**TOWN OF LISBON**
W234 N8676 Woodside Rd.
Lisbon, WI 53089

# Agenda
# Plan Commission Meeting
# Town of Lisbon, Town Hall
# Thursday, June 11, 2020
# 6:30 PM

1. **Roll Call**

2. **NOTICE IS HEREBY GIVEN** that Public Hearings will be held by the Lisbon Plan Commission on Thursday, June 11, 2020, starting at 6:30pm at the Lisbon Town Hall, W234N8676 Woodside Road, Lisbon, WI 53089, to solicit public comments on the following items:

   a. PUBLIC HEARING #1: A Joint Public Hearing will be held by the Lisbon Town Board of Supervisors and Plan Commission to solicit public comments on amendments to the Town's Zoning Code, Chapter 11, in particular, but not limited to, Chapter 11.3.m. Signs, and incorporation of sign regulations into Chapter 11.5.

   b. PUBLIC HEARING #2: Berm construction request in association with a Conditional Use Permit for major grading for property owned by Lannon Stone Products, applicant Carl Johnson of Stark Pavement Corporation, for the properties located at N51W23995 Lisbon Road, Lisbon, WI 53089, LSBT 0280.999, LOT 1 CSM #5524 VOL 44/340 REC AS DOC #1484915 PT NE1/4 SE1/4 SEC 34 T8N R19E; LSBT 0280.992, SE1/4 SE1/4 & E 5 AC OF NE1/4 SE1/4 SEC 34 T8N R19E.

3. **Adjournment.**

**********

Amended 06/09/2020

# Agenda
# Plan Commission Meeting
# Town of Lisbon, Town Hall
# Thursday, June 11, 2020
# Following Public Hearing(s) beginning at 6:30 PM

1. **Roll Call**

2. **Comments from citizens present pertaining to items on the agenda.** Citizens are invited to share their questions, comments, or concerns with the Plan Commission. When speaking, citizens should state their name and address for the record and limit their presentation to three minutes. If a response would involve discussion of Plan Commission policy or decisions that might be of interest to citizens not present at the meeting, the commission may place the item on a future meeting agenda.

3. **Discussion and necessary action on April 30, 2020 Plan Commission Public Hearing & Meeting minutes.**

4. **Unfinished Business**

5. **New Business**

a. Discussion and necessary action on the request for Lannon Stone Products, applicant Carl Johnson of Stark Pavement Corporation, for the property located at N51W23995 Lisbon Road, Lisbon, WI 53089, LSBT 0280.999 and LSBT 0280.992, for berm construction in association with a Conditional Use Permit for major grading.

b. Discussion and necessary action on the request for Lannon Stone Products, applicant Carl Johnson of Stark Pavement Corporation, for the property located at N51W23995 Lisbon Road, Lisbon, WI 53089, LSBT 0280.999 and LSBT 0280.992, for berm construction in association with a SPPOO amendment.

c. **This item to be postponed until the July Plan Commission Meeting per the applicants request.** Discussion and necessary action on the request from Kwik Trip, for the property owned by Wexford Heights, LLC, property located at W260N9579 STH 164, Colgate, WI 53017, LSBT 0161.999.004, for a Conditional Use Permit for a Gas Station / Convenience Store in the B-2 Local Business District, and associated Site Plan / Plan of Operation.

d. Discussion and necessary action on the request for Neumann Developments Inc., for the property located along Hillside Road, in the Town of Lisbon, LSBT 0205.995 and LSBT 0208.987 generally located on the west side of Hillside Drive adjacent to Beverly Lane, for the following:

   i. Discussion and possible action on a Phase 1 Development Agreement for the proposed Hillside Ridge subdivision and recommendation to the Town Board of the same.

e. Discussion and necessary action on the request for Neumann Developments Inc., for the property located along Lisbon Road, in the Town of Lisbon, LSBT 0264.030 generally located north of Lisbon Road and south of Ainsworth Road, adjacent to Basham Lane, for the following:

   i. Discussion and possible action on a Phase 2 Final Plat for the Preserve at Harvest Ridge subdivision and recommendation to the Town Board and Waukesha County of the same.

   ii. Discussion and possible action on a Phase 2 Development Agreement for the Preserve at Harvest Ridge subdivision and recommendation to the Town Board of the same.

f. Discussion and necessary action to review the Conditional Use for Robert and Lulita Zellmer, for the property located at N59W27099 Ainsworth Road, in the Town of Lisbon, LSBT 0264.994, for a private target range.

g. Discussion and necessary action on Ordinance 03-20 amendments to the Town's Zoning Code, Chapter 11, in particular, but not limited to, Chapter 11.3.m. Signs, and incorporation of sign regulations into Chapter 11.5, and recommendation to the Town Board of the same.

**6. Request from members to request items on future agendas.**

**7. Adjournment.**

Joseph Osterman
Chairman

Jane Stadler
Secretary

*Posted: 2020-XX-XX* *Deputy Clerk: N.G.*
*X Website* *X Town Hall Bulletin Boards (2)* *X Sent to Newspapers*

**NOTICE**: 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.

**NOTE**: Please notify the Town of Lisbon 72 hours in advance if you plan to attend and will need an interpreter or assistive hearing device.

**MEMBERS**: Please notify Town Hall at 262-246-6100 if you are unable to attend the meeting.

# Item 5A – Attachments

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600 W. Virginia Street, Suite 601
Milwaukee, WI 53204
(262) 875-5000 phone
(608) 826-0530 FAX
www.vierbicher.com

June 4, 2020

Chairperson Osterman and Town Plan Commission Members
Town of Lisbon
W23N8676 Woodside Road
Lisbon, WI 53089

Re: Stark Pavement – Major Grading Conditional Use Permit (CUP) Review

Dear Plan Commission Members:

The above-referenced Conditional Use Permit (CUP) application was received in our office for review on behalf of the Town of Lisbon. We have reviewed the following application materials:

- Conditional Use Permit (CUP) Application
- Town Site Plan and Plan of Operation Application
- Master Grading/Site Plan and Berm details

**Summary**
Stark Pavement Corporation is proposing to expand their existing aggregate stockpiling area in order to improve the efficiency of the asphalt plant. They will need to grade approximately 180,000 sq. ft. of ground area, plus associated drainage improvements, in order to do so. The property is located at the County Highway K, west of the intersection with County Highway F. The property is composed of two parcels of approximately 44.74 and 8.73 acres in size and is zoned Q-1 Quarrying. The site plan includes:

- A proposed additional aggregate & recycled asphalt stockpile area measuring 180,000 sq. ft.;
- Grading specifications – including a proposed berm along the west side of the aggregate yard
- Erosion control notes

Stark Pavement anticipates three full-time employees at the site, with operations running 6am to 6pm Monday through Friday, 6am to 2pm on Saturday, and 7am to 5pm on Sunday. The Major Grading Conditional Use Permit (CUP) was approved by the Plan Commission on May 14 with conditions, including the need to submit details of a proposed berm for review. This application is submitted in order to meet this condition.

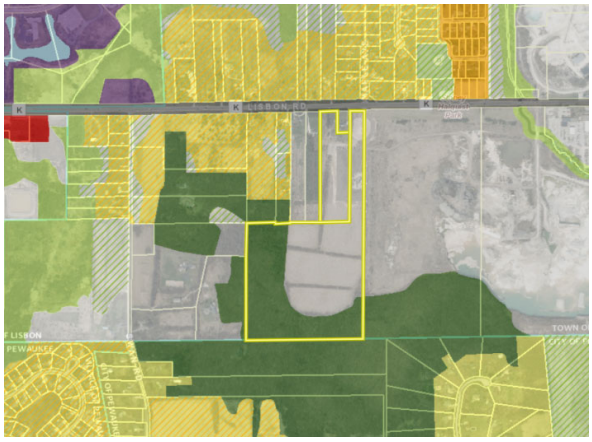
## Application Review

The parcel is subject to compliance with the Town Code Chapters 11, 12, 13, other applicable Chapters.

**Background Information**
Property owner: Lannon Stone Products, Inc.

Location: County Highway K, between State Highway 164 and County Highway F.

Tax Keys: LSBT028092, LSBT0280999




Adjacent land uses and zoning:

North: Residential (zoned A-3 and R-1 Suburban Single-Family)
South: Vacant land (Village of Pewaukee)
East: Residential (zoned Q-1 Quarrying)
West: Quarry (zoned Q-1 Quarrying)

Existing: Q-1 Quarrying

Future Land Use: "Extractive" and "Primary Environmental Corridor" (see inset map image)

The use, removal, and/or distribution of the waste soil on the site shall be worked out between the Town and the applicant separate from this application. For the purposes of this review, we have assumed the pile will be managed according to any applicable grading standards and disposal regulations. Much of the waste soil will be kept on site and used to build landscape berms.

**Conditional Use Permit (CUP) Review**
Chapter 11 of the Town Ordinances (Zoning Code) lays out the requirements for application and approval of Conditional Use Permits in the Town. Certain uses of a special nature require the approval of a Conditional Use Permit by the Town. The basis for approval of the CUP is based on the following five standards. Per Sec. 4(d) of the Zoning Code, the Plan Commission may deny the conditional use request if it concludes, based upon the information submitted, that the proposed use and/or development would likely:

1. **Materially endanger the public health, general welfare, and safety**
   The proposed Major Grading does not appear to endanger the public health, general welfare, and safety. The asphalt plant is currently in operation. The extension of storage area will decrease the number of trucks servicing the facility and, therefore, increase traffic safety. The proposed berm will shield the aggregate yard from view and make use of construction soil which would otherwise have to be trucked off-site.

2. **Be hazardous, harmful, noxious, offensive, or a nuisance by reason of noise, dust, smoke, odor, or other similar factor.**
   The proposed Major Grading does not appear to be hazardous, harmful, noxious, offensive, or a nuisance by reason of noise, dust, smoke, odor, or other factor. Aggregate piles will allow for more organized storage of inputs and outputs from the asphalt plant. The stockpile area will be covered in recycled asphalt, reducing the dust from the current dirt/gravel/turf surface. The reduction in truck trips will reduce noise and truck emissions. The proposed berm will help to reduce noise from the operation.

3. **For any other reason cause a substantially adverse effect on property values.**
   The proposed Major Grading is not expected to have a substantially adverse effect on property values. Aggregate piles will allow for more organized storage of inputs and outputs from the asphalt plant. The reduction in truck trips will reduce traffic on County Highway V. The proposed berms will help to shield the operation from neighboring properties and reduce noise.

4. **Be inharmonious with the area in which it is to be located.**
   The proposed Major Grading is not expected to be inharmonious with the area in which it is to be located. The existing asphalt plant is part of a large quarrying operation.

5. **Will not be in general conformity with the land use plan, comprehensive plan, transportation plan, environmental plan, park, and recreational plan, or other officially adopted plan.**
   The proposed Major Grading is in general conformity with the land use plan and other associated plans. The subject property is mostly designated "Extractive" with a small portion designated "Primary

Environmental Corridor". The proposed grading will be done to support the asphalt plant and the existing quarry and will only occur on the "Extractive" portion of the property. The grading will occur in the rear yard and will not be located near the ROW for County Highway K. Reduced truck traffic for storage of aggregate will minimize impact on the Highway as well.

**Major Grading and Associated Site Plan Review Standards**
The Major Grading and associated Site Plan and Plan of Operation package that we received for review contains most of the items required by ordinance. However, some items are not included at the date of this report. Please see the comments below, Consistency with Zoning, on the additional information needed.

**Consistency with Zoning**
The SPPOO amendment proposes an additional aggregate and recycled asphalt storage area to the rear of the existing asphalt plant. The Q-1 Quarrying zoning district allows for asphalt plants as an accessory to a quarrying operation. The asphalt plant is located adjacent to the quarrying operation as is connected via private drive and is integral to the operation of the quarry. The site plan complies with site requirements of the Q-1 Quarrying zoning district. No additional parking is required. Comments below relate to other details or standards that should be addressed.

*Zoning Code General Provisions*

1. Stormwater storage and drainage calculations will need to be approved by the Town Engineer.

2. At least 15% of the site shall be set aside as open space. The site plan exceeds the standard with approximately 85% pervious surface / open space coverage.

3. The proposed aggregate stock pile is located behind the asphalt plant, therefore greenspace will not be required along County Highway K.

4. Due to the amount of open space surrounding the property, existing vegetation, and presence of existing/previously permitted operation, no perimeter landscape buffer will be required.

5. A berm is proposed to be constructed along the western border of the asphalt plant and aggregate storage area to help shield noise and help shield the operation from view. The berm is proposed to be 12' in height, exceeding the 3' allowable without a Plan Commission approval. The maximum allowable berm is 8', with additional allowance for 1' in height for every 25' from adjacent property lines. As the proposed berm would be 150' from the neighboring property line, an additional 6' would be allowable and the 12' berm would meet the zoning ordinance standard. <u>Plan Commission approval is required for the proposed berm based on the design as shown on the grading plan</u>.

**Recommendation**
If the Plan Commission would require additional materials they have the ability to table the CUP application. If the Plan Commission is generally comfortable with the CUP request, they may conditionally approve it. Recommended conditions may include:

1. The Town of Lisbon retains the right to review the grading for compliance and maintenance of associated stormwater with approved plans.

2. The Fire Chief shall inspect the premises to ensure the site is in compliance with the respective fire codes. Non-objection from the Fire Department and correction of any deficiencies prior to issuance of occupancy permits.

3. The Building Inspector shall inspect the premises to ensure the site is in compliance with the respective building codes. Non-objection from the Building Inspector and correction of any deficiencies prior to issuance of occupancy permits.

4. The Town Engineer review the site plans to ensure the site is in compliance with the respective Town codes. Non-objection from the Town Engineer and correction of any deficiencies prior to issuance of SPPOO approval.

5. Outdoor storage of materials, the aggregate stock, will be partially screened by an extended berm.

6. There shall be no additional trash or commercial/office recycling stored outside of the building, exclusive of raw materials.

7. Provide plans for ongoing maintenance of landscaping, including mowing and weed management.

8. Soil tests shall be done, and provided to the Town, to confirm the soils are buildable.

9. The proposed hours and days of operation shall be 6am to 6pm Monday through Friday, 6am to 2pm on Saturday, and 7am to 5pm on Sunday.

10. All erosion control devices be installed and maintained throughout the duration of the construction project. It is imperative that erosion control be established prior to the onset any excavating or grading activities.

11. The Waukesha County Environmental Health Division may review and approve of the uses on the subject property, prior to the issuance of any permits.

12. Waukesha County review and approval of stormwater plans.

13. Waukesha County approval of any final Stormwater Management Practice and Maintenance Agreement.

14. Once the Storm Water Management Practice and Maintenance Agreement and any addendums of the same have been executed, a record copy shall be sent to the Town of Lisbon and the Town's Engineer for their records.

15. The applicant should obtain all necessary State and County permits and provide a copy of permit approvals to the Town for their records.

16. An up-to-date Site Plan and Plan of Operation must be on file at all times with the Town of Lisbon.

17. The approval is granted for the express conditions stated herein. Changes or alterations including, but not limited to, a change in use, premises, lands, or ownership of the property in question shall require a new Conditional Use Permit and/or Site Plan/Plan of Operation permit, as applicable, with all the zoning procedures at the time of being followed. Any use not specifically listed as permitted for this Q-1 Quarrying zoning district, shall be considered to be prohibited, except as otherwise specified herein.

18. The Town reserves the right to review any condition imposed as part of this Conditional Use Permit and Site Plan and Plan of Operation if said use becomes a problem in the area. The Town Plan Commission may modify, change, delete, add, etc. any conditions, through the Site Plan and Plan of Operation process, which they feel may be reasonable in order to allow this use and ensure it does not become detrimental to the surrounding area. Any major change, as determined by the Town Plan Commission may require modification to the CUP and/or SPPOO Permits or termination of the use.

The issues outlined above are meant to act as a guideline to assist you in discussions as to what issues you feel need to be addressed in order for you to review this proposal. We will be in attendance at the June Plan Commission meeting to answer any questions.

Sincerely,

Joshua Langen, AICP
Community Development Planner

Rachel Holloway, AICP
Town Planner

cc: Natasha Girard, Deputy Clerk, Town of Lisbon

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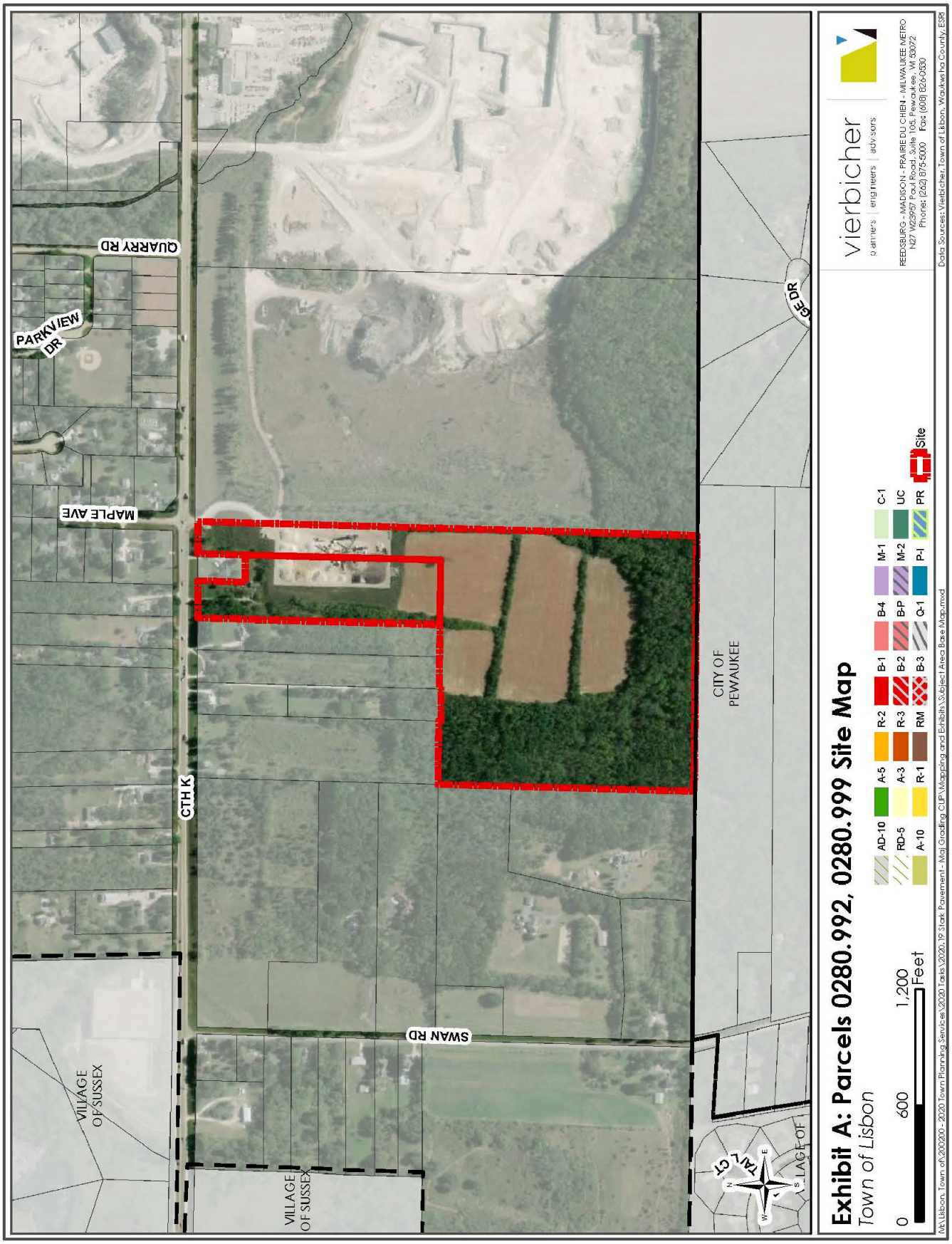
QUARRY RD
PARKVIEW DR
MAPLE AVE
CTH K
SWAN RD
VILLAGE OF SUSSEX
VILLAGE OF SUSSEX
CITY OF PEWAUKEE
GE DR
Exhibit A: Parcels 0280.992, 0280.999 Site Map
Town of Lisbon
0
600
1,200
Feet
AD-10
RD-5
A-10
A-5
A-3
R-1
R-2
R-3
RM
B-1
B-2
B-3
B-4
B-P
Q-1
M-1
M-2
P-I
C-1
UC
PR
Site
vierbicher
planners | engineers | advisors
REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
N27 W23957 Paul Road, Suite 105, Pewaukee, WI 53072
Phone: (262) 875-5000 Fax: (608) 826-0530
Data Sources: Vierbicher; Town of Lisbon, Waukesha County; ESRI
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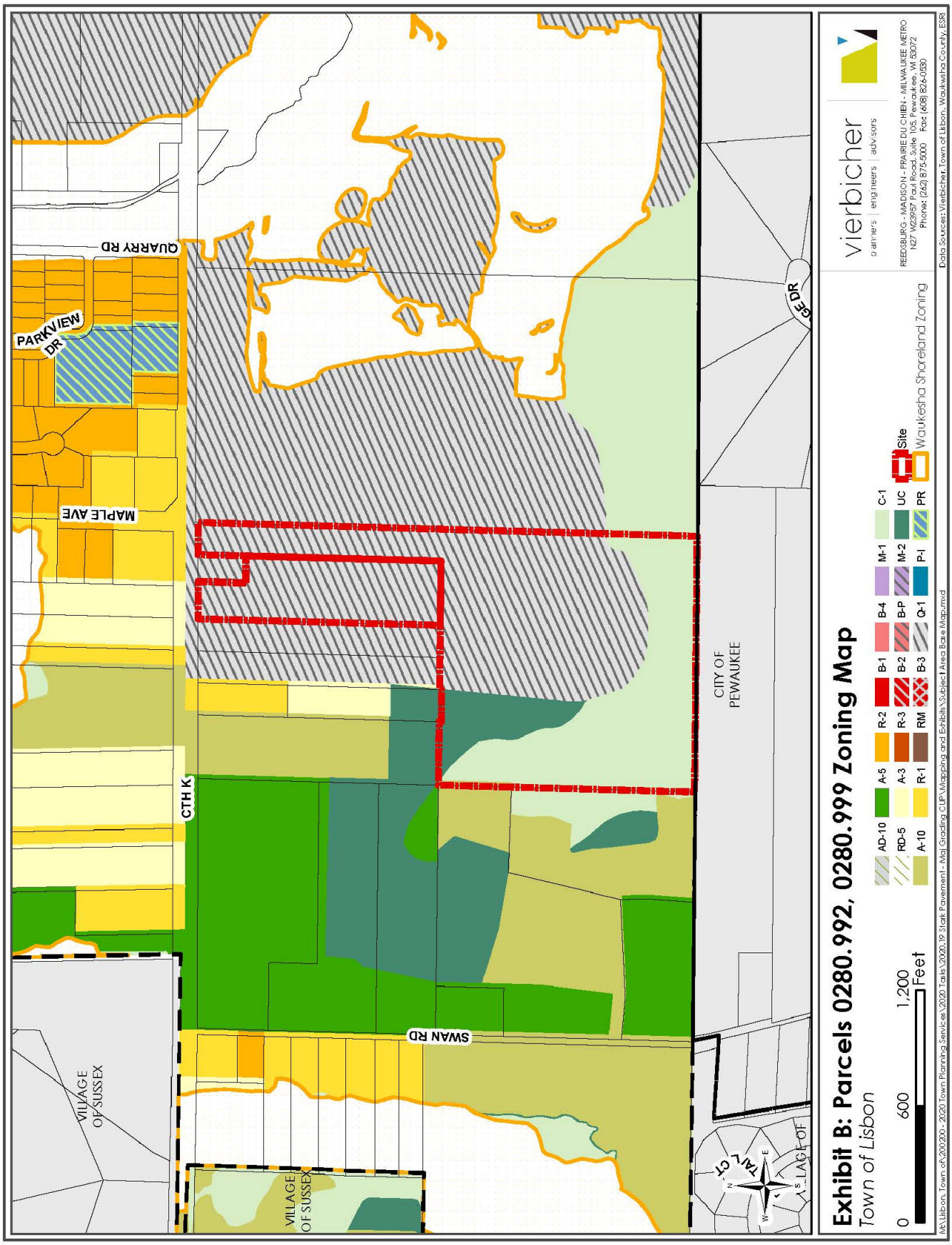
QUARRY RD
PARKVIEW DR
MAPLE AVE
CTH K
SWAN RD
VILLAGE OF SUSSEX
VILLAGE OF SUSSEX
VILLAGE OF SUSSEX
CITY OF PEWAUKEE
GE DR
Exhibit B: Parcels 0280.992, 0280.999 Zoning Map
Town of Lisbon
0
600
1,200
Feet
AD-10
A-5
R-2
B-1
B-4
M-1
C-1
RD-5
A-3
R-3
B-2
B-P
M-2
UC
Site
A-10
R-1
RM
B-3
Q-1
P-I
PR
Waukesha Shoreland Zoning
vierbicher
planners | engineers | advisors
REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
N27 W23957 Paul Road, Suite 105, Pewaukee, WI 53072
Phone: (262) 875-5000 Fax: (608) 826-0530
Data Sources: Vierbicher, Town of Lisbon, Waukesha County, ESRI
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STARK
PAVEMENT CORP

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March 9, 2020

Ms. Gina Gresch
Town Administrator
Town of Lisbon
W234 N 8676 Woodside Drive
Lisbon, WI 53089

**Subject: Amendment to the Stark Pavement Corp. Asphalt Plant Plan of Operation**

Dear Ms. Gresch:

In an effort to improve efficiency at our asphalt plant, Stark Pavement Corporation is requesting approval to expand our aggregate stockpiling area as shown in the attached site plan. It is not anticipated that the expansion will increase traffic on Lisbon Rd., as the additional area is to allow for the potential future opportunity to supply the asphalt plant with off-road haul trucks from within the Lannon Stone Company property. Stormwater design has been performed and shall be in accordance with Waukesha County and WDNR requirements. All other aspects of our Site Plan of Operation remain unchanged from what has been previously approved.

We respectfully request that this item be placed on the April 9, 2020 Plan Commission agenda for consideration.

Thank you for your time and consideration, and should you have any questions or concerns regarding this request, please do not hesitate to contact me at (414) 466-7820. We greatly appreciate the opportunity to successfully operate within the Lisbon community.

Respectfully submitted,

Carl Johnson
Vice President
Stark Pavement Corporation, Inc.

W234 N8676 WOODSIDE RD.
LISBON, WI 53089-1545
TEL: (262) 246-6100

# Plan Commission Application

## Application Type and Fee (check all that apply)

*Application fees are non-refundable. Fees cover costs associated with public notification, postage, copies, and document recording, however applicants agree to pay all additional expenses that the Town may incur by virtue of contracted plan review services including but not limited to: legal, surveying and engineering costs and studies.

☐ **Commercial**
**All commercial projects including any change of occupancy, change of use, or construction/alteration must be submitted to the Lisbon Fire Department as well for review and inspections.*

☐ **Residential** – Home-Based Bus. / In-Law Unit

- ☐ Accessory Building Waiver: $100 (Size/Location/Architectural Review)
- ☐ After the Fact Application: Double Fees
- ☐ Certified Survey Map: $200 + $10 Per lot
  - ☐ Dedication Fee (Per lot): $2,658 (Paid upon receipt of signed CSM)
- ■ Conditional Use Permit: $350
  - ☐ Amendment / Original
  - ■ Major Grading Permit
- ☐ Deed Restriction: $100
- ☐ Developer's Agreement: $250
- ☐ Groundwater Separation Waiver: $100
- ☐ Land Use Amendment: $300
- ☐ Conceptual: $100
- ☐ Plat Review:
  - ☐ Final - $200
  - ☐ Preliminary - $500
- ☐ Re-Submittal: $200
- ☐ Rezone: $350
- ☐ Sign Permit Application: $30 + Sign Fees (See Adopted Fee Schedule)
- ☐ Site Plan/Plan of Operation:
  - ☐ Amendment: $250
  - ☐ Original: $500
  - ☐ Temporary: $125
- ☐ Special Meeting: $600
- ☐ Waivers/Modification from Land Division and Development Ordinance: $200

## Property Information

N51 W23995 Lisbon Rd — Property Address
Lisbon — City
53089 — Zip

LSBT0280992, LSBT0280999 — Tax Key/Parcel ID #
44.746 & 8.733 — Lot Size
Q-1 — Current Zoning

## Property Owner

Hans Dawson, Lannon Stone Products, Inc.
Name / Company Name

Signature

N52 W23096 Lisbon Rd
Address

Sussex — City
WI — State
53089 — Zip

262-251-1520
Phone
E-mail Address

## Applicant

Carl Johnson
Name

Stark Pavement Corporation, Inc.
Company

12845 W Burleigh Rd
Address

Brookfield — City
WI — State
53005 — Zip

414-466-7820
Phone
E-Mail Address

**A complete application along with the appropriate fees shall be submitted by the deadline stated on the meeting schedule. In order for an application to be considered complete, the application shall include the required number of site plans/maps, and all of the necessary supporting information as indicated on the Project Review Checklist. If applying for a conditional use or development agreement, a document showing vested interest in the property is required.** *The Town of Lisbon reserves the right not to accept an application that is deemed incomplete.*

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W234N8676 WOODSIDE RD. • LISBON, WI 53089-1545 • TEL: (262) 246-6100 • FAX: (262) 820-2023
E-mail: townhall@townoflisbonwi.com • Website: www.townoflisbonwi.com

# SITE PLAN AND PLAN OF OPERATION

Please fill out the entire application all questions need a response. If something does not apply please put N/A. Incomplete applications will not be processed or put on the agenda. The completion of this application form must be accompanied by one copy of an up to date and detailed Site Plan drawn to scale and including, but shall not be limited to, all existing buildings, signage, lighting, landscaping, parking, loading, storage, dumpsters, septic and well, etc; an interior layout (plans) of all buildings and the existing and proposed uses of the interior spaces (i.e., office, retail, restaurant, etc); and any other supporting materials. The above shall be submitted to the Town Hall, and upon review of the information, additional items may be required. The plans shall be drawn to scale and shall be no larger than 11" x 17", and shall also be emailed as a PDF. Future revisions to the approved Site Plan/Plan of Operation will require new approvals.

☐ **New business in existing building or on existing site** ☐ **New Owner** ☐ **Temporary Use**

■ **Change in Operations (summarize below what is changing; days/hours, etc)**

Stockpile area expansion, 300' x 600'

☐ **Change in Use (summarize below prior and new use below)**

**BUSINESS / PROPERTY OWNER & PROPERTY INFORMATION**

**Tax Key Number** LSBT0280992 **Acres** 44.747 **Zoning** Q-1

**Business Name & Contact Person:** Stark Pavement Corporation, Inc.; Attn: Carl Johnson

**Full Address (include City & Zip):** N51 W23995 Lisbon Rd, Lisbon, WI 53089

**Phone Number & Email:** 262-246-8144

**Signature & Date:** 3-10-20

*****

**Property Owner Name:** Lannon Stone Products, Inc.

**Full Address (include City & Zip):** N52 W23096 Lisbon Rd, Sussex, WI 53089

**Phone Number & Email:** 262-251-1520

**Signature & Date:** 3/9/20

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1. **Is this business replacing another business?** ☐ Yes ■ No
   a. **If yes, what is the prior business' name:** _____

2. **Is this an expansion of an existing Town approved/based operation?** ■ Yes ☐ No
   a. **If yes, please explain:** Expansion to provide additional aggregate stockpile area

**HOURS OF OPERATION & OPERATING SPECIFICS**

3. **Describe in detail below the specific type of business operation (Retail, Restaurant, Manufacturing, Office, etc.), including temporary, accessory, and outdoor uses (storage, etc). Provide a separate list of all items sold or produced on the property. If items are produced, please provide a separate explanation of the production process.**

   Manufacturing of asphalt paving mixture, which entails blending of heated aggregate and asphalt cement into a mixture used for road surfacing.

4. **Days & Times of Operation:**
   a. **Days & Times:** M-F: 6 AM to 6 PM, Saturday: 6 AM to 2 PM, Sunday 7 AM to 5 PM

5. **Employees (if self-employed please count yourself)**
   a. **Full-Time** 3
   b. **Part-Time** 0

**FOOD / BEVERAGE / LIQUOR**

6. **Is there any food & beverage / liquor service?** ☐ Yes ■ No
   a. **If yes, please explain:** _____

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7. **Table Seating Capacity**
   a. **Outside:** _____
   b. **Inside:** _____
   c. **Bar:** _____

8. **Food / Soda Vending Machines** ☐ **Yes** ☐ **No**
   a. **If yes, quantity of each:** _____

**OUTDOOR USES**

9. **Is there any outdoor storage?** ■ **Yes** ☐ **No**
   a. **If yes, please explain:** Approx. (12) aggregate stockpiles 20 feet high and 50 feet in diameter

10. **Will there be any outdoor events?** ☐ **Yes** ■ **No**
    a. **If yes, please describe the types of events, parking accommodations, sanitary facilities and delineate the locations of the events on the Site Plan submitted. Attach a separate sheet if necessary.**

    _____
    _____
    _____
    _____

11. **Will there be any customer dockage?** ☐ **Yes** ■ **No**
    a. **If yes, please indicate on the Site Plan length and number of piers.**

12. **Parking Lot**
    a. **Dimensions** 70' X 30'
    b. **Total number of spaces** 5
    c. **Number of spaces allotted for employees** 2

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## MUSIC / ENTERTAINMENT

**13. Are any problems such as odor, smoke or noise resulting from this operation?** ■ **Yes** ☐ **No**

**a. If yes, describe what types (live, amplified, recorded, jukebox, etc), indoors and/or outdoors, and the days and hours music will be provided? Attach a separate sheet if necessary.**

The asphalt plant is permitted and monitored by the DNR and shall remain compliant with the permit requirements.

**14. Game Machines** ☐ **Yes** ■ **No**

**a. Quantity:** _____

**b. Location:** _____

## BUILDINGS

**15. Building A**

**a. Dimensions & Levels:** 20' X 10', one level

**b. Use:** Electrical switch gear and process control computers

**16. Building B**

**a. Dimensions & Levels:** _____

**b. Use:** _____

**17. Building C**

**a. Dimensions & Levels:** _____

**b. Use:** _____

## LIGHTING (Submit Cut-Sheets)

**18. Outdoor Lighting**

**a. Type(s):** LED floods

**b. Locations(s):** (2) on top of the asphalt storage silos, (1) atop water tank

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MAR 11 2020
TOWN OF LISBON

**SIGNAGE (Also submit the Town's Signage Application & appropriate fees)**

**19. Describe below the type of signage that exists and what signage is proposed on the site (attached, free standing, ground, mobile, projecting, window, electronic message, banners, flags, sandwich boards, etc.) and if the signs are illuminated, single/double faced, along with the number, size, and height of all signs.**

One free-standing unlit sign is currently located at the Lisbon Rd entrance, including the name and address of the business.

**CHEMICALS/HAZARDOUS MATERIALS**

**20. Are there any Chemicals, Hazardous Waste of Solvents stored on the site?** ■ **Yes** ☐ **No**

**a. If yes, please list those items and how they are disposed of or attach a separate sheet if necessary.**

A 500 gallon diesel fuel storage tank is used for motor fuel for aggregate handling equipment.

**21. Does this Operation involve the Storage/Sale of gasoline or any other Petroleum Products?** ☐ **Yes** ■ **No**

**a. If yes, please list those items and how they are disposed of or attach a separate sheet if necessary.**

**STORM WATER RETENTION, FLOW OF SURFACE WATER, AND AMOUNT OF IMPERVIOUS SURFACES**

**22. Are there surface water drainage facilities?** ■ **Yes** ☐ **No**

**a. If yes, please explain:** Site is covered by WDNR Storm Water Industrial Tier 2 Permit No. WI-S067857-04. Stormwater is directed in a controlled manner into a bio-retention swale for infiltration.

RECEIVED
MAR 11 2020
TOWN OF LISBO

## REFUSE DISPOSAL

**23. Are there dumpsters/waste containers on the site?** ☐ **Yes** ☐ **No**

**a. If yes, show on the Site Plan submitted the location of dumpsters and any screening.**

## PERMIT APPROVAL / ISSUANCE DATES

**24. Is Highway Access Permit Needed?** ☐ **Yes** ☐ **No**

**a. Date Issued:** _____

**25. DNR Well Approval (For New Constructions Only)**

**a. Date Approved:** _____

**26. Septic System Approval (For New Constructions Only)**

**a. Date Approved:** _____

**27. Fire Department Inspection** ☐ **Yes** ☐ **No**

**a. Date Inspected:** _____

**28. Did the Wisconsin Department of Safety & Professional Services approve building plans?** ☐ **Yes** ☐ **No**

**a. Date Approved:** _____

**29. Is security fencing necessary?** ☐ **Yes** ☐ **No**

## HORSE BOARDING

**30. Does this Operation involve the Boarding of Horses?** ☐ **Yes** ☐ **No**

**a. Maximum number of horses boarded:** _____

**b. Maximum number of horses owned:** _____

**31. Has a Conservation Plan been prepared by the Land Conservation Committee?** ☐ **Yes** ☐ **No**

a. **Date Prepared:** _____

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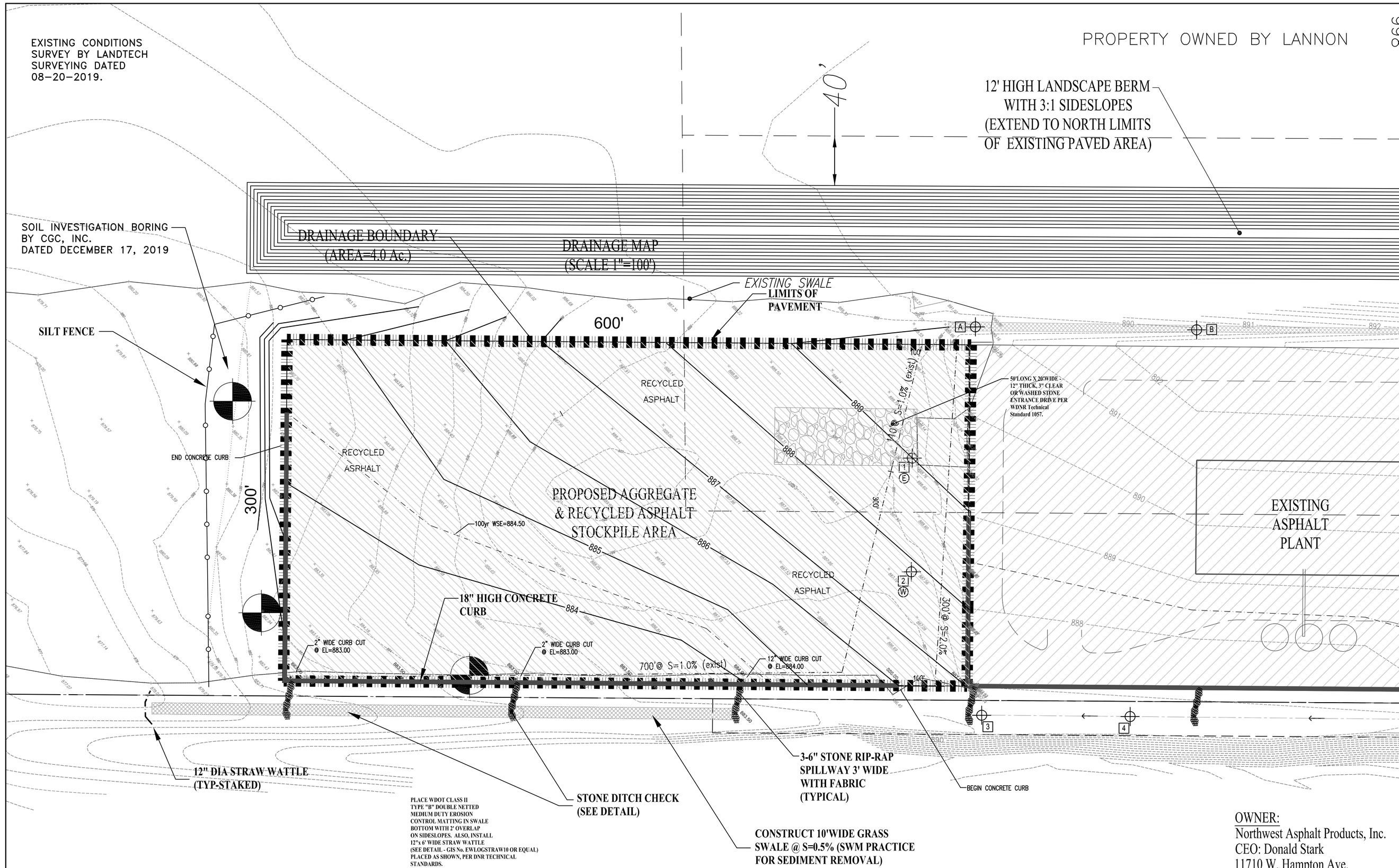
Town Approval Date(s): _____

County Approval Date(s): _____




## EROSION CONTROL SPECIFICATIONS AND CONSTRUCTION SEQUENCING:

I, _____, _____
Carl Johnson, Owner VP DATE
have read and understand this narrative. I also understand that failure to follow the approved narrative may be subject to enforcement action. Contact phone number: 414-466-7820.

The timing and sequence of construction is scheduled as follows (see attached map):

1. Before grading begins the project surveyor will stake out the property lines, silt fence, and storage area corners. The general contractor is charged with installing and maintaining all silt fences, seeding and other erosion control practices.
2. A list of all project contacts, phone numbers, e-mail addresses, etc. are on the plan & permit application.
3. Construction is scheduled to begin on or about April 1, 2020.
4. The gravel tracking pad will be installed first.
5. Silt Fence shall be installed as shown on the plan before any mass grading can occur.
6. Construct swales, as shown. Restore ditches upon completion. Install fabric & North American Green (or equal) straw wattle as shown on the plan.
7. Strip topsoil in the proposed storage area and haul excess topsoil offsite. Fine grade storage area, place re-cycled asphalt. Haul all excess material offsite.
8. Erosion control inspections will be performed weekly and after each rain event of 0.5 inches or larger by the grading contractor and inspection forms will be filled out and kept on site in job trailer.
9. Construction completion is anticipated by June 1, 2020.
10. Any disturbed site that remains inactive for greater than 7 days shall be stabilized with temporary measures such as soil treatment, temporary seeding or mulching. "Inactive" means that no site grading, landscaping or utility work is occurring on the site and that rain is not limiting these activities. Frozen soils do not exclude the site from this requirement.
11. Restoration of all disturbed areas will be stabilized in accordance with the late season stabilization specifications listed below.
12. After grass is well established all silt fences will be removed and permittee will request final inspection by the county.
13. Seeding rates and mixes shall conform to WisDOT Roadway Standard Section 630.

Late Season Stabilization

The objective is to stabilize the site with 70% vegetative coverage of all pervious disturbed areas before the end of the growing season. After November 15, no land disturbing activity is permitted outside of active building envelopes, and all other disturbed areas must be stabilized by November 15 per the following schedule.

a. Permanent Vegetation (before September 15):
   i. Seeding. Prepare seedbed and sow seeds per the rates and mixes of Wisconsin Department of Transportation (WisDOT) Roadway Standard Section 630.
   i. Erosion Control: Immediately apply mulch, erosion control matting, or other permanent stabilization BMPs as specified in the approved erosion control plans and per DNR technical standards.
   ii. Maintenance: Inspect all seeded areas weekly. Ensure adequate water is provided until full vegetative cover is obtained, and repair any erosion problems, wash outs, etc.

b. Temporary Vegetation (September 15 – October 15):
   i. Seeding: The above noted seeding mix must include a minimum of 2 lbs. per 1,000 sq. ft. of a temporary cover (i.e. winter wheat or annual rye grass for fall plantings) per Section 630.
   ii. Erosion Control: Immediately apply mulch, erosion control matting, or other stabilization BMPs as specified below, following DNR technical standards. The approved plans may be more restrictive:

1. Channel Flow (roadside swales, etc.) and Backslopes: Stake erosion matting over all the entire channel cross-section and all backslopes using a minimum WisDOT Erosion Control Product Acceptability (PAL) Class 3 Type A matting, unless otherwise called for in the approved plan.
2. Other disturbed areas: Apply Type B Soil Stabilizer, mulch and tackifier from the WisDOT Product Acceptability List to all disturbed areas that remain exposed.
3. Infalls/Outfalls: Install sod pads (2 rolls) at all culvert outfalls, and other high-erosion locations in accordance with County standards.

   iii. Maintenance: Inspect all seeded areas weekly. Ensure adequate water is provided until full temporary cover is obtained, and repair any erosion problems, wash outs, etc.

c. Dormant Seeding (October 15 – November 15):
   i. Seeding Rate: Same seed mix as subsection (b) (including temporary cover crop) except the rates for perennial species must applied at 1.5 x WisDOT section 630 rates (apply rates of 3-5 lbs./1000 sq.ft.).
   ii. Erosion Control:

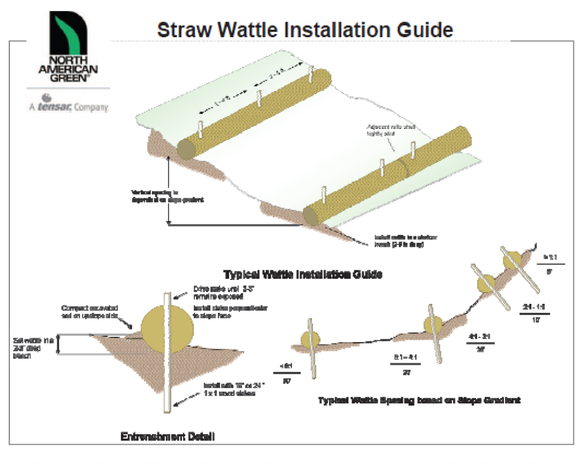
1. Channel Flow (roadside swales, etc.) and Backslopes: Apply Type A soil stabilizer and staked PAL Class 3 Type A erosion matting over the entire channel and all backslopes.
2. Other Areas: Apply Type A Soil Stabilizer from the WisDOT Product Acceptability List to all other disturbed areas that remain exposed.
3. Infalls/Outfalls: Install sod pads (2 rolls) at all culvert outfalls, and other high-erosion locations in accordance with County standards.

   iii. Maintenance: Inspect all seeded areas weekly. Ensure adequate water is provided until full temporary cover is obtained, and repair any erosion problems, wash outs, etc.

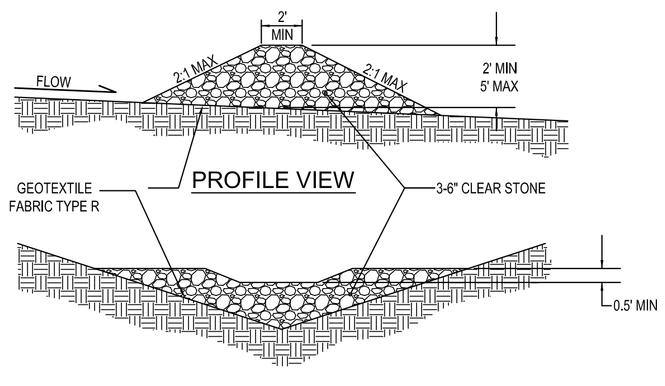
If construction schedules should change significantly, this plan narrative will be updated and resubmitted.

OWNER:
Northwest Asphalt Products, Inc.
CEO: Donald Stark
11710 W. Hampton Ave.
Milwaukee, WI 53225
Phone: 414-466-0644

SCALE: 1" = 50'



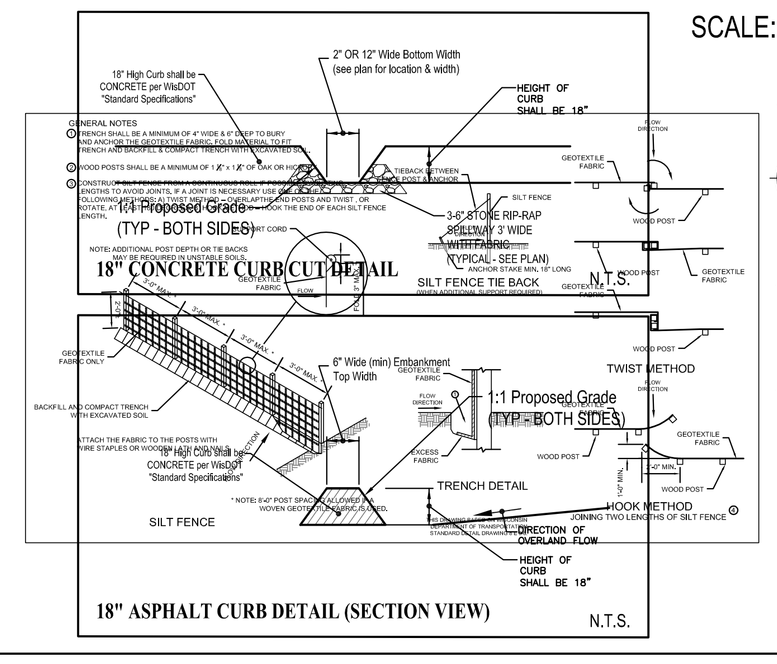

1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2-3" (5-7.5 CM) DEEP X 9" (22.5 CM) WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
3. SECURE THE WATTLE WITH 18-24" (46-61 CM) STAKES EVERY 3-4' (0.9 - 1.2 M) AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2-3" (5-7.5 CM) OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.




SECTION VIEW

## STONE DITCH CHECK DETAIL

NOT TO SCALE




## BORING LEGEND:

- SOIL INVESTIGATION BORING BY CGC, INC. DATED 12-17-2019
- 1 SOIL INVESTIGATION BORING BY CGC, INC. DATED 01-30-2012
- E SOIL INVESTIGATION BORING BY JACK LEITZAU DATED 12-22-2011

THE AS-BUILT GRADES AND UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES, CONTRACTORS AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

NOTE:
EXISTING TOPOGRAPHIC AND BOUNDARY SURVEY PROVIDED BY LANDTECH SURVEYING INC. DATED NOVEMBER, 2011.

| REVISIONS | |
|---|---|
| DATE | BY |
| | |
| | |
| | |
| | |
| | |
| | |
| | |


ELLENA ENGINEERING CONSULTANTS, LLC
SITE CIVIL ENGINEERING & STORMWATER MANAGEMENT
Ellena Engineering Consultants, LLC • 890 Elm Grove Road - Suite 214 • Elm Grove, WI 53122
Phone: 262-719-6183 • Fax: 866-457-2584 • Email: mellena@eecengcom


STARK PAVEMENT CORPORATION PLANT EXPANSION
Town of Lisbon, Wisconsin

WISCONSIN MARK R. ELLENA E-24090 WALES, WI PROFESSIONAL ENGINEER

# Master Grading & Drainage Plan

with Erosion Control

| | | |
|---|---|---|
| SCALE: 1"=50' | | DATE: 05-06-2020 |
| DESIGNED BY: MRE,PE | | PROJECT NO: |
| APPROVED BY: _____ DATE | | SHEET 1 OF 1 |

EXISTING CONDITIONS SURVEY BY LANDTECH SURVEYING DATED 08-20-2019.

PROPERTY OWNED BY LANNON

12' HIGH LANDSCAPE BERM WITH 3:1 SIDESLOPES (EXTEND TO NORTH LIMITS OF EXISTING PAVED AREA)

CSM 5524 LOT 1

SOIL INVESTIGATION BORING BY CGC, INC. DATED DECEMBER 17, 2019

DRAINAGE BOUNDARY (AREA=4.0 Ac.)

DRAINAGE MAP (SCALE 1"=100')

EXISTING SWALE

LIMITS OF PAVEMENT

SILT FENCE

END CONCRETE CURB

600'

300'

RECYCLED ASPHALT

PROPOSED AGGREGATE & RECYCLED ASPHALT STOCKPILE AREA

100yr WSE=884.50

18" HIGH CONCRETE CURB

2' WIDE CURB CUT @ EL=883.00

12' WIDE CURB CUT @ EL=884.00

700' @ S=1.0% (exist)

407' @ S=0.24%

50'LONG X 20'WIDE - 12" THICK, 3" CLEAR OR WASHED STONE ENTRANCE DRIVE PER WDNR Technical Standard 1057.

EXISTING ASPHALT PLANT

12" DIA STRAW WATTLE (TYP-STAKED)

STONE DITCH CHECK (SEE DETAIL)

3-6" STONE RIP-RAP SPILLWAY 3' WIDE WITH FABRIC (TYPICAL)

BEGIN CONCRETE CURB

CONSTRUCT 10'WIDE GRASS SWALE @ S=0.5% (SWM PRACTICE FOR SEDIMENT REMOVAL)

PLACE WDOT CLASS II TYPE "B" DOUBLE NETTED MEDIUM DUTY EROSION CONTROL MATTING IN SWALE BOTTOM WITH 2' OVERLAP ON SIDESLOPES. ALSO, INSTALL 12"x 6' WIDE STRAW WATTLE (SEE DETAIL - GIS No. EWLOGSTRAW10 OR EQUAL) PLACED AS SHOWN, PER DNR TECHNICAL STANDARDS.

OWNER:
Northwest Asphalt Products, Inc.
CEO: Donald Stark
11710 W. Hampton Ave.
Milwaukee, WI 53225
Phone: 414-466-0644

SCALE: 1" = 50'

BORING LEGEND:

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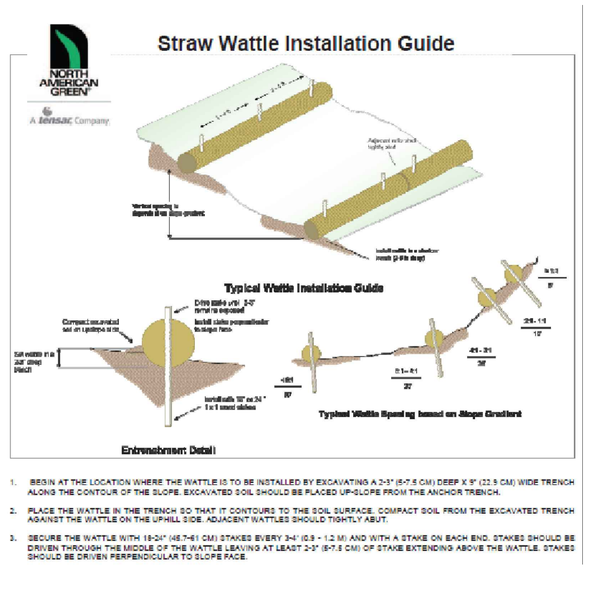


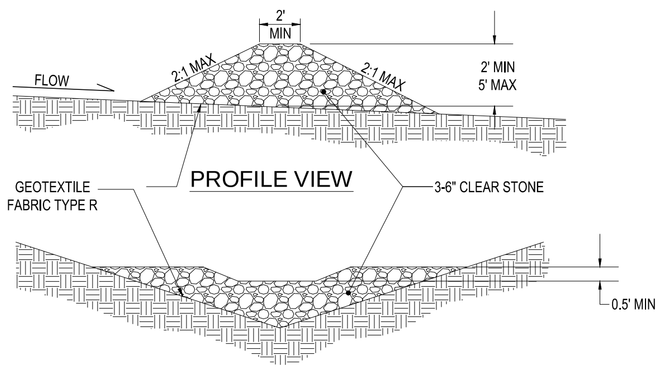


SECTION VIEW

STONE DITCH CHECK DETAIL

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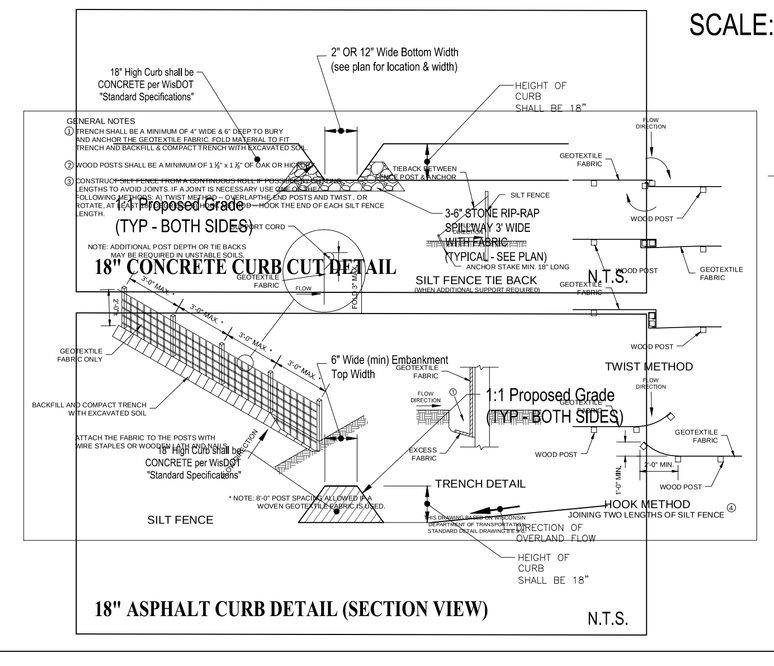


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| REVISIONS | |
|---|---|
| DATE | BY |
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WISCONSIN MARK R. ELLENA E-24090 WALES, WI PROFESSIONAL ENGINEER


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STARK PAVEMENT CORPORATION PLANT EXPANSION

Town of Lisbon, Wisconsin

# Master Grading & Drainage Plan

with Erosion Control

SCALE: 1"=50' | DATE: 05-06-2020

DESIGNED BY: MRE,PE | PROJECT NO:

APPROVED BY: _____ DATE

SHEET 1 OF 1

**NOTE:**
EXISTING TOPOGRAPHIC AND BOUNDARY SURVEY PROVIDED BY LANDTECH SURVEYING INC. DATED NOVEMBER, 2011.

# Item 5B – Attachments

vierbicher
planners | engineers | advisors

600 W. Virginia Street, Suite 601
Milwaukee, WI 53204
(262) 875-5000 phone
(608) 826-0530 FAX
www.vierbicher.com

June 4, 2020

Chairperson Osterman and Town Plan Commission Members
Town of Lisbon
W23N8676 Woodside Road
Lisbon, WI 53089

Re: Stark Pavement – Site Plan / Plan of Operation Amendment Review

Dear Plan Commission Members:

The above-referenced Site Plan / Plan of Operation Amendment (SPPOO) was received in our office for review on behalf of the Town of Lisbon. We have reviewed the following application materials:

- Town Site Plan and Plan of Operation Application
- Master Grading/Site Plan and Berm details

**Summary**
Stark Pavement Corporation is proposing to expand their existing aggregate stockpiling area in order to improve the efficiency of the asphalt plant. They will need to grade approximately 180,000 sq. ft. of ground area, plus associated drainage improvements, in order to do so. The property is located at the County Highway K, west of the intersection with County Highway F. The property is composed of two parcels of approximately 44.74 and 8.73 acres in size and is zoned Q-1 Quarrying. The site plan includes:

- A proposed additional aggregate & recycled asphalt stockpile area measuring 180,000 sq. ft.;
- Grading, Ground Cover, Berm, and Erosion control notes;
- Grading specifications – including a proposed berm along the west side of the aggregate yard;
- One (1) loading area for large trucks;
- Description of outdoor storage to consist of aggregate and recycles asphalt stockpiles;

Stark Pavement anticipates three full employees at the site, with operations running 6am to 6pm Monday through Friday, 6am to 2pm on Saturday, and 7am to 5pm on Sunday. The SPPOO was approved by the Plan Commission on May 14 with conditions, including the need to submit details of a proposed berm for review. This application is submitted in order to meet this condition.

## Application Review

The parcel is subject to compliance with the Town Code Chapters 11, 12, 13, other applicable Chapters.

**Background Information**
Property owner: Lannon Stone Products, Inc.

Location: County Highway K, between State Highway 164 and County Highway F.

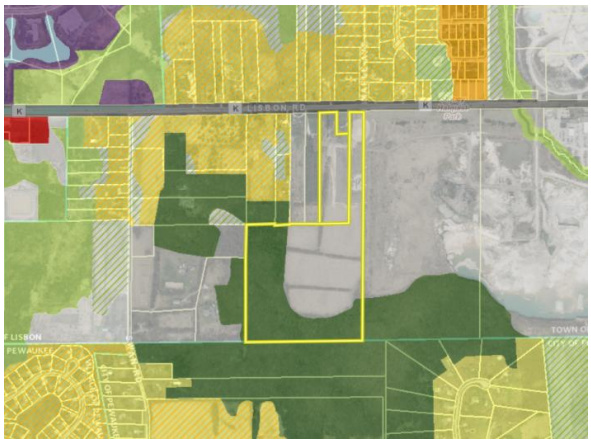
Tax Keys: LSBT028092, LSBT0280999

Adjacent land uses and zoning:

North: Residential (zoned A-3 and R-1 Suburban Single-Family)
South: Vacant land (Village of Pewaukee)
East: Residential (zoned Q-1 Quarrying)
West: Quarry (zoned Q-1 Quarrying)

Existing: Q-1 Quarrying

Future Land Use: "Extractive" and "Primary Environmental Corridor" (see inset map image)




The use, removal, and/or distribution of the waste soil on the site shall be worked out between the Town and the applicant separate from this application. For the purposes of this review, we have assumed the pile will be managed according to any applicable grading standards and disposal regulations. Much of the waste soil will be kept on site and used to build landscape berms.

**Site Plan Review Standards**
The Site Plan and Plan of Operation package that we received for review contains most of the items required by ordinance. However, some items are not included at the date of this report. Please see the comments below, Consistency with Zoning, on the additional information needed.

**Consistency with Zoning**
The SPPOO amendment proposes an additional aggregate and recycled asphalt storage area to the rear of the existing asphalt plant. The Q-1 Quarrying zoning district allows for asphalt plants as an accessory to a quarrying operation. The asphalt plant is located adjacent to the quarrying operation as is connected via private drive and is integral to the operation of the quarry. The site plan complies with site requirements of the Q-1 Quarrying zoning district. No additional parking is required. Comments below relate to other details or standards that should be addressed.

*Zoning Code General Provisions*

1. Stormwater storage and drainage calculation will need to be approved by the Town Engineer.

2. No additional lighting is proposed.

3. No additional signage is proposed.

4. At least 15% of the site shall be set aside as open space. The site plan exceeds the standard with approximately 85% pervious surface coverage.

5. The proposed aggregate stock pile is located behind the asphalt plant, therefore greenspace and parking landscaping will not be required along County Highway K.

6. Due to the amount of open space surrounding the property, existing vegetation, the proposed berm along the western edge of the storage area, the presence of the associated adjacent quarry, and the presence of existing/previously permitted asphalt operation, no perimeter landscape buffer will be required.

7. Commercial parking lots shall not be located in the street yard. The proposed site plan is adding one additional loading zone, which is located in the rear yard.

8. A berm is proposed to be constructed along the western border of the asphalt plant and aggregate storage area to help shield the operation from noise and from view. The berm is proposed to be 12' in height, exceeding the 3' allowable without a Plan Commission approval. The maximum allowable berm is 8', with additional allowance for 1' in height for every 25' from adjacent property lines. As the proposed berm would be 150' from the neighboring property line, an additional 6' would be allowable and the 12' berm would meet the zoning ordinance standard.

**Recommendation**
If the Plan Commission would require additional materials they have the ability to table the CUP application. If the Plan Commission is generally comfortable with the CUP request, they may conditionally approve it. Recommended conditions may include:

If the Plan Commission would require additional materials they have the ability to table the SPPOO amendment application. If the Plan Commission is generally comfortable with the SPPOO amendment request, they may conditionally approve it. Recommended conditions may include:

1. The Town of Lisbon retains the right to review the grading for compliance and maintenance of associated stormwater with approved plans.

2. The Fire Chief shall inspect the premises to ensure the site is in compliance with the respective fire codes. Non-objection from the Fire Department and correction of any deficiencies prior to issuance of occupancy permits.

3. The Building Inspector shall inspect the premises to ensure the site is in compliance with the respective building codes. Non-objection from the Building Inspector and correction of any deficiencies prior to issuance of occupancy permits.

4. The Town Engineer review the site plans to ensure the site is in compliance with the respective Town codes. Non-objection from the Town Engineer and correction of any deficiencies prior to issuance of SPPOO approval.

5. Outdoor storage of materials, the aggregate stock, will be partially screened by an extended berm.

6. There shall be no additional trash or commercial/office recycling stored outside of the building, exclusive of raw materials.

7. Provide plans for ongoing maintenance of landscaping, including mowing and weed management.

8. Soil tests shall be done, and provided to the Town, to confirm the soils are buildable.

9. The proposed hours and days of operation shall be 6am to 6pm Monday through Friday, 6am to 2pm on Saturday, and 7am to 5pm on Sunday.

10. All erosion control devices be installed and maintained throughout the duration of the construction project. It is imperative that erosion control be established prior to the onset any excavating or grading activities.

11. The Waukesha County Environmental Health Division may review and approve of the uses on the subject property, prior to the issuance of any permits.

12. Waukesha County review and approval of stormwater plans.

13. Waukesha County approval of any final Stormwater Management Practice and Maintenance Agreement.

14. Once the Storm Water Management Practice and Maintenance Agreement and any addendums of the same have been executed, a record copy shall be sent to the Town of Lisbon and the Town's Engineer for their records.

15. The applicant should obtain all necessary State and County permits and provide a copy of permit approvals to the Town for their records.

16. An up-to-date Site Plan and Plan of Operation must be on file at all times with the Town of Lisbon.

17. The approval is granted for the express conditions stated herein. Changes or alterations including, but not limited to, a change in use, premises, lands, or ownership of the property in question shall require a new Site Plan/Plan of Operation permit, as applicable, with all the zoning procedures at the time of being followed. Any use not specifically listed as permitted for this Q-1 Quarrying zoning district, shall be considered to be prohibited, except as otherwise specified herein.

18. The Town reserves the right to review any condition imposed as part of this Site Plan and Plan of Operation if said use becomes a problem in the area. The Town Plan Commission may modify, change, delete, add, etc. any conditions, through the Site Plan and Plan of Operation process, which they feel may be reasonable in order to allow this use and ensure it does not become detrimental to the surrounding area. Any major change, as determined by the Town Plan Commission may require modification to the SPPOO Permit or termination of the use.

The issues outlined above are meant to act as a guideline to assist you in discussions as to what issues you feel need to be addressed in order for you to review this proposal. We will be in attendance at the June Plan Commission meeting to answer any questions.

Sincerely,

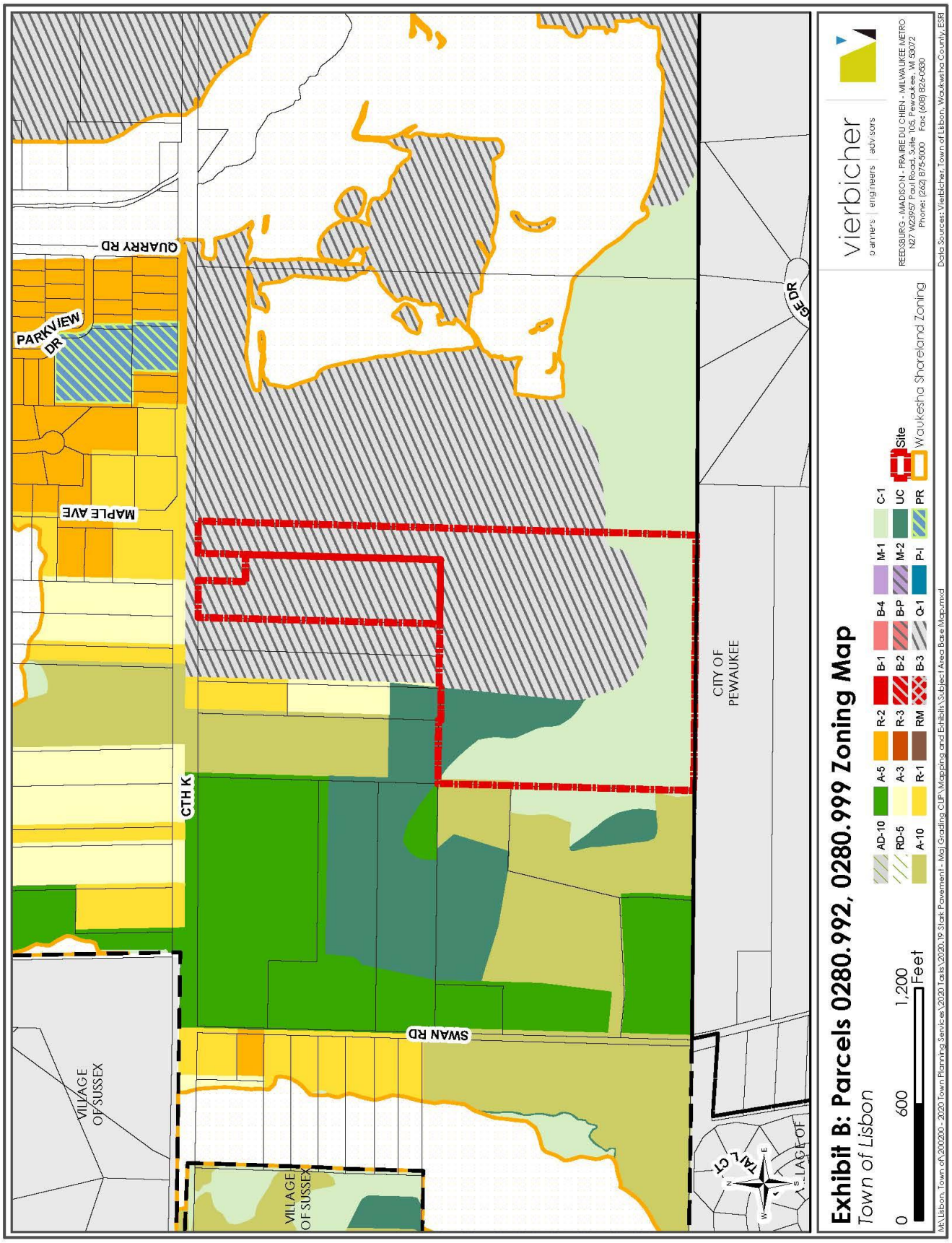
Joshua Langen, AICP
Community Development Planner

Rachel Holloway, AICP
Town Planner

cc: Natasha Girard, Deputy Clerk, Town of Lisbon

M:\Lisbon, Town of\200200 - 2020 Town Planning Services\2020 Tasks\2020.13 Stark Pavement - SPPOO Amendment\Reviews\2020-05-10_Stark Pavement New Grading exhibit SPPOO_Review\2020-05-19_Stark Pavement New Grading exhibit_SPPOO_Review.docx

QUARRY RD
PARKVIEW DR
MAPLE AVE
CTH K
SWAN RD
VILLAGE OF SUSSEX
VILLAGE OF SUSSEX
CITY OF PEWAUKEE
GE DR
Exhibit A: Parcels 0280.992, 0280.999 Site Map
Town of Lisbon
0
600
1,200
Feet
AD-10
RD-5
A-10
A-5
A-3
R-1
R-2
R-3
RM
B-1
B-2
B-3
B-4
B-P
Q-1
M-1
M-2
P-I
C-1
UC
PR
Site
vierbicher
planners | engineers | advisors
REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
N27 W23957 Paul Road, Suite 105, Pewaukee, WI 53072
Phone: (262) 875-5000 Fax: (608) 826-0530
M:\Lisbon, Town of\200200 - 2020 Town Planning Services\2020 Tasks\2020_19 Stark Pavement - Maj Grading CUP\Mapping and Exhibits\Subject Area Base Map.mxd
Data Sources: Vierbicher; Town of Lisbon; Waukesha County; ESRI


QUARRY RD
PARKVIEW DR
MAPLE AVE
CTH K
SWAN RD
VILLAGE OF SUSSEX
VILLAGE OF SUSSEX
CITY OF PEWAUKEE
GE DR
TAYLOR CT
VILLAGE OF
Exhibit B: Parcels 0280.992, 0280.999 Zoning Map
Town of Lisbon
0
600
1,200
Feet
AD-10
RD-5
A-10
A-5
A-3
R-1
R-2
R-3
RM
B-1
B-2
B-3
B-4
B-P
Q-1
M-1
M-2
P-I
C-1
UC
PR
Site
Waukesha Shoreland Zoning
vierbicher
planners | engineers | advisors
REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
N27 W23957 Paul Road, Suite 105, Pewaukee, WI 53072
Phone: (262) 875-5000 Fax: (608) 826-0530
Data Sources: Vierbicher, Town of Lisbon, Waukesha County, ESRI
M:\Lisbon, Town of\200200 - 2020 Town Planning Services\2020 Tasks\2020_19 Stark Pavement - Maj Grading CUP\Mapping and Exhibits\Subject Area Base Map.mxd

**ASPHALT / CONCRETE PAVING CONTRACTOR**
**T: 414-466-7820 • F: 262-784-6840**
12845 W BURLEIGH RD • BROOKFIELD, WI 53005
*An Equal Opportunity Employer*

STARK
PAVEMENT CORP

RECEIVED
MAR 11 2020
TOWN OF LISBON

March 9, 2020

Ms. Gina Gresch
Town Administrator
Town of Lisbon
W234 N 8676 Woodside Drive
Lisbon, WI 53089

**Subject: Amendment to the Stark Pavement Corp. Asphalt Plant Plan of Operation**

Dear Ms. Gresch:

In an effort to improve efficiency at our asphalt plant, Stark Pavement Corporation is requesting approval to expand our aggregate stockpiling area as shown in the attached site plan. It is not anticipated that the expansion will increase traffic on Lisbon Rd., as the additional area is to allow for the potential future opportunity to supply the asphalt plant with off-road haul trucks from within the Lannon Stone Company property. Stormwater design has been performed and shall be in accordance with Waukesha County and WDNR requirements. All other aspects of our Site Plan of Operation remain unchanged from what has been previously approved.

We respectfully request that this item be placed on the April 9, 2020 Plan Commission agenda for consideration.

Thank you for your time and consideration, and should you have any questions or concerns regarding this request, please do not hesitate to contact me at (414) 466-7820. We greatly appreciate the opportunity to successfully operate within the Lisbon community.

Respectfully submitted,

Carl Johnson
Vice President
Stark Pavement Corporation, Inc.

W234 N8676 WOODSIDE RD.
LISBON, WI 53089-1545
TEL: (262) 246-6100

# Plan Commission Application

## Application Type and Fee (check all that apply)

*Application fees are non-refundable. Fees cover costs associated with public notification, postage, copies, and document recording, however applicants agree to pay all additional expenses that the Town may incur by virtue of contracted plan review services including but not limited to: legal, surveying and engineering costs and studies.

☐ **Commercial**
**All commercial projects including any change of occupancy, change of use, or construction/alteration must be submitted to the Lisbon Fire Department as well for review and inspections.*

☐ **Residential** – Home-Based Bus. / In-Law Unit

- ☐ Accessory Building Waiver: $100 (Size/Location/Architectural Review)
- ☐ After the Fact Application: Double Fees
- ☐ Certified Survey Map: $200 + $10 Per lot
  - ☐ Dedication Fee (Per lot): $2,658 (Paid upon receipt of signed CSM)
- ☐ Conditional Use Permit: $350
  - ☐ Amendment / Original
  - ☐ Major Grading Permit
- ☐ Deed Restriction: $100
- ☐ Developer's Agreement: $250
- ☐ Groundwater Separation Waiver: $100
- ☐ Land Use Amendment: $300
- ☐ Conceptual: $100
- ☐ Plat Review:
  - ☐ Final - $200
  - ☐ Preliminary - $500
- ☐ Re-Submittal: $200
- ☐ Rezone: $350
- ☐ Sign Permit Application: $30 + Sign Fees (See Adopted Fee Schedule)
- ■ Site Plan/Plan of Operation:
  - ■ Amendment: $250
  - ☐ Original: $500
  - ☐ Temporary: $125
- ☐ Special Meeting: $600
- ☐ Waivers/Modification from Land Division and Development Ordinance: $200

## Property Information

N51 W23995 Lisbon Rd — Lisbon — 53089
Property Address — City — Zip

LSBT0280992, LSBT0280999 — 44.746 & 8.733 — Q-1
Tax Key/Parcel ID # — Lot Size — Current Zoning

## Property Owner

Hans Dawson, Lannon Stone Products, Inc.
Name / Company Name

Signature

N52 W23096 Lisbon Rd
Address

Sussex — WI — 53089
City — State — Zip

262-251-1520
Phone — E-mail Address

## Applicant

Carl Johnson
Name

Stark Pavement Corporation, Inc.
Company

12845 W Burleigh Rd
Address

Brookfield — WI — 53005
City — State — Zip

414-466-7820
Phone — E-Mail Address

**A complete application along with the appropriate fees shall be submitted by the deadline stated on the meeting schedule. In order for an application to be considered complete, the application shall include the required number of site plans/maps, and all of the necessary supporting information as indicated on the Project Review Checklist. If applying for a conditional use or development agreement, a document showing vested interest in the property is required.** *The Town of Lisbon reserves the right not to accept an application that is deemed incomplete.*

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TOWN OF LISBON

W234N8676 WOODSIDE RD. • LISBON, WI 53089-1545 • TEL: (262) 246-6100 • FAX: (262) 820-2023
E-mail: townhall@townoflisbonwi.com • Website: www.townoflisbonwi.com

# SITE PLAN AND PLAN OF OPERATION

Please fill out the entire application all questions need a response. If something does not apply please put N/A. Incomplete applications will not be processed or put on the agenda. The completion of this application form must be accompanied by one copy of an up to date and detailed Site Plan drawn to scale and including, but shall not be limited to, all existing buildings, signage, lighting, landscaping, parking, loading, storage, dumpsters, septic and well, etc; an interior layout (plans) of all buildings and the existing and proposed uses of the interior spaces (i.e., office, retail, restaurant, etc); and any other supporting materials. The above shall be submitted to the Town Hall, and upon review of the information, additional items may be required. The plans shall be drawn to scale and shall be no larger than 11" x 17", and shall also be emailed as a PDF. Future revisions to the approved Site Plan/Plan of Operation will require new approvals.

☐ **New business in existing building or on existing site** ☐ **New Owner** ☐ **Temporary Use**

■ **Change in Operations (summarize below what is changing; days/hours, etc)**

Stockpile area expansion, 300' x 600'

☐ **Change in Use (summarize below prior and new use below)**

**BUSINESS / PROPERTY OWNER & PROPERTY INFORMATION**

**Tax Key Number** LSBT0280992 **Acres** 44.747 **Zoning** Q-1

**Business Name & Contact Person:** Stark Pavement Corporation, Inc.; Attn: Carl Johnson

**Full Address (Include City & Zip):** N51 W23995 Lisbon Rd, Lisbon, WI 53089

**Phone Number & Email:** 262-246-8144

**Signature & Date:** 3·10·20

*****

**Property Owner Name:** Lannon Stone Products, Inc.

**Full Address (include City & Zip):** N52 W23096 Lisbon Rd, Sussex, WI 53089

**Phone Number & Email:** 262-251-1520

**Signature & Date:** 3/9/20

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1. **Is this business replacing another business?** ☐ Yes ■ No
   a. **If yes, what is the prior business' name:** _____

2. **Is this an expansion of an existing Town approved/based operation?** ■ Yes ☐ No
   a. **If yes, please explain:** Expansion to provide additional aggregate stockpile area

**HOURS OF OPERATION & OPERATING SPECIFICS**

3. **Describe in detail below the specific type of business operation (Retail, Restaurant, Manufacturing, Office, etc.), including temporary, accessory, and outdoor uses (storage, etc). Provide a separate list of all items sold or produced on the property. If items are produced, please provide a separate explanation of the production process.**

   Manufacturing of asphalt paving mixture, which entails blending of heated aggregate and asphalt cement into a mixture used for road surfacing.

4. **Days & Times of Operation:**
   a. **Days & Times:** M-F: 6 AM to 6 PM, Saturday: 6 AM to 2 PM, Sunday 7 AM to 5 PM

5. **Employees (if self-employed please count yourself)**
   a. **Full-Time** 3
   b. **Part-Time** 0

**FOOD / BEVERAGE / LIQUOR**

6. **Is there any food & beverage / liquor service?** ☐ Yes ■ No
   a. **If yes, please explain:** _____

7. **Table Seating Capacity**

   a. **Outside:** _____

   b. **Inside:** _____

   c. **Bar:** _____

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8. **Food / Soda Vending Machines** ☐ **Yes** ☐ **No**

   a. **If yes, quantity of each:** _____

**OUTDOOR USES**

9. **Is there any outdoor storage?** ■ **Yes** ☐ **No**

   a. **If yes, please explain:** Approx. (12) aggregate stockpiles 20 feet high and 50 feet in diameter

10. **Will there be any outdoor events?** ☐ **Yes** ■ **No**

    a. **If yes, please describe the types of events, parking accommodations, sanitary facilities and delineate the locations of the events on the Site Plan submitted. Attach a separate sheet if necessary.**

    _____

    _____

    _____

    _____

11. **Will there be any customer dockage?** ☐ **Yes** ■ **No**

    a. **If yes, please indicate on the Site Plan length and number of piers.**

12. **Parking Lot**

    a. **Dimensions** 70' X 30'

    b. **Total number of spaces** 5

    c. **Number of spaces allotted for employees** 2

## MUSIC / ENTERTAINMENT

**13. Are any problems such as odor, smoke or noise resulting from this operation?** ■ **Yes** ☐ **No**

a. **If yes, describe what types (live, amplified, recorded, jukebox, etc), indoors and/or outdoors, and the days and hours music will be provided? Attach a separate sheet if necessary.**

The asphalt plant is permitted and monitored by the DNR and shall remain compliant with the permit requirements.

**14. Game Machines** ☐ **Yes** ■ **No**

a. **Quantity:** _____

b. **Location:** _____

## BUILDINGS

**15. Building A**

a. **Dimensions & Levels:** 20' X 10', one level

b. **Use:** Electrical switch gear and process control computers

**16. Building B**

a. **Dimensions & Levels:** _____

b. **Use:** _____

**17. Building C**

a. **Dimensions & Levels:** _____

b. **Use:** _____

## LIGHTING (Submit Cut-Sheets)

**18. Outdoor Lighting**

a. **Type(s):** LED floods

b. **Locations(s):** (2) on top of the asphalt storage silos, (1) atop water tank

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**SIGNAGE (Also submit the Town's Signage Application & appropriate fees)**

**19. Describe below the type of signage that exists and what signage is proposed on the site (attached, free standing, ground, mobile, projecting, window, electronic message, banners, flags, sandwich boards, etc.) and if the signs are illuminated, single/double faced, along with the number, size, and height of all signs.**

One free-standing unlit sign is currently located at the Lisbon Rd entrance, including the name and address of the business.

**CHEMICALS/HAZARDOUS MATERIALS**

**20. Are there any Chemicals, Hazardous Waste of Solvents stored on the site?** ■ Yes ☐ No

**a. If yes, please list those items and how they are disposed of or attach a separate sheet if necessary.**

A 500 gallon diesel fuel storage tank is used for motor fuel for aggregate handling equipment.

**21. Does this Operation involve the Storage/Sale of gasoline or any other Petroleum Products?** ☐ Yes ■ No

**a. If yes, please list those items and how they are disposed of or attach a separate sheet if necessary.**

**STORM WATER RETENTION, FLOW OF SURFACE WATER, AND AMOUNT OF IMPERVIOUS SURFACES**

**22. Are there surface water drainage facilities?** ■ Yes ☐ No

**a. If yes, please explain:** Site is covered by WDNR Storm Water Industrial Tier 2 Permit No. WI-S067857-04. Stormwater is directed in a controlled manner into a bio-retention swale for infiltration.

## REFUSE DISPOSAL

**23. Are there dumpsters/waste containers on the site?** ☐ Yes ☐ No

**a. If yes, show on the Site Plan submitted the location of dumpsters and any screening.**

## PERMIT APPROVAL / ISSUANCE DATES

**24. Is Highway Access Permit Needed?** ☐ Yes ☐ No

**a. Date Issued:** _____

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TOWN OF LISBON

**25. DNR Well Approval (For New Constructions Only)**

**a. Date Approved:** _____

**26. Septic System Approval (For New Constructions Only)**

**a. Date Approved:** _____

**27. Fire Department Inspection** ☐ Yes ☐ No

**a. Date Inspected:** _____

**28. Did the Wisconsin Department of Safety & Professional Services approve building plans?** ☐ Yes ☐ No

**a. Date Approved:** _____

**29. Is security fencing necessary?** ☐ Yes ☐ No

## HORSE BOARDING

**30. Does this Operation involve the Boarding of Horses?** ☐ Yes ☐ No

**a. Maximum number of horses boarded:** _____

**b. Maximum number of horses owned:** _____

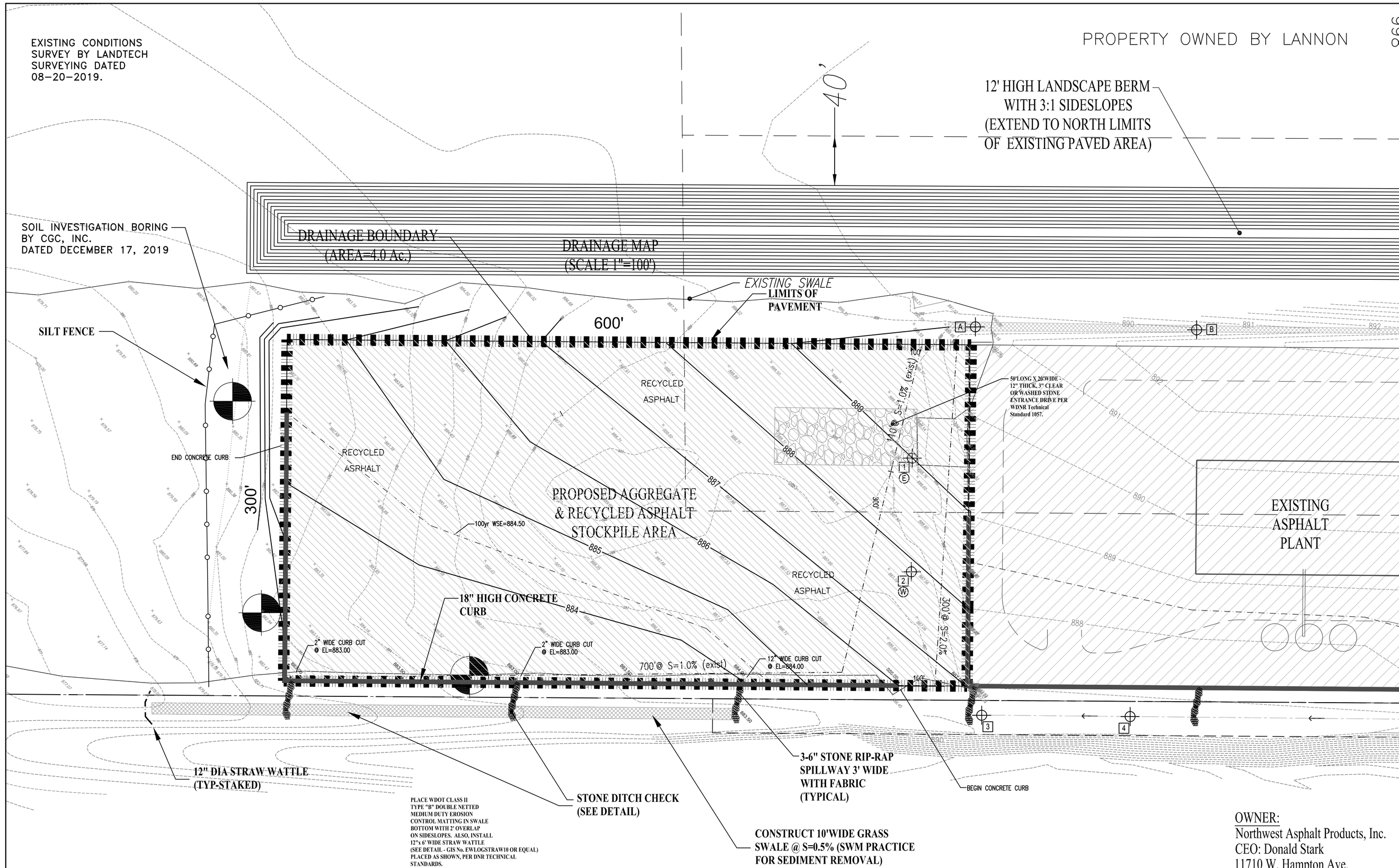
**31. Has a Conservation Plan been prepared by the Land Conservation Committee?** ☐ Yes ☐ No

a. **Date Prepared:** _____

---

Town Approval Date(s): _____

County Approval Date(s): _____




## EROSION CONTROL SPECIFICATIONS AND CONSTRUCTION SEQUENCING:

I, _____, _____
Carl Johnson, Owner VP DATE
have read and understand this narrative. I also understand that failure to follow the approved narrative may be subject to enforcement action. Contact phone number: 414-466-7820.

The timing and sequence of construction is scheduled as follows (see attached map):

1. Before grading begins the project surveyor will stake out the property lines, silt fence, and storage area corners. The general contractor is charged with installing and maintaining all silt fences, seeding and other erosion control practices.
2. A list of all project contacts, phone numbers, e-mail addresses, etc. are on the plan & permit application.
3. Construction is scheduled to begin on or about April 1, 2020.
4. The gravel tracking pad will be installed first.
5. Silt Fence shall be installed as shown on the plan before any mass grading can occur.
6. Construct swales, as shown. Restore ditches upon completion. Install fabric & North American Green (or equal) straw wattle as shown on the plan.
7. Strip topsoil in the proposed storage area and haul excess topsoil offsite. Fine grade storage area, place re-cycled asphalt. Haul all excess material offsite.
8. Erosion control inspections will be performed weekly and after each rain event of 0.5 inches or larger by the grading contractor and inspection forms will be filled out and kept on site in job trailer.
9. Construction completion is anticipated by June 1, 2020.
10. Any disturbed site that remains inactive for greater than 7 days shall be stabilized with temporary measures such as soil treatment, temporary seeding or mulching. "Inactive" means that no site grading, landscaping or utility work is occurring on the site and that rain is not limiting these activities. Frozen soils do not exclude the site from this requirement.
11. Restoration of all disturbed areas will be stabilized in accordance with the late season stabilization specifications listed below.
12. After grass is well established all silt fences will be removed and permittee will request final inspection by the county.
13. Seeding rates and mixes shall conform to WisDOT Roadway Standard Section 630.

Late Season Stabilization

The objective is to stabilize the site with 70% vegetative coverage of all pervious disturbed areas before the end of the growing season. After November 15, no land disturbing activity is permitted outside of active building envelopes, and all other disturbed areas must be stabilized by November 15 per the following schedule.

a. Permanent Vegetation (before September 15):
   i. Seeding. Prepare seedbed and sow seeds per the rates and mixes of Wisconsin Department of Transportation (WisDOT) Roadway Standard Section 630.
   i. Erosion Control: Immediately apply mulch, erosion control matting, or other permanent stabilization BMPs as specified in the approved erosion control plans and per DNR technical standards.
   ii. Maintenance: Inspect all seeded areas weekly. Ensure adequate water is provided until full vegetative cover is obtained, and repair any erosion problems, wash outs, etc.

b. Temporary Vegetation (September 15 – October 15):
   i. Seeding: The above noted seeding mix must include a minimum of 2 lbs. per 1,000 sq. ft. of a temporary cover (i.e. winter wheat or annual rye grass for fall plantings) per Section 630.
   ii. Erosion Control: Immediately apply mulch, erosion control matting, or other stabilization BMPs as specified below, following DNR technical standards. The approved plans may be more restrictive:

1. Channel Flow (roadside swales, etc.) and Backslopes: Stake erosion matting over all the entire channel cross-section and all backslopes using a minimum WisDOT Erosion Control Product Acceptability (PAL) Class 3 Type A matting, unless otherwise called for in the approved plan.
2. Other disturbed areas: Apply Type B Soil Stabilizer, mulch and tackifier from the WisDOT Product Acceptability List to all disturbed areas that remain exposed.
3. Infalls/Outfalls: Install sod pads (2 rolls) at all culvert outfalls, and other high-erosion locations in accordance with County standards.

   iii. Maintenance: Inspect all seeded areas weekly. Ensure adequate water is provided until full temporary cover is obtained, and repair any erosion problems, wash outs, etc.

c. Dormant Seeding (October 15 – November 15):
   i. Seeding Rate: Same seed mix as subsection (b) (including temporary cover crop) except the rates for perennial species must applied at 1.5 x WisDOT section 630 rates (apply rates of 3-5 lbs./1000 sq.ft.).
   ii. Erosion Control:

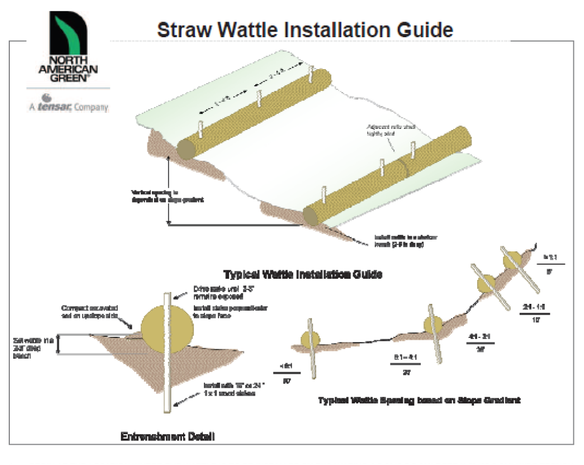
1. Channel Flow (roadside swales, etc.) and Backslopes: Apply Type A soil stabilizer and staked PAL Class 3 Type A erosion matting over the entire channel and all backslopes.
2. Other Areas: Apply Type A Soil Stabilizer from the WisDOT Product Acceptability List to all other disturbed areas that remain exposed.
3. Infalls/Outfalls: Install sod pads (2 rolls) at all culvert outfalls, and other high-erosion locations in accordance with County standards.

   iii. Maintenance: Inspect all seeded areas weekly. Ensure adequate water is provided until full temporary cover is obtained, and repair any erosion problems, wash outs, etc.

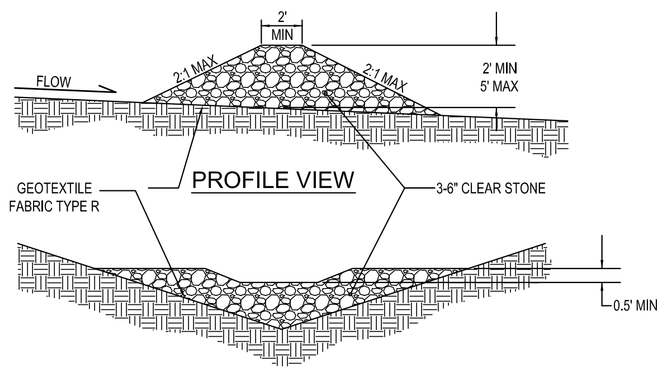
If construction schedules should change significantly, this plan narrative will be updated and resubmitted.

