modeling and long term planning.

From the MS4 permit, the City is divided into three different drainage basins based on where discharges occur. The basins are the Ashwaubenon Creek, East River, and Fox River. The WDNR has established different criteria for TP and TSS reductions based on the receiving body of water. As discussed in the report, the City is meeting requirements in the Ashwaubenon Creek and East River areas, but well below required TP and TSS reduction levels for discharges to the Lower Fox River (See Table 2).

Several alternatives were reviewed to meet long term TP and TSS reductions to areas discharging to the Lower Fox River. These included:

- Pollutant/nutrient trading between the three drainage basins (i.e., the City is providing more pounds of TSS removal in the Ashwaubenon Creek and East River Basins than

required which could be “traded” to the Fox River Basin to where there is not enough pounds of TSS removal).

- Construction of additional storm water management facilities.
- Inclusion of storm water management upgrades in roadway design and construction.
- More restrictive controls on redevelopment which could be achieved through an ordinance update.

Table 3 of the report identifies additional storm water management facilities in the Lower Fox River Basin, along with anticipated TP and TSS reductions from these facilities. As noted in Table 4, even with these facilities, the City will still not attain the required TSS reductions. Therefore, other actions will be required by the City.

Future Action

Staff is continuing to identify other storm water management facilities that could be constructed in the Lower Fox River Basin to attain additional TSS reductions. In the short term, staff will need to determine practices to be used to meet the TMDL restrictions. The practices with details on how they will be incorporated will need to be included in the plan. This will need to be presented to the WDNR. Options to be considered include:

- Additional public storm water management facilities that could be constructed in the Lower Fox River Basin.
- Potential storm water management systems that can be included in street reconstructions.
- Regulatory changes that may make pollutant/nutrient trading between drainage basins (Ashwaubenon Creek and East River Basin to the Fox River Basin) more viable.
- Construction of private storm water management facilities that are constructed as part of redevelopment projects (This may require an ordinance update.).
- Pollutant/nutrient trading with agricultural or other entities outside of the City.

Staff will be bringing recommendations back to the Board in the future identifying which of the practices or combination of items identified above that should be incorporated to meet WDNR mandated reductions.

The storm water management plan will be monitored and updated on a regular basis. Staff will begin to incorporate the construction of facilities identified in the report and potential new facilities such as a pond at Kiwanis Park to treat existing residential development in the capital improvements program.

Recommendation

The main intent of this is to bring the Board up to date on the City’s storm water management plan and identify future action items required to meet WDNR mandated TP and TSS reductions. Staff is requesting input from the Board on whether this should be forwarded to Council.

ATTACHMENTS:

- 2015 Stormwater Management Planning (PDF)

- Storm Water Management Report Presentation (PDF)

R.A. Smith National

*Beyond Surveying
and Engineering*



2015 Stormwater Management Planning City of De Pere, WI

October 21, 2016

Deliver excellence, vision, and responsive service to our clients.

100 West Lawrence Street, Suite 412 • Appleton, WI 54911-5754 • (920) 731-3499 • Fax (920) 731-8398
Corporate Office: Brookfield, WI • rasmithnational.com



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Introduction

The City of De Pere received a new MS4 permit in 2014. The permit included requirements for the City to meet Total Maximum Daily Load (TMDL) allocations in the Lower Fox River basin. These requirements include reductions in Total Suspended Solids (TSS) and Total Phosphorous (TP). In addition, the permit required a stormwater pollution prevention plan (SWPPP) be prepared for the De Pere Municipal Services Facility.

The City most recently evaluated stormwater pollutant loadings and developed a stormwater management plan in 2008, which examined only TSS. Therefore, additional analysis and planning were needed to identify the current pollutant loadings and develop a long-term plan for the City to achieve the TMDL allocations.

As a requirement of the MS4 permit, the City has an ongoing program to detect and eliminate illicit discharges at storm outfalls to the three watersheds; Fox River, Ashwaubenon Creek, and East River. Field screening for illicit discharges needed to be performed at the City's major storm outfalls in 2015-2016.

This report documents the efforts by City of De Pere and R.A. Smith National staff in 2015 and 2016 to accomplish the following:

- Update the City's stormwater quality model for existing conditions
- Create a long-term plan for meeting TMDL requirements
- Prepare a stormwater pollution prevention plan for the City's Municipal Services Facility
- Field screening at all City-owned major storm outfalls

Maps provided in the appendices may not be fully legible at the report scale. These maps have also been separately provided to City at full scale.

Model Update

The WinSLAMM model from the 2008 De Pere analysis was used as the starting point for this study. The model was converted to the latest WinSLAMM version 10.1.6. The model updates included the following:

- Created separate models for each subbasin within the three watersheds of the City
- Revised subbasin boundaries based on latest topographic data and sewer system mapping
- Revised model area to exclude non-connecting highway areas and areas not draining through the City MS4 system
- Utilized latest zoning data with standard WinSLAMM land use files
- Developed explicit input data for each management practice

Additional data on each facility was required to represent the existing management facilities in the model. The available data was reviewed and additional necessary data were identified by R.A. Smith National staff. City of De Pere staff gathered and provided the additional data needed to model each stormwater facility.

Appendix A contains an updated MS4 storm sewer system map, and a map showing WinSLAMM modeling areas, as well as watershed boundaries and areas tributary to existing stormwater management practices.

The existing stormwater management practices in De Pere consist of biweekly street sweeping, two bioretention facilities, and 64 wet detention facilities. The stormwater management facility characteristics are summarized in Table 1.

TABLE 1 - EXISTING STORMWATER MANAGEMENT FACILITIES

Subbasin	Total Tributary Area (ac)	Annual Influent TSS (pounds)	Annual Effluent TSS (pounds)	TSS Percent Reduction	Outlet Type *	Owner
Ashwaubenon Creek						
AC050A	83.9	20,918	3,624	82.7%	Spillway	Private
AC050B	6.0	1,388	361	74.0%	12" Pipe	Private
AC055A	11.8	4,988	1,979	60.3%	12" Pipe	Private
AC055C	6.9	2,745	1,322	51.8%	24" Pipe	Private
AC060A	66.1	17,883	6,898	61.4%	2 @ 12" Pipe	De Pere
AC070A	38.6	14,886	1,844	87.6%	Riser Pipe	Private
AC070B	66.8	13,828	5,099	63.1%	Riser Pipe	Private
AC080A	4.0	1,692	701	58.6%	Riser Pipe	Private
AC090A	18.5	6,284	449	92.9%	Riser Pipe	De Pere
AC090B	7.5	3,526	722	79.5%	36" Pipe	Private
AC090C	6.3	2,949	684	76.8%	10" Pipe	Private
AC090D	3.2	1,511	497	67.1%	10" Pipe	Private
AC090F	11.6	4,345	894	79.4%	24" x 38" Pipe	Private
AC090H	12.5	5,397	1,721	68.1%	26" Pipe	De Pere
AC090I	13.4	6,313	2,089	66.9%	36" Pipe	Private
AC090J	19.1	9,001	4,602	48.9%	18" Pipe	Private
AC090K	2.7	912	140	84.6%	Riser Pipe	Private
AC090L	228.4	63,863	29,557	53.7%	Riser Pipe	De Pere
AC100B	590.6	52,435	35,836	31.7%	36" Pipe	De Pere
AC100C	3.2	727	129	82.3%	12" Pipe	Private
AC100D	484.1	51,394	28,960	43.7%	48" Pipe	De Pere
AC100E	302.2	39,062	14,440	63.0%	Spillway	De Pere
AC100F	374.7	33,572	21,548	35.8%	Spillway	De Pere
AC100G	4.7	2,056	522	74.6%	15" Pipe	Private
AC100H	204.6	32,191	7,151	77.8%	Spillway	De Pere
AC105A	7.1	2,269	541	76.2%	Spillway	Private
AC105B	1.6	403	96	76.1%	Riser Pipe	Private
AC110A	6.5	1,092	254	76.7%	8" Pipe	De Pere
AC130A	18.2	2,977	1,422	52.2%	12" Pipe	Private
AC140A	12.5	2,007	409	79.6%	12" Pipe	De Pere
AC150A	41.8	5,505	1,278	76.8%	10" Pipe	De Pere
AC160A	47.1	15,361	2,012	86.9%	24" Pipe	Private
AC170A	7.1	348	61	82.4%	Biofilter	De Pere

Subbasin	Total Tributary Area (ac)	Annual Influent TSS (pounds)	Annual Effluent TSS (pounds)	TSS Percent Reduction	Outlet Type *	Owner
AC170B	6.5	320	60	81.2%	Biofilter	De Pere
AC180A	17.4	616	26	95.7%	Riser Pipe	De Pere
East River						
ER010A	3.8	861	118	86.3%	24" Pipe	Private
ER010B	160.3	29,442	3,507	88.1%	Riser Pipe	Private
ER010C	239.9	16,495	4,830	70.7%	36" Pipe	Private
ER020A	288.8	49,651	18,740	62.3%	Spillway	De Pere
ER040A	101.9	21,790	5,579	74.4%	Riser Pipe	De Pere
ER050A	213.9	35,167	8,532	75.7%	Spillway	De Pere
ER060A	22.5	3,500	1,054	69.9%	21" Pipe	De Pere
ER080A	13.6	6,263	1,505	76.0%	12" Pipe	Private
ER080B	7.3	3,138	774	75.3%	Riser Pipe	Private
ER080C	103.6	38,092	6,152	83.8%	Spillway	Ledgeview
ER110A	68.2	31,354	11,815	62.3%	30" Pipe	De Pere
ER120A	87.0	16,012	4,678	70.8%	18" Pipe	De Pere
ER130B	57.9	7,665	1,145	85.1%	Riser Pipe	Private
Fox River East						
FE240B	10.1	2,234	86	96.2%	Riser Pipe	Private
FE260A	19.1	6,679	955	85.7%	Riser Pipe	De Pere
FE260B	81.0	31,477	7,451	76.3%	3' Weir	De Pere
FE275A	23.2	5,882	1,256	78.6%	15" Pipe	Private
FE280B	31.7	12,737	3,106	75.6%	14" Pipe	De Pere
FE290A	20.8	6,479	297	95.4%	Riser Pipe	De Pere
Fox River West						
FW010A	25.1	3,163	993	68.6%	24" Pipe	De Pere
FW200A	22.0	6,608	2,121	67.9%	12" Pipe	Private
FW200C	5.3	2,291	577	74.8%	12" Pipe	Private
FW200D	252.3	86,379	35,185	59.3%	12" Pipe	De Pere
FW200E	15.5	4,976	2,805	43.6%	Spillway	Private
FW200F	7.0	3,272	961	70.6%	18" Pipe	Private
FW200G	3.7	1,897	289	84.8%	12" Pipe	Private
FW280A	57.4	27,855	5,046	81.9%	12" Pipe	Private
FW280C	96.5	45,369	18,951	58.2%	42" Pipe	Private
FW290B	180.2	28,944	18,297	36.8%	Spillway	De Pere
FW290C	305.8	43,302	32,076	25.9%	Riser Pipe	De Pere
FW290A	109.2	39,322	6,682	83.0%	21" Pipe	De Pere

Existing Conditions Modeling Results

With the updated model, pollutant loadings were calculated for existing conditions and summarized by watershed for comparison to the TMDL allocations, which are unique to each river reach and watershed. The existing condition modeling results for the City are presented in Table 2.

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Basin	Ashwaubenon Creek	East River	Lower Fox River Mainstem	Total
Area (acres)	1,592	1,253	3,009	5,854
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Percent TP Reduction	61.6%	72.8%	30.2%	47.7%
TMDL Required Percent Phosphorus Reduction	40.5%	40.5%	40.5%	NA
Additional TP Removal Required (pounds/year)	(209)	(235)	189	NA
Total Suspended Solids No Controls (pounds/year)	514,581	321,619	866,773	1,702,973
TSS With Controls (pounds/year)	181,261	85,223	541,590	808,074
Percent TSS Reduction	64.8%	73.5%	37.5%	52.5%
TMDL Required Percent TSS Reduction	52.0%	52.0%	72.2%	NA
Additional TSS Removal Required (pounds/year)	(65,738)	(69,154)	300,280	NA

The modeling results indicate that additional stormwater management facilities are not needed in the East River or Ashwaubenon Creek watersheds. However, significant additional stormwater treatment is needed in the Lower Fox River watershed to comply with the TMDL allocation requirements.

Appendix B contains two maps showing the results of the TSS modeling for each subbasin in WinSLAMM. One map shows the level of TSS generated, in pounds per acre, and the second map shows the level of TSS discharged, in pounds per acre. The results on the second map reflect the effectiveness of the existing stormwater management facilities.

Stormwater Management Plan to Meet TMDL Requirements

Based on the results of the existing conditions evaluation, alternative means for meeting the TMDL requirements were discussed with the City staff. We discussed the potential for pollutant trading between the Ashwaubenon Creek and East River watersheds, where current pollutant reductions exceed the requirements, and the Lower Fox River, where additional reductions are needed. The primary obstacle to such trading is that Ashwaubenon Creek and East River discharge into the Fox River downstream of the reach of the Fox River where the additional pollutant reductions are needed. The Fox River reach within the City of De Pere does not benefit from the “cleaner” discharge from Ashwaubenon Creek and East River. The pollutant trading system

established by WDNR would allow a very small credit toward the Lower Fox River requirements and therefore the effort expended to go through the trading process would outweigh the benefits to be gained at this time.

