

Village of Mukwonago
REGULAR VILLAGE BOARD MEETING
Notice of Meeting and Agenda
Tuesday, October 18, 2016

Time: **6:30 p.m.**
Place: **Mukwonago Municipal Building/Board Room, 440 River Crest Court**

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Announcement of closed session pursuant to Wis. Stat. **§19.85(1)(e)** for discussion and possible action involving the potential acquisition of property and sale of properties.
5. Presentation of Business of the Month Award by the Mukwonago Area Chamber of Commerce
6. Comments from the Public
The purpose of this section is to allow the non-elected general public the opportunity to address the Board on any subject of concern that is not the topic of a current or previous Public Hearing before the Village Board. If you wish to be heard, the Village Board asks that you begin by stating your name and address, speak for no more than three minutes and attempt to avoid duplication. Each person speaking must sign the Comments from the Public Appearance sign-in sheet before speaking. The sign-in sheet is available on the table located at the back of the room. The Board will only receive comments during Public Comment. The Public Comment portion of the meeting is scheduled for a total of 15 minutes in length but will end sooner if the Village President has determined that there is no one else present who still wishes to speak.
7. Consent Agenda
All items listed are considered routine and will be enacted by one motion. There will be no separate discussion of these items unless a Board member so requests, in which event the item will be removed from the Consent agenda and be considered on the regular agenda.
 - A. Approval of minutes for the September 20, 2016 regular meeting, October 4 and October 12, 2016 special meetings, and October 12 Joint Village Board and Town of Mukwonago Board meeting
 - B. Approval of Vouchers payable batches:
 - 1) AP10-2016-1 \$189,936.88
 - 2) M-9-2016-1 \$173,150.23
 - 3) AP10-2016-2 \$316,886.12
 - C. Approval to re-allocate funds previously budgeted for the outdoor performance structure to allow for soil borings in Indianhead park for the construction of an outdoor performance stage, not to exceed \$12,000
 - D. Authorization of the Public Works Director to apply to be certified as a Tree City USA for 2016 carried

8. Committee/Commission Reports

Discussion and Possible Action on the Following Items

A. Plan Commission

- 1) Recommendation to approve the Site Plan/Architectural review requested by Kevin Connor, DDS, OMSA Development LLC, for the construction of a single-story office building on the property located at 320 Bay View Rd., known as MUKV2009954001 contingent upon conditions as stated in the Village Planner review letter dated December 4, 2015

9. New Business

Discussion and Possible Action on the Following Items

A. Engineer

- 1) Storm Water Management Plan for the construction of a single-story office building on the property located at 320 Bay View Rd., known as MUKV2009954001
- 2) Storm Water Maintenance Agreement with OMSA Development LLC
- 3) Acceptance of letter of credit pertaining to the Storm Water Maintenance Agreement with OMSA Development LLC

B. Administrator/Economic Development Director

- 1) Economic development cooperation contract between Waukesha County Center for Growth, Inc. and the Village of Mukwonago

C. Public Works Director

- 1) Acceptance of bid and award of contract regarding the Police Department Roof Project

D. Finance Director

- 1) A Resolution Amending the 2016 Adopted Budget for the Parkland Site Fund

E. Clerk-Treasurer

- 1) Proposed 2015-16 weights and measures schedule of assessments and fees

10. Convene into closed session pursuant to Wis. Stat. **§19.85(1)(e)** (*Deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session*) for discussion and possible action involving the potential acquisition of property and sale of properties.

11. Reconvene into open session pursuant to Wis. Stats. **§19.85(2)** for possible additional discussion and/or action concerning any matter discussed in closed session and/or any unfinished item remaining on the agenda

12. Adjournment

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. Please note that, upon reasonable notice, efforts will be made to accommodate the needs of individuals with disabilities through appropriate aids and services. For additional information or to request this service, contact the Clerk's Office, 440 River Crest Court, (262) 363-6420, Option 4.

MINUTES OF THE REGULAR VILLAGE BOARD MEETING Tuesday, September 20, 2016

Call to Order

Village President Fred Winchowky called the meeting to order at 6:30 p.m. located in the Board Room of the Mukwonago Municipal Building, 440 River Crest Ct.

Roll Call

Board Members present: Jay Vermeulen
Darlene Johnson
Jim Decker
Mark Penzkover
Kelly Klemme
Ken Werner
Fred Winchowky, Village President

Also present: Rebecca Alonge, Engineer
Steven Braatz, Jr., Clerk-Treasurer
Dave Brown, Utilities Director
Ron Bittner, Public Works Director
Diana Doherty, Finance Director
Bruce Kaniewski, Planner/Zoning Administrator
Kevin Schmidt, Police Chief
Jeff Stien, Fire Chief
Violet Razo, Engineer
John Weidl, Administrator/Economic Development Director

Pledge of Allegiance

The Village Board recited the Pledge of Allegiance.

Announcement of closed session

President Winchowky announced the Board will convene into closed sessions later in the meeting pursuant to Wis. Stat. **§19.85(1)(e)** for discussion and possible action involving the potential acquisition or property, sale of properties, leasing of the property located at 915 Main St., and the potential boundary agreement with the Town of Vernon.

Comments from the Public

None.

Consent Agenda

- A. Approval of minutes for the August 16, 2016 regular meeting and August 1 and September 7, 2016 special meetings
- B. Approval of Vouchers payable batches:
 - 1) AP-8-2016-2A \$16,668.59
 - 2) LIBAP8-2016 \$9,578.34
 - 3) M-8-2016-1 \$601,831.33
 - 4) M-8-2016-2 \$5,609.36
 - 5) AP-9-2016-1 \$569,267.86

- C. A resolution amending the village employee handbook update to family medical leave act policy
- D. A resolution to certify that the Village shall provide for and allow the Library to expend no less than the County rate in the prior year
- E. Authorization of the Utilities Director to sell unused generator through Wisconsin Surplus Action Services
- F. Approval of the special event permit requested by Mukwonago Rotary Club for the event known as Jack-O-Lantern Jaunt to be held on October 14-15, 2016 at the property located at 931 N. Rochester St. contingent upon receiving a plan of operation
- G. A resolution approving the Memorandum of Understanding between the Village of Mukwonago and the Wisconsin Department of Transportation for the Mukwonago TID #3 development site generally located on lands southeast of I-43 along WIS 83
- H. A resolution approving the revised yard tree list for the Minors West Subdivision
- I. A resolution approving the CTH NN E non-standard street lighting monthly billing contract with We Energies
- J. Acceptance of the Village Engineer recommendation to reduce the letter of credit for The Orchards of Mukwonago Addn #2 subdivision to \$494,787 in accordance with the letter from the Village Engineer dated September 2, 2016

Motion by Decker/Vermeulen to approve the consent agenda carried.

Committee/Commission Reports

Finance Committee

American Deposit Management Co.

Vermeulen recused himself. Motion by Decker/Johnson to accept the Finance Committee recommendation and adopt the resolution authorizing the American Deposit Management Co. As a designated depository for municipal funds carried.

Plan Commission

Lynch Ventures, LLC

Motion by Penzkover/Werner to accept the Plan Commission recommendation and approve the site plan approval to allow short-term, temporary parking in unpaved areas owned by Lynch between the dealerships (280 & 282 E. Wolf Run) and I-43 right-of-way, subject to the following conditions carried:

1. Parking will be for display purposes only (no long-term parking);
2. A maximum of fifteen (15) vehicles would be on display at any one time;
3. Only new vehicles shall be displayed (used vehicles are prohibited);
4. No vehicles, equipment or personnel shall encroach on the delineated wetlands;
5. Driving and parking of the vehicles shall cause minimal damage to the unpaved areas and not cause any significant increase in sedimentation or storm water entering the wetlands;
6. Lynch shall utilize some type of protective wheel pad under the tires of the vehicles;
7. Lynch employees are the only people allowed in this area (no public access);
8. This topic will be revisited/reevaluated by the Plan Commission and Village Board in nine (9) months (June 2017)

Culvers

Motion by Penzkover/Werner to accept the Plan Commission recommendation and approve the façade improvements to Culver's Restaurant, 1090 N. Rochester Street, in accordance with the following conditions carried:

1. Approval shall be subject to the submitted drawing entitled "Culvers, 1090 N. Rochester Street," prepared by Ollman Ernest Martin Architects dated August 10, 2016.
2. The architectural review approval does not approve of the signs shown on the drawing. Any change in existing wall signage must comply with Chapter 64 of Village Municipal Code and requires a permit from Village Inspection Department.

Recommendation to approve the Site Plan and Architectural Plan Review requested by Douglas Dorger, Apex Development LLC, for the construction of a detached garage on the property located at 511 Oakland Ave., known as MUKV1973998

Item remains at Commission.

Protective Services Committee – Fire Dept Subcommittee Paramedic Intercept Services Agreement

The Town of Mukwonago Board approved this agreement on August 17, 2016. Motion by Johnson/Werner to accept the Protective Services Committee – Fire Dept Subcommittee recommendation and approve the Agreement to Provide Paramedic Intercept Services between the Village and Town of Mukwonago and the Tichigan Vol. Fire Co. carried.

Public Works Committee

Main Street water main replacement

Motion by Penzkover/Decker to authorize the Village Engineer to begin the survey and design work for the Main Street water main replacement project carried.

Selection of an alternative for installation of Chapman Blvd utility service

Motion by Penzkover/Decker to approve Alternate B of the Chapman Farms Blvd. utility installation at a projected cost of \$1,656,400 carried.

Unfinished Business

A resolution to adopt the 2016-18 Strategic Directions for the Village of Mukwonago

Motion by Decker/Klemme to adopt the resolution to adopt the 2016-18 Strategic Directions for the Village of Mukwonago carried.

New Business

Administrator

Resolution for declaration of public necessity and relocation order

Motion by Penzkover/Decker to adopt the resolution for declaration of public necessity and relocation order to construct a roadway and to install public water and sanitary sewer facilities in the Village of Mukwonago contingent upon the insertion of easement language carried.

Annexation of property from the Town of Vernon

Motion by Penzkover/Vermeulen to table the preliminary consideration of annexation of property known as VNT2091999005 from the Town of Vernon until after the closed session carried.

Wisconsin Act 391

Weidl explained changes to zoning law, 2015 Wisconsin Act 391, Property Rights, Shoreland Zoning, Contested Case Hearings, Administrative Rule Promulgation Process, and Deference Afforded Agency Legal Interpretations that may affect properties in the years ahead. Information only. No action taken.

Clerk-Treasurer

2016 populations

Motion by Decker/Werner to accept the preliminary estimate of January 1, 2016 populations for Waukesha and Walworth portions of the Village of Mukwonago carried.

Engineer

I-Mukwonago LLC Storm Water Management Practice Maintenance Agreement

Motion by Penzkover/Vermeulen to approve the First Amendment to Storm Water Management Practice Maintenance Agreement with I-Mukwonago LLC carried.

Village President

Election Inspector for the 2016-2017 term

Motion by Decker/Penzkover to accept the Village President's recommendation and appoint Shara Grover as an Election Inspector for the 2016-2017 term carried.

Motion by Decker/Johnson to convene into closed session at 7:48 p.m. pursuant to Wis. Stat. **§19.85(1)(e)** (*Deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session*) for discussion and possible action involving the potential acquisition or property, sale of properties, leasing of the property located at 915 Main St., and the potential boundary agreement with the Town of Vernon carried unanimously upon roll call vote. Discussion held in closed session.

Motion by Decker/Johnson to adjourn closed session and reconvene into open session at 8:58 p.m. pursuant to Wis. Stats. **§19.85(2)** for possible additional discussion and/or action concerning any matter discussed in closed session and/or any unfinished item remaining on the agenda carried unanimously upon roll call vote.

Motion by Penzkover/Werner to direct the Village Attorney to draft an 8-month lease agreement with Amato Ford to allow the parking of vehicles on the former Lynch site located at 915 Main St., with the following criteria carried:

1. An up front and nonrefundable payment of \$5,000.
2. There shall be a 2-week opt out option.
3. Inclusion of language regarding the lessee covering the costs for maintenance and utilities while they occupy the site.
4. Inclusion of language regarding indemnifying the Village from liability.

Motion by Penzkover/Decker to approve the revised offer to sell agreement for the Chapman property as summarized in the confidential communication dated September 19, 2016, subject to review by the Village Attorney carried.

Annexation of property from the Town of Vernon

Motion by Penzkover/Vermeulen to remove from the table the preliminary consideration of annexation of property known as VNT2091999005 from the Town of Vernon until after the closed session carried. Board is fine with the applicant filing for annexation of the property known as VNT2091999005 from the Town of Vernon. No action taken.

Adjournment

Meeting adjourned at 9:02 p.m.

Respectfully Submitted,

Steven Braatz, Jr.
Clerk-Treasurer

DRAFT

MINUTES OF THE SPECIAL VILLAGE BOARD MEETING

Tuesday, October 4, 2016

Call to Order

Village President Fred Winchowky called the meeting to order at 6:10 p.m. located in the Board Room of the Mukwonago Municipal Building, 440 River Crest Ct.

Roll Call

Board Members present: Jay Vermeulen
Darlene Johnson
Jim Decker
Mark Penzkover
Kelly Klemme
Ken Werner
Fred Winchowky, Village President

Also present: Rebecca Alonge, Village Engineer
Ron Bittner, Public Works Director
Dave Brown, Utilities Director
Robert Harley, Building Codes Official
Bruce Kaniewski, Village Planner
Violet Razo, Village Engineer
Steven Braatz, Jr., Clerk-Treasurer

New Business

Mukwonago High School renovations

Motion by Penzkover/Werner to approve the Storm Water Management Plan for the renovations to Mukwonago High School subject to the following conditions carried:

Prior to issuance of an erosion control permit and any land disturbing activity beginning for Phase 1:

1. Provide additional details (width, length, etc.) of the concentrated flow curb cut pretreatment gravel flow separators.
2. Update the storm water management plans to clearly and correctly identify what is Phase 1 work and what is Phase 2 work.
3. Update the Outlet modelling of the West bio-infiltration basin to reflect the tailwater conditions present at this location.
4. Modify the overflow weir elevation and/or the bypass storm sewer size to reflect the results of modelling the tailwater present at this location.
5. Provide the primary contact for erosion control issues to the Village Engineer prior to the start of work.
6. Provide the Village Engineer with copies of all approved storm water management documents and drawings compiled into one complete PDF with appropriate bookmarks.
7. Execution of a Storm Water Maintenance Agreement by all parties and recording of same with the Register of Deeds. The draft Storm Water Maintenance Agreement is included for reference.
8. Holding a preconstruction conference with representatives of the design team, the construction team, Village and utility staff to ensure all members of the design and construction team understand the Storm Water Management Plan.

Prior to the issuance of an erosion control permit and any construction beginning on-site for Phase 2:

1. Update Phase 2 erosion control plans so that sequencing and erosion control notes correspond to Phase 2 in the Storm Water Management Plan.
2. Holding a preconstruction conference with representatives of the design team, the construction team and Village and Utility Staff to ensure all members of the design and construction team understand the Storm Water Management Plan.
3. Provide updates and receive approval for the storm water maintenance agreement and the storm water management plan if necessitated by design changes that occur after the date of this letter.

During Construction:

1. Owner will maintain approved plans on-site and readily available to the Village erosion control inspector.
2. On-site approved plans must reflect current construction conditions and compliance with the Village ordinance.
3. On-site plans must reflect the current sequence of construction and meet the Wisconsin Department of Natural Resources (DNR) Technical Standards.
4. Provide the Village with copies of all current DNR Chapter 30 and NR 216 permits
5. Village ordinance requires the Mukwonago Area School District to inspect the erosion control measures once every 7 days and within 24 hours of a rainfall of 0.5 inches or greater. All inspection reports must be available on site and available to the Village at any time of day. Reports must contain the information required by the DNR. This inspection will also fulfill NR216 inspection requirements.
6. Water main related construction, and any construction within the public right-of-way, will conform to the Village Standard Specifications and Village standard details. A copy of the requirements and details has been provided to the Engineer and Contractor.
7. Owner will provide erosion control measures and restore any private utility company land disturbance resulting from providing utilities to this site regardless of location.
8. All water main will be installed with a minimum of 6 feet of cover and not more than 8 feet deep.
9. The Owner will grout solid all unused sanitary laterals at the connection to the Village sewer main.
10. The Owner will remove any unused connections to the Village water system in a manner acceptable to the Utility Director.

Motion by Penzkover/Werner to approve the Storm Water Maintenance Agreement with Mukwonago Area School District for the renovations to Mukwonago High School contingent upon the Village Attorney placing the draft into proper format and delivering to the appropriate parties for signatures carried.

Motion made by Penzkover/Werner to authorize the Village Attorney to establish a surety in the form of a performance bond in the amount of \$494,000. The acceptance of a performance bond instead of a letter of credit are based on the fact that this project involved public funding, there is a tight timeframe, and it is in the community's best interest carried.

Mukwonago River stream bank stabilization project

Motion made by Penzkover/Decker to approve the contract with Applied Ecological Services for the Mukwonago River stream bank stabilization project with funding to be provided through a grant from the Southeastern WI Fox River Commission, contingent upon the incorporation of the contract revisions recommended by the Village Attorney carried.

Adjournment

Meeting adjourned at 6:33 p.m.

Respectfully Submitted,

Steven Braatz, Jr.
Clerk-Treasurer

DRAFT

MINUTES OF THE SPECIAL VILLAGE BOARD MEETING Wednesday, October 12, 2016

Call to Order

Village President Fred Winchowky called the meeting to order at 6:11 p.m. located in the Board Room of the Mukwonago Municipal Building, 440 River Crest Ct.

Roll Call

Board Members present: Jay Vermeulen
Darlene Johnson
Jim Decker
Mark Penzkover
Ken Werner
Fred Winchowky, Village President

Board Member excused: Kelly Klemme

Also present: Rebecca Alonge, Village Engineer
Steven Braatz, Jr., Clerk-Treasurer
Dave Brown, Utilities Director
Diana Doherty, Finance Director
Kurt Peot, Village Engineer
Violet Razo, Village Engineer
John Weidl, Administrator/Economic Development Director

New Business

Main Street Water Main Replacement project

Bids were received this morning. The low bidder was D.F. Tomasini, Inc. for a cost of \$792,135 for Phase 1 and \$154,625 for Phase 2, for a total of \$946,760 *[Editor's Note: The Engineer later determined the total cost is actually \$935,420.00, and the correction was made to the resolution].*

Motion made by Penzkover/Johnson to adopt the resolution to declare an emergency under Wis Stat Sec 62.15 and approve a contract to replace the Main Street water main contingent upon the Village Attorney approving the form of the agreement, as well as the receipt of performance and payment bonds and a liability insurance endorsement identifying the Village as an additional insured carried.

Adjournment

Meeting adjourned at 6:27 p.m.

Respectfully Submitted,

Steven Braatz, Jr.
Clerk-Treasurer

MINUTES OF THE SPECIAL VILLAGE BOARD MEETING **Wednesday, October 12, 2016**

Call to Order

Village President Fred Winchowky called the meeting to order at 8:18 p.m. located in the Board Room of the Mukwonago Municipal Building, 440 River Crest Ct.

Roll Call

Board Members present: Jay Vermeulen
Darlene Johnson
Jim Decker
Mark Penzkover
Ken Werner
Fred Winchowky, Village President

Board Member excused: Kelly Klemme

Also present: Ron Bittner, Public Works Director
Steven Braatz, Jr., Clerk-Treasurer
Dave Brown, Utilities Director
Diana Doherty, Finance Director
Robert Harley, Supervisor of Inspections
Kevin Schmidt, Police Chief
Jeff Stien, Fire Chief
Andy Wegner, Deputy Fire Chief
John Weidl, Administrator/Economic Development Director

New Business

2017 Capital equipment and improvements budgets and 5 Year Capital Plan (2017-21)

Doherty handed out and presented the 5 year Capital Plan and asked the Board to focus on 2017 and review and discuss any items that should be removed, changed or delayed. Fire Chief presented the plan to modify the fire dorms in Station #1 at proposed budget of \$250,000. The consensus of the Board was to keep the project on the 2017 plan and to use critical care and reserve funds, no borrowing. There was various discussions on other capital equipment and projects, but the Board retained to list as presented to include as part of the proposed 2017 budget. No action taken.

Adjournment

Meeting adjourned at 9:12 p.m.

Respectfully Submitted,

Steven Braatz, Jr.
Clerk-Treasurer

**MINUTES OF THE SPECIAL VILLAGE BOARD MEETING
JOINT MEETING WITH THE TOWN OF MUKWONAGO BOARD
Wednesday, October 12, 2016**

Call to Order

Village President Fred Winchowky and Town Chairperson Tom Stefanowski called the meeting to order at 6:30 p.m. located in the Board Room of the Mukwonago Village Hall, 440 River Crest Court.

Roll Call

Village Board Members present: Jay Vermeulen
Darlene Johnson
Jim Decker
Mark Penzkover
Ken Werner
Fred Winchowky, Village President

Village Board Member excused: Kelly Klemme

Town Supervisors present: Lyle Boucher
Peter Topczewski
Richard Wrasman
Gail Yerke
Tom Stefanowski, Town Chairperson

Also present: Steven Braatz, Jr., Village Clerk-Treasurer
Diana Doherty, Village Finance Director
Kathy Karalewitz, Town Administrator/Clerk-Treasurer
Jeff Stien, Fire Chief
Andy Wegner, Deputy Fire Chief
John Weidl, Village Administrator/Economic Development Director

New Business

Portable radio equipment purchase

Village: Motion by Johnson/Penzkover to authorize the re-allocation of current 2016 Fire/Ambulance operation funds to purchase portable radio equipment in an amount not to exceed \$45,000 carried.

Town: Motion by Boucher/Yerke to authorize the re-allocation of current 2016 Fire/Ambulance operation funds to purchase portable radio equipment in an amount not to exceed \$45,000 carried.

Discussion of 2016 Expenditures and Revenues Year to Date

Chief Stien explained that through September, the 2016 revenue budget is at 66% of the budget, and the expenditure budget is at 59% of the budget. He explained factors that went into each. Discussion only. No action taken.

2017 Fire/Ambulance Operating Budget

Chief Stien explained the difference between the 2016 and 2017 budgets for the 5900 Other Financing Uses. There is a decrease of \$104,226, mainly due to the use of that money to fund the new full-time EMTs. The fund was created to account for the difference in revenue over expenditure. There was further discussion on other aspects of the budget, as well as reserving for future sick leave payouts.

Village: Motion by Johnson/Werner to preliminarily approve the proposed 2017 Fire/Ambulance operation budget and include as part of the budget hearing carried.

Town: It is the consensus of the Town Board to preliminarily approve the proposed 2017 Fire/Ambulance operation budget but will make their formal motion at another meeting.

2017 Fire/Ambulance Capital Budget

Deputy Chief Wegner presented a proposal to purchase of a multi-functional fire apparatus pumper/tender at a cost of \$625,000. This apparatus will replace the current 1986 GMC 3200 gallon tender, the 1990 Spartan engine, and the 2001 engine. The Village has the money to either purchase this equipment or do the Village-only Fire Department project, but if both were done, the Village would need to borrow. The Town would need to borrow. It is the consensus of the Village Board to go along with the decision of the Town Board. It is the consensus of the Town Board to not consider borrowing due to other debt payments in recent years, and will not go forward with this purchase for 2017.

Adjournment

Motion by Wrasman/Topczewski to adjourn the Town meeting at 8:09 p.m. carried. Village President Winchowky adjourned the Village meeting at 8:09 p.m.

Respectfully Submitted,

Steven A. Braatz, Jr.
Village Clerk-Treasurer

MINUTES OF THE REGULAR COMMITTEE OF THE WHOLE MEETING **Tuesday, October 4, 2016**

Call to Order

Village President Fred Winchowky called the meeting to order at 5:30 p.m. located in the Board Room of the Mukwonago Municipal Building, 440 River Crest Ct.

Roll Call

Committee members present:

- Jay Vermuelen
- Darlene Johnson
- Jim Decker
- Mark Penzkover
- Kelly Klemme
- Ken Werner
- Fred Winchowky, Village President

Also present:

- Rebecca Alonge, Village Engineer
- Ron Bittner, Public Works Director
- Dave Brown, Utilities Director
- Diana Doherty, Finance Director
- Robert Harley, Building Codes Official
- Bruce Kaniewski, Village Planner
- Violet Razo, Village Engineer
- Kevin Schmidt, Police Chief
- Steven Braatz, Jr., Clerk-Treasurer

Minutes

Motion by Decker/Johnson to approve the September 6, 2016 Committee of Whole meeting minutes carried.

Committee Reports

Finance Committee

Vouchers payable batches

Motion by Vermeulen/Johnson to recommend the Village Board approve the following batches of vouchers payable carried:

- a. AP10-2016-1 \$189,936.88
- b. M-9-2016-1 \$173,150.23

2017 Budget workshop schedule of meetings

The joint meeting with the Town of Mukwonago to discuss the Fire Dept. budget will be on October 12 at 6:30 p.m. A Village Board budget workshop to discuss capital items will occur following the joint meeting. Another workshop to discuss operating budgets will occur after the Village Board on October 18.

Monthly Treasury Report

The August 2016 monthly Treasury report is on file in the Clerk's Office.

Health and Recreation Committee

Outdoor Performance Stage

Motion by Werner/Klemme to recommend the Village Board re-allocate funds previously budgeted for the outdoor performance structure to allow for soil borings in Indianhead park for the construction of an outdoor performance stage, not to exceed \$12,000, carried.

Personnel Committee

Administrator performance evaluation paperwork

Decker explained the process being used this year for the Administrator evaluations, to maintain confidentiality.

Protective Services Committee

Monthly Police Report

The August 2016 monthly Police report is on file in the Clerk's Office.

Public Works Committee

Tree City USA

Motion by Penzkover/Decker to recommend the Village Board authorize the Public Works Director to apply to be certified as a Tree City USA for 2016 carried.

Mukwonago River stream bank stabilization project

Motion by Penzkover/Decker to recommend the Village Board approve the contract with Applied Ecological Services for the Mukwonago River stream bank stabilization project with funding to be provided through a grant from the Southeastern WI Fox River Commission, contingent upon the incorporation of the contract revisions recommended by the Village Attorney carried.

Main Street water main replacement

Penzkover updated the Committee on the Main Street water main replacement. The project will be bid out this week and are due next week. The engineer selected five companies that they have worked with in this past. There will be a special Board meeting on October 12 before the joint meeting with the Town to declare this matter an emergency and approve the contract. If all goes well, the project will start October 24, and should take about 3-4 weeks, with more work in the spring of 2017. Doherty notified the Committee that the project will require bonding, t=but there may be enough money to cover until the bonding in 2017.

Monthly Reports

The August 2016 monthly engineering and Sanitary Sewer Utilities report is on file in the Clerk's Office.

Adjournment

Meeting adjourned at 6:03 p.m.

Respectfully Submitted,

Steven Braatz, Jr.
Clerk-Treasurer

Vouchers Payable Cover Sheet

Payments batch AP10-2016-1	\$189,936.88
Payments batch M-9-2016-1	\$173,150.23
Total for board approval:	\$363,087.11

VILLAGE OF MUKWONAGO

09/30/16 10:58 AM

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Payments

Current Period: October 2016

Batch Name	AP10-2016-1	User Dollar Amt	\$189,936.88		
Payments		Computer Dollar Amt	\$189,936.88		
				\$0.00	In Balance
Refer	76613	ADKINS CONSTRUCTION	-		
Cash Payment	E 610-6451-6651	Maintenance-Mains	417 MAIN ST		\$2,055.00
Invoice	14487	9/20/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$2,055.00
Refer	76614	AIRGAS NORTH CENTRAL	-		
Cash Payment	E 150-5231-5311	Supplies	OXYGEN		\$415.23
Invoice	9055224935	9/8/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$415.23
Refer	76615	AM TOWING	-		
Cash Payment	E 100-5212-5219	Professional Services	ACCIDENT TOW		\$200.00
Invoice	31038	9/20/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$200.00
Refer	76616	ASSOCIATED APPRAISAL	-		
Cash Payment	E 100-5153-5219	Professional Services	CONTRACT SERVICE		\$1,362.27
Invoice	122376	9/15/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$1,362.27
Refer	76617	BEAR GRAPHICS	-		
Cash Payment	E 100-5144-5311	Supplies	ABSENTEE ENVELOPES		\$189.49
Invoice	753480	9/22/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$189.49
Refer	76618	BIASEW	-		
Cash Payment	E 100-5241-5335	Training & Travel	HARLEY TRAINING		\$510.00
Invoice	NOV 2016	9/28/2016			
Cash Payment	E 100-5241-5335	Training & Travel	RUTENBECK TRAINING		\$80.00
Invoice	NOV 2016	9/28/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$590.00
Refer	76619	BOUND TREE MEDICAL	-		
Cash Payment	E 150-5231-5311	Supplies	AIRWAYS/FILTERS/MASK		\$141.25
Invoice	82270411	9/16/2016			
Cash Payment	E 150-5231-5311	Supplies	VALVE PLUG REPLACEMENT		\$57.87
Invoice	82265594	9/13/2016			
Cash Payment	E 150-5231-5311	Supplies	GLUCAGON KIT/CONVENIENCE BAGS		\$238.05
Invoice	82265593	9/13/2016			
Cash Payment	E 150-5231-5311	Supplies	ENDOTRACHEAL TUBE/ADENOSINE/CONVENIENCE BAGS		\$52.45
Invoice	82279888	9/27/2016			
Cash Payment	E 150-5231-5311	Supplies	ROCURONIUM		\$38.98
Invoice	82279889	9/27/2016			
Cash Payment	E 150-5231-5311	Supplies	FORCEPS		\$23.54
Invoice	82276143	9/22/2016			
Cash Payment	E 150-5231-5311	Supplies	ONDANSETRON		\$35.00
Invoice	82274595	9/21/2016			
Cash Payment	E 150-5231-5311	Supplies	FORCEPS		\$3.22
Invoice	82277549	9/23/2016			

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Transaction Date	9/28/2016	Citizens	111000	Total	\$590.36
Refer	76620	<i>BUELOW, VETTER, BUIKEMA, OLS</i>	-		
Cash Payment	E 150-5221-5219	Professional Services	FD GENERAL MATTERS		\$605.00
Invoice	5566-10987	9/23/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$605.00
Refer	76621	<i>CERTIFIED LABORATORIES</i>	-		
Cash Payment	E 100-5521-5311	Supplies	STING-XPRO AEROSOL		\$140.85
Invoice	2451894	9/15/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$140.85
Refer	76622	<i>CHIEF</i>	-		
Cash Payment	E 100-5212-5811	Equipment (non-Capitaliz	OXYGEN TANKS FOR NEW SQUADS		\$168.47
Invoice	229832	9/12/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$168.47
Refer	76623	<i>D. LA LICATA CONCRETE INC.</i>	-		
Cash Payment	E 100-5341-5395	Repairs & Maintenance	SIDEWALK PROGRAM		\$18,000.00
Invoice	091516	9/15/2016			
Cash Payment	E 610-6452-6652	Maintenance-Services	DRAKE CT		\$2,000.00
Invoice	091516	9/15/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$20,000.00
Refer	76624	<i>DIGITAL ALLY</i>	-		
Cash Payment	E 100-5212-5395	Repairs & Maintenance	RADAR CABLE		\$160.00
Invoice	1088525	9/9/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$160.00
Refer	76625	<i>EBIX</i>	-		
Cash Payment	E 150-5231-5219	Professional Services	DEPOSITS		\$3,909.89
Invoice	7420	9/6/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$3,909.89
Refer	76626	<i>ELECTION SYSTEMS & SOFTWARE</i>	-		
Cash Payment	E 100-5144-5219	Professional Services	SOFTWARE		\$595.00
Invoice	983139	9/14/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$595.00
Refer	76627	<i>ELKHORN CHEMICAL</i>	-		
Cash Payment	E 150-5221-5395	Repairs & Maintenance	FLOOR PAD		\$26.60
Invoice	579379	9/15/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$26.60
Refer	76628	<i>EMERGENCY APPARATUS</i>	-		
Cash Payment	E 150-5222-5395	Repairs & Maintenance	3463 NFPA PUMP TEST/SERVICE		\$645.47
Invoice	88648	9/8/2016			
Cash Payment	E 150-5222-5395	Repairs & Maintenance	3471 NFPA PUMP TEST/SERVICE		\$679.97
Invoice	88645	9/8/2016			
Cash Payment	E 150-5222-5395	Repairs & Maintenance	3461 NFPA PUMP TEST/SERVICE		\$1,809.17
Invoice	88646	9/8/2016			
Cash Payment	E 150-5222-5395	Repairs & Maintenance	3462 NFPA PUMP TEST/SERVICE		\$1,134.63
Invoice	88647	9/8/2016			
Cash Payment	E 150-5222-5395	Repairs & Maintenance	3462 REPAIRS		\$1,063.30
Invoice	88907	9/13/2016			

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Cash Payment	E 150-5222-5395	Repairs & Maintenance	3463 REPAIRS						\$1,191.82
Invoice	88908			9/13/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$6,524.36
Refer	76629	EXCEL BUILDING SERVICES		-					
Cash Payment	E 100-5211-5394	Bldg Repairs & Maintena	SEPTEMBER CLEANING						\$975.00
Invoice	2656			9/13/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$975.00
Refer	76630	FAHRNER ASPHALT SEALERS		-					
Cash Payment	E 480-5700-5840	Street Pavement Mgmt	MICROSURFACING						\$17,993.00
Invoice	36339			8/31/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$17,993.00
Refer	76631	FOREMOST PROMOTIONS		-					
Cash Payment	E 150-5221-5313	Fire Prevention Materials	PROMO ITEMS						\$93.93
Invoice	360062			9/13/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$93.93
Refer	76632	GARDEN PARTY FLORIST		-					
Cash Payment	E 100-5111-5219	Professional Services	HILL FLOWERS						\$150.00
Invoice	63936			9/24/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$150.00
Refer	76633	GENESEEE AGGREGATE CORP		-					
Cash Payment	E 610-6451-6651	Maintenance-Mains	#1 STONE						\$445.19
Invoice	69075			9/17/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$445.19
Refer	76634	GENESEEE AGGREGATE TRUCKIN		-					
Cash Payment	E 610-6451-6651	Maintenance-Mains	HAULING CHARGE						\$328.75
Invoice	22199			9/17/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$328.75
Refer	76635	HAWKINS WATER TREATMENT		-					
Cash Payment	E 620-8010-8240	Phosphorous Removal C	FERRIC CHLORIDE						\$963.54
Invoice	3950918			9/13/2016					
Cash Payment	E 610-6300-6631	Chemicals	AZONE/CHLORINE/CLEARITAS/SODIUM SILICATE						\$2,779.82
Invoice	3950936			9/13/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$3,743.36
Refer	76636	JEFFERSON FIRE & SAFETY		-					
Cash Payment	E 150-5222-5395	Repairs & Maintenance	AIRPAK REPAIR						\$21.20
Invoice	229889			9/12/2016					
Cash Payment	E 150-5222-5395	Repairs & Maintenance	CYLINDER REPAIR/PARTS						\$234.40
Invoice	229888			9/12/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$255.60
Refer	76637	JOHNS DISPOSAL		-					
Cash Payment	E 410-5140-5219	Professional Services	DPW						\$755.50
Invoice	88905			9/14/2016					
Cash Payment	E 410-5140-5220	Contractual Services	GARBAGE						\$20,839.50
Invoice	89754			9/23/2016					

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Cash Payment	E 410-5140-5310 Outside Services	RECYCLE			\$12,622.50
Invoice 89754	9/23/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$34,217.50
Refer	76638	MATERIALS DISTRIBUTION SERVI	-		
Cash Payment	E 100-5211-5311 Supplies	OFFICE SUPPLIES			\$19.58
Invoice 08/16MD07538	9/12/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$19.58
Refer	76639	MUKWONAGO CHAMBER OF COM	-		
Cash Payment	G 100-244000 Due to Chamber-Room Tax	HOTEL ROOM TAX			\$2,447.10
Invoice AUG 2016	9/15/2016				
Cash Payment	G 100-244000 Due to Chamber-Room Tax	HOTEL ROOM TAX			\$3,845.15
Invoice JULY 2016	9/15/2016				
Cash Payment	G 100-244000 Due to Chamber-Room Tax	HOTEL ROOM TAX			\$2,377.33
Invoice JUNE 2016	9/15/2016				
Cash Payment	G 100-244000 Due to Chamber-Room Tax	HOTEL ROOM TAX			\$2,043.36
Invoice MAY 2016	9/15/2016				
Cash Payment	G 100-244000 Due to Chamber-Room Tax	HOTEL ROOM TAX			\$1,225.45
Invoice APRIL 2016	9/15/2016				
Cash Payment	G 100-244000 Due to Chamber-Room Tax	HOTEL ROOM TAX			\$707.83
Invoice MARCH 2016	9/15/2016				
Cash Payment	G 100-244000 Due to Chamber-Room Tax	HOTEL ROOM TAX			\$705.49
Invoice FEB 2016	9/15/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$13,351.71
Refer	76640	MUKWONAGO FIRE DEPT	-		
Cash Payment	G 720-250015 Due to Fire/Ambulance	OCTOBER TAX			\$17,500.00
Invoice OCT 6	10/6/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$17,500.00
Refer	76641	NEENAH FOUNDRY	-		
Cash Payment	E 620-8030-8310 Maint-Collection System	LID/ADJUSTING RING			\$374.00
Invoice 188755	9/19/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$374.00
Refer	76642	NEXTEL WIRELESS SOLUTIONS	-		
Cash Payment	E 430-5700-5711 Police Dept Capital Equi	EQUIPMENT FOR RADIO VOTED SYSTEM			\$1,785.64
Invoice 6	5/29/2016				
Cash Payment	E 430-5700-5718 Village-wide Capital Ben	SERVER			\$499.00
Invoice 15	8/17/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$2,284.64
Refer	76643	NFPA	-		
Cash Payment	E 150-5221-5313 Fire Prevention Materials	PROMO ITEMS			\$872.18
Invoice 5659848	9/9/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$872.18
Refer	76644	RJ THOMAS MFG CO	-		
Cash Payment	E 340-5890-5806 Donated Fund Expenditu	PARK BENCHES			\$1,800.00
Invoice 187821	9/13/2016				
Cash Payment	E 100-5521-5311 Supplies	PARK BENCHES			\$1,966.00
Invoice 187821	9/13/2016				

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Current Period: October 2016

Transaction Date	9/28/2016	Citizens	111000	Total	\$3,766.00
Refer	76645	QUILL CORPORATION	-		
Cash Payment	E 150-5221-5311	Supplies	SUPPLIES		\$69.85
Invoice	9264203	9/19/2016			
Cash Payment	E 100-5142-5311	Supplies	OFFICE SUPPLIES		\$53.97
Invoice	8974560	9/8/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$123.82
Refer	76646	RAJSKI LINDSAY	-		
Cash Payment	E 150-5232-5335	Training & Travel	TUITION REIMBURSE		\$100.00
Invoice	2016143377	8/16/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$100.00
Refer	76647	RICOH AMERICAS CORPORATION	-		
Cash Payment	E 150-5221-5311	Supplies	OCTOBER 2016		\$104.28
Invoice	21860407	9/16/2016			
Cash Payment	E 100-5142-5312	Printing	OCT 16		\$24.12
Invoice	21860408	9/16/2016			
Cash Payment	E 150-5221-5311	Supplies	OCT 16		\$22.38
Invoice	21860408	9/16/2016			
Cash Payment	E 220-5140-5312	Printing	OCT 16		\$1.72
Invoice	21860408	9/16/2016			
Cash Payment	E 410-5140-5312	Printing	OCT 16		\$3.44
Invoice	21860408	9/16/2016			
Cash Payment	E 440-5511-5312	Printing	OCT 16		\$8.61
Invoice	21860408	9/16/2016			
Cash Payment	E 500-5140-5312	Printing	OCT 16		\$1.72
Invoice	21860408	9/16/2016			
Cash Payment	E 610-6920-6930	Misc General Expenses	OCT 16		\$56.82
Invoice	21860408	9/16/2016			
Cash Payment	E 620-8400-8560	Misc General Expense	OCT 16		\$53.38
Invoice	21860408	9/16/2016			
Cash Payment	E 100-5142-5312	Printing	COPY USAGE		\$22.10
Invoice	5044439337	9/11/2016			
Cash Payment	E 150-5221-5311	Supplies	COPY USAGE		\$20.53
Invoice	5044439337	9/11/2016			
Cash Payment	E 220-5140-5312	Printing	COPY USAGE		\$1.58
Invoice	5044439337	9/11/2016			
Cash Payment	E 410-5140-5312	Printing	COPY USAGE		\$3.16
Invoice	5044439337	9/11/2016			
Cash Payment	E 440-5511-5312	Printing	COPY USAGE		\$7.90
Invoice	5044439337	9/11/2016			
Cash Payment	E 500-5140-5312	Printing	COPY USAGE		\$1.58
Invoice	5044439337	9/11/2016			
Cash Payment	E 610-6920-6930	Misc General Expenses	COPY USAGE		\$52.11
Invoice	5044439337	9/11/2016			
Cash Payment	E 620-8400-8560	Misc General Expense	COPY USAGE		\$48.96
Invoice	5044439337	9/11/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$434.39
Refer	76648	SAFELITE FULFILLMENT INC	-		

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Cash Payment	E 100-5212-5395	Repairs & Maintenance	REPLACE BIRD DAMAGE						\$310.89
Invoice	495672			9/3/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$310.89
Refer	76649	SHERWIN-WILLIAMS	-						
Cash Payment	E 100-5324-5395	Repairs & Maintenance	CABLE						\$41.90
Invoice	74-6			9/14/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$41.90
Refer	76650	TKK ELECTRONICS	-						
Cash Payment	E 150-5231-5811	Equipment (non-Capitaliz	F-150 ALUMINUM BODY						\$670.00
Invoice	13651			9/20/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$670.00
Refer	76651	TOPLINE PROMOTIONS	-						
Cash Payment	E 100-5211-5346	Clothing Allowance	LADUE UNIFORM						\$140.00
Invoice	2284			9/20/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$140.00
Refer	76652	TRACTOR SUPPLY CREDIT PLAN	-						
Cash Payment	E 620-8030-8310	Maint-Collection System	CHALK PAINT						\$8.98
Invoice	299503			9/23/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$8.98
Refer	76653	VERIZON WIRELESS	-						
Cash Payment	E 100-5323-5225	Telephone	CELL PHONES						\$124.89
Invoice	9772021899			9/13/2016					
Cash Payment	E 620-8010-8270	Operation Supply/Expen	CELL PHONES						\$158.85
Invoice	9772021896			9/13/2016					
Cash Payment	E 610-6920-6921	Office Supplies & Expen	CELL PHONES						\$205.47
Invoice	9772021895			9/13/2016					
Cash Payment	E 150-5221-5225	Telephone	CELL PHONES						\$465.05
Invoice	9771951527			9/12/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$954.26
Refer	76654	VILLAGE OF MUKWONAGO	-						
Cash Payment	E 610-6920-6408	Taxes - Village	OCTOBER 2016 TAX						\$30,000.00
Invoice	OCT 16			10/6/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$30,000.00
Refer	76655	WANASEK CORP	-						
Cash Payment	G 610-134500	T&D Services	216 MCKENZIE ST						\$2,534.77
Invoice	6285			9/14/2016					
Cash Payment	E 610-6452-6652	Maintenance-Services	633 MINORS DR						\$5,240.26
Invoice	6287			9/14/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$7,775.03
Refer	76656	WAUKESHA CTY TREASURER	-						
Cash Payment	E 100-5212-5219	Professional Services	INMATE BILLING						\$132.96
Invoice	2016-00000170			9/8/2016					
Transaction Date	9/28/2016		Citizens		111000		Total		\$132.96
Refer	76657	WAUKESHA MEMORIAL HOSPITAL	-						
Cash Payment	E 150-5231-5311	Supplies	AUGUST 2016 SUPPLIES						\$422.60
Invoice	118508			9/14/2016					

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Transaction Date	9/28/2016	Citizens	111000	Total	\$422.60
Refer	76658	WE ENERGIES MLWAUKEE	-		
Cash Payment	E 100-5160-5222	Electric	915 MAIN		\$17.33
Invoice	377-9/20/16	9/20/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$17.33
Refer	76667	DYNAMIC AWARDS	-		
Cash Payment	E 100-5521-5311	Supplies	PLAQUES		\$80.00
Invoice	11841	9/25/2016			
Transaction Date	9/29/2016	Citizens	111000	Total	\$80.00
Refer	76668	HAHN ACE HARDEWARE	-		
Cash Payment	E 620-8010-8330	Maint-Treatment/Dispos	PARTS		\$53.32
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 150-5222-5395	Repairs & Maintenance	FASTENERS/FILLER CAP		\$6.69
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 150-5221-5311	Supplies	CLEANERS/LP GAS		\$138.49
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5212-5395	Repairs & Maintenance	FASTENERS/VELCRO		\$27.16
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5160-5311	Supplies	KEYS		\$11.20
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5348-5311	Supplies	STRETCH FILM		\$19.79
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5323-5311	Supplies	FUNNEL CARABINER HOOK		\$30.89
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5521-5311	Supplies	LIGHTS/BENCH BOLTS/FASTENERS/PLUNGER/WASP SPRAY		\$32.33
Invoice	SEPT 16	9/30/2016			
Transaction Date	9/29/2016	Citizens	111000	Total	\$319.87
Refer	76669	MILWAUKEE TRACTOR & EQUIPM	-		
Cash Payment	E 100-5324-5395	Repairs & Maintenance	TIGER TRACTOR PARTS		\$236.23
Invoice	376985	9/9/2016			
Transaction Date	9/29/2016	Citizens	111000	Total	\$236.23
Refer	76670	PROVEN POWER INC	-		
Cash Payment	E 100-5324-5395	Repairs & Maintenance	RAKE TINE BANNERMAN		\$327.91
Invoice	02-199118	9/9/2016			
Transaction Date	9/29/2016	Citizens	111000	Total	\$327.91
Refer	76671	VELOCITY	-		
Cash Payment	E 100-5142-5395	Repairs & Maintenance	SERVER PROJECT		\$2,251.00
Invoice	20160122	9/26/2016			
Cash Payment	E 430-5700-5718	Village-wide Capital Ben	SERVER PROJECT		\$6,825.00
Invoice	20160121	9/26/2016			
Transaction Date	9/29/2016	Citizens	111000	Total	\$9,076.00
Refer	76677	HIPPENMEYER, REILLY	-		
Cash Payment	E 100-5130-5219	Professional Services	MISC MATTERS		\$2,194.50
Invoice	43245	9/30/2016			
Cash Payment	E 610-6920-6923	Outside Services Employ	STREAM BANK STAB		\$396.00
Invoice	43246	9/30/2016			