OWNER:
Northwest Asphalt Products, Inc.
CEO: Donald Stark
11710 W. Hampton Ave.
Milwaukee, WI 53225
Phone: 414-466-0644

SCALE: 1" = 50'



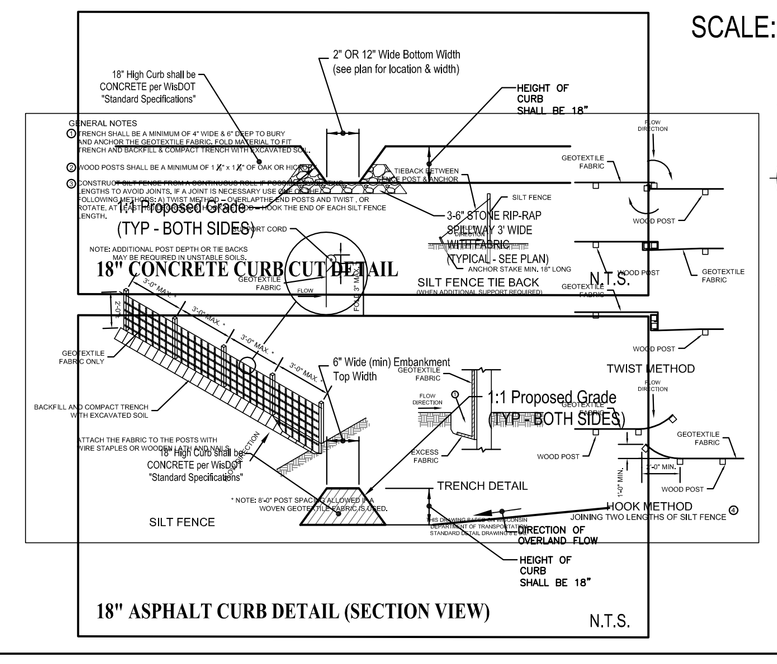

1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2-3" (5-7.5 CM) DEEP X 9" (22.5 CM) WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
3. SECURE THE WATTLE WITH 18-24" (46-61 CM) STAKES EVERY 3-4' (0.9 - 1.2 M) AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2-3" (5-7.5 CM) OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.




SECTION VIEW

## STONE DITCH CHECK DETAIL

NOT TO SCALE




## BORING LEGEND:

- SOIL INVESTIGATION BORING BY CGC, INC. DATED 12-17-2019
- 1 SOIL INVESTIGATION BORING BY CGC, INC. DATED 01-30-2012
- E SOIL INVESTIGATION BORING BY JACK LEITZAU DATED 12-22-2011

THE AS-BUILT GRADES AND UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES, CONTRACTORS AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

NOTE:
EXISTING TOPOGRAPHIC AND BOUNDARY SURVEY PROVIDED BY LANDTECH SURVEYING INC. DATED NOVEMBER, 2011.

| REVISIONS | |
|---|---|
| DATE | BY |
| | |
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ELLENA ENGINEERING CONSULTANTS, LLC
SITE CIVIL ENGINEERING & STORMWATER MANAGEMENT
Ellena Engineering Consultants, LLC • 890 Elm Grove Road - Suite 214 • Elm Grove, WI 53122
Phone: 262-719-6183 • Fax: 866-457-2584 • Email: mellena@eecengcom


STARK PAVEMENT CORPORATION PLANT EXPANSION
Town of Lisbon, Wisconsin

WISCONSIN MARK R. ELLENA E-24090 WALES, WI PROFESSIONAL ENGINEER

# Master Grading & Drainage Plan

with Erosion Control

| | | |
|---|---|---|
| SCALE: 1"=50' | | DATE: 05-06-2020 |
| DESIGNED BY: MRE,PE | | PROJECT NO: |
| APPROVED BY: _____ DATE | | SHEET 1 OF 1 |

EXISTING CONDITIONS SURVEY BY LANDTECH SURVEYING DATED 08-20-2019.

PROPERTY OWNED BY LANNON

12' HIGH LANDSCAPE BERM WITH 3:1 SIDESLOPES (EXTEND TO NORTH LIMITS OF EXISTING PAVED AREA)

CSM 5524 LOT 1

SOIL INVESTIGATION BORING BY CGC, INC. DATED DECEMBER 17, 2019

DRAINAGE BOUNDARY (AREA=4.0 Ac.)

DRAINAGE MAP (SCALE 1"=100')

EXISTING SWALE

LIMITS OF PAVEMENT

SILT FENCE

END CONCRETE CURB

600'

300'

RECYCLED ASPHALT

PROPOSED AGGREGATE & RECYCLED ASPHALT STOCKPILE AREA

100yr WSE=884.50

18" HIGH CONCRETE CURB

2' WIDE CURB CUT @ EL=883.00

12' WIDE CURB CUT @ EL=884.00

700' @ S=1.0% (exist)

407' @ S=0.24%

50'LONG X 20'WIDE - 12" THICK, 3" CLEAR OR WASHED STONE ENTRANCE DRIVE PER WDNR Technical Standard 1057.

EXISTING ASPHALT PLANT

12" DIA STRAW WATTLE (TYP-STAKED)

STONE DITCH CHECK (SEE DETAIL)

3-6" STONE RIP-RAP SPILLWAY 3' WIDE WITH FABRIC (TYPICAL)

BEGIN CONCRETE CURB

CONSTRUCT 10'WIDE GRASS SWALE @ S=0.5% (SWM PRACTICE FOR SEDIMENT REMOVAL)

PLACE WDOT CLASS II TYPE "B" DOUBLE NETTED MEDIUM DUTY EROSION CONTROL MATTING IN SWALE BOTTOM WITH 2' OVERLAP ON SIDESLOPES. ALSO, INSTALL 12"x 6' WIDE STRAW WATTLE (SEE DETAIL - GIS No. EWLOGSTRAW10 OR EQUAL) PLACED AS SHOWN, PER DNR TECHNICAL STANDARDS.

OWNER:
Northwest Asphalt Products, Inc.
CEO: Donald Stark
11710 W. Hampton Ave.
Milwaukee, WI 53225
Phone: 414-466-0644

SCALE: 1" = 50'

BORING LEGEND:

SOIL INVESTIGATION BORING BY CGC, INC. DATED 12-17-2019

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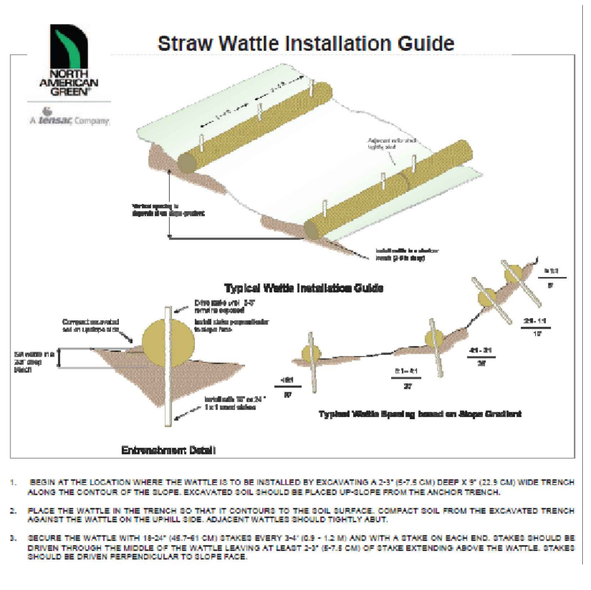
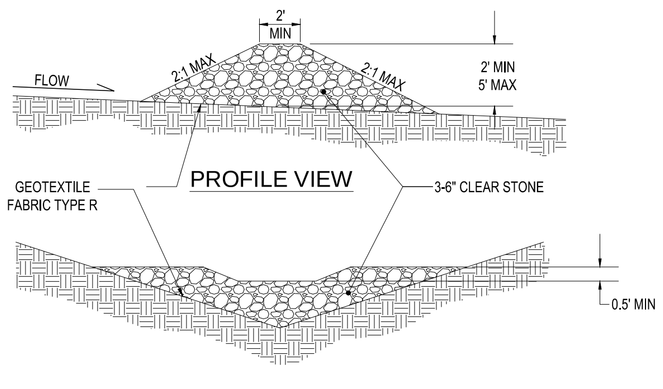
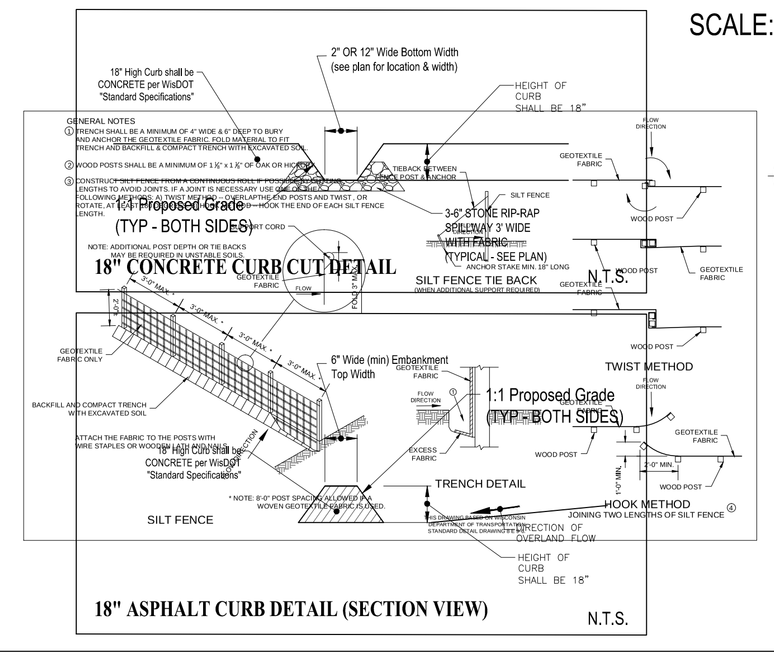



SECTION VIEW

STONE DITCH CHECK DETAIL

NOT TO SCALE




THE AS-BUILT GRADES AND UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES, CONTRACTORS AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

| REVISIONS | |
|---|---|
| DATE | BY |
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WISCONSIN MARK R. ELLENA E-24090 WALES, WI PROFESSIONAL ENGINEER


EEC ELLENA ENGINEERING CONSULTANTS, LLC
SITE CIVIL ENGINEERING & STORMWATER MANAGEMENT
Ellena Engineering Consultants, LLC • 890 Elm Grove Road - Suite 214 • Elm Grove, WI 53122
Phone: 262-719-6183 • Fax: 866-457-2584 • Email: mellena@eeceng.com


STARK PAVEMENT CORPORATION PLANT EXPANSION

Town of Lisbon, Wisconsin

# Master Grading & Drainage Plan

with Erosion Control

SCALE: 1"=50' | DATE: 05-06-2020

DESIGNED BY: MRE,PE | PROJECT NO:

APPROVED BY: _____ DATE

SHEET 1 OF 1

**NOTE:**
EXISTING TOPOGRAPHIC AND BOUNDARY SURVEY PROVIDED BY LANDTECH SURVEYING INC. DATED NOVEMBER, 2011.

# Item 5C – Attachments

vierbicher
planners | engineers | advisors

N27 W23957 Paul Road, Suite 105
Pewaukee, WI 53072
(262) 875-5000 phone
(608) 826-0530 FAX
www.vierbicher.com

June 4, 2020

Chairperson Osterman and Town Plan Commission Members
Town of Lisbon
W23N8676 Woodside Road
Lisbon, WI 53089

Re: Kwik Trip Wexford Heights – Conditional Use Permit Application and Site Plan / Plan of Operation Review

Dear Plan Commission Members:

The above-referenced Conditional Use Permit (CUP) application and associated Site Plan / Plan of Operation (SPPOO) were received in our office for review on behalf of the Town of Lisbon. A concept plan for the development was reviewed in December, 2019. We have reviewed the following application materials:

- Conditional Use Permit (CUP) Application
- Town Site Plan and Plan of Operation Application
- Civil Engineering and Landscape Plans
- Colored Elevations and Architectural Building Plans
- Photometric Site Lighting Plan and Lighting Cut Sheets
- Traffic Impact Study

**Summary**
Kwik Trip, Inc., on behalf of Wexford Heights LP, is proposing to construct a new 7,350 square foot convenience store and gas station with gasoline and diesel canopies at the southwest corner of County Line Road (CTH Q) and State Highway 164. The site is approximately 3.1 acres in size and is zoned B-2 Local Business. The site plan includes:

- A 7,350 square foot, single-story building with a 4,800 square foot gasoline canopy and a 1,200 square foot diesel canopy;
- 31 standard parking stalls (including two (2) ADA accessible stalls with loading zone);
- One (1) loading area for large trucks;
- Outdoor storage of two (2) ice merchandisers for inside overstock, firewood at front of store, and softners at the gas canopy;
- The business will be served by septic system and private well;
- Outdoor seating for eight (8) spots at picnic tables.

Kwik Trip anticipates 28 to 35 full/part-time employees at the site, with operations running seven (7) days/week with pumps available to operate 24 hours. Employees available to work 3am to midnight. Store hours 5am to 11pm. The Plan of Operation notes the desire to sell liquor, beer, wine, and food, but closed container with no open service.

## Application Review

The parcel is subject to compliance with the Town Code Chapters 11, 12, 13, other applicable Chapters.

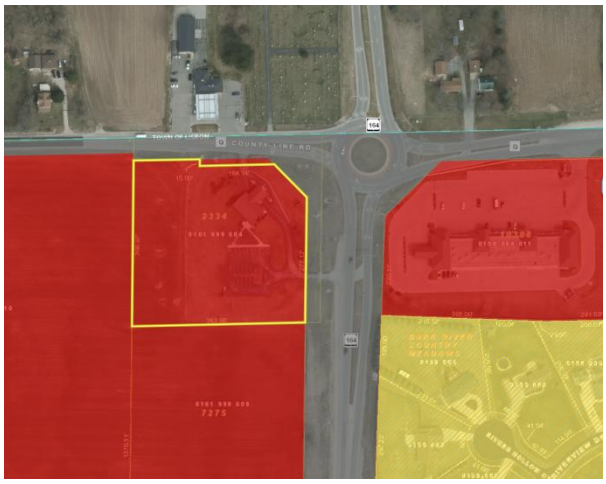
**Background Information**

Property owner: Wexford Heights LP

Location: Southwest corner of County Line Road (CTH Q) and State Highway 164.

Tax Key: LSBT0161999004

Adjacent land uses and zoning:
- North: St. Columbia Cemetery, Gas Station and C-Store (in Town of Richfield, across CTH Q, zoned for B-5 Downtown Business)
- South: Vacant land (zoned B-2 Local Business)
- East: County Line Plaza shopping center (zoned B-2 Local Business)
- West: Vacant land B-2 Local Business and R-1 Suburban Single-Family)




Existing and Proposed Zoning: B-2 Local Business proposed CUP for Gas Station and Convenience Store

Future Land Use: "Commercial and Office Park" (see inset map image)

The use, removal, and/or distribution of the waste soil on the site shall be worked out between the Town and the applicant separate from this application. For the purposes of this review, we have assumed the pile will be managed according to any applicable grading standards and disposal regulations.

**Conditional Use Permit (CUP) Review**

Chapter 11 of the Town Ordinances (Zoning Code) lays out the requirements for application and approval of Conditional Use Permits in the Town. Certain uses of a special nature require the approval of a Conditional Use Permit by the Town. The basis for approval of the CUP is based on the following five standards. Per Sec. 4(d) of the Zoning Code, the Plan Commission may deny the conditional use request if it concludes, based upon the information submitted, that the proposed use and/or development would likely:

1. Materially endanger the public health, general welfare, and safety.
   The proposed fuel station and associated convenience store are configured to safety standards as required by Kwik Trip and applicable safety codes, including approval by transportion planning agencies, and is not anticipated to materially endanger the public health, general welfare, and safety.
2. Be hazardous, harmful, noxious, offensive, or a nuisance by reason of noise, dust, smoke, odor, or other similar factor.
   The proposed fuel station and associated convenience store are configured to safety and mitigation standards as required by Kwik Trip and applicable safety codes and is not anticipated to be hazardous, harmful, noxious, offensive, or a nuisance by reason of noise, dust, smoke, odor, or other similar factor.

3. For any other reason cause a substantially adverse effect on property values.
   The proposed fuel station and associated convenience store are designed to consist of a brick facade with standing seam metal roof. The building and canopy fascia will tie in with franchise colors. The propose store is not anticipated to substantially adverse effect on property values

4. Be inharmonious with the area in which it is to be located.
   The proposed fuel station and associated convenience store are designed to consist of a brick facade with landscaping to shield parking and store operation. The proposed fuel station and store are located the south of an existing fuel and convenience store and west of a shopping center and residential subdivision. The propose store is not anticipated to be inharmonious with the area.

5. Will not be in general conformity with the land use plan, comprehensive plan, transportation plan, environmental plan, park, and recreational plan, or other officially adopted plan.
   The proposed fuel station and associated convenience store are consistent with the comprehensive plan and has a transportion impact study with associated improvements approved by WisDOT and a site access plan approved by Washington County DOT and is in general conformity with officially adopted plans.

**Consistency with Comprehensive Plan**
The proposed use is consistent with the Town Comprehensive Plan, including the Future Land Use Map. The Future Land Use Map designates this area as "Commercial and Office Park" and the proposed use is for a commercial use. The site is located at the intersection of a County Highway and a State Highway and across the street from an existing commercial shopping center. Soil tests shall be done to confirm the soils are buildable.

**Site Plan and Plan of Operation Review Standards**
The Site Plan and Plan of Operation package that we received for review contains most of the items required by ordinance. However, some items are not included at the date of this report. Please see the comments below, Consistency with Zoning, on the additional information needed.

**Consistency with Zoning**
The proposed CUP and SPPOO propose a gas station and associated convenience store. The B-2 Local Business zoning district allows for "Automobile, Gasoline, and Service Station and Convenience Stores associated with gasoline sales" as a Conditional Use. The site plan complies with the use and building requirements of the B-2 Local Business zoning district (currently under review at Waukesha County), including building setbacks and offsets, building height, and maximum floor area ratio. Comments below relate to other details or standards that have been addressed or should be addressed.

*Zoning Code General Provisions*

1. The Town Zoning ordinance requires 221 parking stalls based on 7,350 square feet of retail floor area. The applicant has shown an alternate parking plan for the establishment which is proposed as being adequate for similar establishments which they have constructed and managed. Turning movements have been included with show complete entrance and exit movements throught the site, enter from Hwy. Q and exiting Hwy. 165, and vice versa. <u>The Plan Commission will need to approve the provided parking layout</u>.

   Staff Note: this ordinance standard is archaic and does on separate high-traffic and long-stay retail, such as restaurants, from short-stay users. The Town may want to consider amending this ordinance provision in the future.

2. The site plan provides more than the minimum one (1) loading space that are required by ordinance based on floor area.

3. Stormwater storage and drainage calculation will need to be approved by the Town Engineer.

4. Site plan sheets should indicate location of setback and offsets.

5. Sign approvals are to be handled at a later date with an application for a sign permit.

6. Fuel Canopies, as shown, encompass 4.4% of the total lot size, which exceeds the 3% maximum for accessory structures. The need for additional accessory structure lot coverage is due to industry practice for the proposed fuel service. The size is mitigated by the excess of pervious surface exceeding standard which is provided by the site plan. The excess area requires approved by the Plan Commission. The applicant wishes to exceeds the maximum height of 15' to 22'. The need for additional canopy height is for truck clearance, sidewalls, and grade changes. The excess height will need to be approved by the Plan Commission.

7. At least 15% of the site shall be set aside as open space. The site plan exceeds the standard with 38% pervious surface coverage.

8. A 30' wide green space shall be provided along County Highway Q and State Highway 164 ROW and shall include landscape plantings. The proposed site plan does not meet these standards. However, recent road improvements along Highway Q have been done within the existing ROW and Washington County has given preliminary approval on the access to the site along this arterial, showing no need by the County for more ROW for future for widening. The ROW along State Highway 164 is already at the 100' shown on the Waukesha County Street and Highway width map. Therefore, these green space standards are not needed to accommodate future arterial widening at this site and not needed to be preserved. The site layout will need to be approved by the Plan Commission

9. A 20' wide planted buffer shall be required along all property lines not adjacent to a parking area. For 500' of frontage between driveway, total plantings in buffer should contain 10 shade trees, 30 evergreens, and 100 shrubs on site. The site does not allow for the 20' wide planted buffer shown do not meet this standard. The site configuration does not allow for all the plantings, due to the presence of the stormwater ponds and septic system. Native or bioretention grasses are more appropriate for the site. The plan will be updated to include a total of 10 canopy trees, from 9 shown. Evergreens will remain as shown, 8 total, so as not to block all visibility from the road, for safety reasons, and to not interfere with the septic system. Using grasses as a substitute for some shrubs, there are 141 total total shrubs/grasses. The reduced buffer width and alternative proposed plantings will need to be approved by the Plan Commission.

10. Parking facilities are required to be 30' from the County Highway Q and State Highway 164 ROW. The proposed site plan does not meet these standards. The need to deviate from these parking facility setbacks is due to the site layout accommodating prescribed driveway locations and the configuration need for full access around the store building. The proposed site layout and parking configuration will need to be approved by the Plan Commission.

11. Commercial parking lots shall not be located in the street yard. The proposed site plan does not meet this standard. The need to deviate from this parking placement standard is due to the need for circulation around the store building and access to the pumps. The parking configuration will need to be approved by the Plan Commission.

12. Driveway permits are required by Washington County on Highway Q and WisDOT for Hwy. 164. Permits are issued upon approval of the access configuration, for Washington County, and upon approval of a traffic study, for WisDOT.

    Specifically,the traffic study is reviewed and signed off on by the DOT before TADI issues it formally. The DOT has determined that the driveway on to 164 meet the standards for todays traffic and projected traffic is acceptable based on the proposed use and traffic volumes at this site. This is also evaluating the driveway to Hwy Q and proximity to the roundabout and is deemed acceptable by this study. An email and approval from the Washington County has

been received, stating that they approved this driveway previously for a similar use and they are ok with that same layout for this development as long as the approved geometrics were used. The applicant obtained the design files from the previous development and incorporated them verbatim into the plans. The applicant will be able to finalize a driveway permit once they have approval from the Town. It is typical to not issue permits until it is approved by the Town. A representative from the Consultant TADI that prepared this document and coordinated with the DOT for the study will be available to answer all the technical questions at the Plan Commission meeting.

**Recommendation**
If the Plan Commission would require additional materials they have the ability to table the CUP application and/or the SPPOO application. If the Plan Commission is generally comfortable with the CUP and the SPPOO request, they may conditionally approve it. Recommended conditions may include:

1. The Town of Lisbon retains the right to annually review the business operation for compliance with approved plans.

2. The Fire Chief shall inspect the premises to ensure the site is in compliance with the respective fire codes. Non-objection from the Fire Department and correction of any deficiencies prior to issuance of occupancy permits.

3. The Building Inspector shall inspect the premises to ensure the site is in compliance with the respective building codes. Non-objection from the Building Inspector and correction of any deficiencies prior to issuance of occupancy permits.

4. The Town Engineer review the site plans to ensure the site is in compliance with the respective Town codes. Non-objection from the Town Engineer and correction of any deficiencies prior to issuance of SPPOO approval.

5. Canopy heights are to be minimum 15'5" feet for truck clearance reasons and maximum 22' to account for 4' side wall and grade changes.

6. There shall be no outdoor storage of materials unless otherwise noted on approved site plans.

7. There shall be no trash or recycling stored outside of the building, except within a fully screened on-site dumpster/waste container, which must be shown on the final Site Plan.

8. Show setback and offset lines on plan sheets.

9. Include additional canopy tree. Show snow storage areas on site and landscaping plans.

10. Provide plans for ongoing maintenance of landscaping, including mowing and weed management.

11. Soil tests shall be done, and provided to the Town, to confirm the soils are buildable.

12. The Waukesha County Environmental Health Division may review and approve of the uses on the subject property, prior to the issuance of any permits.

13. An up-to-date Site Plan and Plan of Operation must be on file at all times with the Town of Lisbon.

14. Compliance with Washington County and WisDOT improvements, to include necessary recommendations from a WisDOT approved traffic impact study and other recommendations as

needed. Approved driveway permits shall be provided to the Town.

15. Approval of setbacks along State Highway 164 by WisDOT.

16. Approval from WisDOT, Washington County, and other relevant agencies for grading or work within road ROW. Approved permits shall be provided to the Town.

17. Waukesha County review and approval of stormwater plans.

18. The hours and days of operation shall be seven (7) days/week with pumps available to operate 24 hours. Employees available to work 3am to midnight. Store hours 5am to 11pm..

19. The approval is granted for the express conditions stated herein. Changes or alterations including, but not limited to, a change in use, premises, lands, or ownership of the property in question shall require a new Conditional Use Permit and/or Site Plan/Plan of Operation permit, as applicable, with all the zoning procedures at the time of being followed. Any use not specifically listed as permitted for this B-2 Local Business zoning district, shall be considered to be prohibited, except as otherwise specified herein.

20. The Town reserves the right to review any condition imposed as part of this Conditional Use Permit and Site Plan and Plan of Operation if said use becomes a problem in the area. The Town Plan Commission may modify, change, delete, add, etc. any conditions, through the Site Plan and Plan of Operation process, which they feel may be reasonable in order to allow this use and ensure it does not become detrimental to the surrounding area. Any major change, as determined by the Town Plan Commission may require modification to the CUP and/or SPPOO Permits or termination of the use.

21. County approval of the final Stormwater Management Agreement.

The issues outlined above are meant to act as a guideline to assist you in discussions as to what issues you feel need to be addressed in order for you to review this proposal. We will be in attendance at the June Plan Commission meeting to answer any questions.

Sincerely,

Joshua Langen, AICP
Community Development Planner

Rachel Holloway, AICP
Town Planner

cc: Natasha Girard, Deputy Clerk, Town of Lisbon

M:\Lisbon, Town of\190047 - 2019 Town Planning Services\2019 Tasks\2019.55 - KWIK TRIP 164 and CTH Q\Reviews\2020-06-03 CUP SPPOO Re-submittal Review\2020-06-03 CUP SPPOO Re-submittal Review.docx

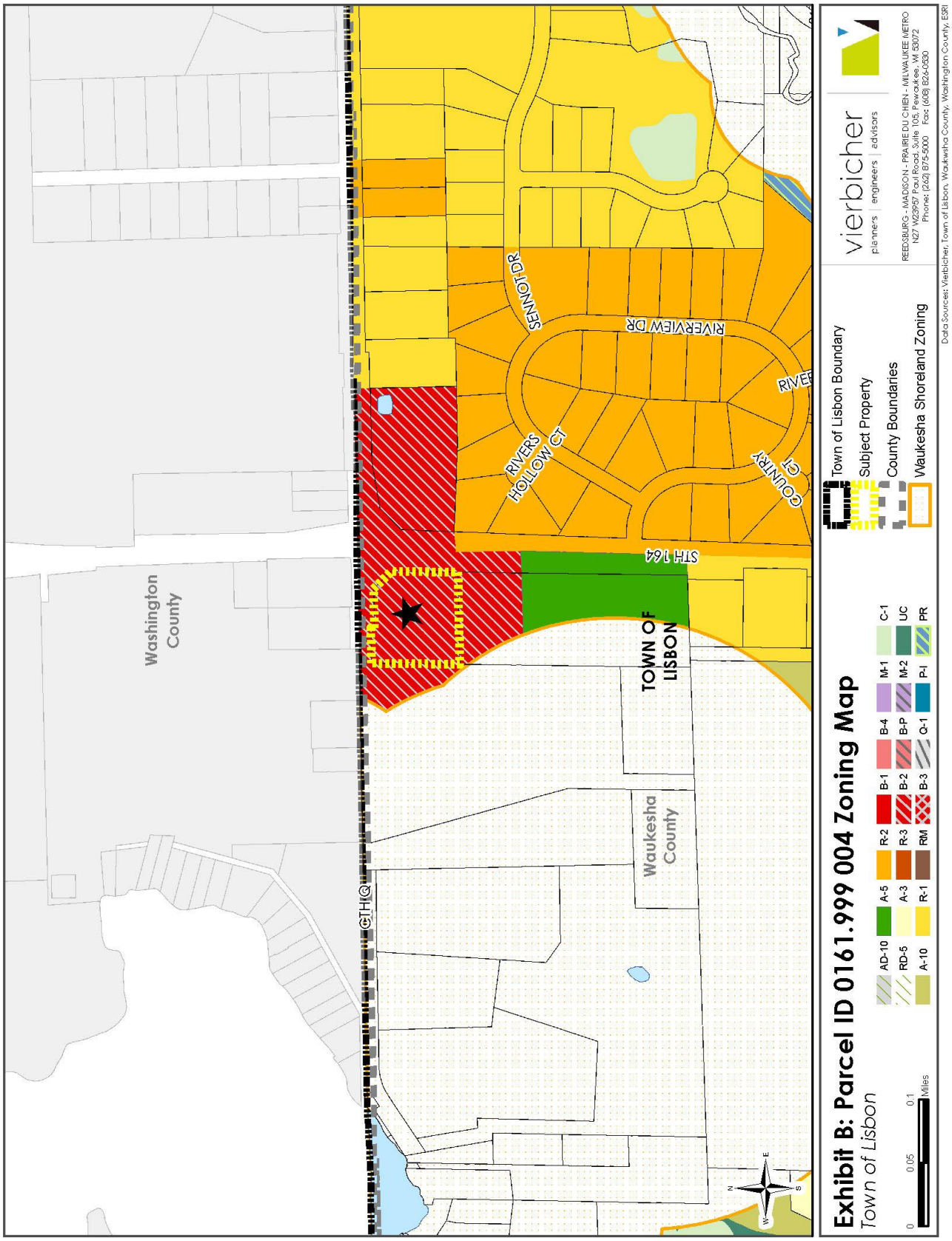
**Exhibit A: Parcel ID 0161.999 004 Site Map**

*Town of Lisbon*

vierbicher
planners | engineers | advisors

REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
N27 W23957 Paul Road, Suite 105, Pewaukee, WI 53072
Phone: (262) 875-5000 Fax: (608) 826-0530

Data Sources: Vierbicher, Town of Lisbon, Waukesha County, Washington County, ESRI


Washington County
CTH Q
Waukesha County
TOWN OF LISBON
STH 164
RIVERS HOLLOW CT
SENNOT DR
RIVERVIEW DR
RIVER
COUNTRY CT
N
W
E
S
Exhibit B: Parcel ID 0161.999 004 Zoning Map
Town of Lisbon
0
0.05
0.1
Miles
AD-10
A-5
R-2
B-1
B-4
M-1
C-1
RD-5
A-3
R-3
B-2
B-P
M-2
UC
A-10
R-1
RM
B-3
Q-1
P-I
PR
Town of Lisbon Boundary
Subject Property
County Boundaries
Waukesha Shoreland Zoning
vierbicher
planners | engineers | advisors
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Phone: (262) 875-5000 Fax: (608) 826-0530
Data Sources: Vierbicher, Town of Lisbon, Waukesha County, Washington County, ESRI

KWIK TRIP INC.

Store Engineering

FAX 608-793-6237

1626 Oak St., P.O. Box 2107
La Crosse, WI 54602

www.kwiktrip.com

Town of Lisbon
Rachel Holloway
W234 N8676 Woodside Rd
Lisbon, WI 53089

February 12th, 2020

**CUP and Site Plan Review Submittals**

Ms. Holloway,

This letter is intended to accompany our submittal for our application to the Town of Lisbon for the requested CUP Application and Site Plan Review Application for our proposed project located at NW260N9579 State Rd 164. We are proposing a new Retail Convenience Store with Fueling and Diesel Canopies at this site.

Kwik Trip, Inc. is proposing the construction of a 7297 S.F. convenience store with an attached dumpster enclosure w/ separate Fueling Canopies. I have submitted this in digital format only per your request. If hard copies are needed please let me know and I will submit them right away. I have verified that the fee is Site Plan Review $500.00, and Erosion Control and CUP $350.00. I included one check for total of $850.00.

The proposed method of operation for this development will be consistent with that for our existing convenience stores within the area. The requested hours of operation will be 24 hours for all uses. The type of products that will be sold will be similar to that of our existing stores: gasoline, in line diesel, E-85, groceries, bakery and dairy, hot and cold food and beverages, tobacco products, beer, wine, liquor, lotto, convenience store merchandise, ice, and propane. The outside merchandising of products is being requested next to the store (ice and propane) and miscellaneous merchandising under the gas canopy. The proposed store is projected to have between 28-35 full and part time employees, with 2-8 on staff at any given time.

The proposed architectural plan will consist of a brick facade with standing seam metal roof. The building and canopy fascia will tie in with franchise colors. The prototype building is larger than previous years building. We have expanded the retail floor area as well as kitchen and mechanical space all on the main level with no basement. The total estimated project costs is $2,000,000.

Kwik Trip would be happy to provide any additional information or answer any questions or concerns you may have with our submission. Please feel free to call me with any questions.

Sincerely,

**Jeff Osgood – Development Manager - Store Engineering - Kwik Trip, Inc.**
608-793-5547 - josgood@kwiktrip.com 1626 Oak St | P.O. Box 2107 | La Crosse, WI 54602

OUR MISSION

*To serve our customers and community more effectively than anyone else by treating our customers, co-workers and suppliers as we, personally, would like to be treated, and to make a difference in someone's life.*

**TOWN OF LISBON**
W234 N8676 Woodside Rd.
Lisbon, WI 53089

## PROCEDURE FOR SITE PLAN, PLAN OF OPERATION &/OR SIGNAGE

1. **PROPERTY OWNER** (or representative) should contact the Town Clerk to make a Planner's Appointment. The Planner, Administrator and Clerk will review the proposed project and give direction on what is needed to complete the application process, as well as deadline dates to meet. Forms will be given at this meeting, but they can also be found online at www.townoflisbonwi.com\169\Permits-Forms-Applications

2. **PROPERTY OWNER** (or representative) completes the application form(s) and provides the Town Clerk with one completed packet with signatures. Hard copy or PDF please; PDF preferred. Also, please bring a check for the application fee made payable to the Town of Lisbon.

3. **PROPERTY OWNER** (or representative) attends the Plan Commission meeting. If you or your representative are not present, the Plan Commission may postpone your item to the following month's agenda.

4. **PLAN COMMISSION** reviews application and facts presented at Plan Commission meeting and takes action.

W234 N8676 WOODSIDE RD.
LISBON, WI 53089-1545
TEL: (262) 246-6100

# Plan Commission Application

## Application Type and Fee (check all that apply)

*Application fees are non-refundable. Fees cover costs associated with public notification, postage, copies, and document recording, however applicants agree to pay all additional expenses that the Town may incur by virtue of contracted plan review services including but not limited to: legal, surveying and engineering costs and studies.

☒ **Commercial**
**All commercial projects including any change of occupancy, change of use, or construction/alteration must be submitted to the Lisbon Fire Department as well for review and inspections.*

☐ **Residential** – Home-Based Bus. / In-Law Unit

- ☐ Accessory Building Waiver: $100 (Size/Location/Architectural Review)
- ☐ After the Fact Application: Double Fees
- ☐ Certified Survey Map: $200 + $10 Per lot
  - ☐ Dedication Fee (Per lot): $2,658 (Paid upon receipt of signed CSM)
- ☒ Conditional Use Permit: $350
  - ☒ Amendment / Original
  - ☐ Major Grading Permit
- ☐ Deed Restriction: $100
- ☐ Developer's Agreement: $250
- ☐ Groundwater Separation Waiver: $100
- ☐ Land Use Amendment: $300
- ☐ Conceptual: $100
- ☐ Plat Review:
  - ☐ Final - $200
  - ☐ Preliminary - $500
- ☐ Re-Submittal: $200
- ☐ Rezone: $350
- ☐ Sign Permit Application: $30 + Sign Fees (See Adopted Fee Schedule)
- ☒ Site Plan/Plan of Operation:
  - ☐ Amendment: $250
  - ☒ Original: $500
  - ☐ Temporary: $125
- ☐ Special Meeting: $600
- ☐ Waivers/Modification from Land Division and Development Ordinance: $200

## Property Information

W260N9579 SUTTON RD 164 — Property Address
LISBON — City
53089 — Zip

LSBT0161999004 — Tax Key/Parcel ID #
3.1 ACRES — Lot Size
B-2 — Current Zoning

## Property Owner

WEXFORD HEIGHTS LP – Scott Beale — Name / Company Name
Signature
W178N9912 RIVERCREST DR. SUITE 101 — Address
GERMANTOWN — City
WI — State
53022 — Zip
scott@jbjcompanies.com — E-mail Address
Phone 262-255-1800

## Applicant

KWIK TRIP, INC – JEFF OSGOOD — Name
KWIK TRIP, INC — Company
1626 OAK ST — Address
LA CROSSE — City
WI — State
54601 — Zip
608-793-5547 — Phone
josgood@kwiktrip.com — E-Mail Address

**A complete application along with the appropriate fees shall be submitted by the deadline stated on the meeting schedule. In order for an application to be considered complete, the application shall include the required number of site plans/maps, and all of the necessary supporting information as indicated on the Project Review Checklist. If applying for a conditional use or development agreement, a document showing vested interest in the property is required.** ***The Town of Lisbon reserves the right not to accept an application that is deemed incomplete.***

Lisbon

**SITE INSPECTION NOTIFICATION:**

The Town of Lisbon Town Plan Commission and Town Board request permission of the property owner or responsible party to enter the subject property, between the hours of 9am to 5pm or upon prior 24 hour notice, for a site inspection prior to any scheduled Plan Commission or Board meeting. The site inspection will allow the Town Plan Commission and Town Board to make more informed decisions with respect to the requested application.

I, the undersigned, have been advised that my signature grants permission to members of the Town Plan Commission and Town Board to conduct site inspections of the subject property. Failure to authorize said site inspection will not be held against the property owner or responsible party in the decision of the requested application; however, the site inspection does allow the Town Plan Commission and Town Board to make more informed decisions.

**RESPONSIBLE PARTY, NAME, MAILING ADDRESS, SIGNATURE & DATE:**

NAME JEFF OSGOOD - KWIK TRIP, INC

ADDRESS 1626 OAK ST LACROSSE, WI 54601

DATE 02/12/2020 SIGNATURE [signature]

PHONE 608-793-5547 EMAIL josgood@kwiktrip.com

**PROPERTY OWNER NAME, MAILING ADDRESS, SIGNATURE & DATE:**

NAME WEXFORD HEIGHTS LP - SCOTT BENCE

ADDRESS W178 N9912 RIVERCREST DR SUITE 101 GERMANTOWN, WI 53022

DATE 02/12/2020 SIGNATURE [signature]

PHONE 262-255-1800 EMAIL scott@jbjcompanies.com

COMMENTS:

Town Official Accepting Form

Date

**PROFESSIONAL SERVICE REIMBURSEMENT FEES:**

Pursuant to the Town of Lisbon Municipal Code Section 1.14, the Town of Lisbon Town Board has made a determination that whenever the services of the Town Planner, Town Engineer, Town Attorney, or any other of the Town's professional staff results in a charge to the Town for that professional's time and services, and such service is not a service supplied to the Town as a whole, the Town Treasurer shall charge one hundred and five percent of the cost of that service for the fees incurred by the Town to the property owner incurring those fees even if the request is not approved. The additional five percent cost above the cost of the service is levied to cover Town administrative charges. Also, pursuant to the Town of Lisbon Municipal Code Section 1.14, certain other fees, costs, and charges are the responsibility of the property owner even if the request is not approved. Imposition of any fees, costs, or charges, however, is subject to the property owner's appeal rights as described in the Town of Lisbon Municipal Code Section 1.14

The undersigned, have been advised that, pursuant to the Town of Lisbon Municipal Code Section 1.14, if the Town Planner, Town Engineer, Town Attorney, or any other Town professional provides services to the Town because of my/our activities, whether at my/our request or at the request of the Town, I/we shall be responsible for the fees incurred by the Town. In addition, I/we have been advised that pursuant to the Town of Lisbon Municipal Code Section 1.14, certain other fees, costs, and charges are my/our responsibility even if my/our request is not approved. By signing this document, I am not waiving my/our appeal rights that are described in the Town of Lisbon Municipal Code Section 1.14.

Statements will be sent monthly so you are kept up to date regarding your current charges.

**RESPONSIBLE PARTY, NAME, MAILING ADDRESS, SIGNATURE & DATE:**

NAME JEFF OSGOOD - KWIK TRIP, INC

ADDRESS 1626 OAK ST LA CROSSE, WI 54602

DATE 02/12/2020 SIGNATURE [signature]

PHONE 608-793-5547 EMAIL josgood@kwiktrip.com

**PROPERTY OWNER NAME, MAILING ADDRESS, SIGNATURE & DATE:**

NAME WEXFORD HEIGHTS LP - Scott Bence

ADDRESS W178 N9912 RIVERCREST DR SUITE 101 GERMANTOWN, WI 53022

DATE 02/12/2020 SIGNATURE [signature]

PHONE 262-255-1800 EMAIL scott@jbjcompanies.com

**PROJECT NAME** KWIK TRIP 1108

W234 N8676 WOODSIDE RD.
LISBON, WI 53089-1545
TEL: (262) 246-6100

# Project Review Checklist

**Prior to the Plan Commission submittal deadline the property owner or applicant presents a site plan prepared with the information below to the Deputy Clerk at the Town Hall. The submittal material is reviewed and if appropriate, discussed at the next regularly scheduled Plan Commission meeting.**

*The information below is a required minimum and the other materials may be requested of the applicant during the review process.*

1) A statement describing the general character of the intended development and including the property address, tax key number and correct legal description. General items to include in the statement are: hours of operation, number of employees, traffic patterns, parking requirements, trash removal, etc.

2) An accurate map (site plan) of the project area. The site plan should be professionally prepared by a licensed architect, surveyor and/or engineer, with accurate dimensions indicating the property size, its relationship to surrounding properties, existing topography, key natural features and show the location of all existing and proposed:

   A. Structures, showing all entrances
   B. Driveways & street access
   C. Parking areas
   D. Walkways
   E. Existing landscaping
   F. Abutting public and private streets
   G. Public easements
   H. Surrounding land uses and zoning
   I. Retaining walls
   J. Decorative accessories
   K. Dumpster location and screening
   L. Location, color, message, dimensions and materials of all signs
   M. Location, size and character of dedicated or private open space
   N. Location of sanitary sewer, storm sewer, water mains and services and stormwater detention facilities
   O. Floor plan of building or addition

3) Stormwater management plan.

4) Grading plan showing existing and finished grades to Town datum.

5) Professionally prepared landscape plan.

6) Lighting plan; photometric plan, type of fixtures, wattage and location and height of lighting structures.

7) Topographic data or pertinent grade elevations, if necessary, for proper remodeling of existing buildings showing finished exterior treatment.

8) Colored elevations of proposed buildings, structures and fencing, or of proposed remodeling of existing buildings, showing finished exterior treatment and a listing of building materials.

9) Names, address, telephone number, fax number and email address of the owner(s) and/or agent to be contacted with regard to the application.

10) Proof of ownership or agent status.

W234N8676 WOODSIDE RD. • LISBON, WI 53089-1545 • TEL: (262) 246-6100 • FAX: (262) 820-2023
E-mail: townhall@townoflisbonwi.com • Website: www.townoflisbonwi.com

# SITE PLAN AND PLAN OF OPERATION

Please fill out the entire application all questions need a response. If something does not apply please put N/A. Incomplete applications will not be processed or put on the agenda. The completion of this application form must be accompanied by one copy of an up to date and detailed Site Plan drawn to scale and including, but shall not be limited to, all existing buildings, signage, lighting, landscaping, parking, loading, storage, dumpsters, septic and well, etc; an interior layout (plans) of all buildings and the existing and proposed uses of the interior spaces (i.e., office, retail, restaurant, etc); and any other supporting materials. The above shall be submitted to the Town Hall, and upon review of the information, additional items may be required. The plans shall be drawn to scale and shall be no larger than 11" x 17", and shall also be emailed as a PDF. Future revisions to the approved Site Plan/Plan of Operation will require new approvals.

☒ **New business in existing building or on existing site** ☒ **New Owner** ☐ **Temporary Use**

☐ **Change in Operations (summarize below what is changing; days/hours, etc)**

☒ **Change in Use (summarize below prior and new use below)**

CURRENTLY A CLOSED BANK / WE ARE PROPOSING A RETAIL CONVENIENCE STORE

**BUSINESS / PROPERTY OWNER & PROPERTY INFORMATION**

**Tax Key Number** LSBT 016/999 004 **Acres** 3.1 **Zoning** B-2

**Business Name & Contact Person:** KWIK TRIP, INC - JEFF OSGOOD

**Full Address (include City & Zip):** 1626 OAK ST LA CROSSE, WI 54602

**Phone Number & Email:** 608-793-5547 / josgood@kwiktrip.com

**Signature & Date:** Jeffrey W. Osgood 02/12/2020

*****

**Property Owner Name:** WGX FIRE HEIGHTS LP - Scott Bence

**Full Address (include City & Zip):** W178N 9912 RIVERCREST DR SUITE 101 GERMANTOWN, WI 53022

**Phone Number & Email:** 262-255-1800 Scott@jbjcompanies.com

**Signature & Date:** 02/12/2020

1. **Is this business replacing another business?** ☒ **Yes** ☐ **No**

   a. **If yes, what is the prior business' name:** CLOSED BANK

2. **Is this an expansion of an existing Town approved/based operation?** ☐ **Yes** ☒ **No**

   a. **If yes, please explain:** _____

**HOURS OF OPERATION & OPERATING SPECIFICS**

3. **Describe in detail below the specific type of business operation (Retail, Restaurant, Manufacturing, Office, etc.), including temporary, accessory, and outdoor uses (storage, etc). Provide a separate list of all items sold or produced on the property. If items are produced, please provide a separate explanation of the production process.**

   SEE ATTACHED COVER LETTER

4. **Days & Times of Operation:**

   a. **Days & Times:** 24/7

5. **Employees (if self-employed please count yourself)**

   a. **Full-Time** _____ } 28-35 FULL/PART-TIME

   b. **Part-Time** _____

**FOOD / BEVERAGE / LIQUOR**

6. **Is there any food & beverage / liquor service?** ☒ **Yes** ☐ **No**

   a. **If yes, please explain:** WE DO REQUEST TO SELL LIQUOR, BEER, + WINE + FOOD BUT CLOSED BAND NO OPEN SERVICE

7. **Table Seating Capacity**

   a. **Outside:** 8 SPOTS @ PICNIC TABLES

   b. **Inside:** 8 SPOTS @ RAISED COUNTER

   c. **Bar:** N/A

8. **Food / Soda Vending Machines** ☐ **Yes** ☒ **No**

   a. **If yes, quantity of each:** _____

**OUTDOOR USES**

9. **Is there any outdoor storage?** ☒ **Yes** ☐ **No**

   a. **If yes, please explain:** 2 - ICE MERCHANDISERS FOR INTIDAL OVERSTOCK / FIREWOOD @ FRONT OF STORE / SOFTENER SALT @ GAS CANOPY

10. **Will there be any outdoor events?** ☐ **Yes** ☒ **No**

   a. **If yes, please describe the types of events, parking accommodations, sanitary facilities and delineate the locations of the events on the Site Plan submitted. Attach a separate sheet if necessary.**

_____

_____

_____

_____

11. **Will there be any customer dockage?** ☐ **Yes** ☒ **No**

   a. **If yes, please indicate on the Site Plan length and number of piers.**

12. **Parking Lot**

   a. **Dimensions** SEE PLAN

   b. **Total number of spaces** 33 W/ ADA / 20 STALLS @ GAS CANOPY

   c. **Number of spaces allotted for employees** 8 MAX

## MUSIC / ENTERTAINMENT

**13. Are any problems such as odor, smoke or noise resulting from this operation?** ☐ Yes ☒ No

a. **If yes, describe what types (live, amplified, recorded, jukebox, etc), indoors and/or outdoors, and the days and hours music will be provided? Attach a separate sheet if necessary.**

_____

_____

_____

_____

**14. Game Machines** ☐ Yes ☒ No

a. **Quantity:** _____

b. **Location:** _____

## BUILDINGS

**15. Building A**

a. **Dimensions & Levels:** 97'-4" X 80'-4" / 1-LEVEL

b. **Use:** RETAIL CONVENIENCE STORE

**16. Building B**

a. **Dimensions & Levels:** 40' X 120' / 1-LEVEL

b. **Use:** GAS CANOPY

**17. Building C**

a. **Dimensions & Levels:** 24' X 50' / 1-LEVEL

b. **Use:** DIESEL CANOPY

## LIGHTING (Submit Cut-Sheets)

**18. Outdoor Lighting**

a. **Type(s):** SEE PHOTOMETRIC PLAN

b. **Locations(s):** " " "

**SIGNAGE (Also submit the Town's Signage Application & appropriate fees)**

**19. Describe below the type of signage that exists and what signage is proposed on the site (attached, free standing, ground, mobile, projecting, window, electronic message, banners, flags, sandwich boards, etc.) and if the signs are illuminated, single/double faced, along with the number, size, and height of all signs.**

SEE SIGNAGE PLAN

**CHEMICALS/HAZARDOUS MATERIALS**

**20. Are there any Chemicals, Hazardous Waste of Solvents stored on the site?** ☐ Yes ☒ No

**a. If yes, please list those items and how they are disposed of or attach a separate sheet if necessary.**

**21. Does this Operation involve the Storage/Sale of gasoline or any other Petroleum Products?** ☒ Yes ☐ No

**a. If yes, please list those items and how they are disposed of or attach a separate sheet if necessary.**

FUEL IS STORED UNDERGROUND IN REGULATED DOUBLE WALL TANKS AND DISPENSED IN REGULATED DISPENSERS TO CUSTOMERS

**STORM WATER RETENTION, FLOW OF SURFACE WATER, AND AMOUNT OF IMPERVIOUS SURFACES**

**22. Are there surface water drainage facilities?** ☒ Yes ☐ No

**a. If yes, please explain:** SEE STORMWATER MANAGEMENT PLAN THAT WAS SUBMITTED TO THE COUNTY FOR REVIEW

## REFUSE DISPOSAL

**23. Are there dumpsters/waste containers on the site?** ☒ Yes ☐ No

a. **If yes, show on the Site Plan submitted the location of dumpsters and any screening.**

## PERMIT APPROVAL / ISSUANCE DATES

**24. Is Highway Access Permit Needed?** ☒ Yes ☐ No

a. **Date Issued:** WORKING W/ BOTH COUNTY + DOT FOR ACCESS

**25. DNR Well Approval (For New Constructions Only)**

a. **Date Approved:** WE WILL BE SUBMITTING TO DNR FOR PERMIT

**26. Septic System Approval (For New Constructions Only)**

a. **Date Approved:** WE WILL BE SUBMITTING FOR PERMIT

**27. Fire Department Inspection** ☐ Yes ☐ No

a. **Date Inspected:** _____

**28. Did the Wisconsin Department of Safety & Professional Services approve building plans?** ☐ Yes ☒ No

a. **Date Approved:** ONCE APPROVED WE WILL PREPARE + SUBMIT FULL PLANS TO DSPS

**29. Is security fencing necessary?** ☐ Yes ☐ No

## HORSE BOARDING

**30. Does this Operation involve the Boarding of Horses?** ☐ Yes ☒ No

a. **Maximum number of horses boarded:** _____

b. **Maximum number of horses owned:** _____

**31. Has a Conservation Plan been prepared by the Land Conservation Committee?** ☐ Yes ☒ No

a. **Date Prepared:** _____

---

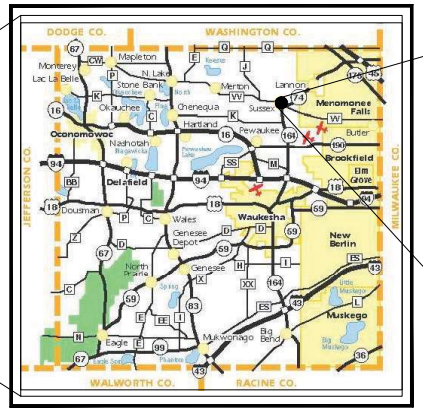
Town Approval Date(s): _____

County Approval Date(s): _____

# KWIK TRIP CONVENIENCE STORE # 1108

## SECTION 5, TOWNSHIP 8N, RANGE 19E

REGIONAL




WAUKESHA COUNTY

SITE LOCATION MAP

TOWN OF LISBON,
WAUKESHA COUNTY, WISCONSIN

| SHEET # | SHEET TITLE |
|---|---|
| T 1.0 | TITLE SHEET |
| DM 1.0 | EXISTING SITE & DEMOLITION PLAN |
| SP 1.0 | SITE TURNING MOVEMENT |
| SP 1.1 | SITE PLAN - LAYOUT |
| SP 1.2 | SITE PLAN - KEYNOTE |
| SP 2.0 | SITE GRADING |
| SP 2.1 | GRADING PLAN - SPOT DETAIL |
| SP 2.2 | GRADING PLAN - SPOT DETAIL |
| SP 2.3 | ACCESSIBLE PLAN |
| SP 3.0 | STORM SEWER PLAN |
| SP 3.1 | STORM WATER BASIN PLAN |
| SP 4.0 | UTILITY PLAN |
| SP 5.0 - 5.1 | MISC. DETAILS |
| SWP 1.0 | EROSION CONTROL PLAN |
| SWP 1.1 | EROSION CONTROL NOTES |
| SWP 1.2 -1.3 | EROSION CONTROL DETAILS |
| L 1.0 - 1.1 | LANDSCAPING NOTES |
| L 2.0 - 2.1 | MULCH, SEEDING, AND TURF PLAN |
| L 2.2 | PLANTING PLAN |
| L 3.0 | LANDSCAPE DETAILS |
| E1 | LIGHTING PLAN |

BENCHMARKS

BENCHMARK # 1
CHISELED SQUARE IN TOP OF NW CORNER OF CONCRETE GAS VAULT
ELEV. = 992.57

CAUTION:

CERTAIN UNDERGROUND UTILITIES HAVE BEEN LOCATED ON THE PLANS. THESE LOCATIONS SHALL NOT BE TAKEN AS CONCLUSIVE. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITES, WHETHER SHOWN ON THE DRAWING OR NOT, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. FOR EXACT LOCATION CONTACT DIGGERS HOTLINE 1-800-242-8511

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

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

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

KWIK TRIP

KWIK STAR


KWIK TRIP, Inc.
P.O. BOX 2107
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LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444


TITLE SHEET

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | T 1.0 |

# ALTA/NSPS LAND TITLE SURVEY

CHAPUT LAND SURVEYS

## TABLE "A" ITEMS

6(b). The zoning information is provided per the Conditional Use Permit, Doc. No. 4231513 dated September 14, 2016.

11. Utility lines are shown from visible surface evidence, municipal plans and from plans and markings provided by Diggers Hotline, the One-call Utility Marking System (Wisconsin Statute 182.0175), Ticket Number 20193207453, 20193212209 & 20193207378.

17. There are no changes in street right of way lines either completed or proposed, and available from the controlling jurisdiction. Observable evidence of recent street or sidewalk construction or repairs if any, is shown.

18. There is no evidence on site of delineated wetlands areas.

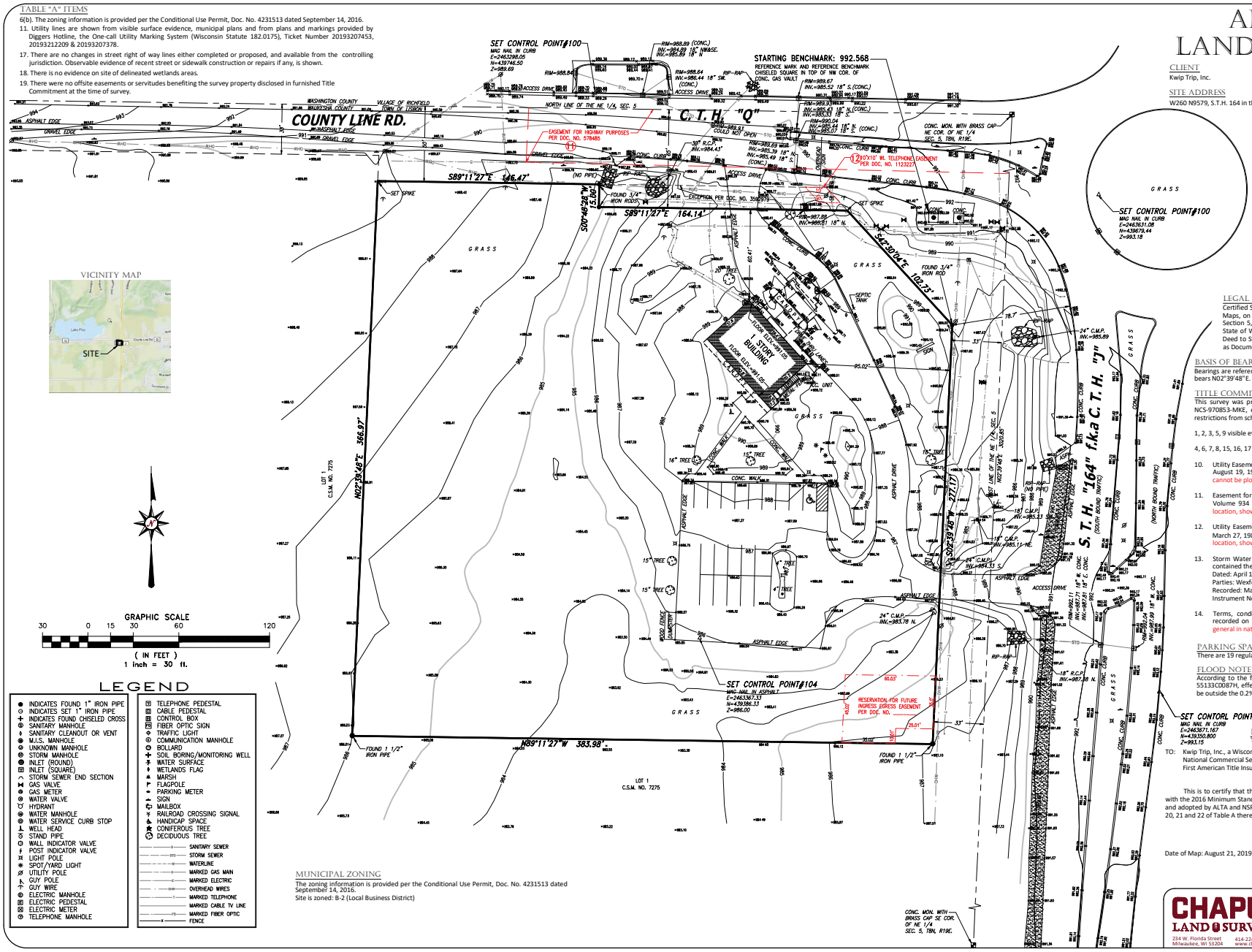
19. There were no offsite easements or servitudes benefiting the survey property disclosed in furnished Title Commitment at the time of survey.

## CLIENT

Kwip Trip, Inc.

## SITE ADDRESS

W260 N9579, S.T.H. 164 in the Town of Lisbon, Waukesha County, Wisconsin.




## VICINITY MAP




## LEGAL DESCRIPTION

Certified Survey Map No. 2334, recorded June 25, 1975, in Volume 17 of Certified Survey Maps, on pages 6 and 7, as Document No. 915432, being part of the Northeast 1/4 of Section 5, Town 8 North, Range 19 East, in the Town of Lisbon, County of Waukesha, State of Wisconsin. EXCEPTING THEREFROM that portion of land conveyed in Warranty Deed to State of Wisconsin, Department of Transportation recorded on August 13, 2008 as Document No. 3592979.

## BASIS OF BEARINGS

Bearings are referenced to the Certified Survey Map No. 2334 in which East line of the NE 1 /4, bears N02°39'48"E.

## TITLE COMMITMENT

This survey was prepared based on First American Title Insurance Company Commitment No. NCS-970853-MKE, effective date of July 16, 2019 which lists the following easements and/or restrictions from schedule B-II:

1, 2, 3, 5, 9 visible evidence shown, if any.

4, 6, 7, 8, 15, 16, 17 & 18 not survey related.

10. Utility Easement to Wisconsin Gas and Electric Company, dated June 12, 1926, recorded/filed August 19, 1926 as Document No. 145420. Affects property by location, general in nature, cannot be plotted.

11. Easement for highway purposes contained in instrument recorded on December 10, 1962 in Volume 934 of Deeds, Page 248 as Document No. 578485. Does not affect property by location, shown.

12. Utility Easement to Wisconsin Telephone Company, dated March 10, 1980, recorded/filed March 27, 1980 in Reel 402, Image 33 as Document No. 1123227. Does not affect property by location, shown.

13. Storm Water Management Practice Agreement upon the terms, conditions and provisions contained therein:
Dated: April 11, 2016
Parties: Wexford Heights, L.P. a Wisconsin limited liability company and Town of Lisbon
Recorded: May 04, 2016
Instrument No.: 4204565. Affects property by location, blanket type.

14. Terms, conditions, restrictions and provisions as contained in Conditional Use Permit recorded on September 14, 2016 as Document No. 4231513. Affects property by location, general in nature.

## PARKING SPACES

There are 19 regular parking spaces and 1 handicap space marked on this site.

## FLOOD NOTE

According to the flood insurance rate map of the County of Milwaukee, Community Panel No. 55133C0087H, effective date of November 5, 2014, this site falls in Zone X (Areas determined to be outside the 0.2% annual chance floodplain).

## LAND AREA

The Land Area of the subject property is 134,554 square feet or 3.0889 acres.

TO: Kwip Trip, Inc., a Wisconsin Corporation
National Commercial Services
First American Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6(a), 6(b), 7(a), 7(c), 8, 9, 11, 14, 17, 18, 19, 20, 21 and 22 of Table A thereof. The field work was completed on August 21, 2019.

Date of Map: August 21, 2019.

DONALD C. CHAPUT S-1316 MILWAUKEE WI LAND SURVEYOR

Donald C. Chaput
Professional Land Surveyor
Registration Number S-1316

## MUNICIPAL ZONING

The zoning information is provided per the Conditional Use Permit, Doc. No. 4231513 dated September 14, 2016.
Site is zoned: B-2 (Local Business District)

## LEGEND

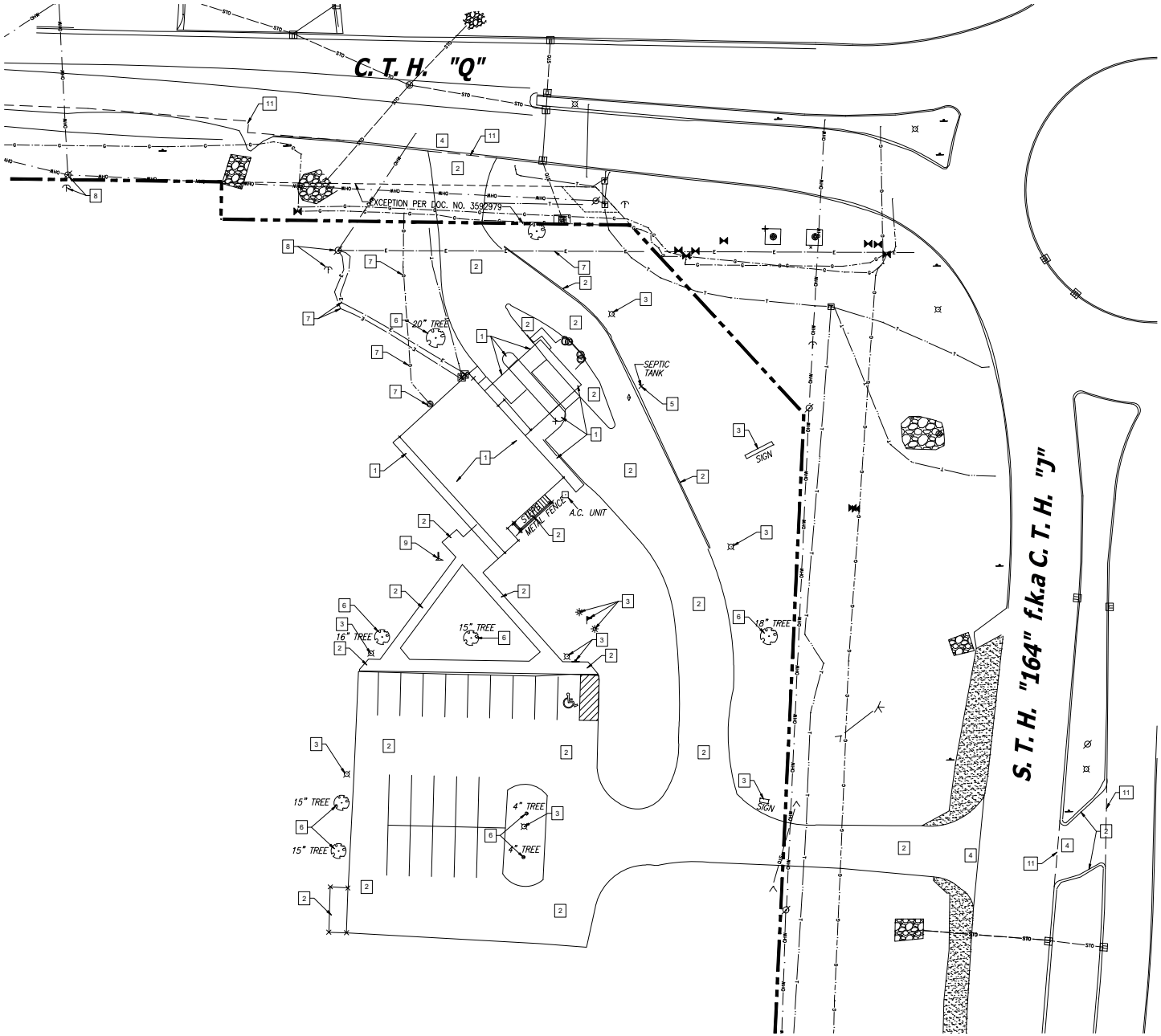
- INDICATES FOUND 1" IRON PIPE
- INDICATES SET 1" IRON PIPE
- INDICATES FOUND CHISELED CROSS
- SANITARY MANHOLE
- SANITARY CLEANOUT OR VENT
- M.I.S. MANHOLE
- UNKNOWN MANHOLE
- STORM MANHOLE
- INLET (ROUND)
- INLET (SQUARE)
- STORM SEWER END SECTION
- GAS VALVE
- GAS METER
- WATER VALVE
- HYDRANT
- WATER MANHOLE
- WATER SERVICE CURB STOP
- WELL HEAD
- STAND PIPE
- WALL INDICATOR VALVE
- POST INDICATOR VALVE
- LIGHT POLE
- SPOT/YARD LIGHT
- UTILITY POLE
- GUY POLE
- GUY WIRE
- ELECTRIC MANHOLE
- ELECTRIC PEDESTAL
- ELECTRIC METER
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- CABLE PEDESTAL
- CONTROL BOX
- FIBER OPTIC SIGN
- TRAFFIC LIGHT
- COMMUNICATION MANHOLE
- BOLLARD
- SOIL BORING/MONITORING WELL
- WATER SURFACE
- WETLANDS FLAG
- MARSH
- FLAGPOLE
- PARKING METER
- SIGN
- MAILBOX
- RAILROAD CROSSING SIGNAL
- HANDICAP SPACE
- CONIFEROUS TREE
- DECIDUOUS TREE
- SANITARY SEWER
- STORM SEWER
- WATERLINE
- MARKED GAS MAIN
- MARKED ELECTRIC
- OVERHEAD WIRES
- MARKED TELEPHONE
- MARKED CABLE TV LINE
- MARKED FIBER OPTIC
- FENCE


CHAPUT LAND SURVEYS
234 W. Florida Street
Milwaukee, WI 53204
414-224-8068
www.chaputlandsurveys.com


| Date | Revision description | |
|---|---|---|
| Aug 28, 2019 | Certification & Zoning | far |


This document is an instrument of professional service, and may be protected by the surveyors work product doctrine or surveyor / client privilege. The information shown hereon is intended solely for the use of the client and client directed third parties.


Drawing No. 20190828ALT1761.02-far




PLAN NOTES:

CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS PRIOR TO COMMENCING WORK ON SITE

CONTRACTOR SHALL CALL FOR UTILITY LOCATIONS PRIOR TO COMMENCING WORK ON SITE

EXISTING SITE CONDITIONS BASED ON SURVEY BY:
CHAPUT LAND SURVEYS
SURVEYOR: DONALD C. CHAPUT
PHONE: 414-224-8068
DATED: AUGUST 21, 2019

CONTRACTOR SHALL PROVIDE ALL NECESSARY EROSION CONTROL MEASURES PER TOWN, CITY, COUNTY AND STATE SPECIFICATIONS. ALL MEASURES ARE TO BE IN PLACE PRIOR TO COMMENCING WORK ON SITE. ALL MEASURES SHALL BE MAINTAINED UNTIL SITE SOILS ARE STABILIZED. SEE SHEET SWP1- SWP4 FOR MORE INFORMATION

CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS FOR DEMOLITION AND CONSTRUCTION PRIOR TO COMMENCING ANY WORK ON SITE.

ALL DAMAGED ASPHALT ON MADISON STREET (C.T.H. D) SHALL BE PATCHED TO THE CENTERLINE OF THE ROAD WITH A MINIMUM 10' WIDTH.

ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO DEMOLITION ACTIVITIES. SEE SHEET SWP 1.0 FOR LOCATIONS OF EROSION CONTROL MEASURES.

SITE PLAN KEYNOTES

1. EXISTING FOUNDATIONS, CANOPY, BUILDING, FOOTINGS, ASSOCIATED SIDEWALKS, AND PAVEMENT TO BE REMOVED. DISCONNECT EXISTING UTILITY SERVICE LINES PER TOWN, CITY, COUNTY AND STATE SPECIFICATIONS
2. EXISTING GRAVEL, CONCRETE AND BITUMINOUS TO BE REMOVED.
3. EXISTING SITE AMENITIES TO BE REMOVED: BOLLARDS, FLAG POLE, LIGHTING AND SIGNS TO BE REMOVED IN THEIR ENTIRETY INCLUDING CONCRETE BASES.
4. ENGINEER IS IN CHARGE OF OBTAINING HIGHWAY RIGHT-OF-WAY PERMIT. NO WORK SHALL START IN HIGHWAY RIGHT-OF-WAY BEFORE PERMIT IS ISSUED
5. EXISTING SEPTIC SYSTEM TO BE REMOVED PER LOCAL CODES.
6. EXISTING VEGETATION TO INCLUDE TREES AND SHRUBS TO BE REMOVED
7. EXISTING UNDER GROUND UTILITIES TO BE REMOVED PER THE UTILITY PROVIDER'S RECOMMENDATIONS
8. EXISTING POWER POLES TO BE RELOCATED PER THE UTILITY PROVIDER'S RECOMMENDATIONS
9. EXISTING WELL TO BE ABANDONED PER TOWN OF LISBON REQUIREMENTS
10. REMOVE EXISTING CMP STORM SEWER PIPE
11. SAWCUT PAVEMENT

0 20 40
SCALE: 1" =20'

PLOTTING NOTE: PLANS PLOTTED TO 11X17 SHEET SIZE ARE ½ SCALE – 1"=40'

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

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

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

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KWIK STAR

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PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444

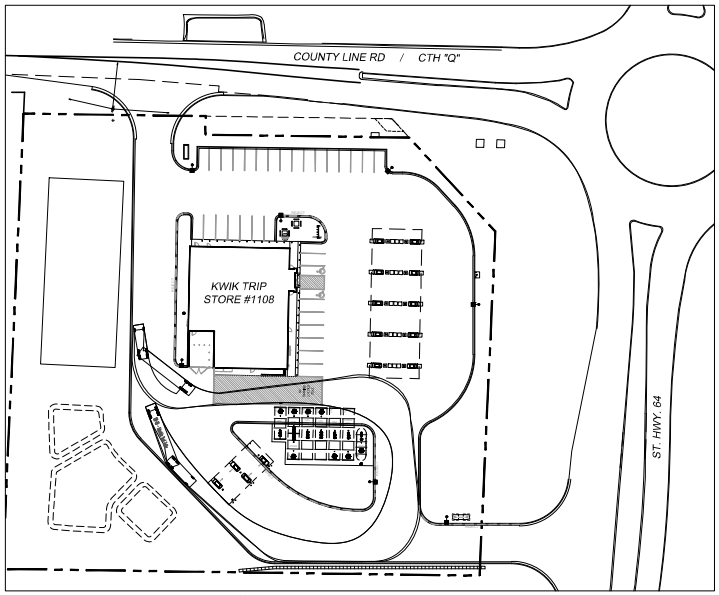
EXISTING SITE PLAN

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

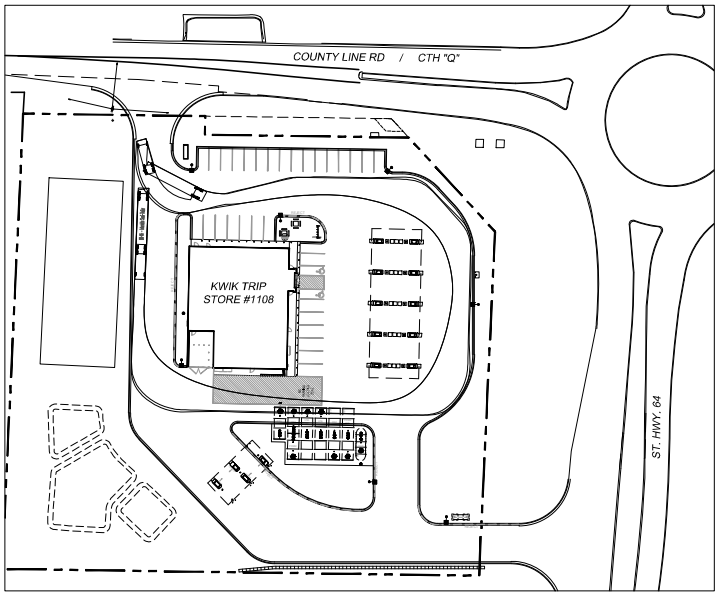
| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | DM 1.0 |



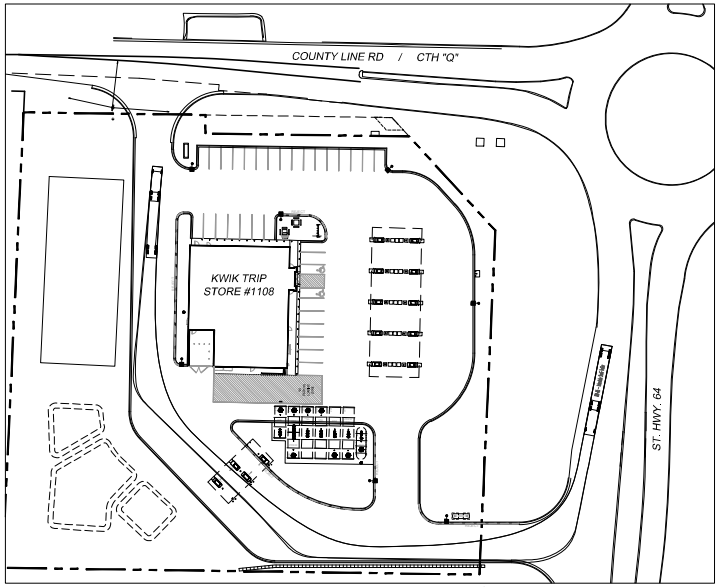

TRUCK ROUTE FOR STORE DELIVERY

SCALE: NOT TO SCALE




TRUCK ROUTE FOR FUEL DELIVERY

SCALE: NOT TO SCALE




TRUCK ROUTE FOR DIESEL CUSTOMER

SCALE: NOT TO SCALE

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KWIK STAR

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LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444

SITE TURNING MOVEMENT

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
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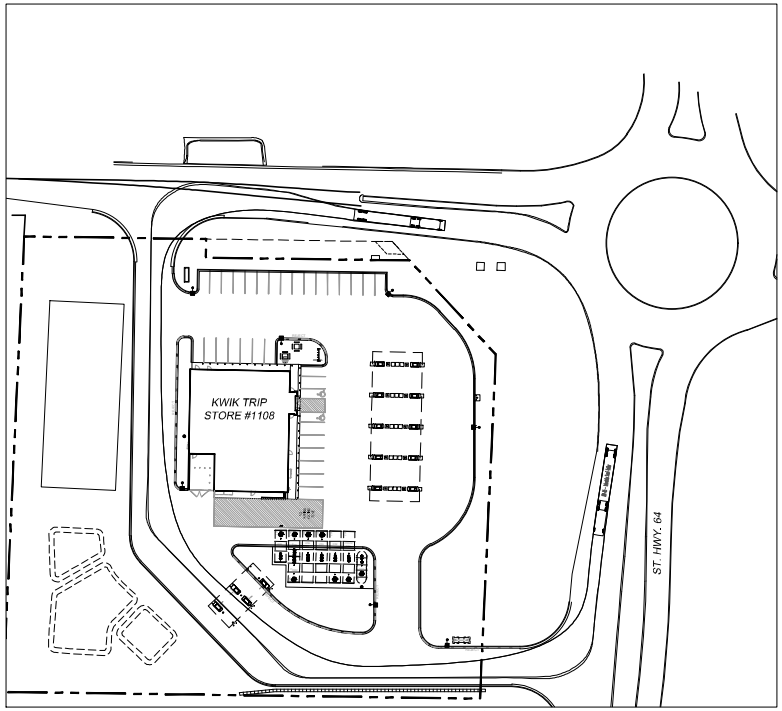
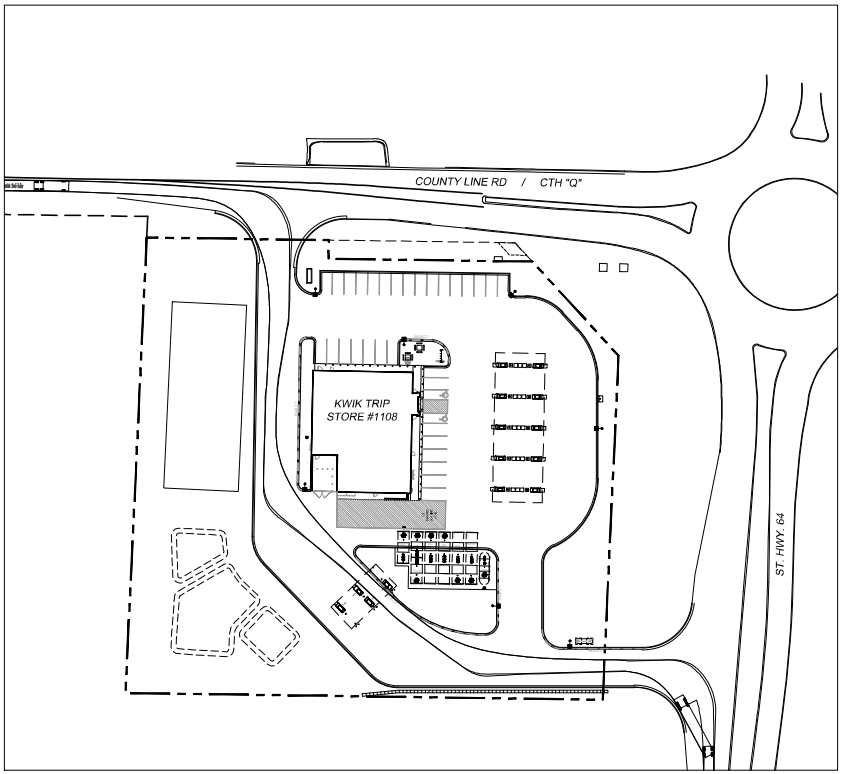
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SP 1.0 |




TRUCK ROUTE FOR DIESEL CUSTOMER

SCALE: NOT TO SCALE




TRUCK ROUTE FOR DIESEL CUSTOMER

SCALE: NOT TO SCALE

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KWIK STAR

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608-838-0444

TURNING MOVEMENTS - DIESEL CUSTOMER

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
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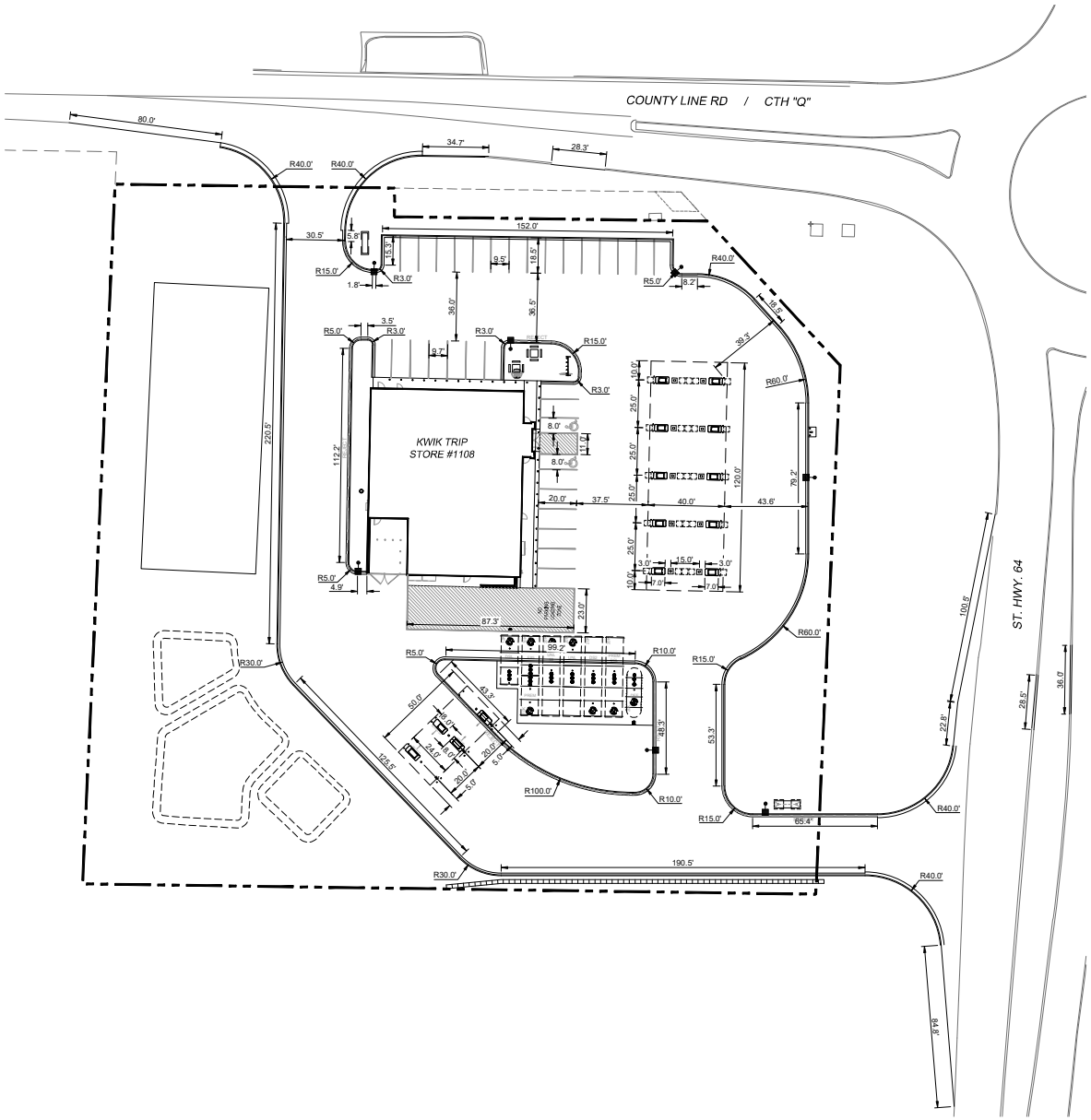
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | 6/3/2020 |
| SHEET | FIG 1 |




## SITE INFORMATION

ZONING DISTRICT: B-2 - LOCAL BUSINESS DISTRICT
TOTAL SITE AREA: 134,554 SF / 3.09 ACRES
TOTAL DISTURBED AREA: 133,840 SF / 3.07 ACRES
EXISTING IMPERVIOUS: 25,067 SF
TOTAL IMPERVIOUS: 82,965 SF (61.7% LOT COVERAGE)
PAVED AREA: 68,475 SF
BUILDING AREA: 7,350 SF
CANOPY AREA: 4,800 SF
SIDEWALK / PICNIC AREA: 2,340 SF
PRO. PERVIOUS: 51,589 SF (38.3% LOT COVERAGE)

## PARKING STALL COUNT

| | |
|---|---|
| STANDARD PARKING: | 31 STALLS |
| ADA PARKING | 2 STALLS WITH LOADING ZONE |
| TRUCK PARKING | 1 UNLOADING STALL |

ADA PARKING STALL REQUIREMENTS:
ADA STALLS REQUIRED ON SITE = 2
ADA STALLS SHOWN ON THE PLANS = 2

## BUILDING HEIGHTS - 45' MAXIMUM

CONVENIENCE STORE 20'-0"
CANOPY 15'-6"

## BUILDING SETBACKS / OFFSETS

FRONT: 50'
REAR: 50' / 10'
SIDE: 50' / 10'
OFFSET DISTANCE TO BE USED WHEN LOT LINE IS NOT ALONG A STREET

## UTILITY COMPANY INFORMATION

ELECTRICITY - ALLIANT ENERGY - 800-862-6222

NATURAL GAS - ALLIANT ENERGY - 800-862-6222

PHONE - SPECTRUM - 855-707-7328

CABLE - SPECTRUM - 855-707-7328

SANITARY SEWER - SEPTIC SYSTEM

WATER SERVICE - PRIVATE WELL

## FIRE LANE:

COUNTY LINE ROAD (C.T.H "Q") OR STATE HWY 164 WILL ACT AS THE FIRE LANE ACCESS TO THE BUILDING.

## NOTE:

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES ON AND ADJACENT TO THE SITE PRIOR TO THE START OF THE PROJECT.

RADII ARE FROM FACE OF CURB

DIMENSIONS ARE FROM FACE OF CURB

## FLOOD NOTE:

ACCORDING TO THE FLOOD INSURANCE RATE MAP OF THE COUNTY OF MILWAUKEE, COMMUNITY PANEL NO. 55133C0087H, EFFECTIVE DATE OF NOVEMBER 5, 2014, THIS SITE FALLS IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN).

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

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

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

0 40 80
SCALE: 1" = 40'

PLOTTING NOTE: PLANS PLOTTED TO 11X17 SHEET SIZE ARE ½ SCALE – 1"=80'

KWIK TRIP

KWIK STAR

KWIK TRIP, Inc.
P.O. BOX 2107
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PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444

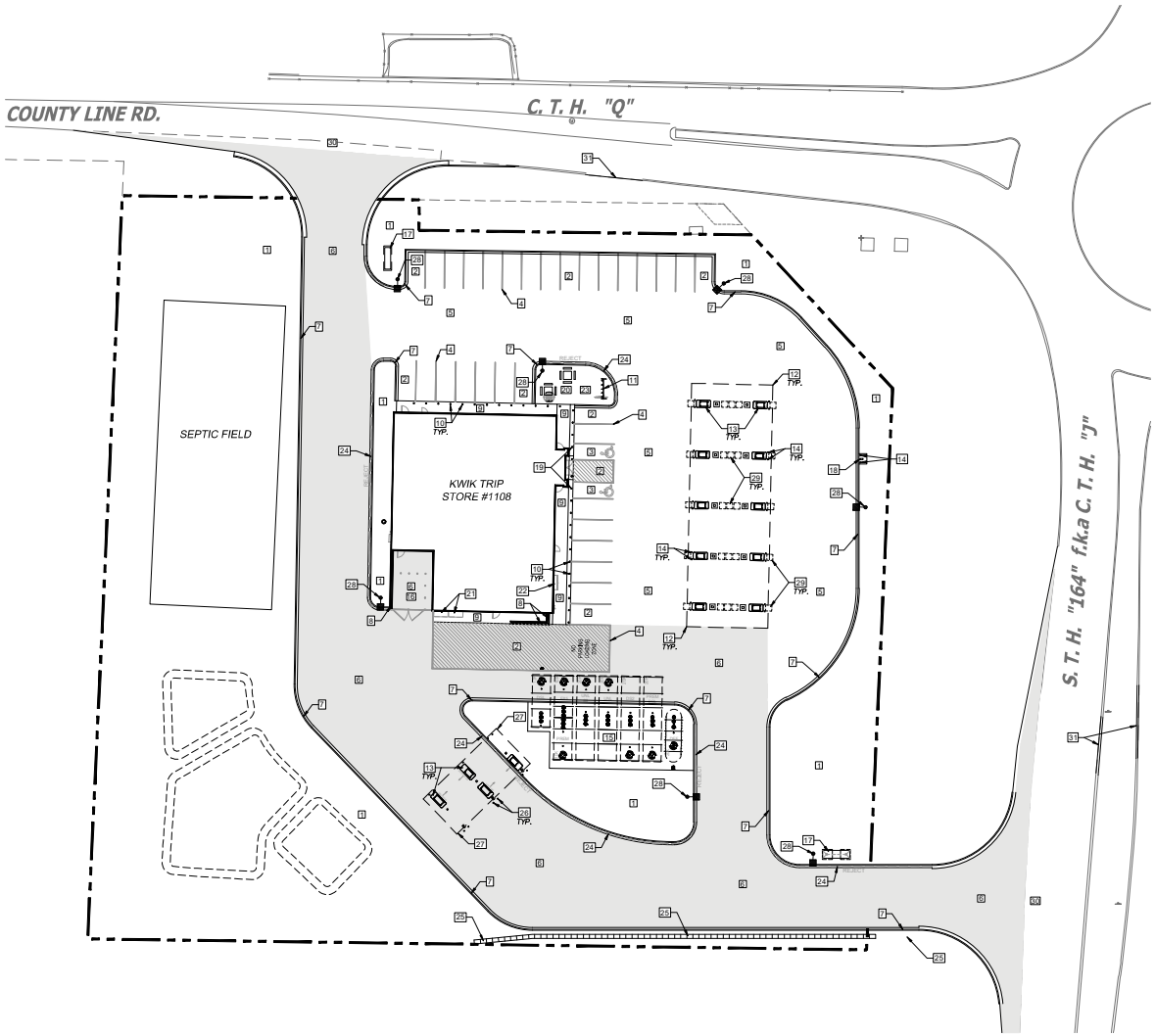
# SITE PLAN - LAYOUT

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SP 1.1 |




## SITE PLAN KEYNOTES

1. LANDSCAPE AREA. SEE SHEET L1.
   ALL GREEN SPACE THAT DOES DONT RECEIVE EROSION MAT SHALL HAVE SOD APPLIED. 8,070 SQ.FT.
2. OFF-STREET PARKING STALLS
   STRIPING - 4" WIDE STALL LINES, USE HIGH VISIBILITY YELLOW PAINT.
   SPACES PROVIDED
   (8) 10'-0"x 20'-0" GENERAL PARKING
   (6) 9'-6"X 20'-0" GENERAL PARKING
   (32) 9'-6"X 18'-0" GENERAL PARKING
   (2) 8'-0"x 20'-0" ACCESSIBLE PARKING WITH
   (1) 11'-0"x 20'-0" LOADING ZONE
   (1) 23'-0"x 87'-0" LOADING ZONE
3. A.D.A. ACCESSIBLE PARKING SPACE WITH LOADING ZONE. PROVIDE APPROPRIATE STRIPING AND PAVEMENT MARKINGS.
4. 4" WIDE, HIGH VISIBILITY, PAVEMENT STRIPING, LANE MARKINGS AND TEXT.
   COLOR: YELLOW
   PAINT SHALL BE SHERWIN WILLIAMS SETFAST PREMIUM ALKYD ZONE MARKING PAINT
5. 6" DEPTH (MIN.) CONCRETE SLAB-ON-GRADE WITH #3 REBAR 3' O.C.
   CONCRETE SEALER: TK-26UV - 30,300 SQ.FT.
6. 8" DEPTH (MIN.) CONCRETE SLAB-ON-GRADE WITH #4 REBAR 3' O.C.
   CONCRETE SEALER: TK-26UV - 38,175 SQ.FT.
7. CONCRETE CURB AND GUTTER PER DETAIL ON SHEET SP 5.0.
8. BRICK SCREENING WALLS, SEE ARCHITECTURAL PLANS FOR DETAILS.
9. 6" INTEGRAL CONCRETE CURB/ WALK. SEE DETAILS.
   CONCRETE SEALER: TK-26UV - 1,626 SQ.FT.
10. 30" HT., 6" DIA. CONCRETE FILLED PIPE BOLLARD SEE DETAIL ON SHEET SP 5.0.
11. 5 STALL BIKE RACK WITH 5' CLEARANCE. BIKE RACKS WILL BE SARIS CITY RACK SKU2409 5-BIKE FREE STANDING MODEL IN COLOR RED.
12. 40'-0"x 120'-0" DISPENSER ISLAND CANOPY. VERIFY SIZE, PLACEMENT, COLUMN AND FOOTING SIZE WITH CANOPY AND STRUCTURAL PLANS. CANOPY GRAPHICS PER OWNER.
13. 3'-6"x 6'-0" CONCRETE ISLANDS W/ 6" EXPOSURE WITH FUEL DISPENSERS. DISPENSER PER OWNER.
14. 36" HT BOLLARD, SEE DETAIL ON SHEET SP 5.0.
15. UNDERGROUND FUEL STORAGE TANKS PER OWNER. PROVIDE PIPING AND VENTING PER OWNER'S SPECIFICATIONS.
16. EXTERNAL TRASH ENCLOSURE TO MATCH BUILDING. SEE ARCHITECTURAL DETAILS.
17. KWIK TRIP TRADEMARK SIGN (VERIFY LOCATION AND STYLE WITH SIGN PERMIT).
18. "FREE AIR" COMPRESSOR. PROVIDE SIGNAGE PER OWNER.
19. HC PVC BOLLARD SLEEVE PER OWNER. VAN ACCESS SIGNAGE AT 48" HT. STALL PARKING AT 60" HT, SEE DETAIL ON SHEET SP 5.0.
20. PICNIC TABLE PER OWNER. PROVIDE 1 HC. ACCESS TABLE SPACE. PROVIDE TRASH CONTAINER PER OWNER.
21. 36"x48" ICE OUTDOOR STORAGE (ITEMS SOLD EXCLUSIVELY IN THE STORE).
22. 26"x84" LP OUTDOOR STORAGE (ITEMS SOLD EXCLUSIVELY IN THE STORE).
23. 4" CONCRETE PATIO AREA 715 SQ.FT.
24. REJECT CURB & GUTTER, SEE DETAIL 7 ON SHEET SP 5.0.
25. BLOCK RETAINING WALL PER DETAIL ON SHEET SP 5.0.
26. 48" HT BOLLARD, SEE DETAIL ON SHEET SP 5.1.
27. 24'-0" X 50'-0" DISPENSER ISLAND CANOPY. VERIFY SIZE, PLACEMENT, COLUMN AND FOOTING SIZE WITH CANOPY AND STRUCTURAL PLANS. CANOPY GRAPHICS PER OWNER.
28. CONCRETE LIGHT POLE BASE, SEE SHEET E1 FOR DETAIL.
29. OUTDOOR MERCHANDISE AREA, TYPICALLY RESERVED FOR BAGS OF SALT.
30. ALL DAMAGED ASPHALT SHALL BE PATCHED TO THE SATISFACTION OF THE VILLAGE OF LISBON.
31. CONCRETE CURB AND GUTTER IN ROW PER WIDOT STANDARDS.