We also discussed potential locations for additional stormwater management facilities and identified twelve sites where additional TSS and TP reductions could possibly be achieved. Of these sites, four were considered infeasible due to contaminated ground conditions or conflicting land use plans. The other eight sites are summarized in Table 3 and individually illustrated on maps in Appendix C.

Estimates of the cost to construct each facility were based on conceptual design and unit costs representative of the current construction climate in De Pere. These estimates are opinions of probable construction cost and are subject to change as the design is refined. Costs do not include land acquisition or easements.

TABLE 3 - POTENTIAL STORMWATER MANAGEMENT FACILITIES

Subbasin	Description	Tributary Area (acres)	Size (surface area)	Anticipated TSS Reduction (%)	Anticipated TSS Removal (pounds/year)	Estimated Construction Cost
FE030	Wet Pond Glenwood Ravine	106.4	1.25 acre	88.2%	20,650	\$650,000
FE110A1	Wet Pond Legion Park West	29.8	0.25 acre	66.4%	3,793	\$250,000
FE110A2	Underground Storage Legion Park	32.3	0.25 acre	65.4%	8,009	\$750,000
FE110B	Underground Storage George St. Parking	137.2	0.35 acre	47.2%	11,084	\$1,050,000
FE170A2	Underground Storage Boat Landing	9.9	0.05 acre	51.5%	973	\$150,000
FE190C	Wet Pond Optimist Park	48.8	1.0 acre	87.5%	7,559	\$550,000
FE190B	Wet Pond Honey Court	9.3	0.25 acres	78.9%	2,294	\$250,000
FW200B2	Wet Pond Westwood Elementary	106.3	1.0 acre	87.6%	18,305	\$550,000
FW200H	Wet Pond Patriot Park	27.1	0.7 acres	90.6%	3,909	\$385,000
FW010A	Outlet Modifications Pond I9-FR59U6	25.1	Add 4" orifice to 24" pipe	87.6%	465	\$10,000
FW300	Wet Pond Industrial Park	120.7	--	82.4%	23,326	--
TOTAL						\$4,595,000

As shown in Table 2, the TSS removal in the Lower Fox River basin needed for the City of De Pere to meet the TMDL allocations is 300,280 pounds per year. The potential facilities identified in Table 3 would provide approximately 95,416 pounds per year of TSS reduction and 241 pounds per year of TP reductions in the discharge to the Lower Fox River. As shown in Table 4, this leaves a balance of 204,864 pounds per year of TSS reduction required to achieve the TMDL allocations. No further reductions in TP would be needed.

TABLE 4 - LOWER FOX RIVER POLLUTANT LOAD COMPARISON

	Existing Conditions	With Potential Facilities (Table 3)	Difference
Total Phosphorus No Controls (pounds/year)	1,838.2	1,870.9	33
TP With Controls (pounds/year)	1,283.2	1,061.8	(221)
Percent TP Reduction	30.2%	43.2%	--
TMDL Required Percent Phosphorus Reduction	40.5%	40.5%	--
Additional TP Removal Required (pounds/year)	189.4	(51.4)	(241)
Total Suspended Solids No Controls (pounds/year)	866,773	877,774	11,000
TSS With Controls (pounds/year)	541,590	449,236	(92,354)
Percent TSS Reduction	37.5%	48.8%	--
TMDL Required Percent TSS Reduction	72.2%	72.2%	--
Additional TSS Removal Required (pounds/year)	300,280	204,864	(95,416)

We recommend that as streets and highways within the City are improved, additional stormwater management be included in the roadway design and construction. At a minimum, catch basins with sumps should be included in roadway improvements. During any redevelopment planning, the City should seek opportunities to utilize further stormwater management practices, such as wet detention basins and biofilters, where possible.

Municipal Services Facility Stormwater Pollution Prevention Plan

A draft Stormwater Pollution Prevention Plan (SWPPP) for the City's Municipal Services Facility was prepared by R.A. Smith National and provided to the City in April 2015. The draft SWPPP identified stormwater management practices consisting of new catch basins with sumps to capture runoff particulates in the material handling area of the center. The City constructed these facilities prior to repaving the center in the summer of 2015. A final SWPPP was prepared and provide to the City in 2016 for ongoing management of the Municipal Services Facility. A copy of the SWPPP is included as Appendix D.

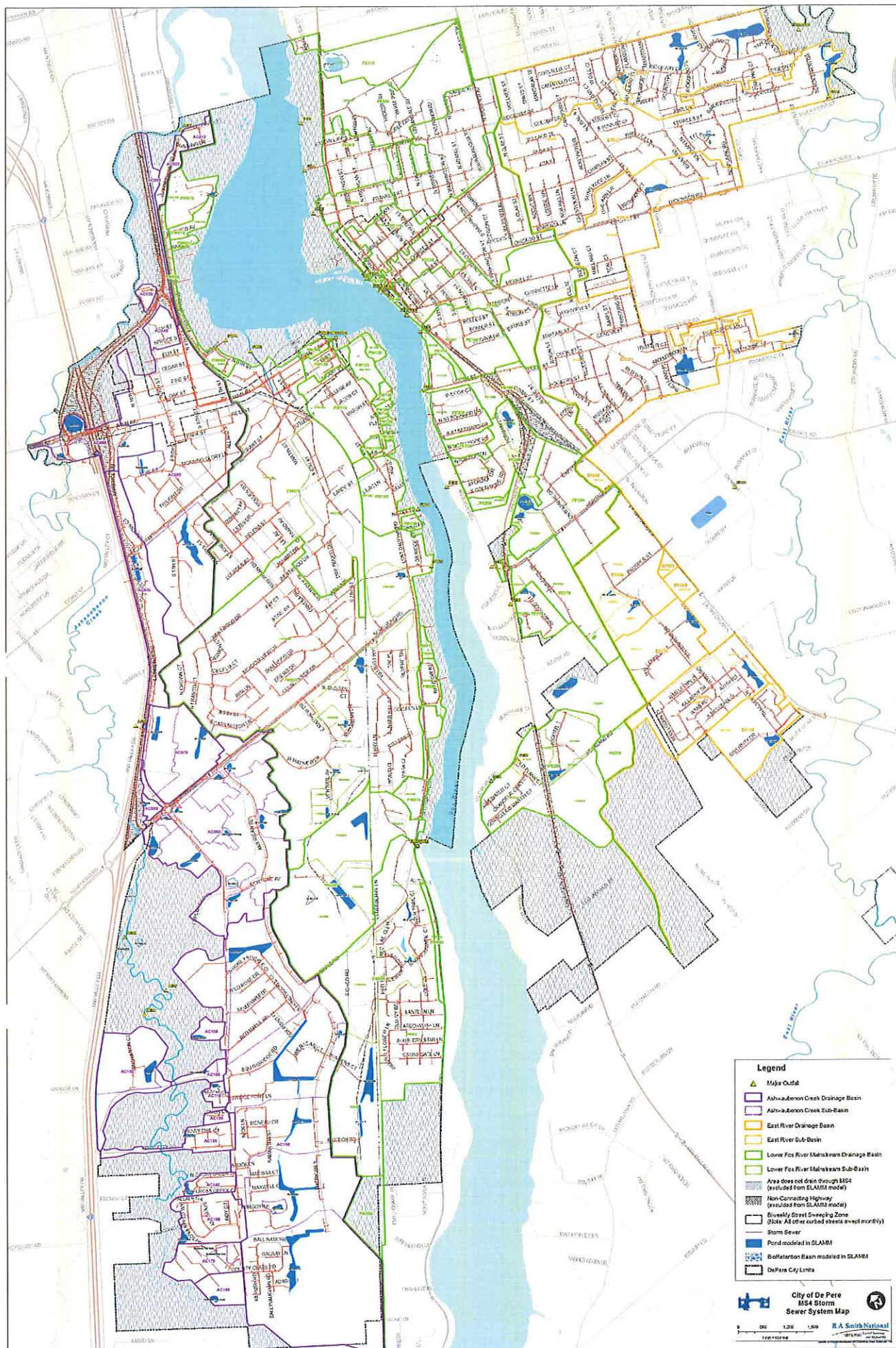
Illicit Discharge Detection Elimination

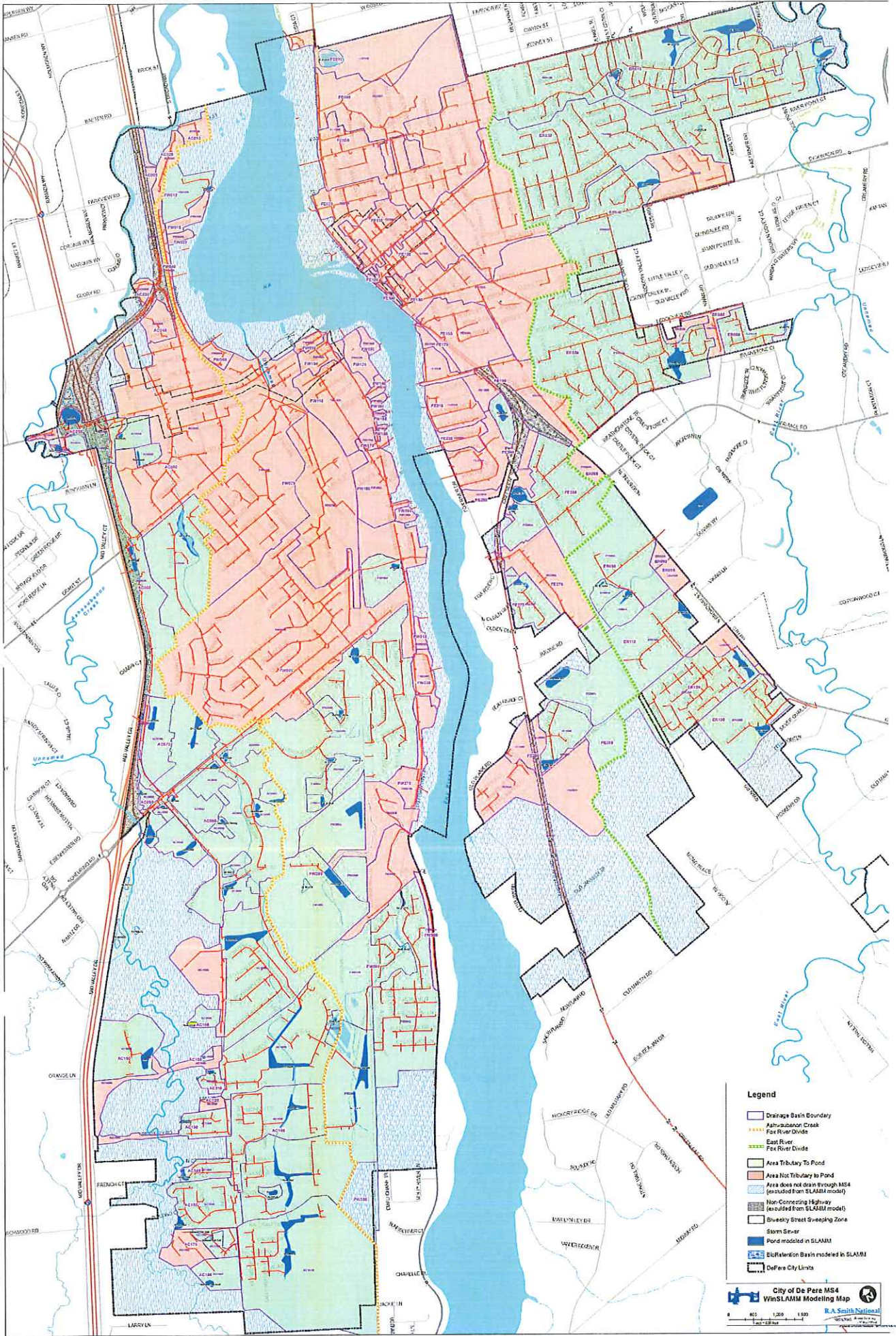
Working with City of De Pere public works staff, R.A. Smith National staff conducted dry weather field screening at all 33 major storm outfalls in the City on August 23, 2016. No illegal or illicit discharges were detected at any of the outfalls. The details of the inspection and results are provided in the report included as Appendix E.