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Cash Payment	E 150-5221-5219 Professional Services	FD			\$82.50
Invoice 43247	9/30/2016				
Cash Payment	G 100-211425 Developer Escrow	ORCHARDS			\$165.00
Invoice 43248	9/30/2016		Project D00011		
Cash Payment	E 200-5130-5219 Professional Services	CHAPMAN PROP			\$272.25
Invoice 43249	9/30/2016		Project EDC006		
Cash Payment	G 100-211425 Developer Escrow	PREMIER			\$33.00
Invoice 43250	9/30/2016		Project D00002		
Cash Payment	E 100-5130-5219 Professional Services	LYNCH REDEV//AMATO LEASE			\$198.00
Invoice 43251	9/30/2016				
Cash Payment	E 150-5221-5219 Professional Services	AMB ACCIDENT			\$16.50
Invoice 43252	9/30/2016				
Cash Payment	E 100-5130-5219 Professional Services	PROSECUTION			\$1,204.00
Invoice 43199-10	9/30/2016				
Transaction Date	9/30/2016	Citizens	111000	Total	\$4,561.75
Refer	76678 KUNKEL ENGINEERING GROUP	-			
Cash Payment	E 220-5335-5219 Professional Services	MISC ENGINEERING			\$300.00
Invoice 171599	9/16/2016				
Transaction Date	9/30/2016	Citizens	111000	Total	\$300.00

Fund Summary

	111000 Citizens
100 GENERAL FUND	\$45,547.54
150 FIRE/AMBULANCE FUND	\$15,412.02
200 COMMUNITY DEVELOPMENT FUND	\$272.25
220 TID#3 - GENERAL	\$303.30
340 VILLAGE DESIGNATED FUND	\$1,800.00
410 RECYCLING FUND	\$34,224.10
430 CAPITAL EQUIPMENT FUND	\$9,109.64
440 LIBRARY FUND	\$16.51
480 CAPITAL IMPROVEMENT FUND	\$17,993.00
500 STORM WATER UTILITY	\$3.30
610 WATER UTILITY FUND	\$46,094.19
620 SEWER UTILITY FUND	\$1,661.03
720 TAX ESCROW AGENCY FUND	\$17,500.00
	<u>\$189,936.88</u>

Pre-Written Checks	\$0.00
Checks to be Generated by the Computer	\$189,936.88
Total	\$189,936.88

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Current Period: September 2016

Batch Name	M-9-2016-1	User Dollar Amt	\$173,150.23		
Payments		Computer Dollar Amt	\$173,150.23		
				\$0.00	In Balance
Refer	76603 FRANKLIN MUNICIPAL COURT	Ck# 020676	9/7/2016		
Cash Payment	G 100-233200 Court Partial Payments	JONATHAN ROSARIO-MURILLO	C6618614		\$79.90
Invoice	C6618614		9/7/2016		
Transaction Date	9/26/2016	Citizens	111000	Total	\$79.90
Refer	76604 TOWN OF MUKWONAGO	Ck# 020677	9/7/2016		
Cash Payment	G 100-233200 Court Partial Payments	MICHELLE ANNY DW8132KRB6			\$829.00
Invoice	DW8132KRB6		9/7/2016		
Transaction Date	9/26/2016	Citizens	111000	Total	\$829.00
Refer	76605 VANTAGEPOINT TRANSFER AGEN	Ck# 020809	9/9/2016		
Cash Payment	G 100-215250 Deferred Compensation	P/R ENDING 9/2/16			\$1,657.99
Invoice	9/2		9/9/2016		
Cash Payment	G 150-215250 Deferred Compensation	P/R ENDING 9/2/16			\$34.38
Invoice	9/2		9/9/2016		
Cash Payment	G 220-215250 Deferred Compensation	P/R ENDING 9/2/16			\$29.03
Invoice	9/2		9/9/2016		
Cash Payment	G 410-215250 Deferred Compensation	P/R ENDING 9/2/16			\$36.94
Invoice	9/2		9/9/2016		
Cash Payment	G 440-215250 Deferred Compensation	P/R ENDING 9/2/16			\$351.26
Invoice	9/2		9/9/2016		
Cash Payment	G 500-215250 Deferred Compensation	P/R ENDING 9/2/16			\$14.43
Invoice	9/2		9/9/2016		
Cash Payment	G 610-215250 Deferred Compensation	P/R ENDING 9/2/16			\$389.22
Invoice	9/2		9/9/2016		
Cash Payment	G 620-215250 Deferred Compensation	P/R ENDING 9/2/16			\$237.34
Invoice	9/2		9/9/2016		
Transaction Date	9/26/2016	Citizens	111000	Total	\$2,750.59
Refer	76606 POSTMASTER	Ck# 020810	9/19/2016		
Cash Payment	E 610-6920-6921 Office Supplies & Expen	POSTAGE FOR WOATER REPORT MAILING3			\$527.88
Invoice	2016 WATER		9/19/2016		
Transaction Date	9/26/2016	Citizens	111000	Total	\$527.88
Refer	76607 MINNESOTA LIFE INSURANCE	Ck# 020898	9/21/2016		
Cash Payment	G 100-215300 Insurance Payable	OCTOBER PREMIUM			\$853.33
Invoice	OCTOBER 16		9/21/2016		
Cash Payment	G 150-215300 Insurance Payable	OCTOBER PREMIUM			\$102.03
Invoice	OCTOBER 16		9/21/2016		
Cash Payment	G 220-215300 Insurance Payable	OCTOBER PREMIUM			\$4.51
Invoice	OCTOBER 16		9/21/2016		
Cash Payment	G 410-215300 Insurance Payable	OCTOBER PREMIUM			\$11.73
Invoice	OCTOBER 16		9/21/2016		
Cash Payment	G 500-215300 Insurance Payable	OCTOBER PREMIUM			\$6.00
Invoice	OCTOBER 16		9/21/2016		
Cash Payment	G 610-215300 Insurance Payable	OCTOBER PREMIUM			\$72.13
Invoice	OCTOBER 16		9/21/2016		

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Cash Payment G 620-215300 Insurance Payable OCTOBER PREMIUM \$55.87					
Invoice OCTOBER 16 9/21/2016					
Cash Payment G 440-215300 Insurance Payable OCTOBER PREMIUM \$84.25					
Invoice OCTOBER 16 9/21/2016					
Transaction Date	9/26/2016	Citizens	111000	Total	\$1,189.85
Refer	76608 VANTAGEPOINT TRANSFER AGEN		Ck# 020899	9/23/2016	
Cash Payment G 100-215250 Deferred Compensation P/R ENDING 9/16/16 \$1,640.19					
Invoice 9/16 9/23/2016					
Cash Payment G 150-215250 Deferred Compensation P/R ENDING 9/16/16 \$33.29					
Invoice 9/16 9/23/2016					
Cash Payment G 220-215250 Deferred Compensation P/R ENDING 9/16/16 \$27.20					
Invoice 9/16 9/23/2016					
Cash Payment G 410-215250 Deferred Compensation P/R ENDING 9/16/16 \$36.94					
Invoice 9/16 9/23/2016					
Cash Payment G 440-215250 Deferred Compensation P/R ENDING 9/16/16 \$351.94					
Invoice 9/16 9/23/2016					
Cash Payment G 500-215250 Deferred Compensation P/R ENDING 9/16/16 \$14.43					
Invoice 9/16 9/23/2016					
Cash Payment G 610-215250 Deferred Compensation P/R ENDING 9/16/16 \$383.05					
Invoice 9/16 9/23/2016					
Cash Payment G 620-215250 Deferred Compensation P/R ENDING 9/16/16 \$211.90					
Invoice 9/16 9/23/2016					
Transaction Date	9/27/2016	Citizens	111000	Total	\$2,698.94
Refer	76609 MUKWONAGO PROFESSIONAL PO		Ck# 020900	9/23/2016	
Cash Payment G 100-215500 Union Dues Payable SEPTEMBER 2016 DUES \$462.00					
Invoice SEPT 16 9/23/2016					
Transaction Date	9/27/2016	Citizens	111000	Total	\$462.00
Refer	76610 MUKWONAGO PROFESSIONAL FI		Ck# 020901	9/23/2016	
Cash Payment G 150-215500 Union Dues Payable SEPTEMBER 2016 DUES \$270.00					
Invoice SEPT 16 9/23/2016					
Transaction Date	9/27/2016	Citizens	111000	Total	\$270.00
Refer	76611 VILLAGE OF MUKWONAGO MRA		Ck# 020902	9/23/2016	
Cash Payment G 100-215350 Flexible Spending Contributi SEPTEMBER 2016 \$1,091.99					
Invoice SEPT 16 9/23/2016					
Cash Payment G 150-215350 Flexible Spending Contributi SEPTEMBER 2016 \$221.97					
Invoice SEPT 16 9/23/2016					
Cash Payment G 220-215350 Flexible Spending Contributi SEPTEMBER 2016 \$10.35					
Invoice SEPT 16 9/23/2016					
Cash Payment G 410-215350 Flexible Spending Contributi SEPTEMBER 2016 \$5.76					
Invoice SEPT 16 9/23/2016					
Cash Payment G 440-215350 Flexible Spending Contributi SEPTEMBER 2016 \$1.67					
Invoice SEPT 16 9/23/2016					
Cash Payment G 500-215350 Flexible Spending Contributi SEPTEMBER 2016 \$3.24					
Invoice SEPT 16 9/23/2016					
Cash Payment G 610-215350 Flexible Spending Contributi SEPTEMBER 2016 \$47.08					
Invoice SEPT 16 9/23/2016					
Cash Payment G 620-215350 Flexible Spending Contributi SEPTEMBER 2016 \$12.92					
Invoice SEPT 16 9/23/2016					

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Transaction Date	9/27/2016	Citizens	111000	Total	\$1,394.98
Refer	76612 <u>AFLAC</u>	Ck# 020903	9/23/2016		
Cash Payment	G 100-215300 Insurance Payable	SEPTEMBER 2016			\$301.16
Invoice	18854 9/23/2016				
Cash Payment	G 150-215300 Insurance Payable	SEPTEMBER 2016			\$206.39
Invoice	18854 9/23/2016				
Cash Payment	G 220-215300 Insurance Payable	SEPTEMBER 2016			\$0.64
Invoice	18854 9/23/2016				
Cash Payment	G 410-215300 Insurance Payable	SEPTEMBER 2016			\$2.38
Invoice	18854 9/23/2016				
Cash Payment	G 610-215300 Insurance Payable	SEPTEMBER 2016			\$129.42
Invoice	18854 9/23/2016				
Cash Payment	G 620-215300 Insurance Payable	SEPTEMBER 2016			\$65.32
Invoice	18854 9/23/2016				
Transaction Date	9/27/2016	Citizens	111000	Total	\$705.31
Refer	76659 <u>MUKWONAGO POLICE DEPT</u>	Ck# 020904	9/27/2016		
Cash Payment	G 100-233200 Court Partial Payments	EVAN LEITERMANN N1386713/N1386714			\$1,508.00
Invoice	N1386713 9/27/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$1,508.00
Refer	76660 <u>LEITERMANN EVAN</u>	Ck# 020905	9/27/2016		
Cash Payment	G 100-233200 Court Partial Payments	OVERPAYMENT N1386713/N1386714			\$62.00
Invoice	N1386713 9/27/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$62.00
Refer	76661 <u>GREAT WEST RETIREMENT SERV</u>	Ck# 006001	9/9/2016		
Cash Payment	G 100-215250 Deferred Compensation	P/R ENDING 9/2/2016			\$803.48
Invoice	9/2 9/9/2016				
Cash Payment	G 150-215250 Deferred Compensation	P/R ENDING 9/2/2016			\$86.26
Invoice	9/2 9/9/2016				
Cash Payment	G 610-215250 Deferred Compensation	P/R ENDING 9/2/2016			\$100.63
Invoice	9/2 9/9/2016				
Cash Payment	G 620-215250 Deferred Compensation	P/R ENDING 9/2/2016			\$100.63
Invoice	9/2 9/9/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$1,091.00
Refer	76662 <u>PAYROLLDATA.COM</u>	Ck# 006002	9/30/2016		
Cash Payment	E 100-5142-5399 Other	SEPTEMBER ADMIN FEES			\$259.30
Invoice	SEPTEMBER 16 9/30/2016				
Cash Payment	E 150-5221-5219 Professional Services	SEPTEMBER ADMIN FEES			\$181.70
Invoice	SEPTEMBER 16 9/30/2016				
Cash Payment	E 440-5511-5399 Other	SEPTEMBER ADMIN FEES			\$181.70
Invoice	SEPTEMBER 16 9/30/2016				
Cash Payment	E 610-6920-6930 Misc General Expenses	SEPTEMBER ADMIN FEES			\$181.70
Invoice	SEPTEMBER 16 9/30/2016				
Cash Payment	E 620-8400-8560 Misc General Expense	SEPTEMBER ADMIN FEES			\$181.70
Invoice	SEPTEMBER 16 9/30/2016				
Transaction Date	9/28/2016	Citizens	111000	Total	\$986.10
Refer	76663 <u>GREAT WEST RETIREMENT SERV</u>	Ck# 006003	9/23/2016		

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Cash Payment	G 100-215250	Deferred Compensation	P/R ENDING 9/16/16	\$803.48
Invoice	9/16	9/23/2016		
Cash Payment	G 150-215250	Deferred Compensation	P/R ENDING 9/16/16	\$86.26
Invoice	9/16	9/23/2016		
Cash Payment	G 610-215250	Deferred Compensation	P/R ENDING 9/16/16	\$100.63
Invoice	9/16	9/23/2016		
Cash Payment	G 620-215250	Deferred Compensation	P/R ENDING 9/16/16	\$100.63
Invoice	9/16	9/23/2016		
Transaction Date	9/28/2016	Citizens	111000	Total \$1,091.00
Refer	76664	WI RETIREMENT SYSTEM	Ck# 006004	9/27/2016
Cash Payment	G 100-215200	Retirement	AUGUST PAYMENTS	\$22,804.87
Invoice	AUGUST 16	9/27/2016		
Cash Payment	G 150-215200	Retirement	AUGUST PAYMENTS	\$6,565.56
Invoice	AUGUST 16	9/27/2016		
Cash Payment	G 220-215200	Retirement	AUGUST PAYMENTS	\$316.68
Invoice	AUGUST 16	9/27/2016		
Cash Payment	G 410-215200	Retirement	AUGUST PAYMENTS	\$231.72
Invoice	AUGUST 16	9/27/2016		
Cash Payment	G 440-215200	Retirement	AUGUST PAYMENTS	\$3,952.82
Invoice	AUGUST 16	9/27/2016		
Cash Payment	G 500-215200	Retirement	AUGUST PAYMENTS	\$63.16
Invoice	AUGUST 16	9/27/2016		
Cash Payment	G 610-215200	Retirement	AUGUST PAYMENTS	\$2,353.38
Invoice	AUGUST 16	9/27/2016		
Cash Payment	G 620-215200	Retirement	AUGUST PAYMENTS	\$1,512.38
Invoice	AUGUST 16	9/27/2016		
Cash Payment	G 100-215200	Retirement	AUGUST PAYMENTS	-\$0.02
Invoice	AUGUST 16	9/27/2016		
Transaction Date	9/28/2016	Citizens	111000	Total \$37,800.55
Refer	76665	EMPLOYEE TRUST FUNDS	Ck# 006005	9/23/2016
Cash Payment	G 100-215300	Insurance Payable	OCTOBER PREMIUM	\$47,614.97
Invoice	OCT 16	9/23/2016		
Cash Payment	G 150-215300	Insurance Payable	OCTOBER PREMIUM	\$6,945.03
Invoice	OCT 16	9/23/2016		
Cash Payment	G 220-215300	Insurance Payable	OCTOBER PREMIUM	\$229.08
Invoice	OCT 16	9/23/2016		
Cash Payment	G 410-215300	Insurance Payable	OCTOBER PREMIUM	\$363.04
Invoice	OCT 16	9/23/2016		
Cash Payment	G 440-215300	Insurance Payable	OCTOBER PREMIUM	\$4,504.26
Invoice	OCT 16	9/23/2016		
Cash Payment	G 500-215300	Insurance Payable	OCTOBER PREMIUM	\$138.52
Invoice	OCT 16	9/23/2016		
Cash Payment	G 610-215300	Insurance Payable	OCTOBER PREMIUM	\$2,314.06
Invoice	OCT 16	9/23/2016		
Cash Payment	G 620-215300	Insurance Payable	OCTOBER PREMIUM	\$1,505.04
Invoice	OCT 16	9/23/2016		
Transaction Date	9/28/2016	Citizens	111000	Total \$63,614.00
Refer	76666	WE ENERGIES MLWAUKEE	Ck# 006006	9/30/2016

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Cash Payment	E 100-5211-5222 Electric	FLASHERS	\$9.70
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5211-5222 Electric	PD GARAGE	\$63.73
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5323-5222 Electric	DPW ELECT	\$337.86
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5323-5224 Gas	DPW GAS	\$26.35
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5342-5222 Electric	STREETLIGHTS	\$10,976.63
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5342-5222 Electric	STREET LIGHTS	\$99.36
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5342-5222 Electric	SCH CROSS LIGHTS	\$15.71
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5512-5222 Electric	MUSEUM	\$437.57
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5521-5222 Electric	ANDREWS ST	\$103.84
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5521-5222 Electric	FIELD PARK	\$119.37
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5521-5222 Electric	FLD PRK BASEBALL LIGHTS	\$38.56
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5521-5222 Electric	PARKS	\$47.27
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5521-5222 Electric	CONSESSION BLDG	\$287.80
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5521-5222 Electric	PARKS	\$24.13
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5521-5222 Electric	FLD PRK SUMP PUMP	\$20.06
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5521-5222 Electric	PARKS	\$116.10
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 100-5521-5220 Contractual Services	MINIWAUKAN	\$42.36
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 440-5511-5224 Gas	LIB GAS	\$114.97
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 610-6200-6622 Fuel or Power Purchase	WELL #3 GAS	\$14.63
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 610-6200-6622 Fuel or Power Purchase	WELL #4 GAS	\$14.37
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 610-6200-6622 Fuel or Power Purchase	WELL #7	\$1,681.70
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 610-6200-6622 Fuel or Power Purchase	GREENWALD	\$40.47
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 610-6200-6622 Fuel or Power Purchase	TOWER	\$32.32
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 620-8020-8210 Pumping Power & Fuel	ATKINSON PUMP	\$342.04
Invoice	SEPT 16 9/30/2016		
Cash Payment	E 620-8020-8210 Pumping Power & Fuel	FOX RIVER VIEW	\$76.75
Invoice	SEPT 16 9/30/2016		

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Cash Payment	E 620-8020-8210 Pumping Power & Fuel	1224 RIVERTON			\$66.04
Invoice	SEPT 16	9/30/2016			
Transaction Date	9/28/2016	Citizens	111000	Total	\$15,149.69
Refer	76672 NORTH SHORE BANK FSB	Ck# 020906	9/29/2016		
Cash Payment	E 100-5241-5158 OPEB Payout	JOE HANKOVICH SICK TIME PAYOUT			\$33,537.28
Invoice	JOE H PAYOUT	9/29/2016			
Transaction Date	9/29/2016	Citizens	111000	Total	\$33,537.28
Refer	76673 TASC	Ck# 006007	9/26/2016		
Cash Payment	E 620-8400-8560 Misc General Expense	OCTOBER FLEX			\$15.63
Invoice	870973	9/24/2016			
Cash Payment	E 610-6920-6930 Misc General Expenses	OCTOBER FLEX			\$15.63
Invoice	870973	9/24/2016			
Cash Payment	E 440-5511-5399 Other	OCTOBER FLEX			\$26.05
Invoice	870973	9/24/2016			
Cash Payment	E 150-5221-5399 Other	OCTOBER FLEX			\$31.26
Invoice	870973	9/24/2016			
Cash Payment	E 100-5241-5399 Other	OCTOBER FLEX			\$15.63
Invoice	870973	9/24/2016			
Cash Payment	E 100-5211-5399 Other	OCTOBER FLEX			\$52.10
Invoice	870973	9/24/2016			
Cash Payment	E 100-5212-5399 Other	OCTOBER FLEX			\$57.31
Invoice	870973	9/24/2016			
Cash Payment	E 100-5213-5311 Supplies	OCTOBER FLEX			\$10.42
Invoice	870973	9/24/2016			
Cash Payment	E 100-5142-5399 Other	OCTOBER FLEX			\$26.05
Invoice	870973	9/24/2016			
Cash Payment	E 100-5323-5311 Supplies	OCTOBER FLEX			\$26.05
Invoice	870973	9/24/2016			
Transaction Date	9/29/2016	Citizens	111000	Total	\$276.13
Refer	76674 TASC	Ck# 006008	9/26/2016		
Cash Payment	E 620-8400-8560 Misc General Expense	HRA - OCT / DEC			\$27.00
Invoice	870375	9/24/2016			
Cash Payment	E 610-6920-6930 Misc General Expenses	HRA - OCT / DEC			\$40.50
Invoice	870375	9/24/2016			
Cash Payment	E 440-5511-5399 Other	HRA - OCT / DEC			\$27.00
Invoice	870375	9/24/2016			
Cash Payment	E 150-5221-5399 Other	HRA - OCT / DEC			\$67.50
Invoice	870375	9/24/2016			
Cash Payment	E 100-5241-5399 Other	HRA - OCT / DEC			\$40.50
Invoice	870375	9/24/2016			
Cash Payment	E 100-5211-5399 Other	HRA - OCT / DEC			\$121.50
Invoice	870375	9/24/2016			
Cash Payment	E 100-5212-5399 Other	HRA - OCT / DEC			\$121.50
Invoice	870375	9/24/2016			
Cash Payment	E 100-5213-5311 Supplies	HRA - OCT / DEC			\$27.00
Invoice	870375	9/24/2016			
Cash Payment	E 100-5142-5399 Other	HRA - OCT / DEC			\$54.00
Invoice	870375	9/24/2016			

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Cash Payment	E 100-5323-5311 Supplies	HRA - OCT / DEC			\$67.50
Invoice	870375	9/24/2016			
Transaction Date	9/29/2016	Citizens	111000	Total	\$594.00
Refer	76675 HASLER MAILING SOLUTIONS	Ck# 006009	9/27/2016		
Cash Payment	E 100-5142-5315 Postage	POSTAGE			\$1,500.00
Invoice	9/27	9/27/2016			
Transaction Date	9/29/2016	Citizens	111000	Total	\$1,500.00
Refer	76676 JP MORGAN CHASE	Ck# 006010	9/30/2016		
Cash Payment	E 100-5213-5219 Professional Services	WI DOT - RENEWAL - #1646			\$76.28
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5211-5219 Professional Services	UNIFI - COPIER - #1646			\$83.33
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5211-5335 Training & Travel	VARIOUS - HOTEL/GAS- #1646			\$23.16
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5215-5335 Training & Travel	KALAHARI - CREDIT - #5772			-\$15.81
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5142-5311 Supplies	WALMART - SUPPLIES - #9283			\$14.48
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5160-5311 Supplies	WALMART - VACCUM - #9356			\$84.43
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5323-5311 Supplies	WALMART- OFFICE SUPPLIES - #9356			\$76.47
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5211-5395 Repairs & Maintenance	AMAZON - REPLACE TRANS PEDAL #9430			\$55.00
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5141-5335 Training & Travel	VARIOUS - MEAL/REGISTRATION - #3311			\$210.46
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5141-5399 Other	FREEMAN - #3311			\$132.00
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5142-5332 Mileage	VARIOUS - GAS/HOTEL - #8848			\$49.26
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5144-5332 Mileage	VARIOUS - GAS - #8848			\$60.41
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5144-5335 Training & Travel	VARIOUS - MEALS - #8848			\$66.87
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5142-5219 Professional Services	AMAZON PRIME MEMBER - #8848			\$99.91
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5141-5225 Telephone	GMAIL - #8848			\$21.60
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5241-5225 Telephone	GMAIL - #8848			\$10.80
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5142-5225 Telephone	GMAIL - #8848			\$14.40
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5323-5225 Telephone	GMAIL - #8848			\$7.20
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5111-5399 Other	GMAIL - #8848			\$25.19
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5632-5399 Other	GMAIL - #8848			\$3.59
Invoice	SEPT 16	9/30/2016			

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Cash Payment	E 100-5120-5399 Other	GMAIL - #8848	\$3.59		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 100-5241-5399 Other	AMAZON - MANUALS - #9184	\$118.21		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5232-5311 Supplies	WALMART - SUPPLIES - #2334	\$25.35		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5232-5311 Supplies	WALMART - WATER/GIFT CARD - #2334	\$117.36		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5223-5311 Supplies	VARIOUS - REFRESHMENTS - #2334	\$84.13		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5221-5219 Professional Services	I/O SOLUTIONS - FORMS - #8764	\$180.00		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5233-5335 Training & Travel	J&BLEARNING - MANUALS - #0931	\$447.11		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5231-5395 Repairs & Maintenance	INTEGRIS - SUPPLIES - #0931	\$365.95		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5231-5811 Equipment (non-Capitaliz	TMS - LIFEPAK MOUNT - #0931	\$768.41		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5231-5311 Supplies	NEWEGG - SUPPLIES - #0931	\$147.44		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 410-5140-5335 Training & Travel	VARIOUS - MEALS - #8848	\$66.62		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 440-5511-5311 Supplies	APPROVED - #1900	\$176.18		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 440-5511-5315 Postage	APPROVED - #1900	\$7.95		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 440-5511-5328 Books	APPROVED - #1900	\$10.00		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 440-5511-5811 Equipment (non-Capitaliz	APPROVED - #1900	\$99.99		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 440-5890-5806 Donated Fund Expenditu	APPROVED - #1900	\$1,069.25		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 440-5511-5340 Digital Materials	APPROVED - #1900	\$50.00		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 610-6920-6933 Transportation Expenses	WIDOT - LICENSE - #9513	\$74.50		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 610-6920-6921 Office Supplies & Expen	OFFICE MAX - SUPPLIES - #9513	\$102.98		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 610-6920-6921 Office Supplies & Expen	GMAIL - #8848	\$10.79		
Invoice SEPT 16	9/30/2016				
Cash Payment	E 620-8400-8510 Office Supplies & Expen	GMAIL - #8848	\$7.19		
Invoice SEPT 16	9/30/2016				
Transaction Date	9/29/2016	Citizens	111000	Total	\$5,032.03

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Current Period: September 2016

Fund Summary

	111000 Citizens	
100 GENERAL FUND		\$130,415.71
150 FIRE/AMBULANCE FUND		\$16,967.38
220 TID#3 - GENERAL		\$617.49
410 RECYCLING FUND		\$755.13
440 LIBRARY FUND		\$11,009.29
500 STORM WATER UTILITY		\$239.78
610 WATER UTILITY FUND		\$8,627.07
620 SEWER UTILITY FUND		\$4,518.38
		<hr/>
		\$173,150.23

Pre-Written Checks	\$173,150.23
Checks to be Generated by the Computer	\$0.00
Total	<hr/>
	\$173,150.23

Vouchers Payable Cover Sheet

Payments batch AP10-2016-2	\$316,886.12
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Total for board approval:	\$316,886.12
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Payments

Current Period: October 2016

Batch Name	AP10-2016-2	User Dollar Amt	\$316,886.12		
	Payments	Computer Dollar Amt	\$316,886.12		
				\$0.00	In Balance
Refer	76679	ADKINS CONSTRUCTION	-		
Cash Payment	E 610-6451-6651	Maintenance-Mains	411 MAIN ST		\$3,885.00
Invoice	14499	9/26/2016			
Cash Payment	G 610-000108	CIP-Utility Mains Projects	1010 CTH NN		\$1,610.00
Invoice	14474	9/13/2016		Project W00004	
Cash Payment	G 620-000108	CIP-Utility Mains Projects	1010 CTH NN		\$35.00
Invoice	14474	9/13/2016		Project W00004	
Cash Payment	E 480-5700-5850	Multi-Use Trail	1010 CTH NN		\$105.00
Invoice	14474	9/13/2016		Project W00004	
Transaction Date	10/10/2016	Citizens	111000	Total	\$5,635.00
Refer	76680	AIRGAS NORTH CENTRAL	-		
Cash Payment	E 150-5231-5311	Supplies	TANK RENTAL		\$68.91
Invoice	9939328461	9/30/2016			
Cash Payment	E 150-5231-5311	Supplies	OXYGEN		\$506.75
Invoice	9055944917	9/29/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$575.66
Refer	76681	ALSCO	-		
Cash Payment	E 100-5323-5311	Supplies	DAMAGED CLOTHING		\$159.10
Invoice	1123736	10/5/2016			
Cash Payment	E 100-5323-5311	Supplies	UNIFORMS/TOWELS		\$257.72
Invoice	SEPT 2016	10/5/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$416.82
Refer	76682	BOUND TREE MEDICAL	-		
Cash Payment	E 150-5231-5311	Supplies	FORCEPS		\$6.44
Invoice	82284254	9/30/2016			
Cash Payment	E 150-5231-5311	Supplies	VASOSTRICT		\$287.94
Invoice	82291698	10/6/2016			
Cash Payment	E 150-5231-5311	Supplies	ARS FOR NEEDLE DECOMPRESSION/TAPE/VENTILATOR/ENDO TUBE/MASK		\$1,093.74
Invoice	82291697	10/6/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$1,388.12
Refer	76683	BRAUN THYSSEN KRUPP	-		
Cash Payment	E 100-5160-5219	Professional Services	4TH QTR SERVICE		\$169.06
Invoice	121128	10/1/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$169.06
Refer	76684	BROWN INDUSTRIES	-		
Cash Payment	E 100-5141-5398	Employee Recognition	LONGEVITY EMPLOYEE GIFTS		\$124.00
Invoice	117-01831	9/27/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$124.00
Refer	76685	BRUCE MUNICIPAL EQUIPMENT	-		
Cash Payment	E 100-5324-5395	Repairs & Maintenance	SWEEPER PARTS		\$92.65
Invoice	P01031	10/7/2016			

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Payments

Current Period: October 2016

Transaction Date	10/10/2016	Citizens	111000	Total	\$92.65
Refer	76686	C & M AUTO PARTS INC	-		
Cash Payment	E 150-5231-5395	Repairs & Maintenance	PARTS 3453		\$200.96
Invoice	6079-222920	8/29/2016			
Cash Payment	E 150-5222-5395	Repairs & Maintenance	ANTIFREEZE		\$166.66
Invoice	6079-223228	9/1/2016			
Cash Payment	E 100-5212-5395	Repairs & Maintenance	ANTIFREEZE		\$166.66
Invoice	6079-223228	9/1/2016			
Cash Payment	E 100-5324-5351	Motor Fuel & Oil	ANTIFREEZE		\$166.67
Invoice	6079-223228	9/1/2016			
Cash Payment	E 100-5212-5395	Repairs & Maintenance	OIL FILTER		\$3.19
Invoice	6079-223624	9/7/2016			
Cash Payment	E 100-5323-5395	Repairs & Maintenance	DIESEL KLEEN		\$9.99
Invoice	6079-224780	9/20/2016			
Cash Payment	E 150-5222-5395	Repairs & Maintenance	PADS/ROTORS		\$109.97
Invoice	6079-224978	9/22/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$824.10
Refer	76687	CLEAN MATS	-		
Cash Payment	E 100-5160-5219	Professional Services	SEPTEMBER MATS		\$74.00
Invoice	40031	10/1/2016			
Cash Payment	E 100-5211-5394	Bldg Repairs & Maintena	SEPTEMBER MATS		\$89.00
Invoice	40042	10/1/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$163.00
Refer	76688	DIMAGGIO, BRENDA	-		
Cash Payment	E 100-5211-5346	Clothing Allowance	REIMBURSE CLOTHING		\$63.35
Invoice	382483	9/29/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$63.35
Refer	76689	EBIX	-		
Cash Payment	E 150-5231-5395	Repairs & Maintenance	DEPOSITS		\$4,368.75
Invoice	7450	10/3/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$4,368.75
Refer	76690	FASTENAL COMPANY	-		
Cash Payment	E 100-5323-5311	Supplies	SUPPLIES		\$18.39
Invoice	WIMUK62628	9/22/2016			
Cash Payment	E 100-5348-5311	Supplies	SNOW SUPPLIES		\$198.74
Invoice	WIMUK62596	9/21/2016			
Cash Payment	E 610-6310-6635	Maintenance-Water Trea	BATTERIES		\$5.59
Invoice	WIMUK62606	9/21/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$222.72
Refer	76691	FOREMOST PROMOTIONS	-		
Cash Payment	E 150-5221-5313	Fire Prevention Materials	PROMO ITEMS		\$493.46
Invoice	363894	10/3/2016			
Cash Payment	E 150-5221-5313	Fire Prevention Materials	PROMO ITEMS		\$851.91
Invoice	363895	10/3/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$1,345.37
Refer	76692	GALLS INC	-		

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Payments

Current Period: October 2016

Cash Payment	E 100-5212-5811 Equipment (non-Capitaliz	RIOT/CROWD CONTROL				\$218.45
Invoice 6114600	9/23/2016					
Transaction Date	10/10/2016	Citizens	111000	Total		\$218.45
Refer	76693	GATEWAY TECHNICAL COLLEGE		-		
Cash Payment	E 620-8400-8541 Educational/Training Exp	SMITH TUITION				\$434.46
Invoice 21636	8/23/2016					
Transaction Date	10/10/2016	Citizens	111000	Total		\$434.46
Refer	76694	GENESEE AGGREGATE CORP		-		
Cash Payment	E 620-8010-8330 Maint-Treatment/Dispos	TORPEDO SAND				\$150.73
Invoice 69217	9/30/2016					
Cash Payment	E 610-6451-6651 Maintenance-Mains	#1 STONE				\$448.18
Invoice 69218	9/30/2016					
Transaction Date	10/10/2016	Citizens	111000	Total		\$598.91
Refer	76695	GENESEE AGGREGATE TRUCKIN		-		
Cash Payment	E 620-8010-8330 Maint-Treatment/Dispos	HAULING CHARGE				\$107.18
Invoice 22247	9/30/2016					
Cash Payment	E 610-6451-6651 Maintenance-Mains	HAULING CHARGE				\$282.69
Invoice 22248	9/30/2016					
Transaction Date	10/10/2016	Citizens	111000	Total		\$389.87
Refer	76696	GENESIS EXCAVATORS, INC.		-		
Cash Payment	G 610-000108 CIP-Utility Mains Projects	CTH NN WATER			Project W00004	\$15,785.78
Invoice 4	8/8/2016					
Cash Payment	G 620-000108 CIP-Utility Mains Projects	CTH NN WATER			Project W00004	\$343.17
Invoice 4	8/8/2016					
Cash Payment	E 480-5700-5850 Multi-Use Trail	CTH NN WATER			Project W00004	\$1,029.50
Invoice 4	8/8/2016					
Transaction Date	10/10/2016	Citizens	111000	Total		\$17,158.45
Refer	76697	HAWKINS WATER TREATMENT		-		
Cash Payment	E 620-8010-8240 Phosphorous Removal C	FERRIC CHLORIDE				\$1,097.30
Invoice 3957269	9/26/2016					
Cash Payment	E 620-8010-8240 Phosphorous Removal C	FERRIC CHLORIDE				\$944.61
Invoice 3953994	9/19/2016					
Cash Payment	E 620-8010-8240 Phosphorous Removal C	FERROUS CHLORIDE				\$2,942.63
Invoice 3953067	8/31/2016					
Cash Payment	E 620-8010-8240 Phosphorous Removal C	FERRIC CHLORIDE				\$571.38
Invoice 3959492	9/29/2016					
Cash Payment	E 610-6300-6631 Chemicals	AZONE/CHLORINE/CLEARITAS/SOLIUM SILICATE				\$1,780.00
Invoice 3962731	10/5/2016					
Transaction Date	10/10/2016	Citizens	111000	Total		\$7,335.92
Refer	76698	HD SUPPLY WATERWORKS		-		
Cash Payment	E 620-8030-8310 Maint-Collection System	PVC PIPES				\$276.16
Invoice G091007	9/16/2016					
Cash Payment	E 610-6452-6652 Maintenance-Services	PARTS				\$866.49
Invoice F989874	8/17/2016					
Cash Payment	E 610-6454-6654 Maintenance-Hydrants	STORZ W/CAP				\$154.44
Invoice F965033	8/12/2016					

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Current Period: October 2016

Cash Payment	E 610-6451-6651 Maintenance-Mains	FLUSHING ELBOW			\$170.77
Invoice F645621	6/10/2016				
Cash Payment	G 610-134600 T&D Meters	METER/SEAL			\$1,660.00
Invoice F593847	5/27/2016				
Cash Payment	E 610-6451-6651 Maintenance-Mains	CLAMP			\$552.72
Invoice F593847	5/27/2016				
Cash Payment	G 610-134600 T&D Meters	METERS			-\$3,700.00
Invoice F597516	6/1/2016				
Cash Payment	E 610-6451-6651 Maintenance-Mains	CLAMPS			\$2,040.00
Invoice G184736	9/27/2016				
Transaction Date	10/10/2016	Citizens	111000	Total	\$2,020.58
Refer	76699	HEARTLAND BUSINESS SYSTEMS	-		
Cash Payment	E 100-5142-5219 Professional Services	THREAT PREVENTION			\$77.91
Invoice 7960V3	9/23/2016				
Cash Payment	E 100-5211-5219 Professional Services	THREAT PREVENTION			\$173.23
Invoice 7960V3	9/23/2016				
Cash Payment	E 100-5323-5219 Professional Services	THREAT PREVENTION			\$173.22
Invoice 7960V3	9/23/2016				
Cash Payment	E 150-5221-5219 Professional Services	THREAT PREVENTION			\$173.23
Invoice 7960V3	9/23/2016				
Cash Payment	E 220-5140-5219 Professional Services	THREAT PREVENTION			\$1.74
Invoice 7960V3	9/23/2016				
Cash Payment	E 410-5140-5219 Professional Services	THREAT PREVENTION			\$1.74
Invoice 7960V3	9/23/2016				
Cash Payment	E 440-5511-5310 Outside Services	THREAT PREVENTION			\$3.48
Invoice 7960V3	9/23/2016				
Cash Payment	E 500-5140-5219 Professional Services	THREAT PREVENTION			\$1.74
Invoice 7960V3	9/23/2016				
Cash Payment	E 610-6920-6923 Outside Services Employ	THREAT PREVENTION			\$43.31
Invoice 7960V3	9/23/2016				
Cash Payment	E 620-8400-8560 Misc General Expense	THREAT PREVENTION			\$43.31
Invoice 7960V3	9/23/2016				
Transaction Date	10/10/2016	Citizens	111000	Total	\$692.91
Refer	76700	JEFFERSON FIRE & SAFETY	-		
Cash Payment	E 150-5222-5811 Equipment (non-Capitaliz	BOOTS			\$140.79
Invoice 230363	9/27/2016				
Cash Payment	E 150-5222-5395 Repairs & Maintenance	AIRPAK REPAIR			\$566.00
Invoice 230362	9/27/2016				
Transaction Date	10/10/2016	Citizens	111000	Total	\$706.79
Refer	76701	KBS OUTDOOR EQUIPMENT	-		
Cash Payment	E 620-8010-8213 Emergency Generator-F	CONTRACT SERVICE			\$50.00
Invoice 3793	9/29/2016				
Transaction Date	10/10/2016	Citizens	111000	Total	\$50.00
Refer	76702	MARSHALL-BOND PUMPS	-		
Cash Payment	E 620-8010-8330 Maint-Treatment/Dispos	URETHANE CV BALL			\$541.62
Invoice 38021.0	9/23/2016				
Transaction Date	10/10/2016	Citizens	111000	Total	\$541.62
Refer	76703	MARTENS PLBG & HTG INC	-		

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Payments

Current Period: October 2016

Cash Payment	R 100-4430-4433 Plumbing Permits	REFUND PLUMBING PERMIT FEE			\$100.00
Invoice 16135	10/4/2016				
Cash Payment	R 100-4600-4309 Other Fees	REFUND PLUMBING PERMIT FEE			\$5.00
Invoice 16135	10/4/2016				
Transaction Date	10/10/2016	Citizens	111000	Total	\$105.00
Refer	<u>76704 MERIT ASPHALT</u>	-			
Cash Payment	E 610-6451-6651 Maintenance-Mains	MAIN & FIELD			\$6,305.00
Invoice 78583	9/27/2016				
Cash Payment	E 610-6451-6651 Maintenance-Mains	MAIN & FIELD			\$6,145.00
Invoice 78584	9/27/2016				
Cash Payment	E 610-6451-6651 Maintenance-Mains	MAIN & FIELD			\$4,915.00
Invoice 78691	10/5/2016				
Transaction Date	10/10/2016	Citizens	111000	Total	\$17,365.00
Refer	<u>76705 METRO MUNICIPAL CLERKS</u>	-			
Cash Payment	E 100-5142-5324 Membership Dues	TAUBERT MEMBERSHIP			\$30.00
Invoice TAUBERT 2016	10/5/2016				
Transaction Date	10/10/2016	Citizens	111000	Total	\$30.00
Refer	<u>76706 MUKWONAGO AUTO PARTS</u>	-			
Cash Payment	E 100-5323-5311 Supplies	PAINT/CUT-OFF WHEEL			\$13.38
Invoice SEPT 16	9/30/2016				
Cash Payment	E 100-5521-5311 Supplies	GLOVES			\$27.98
Invoice SEPT 16	9/30/2016				
Cash Payment	E 100-5324-5395 Repairs & Maintenance	V-BELT/IND BELT/HYD HOSE/TIRE TUBE/TIRE PATCH			\$158.66
Invoice SEPT 16	9/30/2016				
Cash Payment	E 100-5212-5395 Repairs & Maintenance	ADHESIVE TAPE			\$46.13
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5231-5395 Repairs & Maintenance	RELAY			\$16.69
Invoice SEPT 16	9/30/2016				
Cash Payment	E 150-5222-5395 Repairs & Maintenance	WIPER BLADE/BRAKE PADS/ROTOR			\$220.46
Invoice SEPT 16	9/30/2016				
Transaction Date	10/10/2016	Citizens	111000	Total	\$483.30
Refer	<u>76707 MUKWONAGO WATER UTILITY</u>	-			
Cash Payment	E 440-5511-5221 Water-Sewer	LIBRARY			\$837.16
Invoice 3RD QTR 2016	9/30/2016				
Cash Payment	E 100-5512-5221 Water-Sewer	MUSEUM			\$124.75
Invoice 3RD QTR 2016	9/30/2016				
Cash Payment	E 100-5521-5221 Water-Sewer	FIELD PARK PAVILION			\$264.90
Invoice 3RD QTR 2016	9/30/2016				
Cash Payment	E 610-6300-6632 Operation Supply/Exp-Tr	WELL #5			\$145.55
Invoice 3RD QTR 2016	9/30/2016				
Cash Payment	E 100-5323-5221 Water-Sewer	DPW			\$813.37
Invoice 3RD QTR 2016	9/30/2016				
Cash Payment	E 100-5211-5221 Water-Sewer	PD			\$439.25
Invoice 3RD QTR 2016	9/30/2016				
Cash Payment	E 100-5521-5221 Water-Sewer	PHANTOM GLEN			\$157.30
Invoice 3RD QTR 2016	9/30/2016				

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Current Period: October 2016

Cash Payment	E 620-8010-8270 Operation Supply/Expen	WWTP			\$3,853.53
Invoice	3RD QTR 2016	9/30/2016			
Cash Payment	E 100-5521-5221 Water-Sewer	INDIANHEAD			\$286.60
Invoice	3RD QTR 2016	9/30/2016			
Cash Payment	E 610-6300-6632 Operation Supply/Exp-Tr	WELL #4			\$179.00
Invoice	3RD QTR 2016	9/30/2016			
Cash Payment	E 100-5521-5221 Water-Sewer	MINIWAUKAN			\$103.05
Invoice	3RD QTR 2016	9/30/2016			
Cash Payment	E 100-5160-5221 Water-Sewer	HALL			\$482.65
Invoice	3RD QTR 2016	9/30/2016			
Cash Payment	E 610-6300-6632 Operation Supply/Exp-Tr	WELL #6			\$156.40
Invoice	3RD QTR 2016	9/30/2016			
Cash Payment	E 150-5221-5221 Water-Sewer	FD			\$666.38
Invoice	3RD QTR 2016	9/30/2016			
Cash Payment	E 610-6300-6632 Operation Supply/Exp-Tr	WELL #7			\$145.55
Invoice	3RD QTR 2016	9/30/2016			
Cash Payment	E 100-5521-5221 Water-Sewer	FIELD PARK			\$598.83
Invoice	3RD QTR 2016	9/30/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$9,254.27
Refer	76708	NEXT DAY STAMPS	-		
Cash Payment	E 100-5142-5311 Supplies	ADDRESS STAMPS			\$58.40
Invoice	2591	9/28/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$58.40
Refer	76709	PAL STEEL COMPANY	-		
Cash Payment	E 100-5324-5395 Repairs & Maintenance	METAL PIECES			\$94.23
Invoice	27978	9/28/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$94.23
Refer	76710	PAUL CONWAY SHIELDS	-		
Cash Payment	E 150-5222-5311 Supplies	REPANEL/REWORK			\$213.95
Invoice	391919	9/29/2019			
Transaction Date	10/10/2016	Citizens	111000	Total	\$213.95
Refer	76711	PROFESSIONAL SERVICE	-		
Cash Payment	E 200-5335-5219 Professional Services	CHAPMAN FARMS			\$2,306.00
Invoice	450828	7/31/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$2,306.00
Refer	76712	PROHEALTH CARE MEDICAL	-		
Cash Payment	E 150-5221-5219 Professional Services	NEW HIRE CZERWINSKI			\$215.00
Invoice	286690	10/3/2016			
Cash Payment	E 150-5221-5219 Professional Services	NEW HIRE ALBEE/TEJADA			\$470.00
Invoice	286689	10/3/2016			
Cash Payment	E 150-5221-5219 Professional Services	RAFFERTY DRUG			\$220.00
Invoice	286410	10/3/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$905.00
Refer	76713	PUBLIC SERVICE COMMISSION	-		
Cash Payment	E 610-6920-6928 Regulatory Commission	2016/2017 ADVANCE ASSESSMENT			\$1,933.33
Invoice	RA17-I-03980	9/30/2016			
Transaction Date	10/10/2016	Citizens	111000	Total	\$1,933.33

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Current Period: October 2016