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0 40 80
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608-838-0444

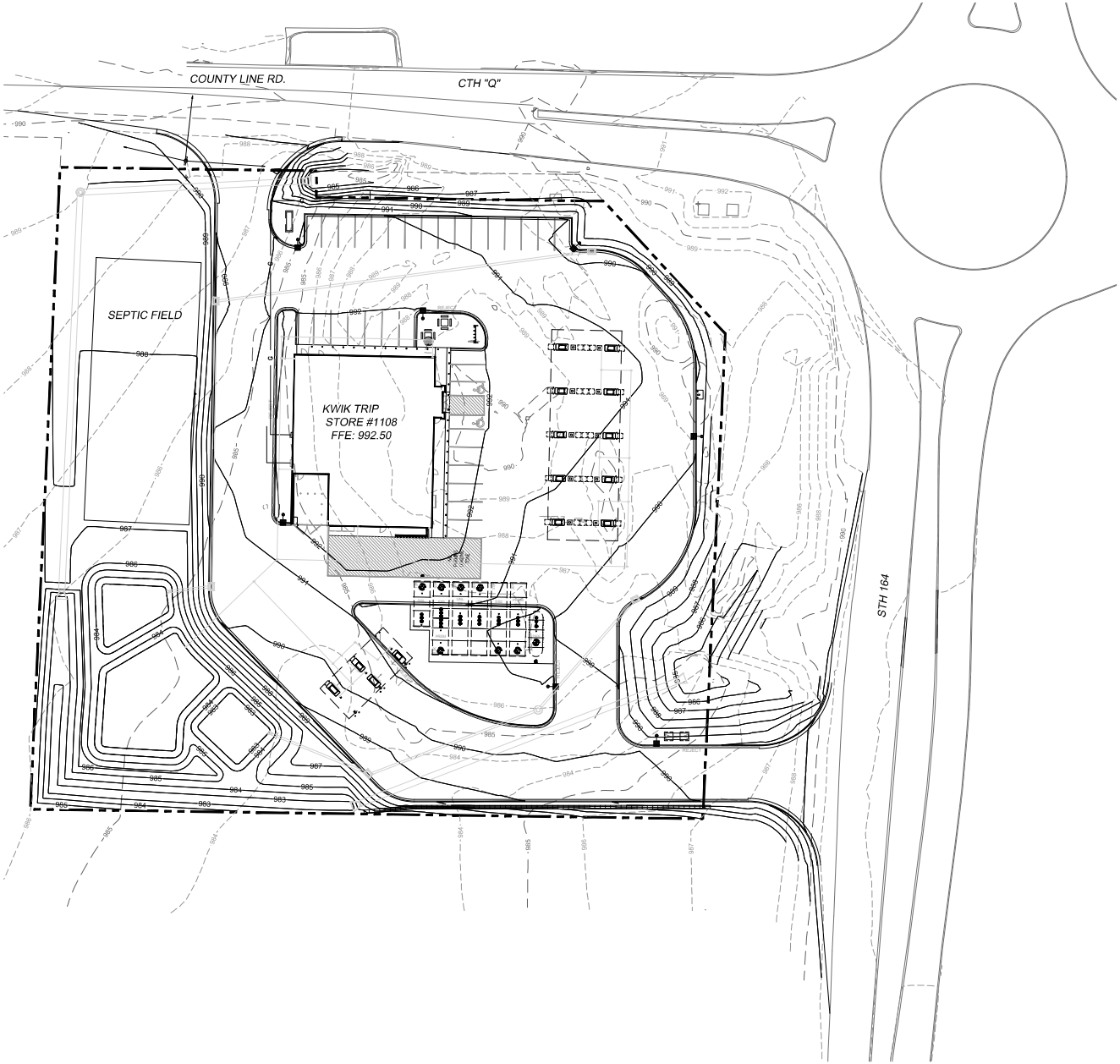
SITE PLAN - KEYNOTE

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SP 1.2 |




NOTES:

–ALL SILT FENCE MUST BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE CITY PRIOR TO ANY SITE WORK.

–SITE EROSION CONTROL MEASURES MUST BE IN PLACE AT ALL TIMES. SHOULD DEVICES BE REMOVED FOR WORK ACCESS, THEY SHALL BE REINSTALLED AT THE END OF EACH WORK DAY UNTIL PAVEMENTS HAVE BEEN INSTALLED AND ALL LANDSCAPE AREAS HAVE BEEN MULCHED AND SODDED. SEEDED AREAS MUST EXHIBIT MINIMUM OF 70% SOIL COVERAGE.

–REFER TO THE EROSION CONTROL PLAN NOTES AND DETAIL SHEETS FOR MORE INFORMATION.

CONTACT JEFF OSGOOD
KWIK TRIP, INC
PO BOX 2107
LACROSSE, WI 54602
608-793-5547

CONSTRUCTION SEQUENCE

*INSTALL EROSION/SEDIMENT CONTROL MEASURES

*INSTALL STORMWATER MANAGEMENT SEDIMENT BASINS

*INSTALL STORM SEWER

*INSTALL STRUCTURES

*INSTALL PAVEMENTS

*INSTALL LAWN/ LANDSCAPE

*FLUSH STORM SEWER

*REMOVE EROSION CONTROL MEASURES ONLY AFTER ALL PAVEMENTS HAVE BEEN INSTALLED AND ALL SOILS HAVE BEEN STABILIZED

NOTES:

ENGINEER TO OBTAIN RIGHT-OF-WAY EXCAVATION PERMIT PRIOR TO BEGINNING SITE WORK.

CONSTRUCTION FENCING TO BE INSTALLED AROUND ENTIRE CONSTRUCTION SITE. COORDINATE WITH OWNER FOR FENCING AND GATE LOCATION AND APPROPRIATE SIGNAGE LOCATION.

PLAN PREPARED FROM ALTA LAND TITLE SURVEY BY:

JOHN P. CASUCCI, PLS
RA SMITH
16745 W. BLUEMOUND ROAD
BROOKFIELD, WI 53005
262-781-1000

CONTRACTOR SHALL LOCATE ALL UTILITIES WHICH MAY AFFECT THIS WORK NOTIFY THE OWNER OF ANY POTENTIAL CONFLICTS.

CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED ELEVATIONS PRIOR TO START OF CONSTRUCTION. VERIFY CRITICAL ELEVATIONS TO ENSURE CONFORMANCE WITH GRADING PLAN, PARTICULARLY WITH WALK, AND/OR PAVEMENTS TO REMAIN. MEET EXISTING GRADES ALONG STREETS, PROPERTY LINES, AND DRIVEWAY ENTRANCES. RESTORE ALL EXISTING PAVEMENTS THAT REMAIN TO THEIR ORIGINAL, IF NOT BETTER CONDITION. NOTIFY OWNER OF ANY CONFLICTS.

AREAS NOT PAVED AND TO BE LANDSCAPED SHALL RECEIVE MINIMUM OF 4" DEPTH COMPACTED TOPSOIL.

CONTRACTOR SHALL COORDINATE GRADING AND INSTALLATION OF DRIVES IN R.O.W. WITH APPROPRIATE GOVERNMENT AGENCIES. OBTAIN APPROPRIATE PERMITS FOR GRADING AND DRAINAGE IN ALL R.O.W.

REFER TO OWNERS SPECIFICATIONS FOR CURB, APPROACH, AND CONCRETE PROFILES AS WELL AS ADDITIONAL SITE STANDARDS RELATED TO THIS PROJECT.

EXCAVATOR IS RESPONSIBLE FOR ALL EROSION CONTROL INSPECTIONS

NOTE FOR GRADING CONTRACTOR:

ANY PROPERTY IRONS THAT ARE DISTURBED IN THE GRADING PROCESS SHALL BE RESET BY A LICENSED LAND SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.

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**TOLL FREE**

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0 30 60
SCALE: 1" = 30'

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SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444

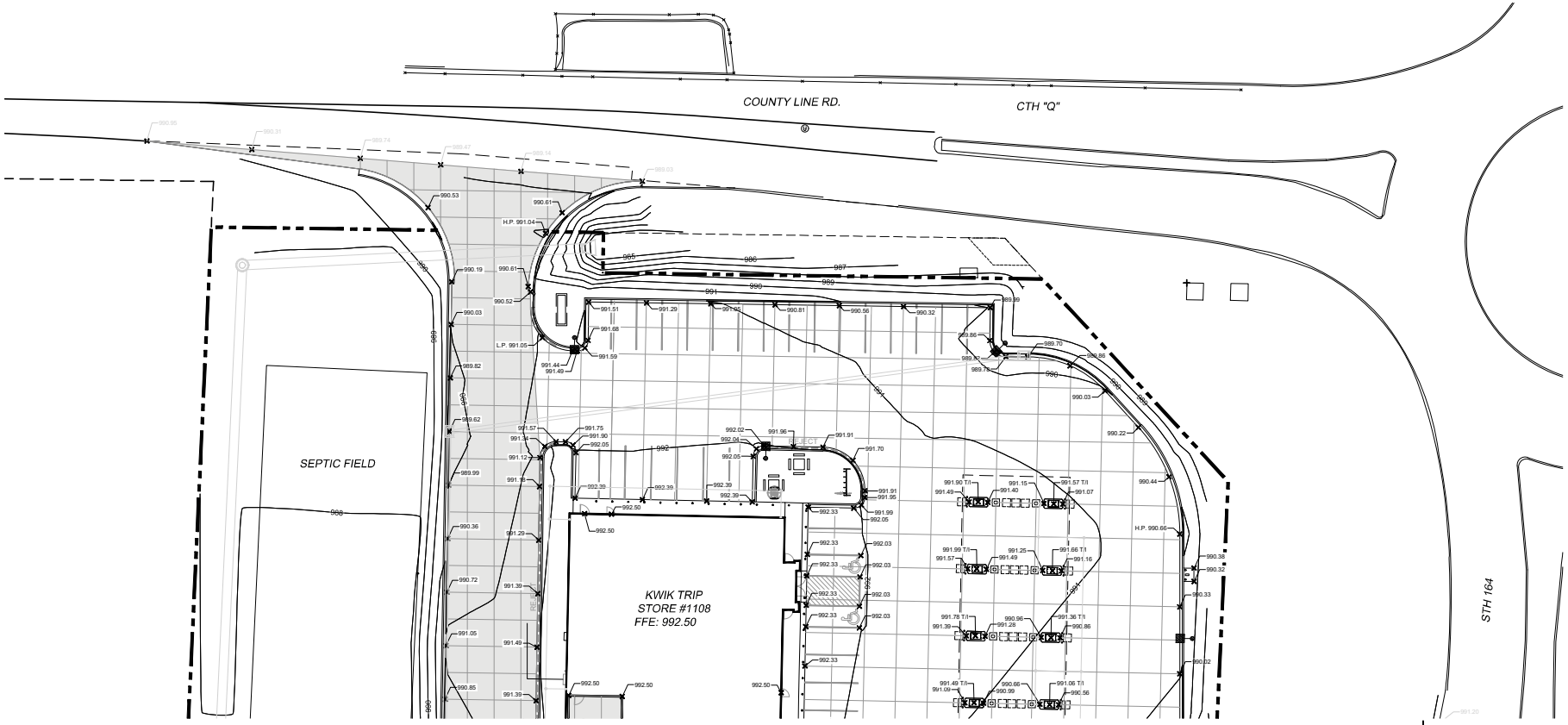
SITE GRADING

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SP 2.0 |




NOTES:

H.P. = HIGH POINT FOR DRAINAGE

L.P. = LOW POINT FOR DRAINAGE

T/I = TOP OF ISLAND ELEVATION

TW = TOP OF WALL

BW = BOTTOM OF WALL

BC = BACK OF CURB

ALL SPOT ELEVATIONS ARE AT THE EDGE OF PAVEMENT (FLAG OF CURB)

HATCHED CURB AND GUTTER DEPICTS REJECT CURB LOCATIONS

ALL LANDSCAPE AND SOD AREAS SHALL HAVE POSITIVE DRAINAGE

CONTRACTOR SHALL PROVIDE CONTROL JOINTS, CONSTRUCTION JOINTS AND EXPANSION JOINTS IN SLAB ON GRADE, SIDEWALKS AND DRIVEWAYS.
CONTROL JOINT MAXIMUM DISTANCE: SIDEWALKS - 8' O.C., ALL OTHERS 10' O.C.
SAW CUT CONTROL JOINTS SHALL BE A MINIMUM OF ¼ OF THE CONCRETE THICKNESS.
EXPANSION JOINT MINIMUM DISTANCE: SIDEWALKS - 24' O.C., ALL OTHERS 40' O.C.
DOWEL ALL EXPANSION JOINTS - 24" O.C.

0 20 40

SCALE: 1" = 20'

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# GRADING - SPOT ELEVATION PLAN

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

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|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
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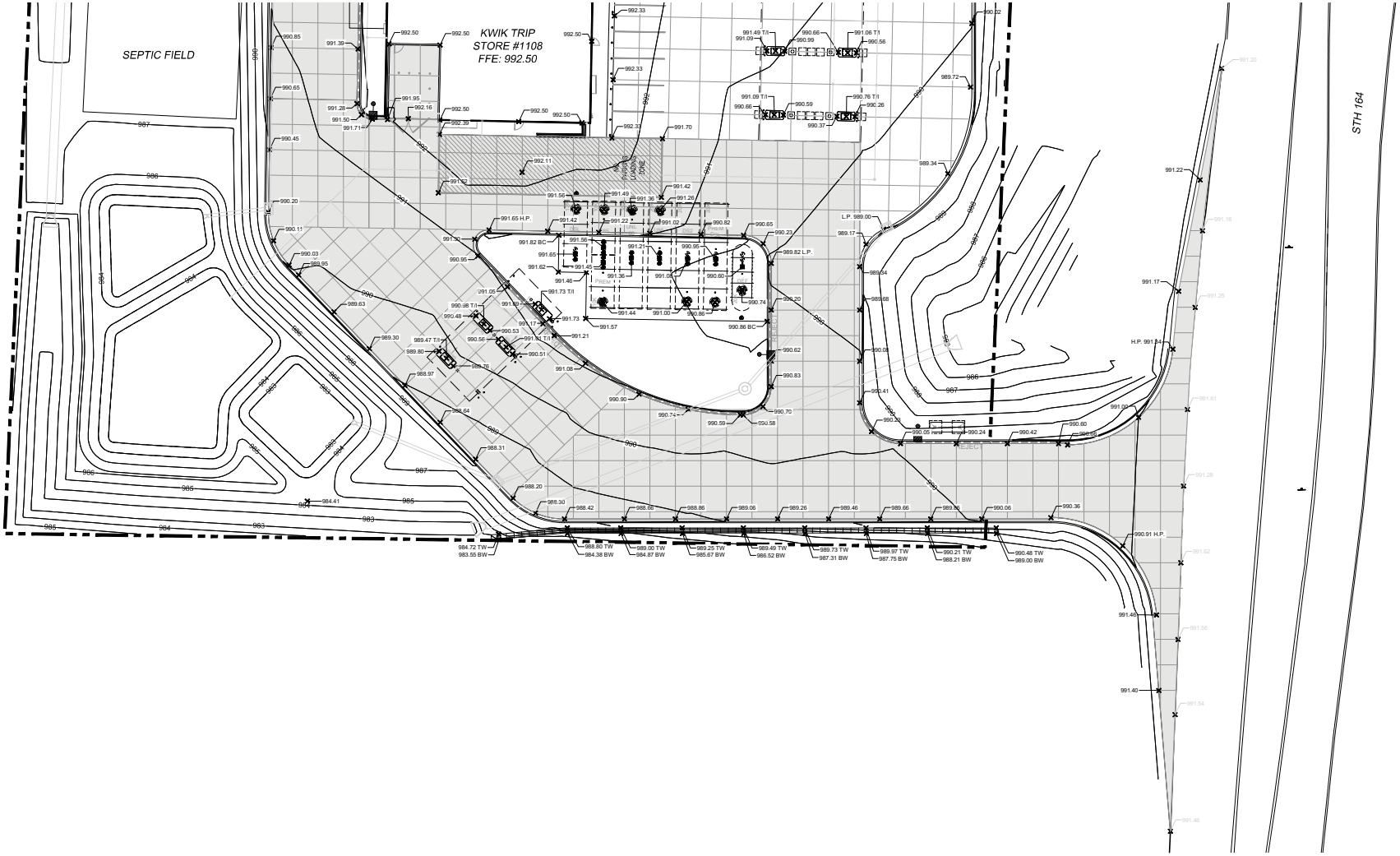


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CONTROL JOINT MAXIMUM DISTANCE: SIDEWALKS - 8' O.C., ALL OTHERS 10' O.C.
SAW CUT CONTROL JOINTS SHALL BE A MINIMUM OF ¼ OF THE CONCRETE THICKNESS.
EXPANSION JOINT MINIMUM DISTANCE: SIDEWALKS - 24' O.C., ALL OTHERS 40' O.C.
DOWEL ALL EXPANSION JOINTS - 24" O.C.

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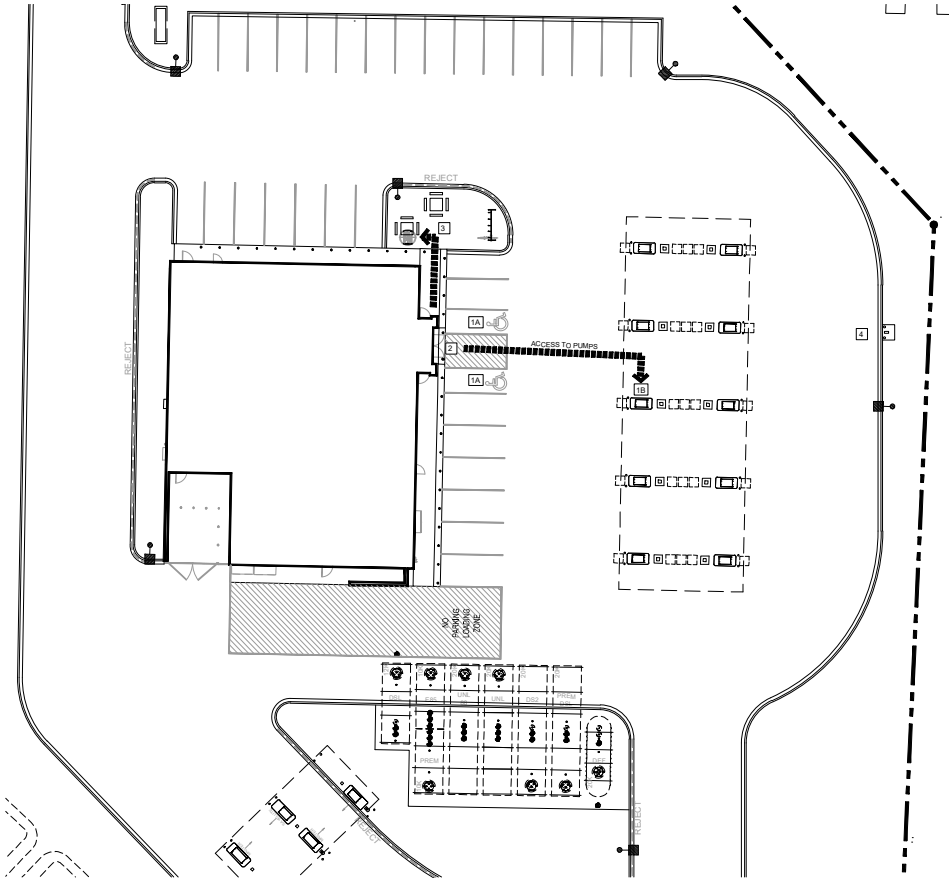
| SHEET | SP 2.2 |




## NOTES FOR CONVENIENCE STORE ACCESSIBLITY

AT LEAST 1 MPD(MULTI PRODUCT DISPENSER) COVERING ALL GRADES OF FUEL MUST BE ACCESSIBLE IN A 30"X48" CLEAR LEVEL FLOOR AREA(CLF).

ALL PUMP CONTROLS SHALL BE < 48"(2010 STANDARD). WINDOW WASHER, PAPER TOWEL DISPENSER, LITERATURE, FIRE EXTINGUISHER, EMERGENCY FUEL STOPS, ETC. BE ACCESSIBLE 30"X48" CLF SPACE AND WITHIN A FORWARD OR SIDE APPROACH REACH RANGE.

PROVIDE ISA(INDUSTRY STANDARD ARCHITECTURE) AT EACH ACCESSIBLE FUEL POSITION ON FACE OF PUMP.

PROVIDE ISA AT EACH ACCESSIBLE FUELING POSITION VISIBLE TO APPROACHING VEHICLES.

PROVIDE A SIGN AT EACH ACCESSIBLE FUELING POSITION WITH STORE TELEPHONE NUMBER, ADVISING AVAILABLE FUELING ASSISTANCE.

ANY PAY FUNCTION- i.e. AIR/VACUUM etc. ARE REQUIRED TO HAVE AN ACCESSIBLE ROUTE TO STORE ENTRANCE. CONTROLS SHALL BE ACCESSIBLE 30"X48" CLF SPACE AND WITHIN A FORWARD OR SIDE APPROACH REACH RANGE.

## NOTES:

-REFER TO THE DOCUMENT FROM THE DEPARTMENT OF JUSTICE ON "2010 ADA STANDARDS FOR ACCESSIBLE DESIGN". CONTRACTOR SHALL REFERENCE CURRENT A.D.A. GUIDELINES AND LOCAL REGULATIONS FOR SITE ACCESSIBILITY. IN ALL CASES THE MINIMUM REQUIREMENTS SHALL BE PROVIDED ON SITE TO ENSURE COMPLIANCE TO ALL REGULATIONS.

- KWIK TRIP STANDARD ENTRANCE DOOR IS AUTOMATIC SLIDING DOOR SYSTEM DESIGNED TO COMPLY WITH ALL ACCESS CODES AND LAWS. ENTRANCE DOORS FOR ACCESSIBLE ROUTES WILL HAVE A MINIMUM CLEAR OPENING OF 32"

-STORE FRONTS WILL PROVIDE FLUSH PAVEMENTS ALONG ACCESSIBLE ROUTES WITH PROTECTIVE SECURITY BOLLARDS INDICATED AND SPACED BETWEEN PARKING SURFACES AND BUILDING WALK PER PLAN.

-NO OBJECTS OR DISPLAYS SHOULD PROTRUDE INTO THE MINIMUM CLEAR SPACE OF THE ACCESSIBLE ROUTES TO THE STORE ENTRANCE. THIS WILL INCLUDE SEASONAL DISPLAY VENDING AREAS AS WELL AS OTHER OUTDOOR STORAGE UNITS FOR PROPANE AND ICE, ETC.

-PER A.D.A GUIDELINES- CLEAR WIDTH OF ACCESSIBLE ROUTES SHALL BE 36" AND PERMITTED TO BE REDUCED TO 32" FOR A LENGTH OF 24".

- ACCESS ISLES SERVING WHEEL CHAIR LIFTS OR CHAIR ACCESS FROM VEHICLES ARE REQUIRED TO BE NEARLY LEVEL IN ALL DIRECTIONS TO PROVIDE SAFE TRANSFER OF WHEELCHAIRS TO AND FROM VEHICLES. THE EXCEPTION WOULD BE FOR DRAINAGE. MAXIMUM SLOPE FOR THE ACCESS ISLE IS 1:48. NO CURB RAMPS SHALL BE A PART OF THE ACCESS ISLE.

-IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY WITH THE DESIGNATION OF 1 "VAN ACCESSIBLE' IN EVERY 8 ACCESSIBLE SPACES ON SITE.

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0 20 40
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## PLAN KEYNOTES

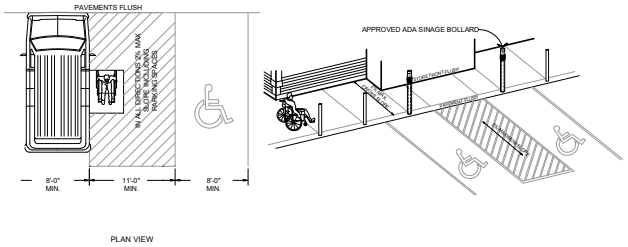
1. ACCESSIBLE STALLS

   A. STRIPING - 4" WIDE STALL LINES, USE HIGH VISIBILITY BLUE PAINT.
   SPACES PROVIDED:

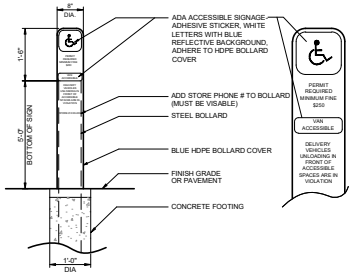
   (2) 8'-0"x 20'-0" ACCESSIBLE PARKING WITH (1) 11'-0"x 20'-0" LOADING ZONE (MIN.)

   B. ACCESSIBLE FUELING POINT AND DISPENSER AND VALET. VALET AND KEY PAD ON PUMP SHALL CONFORM TO ADA REACH DIMENSIONS AS SHOWN IN DETAIL.

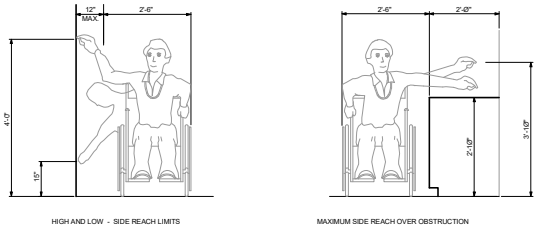
2. PAVEMENTS FLUSH FOR ACCESSIBILITY INTO BUILDING.
3. PICNIC TABLE WITH ACCESSIBLE PLACEMENT
4. ACCESSIBLE ROUTE TO AIR STATION




1 SP2.2 VAN ACCESSIBLE PARKING
NOT TO SCALE




2 SP2.2 ADA BOLLARD SIGNAGE
NOT TO SCALE




3 SP2.2 ACCESSIBLE REACH DIMENSIONS
NOT TO SCALE

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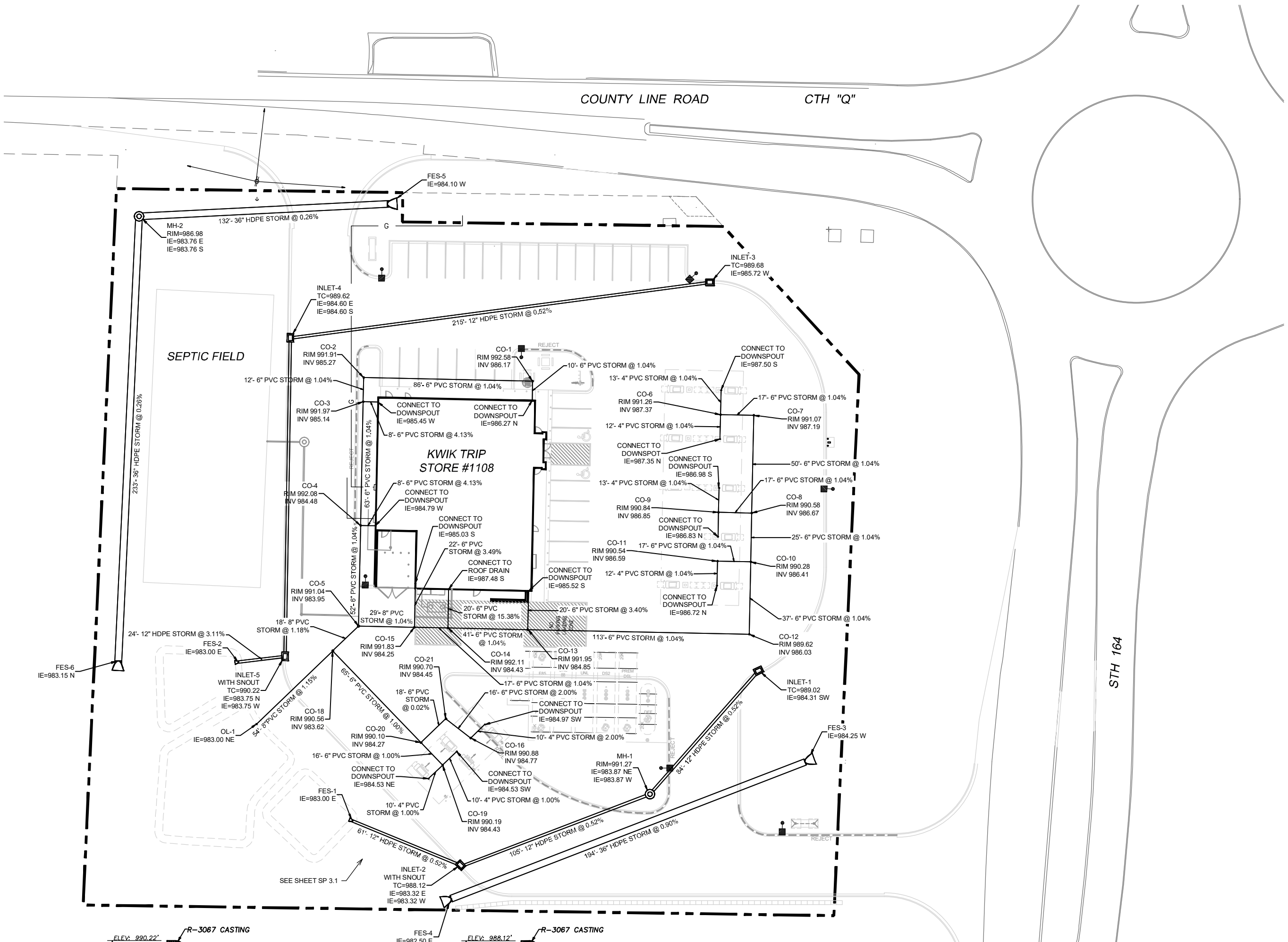
# ACCESSIBLE PLAN

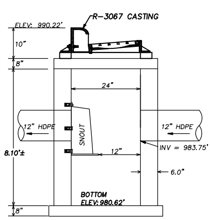
CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

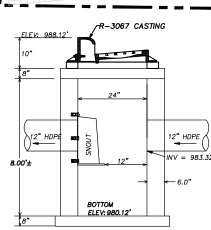
| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SP 2.3 |



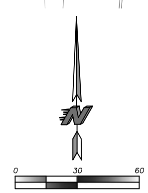

INLET WITH OIL SKIMMER
R-3067 CASTING
SKIMMER MODEL 18F
TOP OF CURB ELEV: 990.22'±
12" HDPE INV: 983.75'
DEPTH: 8.10'±
SUMP: 3.13'

**ST-5**
2' X 3' -INLET
WITH OIL SKIMMER




INLET WITH OIL SKIMMER
R-3067 CASTING
SKIMMER MODEL 18F
TOP OF CURB ELEV: 988.12'±
12" HDPE INV: 983.32'
DEPTH: 8.00'±
SUMP: 3.13'

**ST-2**
2' X 3' -INLET
WITH OIL SKIMMER




SCALE: 1" = 30'

PLOTTING NOTE: PLANS PLOTTED TO 11X17 SHEET SIZE ARE ½ SCALE – 1"=60'

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

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

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

## STORM DRAINAGE:

1. UNLESS OTHERWISE INDICATED, USE REINFORCED, PRECAST, CONCRETE MAINTENANCE HOLES AND CATCHBASINS CONFORMING TO ASTM C478, FURNISHED WITH WATER STOP RUBBER GASKETS AND PRECAST BASES. JOINTS FOR ALL PRECAST MAINTENANCE HOLE SECTIONS SHALL HAVE CONFINED, RUBBER "O"-RING GASKETS IN ACCORDANCE WITH ASTM C923. THE INSIDE BARREL DIAMETER SHALL NOT BE LESS THAN 48 INCHES.
2. ALL JOINTS AND CONNECTIONS TO CATCHBASINS OR MANHOLES SHALL BE WATERTIGHT. USE RESILIENT RUBBER SEALS, WATERSTOP GASKETS, OR APPROVED EQUAL. CEMENT MORTAR JOINTS ARE NOT ALLOWED.
3. INSTALL CATCHBASIN CASTINGS WITH SPECIFIED TOP ELEVATION AT THE FRONT RIM.
4. USE HDPE SOLID WALL PIPE WHEN CALLED OUT ON THE PLANS.
5. PVC PIPE: USE SOLID-CORE, SDR-35, ASTM D3034 POLYVINYL CHLORIDE (PVC) PIPE FOR DESIGNATED PVC STORM SEWER SERVICES 4 TO 15-INCHES IN DIAMETER. USE SOLID-CORE, SDR-35, ASTM F679 POLYVINYL CHLORIDE (PVC) PIPE FOR DESIGNATED PVC STORM SEWER SERVICES 18 TO 27-INCHES IN DIAMETER. JOINTS FOR ALL STORM SEWER SHALL HAVE PUSH-ON JOINTS WITH ELASTOMERIC GASKETS. USE OF SOLVENT CEMENT JOINTS IS ALLOWED FOR BUILDING SERVICES. SOLVENT CEMENT JOINTS IN PVC PIPE MUST INCLUDE USE OF A PRIMER WHICH IS OF CONTRASTING COLOR TO THE PIPE AND CEMENT. PIPE WITH SOLVENT CEMENT JOINTS SHALL BE JOINED WITH PVC CEMENT CONFORMING TO ASTM D2564. LAY ALL PVC PIPE ON A CONTINUOUS GRANULAR BED. INSTALLATION MUST COMPLY WITH ASTM D2321.
6. TESTING: TEST ALL PORTIONS OF STORM SEWER THAT ARE WITHIN 10 FEET OF BUILDINGS, WITHIN 10 FEET OF BURIED WATER, LINES, WITHIN 50 FEET OF WATER WELLS, OR THAT PASS THROUGH SOIL OR WATER IDENTIFIED AS BEING CONTAMINATED. TEST ALL FLEXIBLE STORM SEWER LINES FOR DEFLECTION AFTER THE SEWER LINE HAS BEEN INSTALLED AND BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE TEST FAILS, MAKE NECESSARY REPAIRS AND RETEST.
7. INSTALL DETECTABLE UNDERGROUND MARKING TAPE DIRECTLY ABOVE ALL PVC, POLYETHYLENE, AND OTHER NONCONDUCTIVE UNDERGROUND UTILITIES AT A DEPTH OF 457 MM (18 INCHES) BELOW FINISHED GRADE, UNLESS OTHERWISE INDICATED. BRING THE TAPE TO THE SURFACE AT VARIOUS LOCATIONS IN ORDER TO PROVIDE CONNECTION POINTS FOR LOCATING UNDERGROUND UTILITIES. INSTALL BLUE RHINO TRIVIEW FLEX TEST STATIONS, OR APPROVED EQUAL, WITH BLACK CAPS AT EACH SURFACE LOCATION.
8. TRACER WIRE: LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 182.0715(2R) OF THE STATUTES.
9. THE MINIMUM DEPTH OF COVER FOR BUILDING AND CANOPY ROOF DRAIN LEADERS WITHOUT INSULATION IS 5 FEET. INSULATE ROOF DRAIN LEADERS AT LOCATIONS WHERE THE DEPTH OF COVER IS LESS THAN 5 FEET. PROVIDE A MINIMUM INSULATION THICKNESS OF 2 INCHES. THE INSULATION MUST BE AT LEAST 4 FEET WIDE AND CENTERED ON THE PIPE. INSTALL THE INSULATION BOARDS 6 INCHES ABOVE THE TOPS OF THE PIPES ON MECHANICALLY COMPACTED AND LEVELED PIPE BEDDING MATERIAL. USE HIGH DENSITY, CLOSED CELL, RIGID BOARD MATERIAL EQUIVALENT TO DOW STYROFOAM HI-40 PLASTIC FOAM INSULATION.
10. CLEANOUTS: INSTALL CLEANOUTS ON ALL ROOF DRAINS IN ACCORDANCE WITH S.P.S 382.35 (3)(C)(1.). THE DISTANCE BETWEEN CLEANOUTS IN HORIZONTAL PIPING SHALL NOT EXCEED 100 FEET FOR PIPES 10-INCHES AND UNDER IN SIZE. CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPES THEY SERVE. INSTALL A METER BOX FRAME AND SOLID LID (NEENAH R-1914-A, OR APPROVED EQUAL) OVER ALL CLEANOUTS.
11. INSTALL ALL PIPE WITH THE ASTM IDENTIFICATION NUMBERS ON THE TOP FOR INSPECTION. COMMENCE PIPE LAYING AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. LAY THE PIPE WITH THE BELL END OR RECEIVING GROOVE END OF THE PIPE POINTING UPGRADE. WHEN CONNECTING TO AN EXISTING PIPE, UNCOVER THE EXISTING PIPE IN ORDER TO ALLOW ANY ADJUSTMENTS IN THE PROPOSED LINE AND GRADE BEFORE LAYING ANY PIPE. DO NOT LAY PIPES IN WATER OR WHEN THE TRENCH CONDITIONS ARE UNSUITABLE FOR SUCH WORK.

STRUCTURE TABLE

| STRUCT # | RIM EL | STRUCT TYPE | INVERTS IN | INVERTS OUT |
|---|---|---|---|---|
| CO-1 | 992.58 | 6" CLEANOUT | INV S = 986.17 | INV W = 986.17 |
| CO-2 | 991.91 | 6" CLEANOUT | INV E = 985.27 | INV S = 985.27 |
| CO-3 | 991.97 | 6" CLEANOUT | INV N = 985.14<br>INV E = 985.14 | INV S = 985.14 |
| CO-4 | 992.08 | 6" CLEANOUT | INV N = 984.48<br>INV E = 984.48 | INV S = 984.48 |
| CO-5 | 991.04 | 6" CLEANOUT | INV N = 983.95<br>INV E = 983.95 | INV SW = 983.95 |
| CO-6 | 991.26 | 6" CLEANOUT | INV N = 987.37<br>INV S = 987.48 | INV E = 987.37 |
| CO-7 | 991.07 | 6" CLEANOUT | INV W = 987.19 | INV S = 987.19 |
| CO-8 | 990.58 | 6" CLEANOUT | INV N = 986.67<br>INV W = 986.67 | INV S = 986.67 |
| CO-9 | 990.84 | 6" CLEANOUT | INV N = 986.85<br>INV S = 986.96 | INV E = 986.85 |
| CO-10 | 990.28 | 6" CLEANOUT | INV N = 986.41<br>INV W = 986.41 | INV S = 986.41 |
| CO-11 | 990.54 | 6" CLEANOUT | INV S = 986.59 | INV E = 986.59 |
| CO-12 | 989.62 | 6" CLEANOUT | INV N = 986.03 | INV W = 986.03 |
| CO-13 | 991.95 | 6" CLEANOUT | INV E = 984.85<br>INV N = 984.85 | INV W = 984.85 |
| CO-14 | 992.11 | 6" CLEANOUT | INV E = 984.43<br>INV N = 984.43 | INV W = 984.43 |
| CO-15 | 991.83 | 6" CLEANOUT | INV E = 984.25<br>INV N = 984.25 | INV W = 984.25 |
| CO-16 | 990.88 | 6" CLEANOUT | INV NE = 984.77 | INV NW = 984.77 |
| CO-18 | 990.56 | 8" CLEANOUT | INV NE = 983.73<br>INV SE = 983.62 | INV SW = 983.62 |
| CO-19 | 990.19 | 6" CLEANOUT | INV NE = 984.43<br>INV SW = 984.43 | INV NW = 984.43 |
| CO-20 | 990.10 | 6" CLEANOUT | INV SE = 984.27<br>INV NE = 984.45 | INV NW = 984.27 |
| CO-21 | 990.70 | 6" CLEANOUT | INV SE = 984.45 | INV SW = 984.45 |
| FES-1 | 984.11 | 12" FES | INV E = 983.00 | |
| FES-2 | 984.11 | 12" FES | INV E = 983.00 | |
| FES-3 | 987.46 | 36" FES | | INV W = 984.25 |
| FES-4 | 985.72 | 36" FES | INV E = 982.50 | |
| FES-5 | 987.32 | 36" FES | | INV W = 984.10 |
| FES-6 | 986.36 | 36" FES | INV N = 983.15 | |
| INLET-1 | 989.02 | 2X3 INLET | | INV SW = 984.31 |
| INLET-2 | 988.12 | 2X3 INLET WITH 18F SNOUT | INV E = 983.32 | INV W = 983.32 |
| INLET-3 | 989.68 | 2X3 INLET | | INV W = 985.72 |
| INLET-4 | 989.62 | 2X3 INLET | INV E = 984.60 | INV S = 984.60 |
| INLET-5 | 990.22 | 2X3 INLET WITH 18F SNOUT | INV N = 983.75 | INV W = 983.75 |
| MH-1 | 991.27 | 48" DIA MH | INV NE = 983.87 | INV W = 983.87 |
| MH-2 | 986.98 | 48" DIA MH | INV E = 983.76 | INV S = 983.76 |
| OL-1 | 983.68 | 6" OUTLET | INV NE = 983.00 | |

NOTE :
CURB INLET STRUCTURES (INTAKES) RIM ELEVATION REFERS TO TOP OF CURB (T/C).

KWIK TRIP
KWIK STAR


KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444

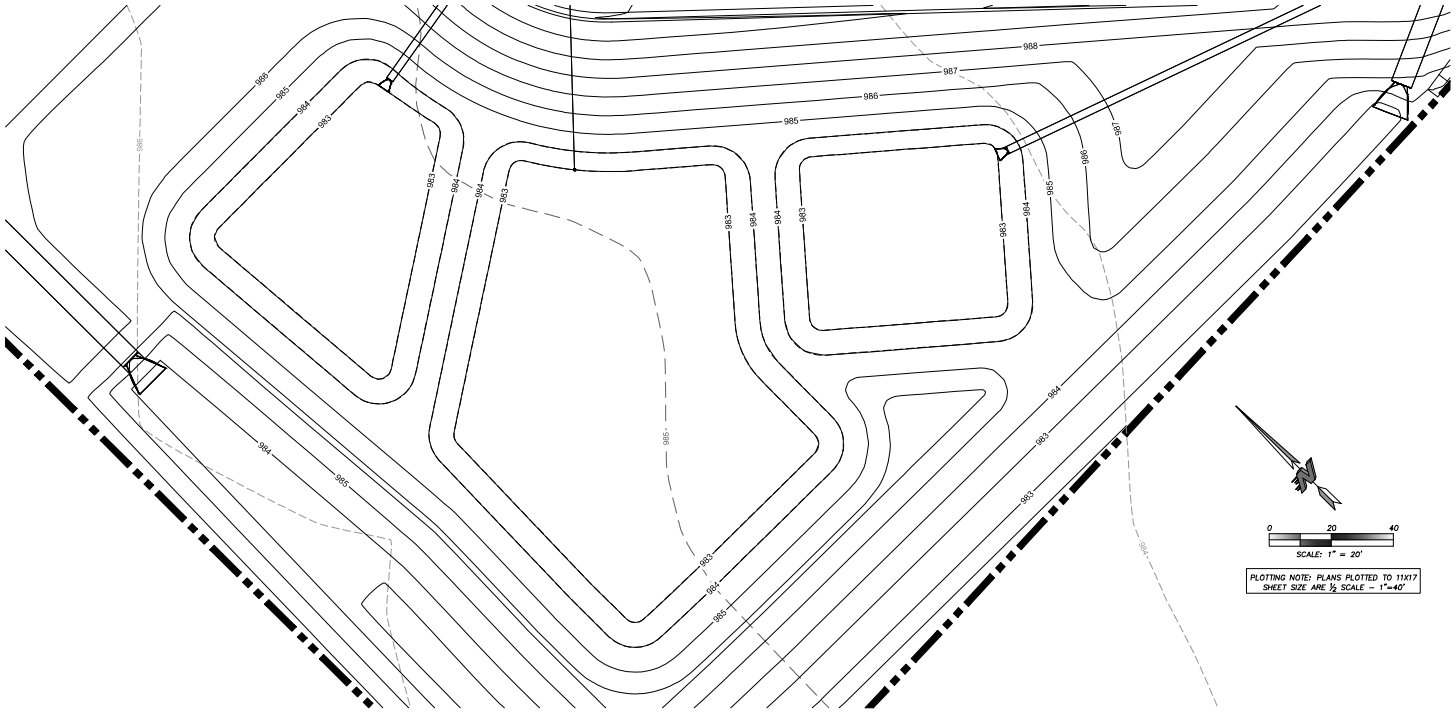

STORM SEWER PLAN

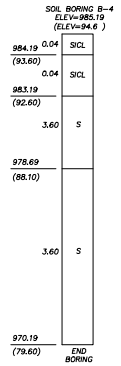
CONVENIENCE STORE #1108
WITH DIESEL

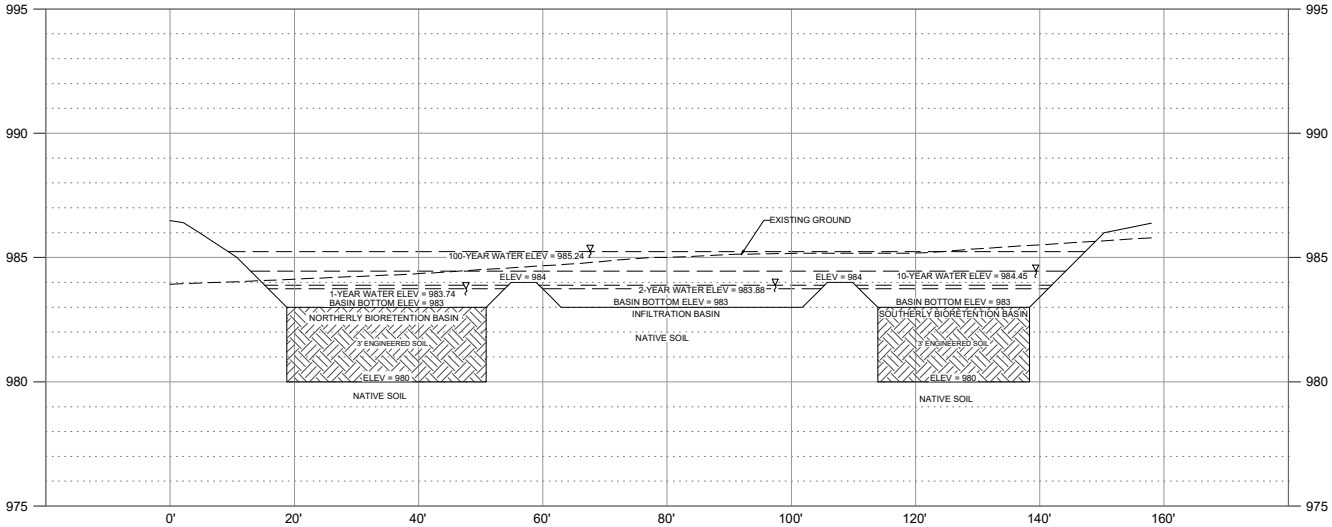
W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SP 3.0 |




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

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608-838-0444

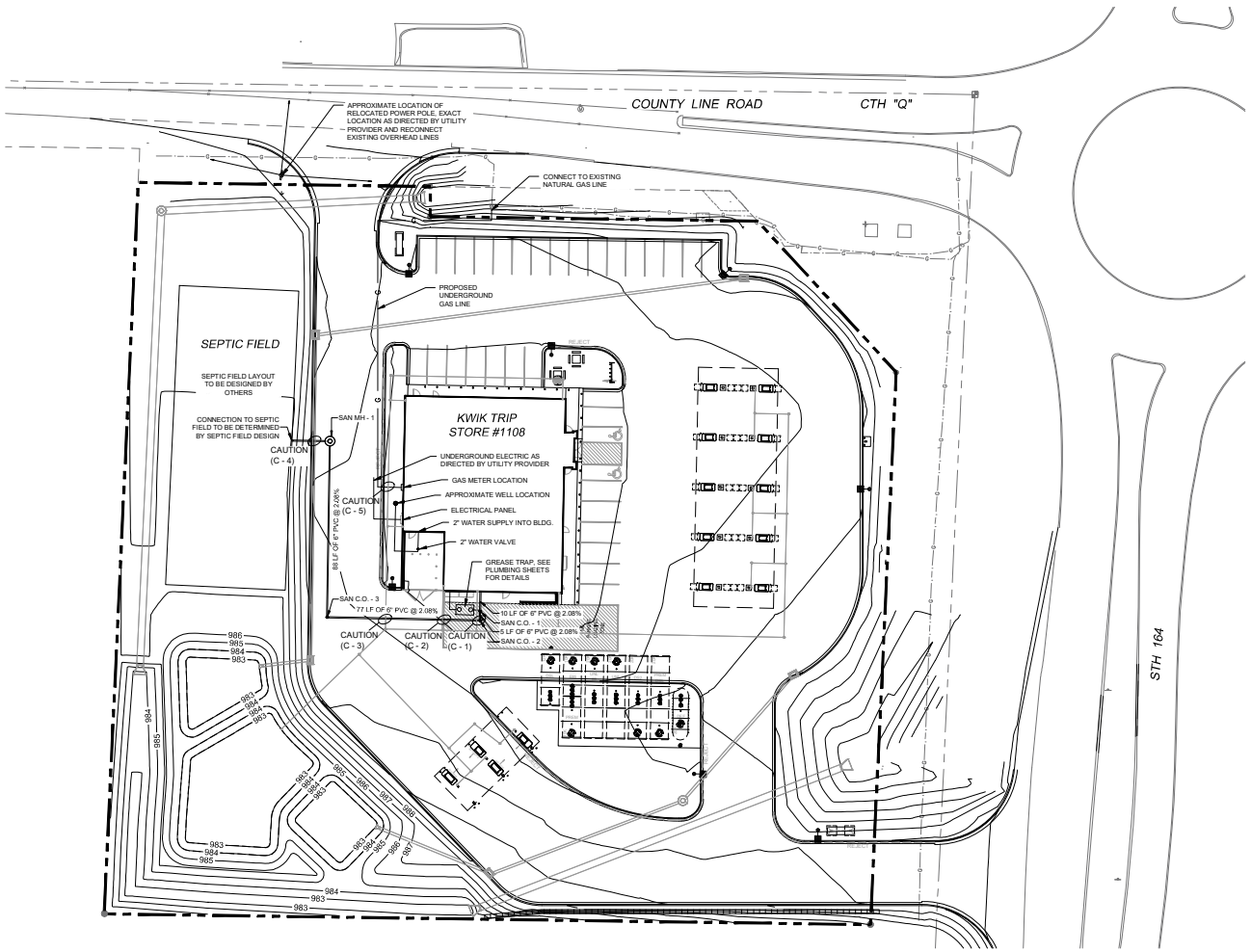
# STORM WATER BASIN PLAN

## CONVENIENCE STORE #1108 WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SP 3.1 |




*WATER DISTRIBUTION SYSTEM:*

1. *BRING ALL SITE UTILITIES TO 5' OUTSIDE OF THE BUILDING LINE WITH THE EXCEPTION OF THE WATER SERVICE. EXTEND WATER SERVICE INTO THE BUILDING AND UP TO THE FLANGE FOR THE WATER METER.*

2. *SEPARATION OF WATER AND SEWER: PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET BETWEEN ALL WATER AND SEWER LINES. PROVIDE A MINIMUM SEPARATION OF 18 INCHES AT ALL WATER LINE AND SEWER LINE CROSSINGS.*

3. *WATERMAIN DEPTH: MAINTAIN 7.0 FEET OF COVER OVER THE TOP OF THE WATER LINES TO THE FINISHED GRADE. VERIFY ELEVATION OF PROPOSED AND EXISTING WATER LINES AT ALL UTILITY CROSSINGS. INSTALL THE WATER LINES AT GREATER DEPTHS IN ORDER TO CLEAR STORM SEWERS, SANITARY SEWERS, OR OTHER UTILITIES AS REQUIRED. INCLUDE COSTS TO LOWER WATER LINES IN THE BASE BID.*

4. *TESTING: PRESSURE TEST AND PERFORM BACTERIOLOGICAL TESTS ON ALL WATER LINES UNDER THE SUPERVISION OF THE CITY OF SUSSEX. NOTIFY THE VILLAGE AT LEAST 24 WORKING HOURS PRIOR TO ANY TESTING. PRESSURIZE THE WATERLINE TO 1034-KPA (150-PSI) GAUGE PRESSURE (MEASURED AT THE POINT OF LOWEST ELEVATION) BY MEANS OF A PUMP CONNECTED TO THE PIPE IN A SATISFACTORY MANNER. MAINTAIN THE TEST PRESSURE FOR A MINIMUM OF 2 HOURS. DO NOT ADD WATER TO THE WATERMAIN IN ORDER TO MAINTAIN THE REQUIRED PRESSURE DURING THE WATER MAIN PRESSURE TESTING. THE TEST SECTION OF PIPE IS ACCEPTABLE WITH A PRESSURE DROP OF 14 KPA (2 PSI) OR LESS.*

5. *USE MECHANICAL JOINT RESTRAINT DEVICES FOR JOINT RESTRAINT ON ALL WATERMAIN BENDS HAVING A VERTICAL OR HORIZONTAL DEFLECTION OF 22-1/2 DEGREES OR GREATER, ALL VALVES, STUBS, EXTENSIONS, TEES, CROSSES, PLUGS, ALL HYDRANT VALVES, AND ALL HYDRANTS IN ACCORDANCE WITH CITY REQUIREMENTS. USE "SERIES 1100 MEGALUG" MANUFACTURED BY EBAA IRON INC., EASTLAND, TEXAS, OR APPROVED EQUAL, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR RESTRAINT ON DUCTILE IRON PIPE.*

6. *AT ALL VALVE LOCATIONS WHICH REQUIRE A 12" OR SMALLER VALVE, INSTALL GATE VALVES WHICH ARE OF THE COMPRESSION RESILIENT SEATED (CRS) TYPE. USE AMERICAN FLOW CONTROL'S SERIES 2500 DUCTILE IRON RESILIENT WEDGE GATE VALVE, OR APPROVED EQUAL. GATE VALVES SHALL CONFORM TO AWWA C509. INSTALL CAST IRON VALVE BOXES CONFORMING TO ASTM A48 AT EACH VALVE LOCATION. VALVE BOXES SHALL BE THE THREE-PIECE TYPE WITH 5-1/4" SHAFTS. USE TYLER 6860-Q WITH NO. 6 BASE, OR EQUIVALENT. VALVE BOXES SHALL HAVE AT LEAST 6" OF ADJUSTMENT ABOVE AND BELOW FINISHED GRADE. DROP COVERS ON VALVE BOXES SHALL BE ROUND AND BEAR THE WORD "WATER" CAST ON THE TOP. USE TYLER 6860-Q "STAYPUT" COVERS WITH EXTENDED SKIRT, OR EQUIVALENT.*

7. *USE MUELLER H 10360 OR FORD EM 2 7057, OR APPROVED EQUAL, AT ALL CURB STOP LOCATIONS. STATIONARY ROD IS REQUIRED ON ALL CURB STOPS.*

8. *WATERMAIN AND LATERALS 4" OR LARGE FOR THE SITE SHALL BE CLASS 52 DUCTILE IRON THAT CONFORM TO THE REQUIREMENTS OF AMERICAN NATIONAL STANDARD FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST, FOR WATER (ANSI/AWWA C151/A21.51 - LATEST REVISION). PIPE SHALL BE CEMENT LINED, PUSH-ON JOINT, AND BONDING STRAPS TO PROVIDE ELECTRICAL CONDUCTIVITY WITHOUT FIELD WELDING. ALL COMPONENTS SHALL CONFORM WITH CITY OF SUSSEX STANDARD SPECIFICATIONS.*

9. *TRACER WIRE: LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THE WISCONSIN STATUTES 182.0175(2R) AND THE WISCONSIN DEPARTMENT OF COMMERCE COMM 82.30(11)(H).*

10. *WHERE EXISTING GAS, ELECTRIC, CABLE, OR TELEPHONE UTILITIES CONFLICT WITH THE WORK, COORDINATE THE ABANDONMENT, RELOCATION, OFFSET, OR SUPPORT OF THE EXISTING UTILITIES WITH THE APPROPRIATE LOCAL UTILITY COMPANIES. COORDINATE NEW GAS METER AND GAS LINE INSTALLATION, ELECTRIC METER AND ELECTRIC SERVICE INSTALLATION, CABLE SERVICE, AND TELEPHONE SERVICE INSTALLATION WITH THE LOCAL UTILITY COMPANIES.*

11. *COORDINATE BUILDING UTILITY CONNECTION LOCATIONS AT 5 FT. OUT FROM THE PROPOSED BUILDING WITH THE WITH THE INTERIOR PLUMBING CONTRACTOR PRIOR TO CONSTRUCTION. VERIFY WATER AND SEWER SERVICE LOCATIONS AND ELEVATIONS WITH THE MECHANICAL ENGINEER PRIOR TO CONSTRUCTION.*

12. *THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE FROM RECORD INFORMATION. THE ENGINEER DOES NOT GUARANTEE THAT ALL EXISTING UTILITIES ARE SHOWN OR, IF SHOWN, EXIST IN THE LOCATIONS INDICATED ON THE PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE FINAL VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES (INCLUDING WATER AND SEWER LINES AND APPURTENANCES). NOTIFY THE ENGINEER OF ANY DISCREPANCIES*

*SANITARY SEWER:*

1. *PIPE: USE SOLID-CORE, SDR-35, ASTM D3034 (OR APPROVED EQUAL) POLYVINYL CHLORIDE (PVC) PLASTIC PIPE FOR ALL DESIGNATED PVC SANITARY SEWER SERVICES. JOINTS FOR ALL SANITARY SEWER SHALL HAVE PUSH-ON JOINTS WITH ELASTOMERIC GASKETS. USE OF SOLVENT CEMENT JOINTS IS ALLOWED FOR BUILDING SERVICES. SOLVENT CEMENT JOINTS IN PVC PIPE MUST INCLUDE USE OF A PRIMER WHICH IS OF CONTRASTING COLOR TO THE PIPE AND CEMENT. PIPE WITH SOLVENT CEMENT JOINTS SHALL BE JOINED WITH PVC CEMENT CONFORMING TO ASTM D2564. LAY ALL PVC PIPE ON A CONTINUOUS GRANULAR BED. INSTALLATION MUST COMPLY WITH ASTM D2321.*

2. *CLEANOUTS: INSTALL CLEANOUTS ON ALL SANITARY SEWER SERVICES. THE DISTANCE BETWEEN CLEANOUTS IN HORIZONTAL PIPING SHALL NOT EXCEED 100 FEET FOR PIPES 4-INCH AND OVER IN SIZE. CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPES THEY SERVE. INCLUDE FROST SLEEVES AND CONCRETE FRAME AND PIPE SUPPORT. INSTALL A METER BOX FRAME AND SOLID LID (NEENAH R-1914-A, OR APPROVED EQUAL) OVER ALL CLEANOUTS.*

3. *TESTING: PRESSURE TEST ALL SANITARY SEWER LINES. TEST ALL FLEXIBLE SANITARY SEWER LINES FOR DEFLECTION AFTER THE SEWER LINE HAS BEEN INSTALLED AND BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE TEST FAILS, MAKE NECESSARY REPAIRS AND RETEST.*

4. *UNLESS OTHERWISE INDICATED, USE REINFORCED, PRECAST, CONCRETE MAINTENANCE HOLES CONFORMING TO ASTM C478. FURNISHED WITH PRECAST BASES. SANITARY SEWER MAINTENANCE HOLES SHALL BE SUPPLIED WITH PRE-FORMED INVERTS AND FLEXIBLE NEOPRENE SLEEVE CONNECTIONS FOR ALL LATERAL LINES 375 MM (15 INCHES) IN DIAMETER OR LESS, UNLESS OTHERWISE INDICATED. JOINTS FOR ALL PRECAST MAINTENANCE HOLE SECTIONS SHALL HAVE CONFINED, RUBBER "O"-RING GASKETS IN ACCORDANCE WITH ASTM C923. THE INSIDE BARREL DIAMETER SHALL NOT BE LESS THAN 48 INCHES.*

5. *INSTALL FLEXIBLE WATERTIGHT FRAME/CHIMNEY SEALS ON ALL SANITARY SEWER MAINTENANCE HOLES. USE EITHER MANUFACTURED MAINTENANCE HOLE FRAME/CHIMNEY SEALS OR ELASTOMERIC WATERPROOFING FRAME/CHIMNEY SEALS.*

6. *USE NEENAH FOUNDRY CO. R-1642 CASTING WITH SELF-SEALING, SOLID, TYPE B LID, OR APPROVED EQUAL, ON ALL SANITARY SEWER MAINTENANCE HOLES. COVERS SHALL BEAR THE "SANITARY SEWER" LABEL.*

7. *THE MINIMUM DEPTH OF COVER FOR SANITARY SEWER WITHOUT INSULATION IS 5 FEET. INSULATE SANITARY SEWER SERVICES AT LOCATIONS WHERE THE DEPTH OF COVER IS LESS THAN 5 FEET. PROVIDE A MINIMUM INSULATION THICKNESS OF 2 INCHES. THE INSULATION MUST BE AT LEAST 4 FEET WIDE AND CENTERED ON THE PIPE. INSTALL THE INSULATION BOARDS 6 INCHES ABOVE THE TOPS OF THE PIPES ON MECHANICALLY COMPACTED AND LEVELED PIPE BEDDING MATERIAL. USE HIGH DENSITY, CLOSED CELL, RIGID BOARD MATERIAL EQUIVALENT TO DOW STYROFOAM HI-40 PLASTIC FOAM INSULATION.*

8. *TRACER WIRE: LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THE WISCONSIN STATUTES 182.0175(2R) AND THE WISCONSIN DEPARTMENT OF COMMERCE COMM 82.30(11)(H).*

SANITARY SEWER STRUCTURE SCHEDULE

| STRUCT # | CASTING | STRUCT TYPE | RIM EL | INV. EL | DEPTH |
|---|---|---|---|---|---|
| SAN C.O. - 1 | NONE | 6" CLEANOUT | 992.30 | 987.77 | 4.53' |
| SAN C.O. - 2 | NONE | 6" CLEANOUT | 992.21 | 987.67 | 4.54' |
| SAN C.O. - 3 | NONE | 6" CLEANOUT | 990.66 | 986.08 | 4.58' |
| SAN MH - 1 | R-1500 SOLID LID | 48" DIA CONC. MH | 990.73 | 984.24 | 6.49' |

CRITICAL UTILITY CROSSING TABLE

| CROSSING NUMBER | INVERT OF TOP PIPE | TOP OF BOTTOM PIPE | CLEARANCE |
|---|---|---|---|
| C - 1 | SS = 987.15 ± | ST = 985.75 ± | 1.40' |
| C - 2 | SS = 986.79 ± | ST = 984.85 ± | 1.94' |
| C - 3 | SS = 986.20 ± | ST = 984.51 ± | 1.69' |
| C - 4 | SS = UNK | ST = 984.32 ± | -- |
| C - 5 | G = 990.48 ± | ST = 985.18 ± | 5.30' |

NOTE:
CONTRACTOR SHALL MAINTAIN APPROPRIATE SEPARATION PER WISCONSIN STANDARDS BETWEEN UTILITIES.

SS = SANITARY SEWER
ST = STORM SEWER
G = NATURAL GAS

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0 30 60
SCALE: 1" = 30'

PLOTTING NOTE: PLANS PLOTTED TO 11x17 SHEET SIZE ARE ½ SCALE – 1"=60'

KWIK TRIP

KWIK STAR

KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444

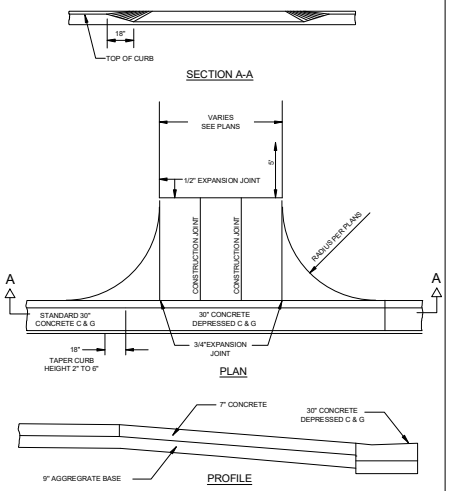
UTILITY PLAN

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

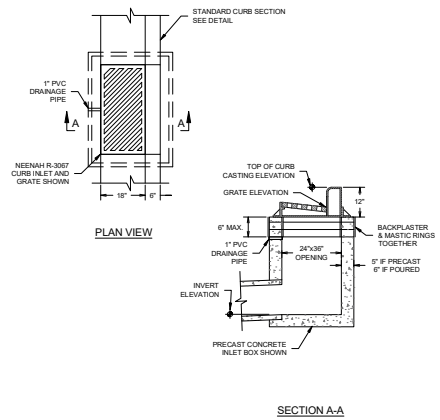
| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SP 4.0 |




NOTE: DRIVEWAY CONSTRUCTION PER SPECIFICATION OF CITY, COUNTY AND STATE. OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING CONSTRUCION WORK. REFER TO GRADE PLAN FOR ALL APPROACH RELATED GRADES AND NOTES.

1 SP5.0 URBAN COMMERCIAL DRIVEWAY DETAIL
NOT TO SCALE




NOTES:
- TOP OF CURB AND PIPE INVERT ELEVATIONS ARE SHOWN ON THE PLANS.

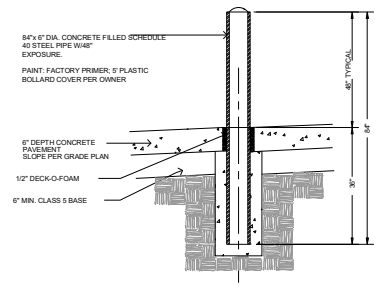
- THE GRATE ELEVATION SHALL BE DEPRESSED 0.1' FROM STRAIGHT GUTTER GRADE STARTING 5' FROM THE INLET AND EXTENDING IN BOTH DIRECTIONS.

- THE CASTING SHALL BE NEENAH FOUNDRY R-3067 CURB INLET WITH REVERSIBLE GRATES WHERE RUNOFF REACHES THE INLET FROM BOTH DIRECTIONS. WHERE RUNOFF REACHES THE INLET FROM ONE DIRECTION A NEENAH R-3067-L CASTING SHALL BE USED. DIRECTIONAL SLOTS TO BE LOCATED TO DIRECT THE FLOW INTO THE STREET INLET.

- MASTIC BETWEEN RINGS AND BACKPLASTER A SMOOTH LAYER OF GROUT OVER THE ENTIRE INNER AND OUTER SURFACES OF THE RINGS.

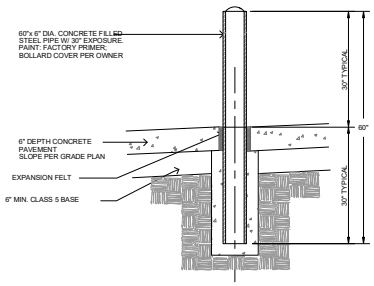
2 SP5.0 STANDARD 2' X 3' STORM SEWER CATCHBASIN - RECTANGULAR INLET
NOT TO SCALE

NOTE: SEE ARCHITECTURAL PLANS FOR REMOVABLE BOLLARD LOCATION AND DETAIL



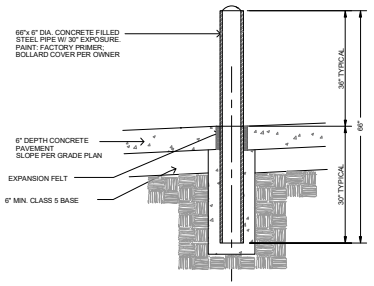

3 SP5.0 84" X 6" DIAMETER PIPE BOLLARD
NOT TO SCALE

NOTE: SEE ARCHITECTURAL PLANS FOR REMOVABLE BOLLARD LOCATION AND DETAIL

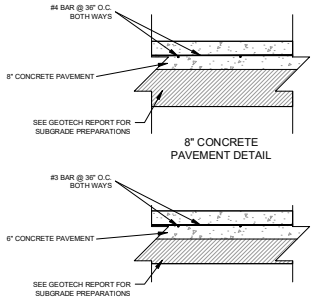



6 SP5.0 60" X 6" DIAMETER PIPE BOLLARD
NOT TO SCALE

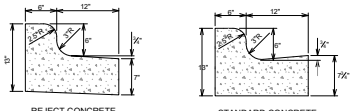
NOTE: SEE ARCHITECTURAL PLANS FOR REMOVABLE BOLLARD LOCATION AND DETAIL




9 SP5.0 66" X 6" DIAMETER PIPE BOLLARD
NOT TO SCALE




4 SP5.0 CONCRETE PAVEMENT SECTIONS
NOT TO SCALE




REJECT CONCRETE
CURB & GUTTER

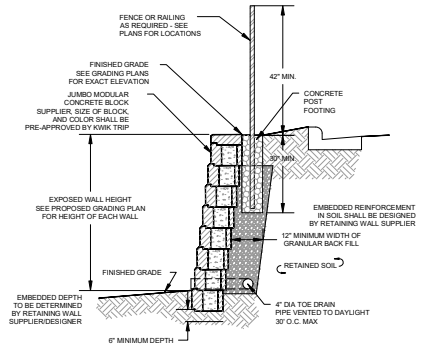
STANDARD CONCRETE
CURB & GUTTER

NOTES:

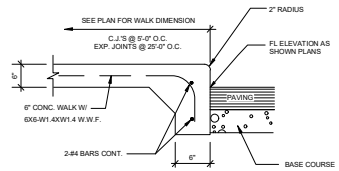
LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER.

THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 1/2" THICK. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.

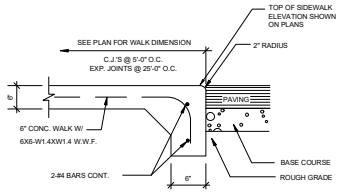
7 SP5.0 CONCRETE CURB AND GUTTER
NOT TO SCALE




10 SP5.0 LARGE BLOCK RETAINING WALL DETAILS
NOT TO SCALE




5 SP5.0 THICKENED EDGE SIDEWALK




8 SP5.0 SIDEWALK/ CURB DETAIL
NOT TO SCALE

11 SP5.0 NOT USED
NOT TO SCALE

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WELL-GRADED GRANULAR WALL ROCK 0.25" TO 1.5" LESS THAN 10% FINES

MISC. DETAILS

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

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|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SP 5.0 |

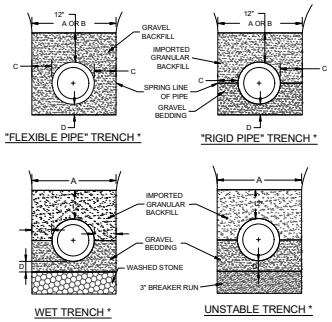
1 SP5.1 NOT USED

3 SP5.1 NOT USED
NOT TO SCALE

4 SP5.1 NOT USED
NOT TO SCALE

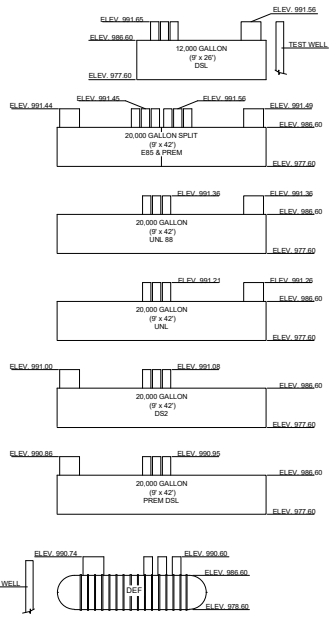
5 SP5.1 NOT USED
NOT TO SCALE

DIMENSIONS:
A: OUTSIDE DIAMETER OF PIPE PLUS 24" (MAXIMUM)
B: FOR ROCK, OUTSIDE DIAMETER OF PIPE PLUS 18" (MAXIMUM)
C: MINIMUM - 6"
D: 4" BELOW BARREL AND 3" BELOW BELL; IN ROCK, 6" BELOW BARREL

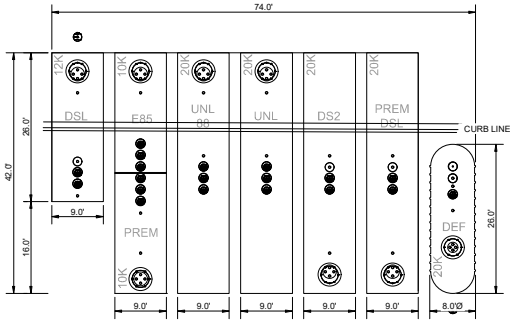



* "RIGID PIPE" INCLUDES REINFORCED CONCRETE PIPE AND DUCTILE IRON PIPE ONLY. ALL OTHER PIPE MATERIALS SHALL BE CONSIDERED "FLEXIBLE PIPE". THE WET TRENCH AND UNSTABLE TRENCH DETAILS ARE DRAWN SHOWING A "RIGID PIPE" TRENCH INSTALLATION.

8 SP5.1 SANITARY/WATER MAIN BEDDING
NOT TO SCALE

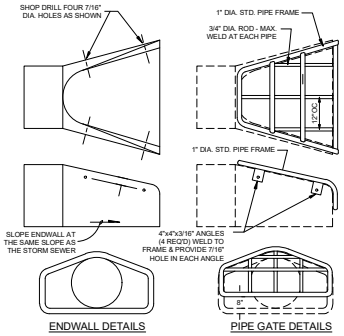



ELEVATION LAYOUT DIAGRAM




TANK LAYOUT DIAGRAM

2 SP5.1 TANK LAYOUT
NOT TO SCALE

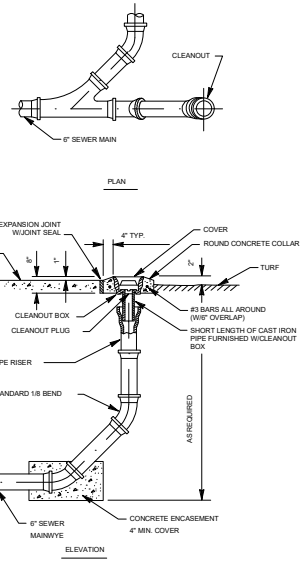



NOTES:
- THE CONTRACTOR SHALL BOLT THE PIPE GATE TO THE CONCRETE ENDWALL WITH FOUR 3/8"x6" MACHINE BOLTS WITH NUTS ON INSIDE WALL.

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

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

7 SP5.1 ENDWALL GRATE DETAIL
NOT TO SCALE




9 SP5.1 SANITARY CLEANOUT
NOT TO SCALE

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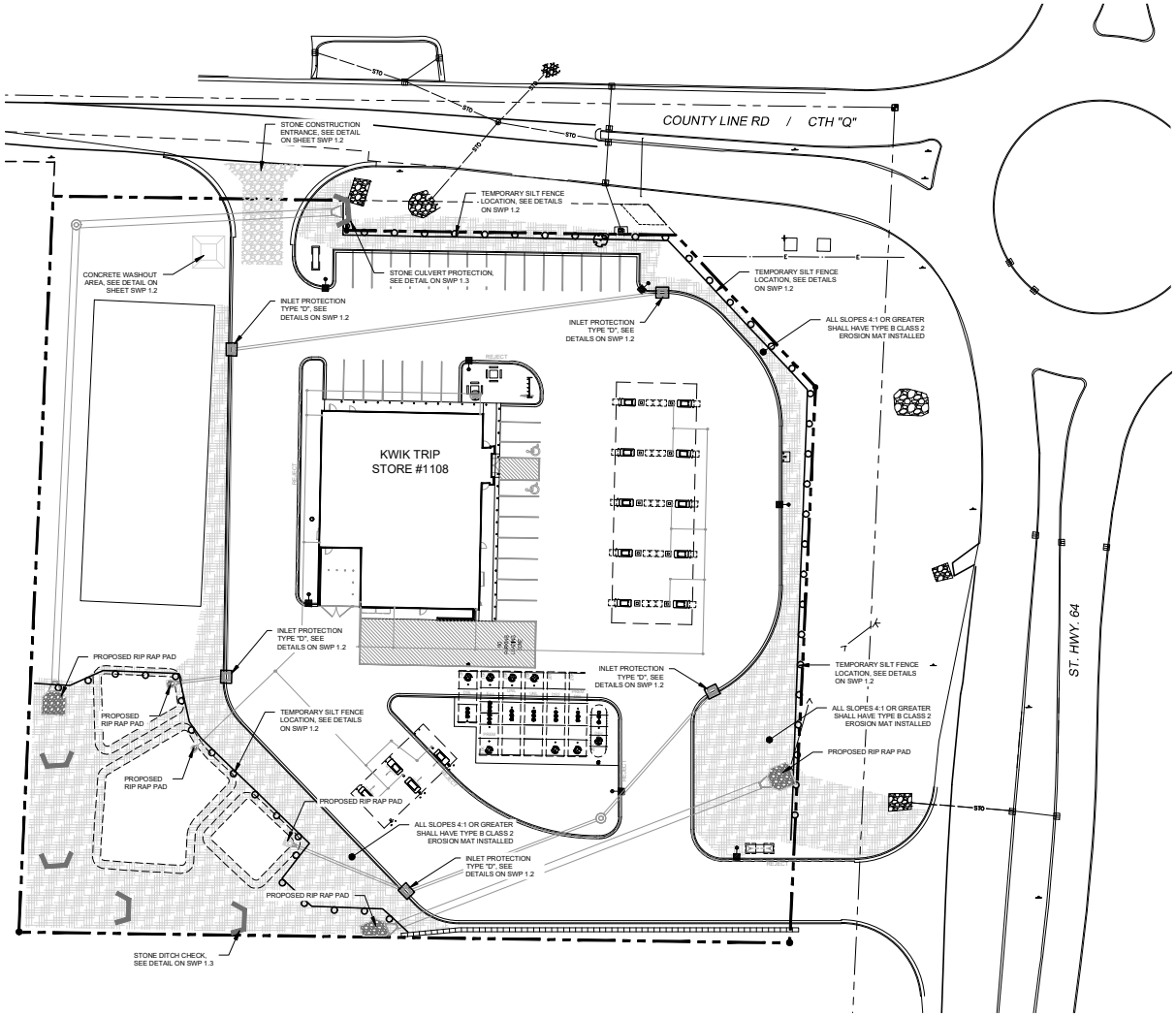


## CONSTRUCTION SEQUENCE

*INSTALL EROSION/SEDIMENT CONTROL MEASURES

*INSTALL STORMWATER MANAGEMENT SEDIMENT BASINS

*INSTALL STORM SEWER

*INSTALL STRUCTURES

*INSTALL PAVEMENTS

*INSTALL LAWN/ LANDSCAPE

*FLUSH STORM SEWER

*REMOVE EROSION CONTROL MEASURES ONLY AFTER ALL PAVEMENTS HAVE BEEN INSTALLED AND ALL SOILS HAVE BEEN STABILIZED

## PROJECT DATA

| | |
|---|---|
| SITE AREA DATA | 134,554 SQ.FT. |
| DISTURBED AREA | 133,840 SQ.FT. |
| PRE-CONSTRUCTION IMPERVIOUS AREA | 25,067 SQ.FT. |
| POST-CONSTRUCTION IMPERVIOUS AREA | 82,965 SQ.FT. |

SOIL DATA:
SURFACE SOIL CONCRETE
W/ GRAVEL BASE OVER FILL

ESTIMATED PRELIMINARY EROSION CONTROL QUANTITIES
(ACTUAL QUANTITIES SUBJECT TO CHANGE)

| ITEM | QUANTITY |
|---|---|
| ROCK CONSTRUCTION ENTRANCE - TEMP | 1 EA. |
| EROSION MAT - PERMANENT | 2,920 S.Y. |
| SILT FENCE - TEMP | 800 L.F. |
| INLET PROTECTION, TYPE A - TEMP | 0 EA. |
| INLET PROTECTION, TYPE D - TEMP | 5 EA. |
| RIP-RAP - PERMANENT | 20 C.Y. |
| STONE DITCH CHECK - PERMANENT | 4 EA. |
| STONE CULVERT PROTECTION - TEMP | 1 EA. |

NOTE: FOR MAINTENANCE PURPOSES CONTRACTOR SHALL SUPPLY ALL SUFFICIENT QUANTITIES FOR REPAIR AND REPLACEMENT OF EROSION CONTROL DEVICES THROUGHOUT ALL PHASES OF THE PROJECTS CONSTRUCTION.

SCALE: 1" = 30'

PLOTTING NOTE: PLANS PLOTTED TO 11X17 SHEET SIZE ARE ½ SCALE - 1"=60'

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

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

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

KWIK TRIP, Inc.
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# EROSION CONTROL PLAN

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

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| DRAWN BY | S. ANDERSON / L. OLSON |
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| DATE | FEBRUARY 5, 2020 |
| SHEET | SWP 1.0 |

## GENERAL STORMWATER POLLUTION PREVENTION:

APPLY FOR AND OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION ACTIVITY.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP): THE SWPPP INCLUDES THIS NARRATIVE, PLAN SHEETS SP3, SP3.1 AND SP3.2, AND THE STORMWATER MANAGEMENT CALCULATIONS. KEEP A COPY OF THE SWPPP, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS AT THE SITE DURING THE CONSTRUCTION. DURING THE CONSTRUCTION PROCESS THE SWPPP WILL HAVE TO BE AMENDED FOR ALL CHANGES PERFORMED BY THE CONTRACTOR. THE OWNER SHALL BE AWARE OF THE AMENDMENTS PRIOR TO CHANGES MADE TO THE SWPPP PLAN. ALL NOTES, PHOTOGRAPHS, RECORDED DATES, SKETCHES, REFERENCES, AND DIAGRAMS WILL HAVE TO BE RECORDED AND MADE AVAILABLE AS PART OF THE SWPPP PERMIT.

INDIVIDUAL(S) PREPARING THE SWPPP FOR THE PROJECT, OVERSEEING IMPLEMENTATION OF THE SWPPP, REVISING AND AMENDING THE SWPPP, AND AT LEAST ONE INDIVIDUAL ON THE PROJECT PERFORMING INSTALLATION, INSPECTION, MAINTENANCE, AND REPAIRS OF BMPS MUST BE TRAINED. THE TRAINING MUST BE DONE BY A LOCAL, STATE, FEDERAL AGENCIES; PROFESSIONAL ORGANIZATION; OR OTHER ENTITIES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, OR PERMANENT STORMWATER MANAGEMENT.

RESPONSIBLE PARTIES: THE CONTRACTOR MUST DESIGNATE A PERSON KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPS WHO WILL OVERSEE THE IMPLEMENTATION OF THE SWPPP, AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE AND DURING CONSTRUCTION.

THE OWNER IS RESPONSIBLE FOR IDENTIFYING WHO WILL HAVE RESPONSIBILITY FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEMS.

OWNER CONTACT:

NAME: JEFF OSGOOD

COMPANY: KWIK TRIP INC.

ADDRESS: KWIK TRIP, INC. - STORE ENGINEERING
1626 OAK STREET, P.O. BOX 2107
LA CROSSE, WI 54602

TELEPHONE: (608) 793-6414

SITE INVESTIGATION, INSTALLATION, IMPLEMENTATION:

PRIOR TO ANY WORK, CONTRACTOR SHALL VISIT THE SITE, DOCUMENT EXISTING CONDITIONS AS NECESSARY(PHOTOS, NOTES, ETC) AND NOTE EXISTING DRAINAGE PATTERNS ON AND OFF SITE THAT ARE RELATED TO THE PROJECT. THESE NOTES SHALL BE PART OF THE SWPP.

INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES INCLUDING SILT FENCE, ROCK CONSTRUCTION ENTRANCE(S), EROSION CONTROL BERMS, ROCK FILTERS, SILT SACKS, ROCK EARTH BERMS, AND SEDIMENTION BASINS TO PROTECT ALL RECEIVING WATERS, CATCH BASINS, DITCHES, INLETS ETC. IN AND AROUND THE SITE. ALL PROTECTIVE AND PREVENTATIVE MEASURES MUST BE IN PLACE AND INSPECTED PRIOR TO BEGINNING SITE CLEARING, GRADING, OR OTHER LAND-DISTURBING ACTIVITY.

PRIOR TO BEGINNING SITE CLEARING AND GRADING, PROTECT ALL STORM SEWER INLETS THAT RECEIVE RUNOFF FROM DISTURBED AREAS. IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING THE DOWNSTREAM STORM SEWER SYSTEM, SEAL ALL STORM SEWER INLETS THAT ARE NOT NEEDED FOR SITE DRAINAGE DURING CONSTRUCTION. PROTECT ALL OTHER STORM SEWER INLETS BY INSTALLING SEDIMENT CONTROL DEVICES, SUCH AS SILT SACKS, OR ROCKED FILTRATION LOGS/WIERS. STRAW BALES OR FABRIC UNDER THE GRATES ARE NOT ACCEPTABLE FORMS OF INLET PROTECTION. PROTECT NEW STORM SEWER INLETS AS THEY ARE COMPLETED. MAINTAIN STORM SEWER INLET PROTECTION IN PLACE UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLETS ARE STABILIZED.

BEFORE BEGINNING CONSTRUCTION, INSTALL A TEMPORARY ROCK CONSTRUCTION ENTRANCE AT EACH POINT WHERE VEHICLES EXIT THE CONSTRUCTION SITE WHEN AT ALL POSSIBLE CONTRACTOR SHALL DESIGNATE ONLY ONE ACCESS POINT FOR VEHICLES ENTERING AND EXITING THE SITE. THE ROCK ON THE ENTRANCE WILL HAVE TO BE INSPECTED DAILY AND REPLACED OR ROCK SUPPLEMENTED BY THE CONTRACTOR WHEN OVER 50% OF THE VOIDS IN THE ROCK ARE FILLED. A CLEANING STATION SHOULD BE MADE AVAILABLE TO DRIVERS AND VISIBLY SIGNED AS SUCH. PROVIDE SHOVELS, BROOMS AND/OR HOSE WITH A WASH OUT AREA SO SOILS CAN BE REMOVED FROM VEHICLES ON SITE.

AVOID ENTIRE REMOVAL OF TREES AND SURFACE VEGETATION ALL AT ONCE WHENEVER POSSIBLE AS THIS LIMITS THE AMOUNT OF SITE SUSCEPTIBLE TO EROSION. SCHEDULE CONSTRUCTION ZONES AND NOTE THIS ON THE SWPP PLAN IN ORDER TO EXPOSE THE SMALLEST PRACTICAL AREA OF SOIL AT ANY GIVEN TIME. UTILIZE VEGETATION REMOVED BY ON SITE GRINDING AND MULCHING AND USING THIS MATERIAL TO PROTECT THE SOIL FROM EROSION.

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, COMPLETE PERMANENT OR TEMPORARY STABILIZATION AGAINST EROSION DUE TO RAIN, WIND, AND RUNNING WATER WITHIN 7 CALENDAR DAYS ON ALL DISTURBED OR GRADED AREAS. THIS REQUIREMENT DOES NOT APPLY TO THOSE AREAS THAT ARE CURRENTLY BEING USED FOR MATERIAL STORAGE ON A DAILY BASIS OR FOR THOSE AREAS ON WHICH GRADING, SITE BUILDING, OR OTHER CONSTRUCTION ACTIVITIES ARE ACTIVELY UNDERWAY. PROVIDE TEMPORARY COVER ON ALL STACKED TOPSOIL PILES, AND OTHER AREAS OF STOCKPILED EXCAVATED MATERIAL IN ORDER TO PREVENT SOIL EROSION AND RAPID RUNOFF DURING THE CONSTRUCTION PERIOD. STOCKPILES CAN BE MULCHED,COVERED WITH POLY OR FABRIC, AND OR SEEDED DURING PROLONGED EXPOSURE. PROLONGED PERIODS OF OPEN, BARE EARTH WITHOUT GRASS COVER WILL NOT BE PERMITTED. STABILIZE ALL DISTURBED GREENSPACE AREAS WITH A MINIMUM OF 4" TOPSOIL IMMEDIATELY AFTER FINAL SUBGRADE COMPLETION. SEED AND MULCH, OR SOD AND PROTECT THESE AREAS WITHIN 48 HOURS AFTER COMPLETION OF FINAL GRADING WORK (WEATHER PERMITTING). STABILIZE ALL DISTURBED AREAS TO BE PAVED USING EARLY APPLICATION OF GRAVEL BASE. STABILIZE THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT CONVEYS WATER FROM THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE CONSTRUCTION SITE, WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR WITHIN 200 FEET FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZE TEMPORARY OR PERMANENT DRAINAGE DITCHES WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER. PROTECT OUTFALLS MINIMUM OF 200FEET DOWN STREAM AND TO THE SIDE OF THE DISCHARGE POINT. ADDITIONAL SETTLING "POTS" ACHIEVED BY FILTER LOGS OR FILTERED STICK BALES STAKED IN THE CHANNEL WILL DISSIPATE THE WATER ENERGY. PROVIDE PIPE OUTLETS WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

RECEIVING WATERS - IT IS THE CONTRACTORS RESPONSIBILITY TO INSPECT THE SITE DISCHARGE POINT AS WELL AS DOWNSTREAM TO THE RECEIVING BODY OF WATER(POND, LAKE, STREAM, ETC.) ON A REGULAR BASIS INCLUDING AFTER EACH STORM EVENT AND DOCUMENT IF ANY DIFFERENCES OR CHANGES IN NORMAL IN DISCHARGE AND IF MATERIAL IS LEAVING THE CONSTRUCTION SITE. IF SO IT SHALL BE DOCUMENTED AND REMOVED IMMEDIATELY.

NOTE: ALL EROSION AND SEDIMENT CONTROL DEVICES WILL BE CHECKED BY THE CONTRACTOR AFTER EACH STORM EVENT AND BE MAINTAINED, OR IMPROVED UPON AFTER EVERY STORM EVENT TO ENSURE ADEQUATE PERFORMANCE.

## POLLUTION CONTROL:

DESIGNATE A CONCRETE WASH-OUT AND TRUCK WASH AREA:
MAKE IT VISIBLE IN THE FIELD TO VEHICLE OPERATORS AND NOTE THIS ON THE SWPP PLAN.

WHEN WASHOUTS OCCUR ON THE SITE, CONCRETE WASHOUT WATER MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. LIQUID AND SOLID WASTES MAY NOT TOUCH THE GROUND AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS.

ON SITES WHERE CONCRETE WASHOUT AREAS ARE NOT FEASIBLE AS SHOWN ON THE DETAIL SHEET, ABOVE GROUND METHODS AND/OR OFF-SITE METHODS CAN BE UTILIZED AS APPROVED BY OWNER.

CONCRETE WASHOUT MAY BE PROVIDED OFF-SITE BY CONCRETE CONTRACTOR OR CONCRETE SUPPLIER, AT AN APPROVED WASHOUT DISPOSAL AREA. CONCRETE SUPPLIER MAY PROVIDE CONCRETE WASHOUT AREAS ON-BOARD THEIR TRANSPORTS FOR DISPOSAL OFF-SITE. CONCRETE CONTRACTOR SHALL VERIFY WITH SUPPLIER IN REGARDS TO PROVIDED CONCRETE WASHOUT AREAS ON AND OFF-SITE, AS NECESSARY.

LIMIT EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES TO A DEFINED AREA PREFERABLY BEFORE THE CONSTRUCTION ACCESS/EXIT POINT. WASH VEHICLES ONLY ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. CONTAIN RUNOFF AND PROPERLY DISPOSE OF WASTE. ENGINE DEGREASING IS PROHIBITED.

SOLID WASTE: PROPERLY DISPOSE OF COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS, AND OTHER WASTES IN COMPLIANCE WITH STATE REQUIREMENTS.

HAZARDOUS MATERIALS: PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE DEBRIS, CLEANING WASTES, OIL, GASOLINE, PAINT, WASTEWATER, TOXIC MATERIALS, AND HAZARDOUS MATERIALS) OFF-SITE. DO NOT ALLOW WASTE AND UNUSED BUILDING MATERIALS TO BE CARRIED BY RUNOFF INTO A RECEIVING CHANNEL OR STORM SEWER SYSTEM. PROPERLY STORE OIL, GASOLINE, PAINT, AND OTHER HAZARDOUS MATERIALS IN ORDER TO PREVENT SPILLS, LEAKS, OR OTHER DISCHARGE. INCLUDE SECONDARY CONTAINMENT. RESTRICT ACCESS TO STORAGE AREAS IN ORDER TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS MATERIALS MUST BE IN COMPLIANCE WITH REGULATIONS.

MACHINERY: AND MECHANIZED EQUIPMENT THAT LEAKS WASTE SHALL HAVE A PROTECTIVE BARRIER OR CONTAINMENT UNDER THE DEVICE ADEQUATE TO CONTAIN THE WASTE. PROPERLY DISPOSE OF THE WASTE.

EMERGENCY SPILL STATION: CONTRACTOR SHALL LOCATE AND SIGN AN EMERGENCY SPILL STATION THAT HAS NECESSARY CONTAINMENT OR CLEANUP DEVICES FOR ALL WORKERS TO ACCESS.

## EROSION CONTROL :

APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.

CONTRACTOR SHALL UTILIZE COARSELY GROUND WOOD AND TREE MULCHES TO COVER EXPOSED SOILS. MULCHES SHALL BE SPORED ON SITE TO SUPPLEMENT AND USE IN PROBLEM AREAS DURING ALL PHASES OF THE CONSTRUCTION PROJECT.

CONTRACTOR SHALL USES STAR TACK OR OTHER ORGANIC SUBSTANCES IN SITUATIONS TO PREVENT SOIL FROM ERODING AWAY BY WIND OR RAIN.

WHENEVER POSSIBLE CONTRACTOR SHALL GRADE AREAS OF SOIL TO LIMIT POTENTIAL OF EROSION, TO INCLUDE TRACKING PERPENDICULAR TO FALL LINE OF GRADES AS WELL AS DIVERTING WATER FLOWS FROM PROBLEMATIC AREAS ON THE SITE.

SEEDING, FIBER BLANKETS, POLY/TARPS OR COVER MULCHES, DISKED MULCHES AND COMPOST CAN BE USED TO COVER TEMPORARILY EXPOSED AREAS FROM WIND AND RAIN. OTHER METHODS BY THE CONTRACTOR SHALL BE DOCUMENTED IN THE SWPP.

## SEDIMENT CONTROL:

ALL INLET PROTECTION SHALL BE TYPE - D AND ON THE WISCONSIN EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL)

SILT FENCE:
INSTALL AND MAINTAIN PER WIDNR CONSERVATION PRACTICE STANDARD 1056.

INSTALL SILT FENCE ALONG THE CONTOUR (ON A LEVEL HORIZONTAL PLANE) WITH THE ENDS TURNED UP (J-HOOKS) IN ORDER TO HELP POND WATER BEHIND THE FENCE. INSTALL THE SILT FENCE ON THE UPHILL SIDE OF THE SUPPORT POSTS. PROVIDE A POST SPACING OF 1.2 M (4 FEET) OR LESS. DRIVE POSTS AT LEAST 0.6 M (2 FEET) INTO THE GROUND. ANCHOR THE SILT FENCE FABRIC IN A TRENCH AT LEAST 152 MM (6 INCHES) DEEP AND 152 MM (6 INCHES) WIDE DUG ON THE UPSLOPE SIDE OF THE SUPPORT POSTS. LAY THE FABRIC IN THE TRENCH AND THEN BACKFILL AND COMPACT WITH A VIBRATORY PLATE COMPACTOR. MAKE ANY SPLICES IN THE FABRIC AT A FENCE POST. AT SPLICES, OVERLAP THE FABRIC AT LEAST 152 MM (6 INCHES), FOLD IT OVER, AND SECURELY FASTEN IT TO THE FENCE POST. SILT FENCE SUPPORTING POSTS SHALL BE 51 MM (2 INCH) SQUARE OR LARGER HARDWOOD, PINE, OR STANDARD T- OR U-SECTION STEEL POSTS. T- OR U-SECTION STEEL POSTS SHALL WEIGH NOT LESS THAN 1.86KG/KG PER METER (1.25 LB PER LINEAL FOOT). POSTS SHALL HAVE A MINIMUM LENGTH OF 1524 MM (5 FEET). POSTS SHALL HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC AND PREVENT SLIPPAGE. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF WIDOT STANDARD SPECIFICATION 628 FOR PREASSEMBLED SILT FENCE, FURNISHED IN A CONTINUOUS ROLL IN ORDER TO AVOID SPLICES. GEOTEXTILE FABRIC SHALL BE UNIFORM IN TEXTURE AND APPEARANCE AND HAVE NO DEFECTS, FLAWS, OR TEARS. THE FABRIC SHALL CONTAIN SUFFICIENT ULTRAVIOLET (UV) RAY INHIBITOR AND STABILIZERS TO PROVIDE A MINIMUM TWO-YEAR SERVICE LIFE OUTDOORS. FABRIC COLOR SHALL BE INTERNATIONAL ORANGE. IN HIGH TRAFFIC AREAS CONTRACTOR SHALL REINFORCE SILT FENCE WITH WIRE FENCING AND METAL POSTS. EXTREME CIRCUMSTANCES WILL REQUIRE TEMPORARY CONCRETE MEDIAN SECTIONS TO SUPPORT MATERIAL BACKING OF STOCK PILED SOIL OR FILLED EARTH.