Appendix A

MS4 Storm Sewer System Map

WinSLAMM Modeling Map





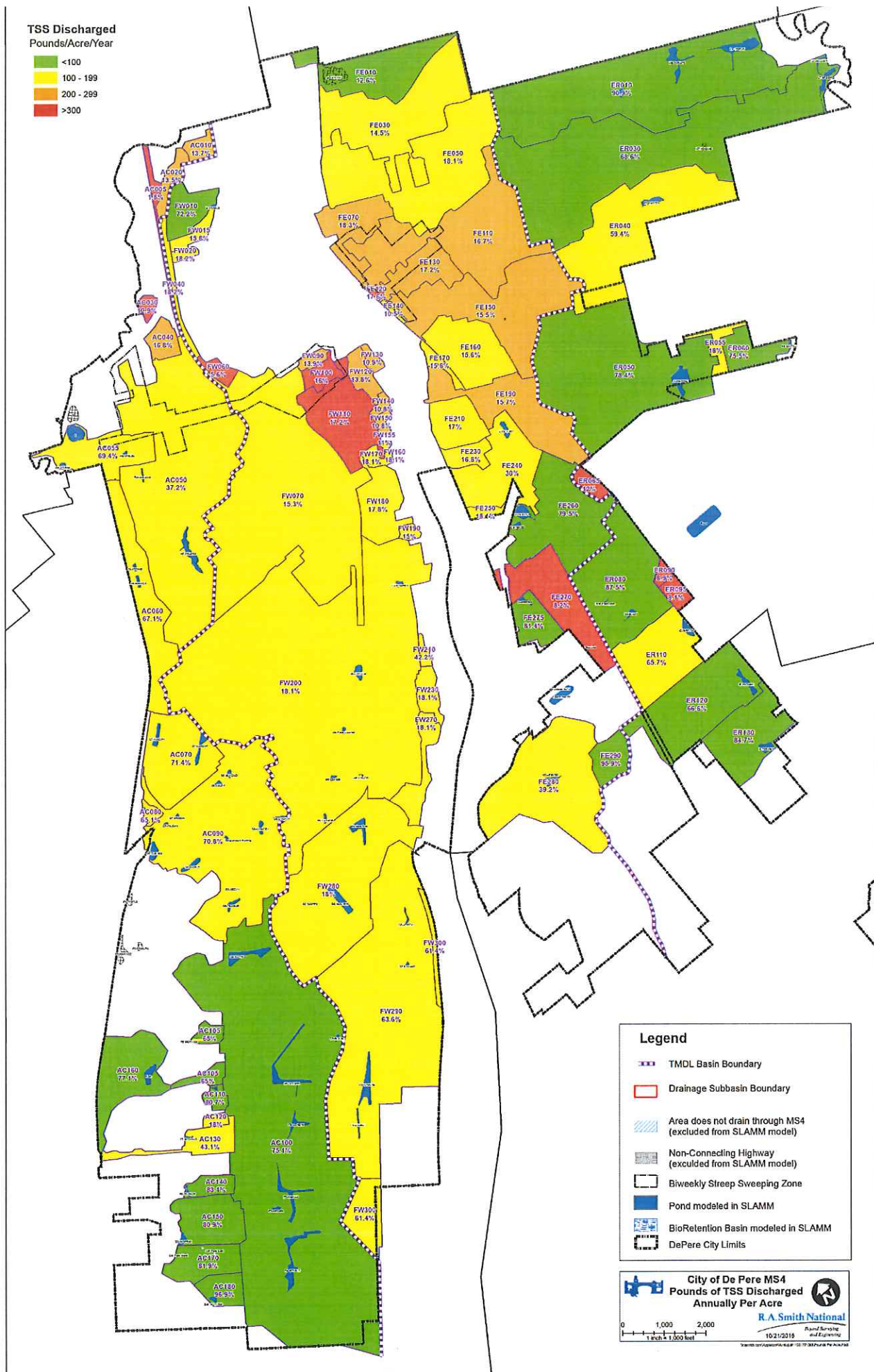
Appendix B

TSS Generated Map

TSS Discharged Map

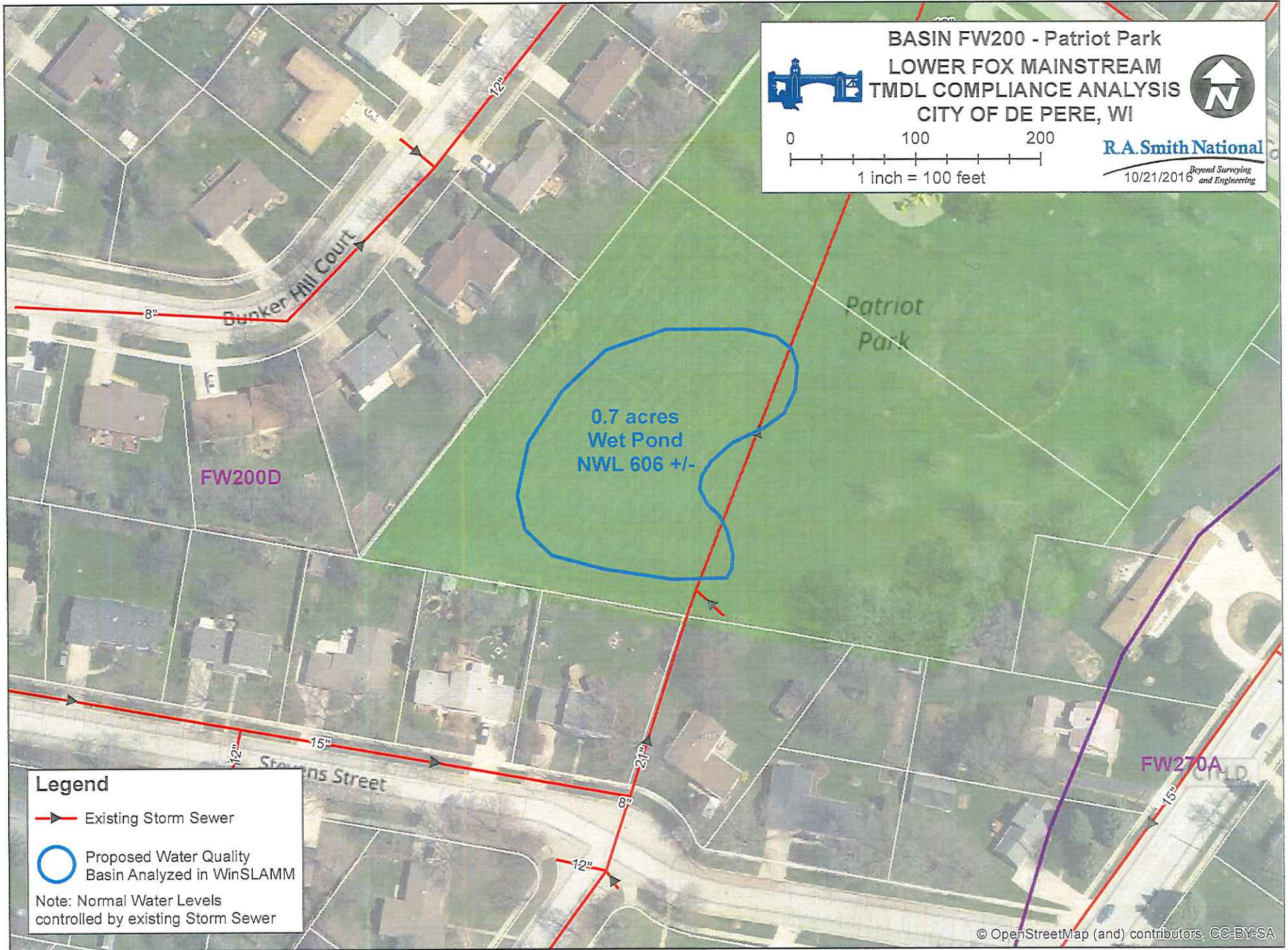


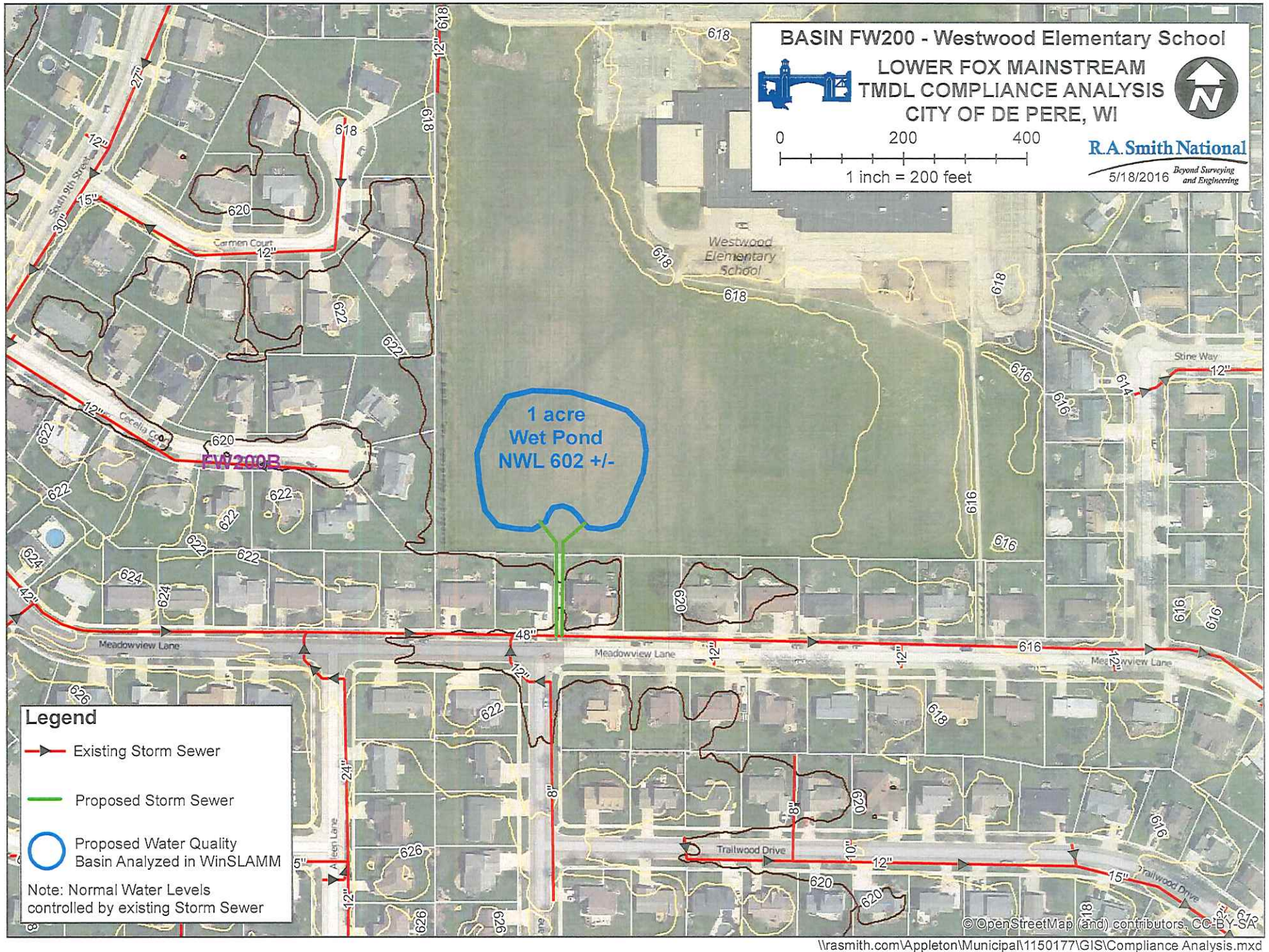
TSS Discharged
Pounds/Acre/Year

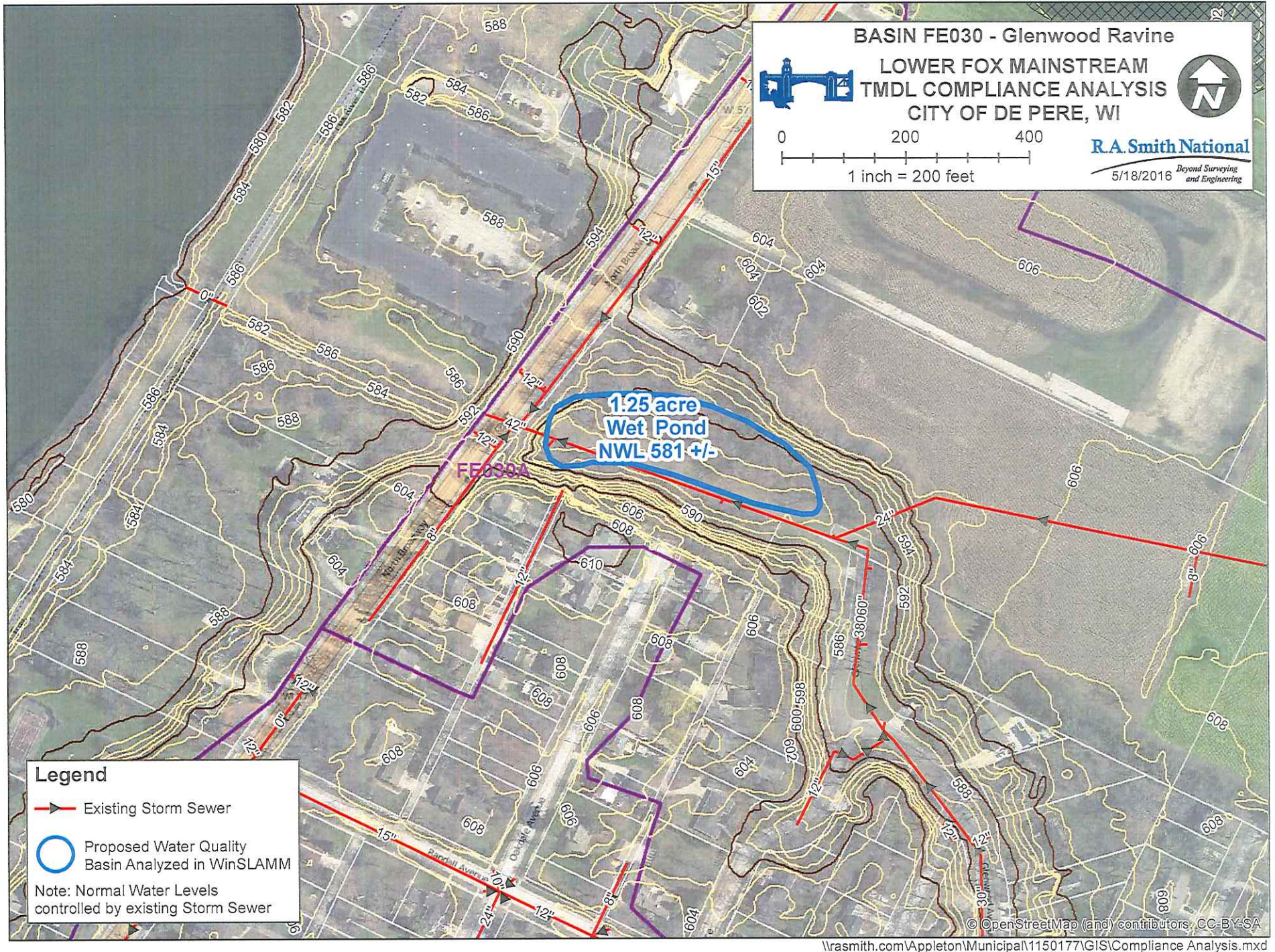


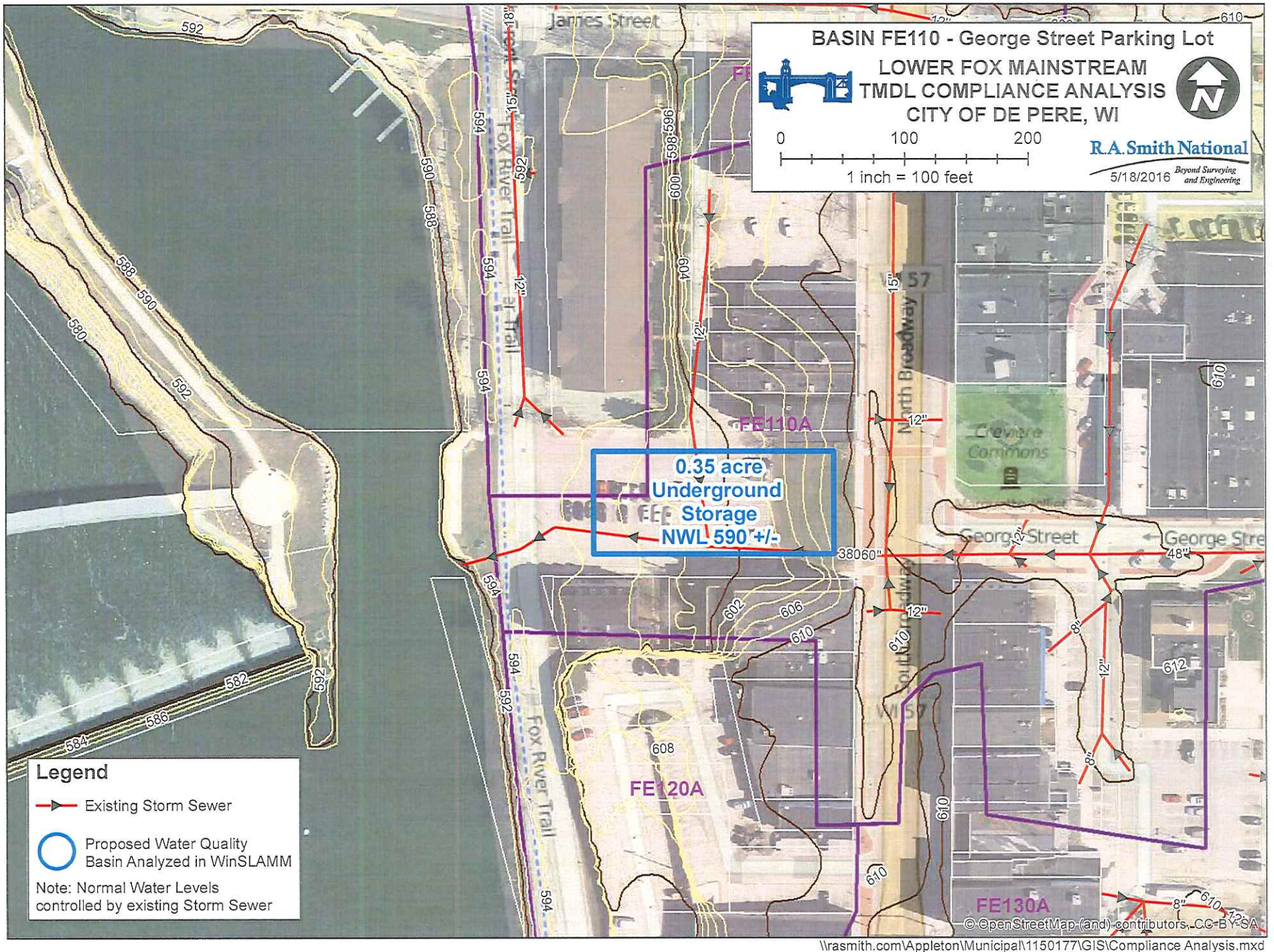
Appendix C

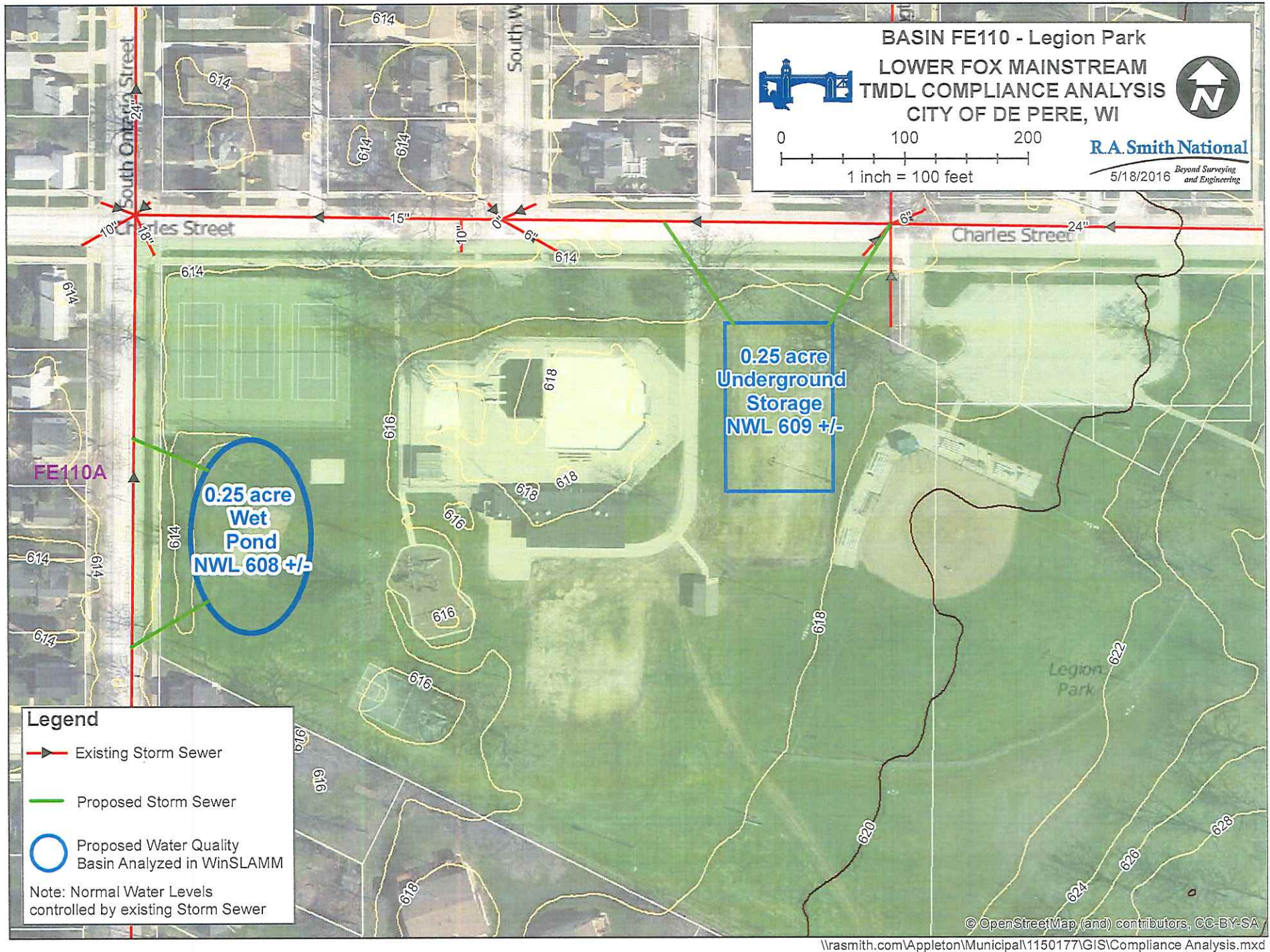
Potential Stormwater Facility Layouts

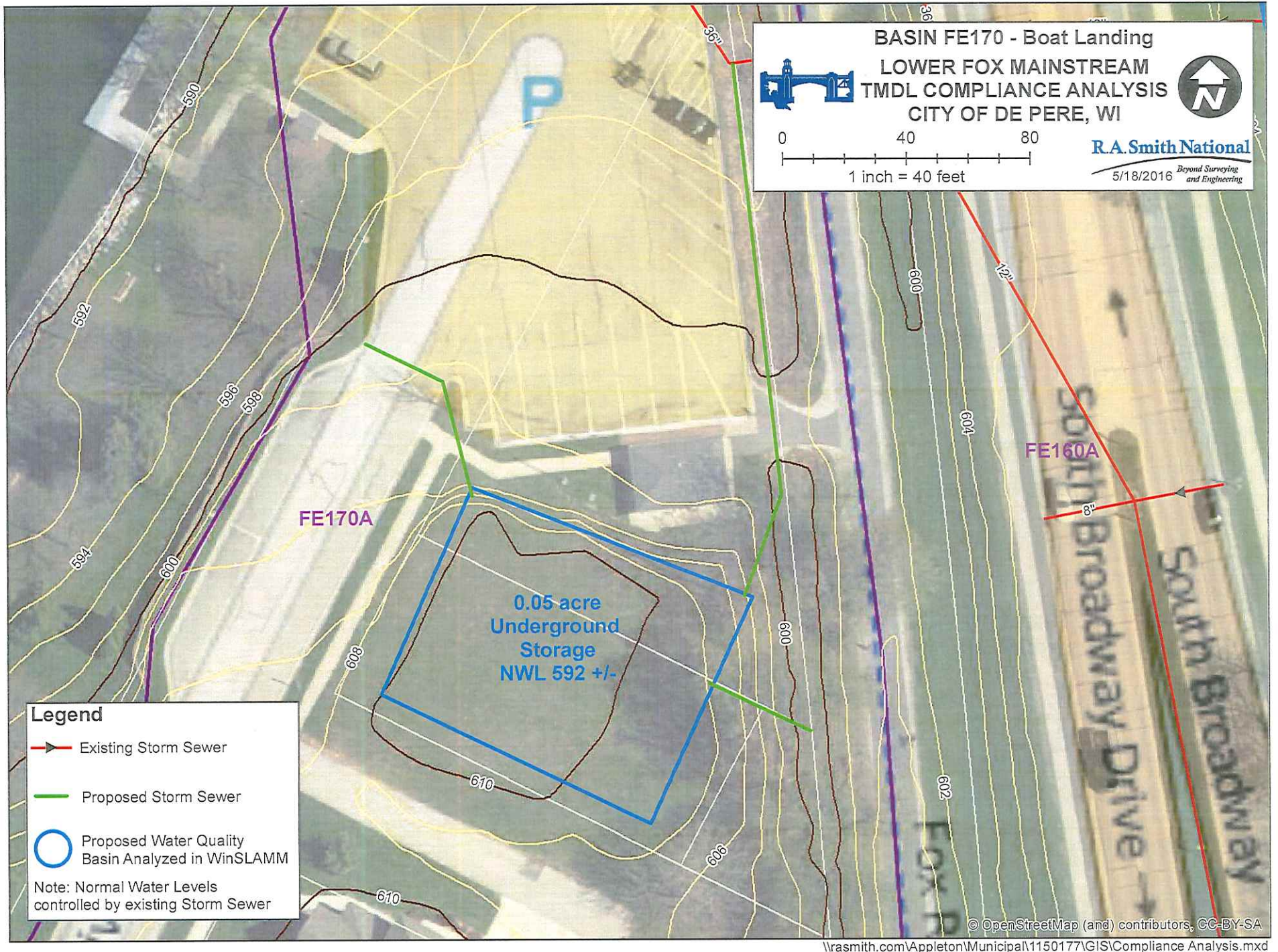


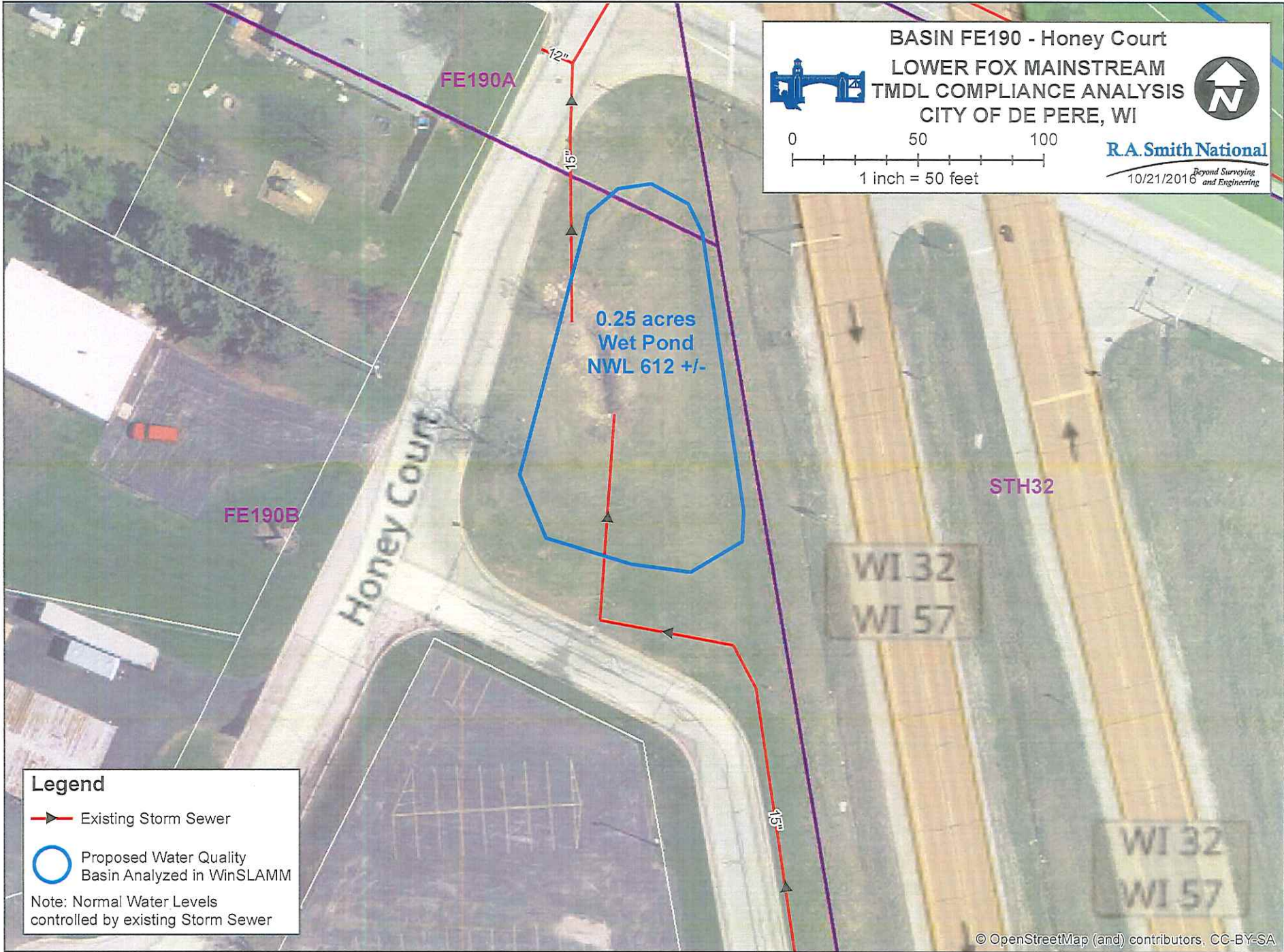


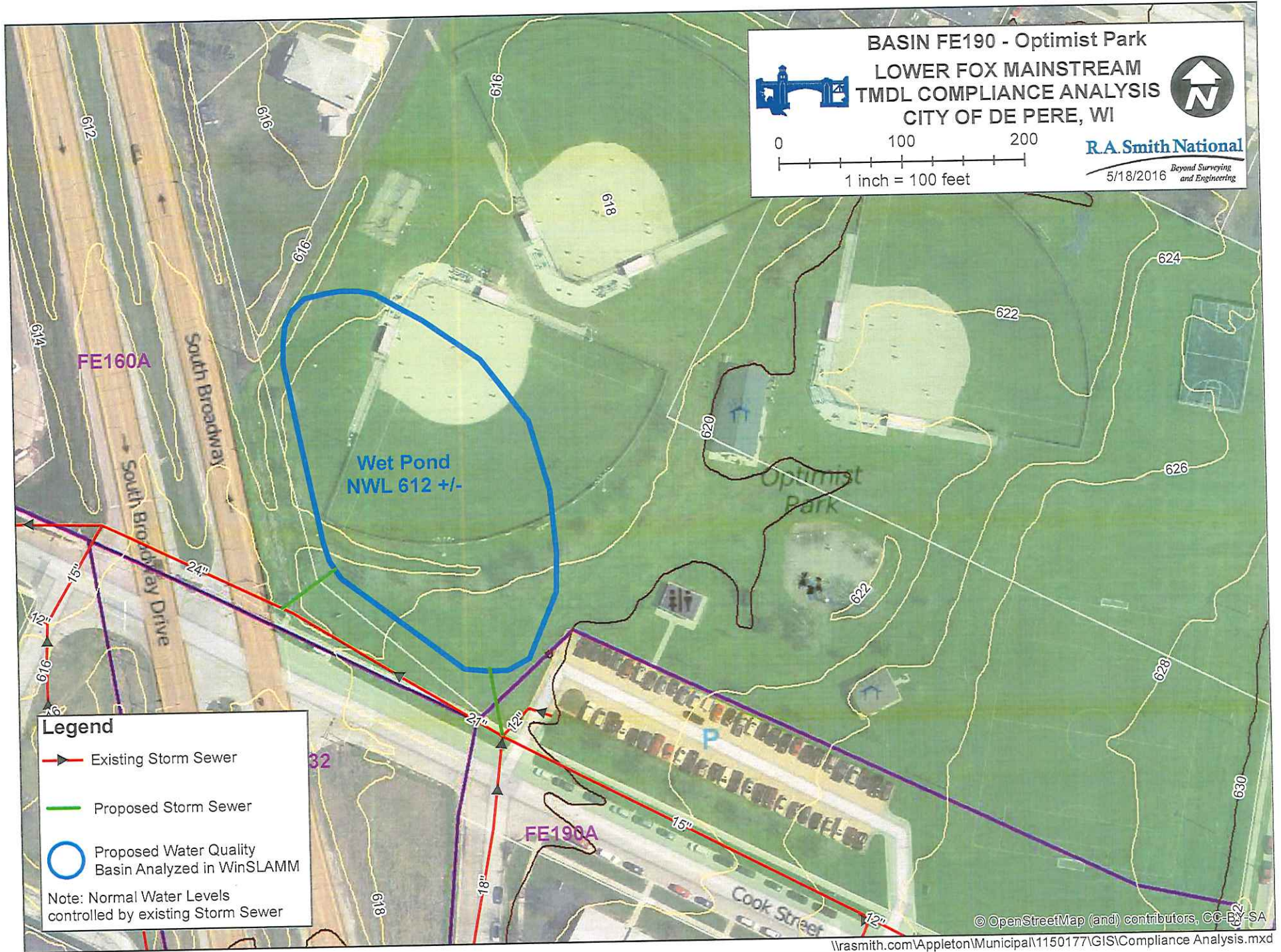




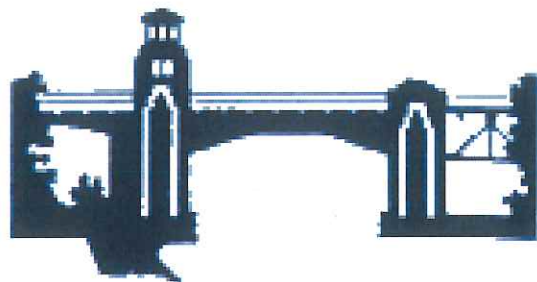








City of De Pere



STORM WATER MANAGEMENT REPORT PRESENTATION

January 9, 2017



2015 Stormwater Management Planning City of De Pere, WI

October 21, 2016

Deliver excellence, vision, and responsive service to our clients.

100 West Lawrence Street, Suite 412 • Appleton, WI 54911-5754 • (920) 731-3499 • Fax (920) 731-8398
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Introduction

The City of De Pere received a new MS4 permit in 2014. The permit included requirements for the City to meet Total Maximum Daily Load (TMDL) allocations in the Lower Fox River