Refer	76714	QUILL CORPORATION	-			
Cash Payment	E 100-5160-5311	Supplies	HAND TOWELS			\$95.96
Invoice	9462088	9/26/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$95.96
Refer	76715	R & R INSURANCE SERVICES	-			
Cash Payment	E 100-5154-5511	Workmens Comp Insura	INSURANCE			\$19,402.00
Invoice	OCT 16	10/18/2016				
Cash Payment	E 100-5154-5512	General Liability Insuran	INSURANCE			\$5,208.00
Invoice	OCT 16	10/18/2016				
Cash Payment	E 100-5154-5512	General Liability Insuran	INSURANCE			\$3,535.00
Invoice	OCT 16	10/18/2016				
Cash Payment	E 100-5154-5514	Auto Insurance	INSURANCE			\$3,004.00
Invoice	OCT 16	10/18/2016				
Cash Payment	E 100-5154-5515	Public Officials Insuranc	INSURANCE			\$1,222.00
Invoice	OCT 16	10/18/2016				
Cash Payment	E 150-5221-5226	Insurance Premiums	INSURANCE			\$12,677.00
Invoice	OCT 16	10/18/2016				
Cash Payment	E 410-5140-5226	Insurance Premiums	INSURANCE			\$145.00
Invoice	OCT 16	10/18/2016				
Cash Payment	E 440-5511-5226	Insurance Premiums	INSURANCE			\$1,849.00
Invoice	OCT 16	10/18/2016				
Cash Payment	E 610-6920-6924	Property Insurance	INSURANCE			\$3,055.00
Invoice	OCT 16	10/18/2016				
Cash Payment	E 620-8400-8530	Insurance	INSURANCE			\$3,453.00
Invoice	OCT 16	10/18/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$53,550.00
Refer	76716	RLP DIVERSIFIED INC	-			
Cash Payment	G 610-235000	Customer Deposits	METER DEPOSIT REFUND			\$1,000.00
Invoice	10/7	10/7/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$1,000.00
Refer	76717	TOWN OF MUKWONAGO	-			
Cash Payment	E 100-5144-5311	Supplies	P-TOUCH LABELS			\$41.96
Invoice	1675	9/26/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$41.96
Refer	76718	TRACTOR SUPPLY CREDIT PLAN	-			
Cash Payment	E 100-5521-5311	Supplies	TANK CLEANER			\$15.99
Invoice	268330	9/15/2016				
Cash Payment	E 100-5347-5311	Supplies	BRINE GEN			\$23.94
Invoice	269350	9/27/2016				
Cash Payment	E 100-5324-5395	Repairs & Maintenance	REPLACEMENT GENERATOR			\$649.99
Invoice	269350	9/27/2016				
Cash Payment	E 100-5347-5311	Supplies	WATER LINE PARTS			\$197.39
Invoice	300094	9/26/2016				
Cash Payment	E 100-5521-5311	Supplies	GLYPHOSATE			\$54.99
Invoice	299146	9/20/2016				
Cash Payment	E 100-5521-5311	Supplies	BLASTING GRIT			\$23.97
Invoice	100250502	4/21/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$966.27

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Refer	76719	TREASURER STATE OF WI	-			
Cash Payment	G 100-242400	Court Fees due to State	JAIL FINES			\$5,066.80
Invoice	SEPT 16	10/7/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$5,066.80
Refer	76720	TREASURER WAUKESHA COUNTY	-			
Cash Payment	G 100-243240	Waukesha County Court Fe	JAIL FINES			\$1,540.00
Invoice	SEPT 16	10/7/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$1,540.00
Refer	76721	UNEMPLOYMENT INSURANCE	-			
Cash Payment	E 440-5511-5110	Salaries & Wages	LININGER SEPT 2016			\$1,480.00
Invoice	SEPT 16	9/30/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$1,480.00
Refer	76722	USA BLUEBOOK	-			
Cash Payment	E 620-8010-8260	Other Chemicals	SODIUM HYDROXIDE/AMMONIUM PERSULFATE			\$23.95
Invoice	73146	9/29/2016				
Cash Payment	E 620-8010-8260	Other Chemicals	SODIUM HYDROXIDE			\$10.99
Invoice	74210	9/30/2016				
Cash Payment	E 620-8010-8260	Other Chemicals	FLUORIDE/TEST STRIPS/KITS			\$1,265.06
Invoice	70045	9/26/2016				
Cash Payment	E 620-8030-8310	Maint-Collection System	MANHOLE LIFTERS			\$1,450.00
Invoice	71417	9/28/2016				
Cash Payment	E 610-6451-6641	Operation Supply/Exp-T	SIGN STAND/ROAD SIGNS			\$862.85
Invoice	71417	9/28/2016				
Cash Payment	E 620-8010-8260	Other Chemicals	SODIUM HYDROXIDE			\$25.30
Invoice	68263	9/23/2016				
Cash Payment	E 610-6451-6651	Maintenance-Mains	SIGNS			\$175.00
Invoice	81251	10/10/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$3,813.15
Refer	76723	VERIZON WIRELESS	-			
Cash Payment	E 100-5141-5225	Telephone	CELLS			\$119.85
Invoice	9771976735	9/13/2016				
Cash Payment	E 100-5241-5225	Telephone	CELLS			\$42.84
Invoice	9771976735	9/13/2016				
Cash Payment	E 610-6920-6921	Office Supplies & Expen	CELLS			\$62.81
Invoice	9771976735	9/13/2016				
Cash Payment	E 620-8010-8270	Operation Supply/Expen	CELLS			\$62.80
Invoice	9771976735	9/13/2016				
Cash Payment	E 100-5211-5225	Telephone	CELLS			\$1.56
Invoice	9772757251	9/26/2016				
Cash Payment	E 150-5221-5225	Telephone	CELLS			\$35.24
Invoice	9773068422	10/3/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$325.10
Refer	76724	WANASEK CORP	-			
Cash Payment	E 610-6451-6651	Maintenance-Mains	507 MAIN ST			\$11,436.66
Invoice	6339	9/20/2016				
Transaction Date	10/10/2016		Citizens	111000	Total	\$11,436.66

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Refer	76725	WAUKESHA COUNTY EMERGENC	-				
Cash Payment	E 150-5222-5311	Supplies	ID CARDS WRIGHT, NYE, FRIESEMA			\$2.74	
Invoice	65	10/4/2016					
Transaction Date	10/10/2016		Citizens	111000	Total	\$2.74	
Refer	76726	WAUKESHA CTY TREASURER	-				
Cash Payment	E 100-5348-5311	Supplies	PAVEMENT MARKINGS			\$310.50	
Invoice	2016-00000171	9/27/2016					
Cash Payment	E 100-5211-5395	Repairs & Maintenance	MOBILE ENHANCEMENTS			\$507.78	
Invoice	2016-00000218	10/5/2016					
Transaction Date	10/10/2016		Citizens	111000	Total	\$818.28	
Refer	76727	WISCONSIN CENTRAL	-				
Cash Payment	E 610-6451-6651	Maintenance-Mains	PIPELINE WATER			\$300.00	
Invoice	9500164629	9/1/2016					
Transaction Date	10/10/2016		Citizens	111000	Total	\$300.00	
Refer	76728	WI RURAL WATER ASSOCIATION	-				
Cash Payment	E 610-6920-6923	Outside Services Employ	REFRESHER TRG			\$63.60	
Invoice	3053	9/28/2016					
Cash Payment	E 620-8030-5310	Outside Services	REFRESHER TRG			\$63.60	
Invoice	3053	9/28/2016					
Transaction Date	10/10/2016		Citizens	111000	Total	\$127.20	
Refer	76729	WISCONSIN IMAGING	-				
Cash Payment	E 100-5211-5395	Repairs & Maintenance	COPY USAGE			\$67.81	
Invoice	36218	9/26/2016					
Transaction Date	10/10/2016		Citizens	111000	Total	\$67.81	
Refer	76730	ADVANCED INTEGRATED TECHN	-				
Cash Payment	E 100-5512-5225	Telephone	LONG DISTANCE			\$1.86	
Invoice	1005142-SEPT 1	9/30/2016					
Cash Payment	E 610-6920-6921	Office Supplies & Expen	LONG DISTANCE			\$2.31	
Invoice	1005142-SEPT 1	9/30/2016					
Cash Payment	E 620-8400-8510	Office Supplies & Expen	LONG DISTANCE			\$2.31	
Invoice	1005142-SEPT 1	9/30/2016					
Transaction Date	10/13/2016		Citizens	111000	Total	\$6.48	
Refer	76731	ARNOLDS ENVIRONMENTAL SER	-				
Cash Payment	E 100-5521-5311	Supplies	360 MCKENZIE			\$296.00	
Invoice	103160	10/5/2016					
Cash Payment	E 100-5521-5311	Supplies	HOLZ PARKWAY			\$74.00	
Invoice	104444	10/7/2016					
Cash Payment	E 100-5521-5311	Supplies	CTH LO			\$74.00	
Invoice	104445	10/7/2016					
Cash Payment	E 100-5521-5311	Supplies	MINOR PARK EAST			\$148.00	
Invoice	104442	10/7/2016					
Cash Payment	E 100-5521-5311	Supplies	WASHINGTON & PARK ST			\$74.00	
Invoice	104443	10/7/2016					
Transaction Date	10/13/2016		Citizens	111000	Total	\$666.00	
Refer	76732	BANYON DATA SYSTEMS	-				
Cash Payment	E 100-5142-5219	Professional Services	SUPPORT CONTRACT			\$601.55	
Invoice	154790	10/1/2016					

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Cash Payment	E 150-5221-5219 Professional Services	SUPPORT CONTRACT		\$158.85
Invoice	154790	10/1/2016		
Cash Payment	E 220-5140-5219 Professional Services	SUPPORT CONTRACT		\$165.20
Invoice	154790	10/1/2016		
Cash Payment	E 410-5140-5219 Professional Services	SUPPORT CONTRACT		\$136.15
Invoice	154790	10/1/2016		
Cash Payment	E 440-5511-5310 Outside Services	SUPPORT CONTRACT		\$132.25
Invoice	154790	10/1/2016		
Cash Payment	E 500-5140-5219 Professional Services	SUPPORT CONTRACT		\$17.20
Invoice	154790	10/1/2016		
Cash Payment	E 610-6920-6923 Outside Services Employ	SUPPORT CONTRACT		\$807.35
Invoice	154790	10/1/2016		
Cash Payment	E 620-8400-8560 Misc General Expense	SUPPORT CONTRACT		\$791.45
Invoice	154790	10/1/2016		
Transaction Date	10/13/2016	Citizens	111000	Total \$2,810.00
Refer	76733 BK PLANNING STRATEGIES			-
Cash Payment	E 100-5632-5219 Professional Services	PLANNING GENERAL		\$3,120.50
Invoice	M0449-2016	10/12/2016		
Cash Payment	E 100-5632-5219 Professional Services	COMP PLAN UPDATE		\$389.11
Invoice	M0450-2016	10/12/2016	Project PLN001	
Cash Payment	E 220-5632-5219 Professional Services	COMP PLAN TID 3		\$222.35
Invoice	M0450-2016	10/12/2016	Project PLN001	
Cash Payment	G 100-162010 Potential TID Accum. Costs	COMP PLAN TID 4		\$222.35
Invoice	M0450-2016	10/12/2016	Project PLN001	
Cash Payment	G 100-162010 Potential TID Accum. Costs	COMP PLAN TID 5		\$55.59
Invoice	M0450-2016	10/12/2016	Project PLN001	
Cash Payment	G 100-162010 Potential TID Accum. Costs	COMP PLAN TID 6		\$166.76
Invoice	M0450-2016	10/12/2016	Project PLN001	
Cash Payment	E 200-5632-5219 Professional Services	COMP PLAN UPDATE		\$55.59
Invoice	M0450-2016	10/12/2016	Project PLN001	
Cash Payment	E 200-5632-5219 Professional Services	CHAPMAN PROP		\$25.50
Invoice	M0451-2016	10/12/2016		
Cash Payment	G 100-162010 Potential TID Accum. Costs	TID 6 PLANNING		\$25.00
Invoice	M0452-2016	10/12/2016	Project TID006	
Cash Payment	G 100-211400 Billable Disbursements	OMSA SITE PLAN APPROVAL		\$50.25
Invoice	M0453-2016	10/12/2016		
Cash Payment	G 100-211400 Billable Disbursements	EDGEWOOD APT REVIEW		\$254.00
Invoice	M0454-2016	10/12/2016		
Cash Payment	G 100-211400 Billable Disbursements	HS EXPANSION COND USE		\$354.25
Invoice	M0455-2016	10/12/2016		
Cash Payment	G 100-211400 Billable Disbursements	INDUSTRIAL DEVELP EXP		\$266.25
Invoice	M0456-2016	10/12/2016		
Cash Payment	G 100-211400 Billable Disbursements	DAA SMOKEHOUSE COND USE		\$95.75
Invoice	M0457-2016	10/12/2016		
Cash Payment	G 100-211400 Billable Disbursements	CHANDLER CONCEPT REVIEW		\$162.25
Invoice	M0458-2016	10/12/2016		
Cash Payment	G 100-211400 Billable Disbursements	LYNCH PARKING		\$17.00
Invoice	M0459-2016	10/12/2016		
Cash Payment	G 100-211400 Billable Disbursements	511 OAKLAND		\$50.25
Invoice	M0460-2016	10/12/2016		

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Transaction Date	10/13/2016	Citizens	111000	Total	\$5,532.75
Refer	76734 <u>BUELOW, VETTER, BUIKEMA, OLS</u>		-		
Cash Payment	E 150-5221-5219 Professional Services	FIRE NEGOTIATIONS			\$3,494.00
Invoice	2488.00013	10/12/2016			
Cash Payment	E 100-5141-5219 Professional Services	FMLA POLICY REVIEW/UPDATE			\$1,357.20
Invoice	2488.00099-10/1	10/12/2016			
Transaction Date	10/13/2016	Citizens	111000	Total	\$4,851.20
Refer	76735 <u>ENVIRONMENT CONTROL</u>		-		
Cash Payment	E 100-5160-5219 Professional Services	MONTHLY CLEANING			\$490.00
Invoice	1841-613	10/1/2016			
Transaction Date	10/13/2016	Citizens	111000	Total	\$490.00
Refer	76736 <u>GRAINGER</u>		-		
Cash Payment	E 440-5511-5395 Repairs & Maintenance	TOILET REPAIR			\$17.06
Invoice	9240147265	9/30/2016			
Cash Payment	E 100-5521-5311 Supplies	TOILET REPAIR			\$137.46
Invoice	9240147265	9/30/2016			
Transaction Date	10/13/2016	Citizens	111000	Total	\$154.52
Refer	76737 <u>HIPPENMEYER, REILLY</u>		-		
Cash Payment	E 100-5130-5219 Professional Services	MISC MATTERS			\$1,905.75
Invoice	43359	10/12/2016			
Cash Payment	E 610-6920-6923 Outside Services Employ	STREAM BANK STABILIZATION			\$321.75
Invoice	43360	10/12/2016			
Cash Payment	G 100-211425 Developer Escrow	ALDI			\$30.00
Invoice	43361	10/12/2016		Project D00004	
Cash Payment	G 100-211400 Billable Disbursements	LYNCH NEW PURCHASE			\$96.00
Invoice	43362	10/12/2016			
Cash Payment	G 100-211425 Developer Escrow	PREMIER			\$82.50
Invoice	43363	10/12/2016		Project D00002	
Cash Payment	E 150-5221-5219 Professional Services	AMB CLAIMS			\$396.75
Invoice	43364	10/12/2016			
Cash Payment	G 100-211400 Billable Disbursements	OMSA			\$41.25
Invoice	43365	10/12/2016			
Cash Payment	E 100-5130-5219 Professional Services	PROSECUTION			\$1,022.00
Invoice	43366	10/12/2016			
Transaction Date	10/13/2016	Citizens	111000	Total	\$3,896.00
Refer	76738 <u>HORN OIL</u>		-		
Cash Payment	E 100-5212-5351 Motor Fuel & Oil	FUEL			\$1,967.95
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5241-5351 Motor Fuel & Oil	FUEL			\$91.07
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 100-5324-5351 Motor Fuel & Oil	FUEL			\$933.25
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 150-5222-5351 Motor Fuel & Oil	FUEL			\$334.18
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 150-5231-5351 Motor Fuel & Oil	FUEL			\$999.66
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 610-6920-6933 Transportation Expenses	FUEL			\$422.50
Invoice	SEPT 16	9/30/2016			

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Cash Payment	E 620-8010-8280	Transportation Expense	FUEL						\$259.78
Invoice	SEPT 16	9/30/2016							
Cash Payment	E 100-5324-5351	Motor Fuel & Oil	OFF ROAD DIESEL						\$829.98
Invoice	SEPT 16	9/30/2016							
Transaction Date	10/13/2016		Citizens	111000			Total		\$5,838.37
Refer	76739	HOSPITALITY MARKETERS							
Cash Payment	E 220-5140-5219	Professional Services	RESEARCH AND ANALYSIS						\$2,000.00
Invoice	9/15	9/15/2016							
Transaction Date	10/13/2016		Citizens	111000			Total		\$2,000.00
Refer	76740	MUNICIPAL CODE CORPORATION							
Cash Payment	E 100-5111-5219	Professional Services	SUPPLEMENTAL PAGES						\$6,635.03
Invoice	276216	9/30/2016							
Cash Payment	E 100-5142-5219	Professional Services	SUPPLEMENTAL PAGES						\$425.00
Invoice	276216	9/30/2016							
Cash Payment	E 100-5660-5219	Professional Services	SUPPLEMENTAL PAGES						\$25.00
Invoice	276216	9/30/2016							
Cash Payment	E 150-5221-5219	Professional Services	SUPPLEMENTAL PAGES						\$25.00
Invoice	276216	9/30/2016							
Transaction Date	10/13/2016		Citizens	111000			Total		\$7,110.03
Refer	76741	PIRANHA PAPER SHREDDING							
Cash Payment	E 100-5211-5394	Bldg Repairs & Maintena	CONTRACT SERVICE						\$50.00
Invoice	1570100616	10/6/2016							
Transaction Date	10/13/2016		Citizens	111000			Total		\$50.00
Refer	76742	REINDERS, INC.							
Cash Payment	E 100-5324-5395	Repairs & Maintenance	TORO PARTS						\$109.90
Invoice	1658022.00	10/4/2016							
Transaction Date	10/13/2016		Citizens	111000			Total		\$109.90
Refer	76743	TIME WARNER CABLE							
Cash Payment	E 100-5120-5225	Telephone	TELECOMMUNICATIONS						\$103.39
Invoice	9/28-10/27	9/20/2016							
Cash Payment	E 100-5141-5225	Telephone	TELECOMMUNICATIONS						\$109.95
Invoice	9/28-10/27	9/20/2016							
Cash Payment	E 100-5142-5225	Telephone	TELECOMMUNICATIONS						\$202.40
Invoice	9/28-10/27	9/20/2016							
Cash Payment	E 100-5211-5225	Telephone	TELECOMMUNICATIONS						\$1,065.76
Invoice	9/28-10/27	9/20/2016							
Cash Payment	E 100-5241-5225	Telephone	TELECOMMUNICATIONS						\$55.35
Invoice	9/28-10/27	9/20/2016							
Cash Payment	E 100-5323-5225	Telephone	TELECOMMUNICATIONS						\$138.03
Invoice	9/28-10/27	9/20/2016							
Cash Payment	E 150-5221-5225	Telephone	TELECOMMUNICATIONS						\$458.46
Invoice	9/28-10/27	9/20/2016							
Cash Payment	E 220-5140-5225	Telephone	TELECOMMUNICATIONS						\$3.26
Invoice	9/28-10/27	9/20/2016							
Cash Payment	E 410-5140-5225	Telephone	TELECOMMUNICATIONS						\$6.53
Invoice	9/28-10/27	9/20/2016							
Cash Payment	E 440-5511-5225	Telephone	TELECOMMUNICATIONS						\$420.42
Invoice	9/28-10/27	9/20/2016							

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Cash Payment	E 500-5140-5225 Telephone	TELECOMMUNICATIONS			\$3.26
Invoice	9/28-10/27	9/20/2016			
Cash Payment	E 610-6920-6921 Office Supplies & Expen	TELECOMMUNICATIONS			\$55.49
Invoice	9/28-10/27	9/20/2016			
Cash Payment	E 620-8400-8510 Office Supplies & Expen	TELECOMMUNICATIONS			\$55.49
Invoice	9/28-10/27	9/20/2016			
Transaction Date	10/13/2016	Citizens	111000	Total	\$2,677.79
Refer	76744 UNIFI EQUIPMENT FINANCE, INC.	-			
Cash Payment	E 100-5211-5219 Professional Services	COPIER			\$83.33
Invoice	248586	10/12/2016			
Transaction Date	10/13/2016	Citizens	111000	Total	\$83.33
Refer	76745 U.S. CELLULAR	-			
Cash Payment	E 100-5211-5225 Telephone	CELL PHONES			\$370.09
Invoice	157646780	9/28/2016			
Transaction Date	10/13/2016	Citizens	111000	Total	\$370.09
Refer	76746 VARITECH INDUSTRIES	-			
Cash Payment	E 430-5700-5712 DPW Capital Equip	SPRAYER			\$7,030.30
Invoice	60-1008355	9/30/2016			
Transaction Date	10/13/2016	Citizens	111000	Total	\$7,030.30
Refer	76747 AMATO FORD	-			
Cash Payment	E 100-5212-5395 Repairs & Maintenance	FUEL PUMP			\$183.14
Invoice	205832	10/12/2016			
Transaction Date	10/14/2016	Citizens	111000	Total	\$183.14
Refer	76748 DIGGERS HOTLINE	-			
Cash Payment	E 620-8030-5310 Outside Services	CONTRACT SERVICE			\$86.23
Invoice	160938301	9/30/2016			
Cash Payment	E 610-6920-6923 Outside Services Employ	CONTRACT SERVICE			\$86.23
Invoice	160938301	9/30/2016			
Cash Payment	E 100-5344-5219 Professional Services	CONTRACT SERVICE			\$86.24
Invoice	160938301	9/30/2016			
Transaction Date	10/14/2016	Citizens	111000	Total	\$258.70
Refer	76749 G & K SERVICES	-			
Cash Payment	E 610-6920-6921 Office Supplies & Expen	UNIFORMS/TOWELS			\$141.63
Invoice	SEPT 16	9/30/2016			
Cash Payment	E 620-8010-8270 Operation Supply/Expen	UNIFORMS/TOWELS			\$141.62
Invoice	SEPT 16	9/30/2016			
Transaction Date	10/14/2016	Citizens	111000	Total	\$283.25
Refer	76750 GOURDOUX LINDA	-			
Cash Payment	E 100-5141-5335 Training & Travel	MILEAGE REIMBURSEMENT			\$97.00
Invoice	OCT 16	10/14/2016			
Transaction Date	10/14/2016	Citizens	111000	Total	\$97.00
Refer	76751 JOURNAL COMMUNICATIONS	-			
Cash Payment	E 430-5700-5711 Police Dept Capital Equi	LEGAL NOTICES			\$49.73
Invoice	SEPT 16	9/30/2016			
Transaction Date	10/14/2016	Citizens	111000	Total	\$49.73
Refer	76752 MATERIALS DISTRIBUTION SERVI	-			

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Cash Payment	E 100-5211-5311 Supplies	OFFICE SUPPLIES		\$36.66
Invoice	09/16MD07538 10/11/2016			
Transaction Date	10/14/2016	Citizens	111000	Total \$36.66
Refer	76753 RUEKERT & MIELKE, INC. -			
Cash Payment	E 100-5335-5219 Professional Services	GEN ENGINEERING		\$2,676.81
Invoice	116496 9/2/2016			
Cash Payment	E 100-5335-5219 Professional Services	COMP PLAN MAPPING		\$348.23
Invoice	116496 9/2/2016		Project PLN001	
Cash Payment	E 220-5335-5219 Professional Services	COMP PLAN MAPPING TID 3		\$198.99
Invoice	116496 9/2/2016		Project PLN001	
Cash Payment	G 100-162010 Potential TID Accum. Costs	COMP PLAN MAPPING TID 4		\$198.99
Invoice	116496 9/2/2016		Project PLN001	
Cash Payment	G 100-162010 Potential TID Accum. Costs	COMP PLAN MAPPING TID 5		\$49.75
Invoice	116497 9/2/2016		Project PLN001	
Cash Payment	G 100-162010 Potential TID Accum. Costs	COMP PLAN MAPPING TID 6		\$149.24
Invoice	116497 9/2/2016		Project PLN001	
Cash Payment	E 200-5335-5219 Professional Services	COMP PLAN MAPPING		\$49.75
Invoice	116497 9/2/2016		Project PLN001	
Cash Payment	G 100-211425 Developer Escrow	PREMIER WOODS		\$4,024.45
Invoice	116498 9/2/2016		Project D00002	
Cash Payment	G 100-211425 Developer Escrow	ALDI		\$294.50
Invoice	116499 9/2/2016		Project D00004	
Cash Payment	E 480-5700-5863 NN Trail & Crosswalk	CTH NN		\$33.00
Invoice	116500 9/2/2016			
Cash Payment	E 480-5700-5850 Multi-Use Trail	CTH NN		\$3,076.25
Invoice	116501 9/2/2016		Project W00004	
Cash Payment	G 610-000108 CIP-Utility Mains Projects	CTH NN		\$68,170.43
Invoice	116577 9/2/2016		Project W00004	
Cash Payment	G 620-000108 CIP-Utility Mains Projects	CTH NN		\$1,481.97
Invoice	116577 9/2/2016		Project W00004	
Cash Payment	E 480-5700-5850 Multi-Use Trail	CTH NN		\$4,445.90
Invoice	116577 9/2/2016		Project W00004	
Cash Payment	G 610-000108 CIP-Utility Mains Projects	CTH NN		-\$1,610.00
Invoice	116577 9/2/2016		Project W00004	
Cash Payment	G 620-000108 CIP-Utility Mains Projects	CTH NN		-\$35.00
Invoice	116577 9/2/2016		Project W00004	
Cash Payment	E 480-5700-5850 Multi-Use Trail	CTH NN		-\$105.00
Invoice	116577 9/2/2016		Project W00004	
Cash Payment	G 610-000108 CIP-Utility Mains Projects	CTH NN		\$335.40
Invoice	116502 9/2/2016		Project W00004	
Cash Payment	G 620-000108 CIP-Utility Mains Projects	CTH NN		\$7.30
Invoice	116502 9/2/2016		Project W00004	
Cash Payment	E 480-5700-5850 Multi-Use Trail	CTH NN		\$21.86
Invoice	116502 9/2/2016		Project W00004	
Cash Payment	G 100-211400 Billable Disbursements	FORWARD DENTAL		\$197.12
Invoice	116503 9/2/2016			
Cash Payment	E 480-5700-5850 Multi-Use Trail	HOLZ PARKWAY TRL		\$1,298.90
Invoice	116504 9/2/2016			
Cash Payment	E 480-5700-5864 Boat Launch	BOAT LAUNCH IMPROVEMENTS		\$4,379.60
Invoice	116505 9/2/2016			

VILLAGE OF MUKWONAGO

10/14/16 11:37 AM

Page 15

Payments

Current Period: October 2016

Cash Payment	G 100-211400 Billable Disbursements	MASD HIGHSCHOOL		\$677.50
Invoice 116506	9/2/2016			
Cash Payment	G 100-211400 Billable Disbursements	INSTRUMENT DEVELP		\$1,081.50
Invoice 116507	9/2/2016			
Cash Payment	E 220-5335-5219 Professional Services	ARROWHEAD DR SIGN		\$165.00
Invoice 116508	9/2/2016		Project TID001	
Cash Payment	G 100-211425 Developer Escrow	FAIRWINDS		\$2,744.08
Invoice 116509	9/2/2016		Project D00007	
Cash Payment	G 100-211425 Developer Escrow	ORCHARDS		\$13,302.09
Invoice 116510	9/2/2016		Project D00011	
Cash Payment	G 100-211400 Billable Disbursements	MAJOR FARM		\$804.00
Invoice 116511	9/2/2016			
Cash Payment	E 620-8400-8520 Outside Services Employ	CHAPMAN FARM		\$4,187.25
Invoice 116512	9/2/2016			
Cash Payment	E 200-5632-5219 Professional Services	CHAPMAN FARM		\$579.90
Invoice 116513	9/2/2016		Project EDC006	
Cash Payment	E 610-6920-6923 Outside Services Employ	CHAPMAN FARM		\$66.06
Invoice 116513	9/2/2016		Project EDC006	
Cash Payment	E 620-8400-8520 Outside Services Employ	CHAPMAN FARM		\$88.09
Invoice 116513	9/2/2016		Project EDC006	
Transaction Date	10/14/2016	Citizens	111000	Total \$113,383.91

Fund Summary

	111000 Citizens
100 GENERAL FUND	\$98,979.80
150 FIRE/AMBULANCE FUND	\$29,639.87
200 COMMUNITY DEVELOPMENT FUND	\$3,016.74
220 TID#3 - GENERAL	\$2,756.54
410 RECYCLING FUND	\$289.42
430 CAPITAL EQUIPMENT FUND	\$7,080.03
440 LIBRARY FUND	\$4,739.37
480 CAPITAL IMPROVEMENT FUND	\$14,285.01
500 STORM WATER UTILITY	\$22.20
610 WATER UTILITY FUND	\$131,264.87
620 SEWER UTILITY FUND	\$24,812.27
	<u>\$316,886.12</u>

Pre-Written Checks	\$0.00
Checks to be Generated by the Computer	\$316,886.12
Total	<u>\$316,886.12</u>



Village of Mukwonago

AGENDA ITEM REQUEST FORM

Committee/Board:	Health and Recreation
Topic:	Borings for the M.O.P. S.
From:	Ron Bittner
Department:	Public Works
Presenter:	Ron / Ken
Date of Committee Action (if required):	10/4/16
Date of Village Board Action (if required):	10/18/16

Information

Subject:

Boring will be required to determine the feasibility of constructing a structure at Indian Head Park.

Background Information/Rationale:

The M.O.P.S Committee identified Indian Head Park as the preferred location.

Key Issues for Consideration:**Fiscal Impact (If any):**

The M.O.P.S. Committee will secure funding upon Board approval.

Requested Action by Committee/Board:

Recommendation to the Village Board to approve borings at the park for the feasibility study.

Attachments

Print this page

Tree City USA

2016 Application for Certification



The Tree City USA award is in recognition of work completed by the community during the 2016 calendar year.

As Mayor or Equivalent of the Community of The Village of Mukwonago

I herewith make application for this community to be officially certified/recertified as a Tree City USA for 2016, having achieved the standards set forth by the Arbor Day Foundation as noted below.

Standard 1: A Tree Board or Department

Community has a Department Chair or City Manager/Official

Department Chair/City Manager

Justin Noe Village Forester 262-363-6447 jnoe@villageofmukwonago.com

Standard 2: A Community Tree Ordinance

Our community ordinance is on record

Standard 3: A Community Forestry Program with an Annual Budget of at Least \$2 Per Capita

Total Community Forestry Expenditures \$23340

Community Population 7507

Per Capita Spending \$3.11

Standard 4: An Arbor Day Observance and Proclamation

Official Arbor Day proclamation is on record

Mayor or Equivalent Signature	Title	Date
<p>Application Certification To Be Completed By The State Forester: The Village of Mukwonago</p> <p>The above named community has made formal application to this office. I am pleased to advise you that we reviewed the application and have concluded that, based on the information contained herein, said community is eligible to be certified as a Tree City USA community, for the 2016 calendar year, having in my opinion met the four standards required for recognition.</p>		
State Forester Signature	Title	Date



Print this page

MINUTES OF THE REGULAR PLAN COMMISSION MEETING

Tuesday, October 11, 2016

Call to Order

Chairperson Fred Winchowky called the meeting to order at 6:36 p.m. located in the Board Room of the Mukwonago Municipal Building, 440 River Crest Ct.

Roll Call

Commissioners present: Joe Abruzzo
Robert Harley
John Meiners
Mark Penzkover
Ken Werner
Fred Winchowky, Chairman

Member excused: Sterling Fairchild

Also present: Bruce Kaniewski, Village Planner
John Weidl, Administrator/Economic Developer
Judith Taubert, Deputy Clerk-Treasurer

Minutes

Motion by Penzkover/Werner to approve the September 13, 2016 regular meeting minutes as presented carried.

New Business

OMSA Development LLC Site Plan/Architectural review

Motion by Penzkover/Werner to recommend the Village approve the Site Plan and Architectural Plan requested by Kevin Connor, DDS, OMSA Development LLC, for the construction of a single-story office building on the property located at 320 Bay View Rd., known as MUKV2009954001 subject to the following conditions set in the Village Planners letter dated December 2015 as well as contingent on execution of storm water maintenance and management agreement and also erosion control plan carried:

1. Approval of the plans for the proposal to construct a structure for Oral and Maxillofacial Survey Associates at approximately 320 Bay View Road shall be subject to the package of plans submitted on behalf of the applicant by Design Unlimited to the Village of Mukwonago and on file in the office of the Village Clerk. Prior to commencement of any site construction or issuance of any building permit, final plans shall be reviewed and approved by the Supervisor of Inspections/Zoning Administrator, Fire Chief, Village Planner and Village Engineer. The final plans shall be modified to conform to all applicable Village codes and other conditions of approval; the floor plans may be modified with the approval of the Supervisor of Inspections to conform to Building and Fire Safety Codes and all plans may be further modified to conform to Village design standards. However, the basic layout of the site as depicted on the Layout Plan dated November 5, 2015 shall remain unchanged.
2. Prior to the start of any site construction or issuance of a building permit, whichever occurs first, the following shall occur:
 - a. Conformance with all terms and conditions of approval for the Conditional Use.
 - b. Completion of all required approvals as listed in Condition No. 1.

- c. Approval of the plans by the Fire Chief, which may include, but are not limited to, the internal fire suppression system, external fire department connection location and hydrant locations.
 - d. Approval of building plans by the Building Inspector after receipt of approval of building plans by the State of Wisconsin.
 - e. Approval of building plans shall include appropriate locations of external mechanical equipment to be placed hidden from view of neighboring properties.
 - f. Recording of the 2-Lot Certified Survey Map.
3. Prior to temporary occupancy issuance, and if needed, prior to final occupancy permit, the following shall occur:
 - a. Completion of all site grading and storm water management facilities in accordance with final approved plans.
 - b. Completion of all exterior lighting in accordance with final approved plans.
 - c. Completion of the buildings in accordance with final approved plans and all applicable codes.
 - d. Completion of a hard parking surface with concrete curb and gutter, including installation of handicapped parking signs and ramp in accordance with final approved plans.
 - e. Completion of the dumpster enclosure.
 4. Prior to final occupancy permit, which shall be issued not later than 90 days after any temporary occupancy permit, the following shall occur:
 - a. Completion of all items within Condition No. 3.
 - b. Completion of paving and striping of the entire parking area, in accordance with approved plans.
 - c. Installation of all site landscaping, in accordance with approved plans.

322 Grand Ave. Historic Preservation Commission Review

Motion by Abruzzo/Penzkover to approve the removal of existing detached garage and construction of a new detached garage at the property located at 322 Grand Avenue known as MUKV1973204 consistent with the plans submitted subject to variance approval of dimension coverage, size and height carried.

201 Pearl Ave., Historic Preservation Commission Review

Motion by Abruzzo/Werner to approve the removal of existing detached garage and construct a new detached garage at the property located at 201 Pearl Ave known as MUKV 1973225 subject to the materials and colors matching the existing house and approval of a variance by the Board and Zoning Appeals for the height, and lot coverage after a survey of the lot carried.

Update to the Comprehensive Plan 2035

Items amended by the Plan Commission:

1. Replace language provided by Village Attorney on Page 34.
2. Replace language provided by Village Attorney as revised on Page 39.
3. Addition of clarifying language regarding likelihood of maximum population on Page 33.
4. Adding the following language to the high density multi-family and medium density multi-family definitions: "Housing dedicated to senior citizens may exceed five (5) dwelling units per acre, up to 20 dwelling units per acre and exceed stated building height restriction" on Page 11.

5. Delete the last sentence of low density multi-family definition on Page 12.
6. Changing maps (Northeast Key Area Recommended Land Use for 2035) to reflect current Linden Grove parcel to medium density.

Motion by Penzkover/Werner to adopt the resolution granting preliminary approval with the above changes to amend "Comprehensive Plan 2035" for the Village of Mukwonago subject to the aforementioned changes carried.

Adjournment

Meeting adjourned at 8:53 p.m.

Respectfully submitted,

Judith A. Taubert
Deputy Clerk/Treasurer

DRAFT

Plan Commissioners;

This is my OMSA report from December 2015. Please see my recommendation for Site Plan and Architectural Plan approval. The Conditional Use and Certified Survey Map were approved in December.

Bruce

December 4, 2015

Fred Winchowky, Village President
Village of Mukwonago
440 River Crest Court
Mukwonago, WI 53149

Re: Approvals for New Building and Facility
Oral and Maxillofacial Surgery Associates
Approximately 320 Bay View Road

Dear President Winchowky and Members of the Plan Commission:

Oral and Maxillofacial Survey Associates has made application for a series of approvals to construct a building with 6,546 square feet of usable space on the north side of Bay View Road, just west of the railroad tracks. The subject property is zoned B-2, General Business District.

The Plan Commission is asked to consider the following actions:

1. Conduct public hearing and consider recommendation to approve a Conditional Use for medical facility.
2. Consider recommendation to approve the Site and Architectural Plans.
3. Consider recommendation to approve a 2-Lot Certified Survey Map (CSM).

The site is highlighted on the aerial photograph below.

On-site storm water management and water quality run-off will be handled through two bioretention basins within the north and west building setbacks. Please see the attached letter from Brennen E. Fischer of the Village Engineer's office indicating the proposed on-site storm water management is sufficient to proceed with site plan approval.

Overall, exterior building design, building and parking lot setbacks, the number of parking spaces and parking lot dimensions, the proposed amount and design of landscaping and the site lighting plan all meet or exceed the minimum standards required by the zoning ordinance.

Certified Survey Map

The proposal is within a 1.8 acre lot created in 2005 in conjunction with approval of the Sherwin Williams site plan. This proposal requests further division into lots of 0.824 and 0.980 acres. The B-2 zoning of the site allows a maximum lot size of 2 acres with no minimum lot size. In addition, B-2 requires a minimum lot width of 100 feet and minimum lot depth of 200 feet. The proposed lot depth of this CSM is 194 feet. However, the insufficient lot depth was created during prior site plan and land division approvals, when an additional 10 feet was dedicated to the Village to increase the right-of-way width of Bay View Road to gain a wider width in anticipation of future widening of the Village street. Therefore, Zoning Administrator Joe Hankovich has indicated to me that the CSM can proceed with slightly less depth than required.

Please see the attached letter from Bruce Cross of the Village Engineer's office providing comments about the proposed CSM. In addition to those comments, I recommend the CSM extend the 34 foot access easement from Lot 1 into Lot 2.

Recommendation

It appears all three actions are ready for approval with the following terms and/or conditions for the specific actions:

Conditional Use:

I recommend the Plan Commission consider conditions of approval for the protection of the health, safety and welfare of the general public after hearing comments from the applicant and the public. Conditions may include approval subject to the approval of the submitted Plan of Operation, and subject to the submitted plans. In addition, the Plan Commission must prepare findings-of-fact.

Site Plan and Architectural Plan:

The following recommended conditions for the Site Plan and Architectural Plan approval are consistent with the conditions for other recent and similar approvals, of course all subject to Conditional Use approval. The conditions are prepared in a format to serve as a checklist for all parties involved as the project proceeds toward construction and completion.

1. Approval of the plans for the proposal to construct a structure for Oral and Maxillofacial Survey Associates at approximately 320 Bay View Road shall be subject to the package of plans submitted on behalf of the applicant by Design Unlimited to the Village of Mukwonago and on file in the office of the Village Clerk. Prior to commencement of any site construction or issuance of any building permit, final plans shall be reviewed and approved by the Supervisor of Inspections/Zoning Administrator, Fire Chief, Village Planner and Village Engineer. The final plans shall be modified to conform to all applicable Village codes and other conditions of approval; the floor plans may be modified with the approval of the Supervisor of Inspections to conform to Building and Fire Safety Codes and all plans may be further modified to conform to Village design standards. However, the basic layout of the site as depicted on the Layout Plan dated November 5, 2015 shall remain unchanged.
2. Prior to the start of any site construction or issuance of a building permit, whichever occurs first, the following shall occur:
 - a. Conformance with all terms and conditions of approval for the Conditional Use.
 - b. Completion of all required approvals as listed in Condition No. 1.
 - c. Approval of the plans by the Fire Chief, which may include, but are not limited to, the internal fire suppression system, external fire department connection location and hydrant locations.
 - d. Approval of building plans by the Building Inspector after receipt of approval of building plans by the State of Wisconsin.
 - e. Approval of building plans shall include appropriate locations of external mechanical equipment to be placed hidden from view of neighboring properties.
 - f. Recording of the 2-Lot Certified Survey Map.
3. Prior to temporary occupancy issuance, and if needed, prior to final occupancy permit, the following shall occur:
 - a. Completion of all site grading and storm water management facilities in accordance with final approved plans.
 - b. Completion of all exterior lighting in accordance with final approved plans.
 - c. Completion of the buildings in accordance with final approved plans and all applicable codes.
 - d. Completion of a hard parking surface with concrete curb and gutter, including installation of handicapped parking signs and ramp in accordance with final approved plans.
 - e. Completion of the dumpster enclosure.
4. Prior to final occupancy permit, which shall be issued not later than 90 days after any temporary occupancy permit, the following shall occur:
 - a. Completion of all items within Condition No. 3.
 - b. Completion of paving and striping of the entire parking area, in accordance with approved plans.
 - c. Installation of all site landscaping, in accordance with approved plans.

Certified Survey Map:

I recommend the following conditions for approval of the 2-Lot CSM:

1. Prior to signing of the CSM by Village officials, a revised CSM shall be submitted for the approval of the Village Engineer.
2. Prior to signing of the CSM by Village officials, the access easement as shown on the CSM shall be extended to the benefit of Lot 2.

I appreciate the thoroughness of the submittal and plans by the applicant and representatives. The proposal will be an excellent addition to the Village.

If any questions arise, please feel free to contact me.

Sincerely,



Bruce S. Kaniewski, AICP
Village Planner

Cc: John Weidl, Village Administrator (via email)
Steve Braatz Jr., Village Clerk (via email)
Joe Hankovich, Supervisor of Inspections (via email)
Mark Blum, Village Attorney (via email)
Kurt Peot, Village Engineer (via email)
Kevin Schmidt, Police Chief (via email)
Jeff Stien, Fire Chief (via email)
Ron Bittner, Public Works Director (via email)
Dave Brown, Utilities (via email)
Kevin Connor, Applicant (via email)
Chris Helwig, Design Unlimited (via email)

Village of Mukwonago
440 River Crest Court, P.O. Box 206
Mukwonago, WI 53149
Phone: (262) 363-6420
Fax: (262) 363-6425
www.villageofmukwonago.com

VILLAGE OF MUKWONAGO
SITE PLAN, ARCHITECTURAL, AND PLANNED
UNIT DEVELOPMENT (PUD) APPLICATION
Application Fee: Below

Date Submitted: 10/3/16

FEES

(Please check one)

- Minor Site Plan (Buildings less than 600 sq. ft.): \$135.00 plus \$.02 per sq. ft.
- Site Plan and/or Architectural Review: \$250.00 plus \$.02 per sq. ft.
- Conceptual Site Plan and/or Architectural Review: \$200.00 plus \$.02 per sq. ft.
- Planned Unit Development (PUD) Review: \$185.00 plus \$25.00/unit
- Resubmittal of or Amendment to Site Plan and/or Architectural Review: \$200.00

CONTACTS

Zoning and Planning Department
Contact: Bruce Karlewski
Phone: (414) 339-4105
Fax: (262) 363-6425
Email: planner@villageofmukwonago.com

GUIDELINES

The undersigned petition is to consider a request, as stated herein, for the specified parcel(s) of land and will be reviewed by the Plan Commission and Village Board of the Village of Mukwonago. The application packet must be filed with the Village Clerk at least 30 days prior to the meeting of the Planning Commission at which action is desired. The Plan Commission meets on the second Tuesday of each month at 6:30 p.m.

Materials listed below must be provided to the Village of Mukwonago in accordance with Village Municipal Code Chapter 100 Article IX, Section 100-601(f) and other pertinent sections of Village ordinances, and, as necessary, to permit review that is consistent with proper planning practice. The Village will strive to accommodate reasonable requests for informal preliminary staff review, however the Village shall not place any items on the agenda for Plan Commission consideration until such time as the application is complete in accordance with all requirements specified on this and other attached application forms.

Mail completed applications to: Village Planner
ATTN: Site Plan/Architectural Plan/Planned Unit Development
PO Box 206
Mukwonago, WI 53149
Deliver to: Village Clerk's Office
440 River Crest Court
Email to: planner@villageofmukwonago.com

Complete, accurate and specific information must be entered. Please Print.

APPLICANT (Full Legal Name)

Name: KEVIN CONNOR, DDS
Company: OMSA DEVELOPMENT LLC
Address: 1111 DELAFIELD ST. SUITE 222 City: WANKESHA State: WI Zip: 53188
Daytime Phone: 262-547-8665 Fax: 262-547-8685
E-Mail: KCONNOR123@hotmail.com

APPLICANT IS REPRESENTED BY (Full Legal Name)

Name: DANIEL HELWIG
Company: DESIGN UNLIMITED OF MARSHFIELD, INC.
Address: 1029 W. McMILLAN City: MARSHFIELD State: WI Zip: 54449
Daytime Phone: 715 384 3207 Fax: 715 384 9922
E-Mail: chris@designunlimitedmfd.com

ARCHITECT

Name: DANIEL HELWIG
Company: DESIGN UNLIMITED OF MARSHFIELD, INC.
Address: 1029 W. McMILLAN City: MARSHFIELD State: WI Zip: ~~WI~~ 54449
Daytime Phone: 715 384-3207 Fax: 715 384-9922
E-Mail: chris@designunlimitedmfd.com

PROFESSIONAL ENGINEER

Name: JIM LUNDBERG
Company: POINT OF BEGINNING, INC.
Address: 5709 WINDY DR. City: STEVENS PT. State: WI Zip: 54482
Daytime Phone: 715-344-9999 Fax: 715-344-9922
E-Mail: jim@pobinc.com

REGISTERED SURVEYOR

Name: TRAVIS PLANTICO
Company: POINT OF BEGINNING, INC.
Address: 5709 WINDY DR. City: STEVENS PT. State: WI Zip: 54482
Daytime Phone: 715 344-9999 Fax: 715 344 9922
E-Mail: travis@pobinc.com

CONTRACTOR

Name: MAGILL CONSTRUCTION (MATT MAGILL)
Company: MAGILL CONSTRUCTION
Address: 977 KOOPMAN LN. City: ELKHORN State: WI Zip: 53121
Daytime Phone: 262-723 2283 Fax: _____
E-Mail: mattm@magillconstruction.com

PROPERTY INFORMATION

Property Owner (s) (if different from applicant): _____
Address: _____ City: _____ State: _____ Zip: _____
Daytime Phone: _____ Fax: _____
E-Mail: _____
Present Zoning: B-2 Tax Key No(s): 2009954001
Location/Address: 320 BAYVIEW RD.
Present Use: VACANT SITE Intended Use: DENTAL OFFICE

PROCEDURAL CHECKLIST FOR SITE PLAN/ARCHITECTURAL PLAN/PUD REVIEW AND APPROVAL

Submittals for review must include and be accompanied by the following:

Application:

- Completed application form including the procedural checklist.
- Application fee: See page 1.
- Agreement for Reimbursable Services (separate application).