INSTALL SILTFENCE, OR OTHER EFFECTIVE SEDIMENT CONTROLS, AROUND ALL TEMPORARY SOIL STOCKPILES. LOCATE SOIL OR DIRT STOCKPILES CONTAINING MORE THAN 10 CUBIC YARDS OF MATERIAL SUCH THAT THE DOWNSLOPE DRAINAGE LENGTH IS NO LESS THAN 8 M (25 FEET) FROM THE TOE OF THE PILE TO A ROADWAY OR DRAINAGE CHANNEL. IF REMAINING FOR MORE THAN SEVEN DAYS, STABILIZE THE STOCKPILES BY MULCHING, VEGETATIVE COVER, TARPS, OR OTHER MEANS. CONTROL EROSION FROM ALL STOCKPILES BY PLACING SILT FENCE BARRIERS AROUND THE PILES. DURING STREET REPAIR, COVER CONSTRUCTION SOIL OR DIRT STOCKPILES LOCATED CLOSER THAN 8 M (25 FEET) TO A ROADWAY OR DRAINAGE CHANNEL WITH TARPS, AND PROTECT STORM SEWER INLETS WITH SILT SACKS OR STAKED SILTFENCE. DO NOT STOCK PILE SOIL OR MATERIAL NEAR CATCH BASINS OR DRAINAGE WAYS.

STONE TRACKING PAD /TEMPORARY ROCK CONSTRUCTION ENTRANCE:
INSTALL AND MAINTAIN PER WIDNR CONSERVATION PRACTICE STANDARD 1057. USE 3INCH TO 6" DIAMETER ROCK. PLACE THE AGGREGATE IN A LAYER AT LEAST 300 MM (12 INCHES) THICK ACROSS THE ENTIRE WIDTH OF THE ENTRANCE. EXTEND THE ROCK ENTRANCE AT LEAST 15 M (50 FEET) INTO THE CONSTRUCTION ZONE. USE A WIDOT TYPE R PERMEABLE GEOTEXTILE FABRIC MATERIAL BENEATH THE AGGREGATE IN ORDER TO PREVENT MIGRATION OF SOIL INTO THE ROCK FROM BELOW. MAINTAIN THE ENTRANCE IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED ROADWAYS. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS REQUIRED. CLOSE ENTRANCES NOT PROTECTED BY TEMPORARY ROCK CONSTRUCTION ENTRANCES TO ALL CONSTRUCTION TRAFFIC.

TEMPORARY SEDIMENT BASINS
IN THE CONSTRUCTION PROCESS OR IF NOTED ON THE PLAN THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASIN(S). AS PER GENERAL RULE THE SEDIMENT BASIN SHALL BE SIZED APPROPRIATELY TO A CAPACITY RELATED TO THE DRAINAGE AREA ON A RATIO OF 3,600 CUBIC FEET PER ACRE OF DRAINAGE ZONE ENTERING THE BASIN. BASINS SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT, MATERIAL REMOVED AND STABILIZED. IF CHANGES TO THE BASIN ARE MADE, DOCUMENT AND AMEND THE SWPP PLAN.

DEWATERING:

IF DEWATERING IS REQUIRED AND SUMP PUMPS ARE USED, ALL PUMPED WATER MUST BE DISCHARGED THROUGH AN EROSION CONTROL FACILITY (TEMPORARY SEDIMENTATION BASIN, GRIT CHAMBER, SAND FILTER, UPFLOW CHAMBER, HYDRO-CYCLONE, SWIRL CONCENTRATOR, DEWATERING BAG OR OTHER APPROPRIATE FACILITY) PRIOR TO LEAVING THE CONSTRUCTION SITE. PROPER ENERGY DISSIPATION MUST BE PROVIDED AT THE OUTLET OF THE PUMP SYSTEM. DISCHARGE CLEAR WATER ONLY. TO ACHIEVE BETTER SEPARATIONS OF THE MATERIAL SUSPENDED IN THE WATER A BIODEGRADABLE NOT TOXIC FLOCCULANT AGENT MAY BE REQUIRED.

PUMPING OF WATER FROM FOUNDATION AREA DURING CONSTRUCTION SHALL NOT EXCEED A RATE OF 70 GALLONS PER MINUTE. SUMP PUMP SHALL BE PLACED ON A CLEAR STONE BEDDING AND A CLOTHMESH SOOK SHALL BE PLACED ON THE OUTLET END OF THE PIPE TO CONTROL SEDIMENT LOSS.

## INSPECTIONS-MAINTENANCE-DAILY RECORD-AMEND THE SWPP PLAN:

CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES, STABILIZED AREAS, AND INFILTRATION AREAS ON A DAILY BASIS UNTIL LAND-DISTURBING ACTIVITY HAS CEASED. THEREAFTER, INSPECT AT LEAST ON A WEEKLY BASIS UNTIL VEGETATIVE COVER IS ESTABLISHED. INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES, STABILIZED AREAS, AND INFILTRATION AREAS WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. REMOVE ACCUMULATED SEDIMENT DEPOSITS FROM BEHIND EROSION AND SEDIMENT CONTROL DEVICES AS NEEDED. DO NOT ALLOW SEDIMENT TO ACCUMULATE TO A DEPTH OF MORE THAN ONE-THIRD OF THE HEIGHT OF THE EROSION AND SEDIMENT CONTROL DEVICES. IMMEDIATELY REPLACE DETERIORATED, DAMAGED, ROTTED, OR MISSING EROSION CONTROL DEVICES. DOCUMENT INSPECTIONS AND DATES OF RAINFALL EVENTS. MAINTAIN A WRITTEN LOG OF ALL INSPECTION, MAINTENANCE, AND REPAIR ACTIVITIES RELATED TO EROSION AND SEDIMENT CONTROL FACILITIES. ALL NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS WITHIN 24 HOURS AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

ALL INSPECTIONS AND MAINTENANCE ACTIVITIES MUST BE RECORDED IN WRITING DAILY IN A DETAILED RECORD(NOTES, PHOTOGRAPHS, SKETCHES, ETC, AND KEPT WITH THE SWPPP BY THE CONTRACTOR.

CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENTS TRACKED OR OTHERWISE DEPOSITED ONTO ADJACENT PROPERTY, PAVEMENT AREAS, SIDEWALKS, STREETS, AND ALLEYS. REMOVAL SHALL BE ON A DAILY BASIS THROUGHOUT THE DURATION OF THE CONSTRUCTION AND/OR AS DIRECTED BY THE VILLAGE. CLEAN PAVED ROADWAYS BY SHOVELING OR WET-SWEEPING. DO NOT DRY SWEEP. IF NECESSARY, SCRAPE PAVED SURFACES IN ORDER TO LOOSEN COMPACTED SEDIMENT MATERIAL PRIOR TO SWEEPING. HAUL SEDIMENT MATERIAL TO A SUITABLE DISPOSAL AREA. STREET WASHING IS ALLOWED ONLY AFTER SEDIMENT HAS BEEN REMOVED BY SHOVELING OR SWEEPING.

ALL SOIL HAULED FROM THE SITE SHALL BE ACCOUNTED FOR AND DOCUMENTED IN THE SWPP BY THE CONTRACTOR. ITS FINAL DESTINATION AND HOW THE SOIL HAS BEEN STORED AND STABILIZED.

CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IN PLACE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED (HARD-SURFACED AREAS PAVED AND VEGETATION ESTABLISHED IN GREENSPACE). REPAIR ANY RUTTING, GULLY FORMATION, OR WASHOUTS. AFTER FINAL ESTABLISHMENT OF PERMANENT STABILIZATION, REMOVE ALL TEMPORARY SYNTHETIC, STRUCTURAL, AND NONBIODEGRADABLE EROSION AND SEDIMENT CONTROL DEVICES AND ANY ACCUMULATED SEDIMENTS. DISPOSE-OF OFF SITE. RESTORE PERMANENT SEDIMENTATION BASINS TO THEIR DESIGN CONDITION IMMEDIATELY FOLLOWING STABILIZATION OF THE SITE.

CONTRACTOR SHALL CLEAN SEDIMENTATION BASINS, STORM SEWER CATCH BASINS, DITCHES, AND OTHER DRAINAGE FACILITIES AS REQUIRED IN ORDER TO MAINTAIN THEIR EFFECTIVENESS. TEMPORARY AND PERMANENT SEDIMENTATION BASINS MUST BE DRAINED AND THE SEDIMENT REMOVED WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 OF THE STORAGE VOLUME. DRAINAGE AND REMOVAL MUST BE COMPLETED WITHIN 72 HOURS, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

CONTRACTOR SHALL INSPECT INFILTRATION AREAS TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITIES IS ACCUMULATING. REMOVE SEDIMENT IMMEDIATELY ENSURING SUBSOILS ARE NOT COMPACTED BY MACHINERY.

EVERY VEHICLE SHALL NOT TRACK MATERIAL OFF-SITE. CLEAN THE WHEELS OF CONSTRUCTION VEHICLES IN ORDER TO REMOVE SOILS BEFORE THE VEHICLES LEAVE THE CONSTRUCTION SITE. WASH VEHICLES ONLY ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

CONTRACTOR SHALL REINFORCE EROSION CONTROL FACILITIES IN AREAS WHERE CONCENTRATED FLOWS OCCUR (SUCH AS SWALES, DITCHES, AND AREAS IN FRONT OF CULVERTS AND CATCH BASINS) BY BACKING THEM WITH SNOW FENCE, WIRE MESH, OR STIFF PLASTIC MESH REINFORCEMENT UNTIL PAVING AND TURF ESTABLISHMENT OPERATIONS HAVE BEEN COMPLETED. POSTS FOR THE REINFORCING FENCE SHALL BE 100 MM (4 INCH) DIAMETER WOOD POSTS, OR STANDARD STEEL FENCE POSTS WEIGHING NOT LESS THAN 0.59 KG (1.3 LBS) PER LINEAL FOOT, WITH A MINIMUM LENGTH OF 762 MM (30 INCHES) PLUS BURIAL DEPTH. SPACE POSTS FOR THE REINFORCING FENCE AT INTERVALS OF 3 M (10 FEET) OR LESS. DRIVE POSTS FOR THE REINFORCING FENCE AT LEAST 0.6 M (2 FEET) INTO THE GROUND.

## GENERAL SOIL STABILIZATION:

ESTABLISHMENT OF LAWN, PRAIRIE/WILDFLOWER AND/OR PLANT BED AREAS WILL BE NOTED ON THE LANDSCAPE PLAN

TO ENSURE STABILIZATION OF SOILS, RESTAKING OF SOD WHERE APPLICABLE, PROPER WATERING AND MULCH MAINTENANCE WILL BE REQUIRED. INSPECT SEEDED OR SODDED AREAS ON A TIMELY DAY-TO-DAY BASIS. IN THE EVENT OF A SEEDING FAILURE, RESEED AND REMULCH THE AREAS WHERE THE ORIGINAL SEED HAS FAILED TO GROW AND PERFORM ADDITIONAL WATERING AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER. SPECIAL MAINTENANCE PROVISIONS FOR WILD AND PRAIRIE GRASS SEEDED AREAS AS NOTED IN THE LANDSCAPE PLAN. PROMPTLY REPLACE ALL SOD THAT DRIES OUT TO THE POINT WHERE IT IS PRESUMED DEAD AND ALL SOD THAT HAS BEEN DAMAGED, DISPLACED, WEAKENED, OR HEAVILY INFESTED WITH WEEDS AT NO ADDITIONAL COST TO THE OWNER.

IN AREAS TO BE TEMPORARILY SEEDED, USE INTRODUCED SEED MIXTURE EQUIVALENT TO WIDOT #10 OR #20. APPLY SEED MIXTURE PER WIDOT 630.3.3.5. INCORPORATE A FERTILIZER (SLOW RELEASE TYPE WITH 10 WEEK RESIDUAL) CONSISTING OF 23-0-30 (N-P-K) INTO THE SOIL AT AN APPLICATION RATE OF 224 KG PER HECTARE (200 LBS PER ACRE) BY DISKING PRIOR TO SEEDING. IN PROBLEMATIC AREAS IT MAY BE NECESSARY TO USE A LOW PHOSPHORUS ORGANIC FERTILIZER IN CASES WHERE SEEDS MAY NOT GERMINATE. IF THIS IS THE CASE, SEED AND FERTILIZER SHALL BE DISKED INTO THE SURFACE AND MULCHED PROPERLY TO ENSURE GERMINATION AND UPTAKE OF THE PHOSPHORUS BY THE SEED.

TO ENSURE ADEQUATE GERMINATION OF THE SEED THE WORK WILL BE PERFORMED AS FOLLOWS:
SPRING- FROM APRIL 1 THROUGH MAY 15.
FALL- FROM AUGUST 15 TO SEPTEMBER 20.
AFTER SEPTEMBER 20, WAIT UNTIL OCTOBER 30 TO PERFORM DORMANT SEEDING. DORMANT SEEDING WILL ONLY BE ALLOWED IF THE MAXIMUM SOIL TEMPERATURE AT A DEPTH OF 25 MM (1 INCH) DOES NOT EXCEED 4.44 DEGREES C (40 DEGREES F) IN ORDER TO PREVENT GERMINATION.

IN SEEDED AREAS WITH SLOPES STEEPER THAN 3:1 AND LENGTHS LESS THAN 15 METERS (50 FEET), INSTALL BIODEGRADABLE EROSION CONTROL BLANKETS UNIFORMLY OVER THE SOIL SURFACE BY HAND WITHIN 24 HOURS AFTER SEEDING IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. USE WIDOT URBAN TYPE B OR OWNER APPROVED EQUAL.

IN AREAS WHERE IRRIGATION IS TO BE INSTALLED, CONTRACTOR SHALL WORK IN ZONES TO FINISH GRADE AND INSTALL THE SYSTEM IN ZONES. NOTE- EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL SOILS HAVE BEEN STABILIZED WITH SOD OR SEEDED AREAS THAT EXHIBIT MINIMUM OF 70% LAWN VEGETATIVE COVERAGE. IF SILT FENCE HAS TO BE REMOVED TO INSTALL THE IRRIGATION SYSTEM, IT SHALL BE REINSTALLED AT THE END OF EACH WORK DAY OR USE BIO ROLLS TO PROVIDE PROTECTION DURING THE INSTALLATION PROCESS UNTIL LAWN AREAS HAVE SOD AND/OR PLANT BEDS ARE MULCHED.

IN AREAS TO BE SODDED, SILT FENCE CAN BE REMOVED SHORT TERM FOR WORKING, BUT EXPOSED SOIL AREAS SHALL BE SODDED OR EROSION CONTROL MEASURES SHALL BE REINSTALLED AT THE END OF EACH WORK DAY.

NOTE: THE PROJECT'S LANDSCAPE PLAN IS PART OF THE SWPP FOR SOIL STABILIZATION. REFERENCES SHALL BE MADE TO THE APPROVED LANDSCAPE PLAN. AMENDMENTS TO THE LANDSCAPE PLAN SHALL BE APPROVED BY THE OWNER AND DOCUMENTED AS PART OF THE SWPP

KWIK TRIP

KWIK STAR

KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444

EROSION CONTROL NOTES

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

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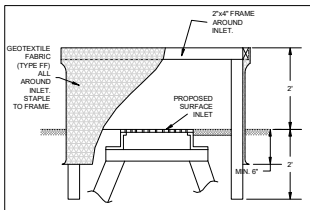
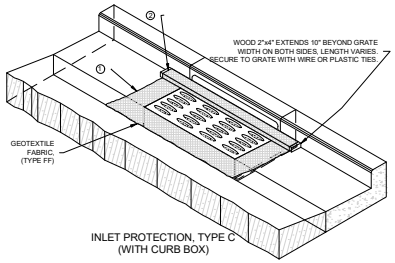
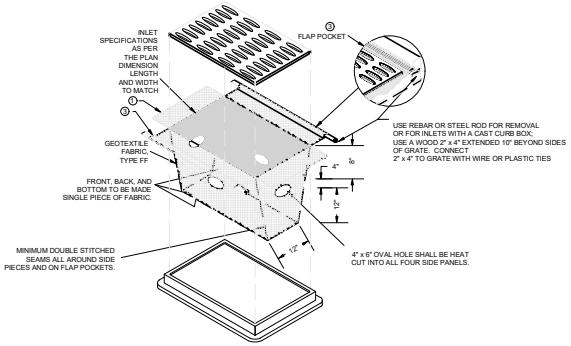
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SWP 1.1 |




INLET PROTECTION, TYPE A




INLET PROTECTION, TYPE C
(WITH CURB BOX)




INLET PROTECTION, TYPE D

1 SWP1.2 STORM WATER INLET PROTECTION
NOT TO SCALE

## ALL EROSION CONTROL MEASURES TO BE INSTALLED AND MAINTAINED PER WDNR STANDARDS

**INSTALLATION NOTES:**

**TYPE C**

- TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
- THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

**TYPE D**

- DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
- THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

**GENERAL NOTES:**

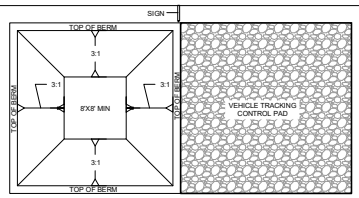
MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON WIS DOT PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

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

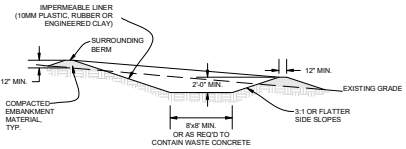
① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKET SHALL BE LARGE ENOUGH TO ACCEPT A WOOD 2" x 4".




PLAN VIEW




TYPICAL SECTION

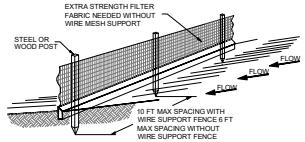
CONCRETE WASHOUT AREA INSTALLATION NOTES

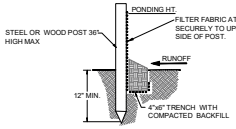
1. SEE EROSION CONTROL PLAN FOR LOCATIONS OF CONCRETE WASHOUT AREA(S). TO BE PLACED A MIN. OF 50' FROM DRAINAGEWAYS, BODIES OF WATER, AND INLETS.)
2. THE CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL PAD IS REQ'D AT THE ACCESS POINT(S).
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA(S), AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREAS TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

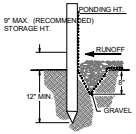
6. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE
7. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
8. WHEN CONCRETE WASHOUT AREA(S) IS REMOVED, THE DISTURBED AREA SHALL BE STABILIZED PER SITE EROSION CONTROL MEASURES.
9. INSPECT WEEKLY AND DURING AND AFTER ALL STORM EVENTS. CLEAN-OUT OR COVER WASHOUT AREA PRIOR TO PREDICTED STORM EVENTS TO PREVENT OVER-FLOW.

4 SWP1.2 CONCRETE WASHOUT AREA
NOT TO SCALE

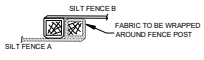


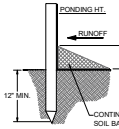

STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL




ALTERNATE DETAIL
TRENCH WITH GRAVEL




ROLL JOINTS




ALTERNATE DETAIL
SOIL BACKFILL

CONSTRUCTION SPECIFICATIONS

THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES. STORAGE HEIGHT SHALL NEVER EXCEED 18".

THE FENCE LINE SHALL FOLLOW THE CONTOUR AS CLOSELY AS POSSIBLE.

IF POSSIBLE, THE FILTER FABRIC SHALL BE CUT FROM A CONTINUOUS ROLL TO AVOID THE USE OF JOINTS. WHEN JOINT'S ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP AND BOTH ENDS SECURELY FASTENED TO THE POST.

POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.

THE ENDS OF THE FENCE SHALL BE TURNED UPHILL.

A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.

WHEN STANDARD-STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG. TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

THE STANDARD-STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 6 INCHES OF THE FABRIC SHALL EXTEND INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

WHEN EXTRA-STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS.

THE TRENCH SHALL BE BACKFILLED AND/OR THE SOIL COMPACTED OVER THE TOE OF THE FILTER FABRIC. THE FILTER FABRIC SHALL NOT BE SECURED BY SAND BAGS.

SILT FENCES PLACED AT THE TOE OF A SLOPE SHALL BE SET AT LEAST 8 FEET FROM THE TOE IN ORDER TO INCREASE PONDING VOLUME.

SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED, AND ANY SEDIMENT STORED BEHIND THE SILT FENCE HAS BEEN REMOVED.

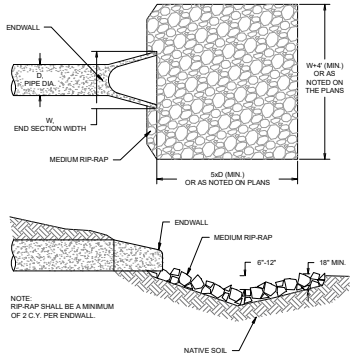
INSPECTION AND MAINTENANCE

SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED WEEKLY AND AFTER EACH SIGNIFICANT STORM (1" IN 24 HR.). ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 HEIGHT OF THE FENCE OR 9 INCHES MAXIMUM.

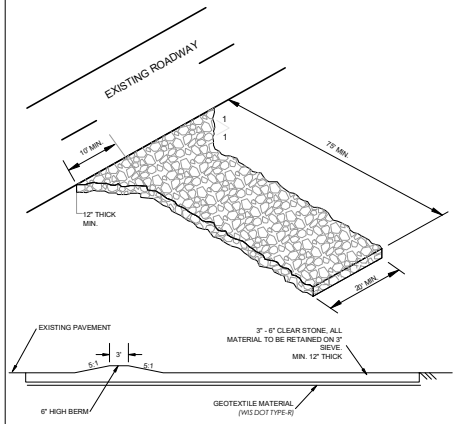
THE REMOVED SEDIMENT SHALL BE VEGETATED OR OTHERWISE STABILIZED.

2 SWP1.2 SILT FENCE INSTALLATION DETAILS
NOT TO SCALE




NOTE:
RIP-RAP SHALL BE A MINIMUM OF 2 C.Y. PER ENDWALL.

3 SWP1.2 BASIN OUTFALL RIPRAP DETAIL
NOT TO SCALE




NOTE: MAINTAIN THE ROCK ENTRANCE TO PREVENT TRACKING ONTO PAVEMENT

FILTER FABRIC SHALL BE PLACED UNDER ROCK TO STOP MUD MIGRATION THROUGH ROCK.

5 SWP1.2 CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

KWIK TRIP

KWIK STAR


KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444


EROSION CONTROL DETAILS

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

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| DRAWN BY | S. ANDERSON / L. OLSON |
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| DATE | FEBRUARY 5, 2020 |
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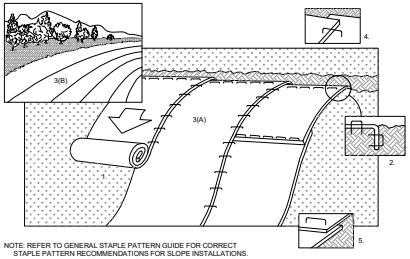
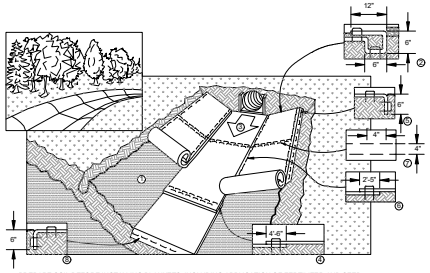



NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

1 / SWP1.3 EROSION CONTROL MAT - SLOPE INSTALLATION
NOT TO SCALE

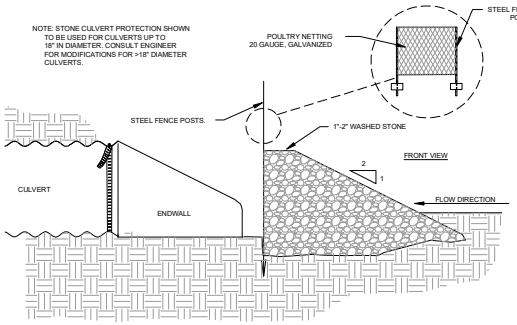



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPE MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 4" AND STAPLED.
7. A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

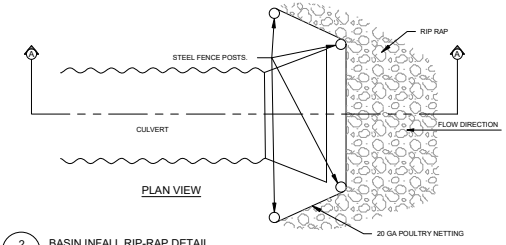
NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLES OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

3 / SWP1.3 EROSION CONTROL MAT - CHANNEL INSTALLATION
NOT TO SCALE

5 / SWP1.3 NOT USED
NOT TO SCALE

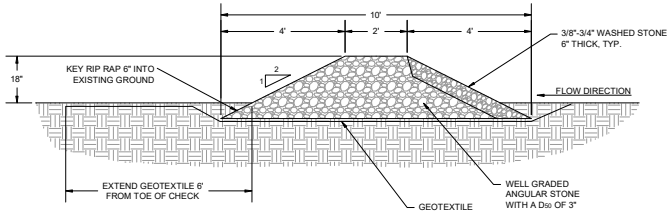



SECTION A-A

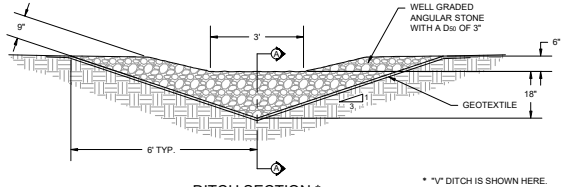



PLAN VIEW

2 / SWP1.3 BASIN INFALL RIP-RAP DETAIL
NOT TO SCALE




SECTION A-A




DITCH SECTION *

* "V" DITCH IS SHOWN HERE. SEE CIVIL PLANS FOR DITCH SECTION.

4 / SWP1.3 STONE DITCH CHECK DETAIL
NOT TO SCALE

KWIK TRIP

KWIK STAR

KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444

EROSION CONTROL DETAILS

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

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| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | SWP 1.3 |

## GENERAL NOTES

1. DRAWINGS ARE INTENDED TO BE PRINTED ON 22 X 34 PAPER. PRINTING THESE DRAWINGS AT A DIFFERENT SIZE WILL IMPACT THE SCALE. VERIFY THE GRAPHIC SCALE BEFORE REFERENCING ANY MEASUREMENTS ON THESE SHEETS. THE RECIPIENT OF THESE DRAWINGS SHALL BE RESPONSIBLE FOR ANY ERRORS RESULTING FROM INCORRECT PRINTING, COPYING, OR ANY OTHER CHANGES THAT ALTER THE SCALE OF THE DRAWINGS.
2. VERIFY ALL PLAN DIMENSIONS PRIOR TO START OF CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE TO ADDRESS ANY QUESTIONS OR CLARIFY ANY DISCREPANCIES.
3. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
4. GEOTECHNICAL SOILS REPORT RECOMMENDATIONS SHALL BE FOLLOWED DURING CONSTRUCTION. THE CONTRACTOR SHALL USE THESE CONTRACT DOCUMENTS AS A BASIS FOR THE BID.
5. CONTRACTOR SHALL CONFIRM THAT SITE CONDITIONS ARE SIMILAR TO THE PLANS, WITHIN TOLERANCES STATED IN THE CONTRACT DOCUMENTS, AND SATISFACTORY TO THE CONTRACTOR PRIOR TO START OF WORK. SHOULD SITE CONDITIONS BE DIFFERENT THAN REPRESENTED ON THE PLANS OR UNSATISFACTORY TO THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND FURTHER DIRECTION.
6. THE CONTRACTOR IS RESPONSIBLE TO PAY FOR, AND OBTAIN, ANY REQUIRED APPLICATIONS, PERMITTING, LICENSES, INSPECTIONS AND METERS ASSOCIATED WITH WORK.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO ANY VIOLATIONS OR NON-CONFORMANCE WITH THE PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, JURISDICTIONAL CODES, AND REGULATORY AGENCIES.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL UTILITY LOCATES PRIOR TO ANY EXCAVATION. REFER TO ENGINEERING UTILITY PLANS FOR ALL PROPOSED UTILITY LOCATIONS AND DETAILS. NOTIFY OWNER'S REPRESENTATIVE IF EXISTING OR PROPOSED UTILITIES INTERFERE WITH THE ABILITY TO PERFORM WORK.
9. UNLESS IDENTIFIED ON THE PLANS FOR DEMOLITION OR REMOVAL, THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT OR EXISTING LANDSCAPE, ADJACENT OR EXISTING PAVING, OR ANY PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION, ESTABLISHMENT OR DURING THE SPECIFIED MAINTENANCE PERIOD. ALL DAMAGES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOGGING ANY DAMAGES PRIOR TO START OF CONSTRUCTION AND DURING THE CONTRACT PERIOD.
10. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER'S REPRESENTATIVE PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE APPROPRIATE JURISDICTIONAL AGENCIES AND THE OWNER'S REPRESENTATIVE IF THEIR WORK AND OPERATIONS AFFECT OR IMPACT THE PUBLIC RIGHTS-OF-WAY. OBTAIN APPROVAL PRIOR TO ANY WORK WHICH AFFECTS OR IMPACTS THE PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THIS REQUIREMENT DURING THE CONTRACT PERIOD.
13. SIGHT TRIANGLES AND SIGHT LINES SHALL REMAIN UNOBSTRUCTED BY EQUIPMENT, CONSTRUCTION MATERIALS, PLANT MATERIAL OR ANY OTHER VISUAL OBSTACLE DURING THE CONTRACT PERIOD AND AT MATURITY OF PLANTS PER LOCAL JURISDICTIONAL REQUIREMENTS.
14. NO PLANT MATERIAL OTHER THAN GROUND COVER IS ALLOWED TO BE PLANTED ADJACENT TO FIRE HYDRANTS AS STIPULATED BY JURISDICTIONAL REQUIREMENTS.
15. COORDINATE SITE ACCESS, STAGING, STORAGE AND CLEANOUT AREAS WITH OWNER'S REPRESENTATIVE.
16. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SAFETY FENCING AND BARRIERS AROUND ALL IMPROVEMENTS SUCH AS WALLS, PLAY STRUCTURES, EXCAVATIONS, ETC. ASSOCIATED WITH THEIR WORK UNTIL SUCH FACILITIES ARE COMPLETELY INSTALLED PER THE PLANS, SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THEIR MATERIAL STOCK PILES AND WORK FROM VANDALISM, EROSION OR UNINTENDED DISTURBANCE DURING THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE IS ISSUED.
18. THE CONTRACTOR SHALL KNOW, UNDERSTAND AND ABIDE BY ANY STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ASSOCIATED WITH THE SITE. IF A STORM WATER POLLUTION PREVENTION PLAN IS NOT PROVIDED BY THE OWNER'S REPRESENTATIVE, REQUEST A COPY BEFORE PERFORMANCE OF ANY SITE WORK.
19. MAINTAIN ANY STORM WATER MANAGEMENT FACILITIES THAT EXIST ON SITE FOR FULL FUNCTIONALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ANY NEW STORM WATER MANAGEMENT FACILITIES THAT ARE IDENTIFIED IN THE SCOPE OF WORK TO FULL FUNCTIONALITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER FOR FAILURE TO MAINTAIN STORM WATER MANAGEMENT FACILITIES DURING THE CONTRACT PERIOD.
20. THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM EXITING THE SITE OR ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION OR CONSTRUCTION OPERATIONS THAT ARE PART OF THE LANDSCAPE INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS DURING THEIR CONTRACTED COURSE OF WORK.
21. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREVENT ANY IMPACTS TO ADJACENT WATERWAYS, WETLANDS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS RESULTING FROM WORK DONE AS PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE STANDARDS DURING THEIR CONTRACTED COURSE OF WORK.

## GENERAL NOTES CONTINUED

22. THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL LOADS OF CONSTRUCTION MATERIAL IMPORTED TO OR EXPORTED FROM THE PROJECT SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF MATERIAL DURING TRANSPORT. TRANSPORTATION METHODS ON PUBLIC RIGHT-OF WAYS SHALL CONFORM TO JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS.
23. THE CLEANING OF EQUIPMENT IS PROHIBITED AT THE JOB SITE UNLESS AUTHORIZED BY THE OWNER'S REPRESENTATIVE IN A DESIGNATED AREA. THE DISCHARGE OF WATER, WASTE CONCRETE, POLLUTANTS, OR OTHER MATERIALS SHALL ONLY OCCUR IN AREAS DESIGNED FOR SUCH USE AND APPROVED BY THE OWNER'S REPRESENTATIVE.
24. THE CLEANING OF CONCRETE EQUIPMENT IS PROHIBITED AT THE JOB SITE EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE IN THE STORM SEWER IS PROHIBITED.
25. LOCAL, STATE AND FEDERAL JURISDICTIONAL REQUIREMENTS, RESTRICTIONS OR PROCEDURES SHALL SUPERSEDE THESE PLANS, NOTES AND SPECIFICATIONS WHEN MORE STRINGENT. NOTIFY THE OWNER'S REPRESENTATIVE IF CONFLICTS OCCUR.

## GENERAL LANDSCAPE NOTES

1. UTILITY WARNING: THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
2. NOTIFY UTILITY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES. AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION. ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLANS AND SPECIFICATIONS AS CLOSELY AS POSSIBLE. ANY SUBSTITUTION OR ALTERATION SHALL NOT BE ALLOWED WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE. OVERALL PLANT QUANTITY AND QUALITY SHALL BE CONSISTENT WITH THE PLANS.
4. ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1-LATEST EDITION).
5. MULCH SHALL NOT BE PLACED AROUND THE COLLAR OF SHRUB OR TREE. PROVIDE A MINIMUM OF 2" BETWEEN MULCH AND COLLAR OF SHRUB OR TREE.
6. ALL PLANT MATERIAL SHALL BE GROWN IN ZONE CAPABLE OF WITHSTANDING LOCAL CLIMATE AND GROWING CONDITIONS.
7. TREE OR SHRUB SHALL STAND PLUMB. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACK FILLING.
8. LIVE PLANTS CAN BE PLANTED IN THE FIELD DURING THE GROWING SEASON FROM MAY 1 THROUGH OCTOBER 1. ANY SUGGESTED PLANTING TIMES NOT IN THIS WINDOW SHALL BE APPROVED BY LANDSCAPE ARCHITECT. IF PLANTING OCCURS OUTSIDE OF THIS WINDOW, ADDITIONAL MEASURES MAY NEED TO BE TAKEN (I.E. MULCH) TO ENSURE PLANT SURVIVAL. IN THESE INSTANCES, THE CONTRACT PRICE MAY NEED TO BE ADJUSTED ACCORDINGLY.
9. PLANTS SHOULD BE WATERED IN AFTER INSTALLATION TO ENSURE THEIR SURVIVAL. THIS TYPICALLY INVOLVES WATERING AT TIME OF INSTALLATION AND 2 TIMES WEEKLY FOR A ONE MONTH PERIOD OR UNTIL GROUND FREEZE UP IF NATURAL RAINFALLS ARE INSUFFICIENT. A SINGLE WATERING EVENT INVOLVES WATERING THE SOIL IN THE PLANTED AREAS TO THE POINT OF SATURATION BUT STOPPING SHORT OF SOIL DISPLACEMENT. SHOULD VERY DRY CONDITIONS DEVELOP WITHIN ONE YEAR OF PLANTING, ADDITIONAL WATERINGS MAY BE NECESSARY, CONSULTANT OR LANDSCAPE ARCHITECT WILL DETERMINE THIS AND CONTRACT PRICES MAY BE ADJUSTED TO ACCOMMODATE THIS ACTION.
10. ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY, HEALTHY, FREE OF DISEASE AND INSECTS AND SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS. PLANTS SHALL ALSO BE FREE FROM PHYSICAL DAMAGE OR OTHER CONDITIONS THAT WOULD PREVENT VIGOROUS GROWTH.
11. ALL PROPOSED PLANTS SHALL BE LOCATED AS SHOWN ON PLANS. ALL TREES TO BE PLANTED A MINIMUM DISTANCE OF 5 FEET FROM PAVEMENTS AND 6 FEET FROM ALL HYDRANTS.
12. CONTRACTOR IS RESPONSIBLE FOR PLANTS AWAITING INSTALLATION AND SHALL PROTECT THEM FROM INJURY AND THEFT.
13. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES. GRAPHIC QUANTITIES TAKES PRECEDENCE OVER WRITTEN QUANTITIES.
14. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND TAG ALL PLANT MATERIAL PRIOR TO SHIPPING TO THE SITE. IN ALL CASES, THE OWNER'S REPRESENTATIVE MAY REJECT PLANT MATERIAL AT THE SITE IF MATERIAL IS DAMAGED, DISEASED, OR DECLINING IN HEALTH AT THE TIME OF ONSITE INSPECTIONS OR IF THE PLANT MATERIAL DOES NOT MEET THE MINIMUM SPECIFIED STANDARD IDENTIFIED ON THE PLANS AND IN THE SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL MATERIALS AND PRODUCTS PRIOR TO INSTALLATION.
15. THE OWNER'S REPRESENTATIVE MAY ELECT TO UPSIZE PLANT MATERIAL AT THEIR DISCRETION BASED ON SELECTION, AVAILABILITY, OR TO ENHANCE SPECIFIC AREAS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL SIZES WITH OWNER'S REPRESENTATIVE PRIOR TO PURCHASING, SHIPPING OR STOCKING OF PLANT MATERIALS. SUBMIT CHANGE ORDER REQUEST TO OWNER'S REPRESENTATIVE FOR APPROVAL IF ADDITIONAL COST IS REQUESTED BY THE CONTRACTOR PRIOR TO INSTALLATION. RE-STOCKING CHARGES WILL NOT BE APPROVED IF THE CONTRACTOR FAILS TO SUBMIT A REQUEST FOR MATERIAL CHANGES.
16. THE CONTRACTOR SHALL WARRANTY ALL CONTRACTED WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION HAS BEEN ISSUED BY THE OWNER'S REPRESENTATIVE FOR THE ENTIRE PROJECT UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS.
17. LANDSCAPE MATERIAL LOCATIONS SHALL HAVE PRECEDENCE OVER IRRIGATION MAINLINE AND LATERAL LOCATIONS. IF IRRIGATION IS INCLUDED, COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.

## GENERAL LANDSCAPE NOTES

18. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS. SURFACE DRAINAGE ON LANDSCAPE AREAS SHALL NOT FLOW TOWARD STRUCTURES AND FOUNDATIONS. MAINTAIN SLOPE AWAY FROM FOUNDATIONS PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. ALL LANDSCAPE AREAS BETWEEN WALKS AND CURBS SHALL DRAIN FREELY TO THE CURB UNLESS OTHERWISE IDENTIFIED ON THE GRADING PLAN. IN NO CASE SHALL THE GRADE, TURF THATCH, OR OTHER LANDSCAPE MATERIALS DAM WATER AGAINST WALKS. MINIMUM SLOPES ON LANDSCAPE AREAS SHALL BE 2%; MAXIMUM SLOPE SHALL BE 25% UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE.
19. PRIOR TO INSTALLATION OF PLANT MATERIALS, AREAS THAT HAVE BEEN COMPACTED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE THOROUGHLY LOOSENED TO A DEPTH OF 8" - 12" AND AMENDED PER SPECIFICATIONS.
20. ALL LANDSCAPED AREAS ARE TO RECEIVE ORGANIC SOIL PREPARATION PER RATE IDENTIFIED BY A SOIL TEST OR AS NOTED IN THE TECHNICAL SPECIFICATIONS.
21. TREES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DRAINAGE AREAS, OR UTILITY EASEMENTS. CONTACT OWNER'S REPRESENTATIVE FOR RELOCATION OF PLANTS IN QUESTIONABLE AREAS PRIOR TO INSTALLATION.
22. THE CENTER OF EVERGREEN TREES SHALL NOT BE PLACED CLOSER THAN 8' AND THE CENTER OF ORNAMENTAL TREES CLOSER THAN 6' FROM A SIDEWALK, STREET OR DRIVE LANE. EVERGREEN TREES SHALL NOT BE LOCATED ANY CLOSER THAN 15' FROM IRRIGATION ROTOR HEADS. NOTIFY OWNER'S REPRESENTATIVE IF TREE LOCATIONS CONFLICT WITH THESE STANDARDS FOR FURTHER DIRECTION.
23. ALL EVERGREEN TREES SHALL BE FULLY BRANCHED TO THE GROUND AND SHALL NOT EXHIBIT SIGNS OF ACCELERATED GROWTH AS DETERMINED BY THE OWNER'S REPRESENTATIVE.
24. ALL TREES ARE TO BE STAKED AND GUYED PER DETAILS FOR A PERIOD OF 1 YEAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING STAKES AT THE END OF 1 YEAR FROM ACCEPTANCE OF LANDSCAPE INSTALLATION BY THE OWNER'S REPRESENTATIVE. OBTAIN APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
25. ALL TREES INSTALLED ABOVE RETAINING WALLS UTILIZING GEO-GRID MUST BE HAND DUG TO PROTECT GEO-GRID. IF GEO-GRID MUST BE CUT TO INSTALL TREES, APPROVAL MUST BE GIVEN BY OWNER'S REPRESENTATIVE PRIOR TO DOING WORK.
26. ALL TREES IN SEED OR TURF AREAS SHALL RECEIVE MULCH RINGS. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE FOR ANY TREES THAT WILL NOT BE MULCHED FOR EXCESSIVE MOISTURE REASONS.
27. EXISTING TURF AREAS THAT ARE DISTURBED DURING CONSTRUCTION, ESTABLISHMENT AND THE MAINTENANCE PERIOD SHALL BE RESTORED WITH NEW SOD TO MATCH EXISTING TURF SPECIES. DISTURBED NATIVE AREAS WHICH ARE TO REMAIN SHALL BE OVER SEEDED AND RESTORED WITH SPECIFIED SEED MIX.
28. WHEN COMPLETE, ALL GRADES SHALL BE WITHIN +/- 1/8" OF FINISHED GRADES AS SHOWN ON THE PLANS.
29. WHEN PLANTER POTS ARE SHOWN ON PLANS, CONTRACTOR SHALL INCLUDE THE FOLLOWING: PLANTER MIX, ANNUAL FLOWER PLANTING PROGRAM (INCLUDES 2 PLANTINGS FOR THE 1ST YEAR (SPRING AND FALL) AND WINTER HAND-WATERING AS NEEDED. UNLESS OTHERWISE SPECIFIED, CONTRACTOR TO PROVIDE ANNUAL PLANTING SELECTION FOR REVIEW BY OWNER. IRRIGATION FOR PLANTERS TO BE ON SEPARATE ZONE(S). CONTRACTOR TO COORDINATE PLACEMENT OF NECESSARY SLEEVING PRIOR TO PLACEMENT OF PAVEMENT.
30. PRIOR TO THE PLACEMENT OF MULCH AND WEED FABRIC, A GRANULAR, PRE-EMERGENT, WEED CONTROL AGENT SHALL BE ADDED TO ALL PLANTING BEDS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTION, EXCEPT AROUND ORNAMENTAL GRASSES.
31. THE CONTRACTOR IS EXPECTED TO KNOW AND UNDERSTAND THE CITY AND COUNTY SPECIFICATIONS FOR LANDSCAPE AND IRRIGATION. IN CASES OF DISCREPANCIES THE HIGHER OF THE TWO STANDARDS SHALL HAVE PRECEDENCE.
32. ALL TREES PLANTED WITHIN RIGHT-OF-WAY WILL INCLUDE CITY APPROVED ROOT BARRIERS.

## LAYOUT NOTES

1. WRITTEN DIMENSIONS WILL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
2. SHOULD SITE CONDITIONS BE DIFFERENT THAN WHAT IS INDICATED ON THE DRAWINGS, CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
3. CURVED WALKS AND CURB EDGES ARE INTENDED TO BE CONSTRUCTED WITH SMOOTH FLOWING CURVES. ANYTHING OTHER THAN SMOOTH FLOWING CURVES WILL BE REJECTED.
4. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.
5. THE CONTRACTOR SHALL PROVIDE A STAKED LAYOUT OF ALL SITE IMPROVEMENTS FOR INSPECTION BY THE OWNER'S REPRESENTATIVE AND MAKE MODIFICATIONS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER. ALL LAYOUT INFORMATION IS AVAILABLE IN DIGITAL FORMAT FOR USE BY THE CONTRACTOR.
6. LAYOUT WALKS, SCORE JOINTS AND PAVING PATTERNS AS CLOSELY AS POSSIBLE TO PLANS, DETAILS, AND SPECIFICATIONS. DO NOT DEVIATE FROM PLANS UNLESS SPECIFIC APPROVAL IS OBTAINED FROM THE OWNER'S REPRESENTATIVE.
7. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE LANDSCAPE ARCHITECT PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK.
8. WHEN APPLICABLE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY FENCING AROUND ALL PLAY STRUCTURES UNTIL PROPER FALL SURFACE IS COMPLETELY INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
9. CONTRACTOR IS RESPONSIBLE FOR SUPERVISING ALL SAFETY SURFACING AND PAVEMENT DURING THE CURING PROCESS.

## BIORETENTION PLANTING NOTES

1. BIORETENTION SHALL CONFORM TO WIS. DNR TECH STANDARD 1004.
2. ENGINEERED SOIL SHALL CONSIST OF 70%-85% SILICA SAND AND 15%-30% COMPOST WITH A PH OF 5.5-6.5
3. BIORETENTION BASINS SHALL BE EXCAVATED AND USED AS SEDIMENT TRAPS DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION AND SITE STABILIZATION, THE BASINS SHALL BE OVER-EXCAVATED 3 FEET MINIMUM AND THEN THE SAND LAYER AND ENGINEERED SOIL SHALL BE PLACED TO WITHIN THREE INCHES OF FINAL GRADE. ONCE THE ENGINEERED SOIL IS PLACED, A COCONUT FIBER MAT SHALL BE ADDED ON TOP OF THE ENGINEERED SOIL.
4. FIELD INFILTRATION TESTING: IMMEDIATELY AFTER ROUGH GRADING OF STORMWATER BIOINFILTRATION AND INFILTRATION DEVICES, PROVIDE FIELD INFILTRATION TESTING CONDUCTED BY A THIRD-PARTY TESTING AGENCY TO VERIFY INFILTRATION RATES FOR ALL STORMWATER BIOINFILTRATION AND INFILTRATION DEVICES. DETERMINE INFILTRATION RATES IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) SITE EVALUATION FOR STORMWATER INFILTRATION, STANDARD 1002. FREQUENCY OF TESTING SHALL BE 1 TEST PER 5000 SQUARE FEET OF SURFACE AREA OF THE STORMWATER INFILTRATION DEVICE MEASURED AT THE DESIGN HIGH WATER LEVEL AND AT LEAST ONE TEST PER DEVICE. FURNISH A REPORT OF THE TEST RESULTS TO ARCHITECT/ENGINEER. TESTING SHALL BE COMPLETED AT THE EXPENSE OF THE CONTRACTOR.
5. SPECIFIC SPECIES OR CONTAINER SIZE SUGGESTED SUBSTITUTIONS SHALL BE PRESENTED TO CONSULTANT ALONG WITH THE REASONS FOR THE SUGGESTIONS. WITH CONSULTANT OR PROJECT ENGINEER'S APPROVAL, SUBSTITUTIONS MAY BE MADE.
6. LIVE PLANTS CAN BE PLANTED IN THE FIELD DURINGTHE GROWING SEASON FROM MAY 1 THROUGH OCTOBER 1. ANY SUGGESTED PLANTING TIMES NOT IN THIS WINDOW SHALL BE APPROVED BY CONSULTANT OR ENGINEER. IF PLANTING OCCURS OUTSIDE OF THIS WINDOW ADDITIONAL MEASURES MAY NEED TO BE TAKEN (I.E. MULCH) TO ENSURE PLANT SURVIVAL. IN THESE INSTANCES, THE CONTRACT PRICE MAY NEED TO BE ADJUSTED ACCORDINGLY.
7. ALL PLANTED MATERIALS WILL BE WARRANTED BY INSTALLATION CONTRACTOR TO BE IN HEALTHY CONDITION WITH A REPLACEMENT GUARANTEE FOR A PERIOD OF ONE YEAR FROM THE DATE OF PLANTING.
8. NATIVE PLANTS SHOULD BE WATERED IN AFTER INSTALLATION TO ENSURE THEIR SURVIVAL. THIS TYPICALLY INVOLVES WATERING AT TIME OF INSTALLATION AND 2 TIMES WEEKLY FOR A ONE MONTH PERIOD OR UNTIL GROUND FREEZE UP IF NATURAL RAINFALLS ARE INSUFFICIENT. A SINGLE WATERING EVENT INVOLVES WATERING THE SOIL IN THE PLANTED AREAS TO THE POINT OF SATURATION BUT STOPPING SHORT OF SOIL DISPLACEMENT. SHOULD VERY DRY CONDITIONS DEVELOP WITHIN ONE YEAR OF PLANTING, ADDITIONAL WATERINGS MAY BE NECESSARY, CONSULTANT OR PROJECT ENGINEER WILL DETERMINE THIS AND CONTRACT PRICES MAY BE ADJUSTED TO ACCOMMODATE THIS ACTION.
9. PLANTS SHALL BE PLANTED IN THE BIORETENTION AREA AT A MINIMUM OF ONE PLANT PER EVERY 12" ON CENTER.
10. UPON COMPLETION OF EXCAVATING & GRADING OPERATIONS, A LOOSE, FRIABLE PLANT BED SHALL BE PREPARED FOR INSTALLATION OF NATIVE PLANT PLUGS.
11. CARE SHALL BE TAKEN TO MINIMIZE SOIL COMPACTION DURING CONSTRUCTION ACTIVITY. BY EXAMPLE OF A STANDARD SOIL PENETROMETER (COMPACTION TESTER), THE TOPSOIL COMPACTION READINGS SHALL BE LESS THAN 200 PSI AT THE 0-6 INCH DEPTH AND LESS THAN 250 PSI AT THE 6-18 INCH DEPTHS IN ALL AREAS TO BE PLANTED.
12. UNDULATIONS OR IRREGULARITIES IN THE PLANT BED WHICH WOULD INTERFERE WITH A CONSISTENT SEEDING OPERATION SHALL BE LEVELED PRIOR TO FINAL SEEDING.
13. FINAL PLANTING AREA SHOULD BE GRADED SUCH THAT THE AREAS TO BE PLANTED SHALL CONSIST OF A SMOOTH, FREE DRAINING, EVEN SURFACE WITH A LOOSE POROUS TEXTURE.

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

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

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LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

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LANDSCAPE NOTES

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
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| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2019 |
| SHEET | L1.0 |

| PLANT SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| QTY | KEY | BOTANICAL NAME | COMMON NAME | INSTALL SIZE | MATURE SIZE | COMMENTS |
| CANOPY TREES | | | | | | |
| 6 | RO | Quercus rubra | NORTHERN RED OAK | 2 1/2" Cal. | 60'h x 60'w | B&B |
| 3 | SM | Acer x freemanii 'Sienna' | SIENNA GLEN MAPLE | 2 1/2" Cal. | 60'h x 40'w | B&B |
| 6 | RB | Betula nigra 'Cully' | HERITAGE RIVER BIRCH | 1 1/2" Cal. | 50'h x 50'h | B&B (MULTI STEM) |
| EVERGREEN TREES | | | | | | |
| 8 | SJ | Juniperus scopulorum 'Skyrocket' | SKYROCKET JUNIPER | 4' | 15'h x 3'w | B&B |
| DECIDUOUS SHRUBS | | | | | | |
| 5'-7' SPREAD | | | | | | |
| 19 | RC | Cotoneaster horizontalis var. perpusilus | ROCK COTONEASTER | 6" Ht. | 1.5'h x 5'w | #5 CONT., (6' O.C.) |
| 25 | AF | Cornus stolonifera 'Farrow' | ARCTIC FIRE DOGWOOD | 18" Ht. | 3'h x 3'w | #5 CONT., (3' O.C.) |
| 7+ SPREAD | | | | | | |
| 16 | RA | Rhus aromatica 'Gro-Low' | GRO-LOW SUMAC | 24" Ht. | 5'h x 8'w | #5 CONT., (7' O.C.) |
| EVERGREEN SHRUBS | | | | | | |
| 5'-7' SPREAD | | | | | | |
| 23 | JH | Juniperus horizontalis 'Hughes' | HUGHES JUNIPER | 6" Ht. | 18"h x 5'w | #5 CONT., (6' O.C.) |
| 16 | JW | Juniperus horizontalis 'Wiltonii' | BLUE RUG JUNIPER | 6" Ht. | 6"h x 7'w | #5 CONT., (6' O.C.) |
| 7' + SPREAD | | | | | | |
| 6 | RW | Rhododendron catawbiense 'Album' | WHITE CATAWBA RHODODENDRON | 24" Ht. | 6'h x 7'w | #5 CONT., (6' O.C.) |
| 10 | MP | Pinus mugo var. pumilio | DWARF MUGO PINE | 24" Ht. | 4'h x 10w | #5 CONT., (6' O.C.) |
| ORNAMENTAL GRASSES | | | | | | |
| 27 | BA | Bouteloua gracilis 'blonde ambition' | BLONDE AMBITION BLUE GRAMA GRASS | 8" Ht. | 36" Ht. | #1 CONT., (3' O.C.) |
| 30 | LB | Schizachyrium scoparium | LITTLE BLUESTEM | 8" Ht. | 36" Ht. | #1 CONT., (3' O.C.) |
| 12 | PS | Panicum virgatum 'shenandoah' | SHENANDOAH SWITCH GRASS | 8" Ht. | 48" Ht. | #1 CONT., (3' O.C.) |

PERENNIAL PLUG MIX AT BIORETENTION
NOTES:
PLANTS SHALL BE PLANTED IN THE BIORETENTION AREA AT A MINIMUM OF ONE PLANT PER EVERY 12" ON CENTER.
TOTAL SF = 2,056 SF
TOTAL PLUGS = 2,056

GROUP A = 40% OF PLUG TOTAL
GROUP B = 40% OF PLUG TOTAL
GROUP C = 20% OF PLUG TOTAL

## BIORETENTION PLANT SCHEDULE

**Group A**

| Common Name | Botanical Name | Percentage |
|---|---|---|
| Showy Black-eyed Susan | *Rudbeckia fulgida* | 16 |
| Dogtooth Daisy | *Helenium autumnale* | 12 |
| Culver's Root | *Veronicastrum virginicum* | 10 |
| Great Blue Lobelia | *Lobelia siphilitica* | 16 |
| Big bluestem | *Andropogon gerardii* | 16 |
| Indian Grass | *Sorghastrum nutans* | 16 |
| Bluejoint Grass | *Calamagrostis canaensis* | 14 |
| | | 100 |

**Group B**

| Common Name | Botanical Name | Percentage |
|---|---|---|
| Ohio Goldenrod | *Solidago ohioensis* | 12 |
| Marsh Milkweed | *Asclepias incarnata* | 18 |
| Butterfly Weed | *Asclepias tuberosa* | 15 |
| Boneset | *Eupatorium perfoliatum* | 11 |
| Heavy Metal Switchgrass | *Panicum virgatum 'Heavy Metal'* | 16 |
| Canada Wild Rye Grass | *Elymus candensis* | 14 |
| Fringed Brome Grass | *Bromus ciliatus* | 14 |
| | | 100 |

**Group C**

| Common Name | Botanical Name | Percentage |
|---|---|---|
| Tall Ironweed | *Vernonia altissima* | 12 |
| Spotted Joe-Pye Weed | *Eutrochium maculatum* | 12 |
| Compass Plant | *Silphium laciniatum* | 17 |
| Prairie Blazingstar | *Liatris pycnostachya* | 16 |
| Wool Grass | *Scirpus cyperinus* | 16 |
| Big bluestem | *Andropogon gerardii* | 12 |
| Dark Green Rush | *Scirpus atrovirens* | 15 |
| | | 100 |

## LANDSCAPE CALCULATIONS

### LAND USE BUFFER

AN APPROPRIATE LAND USE BUFFER AND LANDSCAPE SHALL BE PROVIDED BETWEEN USES BASED ON THE INTENSITY OF USES. THE TOTAL LINEAL FEET LANDSCAPING REQUIREMENT FOR EACH SIDE CAN BE ADDED TOGETHER AND ALLOCATED, HOWEVER IN NO CASE SHALL A LANDSCAPE REQUIREMENT BE LESS THAN ZERO.

THE LINEAL FEET MEASUREMENT OF A SIDE IS REDUCED BY THE PORTION OF THE LENGTH OF THE PRIMARY BUILDING FACING THAT SIDE WHERE NO PARKING LOT IS FOUND ON A PERPENDICULAR TANGENT BETWEEN THE BUILDING AND THE PROPERTY LINE ON THAT SIDE AND WHEN THE BUILDING HAS NO DOCK DOORS ON THAT SIDE OF THE BUILDING.

LUI = LAND USE INTENSITY
ISR = IMPERVIOUS SURFACE RATIO

FOR BUFFERS WITH A LUI DIFFERENCE OF 0-3, 2 SHADE TREES, 6 EVERGREEN TREES, & 20 SHRUBS ARE REQUIRED PER 100 LF

NORTH BUFFER CALCULATIONS
9 (HEAVY COMMERCIAL) - 9 (HEAVY COMMERCIAL) - 1 (LOCAL ROAD)
= 0 (ADJUSTED LUI)
BUFFER LENGTH: 181 LF

EAST BUFFER CALCULATIONS
9 (HEAVY COMMERCIAL) - 8 (GENERAL COMMERCIAL > .65 ISR) - 6 LIMITED ACCESS HWY
= 0 (ADJUSTED LUI)
BUFFER LENGTH: 310 LF

WEST BUFFER CALCULATIONS
9 (HEAVY COMMERCIAL) - 7 (GENERAL COMMERCIAL < .65 ISR)
= 2 (ADJUSTED LUI)
BUFFER LENGTH: * NO PARKING OR DOCK DOORS ON THIS SIDE OF PRIMARY BUILDING

SOUTH BUFFER CALCULATIONS
9 (HEAVY COMMERCIAL) - 7 (GENERAL COMMERCIAL < .65 ISR)
= 2 (ADJUSTED LUI)
BUFFER LENGTH: 235 LF

TOTAL PLANTS NEEDED: 726 LF/100 = 7.3 x (2 SHADE TREES, 6 EVERGREEN TREES, & 20 SHRUBS)
= 15 SHADE TREES, 44 EVERGREEN TREES & 146 SHRUBS
TOTAL PLANTS PROVIDED: 15 SHADE TREES / 8 EVERGREEN TREES / 183 SHRUBS

### PARKING AREA LANDSCAPING

REQUIREMENT: OFF-STREET PARKING AREAS WHICH SERVE 20+ VEHICLES SHALL BE PROVIDED WITH LANDSCAPE AREAS TOTALING NOT LESS THAN 7.5% AND EACH LANDSCAPE AREA SHALL NOT BE LESS THAN 150 SF

TOTAL PARKING AREA: 12,372.09 SF x .075 = 927.91 SF
PROVIDED PARKING LANDSCAPE AREA: 1,279 SF

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KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
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LANDSCAPE NOTES

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

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| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
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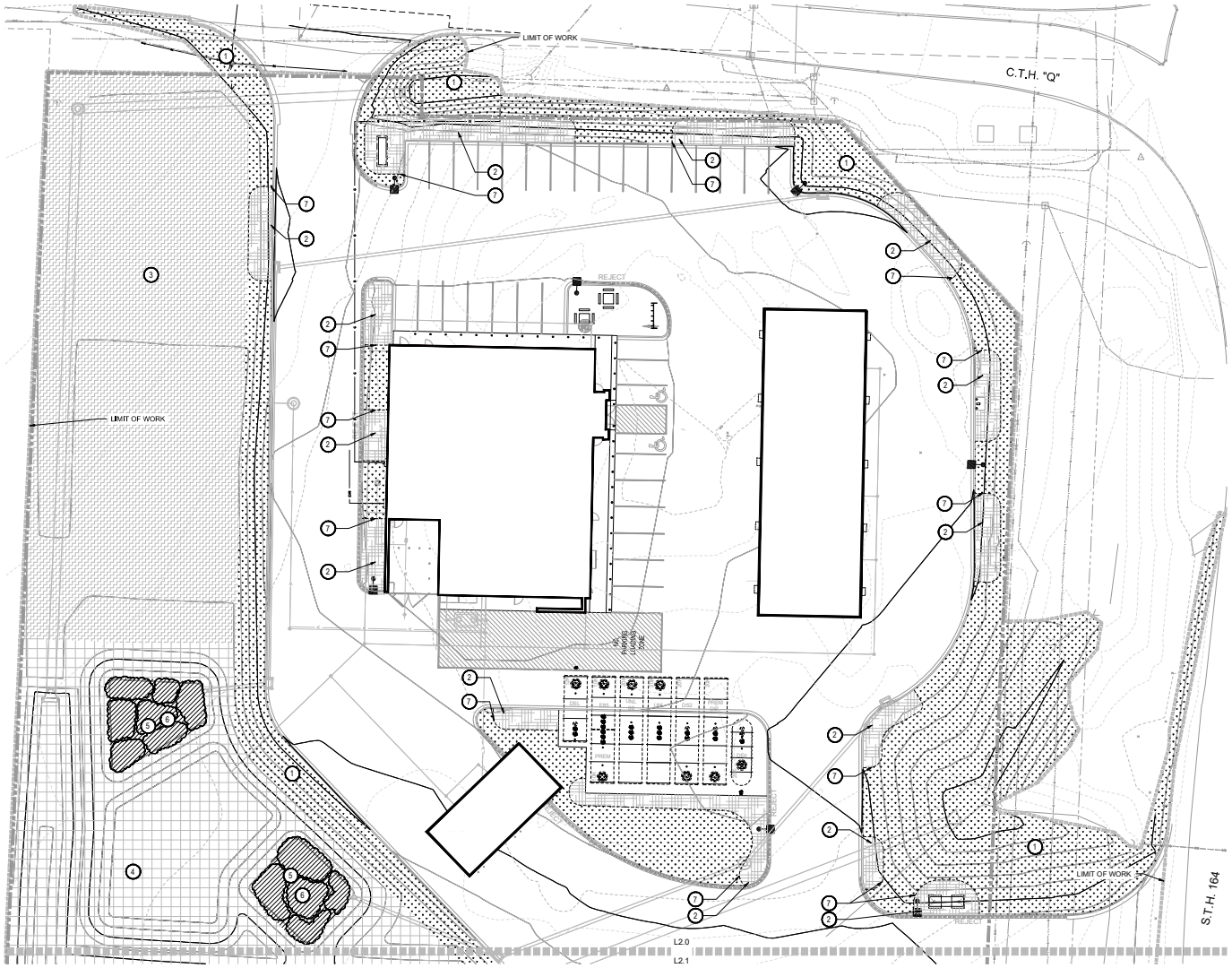
| SHEET | L1.1 |




MULCH, SEEDING AND TURF PLAN

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## LANDSCAPE LEGEND

- 1 SOD (23,171 SF), REFER TO CONSTRUCTION NOTES FOR TYPE
- 2 SHRUB BED WITH HARDWOOD MULCH (47 CY DOES NOT INCLUDE STAND-ALONG TREES OUTSIDE SHRUB BED AREAS), REFER TO CONSTRUCTION NOTES FOR TYPE
- 3 TURF SEED (18,163 SF)
- 4 NATIVE SEED (16,072 SF) REFER TO CONSTRUCTION NOTES FOR TYPE.
- 5 6 PERENNIAL PLUG MIX, REFER TO BIORETENTION PLANT SCHEDULE.
- SPADE CUT EDGER AT 4" DEPTH (659 LF)
- LIMIT OF WORK
- MATCHLINE
- DECIDUOUS CANOPY TREE
- LARGE DECIDUOUS ORNAMENTAL TREE
- EVERGREEN
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES

## LANDSCAPE CONSTRUCTION NOTES

1. KENTUCKY BLUEGRASS SOD PROVIDED BY PAUL'S TURF & TREE NURSERY INC. (608.655.3600) OR APPROVED EQUAL.
2. PROVIDE 3" DEPTH SHREDDED HARDWOOD MULCH AROUND ALL STAND-ALONE TREES TO A MIN. 3-FOOT PERIMETER, AND IN ALL AREAS NOTED ON PLANS OVER GEOTEXTILE WEED CONTROL FABRIC. NO WEED CONTROL FABRIC IS REQUIRED IN GROUNDCOVER OR PERENNIAL AREAS. MULCHED LANDSCAPE BEDS SHALL HAVE A SPADED VERTICAL EDGE WHEN PERIMETER IS NOT CONCRETE CURB. MULCH PROVIDED BY CERTIFIED PRODUCTS, INC. (262.542.2270) OR APPROVED EQUAL.
3. "SUNNY PLACE" TURF SEED BY CERTIFIED PRODUCTS, INC. (262.542.2270) OR APPROVED EQUAL.
4. NATIVE SEED SHALL BE "DETENTION BASIN - BIOSWALE MIX" PROVIDED BY PRAIRIE NURSERY (1.800.476.9453) OR APPROVED EQUAL.
5. PERENNIAL PLUGS PROVIDED BY AGRECOL (608.223.3571) OR APPROVED EQUAL. RE: PLANTING SCHEDULE FOR MIXTURE.
6. ALL BIORETENTION PLANTS SHALL BE INSTALLED PER WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONSERVATION PRACTICE STANDARD CODE 1004 (BIORETENTION FOR INFILTRATION).
7. MULCHED LANDSCAPE BEDS SHALL HAVE A SPADED VERTICAL EDGE AT 4" DEPTH WHEN PERIMETER IS NOT CONCRETE SIDEWALK OR CURB.
8. RETAINING WALL, REFER TO DETAIL 3/L3.0
9. REFER TO CONSTRUCTION SEQUENCE FOR NOTES REGARDING SITE RESTORATION.

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P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
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MULCH, SEEDING AND TURF PLAN

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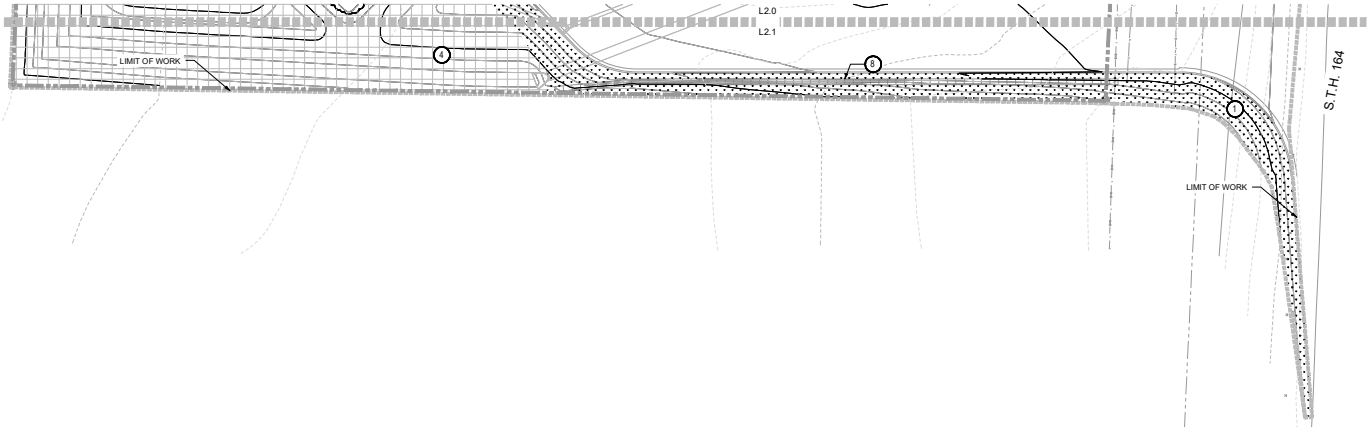


MULCH, SEEDING AND TURF PLAN

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- ORNAMENTAL GRASSES

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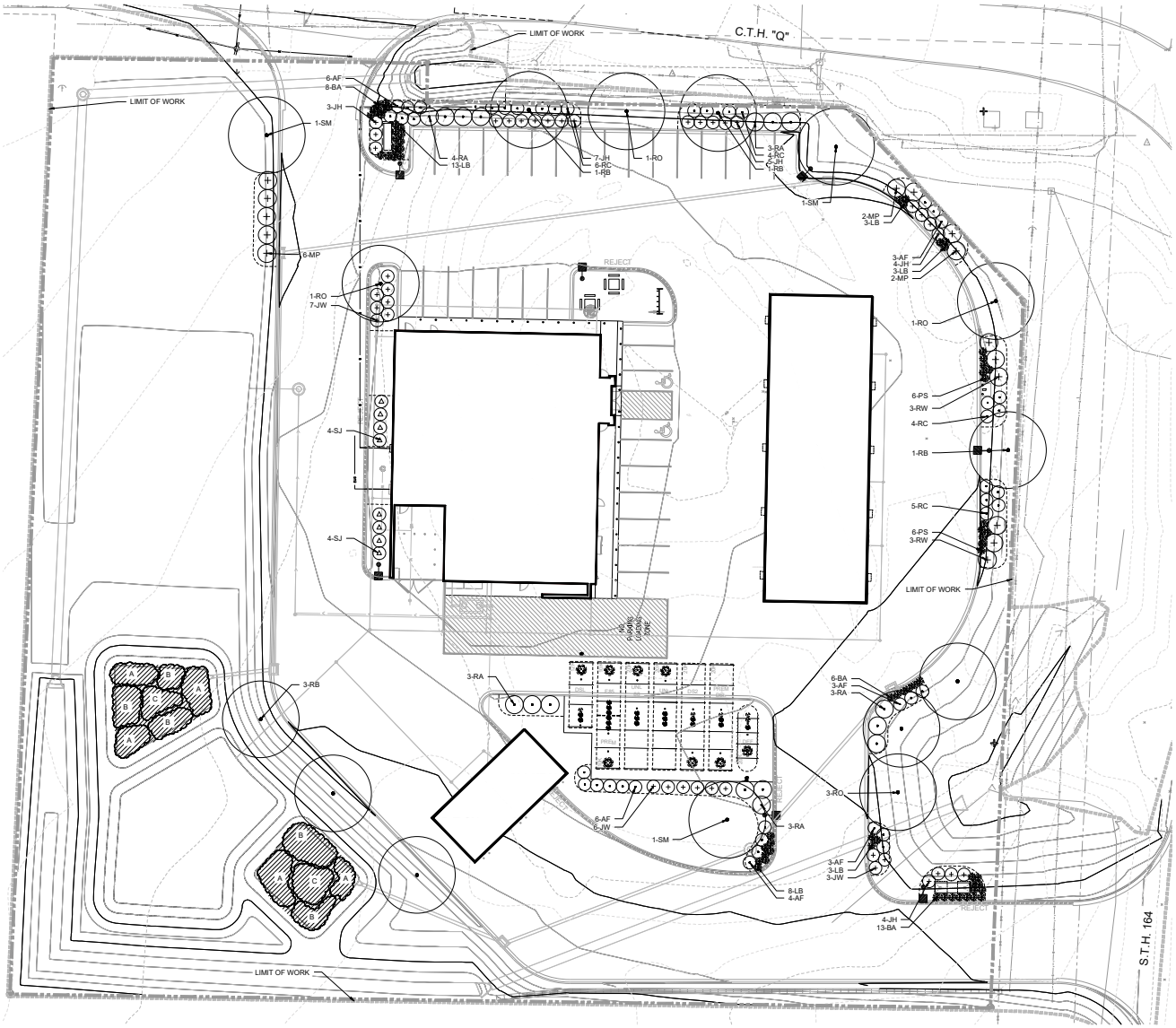
CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2019 |
| SHEET | L 2.1 |




PLANTING PLAN

## LANDSCAPE LEGEND

- (1) SOD (23,171 SF), REFER TO CONSTRUCTION NOTES FOR TYPE.
- (2) SHRUB BED WITH HARDWOOD MULCH (47 CY DOES NOT INCLUDE STAND-ALONG TREES OUTSIDE SHRUB BED AREAS), REFER TO CONSTRUCTION NOTES FOR TYPE
- (3) TURF SEED (18,163 SF)
- (4) NATIVE SEED (16,072 SF) REFER TO CONSTRUCTION NOTES FOR TYPE.
- (5) (6) PERENNIAL PLUG MIX, REFER TO BIORETENTION PLANT SCHEDULE.
- SPADE CUT EDGER AT 4" DEPTH (659 LF)
- LIMIT OF WORK
- MATCHLINE
- DECIDUOUS CANOPY TREE
- LARGE DECIDUOUS ORNAMENTAL TREE
- EVERGREEN
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES

## LANDSCAPE CONSTRUCTION NOTES

1. KENTUCKY BLUEGRASS SOD PROVIDED BY PAUL'S TURF & TREE NURSERY INC. (608.655.3600) OR APPROVED EQUAL.
2. PROVIDE 3" DEPTH SHREDDED HARDWOOD MULCH AROUND ALL STAND-ALONE TREES TO A MIN. 3-FOOT PERIMETER, AND IN ALL AREAS NOTED ON PLANS OVER GEOTEXTILE WEED CONTROL FABRIC. NO WEED CONTROL FABRIC IS REQUIRED IN GROUNDCOVER OR PERENNIAL AREAS. MULCHED LANDSCAPE BEDS SHALL HAVE A SPADED VERTICAL EDGE WHEN PERIMETER IS NOT CONCRETE CURB. MULCH PROVIDED BY CERTIFIED PRODUCTS, INC. (262.542.2270) OR APPROVED EQUAL.
3. "SUNNY PLACE" TURF SEED BY CERTIFIED PRODUCTS, INC. (262.542.2270) OR APPROVED EQUAL.
4. NATIVE SEED SHALL BE "DETENTION BASIN - BIOSWALE MIX" PROVIDED BY PRAIRIE NURSERY (1.800.476.9453) OR APPROVED EQUAL.
5. PERENNIAL PLUGS PROVIDED BY AGRECOL (608.223.3571) OR APPROVED EQUAL. RE: PLANTING SCHEDULE FOR MIXTURE.
6. ALL BIORETENTION PLANTS SHALL BE INSTALLED PER WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONSERVATION PRACTICE STANDARD CODE 1004 (BIORETENTION FOR INFILTRATION).
7. MULCHED LANDSCAPE BEDS SHALL HAVE A SPADED VERTICAL EDGE AT 4" DEPTH WHEN PERIMETER IS NOT CONCRETE SIDEWALK OR CURB.
8. RETAINING WALL, REFER TO DETAIL 3/L3.0
9. REFER TO CONSTRUCTION SEQUENCE FOR NOTES REGARDING SITE RESTORATION.

## PLANT SCHEDULE

| QTY | KEY | COMMON NAME |
|---|---|---|
| CANOPY TREES | | |
| | RO | NORTHERN RED OAK |
| | SM | SIENNA GLEN MAPLE |
| | RB | HERITAGE RIVER BIRCH |
| EVERGREEN TREES | | |
| | SJ | SKYROCKET JUNIPER |
| DECIDUOUS SHRUBS | | |
| 5'-7' SPREAD | | |
| | RC | ROCK COTONEASTER |
| | AF | ARCTIC FIRE DOGWOOD |
| 7' + SPREAD | | |
| | RA | GRO-LOW SUMAC |
| EVERGREEN SHRUBS | | |
| 5'-7' SPREAD | | |
| | JH | HUGHES JUNIPER |
| | JW | BLUE RUG JUNIPER |
| 7' SPREAD | | |
| | RW | WHITE CATAWBA RHODODENDRON |
| | MP | DWARF MUGO PINE |
| ORNAMENTAL GRASSES | | |
| | BA | BLONDE AMBITION BLUE GRAMA GRASS |
| | LB | LITTLE BLUESTEM |
| | PS | SHENANDOAH SWITCH GRASS |

## BIORETENTION PLANT LIST

**Group A**

| Common Name | Percentage |
|---|---|
| Showy Black-eyed Susan | 16 |
| Dogtooth Daisy | 12 |
| Culver's Root | 10 |
| Great Blue Lobelia | 16 |
| Big bluestem | 16 |
| Indian Grass | 16 |
| Bluejoint Grass | 14 |
| | 100 |

**Group B**

| Common Name | Percentage |
|---|---|
| Ohio Goldenrod | 12 |
| Marsh Milkweed | 18 |
| Butterfly Weed | 15 |
| Boneset | 11 |
| Heavy Metal Switchgrass | 16 |
| Canada Wild Rye Grass | 14 |
| Fringed Brome Grass | 14 |
| | 100 |

**Group C**

| Common Name | Percentage |
|---|---|
| Tall Ironweed | 12 |
| Spotted Joe-Pye Weed | 12 |
| Compass Plant | 17 |
| Prairie Blazingstar | 16 |
| Wool Grass | 16 |
| Big bluestem | 12 |
| Dark Green Rush | 15 |
| | 100 |

KWIK TRIP

KWIK STAR

KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

SNYDER & ASSOCIATES
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-835-0444

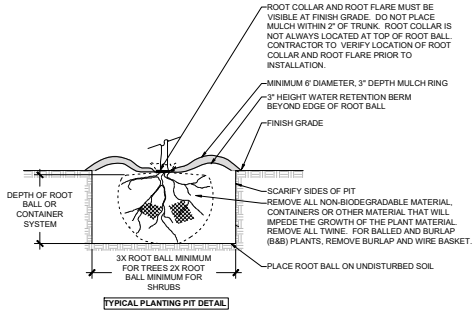
PLANTING PLAN

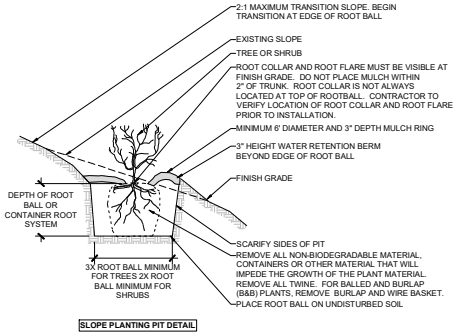
CONVENIENCE STORE #1108 WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

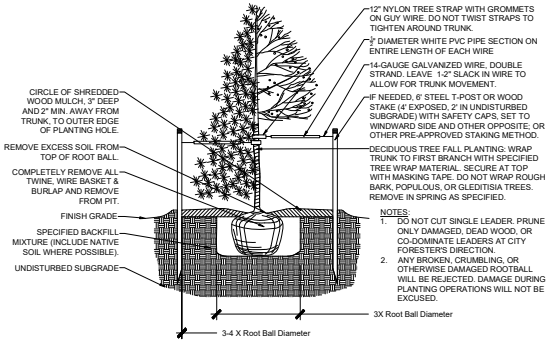
| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2019 |
| SHEET | L 2.2 |



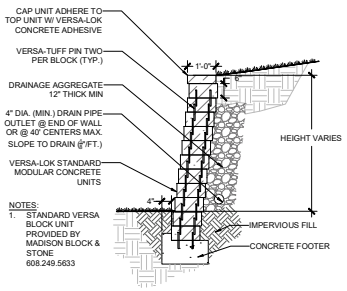

## 1 PLANTING PIT

NO SCALE




## 2 TREE PLANTING

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




## 3 CMU BLOCK RETAINING WALL

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

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LA CROSSE, WI 54602-2107
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FAX (608) 781-8960

SNYDER & ASSOCIATES
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608.838.0444

LANDSCAPE DETAILS

CONVENIENCE STORE #1108 WITH DIESEL

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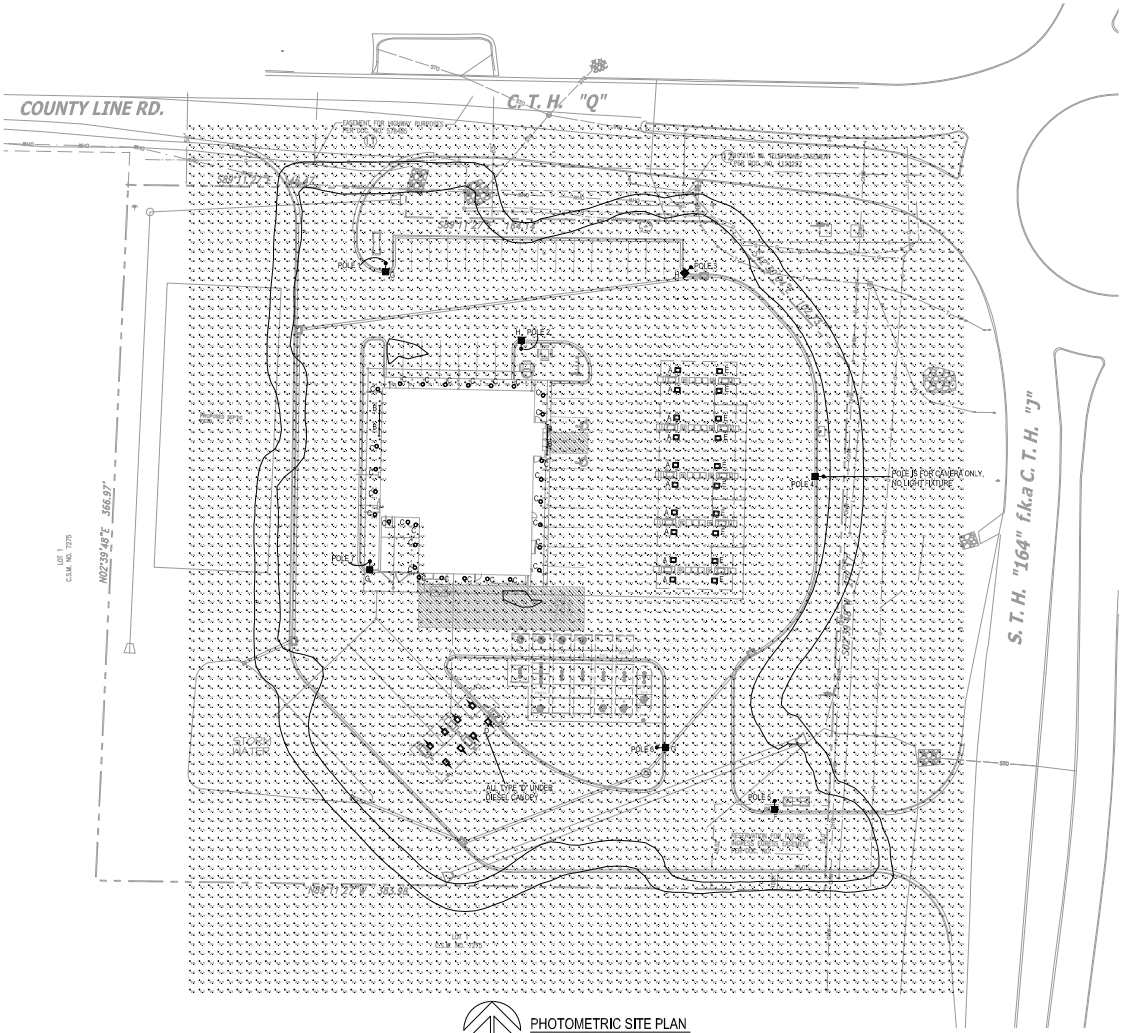
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | S. ANDERSON / L. OLSON |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.30 |
| DATE | FEBRUARY 5, 2019 |
| SHEET | L 3.0 |




PHOTOMETRIC SITE PLAN
SCALE: 1" = 30'-0"

## CALCULATION STATISTICS

AVERAGE: 4.06
MAXIMUM: 79.96
MINIMUM: 0.26

## NOTE:

FOOTCANDLE LEVELS SHOWN ON THIS PLAN ARE CALCULATED AT GRADE LEVEL.

## FIXTURE QUANTITIES

A - 10
B - 4
C - 29
D - 8
E - 10
F - 1
G - 3
H - 2

PROVIDE (7) 15' POLES.

## FIXTURE SYMBOLS:

A, D & E — LED LIGHT MOUNTED UNDER FUEL CANOPIES

B — LED STRIP LIGHT MOUNTED IN GABLE

C — RECESSED LED DOWNLIGHT

F, G & H — POLE MOUNTED LED FIXTURE

## FIXTURE TYPES:

A - LSI LIGHTING: SCVI-LED-ZIL-SOFT-UNIV-50IN-83-WHT
MOUNTED UNDER GAS CANOPY
MOUNT FIXTURES WITH FORWARD THROW OPTIC AIMING AT STORE FRONT.

B - LED STRIP LIGHT MOUNTED IN GABLE
LITHONIA - TZL1N4.96

C - RECESSED LED DOWNLIGHT
GOTHAM EVO-35/30-8AR-WD-120-TRW

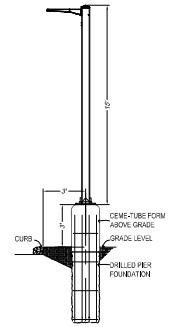
D - LSI LIGHTING: SCVI-LED-ZIL-SOFT-UNIV-50IN-90-BLK
MOUNTED UNDER DIESEL CANOPY
MOUNT FIXTURES WITH FORWARD THROW OPTIC AIMING IN DIRECTION OF ARROW.

E - LSI LIGHTING: SCVI-LED-15L-SC-UNIV-50IN-90-WHT
MOUNTED UNDER GAS CANOPY

F - LSI LIGHTING: SLM-LED-RL-SIL-3-UNV-50-70CRI-WHT

G - LSI LIGHTING: SLM-LED-RL-SIL-5W-UNV-50-70CRI-WHT

H - LSI LIGHTING: SLM-LED-RL-SIL-FT-UNV-50-70CRI-WHT




## LOT LIGHT ELEVATION DETAIL

NOT TO SCALE

POLE 4 IS FOR CAMERA ONLY. NO LIGHT FIXTURE.