basin. These requirements include reductions in Total Suspended Solids (TSS) and Total Phosphorous (TP). In addition, the permit required a stormwater pollution prevention plan (SWPPP) be prepared for the De Pere Municipal Services Facility.

The City most recently evaluated stormwater pollutant loadings and developed a stormwater management plan in 2008, which examined only TSS. Therefore, additional analysis and planning were needed to identify the current pollutant loadings and develop a long-term plan for the City to achieve the TMDL allocations.

As a requirement of the MS4 permit, the City has an ongoing program to detect and eliminate illicit discharges at storm outfalls to the three watersheds; Fox River, Ashwaubenon Creek, and East River. Field screening for illicit discharges needed to be performed at the City's major storm outfalls in 2015-2016.

This report documents the efforts by City of De Pere and R.A. Smith National staff in 2015 and 2016 to accomplish the following:

- Update the City's stormwater quality model for existing conditions
- Create a long-term plan for meeting TMDL requirements
- Prepare a stormwater pollution prevention plan for the City's Municipal Services Facility
- Field screening at all City-owned major storm outfalls

Maps provided in the appendices may not be fully legible at the report scale. These maps have also been separately provided to City at full scale.

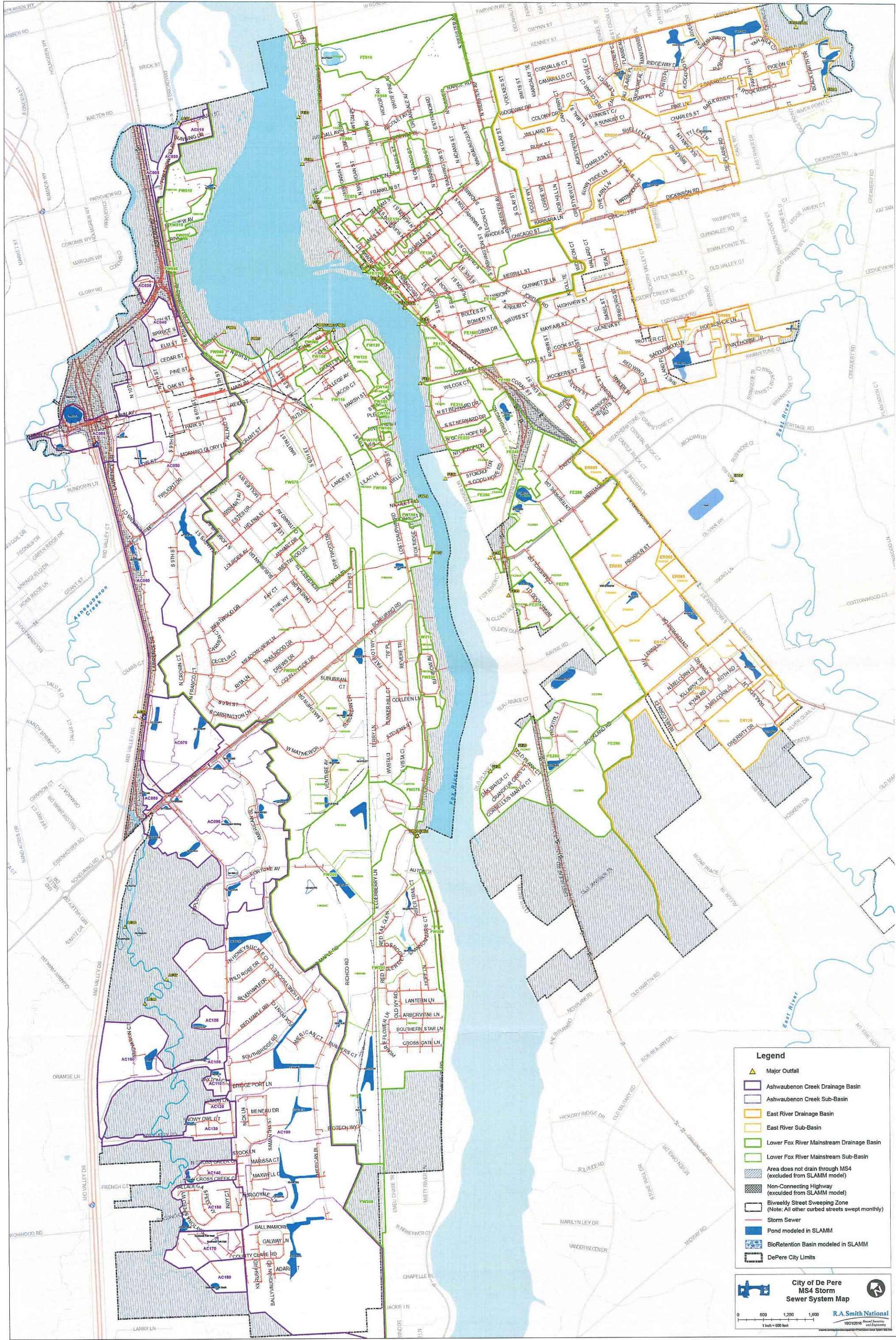
Model Update

The WinSLAMM model from the 2008 De Pere analysis was used as the starting point for this study. The model was converted to the latest WinSLAMM version 10.1.6. The model updates included the following:

- Created separate models for each subbasin within the three watersheds of the City
- Revised subbasin boundaries based on latest topographic data and sewer system mapping
- Revised model area to exclude non-connecting highway areas and areas not draining through the City MS4 system
- Utilized latest zoning data with standard WinSLAMM land use files
- Developed explicit input data for each management practice

Additional data on each facility was required to represent the existing management facilities in the model. The available data was reviewed and additional necessary data were identified by R.A. Smith National staff. City of De Pere staff gathered and provided the additional data needed to model each stormwater facility.