Other Documents:

- Five(5) complete sets of Application and materials, in addition to the original, for Village of Mukwonago review.
 - Project Summary: Please attach a statement detailing the reasons and background for this request including: details of proposal, services provided, wares sold, plans and hours of operation, number of employees, frequency of customer visits, frequency of deliveries to site, description of any interior/exterior modifications or additions to be made to property, any outside storage (dumpsters, trucks, materials...), number of parking stalls, screening/buffer type, any other information available. **PLEASE EXPLAIN IN DETAIL.**
 - Electronic Submittals are required. Email (or CD ROM) with all plans and submittal materials in Adobe PDF to planner@villageofmukwonago.com.
 - Any additional information as determined by Village staff.
-
- Upon receipt of a complete submittal, staff review will be conducted within ten business days.
 - All Site Plan, Architectural, and Planned Unit Development review requests require Plan Commission review and Village Board approval.

CERTIFICATION

Applicant hereby certifies that:

1. All of the above statements and other information submitted as part of this application are true and correct to the best of his or her knowledge.
2. Affirms that no Village of Mukwonago elected or appointed official or employee has a proprietary interest in the above referenced property for which this application is being filed (except as stated below under "Exceptions").
3. None of the above referenced individuals has been promised or given any contract for consultation, planning or construction in relation to this project (except as stated below under "Exceptions").
4. Applicant has read and understands all information in this packet.

Applicant further understands the policies of the Village regarding change of zonings and property development. Conditions of the resolution regarding all approvals are strictly followed. Certificates of Occupancy are not given until all conditions of approval have been met.

By the execution of this application, applicant hereby authorizes the Village of Mukwonago or its agents to enter upon the property during the hours of 7:00 am to 7:00 pm daily for the purpose of inspection. Applicant grants this authorization to enter even if this land has been posted against trespassing pursuant to Section 943.13 WI Stats.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

Signature - Property Owner

DR. KEVIN CONNOR
Name & Title (PRINT)

10/3/16
Date

Signature - Applicant

DR. KEVIN CONNOR
Name & Title (PRINT)

10/3/16
Date

Signature - Property Owner

Name & Title (PRINT)

Date

Signature - Applicant's Representative

DANIEL HELWIG, ARCHITECT
Name & Title (PRINT)

10/3/16
Date

FOR OFFICE USE ONLY	
Date Paid	Receipt #
Plan Commission Date(s)	Village Board Date(s)
Escrow Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	Escrow Amount
Plan Commission Disposition	
Village Board Disposition	

OMSA Proposal Description

Oral and Maxillofacial Associates (OMSA) is proposing constructing a new single story office building on Bay View Rd. The new facility will be approximately 3,900 sf.

The proposed new building will be constructed of brick and cast stone veneers, cementboard siding, composite frieze, metal fascias and soffits, architectural asphalt shingles and tinted glazing in colors and tones approved by the Village during final review.

OMSA's new office will have anticipated normal business hours of 8 am-5 pm Monday through Friday. Emergencies do sometimes require after hours appointments or delays which may cause extended hours. Additionally, after hours staff meetings, maintenance and cleaning services may occur outside of normal operating hours.

Anticipated staffing levels will be approximately 12 staff members during most peak operational times. The exact number of staff present will fluctuate based on patient appointment demands and other normal office responsibilities.

Deliveries to the site are expected to be minimal and may include daily UPS, Fed Ex and USPS drop offs and pick ups.

Patient appointment schedules can vary greatly. During peak periods, it is assumed between 15-30 patients may be seen daily depending on the complexity of the procedures required.

A screened masonry trash enclosure will be provided in the Northeast corner of the Staff Parking Area. Materials used will match the masonry veneer products used on the proposed new building.

Exterior signage details have yet to be finalized and will be presented for review during a future project submittal.

Parking stall counts and layouts are depicted on the attached supporting documents.

We have made every effort to include all requested information in the attached submittals. If there is any additional information required at this time, please do not hesitate to contact Design Unlimited of Marshfield.

OMSA Mukwonago Plan of Operation

OMSA's new office will have anticipated normal business hours of 8 am-5 pm Monday through Friday. Emergencies do sometimes require after hours appointments or delays which may cause extended hours. Additionally, after hours staff meetings, maintenance and cleaning services may occur outside of normal operating hours.

Anticipated staffing levels will be approximately 12 staff members during most peak operational times. The exact number of staff present will fluctuate based on patient appointment demands and other normal office responsibilities.



DESIGN UNLIMITED

OMSA - MUKWONAGO

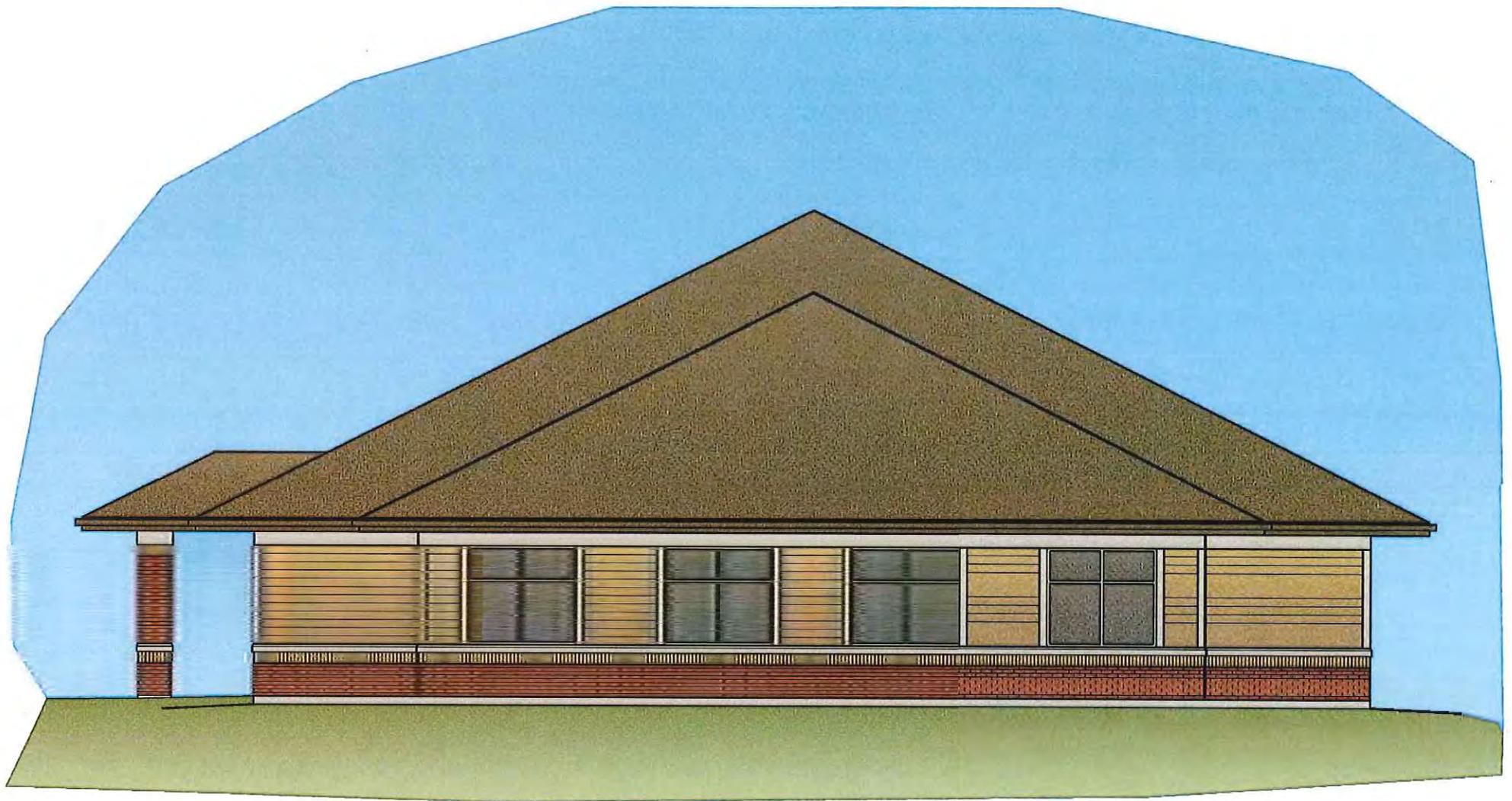
SOUTH ELEVATION



DESIGN UNLIMITED

OMSA - MUKWONAGO

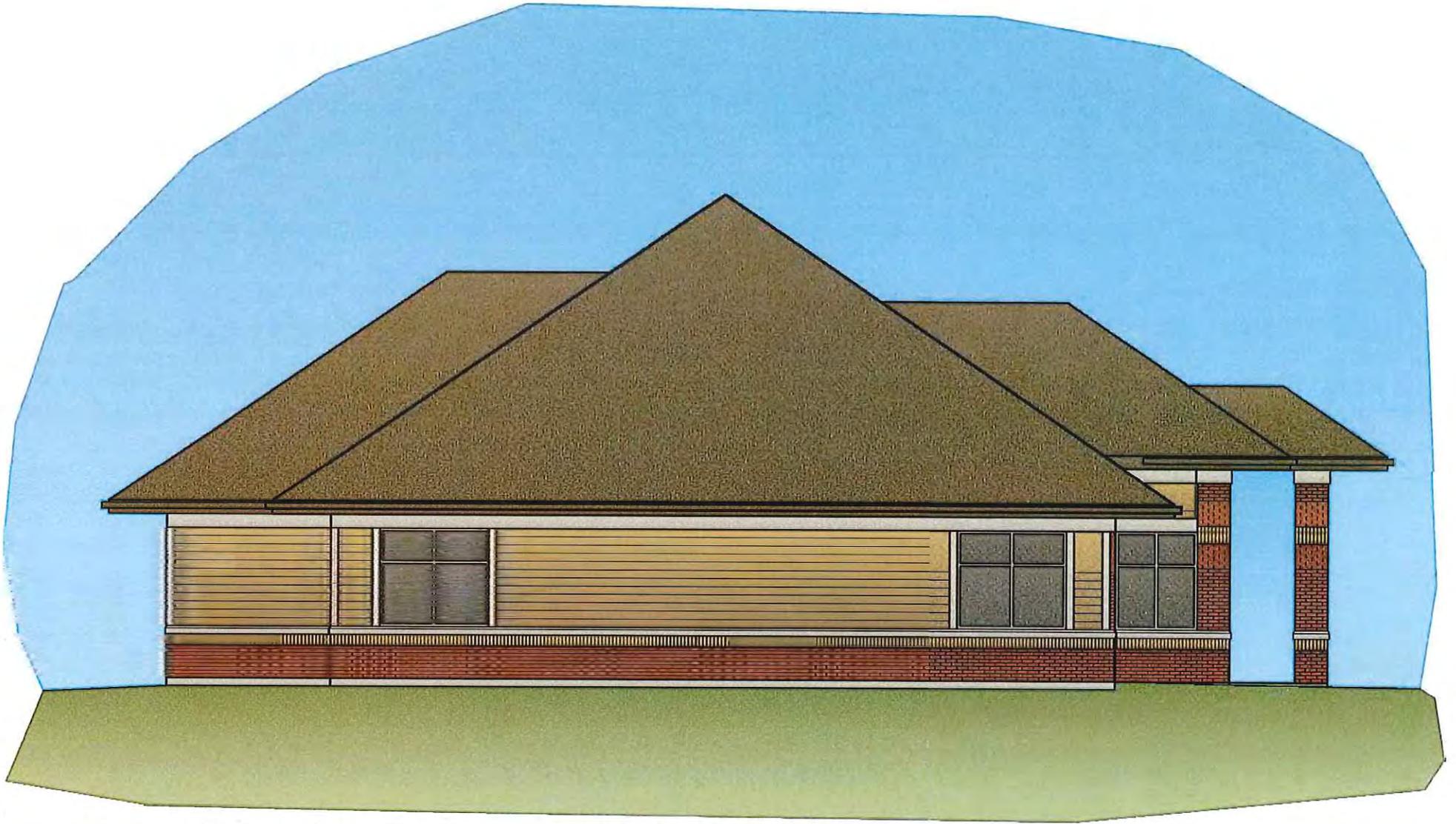
EAST ELEVATION



DESIGN UNLIMITED

OMSA - MUKWONAGO

NORTH ELEVATION



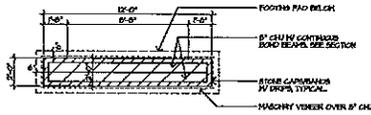
DESIGN UNLIMITED

OMSA - MUKWONAGO

WEST ELEVATION

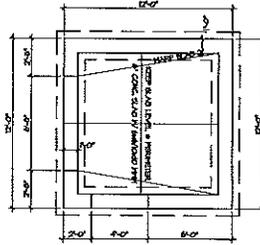
OMSA MUKWONAGO REBID BID DOCUMENTS

BAYFIELD ROAD
MUKWONAGO, WI



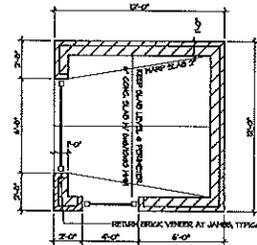
MONUMENT SIGN PLAN

SCALE: 1/4"=1'-0"



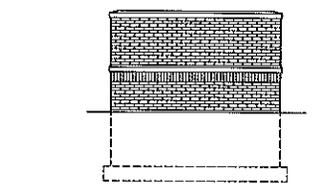
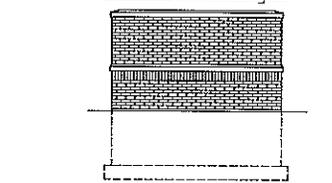
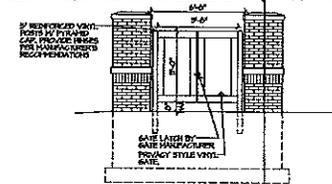
T.E. FOUNDATION PLAN

SCALE: 1/4"=1'-0"



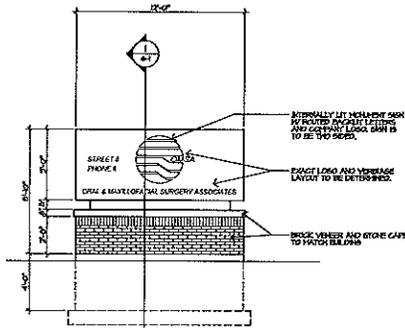
TRASH ENCLOSURE PLAN

SCALE: 1/4"=1'-0"



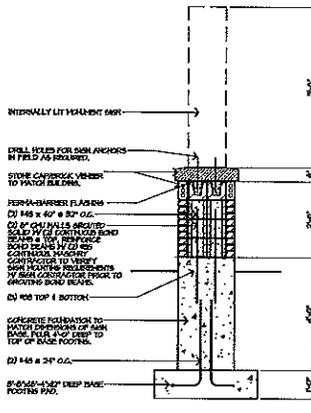
T.E. ELEVATIONS

SCALE: 1/4"=1'-0"



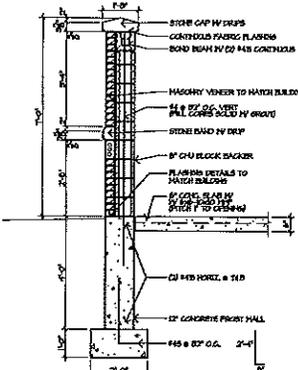
MONUMENT SIGN FRONT ELEVATION

SCALE: 1/4"=1'-0"



1 MONUMENT SIGN SECTION

SCALE: 1/2"=1'-0"



2 TRASH ENCLOSURE SECTION

SCALE: 1/2"=1'-0"

SHEET INDEX		ALL CONTRACTORS, REGARDLESS OF TRADE, ARE TO REVIEW EACH SHEET LISTED IN SHEET INDEX, ANY ADDENDA AND COMPLETE PROJECT MANUAL PRIOR TO BIDDING.	
NUMBER	SHEET DESCRIPTION	NUMBER	SHEET DESCRIPTION
G-1	SHEET INDEX, DESIGN TEAM INFO, SIGNAGE & T.E. DETAILS	A-0	DENTAL EQUIPMENT COVER SHEET
G-2	SITE LAYOUT PLAN	A-1	DENTAL TREATMENT FLOOR PLAN
G-3	GRADING PLAN	G-0	DENTAL EQUIPMENT CONSTRUCTION PLAN
G-4	BROWNS CONTROL PLAN	E-0	DENTAL EQUIPMENT ELECTRICAL PLAN
G-5	SITE UTILITY PLAN	B-1	DENTAL EQUIPMENT LOW VOLTAGE PLAN
G-6	LANDSCAPING PLAN	P-0	DENTAL EQUIPMENT PLUMBING PLAN
A-1	FLOOR PLANS, RCP, NOTES, FINISH SCHEDULES	X-0	DENTAL EQUIPMENT DETAILS
A-2	DOOR & WINDOW ELEVATIONS, SCHEDULES AND DETAILS	X-1	DENTAL EQUIPMENT DETAILS
A-3	EXTERIOR ELEVATIONS	X-2	DENTAL EQUIPMENT DETAILS
A-4	BUILDING SECTION	P-1	PLUMBING COVER SHEET
A-5	OMIT	P-2	PLUMBING PLANS
A-6	SECTIONS	P-3	DENTAL PLUMBING PLANS
A-7	REGIONS	P-4	BANISTERY RASIE AND VERT PLUMBING ISOMETRIC
A-8	DETAILS	P-5	EXPOSING WATER PLUMBING ISOMETRIC
F-1	CASHEMERE & FINISH PLANS, SCHEDULES AND NOTES	P-6	PLUMBING DETAILS
F-2	CASHEMERE & FINISH ELEVATIONS	M-1	MECHANICAL PLANS
F-3	CASHEMERE & FINISH ELEVATIONS	M-2	MECHANICAL NOTES AND SPEC
B-1	FOUNDATION PLAN, FRAMING PLAN AND NOTES	E-0	ELECTRICAL TITLE SHEET
B-2	STRUCTURAL DETAILS	E-1	ELECTRICAL SITE PLAN
		E-2	ELECTRICAL LIGHTING PLAN - MAIN LEVEL
		E-3	ELECTRICAL POWER PLAN - MAIN LEVEL
		E-4	ELECTRICAL SYSTEMS PLAN - MAIN LEVEL
		E-5	ELECTRICAL RISER DIAGRAM AND SCHEDULES

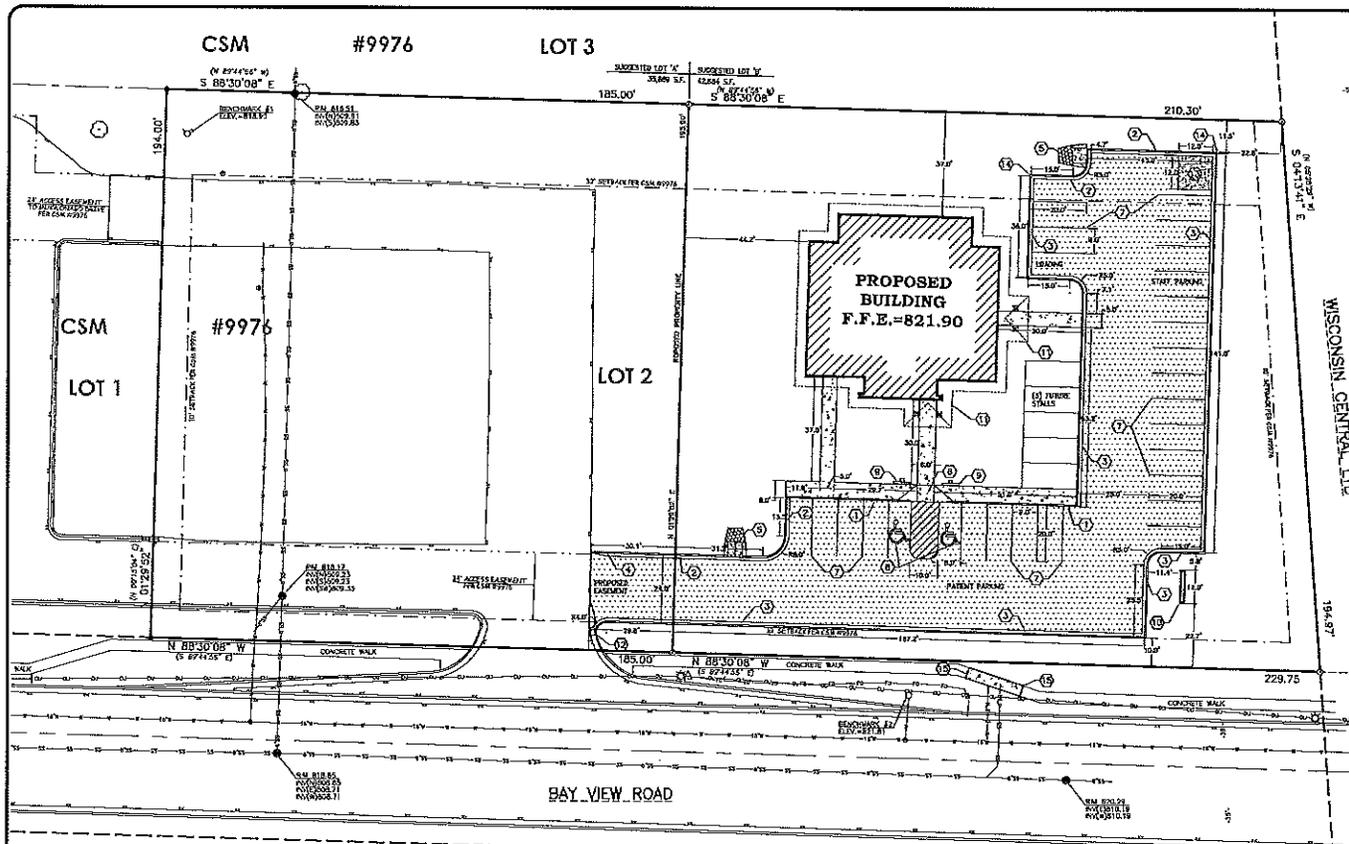
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DRAWN BY: C.H.
 CHECKED BY: D.H.
 DATE: 10/15/10
 TITLE: SIGNAGE
 SCALE: AS NOTED
 JOB NO.:
 SHEET:

G-1



SURVEY LEGEND

- BOUNDARY SURVEY
- OVERLAP FEATURES
- BATHYMETRY
- FOREWATER
- EDGE OF INTERIMOUS CONTROL LINE
- UTILITY MARKER
- WATER MARK
- INSTRUMENT
- VEHICLE
- CLAY PIPE
- TELEPHONE PEG/STAKE
- STAKE
- TREE

KEYNOTES:

- 1 THICKENED EDGE WALK
- 2 18" CONCRETE CURB & GUTTER
- 3 18" CONCRETE CURB & GUTTER (REJECT)
- 4 6" CURB TAPER SECTION
- 5 CONCRETE FLANGE W/rip RAP
- 6 HAND-CAP RAMP
- 7 PARKING LOT STRIPING
- 8 HANDICAP PARKING STALL
- 9 HANDICAP PARKING SIGN
- 10 MONUMENT SIGN (SEE ARCHITECTURAL PLANS)
- 11 BUILDING OVERHANGS (SEE ARCHITECTURAL PLANS)
- 12 SAWCUT AND MATCH EXISTING CONCRETE CURBING
- 13 RAMPMASTER ENCLOSURE (SEE ARCHITECTURAL PLANS)
- 14 STANDARD GUTTER TO REJECT CUTTER TRANSITION POINT
- 15 SAWCUT CONCRETE WALK AT EXISTING JOINT

POB Land Surveying
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BENCH MARK

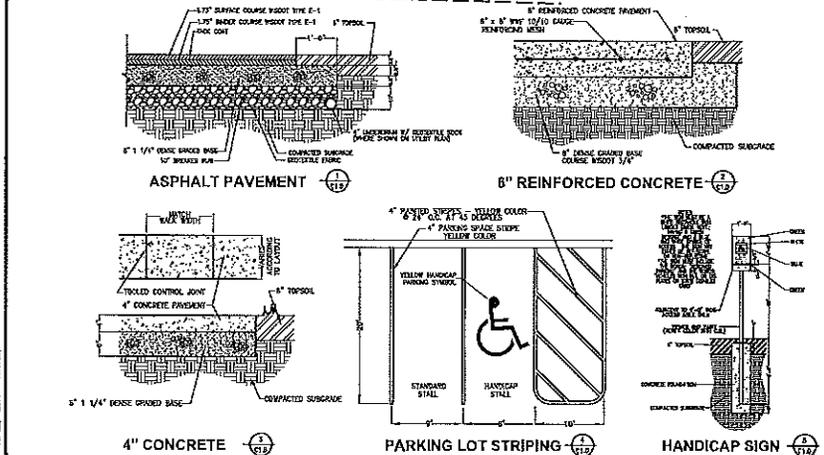
ELEVATIONS ARE REFERENCED TO NAVD 83 DATUM.

DESCRIPTION

THIS SET IS A REVISION TO SHEET C1.0, DATED 7/15/15, LOCATED IN THE REVISIONS SECTION OF THE PROJECT. THE PROJECT IS A REVISION TO SHEET C1.0, DATED 7/15/15, LOCATED IN THE REVISIONS SECTION OF THE PROJECT.

PAVEMENT HATCH PATTERNS:

- PROPOSED 3.5" ASPHALTIC CONCRETE PAVEMENT W/ 1" BASE COURSE AND 1/2" BREAKER RUN
- PROPOSED 4" CONCRETE PAVEMENT
- PROPOSED 6" REINFORCED CONCRETE PAVEMENT



SHEET INDEX:

- C1.0- LAYOUT PLAN
- C2.0- GRADING PLAN
- C3.0- EROSION CONTROL PLAN
- C4.0- UTILITY PLAN
- C5.0- LANDSCAPE PLAN

SITE PARKING TOTALS

EXISTING AND PROPOSED TOTAL = 2-3 GENERAL BUSINESS

ONE-STORY PARKING REQUIREMENTS

4000 S.F. ± 5 STALLS/1000 S.F. = 20 STALLS REQUIRED
ADD 1 STALL FOR EACH EMPLOYEE
ESTIMATED 12 EMPLOYEES = 12 STALLS REQUIRED
TOTAL = 32 STALLS REQUIRED

TWO-STORY PARKING REQUIREMENTS

PROPOSED PARKING = 28 STALLS
SPACE RESERVED FOR FUTURE PARKING = 5 STALLS
TOTAL PROPOSED PARKING = 33 STALLS

GENERAL NOTES:

- CONTACT BIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
- GRADE, LINE, AND LEVEL TO BE REVIEWED IN THE FIELD BY THE CONSTRUCTION MANAGER.
- ALL REQUIRED EROSION CONTROL MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH LOCAL, MUNICIPAL AND DEPARTMENT OF NATURAL RESOURCES REGULATIONS.
- ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES AND LOCAL AUTHORITIES.
- SEE SHEET C1.0 FOR ALL REQUIRED EROSION CONTROL ELEMENTS.
- ANY EXISTING UTILITIES NOT SHOWN ON THIS DOCUMENT WHICH NEED TO BE REMOVED, RELOCATED AND OR ADJUSTED SHALL BE THE RESPONSIBILITY OF THE SITE GRADING CONTRACTOR AND INCLUDED IN THE BASE BID CONTRACT.
- VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
- ALL REQUIRED PLANNING OR SUBMITTING A BID SHALL VISIT THE SITE AND REVIEW THE EXISTING CONDITIONS PRIOR TO THE BID DATE.
- PRIOR TO THE START OF WORK VERIFY WITH THE LOCAL AUTHORITIES THAT ALL REQUIRED PERMITS HAVE BEEN ACQUIRED.
- COORDINATE CONSTRUCTION OF THE WORK WITH THE LOCAL AUTHORITIES.
- PROVIDE PROPER BARRICADES, SIGNS AND TRAFFIC CONTROL TO MAINTAIN THRU TRAFFIC ALONG ADJACENT STREETS IN ACCORDANCE WITH LOCAL MUNICIPAL REGULATIONS.
- ALL SAWCUTS SHALL BE AT AN EXISTING JOINT IN THE CURB AND PAVEMENT.

LAYOUT PLAN

SCALE: 1"=20'-0"

0' 20' 40' 60'

REVISIONS	BY

OMSA MUKWONAGO REBID

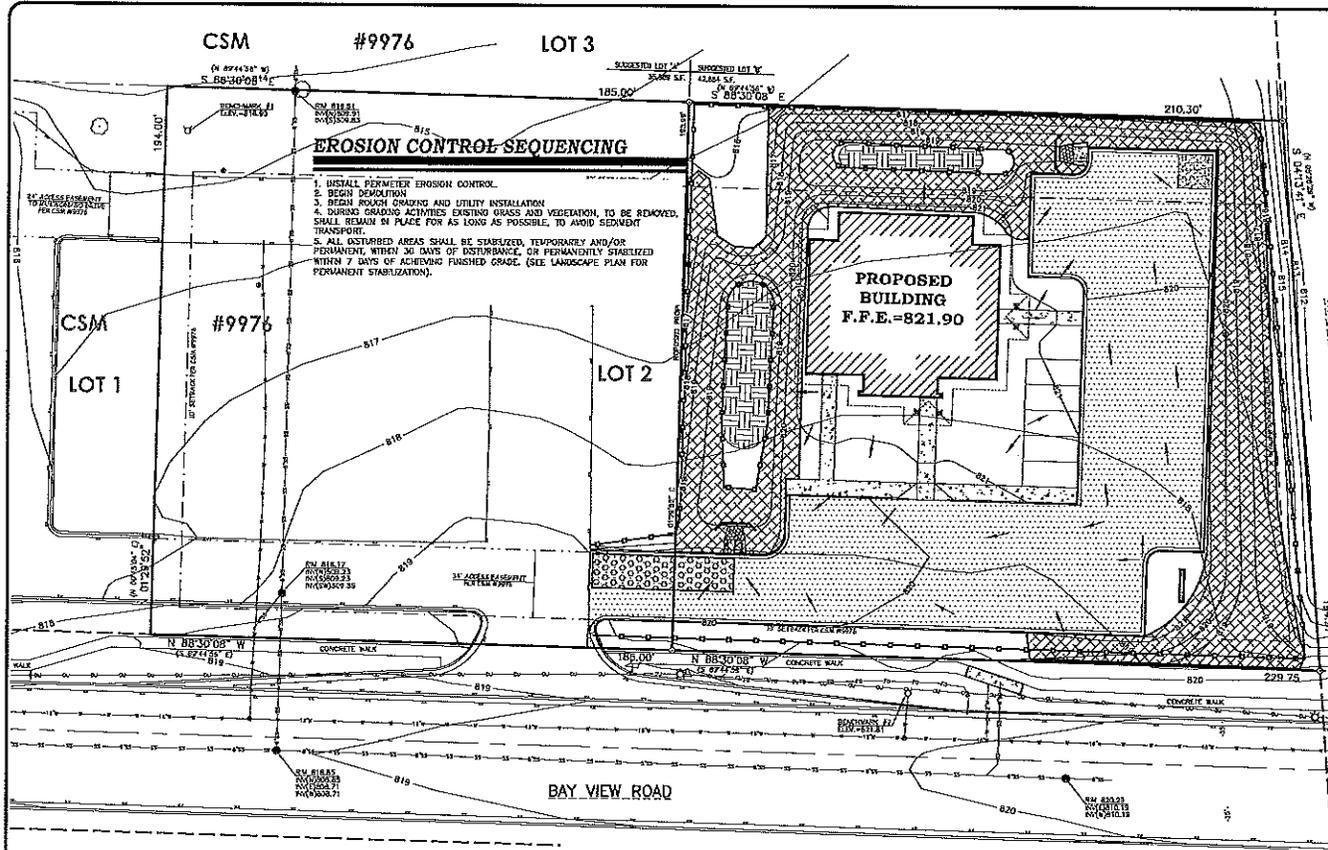
DESIGN UNLIMITED

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(715) 384-3207 FAX (715) 384-9922

C1.0

DESIGNED BY: [Signature]
CHECKED BY: [Signature]
DATE: 7/15/15
SCALE: 1"=20'
JOB NO.: 15151
SHEET



EROSION CONTROL SEQUENCING

1. INSTALL PERMIT EROSION CONTROL.
2. BEGIN DEMOLITION.
3. BEGIN ROUGH GRADING AND UTILITY INSTALLATION.
4. DURING GRADING ACTIVITIES EXISTING GRASS AND VEGETATION, TO BE REMOVED, SHALL REMAIN IN PLACE FOR AS LONG AS POSSIBLE, TO AVOID SEDIMENT TRANSPORT.
5. ALL DISTURBED AREAS SHALL BE STABILIZED, TEMPORARILY AND/OR PERMANENTLY WITHIN 30 DAYS OF DISTURBANCE, OR PERMANENTLY STABILIZED WITHIN 7 DAYS OF ACHIEVING FINISHED GRADE. (SEE LANDSCAPE PLAN FOR PERMANENT STABILIZATION).

SURVEY LEGEND

- SAFETY SIGN
- CHANGING DEVICES
- WATERWAY
- POWER POLES
- EDGE OF HIGHWAY
- BOUNDARY LINE
- SAFETY MARKER
- WATER VALVE
- STAKE
- LEASTLINE
- 5/8" IRON PIPE
- TELEPHONE FEEDLINE
- IRON
- PIPE
- 1/4" O.D. IRON PIPE FOUND
- CONCRETE FOUNDATION FOUND
- 1' PROPOSED AS

Land Surveying
Engineering
Landscaping
Architecture

Point of Beginning

BENCH MARK

EXTENSIVE ARE REFERENCED TO THIS DATA

MARKER #1
 BENCH MARK ON METEOR, LOCATED NEAR THE NORTHEAST CORNER OF THE SUBJECT PROPERTY.
 ELEVATION = 816.00

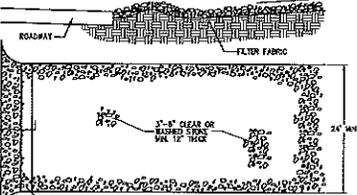
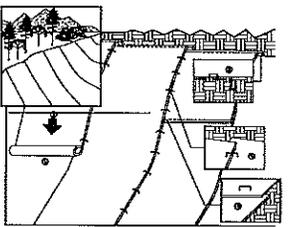
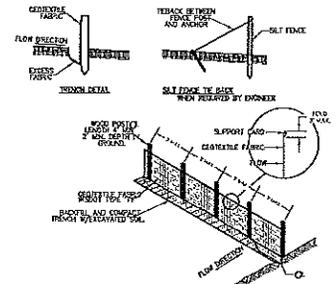
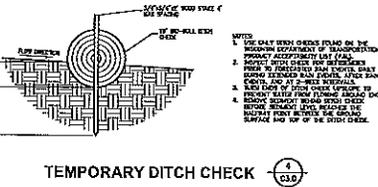
MARKER #2
 BENCH MARK ON METEOR, LOCATED ON THE SOUTH SIDE OF THE NEW ROAD AND NEAR APPROXIMATELY THE 100' WEST END OF EROSION CONTROL LOT 3 PARALLEL TRACK. ELEVATION = 821.01

DESCRIPTION

BEING LOT 3 OF CERTIFIED SURVEY MAP #9976, LOCATED IN THE SECTION 8 OF THE TOWNSHIP 3 N, BY SYSTEM OF TOWNSHIP 3 NORTH RANGE 18 EAST, RANGE OF EROSION CONTROL LOT 3 PARALLEL TRACK, DISTRICT = 821.01

EROSION CONTROL LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SILT FENCE
- PROPOSED INLET PROTECTION
- EROSION CONTROL BLANKET
- ROCK CONSTRUCTION ENTRANCE
- TEMPORARY DITCH CHECK
- STORM WATER OVERLAND FLOW DIRECTION



- NOTES**
1. SLOTTED SILENT BLOCKS SHALL BE INSTALLED AT 10' ON CENTER.
 2. CONCRETE FABRIC SHALL BE 12" THICK WITH 1/2" DIA. HOLES ON 12" ON CENTER.
 3. WOOD PILING SHALL BE 4" DIA. ON 12" ON CENTER.
 4. WOOD STAPLES SHALL BE 1/2" DIA. ON 12" ON CENTER.
 5. WOOD STAPLES SHALL BE 1/2" DIA. ON 12" ON CENTER.
 6. WOOD STAPLES SHALL BE 1/2" DIA. ON 12" ON CENTER.
 7. WOOD STAPLES SHALL BE 1/2" DIA. ON 12" ON CENTER.
 8. WOOD STAPLES SHALL BE 1/2" DIA. ON 12" ON CENTER.
 9. WOOD STAPLES SHALL BE 1/2" DIA. ON 12" ON CENTER.
 10. WOOD STAPLES SHALL BE 1/2" DIA. ON 12" ON CENTER.

- NOTES**
1. THE EROSION CONTROL ELEMENTS SHALL BE MAINTAINED AS LONG AS POSSIBLE.
 2. WHEN NECESSARY, ELEMENTS SHALL BE REPAIRED OR REPLACED.
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 9. WHEN NECESSARY, ELEMENTS SHALL BE REPAIRED OR REPLACED.
 10. WHEN NECESSARY, ELEMENTS SHALL BE REPAIRED OR REPLACED.

GENERAL NOTES:

1. CONTACT DOUGHER'S HOTLINE 6 WORKING DAYS PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
2. NOTIFY THE LOCAL MUNICIPALITY AT LEAST 2 WORKING DAYS PRIOR TO THE START OF SOIL DISTURBING ACTIVITIES.
3. INSTALL ALL TEMPORARY EROSION CONTROL ELEMENTS PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
4. ALL ACTIVITIES SHALL BE CONDUCTED IN A LOGICAL SEQUENCE AS TO MINIMIZE THE AMOUNT OF BARE SOIL EXPOSED AT ANY ONE TIME. MAINTAIN EXISTING VEGETATION AS LONG AS POSSIBLE.
5. CRUSHED ROCK DIMENS FOR SEDIMENT TRACKING UTILIZING 3" CRUSHED ROCK SHALL BE MAINTAINED AT ALL CONSTRUCTION ENTRANCES TO THE SITE. THE ROCK GRASS SHALL BE A MINIMUM OF 12" THICK AND BE A MINIMUM OF 80 FEET IN LENGTH BY THE WIDTH OF THE DRIVEWAY.
6. EXCESSIVE AMOUNTS OF SEDIMENT OR OTHER DEBRIS TRACKED ONTO ADJACENT STREETS SHALL BE CLEANED IMMEDIATELY. FINE SEDIMENT ACCUMULATIONS SHALL BE CLEANED FROM ADJACENT STREETS BY THE USE OF MECHANICAL OR MANUAL SWEEPING OPERATIONS ONCE A WEEK AT A MINIMUM AND BEFORE MAINTENANCE RUN EVENTS.
7. UNDISTURBED GROUND OUTSIDE OF THE OVERLAY CONSTRUCTION AREAS, INCLUDING SOIL STOCKPILES, THAT ARE LEFT INACTIVE FOR MORE THAN 2 DAYS BEFORE AND BEFORE MAINTENANCE RUN EVENTS.
8. WASTE MATERIAL THAT IS GENERATED ON THE CONSTRUCTION SITE SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO RUN INTO RECEIVING WATERS.
9. EROSION CONTROL DEVICES DESTROYED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE END OF EACH WORK DAY.
10. INSPECT ALL EROSION CONTROL MEASURES AT LEAST ONCE A WEEK AND AFTER ANY RAINFALL OF 0.5" OR MORE. MAKE NEEDED REPAIRS AND DOCUMENT ALL ACTIVITIES AS PER THE REQUIREMENTS OF THE NOTICE OF INTENT SUBMITTED BY THE PROJECT CIVIL ENGINEER.
11. ALL TEMPORARY EROSION CONTROL ELEMENTS SHALL REMAIN IN PLACE UNTIL A SUFFICIENT GROWTH OF VEGETATION IS ESTABLISHED AND THEN BE REMOVED AS PART OF THE BIDS.
12. F. SEDIMENT LAUNCH WATERS NEEDS TO BE REMOVED FROM THE SITE. FILTER BAGS OR SCREENING SHALL BE USED IN ACCORDANCE WITH THE WI DNR TECHNICAL STANDARDS 1981 TO PREVENT THE DISCHARGE OF SEDIMENT TO THE MAXIMUM EXTENT PRACTICABLE.
13. PROVIDE RIP RAP AT ALL EXTERNAL STRUCTURES OF THE PROPOSED CURBENTS TO PREVENT WASHOUT AND EROSION.
14. RIP RAP SHALL HAVE FILTER FABRIC PLACED BENEATH.
15. SILT FENCE SHALL BE INSTALLED AROUND THE REBETMENT AREA IMMEDIATELY FOLLOWING INSTALLATION OF THE ENGINEERED SOIL TO PROTECT IT FROM SILT CONTAMINATION.
16. THE CONTRACTOR SHALL ONLY USE PHOSPHORUS FREE FERTILIZER FOR ALL LANDSCAPE APPLICATIONS.
17. THE ENGINEERED SOIL SHALL NOT BE PLACED IN THE REBETMENT AREAS UNTIL THE SURROUNDING DRAINAGE AREA HAS BEEN FULLY STABILIZED. ALL CONSTRUCTION SITE SEDIMENT SHALL BE REMOVED FROM THE SURROUNDING OF THE REBETMENT AREA PRIOR TO PLACEMENT OF THE ENGINEERED SOIL.
18. THE CONTRACTOR SHALL PERFORM INSPECTIONS AND MONITORING OF EROSION CONTROL PRACTICES IN ACCORDANCE WITH THE WI DNR CONSTRUCTION SITE INSPECTION REPORT FORM 3400-187. THIS FORM CAN BE FOUND IN THE CONSTRUCTION SPECIFICATIONS.

THIS DOCUMENT IS THE PROPERTY OF OMSA MUKWONAGO REBID. IT IS TO BE USED ONLY FOR THE PROJECT AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE WRITTEN PERMISSION OF OMSA MUKWONAGO REBID.

EROSION CONTROL PLAN

SCALE: 1" = 20'-0"

0' 20' 40' 60'

REVISIONS	BY

OMSA MUKWONAGO REBID

DESIGN UNLIMITED

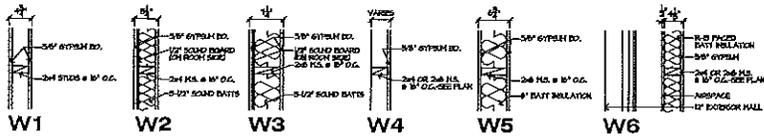
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 (715) 884-3527 FAX (715) 284-8922



DATE	BY
7/15/15	MM

C3.0



WALL TYPES
SCALE: 1/8"=1'-0"

GENERAL PLAN NOTES:

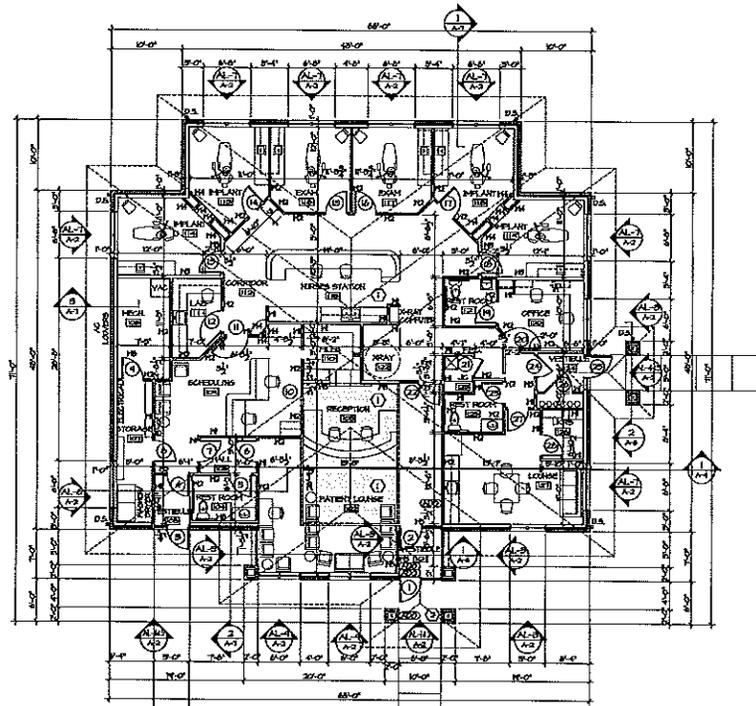
1. ALL EXTERIOR EXPOSURES ARE FROM FACE OF MASONRY (FOUNDATION WALL) TO FACE OF MASONRY EXPOSURE WALLS.
2. ALL INTERIOR EXPOSURES ARE FROM FACE OF METAL STUD, WOOD STUD OR MASONRY TO FACE OF METAL STUD, WOOD STUD OR MASONRY.
3. ALL INTERIOR WOOD STUD WALLS ARE TO EXTEND UP TO THE UNDERSIDE OF ROOF OR FLOOR TRIMMER, SOUND INSULATION FULL HEIGHT AND GYPSUM BOARD AND SOUND BOARD FULL HEIGHT EXPOSED SIDE.
4. PAINT ALL EXPOSED STEEL LINTELS ON INTERIOR AND EXTERIOR, SEE STRUCTURAL.
5. DIA. ON PLAN INDICATES IMPROVED BEARLESS DOWNPOUT, SEE CIVIL AND PLUMBING DRAWINGS.
6. GENERAL CONTRACTOR TO INCLUDE INSTALLING SOUND BLOCKS AROUND ALL MASONRY AND SOCR CRACKS FOR ATTACHING TRIMMER.
7. ALL STONE GAPS AND DAMS ARE TO HAVE CONTINUOUS DRAPE, TYPICAL DETAIL DETAIL.
8. DIA. ON PLAN INDICATES FIRE DOOR OPERATORS, SEE SFD AND ELECTRICAL DRAWINGS.
9. F.E.G. ON PLAN INDICATES FIRE EXTINGUISHER CABINET, F.E. INDICATES FIRE EXTINGUISHER, SEE DETAIL 9-1.

SPECIFIC PLAN NOTES

1. HALL CEILING AREA, SEE REFLECTED CEILING PLAN AND SIGNAGE.
2. AG. TO INCLUDE HOOK ALLOWANCE FOR PROVIDING INSTALLING EXPOSURE.
3. COORDINATE EXACT FIXTURES LOCATION WITH CITY FLOOR TO MASONRY FLOOR.