2020-0105.09

GRAEF
275 West Wisconsin Avenue, Suite 300
Milwaukee, WI 53203
414 / 299 1500
414 / 299 0037 fax

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P.O. BOX 2107
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# PHOTOMETRIC SITE PLAN

CONVENIENCE STORE #1108
WITH DIESEL

W260 N9579 WI-164
TOWN OF LISBON, WISCONSIN

| # | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| DRAWN BY | AVM |
| SCALE | NOTED |
| PROJ. NO. | 119.1179.20 |
| DATE | FEBRUARY 5, 2020 |
| SHEET | E1 |

1 **FRONT ELEVATION**
1/4" = 1'-0"

2 **LEFT ELEVATION**
3/16" = 1'-0"

3 **REAR ELEVATION**
3/16" = 1'-0"

4 **RIGHT ELEVATION**
3/16" = 1'-0"

VANTAGE ARCHITECTS INC
750 N. Third Street ▼ La Crosse, WI 54601
Ph: (608) 784-2729 Fax: (608) 784-2826

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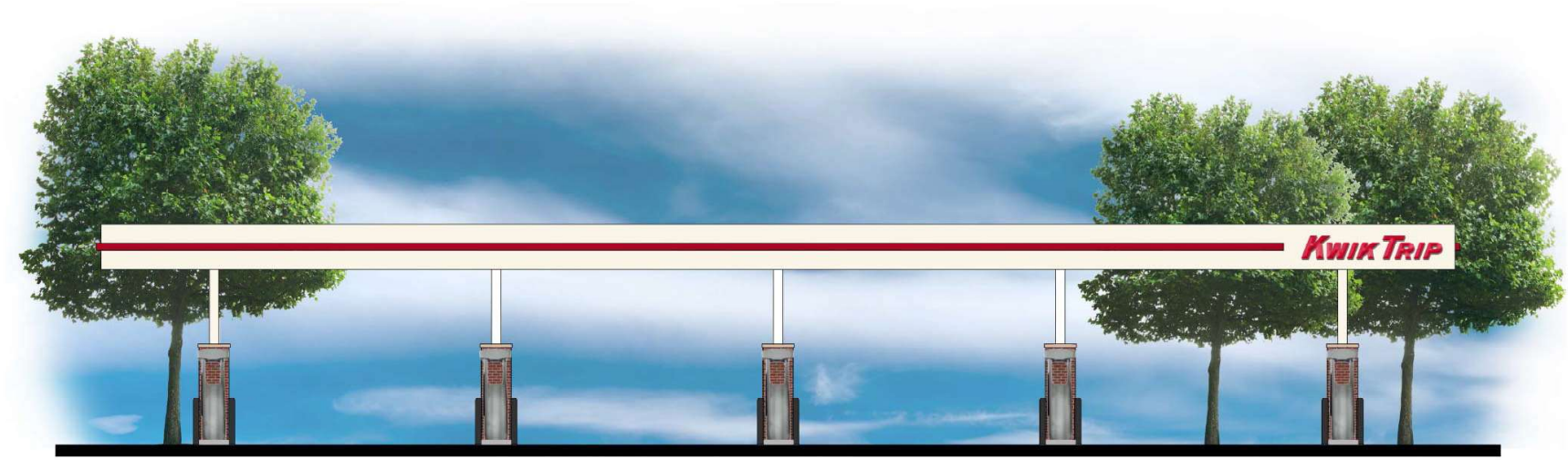


1 FRONT ELEVATION

2 SIDE ELEVATION

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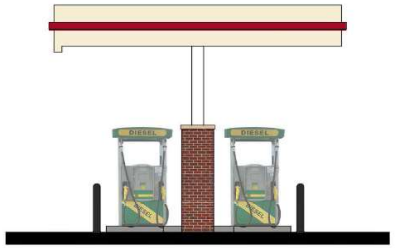
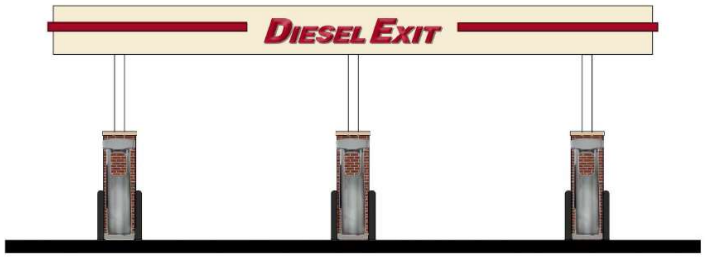
10 MPD
9' BRICK

1 FRONT ELEVATION



2 SIDE ELEVATION




3 REAR ELEVATION

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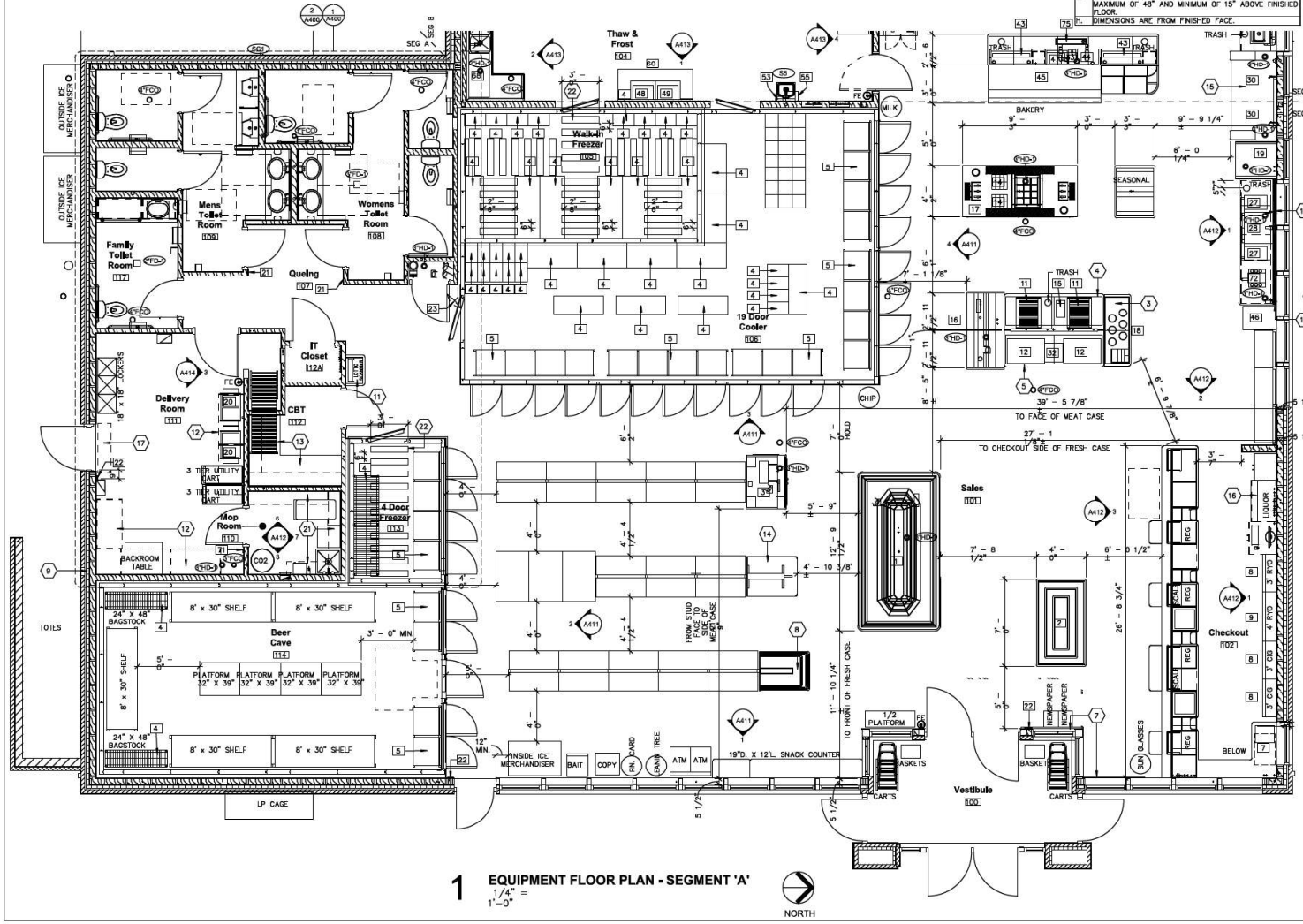
2 LANE DIESEL
9' BRICK




1 EQUIPMENT FLOOR PLAN - SEGMENT 'A'
1/4" = 1'-0"

## GENERAL NOTES EQUIPMENT

| | |
|---|---|
| A. | ALL CASEWORK, SHELVING AND FIXTURES BY OWNER (TYP.) |
| B. | CAULK ALL EXPOSED SEAMS IN FOOD AREAS. |
| C. | CAULK SINK COUNTERTOPS AT WALL. |
| D. | CAULK/ ROPE INSIDE COOLER/FREEZER GLASS DOORS. |
| E. | SEAL (CAULK) ALL OPENINGS AROUND PIPES AND OTHER CONDUITS, WHERE THEY PASS THROUGH WALLS AND FLOORS. SEAL ALL JUNCTIONS BETWEEN THE WALL SURFACE AND THE EDGES OF ATTACHED EQUIPMENT WITH APPROVED CAULK/SEALING COMPUND. |
| F. | EXTEND CONDUIT PIPES FOR BEVERAGE LINES AT LEAST FOUR INCHES ABOVE THE FINISHED FLOOR ELEVATION AT BOTH ENDS. THE SPACE BETWEEN THE BEVERAGE LINES AND THE CONDUIT PIPE MUST BE SEALED WITH A HARD MATERIAL AND PROVIDE A CLEANABLE FINISH. |
| G. | MECHANICAL SYSTEM CONTROLS SHALL BE LOCATED MAXIMUM OF 48" AND MINIMUM OF 15" ABOVE FINISHED FLOOR. |
| H. | DIMENSIONS ARE FROM FINISHED FACE. |

## EQUIPMENT SCHEDULE

| # | TYPE |
|---|---|
| 1 | FRESH CASE |
| 2 | BAKERY SHELF |
| 3 | REFRIGERATED MEAT CASE |
| 4 | NSF APPROVED SHELVES -- COOLERS/FREEZERS |
| 5 | NSF APPROVED SHELVES -- COOLERS/FREEZERS |
| 7 | UTILITY CART |
| 8 | 3'-0" METAL LIGHTED CIGARETTE MERCHANDISER |
| 9 | 4'-0" METAL LIGHTED CIGARETTE MERCHANDISER |
| 11 | ROLLER GRILL |
| 12 | HOT FOOD DISPLAY |
| 14 | FIXIN'S CONDIMENT HOLDER |
| 15 | CHILI CHEESE DISPLAY |
| 16 | PIZZA CASE |
| 17 | MULTI-TERRIA CONDIMENT |
| 18 | SOUP WELL |
| 19 | ICE CREAM NOVELTY CASE |
| 20 | BAG-IN-A-BOX RACK |
| 21 | ADA 8"x8" MEN/WOMEN SIGNAGE WITH BRAILLE SEE SHEET A403 FOR TYP. LOCATION |
| 22 | ADA 3"x6" EXIT SIGNAGE WITH BRAILLE SEE SHEET A501 FOR TYP. LOCATION |
| 23 | SECURITY MIRROR |
| 27 | MALT BLENDER |
| 28 | MALT BLENDER FREEZER |
| 30 | FOUNTAIN MACHINE |
| 32 | PIZZA WARMER |
| 33 | HOT WATER DISPENSER |
| 43 | COFFEE CONDIMENT DISPLAY |
| 44 | CREAMER |
| 45 | BAKERY CASE |
| 46 | SMOOTHIE MACHINE |
| 47 | MICROWAVE -- SNACK |
| 48 | MICROWAVE -- KITCHEN |
| 49 | SCALE/LABEL MACHINE |
| 53 | SOAP DISPENSER |
| 55 | PAPER TOWEL DISPENSER-KITCHEN |
| 60 | 6'-0" STAINLESS TABLE |
| 68 | 42" STAINLESS DRY RACK |
| 71 | CO2 SIGNAGE BY OWNER |
| 72 | WHIPPED CREAM DISPENSER |
| 75 | 30" DRIP TRAY |

## EQUIPMENT PLAN KEY NOTES

| # | Description | |
|---|---|---|
| 1 | CAPPUCCINO AND BAKERY ISLAND. SEE DETAIL | 6 A429 |
| 2 | CONDIMENT DISPLAY (TYP. OF 2). SEE DETAIL | 9 A429 |
| 3 | SOUP CART. SEE DETAIL | 7 A429 |
| 4 | ROLLING GRILLE MOVABLE CART. SEE DETAIL | 11 A429 |
| 5 | HOT FOOD DISPLAY MOVABLE CART. SEE DETAIL | 10 A429 |
| 6 | BAKERY DISPLAY. SEE DETAIL | 8 A429 |
| 7 | 1'-0" H. X 5'-0" L. WOOD CART BUMBER. MOUNT DIRECTLY ABOVE WALL BASE. | |
| 8 | PRODUCE CART. SEE DETAIL | 13 A429 |
| 9 | CO2 FILL W/ 3/4" PEX PIPING TO MOP ROOM. RISE UP EXT. WALL AND FOLLOW CEILING. MOUNT AT 42" A.F.F., R.O. 8 1/8"H. X 7 1/8"W. MIN. | |
| 10 | NOT USED | |
| 11 | LOTTO SCANNER. SEE DETAIL | 14 A429 |
| 12 | 8'-0" STANDARDS AT 4" A.F.F. FOR SHELVING (TYPICAL AT 3 WALLS.) | |
| 13 | 32"D. COUNTER MOUNTED 31 3/4" A.F.F. TO TOP | |
| 14 | BREAD CART. SEE DETAIL | 12 A429 |
| 15 | FOUNTAIN WALL. SEE DETAIL | 5 A429 |
| 16 | LIQUOR CABINET. SEE DETAIL | 4 A429 |
| 17 | AIR CURTAIN UNIT ABOVE. | |
| 18 | HATCH INDICATES ELECTRICAL RACE WAY. | |
| 19 | END OF ELECTRICAL FACEWAY. PROVIDE SOLID SURFACE END CAP. | |
| 20 | SOLID SURFACE TOP ONLY. | |
| 21 | SHELVES ON MTL. STANDARDS AND BRACKETS (VERIFY MTG. HTG. OF STANDARDS SHELVES). SEE INTERIOR ELEVATIONS A412. | |
| 22 | 36" L. X 6" W. GRIP STRIPS ON FREEZER FLOOR. STRIPS TO BE SPACED 6" APART. | |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PROJECT TITLE: Store - Gen 2-RH

PROJECT LOCATION:

JOB #:
DATE:
DRAWN BY:
TYPE:

REVISIONS

| NO. | DATE |
|---|---|
| | |

SHEET TITLE
Equipment Floor Plan - Segment 'A'

SHEET NO.
A120A

## EQUIPMENT SCHEDULE

| # | TYPE |
|---|---|
| 14 | FIXIN'S CONDIMENT HOLDER |
| 19 | ICE CREAM NOVELTY CASE |
| 22 | ADA 3"X6" EXIT SIGNAGE WITH BRAILLE SEE SHEET A901 FOR TYP. LOCATION |
| 27 | MALT BLENDER |
| 28 | MALT BLENDER FREEZER |
| 30 | FOUNTAIN MACHINE |
| 33 | HOT WATER DISPENSER |
| 34 | ICE TEA MAKER |
| 35 | SLUSHEE MACHINE |
| 36 | SURESHOT FLAVORSHOT 2 |
| 38 | COFFEE BREWER |
| 39 | COFFEE GRINDER |
| 40 | FRANKE FOAMMASTER FM800 |
| 41 | ICE DISPENSER |
| 42 | BUNN-3 MACHINE |
| 43 | COFFEE CONDIMENT DISPLAY |
| 44 | CREAMER |
| 46 | BAKERY CASE |
| 47 | MICROWAVE - SNACK |
| 48 | MICROWAVE - KITCHEN |
| 49 | SCALE/LABEL MACHINE |

## EQUIPMENT SCHEDULE

| # | TYPE |
|---|---|
| 50 | MONITOR |
| 52 | BIN RACK |
| 53 | SOAP DISPENSER |
| 55 | PAPER TOWEL DISPENSER-KITCHEN |
| 56 | TURBOCHEF IB OVEN RACK |
| 57 | TURBOCHEF OVEN |
| 58 | TURBOCHEF IB OVEN |
| 59 | CART (STAINLESS STEEL) |
| 60 | 6'-0" STAINLESS TABLE |
| 61 | 6'-0" STAINLESS TABLE w/ CENTER SHELF ABOVE |
| 62 | BAKERY RACK WITH COVER |
| 63 | CAPTIVE AIRE HOOD |
| 64 | REFRIGERATED PREP TABLE |
| 65 | UNDERCOUNTER FREEZER KITCHEN |
| 68 | 42" STAINLESS DRY RACK |
| 69 | 2'-0" W. X 3'-6" L. STAINLESS TABLE |
| 73 | COLD BREW DISPENSER |
| 74 | COLD BREW CUPS |
| 75 | 30" DRIP TRAY |
| 76 | 40" DRIP TRAY |

## GENERAL NOTES EQUIPMENT

| | |
|---|---|
| A. | ALL CASEWORK, SHELVING AND FIXTURES BY OWNER (TYP.) |
| B. | CAULK ALL EXPOSED SEAMS IN FOOD AREAS. |
| C. | CAULK SINK COUNTERTOPS AT WALL. |
| D. | CAULK/ ROPE INSIDE COOLER/FREEZER GLASS DOORS. |
| E. | SEAL (CAULK) ALL OPENINGS AROUND PIPES AND OTHER CONDUITS, WHERE THEY PASS THROUGH WALLS AND FLOORS. SEAL ALL JUNCTIONS BETWEEN THE WALL SURFACE AND THE EDGES OF ATTACHED EQUIPMENT WITH APPROVED CAULK/SEALING COMPOUND. |
| F. | EXTEND CONDUIT PIPES FOR BEVERAGE LINES AT LEAST FOUR INCHES ABOVE THE FINISHED FLOOR ELEVATION AT BOTH ENDS. THE SPACE BETWEEN THE BEVERAGE LINES AND THE CONDUIT PIPE MUST BE SEALED WITH A HARD MATERIAL AND PROVIDE A CLEANABLE FINISH. |
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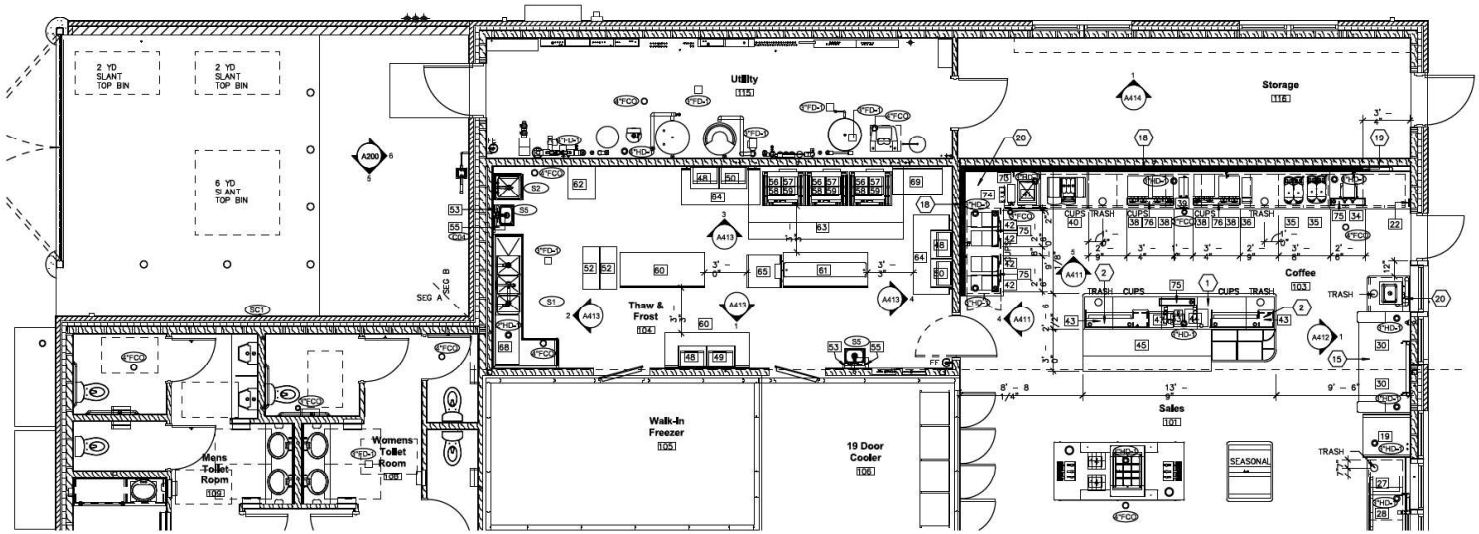



1 EQUIPMENT FLOOR PLAN - SEGMENT 'B'
1/4" = 1'-0"

## EQUIPMENT PLAN KEY NOTES

| # | Description | |
|---|---|---|
| 1 | CAPPUCCINO AND BAKERY ISLAND. SEE DETAIL | 8 A420 |
| 2 | CONDIMENT DISPLAY (TYP. OF 2). SEE DETAIL | 9 A420 |
| 3 | SOUP CART. SEE DETAIL | 7 A420 |
| 4 | ROLLING GRILLE MOVABLE CART. SEE DETAIL | 11 A420 |
| 5 | HOT FOOD DISPLAY MOVABLE CART. SEE DETAIL | 10 A420 |
| 6 | BAKERY DISPLAY. SEE DETAIL | 9 A420 |
| 7 | 1'-0" H. X 5'-0" L. WOOD CART BUMPER. MOUNT DIRECTLY ABOVE WALL BASE. | |
| 8 | PRODUCE CART. SEE DETAIL | 13 A420 |
| 9 | CO2 FILL W/ 3/4" PEX PIPING TO MOP ROOM. RISE UP EXT. WALL AND FOLLOW CEILING. MOUNT AT 42" A.F.F.. R.O. 8 1/8"H. X 7 1/8"W. MIN. | |
| 10 | NOT USED | |
| 11 | LOTTO SCANNER. SEE DETAIL | 14 A420 |
| 12 | 8'-0" STANDARDS AT 4" A.F.F. FOR SHELVING (TYPICAL AT 3 WALLS.) | |
| 13 | 32"D. COUNTER MOUNTED 31 3/4" A.F.F. TO TOP | |
| 14 | BREAD CART. SEE DETAIL | 12 A420 |
| 15 | FOUNTAIN WALL. SEE DETAIL | 5 A420 |
| 16 | LIQUOR CABINET. SEE DETAIL | 4 A420 |
| 17 | AIR CURTAIN UNIT ABOVE. | |
| 18 | HATCH INDICATES ELECTRICAL RACE WAY. | |
| 19 | END OF ELECTRICAL FACEWAY. PROVIDE SOLID SURFACE END CAP. | |
| 20 | SOLID SURFACE TOP ONLY. | |
| 21 | SHELVES ON MTL. STANDARDS AND BRACKETS (VERIFY MTG. HTG. OF STANDARDS SHELVES). SEE INTERIOR ELEVATIONS A412. | |
| 22 | 36" L. X 6" W. GRIP STRIPS ON FREEZER FLOOR. STRIPS TO BE SPACED 6" APART. | |


VANTAGE ARCHITECTS INC
750 N. Third Street ▼ La Crosse, WI 54601
Ph (608) 784-2729 Fax (608) 784-2826


KWIK TRIP
KWIK STAR


KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960


PROJECT TITLE:
Store - Gen 2-RH

PROJECT LOCATION:

JOB #:
DATE:
DRAWN BY:
TYPE:

REVISIONS

| NO. | DATE |
|---|---|
| | |

SHEET TITLE
Equipment Floor Plan - Segment 'B'

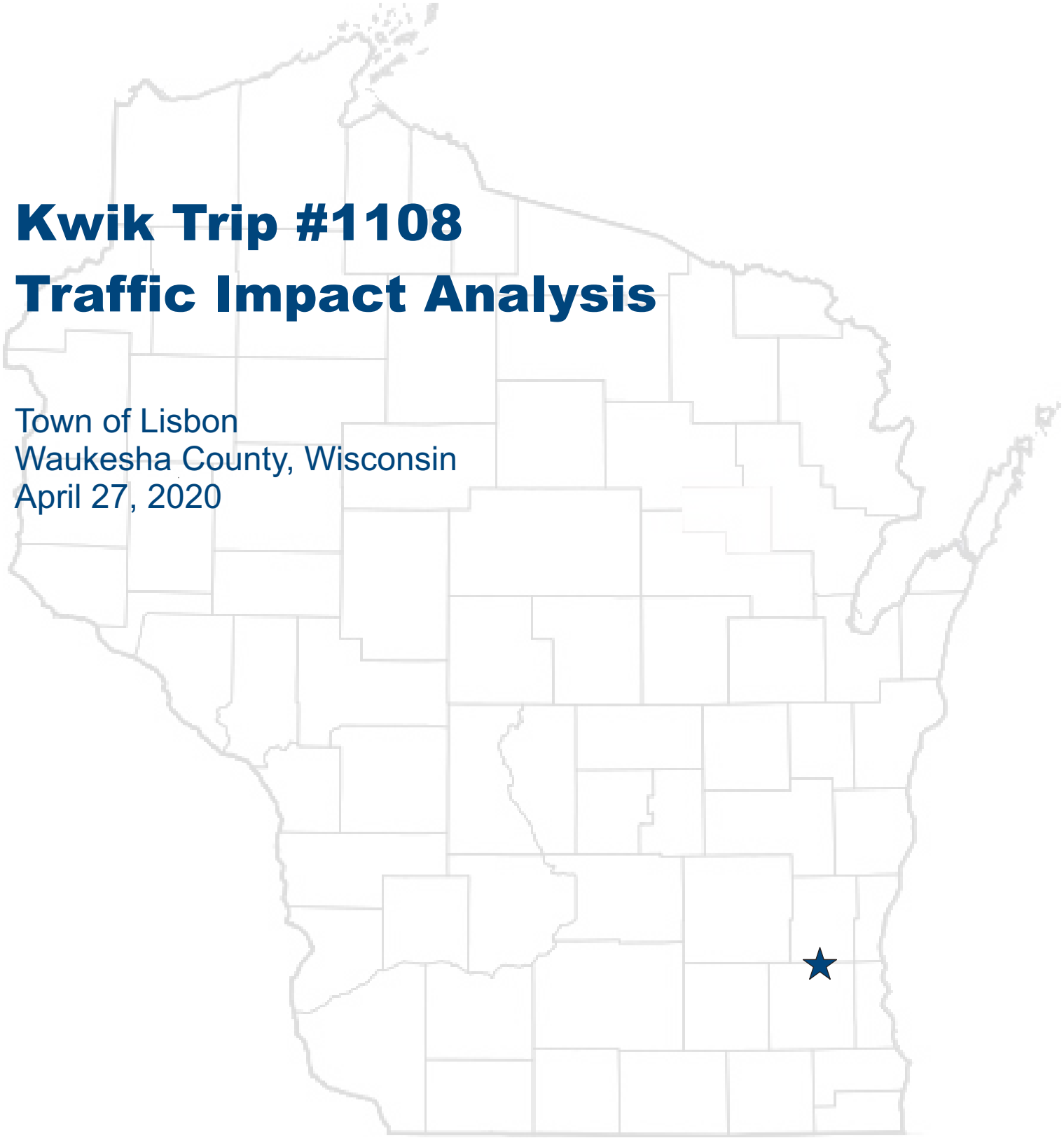
SHEET NO.
A120B

TRAFFIC ANALYSIS & DESIGN, INC.

P.O. Box 128
Cedarburg, WI 53012
800.605.3091
www.tadi-us.com

# Kwik Trip #1108
# Traffic Impact Analysis

Town of Lisbon
Waukesha County, Wisconsin
April 27, 2020



ABBREVIATED TRAFFIC IMPACT ANALYSIS FOR:

# KWIK TRIP #1108

LISBON, WISCONSIN

April 27, 2020

**PREPARED FOR:**
Kwik Trip, Inc.
1626 Oak Street
P.O. Box 2107
La Crosse, WI 54602
Phone: (608) 793-5547
Contact Person: Jeff Osgood, Store Engineering

**PREPARED BY:**
Traffic Analysis & Design, Inc.
P.O. Box 128
Cedarburg, WI 53012
Phone: (262) 377-1845
Fax: (262) 377-4381
Contact Persons: Tammi Czewski, P.E., PTOE (WisDOT TIA Certification #SE05-804-045)
John A. Bieberitz, P.E., PTOE (WisDOT TIA Certification #SE05-804-044)

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Exhibit 2-4 .....Existing and Proposed Land Uses

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Exhibit 4-4 .....Trip Distribution Diagram
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- *Summary of PHF and Percent Heavy Vehicles*
- *Existing Traffic Counts*

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# CHAPTER 1 – INTRODUCTION & EXECUTIVE SUMMARY

## PART A – PURPOSE OF REPORT AND STUDY OBJECTIVES

A Kwik Trip gas station and convenience store is proposed to be constructed in the southwest quadrant of State Trunk Highway (STH) 164 at County Line Road (CTH Q) in the Town of Lisbon, Waukesha County, Wisconsin. Driveway access is proposed at both STH 164 and CTH Q (jurisdiction of Washington County). An Initial Review document was prepared for this site and submitted to WisDOT on March 27, 2020. Based on the review, WisDOT requested that an abbreviated traffic impact analysis (Abbreviated TIA) be prepared for the development site.

This Abbreviated TIA report follows the WisDOT *Statewide TIA Guidelines*. The TIA evaluates the expected weekday AM and PM peak hour operating conditions with base year 2020 background traffic, plus the additional traffic volumes expected from the buildout of the proposed Kwik Trip. Based on the intersection capacity analysis, geometrics and traffic control, modifications were recommended if needed to mitigate unacceptable delays or traffic queues at the study intersections.

## PART B – EXECUTIVE SUMMARY

The executive summary includes a description of the study area, description of the development and conclusions based on the findings of the TIA.

### B1. Location of Study Site with Respect to Area Roadway Network

The study area includes the following intersections:

- CTH Q & STH 164 (multi-lane roundabout control)
- CTH Q & the Mobil west driveway/proposed Kwik Trip driveway (full access)
- CTH Q & the Mobil east driveway (full access)
- STH 164 & the proposed Kwik Trip driveway (right-in/right-out)

### B2. Proposed Development

As shown on the conceptual site plan (Exhibit 1-1), the 22-fueling position Kwik Trip gas station with convenience market is proposed to have one full-access driveway to CTH Q, across from the Mobil gas station's west driveway and one right-in/right-only driveway to STH 164, at the southern edge of the site property. Based on trip generation for the site, the Kwik Trip is expected to generate 5,070 driveway trips on a typical weekday, with 390 driveway trips during the weekday AM peak hour and 325 driveway trips during the weekday PM peak hour. Development of the site is expected in 2021.

### B3. Recommended Modifications

The study area intersections were analyzed based on the procedures set forth in the *Highway Capacity Manual* (HCM) 6th Edition using the Synchro 10 traffic analysis program. Intersection operation is defined by "Level of Service". Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS 'A', to very poor, represented by LOS 'F'. For the purpose of this study, LOS D or better was used to define desirable peak hour operating conditions.

The improvements listed below and shown on Exhibit 1-2 are recommended to accommodate traffic based on the assumptions outlined in the TIA. Improvements are split into these categories:

- "Background Traffic" – These improvements are recommended to mitigate a background traffic deficiency and are *not* driven by the proposed development. For this study, the background traffic conditions are a combination of the existing traffic volumes collected at the study intersections in November 2017 and March 2020.
- "Build Traffic" – These improvements are recommended in addition to the background traffic recommended improvements to mitigate an impact created by the proposed development.

*Improvements are for jurisdictional consideration and are not legally binding. WisDOT, Washington County, and the Town of Lisbon reserves the right to determine alternative solutions.*

*CTH Q & Mobil W. Driveway/Kwik Trip Driveway*

- *Background Traffic:* No modifications
- *Build Traffic:*
  - Provide a two-way left-turn lane (TWLTL) on CTH Q as shown on the Kwik Trip site plan. This median will separate left turns from the through lane for eastbound traffic turning into the Mobil W. driveway and westbound traffic turning into the Kwik Trip driveway.
  - Provide a single exit lane on the Kwik Trip driveway with stop sign control at CTH Q.

*CTH Q & Mobil E. Driveway*

- *Background Traffic:* No modifications
- *Build Traffic:* The TWLTL recommended on CTH Q will separate left turns from the through lane for eastbound traffic turning into the Mobil E. driveway.

*STH 164 & Kwik Trip Driveway*

- *Background Traffic:* N/A
- *Build Traffic:*
  - Provide a single-lane exit on the Kwik Trip driveway with stop sign control at STH 164.
  - Position the driveway in the southernmost 50 feet of the site property as shown on the site plan.
  - Close the median on STH 164 with the removal of the existing bank driveway to STH 164.
  - Provide a 10-foot paved shoulder along southbound STH 164 from the end of the curb and gutter for the STH 164/CTH Q roundabout south through the proposed Kwik Trip driveway to STH 164.

**PART C – CONCLUSION**

With the intersection modifications recommended above, the study intersections are expected to operate acceptably at LOS C or better during the peak hours with the buildout of the proposed Kwik Trip development in the southwest corner of the STH 164/CTH Q intersection. The proposed Kwik Trip is expected to generate higher, but reasonably similar peak hour traffic volumes at the proposed driveway to CTH Q and STH 164. Therefore, the WisDOT site access requirements stated in the December 3, 2014 letter for the October 20, 2014 C-Store Commercial Development TIA submittal are expected to be adequate for the alternate Kwik Trip use on the same site.

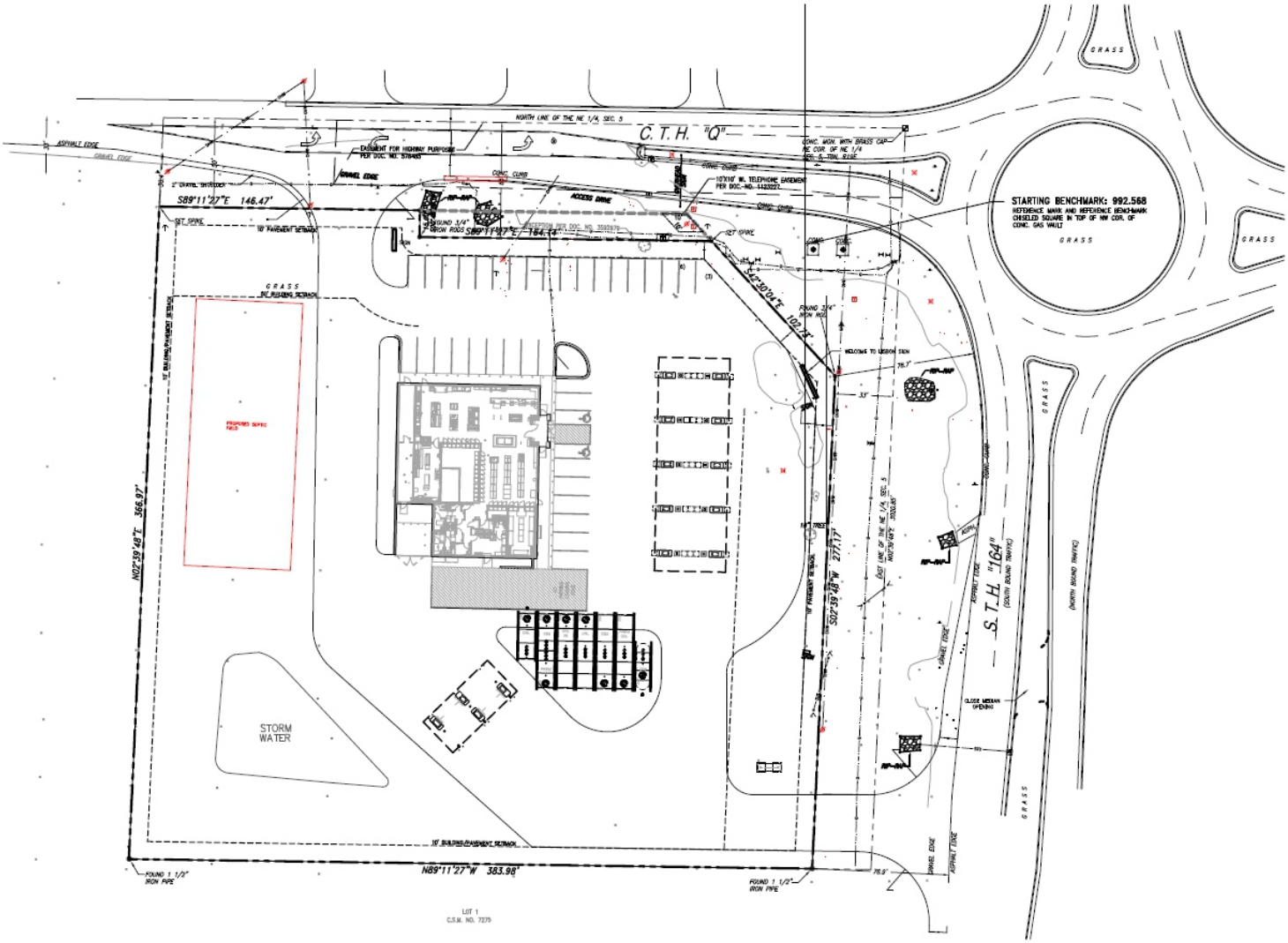


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**EXHIBIT 1-1**
**KWIK TRIP #1108 CONCEPTUAL SITE PLAN**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

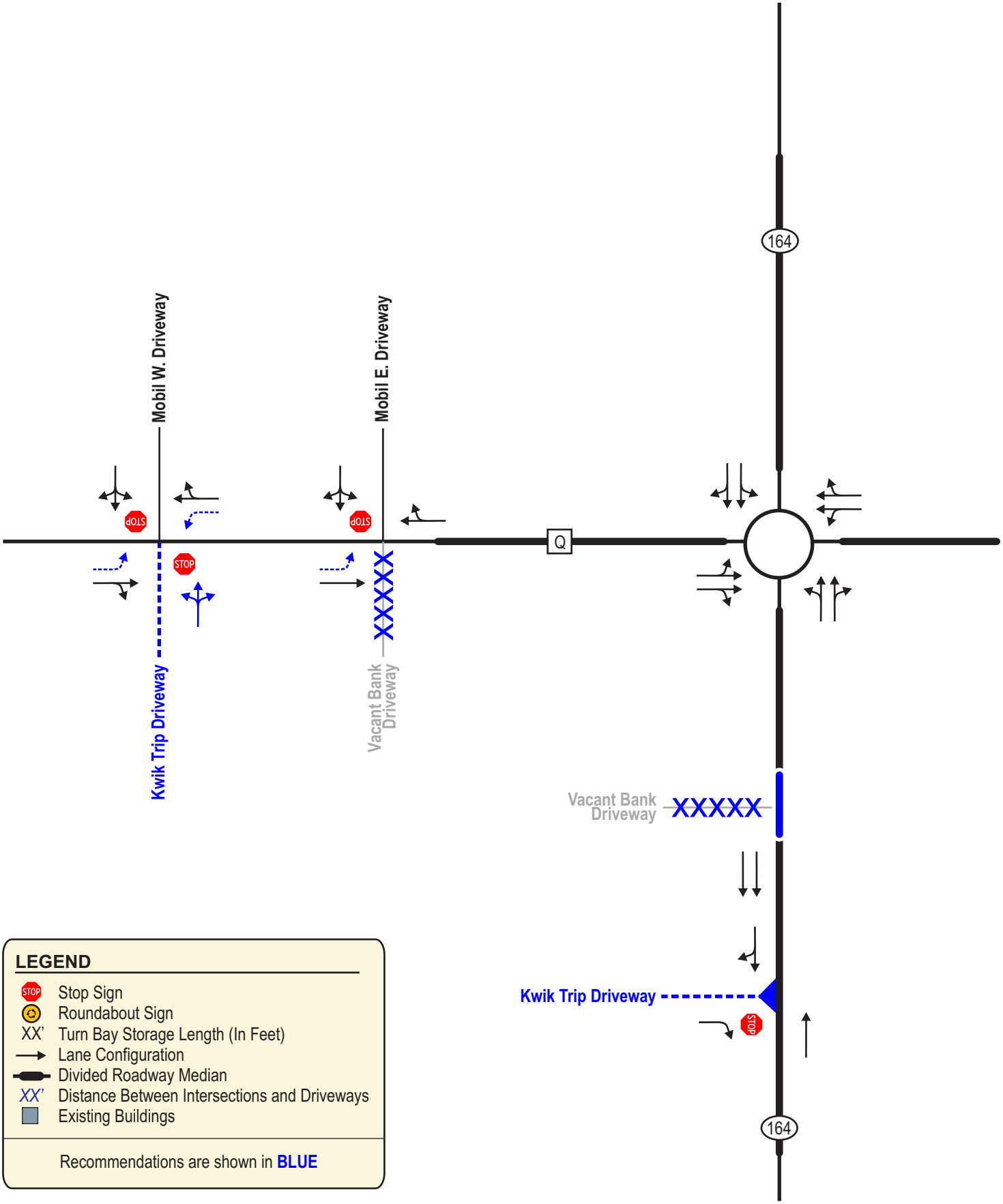


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**EXHIBIT 1-2**
**RECOMMENDATIONS**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

# CHAPTER 2 – PROPOSED DEVELOPMENT

## PART A – ON-SITE DEVELOPMENT

A street map illustrating the location of the proposed development site with respect to the existing surrounding roadway system is shown on Exhibit 2-1. The site plan for the proposed Kwik Trip is shown on Exhibit 2-2. The development is shown to have a convenience store and 22 total fueling positions. Buildout is expected by the year 2021. Due to the site location and customer base, this Kwik Trip location will not be a 24-hour store. Instead, the hours of operation will be from 5:00 a.m. to 11:00 p.m. daily.

A now-vacant bank is currently located on the approximate 3-acre property. The bank has one full-access driveway to CTH Q, directly across from the Mobil gas station's east driveway, and one full-access driveway to STH 164, near the bottom 1/3 of the property. When redeveloped, it is proposed that the Kwik Trip will have one full-access driveway to CTH Q, directly across from the Mobil gas station's west driveway, and one right-in/right-in only driveway to STH 164, at the southern end of the property.

## PART B – STUDY AREA

### B1. Influence Area

The project site is located near the Lake Five area, about seven miles west of Menomonee Falls and over eight miles north of the Village of Pewaukee. Development near the study area includes a Mobil gas station, cemetery, retail, and single-family residential housing in the four corners surrounding the STH 164/CTH Q roundabout intersection. Residential neighborhoods are generally located to the east of the site, and vacant fields with sporadic farmhouses and other residences are located to the west. The existing and proposed land uses for the study area are shown on Exhibit 2-4.

### B2. Area of Significant Traffic Impact

The study intersections evaluated in this TIA are listed below. The node number corresponds to the intersection to be modeled in the capacity analysis of the TIA. The existing control types are listed after each intersection.

- Node 100: CTH Q & STH 164 (multi-lane roundabout control)
- Node 200: CTH Q & the Mobil east driveway (stop sign control)
- Node 250: CTH Q & the Mobil west driveway/proposed Kwik Trip driveway (stop sign control)
- Node 300: STH 164 & the proposed Kwik Trip right-in/right-out driveway (future)

## PART C – OFF-SITE LAND USE AND DEVELOPMENT

No off-site developments were identified for inclusion in this traffic impact study.

## PART D – SITE ACCESSIBILITY

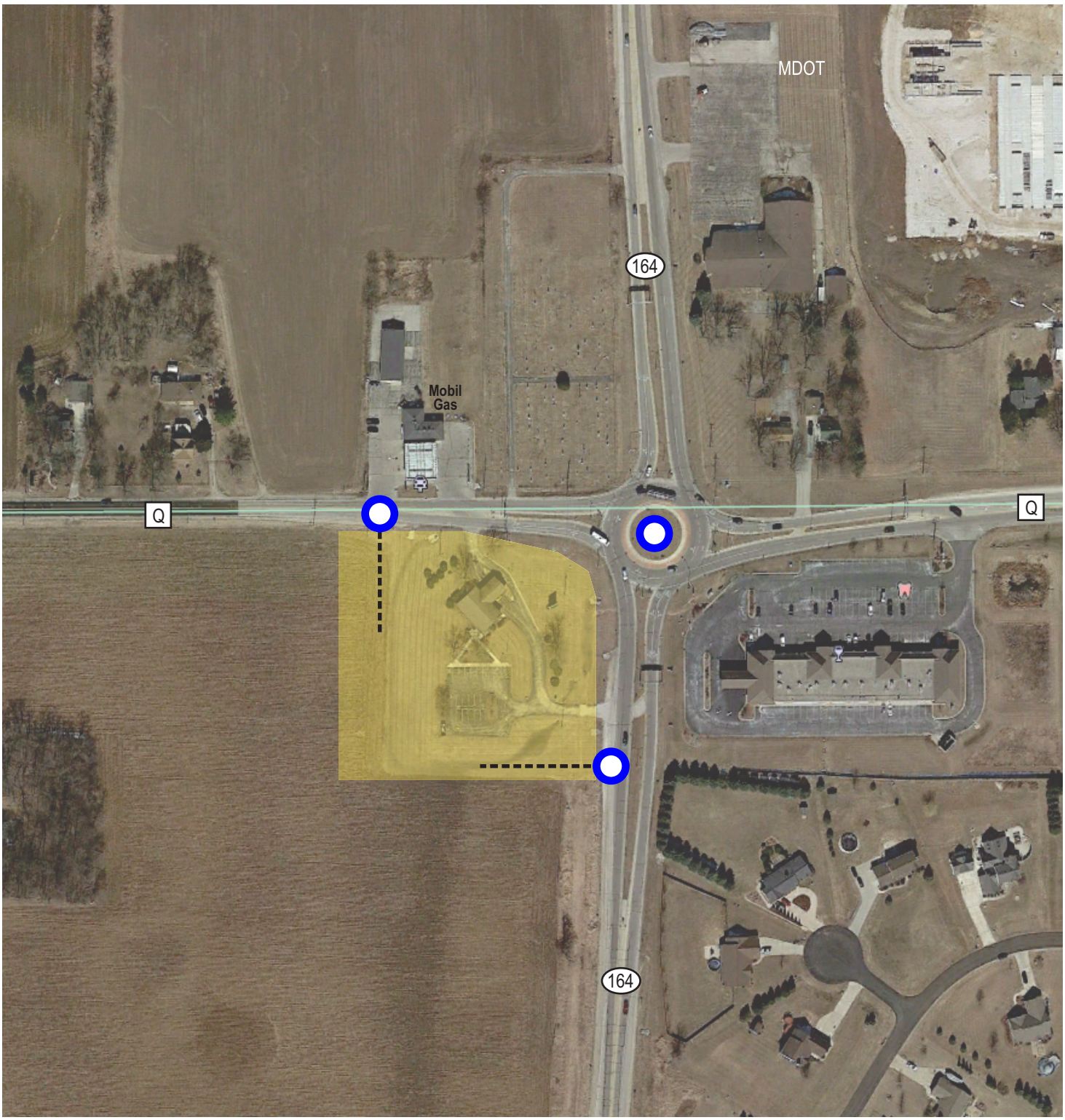
### D1. Study Area Roadway

*STH 164* is a north/south two-lane undivided Principal Arterial with a posted speed limit of 55 miles per hour (mph). The WisDOT Year 2018 annual average daily traffic (AADT) volume on STH 164 was 13,000 vehicles per day (vpd) north of CTH Q and 18,900-vpd south of CTH Q. No sidewalks currently exist along STH 164 within the limits of the study area.

*CTH Q* is an east-west two-lane undivided Principal Arterial with a posted speed limit of 40 mph to the west of STH 164 and 50 mph to the east. The WisDOT Year 2018 AADT volume on CTH Q was 3,900 vpd west of STH 164 and 8,600 vpd to the east. No sidewalks currently exist along CTH Q within the limits of the study area.

### D2. Alternative Modes of Transportation

The development site is located in a generally rural area with no sidewalks or multi-use trails along either side of STH 164 or CTH Q. No regularly scheduled public transit service or park-and-ride lots were identified within the study area.




**LEGEND**

- Kwik Trip Site
- Proposed Access
- Study Intersection

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**EXHIBIT 2-1**
**SITE LOCATION MAP**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

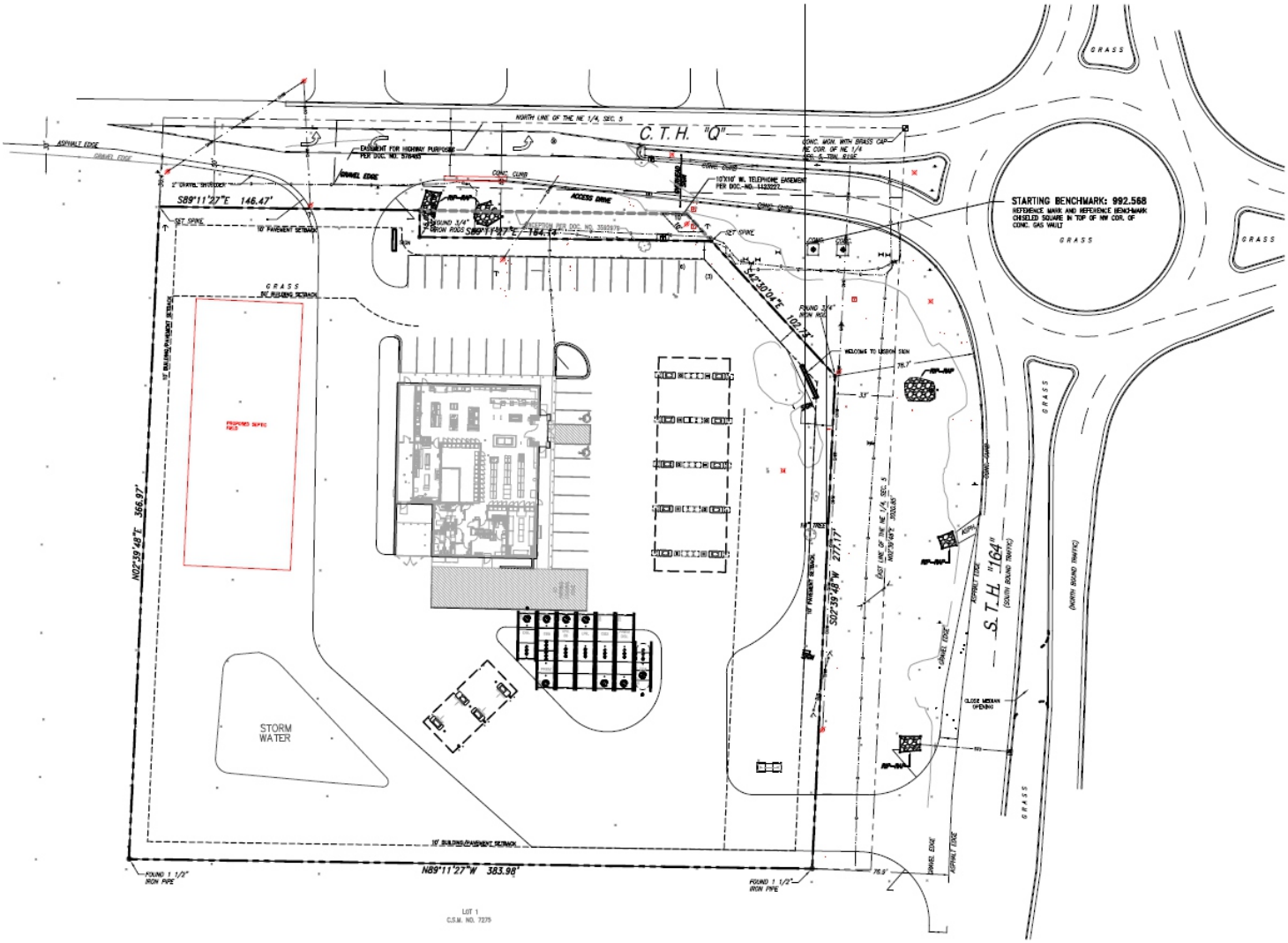


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**EXHIBIT 2-2**
**KWIK TRIP #1108 CONCEPTUAL SITE PLAN**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

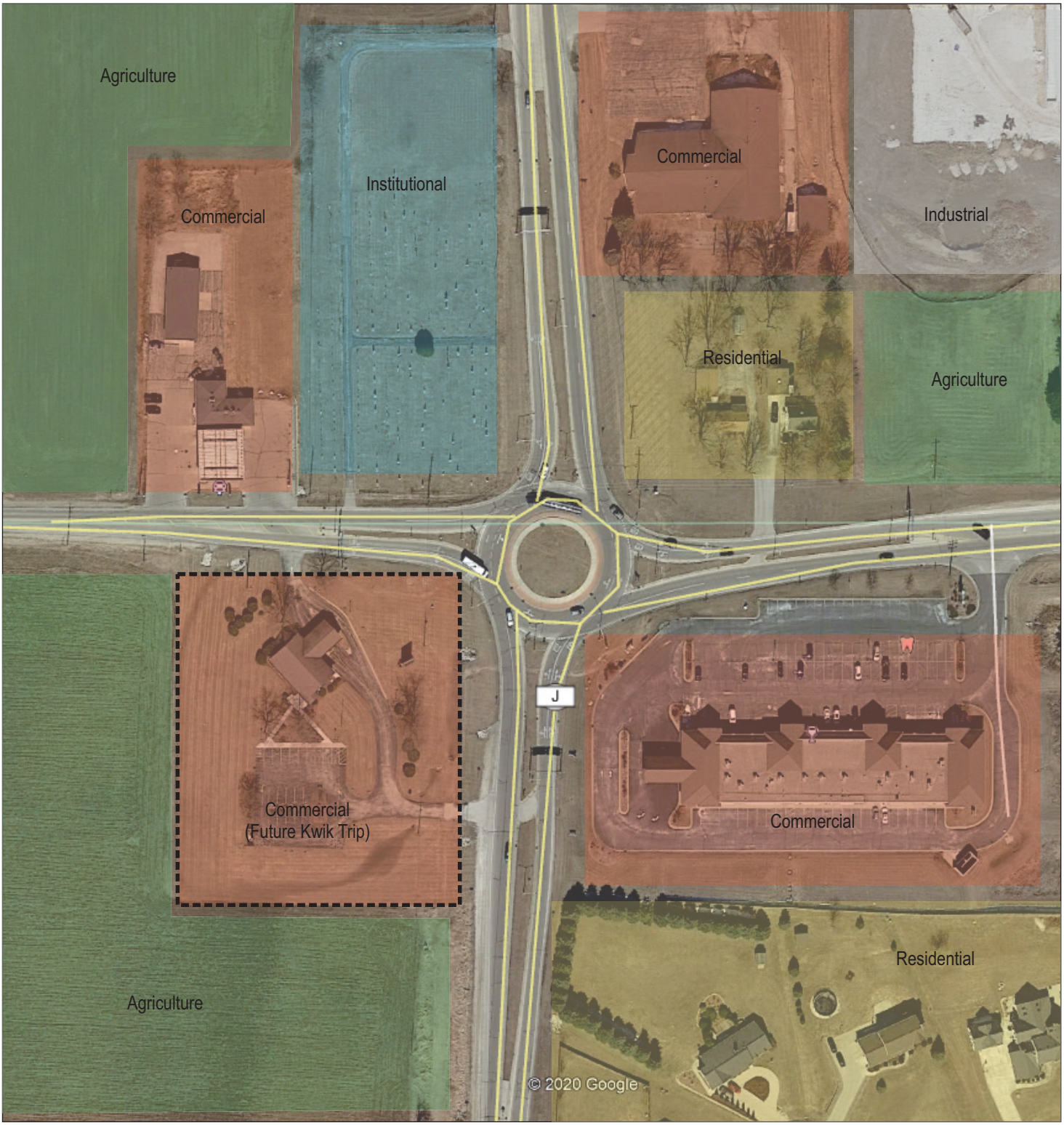


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**EXHIBIT 2-4**
**EXISTING AND PROPOSED LAND USES**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

# CHAPTER 3 – ANALYSIS OF EXISTING CONDITIONS

## PART A – PHYSICAL CHARACTERISTICS

Exhibit 3-1 shows the existing transportation system detail for the roadways within the study area. The exhibit illustrates existing posted speed limits, distances between intersections and driveways, and existing intersection geometrics (travel lanes, intersection turn lanes, traffic control, and turn-lane storage).

## PART B – TRAFFIC VOLUMES

### B1. Data Collection

TADI collected weekday morning (6:00-9:00 a.m.) and weekday afternoon (3:00-6:00 p.m.) turning movement counts for traffic turning into and out of the Mobil gas station driveways. These counts were collected in the afternoon of Monday, March 9 and in the morning of Friday, March 13 and therefore may have represented volumes lower than normal due to the stay-home measures encouraged at the time for the Covid-19 pandemic (stay-home orders weren't yet required for Wisconsin residents). To better match the 2020 driveway counts to levels evaluated in previous studies, WisDOT directed that each driveway turning movement to be increased by five vehicles in the peak hours.

Due to the impact of the Covid-19 pandemic on traffic volumes at the adjacent STH 164/CTH Q study intersection, WisDOT directed that the November 2017 traffic count collected at that intersection be used for this study. The traffic count data used in this study is located in Appendix A.

### B2. Peak Hours

Based on the November 2017 traffic count data collected at the STH 164/CTH Q intersection, the weekday peak hours were determined to occur during the following times:

- Weekday morning (AM) peak hour: 7:00-8:00 a.m.
- Weekday evening (PM) peak hour: 4:30-5:30 p.m.

### B3. Existing & Background Traffic Volumes

The traffic count data was compiled for the weekday AM and PM peak hour time periods and are shown on Exhibit 3-2. These existing traffic volumes are also considered the base Year 2021 Background traffic volumes evaluated in this report.

## PART C – CAPACITY LEVEL OF SERVICE

The study intersections were analyzed using the Synchro 10 traffic analysis model (outputs based on the Highway Capacity Manual, 6$^{th}$ Edition).

### C1. Level of Service Definitions

Intersection operation is defined by "level of service". Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS 'A', to very poor, represented by LOS 'F'. For the purpose of this study,

LOS D was used to define acceptable peak hour operating conditions. Descriptions of the various levels of service are as follows:

**LOS A** is the highest level of service that can be achieved. Under this condition, intersection approaches appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation. At unsignalized intersections, average delays are less than 10 seconds.

**LOS B** represents stable operation. At unsignalized intersections, average delays are 10 to 15 seconds.

**LOS C** still represents stable operation, but periodic backups of a few vehicles may develop behind turning vehicles. Most drivers begin to feel restricted, but not objectionably so. At unsignalized intersections, average delays are 15 to 25 seconds.

**LOS D** represents increasing traffic restrictions as the intersection approaches instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but periodic clearance of long lines occurs, thus preventing excessive backups. At unsignalized intersections, average delays are 25 to 35 seconds.

**LOS E** represents the capacity of the intersection. At unsignalized intersections, average delays are 35 to 50 seconds.

**LOS F** represents jammed conditions where the intersection is over capacity and acceptable gaps for unsignalized intersections in the mainline traffic flow are minimal. At unsignalized intersections, average delays exceed 50 seconds.

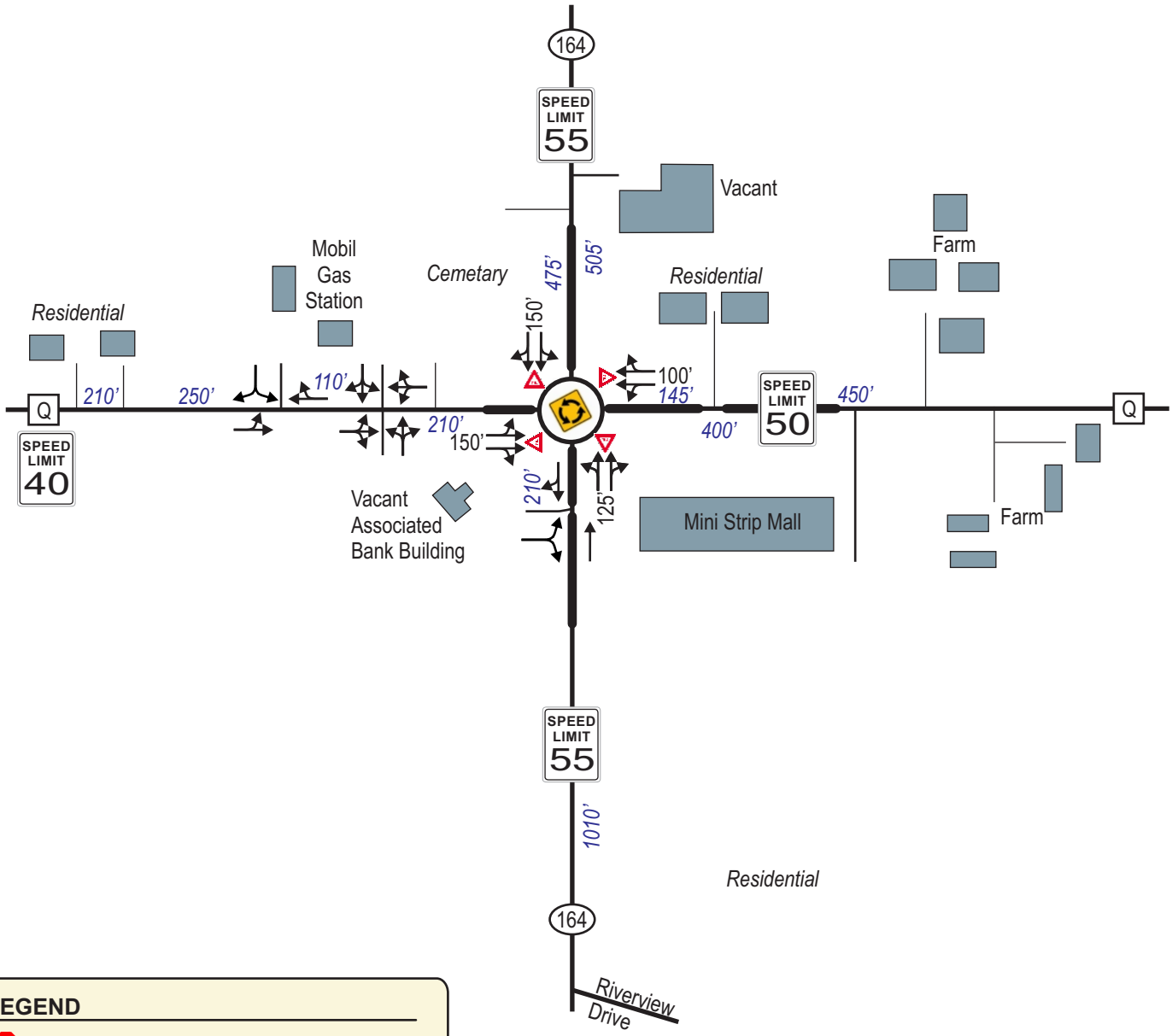
### C2. Year 2021 Background Traffic Operating Conditions

The Year 2021 Background traffic capacity analysis was conducted using the existing geometrics and traffic control at the study intersections. As shown on Exhibit 3-3, all turning movements at the study intersections operate acceptably at LOS B or better during the peak hours. The traffic capacity/level of service analysis output sheets are located in Appendix B.

## PART D – SOURCES OF DATA

The following sources of data were used for the traffic impact analysis:

- Intersection turning movement counts: TADI & WisDOT
- Historical AADT volumes at the study intersections: WisDOT Coverage Counts and traffic forecast AADT map
- Exiting Field Geometrics: TADI, Google Earth
- Site Access Requirements: TADI October 20, 2014 C-Store Commercial Development Traffic Impact Study and WisDOT requirement letter dated December 3, 2014.




**LEGEND**

- Stop Sign
- Roundabout Sign
- XX' Turn Bay Storage Length (In Feet)
- Lane Configuration
- Divided Roadway Median
- XX' Distance Between Intersections and Driveways
- Existing Buildings

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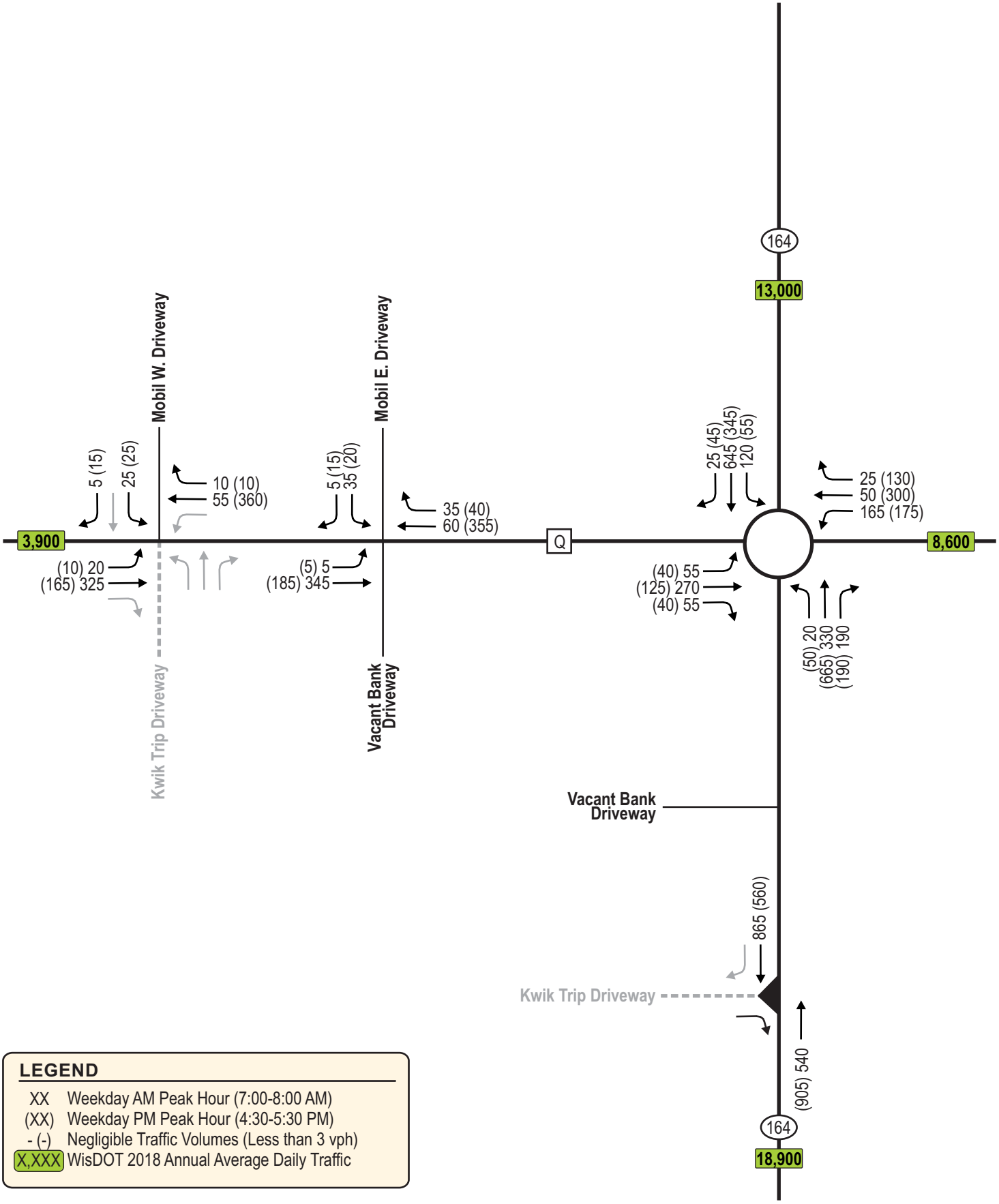
**EXHIBIT 3-1**
**EXISTING TRANSPORTATION SYSTEM**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**




**LEGEND**

| | |
|---|---|
| XX | Weekday AM Peak Hour (7:00-8:00 AM) |
| (XX) | Weekday PM Peak Hour (4:30-5:30 PM) |
| - (-) | Negligible Traffic Volumes (Less than 3 vph) |
| X,XXX | WisDOT 2018 Annual Average Daily Traffic |

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**EXHIBIT 3-2**
**YEAR 2021 BACKGROUND TRAFFIC VOLUMES**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

| Intersection | Peak Hour | MOE[1,2] | Level of Service per Movement by Approach | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
| | | | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| *Node 100:* CTH Q & STH 164[3] *(Roundabout)* | AM | LOS | B | - | B | A | - | A | A | - | A | A | - | A |
| | | Queue | 45 | - | 50 | 25 | - | 10 | 45 | - | 50 | 55 | - | 65 |
| | PM | LOS | A | - | A | B | - | B | A | - | A | A | - | A |
| | | Queue | 15 | - | 15 | 55 | - | 65 | 60 | - | 70 | 30 | - | 35 |
| *Node 200:* CTH Q & Mobil Gas E. Driveway *(Stop Sign)* | AM | LOS | A | | - | - | A | | - | | | B | | |
| | | Queue | 0 | | - | - | 0 | | - | | | 10 | | |
| | PM | LOS | A | | - | - | A | | - | | | B | | |
| | | Queue | 0 | | - | - | 0 | | - | | | 5 | | |
| *Node 250:* CTH Q & Mobil Gas W. Driveway *(Stop Sign)* | AM | LOS | A | | - | - | A | | - | | | B | | |
| | | Queue | 0 | | - | - | 0 | | - | | | 5 | | |
| | PM | LOS | A | | - | - | A | | - | | | B | | |
| | | Queue | 0 | | - | - | 0 | | - | | | 10 | | |

[1] *(--) indicates a movement that is prohibited, not analyzed, or does not exist; All free-flow movements shown as LOS A.*

[2] *Queue is maximum of the 50th & 95th percentile queue, measured in feet.*

[3] *LT data is for the LT/TH lane group; RT data is for the TH/RT lane group.*

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**EXHIBIT 3-3**
**YEAR 2021 BACKGROUND TRAFFIC CAPACITY/LOS ANALYSIS**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

# CHAPTER 4 – PROJECTED TRAFFIC

## PART A – BACKGROUND TRAFFIC FORECASTING

The Abbreviated TIA for the proposed development site evaluated base year 2021 traffic conditions. Therefore, no traffic forecasting was prepared for this TIA.

## PART B – ON-SITE AND OFF-SITE DEVELOPMENT TRAFFIC FORECASTING

### B1. Trip Generation

The expected traffic volumes generated by the proposed development were calculated based on trip rates or equations published in the ITE *Trip Generation Manual, 10th Edition, 2017*. The use of trip rates or equations was determined based on procedures listed in the trip generation manual and in the ITE *Trip Generation Handbook, 3rd Edition*. In the ITE manual, land uses with at least 10 fueling positions and an on-site convenience market of at least 3,000 square feet should be categorized as a "Super Convenience Market/Gas Station" (ITE land use 960).

Based on ITE rates for this land use and using peak hour volume of adjacent street traffic as the independent variable for the AM and PM peak hours, the proposed Kwik Trip would be expected to generate 390 driveway trips during the weekday AM peak hour and 325 driveway trips during the weekday PM peak hour (Exhibit 4-3). The peak hour volume of adjacent street traffic is not available as an independent variable for weekday daily trip generation. Therefore, the weekday daily traffic volumes, based on the number of fueling positions on site, are expected to be about 5,070 trips.

In October 2014, TADI submitted a TIA report to WisDOT, Washington County, and the Town of Lisbon for a proposed C-Store Commercial development on the same development site. The trip generation for that development is about 105 vehicles higher during the weekday AM peak hour, but only 20 vehicles higher during the weekday PM peak hour. Based on the traffic assignment prepared for this study, this results in higher, but reasonably similar traffic assignment for the proposed Kwik Trip driveway to STH 164 as for the C-Store development driveway (30 AM/10 PM higher southbound right-turn volumes and 25 AM/10 PM higher eastbound right-turn volumes).

### B2. Mode Split

For this study, the effect of organized carpools, van pools, buses, bicycles, and pedestrians were considered insignificant factors on traffic volumes in the area, and therefore, the effects of these alternative modes of travel were not included in this project.

### B3. Determination of Pass-by, Internally-Linked, Multi-Linked and Externally-Linked Trip Traffic

Based on the location of the Kwik Trip site, up to 55% of the driveway trips are expected to be pass-by trips. Pass-by trips occur when a motorist already on the roadway system stops at a development prior to continuing on their intended route (e.g., a motorist on southbound STH 164 makes a stop at the Kwik Trip prior to continuing south on STH 164). Pass-by trips for the Kwik

Trip site were estimated as 2,280 trips during a typical weekday, with 210 pass-by trips during the weekday AM peak hour and 180 pass-by trips during the weekday PM peak hour.

### B4. Trip Distribution

The proposed trip distribution for the on-site development is listed below and also shown on Exhibit 4-4. The trip distribution was based upon the existing traffic patterns at the STH 164/CTH Q intersection:

- 30% to/from the north on STH 164
- 40% to/from the south on STH 164
- 20% to/from the east on CTH Q
- 10% to/from the west on CTH Q

### B5. Trip Assignment

The Kwik Trip traffic assignments are shown on the following exhibits:

- Exhibit 4-5A: On-Site Development Traffic Assignment – New Trips
- Exhibit 4-5B: On-Site Development Traffic Assignment – Pass-by Trips
- Exhibit 4-5C: On-Site Development Traffic Assignment – Driveway Trips

## PART C – BUILD TRAFFIC

The Year 2021 Build traffic volumes (Exhibit 4-11) were developed by adding the on-site development traffic assignment – driveway trips to the Year 2021 Background traffic volumes.

| Land Use | ITE Code | Independent Variable | Weekday Daily | AM Peak In | AM Peak Out | AM Peak Total | PM Peak In | PM Peak Out | PM Peak Total |
|---|---|---|---|---|---|---|---|---|---|
| Super Convenience Market/Gas Station | 960 | 22 Fuel Positions | 5,070 (230.52) | | | | | | |
| Super Convenience Market/ Gas Station | 960 | 1,951 (AM PH Vol)<br>2,150 (PM PH Vol) | | 195 (50%) | 195 (50%) | 390 (0.20) | 165 (50%) | 160 (50%) | 325 (0.15) |
| **Total Driveway Trips** | | | **5,070** | **195** | **195** | **390** | **165** | **160** | **325** |
| *Minus Pass-by Trips* | *(960)* | *55%* | *-2,280* | *-105* | *-105* | *-210* | *-90* | *-90* | *-180* |
| **Total New Trips** | | | **2,790** | **90** | **90** | **180** | **75** | **70** | **145** |

*ITE Trip Rates (X.XX) and/or Fitted Curve Equations (FCE) are from the ITE Trip Generation Manual, 10th Edition.*

| ***TRIP DISTRIBUTION*** | | AADT | | | | | |
|---|---|---|---|---|---|---|---|
| North on STH 164 | 30% | 13000 | 840 | 25 | 25 | 20 | 20 |
| South on STH 164 | 40% | 18900 | 1110 | 35 | 35 | 30 | 30 |
| East on CTH Q | 20% | 8600 | 560 | 20 | 20 | 15 | 15 |
| West on CTH Q | 10% | 3900 | 280 | 10 | 10 | 10 | 5 |
| | ***100%*** | ***44400*** | ***2790*** | ***90*** | ***90*** | ***75*** | ***70*** |

| ***PASS-BY REDUCTION*** | **AM** | **PM** | | | | |
|---|---|---|---|---|---|---|
| Southbound on STH 164 | 40% | 20% | 45 | 45 | 20 | 20 |
| Northbound on STH 164 | 30% | 40% | 30 | 30 | 35 | 35 |
| Westbound on CTH Q | 10% | 30% | 10 | 10 | 25 | 25 |
| Eastbound on CTH Q | 20% | 10% | 20 | 20 | 10 | 10 |
| | | | ***105*** | ***105*** | ***90*** | ***90*** |

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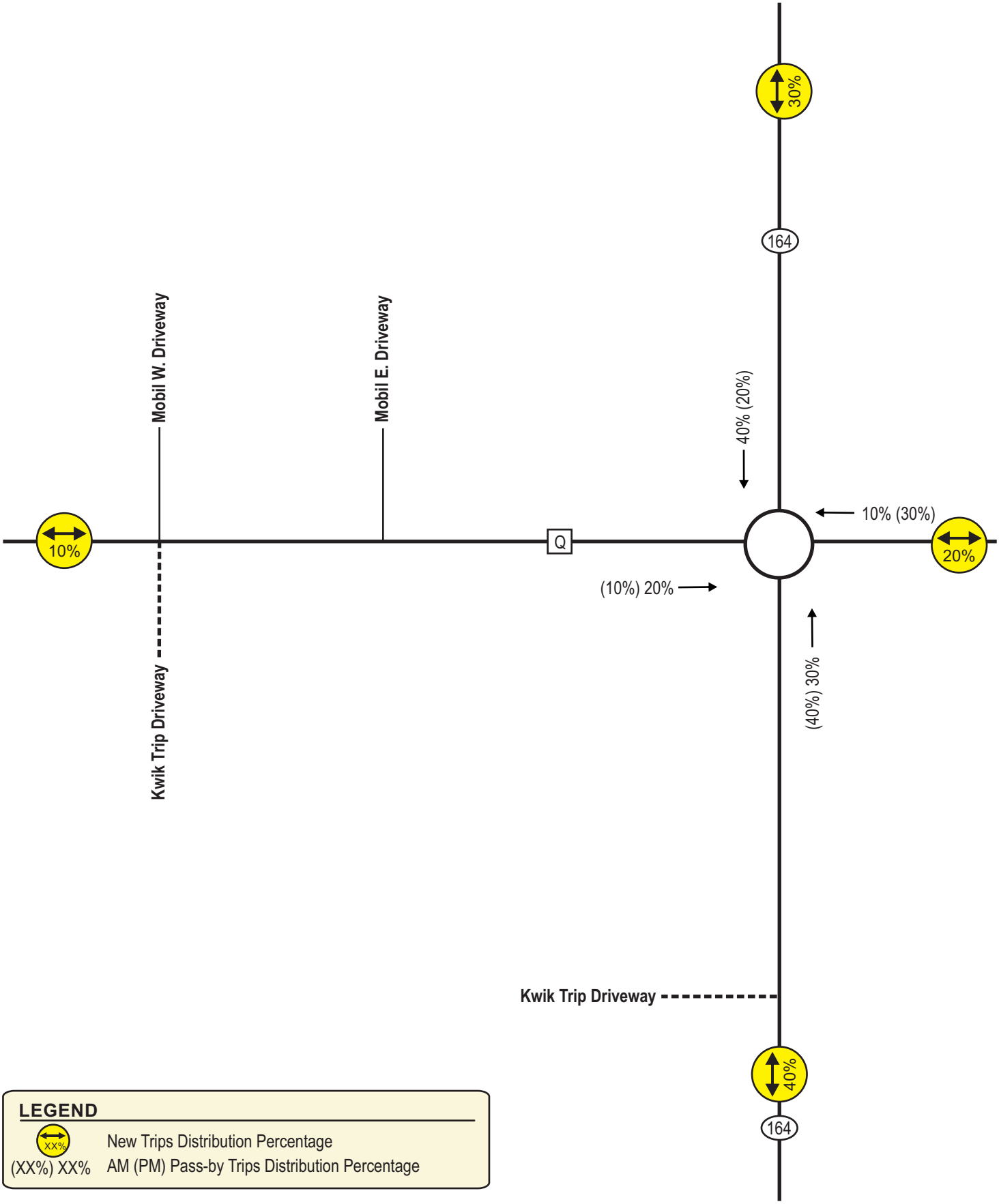
**EXHIBIT 4-3**
**ON-SITE DEVELOPMENT TRIP GENERATION TABLE**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

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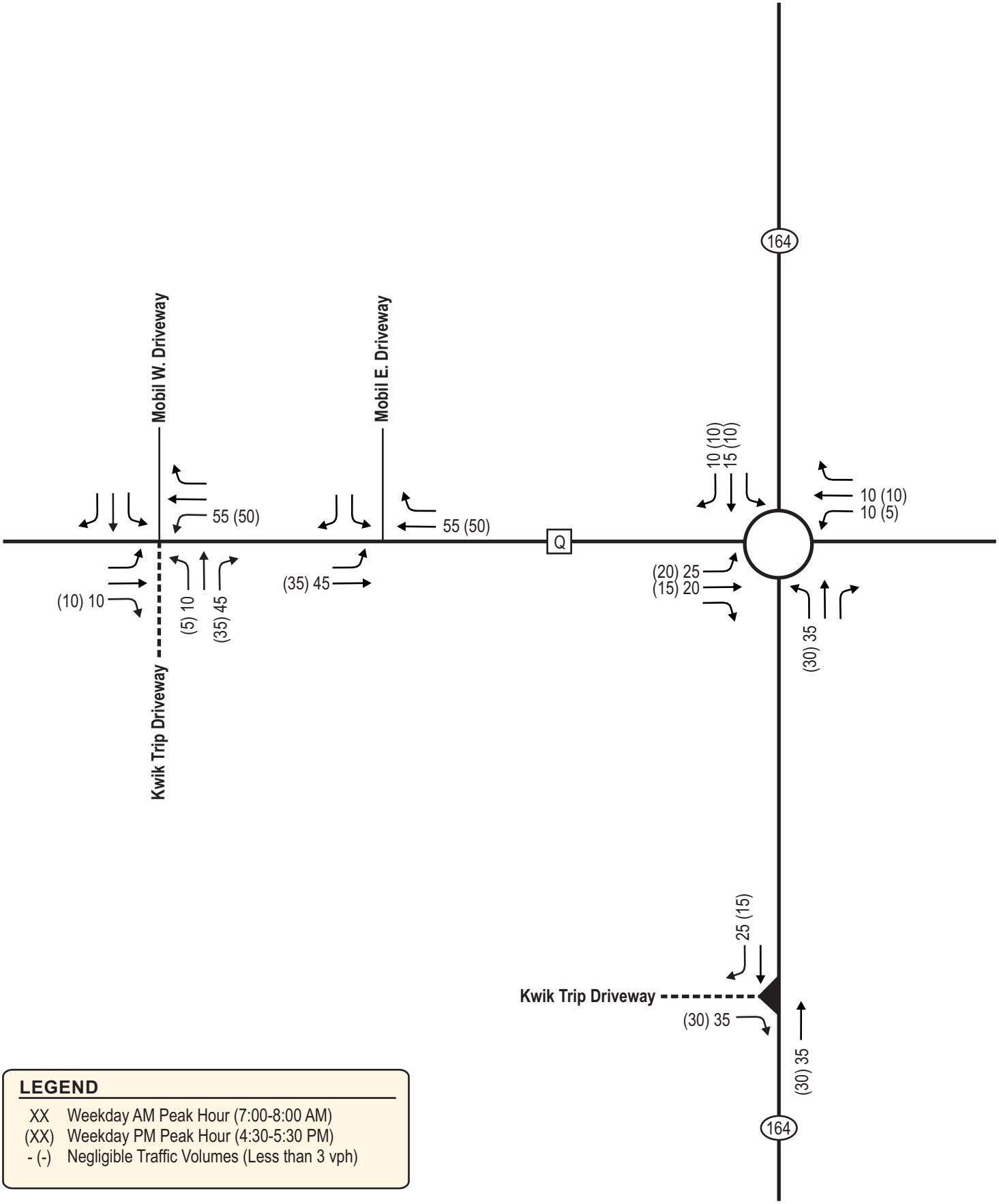
N
NOT TO SCALE

**EXHIBIT 4-4**
**TRIP DISTRIBUTION DIAGRAM**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**




**LEGEND**

| | |
|---|---|
| XX | Weekday AM Peak Hour (7:00-8:00 AM) |
| (XX) | Weekday PM Peak Hour (4:30-5:30 PM) |
| - (-) | Negligible Traffic Volumes (Less than 3 vph) |

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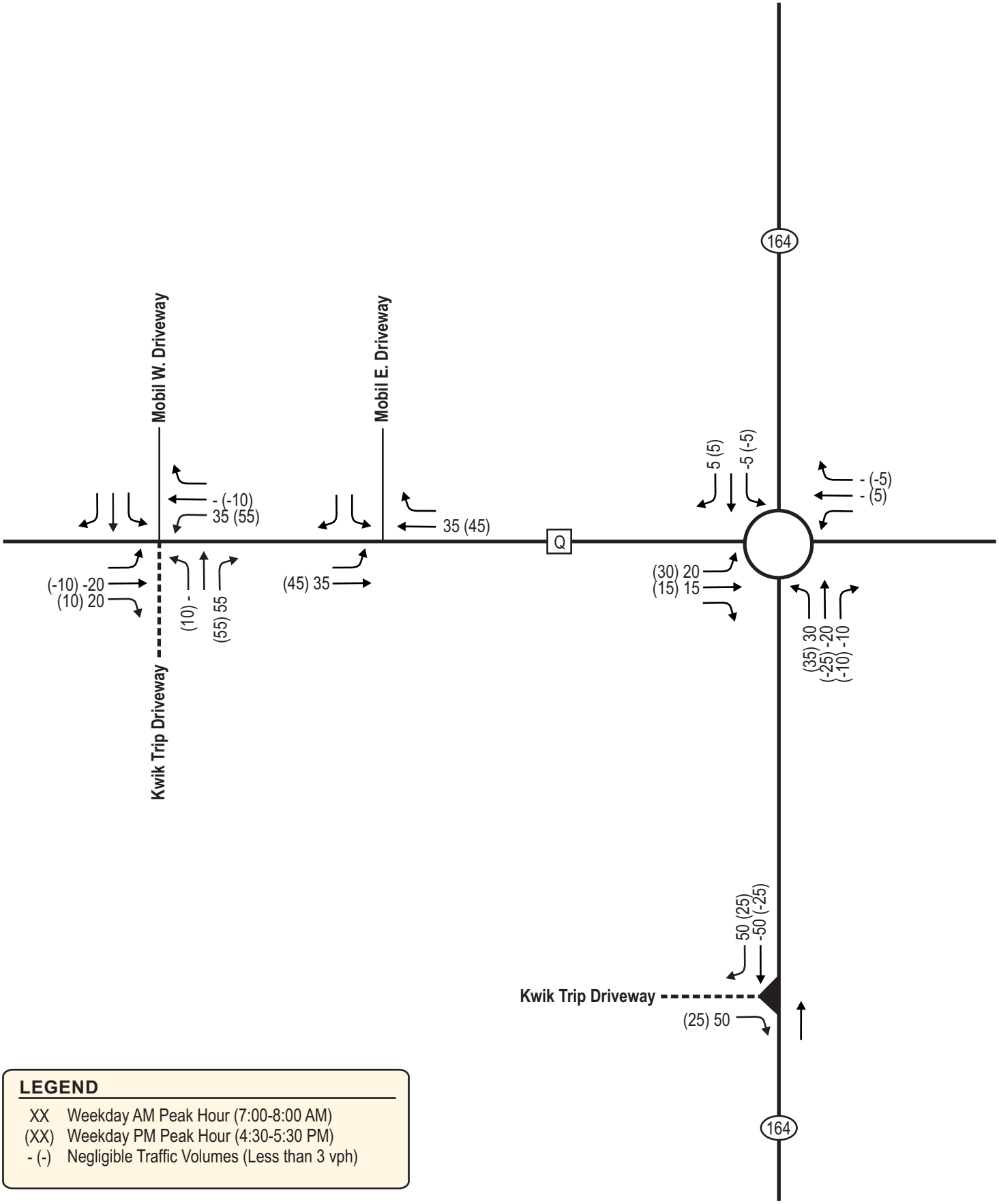
**EXHIBIT 4-5A**
**ON-SITE DEVELOPMENT TRAFFIC ASSIGNMENT**
**NEW TRIPS**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**




**LEGEND**

| | |
|---|---|
| XX | Weekday AM Peak Hour (7:00-8:00 AM) |
| (XX) | Weekday PM Peak Hour (4:30-5:30 PM) |
| - (-) | Negligible Traffic Volumes (Less than 3 vph) |

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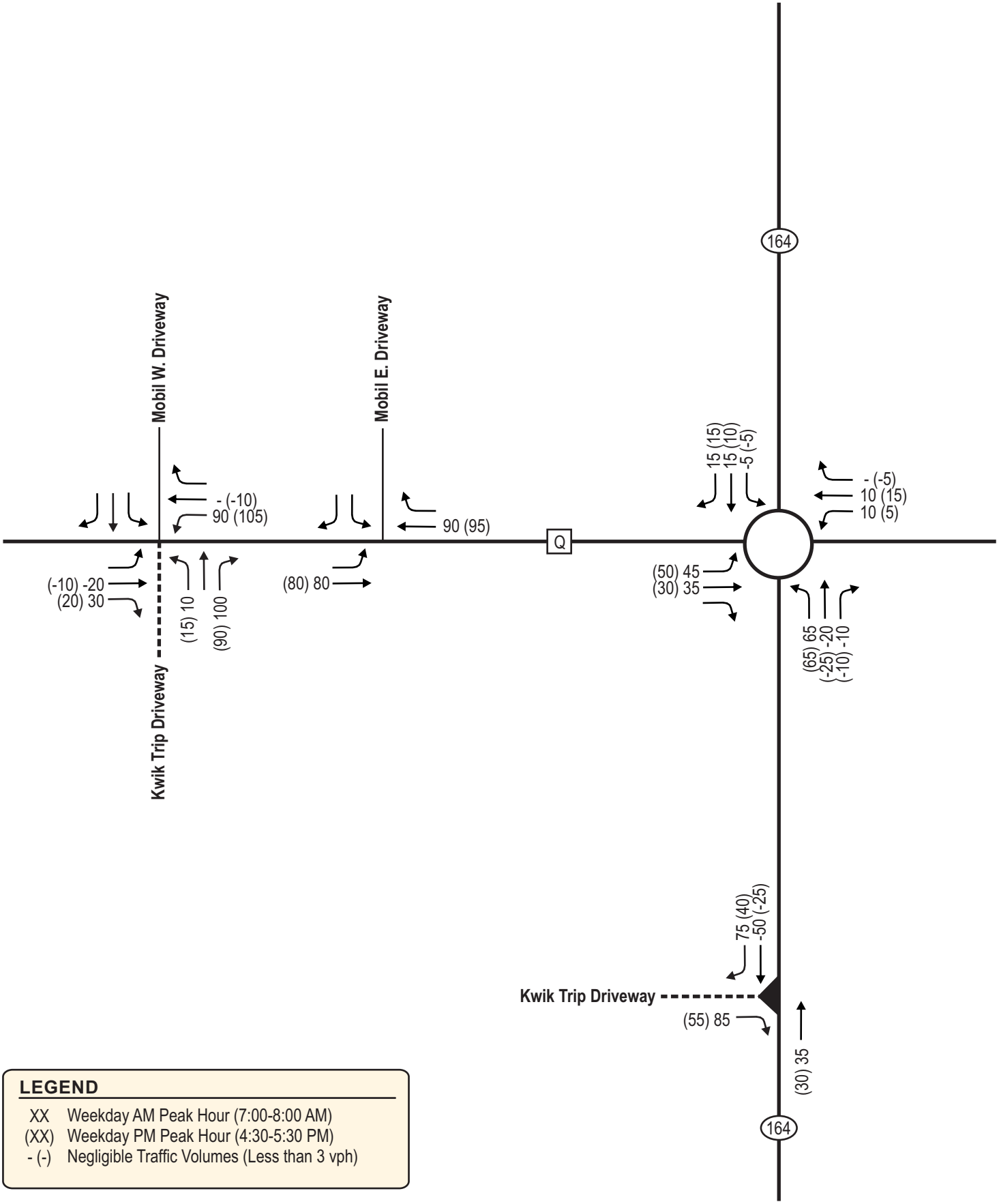
**EXHIBIT 4-5B**
**ON-SITE DEVELOPMENT TRAFFIC ASSIGNMENT**
**PASS-BY TRIPS**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**




**LEGEND**

| | |
|---|---|
| XX | Weekday AM Peak Hour (7:00-8:00 AM) |
| (XX) | Weekday PM Peak Hour (4:30-5:30 PM) |
| - (-) | Negligible Traffic Volumes (Less than 3 vph) |

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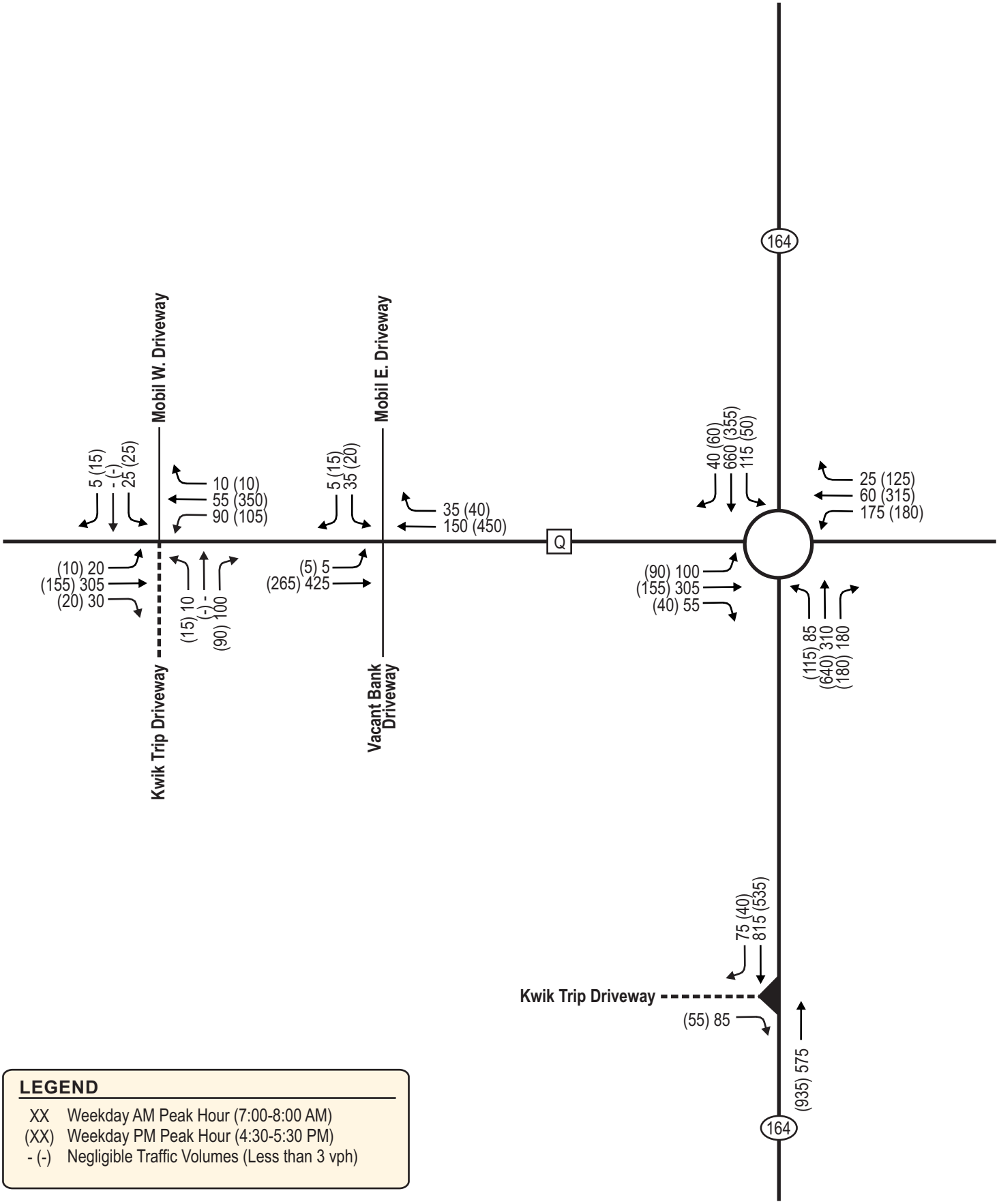
**EXHIBIT 4-5C**
**ON-SITE DEVELOPMENT TRAFFIC ASSIGNMENT**
**DRIVEWAY TRIPS**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**




**LEGEND**

| | |
|---|---|
| XX | Weekday AM Peak Hour (7:00-8:00 AM) |
| (XX) | Weekday PM Peak Hour (4:30-5:30 PM) |
| - (-) | Negligible Traffic Volumes (Less than 3 vph) |

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**EXHIBIT 4-11**
**YEAR 2021 BUILD DEVELOPMENT TRAFFIC VOLUMES**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

# CHAPTER 5 – TRAFFIC AND IMPROVEMENT ANALYSIS

## PART A – SITE ACCESS

In the December 3, 2014 requirement letter for the October 20, 2014 C-Store Commercial Development TIA, WisDOT presented the following requirements for site access for the development site:

- Align the driveway to CTH Q across from the Mobil gas station's west driveway and provide a two-way left-turn lane (TWLTL) from the end of the splitter island at the STH 164/CTH Q roundabout through the CTH Q intersection with the Mobil gas station's west driveway.
- Locate the driveway to STH 164 entirely within the southernmost 50 feet of the property and restrict it to right-in and right-out movements only. The median opening for the existing bank driveway to STH 164 shall be closed and a 10-foot paved shoulder shall be constructed along southbound STH 164 from the end of the curb and gutter at the STH 164/CTH Q roundabout south through the proposed driveway.

The site plan for the proposed Kwik Trip includes these access requirements.

## PART B – CAPACITY / LEVEL OF SERVICE ANALYSIS

This study evaluates the Year 2021 traffic volumes for the Background and Build traffic conditions.

### B1. Year 2021 Build Development Traffic – Existing Transportation System

For the Year 2021 Build analysis, the study intersections were evaluated with the existing geometrics and traffic control, plus the site access requirements stated in the WisDOT December 3, 2014 TIA requirement letter. As shown on Exhibit 5-3, all turning movements at the study intersections are expected to operate acceptably at LOS C or better during the peak hours with the WisDOT site access requirements and the Build traffic volumes. The Synchro output sheets for this scenario are located in Appendix C.

## PART C – QUEUEING ANALYSIS

For most studies conducted in Wisconsin, the 95$^{th}$ percentile queue (maximum back of queue based on the 95$^{th}$ percentile traffic volumes) is used for determining the adequacy or design of turn lane storage at an intersection. This provides a more conservative estimate of potential queuing at an intersection than what the user inputs for peak hour traffic flow. The 95$^{th}$ percentile traffic queues are shown in the LOS tables on Exhibit 3-3 for the year 2021 Background traffic volumes and on Exhibit 5-3 for the year 2021 Build traffic volumes.

## PART D – MULTI-MODAL CONSIDERATIONS

The proposed development is expected to generate minimal pedestrian trips to or from the site.

## PART E – SPEED CONSIDERATION/SIGHT DISTANCE

*Note that the sight distance measurements and photographs discussed in this report are based on the proposed intersection placement and on-line aerial and street view photography. The party responsible for designing the intersections is responsible for cross-checking, verifying and designing for all applicable sight distances.*

The proposed Kwik Trip driveway to STH 164 should be designed for intersection sight distance (ISD) in accordance with the latest edition of the American Association of State Highway Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets* and in accordance with the latest Facilities Development Manual (FDM) design guidelines (Procedure 11-10-5). WisDOT minimum and desirable sight distance calculations for the proposed new road are located in Appendix H.

Sight distance evaluation at the proposed driveway was completed using a design speed of 5 mph above the posted speed limit, or 60 mph on STH 164. Since the driveway is proposed to be restricted to right-in/right-out only, the sight distance was evaluated for traffic movements turning right from the stop-controlled driveway approach.

A WB truck was used as the design vehicle for the sight distance analysis, which has a 1,110-foot desirable sight distance. Although on-line aerials show that this visibility is likely to be met, the controlling sight distance for the proposed driveway is turning movements from the STH 164/CTH Q roundabout. As shown on Exhibit 5-27 (Google Earth street-view photo), all turning movements at the roundabout can be seen from the proposed Kwik Trip driveway. Therefore, intersection sight distance is considered to be met.

## PART F – TRAFFIC CONTROL NEEDS

The proposed Kwik Trip driveways to CTH Q and STH 164 are recommended to have stop sign control on the driveway approaches. Based on the capacity analysis, this control is expected to result in acceptable LOS C or better conditions during the peak hours with the year 2021 build traffic volumes.

**Build Traffic Operations & Queues**

| Intersection | Peak Hour | MOE[1,2] | Level of Service per Movement by Approach | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
| | | | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| *Node 100:* CTH Q & STH 164[3] *(Roundabout)* | AM | LOS | B | - | C | A | - | A | B | - | B | A | - | B |
| | | Queue | 60 | - | 75 | 30 | - | 15 | 50 | - | 65 | 65 | - | 80 |
| | PM | LOS | A | - | A | B | - | B | A | - | B | A | - | A |
| | | Queue | 20 | - | 20 | 65 | - | 80 | 70 | - | 85 | 35 | - | 40 |
| *Node 200:* CTH Q & Mobil Gas E. Driveway[4] *(Stop Sign)* | AM | LOS | A | | - | - | A | | - | | | B | | |
| | | Queue | 0 | | - | - | 0 | | - | | | 10 | | |
| | PM | LOS | A | | - | - | A | | - | | | B | | |
| | | Queue | 0 | | - | - | 0 | | - | | | 10 | | |
| *Node 250:* CTH Q & Mobil Gas W. Driveway/Kwik Trip Driveway[4] *(Stop Sign)* | AM | LOS | A | A | | A | A | | B | | | C | | |
| | | Queue | 0 | 0 | | 10 | 0 | | 20 | | | 10 | | |
| | PM | LOS | A | A | | A | A | | B | | | C | | |
| | | Queue | 0 | 0 | | 10 | 0 | | 15 | | | 15 | | |
| *Node 300:* STH 164 & Kwik Trip Driveway *(Stop Sign)* | AM | LOS | - | | C | - | | | - | A | - | - | A | |
| | | Queue | - | | 30 | - | | | - | 0 | - | - | 0 | |
| | PM | LOS | - | | B | - | | | - | A | - | - | A | |
| | | Queue | - | | 10 | - | | | - | 0 | - | - | 0 | |

[1] *(--) indicates a movement that is prohibited, not analyzed, or does not exist; All free-flow movements shown as LOS A.*

[2] *Queue is maximum of the 50th & 95th percentile queue, measured in feet.*

[3] *LT data is for the LT/TH lane group; RT data is for the TH/RT lane group.*

[4] *The Kwik Trip driveway at CTH Q was modeled with an eastbound LT lane and WB TWLTL on CTH Q.*

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**EXHIBIT 5-3**
**BUILD TRAFFIC CAPACITY/LOS ANALYSIS**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

Intersection Sight Distance
Kwik Trip Driveway at STH 164
Right-Turn (Looking Left)

WisDOT Desirable Sight Distance: 1,110' (WB Truck)
Controlling Sight Distance: Turning movements from the STH 164/CTH Q roundabout

Full visibility to all movements at the roundabout ~300' north of the proposed Kwik Trip driveway.

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**EXHIBIT 5-27**
**INTERSECTION SIGHT DISTANCE**
**STH 164 & KWIK TRIP DRIVEWAY**

**KWIK TRIP #1108 ABBREVIATED TIA - LISBON, WI**

# CHAPTER 6 – CONCLUSIONS AND RECOMMENDATIONS

## PART A – RECOMMENDATIONS

The study area intersections were analyzed based on the procedures set forth in the *Highway Capacity Manual* (HCM) 6th Edition using the Synchro 10 traffic analysis program. Intersection operation is defined by "Level of Service". Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS 'A', to very poor, represented by LOS 'F'. For the purpose of this study, LOS D or better was used to define desirable peak hour operating conditions.

The improvements listed below are recommended to accommodate traffic based on the assumptions outlined in the TIA. Improvements are split into these categories:

- "Background Traffic" – These improvements are recommended to mitigate a background traffic deficiency and are *not* driven by the proposed development. For this study, the background traffic conditions are a combination of the existing traffic volumes collected at the study intersections in November 2017 and March 2020.
- "Build Traffic" – These improvements are recommended in addition to the background traffic recommended improvements to mitigate an impact created by the proposed development.

*Improvements are for jurisdictional consideration and are not legally binding. WisDOT, Washington County, and the Town of Lisbon reserves the right to determine alternative solutions.*

<u>*CTH Q & Mobil W. Driveway/Kwik Trip Driveway*</u>

- *Background Traffic:* No modifications
- *Build Traffic:*
  - Provide a two-way left-turn lane (TWLTL) on CTH Q as shown on the Kwik Trip site plan. This median will separate left turns from the through lane for eastbound traffic turning into the Mobil W. driveway and westbound traffic turning into the Kwik Trip driveway.
  - Provide a single exit lane on the Kwik Trip driveway with stop sign control at CTH Q.

<u>*CTH Q & Mobil E. Driveway*</u>

- *Background Traffic:* No modifications
- *Build Traffic:* The TWLTL recommended on CTH Q will separate left turns from the through lane for eastbound traffic turning into the Mobil E. driveway.

<u>*STH 164 & Kwik Trip Driveway*</u>

- *Background Traffic:* N/A
- *Build Traffic:*
  - Provide a single-lane exit on the Kwik Trip driveway with stop sign control at STH 164.

- Position the driveway in the southernmost 50 feet of the site property as shown on the site plan.
- Close the median on STH 164 with the removal of the existing bank driveway to STH 164.
- Provide a 10-foot paved shoulder along southbound STH 164 from the end of the curb and gutter for the STH 164/CTH Q roundabout south through the proposed Kwik Trip driveway to STH 164.