Appendix A contains an updated MS4 storm sewer system map, and a map showing WinSLAMM modeling areas, as well as watershed boundaries and areas tributary to existing stormwater management practices.



Existing Conditions Modeling Results

With the updated model, pollutant loadings were calculated for existing conditions and summarized by watershed for comparison to the TMDL allocations, which are unique to each river reach and watershed. The existing condition modeling results for the City are presented in Table 2.

TABLE 2 - MODELING RESULTS FOR EXISTING CONDITIONS

Basin	Ashwaubenon Creek	East River	Lower Fox River Mainstem	Total
Area (acres)	1,592	1,253	3,009	5,854
Total Phosphorus No Controls (pounds/year)	987	728	1,838	3,553
TP With Controls (pounds/year)	379	198	1,283	1,860
Percent TP Reduction	61.6%	72.8%	30.2%	47.7%
TMDL Required Percent Phosphorus Reduction	40.5%	40.5%	40.5%	NA
Additional TP Removal Required (pounds/year)	(209)	(235)	189	NA
Total Suspended Solids No Controls (pounds/year)	514,581	321,619	866,773	1,702,973
TSS With Controls (pounds/year)	181,261	85,223	541,590	808,074
Percent TSS Reduction	64.8%	73.5%	37.5%	52.5%
TMDL Required Percent TSS Reduction	52.0%	52.0%	72.2%	NA
Additional TSS Removal Required (pounds/year)	(65,738)	(69,154)	300,280	NA

The modeling results indicate that additional stormwater management facilities are not needed in the East River or Ashwaubenon Creek watersheds. However, significant additional stormwater treatment is needed in the Lower Fox River watershed to comply with the TMDL allocation requirements.

Appendix B contains two maps showing the results of the TSS modeling for each subbasin in WinSLAMM. One map shows the level of TSS generated, in pounds per acre, and the second map shows the level of TSS discharged, in pounds per acre. The results on the second map reflect the effectiveness of the existing stormwater management facilities.

Stormwater Management Plan to Meet TMDL Requirements

Based on the results of the existing conditions evaluation, alternative means for meeting the TMDL requirements were discussed with the City staff. We discussed the potential for pollutant trading between the Ashwaubenon Creek and East River watersheds, where current pollutant reductions exceed the requirements, and the Lower Fox River, where additional reductions are needed. The primary obstacle to such trading is that Ashwaubenon Creek and East River discharge into the Fox River downstream of the reach of the Fox River where the additional pollutant reductions are needed. The Fox River reach within the City of De Pere does not benefit from the “cleaner” discharge from Ashwaubenon Creek and East River. The pollutant trading system



City of De Pere

DE PERE STORM WATER MANAGEMENT REPORT LONG TERM RECOMMEDATIONS

Pages 5 thru 7 identify and discuss several options for meeting WDNR required TP and TSS reductions. These options include:

- Pollutant Trading Between Basins
- Construction of Additional Facilities
- Inclusion of Storm Water Upgrades in Roadway Design and Construction
- More Restrictive Controls on Redevelopment

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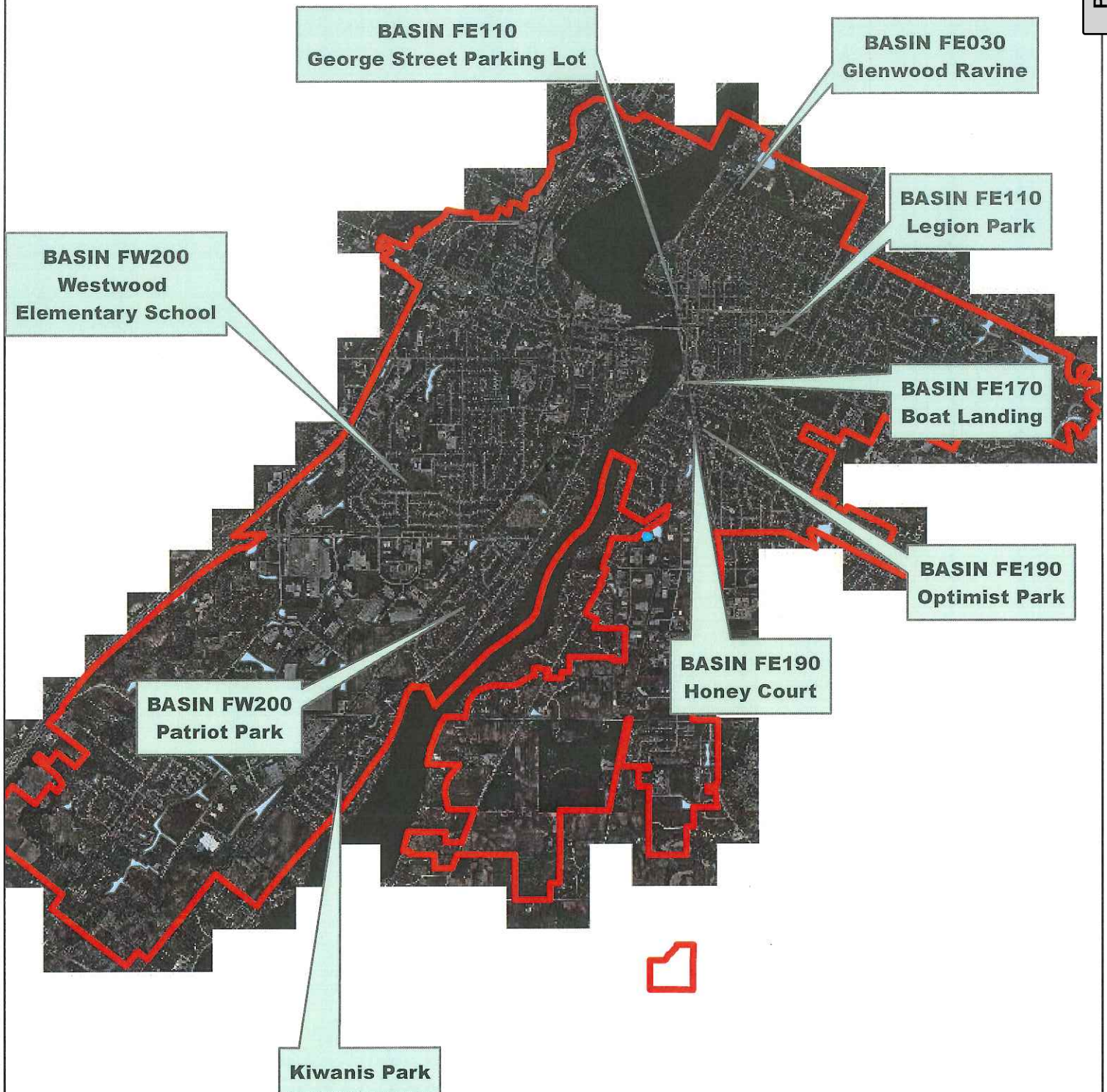
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TABLE 3 - POTENTIAL STORMWATER MANAGEMENT FACILITIES

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FW300	Wet Pond Industrial Park	120.7	--	82.4%	23,326	--
TOTAL						\$4,595,000

As shown in Table 2, the TSS removal in the Lower Fox River basin needed for the City of De Pere to meet the TMDL allocations is 300,280 pounds per year. The potential facilities identified in Table 3 would provide approximately 95,416 pounds per year of TSS reduction and 241 pounds per year of TP reductions in the discharge to the Lower Fox River. As shown in Table 4, this leaves a balance of 204,864 pounds per year of TSS reduction required to achieve the TMDL allocations. No further reductions in TP would be needed.

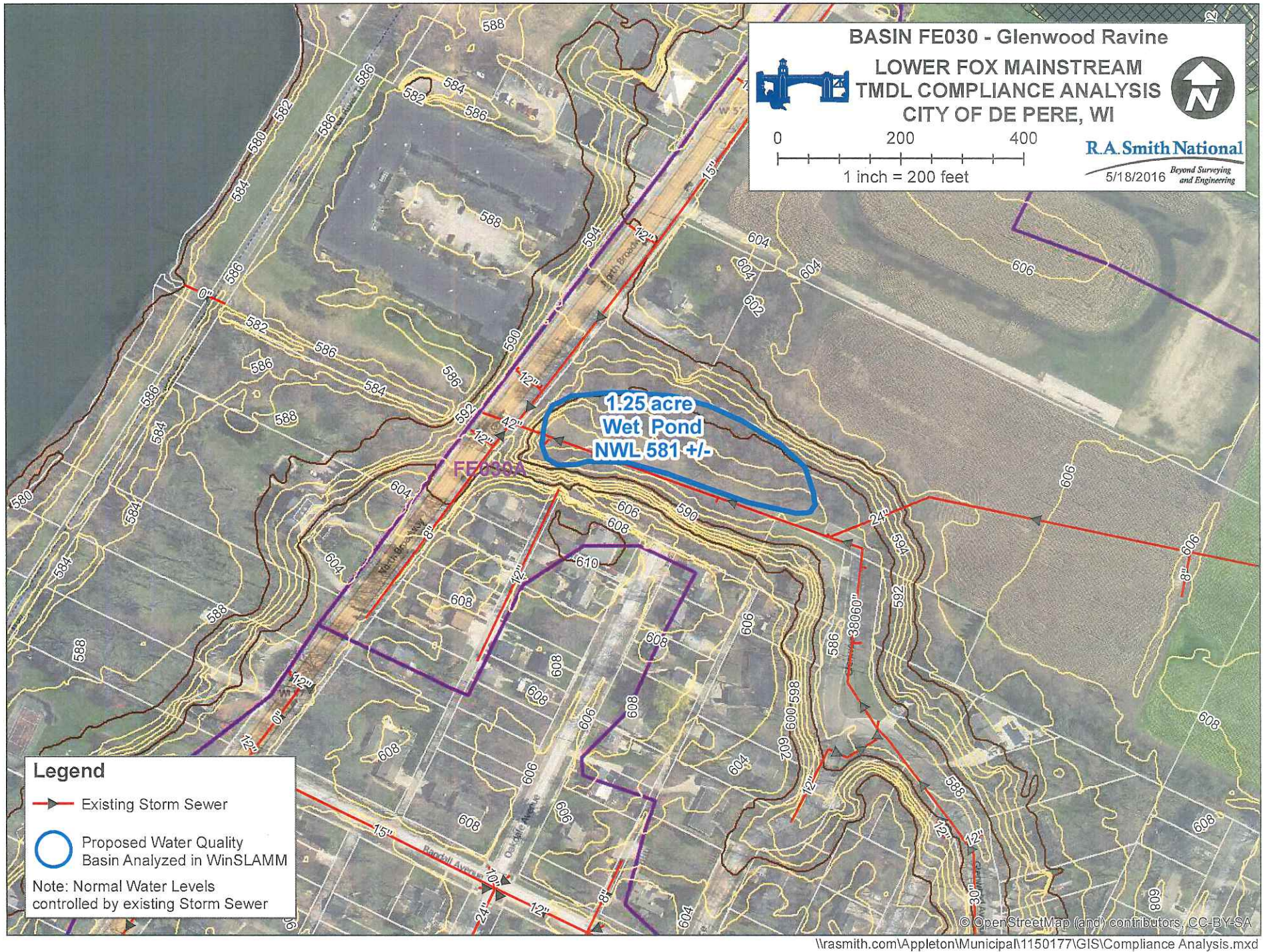


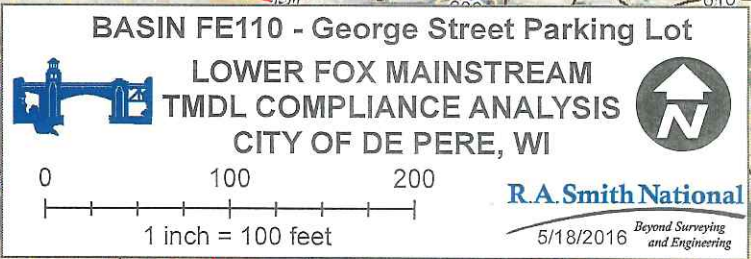
Stormwater Management Planning City of De Pere, Wi