ROOM FINISH SCHEDULE

RMP	ROOM NAME	FLOOR	BASE	WALLS	CEILING	HEIGHT	REMARKS
101	VESTIBULE	TILE*	4" TILE	GYP. BD. PTD.	2X2 AGT	12'-4"	*SEE PLAN F1
102	PATIENT LOUNGE	CARPET TILE	4" TILE	GYP. BD. PTD.	VARIES	VARIES	*SEE PLAN F1
103	RECEPTION	CARPET TILE	WOOD, 4" TILE	GYP. BD. PTD.	VARIES	VARIES	*SEE PLAN F1
104	REST ROOM	TILE*	6" TILE	GYP. BD. PTD.	2X2 AGT	8'-0"	*SEE PLAN F1
105	VESTIBULE	TILE*	4" TILE	GYP. BD. PTD.	2X2 AGT	9'-4"	*SEE PLAN F1
106	HALL	TILE*	4" TILE	GYP. BD. PTD.	2X2 AGT	9'-4"	*SEE PLAN F1
107	STORAGE	SEALED CONCRETE	4" RB 1	GYP. BD. PTD.	GYP. BD. PTD.	12'-0"	
108	MECH.	SEALED CONCRETE	4" RB 1	GYP. BD. PTD.	GYP. BD. PTD.	12'-0"	
109	SCHEDULING	CARPET TILE	WOOD	GYP. BD. PTD.	2X2 AGT	9'-4"	
110	FILES	CARPET TILE	WOOD	GYP. BD. PTD.	2X2 AGT	9'-4"	
111	LAB	VINYL 2	4" RB 2	GYP. BD. PTD.	2X2 AGT	9'-4"	
112	CORRIDOR	CARPET TILE	WOOD	GYP. BD. PTD.	2X2 AGT	9'-4"	
113	NURSES STATION	VINYL 2	4" RB 2	GYP. BD. PTD.	2X2 AGT	9'-4"	
114	IMPLANT	VINYL 1	4" RB 1	GYP. BD. PTD.*	2X2 AGT	9'-4"	*ACCENT PTD WEST
115	IMPLANT	VINYL 1	4" RB 1	GYP. BD. PTD.*	2X2 AGT	9'-4"	*ACCENT PTD NORTH
116	EXAM	VINYL 1	4" RB 1	GYP. BD. PTD.*	2X2 AGT	9'-4"	*ACCENT PTD NORTH
117	EXAM	VINYL 1	4" RB 1	GYP. BD. PTD.*	2X2 AGT	9'-4"	*ACCENT PTD NORTH
118	IMPLANT	VINYL 1	4" RB 1	GYP. BD. PTD.*	2X2 AGT	9'-4"	*ACCENT PTD NORTH
119	IMPLANT	VINYL 1	4" RB 1	GYP. BD. PTD.*	2X2 AGT	9'-4"	*ACCENT PTD EAST
120	OFFICE	CARPET TILE	WOOD	GYP. BD. PTD.	2X2 AGT	9'-4"	
121	REST ROOM	VINYL 2	6" RB 2	GYP. BD. PTD.	2X2 AGT	8'-0"	
122	XRAY	CARPET TILE	WOOD	GYP. BD. PTD.	2X2 AGT	9'-4"	
123	J.	VINYL 2	4" RB 2	GYP. BD. PTD.	GYP. BD. PTD.	12'-0"	
124	VESTIBULE	TILE*	4" TILE	GYP. BD. PTD.	2X2 AGT	9'-4"	*SEE PLAN F1
125	REST ROOM	TILE*	6" TILE	GYP. BD. PTD.	2X2 AGT	8'-0"	*SEE PLAN F1
126	LOCKERS	VINYL 1	4" RB 1	GYP. BD. PTD.	2X2 AGT	8'-0"	
127	LOUNGE	VINYL 1	4" RB 1	GYP. BD. PTD.	2X2 AGT	9'-4"	



MAIN LEVEL FLOOR PLAN
SCALE: 1/8"=1'-0"

REVISIONS	BY

OMSA MUKWONAGO REBID
DESIGN UNLIMITED
 DAN REDDING, ARCHITECT, AIA, 6501 WEST HOLLAND STREET, MASSAPELLLO, WI 54944
 WWW.DESIGNUNLIMITED.COM
 (920) 364-3007 FAX (920) 364-4922

DRAWN BY: C.H.
 CHECKED BY: D.H.
 DATE: 7/26/06
 AS NOTED
 JOB NO.:
 SHEET:
A-1

Aug 05, 2006 - 4:58pm

W233 N2080 Ridgeview Parkway • Waukesha, WI 53188-1020 • Tel. (262) 542-5733

January 4, 2016

Mr. James Lundberg, P.E
Point of Beginning, Inc.
5709 Windy Drive
Stevens Point, WI 54482

RE: Oral and Maxillofacial Surgery Associates Preliminary Review
Preliminary Storm Water Review Additional Comments

Dear Mr. Lundberg:

In addition to the Preliminary Storm Water Review letter sent on December 2, 2015 for the proposed Oral Maxillofacial Surgery Associates development along Bayview Road we would offer one additional comment. In discussions with the Village of Mukwonago attorney, it should be noted that the storm water discharged off of the Oral Maxillofacial Surgery Associates site shall be conveyed in an easement when discharged into the existing storm water pond.

If you have any questions, comments, or concerns, please do not hesitate to contact me.

Very truly yours,

RUEKERT & MIELKE, INC.



Brennen E. Fischer, E.I.T.
Project Engineer
bfischer@ruekert-mielke.com

BEF:sjs

cc: John Weidl, Village of Mukwonago
Steve Braatz, Village of Mukwonago
Joseph Hankovich, Village of Mukwonago
Bruce Kaniewski, Village of Mukwonago
Mark G. Blum, Village of Mukwonago
Chris Helwig, Design Unlimited
Kurt A. Peot, P.E., Ruekert & Mielke, Inc.
File

~12-10051 Oral and Maxiofacial Surgery Associates Review > Review > Correspondence > Pt of Beginning-Lundberg-20160104-Preliminary Storm Water Review Additional Comments.docx~

Peot, Kurt

From: Comstock, Julie
Sent: Friday, November 20, 2015 3:50 PM
To: Fred Winchowky (president@villageofmukwonago.com)
Cc: John Weidl (jweidl@villageofmukwonago.com); Steve Braatz; Joe Hankovich; Bruce Kaniewski; M Blum; Cross, Bruce; Peot, Kurt; travis@pobinc.com; dan@designunlimitedmfld.com
Subject: Emailing - Winchowky-20151120-OSMA CSM review.pdf
Attachments: Winchowky-20151120-OSMA CSM review.pdf

Good Afternoon,

The attached OMSA Development, LLC – CSM Review is being sent on behalf of Bruce Cross. Please contact Bruce with comments or questions.

Thanks

W233 N2080 Ridgeview Parkway • Waukesha, WI 53188-1020 • Tel. (262) 542-5733

November 20, 2015

Mr. Fred Winchowky
Village President
Village of Mukwonago
P.O. Box 206
Mukwonago, WI 53149

RE: OMSA Development, LLC - Certified Survey Map Review

Dear President Winchowky:

We have reviewed the above Certified Survey Map, dated November 5, 2015, as requested by Village Staff. Our review is primarily focused on the requirements of the Wisconsin Administrative Code A-E 7, Wisconsin Statute Chapter 236, and the Village of Mukwonago Ordinance Chapter 45, Article IV. We offer the following comments:

1. We have no A-E7 comments.
2. Per 236.34 (1m) (c) (2): On Sheet 3, the location of the property surveyed must be shown.
3. Per 236.34 (1m) (c), which references 236.20 (3) (d): The names of adjoining subdivisions must be shown and underscored. It looks like they may be shown but not underscored.
4. Per Chapter 45, Article IV, Sec. 45-94 (3): The address of the owner must be shown.
5. Per Chapter 45, Article IV, Sec. 45-94 (4): There appears to be some sort of paving on this property. This should be shown.
6. Per Chapter 45, Article IV, Sec. 45-95: Bearings shall be referenced to the Wisconsin State Plane Coordinate System, South Zone. The Northeast corner of Section 35 is in a river. This map is showing a witness corner and must indicate as such.

~12-10051 Oral and Maxiofacial Surgery Associates Review > Review > Correspondence > Winchowky-20151120-OSMA CSM review.docx~

Mr. Fred Winchowky
Village of Mukwonago
OMSA Development, LLC - Certified Survey Map Review
November 20, 2015
Page 2

We have contacted “Point of Beginning” to make them aware of these comments. We recommend the Village Plan Commission recommend approval of the subject CSM to the Village Board subject to the above revisions being made. We further recommend the Village Board authorize the Village President to sign the CSM once the above revisions have been made.

If you have any questions or comments, please contact our office.

Very truly yours,

RUEKERT & MIELKE, INC.



Bruce K. Cross, P.L.S.

Professional Land Surveyor

bcross@ruekert-mielke.com

BKC:jkc

cc: John Weidl, Village of Mukwonago
Steven Braatz, Jr., CMC/WCMC, Village of Mukwonago
Joseph Hankovich, Village of Mukwonago
Bruce Kaniewski, Village of Mukwonago
Mark Blum, Village of Mukwonago
Travis Plantico, Point of Beginning
Daniel J. Helwig, Design Unlimited of Marshfield, LLC
Kurt A. Peot, P.E., Ruekert & Mielke, Inc.
File

W233 N2080 Ridgeview Parkway • Waukesha, WI 53188-1020 • Tel. (262) 542-5733

December 2, 2015

Mr. Fred Winchowky
Village President
Village of Mukwonago
P.O. Box 206
Mukwonago, WI 53149

RE: Oral and Maxillofacial Surgery Associates Preliminary Review
Preliminary Storm Water Review Letter

Dear President Winchowky:

We received a conceptual plan submittal for a proposed Oral Maxillofacial Surgery Associates development along Bayview Road on November 6, 2015. We have completed our preliminary storm water review required by the Village Storm Water Management Ordinance. A preliminary storm water review is intended to encourage planning for required storm water measures early in the approval process to help avoid expensive revisions later in the process and to ensure that land is available for future storm water management practices. As a part of the submittal we also received a preliminary storm water management plan and drawings, these were also reviewed in conjunction to the Preliminary Storm Water Review. A separate letter is being sent to the design engineer addressing specific comments that were prepared as a part of the storm water review process.

The proposed Oral Maxillofacial Surgery Associates development involves the development of a lot within the Berg Bayview Road Site currently containing Sherwin Williams. There is an existing storm water management plan for this development and as a result this development is considered part of a common plan of development. The development of the proposed Oral Maxillofacial Surgery Associates site was not included in the design of the existing storm water pond meaning this site must meet all requirements of the Village Storm Water Ordinance. We believe the site will be able to meet the requirements of the Village Storm Water Ordinance. This letter will serve as a preliminary storm water review letter required by the Village Storm Water Ordinance prior to approval of a certified survey map and site plan by the Plan Commission and the Village Board.

Mr. Fred Winchowky
Village of Mukwonago
December 2, 2015
Page 2

If you have any questions, comments, or concerns, please do not hesitate to contact me.

Very truly yours,

RUEKERT & MIELKE, INC.



Brennen E. Fischer, E.I.T.
Project Engineer
bfischer@ruekert-mielke.com

BEF:sjs

cc: John Weidl, Village of Mukwonago
Steve Braatz, Village of Mukwonago
Joseph Hankovich, Village of Mukwonago
Bruce Kaniewski, Village of Mukwonago
Dave Brown, Village of Mukwonago
Ivan Zaremba, Village of Mukwonago
Ron Bittner, Village of Mukwonago
James Lundberg, P.E., Point of Beginning
Chris Helwig, Design Unlimited
Kurt A. Peot, P.E., Ruekert & Mielke, Inc.
File

_____, as “Owner” of the property described in Exhibit A, in accordance with Chapter 34 of the Village of Mukwonago Municipal Code, agrees to install and maintain storm water best *management practices* (referred to herein as or *BMP*)¹ on the subject property in accordance with approved plans and Storm Water Permit conditions. The owner further agrees to the terms stated in this document to ensure that the storm water BMP’s continue serving the intended functions in perpetuity. This Agreement includes the following exhibits:²

Exhibit A: Legal Description of the real estate for which this Agreement applies (“Property”).

Exhibit B: Location Map - shows an accurate location of each storm water management practice affected by this Agreement.

Exhibit C: Maintenance Plan - prescribes those activities that must be carried out to maintain compliance with this Agreement.

Exhibit D: Design Summary - contains a summary of key Engineering calculations and other data used to design the BMP’s.

Exhibit E: As-built survey - shows a detailed “as-built” cross section and plan view of the BMP’s.

Exhibit F: Engineering/Construction Verification - provides verification from the project engineer that the design and construction of the wet detention basin complies with all applicable technical standards and the Village’s requirements.

Through this Agreement, the Owner hereby subjects the Property to the following covenants, conditions and restrictions:

1. The Owner shall construct, maintain and if necessary reconstruct the storm water BMPs so as to maintain their compliance with applicable governmental, statutes, ordinances of rules. The Owner shall be responsible for the routine and extraordinary maintenance and repair of the storm water BMP’s identified in Exhibit B in accordance with the maintenance plan contained in Exhibit C.
2. Upon written notification by Village of Mukwonago or its designee and not less than biannually, the Owner shall, at their own cost and within a reasonable time period determined by the Village of Mukwonago, have an inspection of the storm water management BMP’s conducted by a qualified professional, who shall then file a report with the Village of Mukwonago and the

¹ Best management practices or BMP are defined as structural and nonstructural measures, practices, techniques or devices employed to avoid or minimize sediment or other pollutants carried in runoff.

² In the event this Agreement is required to be recorded by the Village in order for an Occupancy Permit to be issued prior to all construction of the Storm Water Management Practices being completed or verification being accepted by the Village, then the Village may require an addendum(s) to this agreement to be recorded by the Owner showing design and construction details. The addendum may contain several additional exhibits, as described in Exhibit E and Exhibit F.

Owner shall thereafter timely complete any maintenance or repair work recommended in the report. The Owner shall be liable for the failure to undertake any maintenance or repairs.

3. In addition, and independent of the requirements under paragraph 2 above, the Village of Mukwonago, or its designee, is authorized but not required to access the property as necessary to conduct inspections of the storm water management BMP's to ascertain compliance with the terms and intent of this Agreement and the activities prescribed in Exhibit C. The Village of Mukwonago may require work to be done which differs from the report described in paragraph 2 above, if the Village of Mukwonago reasonably concludes that such work is necessary and consistent with the intent of this agreement. Upon notification by the Village of Mukwonago of required maintenance or repairs, the Owner shall complete the specified maintenance or repairs within a reasonable time frame, as determined by the Village of Mukwonago.
4. If the Owner does not complete an inspection under 2 above or complete the required maintenance or repairs under 3. above within the specified time period, the Village of Mukwonago is authorized, but not required, to perform the specified inspections, maintenance or repairs. In the case of an emergency situation, as determined by the Village of Mukwonago, no notice shall be required prior to the Village of Mukwonago performing emergency maintenance or repairs.

The cost of inspections or measures undertaken by the Village pursuant to this agreement shall be first paid from the proceeds of any surety maintained to secure the performance by the Owner/Developer of its obligations under this agreement and the conditions of the use, site and architectural approval. In the event that the costs of said measures shall exceed the value of the surety or the surety has expired or been terminated, then in that event the cost of said measures shall be assessed as a special charge for current services pursuant to Wis Stat Sec. 66.0627. Any such assessment which is not paid within 60 days after billing shall be deemed a delinquent special charge and shall become a lien upon the parcel against which such charge has been assessed. Such delinquent charges shall be extended upon the current or next tax roll as a delinquent tax against the parcels for which payment has not been received by the Village and all proceedings in relation to the collection, return and sale of property for delinquent real estate taxes shall apply to such special charges. The Developer hereby consents to the levy of such charge and waives notice and the right to hearing.

5. This Agreement shall run with the property and be binding upon all heirs, successors and assigns. After the Owner records this document, the Village of Mukwonago shall have the sole authority to modify this agreement contingent upon the Village of Mukwonago providing a 30-day written notice to the current Owner. Any modifications shall conform to the minimum requirements of Chapter 34 (or its successor) and be written so as to ensure the long-term maintenance of the stormwater BMP's.
6. The Owner/Developer agrees to pledge a surety in a form acceptable to the Village of Mukwonago to secure performance of the obligations arising from the construction and

maintenance of the storm water BMPs provided for under this Agreement in the amount of 120% of the actual cost of the storm water BMPs. Said surety shall remain in effect for a period of three (3) years from the date of the execution of this Agreement or until drawn upon in full by the Village or one year(1) from the date of the certification of the storm water improvements whichever occurs first. Release of the surety prior to the deadlines stated herein shall be governed by Mukwonago Village code section 34-108(c) as amended

- 7. This Agreement shall be governed and construed in accordance with the laws of the State of Wisconsin.

Dated this ____ day of _____, 201__

Owner:

Authorized Representative of _____ (Owner)

(Printed Name of Authorized Representative)

State of Wisconsin:

County of Waukesha

Personally came before me this ____ day of _____, 201__, the above named _____, as the authorized Representative of _____ (owner) _____ for the purpose of signing this document, to me known to be the person who executed the foregoing instrument and acknowledged the same.

[Name]

Notary Public, Waukesha County, WI

My commission expires: _____

Accepted by the Village of Mukwonago this ____ day of _____, 201__.

Fred Winchowky, Village President

Steven Braatz, Jr., Village Clerk

This document was drafted by:

Attorney Shawn N. Reilly

Hippenmeyer, Reilly, Moodie & Blum, S.C.

P.O. Box 766

Waukesha, WI 53187-0766

Telephone: (262) 549-8181

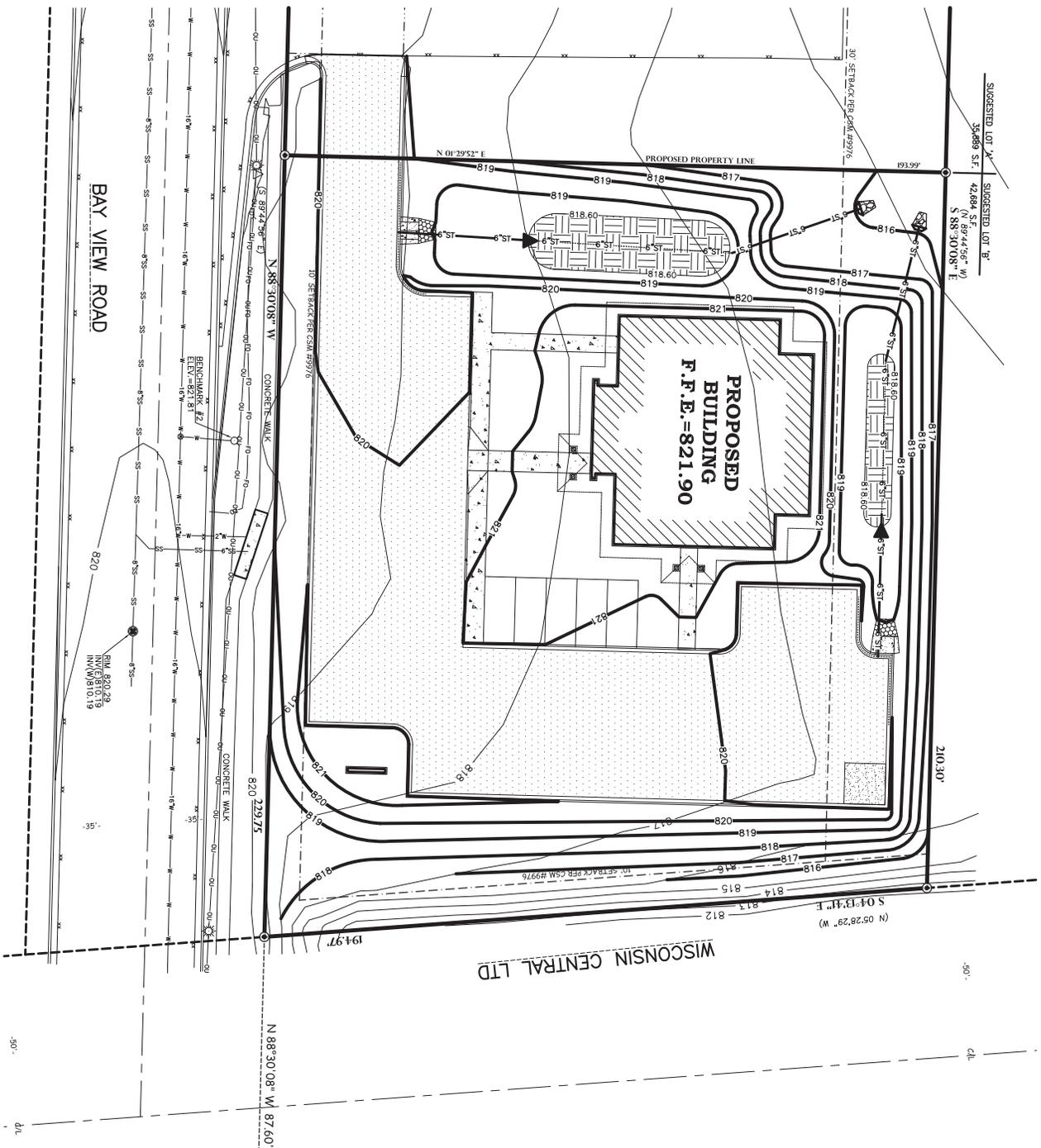
Facsimile: (262) 549-8191

Email: sreilly@hrmblawfirm.com

Exhibit A:

Legal Description

Commencing at the East $\frac{1}{4}$ corner of Section 35, Township 5 North, Range 18 East; thence N $00^{\circ}56'28''$ E along the East line of the Northeast $\frac{1}{4}$ of said Section 35, 528.32 feet; thence N $88^{\circ}30'08''$ W, 87.60 feet to the North line of Bay View Road and the West line of Wisconsin Central LTD and the point of beginning (POB) of the parcel to be described; thence N $88^{\circ}30'08''$ W along said North line of Bay View Road, 229.75 feet; thence N $01^{\circ}29'52''$ E, 193.99 feet; thence S $88^{\circ}30'08''$ E, 210.30 feet to said West line of Wisconsin Central LTD; thence S $04^{\circ}13'41''$ E along said West line of Wisconsin Central LTD, 194.97 feet to the point of beginning.



**STORMWATER
MANAGEMENT LEGEND:**

- X-ST — PROPOSED STORM SEWER
- X-ST — PROPOSED PERFORATED UNDERDRAIN
- 100 — PROPOSED CONTOUR
- 100 — EXISTING CONTOUR
- ▲ PROPOSED ENDWALL STRUCTURE WITH RIP RAP
- ▲ PROPOSED STORM CLEANOUT
- PROPOSED BIORETENTION BASIN

NE CORNER SEC.35-18
 2539.38'
 EAST LINE - NE 1/4
 2011.06'
 528.32'
 N 00°56'28" E
 E 1/4 CORNER SEC.35-18



Point of Beginning



Land Surveying
 Engineering
 Landscape Architecture

5709 Windy Drive, Suite D
 Stevens Point, WI 54482
 715.344.9979 (ph) 715.344.9921 (fx)

STATE OF WISCONSIN, INC. INCLUDES THE SURVEYOR'S COMPENSATION AND NO THESE PLANS, DRAWINGS AND INSTRUMENTS, NO 18466 INCORPORATION INTO OTHER DOCUMENTS OR RESUBMITTAL OR REVISIONS OF POINT OF BEGINNING, WITHOUT THE WRITTEN CONSENT OF POINT OF BEGINNING, INC.

Exhibit B: Location Map

Oral & Maxillofacial Surgery Associates, LTD
 Village of Mukwonago, Waukesha County, WI

Drawn:	NJL
Checked:	JJL
Date:	10/3/2016
Scale:	1"=30'

Exhibit C:

Operation and Maintenance, Long-term

The OWNER of this project in the Village of Mukwonago, Waukesha County, WI is directly responsible for the operation, inspection, and maintenance of all stormwater facilities located within the OMSA Mukwonago site, as described below.

- **Bioretention Basin :**

Inspection: Look for accumulation of sediment and/or debris. Length of time water is retained in basin. Look for erosion or damage. Review plant health; look for weeds and grasses encroaching on plants.

Maintenance: Remove accumulated sediment deposits and/or debris and repair any eroded or damaged grass areas. If water is retained for more than 24-48 hours after a storm event replace top 6” of engineered soil. Remove any identified weeds or grasses. Do not plow/store snow in bio-retention basin.

- **Storm Sewer and Outfall:**

Inspection: Accumulation of sediment and/or debris within storm sewer pipe, and/or outfall. Look for damage to pipe and outfall.

Maintenance: Remove accumulated sediment and/or debris within the pipe, and/or within or near outfall. Repair damage to pipe, catch basin, and/or outfall. If the damage is un-repairable then the pipe and/or outfall shall be replaced.

The aforementioned inspection and maintenance schedule shall be performed after any rainfall event exceeding one inch of rainfall, and at a minimum semi-annually in early spring and fall.

All inspections and maintenance shall be documented and the OWNER shall keep all inspection and maintenance reporting/records onsite and available upon request of the Village/County and/or Wisconsin Department of Natural Resources.

Exhibit D:

Design Summary

Erosion Control/Storm Water Management Maintenance/Operation Plan

For:

Design Unlimited

PREPARED BY:



Point of Beginning

**5709 WINDY DRIVE, SUITE D
STEVENS POINT, WI 54482
(715) 344-9999 ■ (715) 344-9922**

Located in:

**Village of Mukwonago
Waukesha County, Wisconsin**

Dated:

October 30, 2015

Revised:

March 14, 2016

October 3, 2016

October 13, 2016

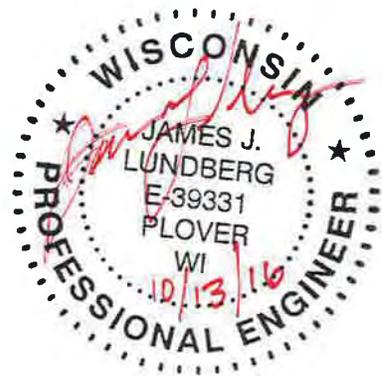


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Design Unlimited
Village of Mukwonago, Wisconsin
October 13, 2016

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- A.** Proposed Layout Plan
- B.** Geotechnical Data
- C.** Existing Drainage Map and Calculations
- D.** Proposed Drainage Map and Calculations
- E.** Proposed Erosion Control Plan
- F.** State of Wisconsin Construction Site Inspection Report, and Post Construction Long-Term Storm Water Management Checklist

STORM WATER MANAGEMENT PLAN AND EROSION CONTROL PLAN & MAINTENANCE/OPERATION PLAN

for
Design Unlimited
Mukwonago, WI

1.0 BACKGROUND & GENERAL INFORMATION

1.1 Introduction and Project Location

Point of Beginning, Inc. has been retained by Design Unlimited to perform storm water management calculations and prepare a storm water management plan per NR216.47 and NR151, for the proposed OMSA – Mukwonago project. The project site is located in Section 35, Township 5 North, Range 18 East, Village of Mukwonago, Waukesha County, Wisconsin.

1.2 Project Description

The proposed project consists of developing the existing vacant lot into an Oral Surgery Center. A new building and parking lot will be built on this lot. Water and sewer services will be installed and connect the proposed building to public utilities. Additionally the site will be graded for storm water management best management practices. (See Layout Plan in **Appendix A**).

1.3 Project Requirements

The project area includes approximately 0.950 acres that will be disturbed. Since the disturbed area does not exceed one acre, a Wisconsin Department of Natural Resources Notice of Intent application/permit (NOI-WPDES per WDNR) is not required. Since the disturbed area exceeds, 3,000 square feet or more, a stormwater permit is required by the Village of Mukwonago.

The storm water management plan for this project is developed in accordance with the Village of Mukwonago, WI Code of Ordinance Section 34-110 – Stormwater management plan requirements.

1.4 General Project Data

Soils

Based on existing soil mapping data, Natural Resources Conservation Service, the existing subgrade soils are expected to be Elliott Silt Loam, which is classified as hydrologic class “C/D”. Based on the subsurface exploration performed by Nummelin Testing Services, the subsurface soils are a mixture of silty clay loam topsoil overlaying clay loam with traces of silt and sand. The geotechnical data containing soil hydrologic classes and boring logs are attached in **Appendix B**.

Wetlands

According to the Wisconsin DNR Wetlands and Wetlands Indicator map, there are no identified or potential wetlands within the project limits.

2.0 EXISTING DRAINAGE CONDITIONS

2.1 Existing Drainage Area

Predevelopment conditions for this site were analyzed and reported by RSV Engineering, Inc. This information is contained in “Hydrology Calculations for Sherwin-Williams and Wetland Restoration Site,” dated May 9, 2008 and is attached in **Appendix C**.

Prior to development, the site contained two sub-basins (E1-E2). Sub-basin E1 consisted almost exclusively of undeveloped land. Runoff from E1 generally flowed off-site to the north. Sub-basin E2 contained mostly undeveloped land, and an existing circular gravel drive. Runoff from E2 collects in an existing depression with a 12" diameter culvert outlet near the northeast corner of the existing drive. The 12" culvert conveys runoff from E2 northeast where it joins runoff from E1 near the north property line and flows offsite. An existing drainage map can be found in **Appendix C**.

2.2 Existing Drainage Calculation Summary

Existing drainage calculations contained in this report are based on predevelopment conditions information provided by RSV Engineering, Inc. Calculations utilize TR-55 methodology, and results for 1, 2, 10, and 100-year design storms are included. Existing drainage calculations are provided in **Appendix C**.

3.0 PROPOSED DRAINAGE CONDITIONS

3.1 Proposed Drainage Areas

Development of this property began in 2008 with the construction of a Sherwin-Williams retail store, parking, drives, utilities and site improvements in the southwest portion of the site. The 2008 project also included grading for stormwater management BMPs. The current development consists of one sub-basin (D1). Sub-basin D1 consists of roof, paved parking lot, concrete sidewalk, landscape area and lawn area. Runoff from D1 generally flows to the north to the detention pond (3P) installed during the 2008 project. A post-development drainage map, and stormwater management calculations can be found in **Appendix C**.

The proposed site is divided into five sub-basins (B1-B5). B1 consists of runoff from the Sherwin-Williams site. Runoff from B1 is conveyed to the existing detention pond (3P). B2 consists of runoff from the proposed driveway and parking areas, concrete sidewalk, and lawn areas. Runoff from B2 will be conveyed to a bio-retention basin (2P) for treatment and rate control. B3 consists of runoff from the lawn area. Runoff from B3 will be conveyed directly off-site to the east in a ditch along the Soo Line Railroad. B4 consist of runoff from roof and lawn areas. Runoff from B4 will be conveyed to the detention pond (3P) for rate control. B5 consists of runoff from the proposed driveway and parking areas, concrete sidewalk, three landscape areas and lawn area. Runoff from B5 will be conveyed to a bio-retention 1 (1P) for treatment and rate control. From the bio-retentions (1P & 2P) a culvert conveys the runoff to a detention pond (3P) for further treatment and rate control. A proposed drainage area map is provided in **Appendix D**.

3.2 Post-Development Runoff Summary

Proposed drainage calculations utilize TR-55 methodology and results for a 1, 2, 10, and 100-year design storm have been attached. A proposed drainage area map and calculations are provided in **Appendix D**.

3.3 Proposed Detention/Retention Areas

There are multiple ponds proposed for storm water management. There are 2 bio-retention basins, 1P is located west of the proposed building and 2P is located to the north of the proposed building. The surface elevation of 1P is at 818.60', the bottom of the engineered soil is at 817.10' and the surface elevation of 2P is at 818.60', the bottom of the engineered soil is at 817.10'. A 6" underdrain is the primary outlet for both basins to the outlet on-site and an overflow weir is included as an emergency overflow to the detention pond (3P). Pond 3P is a detention pond. The detention pond gathers runoff from the entire development. See **Appendix C** for detention pond calculations. See **Appendix D** for infiltration basin volume calculations.

4.0 POST-DEVELOPMENT PERFORMANCE STANDARDS

4.1 Total Suspended Solids

According to Section 34-110(d)(2), BMPs shall be designed in accordance with Section 34-110(d)(2)(1), or to the maximum extent practicable. For new development projects Section 34-110(d)(2)(1) indicates that the total suspended solids load from parking areas and driveway shall be reduced by 80 percent, based on an average annual rainfall, as compared to no runoff management controls.

The total suspended solids removal has been modeled in WinSLAMM version 10.2.0. According to the WinSLAMM modeling the expected TSS removal from the entire site is 83.42%; therefore, the proposed design meets the requirements of Section 34-110(d)(2). See **Appendix D** for the WinSLAMM modeling inputs and outputs.

4.2 Infiltration

According to Section 34-110 (3)(f), areas where the infiltration rate of the soil is less than 0.6 inches/hour based on NRCS Web Soil Survey are exempt from the infiltration requirements.

The boring report indicates the existing onsite soils are estimated to have infiltration rates less than 0.6 inches/hour throughout the site, and is therefore exempt from the infiltration requirement. See **Appendix D** for HydroCAD modeling routing diagrams, summaries, and node listings.

4.3 Peak Discharge

According to Section 34-110 (d)(1)(a), BMPs shall be employed to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to pre-development conditions. The calculated proposed-development peak stormwater discharge rate for the 100-year design storm shall not exceed the calculated predevelopment discharge rates for the ten-year design storm. The calculated proposed-development peak stormwater discharge rate for the ten-year design storm shall not exceed the calculated predevelopment discharge rates for the two-year design storm. Finally, the calculated proposed-development peak stormwater discharge rate for the two-year design storm shall not exceed the calculated predevelopment discharge rates for the one-year design storm. RSV Engineering, Inc. developed the original stormwater plan for the site. With the new development for the vacant lot, little to no runoff discharge rates shall be added.

The pre-development, current post-development and proposed development peak rates of discharge leaving the site are summarized in the table below. See **Appendix D** for HydroCAD modeling routing diagrams, summaries, and node listings.

	Pre Sherwin Williams Development	Post Sherwin Williams Development	Proposed-Development
	Total (1L)	Total (1L)	Total (1L)
1-year 24-hour Peak Flow	2.25 cfs	1.19 cfs	1.51 cfs
2-year 24-hour Peak Flow	3.17 cfs	1.44 cfs	1.90 cfs
10-year 24-hour Peak Flow	7.28 cfs	2.72 cfs	2.95 cfs
100-year 24-hour Peak Flow	17.91 cfs	3.94 cfs	4.23 cfs

4.4 Protective Area

According to Section 34-110 (d)(4) areas of post-construction sites from which the runoff does not enter the surface water, including wetlands, without first being treated by a BMP to meet the requirements of Section 34-110 (d)(4), are exempt from meeting the requirements of the Protective Areas performance standards.

4.5 Summary

The modeling of this site shows that the requirements set by the Village of Mukwonago for total suspended solids, peak discharge, and infiltration can all be met with the proposed design.

The Storm Water Management Plan shows basic compliance with accepted engineering practice in hydrology planning and design. The resulting development will function as a positive addition to the community while sustaining environmental benefits in storm water management and quality.

5.0 CONSTRUCTION SITE PERFORMANCE STANDARDS

5.1 Erosion Control

The purpose of this control plan is to provide guidelines that comply with the state and local requirements, as well as to make recommendations regarding erosion control and storm water management. The construction of this development is a critical phase in terms of storm water management and runoff control. Construction site erosion control will help minimize the impact of development, enhance and protect local environment, and protect the surrounding project area by applying best management practices for erosion control at construction sites. This work shall be planned and executed in accordance with the Wisconsin Department of Natural Resources Storm Water Management Technical Standards and/or accepted local engineering practice (Section 34-109(c) in municipal code). The owner/developer will be responsible for erosion control during the process of construction. Silt fence, site vegetation, and erosion mat will be utilized to keep sediment from leaving the construction site. **See Appendix E.**

5.2 Construction Site Erosion Control Measures

The following erosion control devices may be used on the project site at any time during the construction phases to ensure the compliance with local erosion control requirements (Section 34-109(e)(1) in municipal code), as applicable.

a) Silt Fence (WDNR 1056)

Continuous silt fencing will be required along all areas downstream of disturbed area, and around the base of all stockpiled material subject to sediment transportation during rain fall events (stockpiled topsoil, gravel base, etc.). The silt fencing will provide a siltation barrier between the disturbed area and any inlets and ultimately downstream water bodies. All silt fence shall be removed upon completion of the project or when disturbed areas have generated sufficient vegetation to prevent erosion and the threat of sediment reaching inlets and bodies of water.

b) Site Vegetation

Existing site vegetation outside of project limits shall be protected and maintained to the maximum extent practicable. Existing site vegetation within the project limits shall remain undisturbed until construction schedule warrants disturbance. For disturbed areas vegetation that resists erosion, maintains slow storm water velocities, and retains sediment from runoff shall be provided by the contractor. Temporary seeding may be required for disturbed areas that are subject to long periods of construction inactivity. Temporary vegetation is used when areas are disturbed

and may remain unfinished long enough to allow vegetation to grow and assist with erosion control. Permanent vegetation is encouraged as soon as possible in the construction process.

c) Stone Tracking Pad (WDNR 1057)

Stone tracking pads will be constructed at all entrances to the construction site to minimize sediment tracking onto existing streets. A minimum of one construction entrance is required for the project site. Tracking pads are temporary and will be removed or much of the aggregate will be removed before the site is completed.

d) Waste and Material Disposal

All waste and unused building materials (including garbage, debris, cleaning wastes, or other construction materials) shall be properly disposed of and not allowed to be carried by runoff into a receiving channel or inlet.

5.3 Operation and Maintenance, Short-term

The owner of this project in the Village of Mukwonago, Waukesha County, Wisconsin, is directly responsible for implementation and maintenance of the construction site erosion control measures.

The Contractor shall conduct the following inspections:

- Weekly inspections of implemented erosion and sediment controls.
- Inspections of erosion and sediment controls within 24 hours after precipitation event 0.5 inches or greater which results in runoff during active construction periods.

The Contractor shall maintain weekly written reports of all inspections that include:

- The date, time, and exact place of the inspection.
- The name of the individual who performed the inspection.
- An assessment of the condition of erosion and sediment controls.
- A description of any erosion and sediment control implementation and maintenance performed.
- A description of the present phase of construction at the site.

Repairs shall be made immediately, as required, to maintain effectiveness, until permanent vegetation is established. All repairs to erosion control devices shall be documented on the Wisconsin Department of Natural Resources Construction Site Inspection Report (Form 3400-187). A copy of Form 3400-187 can be found in **Appendix F**.

5.4 Operation and Maintenance, Long-term

The OWNER of this project in the Village of Mukwonago, Waukesha County, Wisconsin, is directly responsible for the operation, inspection, and maintenance of all storm water facilities located within the project site, as described below.

- Bio-retention Basin:
Inspection: Look for accumulation of sediment and/or debris. Length of time water is retained in basin. Look for erosion or damage. Review plant health; look for weeds and grasses encroaching on plants.
Maintenance: Remove accumulated sediment deposits and/or debris and repair any eroded or damaged grass areas. If water is retained for more than 24-48 hours after a storm event replace top 6" of engineered soil. Remove any identified weeds or grasses. Do not plow/store snow in bio-retention basin.

- Storm Sewer:
Inspection: Accumulation of sediment and/or debris within endwall structure and storm sewer pipe. Look for damage to pipe and endwall structure.
Maintenance: Remove accumulated sediment and/or debris within the pipe and endwall structure. Repair damage to pipe or endwall structure. If the damage is un-repairable then the pipe and/or endwall structure shall be replaced.

The aforementioned inspection and maintenance schedule shall be performed after any rainfall event exceeding one inch of rainfall, and at a minimum semi-annually in early spring and fall.

All inspections and maintenance shall be documented and the OWNER shall keep all inspection and maintenance reporting/records onsite and available upon request of the Village.

6.0 SUMMARY

6.1 General

The proposed development as outlined above meets all of Village of Mukwonago municipal code and Wisconsin Department of Natural Resources storm water regulations pertaining to new development.

For the temporary construction site scenario, sediment transport from this site to adjacent properties will be reduced by the erosion control devices and conservation practice standards.

This plan meets or exceeds state and local storm water requirements and provides an environmentally sound and practical solution for the future storm water runoff generated from the development of this site.

APPENDIX A

Proposed Layout Plan

APPENDIX B

Geotechnical Data

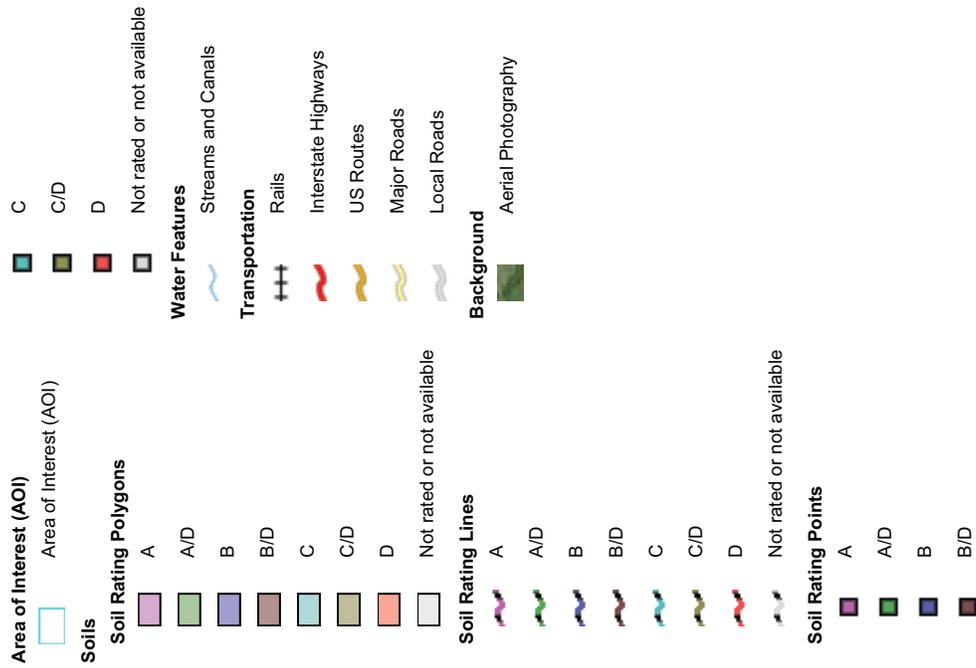
Hydrologic Soil Group—Milwaukee and Waukesha Counties, Wisconsin



Map Scale: 1:489 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND



MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Milwaukee and Waukesha Counties, Wisconsin
 Survey Area Data: Version 11, Sep 25, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 29, 2011—Mar 28, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Milwaukee and Waukesha Counties, Wisconsin (WI602)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
EsA	Elliott silt loam, 1 to 3 percent slopes	C/D	1.0	100.0%
Totals for Area of Interest			1.0	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



CENTRAL WISCONSIN AREA:
3217 Whiting Avenue
P.O. Box 127
Stevens Point, WI 54481
(715) 341-7974 • Fax (715) 341-8654

MADISON AREA:
5620 Woodland Drive
Waunakee, WI 53597
(608) 849-9120 • Fax (608) 849-9122

June 27, 2016

**Design Unlimited
1029 W. McMillan
Marshfield, WI 54449**

Project No. 1667801_rep

Attention: Mr. Chris Helwig

email: chris@designunlimitedmfld.com

Re: Site Evaluation for Storm Water Infiltration
Soil Classification and Evaluation w/ Soil Borings
OMSA Site
Mukwonago, WI

INTRODUCTION:

As requested, Nummelin Testing Services, Inc. has performed a subsurface soil investigation with soil borings to classify and evaluate the soil horizons in accordance with the USDA soil classification system. Soil samples were obtained from four (4) soil borings at the OMSA site in Mukwonago, WI.

The soil borings and soil observations were conducted to comply with the Wisconsin Department of Natural Resources Conservation Practice Standard for Site Evaluation for Storm Water Infiltration (1002), Section V. Criteria, Step B. Field Verification of the Initial Screening.

DISCUSSION:

On June 10, 2016, four (4) soil borings (B1 through B4) were performed at the approximate locations indicated on the attached soil boring location sketch. The soil borings were scheduled to be performed to a depth of 15 feet each below the existing soil surface. All borings were performed to the scheduled depth except B3 was terminated at 10 feet due to free water being encountered. The soils were continuously sampled using a 3" diameter split spoon sampler driven 24" using a 140 pound automatic hammer. Free water was encountered in Boring B3 only. Mottling was noted in all four borings. Criteria used to determine Depth of Limiting Factor is bedrock, groundwater and mottling.

Soil Classification and Evaluation- Soil Borings
OMSA Site
Mukwonago, WI

Project No. 1667801_rep

The enclosed Soil Evaluation Report form was written in accordance with descriptive procedures, terminology and interpretations found in the Field Book for Describing and Sampling Soil, USDA, NRCS, 1998.

Laboratory analyses were not performed on any of the soil samples obtained from the soil borings.

CLOSING:

Soil sample size and recovery when using the split spoon method can cause the recorded depths of soil horizons to vary from actual depth. Some variation can be expected.

If you have any questions please feel free to call our office at 715-341-7974.

Sincerely,

A handwritten signature in cursive script that reads "Bruce Nummelin". The signature is written in black ink on a light-colored background.

Bruce Nummelin, President
NUMMELIN TESTING SERVICES, INC.

encl. Soil Evaluation - Storm
Soil Boring Location Sketch
Texture Class Code

bn/jn

SOIL EVALUATION -STORM

in accordance with Comm 82.365, Wis. Adm. Code

Attach complete site plan on paper not less than 8 1/2 x 11 inches in size. Plan must include, but not be limited to: vertical and horizontal reference point (BM), direction and percent slope, scale or dimensions, north arrow, and BM referenced to nearest road.

Please print all information.

Personal information you provide may be used for secondary purposes (Privacy Law, s. 15.04 (1)(m)).