**PART B – CONCLUSION**

With the intersection modifications recommended above, the study intersections are expected to operate acceptably at LOS C or better during the peak hours with the buildout of the proposed Kwik Trip development in the southwest corner of the STH 164/CTH Q intersection. The proposed Kwik Trip is expected to generate higher, but reasonably similar peak hour traffic volumes at the proposed driveway to CTH Q and STH 164. Therefore, the WisDOT site access requirements stated in the December 3, 2014 letter for the October 20, 2014 C-Store Commercial Development TIA submittal are expected to be adequate for the alternate Kwik Trip use on the same site.

# APPENDIX A

# Traffic

## Summary of PHF & Percent HV
## Existing Traffic Counts

## Lisbon Kwik Trip TIA - PHF & HV%

| Intersection | Traffic Control | Peak Hour | Heavy Vehicle Percentage | | | | PHF |
|---|---|---|---|---|---|---|---|
| | | | EB | WB | NB | SB | |
| #100 CTH Q & STH 164 | Round-about | AM | 5% | 14% | 12% | 5% | 0.89 |
| | | PM | 8% | 1% | 6% | 7% | 0.96 |
| #200 CTH Q & Mobil Gas E. Driveway | Stop Sign | AM | 5% | 10% | | 7% | 0.86 |
| | | PM | 8% | 2% | | 0% | 0.92 |
| #250 CTH Q & Mobil Gas W. Driveway/Kwik Trip Driveway | Stop Sign | AM | 5% | 10% | 2% | 0% | 0.86 |
| | | PM | 8% | 2% | 2% | 7% | 0.92 |
| #300 Kwik Trip Driveway/STH 164 | Stop Sign | AM | 2% | | 12% | 7% | 0.94 |
| | | PM | 2% | | 6% | 6% | 0.90 |

*PHF & HV for driveways along CTH Q & STH 164 recalculated from CTH Q/STH 164 traffic count.*

## CTH Q & STH 164

| | SB | | | WB | | | NB | | | EB | | | Q | 164 | Q | 164 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AM | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | WB | SB | E/W | N/S |
| 7:00 | 8 | 155 | 22 | 2 | 9 | 32 | 32 | 62 | 6 | 16 | 65 | 14 | 23 | 203 | 118 | 303 |
| 7:15 | 5 | 181 | 27 | 7 | 15 | 42 | 43 | 78 | 8 | 18 | 74 | 17 | 28 | 241 | 137 | 370 |
| 7:30 | 8 | 168 | 45 | 8 | 15 | 47 | 63 | 86 | 2 | 10 | 86 | 13 | 25 | 225 | 134 | 376 |
| 7:45 | 3 | 143 | 27 | 8 | 9 | 44 | 50 | 104 | 5 | 13 | 44 | 10 | 17 | 200 | 84 | 359 |
| HV | 3 | 35 | 4 | 4 | 4 | 25 | 28 | 36 | 2 | 3 | 10 | 4 | 9 | 63 | 0.86 | 0.94 |
| | | | | | | | | | | | | | 10% | 7% | | |
| | SB | | | WB | | | NB | | | EB | | | Q | 164 | Q | 164 |
| PM | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | WB | SB | E/W | N/S |
| 4:30 | 8 | 87 | 17 | 31 | 71 | 22 | 41 | 163 | 13 | 14 | 39 | 15 | 92 | 123 | 160 | 340 |
| 4:45 | 11 | 110 | 18 | 20 | 38 | 52 | 63 | 152 | 19 | 10 | 30 | 8 | 68 | 172 | 116 | 406 |
| 5:00 | 12 | 70 | 14 | 43 | 104 | 51 | 44 | 157 | 7 | 4 | 26 | 8 | 123 | 125 | 161 | 333 |
| 5:15 | 12 | 77 | 7 | 34 | 89 | 52 | 40 | 191 | 9 | 10 | 29 | 9 | 110 | 139 | 158 | 379 |
| HV | 4 | 23 | 3 | 2 | 2 | 3 | 14 | 34 | 2 | 5 | 7 | 5 | 8 | 31 | 0.92 | 0.90 |
| | | | | | | | | | | | | | 2% | 6% | | |

# Intersection Traffic Volume Report

| Count Basics | Version 2013.J4.1 | | Page 1 of 11 |
|---|---|---|---|
| Start Date: | Wednesday, November 08, 2017 | Weekday | Schools in Session |
| Total Number of Hours Counted: 13 | | Non-Holiday | No Special Events |

## *Base Information, Observed (13) Hour and Estimated (24) Hour Volume Summaries*

### *Intersection of: STH 164 and CTH Q*

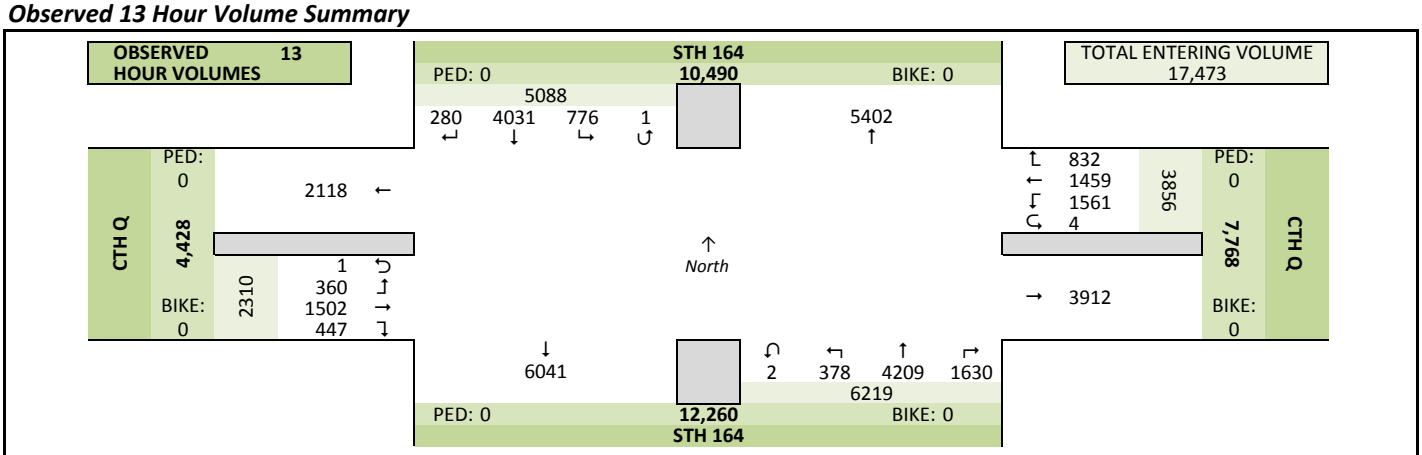
### Site Information

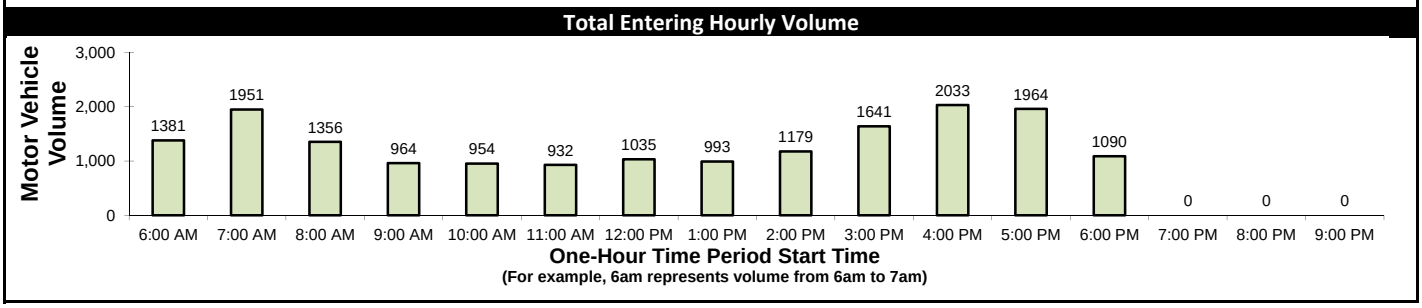
| | | | |
|---|---|---|---|
| Municipality | Richfield | | |
| County | Washington | WisDOT Region | SE |
| Traffic Control | Roundabout | | |
| Roadway Names | | North Direction | ↑ |
| North Leg | STH 164 | | |
| East Leg | CTH Q | | |
| South Leg | STH 164 | | |
| West Leg | CTH Q | | |
| Special Considerations | | | |
| Schools | In Session | | |
| Holidays | None | | |
| Special Events | None | | |
| Special Pedestrians Observed | | | |
| Pre-school children | | None | |
| Elementry school age children | | None | |
| Visually impaired (white cane/helper dog) | | None | |
| Elderly/disabled (except wheelchairs) | | None | |
| Wheelchairs/electric scooters | | None | |
| Other (describe) | None | None | |

### Count Information

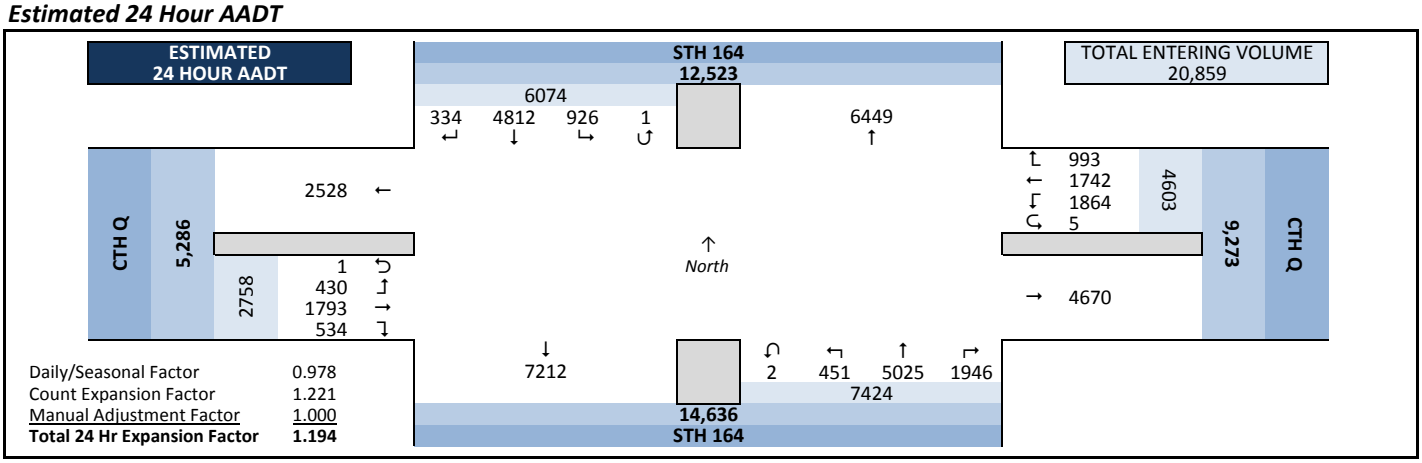
| | | | | | |
|---|---|---|---|---|---|
| Hrs Counted: | 6:00 AM-7:00 PM | | | | |
| 1st Day of Count | Wednesday, November 08, 2017 | | | Weather | |
| AM Peak Period | Thursday, November 09, 2017 | | | Clear & Dry | |
| Midday Peak Period | Thursday, November 09, 2017 | | | Clear & Dry | |
| PM Peak Period | Wednesday, November 08, 2017 | | | Clear & Dry | |
| Calculated Peak Hours | | | | | |
| AM | 7:00-8:00am | MD | 11:45-12:45pm | PM | 4:30-5:30pm |
| Peak Hours Selected for Analysis | | | | | |
| AM | 7:00-8:00am | MD | 11:45-12:45pm | PM | 4:30-5:30pm |
| Daily/Seasonal Adjustment Group | (2) Urban Arterials & Collectors | | | | |
| Count Expansion Group | (2) Urban Arterials & Collectors | | | | |
| Daily/Seasonal Adjustment Factor | 0.978 | Count Expansion Factor | 1.221 | | |
| Company Name | TADi | | | Manual Adj. | 1.000 |
| Observers | AM Peak Period | Amy Scheuerlein, Jeff Schleif | | | |
| | Midday Peak Period | Wendy Picard, Karlyn Bieberitz | | | |
| | PM Peak Period | Ted Atwell, Larry Numerich | | | |
| Comments | 2016 DOT Seasonal Factors | | | | |

### *Observed 13 Hour Volume Summary*




### *Estimated 24 Hour AADT*




| | |
|---|---|
| Daily/Seasonal Factor | 0.978 |
| Count Expansion Factor | 1.221 |
| Manual Adjustment Factor | 1.000 |
| **Total 24 Hr Expansion Factor** | **1.194** |

# Intersection Traffic Volume Report

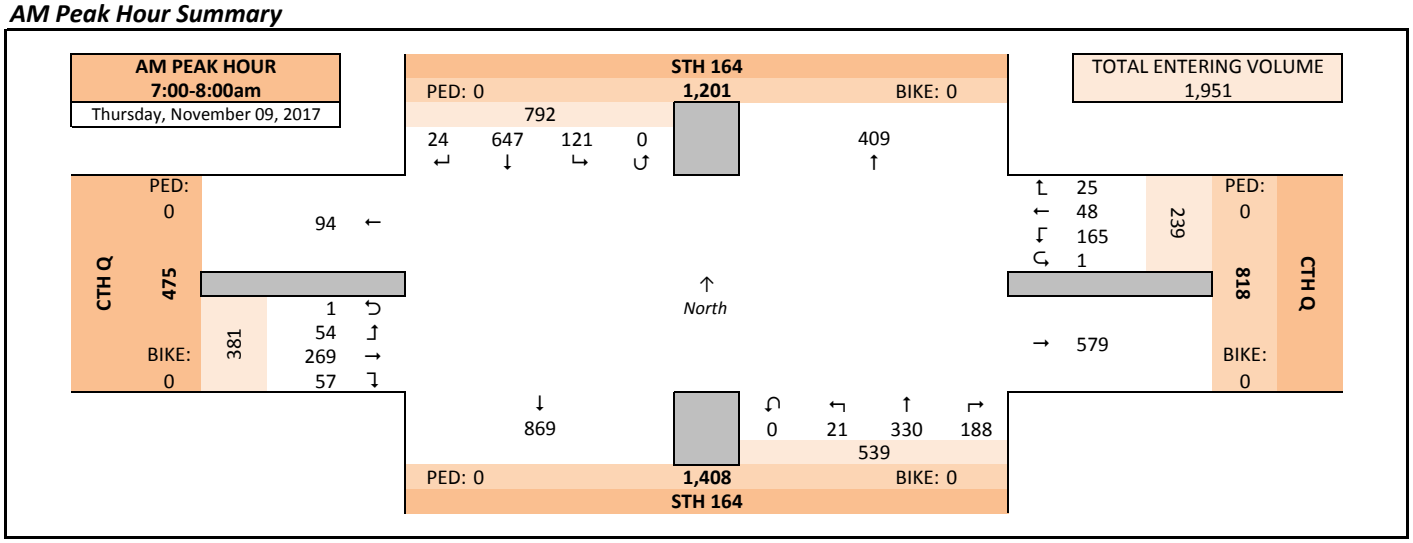
| Count Basics | | | Page 2 of 11 |
|---|---|---|---|
| Start Date: | Wednesday, November 08, 2017 | Weekday | Schools in Session |
| Total Number of Hours Counted: 13 | | Non-Holiday | No Special Events |

## *Peak Hour Volume Graphical Summary*

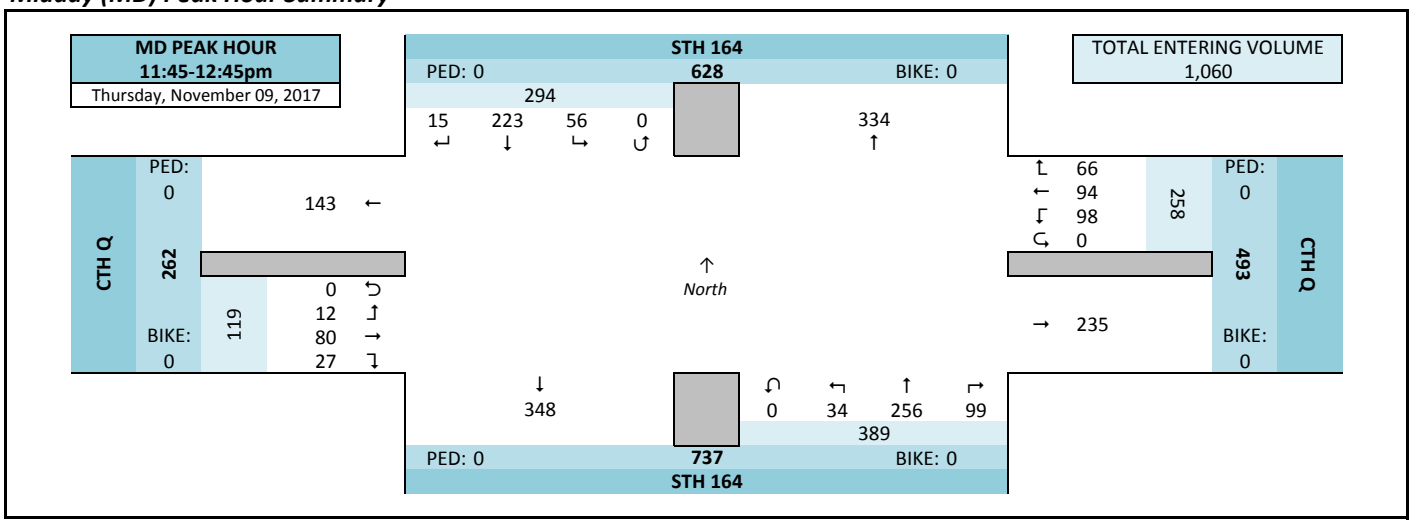
**All Motor Vehicles**

### *STH 164 and CTH Q*

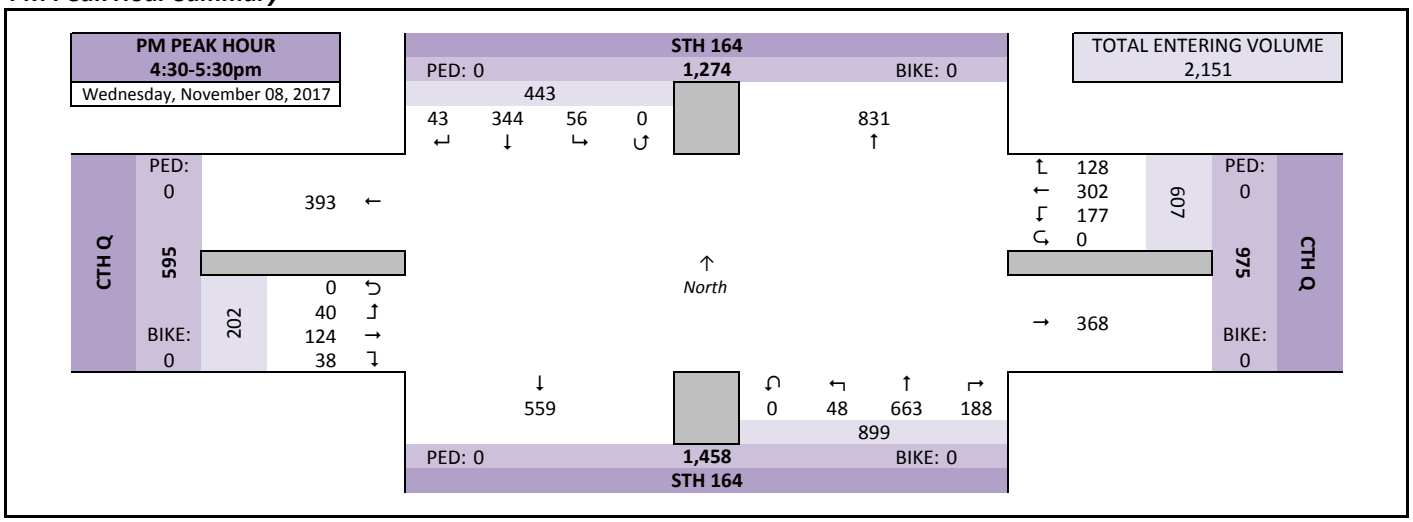
### *AM Peak Hour Summary*




### *Midday (MD) Peak Hour Summary*




### *PM Peak Hour Summary*



# Intersection Traffic Volume Report

| Count Basics | | | Page 3 of 11 |
|---|---|---|---|
| Start Date: | Wednesday, November 08, 2017 | Weekday | Schools in Session |
| Total Number of Hours Counted: 13 | | Non-Holiday | No Special Events |

## *Peak Hour Volume Summary*

**All Motor Vehicles**

### *STH 164 and CTH Q*

### Peak Hour Volumes, Truck Percentages, and PHFs

| Thursday, November 09, 2017 | | From North | | | | | From East | | | | | From South | | | | | From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak Hour | STH 164 | | | | | CTH Q | | | | | STH 164 | | | | | CTH Q | | | | | |
| | Start Time | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Totals |
| AM Peak Hour | 7:00 AM | 8 | 155 | 22 | 0 | 185 | 2 | 9 | 32 | 1 | 44 | 32 | 62 | 6 | 0 | 100 | 16 | 65 | 14 | 0 | 95 | 424 |
| | 7:15 AM | 5 | 181 | 27 | 0 | 213 | 7 | 15 | 42 | 0 | 64 | 43 | 78 | 8 | 0 | 129 | 18 | 74 | 17 | 1 | 110 | 516 |
| | 7:30 AM | 8 | 168 | 45 | 0 | 221 | 8 | 15 | 47 | 0 | 70 | 63 | 86 | 2 | 0 | 151 | 10 | 86 | 13 | 0 | 109 | 551 |
| | 7:45 AM | 3 | 143 | 27 | 0 | 173 | 8 | 9 | 44 | 0 | 61 | 50 | 104 | 5 | 0 | 159 | 13 | 44 | 10 | 0 | 67 | 460 |
| | Peak Hour Volume | 24 | 647 | 121 | 0 | 792 | 25 | 48 | 165 | 1 | 239 | 188 | 330 | 21 | 0 | 539 | 57 | 269 | 54 | 1 | 381 | 1951 |
| | Rounded Hourly Volume | 25 | 645 | 120 | 0 | 790 | 25 | 50 | 165 | 0 | 240 | 190 | 330 | 20 | 0 | 540 | 55 | 270 | 55 | 0 | 380 | 1950 |
| | % Single Unit Trucks | 8.3 | 3.9 | 3.3 | 0.0 | 3.9 | 16.0 | 8.3 | 14.5 | 0.0 | 13.4 | 13.8 | 8.2 | 9.5 | 0.0 | 10.2 | 5.3 | 3.0 | 7.4 | 0.0 | 3.9 | 6.8 |
| | % Heavy Trucks | 4.2 | 1.5 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 0.6 | 0.0 | 0.4 | 1.1 | 2.7 | 0.0 | 0.0 | 2.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.5 | 1.3 |
| | % Trucks (Total) | 12.5 | 5.4 | 3.3 | 0.0 | 5.3 | 16.0 | 8.3 | 15.2 | 0.0 | 13.8 | 14.9 | 10.9 | 9.5 | 0.0 | 12.2 | 5.3 | 3.7 | 7.4 | 0.0 | 4.5 | 8.1 |
| | Peak Hour Factor (PHF) | 0.75 | 0.89 | 0.67 | 0.00 | 0.90 | 0.78 | 0.80 | 0.88 | 0.25 | 0.85 | 0.75 | 0.79 | 0.66 | 0.00 | 0.85 | 0.79 | 0.78 | 0.79 | 0.25 | 0.87 | 0.89 |

| Thursday, November 09, 2017 | | From North | | | | | From East | | | | | From South | | | | | From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MD Peak Hour | STH 164 | | | | | CTH Q | | | | | STH 164 | | | | | CTH Q | | | | | |
| | Start Time | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Totals |
| Midday (MD) Peak Hour | 11:45 AM | 4 | 52 | 10 | 0 | 66 | 20 | 24 | 28 | 0 | 72 | 29 | 61 | 10 | 0 | 100 | 7 | 21 | 2 | 0 | 30 | 268 |
| | 12:00 PM | 4 | 66 | 12 | 0 | 82 | 16 | 25 | 24 | 0 | 65 | 24 | 66 | 11 | 0 | 101 | 11 | 21 | 2 | 0 | 34 | 282 |
| | 12:15 PM | 4 | 55 | 18 | 0 | 77 | 17 | 18 | 27 | 0 | 62 | 18 | 62 | 5 | 0 | 85 | 5 | 13 | 5 | 0 | 23 | 247 |
| | 12:30 PM | 3 | 50 | 16 | 0 | 69 | 13 | 27 | 19 | 0 | 59 | 28 | 67 | 8 | 0 | 103 | 4 | 25 | 3 | 0 | 32 | 263 |
| | Peak Hour Volume | 15 | 223 | 56 | 0 | 294 | 66 | 94 | 98 | 0 | 258 | 99 | 256 | 34 | 0 | 389 | 27 | 80 | 12 | 0 | 119 | 1060 |
| | Rounded Hourly Volume | 15 | 225 | 55 | 0 | 295 | 65 | 95 | 100 | 0 | 260 | 100 | 255 | 35 | 0 | 390 | 25 | 80 | 10 | 0 | 115 | 1060 |
| | % Single Unit Trucks | 6.7 | 10.3 | 10.7 | 0.0 | 10.2 | 6.1 | 9.6 | 22.4 | 0.0 | 13.6 | 20.2 | 6.6 | 8.8 | 0.0 | 10.3 | 18.5 | 11.2 | 8.3 | 0.0 | 12.6 | 11.3 |
| | % Heavy Trucks | 0.0 | 1.8 | 1.8 | 0.0 | 1.7 | 1.5 | 0.0 | 2.0 | 0.0 | 1.2 | 4.0 | 3.5 | 0.0 | 0.0 | 3.3 | 3.7 | 1.2 | 0.0 | 0.0 | 1.7 | 2.2 |
| | % Trucks (Total) | 6.7 | 12.1 | 12.5 | 0.0 | 11.9 | 7.6 | 9.6 | 24.5 | 0.0 | 14.7 | 24.2 | 10.2 | 8.8 | 0.0 | 13.6 | 22.2 | 12.5 | 8.3 | 0.0 | 14.3 | 13.5 |
| | Peak Hour Factor (PHF) | 0.94 | 0.84 | 0.78 | 0.00 | 0.90 | 0.82 | 0.87 | 0.87 | 0.00 | 0.90 | 0.85 | 0.96 | 0.77 | 0.00 | 0.94 | 0.61 | 0.80 | 0.60 | 0.00 | 0.87 | 0.94 |

| Wednesday, November 08, 2017 | | From North | | | | | From East | | | | | From South | | | | | From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PM Peak Hour | STH 164 | | | | | CTH Q | | | | | STH 164 | | | | | CTH Q | | | | | |
| | Start Time | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Totals |
| PM Peak Hour | 4:30 PM | 8 | 87 | 17 | 0 | 112 | 31 | 71 | 22 | 0 | 124 | 41 | 163 | 13 | 0 | 217 | 14 | 39 | 15 | 0 | 68 | 521 |
| | 4:45 PM | 11 | 110 | 18 | 0 | 139 | 20 | 38 | 52 | 0 | 110 | 63 | 152 | 19 | 0 | 234 | 10 | 30 | 8 | 0 | 48 | 531 |
| | 5:00 PM | 12 | 70 | 14 | 0 | 96 | 43 | 104 | 51 | 0 | 198 | 44 | 157 | 7 | 0 | 208 | 4 | 26 | 8 | 0 | 38 | 540 |
| | 5:15 PM | 12 | 77 | 7 | 0 | 96 | 34 | 89 | 52 | 0 | 175 | 40 | 191 | 9 | 0 | 240 | 10 | 29 | 9 | 0 | 48 | 559 |
| | Peak Hour Volume | 43 | 344 | 56 | 0 | 443 | 128 | 302 | 177 | 0 | 607 | 188 | 663 | 48 | 0 | 899 | 38 | 124 | 40 | 0 | 202 | 2151 |
| | Rounded Hourly Volume | 45 | 345 | 55 | 0 | 445 | 130 | 300 | 175 | 0 | 605 | 190 | 665 | 50 | 0 | 905 | 40 | 125 | 40 | 0 | 205 | 2160 |
| | % Single Unit Trucks | 9.3 | 5.8 | 5.4 | 0.0 | 6.1 | 1.6 | 0.7 | 1.7 | 0.0 | 1.2 | 5.9 | 4.7 | 4.2 | 0.0 | 4.9 | 13.2 | 4.8 | 12.5 | 0.0 | 7.9 | 4.4 |
| | % Heavy Trucks | 0.0 | 0.9 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.5 | 0.0 | 0.0 | 0.7 | 0.0 | 0.8 | 0.0 | 0.0 | 0.5 | 0.5 |
| | % Trucks (Total) | 9.3 | 6.7 | 5.4 | 0.0 | 6.8 | 1.6 | 0.7 | 1.7 | 0.0 | 1.2 | 7.4 | 5.1 | 4.2 | 0.0 | 5.6 | 13.2 | 5.6 | 12.5 | 0.0 | 8.4 | 4.8 |
| | Peak Hour Factor (PHF) | 0.90 | 0.78 | 0.78 | 0.00 | 0.80 | 0.74 | 0.73 | 0.85 | 0.00 | 0.77 | 0.75 | 0.87 | 0.63 | 0.00 | 0.94 | 0.68 | 0.79 | 0.67 | 0.00 | 0.74 | 0.96 |

### Peak Hour Pedestrian and Bicyclist Volumes

| Pedestrians and Bicyclists | | Crossing North Approach | | | Crossing East Approach | | | Crossing South Approach | | | Crossing West Approach | | | Total Ped & Bike Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | STH 164 | | | CTH Q | | | STH 164 | | | CTH Q | | | |
| | 15-Minute Start Time | Pedestrian | Bicyclist | Total | Pedestrian | Bicyclist | Total | Pedestrian | Bicyclist | Total | Pedestrian | Bicyclist | Total | |
| AM | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MD | 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# Intersection Traffic Volume Report

| *Count Basics* | | | *Page 5 of 11* |
|---|---|---|---|
| Start Date: | Wednesday, November 08, 2017 | Weekday | Schools in Session |
| Total Number of Hours Counted: 13 | | Non-Holiday | No Special Events |

## *15-Minute Motor Vehicle Data*

**All Motor Vehicles**

### *STH 164 and CTH Q*

### 15-Minute Motor Vehicle Data

| 15-Minute Time Period Start Time | | From North (STH 164) Right | Thru | Left | U-Tn | Total | From East (CTH Q) Right | Thru | Left | U-Tn | Total | From South (STH 164) Right | Thru | Left | U-Tn | Total | From West (CTH Q) Right | Thru | Left | U-Tn | Total | 15-Min Totals | Hourly Sum | PHF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AM Peak Period | 6:00 AM | 2 | 65 | 12 | 0 | 79 | 4 | 8 | 16 | 0 | 28 | 23 | 23 | 3 | 0 | 49 | 12 | 42 | 4 | 0 | 58 | 214 | 1381 | 0.73 |
| | 6:15 AM | 5 | 93 | 13 | 0 | 111 | 5 | 8 | 17 | 0 | 30 | 35 | 50 | 2 | 0 | 87 | 11 | 42 | 9 | 0 | 62 | 290 | 1591 | 0.85 |
| | 6:30 AM | 9 | 159 | 21 | 0 | 189 | 3 | 10 | 38 | 1 | 52 | 40 | 72 | 6 | 0 | 118 | 29 | 73 | 9 | 0 | 111 | 470 | 1817 | 0.88 |
| | 6:45 AM | 4 | 140 | 30 | 0 | 174 | 6 | 18 | 31 | 0 | 55 | 45 | 53 | 4 | 1 | 103 | 14 | 50 | 11 | 0 | 75 | 407 | 1898 | 0.86 |
| | 7:00 AM | 8 | 155 | 22 | 0 | 185 | 2 | 9 | 32 | 1 | 44 | 32 | 62 | 6 | 0 | 100 | 16 | 65 | 14 | 0 | 95 | 424 | 1951 | 0.89 |
| | 7:15 AM | 5 | 181 | 27 | 0 | 213 | 7 | 15 | 42 | 0 | 64 | 43 | 78 | 8 | 0 | 129 | 18 | 74 | 17 | 1 | 110 | 516 | 1928 | 0.87 |
| | 7:30 AM | 8 | 168 | 45 | 0 | 221 | 8 | 15 | 47 | 0 | 70 | 63 | 86 | 2 | 0 | 151 | 10 | 86 | 13 | 0 | 109 | 551 | 1731 | 0.79 |
| | 7:45 AM | 3 | 143 | 27 | 0 | 173 | 8 | 9 | 44 | 0 | 61 | 50 | 104 | 5 | 0 | 159 | 13 | 44 | 10 | 0 | 67 | 460 | 1524 | 0.83 |
| | 8:00 AM | 5 | 110 | 27 | 0 | 142 | 7 | 20 | 28 | 0 | 55 | 47 | 81 | 3 | 0 | 131 | 6 | 61 | 6 | 0 | 73 | 401 | 1356 | 0.85 |
| | 8:15 AM | 7 | 97 | 24 | 0 | 128 | 5 | 6 | 31 | 0 | 42 | 29 | 77 | 5 | 0 | 111 | 8 | 27 | 3 | 0 | 38 | 319 | 1198 | 0.87 |
| | 8:30 AM | 2 | 95 | 21 | 0 | 118 | 7 | 17 | 41 | 0 | 65 | 39 | 74 | 3 | 1 | 117 | 13 | 28 | 3 | 0 | 44 | 344 | 1122 | 0.82 |
| | 8:45 AM | 2 | 81 | 17 | 0 | 100 | 11 | 13 | 35 | 0 | 59 | 33 | 62 | 7 | 0 | 102 | 4 | 19 | 8 | 0 | 31 | 292 | 1030 | 0.88 |
| | 9:00 AM | 7 | 59 | 15 | 0 | 81 | 9 | 16 | 28 | 0 | 53 | 22 | 50 | 4 | 0 | 76 | 6 | 21 | 6 | 0 | 33 | 243 | 964 | 0.96 |
| | 9:15 AM | 1 | 60 | 26 | 0 | 87 | 9 | 18 | 30 | 0 | 57 | 21 | 44 | 6 | 0 | 71 | 6 | 18 | 4 | 0 | 28 | 243 | 962 | 0.95 |
| | 9:30 AM | 3 | 55 | 20 | 0 | 78 | 16 | 9 | 23 | 0 | 48 | 26 | 63 | 4 | 0 | 93 | 8 | 22 | 3 | 0 | 33 | 252 | 954 | 0.95 |
| | 9:45 AM | 2 | 65 | 12 | 0 | 79 | 13 | 11 | 25 | 0 | 49 | 17 | 49 | 3 | 0 | 69 | 1 | 22 | 6 | 0 | 29 | 226 | 936 | 0.97 |
| Midday Peak Period | 10:00 AM | 6 | 57 | 12 | 1 | 76 | 12 | 15 | 26 | 0 | 53 | 36 | 38 | 4 | 0 | 78 | 7 | 20 | 7 | 0 | 34 | 241 | 954 | 0.98 |
| | 10:15 AM | 1 | 45 | 11 | 0 | 57 | 15 | 14 | 24 | 0 | 53 | 26 | 52 | 4 | 0 | 82 | 4 | 29 | 10 | 0 | 43 | 235 | 943 | 0.97 |
| | 10:30 AM | 4 | 46 | 17 | 0 | 67 | 10 | 14 | 19 | 0 | 43 | 30 | 57 | 2 | 0 | 89 | 6 | 25 | 4 | 0 | 35 | 234 | 942 | 0.97 |
| | 10:45 AM | 1 | 49 | 16 | 0 | 66 | 17 | 20 | 28 | 0 | 65 | 18 | 57 | 4 | 0 | 79 | 9 | 25 | 0 | 0 | 34 | 244 | 908 | 0.93 |
| | 11:00 AM | 3 | 50 | 9 | 0 | 62 | 8 | 11 | 24 | 0 | 43 | 28 | 56 | 7 | 0 | 91 | 5 | 26 | 3 | 0 | 34 | 230 | 932 | 0.87 |
| | 11:15 AM | 7 | 50 | 10 | 0 | 67 | 5 | 20 | 28 | 0 | 53 | 25 | 53 | 4 | 0 | 82 | 3 | 26 | 3 | 0 | 32 | 234 | 984 | 0.87 |
| | 11:30 AM | 8 | 53 | 12 | 0 | 73 | 6 | 22 | 14 | 0 | 42 | 18 | 39 | 3 | 0 | 60 | 12 | 12 | 1 | 0 | 25 | 200 | 997 | 0.88 |
| | 11:45 AM | 4 | 52 | 10 | 0 | 66 | 20 | 24 | 28 | 0 | 72 | 29 | 61 | 10 | 0 | 100 | 7 | 21 | 2 | 0 | 30 | 268 | 1060 | 0.94 |
| | 12:00 PM | 4 | 66 | 12 | 0 | 82 | 16 | 25 | 24 | 0 | 65 | 24 | 66 | 11 | 0 | 101 | 11 | 21 | 2 | 0 | 34 | 282 | 1035 | 0.92 |
| | 12:15 PM | 4 | 55 | 18 | 0 | 77 | 17 | 18 | 27 | 0 | 62 | 18 | 62 | 5 | 0 | 85 | 5 | 13 | 5 | 0 | 23 | 247 | 976 | 0.93 |
| | 12:30 PM | 3 | 50 | 16 | 0 | 69 | 13 | 27 | 19 | 0 | 59 | 28 | 67 | 8 | 0 | 103 | 4 | 25 | 3 | 0 | 32 | 263 | 975 | 0.93 |
| | 12:45 PM | 5 | 64 | 7 | 0 | 76 | 11 | 13 | 21 | 1 | 46 | 20 | 62 | 5 | 0 | 87 | 6 | 20 | 8 | 0 | 34 | 243 | 999 | 0.87 |
| | 1:00 PM | 4 | 39 | 10 | 0 | 53 | 15 | 27 | 20 | 0 | 62 | 20 | 59 | 6 | 0 | 85 | 5 | 14 | 4 | 0 | 23 | 223 | 993 | 0.86 |
| | 1:15 PM | 6 | 55 | 5 | 0 | 66 | 9 | 23 | 26 | 0 | 58 | 24 | 61 | 6 | 0 | 91 | 8 | 17 | 6 | 0 | 31 | 246 | 988 | 0.86 |
| | 1:30 PM | 2 | 53 | 14 | 0 | 69 | 10 | 24 | 37 | 1 | 72 | 33 | 65 | 8 | 0 | 106 | 6 | 27 | 7 | 0 | 40 | 287 | 1040 | 0.87 |
| | 1:45 PM | 5 | 45 | 7 | 0 | 57 | 13 | 27 | 35 | 0 | 75 | 23 | 52 | 7 | 0 | 82 | 6 | 13 | 4 | 0 | 23 | 237 | 1084 | 0.82 |
| PM Peak Period | 2:00 PM | 0 | 46 | 3 | 0 | 49 | 13 | 24 | 29 | 0 | 66 | 24 | 48 | 7 | 0 | 79 | 5 | 16 | 3 | 0 | 24 | 218 | 1179 | 0.89 |
| | 2:15 PM | 4 | 69 | 9 | 0 | 82 | 17 | 28 | 24 | 0 | 69 | 18 | 91 | 4 | 0 | 113 | 7 | 26 | 1 | 0 | 34 | 298 | 1318 | 0.92 |
| | 2:30 PM | 9 | 70 | 15 | 0 | 94 | 15 | 37 | 33 | 0 | 85 | 33 | 71 | 3 | 0 | 107 | 11 | 28 | 6 | 0 | 45 | 331 | 1394 | 0.93 |
| | 2:45 PM | 6 | 61 | 13 | 0 | 80 | 17 | 44 | 31 | 0 | 92 | 25 | 88 | 14 | 0 | 127 | 4 | 22 | 7 | 0 | 33 | 332 | 1465 | 0.91 |
| | 3:00 PM | 10 | 72 | 11 | 0 | 93 | 25 | 37 | 19 | 0 | 81 | 38 | 94 | 13 | 0 | 145 | 9 | 21 | 8 | 0 | 38 | 357 | 1641 | 0.81 |
| | 3:15 PM | 4 | 54 | 12 | 0 | 70 | 42 | 47 | 19 | 0 | 108 | 29 | 116 | 8 | 0 | 153 | 10 | 26 | 7 | 0 | 43 | 374 | 1751 | 0.86 |
| | 3:30 PM | 12 | 75 | 8 | 0 | 95 | 25 | 45 | 33 | 0 | 103 | 30 | 117 | 7 | 0 | 154 | 13 | 27 | 10 | 0 | 50 | 402 | 1891 | 0.92 |
| | 3:45 PM | 9 | 105 | 13 | 0 | 127 | 32 | 58 | 30 | 0 | 120 | 39 | 160 | 18 | 0 | 217 | 5 | 29 | 10 | 0 | 44 | 508 | 2010 | 0.96 |
| | 4:00 PM | 6 | 108 | 9 | 0 | 123 | 34 | 48 | 28 | 0 | 110 | 47 | 131 | 9 | 0 | 187 | 11 | 26 | 10 | 0 | 47 | 467 | 2033 | 0.96 |
| | 4:15 PM | 12 | 99 | 10 | 0 | 121 | 34 | 66 | 45 | 0 | 145 | 41 | 155 | 11 | 0 | 207 | 9 | 22 | 10 | 0 | 41 | 514 | 2106 | 0.98 |
| | 4:30 PM | 8 | 87 | 17 | 0 | 112 | 31 | 71 | 22 | 0 | 124 | 41 | 163 | 13 | 0 | 217 | 14 | 39 | 15 | 0 | 68 | 521 | 2151 | 0.96 |
| | 4:45 PM | 11 | 110 | 18 | 0 | 139 | 20 | 38 | 52 | 0 | 110 | 63 | 152 | 19 | 0 | 234 | 10 | 30 | 8 | 0 | 48 | 531 | 2106 | 0.94 |
| | 5:00 PM | 12 | 70 | 14 | 0 | 96 | 43 | 104 | 51 | 0 | 198 | 44 | 157 | 7 | 0 | 208 | 4 | 26 | 8 | 0 | 38 | 540 | 1964 | 0.88 |
| | 5:15 PM | 12 | 77 | 7 | 0 | 96 | 34 | 89 | 52 | 0 | 175 | 40 | 191 | 9 | 0 | 240 | 10 | 29 | 9 | 0 | 48 | 559 | 1767 | 0.79 |
| | 5:30 PM | 0 | 91 | 9 | 0 | 100 | 34 | 70 | 41 | 0 | 145 | 35 | 143 | 12 | 0 | 190 | 8 | 22 | 11 | 0 | 41 | 476 | 1508 | 0.79 |
| | 5:45 PM | 4 | 71 | 13 | 0 | 88 | 17 | 31 | 39 | 0 | 87 | 21 | 134 | 19 | 0 | 174 | 8 | 20 | 12 | 0 | 40 | 389 | 1259 | 0.81 |
| | 6:00 PM | 10 | 66 | 15 | 0 | 91 | 28 | 28 | 27 | 0 | 83 | 36 | 87 | 11 | 0 | 134 | 7 | 19 | 9 | 0 | 35 | 343 | 1090 | 0.79 |
| | 6:15 PM | 5 | 52 | 14 | 0 | 71 | 24 | 17 | 17 | 0 | 58 | 33 | 79 | 13 | 0 | 125 | 11 | 24 | 11 | 0 | 46 | 300 | | |
| | 6:30 PM | 3 | 57 | 12 | 0 | 72 | 10 | 28 | 34 | 0 | 72 | 11 | 41 | 10 | 0 | 62 | 5 | 11 | 5 | 0 | 21 | 227 | | |
| | 6:45 PM | 3 | 36 | 9 | 0 | 48 | 20 | 23 | 27 | 0 | 70 | 17 | 56 | 6 | 0 | 79 | 7 | 11 | 5 | 0 | 23 | 220 | | |
| | 7:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 8:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Totals | | 280 | 4031 | 776 | 1 | 5088 | 832 | 1459 | 1561 | 4 | 3856 | 1630 | 4209 | 378 | 2 | 6219 | 447 | 1502 | 360 | 1 | 2310 | 17473 | | |

### Peak Hour All Vehicle Volume Summary

| Hourly Time Period Start Time | | From North (STH 164) Right | Thru | Left | U-Tn | Total | From East (CTH Q) Right | Thru | Left | U-Tn | Total | From South (STH 164) Right | Thru | Left | U-Tn | Total | From West (CTH Q) Right | Thru | Left | U-Tn | Total | Total Hourly Volume | PHF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AM | 7:00 AM | 24 | 647 | 121 | 0 | 792 | 25 | 48 | 165 | 1 | 239 | 188 | 330 | 21 | 0 | 539 | 57 | 269 | 54 | 1 | 381 | 1951 | 0.89 |
| MD | 11:45 AM | 15 | 223 | 56 | 0 | 294 | 66 | 94 | 98 | 0 | 258 | 99 | 256 | 34 | 0 | 389 | 27 | 80 | 12 | 0 | 119 | 1060 | 0.94 |
| PM | 4:30 PM | 43 | 344 | 56 | 0 | 443 | 128 | 302 | 177 | 0 | 607 | 188 | 663 | 48 | 0 | 899 | 38 | 124 | 40 | 0 | 202 | 2151 | 0.96 |

# Intersection Traffic Volume Report

| *Count Basics* | | | *Page 9 of 11* |
|---|---|---|---|
| Start Date: | Wednesday, November 08, 2017 | Weekday | Schools in Session |
| Total Number of Hours Counted: 13 | | Non-Holiday | No Special Events |

## *15-Minute Heavy Vehicle Data*

**Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)**

### *STH 164 and CTH Q*

### 15-Minute Heavy Vehicle Data

| | 15-Minute Time Period Start Time | ↓ From North STH 164 | | | | | ← From East CTH Q | | | | | ↑ From South STH 164 | | | | | → From West CTH Q | | | | | 15-Min Totals | Hourly Sum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | | |
| AM Peak Period | 6:00 AM | 0 | 4 | 0 | 0 | 4 | 1 | 0 | 1 | 0 | 2 | 3 | 2 | 0 | 0 | 5 | 0 | 2 | 1 | 0 | 3 | 14 | 101 |
| | 6:15 AM | 1 | 6 | 0 | 0 | 7 | 0 | 1 | 2 | 0 | 3 | 2 | 4 | 0 | 0 | 6 | 0 | 2 | 0 | 0 | 2 | 18 | 116 |
| | 6:30 AM | 0 | 9 | 2 | 0 | 11 | 0 | 3 | 6 | 0 | 9 | 2 | 8 | 0 | 0 | 10 | 2 | 1 | 2 | 0 | 5 | 35 | 127 |
| | 6:45 AM | 0 | 10 | 0 | 0 | 10 | 1 | 2 | 3 | 0 | 6 | 4 | 9 | 0 | 0 | 13 | 0 | 4 | 1 | 0 | 5 | 34 | 135 |
| | 7:00 AM | 1 | 10 | 0 | 0 | 11 | 1 | 1 | 3 | 0 | 5 | 3 | 6 | 0 | 0 | 9 | 1 | 3 | 0 | 0 | 4 | 29 | 158 |
| | 7:15 AM | 0 | 8 | 1 | 0 | 9 | 1 | 1 | 2 | 0 | 4 | 3 | 7 | 0 | 0 | 10 | 2 | 3 | 1 | 0 | 6 | 29 | 168 |
| | 7:30 AM | 0 | 5 | 1 | 0 | 6 | 2 | 2 | 11 | 0 | 15 | 9 | 10 | 0 | 0 | 19 | 0 | 3 | 0 | 0 | 3 | 43 | 182 |
| | 7:45 AM | 2 | 12 | 2 | 0 | 16 | 0 | 0 | 9 | 0 | 9 | 13 | 13 | 2 | 0 | 28 | 0 | 1 | 3 | 0 | 4 | 57 | 194 |
| | 8:00 AM | 1 | 9 | 0 | 0 | 10 | 1 | 1 | 6 | 0 | 8 | 7 | 9 | 1 | 0 | 17 | 0 | 3 | 1 | 0 | 4 | 39 | 171 |
| | 8:15 AM | 0 | 6 | 2 | 0 | 8 | 1 | 1 | 3 | 0 | 5 | 6 | 15 | 3 | 0 | 24 | 3 | 2 | 1 | 0 | 6 | 43 | 165 |
| | 8:30 AM | 0 | 6 | 2 | 0 | 8 | 2 | 5 | 13 | 0 | 20 | 9 | 15 | 1 | 0 | 25 | 2 | 0 | 0 | 0 | 2 | 55 | 171 |
| | 8:45 AM | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 9 | 0 | 10 | 8 | 12 | 0 | 0 | 20 | 0 | 1 | 1 | 0 | 2 | 34 | 151 |
| | 9:00 AM | 1 | 4 | 0 | 0 | 5 | 2 | 4 | 9 | 0 | 15 | 5 | 5 | 1 | 0 | 11 | 2 | 0 | 0 | 0 | 2 | 33 | 153 |
| | 9:15 AM | 0 | 13 | 4 | 0 | 17 | 4 | 2 | 11 | 0 | 17 | 7 | 4 | 1 | 0 | 12 | 2 | 0 | 1 | 0 | 3 | 49 | 166 |
| | 9:30 AM | 0 | 4 | 0 | 0 | 4 | 0 | 2 | 7 | 0 | 9 | 7 | 11 | 1 | 0 | 19 | 2 | 0 | 1 | 0 | 3 | 35 | 147 |
| | 9:45 AM | 0 | 9 | 2 | 0 | 11 | 1 | 2 | 6 | 0 | 9 | 7 | 7 | 0 | 0 | 14 | 0 | 1 | 1 | 0 | 2 | 36 | 139 |
| Midday Peak Period | 10:00 AM | 1 | 13 | 3 | 0 | 17 | 1 | 0 | 7 | 0 | 8 | 10 | 8 | 0 | 0 | 18 | 3 | 0 | 0 | 0 | 3 | 46 | 147 |
| | 10:15 AM | 0 | 2 | 1 | 0 | 3 | 8 | 0 | 3 | 0 | 11 | 6 | 10 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 30 | 132 |
| | 10:30 AM | 0 | 4 | 1 | 0 | 5 | 0 | 2 | 3 | 0 | 5 | 6 | 9 | 0 | 0 | 15 | 0 | 2 | 0 | 0 | 2 | 27 | 130 |
| | 10:45 AM | 1 | 5 | 3 | 0 | 9 | 4 | 2 | 15 | 0 | 21 | 4 | 8 | 0 | 0 | 12 | 0 | 2 | 0 | 0 | 2 | 44 | 134 |
| | 11:00 AM | 0 | 4 | 1 | 0 | 5 | 0 | 0 | 7 | 0 | 7 | 7 | 9 | 0 | 0 | 16 | 0 | 2 | 1 | 0 | 3 | 31 | 127 |
| | 11:15 AM | 2 | 2 | 0 | 0 | 4 | 2 | 3 | 5 | 0 | 10 | 6 | 6 | 0 | 0 | 12 | 0 | 2 | 0 | 0 | 2 | 28 | 129 |
| | 11:30 AM | 1 | 6 | 1 | 0 | 8 | 0 | 0 | 6 | 0 | 6 | 7 | 8 | 0 | 0 | 15 | 0 | 2 | 0 | 0 | 2 | 31 | 141 |
| | 11:45 AM | 0 | 8 | 1 | 0 | 9 | 0 | 1 | 6 | 0 | 7 | 9 | 8 | 0 | 0 | 17 | 3 | 0 | 1 | 0 | 4 | 37 | 143 |
| | 12:00 PM | 0 | 4 | 2 | 0 | 6 | 2 | 4 | 4 | 0 | 10 | 6 | 7 | 0 | 0 | 13 | 1 | 3 | 0 | 0 | 4 | 33 | 142 |
| | 12:15 PM | 0 | 11 | 2 | 0 | 13 | 1 | 2 | 9 | 0 | 12 | 3 | 7 | 0 | 0 | 10 | 1 | 4 | 0 | 0 | 5 | 40 | 135 |
| | 12:30 PM | 1 | 4 | 2 | 0 | 7 | 2 | 2 | 5 | 0 | 9 | 6 | 4 | 3 | 0 | 13 | 1 | 3 | 0 | 0 | 4 | 33 | 128 |
| | 12:45 PM | 2 | 13 | 0 | 0 | 15 | 0 | 3 | 3 | 0 | 6 | 4 | 5 | 0 | 0 | 9 | 0 | 3 | 3 | 0 | 6 | 36 | 144 |
| | 1:00 PM | 0 | 3 | 1 | 0 | 4 | 3 | 2 | 6 | 0 | 11 | 3 | 7 | 0 | 0 | 10 | 0 | 0 | 1 | 0 | 1 | 26 | 150 |
| | 1:15 PM | 1 | 8 | 0 | 0 | 9 | 0 | 3 | 5 | 0 | 8 | 3 | 11 | 0 | 0 | 14 | 0 | 2 | 0 | 0 | 2 | 33 | 151 |
| | 1:30 PM | 0 | 6 | 1 | 0 | 7 | 3 | 5 | 11 | 0 | 19 | 9 | 7 | 1 | 0 | 17 | 0 | 2 | 4 | 0 | 6 | 49 | 148 |
| | 1:45 PM | 1 | 9 | 0 | 0 | 10 | 0 | 3 | 10 | 0 | 13 | 10 | 5 | 1 | 0 | 16 | 0 | 3 | 0 | 0 | 3 | 42 | 126 |
| PM Peak Period | 2:00 PM | 0 | 6 | 0 | 0 | 6 | 0 | 4 | 3 | 0 | 7 | 4 | 7 | 0 | 0 | 11 | 0 | 2 | 1 | 0 | 3 | 27 | 115 |
| | 2:15 PM | 0 | 7 | 1 | 0 | 8 | 1 | 2 | 5 | 0 | 8 | 1 | 9 | 0 | 0 | 10 | 1 | 2 | 1 | 0 | 4 | 30 | 124 |
| | 2:30 PM | 1 | 4 | 1 | 0 | 6 | 0 | 2 | 4 | 0 | 6 | 2 | 10 | 0 | 0 | 12 | 1 | 2 | 0 | 0 | 3 | 27 | 112 |
| | 2:45 PM | 0 | 6 | 0 | 0 | 6 | 0 | 3 | 8 | 0 | 11 | 4 | 8 | 0 | 0 | 12 | 1 | 1 | 0 | 0 | 2 | 31 | 109 |
| | 3:00 PM | 0 | 12 | 1 | 0 | 13 | 1 | 3 | 3 | 0 | 7 | 4 | 8 | 0 | 0 | 12 | 2 | 2 | 0 | 0 | 4 | 36 | 104 |
| | 3:15 PM | 0 | 2 | 1 | 0 | 3 | 0 | 1 | 0 | 0 | 1 | 3 | 6 | 1 | 0 | 10 | 1 | 2 | 1 | 0 | 4 | 18 | 96 |
| | 3:30 PM | 1 | 5 | 1 | 0 | 7 | 2 | 0 | 5 | 0 | 7 | 3 | 4 | 0 | 0 | 7 | 0 | 1 | 2 | 0 | 3 | 24 | 106 |
| | 3:45 PM | 0 | 6 | 1 | 0 | 7 | 0 | 2 | 4 | 0 | 6 | 2 | 5 | 1 | 0 | 8 | 0 | 3 | 2 | 0 | 5 | 26 | 104 |
| | 4:00 PM | 0 | 11 | 0 | 0 | 11 | 1 | 0 | 2 | 0 | 3 | 4 | 9 | 0 | 0 | 13 | 0 | 1 | 0 | 0 | 1 | 28 | 118 |
| | 4:15 PM | 1 | 7 | 0 | 0 | 8 | 2 | 2 | 6 | 0 | 10 | 1 | 7 | 0 | 0 | 8 | 0 | 0 | 2 | 0 | 2 | 28 | 119 |
| | 4:30 PM | 2 | 3 | 0 | 0 | 5 | 1 | 1 | 2 | 0 | 4 | 1 | 7 | 0 | 0 | 8 | 3 | 1 | 1 | 0 | 5 | 22 | 104 |
| | 4:45 PM | 1 | 9 | 3 | 0 | 13 | 1 | 0 | 0 | 0 | 1 | 10 | 8 | 1 | 0 | 19 | 2 | 4 | 1 | 0 | 7 | 40 | 96 |
| | 5:00 PM | 0 | 5 | 0 | 0 | 5 | 0 | 1 | 1 | 0 | 2 | 2 | 15 | 0 | 0 | 17 | 0 | 2 | 3 | 0 | 5 | 29 | 67 |
| | 5:15 PM | 1 | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 13 | 49 |
| | 5:30 PM | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 2 | 0 | 3 | 2 | 4 | 0 | 0 | 6 | 0 | 2 | 1 | 0 | 3 | 14 | 43 |
| | 5:45 PM | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 11 | 32 |
| | 6:00 PM | 0 | 3 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 0 | 1 | 0 | 0 | 1 | 11 | 29 |
| | 6:15 PM | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 7 | |
| | 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | |
| | 6:45 PM | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 8 | |
| | 7:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 8:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Totals | | 24 | 323 | 45 | 0 | 392 | 52 | 82 | 253 | 0 | 387 | 239 | 383 | 22 | 0 | 644 | 37 | 83 | 39 | 0 | 159 | 1582 | |

### Peak Hour Heavy Vehicle Volume Summary

| | Hourly Time Period Start Time | ↓ From North STH 164 | | | | | ← From East CTH Q | | | | | ↑ From South STH 164 | | | | | → From West CTH Q | | | | | Total Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | |
| AM | 7:00 AM | 3 | 35 | 4 | 0 | 42 | 4 | 4 | 25 | 0 | 33 | 28 | 36 | 2 | 0 | 66 | 3 | 10 | 4 | 0 | 17 | 158 |
| MD | 11:45 AM | 1 | 27 | 7 | 0 | 35 | 5 | 9 | 24 | 0 | 38 | 24 | 26 | 3 | 0 | 53 | 6 | 10 | 1 | 0 | 17 | 143 |
| PM | 4:30 PM | 4 | 23 | 3 | 0 | 30 | 2 | 2 | 3 | 0 | 7 | 14 | 34 | 2 | 0 | 50 | 5 | 7 | 5 | 0 | 17 | 104 |

Counter buttons – Job # 2509-PL, Lisbon, CTH Q at the 2 Mobil Driveways on CTH Q. Ted Atwell

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East Drive = 3/9/20 – 3:00 PM to 6:00 PM

" " 3/13/20 – 6:00 AM to 9:00 AM

But 2 = OUT = WB But 4 = OUT = EB

But 16 = IN = EB But 6 = IN = WB

West Drive = 3/9/20 – 3:00 PM to 6:00 PM

" " 3/13/20 – 6:00 AM to 9:00 AM

But 12 = OUT = WB But 10 = OUT = EB

But 14 = IN = EB But 8 = IN = WB

# Intersection Traffic Volume Report

| Count Basics | Version 2013.J4.1 | | Page 1 of 13 |
|---|---|---|---|
| Start Date: | Monday, March 9, 2020 | Weekday | Schools in Session |
| Total Number of Hours Counted: 6 | | Non-Holiday | No Special Events |

## *Base Information, Observed (6) Hour and Estimated (24) Hour Volume Summaries*

### *Intersection of: See notes for button use and CTH Q and Mobil Driveways*

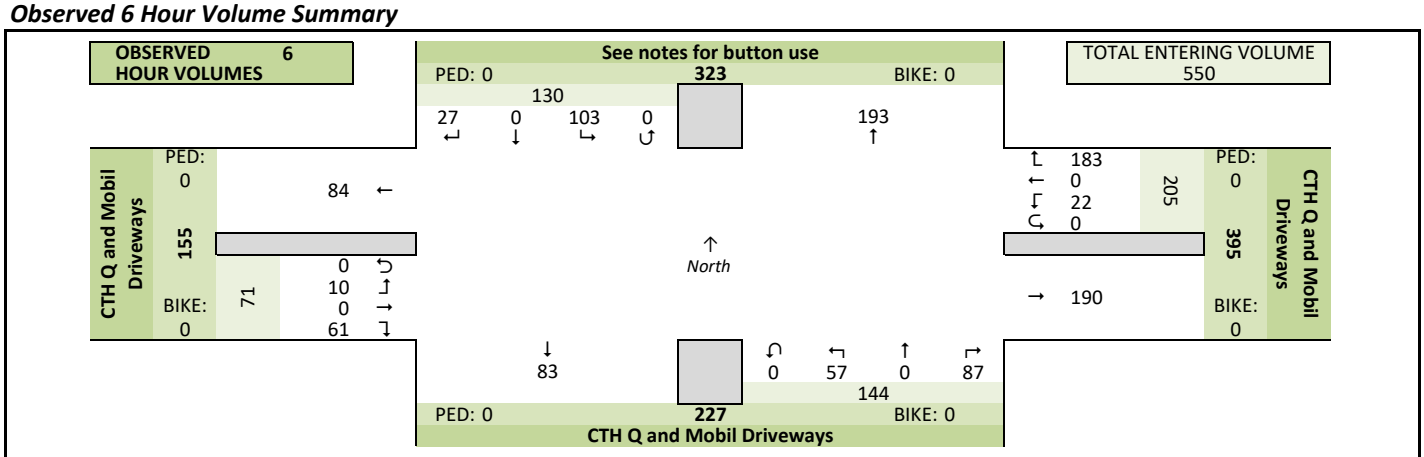
### Site Information

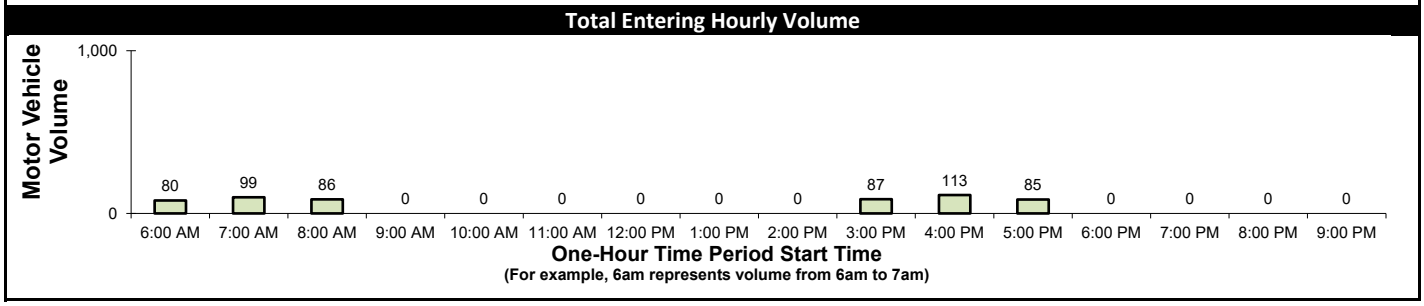
| | | | |
|---|---|---|---|
| Municipality | Town of Lisbon | | |
| County | Waukesha | WisDOT Region | SE |
| Traffic Control | Uncontrolled | | |
| Roadway Names | | North Direction | ↑ |
| North Leg | See notes for button use | | |
| East Leg | CTH Q and Mobil Driveways | | |
| South Leg | CTH Q and Mobil Driveways | | |
| West Leg | CTH Q and Mobil Driveways | | |
| Special Considerations | | | |
| Schools | In Session | | |
| Holidays | None | | |
| Special Events | None | | |
| Special Pedestrians Observed | | | |
| Pre-school children | None | | |
| Elementry school age children | None | | |
| Visually impaired (white cane/helper dog) | None | | |
| Elderly/disabled (except wheelchairs) | None | | |
| Wheelchairs/electric scooters | None | | |
| Other (describe) | None | None | |

### Count Information

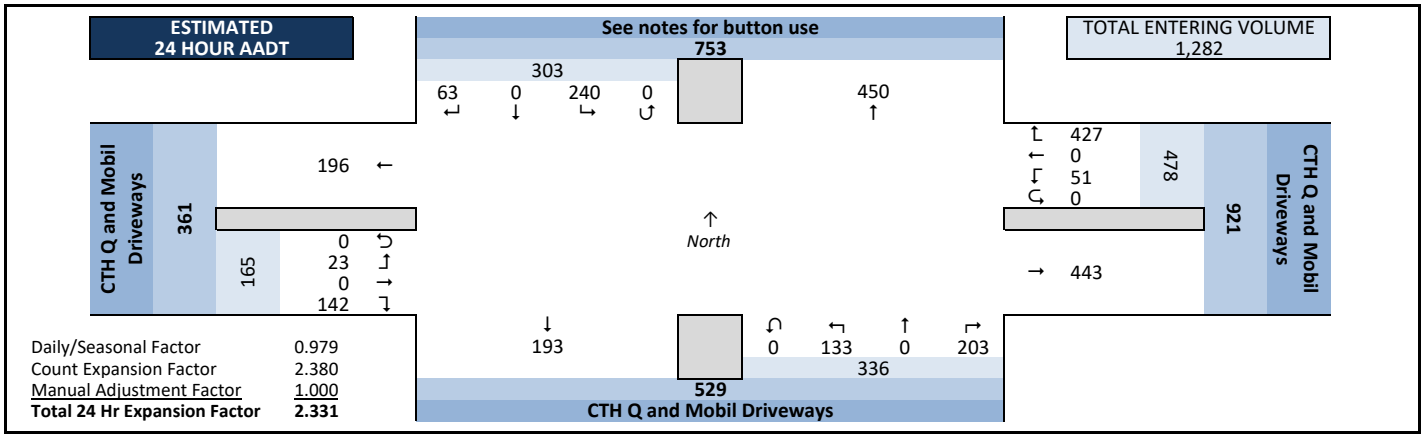
| | | | | | |
|---|---|---|---|---|---|
| Hrs Counted: | 6:00 AM-9:00 AM and 3:00 PM-6:00 PM | | | | |
| 1st Day of Count | Monday, March 9, 2020 | | | Weather | |
| AM Peak Period | Friday, March 13, 2020 | | | Clear & Dry | |
| Midday Peak Period | Monday, March 9, 2020 | | | Clear & Dry | |
| PM Peak Period | Monday, March 9, 2020 | | | Clear & Dry | |
| Calculated Peak Hours | | | | | |
| AM | 7:15-8:15am | MD | | PM | 4:00-5:00pm |
| Peak Hours Selected for Analysis | | | | | |
| AM | 7:00-8:00am | MD | | PM | 4:30-5:30pm |
| Daily/Seasonal Adjustment Group | (2) Urban Arterials & Collectors | | | | |
| Count Expansion Group | (2) Urban Arterials & Collectors | | | | |
| Daily/Seasonal Adjustment Factor | 0.979 | Count Expansion Factor | 2.380 | | |
| Company Name | TADI, Inc. | | | Manual Adj. | 1.000 |
| Observers | AM Peak Period | Ted Atwell | | | |
| | Midday Peak Period | None | | | |
| | PM Peak Period | Ted Atwell | | | |
| Comments | Volumes to/from north are Mobil East Driveway. Volumes to/from the south are Mobile West Driveway. | | | | |

### *Observed 6 Hour Volume Summary*




### *Estimated 24 Hour AADT*



# Intersection Traffic Volume Report

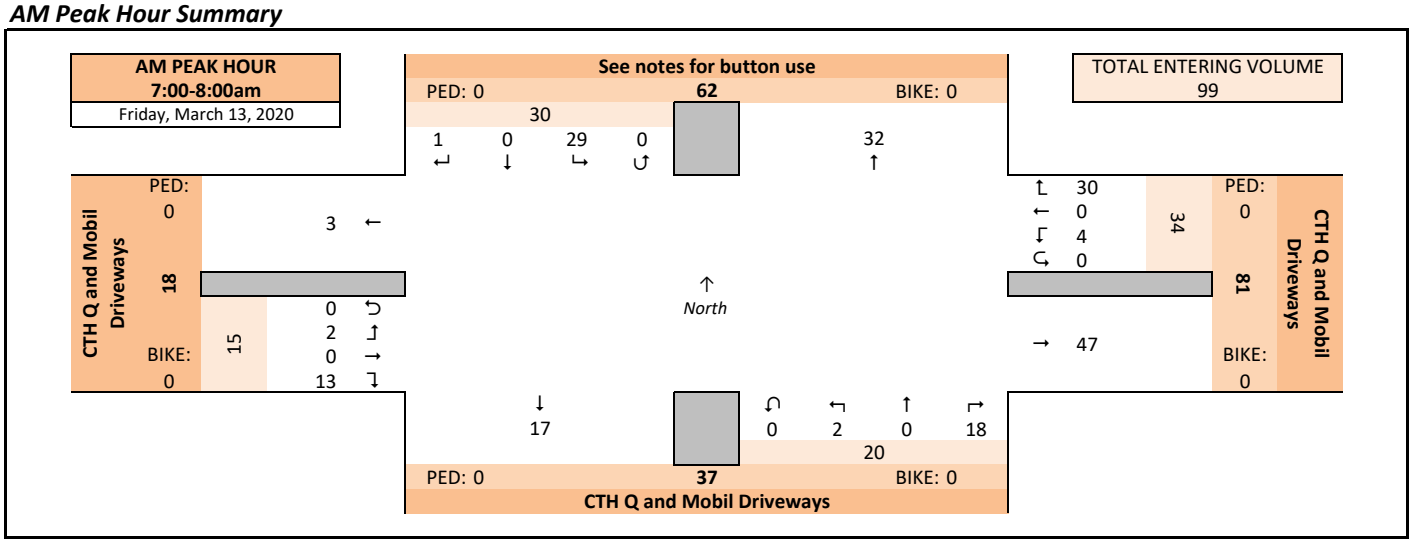
| Count Basics | | | Page 2 of 13 |
|---|---|---|---|
| Start Date: | Monday, March 9, 2020 | Weekday | Schools in Session |
| Total Number of Hours Counted: 6 | | Non-Holiday | No Special Events |

## *Peak Hour Volume Graphical Summary*

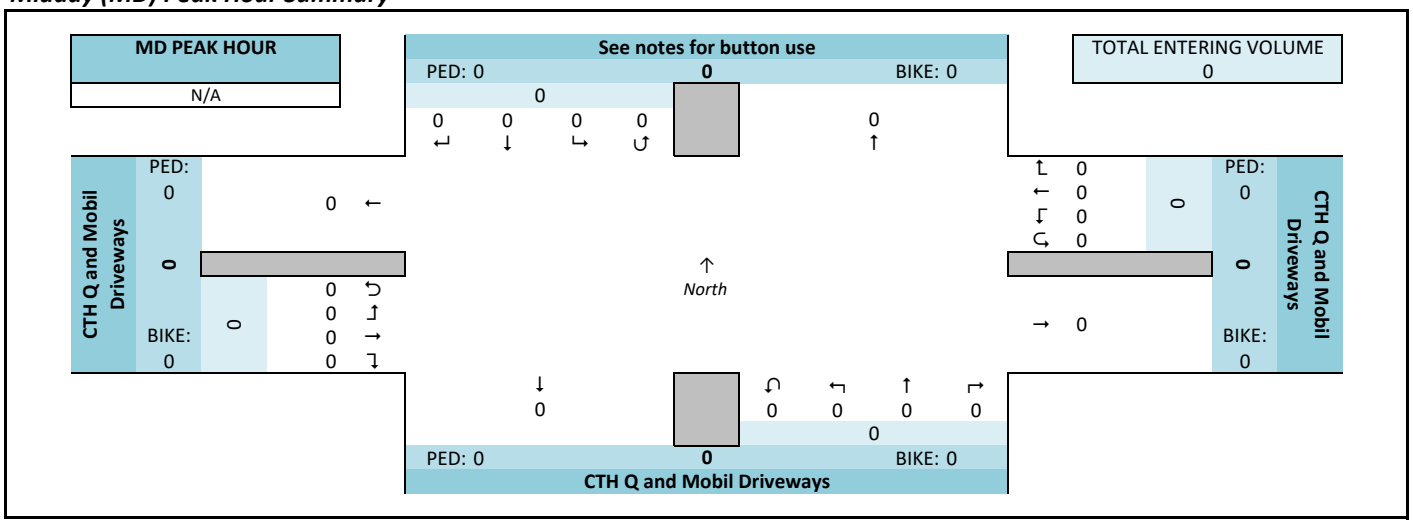
***See notes for button use and CTH Q and Mobil Driveways***

**All Motor Vehicles**

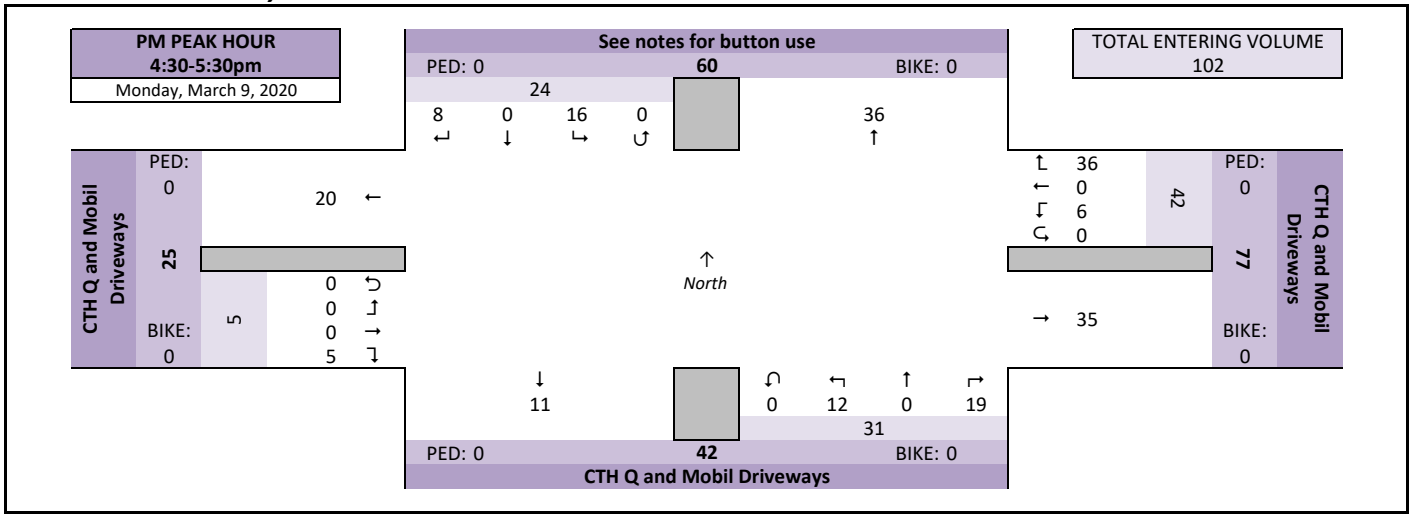
### *AM Peak Hour Summary*




### *Midday (MD) Peak Hour Summary*




### *PM Peak Hour Summary*



# Intersection Traffic Volume Report

| Count Basics | | | Page 3 of 13 |
|---|---|---|---|
| Start Date: | Monday, March 9, 2020 | Weekday | Schools in Session |
| Total Number of Hours Counted: 6 | | Non-Holiday | No Special Events |

## *Peak Hour Volume Summary*

***See notes for button use and CTH Q and Mobil Driveways***

**All Motor Vehicles**

### Peak Hour Volumes, Truck Percentages, and PHFs

| Friday, March 13, 2020 | | From North | | | | | From East | | | | | From South | | | | | From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak Hour | See notes for button use | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | |
| | Start Time | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Totals |
| AM Peak Hour | 7:00 AM | 0 | 0 | 7 | 0 | 7 | 6 | 0 | 1 | 0 | 7 | 1 | 0 | 1 | 0 | 2 | 3 | 0 | 1 | 0 | 4 | 20 |
| | 7:15 AM | 0 | 0 | 6 | 0 | 6 | 4 | 0 | 1 | 0 | 5 | 7 | 0 | 0 | 0 | 7 | 2 | 0 | 1 | 0 | 3 | 21 |
| | 7:30 AM | 0 | 0 | 11 | 0 | 11 | 11 | 0 | 1 | 0 | 12 | 5 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 0 | 6 | 34 |
| | 7:45 AM | 1 | 0 | 5 | 0 | 6 | 9 | 0 | 1 | 0 | 10 | 5 | 0 | 1 | 0 | 6 | 2 | 0 | 0 | 0 | 2 | 24 |
| | Peak Hour Volume | 1 | 0 | 29 | 0 | 30 | 30 | 0 | 4 | 0 | 34 | 18 | 0 | 2 | 0 | 20 | 13 | 0 | 2 | 0 | 15 | 99 |
| | Rounded Hourly Volume | 0 | 0 | 30 | 0 | 30 | 30 | 0 | 5 | 0 | 35 | 20 | 0 | 0 | 0 | 20 | 15 | 0 | 0 | 0 | 15 | 100 |
| | % Single Unit Trucks | 0.0 | 0.0 | 6.9 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.4 | 0.0 | 0.0 | 0.0 | 13.3 | 4.0 |
| | % Heavy Trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | % Trucks (Total) | 0.0 | 0.0 | 6.9 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.4 | 0.0 | 0.0 | 0.0 | 13.3 | 4.0 |
| | Peak Hour Factor (PHF) | 0.25 | 0.00 | 0.66 | 0.00 | 0.68 | 0.68 | 0.00 | 1.00 | 0.00 | 0.71 | 0.64 | 0.00 | 0.50 | 0.00 | 0.71 | 0.54 | 0.00 | 0.50 | 0.00 | 0.62 | 0.73 |

| N/A | | From North | | | | | From East | | | | | From South | | | | | From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MD Peak Hour | See notes for button use | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | |
| | Start Time | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Totals |
| Midday (MD) Peak Hour | 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Peak Hour Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Rounded Hourly Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | % Single Unit Trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | % Heavy Trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | % Trucks (Total) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Peak Hour Factor (PHF) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| Monday, March 9, 2020 | | From North | | | | | From East | | | | | From South | | | | | From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PM Peak Hour | See notes for button use | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | |
| | Start Time | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Totals |
| PM Peak Hour | 4:30 PM | 2 | 0 | 6 | 0 | 8 | 6 | 0 | 1 | 0 | 7 | 4 | 0 | 3 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 22 |
| | 4:45 PM | 2 | 0 | 2 | 0 | 4 | 12 | 0 | 2 | 0 | 14 | 5 | 0 | 6 | 0 | 11 | 1 | 0 | 0 | 0 | 1 | 30 |
| | 5:00 PM | 3 | 0 | 3 | 0 | 6 | 11 | 0 | 0 | 0 | 11 | 3 | 0 | 2 | 0 | 5 | 3 | 0 | 0 | 0 | 3 | 25 |
| | 5:15 PM | 1 | 0 | 5 | 0 | 6 | 7 | 0 | 3 | 0 | 10 | 7 | 0 | 1 | 0 | 8 | 1 | 0 | 0 | 0 | 1 | 25 |
| | Peak Hour Volume | 8 | 0 | 16 | 0 | 24 | 36 | 0 | 6 | 0 | 42 | 19 | 0 | 12 | 0 | 31 | 5 | 0 | 0 | 0 | 5 | 102 |
| | Rounded Hourly Volume | 10 | 0 | 15 | 0 | 25 | 35 | 0 | 5 | 0 | 40 | 20 | 0 | 10 | 0 | 30 | 5 | 0 | 0 | 0 | 5 | 100 |
| | % Single Unit Trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 0.0 | 16.7 | 0.0 | 4.8 | 5.3 | 0.0 | 8.3 | 0.0 | 6.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 |
| | % Heavy Trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | % Trucks (Total) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 0.0 | 16.7 | 0.0 | 4.8 | 5.3 | 0.0 | 8.3 | 0.0 | 6.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 |
| | Peak Hour Factor (PHF) | 0.67 | 0.00 | 0.67 | 0.00 | 0.75 | 0.75 | 0.00 | 0.50 | 0.00 | 0.75 | 0.68 | 0.00 | 0.50 | 0.00 | 0.70 | 0.42 | 0.00 | 0.00 | 0.00 | 0.42 | 0.85 |

### Peak Hour Pedestrian and Bicyclist Volumes

| Pedestrians and Bicyclists | | Crossing North Approach | | | Crossing East Approach | | | Crossing South Approach | | | Crossing West Approach | | | Total Ped & Bike Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | See notes for button use | | | CTH Q and Mobil Driveways | | | CTH Q and Mobil Driveways | | | CTH Q and Mobil Driveways | | | |
| | 15-Minute Start Time | Pedestrian | Bicyclist | Total | Pedestrian | Bicyclist | Total | Pedestrian | Bicyclist | Total | Pedestrian | Bicyclist | Total | |
| AM | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MD | 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# Intersection Traffic Volume Report

| *Count Basics* | | *Page 5 of 13* |
|---|---|---|
| Start Date: Monday, March 9, 2020 | Weekday | Schools in Session |
| Total Number of Hours Counted: 6 | Non-Holiday | No Special Events |

## *15-Minute Motor Vehicle Data*

**All Motor Vehicles**

***See notes for button use and CTH Q and Mobil Driveways***

### 15-Minute Motor Vehicle Data

| 15-Minute Time Period Start Time | | From North (See notes for button use) | | | | | From East (CTH Q and Mobil Driveways) | | | | | From South (CTH Q and Mobil Driveways) | | | | | From West (CTH Q and Mobil Driveways) | | | | | 15-Min Totals | Hourly Sum | PHF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | | | |
| AM Peak Period | 6:00 AM | 0 | 0 | 6 | 0 | 6 | 5 | 0 | 1 | 0 | 6 | 1 | 0 | 2 | 0 | 3 | 2 | 0 | 1 | 0 | 3 | 18 | 80 | 0.87 |
| | 6:15 AM | 0 | 0 | 5 | 0 | 5 | 6 | 0 | 2 | 0 | 8 | 5 | 0 | 0 | 0 | 5 | 3 | 0 | 2 | 0 | 5 | 23 | 82 | 0.89 |
| | 6:30 AM | 2 | 0 | 5 | 0 | 7 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 6 | 0 | 1 | 0 | 7 | 17 | 80 | 0.91 |
| | 6:45 AM | 0 | 0 | 5 | 0 | 5 | 8 | 0 | 0 | 0 | 8 | 3 | 0 | 2 | 0 | 5 | 2 | 0 | 2 | 0 | 4 | 22 | 97 | 0.71 |
| | 7:00 AM | 0 | 0 | 7 | 0 | 7 | 6 | 0 | 1 | 0 | 7 | 1 | 0 | 1 | 0 | 2 | 3 | 0 | 1 | 0 | 4 | 20 | 99 | 0.73 |
| | 7:15 AM | 0 | 0 | 6 | 0 | 6 | 4 | 0 | 1 | 0 | 5 | 7 | 0 | 0 | 0 | 7 | 2 | 0 | 1 | 0 | 3 | 21 | 100 | 0.74 |
| | 7:30 AM | 0 | 0 | 11 | 0 | 11 | 11 | 0 | 1 | 0 | 12 | 5 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 0 | 6 | 34 | 98 | 0.72 |
| | 7:45 AM | 1 | 0 | 5 | 0 | 6 | 9 | 0 | 1 | 0 | 10 | 5 | 0 | 1 | 0 | 6 | 2 | 0 | 0 | 0 | 2 | 24 | 88 | 0.92 |
| | 8:00 AM | 2 | 0 | 6 | 0 | 8 | 3 | 0 | 0 | 0 | 3 | 1 | 0 | 2 | 0 | 3 | 7 | 0 | 0 | 0 | 7 | 21 | 86 | 0.90 |
| | 8:15 AM | 1 | 0 | 3 | 0 | 4 | 6 | 0 | 1 | 0 | 7 | 3 | 0 | 1 | 0 | 4 | 4 | 0 | 0 | 0 | 4 | 19 | | |
| | 8:30 AM | 1 | 0 | 3 | 0 | 4 | 8 | 0 | 1 | 0 | 9 | 5 | 0 | 1 | 0 | 6 | 5 | 0 | 0 | 0 | 5 | 24 | | |
| | 8:45 AM | 0 | 0 | 4 | 0 | 4 | 6 | 0 | 2 | 0 | 8 | 4 | 0 | 3 | 0 | 7 | 1 | 0 | 2 | 0 | 3 | 22 | | |
| | 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Midday Peak Period | 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| PM Peak Period | 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 3:00 PM | 2 | 0 | 3 | 0 | 5 | 9 | 0 | 0 | 0 | 9 | 2 | 0 | 4 | 0 | 6 | 3 | 0 | 0 | 0 | 3 | 23 | 87 | 0.87 |
| | 3:15 PM | 4 | 0 | 4 | 0 | 8 | 10 | 0 | 0 | 0 | 10 | 1 | 0 | 4 | 0 | 5 | 2 | 0 | 0 | 0 | 2 | 25 | 93 | 0.80 |
| | 3:30 PM | 1 | 0 | 3 | 0 | 4 | 8 | 0 | 1 | 0 | 9 | 5 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 19 | 100 | 0.78 |
| | 3:45 PM | 1 | 0 | 4 | 0 | 5 | 9 | 0 | 0 | 0 | 9 | 2 | 0 | 3 | 0 | 5 | 1 | 0 | 0 | 0 | 1 | 20 | 103 | 0.80 |
| | 4:00 PM | 0 | 0 | 2 | 0 | 2 | 12 | 0 | 1 | 0 | 13 | 5 | 0 | 6 | 0 | 11 | 3 | 0 | 0 | 0 | 3 | 29 | 113 | 0.88 |
| | 4:15 PM | 3 | 0 | 1 | 0 | 4 | 12 | 0 | 1 | 0 | 13 | 4 | 0 | 8 | 0 | 12 | 3 | 0 | 0 | 0 | 3 | 32 | 109 | 0.85 |
| | 4:30 PM | 2 | 0 | 6 | 0 | 8 | 6 | 0 | 1 | 0 | 7 | 4 | 0 | 3 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 22 | 102 | 0.85 |
| | 4:45 PM | 2 | 0 | 2 | 0 | 4 | 12 | 0 | 2 | 0 | 14 | 5 | 0 | 6 | 0 | 11 | 1 | 0 | 0 | 0 | 1 | 30 | 95 | 0.79 |
| | 5:00 PM | 3 | 0 | 3 | 0 | 6 | 11 | 0 | 0 | 0 | 11 | 3 | 0 | 2 | 0 | 5 | 3 | 0 | 0 | 0 | 3 | 25 | 85 | 0.85 |
| | 5:15 PM | 1 | 0 | 5 | 0 | 6 | 7 | 0 | 3 | 0 | 10 | 7 | 0 | 1 | 0 | 8 | 1 | 0 | 0 | 0 | 1 | 25 | | |
| | 5:30 PM | 1 | 0 | 0 | 0 | 1 | 7 | 0 | 0 | 0 | 7 | 3 | 0 | 4 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 15 | | |
| | 5:45 PM | 0 | 0 | 4 | 0 | 4 | 7 | 0 | 2 | 0 | 9 | 4 | 0 | 2 | 0 | 6 | 1 | 0 | 0 | 0 | 1 | 20 | | |
| | 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 8:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Totals | | 27 | 0 | 103 | 0 | 130 | 183 | 0 | 22 | 0 | 205 | 87 | 0 | 57 | 0 | 144 | 61 | 0 | 10 | 0 | 71 | 550 | | |

### Peak Hour All Vehicle Volume Summary

| Hourly Time Period Start Time | | From North (See notes for button use) | | | | | From East (CTH Q and Mobil Driveways) | | | | | From South (CTH Q and Mobil Driveways) | | | | | From West (CTH Q and Mobil Driveways) | | | | | Total Hourly Volume | PHF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | | |
| AM | 7:00 AM | 1 | 0 | 29 | 0 | 30 | 30 | 0 | 4 | 0 | 34 | 18 | 0 | 2 | 0 | 20 | 13 | 0 | 2 | 0 | 15 | 99 | 0.73 |
| MD | 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| PM | 4:30 PM | 8 | 0 | 16 | 0 | 24 | 36 | 0 | 6 | 0 | 42 | 19 | 0 | 12 | 0 | 31 | 5 | 0 | 0 | 0 | 5 | 102 | 0.85 |

# Intersection Traffic Volume Report

| *Count Basics* | | | *Page 9 of 13* |
|---|---|---|---|
| Start Date: | Monday, March 9, 2020 | Weekday | Schools in Session |
| Total Number of Hours Counted: 6 | | Non-Holiday | No Special Events |

## *15-Minute Heavy Vehicle Data*

***See notes for button use and CTH Q and Mobil Driveways***

**Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)**

### 15-Minute Heavy Vehicle Data

| | 15-Minute Time Period Start Time | ↓ From North | | | | | ← From East | | | | | ↑ From South | | | | | → From West | | | | | 15-Min Totals | Hourly Sum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | See notes for button use | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | | |
| | | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | | |
| AM Peak Period | 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 4 |
| | 6:15 AM | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 3 |
| | 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 4 |
| | 7:15 AM | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 3 |
| | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 3 | |
| | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| | 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Midday Peak Period | 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| PM Peak Period | 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| | 3:45 PM | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 4 |
| | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| | 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 8:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Totals | | 0 | 0 | 4 | 0 | 4 | 3 | 0 | 4 | 0 | 7 | 3 | 0 | 2 | 0 | 5 | 3 | 0 | 1 | 0 | 4 | 20 | |

### Peak Hour Heavy Vehicle Volume Summary

| | Hourly Time Period Start Time | ↓ From North | | | | | ← From East | | | | | ↑ From South | | | | | → From West | | | | | Total Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | See notes for button use | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | CTH Q and Mobil Driveways | | | | | |
| | | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | Right | Thru | Left | U-Tn | Total | |
| AM | 7:00 AM | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 4 |
| MD | 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |

# APPENDIX B

# Year 2021 Background Traffic Operational Analysis

# HCS7 Roundabouts Report

## General Information

| | |
|---|---|
| Analyst | TSC |
| Agency or Co. | TADI |
| Date Performed | 4/20/2020 |
| Analysis Year | 2017 |
| Time Analyzed | AM Peak Hour - Existing |
| Project Description | 2509 Lisbon Kwik Trip STH 164/CTH Q TIA |

## Site Information

| | |
|---|---|
| Intersection | STH 164 & CTH Q |
| E/W Street Name | CTH Q |
| N/S Street Name | STH 164 |
| Analysis Time Period (hrs) | 0.25 |
| Peak Hour Factor | 0.89 |
| Jurisdiction | WisDOT Abb TIA |

## Volume Adjustments and Site Characteristics

| Approach | EB | | | | WB | | | | NB | | | | SB | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Number of Lanes (N) | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 |
| Lane Assignment | LT | | TR | | LT | | TR | | LT | | TR | | LT | | TR | |
| Volume (V), veh/h | 0 | 55 | 270 | 55 | 0 | 165 | 50 | 25 | 0 | 20 | 330 | 190 | 0 | 120 | 645 | 25 |
| Percent Heavy Vehicles, % | 5 | 5 | 5 | 5 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 12 | 5 | 5 | 5 | 5 |
| Flow Rate ($v_{PCE}$), pc/h | 0 | 65 | 319 | 65 | 0 | 211 | 64 | 32 | 0 | 25 | 415 | 239 | 0 | 142 | 761 | 29 |
| Right-Turn Bypass | None | | | | None | | | | None | | | | None | | | |
| Conflicting Lanes | 2 | | | | 2 | | | | 2 | | | | 2 | | | |
| Pedestrians Crossing, p/h | 0 | | | | 0 | | | | 0 | | | | 0 | | | |

## Critical and Follow-Up Headway Adjustment

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Critical Headway (s) | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | |
| Follow-Up Headway (s) | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | |

## Flow Computations, Capacity and v/c Ratios

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Entry Flow ($v_e$), pc/h | 211.03 | 237.97 | | 211.00 | 96.00 | | 319.13 | 359.87 | | 438.04 | 493.96 | |
| Entry Volume veh/h | 200.98 | 226.64 | | 185.09 | 84.21 | | 284.94 | 321.31 | | 417.18 | 470.44 | |
| Circulating Flow ($v_c$), pc/h | 1114 | | | 505 | | | 526 | | | 300 | | |
| Exiting Flow ($v_{ex}$), pc/h | 700 | | | 118 | | | 512 | | | 1037 | | |
| Capacity ($c_{pce}$), pc/h | 575.08 | 575.08 | | 892.79 | 892.79 | | 879.35 | 879.35 | | 1035.25 | 1035.25 | |
| Capacity (c), veh/h | 547.70 | 547.70 | | 783.15 | 783.15 | | 785.13 | 785.13 | | 985.96 | 985.96 | |
| v/c Ratio (x) | 0.37 | 0.41 | | 0.24 | 0.11 | | 0.36 | 0.41 | | 0.42 | 0.48 | |

## Delay and Level of Service

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Lane Control Delay (d), s/veh | 12.2 | 13.2 | | 7.2 | 5.7 | | 9.0 | 9.8 | | 8.4 | 9.3 | |
| Lane LOS | B | B | | A | A | | A | A | | A | A | |
| 95% Queue, veh | 1.7 | 2.0 | | 0.9 | 0.4 | | 1.7 | 2.0 | | 2.1 | 2.6 | |
| Approach Delay, s/veh | 12.7 | | | 6.7 | | | 9.4 | | | 8.9 | | |
| Approach LOS | B | | | A | | | A | | | A | | |
| Intersection Delay, s/veh \| LOS | 9.5 | | | | | | A | | | | | |

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| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 5 | 345 | 60 | 35 | 35 | 5 |
| Future Volume (vph) | 5 | 345 | 60 | 35 | 35 | 5 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 0 | | | 0 | 0 | 0 |
| Storage Lanes | 0 | | | 0 | 1 | 0 |
| Taper Length (ft) | 25 | | | | 25 | |
| Link Speed (mph) | | 50 | 50 | | 30 | |
| Link Distance (ft) | | 120 | 311 | | 208 | |
| Travel Time (s) | | 1.6 | 4.2 | | 4.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 5% | 5% | 10% | 10% | 7% | 7% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 5 | 345 | 60 | 35 | 35 | 5 |
| Future Vol, veh/h | 5 | 345 | 60 | 35 | 35 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 5 | 5 | 10 | 10 | 7 | 7 |
| Mvmt Flow | 6 | 401 | 70 | 41 | 41 | 6 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 111 | 0 | - | 0 | 504 | 91 |
| Stage 1 | - | - | - | - | 91 | - |
| Stage 2 | - | - | - | - | 413 | - |
| Critical Hdwy | 4.15 | - | - | - | 6.47 | 6.27 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.47 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.47 | - |
| Follow-up Hdwy | 2.245 | - | - | - | 3.563 | 3.363 |
| Pot Cap-1 Maneuver | 1460 | - | - | - | 519 | 953 |
| Stage 1 | - | - | - | - | 920 | - |
| Stage 2 | - | - | - | - | 657 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1460 | - | - | - | 516 | 953 |
| Mov Cap-2 Maneuver | - | - | - | - | 516 | - |
| Stage 1 | - | - | - | - | 915 | - |
| Stage 2 | - | - | - | - | 657 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 12.2 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1460 | - | - | - | 547 |
| HCM Lane V/C Ratio | 0.004 | - | - | - | 0.085 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 12.2 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.3 |

| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 20 | 325 | 55 | 10 | 25 | 5 |
| Future Volume (vph) | 20 | 325 | 55 | 10 | 25 | 5 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 0 | | | 0 | 0 | 0 |
| Storage Lanes | 0 | | | 0 | 1 | 0 |
| Taper Length (ft) | 25 | | | | 25 | |
| Link Speed (mph) | | 50 | 50 | | 25 | |
| Link Distance (ft) | | 259 | 120 | | 211 | |
| Travel Time (s) | | 3.5 | 1.6 | | 5.8 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 5% | 5% | 10% | 10% | 1% | 1% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 325 | 55 | 10 | 25 | 5 |
| Future Vol, veh/h | 20 | 325 | 55 | 10 | 25 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 5 | 5 | 10 | 10 | 1 | 1 |
| Mvmt Flow | 23 | 378 | 64 | 12 | 29 | 6 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 76 | 0 | - | 0 | 494 | 70 |
| Stage 1 | - | - | - | - | 70 | - |
| Stage 2 | - | - | - | - | 424 | - |
| Critical Hdwy | 4.15 | - | - | - | 6.41 | 6.21 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.41 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.41 | - |
| Follow-up Hdwy | 2.245 | - | - | - | 3.509 | 3.309 |
| Pot Cap-1 Maneuver | 1504 | - | - | - | 536 | 996 |
| Stage 1 | - | - | - | - | 955 | - |
| Stage 2 | - | - | - | - | 662 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1504 | - | - | - | 526 | 996 |
| Mov Cap-2 Maneuver | - | - | - | - | 526 | - |
| Stage 1 | - | - | - | - | 937 | - |
| Stage 2 | - | - | - | - | 662 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 11.7 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1504 | - | - | - | 571 |
| HCM Lane V/C Ratio | 0.015 | - | - | - | 0.061 |
| HCM Control Delay (s) | 7.4 | 0 | - | - | 11.7 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