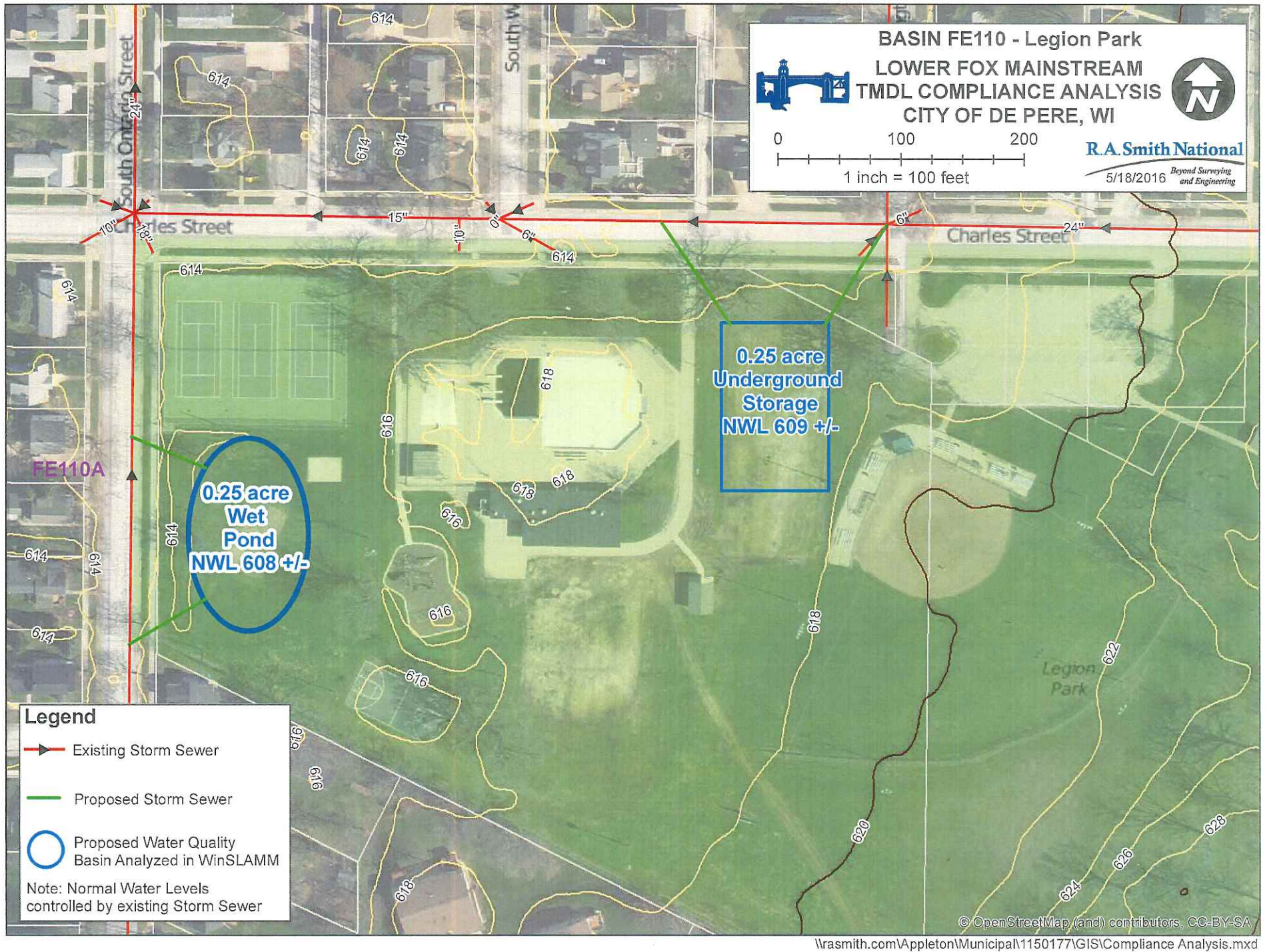


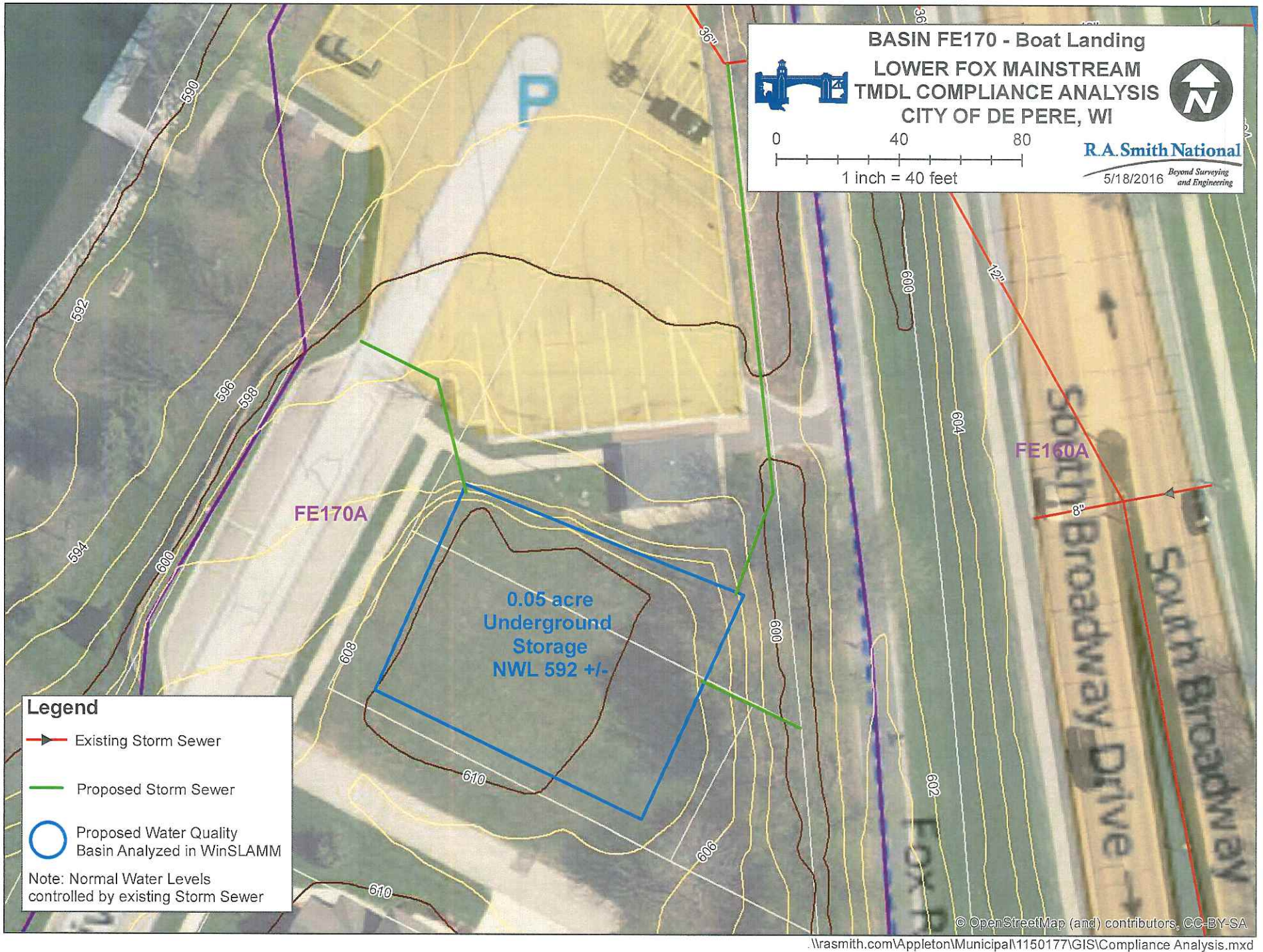
Appendix C

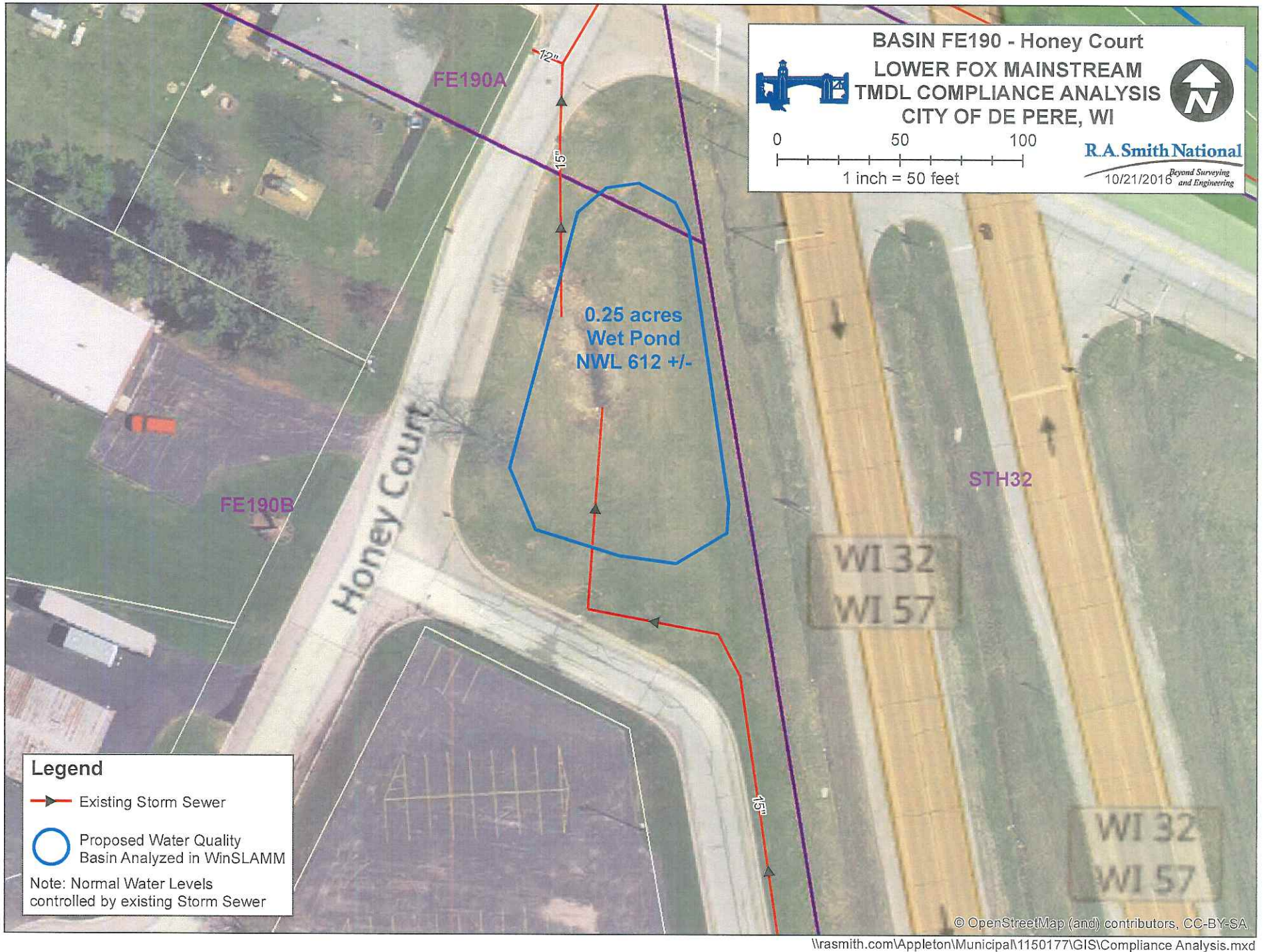
Potential Stormwater Facility Layouts

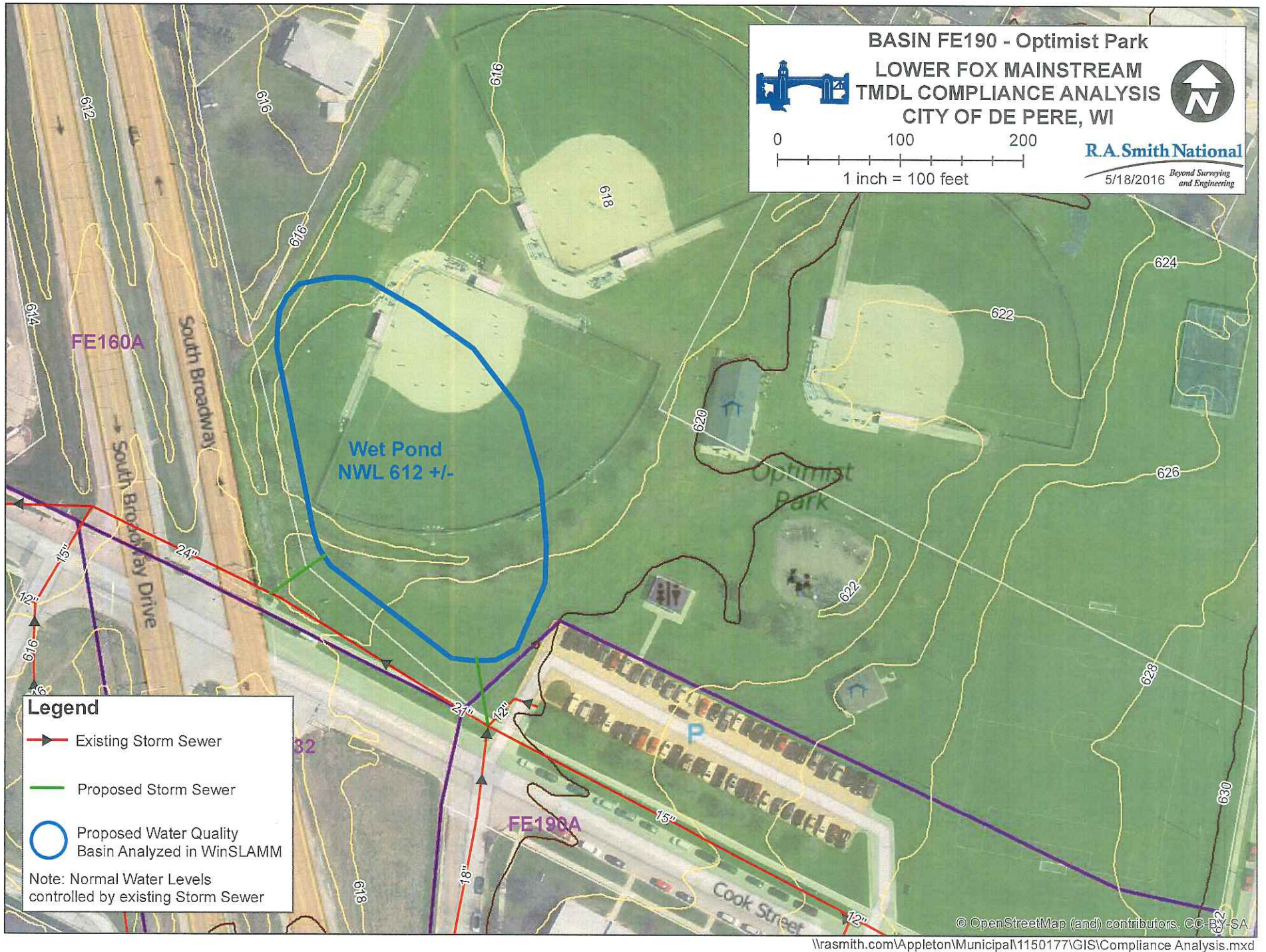


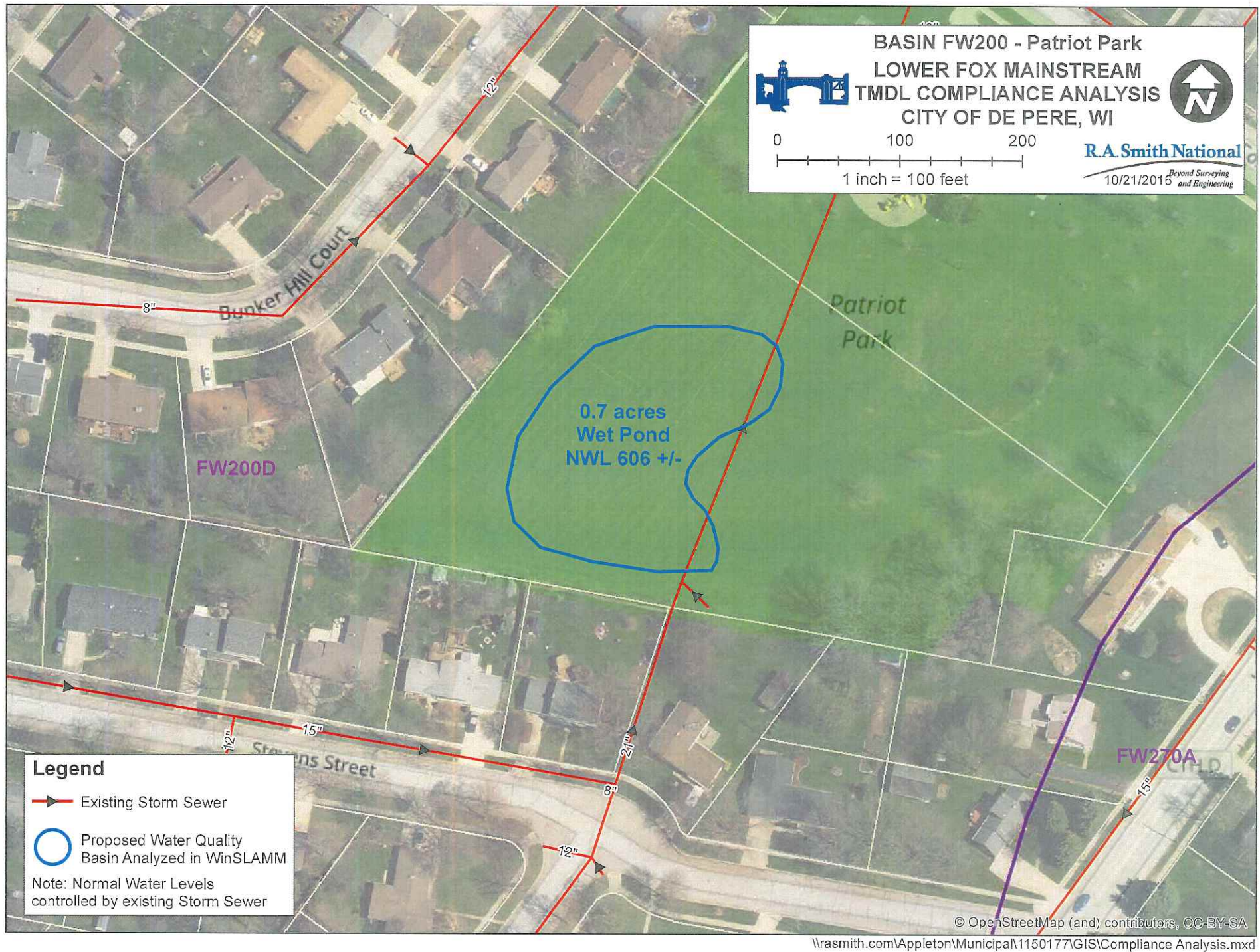












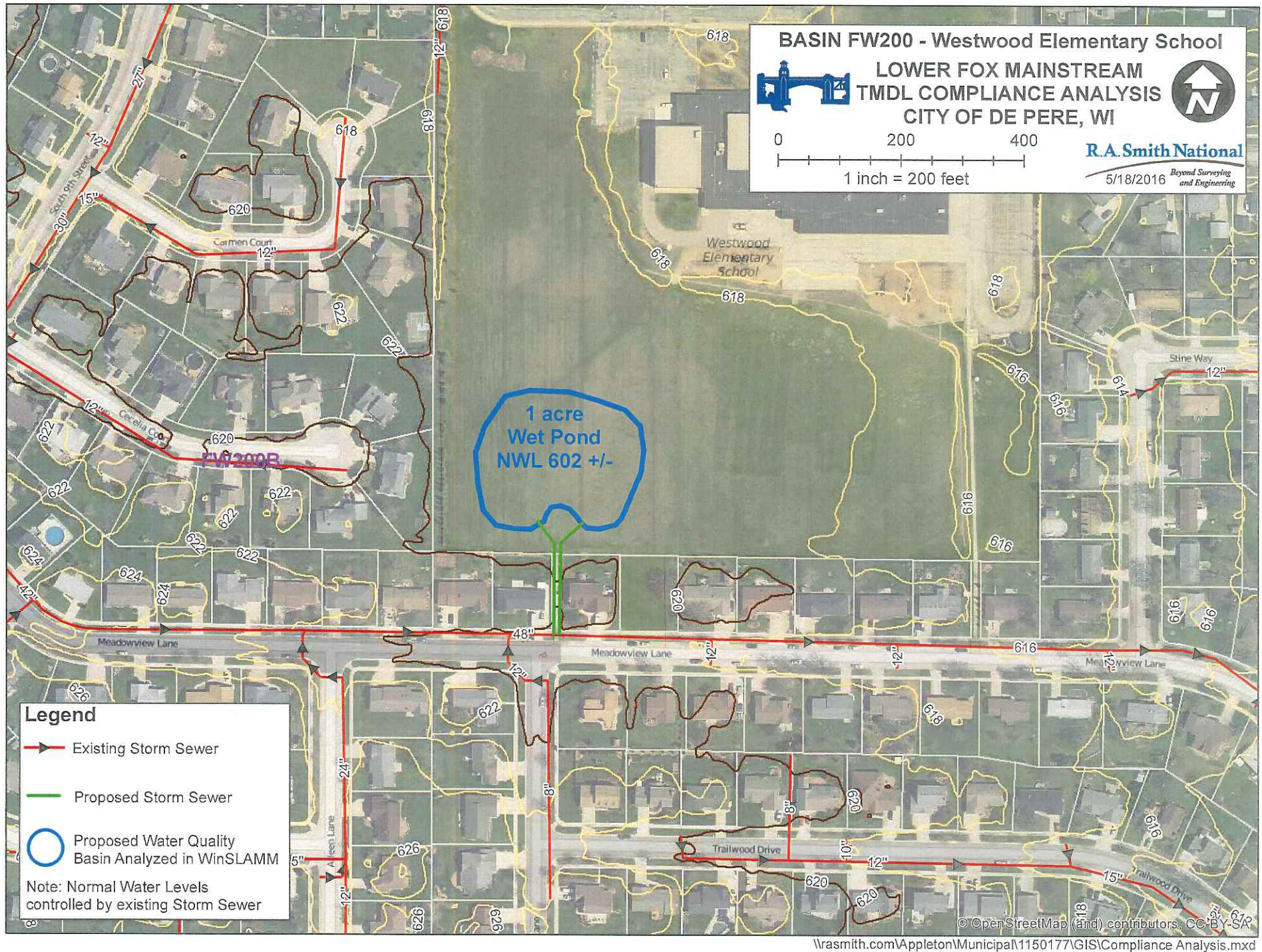


TABLE 4 - LOWER FOX RIVER POLLUTANT LOAD COMPARISON

	Existing Conditions	With Potential Facilities (Table 3)	Difference
Total Phosphorus No Controls (pounds/year)	1,838.2	1,870.9	33
TP With Controls (pounds/year)	1,283.2	1,061.8	(221)
Percent TP Reduction	30.2%	43.2%	--
TMDL Required Percent Phosphorus Reduction	40.5%	40.5%	--
Additional TP Removal Required (pounds/year)	189.4	(51.4)	(241)
Total Suspended Solids No Controls (pounds/year)	866,773	877,774	11,000
TSS With Controls (pounds/year)	541,590	449,236	(92,354)
Percent TSS Reduction	37.5%	48.8%	--
TMDL Required Percent TSS Reduction	72.2%	72.2%	--
Additional TSS Removal Required (pounds/year)	300,280	204,864	(95,416)

We recommend that as streets and highways within the City are improved, additional stormwater management be included in the roadway design and construction. At a minimum, catch basins with sumps should be included in roadway improvements. During any redevelopment planning, the City should seek opportunities to utilize further stormwater management practices, such as wet detention basins and biofilters, where possible.

Municipal Services Facility Stormwater Pollution Prevention Plan

A draft Stormwater Pollution Prevention Plan (SWPPP) for the City's Municipal Services Facility was prepared by R.A. Smith National and provided to the City in April 2015. The draft SWPPP identified stormwater management practices consisting of new catch basins with sumps to capture runoff particulates in the material handling area of the center. The City constructed these facilities prior to repaving the center in the summer of 2015. A final SWPPP was prepared and provide to the City in 2016 for ongoing management of the Municipal Services Facility. A copy of the SWPPP is included as Appendix D.

Illicit Discharge Detection Elimination