County Waukesha	
Parcel I.D. 166.78	
Reviewed By	Date 6/10/2016

Property Owner Design Unlimited				Property Location Bay View Road						
Property Owner's Mailing Address 1029 W. Mcmillan Road				Govt Lot 1/4	1/4	S	T	N	R	E (or) W
City Marshfield				State WI	Zip Code 54449	Phone Number		Subdivision Name or CSM# OMSA		
City Marshfield				State WI	Zip Code 54449	Phone Number		Nearest Road Mukwonago		
Drainage Area _____ <input type="checkbox"/> Sq Ft <input type="checkbox"/> Acres Optional Test Site Suitable for (Check All That Apply) <input type="checkbox"/> Irrigation <input type="checkbox"/> Bioretention Trench <input type="checkbox"/> Infiltration Trench <input type="checkbox"/> Rain Garden <input type="checkbox"/> Grassed Sw ale <input type="checkbox"/> Reuse <input type="checkbox"/> Trench(es) <input type="checkbox"/> SDS (>15' Wide) <input type="checkbox"/> Other _____				Hydraulic Application Test Method <input checked="" type="checkbox"/> Morphological Evaluation <input type="checkbox"/> Double-Ring Infiltrometer <input type="checkbox"/> Other (Specify) _____						

1	Obs #	<input checked="" type="checkbox"/> Boring <input type="checkbox"/> Pit	Ground Surface Elevation: <u>817.4</u> ft.	Depth to Limiting Factor: <u>60</u> in.
----------	-------	--	--	---

Horizon	Depth (in)	Dominant Color (Munsell)	Redox Description (Qu. Sz. Cont. Color)	Texture	Structure (Gr.Sz.Sh.)	Consistency	Boundary	% Rock Frag.	Hydraulic App. Rate (in/hr)
1	0 - 2"	10YR 3/2		SICL	2msbk	mfr	CS	4	0.04
2	2 - 24"	10YR 6/3		SC	M		GS	8	0.04
3	24 - 60"	10YR 4/3		SC	M		GS	8	0.04
4	60 - 120"	10YR 6/4	f2d 7.5YR 6/6	SCL	M		GS	10	0.11
5	120 - 180"	10YR 6/1, 5/4	f2d 7.5YR 6/6	SIC	M		GS	4	0.07

2	Obs #	<input checked="" type="checkbox"/> Boring <input type="checkbox"/> Pit	Ground Surface Elevation: <u>817.8</u> ft.	Depth to Limiting Factor: <u>60</u> in.
----------	-------	--	--	---

Horizon	Depth (in)	Dominant Color (Munsell)	Redox Description (Qu. Sz. Cont. Color)	Texture	Structure (Gr.Sz.Sh.)	Consistency	Boundary	% Rock Frag.	Hydraulic App. Rate (in/hr)
1	0 - 2"	10YR 3/2		SICL	2msbk	mfr	CS	4	0.04
2	2 - 60"	10YR 4/3		SCL	2msbk	mfr	GS	10	0.11
3	60 - 108"	10YR 5/3	f2d 7.5YR 5/6	SICL	2msbk	mfr	GS	10	0.04
4	108 - 132"	10YR 5/3	f2d 7.5YR 4/6	SICL	M		GS	10	0.04
5	132 - 180"	10YR 6/3	f2d 7.5YR 4/6	SCL	M			12	0.11

CST Name: Bruce Nummelin	Signature: 	CST Number: 241581
Address: P.O. Box 127 Stevens Point, WI 54481	Date Evaluation Conducted:	Telephone Number: (715) 341-7974

3 Obs # Boring Pit Ground Surface Elevation: 816.5 ft. Depth to Limiting Factor: 90 in.

Horizon	Depth (in)	Dominant Color (Munsell)	Redox Description (Qu. Sz. Cont. Color)	Texture	Structure (Gr.Sz.Sh.)	Consistency	Boundary	% Rock Frag.	Hydraulic App. Rate (in/hr)
1	0 - 6"	10YR 3/1		SICL	2msbk	mfr	CS	5	0.04
2	6 - 12"	10YR 5/2		GRSL	2mgr	mfr	GS	20	0.50
3	12 - 60"	10YR 4/3		SC	M		CS	10	0.04
4	60 - 90"	10YR 5/3		SC	M		GS	10	0.04
5	90 - 120"	10YR 6/3	f2d 7.5YR 5/6	SCL	M			12	0.11

4 Obs # Boring Pit Ground Surface Elevation: 816.9 ft. Depth to Limiting Factor: 118 in.

Horizon	Depth (in)	Dominant Color (Munsell)	Redox Description (Qu. Sz. Cont. Color)	Texture	Structure (Gr.Sz.Sh.)	Consistency	Boundary	% Rock Frag.	Hydraulic App. Rate (in/hr)
1	0 - 6"	10YR 3/1		SICL	2msbk	mvfr	CS	4	0.04
2	6 - 18"	10YR 5/2		GRSL	2mgr	mfr	GS	20	0.50
3	18 - 60"	10YR 2/2, 4/4		SC	M		GS	10	0.04
4	60 - 118"	10YR 5/3, 5/4		SC	M		CS	12	0.04
5	118 - 180"	10YR 6/1, 5/4		SIC	M			0	0.04

Test Results and/or Summary Comments

Boring #1: Possible fill to 60 inches, mottling started at 60 inches.

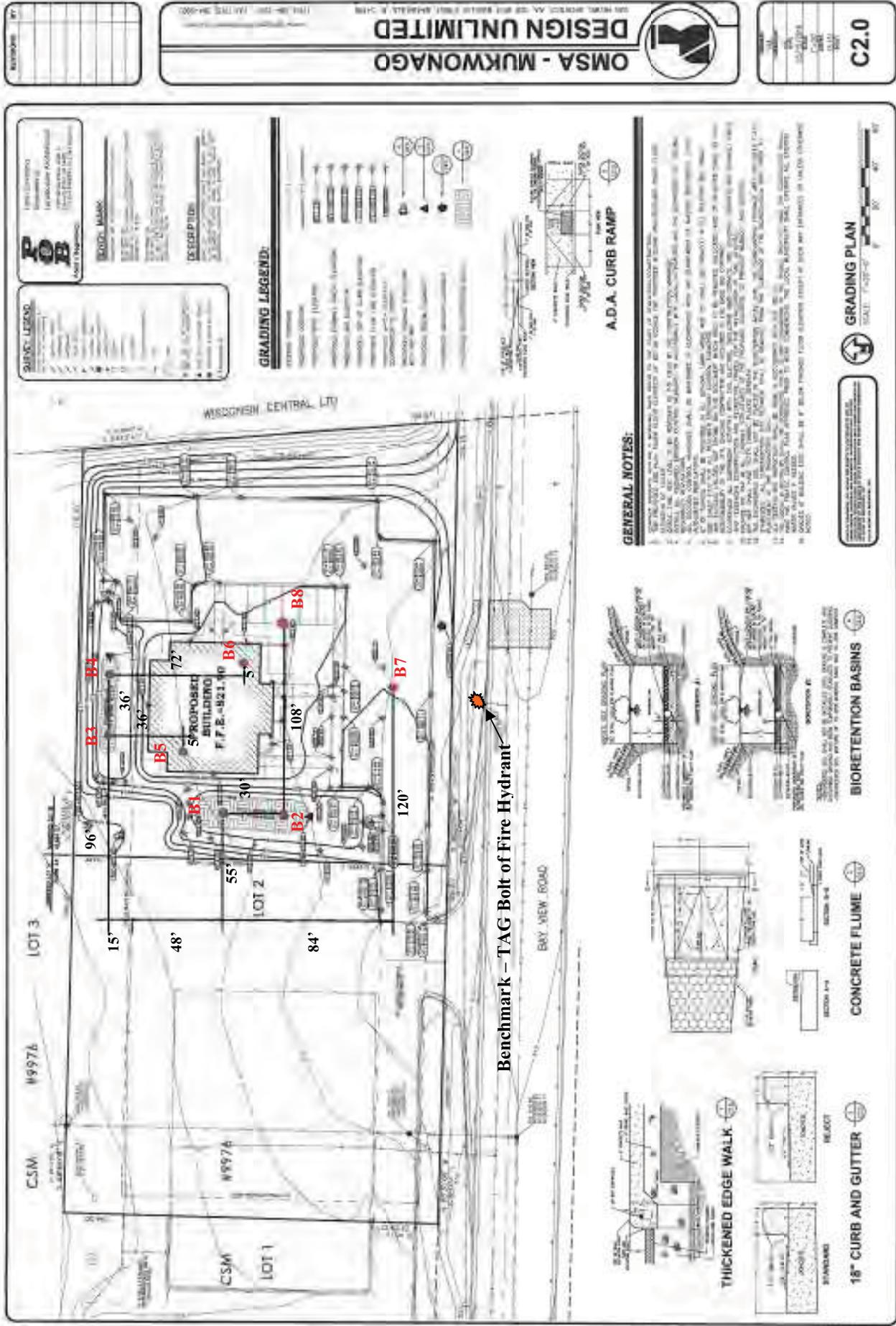
Boring #2: Possible fill to 36 inches, mottling started at 60 inches.

Boring #3: Possible fill to 60 inches, mottling started at 90 inches. Boring terminated at 120 inches due to free water.

Boring #4: Possible fill to 60 inches, gray soil (6/1) started at 118 inches.

CST Name: Bruce Nummelin	Signature: <i>Bruce Nummelin</i>	CST Number: 241581
Address: P.O. Box 127 Stevens Point, WI 54481	Date Evaluation Conducted: 6/10/2016	Telephone Number: (715) 341-7974

Site Plan - Boring Location



Benchmark - TAG Bolt of Fire Hydrant

NOTE: Soil Texture encompasses only the fine earth fraction (<2mm).
Particle Size Distribution (PSD) encompasses the whole soil, including both the fine earth fraction (<2mm) and rock fragments (>2mm).

TEXTURE CLASS -

Texture Class	Code	
	Conv.	NASIS
Coarse Sand	cos	COS
Sand	s	S
Fine Sand	fs	FS
Very Fine Sand	vfs	VFS
Loamy Coarse Sand	lcos	LCOS
Loamy Sand	ls	LS
Loamy Fine Sand	lfs	LFS
Loamy Very Fine Sand	lvfs	LVFS
Coarse Sandy Loam	cosl	COSL
Sandy Loam	sl	SL
Fine Sandy Loam	fsl	FSL
Very Fine Sandy Loam	vfsl	VFSL
Loam	l	L
Silt Loam	sil	SIL
Silt	si	SI
Sandy Clay Loam	scl	SCL
Clay Loam	cl	CL
Silty Clay Loam	sicl	SICL
Sandy Clay	sc	SC
Silty Clay	sic	SIC
Clay	c	C

Table 2: Design Infiltration Rates For Soil Textures Receiving Stormwater

Soil Texture ¹	Design Infiltration Rate Without Measurement inches / hour²
Coarse sand or coarser	3.60
Loamy coarse sand	3.60
Sand	3.60
Loamy Sand	1.63
Sandy loam	0.50
Loam	0.24
Silt Loam	0.13
Sandy clay loam	0.11
Clay loam	0.03
Silty clay loam	0.04 ³
Sandy clay	0.04
Silty clay	0.07
Clay	0.07

¹ Use sandy loam design infiltration rates for fine sand, loamy fine sand, very fine sand, and loamy fine sand soil textures.

² Infiltration rates represent the lowest value for each textural class presented in Table 2 of Rawls, 1998.

³ Infiltration rate is an average based on Rawls, 1982 and Clapp & Hornberger, 1978.

APPENDIX C

Existing Drainage Map and Calculations

REVISIONS	BY	DATE	DESCRIPTION

OMSA MUKWONAGO REBID

DESIGN UNLIMITED

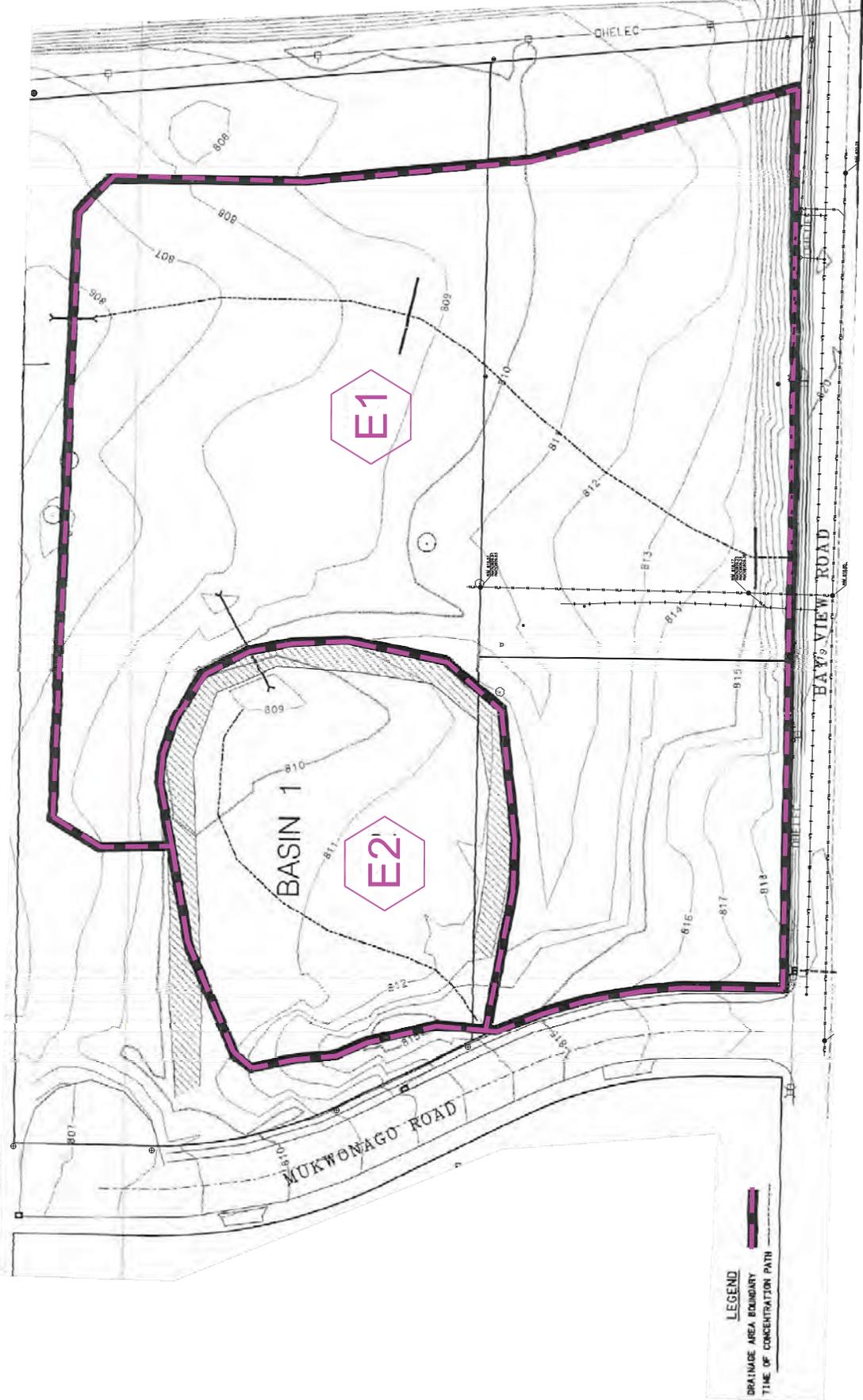
DAN HELWIG, ARCHITECT, AIA, 1029 WEST MULLAN STREET, MARSHFIELD, WI 54449
 www.designunlimitedmid.com (715) 384-3207 FAX (715) 384-9922

DESIGNED BY	NAI
CHECKED BY	NAI
DATE	10/12/15
SCALE	AS SHOWN
JOB NO.	15-151
SHEET	15-151

Point of Beginning

Land Surveying
 Engineering
 Landscape Architecture

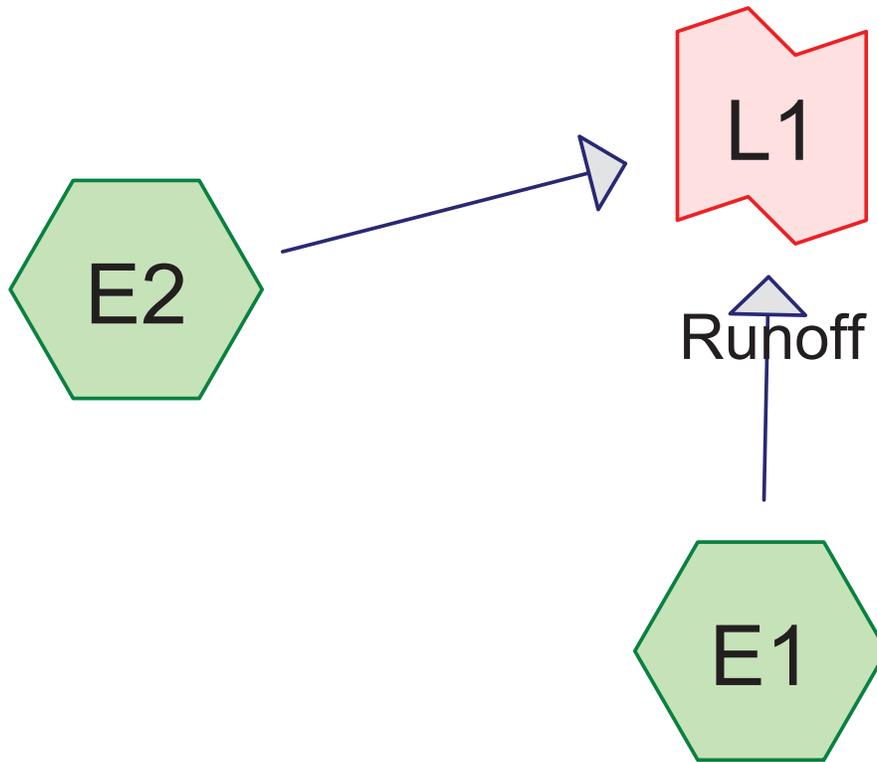
5709 Wisconsin State D
 715.344.9922
 715.344.9922



EXISTING DRAINAGE



NOTES:
 1. THIS DRAWING IS A PRELIMINARY DESIGN AND IS SUBJECT TO CHANGE WITHOUT NOTICE.
 2. THE CLIENT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 3. THE CLIENT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 4. THE CLIENT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.



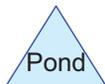
Drainage to North



Subcat



Reach



Pond



Link

Pre Sherwin Williams Development

Prepared by Hewlett-Packard Company

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MSE 24-hr 3 1-Year Rainfall=2.40"

Printed 10/12/2016

Page 2

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1: Drainage to North

Runoff Area=4.600 ac 0.00% Impervious Runoff Depth=0.44"
Tc=26.1 min CN=71 Runoff=1.59 cfs 7,384 cf

Subcatchment E2:

Runoff Area=1.300 ac 15.38% Impervious Runoff Depth=0.59"
Tc=26.0 min CN=75 Runoff=0.67 cfs 2,798 cf

Link L1: Runoff

Inflow=2.25 cfs 10,182 cf
Primary=2.25 cfs 10,182 cf

Total Runoff Area = 257,004 sf Runoff Volume = 10,182 cf Average Runoff Depth = 0.48"
96.61% Pervious = 248,292 sf 3.39% Impervious = 8,712 sf

Summary for Subcatchment E1: Drainage to North

Runoff = 1.59 cfs @ 12.44 hrs, Volume= 7,384 cf, Depth= 0.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

Area (ac)	CN	Description
4.600	71	Meadow, non-grazed, HSG C
4.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1					Direct Entry,

Summary for Subcatchment E2:

Runoff = 0.67 cfs @ 12.42 hrs, Volume= 2,798 cf, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

Area (ac)	CN	Description
* 1.100	71	meadows
* 0.200	98	impervious
1.300	75	Weighted Average
1.100		84.62% Pervious Area
0.200		15.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.0					Direct Entry,

Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 3.39% Impervious, Inflow Depth = 0.48" for 1-Year event
 Inflow = 2.25 cfs @ 12.44 hrs, Volume= 10,182 cf
 Primary = 2.25 cfs @ 12.44 hrs, Volume= 10,182 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Pre Sherwin Williams Development

MSE 24-hr 3 2-Year Rainfall=2.70"

Prepared by Hewlett-Packard Company

Printed 10/12/2016

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Page 4

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1: Drainage to North

Runoff Area=4.600 ac 0.00% Impervious Runoff Depth=0.59"
Tc=26.1 min CN=71 Runoff=2.28 cfs 9,922 cf

Subcatchment E2:

Runoff Area=1.300 ac 15.38% Impervious Runoff Depth=0.77"
Tc=26.0 min CN=75 Runoff=0.90 cfs 3,635 cf

Link L1: Runoff

Inflow=3.17 cfs 13,558 cf
Primary=3.17 cfs 13,558 cf

Total Runoff Area = 257,004 sf Runoff Volume = 13,558 cf Average Runoff Depth = 0.63"
96.61% Pervious = 248,292 sf 3.39% Impervious = 8,712 sf

Summary for Subcatchment E1: Drainage to North

Runoff = 2.28 cfs @ 12.44 hrs, Volume= 9,922 cf, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

Area (ac)	CN	Description
4.600	71	Meadow, non-grazed, HSG C
4.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1					Direct Entry,

Summary for Subcatchment E2:

Runoff = 0.90 cfs @ 12.40 hrs, Volume= 3,635 cf, Depth= 0.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

Area (ac)	CN	Description
* 1.100	71	meadows
* 0.200	98	impervious
1.300	75	Weighted Average
1.100		84.62% Pervious Area
0.200		15.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.0					Direct Entry,

Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 3.39% Impervious, Inflow Depth = 0.63" for 2-Year event
 Inflow = 3.17 cfs @ 12.42 hrs, Volume= 13,558 cf
 Primary = 3.17 cfs @ 12.42 hrs, Volume= 13,558 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Pre Sherwin Williams Development

MSE 24-hr 3 10-Year Rainfall=3.81"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1: Drainage to North

Runoff Area=4.600 ac 0.00% Impervious Runoff Depth=1.27"
Tc=26.1 min CN=71 Runoff=5.39 cfs 21,136 cf

Subcatchment E2:

Runoff Area=1.300 ac 15.38% Impervious Runoff Depth=1.53"
Tc=26.0 min CN=75 Runoff=1.89 cfs 7,199 cf

Link L1: Runoff

Inflow=7.28 cfs 28,335 cf
Primary=7.28 cfs 28,335 cf

Total Runoff Area = 257,004 sf Runoff Volume = 28,335 cf Average Runoff Depth = 1.32"
96.61% Pervious = 248,292 sf 3.39% Impervious = 8,712 sf

Summary for Subcatchment E1: Drainage to North

Runoff = 5.39 cfs @ 12.39 hrs, Volume= 21,136 cf, Depth= 1.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

Area (ac)	CN	Description
4.600	71	Meadow, non-grazed, HSG C
4.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1					Direct Entry,

Summary for Subcatchment E2:

Runoff = 1.89 cfs @ 12.39 hrs, Volume= 7,199 cf, Depth= 1.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

Area (ac)	CN	Description
* 1.100	71	meadows
* 0.200	98	impervious
1.300	75	Weighted Average
1.100		84.62% Pervious Area
0.200		15.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.0					Direct Entry,

Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 3.39% Impervious, Inflow Depth = 1.32" for 10-Year event
Inflow = 7.28 cfs @ 12.39 hrs, Volume= 28,335 cf
Primary = 7.28 cfs @ 12.39 hrs, Volume= 28,335 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Pre Sherwin Williams Development

MSE 24-hr 3 100-Year Rainfall=6.18"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1: Drainage to North

Runoff Area=4.600 ac 0.00% Impervious Runoff Depth=3.04"
Tc=26.1 min CN=71 Runoff=13.57 cfs 50,836 cf

Subcatchment E2:

Runoff Area=1.300 ac 15.38% Impervious Runoff Depth=3.44"
Tc=26.0 min CN=75 Runoff=4.34 cfs 16,214 cf

Link L1: Runoff

Inflow=17.91 cfs 67,051 cf
Primary=17.91 cfs 67,051 cf

Total Runoff Area = 257,004 sf Runoff Volume = 67,051 cf Average Runoff Depth = 3.13"
96.61% Pervious = 248,292 sf 3.39% Impervious = 8,712 sf

Summary for Subcatchment E1: Drainage to North

Runoff = 13.57 cfs @ 12.38 hrs, Volume= 50,836 cf, Depth= 3.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

Area (ac)	CN	Description
4.600	71	Meadow, non-grazed, HSG C
4.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1					Direct Entry,

Summary for Subcatchment E2:

Runoff = 4.34 cfs @ 12.39 hrs, Volume= 16,214 cf, Depth= 3.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

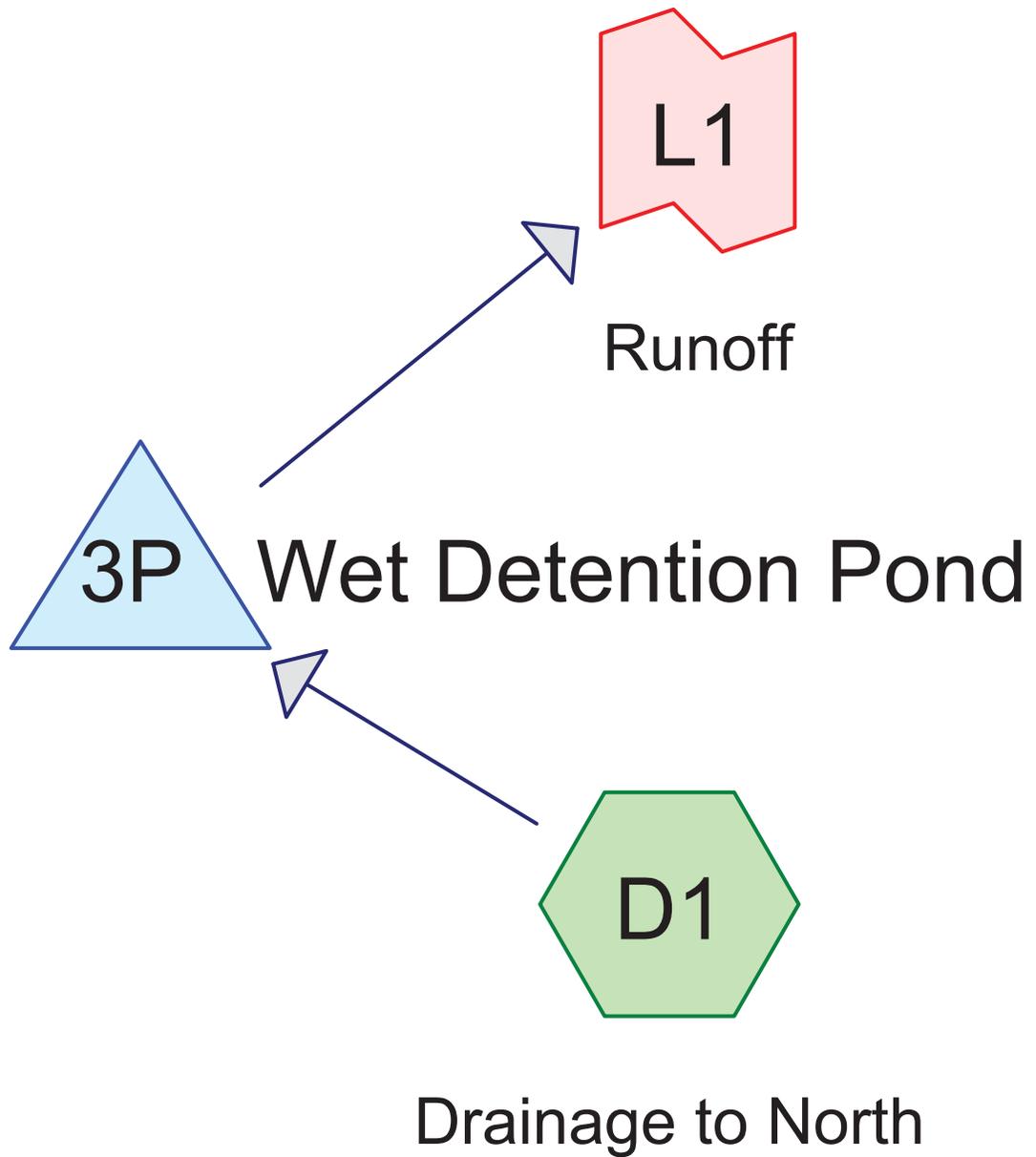
Area (ac)	CN	Description
* 1.100	71	meadows
* 0.200	98	impervious
1.300	75	Weighted Average
1.100		84.62% Pervious Area
0.200		15.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.0					Direct Entry,

Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 3.39% Impervious, Inflow Depth = 3.13" for 100-Year event
 Inflow = 17.91 cfs @ 12.38 hrs, Volume= 67,051 cf
 Primary = 17.91 cfs @ 12.38 hrs, Volume= 67,051 cf, Atten= 0%, Lag= 0.0 min

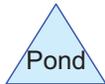
Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs



Subcat



Reach



Pond



Link

Post Sherwin William Development

MSE 24-hr 3 1-Year Rainfall=2.40"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment D1: Drainage to North

Runoff Area=5.900 ac 18.64% Impervious Runoff Depth=0.63"
Tc=19.8 min CN=76 Runoff=3.85 cfs 13,596 cf

Pond 3P: 1P

Peak Elev=805.63' Storage=0.447 af Inflow=3.85 cfs 13,596 cf
Outflow=1.19 cfs 13,581 cf

Link L1: Runoff

Inflow=1.19 cfs 13,581 cf
Primary=1.19 cfs 13,581 cf

Total Runoff Area = 257,004 sf Runoff Volume = 13,596 cf Average Runoff Depth = 0.63"
81.36% Pervious = 209,088 sf 18.64% Impervious = 47,916 sf

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MSE 24-hr 3 1-Year Rainfall=2.40"

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Summary for Subcatchment D1: Drainage to North

Runoff = 3.85 cfs @ 12.32 hrs, Volume= 13,596 cf, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

Area (ac)	CN	Description
4.500	71	Meadow, non-grazed, HSG C
1.100	98	Paved parking, HSG C
0.300	74	>75% Grass cover, Good, HSG C
5.900	76	Weighted Average
4.800		81.36% Pervious Area
1.100		18.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Pond 3P: 1P

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth = 0.63" for 1-Year event
 Inflow = 3.85 cfs @ 12.32 hrs, Volume= 13,596 cf
 Outflow = 1.19 cfs @ 12.80 hrs, Volume= 13,581 cf, Atten= 69%, Lag= 29.1 min
 Primary = 1.19 cfs @ 12.80 hrs, Volume= 13,581 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 805.63' @ 12.80 hrs Surf.Area= 0.198 ac Storage= 0.447 af (0.112 af above start)

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= 118.8 min (969.2 - 850.4)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.19 cfs @ 12.80 hrs HW=805.63' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 1.19 cfs @ 2.70 fps)

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MSE 24-hr 3 1-Year Rainfall=2.40"

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Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth > 0.63" for 1-Year event
Inflow = 1.19 cfs @ 12.80 hrs, Volume= 13,581 cf
Primary = 1.19 cfs @ 12.80 hrs, Volume= 13,581 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Post Sherwin William Development

MSE 24-hr 3 2-Year Rainfall=2.70"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment D1: Drainage to North

Runoff Area=5.900 ac 18.64% Impervious Runoff Depth=0.82"
Tc=19.8 min CN=76 Runoff=5.13 cfs 17,532 cf

Pond 3P: 1P

Peak Elev=805.79' Storage=0.481 af Inflow=5.13 cfs 17,532 cf
Outflow=1.62 cfs 17,516 cf

Link L1: Runoff

Inflow=1.62 cfs 17,516 cf
Primary=1.62 cfs 17,516 cf

Total Runoff Area = 257,004 sf Runoff Volume = 17,532 cf Average Runoff Depth = 0.82"
81.36% Pervious = 209,088 sf 18.64% Impervious = 47,916 sf

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MSE 24-hr 3 2-Year Rainfall=2.70"

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Summary for Subcatchment D1: Drainage to North

Runoff = 5.13 cfs @ 12.31 hrs, Volume= 17,532 cf, Depth= 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

Area (ac)	CN	Description
4.500	71	Meadow, non-grazed, HSG C
1.100	98	Paved parking, HSG C
0.300	74	>75% Grass cover, Good, HSG C
5.900	76	Weighted Average
4.800		81.36% Pervious Area
1.100		18.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Pond 3P: 1P

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth = 0.82" for 2-Year event
 Inflow = 5.13 cfs @ 12.31 hrs, Volume= 17,532 cf
 Outflow = 1.62 cfs @ 12.77 hrs, Volume= 17,516 cf, Atten= 68%, Lag= 27.8 min
 Primary = 1.62 cfs @ 12.77 hrs, Volume= 17,516 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 805.79' @ 12.77 hrs Surf.Area= 0.208 ac Storage= 0.481 af (0.146 af above start)

Plug-Flow detention time= 691.1 min calculated for 2,924 cf (17% of inflow)
 Center-of-Mass det. time= 106.4 min (950.6 - 844.2)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.63 cfs @ 12.77 hrs HW=805.79' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 1.63 cfs @ 3.03 fps)

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MSE 24-hr 3 2-Year Rainfall=2.70"

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Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth > 0.82" for 2-Year event
Inflow = 1.62 cfs @ 12.77 hrs, Volume= 17,516 cf
Primary = 1.62 cfs @ 12.77 hrs, Volume= 17,516 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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MSE 24-hr 3 10-Year Rainfall=3.81"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment D1: Drainage to North

Runoff Area=5.900 ac 18.64% Impervious Runoff Depth=1.59"
Tc=19.8 min CN=76 Runoff=10.50 cfs 34,146 cf

Pond 3P: 1P

Peak Elev=806.49' Storage=0.654 af Inflow=10.50 cfs 34,146 cf
Outflow=2.72 cfs 34,128 cf

Link L1: Runoff

Inflow=2.72 cfs 34,128 cf
Primary=2.72 cfs 34,128 cf

Total Runoff Area = 257,004 sf Runoff Volume = 34,146 cf Average Runoff Depth = 1.59"
81.36% Pervious = 209,088 sf 18.64% Impervious = 47,916 sf

Post Sherwin William Development

MSE 24-hr 3 10-Year Rainfall=3.81"

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Summary for Subcatchment D1: Drainage to North

Runoff = 10.50 cfs @ 12.30 hrs, Volume= 34,146 cf, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

Area (ac)	CN	Description
4.500	71	Meadow, non-grazed, HSG C
1.100	98	Paved parking, HSG C
0.300	74	>75% Grass cover, Good, HSG C
5.900	76	Weighted Average
4.800		81.36% Pervious Area
1.100		18.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Pond 3P: 1P

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth = 1.59" for 10-Year event
 Inflow = 10.50 cfs @ 12.30 hrs, Volume= 34,146 cf
 Outflow = 2.72 cfs @ 12.80 hrs, Volume= 34,128 cf, Atten= 74%, Lag= 30.2 min
 Primary = 2.72 cfs @ 12.80 hrs, Volume= 34,128 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 806.49' @ 12.80 hrs Surf.Area= 0.308 ac Storage= 0.654 af (0.319 af above start)

Plug-Flow detention time= 288.8 min calculated for 19,535 cf (57% of inflow)
 Center-of-Mass det. time= 92.8 min (922.1 - 829.3)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.72 cfs @ 12.80 hrs HW=806.49' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 2.72 cfs @ 4.99 fps)

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MSE 24-hr 3 10-Year Rainfall=3.81"

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Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth > 1.59" for 10-Year event
Inflow = 2.72 cfs @ 12.80 hrs, Volume= 34,128 cf
Primary = 2.72 cfs @ 12.80 hrs, Volume= 34,128 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Post Sherwin William Development

MSE 24-hr 3 100-Year Rainfall=6.18"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment D1: Drainage to North

Runoff Area=5.900 ac 18.64% Impervious Runoff Depth=3.54"
Tc=19.8 min CN=76 Runoff=23.59 cfs 75,729 cf

Pond 3P: 1P

Peak Elev=807.67' Storage=1.179 af Inflow=23.59 cfs 75,729 cf
Outflow=3.94 cfs 75,708 cf

Link L1: Runoff

Inflow=3.94 cfs 75,708 cf
Primary=3.94 cfs 75,708 cf

Total Runoff Area = 257,004 sf Runoff Volume = 75,729 cf Average Runoff Depth = 3.54"
81.36% Pervious = 209,088 sf 18.64% Impervious = 47,916 sf

Post Sherwin William Development

MSE 24-hr 3 100-Year Rainfall=6.18"

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Summary for Subcatchment D1: Drainage to North

Runoff = 23.59 cfs @ 12.30 hrs, Volume= 75,729 cf, Depth= 3.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

Area (ac)	CN	Description
4.500	71	Meadow, non-grazed, HSG C
1.100	98	Paved parking, HSG C
0.300	74	>75% Grass cover, Good, HSG C
5.900	76	Weighted Average
4.800		81.36% Pervious Area
1.100		18.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Pond 3P: 1P

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth = 3.54" for 100-Year event
 Inflow = 23.59 cfs @ 12.30 hrs, Volume= 75,729 cf
 Outflow = 3.94 cfs @ 12.98 hrs, Volume= 75,708 cf, Atten= 83%, Lag= 40.9 min
 Primary = 3.94 cfs @ 12.98 hrs, Volume= 75,708 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 807.67' @ 12.98 hrs Surf.Area= 0.633 ac Storage= 1.179 af (0.844 af above start)

Plug-Flow detention time= 221.8 min calculated for 61,115 cf (81% of inflow)
 Center-of-Mass det. time= 116.0 min (929.0 - 812.9)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=3.94 cfs @ 12.98 hrs HW=807.67' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 3.94 cfs @ 7.22 fps)

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MSE 24-hr 3 100-Year Rainfall=6.18"

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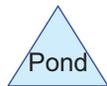
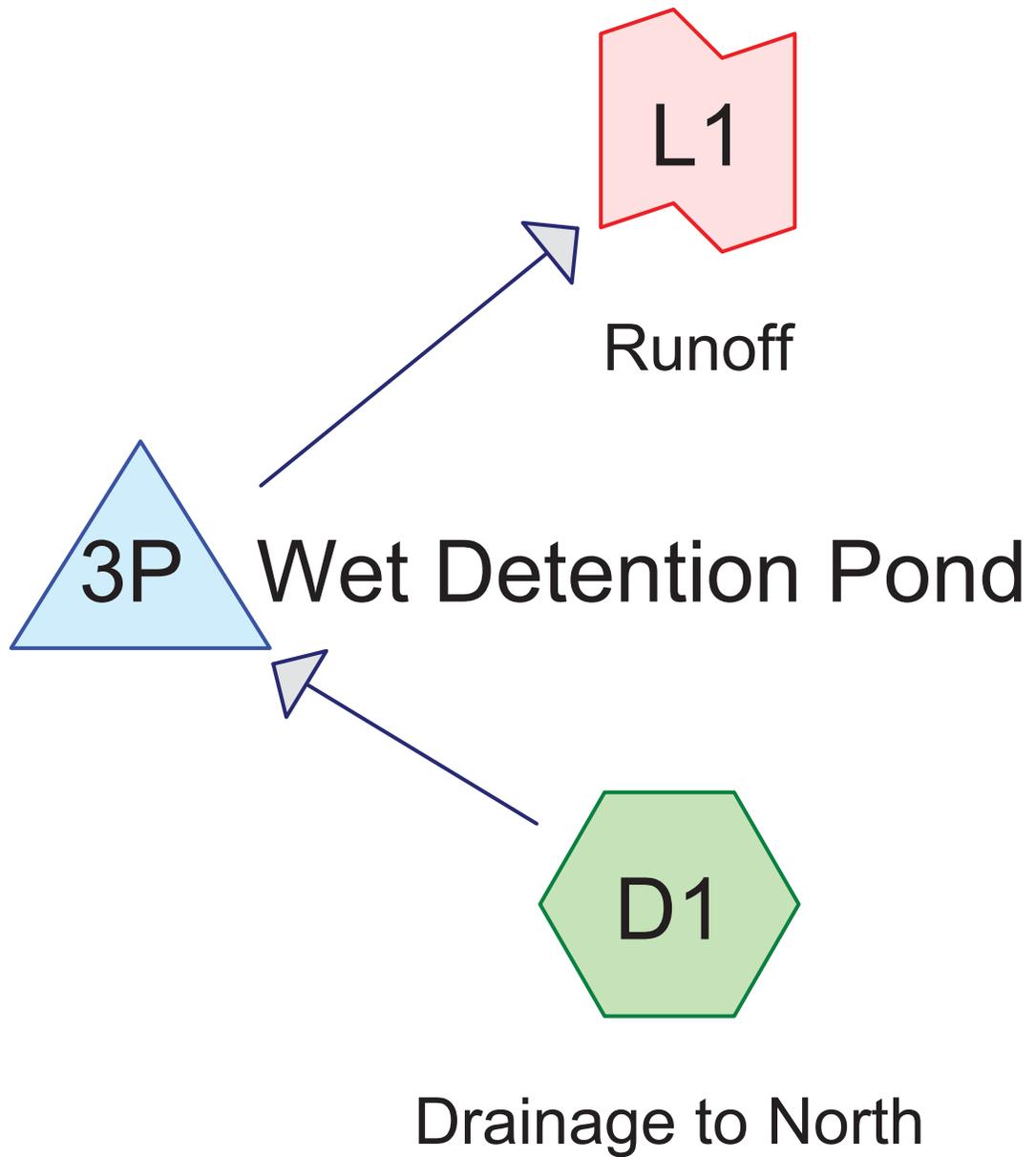
Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth > 3.53" for 100-Year event
Inflow = 3.94 cfs @ 12.98 hrs, Volume= 75,708 cf
Primary = 3.94 cfs @ 12.98 hrs, Volume= 75,708 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

APPENDIX D

Proposed Drainage Map and Calculations



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MSE 24-hr 3 1-Year Rainfall=2.40"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment D1: Drainage to North

Runoff Area=5.900 ac 18.64% Impervious Runoff Depth=0.63"
Tc=19.8 min CN=76 Runoff=3.85 cfs 13,596 cf

Pond 3P: 1P

Peak Elev=805.63' Storage=0.447 af Inflow=3.85 cfs 13,596 cf
Outflow=1.19 cfs 13,581 cf

Link L1: Runoff

Inflow=1.19 cfs 13,581 cf
Primary=1.19 cfs 13,581 cf

Total Runoff Area = 257,004 sf Runoff Volume = 13,596 cf Average Runoff Depth = 0.63"
81.36% Pervious = 209,088 sf 18.64% Impervious = 47,916 sf

Post Sherwin William Development

MSE 24-hr 3 1-Year Rainfall=2.40"

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Summary for Subcatchment D1: Drainage to North

Runoff = 3.85 cfs @ 12.32 hrs, Volume= 13,596 cf, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

Area (ac)	CN	Description
4.500	71	Meadow, non-grazed, HSG C
1.100	98	Paved parking, HSG C
0.300	74	>75% Grass cover, Good, HSG C
5.900	76	Weighted Average
4.800		81.36% Pervious Area
1.100		18.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Pond 3P: 1P

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth = 0.63" for 1-Year event
 Inflow = 3.85 cfs @ 12.32 hrs, Volume= 13,596 cf
 Outflow = 1.19 cfs @ 12.80 hrs, Volume= 13,581 cf, Atten= 69%, Lag= 29.1 min
 Primary = 1.19 cfs @ 12.80 hrs, Volume= 13,581 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 805.63' @ 12.80 hrs Surf.Area= 0.198 ac Storage= 0.447 af (0.112 af above start)

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= 118.8 min (969.2 - 850.4)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.19 cfs @ 12.80 hrs HW=805.63' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 1.19 cfs @ 2.70 fps)

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MSE 24-hr 3 1-Year Rainfall=2.40"

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Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth > 0.63" for 1-Year event
Inflow = 1.19 cfs @ 12.80 hrs, Volume= 13,581 cf
Primary = 1.19 cfs @ 12.80 hrs, Volume= 13,581 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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MSE 24-hr 3 2-Year Rainfall=2.70"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment D1: Drainage to North

Runoff Area=5.900 ac 18.64% Impervious Runoff Depth=0.82"
Tc=19.8 min CN=76 Runoff=5.13 cfs 17,532 cf

Pond 3P: 1P

Peak Elev=805.79' Storage=0.481 af Inflow=5.13 cfs 17,532 cf
Outflow=1.62 cfs 17,516 cf

Link L1: Runoff

Inflow=1.62 cfs 17,516 cf
Primary=1.62 cfs 17,516 cf

Total Runoff Area = 257,004 sf Runoff Volume = 17,532 cf Average Runoff Depth = 0.82"
81.36% Pervious = 209,088 sf 18.64% Impervious = 47,916 sf

Post Sherwin William Development

MSE 24-hr 3 2-Year Rainfall=2.70"

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Summary for Subcatchment D1: Drainage to North

Runoff = 5.13 cfs @ 12.31 hrs, Volume= 17,532 cf, Depth= 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

Area (ac)	CN	Description
4.500	71	Meadow, non-grazed, HSG C
1.100	98	Paved parking, HSG C
0.300	74	>75% Grass cover, Good, HSG C
5.900	76	Weighted Average
4.800		81.36% Pervious Area
1.100		18.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Pond 3P: 1P

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth = 0.82" for 2-Year event
 Inflow = 5.13 cfs @ 12.31 hrs, Volume= 17,532 cf
 Outflow = 1.62 cfs @ 12.77 hrs, Volume= 17,516 cf, Atten= 68%, Lag= 27.8 min
 Primary = 1.62 cfs @ 12.77 hrs, Volume= 17,516 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 805.79' @ 12.77 hrs Surf.Area= 0.208 ac Storage= 0.481 af (0.146 af above start)

Plug-Flow detention time= 691.1 min calculated for 2,924 cf (17% of inflow)
 Center-of-Mass det. time= 106.4 min (950.6 - 844.2)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.63 cfs @ 12.77 hrs HW=805.79' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 1.63 cfs @ 3.03 fps)

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MSE 24-hr 3 2-Year Rainfall=2.70"

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Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth > 0.82" for 2-Year event
Inflow = 1.62 cfs @ 12.77 hrs, Volume= 17,516 cf
Primary = 1.62 cfs @ 12.77 hrs, Volume= 17,516 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Post Sherwin William Development

MSE 24-hr 3 10-Year Rainfall=3.81"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment D1: Drainage to North

Runoff Area=5.900 ac 18.64% Impervious Runoff Depth=1.59"
Tc=19.8 min CN=76 Runoff=10.50 cfs 34,146 cf

Pond 3P: 1P

Peak Elev=806.49' Storage=0.654 af Inflow=10.50 cfs 34,146 cf
Outflow=2.72 cfs 34,128 cf

Link L1: Runoff

Inflow=2.72 cfs 34,128 cf
Primary=2.72 cfs 34,128 cf

Total Runoff Area = 257,004 sf Runoff Volume = 34,146 cf Average Runoff Depth = 1.59"
81.36% Pervious = 209,088 sf 18.64% Impervious = 47,916 sf

Post Sherwin William Development

MSE 24-hr 3 10-Year Rainfall=3.81"

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Summary for Subcatchment D1: Drainage to North

Runoff = 10.50 cfs @ 12.30 hrs, Volume= 34,146 cf, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

Area (ac)	CN	Description
4.500	71	Meadow, non-grazed, HSG C
1.100	98	Paved parking, HSG C
0.300	74	>75% Grass cover, Good, HSG C
5.900	76	Weighted Average
4.800		81.36% Pervious Area
1.100		18.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Pond 3P: 1P