# HCS7 Roundabouts Report

## General Information

| | |
|---|---|
| Analyst | TSC |
| Agency or Co. | TADI |
| Date Performed | 4/20/2020 |
| Analysis Year | 2017 |
| Time Analyzed | PM Peak Hour - Existing |
| Project Description | 2509 Lisbon Kwik Trip STH 164/CTH Q TIA |

## Site Information

| | |
|---|---|
| Intersection | STH 164 & CTH Q |
| E/W Street Name | CTH Q |
| N/S Street Name | STH 164 |
| Analysis Time Period (hrs) | 0.25 |
| Peak Hour Factor | 0.96 |
| Jurisdiction | WisDOT Abb TIA |

## Volume Adjustments and Site Characteristics

| Approach | EB | | | | WB | | | | NB | | | | SB | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Number of Lanes (N) | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 |
| Lane Assignment | LT | | TR | | LT | | TR | | LT | | TR | | LT | | TR | |
| Volume (V), veh/h | 0 | 40 | 125 | 40 | 0 | 175 | 300 | 130 | 0 | 50 | 665 | 190 | 0 | 55 | 345 | 45 |
| Percent Heavy Vehicles, % | 8 | 8 | 8 | 8 | 1 | 1 | 1 | 1 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| Flow Rate ($v_{PCE}$), pc/h | 0 | 45 | 141 | 45 | 0 | 184 | 316 | 137 | 0 | 55 | 734 | 210 | 0 | 61 | 385 | 50 |
| Right-Turn Bypass | None | | | | None | | | | None | | | | None | | | |
| Conflicting Lanes | 2 | | | | 2 | | | | 2 | | | | 2 | | | |
| Pedestrians Crossing, p/h | 0 | | | | 0 | | | | 0 | | | | 0 | | | |

## Critical and Follow-Up Headway Adjustment

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Critical Headway (s) | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | |
| Follow-Up Headway (s) | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | |

## Flow Computations, Capacity and v/c Ratios

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Entry Flow ($v_e$), pc/h | 108.57 | 122.43 | | 299.39 | 337.61 | | 469.53 | 529.47 | | 233.12 | 262.88 | |
| Entry Volume veh/h | 100.53 | 113.36 | | 296.43 | 334.27 | | 442.95 | 499.50 | | 217.87 | 245.68 | |
| Circulating Flow ($v_c$), pc/h | 630 | | | 834 | | | 247 | | | 555 | | |
| Exiting Flow ($v_{ex}$), pc/h | 412 | | | 421 | | | 916 | | | 614 | | |
| Capacity ($c_{pce}$), pc/h | 815.72 | 815.72 | | 703.97 | 703.97 | | 1075.65 | 1075.65 | | 861.12 | 861.12 | |
| Capacity (c), veh/h | 755.30 | 755.30 | | 697.00 | 697.00 | | 1014.76 | 1014.76 | | 804.79 | 804.79 | |
| v/c Ratio (x) | 0.13 | 0.15 | | 0.43 | 0.48 | | 0.44 | 0.49 | | 0.27 | 0.31 | |

## Delay and Level of Service

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Lane Control Delay (d), s/veh | 6.2 | 6.4 | | 11.1 | 12.2 | | 8.4 | 9.4 | | 7.5 | 8.0 | |
| Lane LOS | A | A | | B | B | | A | A | | A | A | |
| 95% Queue, veh | 0.5 | 0.5 | | 2.1 | 2.6 | | 2.3 | 2.8 | | 1.1 | 1.3 | |
| Approach Delay, s/veh | 6.3 | | | 11.7 | | | 9.0 | | | 7.7 | | |
| Approach LOS | A | | | B | | | A | | | A | | |
| Intersection Delay, s/veh \| LOS | 9.2 | | | | | | A | | | | | |

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| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 5 | 185 | 355 | 40 | 20 | 15 |
| Future Volume (vph) | 5 | 185 | 355 | 40 | 20 | 15 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 0 | | | 0 | 0 | 0 |
| Storage Lanes | 0 | | | 0 | 1 | 0 |
| Taper Length (ft) | 25 | | | | 25 | |
| Link Speed (mph) | | 50 | 50 | | 30 | |
| Link Distance (ft) | | 120 | 311 | | 208 | |
| Travel Time (s) | | 1.6 | 4.2 | | 4.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 8% | 8% | 2% | 2% | 1% | 1% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 5 | 185 | 355 | 40 | 20 | 15 |
| Future Vol, veh/h | 5 | 185 | 355 | 40 | 20 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 8 | 8 | 2 | 2 | 1 | 1 |
| Mvmt Flow | 5 | 201 | 386 | 43 | 22 | 16 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 429 | 0 | - | 0 | 619 | 408 |
| Stage 1 | - | - | - | - | 408 | - |
| Stage 2 | - | - | - | - | 211 | - |
| Critical Hdwy | 4.18 | - | - | - | 6.41 | 6.21 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.41 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.41 | - |
| Follow-up Hdwy | 2.272 | - | - | - | 3.509 | 3.309 |
| Pot Cap-1 Maneuver | 1099 | - | - | - | 454 | 645 |
| Stage 1 | - | - | - | - | 673 | - |
| Stage 2 | - | - | - | - | 827 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1099 | - | - | - | 452 | 645 |
| Mov Cap-2 Maneuver | - | - | - | - | 452 | - |
| Stage 1 | - | - | - | - | 670 | - |
| Stage 2 | - | - | - | - | 827 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 12.5 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1099 | - | - | - | 518 |
| HCM Lane V/C Ratio | 0.005 | - | - | - | 0.073 |
| HCM Control Delay (s) | 8.3 | 0 | - | - | 12.5 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 10 | 165 | 360 | 10 | 25 | 15 |
| Future Volume (vph) | 10 | 165 | 360 | 10 | 25 | 15 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 0 | | | 0 | 0 | 0 |
| Storage Lanes | 0 | | | 0 | 1 | 0 |
| Taper Length (ft) | 25 | | | | 25 | |
| Link Speed (mph) | | 50 | 50 | | 25 | |
| Link Distance (ft) | | 259 | 120 | | 211 | |
| Travel Time (s) | | 3.5 | 1.6 | | 5.8 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 8% | 8% | 2% | 2% | 7% | 7% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 165 | 360 | 10 | 25 | 15 |
| Future Vol, veh/h | 10 | 165 | 360 | 10 | 25 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 8 | 8 | 2 | 2 | 7 | 7 |
| Mvmt Flow | 11 | 179 | 391 | 11 | 27 | 16 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 402 | 0 | - | 0 | 598 | 397 |
| Stage 1 | - | - | - | - | 397 | - |
| Stage 2 | - | - | - | - | 201 | - |
| Critical Hdwy | 4.18 | - | - | - | 6.47 | 6.27 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.47 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.47 | - |
| Follow-up Hdwy | 2.272 | - | - | - | 3.563 | 3.363 |
| Pot Cap-1 Maneuver | 1125 | - | - | - | 457 | 642 |
| Stage 1 | - | - | - | - | 668 | - |
| Stage 2 | - | - | - | - | 821 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1125 | - | - | - | 452 | 642 |
| Mov Cap-2 Maneuver | - | - | - | - | 452 | - |
| Stage 1 | - | - | - | - | 661 | - |
| Stage 2 | - | - | - | - | 821 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 12.7 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1125 | - | - | - | 508 |
| HCM Lane V/C Ratio | 0.01 | - | - | - | 0.086 |
| HCM Control Delay (s) | 8.2 | 0 | - | - | 12.7 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.3 |

# APPENDIX C

# Year 2021 Build Traffic Operational Analysis

# HCS7 Roundabouts Report

## General Information

| | |
|---|---|
| Analyst | TSC |
| Agency or Co. | TADI |
| Date Performed | 4/20/2020 |
| Analysis Year | 2017 |
| Time Analyzed | AM Peak Hour - Build |
| Project Description | 2509 Lisbon Kwik Trip STH 164/CTH Q TIA |

## Site Information

| | |
|---|---|
| Intersection | STH 164 & CTH Q |
| E/W Street Name | CTH Q |
| N/S Street Name | STH 164 |
| Analysis Time Period (hrs) | 0.25 |
| Peak Hour Factor | 0.89 |
| Jurisdiction | WisDOT Abb TIA |

## Volume Adjustments and Site Characteristics

| Approach | EB | | | | WB | | | | NB | | | | SB | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Number of Lanes (N) | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 |
| Lane Assignment | LT | | TR | | LT | | TR | | LT | | TR | | LT | | TR | |
| Volume (V), veh/h | 0 | 100 | 305 | 55 | 0 | 175 | 60 | 25 | 0 | 85 | 310 | 180 | 0 | 115 | 660 | 40 |
| Percent Heavy Vehicles, % | 5 | 5 | 5 | 5 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 12 | 5 | 5 | 5 | 5 |
| Flow Rate ($v_{PCE}$), pc/h | 0 | 118 | 360 | 65 | 0 | 224 | 77 | 32 | 0 | 107 | 390 | 227 | 0 | 136 | 779 | 47 |
| Right-Turn Bypass | None | | | | None | | | | None | | | | None | | | |
| Conflicting Lanes | 2 | | | | 2 | | | | 2 | | | | 2 | | | |
| Pedestrians Crossing, p/h | 0 | | | | 0 | | | | 0 | | | | 0 | | | |

## Critical and Follow-Up Headway Adjustment

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Critical Headway (s) | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | |
| Follow-Up Headway (s) | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | |

## Flow Computations, Capacity and v/c Ratios

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Entry Flow ($v_e$), pc/h | 255.21 | 287.79 | | 224.00 | 109.00 | | 340.28 | 383.72 | | 452.14 | 509.86 | |
| Entry Volume veh/h | 243.06 | 274.09 | | 196.49 | 95.61 | | 303.82 | 342.61 | | 430.61 | 485.58 | |
| Circulating Flow ($v_c$), pc/h | 1139 | | | 615 | | | 614 | | | 408 | | |
| Exiting Flow ($v_{ex}$), pc/h | 723 | | | 231 | | | 540 | | | 1068 | | |
| Capacity ($c_{pce}$), pc/h | 564.79 | 564.79 | | 824.60 | 824.60 | | 825.20 | 825.20 | | 957.57 | 957.57 | |
| Capacity (c), veh/h | 537.90 | 537.90 | | 723.34 | 723.34 | | 736.79 | 736.79 | | 911.98 | 911.98 | |
| v/c Ratio (x) | 0.45 | 0.51 | | 0.27 | 0.13 | | 0.41 | 0.47 | | 0.47 | 0.53 | |

## Delay and Level of Service

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Lane Control Delay (d), s/veh | 14.4 | 16.0 | | 8.2 | 6.4 | | 10.3 | 11.4 | | 9.8 | 11.0 | |
| Lane LOS | B | C | | A | A | | B | B | | A | B | |
| 95% Queue, veh | 2.3 | 2.9 | | 1.1 | 0.5 | | 2.0 | 2.5 | | 2.6 | 3.2 | |
| Approach Delay, s/veh | 15.2 | | | 7.6 | | | 10.9 | | | 10.4 | | |
| Approach LOS | C | | | A | | | B | | | B | | |
| Intersection Delay, s/veh \| LOS | 11.3 | | | | | | B | | | | | |

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| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 5 | 425 | 150 | 35 | 35 | 5 |
| Future Volume (vph) | 5 | 425 | 150 | 35 | 35 | 5 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 50 | | | 0 | 0 | 0 |
| Storage Lanes | 1 | | | 0 | 1 | 0 |
| Taper Length (ft) | 25 | | | | 25 | |
| Link Speed (mph) | | 50 | 50 | | 30 | |
| Link Distance (ft) | | 120 | 311 | | 208 | |
| Travel Time (s) | | 1.6 | 4.2 | | 4.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 5% | 5% | 10% | 10% | 7% | 7% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 5 | 425 | 150 | 35 | 35 | 5 |
| Future Vol, veh/h | 5 | 425 | 150 | 35 | 35 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 5 | 5 | 10 | 10 | 7 | 7 |
| Mvmt Flow | 6 | 494 | 174 | 41 | 41 | 6 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 215 | 0 | - | 0 | 701 | 195 |
| Stage 1 | - | - | - | - | 195 | - |
| Stage 2 | - | - | - | - | 506 | - |
| Critical Hdwy | 4.15 | - | - | - | 6.47 | 6.27 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.47 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.47 | - |
| Follow-up Hdwy | 2.245 | - | - | - | 3.563 | 3.363 |
| Pot Cap-1 Maneuver | 1337 | - | - | - | 397 | 834 |
| Stage 1 | - | - | - | - | 826 | - |
| Stage 2 | - | - | - | - | 595 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1337 | - | - | - | 395 | 834 |
| Mov Cap-2 Maneuver | - | - | - | - | 395 | - |
| Stage 1 | - | - | - | - | 823 | - |
| Stage 2 | - | - | - | - | 595 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 14.6 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1337 | - | - | - | 423 |
| HCM Lane V/C Ratio | 0.004 | - | - | - | 0.11 |
| HCM Control Delay (s) | 7.7 | - | - | - | 14.6 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.4 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 20 | 305 | 30 | 90 | 55 | 10 | 10 | 1 | 100 | 25 | 1 | 5 |
| Future Volume (vph) | 20 | 305 | 30 | 90 | 55 | 10 | 10 | 1 | 100 | 25 | 1 | 5 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 50 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 0 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Link Speed (mph) | | 50 | | | 50 | | | 30 | | | 25 | |
| Link Distance (ft) | | 259 | | | 120 | | | 261 | | | 211 | |
| Travel Time (s) | | 3.5 | | | 1.6 | | | 5.9 | | | 5.8 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 5% | 5% | 5% | 10% | 10% | 10% | 2% | 2% | 2% | 1% | 1% | 1% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 20 | 305 | 30 | 90 | 55 | 10 | 10 | 1 | 100 | 25 | 1 | 5 |
| Future Vol, veh/h | 20 | 305 | 30 | 90 | 55 | 10 | 10 | 1 | 100 | 25 | 1 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 50 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 5 | 5 | 5 | 10 | 10 | 10 | 2 | 2 | 2 | 1 | 1 | 1 |
| Mvmt Flow | 23 | 355 | 35 | 105 | 64 | 12 | 12 | 1 | 116 | 29 | 1 | 6 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 76 | 0 | 0 | 390 | 0 | 0 | 703 | 705 | 373 | 757 | 716 | 70 |
| Stage 1 | - | - | - | - | - | - | 419 | 419 | - | 280 | 280 | - |
| Stage 2 | - | - | - | - | - | - | 284 | 286 | - | 477 | 436 | - |
| Critical Hdwy | 4.15 | - | - | 4.2 | - | - | 7.12 | 6.52 | 6.22 | 7.11 | 6.51 | 6.21 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.11 | 5.51 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.11 | 5.51 | - |
| Follow-up Hdwy | 2.245 | - | - | 2.29 | - | - | 3.518 | 4.018 | 3.318 | 3.509 | 4.009 | 3.309 |
| Pot Cap-1 Maneuver | 1504 | - | - | 1126 | - | - | 352 | 361 | 673 | 325 | 357 | 996 |
| Stage 1 | - | - | - | - | - | - | 612 | 590 | - | 729 | 681 | - |
| Stage 2 | - | - | - | - | - | - | 723 | 675 | - | 571 | 582 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1504 | - | - | 1126 | - | - | 320 | 322 | 673 | 246 | 319 | 996 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 320 | 322 | - | 246 | 319 | - |
| Stage 1 | - | - | - | - | - | - | 603 | 581 | - | 718 | 618 | - |
| Stage 2 | - | - | - | - | - | - | 651 | 612 | - | 464 | 573 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 4.9 | 12.5 | 19.6 |
| HCM LOS | | | B | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 607 | 1504 | - | - | 1126 | - | - | 282 |
| HCM Lane V/C Ratio | 0.213 | 0.015 | - | - | 0.093 | - | - | 0.128 |
| HCM Control Delay (s) | 12.5 | 7.4 | - | - | 8.5 | - | - | 19.6 |
| HCM Lane LOS | B | A | - | - | A | - | - | C |
| HCM 95th %tile Q(veh) | 0.8 | 0 | - | - | 0.3 | - | - | 0.4 |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 0 | 85 | 0 | 575 | 815 | 75 |
| Future Volume (vph) | 0 | 85 | 0 | 575 | 815 | 75 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | | 0% | 0% | |
| Storage Length (ft) | 0 | 0 | 0 | | | 0 |
| Storage Lanes | 0 | 1 | 0 | | | 0 |
| Taper Length (ft) | 25 | | 25 | | | |
| Link Speed (mph) | 30 | | | 55 | 55 | |
| Link Distance (ft) | 335 | | | 282 | 91 | |
| Travel Time (s) | 7.6 | | | 3.5 | 1.1 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 12% | 12% | 7% | 7% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | | 0% | 0% | |
| Shared Lane Traffic (%) | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↱ | | ↑ | ↑↳ | |
| Traffic Vol, veh/h | 0 | 85 | 0 | 575 | 815 | 75 |
| Future Vol, veh/h | 0 | 85 | 0 | 575 | 815 | 75 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 12 | 12 | 7 | 7 |
| Mvmt Flow | 0 | 90 | 0 | 612 | 867 | 80 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 907 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.22 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.318 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 334 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 334 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 19.7 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 334 | - | - |
| HCM Lane V/C Ratio | - | 0.271 | - | - |
| HCM Control Delay (s) | - | 19.7 | - | - |
| HCM Lane LOS | - | C | - | - |
| HCM 95th %tile Q(veh) | - | 1.1 | - | - |

# HCS7 Roundabouts Report

## General Information

| | |
|---|---|
| Analyst | TSC |
| Agency or Co. | TADI |
| Date Performed | 4/20/2020 |
| Analysis Year | 2017 |
| Time Analyzed | PM Peak Hour - Build |
| Project Description | 2509 Lisbon Kwik Trip STH 164/CTH Q TIA |

## Site Information

| | |
|---|---|
| Intersection | STH 164 & CTH Q |
| E/W Street Name | CTH Q |
| N/S Street Name | STH 164 |
| Analysis Time Period (hrs) | 0.25 |
| Peak Hour Factor | 0.96 |
| Jurisdiction | WisDOT Abb TIA |

## Volume Adjustments and Site Characteristics

| Approach | EB | | | | WB | | | | NB | | | | SB | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Number of Lanes (N) | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 |
| Lane Assignment | LT | | TR | | LT | | TR | | LT | | TR | | LT | | TR | |
| Volume (V), veh/h | 0 | 90 | 155 | 40 | 0 | 180 | 315 | 125 | 0 | 115 | 640 | 180 | 0 | 50 | 355 | 60 |
| Percent Heavy Vehicles, % | 8 | 8 | 8 | 8 | 1 | 1 | 1 | 1 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| Flow Rate ($v_{PCE}$), pc/h | 0 | 101 | 174 | 45 | 0 | 189 | 331 | 132 | 0 | 127 | 707 | 199 | 0 | 56 | 396 | 67 |
| Right-Turn Bypass | None | | | | None | | | | None | | | | None | | | |
| Conflicting Lanes | 2 | | | | 2 | | | | 2 | | | | 2 | | | |
| Pedestrians Crossing, p/h | 0 | | | | 0 | | | | 0 | | | | 0 | | | |

## Critical and Follow-Up Headway Adjustment

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Critical Headway (s) | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | | 4.0000 | 4.0000 | |
| Follow-Up Headway (s) | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | | 2.8000 | 2.8000 | |

## Flow Computations, Capacity and v/c Ratios

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Entry Flow ($v_e$), pc/h | 150.40 | 169.60 | | 306.44 | 345.56 | | 485.51 | 547.49 | | 243.93 | 275.07 | |
| Entry Volume veh/h | 139.26 | 157.04 | | 303.41 | 342.14 | | 458.03 | 516.50 | | 227.97 | 257.07 | |
| Circulating Flow ($v_c$), pc/h | 641 | | | 935 | | | 331 | | | 647 | | |
| Exiting Flow ($v_{ex}$), pc/h | 429 | | | 525 | | | 940 | | | 630 | | |
| Capacity ($c_{pce}$), pc/h | 809.26 | 809.26 | | 654.45 | 654.45 | | 1012.33 | 1012.33 | | 805.76 | 805.76 | |
| Capacity (c), veh/h | 749.32 | 749.32 | | 647.97 | 647.97 | | 955.03 | 955.03 | | 753.05 | 753.05 | |
| v/c Ratio (x) | 0.19 | 0.21 | | 0.47 | 0.53 | | 0.48 | 0.54 | | 0.30 | 0.34 | |

## Delay and Level of Service

| Approach | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass | Left | Right | Bypass |
| Lane Control Delay (d), s/veh | 6.8 | 7.1 | | 12.7 | 14.2 | | 9.6 | 10.8 | | 8.4 | 8.9 | |
| Lane LOS | A | A | | B | B | | A | B | | A | A | |
| 95% Queue, veh | 0.7 | 0.8 | | 2.5 | 3.1 | | 2.7 | 3.3 | | 1.3 | 1.5 | |
| Approach Delay, s/veh | 7.0 | | | 13.5 | | | 10.2 | | | 8.7 | | |
| Approach LOS | A | | | B | | | B | | | A | | |
| Intersection Delay, s/veh \| LOS | 10.4 | | | | | | B | | | | | |

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| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 5 | 265 | 450 | 40 | 20 | 15 |
| Future Volume (vph) | 5 | 265 | 450 | 40 | 20 | 15 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 50 | | | 0 | 0 | 0 |
| Storage Lanes | 1 | | | 0 | 1 | 0 |
| Taper Length (ft) | 25 | | | | 25 | |
| Link Speed (mph) | | 50 | 50 | | 30 | |
| Link Distance (ft) | | 120 | 311 | | 208 | |
| Travel Time (s) | | 1.6 | 4.2 | | 4.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 8% | 8% | 2% | 2% | 1% | 1% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 5 | 265 | 450 | 40 | 20 | 15 |
| Future Vol, veh/h | 5 | 265 | 450 | 40 | 20 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 8 | 8 | 2 | 2 | 1 | 1 |
| Mvmt Flow | 5 | 288 | 489 | 43 | 22 | 16 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 532 | 0 | - | 0 | 809 | 511 |
| Stage 1 | - | - | - | - | 511 | - |
| Stage 2 | - | - | - | - | 298 | - |
| Critical Hdwy | 4.18 | - | - | - | 6.41 | 6.21 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.41 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.41 | - |
| Follow-up Hdwy | 2.272 | - | - | - | 3.509 | 3.309 |
| Pot Cap-1 Maneuver | 1006 | - | - | - | 351 | 565 |
| Stage 1 | - | - | - | - | 604 | - |
| Stage 2 | - | - | - | - | 755 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1006 | - | - | - | 349 | 565 |
| Mov Cap-2 Maneuver | - | - | - | - | 349 | - |
| Stage 1 | - | - | - | - | 601 | - |
| Stage 2 | - | - | - | - | 755 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 14.5 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1006 | - | - | - | 417 |
| HCM Lane V/C Ratio | 0.005 | - | - | - | 0.091 |
| HCM Control Delay (s) | 8.6 | - | - | - | 14.5 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.3 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 10 | 155 | 20 | 105 | 350 | 10 | 15 | 1 | 90 | 25 | 1 | 15 |
| Future Volume (vph) | 10 | 155 | 20 | 105 | 350 | 10 | 15 | 1 | 90 | 25 | 1 | 15 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 50 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 0 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Link Speed (mph) | | 50 | | | 50 | | | 25 | | | 25 | |
| Link Distance (ft) | | 259 | | | 120 | | | 261 | | | 211 | |
| Travel Time (s) | | 3.5 | | | 1.6 | | | 7.1 | | | 5.8 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 8% | 8% | 8% | 2% | 2% | 2% | 2% | 2% | 2% | 7% | 7% | 7% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 10 | 155 | 20 | 105 | 350 | 10 | 15 | 1 | 90 | 25 | 1 | 15 |
| Future Vol, veh/h | 10 | 155 | 20 | 105 | 350 | 10 | 15 | 1 | 90 | 25 | 1 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | - | 50 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 8 | 8 | 8 | 2 | 2 | 2 | 2 | 2 | 2 | 7 | 7 | 7 |
| Mvmt Flow | 11 | 168 | 22 | 114 | 380 | 11 | 16 | 1 | 98 | 27 | 1 | 16 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 391 | 0 | 0 | 190 | 0 | 0 | 823 | 820 | 179 | 865 | 826 | 386 |
| Stage 1 | - | - | - | - | - | - | 201 | 201 | - | 614 | 614 | - |
| Stage 2 | - | - | - | - | - | - | 622 | 619 | - | 251 | 212 | - |
| Critical Hdwy | 4.18 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.17 | 6.57 | 6.27 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.17 | 5.57 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.17 | 5.57 | - |
| Follow-up Hdwy | 2.272 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.563 | 4.063 | 3.363 |
| Pot Cap-1 Maneuver | 1136 | - | - | 1384 | - | - | 292 | 310 | 864 | 269 | 302 | 651 |
| Stage 1 | - | - | - | - | - | - | 801 | 735 | - | 471 | 475 | - |
| Stage 2 | - | - | - | - | - | - | 474 | 480 | - | 742 | 718 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1136 | - | - | 1384 | - | - | 264 | 282 | 864 | 221 | 275 | 651 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 264 | 282 | - | 221 | 275 | - |
| Stage 1 | - | - | - | - | - | - | 793 | 728 | - | 466 | 436 | - |
| Stage 2 | - | - | - | - | - | - | 423 | 441 | - | 651 | 711 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 1.8 | 11.8 | 19.5 |
| HCM LOS | | | B | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 644 | 1136 | - | - | 1384 | - | - | 293 |
| HCM Lane V/C Ratio | 0.179 | 0.01 | - | - | 0.082 | - | - | 0.152 |
| HCM Control Delay (s) | 11.8 | 8.2 | - | - | 7.8 | - | - | 19.5 |
| HCM Lane LOS | B | A | - | - | A | - | - | C |
| HCM 95th %tile Q(veh) | 0.6 | 0 | - | - | 0.3 | - | - | 0.5 |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 0 | 55 | 0 | 935 | 535 | 40 |
| Future Volume (vph) | 0 | 55 | 0 | 935 | 535 | 40 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | | 0% | 0% | |
| Storage Length (ft) | 0 | 0 | 0 | | | 0 |
| Storage Lanes | 0 | 1 | 0 | | | 0 |
| Taper Length (ft) | 25 | | 25 | | | |
| Link Speed (mph) | 30 | | | 55 | 55 | |
| Link Distance (ft) | 335 | | | 282 | 91 | |
| Travel Time (s) | 7.6 | | | 3.5 | 1.1 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 6% | 6% | 6% | 6% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | | 0% | 0% | |
| Shared Lane Traffic (%) | | | | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | ↱ | | ↑ | ↑↳ | |
| Traffic Vol, veh/h | 0 | 55 | 0 | 935 | 535 | 40 |
| Future Vol, veh/h | 0 | 55 | 0 | 935 | 535 | 40 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 6 | 6 | 6 | 6 |
| Mvmt Flow | 0 | 61 | 0 | 1039 | 594 | 44 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 616 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.22 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.318 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 491 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 491 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 13.4 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|
| Capacity (veh/h) | - | 491 | - | - |
| HCM Lane V/C Ratio | - | 0.124 | - | - |
| HCM Control Delay (s) | - | 13.4 | - | - |
| HCM Lane LOS | - | B | - | - |
| HCM 95th %tile Q(veh) | - | 0.4 | - | - |

# APPENDIX H

# Intersection Sight Distance Calculations

# ISD CALCULATIONS

Performed by: TADI-TSC Date: 4/21/2020
Location: STH 164 @ Proposed D/W

Mainline Name: STH 164
Sidestreet Name: Proposed D/W

| | | | | |
|---|---|---|---|---|
| T-Intersection (1=yes, 0=no): | 1 | | | |
| Design Speed from Left: | 55 | mph | 80.67 | fps |
| Design Speed from Right: | 55 | mph | 80.67 | fps |
| Median Width: | 25 | feet | 2.08 | equivalent lanes |
| Near Side Right: | 1 | lane or taper | | |
| Near Side Thru: | 2 | lane(s) | | |
| Far Side Thru: | 1 | lane(s) | | |
| Far Side Right: | 0 | lane or taper | | |

| | P | SU | WB | |
|---|---|---|---|---|
| Design Vehicles: | x | x | x | (place an "X") |

CASE B1: Left Turn from Minor Street or Median (driver looking right)

| | *MINIMUM ISD* | | | *DESIRABLE ISD* | | |
|---|---|---|---|---|---|---|
| | P | SU | WB | P | SU | WB |
| Base Time Gap, sec: | 7.5 | 9.5 | 11.5 | 10.0 | 12.0 | 13.0 |
| Additional Time Gap, sec: | 0.0 | 2.9 | 2.9 | 0.0 | 2.9 | 2.9 |
| Total Time Gap, sec: | 7.5 | 12.4 | 14.4 | 10.0 | 14.9 | 15.9 |
| Case B1 ISD, feet: | 605.0 | 1000.3 | 1161.6 | 806.7 | 1201.9 | 1282.6 |
| Rounded Case B1 ISD, feet: | 610 | 1005 | 1165 | 810 | 1205 | 1285 |

CASE B2: Right Turn from Minor Street (driver looking left)

| | *MINIMUM ISD* | | | *DESIRABLE ISD* | | |
|---|---|---|---|---|---|---|
| | P | SU | WB | P | SU | WB |
| Base Time Gap, sec: | 6.5 | 8.5 | 10.5 | 8.0 | 10.0 | 12.0 |
| Additional Time Gap, sec: | 0.5 | 0.7 | 0.7 | 0.5 | 0.7 | 0.7 |
| Total Time Gap, sec: | 7.0 | 9.2 | 11.2 | 8.5 | 10.7 | 12.7 |
| Case B2 ISD, feet: | 564.7 | 742.1 | 903.5 | 685.7 | 863.1 | 1024.5 |
| Rounded Case B2 ISD, feet: | 565 | 745 | 905 | 690 | 865 | 1025 |

CASE B3: Crossing from Minor Street (driver looking left)

| | *MINIMUM ISD* | | | *DESIRABLE ISD* | | |
|---|---|---|---|---|---|---|
| | P | SU | WB | P | SU | WB |
| Base Time Gap, sec: | 6.5 | 8.5 | 10.5 | 7.0 | 10.0 | 13.0 |
| Additional Time Gap, sec: | 0.5 | 0.7 | 0.7 | 0.5 | 0.7 | 0.7 |
| Total Time Gap, sec: | 7.0 | 9.2 | 11.2 | 7.5 | 10.7 | 13.7 |
| Case B3 ISD, feet: | 564.7 | 742.1 | 903.5 | 605.0 | 863.1 | 1105.1 |
| Rounded Case B3 ISD, feet: | 565 | 745 | 905 | 610 | 865 | 1110 |

CASE B3: Crossing from Minor Street or Median (driver looking right)

| | *MINIMUM ISD* | | | *DESIRABLE ISD* | | |
|---|---|---|---|---|---|---|
| | P | SU | WB | P | SU | WB |
| Base Time Gap, sec: | 6.5 | 8.5 | 10.5 | 7.0 | 10.0 | 13.0 |
| Additional Time Gap, sec: | -6.5 | -8.5 | -10.5 | -7.0 | -10.0 | -13.0 |
| Total Time Gap, sec: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Case B3 ISD, feet: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rounded Case B3 ISD, feet: | 0 | 0 | 0 | 0 | 0 | 0 |

CASE F: Left from Major to Minor (driver looking to left of access)

| | *MINIMUM ISD* | | | *DESIRABLE ISD* | | |
|---|---|---|---|---|---|---|
| | P | SU | WB | P | SU | WB |
| Base Time Gap, sec: | 5.5 | 6.5 | 7.5 | 8.0 | 8.0 | 8.0 |
| Additional Time Gap, sec: | 1.0 | 1.4 | 1.4 | 1.0 | 1.4 | 1.4 |
| Total Time Gap, sec: | 6.5 | 7.9 | 8.9 | 9.0 | 9.4 | 9.4 |
| Case F ISD, feet: | 524.3 | 637.3 | 717.9 | 726.0 | 758.3 | 758.3 |
| Rounded Case F ISD, feet: | 525 | 640 | 720 | 730 | 760 | 760 |

**CONTROLLING DISTANCES:**

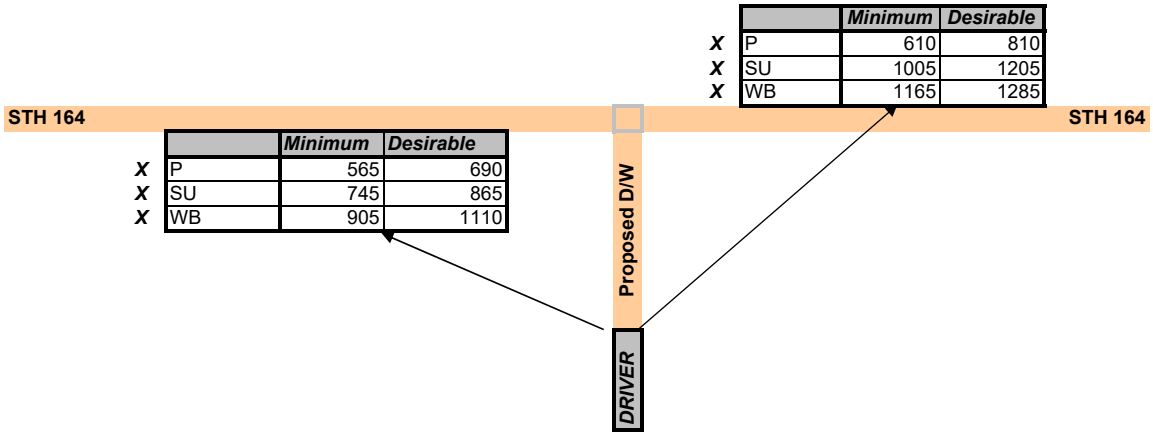
| | ***MINIMUM ISD*** | | | ***DESIRABLE ISD*** | | |
|---|---|---|---|---|---|---|
| | **P** | **SU** | **WB** | **P** | **SU** | **WB** |
| **To Left of Access:** | **565** | **745** | **905** | **690** | **865** | **1110** |
| **To Right of Access:** | **610** | **1005** | **1165** | **810** | **1205** | **1285** |
| **Left-Turn from Mainline:** | **525** | **640** | **720** | **730** | **760** | **760** |

*NOTES: A median width of 25' or more necessary for two-stage of 19' P-Vehicle*
*A median width of 36' or more necessary for two-stage of 30' SU-Vehicle*
*A median width of 71' or more necessary for two-stage of 65' WB-Vehicle*

# *ISD CALCULATIONS*

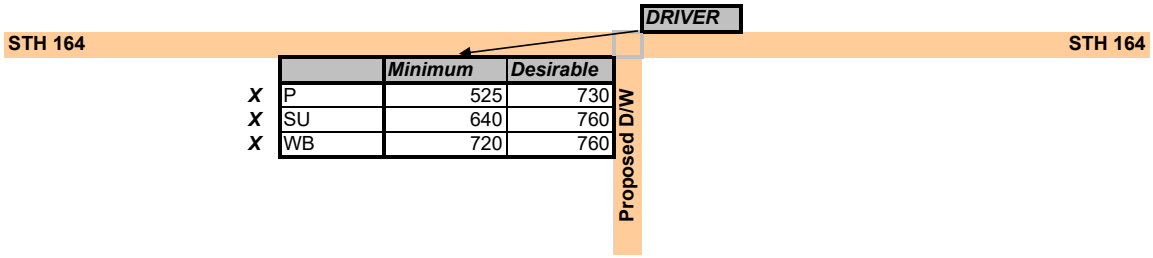
Performed by: TADI-TSC Date: 4/21/2020
Location: STH 164 @ Proposed D/W
0

***SPECIAL INSTRUCTIONS:***



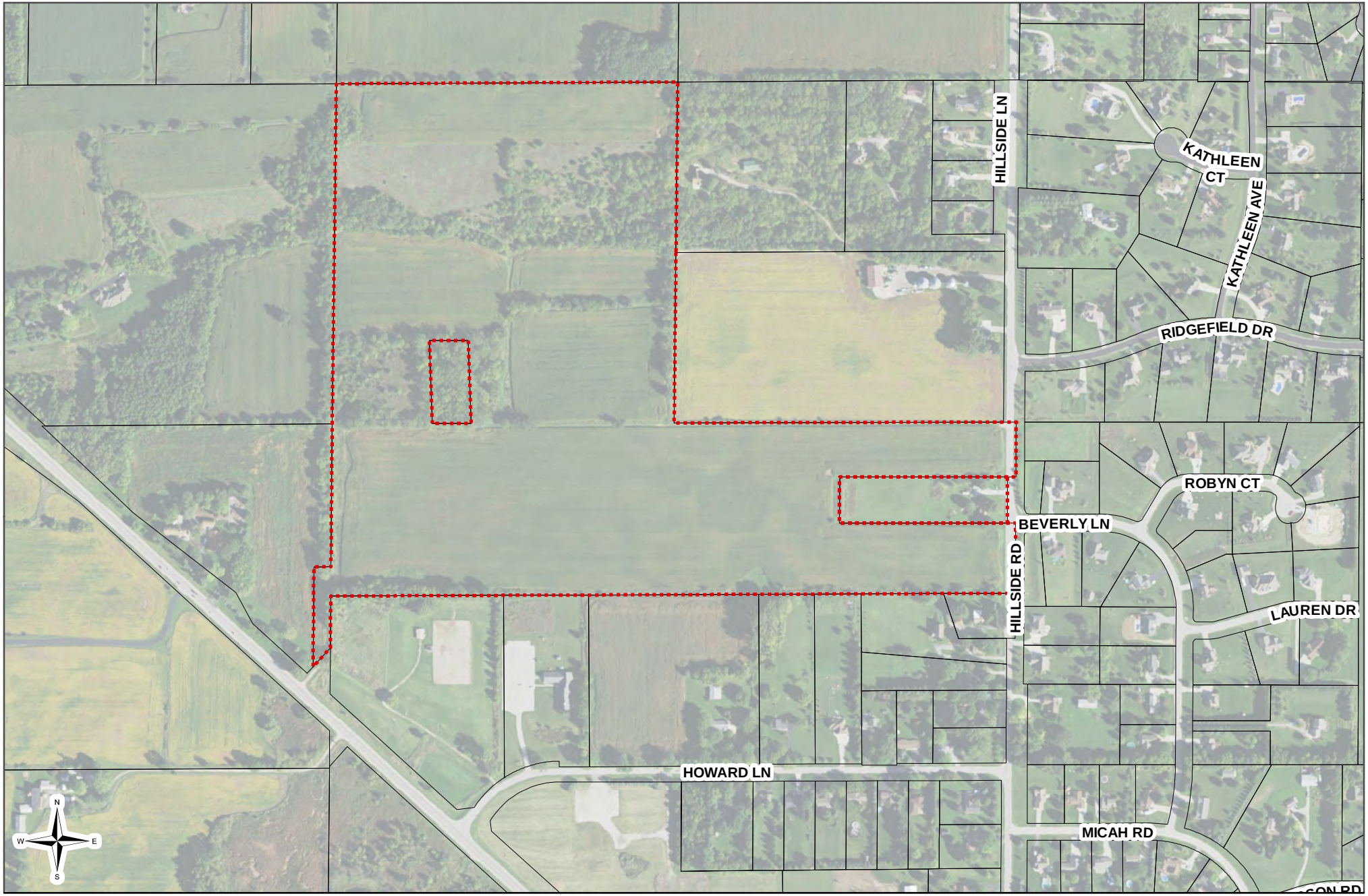

| | | Minimum | Desirable |
|---|---|---|---|
| X | P | 565 | 690 |
| X | SU | 745 | 865 |
| X | WB | 905 | 1110 |

| | | Minimum | Desirable |
|---|---|---|---|
| X | P | 610 | 810 |
| X | SU | 1005 | 1205 |
| X | WB | 1165 | 1285 |




| | | Minimum | Desirable |
|---|---|---|---|
| X | P | 525 | 730 |
| X | SU | 640 | 760 |
| X | WB | 720 | 760 |

# Item 5D – Attachments




# Parcel ID 0205995 & 0208987: Site Map

*Town of Lisbon*

1 inch = 500 feet

0 250 500 1,000 Feet

Town of Lisbon Boundary

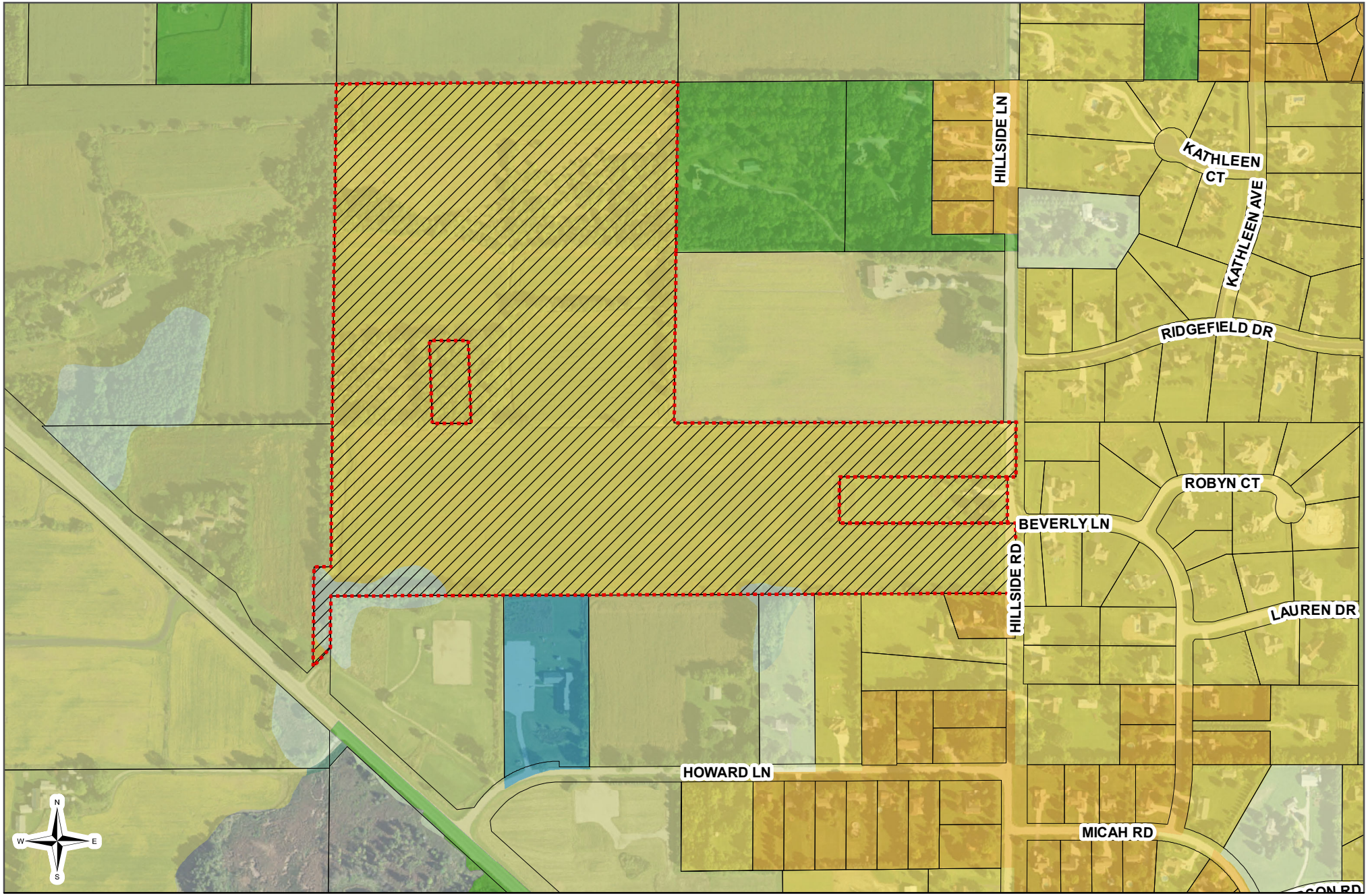
Subject Parcels

vierbicher
planners | engineers | advisors

REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
N27 W23957 Paul Road, Suite 105, Pewaukee, WI 53072
Phone: (262) 875-5000 Fax: (608) 826-0530

M:\Lisbon, Town of\170246 - Town Planning\Planning & Zoning

Data Sources: Vierbicher, Town of Lisbon, Waukwsha County, ESRI




# Parcel ID 0205995 & 0208987: Current Zoning

*Town of Lisbon*

1 inch = 500 feet

0 250 500 1,000 Feet

Subject Parcels

PUD Area

| | | | | | | |
|---|---|---|---|---|---|---|
| AD-10 | A-5 | R-2 | B-1 | B-4 | M-1 | C-1 |
| RD-5 | A-3 | R-3 | B-2 | B-P | M-2 | UC |
| A-10 | R-1 | RM | B-3 | Q-1 | P-I | PR |

vierbicher
planners | engineers | advisors

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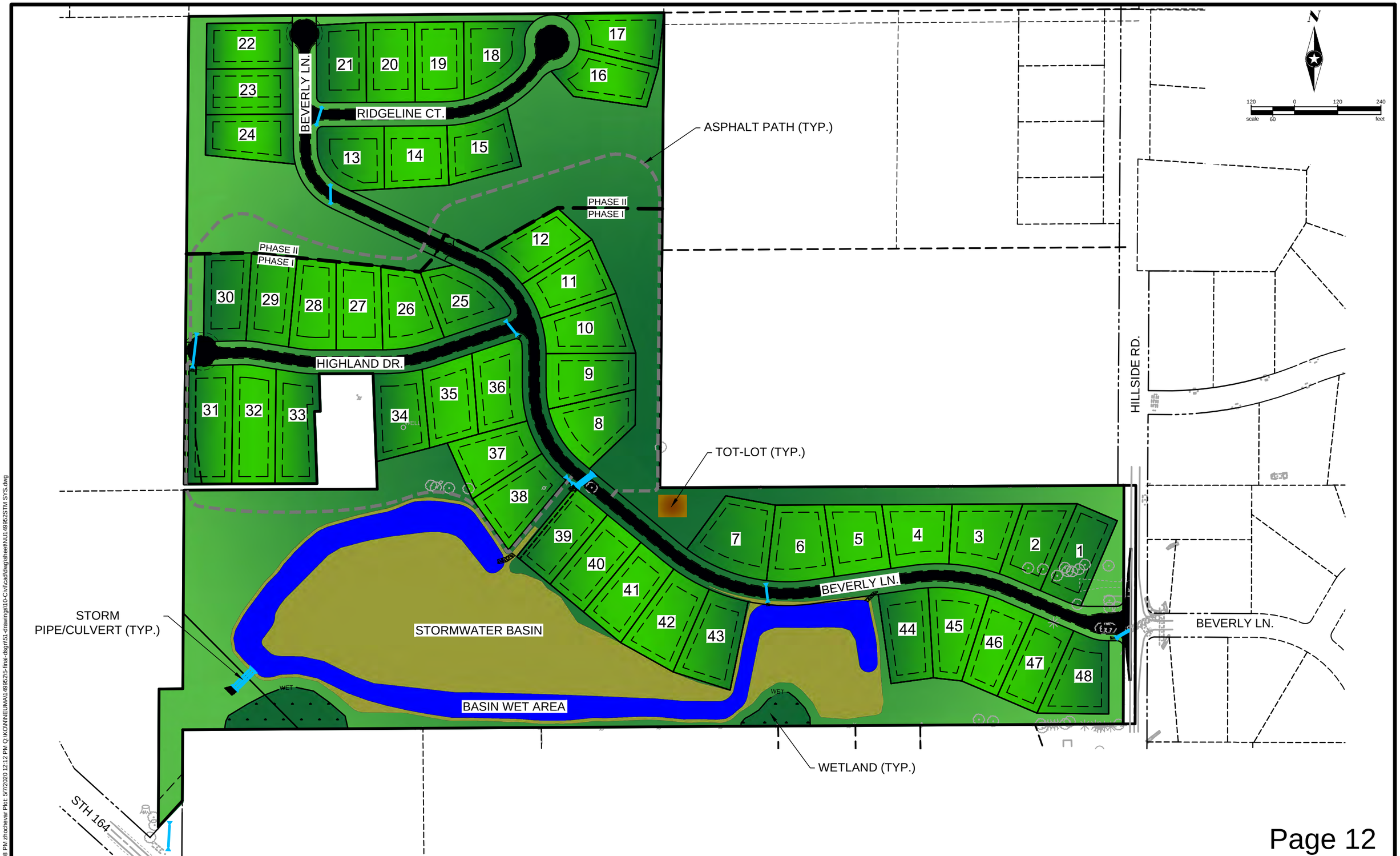


Page 12

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| DRAWN BY: ZJH<br>DESIGNER: MAM<br>CHECKED BY: MRG<br>DESIGN TEAM | NO. | BY | DATE | REVISIONS | |

SEH
PHONE: 262.646.6855
501 MAPLE AVENUE
DELAFIELD, WI 53018
www.sehinc.com

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O E E O MENT E T

FILE NO. 149952

DATE 05/07/2020

1 OF 1

**DEVELOPER'S AGREEMENT PHASE I**
**FOR HILLSIDE RIDGE**
**TOWN OF LISBON, WAUKESHA COUNTY, WISCONSIN**

**THIS AGREEMENT** made this ____ day of June, 2020, between Hillside Ridge, LLC, N27W24025 Paul Court, Suite 100, Pewaukee, WI 53072, hereinafter called "DEVELOPER," and the Town of Lisbon in the County of Waukesha and the State of Wisconsin, hereinafter called the "TOWN."

**WHEREAS**, the DEVELOPER is the owner of approximately 79 acres of land in the TOWN, upon which the DEVELOPER desired to construct a 48-lot conservation subdivision, said land being described on **EXHIBIT A** attached hereto and incorporated herein, hereinafter called "SUBJECT LANDS"; and

**WHEREAS**, the DEVELOPER desires to divide and develop SUBJECT LANDS for residential purposes by use of the standard regulations as set forth in Chapter 236 of the Wisconsin Statutes and the municipal ordinance regulating land division and development; and

**WHEREAS**, the DEVELOPER desires to improve Lots 1 through 12 and Lots 25 through 48 in the Summer of 2020 as part of Phase I of the Development; and

**WHEREAS**, the DEVELOPER desires to improve certain Lots in future phases of the Development, which will be addressed by the Town at such a time as an application for development is received; and

**WHEREAS**, Wis. Stat. § 236.13 provides that, as a condition of approval, the governing body of a municipality within which the subject lands lie may require that the DEVELOPER make and install any public improvements reasonably necessary and/or that the DEVELOPER provide financial security to ensure that the DEVELOPER will make these improvements within reasonable time; and

**WHEREAS**, said SUBJECT LANDS are presently zoned R-1 with a small portion zoned A-10 and C-1, and utilizing a Residential Planned Unit Development (PUD), which allows the above development; and

**WHEREAS**, said SUBJECT LANDS received approval by the TOWN for a Residential PUD Overlay to allow for lots sizes of less than one acre. The development shall follow adopted PUD General Development Plan and Specific Development Plan details approved by the Town Board and Plan Commission.

**WHEREAS**, the DEVELOPER and TOWN desire to enter into this Agreement in order to ensure that the DEVELOPER will make and install all public improvements which are reasonably necessary and further that the DEVELOPER shall dedicate the public

improvements to the TOWN, and the TOWN agrees to accept said improvements, provided that said public improvements are constructed to municipal specifications, all applicable government regulations and this Agreement without cost to the TOWN; and

**WHEREAS**, this Agreement is necessary to implement the TOWN zoning and land division ordinances; and

**WHEREAS**, the DEVELOPER agrees to develop SUBJECT LANDS as herein described in accordance with this Agreement, conditions approved by the TOWN Plan Commission and TOWN Board, conditions of certain agencies and individuals in the County, all TOWN ordinances and all laws and regulations governing said development;

**NOW, THEREFORE**, in consideration of the mutual promises and covenants contained herein, the DEVELOPER does hereby agree to develop SUBJECT LANDS as follows and as otherwise regulated by TOWN ordinances and all laws and regulations governing said development, the parties hereto agree as follows:

## DEVELOPER'S COVENANTS

## I. IMPROVEMENTS

A. PUBLIC STREETS. The DEVELOPER hereby agrees that:

1. Prior to the start of construction of improvements, the DEVELOPER shall provide to the TOWN written certification from the DEVELOPER'S Engineer or Surveyor that all public street plans are in conformance with all federal, state, county and TOWN specifications, regulations and ordinances, and written proof from the TOWN Engineer evidencing review and approval of said plans.

2. The DEVELOPER shall grade and install all planned public streets in accordance with the preliminary plat, approved development plan of said development or subdivision, which is attached to this document, or final plat as the case may be and the plans and specifications on file in the TOWN Clerk's office.

3. Construction of the public streets providing access to and fronting a specific lot will be completed, presented and approved by the TOWN Board through the first lift of asphalt before any building permits are issued for said lot.

4. The first lift of the public streets will be completed and presented to the TOWN Board no later than November 30, 2020 or as extended by the TOWN Board.

5. The final lift of asphalt shall be placed on all public streets after at least one winter season, and no sooner than 10 months from the installation of the first lift of asphalt but no longer than 14 months from the installation of the first lift of asphalt.

6. The DEVELOPER shall maintain public streets, including snow plowing, until accepted by resolution by the TOWN Board.

7. The DEVELOPER shall furnish "as built" plans showing changes from the construction plans, pursuant to specifications approved by the TOWN Engineer.

8. The DEVELOPER shall have ultimate responsibility for cleaning up any and all construction related mud, dirt, stone or debris on the streets until such time as the final lift of asphalt has been installed by the DEVELOPER and accepted by the TOWN Board. The TOWN shall make a reasonable effort to require the contractor, who is responsible for placing the mud, dirt, stone or debris on the street, to clean up the same or to hold the subject property owner who hired the contractor responsible. The DEVELOPER and/or subject property owner shall clean up the streets within forty-eight (48) hours after receiving a notice from the TOWN. If said mud, dirt, stone or debris are not cleaned up after notification to the DEVELOPER, the TOWN Board will do so at the DEVELOPER'S and/or subject property owner's expense, at the option of the TOWN.

B. SURFACE AND STORM WATER DRAINAGE. The DEVELOPER hereby agrees that:

1. Prior to the start of construction of improvements, the DEVELOPER shall provide to the TOWN written certification from the DEVELOPER'S Engineer or Surveyor that all surface and storm water drainage facilities and erosion control plans are in conformance with all federal, state, county and TOWN regulations, guidelines, specifications, laws and ordinances, and written proof that the TOWN Engineer and the County Department of Environmental Resources, Division of Land Conservation, have reviewed and approved said plans.

2. During the terms of development, the DEVELOPER shall construct, install, furnish and provide adequate facilities for surface and storm water drainage throughout the development with adequate capacity to transmit the anticipated flow from the development and adjacent property, in accordance with all plans and specifications, and all applicable federal, state, county and TOWN regulations, guidelines, specifications, laws and ordinances, and as reviewed and approved by the TOWN Engineer and the County Department of Environmental Resources, Division of Land

Conservation, including where necessary as determined by the TOWN Engineer, curb, gutter, storm sewers, catch basins, and infiltration/retention/detention basins.

3. The DEVELOPER agrees that the site grading and construction of surface and storm water drainage facilities shall be completed and accepted by the TOWN Board, and comply with Section XII of this agreement before any building permits are issued.

4. The Developer agrees to maintain storm water drainage and detention facilities as depicted on the drainage plans submitted to and approved by the Town Engineer. In the event drainage problems arise within the project, or are in any way related to activities conducted on the project or to the installation and maintenance of the storm water drainage and detention facilities or determined to be related to drainage problems on adjoining lands, they shall be the responsibility of the Developer, or the subsequent owners of the lots of record, to correct the problems at the owner's expense.

5. The TOWN Board will not accept the surface and storm water drainage system until the entire system is installed and landscaped in accordance with plans and specifications.

6. If required, the DEVELOPER shall clean all storm sewers, if any, prior to issuance of building permits and acceptance of improvements by the TOWN Board.

7. During the time of development or prior to acceptance of all public improvements, whichever is later, the TOWN retains the right to require DEVELOPER to install additional surface and storm water drainage measures if it is determined by the TOWN Engineer that the original surface and storm water drainage plan as designed and/or constructed does not provide reasonable storm water drainage within the development and/or creates additional storm water runoff impacts to the surrounding areas. If DEVELOPER fails to construct the additional improvement within a reasonable period of time, the TOWN may cause such work to be carried out and shall charge the cost of the same against the financial guarantee held by the TOWN pursuant to this Agreement.

8. The DEVELOPER shall furnish "as built" plans of the entire drainage system, pursuant to specifications approved by the TOWN Engineer prior to the issuance of Building Permits, if required by the TOWN Engineer.

9. The DEVELOPER shall comply with all applicable requirements of Chapter 14, Article VIII of the Waukesha County Code of Ordinances (Storm Water Management and Erosion Control), and any future amendments thereto, including implementation of approved storm water management and erosion control plans. In accordance with an intergovernmental agreement entered between the TOWN and the County, the financial assurance held by the TOWN for purposes of enforcement of this Agreement may be utilized by Waukesha County for enforcement of Chapter 14, Article VIII.

C. GRADING, EROSION AND SILT CONTROL: The DEVELOPER hereby agrees that:

1. Prior to commencing site grading and execution, the DEVELOPER shall provide to the TOWN written certification from the DEVELOPER'S Engineer that said plan, once implemented, shall meet all federal, state, County and local regulations, guidelines, specifications, laws and ordinances, including proof of notification of land disturbances to the State of Wisconsin Department of Natural Resources, and written proof that the TOWN Engineer, Wisconsin Department of Natural Resources and the Army Corps of Engineers, if applicable, have approved said plans.

2. The DEVELOPER shall not materially deviate from the construction sequencing identified in the storm water management and erosion control plans without prior written approval to do so from the Wisconsin Department of Natural Resources and the TOWN Engineer, such approval not to be unreasonably withheld, conditioned, or delayed.

3. The DEVELOPER shall cause all grading, excavation, open cuts, side slopes and other land surface disturbances on or adjacent to the Property to be so seeded and mulched, sodded or otherwise protected that erosion, siltation, sedimentation and washing are prevented in accordance with the plans and specifications reviewed and approved by the TOWN Engineer, Wisconsin Department of Natural Resources and Army Corps of Engineers, if applicable. If needed, the DEVELOPER is responsible for obtaining all necessary consents from neighboring property owners required to comply with this Section II(C)(3); in the event the DEVELOPER is unable to obtain such consents despite its commercially reasonable good faith efforts, the TOWN and the DEVELOPER agree to cooperate in good faith to perform any required erosion control measures in a manner reasonably acceptable to the TOWN.

4. All disturbed areas of the Property and adjacent to the Property shall be restored in accordance with the approved plans and to the reasonable satisfaction of the TOWN Engineer.

5. Ditches shall be to final grade and seeded before occupancy permits will be issued.

D. LANDSCAPING AND SITE WORK: The DEVELOPER hereby agrees that:

1. To the extent practicable, the DEVELOPER agrees to exercise commercially reasonable efforts to preserve the existing trees, shrubbery, vines, and grasses not actually lying on the public streets, drainage ways, building foundation sites, private driveways, soil absorption waste disposal areas, paths, and trails. The Developer shall submit a landscape plan in a form acceptable to the Town Plan Commission and Town Engineer.

2. The DEVELOPER, as required by the TOWN, shall remove and lawfully dispose of buildings, destroyed trees, brush, tree trunks, shrubs and other natural growth and all rubbish.

3. Landscaping and removal of unwanted items, will be completed and certified as complete by the TOWN Engineer prior to the issuance of any building permits.

4. The TOWN of Lisbon has the right to trim and remove any features which would interfere with safe operation and maintenance of the TOWN right-of-ways and drainage ways.

5. The landscape plan must indicate the boulevard island in Beverly Lane as set forth on the Final Plat and approved by the TOWN Engineer and TOWN Board.

6. Before an occupancy permit is issued for a respective lot, the DEVELOPER shall install trees, in accordance with Section 12(8)(12) of the TOWN'S Chapter 12, Land Division and Development Ordinance, and DEVELOPER agrees to place said requirement in the Declaration of Restrictions.

E. STREET SIGNS AND TRAFFIC CONTROL SIGNS: The DEVELOPER hereby agrees that:

1. Street signs, traffic control signs, culverts, posts, and guard rails as required by the TOWN in accordance with Chapter 12 (8)(11) of the TOWN'S Chapter 12, Land Division and Development Ordinance, shall be obtained and placed by the TOWN, and the cost thereof shall be paid by the DEVELOPER.

2. All traffic control signs and street signs, as required by the TOWN, will be installed within five (5) working days of the placement of the first lift of asphalt.

F. FIRE TANK PROTECTION: DEVELOPER shall pay a fee in the amount of $15,000 to the TOWN equivalent to the cost of installed on-site water storage tanks per the schedule listed in Section 8.14(A) of the Land Division and Development Ordinance. All payments in lieu of shall be payed to the Town before the signing of the Final Plat.

G. OTHER UTILITIES. The Developer shall cause gas, electrical power, telephone, and cable television facilities to be installed in such a manner as to make adequate service available to each lot. All new electrical distribution lines, television cables, and telephone lines from which lots are individually served shall be underground unless the TOWN Board, in its sole discretion, specifically allows overhead poles for the following reasons:

1. Topography, soil, water table, solid rock, boulders, or other physical conditions which would make underground installation unreasonable or impractical; or

2. The lots to be served by said facilities can be served directly from existing overhead facilities.

3. The Developer shall work with WE Energies to record any necessary utility easements. The utility easement shall be recorded by separate documents and copies provided to the Town prior issuance of building permits.

## II. TIME OF COMPLETION OF IMPROVEMENTS

A. The improvements set forth in Section I above shall be completed by the DEVELOPER in total within 12 months of the date of this Agreement being signed except as otherwise provided for in this Agreement.

B. The DEVELOPER shall, at the DEVELOPER'S expense, retain the services of a consulting engineer and such other professionals as necessary to provide construction administration and staking. The TOWN will provide periodic construction observation and material testing as necessary during the construction of the Improvements. Said construction review shall not relieve the contractor of any obligation to construct the Improvements in conformity with the plans and specifications, nor shall it in any manner make the TOWN or TOWN Engineer, an insurer of, nor relieve the contractor of, any obligations or guarantees concerning the contractor's performance. The DEVELOPER shall reimburse the TOWN for the actual costs of these services as set forth in Section XIV.

C. In addition to other site visits conducted by the TOWN to observe construction, the Town shall, in the company of a representative of the DEVELOPER'S engineer, make site visits and observe construction at the following stages of construction:

1. After installation of erosion control measures;
2. After the completion of grading;
3. During the construction of storm water ponds;
4. During the roll test of street subgrade;
5. During the installation of culverts;
6. During the installation of concrete curb and gutter;
7. During the installation of storm sewer improvements;
8. During the placement of aggregate base course;
9. During paving;
10. Pre-final surface installation per Paragraph D of this Section below;
11. After completion of the Improvements.

The TOWN Engineer and TOWN shall be given notice of at least two full business days prior to the start of construction, as well as two full business days' notice of when each stage of construction is ready for inspection.

D. Seven (7) days prior to paving, the asphalt mix design(s) shall be provided to the TOWN Engineer for review. During paving, the paving contractor shall submit quality control testing results for actual pavement placed. If quality control testing results indicate the mix was not within mix limits when it was placed, the pavement is subject to removal at the DEVELOPER'S cost at the sole discretion of the TOWN. Also during paving, the TOWN shall conduct testing, including density testing, for binder and surface lifts according to the TOWN'S Public Infrastructure Inspection and Testing Policy. If results from pavement testing yield densities below specified minimums, the DEVELOPER shall be charged an amount as determined by the Fee Schedule in effect on the date of testing. The amount due shall be paid to the TOWN within 15 days of receipt of notice from the TOWN. If not paid by such date, the TOWN may charge interest at the annual percentage rate of 18% until paid, or may, if necessary and at its discretion, draw directly on the DEVELOPER'S surety.

Alternatively, the DEVELOPER may, with the approval of the TOWN Engineer, remove and replace pavement that does not meet the required specifications.

## III. FINAL ACCEPTANCE

A. Throughout this Agreement, various stages of the development will require approval and/or acceptance by the TOWN. It is understood that building permits may be issued by the TOWN prior to the time of Final Acceptance of all of the improvements in the development. The one-year correction period provided for in this Agreement shall not commence to run until Final Acceptance is granted by

the TOWN Board of all improvements. The issuance of building permits and approval of various items of development shall not commence the one-year correction period. Acceptance of the improvements by the Town does not constitute a waiver of its right to draw on funds under the required letter of credit in the event of defects or failure of any improvement which is discovered or occurs following such acceptance.

B. The Final Plat may be approved with conditions, in accordance with State Statutes, local and county ordinances, and all other applicable laws. If so, the DEVELOPER agrees to satisfy those conditions of approval prior to the TOWN signing the Final Plat.

## IV. DEDICATION OF IMPROVEMENTS

Subject to all of the other provisions of this Agreement, the DEVELOPER shall, without charge to the TOWN, upon completion of the above-described improvements, unconditionally give, grant, convey and fully dedicate the public improvements to the TOWN, its successors and assigns, forever, free and clear of all encumbrances whatever, together with and including, without limitation because of enumeration, any and all land, buildings, structures, mains, conduits, pipes, lines, plant machinery, equipment, appurtenances and hereditaments which may in any way be a part of or pertain to such improvements and together with any and all necessary easements for access thereto. After such dedication, the TOWN shall have the right to connect or integrate other improvements as the TOWN decides, with no payment or award to, or consent required of, the DEVELOPER.

Dedication shall not constitute acceptance of any improvement by the TOWN Board. All improvements will be accepted by the TOWN Board by separate resolution at such time as such improvements are in acceptable form and according to the TOWN specifications. Said resolution shall be recorded, if needed, with the Waukesha County Register of Deeds. DEVELOPER will furnish proof to the TOWN, prior to the dedication required, that the public land and improvements proposed for dedication are free of all liens, claims and encumbrances, including mortgages.

## V. ACCEPTANCE OF WORK AND DEDICATION

When the DEVELOPER shall have completed the improvements herein required and shall have dedicated the same to the TOWN as set forth herein, the same shall be accepted by the TOWN Board if said improvements have been completed as required by this Agreement and as required by all federal, state, county or TOWN guidelines, specifications, regulations, laws and ordinances. The TOWN agrees to take all necessary actions to accept the improvements upon request of the DEVELOPER once the improvements meet TOWN specifications.

## VI. GUARANTEES OF IMPROVEMENTS

A. GUARANTEE: The DEVELOPER shall guarantee, after Final Acceptance, the public improvements and all other improvements described in Section I hereof against defects due to faulty materials or workership, provided that such defects appear within a period of one year from the date of Final Acceptance, by providing the TOWN with a letter of credit in a form acceptable to the TOWN Attorney in an aggregate amount of one hundred twenty percent (120%) of the total cost of all improvements. The DEVELOPER shall pay for any damages to TOWN property and/or improvements resulting from such faulty materials or workership. This guarantee shall not be a bar to any action the TOWN might have for negligent workmanship or materials. Wisconsin law on negligence shall govern such situations. If the DEVELOPER fails to pay for any damages or defects to TOWN property and/or improvements, and the TOWN is required to draw against the letter of credit on file with the TOWN, the DEVELOPER is required to replenish said monies up to the aggregate amount of one hundred twenty percent (120%) of the total cost of all improvements.

B. OBLIGATION TO REPAIR: The DEVELOPER shall make or cause to be made, at its own expense, any and all repairs which may become necessary under and by virtue of the DEVELOPER'S guarantee and shall leave the improvements in good and sound condition, satisfactory to the TOWN Board at the expiration of the guarantee period. DEVELOPER shall be responsible for the costs of repairs to existing roadways and infrastructure for damage caused in areas immediately adjacent to the construction limits as a result of the construction activities called for hereunder.

C. NOTICE OF REPAIR: If during said guarantee period the improvements shall, in the reasonable opinion of the TOWN Staff, require any repair or replacement which, in their judgment, is necessitated by reason of settlement of foundation, structure of backfill, or other defective materials or workership, the DEVELOPER shall, upon notification by the TOWN of the necessity for such repair or replacement, make such repair or replacement, at its own cost and expense. Should the DEVELOPER fail to make such repair or replacement within the time specified by the TOWN in the aforementioned notification, after notice has been sent as provided herein, the TOWN Board may cause such work to be done, but has no obligation to do so, either by contract or otherwise, and the TOWN Board may draw upon such guarantee security to pay any costs or expenses incurred in connection with such repairs or replacements. Should the costs or expenses incurred by the TOWN Board in repairing or replacing any portion of the improvements covered by this guarantee exceed the amount of the guarantee security, then the DEVELOPER shall immediately pay any excess cost or expense incurred in the correction process.

D. MAINTENANCE PRIOR TO ACCEPTANCE

1. Until acceptance of the improvements by the TOWN, all improvements shall be maintained by the DEVELOPER so they conform to the approved plans and specifications at the time of their Final Acceptance by the TOWN Board. This maintenance shall include routine maintenance, such as crack filling, roadway patching, snow plowing and the like, except as limited in Section D (4) below. In cases where emergency maintenance is required, the TOWN Board retains the right to complete the required emergency maintenance in a timely fashion and bill the DEVELOPER for all such associated costs. Said bill shall be paid immediately by the DEVELOPER. The DEVELOPER'S obligation to maintain all improvements shall expire at the expiration of the guarantee period.

2. Street sweeping and dust suppression shall be done by the DEVELOPER upon a regular basis as needed to ensure a reasonably clean and safe roadway until Final Acceptance by the TOWN Board. If after reasonable notice to the DEVELOPER, the DEVELOPER fails to meet this requirement, the TOWN Board will cause the work to be done and will bill the DEVELOPER on a time and material basis. Said bill shall be paid immediately by the DEVELOPER.

3. In the event drainage problems arise within the subject property or related activities on the subject property, the DEVELOPER shall correct such problems to the satisfaction of the TOWN. Such correction measures shall include, without limitation because of enumeration, cleaning of soil, loose aggregate and construction debris from culverts, drainage ditches and streets; dredging and reshaping of siltation or retention ponds; replacing of siltation fences; sodding and seeding; construction of diversion ditches, ponds and siltation traps; and restoration of all disturbed areas. This responsibility shall continue until such time as the roads, ditches, and other disturbed areas have become adequately vegetated and the TOWN Board is satisfied that the DEVELOPER has restored all areas which were disturbed because of this development.

4. The TOWN shall snowplow the subdivision streets, as shown on the Preliminary Plat, subsequent to installation of the first lift of asphalt. DEVELOPER agrees they shall defend, indemnify, and hold harmless the TOWN for any damage that may occur as a result of the TOWN'S snowplowing efforts.

E. <u>DEFINITION</u>: For purposes of this Agreement and by way of definition, the parties agree to comply with the general standards acceptable in the particular industry or common practice.

## VII. TOWN RESPONSIBILITY FOR IMPROVEMENTS

The TOWN shall NOT be responsible to perform repair, maintenance on any improvements until Final Acceptance by the TOWN Board.

## VIII. RISK OF PROCEEDING WITH IMPROVEMENTS PRIOR TO APPROVAL OF FINAL PLAT

If DEVELOPER proceeds with the installation of public improvements or other work on the site prior to approval of the final plat, it proceeds at its own risk as to whether or not the final plat will receive all necessary approvals. The DEVELOPER, prior to commencement of the installation of public improvements or other work on site, shall notify the TOWN of the DEVELOPER'S intention to proceed with the installation of public improvements or other work on site, prior to approval of the final plat. Additionally, DEVELOPER shall make arrangements to have any public improvements and/or other work on site inspected by the TOWN Engineer.

## IX. FINANCIAL GUARANTEE

Prior to the execution of this Agreement by the TOWN Board, the DEVELOPER shall file with the TOWN a Letter of Credit setting forth terms and conditions in a form approved by the TOWN Attorney in the amount as approved by the TOWN Engineer as a guarantee that the DEVELOPER will perform all terms of this Agreement no later than one year from the signing of this Agreement except as otherwise set forth in this Agreement. If at any time:

A. The DEVELOPER is in default of any aspect of this Agreement, or

B. The DEVELOPER fails to maintain such Letter of Credit during the term of this Agreement and fails to provide the TOWN with proof of renewal of such Letter of Credit at least thirty (30) days prior to the expiration date, if any, of such Letter of Credit; or

C. The DEVELOPER does not complete the installation of the improvements within one (1) year from the signing of this Agreement unless otherwise extended by this Agreement or by action of the TOWN Board, or

D. If the DEVELOPER fails to provide the TOWN with proof of renewal of the Letter of Credit at least thirty (30) days prior to its expiration date; or

E. The DEVELOPER fails to maintain a Letter of Credit in an amount approved by TOWN Engineer, and in a form approved by the TOWN Attorney; the DEVELOPER shall be deemed in violation of this Agreement and the TOWN Board shall have the right to draw upon the Letter of Credit.

The lending institution providing the irrevocable Letter of Credit shall pay to the TOWN all sums available for payment under the irrevocable Letter of Credit upon demand, subject to the terms and conditions of the irrevocable Letter of Credit, and upon its failure to do so, in whole or in part, the TOWN shall be empowered in addition to its other remedies, without notice or hearing, to impose a special charge for the amount of said completion costs, upon each and every lot in the development payable with the next succeeding tax roll.

The security shall be provided no later than ten (10) days before the commencement of the installation of the improvements.

No land surface disturbance or construction shall commence within this Development prior to the DEVELOPER providing surety for the Improvements.

## X. REDUCTION AND RELEASE OF GUARANTEE

The amount of the Letter of Credit will be reduced from time to time as and to the extent that the portion of work required under this Agreement is completed and paid for, provided that the remaining letter of credit is sufficient to secure payment for any remaining improvements and also provided that no reduction shall occur until it is approved in writing by the TOWN Engineer and TOWN Board. The remaining balance within the Letter of Credit, as required by Section VI will be refunded by the Town after the one-year warranty period has expired and all sums due the Town from the Developer have been paid.

## XI. BUILDING AND OCCUPANCY PERMITS

It is expressly understood and agreed that no building or occupancy permits shall be issued for any homes, until the TOWN Engineer has determined that:

1. The installation of the first lift of asphalt of the public street(s) providing access to and fronting a specific lot for which a building permit is requested has been completed and accepted by the TOWN Board.

2. Proof of payment for Subdivision gas, electric, telephone and cable television utilities are provided to the TOWN.

3. All required grading, street, and storm water management plans have been submitted to, reviewed by and approved by both the Town and the TOWN Engineer.

4. The DEVELOPER has paid in full all permit fees and reimbursement of administrative costs as required by this Agreement.

5. The storm water management plan was approved based upon wooded lots and corresponding runoff coefficients. If applicable, no trees shall be removed from any buildable lot prior to the issuance of a building permit. A building survey showing the size and location of existing trees, which are proposed to be removed for the home construction, shall be submitted to the TOWN Engineer for approval prior to issuance of a building permit.

6. All destroyed trees, brush, tree trunks, shrubs and other natural growth and all rubbish are removed from the development and disposed of lawfully.

7. The DEVELOPER is not in default of any aspect of this Agreement.

8. All street trees per TOWN Ordinances have been installed and approved by the TOWN.

## XII. RESERVATION OF RIGHTS AS TO ISSUANCE OF BUILDING PERMITS

The TOWN reserves the right to withhold issuance of any and all building permits if DEVELOPER is in violation of this Agreement or has not completed any of the following to the satisfaction of the Town and Town Engineer.

1. Asphalt binder is in place on all street frontages.

2. Street and regulatory signs are in place and the TOWN has been reimbursed for costs incurred.

3. Driveway culvert map has been approved.

4. All applicable TOWN Standards have been met.

5. Recorded version of the Final Plat documents have been provided to the TOWN.

6. All other subdivision street and drainage Improvements are substantially complete.

## XIII. MISCELLANEOUS REQUIREMENTS

The DEVELOPER shall:

A. EASEMENTS: Provide any easements including vision easements on SUBJECT LANDS deemed necessary by the TOWN Engineer before the final plat is signed or on the final plat and such easements shall be along lot lines if at all possible.

B. MANNER OF PERFORMANCE: Cause all construction called for by this Agreement to be carried out and performed in a good and worker like manner.

C. SURVEY MONUMENTS: Properly place and install any lot, block or other monuments required by State Statute, TOWN Ordinance or the TOWN Engineer.

D. DEED RESTRICTIONS: Execute and record deed restrictions and provide proof of recording prior to sale of lots for the SUBJECT LANDS in the form approved by the Town Board.

1. LOT GRADE: Each lot owner must strictly adhere to and finish grade its lot in accordance with the Master Lot Grading Plan or any amendment thereto approved by the TOWN Engineer on file in the office of the TOWN Clerk. The DEVELOPER and/or the TOWN and/or their agents, employees or independent contractors shall have the right to enter upon any lot, at any time, for the purpose of inspection, maintenance, correction of any drainage condition, and the property owner is responsible for cost of the same.

2. ISSUANCE OF BUILDING PERMIT/GRADES: Prior to the issuance of a building permit for a specific lot, lot owner and/or their agent shall furnish to the Building Inspector of the TOWN a copy of the stake out survey, which is based on USGS Vertical Datum, showing the street grade in front of the lot, the finished yard grade, the grade of all four corners of the lot, and the lot corner grades of the buildings on adjoining lots where applicable, as existing and as proposed.

E. PERMITS: Provide and submit to the TOWN requesting the same, valid copies of any and all governmental agency permits.

F. PARK AND PUBLIC SITE DEDICATION FEES: To pay as provided in the TOWN'S Ordinances, a fee per lot developed in lieu of dedication of lands for park and public sites. The fee shall be paid, in full, at the time of application for a building permit. All applicable fees for this development are attached on **EXHIBIT B** which is incorporated herein by reference.

G. NOISE: Make every effort to minimize noise, dust, and similar disturbances, recognizing that the SUBJECT LANDS are located near existing residences. Construction of improvements shall not begin before 6:00 AM and it shall end before 6:00 PM, Monday through Saturday. There shall be no construction activities on Sundays and holidays.

H. DOCUMENTS: The DEVELOPER shall provide three (3) complete sets of recorded final plat documents to the TOWN including, but not limited to:

1. A full-size Final Plat.

2. An 11" x 17" or smaller Final Plat.
3. AutoCAD version of Final Plat document.
4. Deed Restrictions and Protective Covenants.
5. Other documents recorded with the Register of Deeds, or as determined by the Town Attorney.

## XIV. PAYMENT OF COSTS, INSPECTION, & ADMINISTRATIVE FEES

The DEVELOPER shall pay and reimburse the TOWN promptly upon billing for all reasonable fees, expenses, costs and disbursements which shall be incurred by the TOWN in connection with this subdivision or relative to the construction, installation, dedication and acceptance of the subdivision improvements covered by this Agreement, including without limitation by reason of enumeration, design, engineering, review, supervision, inspection and legal, administrative and fiscal work. Any such charge not paid by DEVELOPER within thirty (30) days of being invoiced may be charged against the financial guarantee held by the TOWN pursuant to this Agreement, or assessed against the subdivision land as a special charge pursuant to §66.027, Wis. Stats. All applicable fees set forth on **EXHIBIT B** to this development are set.

## XV. GENERAL INDEMNITY

In addition to, and not to the exclusion or prejudice of, any provisions of this Agreement or documents incorporated herein by reference, the DEVELOPER shall indemnify and save harmless and agrees to accept tender of defense and to defend and pay any legal, accounting, consulting, engineering and other expenses relating to the defense of any claim asserted or imposed upon the TOWN, its officers, agents, employees and independent contractors related to the actions and conduct of DEVELOPER conducted in accordance of this Agreement as stated above by any party or parties. This indemnity is limited to the conduct of the DEVELOPER or its agents and shall not apply to conduct of third parties in the development or any subsequent changes to the property involved in the development.

## XVI. INSURANCE

The DEVELOPER, its contractors, suppliers, and any other individual working on the SUBJECT PROPERTY shall maintain at all times until the expiration of the guarantee period insurance coverage in the forms and in the amounts as set forth on **EXHIBIT C**.

## XVII. EXCULPATION OF TOWN CORPORATE AUTHORITIES

The parties mutually agree that the TOWN Chair of the TOWN Board and/or the TOWN Clerk entered into and are signatory to this Agreement solely in their official capacity and not individually and shall have no personal liability or responsibility hereunder and personal liability as may otherwise exist being expressly released and/or waived.

## XVIII. GENERAL CONDITIONS AND REGULATIONS

All provisions of the TOWN Ordinances are incorporated herein by reference, and all such provisions shall bind the parties hereto and be a part of this Agreement as fully as if set forth at length herein. This Agreement and all work and improvements required hereunder shall be performed and carried out in strict accordance with and subject to the provisions of said Ordinances.

## XIX. PLANNED UNIT DEVELOPMENT (PUD)

The development shall follow adopted PUD General Development Plan (GDP) and Specific Development Plan (SDP) details approved by the Town Board and Plan Commission. The PUD GDP and SDP details are included as **EXHIBIT D** to this agreement.

## XX. COMPLIANCE WITH CODES AND STATUTES

The DEVELOPER shall comply with all current applicable codes of the TOWN, County, State, and federal government, and further, DEVELOPER shall follow all current and future lawful orders of any and all duly authorized employees and/or representatives of the TOWN, County, State, or federal government.

## XXI. PRELIMINARY PLAT AND FINAL PLAT CONDITIONS

The DEVELOPER acknowledges that the SUBJECT LANDS are subject to a conditional preliminary plat approval and a conditional final plat approval by the TOWN. The DEVELOPER and the TOWN further agree that they are bound by these conditions. Conditional final plat approval for the subject property is incorporated herein and will be provided to the Town upon Developer's receipt of the Final Plat. If there is a conflict between the conditions as forth in said conditional approvals and the DEVELOPER'S Agreement, the more restrictive shall apply.

## XXII. ASSIGNMENT

The DEVELOPER shall not assign this Agreement without the prior written consent of the TOWN. The assignee must agree to all terms and conditions of this document in writing. Said Developer's Agreement shall be recorded with the Waukesha County Register of Deeds, by the TOWN and paid for by the DEVELOPER.

## XXIII. PARTIES BOUND

The DEVELOPER or its assignees shall be bound by the terms of this Agreement or any part herein as it applies to any phase of the development of the subdivision.

## XXIV. HEIRS & ASSIGNS

This Agreement is binding upon the DEVELOPER, owners, their heirs, their assigns, and successors, and all future owners of the SUBJECT LANDS.

## XXV. REVIEW PROCESS

If the TOWN Engineer and DEVELOPER cannot agree with the decision of the TOWN Engineer, then DEVELOPER shall have the right to have the matter reviewed by the TOWN Attorney or TOWN Board and to present such evidence as may be warranted. The TOWN Attorney or TOWN Board may modify, correct, or affirm the TOWN Engineer's decision.

## XXVI. AMENDMENTS

The TOWN and the DEVELOPER, by mutual consent, may amend this Developer's Agreement at any meeting of the TOWN Board. The TOWN shall not, however, consent to an amendment until after first having received a recommendation from the TOWN'S Plan Commission. After an amendment has been consented to by the Town Board, it must be reduced to a written amendment which shall be approved and executed by both the TOWN and DEVELOPER.

IN WITNESS WHEREOF, the DEVELOPER and the TOWN have caused this Agreement to be signed by their appropriate officers and their corporate seals to be hereunto affixed in three original counterparts the day and year first above written.

*Signature Pages to Follow*

DEVELOPER:

Hillside Ridge, LLC, a Wisconsin limited liability company

By: Neumann Developments, Inc., its sole member

By:_____
Steve DeCleene, President

STATE OF WISCONSIN )
) ss.
COUNTY OF WAUKESHA )

Personally came before me this _____ day of _____, 2020, the above named

_____, Authorized Signatory of _____, to me known

to be the person who executed the foregoing instrument and acknowledged the same.

_____
Notary Public, State of Wisconsin

My commission expires: _____

TOWN OF LISBON
WAUKESHA COUNTY, WISCONSIN

By:_____
Joseph Osterman, Chairman

By:_____
Rick J. Goeckner, Interim Town Clerk

STATE OF WISCONSIN )
) ss.
COUNTY OF WAUKESHA )

Personally came before me this _____ day of _____, 2020, the above named Joseph Osterman and Rick J. Goeckner, TOWN Chairman and Interim TOWN Clerk respectively, of the above-named municipal corporation, to me known to be the persons who executed the foregoing instrument and to me known to be the TOWN Chairman and TOWN Clerk of said municipal corporation and acknowledged that they executed the foregoing instrument as such officers as the deed of said municipal corporation by its authority and pursuant to the authorization by the TOWN Board.

_____
Notary Public, State of Wisconsin

My commission expires: _____

APPROVED AS TO FORM:

_____
TOWN Attorney

**ATTACHMENTS:**

EXHIBIT A: Preliminary Plat
EXHIBIT B: Dedication Fees
EXHIBIT C: Certificate of Insurance
EXHIBIT D: GDP/SDP

This document reviewed by:
Attorney Kathryn Sawyer Gutenkunst
Atttorney Michael P. Van Kleunen
CRAMER, MULTHAUF & HAMMES, LLP
1601 East Racine Avenue • Suite 200
P.O. Box 558
Waukesha, WI 53187
(262)-542-4278

# Item 5E – Attachments

vierbicher
planners | engineers | advisors

N27 W23957 Paul Road, Suite 105
Pewaukee, WI 53072
(262) 875-5000 phone
(608) 826-0530 FAX
www.vierbicher.com

June 4, 2020

Chairperson Osterman and Town Plan Commission Members
Town of Lisbon
N23N8676 Woodside Road
Lisbon, WI 53089

RE: The Preserve at Harvest Ridge - First Addition Final Plat Review

Dear Plan Commission Members:

The above-referenced plat was received in our office for review on behalf of the Town of Lisbon. The Preserve at Harvest Ridge, LLC (Neumann Companies, Inc.) has submitted a Final Plat for Phase 2, also known as the First Addition, to the Preserve at Harvest Ridge subdivision. We have reviewed the following application materials:

- Final Plat (received May 13, 2020)
- Stormwater Management Plan (received March 31, 2020)
- Civil Plans (received March 31, 2020)
- Geotechnical Report (received March 31, 2020)
- Declaration of Restrictive Covenants (received June 3, 2020)

**Summary**
The project was established as a Planned Unit Development with a General Development Plan (GDP) approved in September 2019 and a Specific Development Plan (SDP) approved in November 2019. The Preliminary Plat included all 64 proposed lots in the subdivision, and the developer chose to submit the Final Plats in phases. Phase 1 featured 26 lots and 4 outlots. This Phase 2 Final Plat contains 11 lots and 2 outlots, comprising approximately 60 acres of what is currently Outlot 4 of the recorded subdivision plat. Subsequent phases of the development will be labeled Second Addition, Third Addition, etc.

The Phase 2 / First Addision construction plans and Stormwater Management Plan were submitted in March and have received approval by the Town Engineer and Waukesha County (the County stormwater permit was issued May 11th). A letter of credit for Phase 2 has been provided to the Town.

The Development Agreement for Phase 2 has been prepared by the Town Attorney and is included in meeting packets for review and approval by the Applicant, the Plan Commission and Town Board.

The plat will be subject to review by the Lisbon-Merton JPC and extraterritorial review by the Village of Merton.

## Application Review

**Background Information**

Property owner: The Preserve at Harvest Ridge, LLC

Location: north of Lisbon Road, south of Ainsworth Road, and east of Green Meadow Road

Tax Key: LSBT 0264030

Adjacent land uses and zoning:

North: Single-family residential neighborhood (Beaumont Ridge), across Ainsworth Road, in the Village of Merton)

South: Single-family residential (Phase 1 of the Preserve at Harvest Ridge, zoned R-1 Suburban Single-Family with PUD overlay)

East: Vacant and agricultural lands (zoned A-5 Mini Farm and A-10 Agricultural)

West: Single-family residential (Walnut Grove subdivision zoned R-1 Suburban Single-Family, one lot zoned R-2 Single-Family)

Existing and Proposed Zoning: R-1 Suburban Single-Family Residential with PUD overlay

Future Land Use: "Suburban I Density Residential" (see inset map image)

**Consistency with Comprehensive Plan**
The Town approved a Comprehensive Plan amendment in May 2019. The amendment changed the future land use designation on the areas outside of the wetlands from "Rural Density and Other Agricultural Land" to "Suburban I Density Residential." Inside the wetlands, the future land use designation of "Other Open Lands to be Preserved" was left unchanged.

1.
2.
3.
4.

Suburban I Density Residential is defined as residential development ranging from 1.5 to 2.9 acres per dwelling unit. The approved GDP-SDP provides for an overall plat density of 1.7 acres per lot, consistent with this density policy.

**Consistency with Zoning**
The site is zoned R-1 Suburban Single-Family with a PUD Overlay. The PUD (approved as Town Ordinance 11-19 in May 2019) established a miniminum lot width of 110 feet, minimum lot size of 30,000 square feet, and reduced the front yard setback to 35 feet.

The Final Plat layout is consistent with the PUD zoning standards and previously approved waivers.

**Layout**
The First Addition Final Plat complies with all of the requirements under Chapter 12, Sec. 7.06, the PUD Ordinance for this development, and all waivers granted during the Preliminary Plat approval process. Waivers were approved to the Chapter 12 requirements for side lot lines at right angles, minimum road tangent lengths of 100 feet, and maximum cul-de-sac lengths of 500 feet,

The layout for these 11 lots substantially conforms to the layout approved in the Preliminary Plat.

*Clarification & Revisions Prior to Town Board approval of Final Plat (unless otherwise noted):*

1. Chapter 12 states that driveways with preplanned locations shall be shown on the Plat. If such locations are known at this time, Applicant shall add them to one of the detail sheets.

2. Lots appear to meet the minimum 110 feet width at the building setback line; however please verify the width of Lots 29-32 by noting the widths of each lot at the setback line.

3. The Vision Corner Easement shown on the intersection corners appear adequate. They match the vision corners previously approved by the Town for the intersection of local roads in Phase 1, and match the construction plans approved by the Town Engineer.

**Soil Types and Testing**
The Seasonal High Ground Water Table on Sheet 1 of this plat shows the seasonal high water table elevation, minimum basement elevation, and groundwater depth relative to existing grade. Town Ordinance requires minimum basement elevations to be no less than 18 inches above the seasonal high groundwater elevation. The Plat meets this standard, with the exception of the two bullets listed below.

Per Note 6 on Sheet 1 of the plat, all lots in this phase will be served by mound-type soil absorption sewage disposal systems. Per Note 7, all wells shall be located within 50 feet of the front lot lines in order to provide adequate separation between wells and septic and/or storm water management areas.

*Clarification & Revisions Prior to Town Board approval of Final Plat (unless otherwise noted):*

4. The minimum basement elevation shown in the table for Lots 30, 31, 35, and 37 are slighty shy of the 18" minimum. This is likely due to rounding, but the minimum basement elevations for these three lots shall be amended to 1039.9, 1038.6, 1054.4, and 1062.4 respectively.

5. Section 5.02 of the subdivision code states that septic systems with preplanned locations shall be shown on the Plat. If such locations are known at this time, please add them to the plat.

**Trails**

6. Development approvals to date provide for 8-foot wide trails on 12-foot wide easements. The plat shows a 15-foot wide public trail easement extending into Outlot 5, which ends in the vicinity of the wetland. Please clarify the purpose of this easement, as it does not appear to reach the proposed stormwater facilities. If necessary for stormwater facility maintenance, the easement may need to be modified.

7. Submit the proposed public trail easement documentation to the Town for review and approval, and provide a copy of the recorded easement when available (see General Note #13 on Sheet 1 of the Final Plat). A trail easement for trails within Phase 1 shall also be submitted (it is understood that this is in progress).

**Additional Final Plat Items:**

*Clarification & Revisions Prior to Town Board approval of Final Plat (unless otherwise noted):*

8. Address any comments from Waukesha County, the Village of Merton, and the Department of Administration following a review of any submitted materials.

9. Address any comments from the Town Engineer's review of the Final Plat, Civil Plans, Stormwater Management Plan, and Geotechnical Report for this phase of the Final Plat.

10. Utility easements shall be designated on the plat, or may be created by separate easement if the Town allows, related to the provisions on Sheet 3 of the plat. If created by a separate document, a copy of the recorded document shall be provided to the Town upon recording.

11. Landscaping shall be installed per the approved Landscaping Plan (Garland Alliance planting plan dated August 27, 2019), with installation to be field verified by the Town Engineer.

12. Any new proposed subdivision signage requires a sign permit application submitted to the Town Plan Commission for review and approval.

13. On the Town Board approval certificate, please amend the Town Clerk's name and title to Natasha Girard, Deputy Clerk. On the Town Treasurer's certificate, please confirm the Treasurer's name with the Town prior to finalizing the plat for signatures and recording.

14. The property to the east abutting Ainsworth Road contains a conditional use permit approved in 1989 to operate a black powder target range. The CU conditions specify that the CU must be reviewed if lands to the west are developed. Previous County and Town plat approvals were conditioned upon reviewing the CU prior to Phase 2. We recommend the Town review the CU prior to taking final action on the plat.

    Additionally, to help ensure the safety of residents in the subdivision we recommend that language be added to the Covenants and Restrictions, and that a note be added to the General Notes of the plat, noting the presence of the black powder range Conditional Use.

**Recommendation – Final Plat**
If the Plan Commission would require additional materials they have the ability to table action on the Final Plat. If the Plan Commission is comfortable with the proposed Final Plat, they may conditionally approve it. Planning staff recommend the following conditions of approval:

1. Subject to the Developer satisfying all comments, conditions and concerns of the Town Planner (as noted above) and the Town Engineer, which includes compliance with the Town's adopted Land Division Review Checklist and Subdivision Control Ordinance; and all reviewing, objecting and approving bodies, which may include but not be limited to the State of Wisconsin Department of Commerce per Chapter 236, Wisconsin Statutes and Chapter COMM 85, Wisconsin Administrative Code; State of Wisconsin Department of Administration per Chapter 236, Wisconsin Statutes; the Waukesha County Department of Parks and Land Use (including the Planning and Zoning Division, Parks System Division, Land Resources Division, and Environmental Health Division) and the Waukesha County Department of Public Works; in regard to the Preliminary Plat, and obtaining all necessary permits and approvals, prior to commencing construction of any improvement, whether public or private, or site development or approval of the Final Plat whichever is earlier.