Working with City of De Pere public works staff, R.A. Smith National staff conducted dry weather field screening at all 33 major storm outfalls in the City on August 23, 2016. No illegal or illicit discharges were detected at any of the outfalls. The details of the inspection and results are provided in the report included as Appendix E.



DE PERE STORM WATER MANAGEMENT FUTURE ACTIONS

Staff is continuing to identify other storm water management facilities that could be constructed in the Lower Fox River Basin to attain additional TSS reductions. In the short term, staff will need to determine practices to be used to meet the TMDL restrictions. The practices with details on how they will be incorporated will need to be included in the plan. This will need to be presented to the WDNR. Options to be considered include:

- Additional public storm water management facilities that could be constructed in the Lower Fox River Basin.
- Potential storm water management systems that can be included in street reconstructions.
- Regulatory changes that may make pollutant/nutrient trading between drainage basins (Ashwaubenon Creek and East River Basin to the Fox River Basin) more viable.
- Construction of private storm water management facilities that are constructed as part of redevelopment projects (This may require an ordinance update.).
- Pollutant/nutrient trading with agricultural or other entities outside of the City.

Staff will be bringing recommendations back to the Board in the future identifying which of the practices or combination of items identified above that should be incorporated to meet WDNR mandated reductions.

The storm water management plan will be monitored and updated on a regular basis. Staff will begin to incorporate the construction of facilities identified in the report and potential new facilities such as a pond at Kiwanis Park to treat existing residential development in the capital improvements program.



City of De Pere

Action Item Recommendations/Closing

The main intent of this is to bring the Board up to date on the City's storm water management plan and identify future action items required to meet WDNR mandated TP and TSS reductions. Staff is requesting input from the Board on whether this should be forwarded to Council.