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth = 1.59" for 10-Year event
 Inflow = 10.50 cfs @ 12.30 hrs, Volume= 34,146 cf
 Outflow = 2.72 cfs @ 12.80 hrs, Volume= 34,128 cf, Atten= 74%, Lag= 30.2 min
 Primary = 2.72 cfs @ 12.80 hrs, Volume= 34,128 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 806.49' @ 12.80 hrs Surf.Area= 0.308 ac Storage= 0.654 af (0.319 af above start)

Plug-Flow detention time= 288.8 min calculated for 19,535 cf (57% of inflow)
 Center-of-Mass det. time= 92.8 min (922.1 - 829.3)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.72 cfs @ 12.80 hrs HW=806.49' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 2.72 cfs @ 4.99 fps)

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MSE 24-hr 3 10-Year Rainfall=3.81"

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Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth > 1.59" for 10-Year event
Inflow = 2.72 cfs @ 12.80 hrs, Volume= 34,128 cf
Primary = 2.72 cfs @ 12.80 hrs, Volume= 34,128 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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MSE 24-hr 3 100-Year Rainfall=6.18"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment D1: Drainage to North

Runoff Area=5.900 ac 18.64% Impervious Runoff Depth=3.54"
Tc=19.8 min CN=76 Runoff=23.59 cfs 75,729 cf

Pond 3P: 1P

Peak Elev=807.67' Storage=1.179 af Inflow=23.59 cfs 75,729 cf
Outflow=3.94 cfs 75,708 cf

Link L1: Runoff

Inflow=3.94 cfs 75,708 cf
Primary=3.94 cfs 75,708 cf

Total Runoff Area = 257,004 sf Runoff Volume = 75,729 cf Average Runoff Depth = 3.54"
81.36% Pervious = 209,088 sf 18.64% Impervious = 47,916 sf

Post Sherwin William Development

MSE 24-hr 3 100-Year Rainfall=6.18"

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Summary for Subcatchment D1: Drainage to North

Runoff = 23.59 cfs @ 12.30 hrs, Volume= 75,729 cf, Depth= 3.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

Area (ac)	CN	Description
4.500	71	Meadow, non-grazed, HSG C
1.100	98	Paved parking, HSG C
0.300	74	>75% Grass cover, Good, HSG C
5.900	76	Weighted Average
4.800		81.36% Pervious Area
1.100		18.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Pond 3P: 1P

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth = 3.54" for 100-Year event
 Inflow = 23.59 cfs @ 12.30 hrs, Volume= 75,729 cf
 Outflow = 3.94 cfs @ 12.98 hrs, Volume= 75,708 cf, Atten= 83%, Lag= 40.9 min
 Primary = 3.94 cfs @ 12.98 hrs, Volume= 75,708 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 807.67' @ 12.98 hrs Surf.Area= 0.633 ac Storage= 1.179 af (0.844 af above start)

Plug-Flow detention time= 221.8 min calculated for 61,115 cf (81% of inflow)
 Center-of-Mass det. time= 116.0 min (929.0 - 812.9)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=3.94 cfs @ 12.98 hrs HW=807.67' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 3.94 cfs @ 7.22 fps)

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MSE 24-hr 3 100-Year Rainfall=6.18"

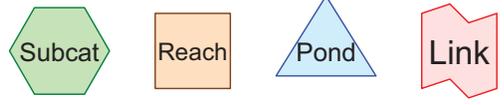
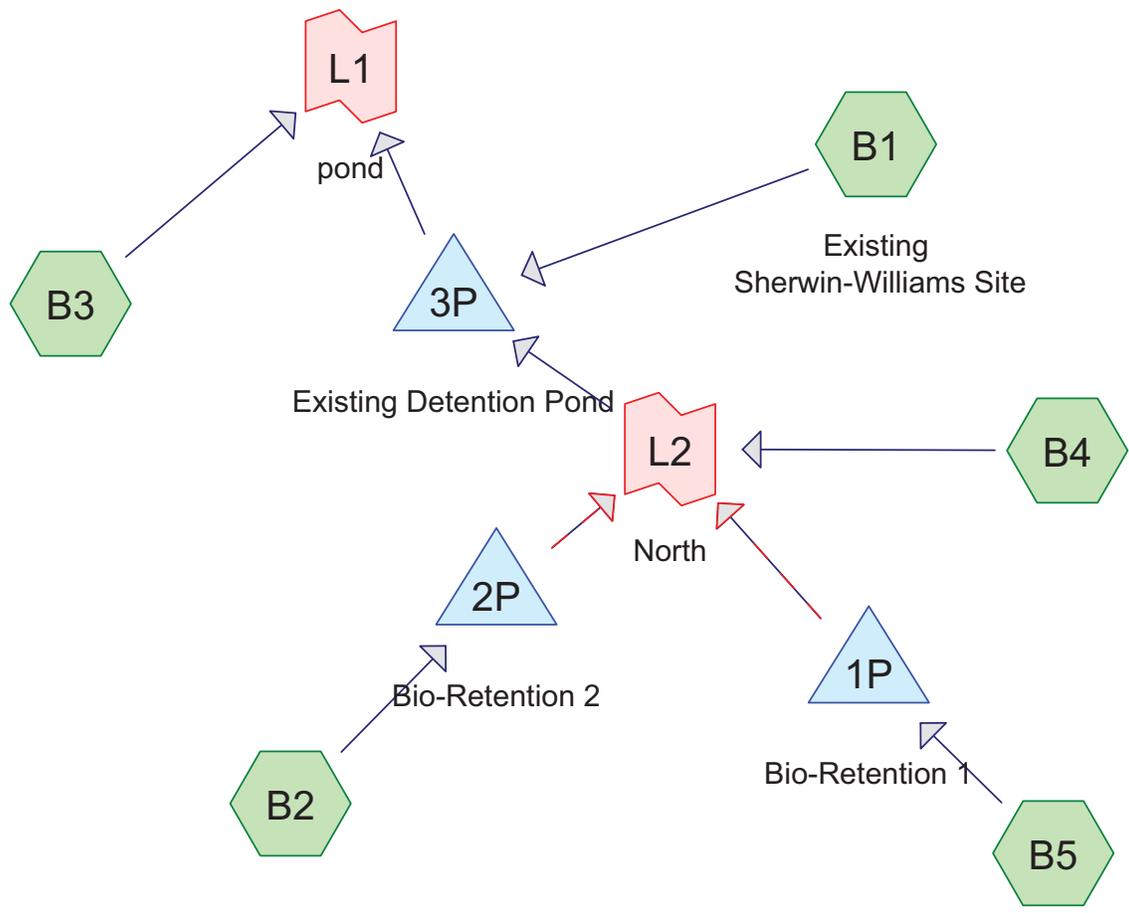
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Summary for Link L1: Runoff

Inflow Area = 257,004 sf, 18.64% Impervious, Inflow Depth > 3.53" for 100-Year event
Inflow = 3.94 cfs @ 12.98 hrs, Volume= 75,708 cf
Primary = 3.94 cfs @ 12.98 hrs, Volume= 75,708 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs



Routing Diagram for Proposed Development
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MSE 24-hr 3 1-Year Rainfall=2.40"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment B1: Existing	Runoff Area=4.866 ac 22.61% Impervious Runoff Depth=0.68" Tc=19.8 min CN=77 Runoff=3.45 cfs 11,983 cf
Subcatchment B2:	Runoff Area=13,798 sf 66.87% Impervious Runoff Depth=1.44" Tc=19.8 min CN=90 Runoff=0.52 cfs 1,658 cf
Subcatchment B3:	Runoff Area=10,286 sf 0.00% Impervious Runoff Depth=0.44" Tc=19.8 min CN=71 Runoff=0.09 cfs 379 cf
Subcatchment B4:	Runoff Area=6,000 sf 10.15% Impervious Runoff Depth=0.63" Tc=19.8 min CN=76 Runoff=0.09 cfs 317 cf
Subcatchment B5:	Runoff Area=14,959 sf 66.23% Impervious Runoff Depth=1.44" Tc=19.8 min CN=90 Runoff=0.56 cfs 1,798 cf
Pond 1P: Bio-Retention 1	Peak Elev=816.57' Storage=246 cf Inflow=0.56 cfs 1,798 cf Discarded=0.00 cfs 126 cf Primary=0.48 cfs 1,665 cf Secondary=0.00 cfs 0 cf Outflow=0.48 cfs 1,791 cf
Pond 2P: Bio-Retention 2	Peak Elev=816.66' Storage=119 cf Inflow=0.52 cfs 1,658 cf Discarded=0.00 cfs 81 cf Primary=0.50 cfs 1,576 cf Secondary=0.00 cfs 0 cf Outflow=0.50 cfs 1,657 cf
Pond 3P: Existing Detention Pond	Peak Elev=805.73' Storage=0.468 af Inflow=4.49 cfs 15,541 cf Outflow=1.47 cfs 15,526 cf
Link L1: pond	Inflow=1.51 cfs 15,905 cf Primary=1.51 cfs 15,905 cf
Link L2: North	Inflow=1.06 cfs 3,558 cf Primary=1.06 cfs 3,558 cf

Total Runoff Area = 257,006 sf Runoff Volume = 16,135 cf Average Runoff Depth = 0.75"
73.67% Pervious = 189,346 sf 26.33% Impervious = 67,660 sf

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MSE 24-hr 3 1-Year Rainfall=2.40"

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Summary for Subcatchment B1: Existing Sherwin-Williams Site

Runoff = 3.45 cfs @ 12.32 hrs, Volume= 11,983 cf, Depth= 0.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

Area (ac)	CN	Description
3.466	71	Meadow, non-grazed, HSG C
1.100	98	Water Surface, HSG C
0.300	74	>75% Grass cover, Good, HSG C
4.866	77	Weighted Average
3.766		77.39% Pervious Area
1.100		22.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B2:

Runoff = 0.52 cfs @ 12.29 hrs, Volume= 1,658 cf, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

Area (sf)	CN	Description
2,031	98	Roofs, HSG C
* 150	98	sidewalk
* 6,902	98	parking lot
* 0	98	future parking lot
* 144	98	concrete pad
4,571	74	>75% Grass cover, Good, HSG C
13,798	90	Weighted Average
4,571		33.13% Pervious Area
9,227		66.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B3:

Runoff = 0.09 cfs @ 12.34 hrs, Volume= 379 cf, Depth= 0.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

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MSE 24-hr 3 1-Year Rainfall=2.40"

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Area (sf)	CN	Description
10,286	71	Meadow, non-grazed, HSG C
10,286		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B4:

Runoff = 0.09 cfs @ 12.32 hrs, Volume= 317 cf, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

Area (sf)	CN	Description
609	98	Roofs, HSG A
5,391	74	>75% Grass cover, Good, HSG C
6,000	76	Weighted Average
5,391		89.85% Pervious Area
609		10.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B5:

Runoff = 0.56 cfs @ 12.29 hrs, Volume= 1,798 cf, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

Area (sf)	CN	Description
8,610	98	Paved parking, HSG C
5,051	74	>75% Grass cover, Good, HSG C
1,298	98	Roofs, HSG C
14,959	90	Weighted Average
5,051		33.77% Pervious Area
9,908		66.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

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MSE 24-hr 3 1-Year Rainfall=2.40"

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Summary for Pond 1P: Bio-Retention 1

Inflow Area = 14,959 sf, 66.23% Impervious, Inflow Depth = 1.44" for 1-Year event
 Inflow = 0.56 cfs @ 12.29 hrs, Volume= 1,798 cf
 Outflow = 0.48 cfs @ 12.38 hrs, Volume= 1,791 cf, Atten= 14%, Lag= 5.5 min
 Discarded = 0.00 cfs @ 11.37 hrs, Volume= 126 cf
 Primary = 0.48 cfs @ 12.38 hrs, Volume= 1,665 cf
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
 Peak Elev= 816.57' @ 12.38 hrs Surf.Area= 914 sf Storage= 246 cf

Plug-Flow detention time= 47.2 min calculated for 1,791 cf (100% of inflow)
 Center-of-Mass det. time= 44.9 min (854.9 - 810.0)

Volume	Invert	Avail.Storage	Storage Description
#1	818.60'	156,317 cf	Custom Stage Data (Irregular) Listed below (Recalc)
#2	817.10'	370 cf	Custom Stage Data (Irregular) Listed below (Recalc)
			1,371 cf Overall x 27.0% Voids
#3	815.77'	397 cf	Custom Stage Data (Irregular) Listed below (Recalc)
			1,216 cf Overall - 12 cf Embedded = 1,204 cf x 33.0% Voids
#4	815.96'	12 cf	6.0" Round Pipe Storage Inside #3
			L= 61.0' S= 0.0104 '/'
		157,097 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
818.60	914	137.2	0	0	914
819.00	1,295	162.8	440	440	1,528
919.50	1,822	188.4	155,878	156,317	19,190

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
817.10	914	137.2	0	0	914
818.60	914	137.2	1,371	1,371	1,120

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
815.77	914	137.2	0	0	914
817.10	914	137.2	1,216	1,216	1,096

Device	Routing	Invert	Outlet Devices
#1	Secondary	819.40'	7.4' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	815.77'	0.070 in/hr Exfiltration over Surface area
#3	Primary	815.97'	6.0" Round Culvert L= 40.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 815.97' / 815.55' S= 0.0105 '/' Cc= 0.900

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n= 0.012, Flow Area= 0.20 sf
 #4 Discarded 816.30' **3.600 in/hr Exfiltration over Surface area above 816.30'**
 Excluded Surface area = 914 sf

Discarded OutFlow Max=0.00 cfs @ 11.37 hrs HW=815.96' (Free Discharge)
 ↑ **2=Exfiltration** (Exfiltration Controls 0.00 cfs)
 ↑ **4=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.56 cfs @ 12.38 hrs HW=816.57' (Free Discharge)
 ↑ **3=Culvert** (Inlet Controls 0.56 cfs @ 2.84 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=815.77' (Free Discharge)
 ↑ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: Bio-Retention 2

Inflow Area = 13,798 sf, 66.87% Impervious, Inflow Depth = 1.44" for 1-Year event
 Inflow = 0.52 cfs @ 12.29 hrs, Volume= 1,658 cf
 Outflow = 0.50 cfs @ 12.33 hrs, Volume= 1,657 cf, Atten= 3%, Lag= 2.3 min
 Discarded = 0.00 cfs @ 9.99 hrs, Volume= 81 cf
 Primary = 0.50 cfs @ 12.33 hrs, Volume= 1,576 cf
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
 Peak Elev= 816.66' @ 12.33 hrs Surf.Area= 393 sf Storage= 119 cf

Plug-Flow detention time= 45.8 min calculated for 1,657 cf (100% of inflow)
 Center-of-Mass det. time= 45.8 min (855.8 - 810.0)

Volume	Invert	Avail.Storage	Storage Description
#1	818.60'	1,976 cf	Custom Stage Data (Irregular) Listed below (Recalc)
#2	817.10'	159 cf	Custom Stage Data (Irregular) Listed below (Recalc) 590 cf Overall x 27.0% Voids
#3	815.77'	170 cf	Custom Stage Data (Irregular) Listed below (Recalc) 523 cf Overall - 9 cf Embedded = 514 cf x 33.0% Voids
#4	816.13'	9 cf	6.0" Round Pipe Storage Inside #3 L= 45.0' S= 0.0104 '/'
		2,313 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
818.60	393	110.8	0	0	393
819.00	891	184.8	250	250	2,135
819.35	1,646	203.7	437	687	2,723
820.00	2,339	158.1	1,289	1,976	4,041

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
817.10	393	110.8	0	0	393
818.60	393	110.8	590	590	559

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
815.77	393	110.8	0	0	393
817.10	393	110.8	523	523	540

Device	Routing	Invert	Outlet Devices
#1	Secondary	819.35'	4.4' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	815.77'	0.070 in/hr Exfiltration over Surface area
#3	Primary	816.13'	6.0" Round Culvert L= 40.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 816.13' / 815.71' S= 0.0105 ' S= 0.0105 ' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#4	Discarded	816.30'	3.600 in/hr Exfiltration over Surface area above 816.30' Excluded Surface area = 393 sf

Discarded OutFlow Max=0.00 cfs @ 9.99 hrs HW=815.81' (Free Discharge)

↳ **2=Exfiltration** (Exfiltration Controls 0.00 cfs)

↳ **4=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.50 cfs @ 12.33 hrs HW=816.66' (Free Discharge)

↳ **3=Culvert** (Inlet Controls 0.50 cfs @ 2.54 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=815.77' (Free Discharge)

↳ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 3P: Existing Detention Pond

Inflow Area = 246,720 sf, 27.42% Impervious, Inflow Depth = 0.76" for 1-Year event
 Inflow = 4.49 cfs @ 12.32 hrs, Volume= 15,541 cf
 Outflow = 1.47 cfs @ 12.78 hrs, Volume= 15,526 cf, Atten= 67%, Lag= 27.3 min
 Primary = 1.47 cfs @ 12.78 hrs, Volume= 15,526 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 805.73' @ 12.78 hrs Surf.Area= 0.204 ac Storage= 0.468 af (0.133 af above start)

Plug-Flow detention time= 1,000.1 min calculated for 933 cf (6% of inflow)
 Center-of-Mass det. time= 111.1 min (951.5 - 840.3)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

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Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.48 cfs @ 12.78 hrs HW=805.73' (Free Discharge)
↑**1=Orifice/Grate** (Orifice Controls 1.48 cfs @ 2.91 fps)

Summary for Link L1: pond

Inflow Area = 257,006 sf, 26.33% Impervious, Inflow Depth > 0.74" for 1-Year event
Inflow = 1.51 cfs @ 12.75 hrs, Volume= 15,905 cf
Primary = 1.51 cfs @ 12.75 hrs, Volume= 15,905 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Summary for Link L2: North

Inflow Area = 34,757 sf, 56.81% Impervious, Inflow Depth = 1.23" for 1-Year event
Inflow = 1.06 cfs @ 12.35 hrs, Volume= 3,558 cf
Primary = 1.06 cfs @ 12.35 hrs, Volume= 3,558 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment B1: Existing	Runoff Area=4.866 ac 22.61% Impervious Runoff Depth=0.87" Tc=19.8 min CN=77 Runoff=4.54 cfs 15,343 cf
Subcatchment B2:	Runoff Area=13,798 sf 66.87% Impervious Runoff Depth=1.71" Tc=19.8 min CN=90 Runoff=0.61 cfs 1,967 cf
Subcatchment B3:	Runoff Area=10,286 sf 0.00% Impervious Runoff Depth=0.59" Tc=19.8 min CN=71 Runoff=0.14 cfs 509 cf
Subcatchment B4:	Runoff Area=6,000 sf 10.15% Impervious Runoff Depth=0.82" Tc=19.8 min CN=76 Runoff=0.12 cfs 409 cf
Subcatchment B5:	Runoff Area=14,959 sf 66.23% Impervious Runoff Depth=1.71" Tc=19.8 min CN=90 Runoff=0.66 cfs 2,132 cf
Pond 1P: Bio-Retention 1	Peak Elev=816.68' Storage=281 cf Inflow=0.66 cfs 2,132 cf Discarded=0.00 cfs 128 cf Primary=0.57 cfs 1,998 cf Secondary=0.00 cfs 0 cf Outflow=0.57 cfs 2,126 cf
Pond 2P: Bio-Retention 2	Peak Elev=816.76' Storage=133 cf Inflow=0.61 cfs 1,967 cf Discarded=0.00 cfs 82 cf Primary=0.59 cfs 1,884 cf Secondary=0.00 cfs 0 cf Outflow=0.59 cfs 1,966 cf
Pond 3P: Existing Detention Pond	Peak Elev=805.91' Storage=0.506 af Inflow=5.77 cfs 19,634 cf Outflow=1.85 cfs 19,617 cf
Link L1: pond	Inflow=1.90 cfs 20,127 cf Primary=1.90 cfs 20,127 cf
Link L2: North	Inflow=1.26 cfs 4,291 cf Primary=1.26 cfs 4,291 cf

Total Runoff Area = 257,006 sf Runoff Volume = 20,361 cf Average Runoff Depth = 0.95"
73.67% Pervious = 189,346 sf 26.33% Impervious = 67,660 sf

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Summary for Subcatchment B1: Existing Sherwin-Williams Site

Runoff = 4.54 cfs @ 12.30 hrs, Volume= 15,343 cf, Depth= 0.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

Area (ac)	CN	Description
3.466	71	Meadow, non-grazed, HSG C
1.100	98	Water Surface, HSG C
0.300	74	>75% Grass cover, Good, HSG C
4.866	77	Weighted Average
3.766		77.39% Pervious Area
1.100		22.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B2:

Runoff = 0.61 cfs @ 12.29 hrs, Volume= 1,967 cf, Depth= 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

Area (sf)	CN	Description
2,031	98	Roofs, HSG C
* 150	98	sidewalk
* 6,902	98	parking lot
* 0	98	future parking lot
* 144	98	concrete pad
4,571	74	>75% Grass cover, Good, HSG C
13,798	90	Weighted Average
4,571		33.13% Pervious Area
9,227		66.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B3:

Runoff = 0.14 cfs @ 12.34 hrs, Volume= 509 cf, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

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Area (sf)	CN	Description
10,286	71	Meadow, non-grazed, HSG C
10,286		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B4:

Runoff = 0.12 cfs @ 12.31 hrs, Volume= 409 cf, Depth= 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

Area (sf)	CN	Description
609	98	Roofs, HSG A
5,391	74	>75% Grass cover, Good, HSG C
6,000	76	Weighted Average
5,391		89.85% Pervious Area
609		10.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B5:

Runoff = 0.66 cfs @ 12.29 hrs, Volume= 2,132 cf, Depth= 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

Area (sf)	CN	Description
8,610	98	Paved parking, HSG C
5,051	74	>75% Grass cover, Good, HSG C
1,298	98	Roofs, HSG C
14,959	90	Weighted Average
5,051		33.77% Pervious Area
9,908		66.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

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Summary for Pond 1P: Bio-Retention 1

Inflow Area = 14,959 sf, 66.23% Impervious, Inflow Depth = 1.71" for 2-Year event
 Inflow = 0.66 cfs @ 12.29 hrs, Volume= 2,132 cf
 Outflow = 0.57 cfs @ 12.38 hrs, Volume= 2,126 cf, Atten= 14%, Lag= 5.5 min
 Discarded = 0.00 cfs @ 11.12 hrs, Volume= 128 cf
 Primary = 0.57 cfs @ 12.38 hrs, Volume= 1,998 cf
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
 Peak Elev= 816.68' @ 12.38 hrs Surf.Area= 914 sf Storage= 281 cf

Plug-Flow detention time= 41.4 min calculated for 2,126 cf (100% of inflow)
 Center-of-Mass det. time= 39.4 min (846.0 - 806.6)

Volume	Invert	Avail.Storage	Storage Description
#1	818.60'	156,317 cf	Custom Stage Data (Irregular) Listed below (Recalc)
#2	817.10'	370 cf	Custom Stage Data (Irregular) Listed below (Recalc)
			1,371 cf Overall x 27.0% Voids
#3	815.77'	397 cf	Custom Stage Data (Irregular) Listed below (Recalc)
			1,216 cf Overall - 12 cf Embedded = 1,204 cf x 33.0% Voids
#4	815.96'	12 cf	6.0" Round Pipe Storage Inside #3
			L= 61.0' S= 0.0104 '/'
		157,097 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
818.60	914	137.2	0	0	914
819.00	1,295	162.8	440	440	1,528
919.50	1,822	188.4	155,878	156,317	19,190

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
817.10	914	137.2	0	0	914
818.60	914	137.2	1,371	1,371	1,120

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
815.77	914	137.2	0	0	914
817.10	914	137.2	1,216	1,216	1,096

Device	Routing	Invert	Outlet Devices
#1	Secondary	819.40'	7.4' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	815.77'	0.070 in/hr Exfiltration over Surface area
#3	Primary	815.97'	6.0" Round Culvert L= 40.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 815.97' / 815.55' S= 0.0105 '/' Cc= 0.900

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n= 0.012, Flow Area= 0.20 sf
 #4 Discarded 816.30' **3.600 in/hr Exfiltration over Surface area above 816.30'**
 Excluded Surface area = 914 sf

Discarded OutFlow Max=0.00 cfs @ 11.12 hrs HW=815.96' (Free Discharge)
 ↑ **2=Exfiltration** (Exfiltration Controls 0.00 cfs)
 ↑ **4=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.61 cfs @ 12.38 hrs HW=816.68' (Free Discharge)
 ↑ **3=Culvert** (Barrel Controls 0.61 cfs @ 3.11 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=815.77' (Free Discharge)
 ↑ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: Bio-Retention 2

Inflow Area = 13,798 sf, 66.87% Impervious, Inflow Depth = 1.71" for 2-Year event
 Inflow = 0.61 cfs @ 12.29 hrs, Volume= 1,967 cf
 Outflow = 0.59 cfs @ 12.33 hrs, Volume= 1,966 cf, Atten= 4%, Lag= 2.6 min
 Discarded = 0.00 cfs @ 9.58 hrs, Volume= 82 cf
 Primary = 0.59 cfs @ 12.33 hrs, Volume= 1,884 cf
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
 Peak Elev= 816.76' @ 12.33 hrs Surf.Area= 393 sf Storage= 133 cf

Plug-Flow detention time= 39.9 min calculated for 1,966 cf (100% of inflow)
 Center-of-Mass det. time= 39.7 min (846.3 - 806.6)

Volume	Invert	Avail.Storage	Storage Description
#1	818.60'	1,976 cf	Custom Stage Data (Irregular) Listed below (Recalc)
#2	817.10'	159 cf	Custom Stage Data (Irregular) Listed below (Recalc) 590 cf Overall x 27.0% Voids
#3	815.77'	170 cf	Custom Stage Data (Irregular) Listed below (Recalc) 523 cf Overall - 9 cf Embedded = 514 cf x 33.0% Voids
#4	816.13'	9 cf	6.0" Round Pipe Storage Inside #3 L= 45.0' S= 0.0104 ' /'
		2,313 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
818.60	393	110.8	0	0	393
819.00	891	184.8	250	250	2,135
819.35	1,646	203.7	437	687	2,723
820.00	2,339	158.1	1,289	1,976	4,041

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
817.10	393	110.8	0	0	393
818.60	393	110.8	590	590	559

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
815.77	393	110.8	0	0	393
817.10	393	110.8	523	523	540

Device	Routing	Invert	Outlet Devices
#1	Secondary	819.35'	4.4' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	815.77'	0.070 in/hr Exfiltration over Surface area
#3	Primary	816.13'	6.0" Round Culvert L= 40.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 816.13' / 815.71' S= 0.0105 ' S= 0.0105 ' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#4	Discarded	816.30'	3.600 in/hr Exfiltration over Surface area above 816.30' Excluded Surface area = 393 sf

Discarded OutFlow Max=0.00 cfs @ 9.58 hrs HW=815.81' (Free Discharge)

↳ **2=Exfiltration** (Exfiltration Controls 0.00 cfs)

↳ **4=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.59 cfs @ 12.33 hrs HW=816.76' (Free Discharge)

↳ **3=Culvert** (Inlet Controls 0.59 cfs @ 2.98 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=815.77' (Free Discharge)

↳ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 3P: Existing Detention Pond

Inflow Area = 246,720 sf, 27.42% Impervious, Inflow Depth = 0.95" for 2-Year event
 Inflow = 5.77 cfs @ 12.32 hrs, Volume= 19,634 cf
 Outflow = 1.85 cfs @ 12.77 hrs, Volume= 19,617 cf, Atten= 68%, Lag= 27.2 min
 Primary = 1.85 cfs @ 12.77 hrs, Volume= 19,617 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 805.91' @ 12.77 hrs Surf.Area= 0.215 ac Storage= 0.506 af (0.171 af above start)

Plug-Flow detention time= 540.7 min calculated for 5,025 cf (26% of inflow)
 Center-of-Mass det. time= 101.9 min (937.4 - 835.5)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

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Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.85 cfs @ 12.77 hrs HW=805.91' (Free Discharge)
↑**1=Orifice/Grate** (Orifice Controls 1.85 cfs @ 3.39 fps)

Summary for Link L1: pond

Inflow Area = 257,006 sf, 26.33% Impervious, Inflow Depth > 0.94" for 2-Year event
Inflow = 1.90 cfs @ 12.74 hrs, Volume= 20,127 cf
Primary = 1.90 cfs @ 12.74 hrs, Volume= 20,127 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Summary for Link L2: North

Inflow Area = 34,757 sf, 56.81% Impervious, Inflow Depth = 1.48" for 2-Year event
Inflow = 1.26 cfs @ 12.35 hrs, Volume= 4,291 cf
Primary = 1.26 cfs @ 12.35 hrs, Volume= 4,291 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment B1: Existing Runoff Area=4.866 ac 22.61% Impervious Runoff Depth=1.66"
Tc=19.8 min CN=77 Runoff=9.08 cfs 29,405 cf

Subcatchment B2: Runoff Area=13,798 sf 66.87% Impervious Runoff Depth=2.74"
Tc=19.8 min CN=90 Runoff=0.96 cfs 3,150 cf

Subcatchment B3: Runoff Area=10,286 sf 0.00% Impervious Runoff Depth=1.27"
Tc=19.8 min CN=71 Runoff=0.32 cfs 1,085 cf

Subcatchment B4: Runoff Area=6,000 sf 10.15% Impervious Runoff Depth=1.59"
Tc=19.8 min CN=76 Runoff=0.25 cfs 797 cf

Subcatchment B5: Runoff Area=14,959 sf 66.23% Impervious Runoff Depth=2.74"
Tc=19.8 min CN=90 Runoff=1.04 cfs 3,415 cf

Pond 1P: Bio-Retention 1 Peak Elev=817.17' Storage=426 cf Inflow=1.04 cfs 3,415 cf
Discarded=0.08 cfs 170 cf Primary=0.81 cfs 3,237 cf Secondary=0.00 cfs 0 cf Outflow=0.89 cfs 3,407 cf

Pond 2P: Bio-Retention 2 Peak Elev=817.45' Storage=215 cf Inflow=0.96 cfs 3,150 cf
Discarded=0.03 cfs 113 cf Primary=0.86 cfs 3,036 cf Secondary=0.00 cfs 0 cf Outflow=0.89 cfs 3,148 cf

Pond 3P: Existing Detention Pond Peak Elev=806.59' Storage=0.687 af Inflow=10.92 cfs 36,476 cf
Outflow=2.85 cfs 36,457 cf

Link L1: pond Inflow=2.95 cfs 37,542 cf
Primary=2.95 cfs 37,542 cf

Link L2: North Inflow=1.90 cfs 7,070 cf
Primary=1.90 cfs 7,070 cf

Total Runoff Area = 257,006 sf Runoff Volume = 37,852 cf Average Runoff Depth = 1.77"
73.67% Pervious = 189,346 sf 26.33% Impervious = 67,660 sf

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Summary for Subcatchment B1: Existing Sherwin-Williams Site

Runoff = 9.08 cfs @ 12.30 hrs, Volume= 29,405 cf, Depth= 1.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

Area (ac)	CN	Description
3.466	71	Meadow, non-grazed, HSG C
1.100	98	Water Surface, HSG C
0.300	74	>75% Grass cover, Good, HSG C
4.866	77	Weighted Average
3.766		77.39% Pervious Area
1.100		22.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B2:

Runoff = 0.96 cfs @ 12.29 hrs, Volume= 3,150 cf, Depth= 2.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

Area (sf)	CN	Description
2,031	98	Roofs, HSG C
* 150	98	sidewalk
* 6,902	98	parking lot
* 0	98	future parking lot
* 144	98	concrete pad
4,571	74	>75% Grass cover, Good, HSG C
13,798	90	Weighted Average
4,571		33.13% Pervious Area
9,227		66.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B3:

Runoff = 0.32 cfs @ 12.30 hrs, Volume= 1,085 cf, Depth= 1.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

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Area (sf)	CN	Description
10,286	71	Meadow, non-grazed, HSG C
10,286		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B4:

Runoff = 0.25 cfs @ 12.30 hrs, Volume= 797 cf, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

Area (sf)	CN	Description
609	98	Roofs, HSG A
5,391	74	>75% Grass cover, Good, HSG C
6,000	76	Weighted Average
5,391		89.85% Pervious Area
609		10.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B5:

Runoff = 1.04 cfs @ 12.29 hrs, Volume= 3,415 cf, Depth= 2.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

Area (sf)	CN	Description
8,610	98	Paved parking, HSG C
5,051	74	>75% Grass cover, Good, HSG C
1,298	98	Roofs, HSG C
14,959	90	Weighted Average
5,051		33.77% Pervious Area
9,908		66.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

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Summary for Pond 1P: Bio-Retention 1

Inflow Area = 14,959 sf, 66.23% Impervious, Inflow Depth = 2.74" for 10-Year event
 Inflow = 1.04 cfs @ 12.29 hrs, Volume= 3,415 cf
 Outflow = 0.89 cfs @ 12.38 hrs, Volume= 3,407 cf, Atten= 15%, Lag= 5.8 min
 Discarded = 0.08 cfs @ 12.33 hrs, Volume= 170 cf
 Primary = 0.81 cfs @ 12.38 hrs, Volume= 3,237 cf
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
 Peak Elev= 817.17' @ 12.38 hrs Surf.Area= 1,828 sf Storage= 426 cf

Plug-Flow detention time= 29.6 min calculated for 3,407 cf (100% of inflow)
 Center-of-Mass det. time= 28.5 min (825.7 - 797.2)

Volume	Invert	Avail.Storage	Storage Description
#1	818.60'	156,317 cf	Custom Stage Data (Irregular) Listed below (Recalc)
#2	817.10'	370 cf	Custom Stage Data (Irregular) Listed below (Recalc)
			1,371 cf Overall x 27.0% Voids
#3	815.77'	397 cf	Custom Stage Data (Irregular) Listed below (Recalc)
			1,216 cf Overall - 12 cf Embedded = 1,204 cf x 33.0% Voids
#4	815.96'	12 cf	6.0" Round Pipe Storage Inside #3
			L= 61.0' S= 0.0104 '/'
		157,097 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
818.60	914	137.2	0	0	914
819.00	1,295	162.8	440	440	1,528
919.50	1,822	188.4	155,878	156,317	19,190

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
817.10	914	137.2	0	0	914
818.60	914	137.2	1,371	1,371	1,120

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
815.77	914	137.2	0	0	914
817.10	914	137.2	1,216	1,216	1,096

Device	Routing	Invert	Outlet Devices
#1	Secondary	819.40'	7.4' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	815.77'	0.070 in/hr Exfiltration over Surface area
#3	Primary	815.97'	6.0" Round Culvert L= 40.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 815.97' / 815.55' S= 0.0105 '/' Cc= 0.900

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n= 0.012, Flow Area= 0.20 sf
 #4 Discarded 816.30' **3.600 in/hr Exfiltration over Surface area above 816.30'**
 Excluded Surface area = 914 sf

Discarded OutFlow Max=0.08 cfs @ 12.33 hrs HW=817.12' (Free Discharge)
 ↳ **2=Exfiltration** (Exfiltration Controls 0.00 cfs)
 ↳ **4=Exfiltration** (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=0.81 cfs @ 12.38 hrs HW=817.17' (Free Discharge)
 ↳ **3=Culvert** (Barrel Controls 0.81 cfs @ 4.15 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=815.77' (Free Discharge)
 ↳ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: Bio-Retention 2

Inflow Area = 13,798 sf, 66.87% Impervious, Inflow Depth = 2.74" for 10-Year event
 Inflow = 0.96 cfs @ 12.29 hrs, Volume= 3,150 cf
 Outflow = 0.89 cfs @ 12.35 hrs, Volume= 3,148 cf, Atten= 7%, Lag= 3.9 min
 Discarded = 0.03 cfs @ 12.25 hrs, Volume= 113 cf
 Primary = 0.86 cfs @ 12.35 hrs, Volume= 3,036 cf
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
 Peak Elev= 817.45' @ 12.35 hrs Surf.Area= 786 sf Storage= 215 cf

Plug-Flow detention time= 27.4 min calculated for 3,148 cf (100% of inflow)
 Center-of-Mass det. time= 27.4 min (824.6 - 797.2)

Volume	Invert	Avail.Storage	Storage Description
#1	818.60'	1,976 cf	Custom Stage Data (Irregular) Listed below (Recalc)
#2	817.10'	159 cf	Custom Stage Data (Irregular) Listed below (Recalc) 590 cf Overall x 27.0% Voids
#3	815.77'	170 cf	Custom Stage Data (Irregular) Listed below (Recalc) 523 cf Overall - 9 cf Embedded = 514 cf x 33.0% Voids
#4	816.13'	9 cf	6.0" Round Pipe Storage Inside #3 L= 45.0' S= 0.0104 '/'
		2,313 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
818.60	393	110.8	0	0	393
819.00	891	184.8	250	250	2,135
819.35	1,646	203.7	437	687	2,723
820.00	2,339	158.1	1,289	1,976	4,041

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
817.10	393	110.8	0	0	393
818.60	393	110.8	590	590	559

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
815.77	393	110.8	0	0	393
817.10	393	110.8	523	523	540

Device	Routing	Invert	Outlet Devices
#1	Secondary	819.35'	4.4' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	815.77'	0.070 in/hr Exfiltration over Surface area
#3	Primary	816.13'	6.0" Round Culvert L= 40.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 816.13' / 815.71' S= 0.0105 ' S= 0.0105 ' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#4	Discarded	816.30'	3.600 in/hr Exfiltration over Surface area above 816.30' Excluded Surface area = 393 sf

Discarded OutFlow Max=0.03 cfs @ 12.25 hrs HW=817.14' (Free Discharge)

↳ **2=Exfiltration** (Exfiltration Controls 0.00 cfs)

↳ **4=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.86 cfs @ 12.35 hrs HW=817.45' (Free Discharge)

↳ **3=Culvert** (Barrel Controls 0.86 cfs @ 4.36 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=815.77' (Free Discharge)

↳ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 3P: Existing Detention Pond

Inflow Area = 246,720 sf, 27.42% Impervious, Inflow Depth = 1.77" for 10-Year event
 Inflow = 10.92 cfs @ 12.30 hrs, Volume= 36,476 cf
 Outflow = 2.85 cfs @ 12.82 hrs, Volume= 36,457 cf, Atten= 74%, Lag= 30.9 min
 Primary = 2.85 cfs @ 12.82 hrs, Volume= 36,457 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 806.59' @ 12.82 hrs Surf.Area= 0.327 ac Storage= 0.687 af (0.352 af above start)

Plug-Flow detention time= 272.2 min calculated for 21,860 cf (60% of inflow)
 Center-of-Mass det. time= 93.5 min (916.7 - 823.2)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

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Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.85 cfs @ 12.82 hrs HW=806.59' (Free Discharge)
↑**1=Orifice/Grate** (Orifice Controls 2.85 cfs @ 5.22 fps)

Summary for Link L1: pond

Inflow Area = 257,006 sf, 26.33% Impervious, Inflow Depth > 1.75" for 10-Year event
Inflow = 2.95 cfs @ 12.70 hrs, Volume= 37,542 cf
Primary = 2.95 cfs @ 12.70 hrs, Volume= 37,542 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Summary for Link L2: North

Inflow Area = 34,757 sf, 56.81% Impervious, Inflow Depth = 2.44" for 10-Year event
Inflow = 1.90 cfs @ 12.35 hrs, Volume= 7,070 cf
Primary = 1.90 cfs @ 12.35 hrs, Volume= 7,070 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment B1: Existing Runoff Area=4.866 ac 22.61% Impervious Runoff Depth=3.64"
Tc=19.8 min CN=77 Runoff=19.98 cfs 64,238 cf

Subcatchment B2: Runoff Area=13,798 sf 66.87% Impervious Runoff Depth=5.02"
Tc=19.8 min CN=90 Runoff=1.71 cfs 5,774 cf

Subcatchment B3: Runoff Area=10,286 sf 0.00% Impervious Runoff Depth=3.04"
Tc=19.8 min CN=71 Runoff=0.81 cfs 2,610 cf

Subcatchment B4: Runoff Area=6,000 sf 10.15% Impervious Runoff Depth=3.54"
Tc=19.8 min CN=76 Runoff=0.55 cfs 1,768 cf

Subcatchment B5: Runoff Area=14,959 sf 66.23% Impervious Runoff Depth=5.02"
Tc=19.8 min CN=90 Runoff=1.86 cfs 6,259 cf

Pond 1P: Bio-Retention 1 Peak Elev=818.65' Storage=829 cf Inflow=1.86 cfs 6,259 cf
Discarded=0.16 cfs 388 cf Primary=1.24 cfs 5,864 cf Secondary=0.00 cfs 0 cf Outflow=1.40 cfs 6,252 cf

Pond 2P: Bio-Retention 2 Peak Elev=818.89' Storage=501 cf Inflow=1.71 cfs 5,774 cf
Discarded=0.10 cfs 218 cf Primary=1.26 cfs 5,554 cf Secondary=0.00 cfs 0 cf Outflow=1.36 cfs 5,772 cf

Pond 3P: Existing Detention Pond Peak Elev=807.70' Storage=1.202 af Inflow=22.92 cfs 77,424 cf
Outflow=3.97 cfs 77,402 cf

Link L1: pond Inflow=4.23 cfs 80,012 cf
Primary=4.23 cfs 80,012 cf

Link L2: North Inflow=3.01 cfs 13,186 cf
Primary=3.01 cfs 13,186 cf

Total Runoff Area = 257,006 sf Runoff Volume = 80,648 cf Average Runoff Depth = 3.77"
73.67% Pervious = 189,346 sf 26.33% Impervious = 67,660 sf

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Summary for Subcatchment B1: Existing Sherwin-Williams Site

Runoff = 19.98 cfs @ 12.29 hrs, Volume= 64,238 cf, Depth= 3.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

Area (ac)	CN	Description
3.466	71	Meadow, non-grazed, HSG C
1.100	98	Water Surface, HSG C
0.300	74	>75% Grass cover, Good, HSG C
4.866	77	Weighted Average
3.766		77.39% Pervious Area
1.100		22.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B2:

Runoff = 1.71 cfs @ 12.28 hrs, Volume= 5,774 cf, Depth= 5.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

Area (sf)	CN	Description
2,031	98	Roofs, HSG C
* 150	98	sidewalk
* 6,902	98	parking lot
* 0	98	future parking lot
* 144	98	concrete pad
4,571	74	>75% Grass cover, Good, HSG C
13,798	90	Weighted Average
4,571		33.13% Pervious Area
9,227		66.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B3:

Runoff = 0.81 cfs @ 12.30 hrs, Volume= 2,610 cf, Depth= 3.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

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MSE 24-hr 3 100-Year Rainfall=6.18"

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Area (sf)	CN	Description
10,286	71	Meadow, non-grazed, HSG C
10,286		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B4:

Runoff = 0.55 cfs @ 12.30 hrs, Volume= 1,768 cf, Depth= 3.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

Area (sf)	CN	Description
609	98	Roofs, HSG A
5,391	74	>75% Grass cover, Good, HSG C
6,000	76	Weighted Average
5,391		89.85% Pervious Area
609		10.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Summary for Subcatchment B5:

Runoff = 1.86 cfs @ 12.28 hrs, Volume= 6,259 cf, Depth= 5.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

Area (sf)	CN	Description
8,610	98	Paved parking, HSG C
5,051	74	>75% Grass cover, Good, HSG C
1,298	98	Roofs, HSG C
14,959	90	Weighted Average
5,051		33.77% Pervious Area
9,908		66.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					Direct Entry,

Proposed Development

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MSE 24-hr 3 100-Year Rainfall=6.18"

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Summary for Pond 1P: Bio-Retention 1

Inflow Area = 14,959 sf, 66.23% Impervious, Inflow Depth = 5.02" for 100-Year event
 Inflow = 1.86 cfs @ 12.28 hrs, Volume= 6,259 cf
 Outflow = 1.40 cfs @ 12.42 hrs, Volume= 6,252 cf, Atten= 25%, Lag= 8.1 min
 Discarded = 0.16 cfs @ 12.42 hrs, Volume= 388 cf
 Primary = 1.24 cfs @ 12.42 hrs, Volume= 5,864 cf
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
 Peak Elev= 818.65' @ 12.42 hrs Surf.Area= 2,788 sf Storage= 829 cf

Plug-Flow detention time= 20.8 min calculated for 6,251 cf (100% of inflow)
 Center-of-Mass det. time= 20.3 min (805.6 - 785.3)

Volume	Invert	Avail.Storage	Storage Description
#1	818.60'	156,317 cf	Custom Stage Data (Irregular) Listed below (Recalc)
#2	817.10'	370 cf	Custom Stage Data (Irregular) Listed below (Recalc)
			1,371 cf Overall x 27.0% Voids
#3	815.77'	397 cf	Custom Stage Data (Irregular) Listed below (Recalc)
			1,216 cf Overall - 12 cf Embedded = 1,204 cf x 33.0% Voids
#4	815.96'	12 cf	6.0" Round Pipe Storage Inside #3
			L= 61.0' S= 0.0104 '/'
		157,097 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
818.60	914	137.2	0	0	914
819.00	1,295	162.8	440	440	1,528
919.50	1,822	188.4	155,878	156,317	19,190

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
817.10	914	137.2	0	0	914
818.60	914	137.2	1,371	1,371	1,120

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
815.77	914	137.2	0	0	914
817.10	914	137.2	1,216	1,216	1,096

Device	Routing	Invert	Outlet Devices
#1	Secondary	819.40'	7.4' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	815.77'	0.070 in/hr Exfiltration over Surface area
#3	Primary	815.97'	6.0" Round Culvert L= 40.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 815.97' / 815.55' S= 0.0105 '/' Cc= 0.900

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MSE 24-hr 3 100-Year Rainfall=6.18"

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n= 0.012, Flow Area= 0.20 sf
 #4 Discarded 816.30' **3.600 in/hr Exfiltration over Surface area above 816.30'**
 Excluded Surface area = 914 sf

Discarded OutFlow Max=0.16 cfs @ 12.42 hrs HW=818.65' (Free Discharge)
 ↳ **2=Exfiltration** (Exfiltration Controls 0.00 cfs)
 ↳ **4=Exfiltration** (Exfiltration Controls 0.16 cfs)

Primary OutFlow Max=1.24 cfs @ 12.42 hrs HW=818.65' (Free Discharge)
 ↳ **3=Culvert** (Barrel Controls 1.24 cfs @ 6.32 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=815.77' (Free Discharge)
 ↳ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: Bio-Retention 2

Inflow Area = 13,798 sf, 66.87% Impervious, Inflow Depth = 5.02" for 100-Year event
 Inflow = 1.71 cfs @ 12.28 hrs, Volume= 5,774 cf
 Outflow = 1.36 cfs @ 12.40 hrs, Volume= 5,772 cf, Atten= 21%, Lag= 7.2 min
 Discarded = 0.10 cfs @ 12.40 hrs, Volume= 218 cf
 Primary = 1.26 cfs @ 12.40 hrs, Volume= 5,554 cf
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
 Peak Elev= 818.89' @ 12.40 hrs Surf.Area= 1,525 sf Storage= 501 cf

Plug-Flow detention time= 18.0 min calculated for 5,771 cf (100% of inflow)
 Center-of-Mass det. time= 18.1 min (803.4 - 785.3)

Volume	Invert	Avail.Storage	Storage Description
#1	818.60'	1,976 cf	Custom Stage Data (Irregular) Listed below (Recalc)
#2	817.10'	159 cf	Custom Stage Data (Irregular) Listed below (Recalc) 590 cf Overall x 27.0% Voids
#3	815.77'	170 cf	Custom Stage Data (Irregular) Listed below (Recalc) 523 cf Overall - 9 cf Embedded = 514 cf x 33.0% Voids
#4	816.13'	9 cf	6.0" Round Pipe Storage Inside #3 L= 45.0' S= 0.0104 '/'
		2,313 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
818.60	393	110.8	0	0	393
819.00	891	184.8	250	250	2,135
819.35	1,646	203.7	437	687	2,723
820.00	2,339	158.1	1,289	1,976	4,041

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
817.10	393	110.8	0	0	393
818.60	393	110.8	590	590	559

Proposed Development

MSE 24-hr 3 100-Year Rainfall=6.18"

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
815.77	393	110.8	0	0	393
817.10	393	110.8	523	523	540

Device	Routing	Invert	Outlet Devices
#1	Secondary	819.35'	4.4' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	815.77'	0.070 in/hr Exfiltration over Surface area
#3	Primary	816.13'	6.0" Round Culvert L= 40.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 816.13' / 815.71' S= 0.0105 ' S= 0.0105 ' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#4	Discarded	816.30'	3.600 in/hr Exfiltration over Surface area above 816.30' Excluded Surface area = 393 sf

Discarded OutFlow Max=0.10 cfs @ 12.40 hrs HW=818.89' (Free Discharge)

↳ **2=Exfiltration** (Exfiltration Controls 0.00 cfs)

↳ **4=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=1.26 cfs @ 12.40 hrs HW=818.89' (Free Discharge)

↳ **3=Culvert** (Barrel Controls 1.26 cfs @ 6.42 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=815.77' (Free Discharge)

↳ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 3P: Existing Detention Pond

Inflow Area = 246,720 sf, 27.42% Impervious, Inflow Depth = 3.77" for 100-Year event
 Inflow = 22.92 cfs @ 12.30 hrs, Volume= 77,424 cf
 Outflow = 3.97 cfs @ 12.99 hrs, Volume= 77,402 cf, Atten= 83%, Lag= 41.7 min
 Primary = 3.97 cfs @ 12.99 hrs, Volume= 77,402 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Starting Elev= 805.00' Surf.Area= 0.160 ac Storage= 0.335 af
 Peak Elev= 807.70' @ 12.99 hrs Surf.Area= 0.646 ac Storage= 1.202 af (0.867 af above start)

Plug-Flow detention time= 220.5 min calculated for 62,797 cf (81% of inflow)
 Center-of-Mass det. time= 117.3 min (926.1 - 808.8)

Volume	Invert	Avail.Storage	Storage Description
#1	801.00'	2.375 af	Custom Stage Data (Prismatic) Listed below (Recalc)

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Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
801.00	0.050	0.000	0.000
804.00	0.090	0.210	0.210
805.00	0.160	0.125	0.335
806.00	0.220	0.190	0.525
807.00	0.400	0.310	0.835
808.00	0.750	0.575	1.410
809.00	1.180	0.965	2.375

Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	10.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=3.97 cfs @ 12.99 hrs HW=807.70' (Free Discharge)
↑**1=Orifice/Grate** (Orifice Controls 3.97 cfs @ 7.28 hrs)

Summary for Link L1: pond

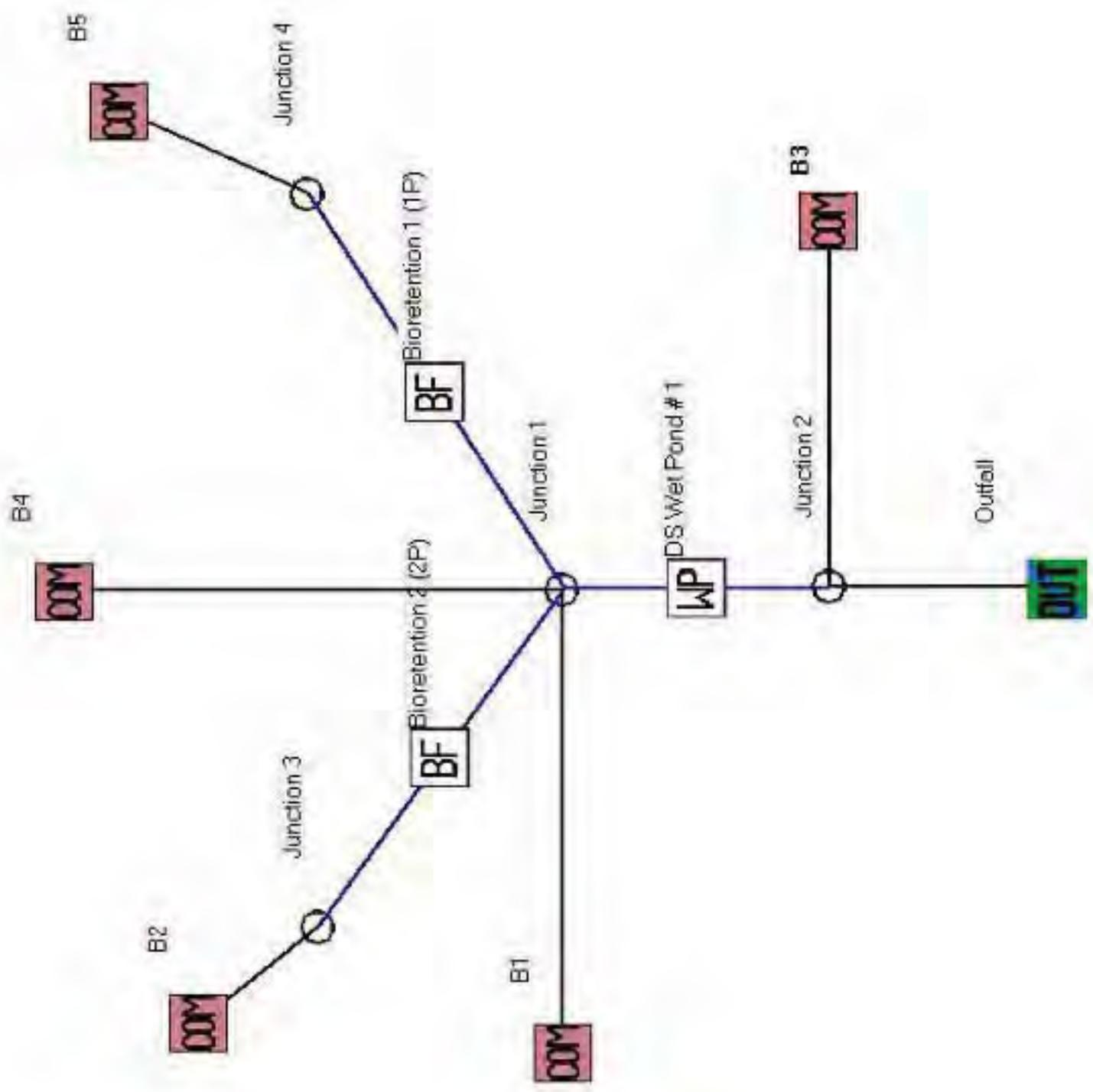
Inflow Area = 257,006 sf, 26.33% Impervious, Inflow Depth > 3.74" for 100-Year event
Inflow = 4.23 cfs @ 12.44 hrs, Volume= 80,012 cf
Primary = 4.23 cfs @ 12.44 hrs, Volume= 80,012 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Summary for Link L2: North

Inflow Area = 34,757 sf, 56.81% Impervious, Inflow Depth = 4.55" for 100-Year event
Inflow = 3.01 cfs @ 12.34 hrs, Volume= 13,186 cf
Primary = 3.01 cfs @ 12.34 hrs, Volume= 13,186 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs



15.151 WINSLAMM Model 10-12-16 - InputData.txt

Data file name: O:\Projects\2015\15.151- OMSA - Mukwonago - Design Unlimited\Storm Water\15.151 WINSLAMM Model 10-12-16.mdb
WinSLAMM Version 10.2.1
Rain file name: C:\winSLAMM Files\Rain Files\wisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\winSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\winSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\winSLAMM Files\WI_Com Inst Indust Dec06.std
Institutional Street Delivery file name: C:\winSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\winSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\winSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\winSLAMM Files\WI_Com Inst Indust Dec06.std
Freeway Street Delivery file name: C:\winSLAMM Files\WI_Com Inst Indust Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\winSLAMM Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\winSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Date: 10-12-2016 Time: 09:47:56
Site information:

LU# 1 - Commercial: B1 Total area (ac): 4.866
1 - Roofs 1: 0.110 ac. Flat Connected Source Area PSD File:
C:\winSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.960 ac. Connected Source Area PSD File:
C:\winSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.030 ac. Connected Source Area PSD File: C:\winSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.300 ac. Normal Silty Source Area PSD File: C:\winSLAMM Files\NURP.cpz
57 - Undeveloped Areas 1: 3.466 ac. Normal Silty Source Area PSD File: C:\winSLAMM Files\NURP.cpz

LU# 2 - Commercial: B2 Total area (ac): 0.316
1 - Roofs 1: 0.047 ac. Flat Connected Source Area PSD File:
C:\winSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.161 ac. Connected Source Area PSD File:
C:\winSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.003 ac. Connected Source Area PSD File: C:\winSLAMM Files\NURP.cpz
57 - Undeveloped Areas 1: 0.105 ac. Normal Silty Source Area PSD File: C:\winSLAMM Files\NURP.cpz

LU# 3 - Commercial: B3 Total area (ac): 0.236
57 - Undeveloped Areas 1: 0.236 ac. Normal Silty Source Area PSD File:
C:\winSLAMM Files\NURP.cpz

LU# 4 - Commercial: B4 Total area (ac): 0.138
1 - Roofs 1: 0.014 ac. Flat Connected Source Area PSD File:
C:\winSLAMM Files\NURP.cpz
57 - Undeveloped Areas 1: 0.124 ac. Normal Silty Source Area PSD File:
C:\winSLAMM Files\NURP.cpz

15.151 WINSLAMM Model 10-12-16 - InputData.txt

LU# 5 - Commercial: B5 Total area (ac): 0.344
 1 - Roofs 1: 0.030 ac. Flat Connected Source Area PSD File:
 C:\winSLAMM Files\NURP.cpz
 13 - Paved Parking 1: 0.198 ac. Connected Source Area PSD File:
 C:\winSLAMM Files\NURP.cpz
 57 - Undeveloped Areas 1: 0.116 ac. Normal Silty Source Area PSD File:
 C:\winSLAMM Files\NURP.cpz

Control Practice 1: Wet Detention Pond CP# 1 (DS) - DS Wet Pond # 1
 Particle Size Distribution file name: Not needed - calculated by program
 Initial stage elevation (ft): 5
 Peak to Average Flow Ratio: 3.8
 Maximum flow allowed into pond (cfs): No maximum value entered
 Outlet Characteristics:

Outlet type: Orifice 1
 1. Orifice diameter (ft): 0.83
 2. Number of orifices: 1
 3. Invert elevation above datum (ft): 6
 Outlet type: Broad Crested Weir
 1. Weir crest length (ft): 2
 2. Weir crest width (ft): 1
 3. Height from datum to bottom of weir opening: 8.5

Pond stage and surface area

(cfs)	Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow
0.00	0	0.00	0.0000	0.00	
0.00	1	1.00	0.0500	0.00	
0.00	2	4.00	0.0900	0.00	
0.00	3	5.00	0.1600	0.00	
0.00	4	6.00	0.2200	0.00	
0.00	5	7.00	0.4000	0.00	
0.00	6	8.00	0.7500	0.00	
0.00	7	9.00	1.1800	0.00	

Control Practice 2: Biofilter CP# 1 (DS) - Bioretention 2 (2P)
 1. Top area (square feet) = 1288
 2. Bottom area (square feet) = 393
 3. Depth (ft): 4.33
 4. Biofilter width (ft) - for Cost Purposes Only: 10
 5. Infiltration rate (in/hr) = 0.07
 6. Random infiltration rate generation? No
 7. Infiltration rate fraction (side): 1
 8. Infiltration rate fraction (bottom): 1
 9. Depth of biofilter that is rock filled (ft) 1.33
 10. Porosity of rock filled volume = 0.33
 11. Engineered soil infiltration rate: 3.6
 12. Engineered soil depth (ft) = 1.5
 13. Engineered soil porosity = 0.27

15.151 WINSLamm Model 10-12-16 - Output Summary.txt

SLamm for windows Version 10.2.1
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Data file name: O:\Projects\2015\15.151- OMSA - Mukwonago - Design Unlimited\Storm Water\15.151 WINSLamm Model 10-12-16.mdb
 Data file description:
 Rain file name: C:\winSLamm Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
 Particulate Solids Concentration file name: C:\winSLamm Files\v10.1 WI_AVG01.pscx
 Runoff Coefficient file name: C:\winSLamm Files\WI_SL06 Dec06.rsvx
 Residential Street Delivery file name: C:\winSLamm Files\WI_Com Inst Indust Dec06.std
 Institutional Street Delivery file name: C:\winSLamm Files\WI_Com Inst Indust Dec06.std
 Commercial Street Delivery file name: C:\winSLamm Files\WI_Com Inst Indust Dec06.std
 Industrial Street Delivery file name: C:\winSLamm Files\WI_Com Inst Indust Dec06.std
 Other Urban Street Delivery file name: C:\winSLamm Files\WI_Com Inst Indust Dec06.std
 Freeway Street Delivery file name: C:\winSLamm Files\WI_Com Inst Indust Dec06.std
 Pollutant Relative Concentration file name: C:\winSLamm Files\WI_GEO03.ppdX
 Start of Winter Season: 12/06 End of Winter Season: 03/28
 Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
 Date of run: 10-12-2016 Time of run: 09:47:46
 Total Area Modeled (acres): 5.900
 Years in Model Run: 0.99

Particulate	Percent	Runoff	Percent	Particulate
Solids	Particulate	Volume	Runoff	Solids
Yield	Solids	(cu ft)	Volume	Conc.
(lbs)	Reduction		Reduction	(mg/L)
Total of all Land Uses without Controls:		143037	-	102.1
911.5	-			
Outfall Total with Controls:		120503	15.75%	20.09
151.1	83.42%			
Annualized Total After Outfall Controls:		122176		
153.2				

APPENDIX E

Proposed Erosion Control Plan

APPENDIX F

State of Wisconsin Construction Site Inspection Report, And Post Construction Long-Term Storm Water Management Checklist

Notice: Use of this specific form is voluntary, but the information contained on this form must be collected and kept by the permittee under s. NR 216.48(4), Wis. Adm. Code, for a construction site covered under the General WPDES Construction Site Storm Water Discharge Permit, Permit No. WI-0067831-2. This form is provided for the convenience of the permittee to meet the requirements of s. NR 216.48(4), Wis. Adm. Code. Multiple copies of this form may be made to compile the inspection report.

Inspections of implemented erosion and sediment control best management practices must be performed weekly and within 24 hours after a precipitation event 0.5 inches or greater which results in runoff.

Weekly written reports of all inspections conducted by or for the permittee must be maintained throughout the period of general permit coverage.

The information maintained in accordance with s. NR 216.48 (4) must be submitted to the Department upon request.

Name of Permittee:	
Construction Site Name (Project):	Construction Site ID No.:
Location:	County:
Contractor:	Field Office Phone:

Note: Weekly inspection reports, along with erosion control and stormwater management plans, are required to be maintained on site and made available upon request.

Date of inspection (mm/dd/yy): _____ Time of inspection: Start: _____ a.m./p.m. End: _____ a.m./p.m.	Type of inspection: <input type="checkbox"/> Weekly <input type="checkbox"/> Precipitation Event <input type="checkbox"/> Other (specify) _____ Name(s) of individual(s) performing inspection:
--	---

Weather:

Description of present phase of construction:

Modifications Required	Yes	No	Not Applicable	Comments/Recommendations about the overall effectiveness of the erosion and sediment control measures. Note: For each item checked "Yes", complete the follow-up information on page 2.
Ditch Checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Erosion Control Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Erosion Mat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grading Practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Inlet Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mulch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Offsite Sediment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Permanent Seeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Schedule / Phasing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Silt Fence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Silt Screen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stabilized Outlet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Temp. Diversion Channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Temp. Settling Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Temporary Seeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tracking Pads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Turbidity Barrier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

CONSTRUCTION SITE INSPECTION REPORT

Form 3400-187 (rev. 9/04)

Page 2 of 2

Name of Permittee:

Construction Site Name (Project):

Construction Site ID No.:

Use the space below for detailed follow-up action items.

Exact place of erosion/sediment control inspected	Type of erosion/sediment control and its observed condition	Description of any necessary maintenance or repair to erosion/sediment control, including anticipated date of completion

Storm Water Management Practices Post Construction Long-Term Storm Water Management Checklist

Site Name: OMSA – Mukwonago

Location: Village of Mukwonago, Waukesha County, Wisconsin

Responsible Party: The owner of the property is responsible for the post construction long-term storm water management upkeep. This checklist may be utilized when performing inspections after any rainfall event exceeding one inch of rainfall, and at a minimum semi-annually in early spring and fall.

Date of Inspection: (mm/dd/yy)

Time of Inspection: (start/end)

Type of Inspection: (annual/quarterly/precipitation event)

Weather:

Inspector's Name:

<u>Component Inspected:</u>	<u>Repairs Required:</u>	<u>Comments:</u>
-----------------------------	--------------------------	------------------

Grass and Plants throughout Site

- Bare Spots
- Dead Plant Material
- Washouts

Bio-retention Basin

- Sediment Deposits
- Trash
- Plant Life
- Mulch

Site Vegetation

Storm Sewer Pipe

Endwall Structure

**ECONOMIC DEVELOPMENT COOPERATION CONTRACT
BETWEEN
WAUKESHA COUNTY CENTER FOR GROWTH, INC.
AND THE
(INSERT MUNICIPALITY)**

This Contract is by and between the Waukesha County Center for Growth Inc., 2717 North Grandview Boulevard, Suite 300, Waukesha, Wisconsin 53188, referred to herein as Growth Center, and the (name of municipality), a Wisconsin municipal corporation, (municipal address), referred to herein as (City,Village,Town). Together, Growth Center and (City,Village,Town) are referred to as the Parties.

Recitals

WHEREAS, the (City,Village,Town) and the Growth Center both recognize the need to provide for a central point of contact for businesses looking for workforce, financial management, growth and site selection technical assistance and be able to connect businesses to the organizations providing those resources.

WHEREAS, (City,Village,Town) wishes to engage the Growth Center to conduct economic development services for the (City,Village,Town), and the Growth Center has the resources to provide such services and is willing to do so.

Therefore, in consideration of the mutual promises of the Parties contained herein, they agree and contract as follows:

1. **Growth Center Services.** Services to be provided to (City,Village,Town) by the Growth Center include the following:
 - a. Work with the (City,Village,Town) to prepare a community profile for the (City,Village,Town) that is specific to business and developer audiences.
 - b. Assist the (City,Village,Town) in promoting the availability of existing and proposed business parks, industrial parks, and redevelopment areas.
 - c. Outreach to local chambers of commerce to coordinate business expansion, retention and recruitment efforts.
 - d. Coordinate the development of recruitment proposals and site-specific proposals for development consideration. The recruitment proposals will be actively provided to developers, brokers, franchises and commercial and industrial development interests. This information could- also be placed on the (City,Village,Town) website.
 - e. Establish an on-going business expansion and retention program that consists, at a minimum, of the following:
 - i. A coordinated business outreach program including an interview with prominent (City,Village,Town) industries. The program will assist in providing direct assistance to these industries including, but not limited to, physical expansion referral to appropriate local officials, workforce development and financial assistance, as well as guide in developing new, and refining existing programs for all businesses.
 - ii. Identification of first-stage companies (companies with fewer than 20 employees) and second-stage companies (companies with between 20 and approximately 100 employees and no more than \$50 million in annual sales), and the development and offering of cooperative programs and technical assistance to them.

- f. Assist existing businesses per direct contact or referral from the (Mayor, President, Chair) or designee and report findings and resolution to the respective party. When meeting with local companies, Growth Center staff will provide information on existing state and federal economic development assistance programs that provide funding to help meet the needs of local businesses, including those that offer low-interest loans, tax credit programs and workforce development assistance.
- g. Continue the implementation of a targeted business recruitment program that includes emphasis on the following:
 - i. Second-stage companies or those companies with between 20 and approximately 100 employees and no more than \$50 million in sales.
 - ii. Milwaukee 7 or regional industry targets.
- h. Provide assistance through the development of customized proposals to businesses interested in establishing a location within the (City, Village, Town) from reliable sources. This activity includes providing copies of such proposals (unless deemed confidential), when requested, to the (Mayor, President, Chair) and provide status updates on proposals presented to businesses.
- i. Access to commercial research and market data in Xceligent or equivalent database.
- j. Evaluate and potentially participate in the following if the Parties deem it beneficial:
 - i. Trade show events,
 - ii. Milwaukee 7 marketing activities.
- k. Author press releases and engage in other media relations promoting economic development/workforce development issues.
- l. Provide a written annual report summarizing activities conducted through this Contract and in-person updates as requested by the (Mayor, President, Chair).
- m. Coordinate economic development initiatives with the following agencies:
 - i. Milwaukee 7.
 - ii. Southeastern Wisconsin Regional Planning Commission.
 - iii. U.S. Economic Development Administration.
 - iv. U.S. Small Business Administration.
 - v. UW-Waukesha.
 - vi. Waukesha County Technical College
 - vii. Waukesha-Ozaukee-Washington Workforce Development, Inc.
 - viii. Wisconsin Economic Development Corporation.
 - ix. Wisconsin Department of Administration.
 - x. University of Wisconsin-Extension Small Business Development Center.

such liability is founded upon or grows out of the acts, errors, or omissions of the Growth Center, its employees, agents or subcontractors.

- b. The (City,Village,Town) agrees to indemnify, hold harmless, and defend the Growth Center, its officers, agents, and employees from any and all liability including claims, demands, damages, actions or causes of action; together with any and all losses, costs, or expense, including reasonable attorney fees, where such liability is founded upon or grows out of the acts, errors, or omissions of the (City,Village,Town), its employees, agents or subcontractors.
- c. Notwithstanding the foregoing, nothing in this Contract, including the indemnification provision above, shall in any way constitute a waiver by the (City,Village,Town) of any immunity, liability limitation, limitation on the amount recoverable, or other protections applicable to the under Section 893.80, Wis. Stats., or any other applicable statute or law.

12. **Assignment Prohibited.** This Contract, and the Growth Center's responsibility to perform the services under this Contract, may not be assigned by the Growth Center without the (City,Village,Town) written consent.

13. **Notices.** All notices required by this Contract, and all other communications between the Parties, shall be addressed as follows:

To the (City,Village,Town) :

To Growth Center:

14. **Severability.** If any term of this Contract is held unenforceable by a court having jurisdiction, then to the extent the unenforceable term can be severed from the remainder of this Contract without affecting the enforceability of the remainder of this Contract or substantially frustrating its purpose, it will be so severed, and the remainder of this Contract will remain in effect and enforceable.

15. **Governing Law and Jurisdiction.** This Contract will be construed and enforced according to the laws of Wisconsin. If a lawsuit arises out of this Contract, it shall be filed in the state Circuit Court for Waukesha County, Wisconsin. The Parties consent to personal and subject-matter jurisdiction in Wisconsin, and waive all jurisdictional defenses.

(City,Village,Town)

(Mayor, President, Chair)
Date: _____

Clerk
Date: _____

Waukesha County Growth Center, Inc.

President
Date: _____

By (print name) _____
Title: _____
Date: _____

Waukesha County Center for Growth Municipal Support Formula

Municipality	Population	% of Total Population	Contribution Based on Population (80% Base Contribution with \$2000 min)	Combined Planned and existing industrial park acreage	% of Planned and Existing Industrial Park Acreage	Contribution Based on Business Park Acreage - Existing and Planned (20% Contribution)	Total Municipal Contribution under 80 / 20 Model
City of Waukesha	71,044	18.09%	\$36,176.71	1,109	8.66%	\$4,327.97	\$40,504.68
City of Pewaukee	13,728	3.50%	\$6,990.51	2,189	17.09%	\$8,542.77	\$15,533.28
City of Oconomowoc	16,293	4.15%	\$8,296.65	875	6.83%	\$3,414.77	\$11,711.42
City of New Berlin	40,130	10.22%	\$20,434.82	2,765	21.58%	\$10,790.67	\$31,225.48
City of Muskego	24,304	6.19%	\$12,375.97	527	4.11%	\$2,056.67	\$14,432.64
City of Delafield	7,093	1.81%	\$3,611.87	97	0.76%	\$378.55	\$3,990.42
City of Brookfield	37,847	9.64%	\$19,272.28	1,032	8.05%	\$4,027.47	\$23,299.75
Village of Wales	2,544	0.65%	\$2,000.00	0	0.00%	\$0.00	\$2,000.00
Village of Sussex	10,669	2.72%	\$5,432.82	366	2.86%	\$1,428.35	\$6,861.17
Village of Summit	4,713	1.20%	\$2,399.93	214	1.67%	\$835.15	\$3,235.09
Village of Pewaukee	8,154	2.08%	\$4,152.14	169	1.32%	\$659.54	\$4,811.68
Village of Oconomowoc Lake	589	0.15%	\$2,000.00	0	0.00%	\$0.00	\$2,000.00
Village of North Prairie	2,144	0.55%	\$2,000.00	135	1.05%	\$526.85	\$2,526.85
Village of Nashotah	1,387	0.35%	\$2,000.00	0	0.00%	\$0.00	\$2,000.00
Village of Mukwonago	7,390	1.88%	\$3,763.10	601	4.69%	\$2,345.46	\$6,108.56
Village of Merton	3,435	0.87%	\$2,000.00	0	0.00%	\$0.00	\$2,000.00
Village of Menomonee Falls	35,798	9.11%	\$18,228.90	1,339	10.45%	\$5,225.57	\$23,454.47
Village of Lannon	1,099	0.28%	\$2,000.00	17	0.13%	\$66.34	\$2,066.34
Village of Lac LaBelle	291	0.07%	\$2,000.00	0	0.00%	\$0.00	\$2,000.00
Village of Hartland	9,141	2.33%	\$4,654.74	499	3.89%	\$1,947.39	\$6,602.13
Village of Elm Grove	5,963	1.52%	\$3,036.45	0	0.00%	\$0.00	\$3,036.45
Village of Eagle	1,946	0.50%	\$2,000.00	79	0.62%	\$308.30	\$2,308.30
Village of Dousman	2,327	0.59%	\$2,000.00	144	1.12%	\$561.97	\$2,561.97
Village of Chenequa	587	0.15%	\$2,000.00	0	0.00%	\$0.00	\$2,000.00
Village of Butler	1,832	0.47%	\$2,000.00	210	1.64%	\$819.54	\$2,819.54
Village of Big Bend	1,292	0.33%	\$2,000.00	198	1.55%	\$772.71	\$2,772.71
Town of Waukesha	9,168	2.33%	\$4,668.49	60	0.47%	\$234.16	\$4,902.64
Town of Vernon	7,624	1.94%	\$3,882.26	19	0.15%	\$74.15	\$3,956.41
Town of Ottawa	3,876	0.99%	\$2,000.00	0	0.00%	\$0.00	\$2,000.00
Town of Oconomowoc	8,602	2.19%	\$4,380.27	59	0.46%	\$230.25	\$4,610.52
Town of Mukwonago	8,010	2.04%	\$4,078.82	0	0.00%	\$0.00	\$4,078.82
Town of Merton	8,383	2.13%	\$4,268.75	0	0.00%	\$0.00	\$4,268.75
Town of Lisbon	10,236	2.61%	\$5,212.33	33	0.26%	\$128.79	\$5,341.12
Town of Genesee	7,330	1.87%	\$3,732.55	19	0.15%	\$74.15	\$3,806.70
Town of Eagle	3,507	0.89%	\$2,000.00	0	0.00%	\$0.00	\$2,000.00
Town of Delafield	8,221	2.09%	\$4,186.26	0	0.00%	\$0.00	\$4,186.26
Town of Brookfield	<u>6,064</u>	<u>1.54%</u>	<u>\$3,087.88</u>	<u>57</u>	<u>0.44%</u>	<u>\$222.45</u>	<u>\$3,310.33</u>
Total	392,761	100.00%	\$214,324.51	12,812	100.00%	\$50,000.00	\$264,324.51

Business Park Acreage in Waukesha County Municipalities

Municipality	Population	Proposed Business Parks (acres)	Existing Business Parks (acres)	Total Business Parks (acres)
City of Waukesha	71,044	0	1,109	1,109
City of Pewaukee	13,728	282	1,907	2,189
City of Oconomowoc	16,293	0	875	875
City of New Berlin	40,130	959	1,806	2,765
City of Muskego	24,304	105	422	527
City of Delafield	7,093	0	97	97
City of Brookfield	37,847	92	940	1,032
Village of Wales	2,544	0	0	0
Village of Sussex	10,669	22	344	366
Village of Summit	4,713	58	156	214
Village of Pewaukee	8,154	0	169	169
Village of Oconomowoc Lake	589	0	0	0
Village of North Prairie	2,144	0	135	135
Village of Nashotah	1,387	0	0	0
Village of Mukwonago	7,390	215	386	601
Village of Merton	3,435	0	0	0
Village of Menomonee Falls	35,798	0	1,339	1,339
Village of Lannon	1,099	0	17	17
Village of Lac LaBelle	291	0	0	0
Village of Hartland	9,141	0	499	499
Village of Elm Grove	5,963	0	0	0
Village of Eagle	1,946	0	79	79
Village of Dousman	2,327	114	30	144
Village of Chenequa	587	0	0	0
Village of Butler	1,832	0	210	210
Village of Big Bend	1,292	0	198	198
Town of Waukesha	9,168	0	60	60
Town of Vernon	7,624	0	19	19
Town of Ottawa	3,876	0	0	0
Town of Oconomowoc	8,602	0	59	59
Town of Mukwonago	8,010	0	0	0
Town of Merton	8,383	0	0	0
Town of Lisbon	10,236	0	33	33
Town of Genesee	7,330	0	19	19
Town of Eagle	3,507	0	0	0
Town of Delafield	8,221	0	0	0
Town of Brookfield	6,064	0	57	57
	392,761	1,847	10,965	12,812



Sussex, Wisconsin 2016 Economic Profile

NEW CIVIC CENTER OPENS IN OCTOBER, 2016 TO BETTER SERVE COMMUNITY NEEDS

SUSSEX WAS INCORPORATED IN 1924

Original settlement was in 1843 by George Elliot, a bricklayer from East Sussex, England, and Richard Cooling, a blacksmith from Dorset. The Village of Sussex was incorporated in 1924.

Location: Sussex is located 19 miles northwest of Milwaukee and 9 miles north of Waukesha, 4 miles from Interstate 94 on State Highway 164

Latitude: 43.14 N Longitude: 88.22 W
Land Area: 7.55 square miles
Elevation: 930 ft.

Population in 2016: 10,743
Population in 2010: 10,518
Median Resident Age: 35.9 years
Females: 50.6%
Males: 49.4%

White Non-Hispanic: 95.2%
Hispanic: 2.4%
2 or more races: 1.1%
Black: .8%
American Indian: .3%
Asian: 2.1%
Other: 0%

Number of Households: 4,186
Owner Occupied: 65%
Renter Occupied: 35%

HH Income, 2012: \$72,555
Med. Home Value, 2012: \$271,200

Educational Attainment:
Less than High School: 5.8%
High School or higher: 94.2%
Bachelors or higher: 37.2%
Graduate or Professional: 11.1%

Total Labor Force, 2011: 6,199
White Collar: 77.87%
Blue Collar: 22.13%
By Industry:
Manufacturing: 24.2%
Educ., Health, Gov.: 21.7%
Retail: 12.4%
Prof., Science, Admin.: 9.5%

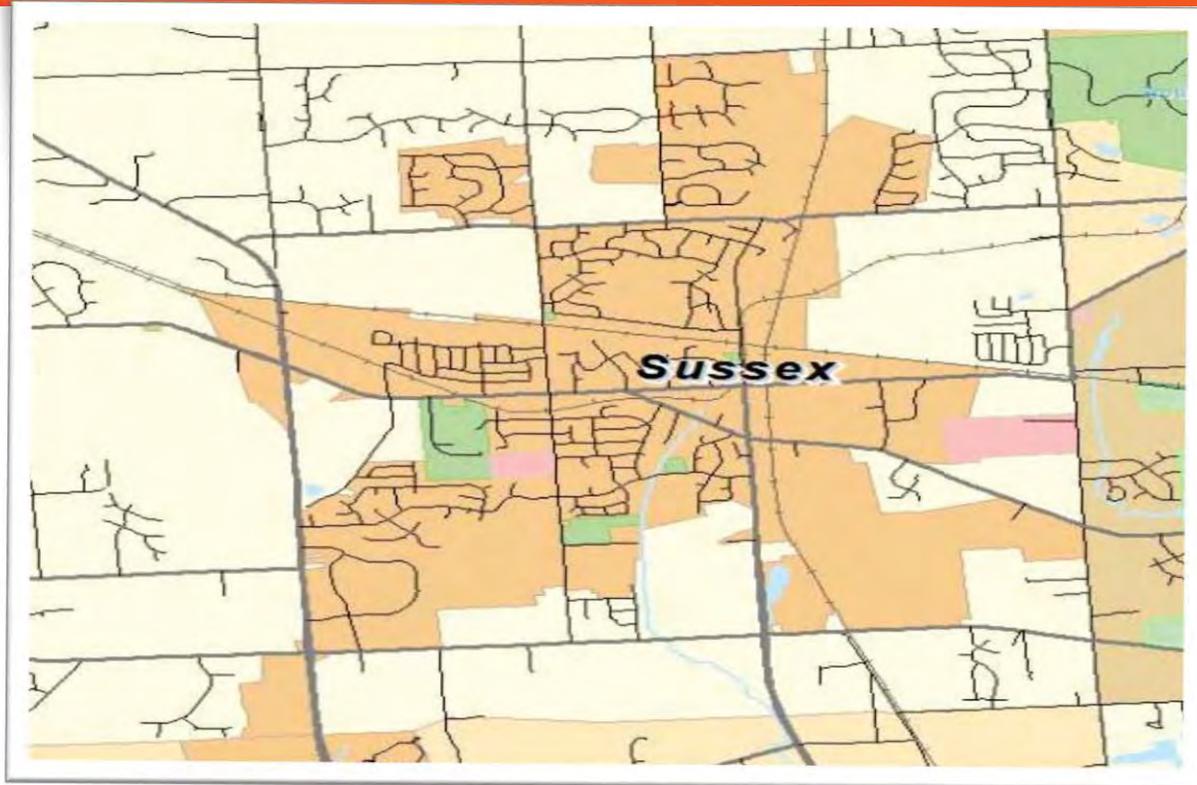
Education: The Hamilton School District has four elementary, one middle and Hamilton High School serving Sussex, Lannon, Butler, and portions of Lisbon and Menomonee Falls. Graduation rate is 95.9%.

ACT Scores:	Hamilton	National
English:	23.3	20.3
Math:	24.6	20.9
Reading:	23.7	21.3
Science:	24.0	20.8
Composite:	24.1	21.0

Governance: Sussex is governed by a Village Board with seven members, one of whom is the Village President. A full time Administrator and Assistant Administrator direct day-to-day operations. Full Time Equivalent employment of the Village is 56 people. Law Enforcement is provided by the Waukesha County Sherriff's Department under contract. Fire protection and Emergency Medical Services are provided by full time Paramedics and paid volunteer Fire fighters/EMT staff on call.

The Village enjoys an Aa3 bond rating, and local property taxes are \$16.02 per \$1,000 of assessed value, for all local government purposes (Village, Schools, County, Tech. College), one of the lowest rates in the County.

The economic base includes manufacturing and industrial firms, with the service and retail offerings of a smaller city. More than 4 million square feet of industrial space is located in several quality business park settings. Almost one million square feet of retail space includes larger shopping plazas along the highways along with Main Street local retail.



Sussex, Waukesha County

Average Daily Traffic Counts, 2009
Highway 164 and K – 22,300 Vehicles
Main St. & Maple – 11,400 Vehicles

Major Employers in Sussex:

Quad/Grhpics, printing	2,100
Quad/Tech, print equip.	360
Beer Capitol distributing	338
Sussex IM packaging	232
Hamilton Schools	145
Sharp packaging	114
Quad/Med healthcare	95
Color, Ink printing	92
Waukesha Tool, stamping	88
Power Test dynamometers	77
Tools, Inc. tool and die	75



Quad Graphics is one of the two largest printing firms in the US, and is moving into digital

marketing in partnership with Rise Marketing of Chicago. Quad has its headquarters in Sussex, and has been a major contributor to the Community since its founding here in 1972.

Quality of Life:

Sussex has the advantage of small town charm and livability, while being close to other cities in the area, including Milwaukee.

The Pauline Haass Library is adjacent to the Civic Center and is part of a County-wide system for broader access. A Village Farmer's Market is held on Saturdays in the summer.

12 local parks are augmented by nearby County parks and the popular Bugline Recreational Trail

follows a scenic 14 mile journey with Sussex at the center. Wanaki Golf Course (County) and the Silver Spring Country Club offering challenging courses.



Living Options:

New subdivisions in and near the Village allow for custom homes, and a range of housing is available.

New to the downtown area is the Mammoth Springs apartments with underground and surface parking, and generous amenities. A mix of retail uses is planned, and the location is a short walk from the new Civic Center Campus and Main Street and other shopping.

HEADING 4 STYLE



This picture caption uses the Caption 2 paragraph style and is inside a text box so that you can move it easily as needed to accompany a photo.

To setup a document for multiple column text, on the **Page Layout** tab, in the **Page Setup** group, click **Columns** and then click

such as paper size, margins, or orientation, the best section break type to use is a **Next Page** section break because it automatically



Working with Columns

by [Article Author]

the number of columns you need. You can also click More Columns to specify column widths, the space between columns, or to automatically add a vertical line between columns.

To change the number of columns for just part of the document (or if you want text to wrap to just the top part of the page and a new article to start below – as shown on this page), insert a section break before the position where you want to start the new column layout. To do this, on the **Page Layout** tab, in the **Page Setup** group, click **Breaks** and then click the type of section break you need.

Select a section break

When changing many types of page layout formatting for just part of the document—

starts the new section on a new page. However, when changing the number of columns as you might in this newsletter, you may prefer to select a **Continuous** break. The continuous section break (used a few times throughout this template) starts a new section immediately after the preceding one. So, for example, you can have a three-column article followed by a four-column article, on the same page.

HEADING 4



42%

Cras ut blandit diam. Suspendis quis urna semper aliquam.

FOR MORE INFORMATION

Abico eum, ille et, conventio obruo duis ullamcorper ut, neo demoveo. Vel reprobo:

HEADING 5
Contact Info



Sidebar Setup

The sidebars in this template use simple, single-row tables for the gray-shaded headings and thermometer charts shown below for easy alignment.



Add Sidebar Content

Adding content into a column to create a sidebar is no different from adding text. As noted earlier in this template, apply the styles provided for headings, sidebar text, and even pictures to align them quickly and easily.

FAST FACTS

68%

Learn about these "thermometer charts" in the article at right.

This placeholder article provides the following tips: *Caption 2 style is used to add thermometer charts using in tables, as shown at left, easy placement relative to images.*

- Creating "thermometer charts" using in tables, as shown at left, easy placement relative to images.
- Setting up multipage articles.
- Wrapping text around images
- Adding article titles and bylines

Creating the sidebar thermometer charts

When you work in Word 2010 (or PowerPoint 2010), you have the full power of Excel 2010 charts (provided that Excel is installed on

your computer). Insert a chart in Word from the **Insert** tab, in the **Illustrations** group. Charts are easy to create and use and automatically coordinate with your active document theme. However, notice in the sidebar at left that the "thermometer charts" were created using single-row Word tables. This is because they automatically fit the tight space without having to remove any chart elements. And you might be surprised to learn that it's easy to make them essentially mathematically accurate.

To use a table as a thermometer chart, do the following:

1. On the **Insert** tab, in the **Tables** group, click **Table** and then drag across the grid to select the first two cells in the first row. Click to insert a two-cell, one-row table.
2. Click in the table and then, on the **Table Tools Layout** tab, in the **Table** group, click **Properties**.
3. On the **Columns** tab of the **Table Properties** dialog box, change the **Measure In** setting to **Percentage**. You can then set the percentage to up to one decimal point in accuracy.



Setting up multipage articles

Word is designed to allow text to automatically flow from one page to the next. So, when you want an article to continue on the next page, just keep typing.

In the case of this placeholder article, it is separated into two placeholder content controls (one on this page and another that starts at the top of the following page) just so that you can still see the layout of the following page while you begin adding your own text on this page. As mentioned on the first page of this template, remember that it might look like the layout is skewed when you replace a long piece of placeholder text by starting to type your own, but it is not. As you add your content, the layout that follows will move down automatically and back into position.

To remove the second placeholder control that starts immediately following this one, just select it and then press any key. You can then continue typing from this page and your text will automatically flow onto the next.

Wrap text around images

The photos in this article that are angled with white borders are “floating” images. That is, they are setup for text to wrap around them—which is why they can span multiple

columns in a three-column section. Additionally, as mentioned earlier, the photo of the young woman in the body of this article is set to wrap text so that text will flow around the image as you add your own text. To select text wrap settings, start by selecting the image and then do the following:

Notice the image of the young woman that’s within a text column on the preceding page. The background has been removed from that image to allow text to wrap directly around the subject.

Office 2010 introduced several new and improved picture formatting tools in Word, PowerPoint, and Excel. Among those is the Remove Background tool that you can use to remove backgrounds from your own images,



1. On the **Picture Tools Format** tab, in the **Arrange** group, click **Wrap Text** and then select either **Square, Tight, or Top and Bottom**—depending on how you want the text to wrap. You might be happy with the default behavior as soon as you do this. Otherwise, continue to step two for customization options.
2. To set a specific position or control behavior (such as whether or not the image moves with text), on the **Picture Tools Format** tab, in the **Arrange** group, click **Position** and then click **More Layout Options**.
 - ➔ On the **Text Wrapping** tab of the **Layout** dialog box, you can set a specific distance from the image for text to wrap and control whether text can wrap on both sides, one side only, or just above and below the image.
 - ➔ On the **Position** tab of that dialog box, you can set a specific position for the image on the page and select or clear

newsletter are created in text boxes. This is because text can wrap around a text box just like it can around a picture. Similarly, the orange divider bars that you see on pages containing more than one article are shapes that can easily span multiple columns without having to insert a section break or change the number of columns for just that portion of the page.

When you select a text box or a shape, on the **Drawing Tools Format** tab, in the **Arrange** group, you have the same settings for text wrapping and positioning that are described above for wrapping text around pictures. Note that, because text is set to wrap around the orange divider bars, your article might appear to slip below or above a bar, depending upon length. To adjust the position of a divider bar shape to accommodate the length of your articles, just select the shape and then use the up and down arrow keys on your keyboard to nudge it to the proper position.

the option to allow the picture to move with text.

Adding article titles, bylines, and dividers

The article titles and bylines for this similar to the sample image on the preceding page.

To do this in Word, first insert your image into the document (on the **Insert** tab, click **Picture**), and then select it. Then, on the **Picture Tools Format** tab, in the **Adjust** group, click **Remove Background**.

The Remove Background feature automatically displays what it believes to be the central subject of the image. However, it’s easy to adjust this if the immediate result is not what you need.

On the **Background Removal** tab, click **Mark Areas to Keep** or **Mark Areas to Remove** and then drag your mouse pointer in a line across the portion of the image you want to add or remove. When you are finished making adjustments, click **Keep Changes**.



FOR MORE INFORMATION

Abico eum, ille et, conventio obruo duis ullamcorper ut, neo demoveo. Vel reprobo:

HEADING 5
Contact Info

Remove Image Backgrounds

by [Article Author]

Title Lorem Ipsum Dolor

by [Article Author]

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Sussex, Wisconsin 2016 Economic Profile

[Street Address]
[City, ST ZIP Code]



Village of Mukwonago Office of the Village Public Works Dept.

P.O. Box 206, 440 River Crest Court, Mukwonago, Wisconsin 53149
(262) 363-6447 Fax: (262)363-7197

www.villageofmukwonago.com

Date: October 10, 2016

To: Village of Mukwonago Board

From: Ron Bittner

RE: Village of Mukwonago Police Department Roofing Project 2016

Bids for the above project were opened on October 6th, 2016 at 10:00 a.m. and were as follows:

	Base Bid	Alterative Bid	Total
Performance Roofing Systems, INC	\$38,656	\$5,500	\$44,156
Carlson Racine Roofing	\$49,969	\$5,640	\$55,609
H.I.S. Corporation	\$47,622	\$1,100	\$48,722
Langer Roofing	\$45,280	\$5,640	\$50,920
Cudahy Roofing & Supply	\$58,560	\$4,395	\$63,045
Hernandez Roofing, LLC	\$41,696	\$5,577	\$47,273

The PW Department has reviewed the documentation submitted by the apparent low bidder, Performance Roofing System, INC and found that:

1. The Bid Form has been appropriately completed.
2. We have no objections to the low bidder.
3. Low bidder has successfully completed similar projects over the last several years.

On these bases, we recommend the approval of the contract with Performance Roofing Systems, INC. for the base bid of \$38,656

Sincerely,
Village of Mukwonago

Ron Bittner
Public Works Director

2015-16 Weights Measures Assessment Schedule

<u>Name</u>	<u>Sample Size</u>	<u>W&M Charges to Bill</u>
Aldi	232	\$1,401.81
BP/Kwik Stop	1	\$6.04
Bucky's Fine Meats & Sausage LLC	3	\$18.13
Elegant Farmer	8	\$48.34
Health Hut	3	\$18.13
Horn Feeds, Inc.	4	\$24.17
Kwik Trip #282 Inc.	60	\$362.54
Mukwonago Coin Laundry	24	\$145.02
Mukwonago Express Mart	19	\$114.80
North Star Shell	32	\$193.35
Pick N Save	128	\$773.41
Village Pumper	1	\$6.04
Wal-Mart Supercenter	47	\$283.99
Walgreens Drug Store	100	\$604.23
TOTALS	662	\$4,000.00

Cost of Weights and Measures Contract	\$4,000.00
Cost per Sample (\$4,000/1712)	\$6.04