2. Subject to the Developer submitting to and receiving from the Town Attorney and the Town Engineer, approval of a Developer's Agreement for the improvements (including all public, private, and site development improvements), prior to commencing construction of any improvement, whether public or private, or site development or approval of the Final Plat, whichever is earlier.

3. Subject to the Developer submitting to the Town Clerk and receiving approval as to form from the Town Attorney and as to amount from the Town Engineer, a letter of credit or cash for the improvements (including all public, private, and site development improvements), prior to commencing construction of any improvement, whether public or private, or site development or approval of the Final Plat, whichever is earlier.

4. Subject to the Developer submitting to and receiving from the Town Board, Town Attorney, and Town Planner, and Town Engineer, approval of the final draft of the deed restrictions prior to the approval of the Final Plat.

5. The Petitioner shall, on demand, reimburse the Town for all costs and expenses of any type that the Town incurs in connection with this development, including the cost of professional services incurred by the Town (including engineering, legal, planning and other consulting fees) for the review and preparation of required documents or attendance at meetings or other related professional services for this application, as well as to enforce the conditions in this conditional approval due to a violation of these conditions.

6. Any unpaid bills owed to the Town by the subject property owner or his or her tenants, operators or occupants, for reimbursement of professional fees (as described above); or for personal property taxes; or for real property taxes; or for licenses, permit fees or any other fees owed to the Town; shall be placed upon the tax roll for the subject property if not paid within thirty (30) days of billing by the Town, pursuant to Section 66.0627, Wisconsin Statutes. Such unpaid bills also constitute a breach of the requirements of this conditional approval that is subject to all remedies available to the Town, including possible cause for termination of the conditional approval.

7. Subject to the Developer applying for and receiving from the Town BOA, Town Plan Commission, Town Board, and Waukesha County, all necessary variances and waivers (if any) to the Town of Lisbon Zoning Ordinance and the Town of Lisbon Subdivision Control Ordinance prior to commencing construction of any improvement, whether public or private, or site development or approval of the Final Plat, whichever is earlier.

**Recommendation – Development Agreement**
The draft Development Agreement is included in the Plan Commission's meeting packets for review, as has been customary in Lisbon. If the Plan Commission is comfortable with the proposed Development Agreement they may recommend its approval to the Town Board. Planning staff recommend approval of the Development Agreement subject to final review by the Town Attorney.

Any conditional approval document shall not be read as providing any assurance or expectation that such variances or waivers will be granted, and shall not vest any right regarding the grant of such variances or waivers.

Sincerely,

Rachel Holloway, AICP
Town Planner

Aaron Prichard
Community Development Planner

cc: Natasha Girard, Deputy Clerk, Town of Lisbon

M:\Lisbon, Town of\190047 - 2019 Town Planning Services\2019 Tasks\2019.02 - Preserve at Harvest Ridge Development (Neumann - Lisbon Road)\Reviews\2020-06-02 Ph 2 Final Plat Review\2020-06-04 Memo - Preserve at Harvest Ridge Ph2 Final Plat and DA.docx

# Review of Preserve of Harvest Ridge Addn No. 1 dated 05/06/20

(Please forward comments to the developer, T/Lisbon Plan Commission and Town Board)

**Please note: The County land division review team will provide *separate* review comments from those I provide herein to the Town as the Town Community Assistance Planner. The County land division review team comments are based solely on County ordinances and require compliance thereof whereas my review/comments are generally based on the Town's LDDO, etal.**

- On Sheet 1, the outer bearings/dimensions appear to be missing from the north, west, and part of the southern (6 segments) boundary.
- Sheet 2 of the plat states Outlot No. 5 contains a Wetland Conservancy Area. Therefore, General Note No. 8 on Sheet 1 should be updated to reflect this information.
- On Sheet 1, General Note No. 12 alludes to the fact that there are stormwater facilities on Outlot 6, yet General Note No. 9, which discusses Outlot No. 6, does not include Stormwater Management Facilities. Note No. 9 should be updated to reflect this information.
- The purpose of General Note No. 14 is not clear as all lot lines in the plat are regulated either by Waukesha County and/or the Town of Lisbon. Please clarify the purpose of this note. Further there should be a space between the words 'lot' and 'lines'.
- On Sheet 2, there appear to be bearings/dimensions missing along the southern portion of the public access easement (7 segments).
- The Developer shall make every effort to keep sediment out of the infiltration basins upon their completion.
- It is important that soils not be disturbed where mound systems are to be located.
- I did not note the location of any fire tanks on the plat. If required by the Town, those tank locations should be added to the plat.
- The plat shall comply with the Town's Trail Standards. The trails are not shown on the Final Plat and instead bulleted notes have been added in the General Notes section on Sheet 1 (Nos. 8 and 13).
- The plat shall comply with the Town's Street and Highway Chapter.
- The plat shall comply with the Town and County stormwater requirements.
- The plat shall comply with the County POWTS regulations.
- The plat shall comply with the County Subdivision Control Ordinance.
- The cul-de-sac may exceed 500 feet in length and may require a waiver from the Town.
- Utility easements shall be shown on the final plat as necessary.
- The property to the east abutting Ainsworth Road contains a Conditional Use Permit for a target range for black powder weapons. A condition of the CU is for it to be reviewed should there be any development proposed on the lands to the west (i.e. the subject property). If not yet addressed, the Town should evaluate the broader safety concerns with firing black powder weapons within certain distances to subdivisions and act accordingly prior to final approval of the plat.
- In Bullet No. 13 under General Notes on Sheet 1, it refers to a public access easement width of 12 feet whereas the public access easement shown on Sheet 2 is noted as 15 feet in width. The access width on Sheet 1 and the note on Sheet 2 shall be corrected to be consistent with one another, unless the trail easement width will in fact be a lesser width of 12 feet than the 15 foot wide public access easement.
- On Sheet 3 under the Town Board Approval Certificate, you will have to find out what name the Town would like you to use for the Town Clerk.

- The Final Plat shall be signed, sealed and all pages dated with the same revision date by the surveyor prior to seeking signatures.

Respectfully submitted,

***Sandy Scherer***
***Town of Lisbon Community Assistance Planner***
*Senior Planner*
Waukesha County Department of Parks and Land Use
Planning and Zoning Division
515 W. Moreland Blvd. **Room AC 230**
Waukesha, WI 53188
**Phone 262.548.7790** Fax 262.896.8071
**Email sscherer@waukeshacounty.gov**
PZD Website www.waukeshacounty.gov/planningandzoning
**Town of Lisbon Website http://www.townoflisbonwi.com/**
Waukesha County GIS Interactive Mapping Site www.waukeshacounty.gov/defaultwc.aspx?id=39458
**County** Planner of the Day Customer Service Hours **8:00 am-4:30 pm Tuesday-Friday** **pod@waukeshacounty.gov**

***Please consider your responsibility to the environment before printing this e-mail.***

cc: Rebekah Leto, Waukesha County PZD
Rachel Holloway, Town of Lisbon

KUNKEL engineering group

107 Parallel Street
Beaver Dam, WI 53916

1115 S Main Street
West Bend, WI 53095

920-356-9447
Fax 920-356-9454
kunkelengineering.com

May 8, 2020

Ms. Gina Gresch, Administrator
Town of Lisbon
W234 N8676 Woodside Road
Lisbon WI 53089

**Re: The Preserve at Harvest Ridge – Phase 2 | Document Review**

Dear Ms. Gresch,

The following documents were submitted to the Town for review by Neumann Developments, Inc. on March 31, 2020:

- Construction Plans for The Preserve at Harvest Ridge – Phase 2
- Storm Water Management Plan for The Preserve at Harvest Ridge – Phase 2
- Geotechnical Exploration Report for Stolz Site Conservation Subdivision

My findings are as follows:

- Construction Plans for The Preserve at Harvest Ridge – Phase 2
  - C6.0: Construction Notes & Details
    - Asphalt paving needs to comply with Sections 450, 455, 460 and 465 of State of Wisconsin Department of Transportation, Division of Highways, Standard Specifications for Highway and Structure Construction, Latest Edition (Standard Specifications).
    - Specify the hot mix asphalt gradation, traffic volume, binder and binder designation level in compliance with Section 460 of the Standard Specifications.
    - Revise the depth of the upper layer to two inches.
    - Revise the depth of the lower layer to three inches.
    - Aggregate subbase and base needs to comply with Dense Graded Base, 3-Inch and 1-1/4-Inch, respectively, per Section 305 of the Standard Specifications.
    - Shoulders are to be constructed using salvaged or recycled asphalt material conforming to Dense Graded Base, 3/4-Inch per Section 305 of the Standard Specifications.
  - C4.1: Roadway & Storm Sewer Plan & Profile
    - Is there a timeline for future phase construction? The current configuration of the temporary asphalt tee seems very dangerous to motorists and/or bike traffic due to the significant variation in the existing and proposed grades. Include the installation of a road end barricade(s), extending the entire 66 feet of asphalt pavement in accordance with SDD 15C26 of the State of Wisconsin Department of Transportation Standard Detail Drawings. Is there a safety provision for the sides of the temporary asphalt tee? Vehicles making turning movements are exposed to the same risk in an attempt to exit the tee.

- Geotechnical Exploration Report for Stolz Site Conservation Subdivision
  - All appears in order and correct.
  - Obtain approval of all required Town, County and State permitting. Requirements set forth by any permitting is to be reflected, as applicable, within the storm water management plan. Provide copies of all approvals to the Town.

- Storm Water Management Plan for The Preserve at Harvest Ridge – Phase 2
  - All appears in order and correct.
  - Obtain approval of all required Town, County and State permitting. Requirements set forth by any permitting is to be reflected, as applicable, within the storm water management plan. Provide copies of all approvals to the Town.

Based on review of the documents, it is my recommendation that the Storm Water Management Plan for The Preserve at Harvest Ridge – Phase 2 be deemed acceptable and stormwater permit be considered for approval based on the above condition. The Construction Plans for The Preserve at Harvest Ridge – Phase 2 be considered for approval based on the above conditions.

Gina, should you have any questions, please contact me at your convenience.

Sincerely,

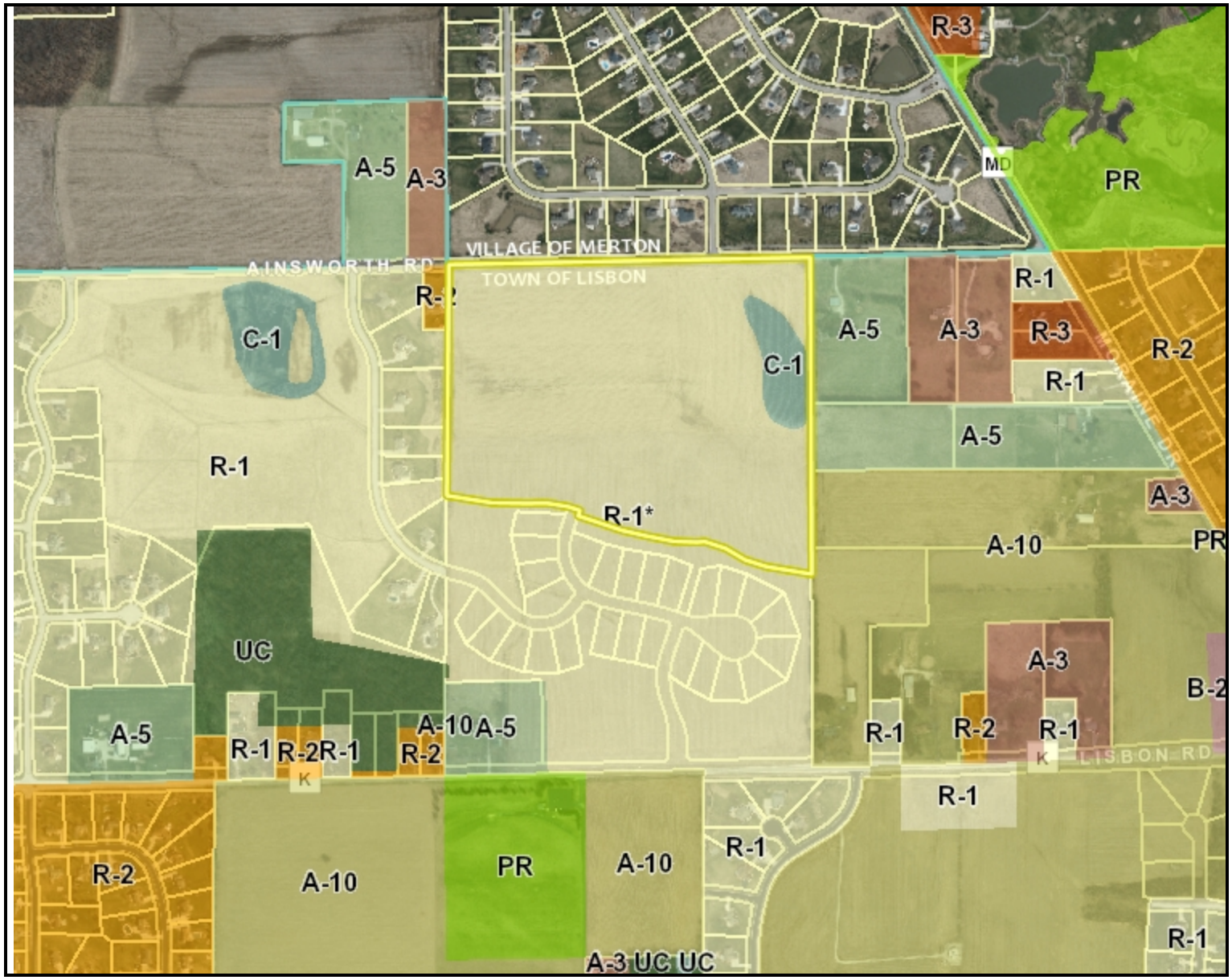
KUNKEL ENGINEERING GROUP

J Kohn-Born

Jackie Kohn – Born, PE
Design Engineer

LAND INFORMATION SYSTEMS DIVISION

# Waukesha County GIS Map




**Legend**

Special Districts
- Historic Landmark
- Historic District
- Hydric Soil District
- Planned Unit Development
- Well Head Protection Distric

Wetland Overlay

Environmental Corridor O

Town Zoning District
- <all other values>
- A-1
- A-1a
- A-2
- A-3 Agricultural/Residential
- A-4
- A-5 Mini-Farm
- A-E
- A-P
- A-B
- A-T
- AD-10 Agricultural Density 1
- A-10 Agricultural
- AP
- B-1 Restricted Business
- B-2 Local Business
- B-3 General Business
- B-4 Community Business
- B-P Mixed Use Business Pa
- C-1 Conservancy Wetland a
- EC
- FLC
- FLP
- HG
- I-1
- I-2
- M-1 Limited Industrial
- M-2 General Industrial
- MU-1
- Not Zoned
- P-1
- P-I Public and Institutional
- PR Park and Recreation
- Q-1 Quarrying
- R-1 Suburban Single Family

0 800.00 Feet

The information and depictions herein are for informational purposes and Waukesha County specifically disclaims accuracy in this reproduction and specifically admonishes and advises that if specific and precise accuracy is required, the same should be determined by procurement of certified maps, surveys, plats, Flood Insurance Studies, or other official means. Waukesha County will not be responsible for any damages which result from third party use of the information and depictions herein, or for use which ignores this warning.

**Notes:**

Printed: 6/4/2020

## Data Summary Table
### 64 Lot Conservation Subdivision

Total Area = ± 106.13 acres
(with full ROW dedication)

Density = 1.66 acres/lot

Total Road Length = 6,850 l.f.
[107 l.f. per lot]

**PUD Proposed Standards**
Lot Size: 30,000 s.f. min.
Lot Width: 110' minimum
Proposed Setbacks:
Public Road = 35'
Side=20'
Rear=20'
Lisbon & Ainsworth Rd = 50'

**PUD Open Space Calculations:**
Total PUD Area = 106.13 acres

Outlot Area* = 48.74 ac (45.9%)
- % Wetland = 4.05/48.74= 8.3%
- % Stormwater = 5.4/48.74= 11.1%
- % Upland = 39.29/44.5 = 80.6%

[*Outlots 1, 2, 3 & 4]

Developed By:
NEUMANN DEVELOPMENTS, INC.
N27 W24025 Paul Court
Pewaukee, WI 53072

TRIO DESIGN · LAND SURVEYING · CIVIL ENGINEERING

Ainsworth Road

Landscape Buffer

Infiltration Pond (C)

Infiltration Basin (B) — Wet Pond

Neighborhood Stormwater Improvement Area (A)

Improve the current condition by increasing volume of depression area to reduce ponding depth and discharge rates to Ainsworth Rd cross culvert

WETLAND (STANTEC, 5-11-15) [3.37 ac]

WETLAND (D) [0.68 ac] (STANTEC, 5-11-15)

Infiltration Basin — Wet Pond

Firepit

Paved Trail

OL #3 610021 SF

OL #4 642141 SF

Infiltration Basin — Improve the current condition by increasing infiltration area volume and reducing discharge rates

Wet Pond (E)

Green Meadow Rd

Playground

OL #1 437699 SF

Pretreatment Swale

Infiltration Basin (F)

Landscape Berm

Pond

OL #2 433845 SF

Homestead
Lot 1 of CSM
5.05 ac

Lisbon Road (CTH K)

N

0 50 100 200

Scale: 1" = 100' (22"X34")
Scale: 1" = 200' (11"X17")

DATE: 03/21/2019

# CONSERVATION SUBDIVISION
## Conceptual Site Plan - Stolz Site
Lisbon Road, Town of Lisbon, WI

Paid $200 on 2020-05-11 GG

W234 N8676 WOODSIDE RD.
LISBON, WI 53089-1545
TEL: (262) 246-6100

# Plan Commission Application

## Application Type and Fee (check all that apply)

*Application fees are non-refundable. Fees cover costs associated with public notification, postage, copies, and document recording, however applicants agree to pay all additional expenses that the Town may incur by virtue of contracted plan review services including but not limited to: legal, surveying and engineering costs and studies.

☐ **Commercial**
**All commercial projects including any change of occupancy, change of use, or construction/alteration must be submitted to the Lisbon Fire Department as well for review and inspections.*

☐ **Residential** – Home-Based Bus. / In-Law Unit

- ☐ Accessory Building Waiver: $100 (Size/Location/Architectural Review)
- ☐ After the Fact Application: Double Fees
- ☐ Certified Survey Map: $200 + $10 Per lot
  - ☐ Dedication Fee (Per lot): $2,658 (Paid upon receipt of signed CSM)
- ☐ Conditional Use Permit: $350
  - ☐ Amendment / Original
  - ☐ Major Grading Permit
- ☐ Deed Restriction: $100
- ☐ Developer's Agreement: $250
- ☐ Groundwater Separation Waiver: $100
- ☐ Land Use Amendment: $300
- ☐ Conceptual: $100
- ☒ Plat Review:
  - ■ Final - $200
  - ☐ Preliminary - $500
- ☐ Re-Submittal: $200
- ☐ Rezone: $350
- ☐ Sign Permit Application: $30 + Sign Fees (See Adopted Fee Schedule)
- ☐ Site Plan/Plan of Operation:
  - ☐ Amendment: $250
  - ☐ Original: $500
  - ☐ Temporary: $125
- ☐ Special Meeting: $600
- ☐ Waivers/Modification from Land Division and Development Ordinance: $200

RECEIVED
MAY 11 2020
TOWN OF LISBON

## Property Information

| Property Address | City | Zip |
|---|---|---|
| Hwy K and Harvest Ridge Drive | Lisbon | 53089 |

| Tax Key/Parcel ID # | Lot Size | Current Zoning |
|---|---|---|
| LSBT 0264998 | 15.86 Acres | R-1 PUD Overlay |

## Property Owner

Name / Company Name: The Preserve at Harvest Ridge LLC

Signature: 5/11/2020

Address: N27 W24025 Paul Ct

City: Pewaukee State: WI Zip: 53072

Phone: 262-542-9200 E-mail Address:

## Applicant

Name: Eric Obarski

Company: The Preserve at Harvest Ridge LLC

Address: N27 W24025 Paul Ct

City: Pewuakee State: WI Zip: 53072

Phone: 262-542-9200 E-Mail Address: eobarski@neumanncompanies.cor

**A complete application along with the appropriate fees shall be submitted by the deadline stated on the meeting schedule. In order for an application to be considered complete, the application shall include the required number of site plans/maps, and all of the necessary supporting information as indicated on the Project Review Checklist. If applying for a conditional use or development agreement, a document showing vested interest in the property is required.** ***The Town of Lisbon reserves the right not to accept an application that is deemed incomplete.***

# THE PRESERVE AT HARVEST RIDGE ADDITION NO. 1

BEING A REDIVISION OF OUTLOT 4, "THE PRESERVE AT HARVEST RIDGE", BEING A PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 AND THE NORTHWEST 1/4, NORTHEAST 1/4, SOUTHWEST 1/4 AND SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 30, TOWN 8 NORTH, RANGE 19 EAST, IN THE TOWN OF LISBON, WAUKESHA COUNTY, WISCONSIN.

There are no objections to this plat with respect to Secs. 236.15, 236.16, 236.20 and 236.21(1) and (2), Wis Stats. as provided by s. 236.12, Wis. Stats.

Certified _____, 20____

Department of Administration

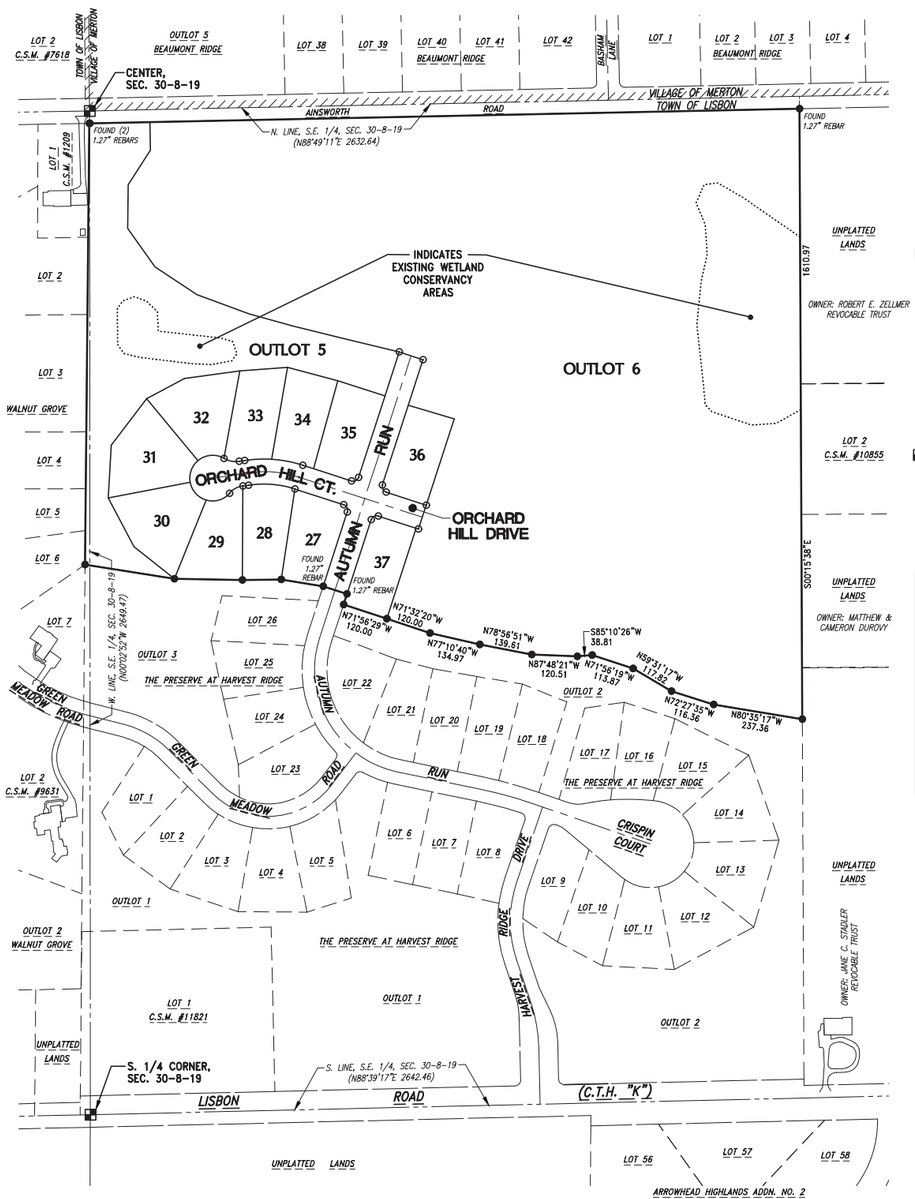
**ZONING DATA:**

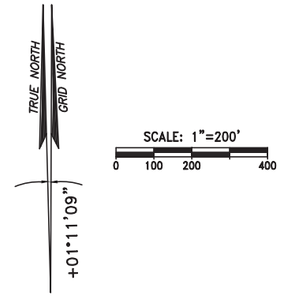
CATEGORY – "R-1" (PUD OVERLAY)
Minimum Lot Area = 30,000 S.F.
Minimum Lot Width = 110 ft. @ FSB
Minimum Building Setbacks:
Public Roads ..... 35 ft.
Lisbon & Ainsworth Roads ... 50 ft.
Side Yard ..... 20 ft.
Rear Yard ..... 20 ft.
Wetlands ..... 75 ft.

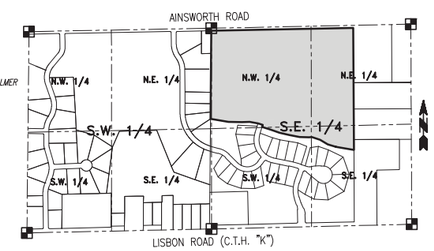
**OWNER:**

THE PRESERVE AT HARVEST RIDGE, LLC
N27 W24025 PAUL COURT, SUITE 100
PEWAUKEE, WI 53072
(262) 542-9200
(262) 349-9324

## OVERALL DETAIL SHEET

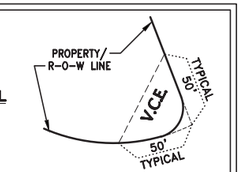



**LOCATION MAP:**
*S.W. 1/4 & S.E. 1/4, SEC. 30, T. 8 N., R. 19 E.*
*SCALE: 1"=1000'*

**VISION CORNER EASEMENT DETAIL (V.C.E.)**




**V.C.E. APPLIES TO:**

Lots 27, 35, 36 & 37 are herein subject to a Vision Corner Easement in that the height of planting berms, fences, signs & any other structure within the Easement is restricted to 24" above the intersection elevation. There shall be no direct vehicular access from the Lots and Outlots in this Subdivision to the public Roads across the Vision Corner Easement.

**SEASONAL HIGH GROUND WATER TABLE:**

| LOT # | LOT # AS SHOWN IN REPORT | SEASON HIGH WATER TABLE ELEV. [1] | MIN. BSMT. ELEV. (PER TOWN OF LISBON)[2] | Groundwater Depth (feet) [3] |
|---|---|---|---|---|
| 27 | 60 | 1056.5 | 1058.0 | 2 |
| 28 | 59 | 1049.3 | 1050.8 | 2 |
| 29 | 58 | 1041.55 | 1043.1 | 2.66 |
| 30 | 57 | 1038.34 | 1039.8 | 2 |
| 31 | 56 | 1037.04 | 1038.5 | 2.5 |
| 32 | 55 | 1038.38 | 1039.9 | 3 |
| 33 | 54 | 1042.7 | 1044.2 | 1.91 |
| 34 | 53 | 1047.19 | 1048.7 | 3.33 |
| 35 | 52 | 1052.82 | 1054.3 | 3.33 |
| 36 | 39 | 1062.16 | 1063.7 | 3.33 |
| 37 | 23 | 1060.83 | 1062.3 | 2.66 |

[1] Elevations obtained from "Form A - Seasonal High Groundwater Determination Report" - prepared by Jeffrey Hammes (Professional Soil Scientist #191-112) dated 5/29/2019.

[2] Minimum basement elevations are set 18" above the reported seasonal high groundwater elevation, per Town of Lisbon.

[3] Indicates groundwater depth from existing grade. Per Waukesha County, basement floor surface shall be 1' above interpolated groundwater depth, or if any portion of the proposed basement floor is less than one foot above the highest groundwater table, a gravity drain system and suitable outlet is required.

Basement elevations shall comply with both Town of Lisbon & Waukesha County requirements, as noted on table.

## WETLAND PRESERVATION RESTRICTIONS:

**The Wetland Conservancy Areas shown on Outlots 5 and 6 of this Plat shall be subject to the following restrictions:**

1. Grading, filling, the removal of topsoil or other earthen materials are prohibited, unless specifically authorized by the municipality in which this land is located and, if applicable, the Waukesha County Department of Parks and Land Use–Planning and Zoning Division, the Wisconsin Department of Natural Resources and the Army Corps of Engineers.
2. The removal or destruction of any vegetative cover, i.e., trees, shrubs, grasses, etc., is prohibited, with the exception that dead, diseased, invasive species or dying vegetation may be removed, at the discretion of the landowner and with approval of the Waukesha County Department of Parks and Land Use–Planning and Zoning Division. Silvicultural thinning, upon the recommendation of a forester or naturalist and with approval from the Waukesha County Department of Parks and Land Use – Planning and Zoning Division, shall also be permitted.
3. Grazing by domesticated animals, i.e., horses, cows, etc, is prohibited.
4. The introduction of plant material not indigenous to the existing environment is prohibited.
5. Ponds may be permitted in the wetland area subject to the approval of the municipality in which they are located and, if applicable, the Waukesha County Department of Parks and Land Use–Planning and Zoning Division, the Wisconsin Department of Natural Resources and the Army Corps of Engineers. Ponds are prohibited in the 100-yr. floodplain, primary environmental corridor and isolated natural resource area.
6. The construction of buildings is prohibited.

## GENERAL NOTES:

⊙ — 1. Indicates Set 1.270" outside diameter x 18" long Reinforcing Bar weighing 4.303 lbs. per lineal foot. All other Lot and Outlot corners are staked with 0.750" outside diameter x 18" long Reinforcing Bar weighing 1.502 lbs. per lineal foot.

● — 2. Indicates Found 0.75" outside diameter Reinforcing Bar unless otherwise noted.

3. All linear measurements have been made to the nearest one-hundredth of a foot.
4. All angular measurements have been made to nearest second and computed to the nearest half-second.
5. All bearings are referenced to the grid north of the Wisconsin State Plane Coordinate System (NAD 1927 datum) – South Zone, in which the West line of the S.E. 1/4 of Section 30, T. 8 N., R. 19 E., is taken to bear North 00°02'52" West.
6. All lots to be served by Wells and onsite Soil Absorption Sewage Disposal Systems. All Septic areas for Lots 27 through 37 will be mound type systems.
7. All Wells shall be located within 50 ft. off the front Lotline to ensure proper separation to Septic Systems and Stormwater Management areas.
8. Outlot 5 contains Stormwater Management Facilities, a Public Asphalt Trail System and Open Space.
9. Outlot 6 contains a Wetland Conservancy Area and Open Space. This Outlot to be retained by the Owner for future development. Neither Waukesha County nor the Town of Lisbon shall be liable for fees or special charges in the event they become the owner of Outlot 6 in the Subdivision by reason of tax delinquency.
10. The Owners of the residential Lots within this Subdivision and any previous and future additions to this Subdivision shall each own an equal undivided fractional interest in Outlot 5 of this Subdivision. Neither Waukesha County nor the Town of Lisbon shall be liable for fees or special charges in the event they become the owner of any Lot or Outlot in the Subdivision by reason of tax delinquency.
11. There shall be no direct vehicular ingress or egress to Ainsworth Road from any Lot or Outlot within this Subdivision. It being expressly intended that this restriction shall constitute a restriction for the benefit of the public according to s.236.293 of the Wisconsin Statutes and shall be enforced by the Wisconsin Department of Transportation and Waukesha County.
12. Stormwater Drainage Easements shall be provided around Stormwater Management Facilities on Outlots 5 and 6 and recorded by separate Documents.
13. There shall be a 12' wide Public Access Easement centered upon and located over the Public Asphalt Trail System to be created by separate Document and granted to the Town of Lisbon for public trail purposes.
14. All side and rear Lotlines not regulated by Waukesha County or the Town of Lisbon shall be graded and maintained in cooperation with abutting Property Owners so as to neither impede the flow of Stormwater, nor negatively impact any abutting property, while also adhering to the established, approved, and accepted Stormwater Management Plan.
15. Per the Wisconsin Historic Preservation database and State Archaeologist, there are no reported archeological sites within the Subdivision.
16. Wetland boundaries shown hereon were field delineated by Jeff Kraemer of Stantec Consulting, Inc. (a WDNR certified assured delineator) on April 21, 2015.
17. All lands with area labeled "Public Drainage Easement" are reserved for stormwater collection, conveyance, treatment of infiltration. No buildings or other structures are allowed in these areas. No grading or filling is allowed in these areas that may interrupt stormwater flows in any way. The Maintenance Agreement may contain specific maintenance requirements for these areas. The Town of Lisbon, Waukesha County or their designee are authorized access in these areas for purposes of inspecting the storm water management practices or enforcing the terms of the Maintenance Agreement.
18. All lands within areas labeled "Public Access Easement" shall remain clear of trees, shrubs and any structures that may interfere with the free movement of vehicles that may be needed to enter the area for maintenance purposes. The Town of Lisbon, Waukesha County or their designee are authorized access in these areas for purposes of inspecting the storm water management practices or enforcing the terms of the Maintenance Agreement.
19. All lands within areas labeled "Well Setback" are restricted from the placement of any Well due to potential risk of contamination in accordance with the Stormwater Ordinance and Wisconsin Administrative Codes.
20. Basement floor surface elevations shall not be lower than those listed in the Seasonal High Ground Water Table shown below due to potential for high ground water.
21. Per Chapter 12, Section 2.06.j of the Town of Lisbon Land Division and Development Ordinance dated 8–14–17, – "Development within a Wetland is prohibited and a 75 foot Building Setback from the Wetland boundary line shall be provided."
22. Building Restrictions: A. Minimum 2–foot vertical separation between the lowest elevation of the structure that is exposed to the ground surface and the maximum water surface elevation produced by the 100–year–24–hour design storm. B. Minimum 50–foot horizontal setback between the building and the closest edge of the water at the elevation produced by the 100–year, 24–hour design storm.

## STORMWATER MANAGEMENT PRACTICE MAINTENANCE:

The titleholders of all Lots within this Subdivision and the titleholders of all Lots within any previous and future additions to this Subdivision shall each hold an equal undivided and nontransferable interest in Outlot 5, where stormwater management practices are located. There are one or more separate documents recorded on the property title through the Waukesha County Register of Deeds entitled "Stormwater Management Practice Maintenance Agreement" ("Maintenance Agreement") that apply to Outlot 5. The Maintenance Agreement subjects this Subdivision Plat, and all the Owners therein, to covenants, conditions and restrictions necessary to ensure the long–term maintenance of the stormwater management practice. The Maintenance Agreement also outlines a process by which the Town of Lisbon may levy and collect special assessments of charges for any services the community might provide relating to enforcement of the Maintenance Agreement.

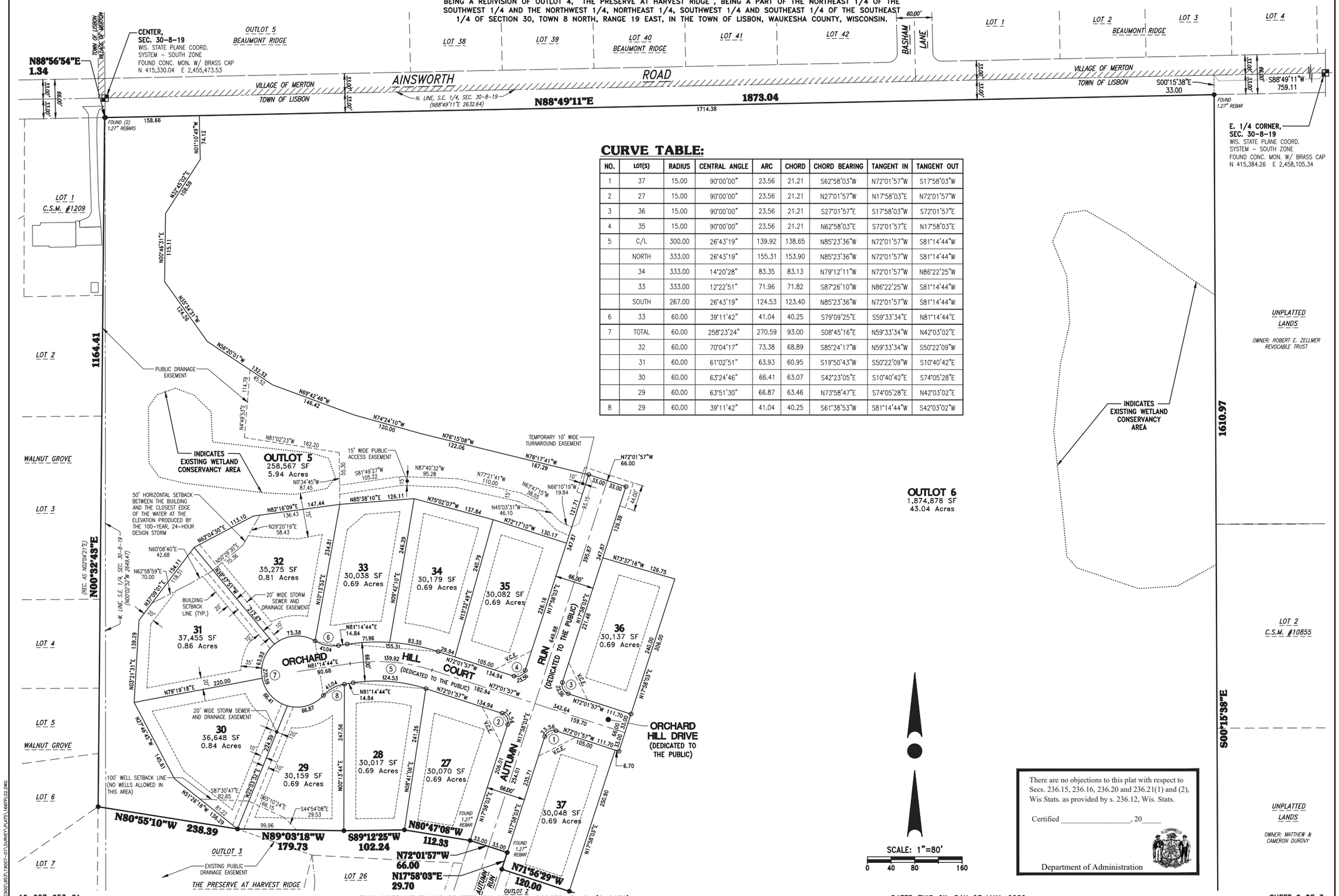
In accordance with Chapter 14–Article VII of the Waukesha County Code of Ordinances ("Stormwater Ordinance"), the Stormwater Permit Holder is responsible for constructing the Stormwater Management practices following plans approved by Waukesha County and is responsible for maintaining the stormwater practices until permit termination by Waukesha County. Upon termination of the Stormwater Permit, the Owners of all Lots within this Subdivision and the Owners of all Lots within any previous and future additions to this Subdivision shall be responsible for the maintenance of the stormwater management practices in accordance with the Maintenance Agreement.

## BASEMENT RESTRICTION FOR GROUNDWATER:

Although all Lots in the Subdivision have been reviewed and approved for development with single–family residential use in accordance with Section 236 Wisconsin Statutes, some Lots contain soil conditions that, due to the possible presence of groundwater near the surface, may require additional soil engineering and foundation design with regard to basement construction. It is recommended that a licensed professional engineer design a basement and foundation that will be suitable to withstand the various problems associated with saturated soil conditions on basement walls or floors or that other special measures be taken. Refer to Town Ordinance Ch. 11 Sec. 3(C) 10. Drainage Regulations.

# THE PRESERVE AT HARVEST RIDGE ADDITION NO. 1

BEING A REDIVISION OF OUTLOT 4, "THE PRESERVE AT HARVEST RIDGE", BEING A PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 AND THE NORTHWEST 1/4, NORTHEAST 1/4, SOUTHWEST 1/4 AND SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 30, TOWN 8 NORTH, RANGE 19 EAST, IN THE TOWN OF LISBON, WAUKESHA COUNTY, WISCONSIN.




## CURVE TABLE:

| NO. | LOT(S) | RADIUS | CENTRAL ANGLE | ARC | CHORD | CHORD BEARING | TANGENT IN | TANGENT OUT |
|---|---|---|---|---|---|---|---|---|
| 1 | 37 | 15.00 | 90°00'00" | 23.56 | 21.21 | S62°58'03"W | N72°01'57"W | S17°58'03"W |
| 2 | 27 | 15.00 | 90°00'00" | 23.56 | 21.21 | N27°01'57"W | N17°58'03"E | N72°01'57"W |
| 3 | 36 | 15.00 | 90°00'00" | 23.56 | 21.21 | S27°01'57"E | S17°58'03"W | S72°01'57"E |
| 4 | 35 | 15.00 | 90°00'00" | 23.56 | 21.21 | N62°58'03"E | S72°01'57"E | N17°58'03"E |
| 5 | C/L | 300.00 | 26°43'19" | 139.92 | 138.65 | N85°23'36"W | N72°01'57"W | S81°14'44"W |
| | NORTH | 333.00 | 26°43'19" | 155.31 | 153.90 | N85°23'36"W | N72°01'57"W | S81°14'44"W |
| | 34 | 333.00 | 14°20'28" | 83.35 | 83.13 | N79°12'11"W | N72°01'57"W | N86°22'25"W |
| | 33 | 333.00 | 12°22'51" | 71.96 | 71.82 | S87°26'10"W | N86°22'25"W | S81°14'44"W |
| | SOUTH | 267.00 | 26°43'19" | 124.53 | 123.40 | N85°23'36"W | N72°01'57"W | S81°14'44"W |
| 6 | 33 | 60.00 | 39°11'42" | 41.04 | 40.25 | S79°09'25"E | S59°33'34"E | N81°14'44"E |
| 7 | TOTAL | 60.00 | 258°23'24" | 270.59 | 93.00 | S08°45'16"E | N59°33'34"W | N42°03'02"E |
| | 32 | 60.00 | 70°04'17" | 73.38 | 68.89 | S85°24'17"W | N59°33'34"W | S50°22'09"W |
| | 31 | 60.00 | 61°02'51" | 63.93 | 60.95 | S19°50'43"W | S50°22'09"W | S10°40'42"E |
| | 30 | 60.00 | 63°24'46" | 66.41 | 63.07 | S42°23'05"E | S10°40'42"E | S74°05'28"E |
| | 29 | 60.00 | 63°51'30" | 66.87 | 63.46 | N73°58'47"E | S74°05'28"E | N42°03'02"E |
| 8 | 29 | 60.00 | 39°11'42" | 41.04 | 40.25 | S61°38'53"W | S81°14'44"W | S42°03'02"W |

There are no objections to this plat with respect to Secs. 236.15, 236.16, 236.20 and 236.21(1) and (2), Wis Stats. as provided by s. 236.12, Wis. Stats.

Certified _____, 20_____

Department of Administration

19-007-953-01

THIS INSTRUMENT WAS DRAFTED BY GRADY L. GOSSER, P.L.S. (S-2972)

DATED THIS 6th DAY OF MAY, 2020



H:\C9001\953\19007-01\SURVEY\PLATS\16FPL02.DWG

# THE PRESERVE AT HARVEST RIDGE ADDITION NO. 1

BEING A REDIVISION OF OUTLOT 4, "THE PRESERVE AT HARVEST RIDGE", BEING A PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 AND THE NORTHWEST 1/4, NORTHEAST 1/4, SOUTHWEST 1/4 AND SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 30, TOWN 8 NORTH, RANGE 19 EAST, IN THE TOWN OF LISBON, WAUKESHA COUNTY, WISCONSIN.

## SURVEYOR'S CERTIFICATE:

STATE OF WISCONSIN )
) SS
COUNTY OF WAUKESHA)

I, Grady L. Gosser, Professional Land Surveyor, do hereby certify:

That I have Surveyed, divided and mapped a redivision of Outlot 4, "The Preserve at Harvest Ridge", recorded in the office of the Register of Deeds for Waukesha County on December 27, 2019, in Book 55 of Subdivision Plats, on Pages 27 through 30 inclusive, as Document No. 4444332, being a part of the Northeast 1/4 of the Southwest 1/4 and the Northwest 1/4, Northeast 1/4, Southwest 1/4 and Southeast 1/4 of the Southeast 1/4 of Section 30, Town 8 North, Range 19 East, in the Town of Lisbon, Waukesha County, Wisconsin, now being more particularly bounded and described as follows:

Said Parcel contains 2,567,816 Square Feet (or 58.9490 Acres) of land, more or less,

That I have made such survey, land division, and map by the direction of THE PRESERVE AT HARVEST RIDGE, LLC, owner of said lands.

That such map is a correct representation of all the exterior boundaries of the land surveyed and the land division thereof made.

That I have fully complied with the provisions of Chapter 236 of the Wisconsin Statutes and the Subdivision Regulations of Waukesha County and the Town of Lisbon in surveying, dividing and mapping the same.

Dated this _____ Day of _____, 20 _____.

_____
Grady L. Gosser, P.L.S.
Professional Land Surveyor, S-2972
TRIO ENGINEERING, LLC
4100 N. Calhoun Road, Suite 300
Brookfield, WI 53005
Phone: (262)790-1480 Fax: (262)790-1481

## UTILITY EASEMENT PROVISIONS:

An easement for electric, natural gas, and communications service is hereby granted by

THE PRESERVE AT HARVEST RIDGE, LLC, Grantor, to

WISCONSIN ELECTRIC POWER COMPANY and WISCONSIN GAS, LLC, Wisconsin corporations doing business as We Energies, and WISCONSIN BELL, INC. doing business as AT&T Wisconsin, a Wisconsin corporation, and SPECTRUM, Grantee, AND

their respective successors and assigns, to construct, install, operate, repair, maintain and replace from time to time, facilities used in connection with overhead and underground transmission and distribution of electricity and electric energy, natural gas, telephone and cable TV facilities for such purposes as the same is now or may hereafter be used, all in, over, under, across, along and upon the property shown within those areas on the plat designated as "Utility Easement Areas" and the property designated on the plat for streets and alleys, whether public or private, together with the right to install service connections upon, across within and beneath the surface of each lot to serve improvements, thereon, or on adjacent lots; also the right to trim or cut down trees, brush and roots as may be reasonably required incident to the rights herein given, and the right to enter upon the subdivided property for all such purposes. The Grantees agree to restore or cause to have restored, the property, as nearly as is reasonably possible, to the condition existing prior to such entry by the Grantees or their agents. This restoration, however, does not apply to the initial installation of said underground and/or above ground electric facilities, natural gas facilities, or telephone and cable TV facilities or to any trees, brush or roots which may be removed at any time pursuant to the rights herein granted. Buildings shall not be placed over Grantees' facilities or in, upon or over the property within the lines marked "Utility Easement Areas" without the prior written consent of Grantees. After installation of any such facilities, the grade of the subdivided property shall not be altered by more than four inches without written consent of grantees.

The grant of easement shall be binding upon and inure to the benefit of the heirs, successors and assigns of all parties hereto.

## VILLAGE OF MERTON EXTRA-TERRITORIAL APPROVAL CERTIFICATE:

Resolved, that the plat known as "THE PRESERVE AT HARVEST RIDGE ADDITION NO. 1", in the Town of Lisbon, Waukesha County, Wisconsin, "THE PRESERVE AT HARVEST RIDGE, LLC, a Wisconsin Limited Liability Company, Owner is hereby approved by the Village Board this _____ Day of _____, 20 _____,

_____
Ron Reinowski, Village President

I hereby certify the foregoing is a true and correct copy of a resolution adopted by the Village Board of the Village of Merton this _____ Day of _____, 20 _____,

_____
Ron Reinowski, Village President

_____
Tom Nelson, Village Clerk/Treasurer

## CORPORATE OWNER'S CERTIFICATE OF DEDICATION:

THE PRESERVE AT HARVEST RIDGE, LLC, a Wisconsin Limited Liability Company duly organized and existing under and by virtue of the laws of the State of Wisconsin, as owner, certifies that said Limited Liability Company has caused the land described on this plat to be surveyed, divided, mapped and dedicated as represented on this plat. I also certify that this plat is required by S.236.10 or S.236.12 to be submitted to the following for approval or objection.

APPROVING AGENCIES:

1. Town of Lisbon
2. Waukesha County, Department of Parks and Land Use
3. Village of Merton (Extra-Territorial Jurisdiction)

AGENCIES WHO MAY OBJECT:

1. State of Wisconsin, Department of Administration

Witness the hand and seal of said Owner this _____ day of _____, 20_____.

THE PRESERVE AT HARVEST RIDGE, LLC

_____
Steve DeCleene, President of Neumann Developments, its sole member

STATE OF WISCONSIN )
) SS
COUNTY OF WAUKESHA )

Personally came before me this _____ day of _____, 20_____, the above named Steve DeCleene, President of Neumann Developments, its sole member, of the above named Limited Liability Company, to me known to be the person who executed the foregoing instrument, and to me known to be such President of said Limited Liability Company, and acknowledged that he executed the foregoing instrument as such officer as the deed of said Limited Liability Company, by its authority.

_____
Print Name: _____
Public, Waukesha County, WI
My Commission Expires: _____

## CONSENT OF CORPORATE MORTGAGEE:

CORNERSTONE COMMUNITY BANK, a Corporation duly organized and existing by virtue of the laws of the State of Wisconsin, mortgagee of the above described land, does hereby consent to the surveying, dividing, mapping and dedicating of the land described on this Plat, and does hereby consent to the above certificate of THE PRESERVE AT HARVEST RIDGE, LLC, owner, this _____ day of _____, 20 _____.

_____
Chris Zirbes, Vice President

STATE OF WISCONSIN )
) SS
COUNTY OF WAUKESHA )

Personally came before me this _____ day of _____, 20____, the above named Chris Zirbes, Vice President of the above named corporation, to me known to be the person who executed the foregoing instrument, and to me known to be such Vice President of said corporation, and acknowledged that he executed the foregoing instrument as such officer as the deed of said corporation, by its authority.

_____
Print Name: _____
Public, _____County, WI
My Commission Expires: _____

## CONSENT OF CORPORATE MORTGAGEE:

BOWEN GLOBAL INVESTMENTS, INC., a Nevada Corporation duly organized and existing by virtue of the laws of the State of Wisconsin, mortgagee of the above described land, does hereby consent to the surveying, dividing, mapping and dedicating of the land described on this Plat, and does hereby consent to the above certificate of THE PRESERVE AT HARVEST RIDGE, LLC, owner, this _____ day of _____, 20 _____.

_____
Jeffrey R. Stolz, Vice President

STATE OF _____)
) SS
COUNTY OF _____)

Personally came before me this _____ day of _____, 20____, the above named Jeffrey R. Stolz, Vice President of the above named corporation, to me known to be the person who executed the foregoing instrument, and to me known to be such Vice President of said corporation, and acknowledged that he executed the foregoing instrument as such officer as the deed of said corporation, by its authority.

_____
Print Name: _____
Public, _____County, _
My Commission Expires: _____

There are no objections to this plat with respect to Secs. 236.15, 236.16, 236.20 and 236.21(1) and (2), Wis Stats. as provided by s. 236.12, Wis. Stats.

Certified _____, 20_____

Department of Administration

## CERTIFICATE OF COUNTY TREASURER:

STATE OF WISCONSIN )
) SS
COUNTY OF WAUKESHA)

I, Pamela F. Reeves, being duly elected, qualified and acting Treasurer of the County of Waukesha, do hereby certify that the records in my office show no unredeemed tax sales and no unpaid taxes or special assessments as of this _____ Day of _____, 20 _____ on any of the land included in the Plat of "THE PRESERVE AT HARVEST RIDGE ADDITION NO. 1".

Dated this _____ Day of _____, 20 _____.

_____
Pamela F. Reeves, County Treasurer

## CERTIFICATE OF TOWN TREASURER:

STATE OF WISCONSIN )
) SS
COUNTY OF WAUKESHA)

I, Amy Buchman, being duly appointed, qualified and acting Treasurer of the Town of Lisbon, do hereby certify that in accordance with the records in my office, there are no unpaid taxes or special assessments as of this _____ Day of _____, 20 ___ on any of the land included in the Plat of "THE PRESERVE AT HARVEST RIDGE ADDITION NO. 1".

Dated this _____ Day of _____, 20 _____.

_____
Amy Buchman, Town Treasurer

## TOWN BOARD APPROVAL CERTIFICATE:

Resolved, that the plat known as "THE PRESERVE AT HARVEST RIDGE ADDITION NO. 1", in the Town of Lisbon, Waukesha County, Wisconsin, is hereby approved by the Town Board. The Town of Lisbon also hereby approves and accepts all dedications shown hereon.

All conditions have been met as of this _____ Day of _____, 20 _____.

_____
Joseph Osterman, Town Chairman

I hereby certify the foregoing is a true and correct copy of a resolution adopted by the Town Board of the Town of Lisbon this _____ Day of _____, 20 _____,

_____
Joseph Osterman, Town Chairman

_____
Dan Green, Town Clerk

## TOWN PLAN COMMISSION APPROVAL CERTIFICATE:

Resolved, that the plat known as "THE PRESERVE AT HARVEST RIDGE ADDITION NO. 1", in the Town of Lisbon, Waukesha County, Wisconsin, is hereby approved by the Town Plan Commission this _____ Day of _____, 20 _____,

_____
Joseph Osterman, Town Chairman

_____
Jane Stadler, Plan Commission Secretary

## WAUKESHA COUNTY DEPARTMENT OF PARKS AND LAND USE APPROVAL CERTIFICATE:

The above, which has been filed for approval as required by Chapter 236 of the Wisconsin State Statutes, is hereby approved on this _____ Day of _____, 20 _____,

_____
Dale R. Shaver, Director

**Electronically Recorded**
**4444413**
WAUKESHA COUNTY, WI
REGISTER OF DEEDS
James R Behrend
Recorded On:12/27/2019 11:39:59 AM
Total Fee: $30.00 Page(s): 32
Transfer Tax: $0.00

The above recording informationverifies that this document has been electronically recorded and returned to the submitter.

# DECLARATION OF PROTECTIVE COVENANTS OF THE PRESERVE AT HARVEST RIDGE

THIS DECLARATION OF PROTECTIVE COVENANTS Of The Preserve at Harvest Ridge (the "***Declaration***") is made this 26th day of December, 2019, by Preserve at Harvest Ridge, LLC, a Wisconsin limited liability company ("***Declarant***").

## RECITALS

WHEREAS, Declarant owns the real estate located in the Town of Lisbon, Waukesha County, Wisconsin, as more particularly described on Exhibit A attached hereto and incorporated herein by this reference (the "***Property***").

WHEREAS, upon approval and recording of the plat for the Subdivision (as hereinafter defined), the Subdivision will be a platted subdivision consisting of Twenty-Six (26) single-family lots and four (4) outlots, as more particularly described on Exhibit A and as depicted on Exhibit B, as they are attached hereto and incorporated herein.

Name and Return Address:

Preserve at Harvest Ridge, LLC
c/o Neumann Developments
N27 W24025 Paul Court, Suite 100
Pewaukee, WI 53072

Tax Key No(s):

pt of LSBT 0264-998 (for 2019)
pt of LSBT 0264-998-002 (for 2020)

WHEREAS, at the time of this Declaration, the Declarant desires to subject the lots and outlots of the Subdivision, to the covenants, conditions, restrictions, reservations and easements hereinafter set forth, for the benefit of the Subdivision as a whole, and for the benefit of each Lot Owner (as hereinafter defined).

## DECLARATION

NOW, THEREFORE, Declarant, as fee owner of the Property, hereby declares that the Subdivision and all portions thereof shall be used, held, leased, transferred, sold, and conveyed subject to the covenants, conditions, restrictions, reservations and easements hereinafter set forth, which shall inure to the benefit of and shall pass with each Lot (as hereinafter defined) as covenants running with the land and shall apply to and bind all successors in interest, users and owners.

The general purpose of this Declaration is to: (1) promote the harmonious development of the Subdivision into a high quality residential community while protecting the natural beauty and quality of the environment; (2) help ensure that the Subdivision will become and remain an attractive community; (3) guard against the erection of poorly designed or poorly proportioned structures; (4) require harmonious use of building materials; (5) promote the highest and best residential development of the Subdivision; (6) require the erection of attractive homes in appropriate locations on building sites; (7) be in compliance with Municipal (as hereinafter

defined) codes and ordinances; and (8) provide for the expansion of the Subdivision consistent with this Declaration.

## ARTICLE 1. DEFINITIONS

Capitalized terms not otherwise defined in this Declaration shall have the assigned definitions:

1.1 "***Association***" shall mean The Preserve at Harvest Ridge Homeowners Association, Inc., the members of which shall be all Owners (as hereinafter defined) of Lots (as hereinafter defined) in the Subdivision.

1.2 "***ACC***" shall mean the Architectural Control Board as established by the Declarant.

1.3 "***Amenity Area***" shall mean that area as more particularly described in Article 7. The area shall be a Common Area and any improvements which may be constructed in the Amenity Area shall be Common Improvements.

1.4 "***Association Insurance***" shall mean all policies of insurance as may be maintained by the Association under this Declaration.

1.5 "***Board***" or "***Board of Directors***" shall mean the governing body of the Association, elected according to the Bylaws.

1.6 "***Building***" shall mean any freestanding structure located in the Subdivision. A "***dwelling***" or a "***home***" is a Building intended for occupancy in accordance with Article 6.

1.7 "***Bylaws***" shall mean the Bylaws of the Association as adopted by the Board.

1.8 "***Common Areas***" shall mean the easements, Outlots [other than the Expansion Area], Amenity Area, and those areas identified on that certain Plat of Subdivision as recorded in the Register's Office.

1.9 "***Common Improvements***" shall mean all personal property, fixtures, structures, improvements, signs, Storm Water Facilities, landscaping, utilities, Mailbox CBUs, Buildings or other improvements made by the Developer or the Association in the Common Areas, cul-de-sac islands and medians.

1.10 "***County***" shall mean the County of Waukesha, Wisconsin.

1.11 "***Declarant***" shall mean Preserve at Harvest Ridge, LLC and its successors and assigns pursuant to Section 15 of this Declaration.

1.12 "***Declaration***" shall mean this Declaration as the same may be amended from time to time.

1.13 "***Developer***" shall mean Preserve at Harvest Ridge, LLC.

1.14 "***Director***" shall mean a member of the Board.

1.15 "***Documents***" shall mean the Articles of Incorporation of the Association, the Bylaws, the Rules, and this Declaration, as they may be amended from time to time.

1.16 "***Easement***" shall mean an area on a Lot or in the Subdivision to which has been granted the right of use to an Owner, the Association or a third party for a limited purpose and shall be identified as shown on the Plat. An Owner shall not build, plant or create any obstruction on, over, under or through an Easement, except as consistent with the express, written grant of said Easement rights.

1.17 "***Lot***" shall mean a platted lot intended for construction of a home as shown on the Plat. The reference to a Lot by a number shall mean that particular Lot as shown on the Plat. The term "Lot" will also include any platted lot intended for construction of a home as shown on any amendment to the Plat or additional plat of any Outlot, which lots are included in any amendment expanding the jurisdiction of this Declaration under Article 11.

1.18 "***Mortgage***" shall mean a recorded first lien mortgage against a Lot or the vendor's interest under a recorded first lien land contract relating to a Lot.

1.19 "***Mortgagee***" shall mean the holder of a Mortgage.

1.20 "***Municipality***" or "***Municipal***" shall mean the Town of Lisbon, Wisconsin.

1.21 "***Natural Materials***" shall mean any building material that is naturally forming or generally composed of natural materials. Examples shall include, but not be limited to masonry, stone, cement board, or LP SmartSide Siding or other as determined by the ACC. Materials specifically excluded in this definition include, but are not limited to, vinyl, aluminum, fabricated wood panel wall sheathing or other materials as determined by the ACC.

1.22 "***Occupant***" shall mean the Owner and any other person residing in a Building.

1.23 "***Owner***" shall mean each fee simple owner or land contract vendee of a Lot. The Declarant is an Owner with respect to Lots to which it holds title.

1.24 "***Outlot***" or "***Outlots***" shall mean an outlet as shown on the Plat, and any subsequent plats. The reference to an Outlot by a number shall mean that particular Outlot as shown on such Plat.

1.25 "***Pet***" shall mean a domestic cat, a domestic dog, service animal and emotional support animal, a single caged bird or common small tank fish.

1.26 "***Plat***", "***Plat of Subdivision***", or "***Final Plat***" shall mean the Plat of The Preserve at Harvest Ridge, as recorded with the Register's Office on December 27, 2019 as Document No. 4444332 and attached hereto as Exhibit B.

1.27 "***Register's Office***" shall mean the office of the Register of Deeds for County in which the project is located.

1.28 "***Rules***" shall mean rules established by the Association governing the administration of the Common Areas and Common Improvements.

1.29 "***Storm Water Facilities***" shall mean the private storm water basins installed in Outlots 1 and 2 together with the easements as shown on the Final Plat.

1.30 "***Storm Water Management Agreement***" shall mean that certain Storm Water Management Practice Maintenance Agreement executed by Declarant.

1.31 "***Storm Water Permit***" shall mean the permit as issued by the Municipality, as shall be assigned to the Association, for the maintenance and upkeep of the Storm Water Facilities.

1.32 "***Subdivision***" shall mean all of the Lots and Outlots, as more particularly described on Exhibit A and as depicted on the Plat attached hereto as Exhibit B.

## ARTICLE 2. ARCHITECTURAL CONTROL

2.1 Architectural Controls; Restrictions on Development.

2.1.1 Architectural Control Committee. So long as Declarant has title to any Lot subject to this Declaration, including the Expansion Area, the ACC shall consist of three (3) members appointed in writing by Declarant. The Declarant appointed members are not required to be Lot Owners in the Subdivision. All members of the ACC shall serve at the pleasure of the Declarant. The Declarant shall surrender the selection of the members of the ACC upon the earlier of: (a) thirty (30) days from Declarant's conveyance of the final Lot, including any Lots which may be platted within the Expansion Area as provided in this Declaration, to an Owner who has been granted an occupancy permit and intends to reside on the Lot; (b) ten (10) years from the date of this Declaration; or (c) Declarant's election to waive its rights to control the ACC. Upon Declarant's surrender of the ACC as provided above, the members of the ACC shall be elected by the Board, provided, however, that if selected by the Board, a representative of Declarant may serve on the ACC. Notwithstanding the election of the new members of the ACC, the approval of Drawings for the initial construction of a home on a Lot shall not be effective without the express prior consent of the Declarant; approval of Drawings for other matters will not require Declarant's approval. For the avoidance of doubt, for purposes of this Section a "bulk" or multi-Lot conveyance to a party who is not intending to occupy the property conveyed shall not be considered a conveyance for purposes of (a) above.

2.1.2 No Development Without Prior Approval. Not less than ten (10) days prior to each time any of the following is proposed to occur:

(a) commencement of construction of any Building or other improvements or alteration on any Lot; or

(b) the reconstruction of any Building or other improvements on any portion or portions of such property following a casualty loss thereto; or

(c) the demolition of any Building or other improvements on any portion or portions of such property; or

(d) the initial painting, or subsequent decoration or alteration of the exterior of any Building or other improvement on such property; or

(e) the installation of items such as, but not limited to, solar panels, wind-driven energy devices, awnings, enclosure, hot tub, deck, swimming pool, mailboxes, fences, berms or other features on any such property;

the Owner(s) of such property shall submit to the ACC for consideration as described below three (3) copies of written information, which shall include a survey of such property prepared by a licensed surveyor or the equivalent, as approved by the ACC for the particular submission, ("***Drawings***") showing:

(1) the location, size, elevations and type of Building(s) and other improvements, including, but not limited to, homes, garages and fences or other matters proposed to be erected or reconstructed on such property,

(2) detailed plans and specifications for construction or reconstruction, including building material, type and color, and plans to screen the demolition, construction or reconstruction from view,

(3) the proposed landscaping, including any fences or walls, and

(4) the proposed location and specifications for utilities servicing such improvements.

The Drawings shall be submitted in 11x17 format and reflect the proposals in (1) through (4) above, which are appropriate to be shown on the survey. Any of the actions described in clauses (a) through (e) above may be taken (subject to Section 2.1.3 below) on or after the date on which the ACC approves or does not object or is deemed to have done so as provided in Section 2.1.3 below, unless such time periods are waived by the ACC in its sole discretion where the ACC believes that such earlier commencement is consistent with the purposes of this Declaration. No action described in paragraphs (a) through (e) above shall take place without the approval by the ACC of the Drawings for such action, except if the action is the repair or replacement of previously approved exterior features with features that are identical or if the action is the repainting of an exterior surface with paint of the same color.

The Municipality may also require permits prior to proceeding with the development activities for the items listed above.

2.1.3 Standards and Procedural Matters of Consideration. The ACC shall not unreasonably refuse to consider submitted Drawings provided that any fees imposed for review have been paid. In considering any Drawings, the ACC shall consider, among other factors, whether all of the improvements and the lighting, exterior finishes (such as materials, decorations, and paint color), landscaping, the placement and protection of trees and such other matters proposed in such Drawings comply with the terms of this Declaration and the Municipality's ordinances and otherwise are, in the ACC's sole opinion, in keeping with and do not detract from the harmony of the external design of, or depreciate any portion of the Property, whether then

undeveloped, developed or in the process of development, even if the Drawings otherwise do not breach any other standard set forth in this Declaration. The ACC may approve Drawings (absolutely or conditionally), may object to Drawings (absolutely or conditionally), or may state that it has no objection to Drawings (absolutely or conditionally). Approval must be express and in writing. The failure of the ACC to approve, object to, or acquiesce conditionally as provided above within thirty (30) business days after submittal of the complete Drawings and payment of any review fees shall be deemed to be the ACC's acceptance of the Drawings as submitted. If the ACC objects to Drawings in whole or in part for any reason, the submitting Owner shall thereafter resubmit Drawings to the ACC with such revisions as are required. Each time an Owner so submits the Drawings, the ACC shall have the right to approve, acquiesce conditionally or object to the Drawings as described above in the time periods as measured from the last submittal. Following the ACC's approval of the Drawings, the improvements described therein shall be developed strictly in accordance with the approved Drawings and requirements. If the approved improvements are not completed within one (1) year of their initial approval, then such approval shall be deemed withdrawn and the same or different Drawings required to be submitted or resubmitted, as the case may be; provided that the ACC may, in its discretion, extend such period by up to an additional six (6) months if it reasonably determines that delay has been primarily caused by factors outside of the control of the Owner; and provided further that the initial driveway need not be completed until the time period specified.

2.1.4 Prior Approval for Changes. If after the completion of the improvements to an affected Lot, the Owner thereof desires to construct any additional improvements or to substantially alter the then existing improvements or the grade of the affected Lot, the Owner shall comply with the provisions of Section 2.1.2 above. A proposed alteration will be deemed substantial if it affects the grade of the affected Lot or the location or exterior appearance of the approved improvements.

2.1.5 Procedures and Budget. The ACC may set its own operating procedures consistent with this Declaration and any limitations hereafter imposed by the Board. The costs of operating the ACC shall be assessed by the Association as common expenses, except as permitted below. The ACC may, but need not, require the payment of a review fee in connection with the submittal of any Drawings pursuant to a written policy. The ACC may engage consultants (e.g., architects, engineers or attorneys) either on a general or on a case-by-case basis, and the costs thereof may be charged to the applicant. The members of the ACC shall not draw any compensation for serving thereon, but may be reimbursed for expenses incurred in performing their duties. All funds relating to the ACC shall be handled by the treasurer of the Association.

2.1.6 Separate Municipal Approval. Matters which require approval of the ACC may also require the approval of the Municipality. Obtaining approval from the ACC and from the Municipality is the sole responsibility of the Owner desiring approval. Approval of Drawings by the ACC shall not be deemed approval by the Municipality, and approval by the Municipality shall not be deemed approval by the ACC. ACC interpretations of Municipal ordinances are not binding on the Municipality.

2.1.7 Uniformity Standards. Certain standards of architectural control are set forth below. The ACC may adopt additional written standards of uniformity, setback, grading, landscaping, basements, roofing, or exterior, whether generally or for certain types of

improvements. The ACC may enforce any standard even if it has, expressly or by acquiescence, permitted previous deviations from such standard.

2.1.8 Indemnification. Each member or former member of the ACC, together with the personal representatives and heirs of each such person, shall be indemnified, defended, and held harmless by the Association from and against any and all claims, actions, suits, proceedings (including criminal proceedings), losses, costs, damages and expenses, including, without limitation, reasonable attorneys' fees and costs, asserted against, incurred by, imposed in connection with, related to, or resulting from service as a member of the ACC, except as to matters resulting in a final determination of negligence or willful misconduct on the part of such member. In the event of settlement of such proceeding, indemnification shall be provided only in connection with such matters covered by the settlement as to which the Association is advised by counsel that the person to be indemnified has not been guilty of negligence or willful misconduct in the performance of such person as a member in the matter involved. This right of indemnification shall be in addition to all other rights and defenses. All liability, loss, damage, cost and expense incurred or suffered by the Association in connection with this indemnification shall be a common expense. Nothing in this subsection shall be deemed an indemnification of such person with respect to such person's status as an Owner, Occupant or otherwise.

2.2 Antennas. No antenna, aerial, satellite dish or cable for television or radio reception which is greater than 36" in diameter shall be erected or installed on or in any roof or any other portion of a Building, on any Lot, or on the unimproved portions of such properties, except as erected or installed by Declarant, the Association, or any individual Owner with written approval of the ACC, and, in each case, in compliance with Municipal ordinances.

2.3 Minimum / Maximum Home Size Requirements. Only one single-family home not to exceed two stories in height may be constructed on each Lot. The following types of homes on Lots shall have the following minimum sizes:

| **HOME TYPE:** | **MINIMUM SIZE:** |
|---|---|
| One story | 2,000 square feet |
| More than one story | 2,400 square feet |

For purposes hereof, "more than one story" includes homes referred to as one and a half story, two-story, split level or bi-level. The type of home and the number of square feet shall be determined on a uniform basis by the ACC and shall not include basement, attic, garage, porch or patio areas in the computation.

2.4 Garages / Driveway / Curbing & Roadways.

2.4.1 Garages. Each residence shall have a garage for not less than two cars attached to the residence containing a minimum of 500 square feet. Garage Doors are required to be on the side of the building. Canted garages at an angle to the dwelling of not more than 135° shall be permitted. Front entry garages may be approved by the ACC, however all garage doors

facing the street shall be decorative garage doors (raised panels shall not be considered decorative) with either glass inserts or have architectural design such as carriage style or similar.

2.4.2 Driveways. All drives shall be asphalt or concrete or some other hard surface as approved by the ACC and shall be installed no later than twelve (12) months from occupancy. No permanent gravel drive will be permitted.

2.4.3 Curbing & Roadways. Lot Owner shall be responsible for repairing and/or replacing any curbing damaged during construction of the home. Damaged curbing shall be removed and replaced per municipal requirements as part of the driveway installation if allowed by the Municipality. The Declarant is responsible for placing the surface course of asphalt on the public roadways; the Lot Owner is hereby notified that is may occur after the structure is built on the Lot. Prior to installing the surface course of paving, the Municipality will inspect the roadways and curbing, if the Declarant is notified by the Municipality that curbing needs replacement, the owner of the Lot shall be responsible for costs associated with the replacement of the damaged curbing.

2.5 Certain Exterior Features. With respect to the construction of a Building on a Lot or other improvement to a Lot:

2.5.1 Exterior Siding. Natural Materials shall be used for the exterior siding of the Buildings; provided, however, that fascia and soffit may be aluminum. Window and door wraps shall be at least four inch (4") nominal in width and used on all locations except on windows with shutters. All corners shall be six inch (6") trim boards. Front Elevation should contain at least one prominent architectural feature such as a front porch or a minimum of 20% stone or brick accent material. If masonry is used on the exterior walls, it should whenever possible, terminate only at an inside corner. In the event it is not possible to terminate the masonry material at an inside corner, the material must then terminate at a corner board that is at least six (6) inches in width. Side elevations of homes shall require a minimum of two (2) architectural elements for each ranch elevation and three (3) architectural elements for each two-story elevation. Architectural elements shall include any window, door, closed shutter (false window), fypon, horizontal trim, or break in elevation or foundation.

The ACC shall be acting reasonably if it disapproves the Drawings, or any portion thereof, for a home because such home would be similar in appearance, or color, to other homes in close proximity, as determined by the ACC.

2.5.2 Roof. A residence shall have a roof made of dimensional shingles, or better, with a minimum pitch ratio of 8:12, 10:12 for front facing gables, or such other pitch as is specifically approved by the ACC. "3-tab" shingles shall not be allowed.

2.5.3 Grading. No soil shall be removed from any Lot nor may excess soil stored on any Lot (except for prompt use for backfilling, finish grading or landscaping) unless in either case contemplated by the approved Drawings. Even if so approved, the final grades (sometimes called a "finish grade" or "master grade") of a Lot must conform to grading plans approved by the Municipality. Waukesha County Parks and Land Use has determined that Lots 1, 2, 3, 4, 5, 20, 23, 24, 25 & 26 will require the installation of a gravity fed drain tile system. The installation will

be verified and approved along with the individual lot drainage plan by the Municipality. The ACC shall be acting reasonably if it requires that, on Lots with significant grades as determined by the ACC, portions of basement walls be exposed to allow for a more natural transition between homes. Any such exposed basement or foundation walls shall be covered with suitable material consistent with the overall architecture of the home.

2.5.4 Pools. Only in-ground pools may be installed on a Lot (above-ground pools are not allowed) and only with approval of the ACC, which approval shall not be construed as a review of conformance to the Municipal or other regulatory bodies' requirements. Pools shall be completely enclosed by a wall or fence of a minimum of four foot (4') elevation, with a self-closing or self-latching gate or door (at the top of such gate or door) with at least four feet (4') clearance between the fence and the pool. Owner is responsible to insure conformance to applicable Municipal and State of Wisconsin codes and ordinances to insure conformance to size, setbacks and any other requirements.

Pool houses may be permitted by the ACC, provided that the following requirements have been satisfied.

(a) The maximum square footage shall not exceed 200 square feet.

(b) Door openings and all overhead doors shall not exceed 9' in height.

(c) Color, design, and building materials shall be consistent with existing home on the lot.

(d) Underground electric shall be required

(e) Site location, landscape plans, construction plans and survey must be approved by the ACC prior to construction of the same.

(f) Building must be located within setback lines.

2.5.5 Mailboxes, CBU's & Lamppost:

(a) Mailboxes. The term "***mailbox***" shall mean the post and mailbox combination. Unless the U.S. Postal Service (the "***USPS***") requires CBUs in the Subdivision, the ACC shall select a standard mailbox for the Subdivision. The Declarant will provide each Lot owner a layout for placement of the mailboxes in the Subdivision in locations as determined by the USPS. If any mailbox is damaged, destroyed, stolen, or any other adverse effected, the Owner shall be solely responsible to repair the defect in a timely manner and at the Owner's expense. Each Owner is responsible to conform to USPS installation requirement. The ACC shall re-select the mailbox if the selected item is determined to no longer be available.

(b) CBUs. The term "***CBU***" shall mean the Cluster Box Unit installed along the roadway or in a Common Area serving the postal needs of each home. Unless the USPS allows mailboxes in the Subdivision, the Developer shall direct the HOA to install CBUs in locations as approved by the USPS. The Declarant will provide each Lot

owner a layout for placement of the mailboxes in the Subdivision in locations as determined USPS. If any CBU is damaged, destroyed, stolen, or any other adverse effected, the HOA shall be responsible, on behalf of the Lot Owners, to repair the defect in a timely manner and at the HOA's expense. The HOA shall issue a single key for a box to a Lot Owner at the INITIAL occupancy of each home and the HOA shall retain the spare master key for each box. If a key is lost, not transferred when the home is sold, the HOA shall make a copy of the key and charge the Owner the then-current rate as determined by the HOA.

(c) Lamppost. The term "***lamppost***" shall mean the post and lantern combination including lamps and other devices. The ACC shall select a standard lamppost for the Subdivision. The lamppost shall be purchased and installed by Owner, or Owner's contractor, and shall be operational before occupancy. The lamppost must be located in the front yard, generally ten feet (10') from the edge of the driveway and no more than fifteen feet (15') from the front of the house or sidewalk, on the front door side of the driveway. Each lamppost shall be fitted with a photocell that automatically energizes the lamps at dusk and de-energized the lamps at dawn. Owner shall maintain the lamppost in operational condition and shall not tamper with such lantern controls. The ACC shall re-select the lamppost if the selected item is determined to no longer be available.

(d) Installation; Maintenance. Each Owner shall maintain its mailbox (if required) and lamppost in good condition and working order. If an Owner does not install or maintain the mailbox or lamppost, the Association may install, repair, replace, or maintain the same as deemed necessary by the Association and charge Owner for such amount plus a fee for services rendered as determined by Association. Without limiting the authority of the Association, the costs of enforcing the covenants in this subsection may be assessed to an offending Owner or other method as set forth in Article 4. The HOA shall maintain the CBUs and retain a master keys for each unit.

(e) Installation by Declarant. If Declarant, in its discretion, installs any mailbox or mailbox post, or performs or pays for any other matter required herein on behalf of any Owner, it shall not be deemed a waiver of any of the requirements herein as to any other Lot or Owner and shall not obligate Declarant to perform the same action on any other Lot, for any other Owner, or on any subsequent occasion.

2.5.6 Utilities. All utilities servicing the Lot shall be installed underground.

2.5.7 Alternative Energy. No solar collectors, wind turbines, or other exterior energy producing devices shall be erected or installed unless approved by the ACC.

2.5.8 Dog Kennels. Dog kennels shall not be allowed on any Lot even one would otherwise be permitted by Municipal ordinance or code.

2.5.9 Play Equipment. If an Owner chooses to install a play set of any size, whether temporary or permanent, said playground equipment must be approved in advance by the ACC and conform to Municipal codes and ordinances. Play equipment shall be located a minimum of ten feet (10') away from any property lines.

2.6 Landscaping.

2.6.1 Landscaping.

(a) Plantings. Each Lot with a home in the Subdivision must plant and maintain a tree at least six (6) feet in height and two (2) inches in diameter at breast height (dbh) every 60 feet of road frontage to be located on the property side of the Right of Way, with a minimum of two (2) – 2.5" caliper trees and one (1) – 2" caliper ornamental tree located in the front yard. Additionally, there must be a minimum of twelve (12) foundation plantings and mulched bed along the front foundation wall.

(b) Vegetative Cover. Each individual Lot Owner shall be responsible for installing and maintaining vegetative cover (a lawn or landscaping) on all exposed soil on their Lot to prevent erosion of the soil into unwanted locations. This vegetative cover must be installed within one hundred twenty (120) days of obtaining occupancy of the home or, in the case of winter occupancy as outlined below. Note that other materials are allowable around the foundation and paved surfaces including, but not limited to gravel, mulch, brick or any other material that will reduce erosion and permanently stabilize the disturbed areas of soil. If the Owner of any Lot, after reasonable written notice from the Association, fails or refuses to install vegetative cover as described herein, or maintain it as required above, the Association, through its duly authorized agents or employees, shall have the right to enter upon said Lot at reasonable hours to perform said landscaping and/or maintenance. The costs of the materials and labor to perform such landscaping and/or maintenance shall be assessed against said Lot in accordance with Municipal codes or ordinances, or the Wisconsin State Statutes. This restriction for vegetative cover does not apply during the winter months when growing conditions will not allow the establishment of vegetation cover. In such an event the Owner shall be required to establish vegetative cover within one hundred twenty (120) days of proper growing conditions which is anticipated to be from mid-April to mid-October.

2.6.2 Irrigation. Irrigation systems for lawns and planting beds, if installed, shall utilize irrigation controllers and components that conform to the Environmental Protection Agency's "WaterSense" criteria. If such criteria are no longer available, the ACC may substitute a different standard. Controllers shall be TORO Evolution Series equipped with a precision soil sensor and rain sensor, as minimum components. Controllers and equipment shall be installed, programmed and maintained according to manufacturer's recommendations. If the model of controller specified above is, in the opinion of the ACC, no longer readily available or available at reasonable cost, the ACC may choose a different controller from time to time as the standard. The ACC may also permit use of other products from other manufacturers, with similar features, as "or equal" products.

2.6.3 Easements. Plantings in the public and private easements may not be permitted by terms of the easement and should be avoided. Plantings within easements will be at-risk for removal by the Municipality and may be subject to damage or removal for maintenance and/or repair operations.

2.7 Municipal Codes and Ordinances. All items in this Article 2 shall be subject to Municipal codes and ordinances, as may be modified from time to time.

## ARTICLE 3. ASSOCIATION OF OWNERS

3.1 Administration. Declarant shall establish the Association, which shall be incorporated as a Wisconsin nonstock corporation, and shall adopt Bylaws for its governance and administration of the Common Areas and Common Improvements. The Board may, but need not, from time to time adopt and amend Rules that are binding on all Owners and Occupants. The Board shall administer and enforce the Common Areas, the provisions of this Declaration and the Bylaws, the Rules, and all other uses of and restrictions on the Property such as easements. Until the establishment of the Association, all powers of the Association shall be exercised by Declarant.

3.2 Membership and Voting. Effective as of the date of purchase or creation of a Lot, each Owner shall be a member of the Association. In the Association, the Owner(s) of each Lot shall be entitled to one vote for each Lot owned. If one or more Lots change their status to some other form of ownership, the votes appurtenant to each original Lot shall not be changed. No member shall be permitted to vote if such member is more than thirty (30) days delinquent in the payment of any amount due to the Association under Article 4 of this Declaration.

3.3 Control of Association. Declarant shall have the right to appoint and remove Directors of the Association and to exercise any and all powers and responsibilities assigned to the Association, the Board, or its officers, by the Articles of Incorporation, Bylaws, this Declaration or the Wisconsin Nonstock Corporation Law (as amended from time to time), which rights shall expire upon the earlier of: (a) thirty (30) days from Declarant's conveyance of the final, including any Lots which may be platted within the Expansion Area as provided in this Declaration, Owner who has been granted an occupancy permit and intends to reside on the Lot; (b) fifteen (15) years from the date of this Declaration; or (c) Declarant's election to waive its rights to control the Association. Upon Declarant's surrender of its rights to control the Association as provided above, the Directors shall be elected by the majority vote of the Owners within the Subdivision. For the avoidance of doubt, for purposes of this Section a "bulk" or multi-Lot conveyance to a party who is not intending to occupy the property conveyed shall not be considered a conveyance for purposes of (a) above.

3.4 Management. The Association may employ a professional management agent or company to assist in carrying out its duties regarding the Common Areas, the Common Improvements, and this Declaration, with such experience and qualifications and on such terms and conditions as are acceptable to the Board. Any such agreement must be terminable by the Board, without cause, upon 90-day notice without payment of any penalty.

## ARTICLE 4. ASSESSMENTS

4.1 Budget and Assessments.

4.1.1 Deposit. In addition to the Lot purchase price, each Owner will deposit an initial fee with the Association as an initial assessment; amount as stated in the purchase documents. The deposit must be made at the time of closing of the initial purchase of the Lot by an Owner intending to occupy a home on such Lot.

4.1.2 Assessments. The Association shall have the power to levy an annual assessment against each Lot for the purpose of defraying, in whole or in part, the costs incurred by the Association, including costs to operate the Amenity Area improvements and to fund capital accounts. Such annual assessment shall be levied by the Association as of March 1st of each year, for all platted lots in the subdivision as of January 1st of that year, and a statement for such amount shall be mailed to the owner of each Lot as of such date and shall be payable on or before March 31st of each year. The Association may from time to time permit the payment of the annual assessment on a monthly or other basis, but the entire assessment remains due.

4.1.3 Budget. The Association shall annually adopt a budget of common expenses and levy assessments on the Lots based on such budget as provided above, allocating such assessments equally to each Lot, subject to the limitations herein. The budget shall include amounts representing assessments that are bad debts, and a reserve for contingencies and replacements for the Amenity Area as provided in Section 7, and may include a replacement reserve for any other purpose determined by the Board in its reasonable discretion, which in each case shall constitute part of the general assessments. Until a new budget is adopted, the prior year's budget shall remain in effect.

4.1.4 Collection. The Association may delegate to a third party manager or collection agent the authority to collect any assessments.

4.1.5 Special Assessments; Fines. The Association may also levy: (a) special assessments on all Lots for any purpose for which a general assessment or special assessment may be levied; or (b) fines on particular Owners for the purpose of collecting any amounts due the Association or enforcing compliance by such Owners with any provision of this Declaration, the Bylaws or any Rules. The Board may adopt a Rule to impose uniform charges for services which the Association provides related to transfer of Lots, review of proposals under Article 2, and the like. The Board may adopt an initial budget showing the anticipated amounts necessary to cover common expenses.

4.2 Installments; Late Payments. General assessments shall be levied on an annual basis, but shall be due and payable on March 31st, or as determined by the Board from time to time and as set forth herein. Special assessments shall be due and payable at such time and in such manner as the Board may determine. If an assessment is not paid when due then such assessment shall become delinquent and shall accrue interest at the rate of twelve percent (12%) per annum until the assessment is paid in full. Any assessment or installment of an assessment not paid within ten (10) days of its due date may also be subject to a late charge and/or interest as set forth in the Bylaws and/or in the Rules.

4.3 Enforcement; Liens. All general and special assessments which are not paid when due shall constitute a lien on the Lot; and shall be collectible and enforceable by the Association by suit against the Lot Owner, by foreclosure of the lien, and/or in any other manner or method provided under this Declaration or laws of the State of Wisconsin. The lien granted hereunder shall also cover and include all interest accruing on delinquent assessments, plus costs, expenses and attorneys' fees for collection. The Association shall have the exclusive right and power to collect or enforce collection of all general and special assessments and shall further have the exclusive right to bring any and all actions and proceedings for the collection thereof and/or the

enforcement of liens arising therefrom. The Association may bring an action at law against any Lot Owner personally to collect such assessments and/or to foreclose the lien for such assessments against the Lot (in the same manner and method as an action to foreclose a real estate mortgage). The Association may purchase a property upon foreclosure of its lien. Under Section 3.2 an Owner delinquent in payments may in some cases not be permitted to vote on matters before the membership of the Association.

4.4 Association Statements. Within five (5) business days of written request from an Owner or a Mortgagee, the Association shall provide a letter stating the existence and amount of outstanding general or special assessments against the Owner's property, if any. Notwithstanding anything to the contrary in the preceding sentence, all property conveyed by Declarant shall be deemed conveyed free from outstanding general, special or working capital assessments and no such letter shall be required or given as to such property.

4.5 Common Expenses and Surpluses. Common expenses and surpluses shall be allocated in the same manner as general assessments are allocated. All common surpluses for each fiscal year shall be retained for common expenses for the next succeeding fiscal year.

## ARTICLE 5. MAINTENANCE AND ALTERATIONS

5.1 Owner Responsibility. Each Owner or Occupant shall reimburse the Association for the cost of the Association's repair or replacement of any portion of the Common Areas or Common Improvements (including the Amenity Area, if any) damaged through the fault or negligence of such Owner/Occupant or such Owner's/Occupant's family, guests, invitees or tenants. Each Owner shall, at the Owner's cost, even if no home has been constructed by such Owner, maintain the yard, including the cutting of grass and snow removal from driveways and, if any, sidewalks, in an orderly and neat manner and shall maintain all structures on the Lot in good repair and condition.

5.2 Association Responsibility. The Association shall maintain in good condition and repair, including snow removal, replace and operate all of the Common Areas and Common Improvements, including easements, landscaping, trees and plantings in the Common Areas and trimming of such landscaping. The Association may, in its discretion, install additional Common Improvements in the Common Areas. Each Owner shall be responsible for its share of the cost for such activities. The Association shall release and indemnify the Municipality for any maintenance responsibilities with respect to same.

5.3 Municipal Responsibility. The Municipality shall have no responsibility for maintenance or alteration under this Article 5. If the Association fails to maintain the Common Area as set forth herein, the Municipality, after proper notice to the Association, may cause such maintenance to be accomplished and may invoice the Association for the cost thereof. If such invoice is not paid in accordance with the period of time customary for the Municipality, the costs may be apportioned among the Owners of all Lots in the subdivision and placed on the next tax bill of each Lot.

5.4 Alterations and Maintenance. Landscaping, berms, grading, drainage pathways, Common Improvements or other improvements in the Amenity Area or Common Areas may not

be removed or substantially altered without written approval by the Association, Municipal engineer and the Municipal plan commission, as may be required. Maintenance and minor alterations of these improvements are allowed, such as the removal/repair of damage structures, pruning of trees, replacement of ground cover, and repair or replacement of the fencing and other structures. Owners are encouraged to remove trash and debris and should report any unauthorized use within the Common Areas or Common Improvements to the Association. Declarant and or the Municipality are able to provide a copy of the plans for the Common Area upon request by the Association.

## ARTICLE 6. RESTRICTIONS ON USE AND OCCUPANCY

6.1 Permitted Uses.

6.1.1 Single-Family Residential. Each Lot shall be occupied and used only for single family residential purposes, except as provided in Section 6.1.2. The term "***residential purposes***" includes only those activities necessary for or normally associated with the use and enjoyment of a home site as a place of residence and limited recreation. No garage or other mobile or accessory structure shall be used for temporary or permanent living or sleeping for family or guests without prior approval of the ACC.

6.1.2 Home Business. A home may be used for a home-business if it obtains the prior written approval of the ACC. A home-business shall only be approved if the home-business has no (zero) employees other than immediate family members, and the home-business has no outside client, vendor or customer sales occurring at the home. No trade or business shall be carried on anywhere in the Subdivision, except for (1) the incidental use of a Lot for personal business conducted by mail and telecommunications which does not burden the use of the Subdivision by frequent visits by business service providers or customers, subject to any Rules relating to such burdens, or (2) the sale of Lots, subject to the other provisions hereof and any Rules related thereto, or (3) the establishment of offices by Declarant or its agents for sales of Lots or by the Association for conducting its affairs.

6.1.3 Amenity Area. The Amenity Area shall be used for the purpose of miscellaneous recreational amenities (which may include, without limitation paved pathways and or other Amenities as determined by Declarant or Association) as decided by the Association, in its sole discretion.

6.2 Pets. Subject to Municipal Ordinances, and applicable federal or state statutes, rules, regulations, or orders to the extent they supersede the restrictions of this Declaration, no animals, livestock or poultry shall be raised, bred or kept on any Lot, except that Pets shall be permitted providing they are not raised, bred and/or kept for commercial purposes and service animals and emotional support animals shall be permitted to the extent permitted by applicable municipal ordinances and applicable federal or state statutes, rules, regulations, or orders to the extent they supersede the restrictions of this Declaration. An Owner or Occupant may keep no more than three (3) Pets per Lot on the conditions that:

(a) the Pet is not permitted on any of the Common Areas while unattended or unleashed; and

(b) the Pet is licensed by the Municipality or appropriate licensing authority, if required under applicable ordinances; and

(c) no reptiles or un-caged birds shall be permitted; and

(d) the Pet must immediately and permanently be removed from the Property if, in the sole judgment of the Board or Municipality, the Pet is or becomes offensive, a nuisance or harmful in any way to the Property or any Owner or Occupant, or otherwise violates the terms of this Section or any Rules adopted relating to Pets; and

(e) the Pet is subject to such Rules as the Association may adopt from time to time on the subject; and

(f) possession of Pets is a privilege which may be revoked and shall not be considered a property right.

6.3 Vehicles. No outdoor parking of vehicles shall be permitted on the Lots for more than twenty-four (24) consecutive hours, without the express prior consent of the Board. No person shall occupy, park or otherwise use a vehicle so as to block access to a Lot. Storage or parking of trailers, campers, camping trucks, boats or other marine craft, horse or boat trailers, motorcycles, mopeds, motorized bicycles, vehicles licensed as recreational vehicles or commercial vehicles, snowmobiles, all-terrain vehicles, inoperative or unlicensed vehicles or the like shall not be permitted on a Lot, except (i) in a garage, (ii) in the case of recreational vehicles, commercial vehicles, campers, trailers, and boats, outside of a garage for no longer than one twenty-four (24) hours in a one week period; or (iii) outside parking on a case-by-case basis as approved by the ACC.

6.4 Waste. Accumulations of waste, litter, excess or unused building materials or trash other than in appropriate receptacles is prohibited. Garbage containers stored outside during initial construction or remodeling shall be situated only in locations designated by the Association. Lots shall be kept free of debris during construction of improvements thereon by maintenance of a dumpster on-site. The refuse and garbage receptacles for each occupied home shall be stored in the home or garage, except for a period of twelve (12) hours prior to and following the scheduled garbage pickup. All incinerators and other equipment for the storage or disposal of such material shall be kept in a clean and sanitary condition.

6.5 Temporary Structures. No structure, trailer, shack or barn, temporary or otherwise, shall be placed or maintained on any portion of a Lot or Common Area without written approval of the ACC, except for construction trailers maintained by Declarant and its successors and assigns, or the Association.

6.6 Quiet Enjoyment. Each Owner shall have the right to use its property in accordance with this Declaration and applicable law, free from unreasonable interference from any other Owner, Occupant and other invitee. No person shall cause or permit the Common Areas to be used so as to deny any Owner or Occupant the full use of the Common Areas except as permitted by the Association under Article 3 or in accordance with rules established by the Association with respect to the Amenity Area.

6.7 Noxious Activity. No use or practice shall be allowed in the Subdivision or the Common Areas which is immoral, improper or offensive in the opinion of the Board or which is in violation of the Documents. By way of example and not limitation, offensive activity shall include excessive amplification of musical instruments and/or audio or audio visual equipment.

6.8 Patios and Balconies. Patios, decks and balconies of Buildings on Lots shall be kept in good condition and maintained in a quality similar to that of any Building on the Lot.

6.9 Signs. No Owner or Occupant may erect, post or display posters, Signs or advertising material on the Common Areas or at locations within a Building which are visible from the public streets or Common Areas without the prior written consent of the Board, except (a) Declarant may do so without such approval, and (b) an Owner may erect or post a temporary sign of customary and reasonable dimension relating to the sale of a Lot. The Board may at its discretion, in particular circumstances or in general, delegate its right to consent under this Section to the ACC described in Article 2. Where Board consent is sought and obtained, the permitted Signs will be erected and maintained in accordance with all ordinances, rules, regulations and conditions applicable thereto. "***Signs***" as used herein shall be construed and interpreted in the broadest possible sense, and shall include any placard, posters or other such devices as may be affixed to the interior of any exterior windows so as to be visible from the exterior of the Building. All Signs placed within easements or the public right-of-ways shall also require Municipal approval and/or permits.

6.10 Compliance with Laws; Environmental Matters. Each Owner and Occupant shall comply with all applicable governmental or Association statutes, ordinances, regulations or rules, including but not limited to, Municipal ordinances. Such applicable laws include, but are not limited to those relating to the storage, transport and release to, from, on or in such Lot of any substance or compound governed by any one or more State of Wisconsin Statutes; Comprehensive Environmental Response, Compensation and Liability Act ("***CERCLA***"); Toxic Substances Control Act ("***TOCSA***"); Resource Conservation and Recovery Act ("***RCRA***"); Municipal ordinances; and similar laws relating to the storage, transport or release of substances, compounds or recyclable materials, all as in effect from time to time.

6.11 Obstructions. Unless installed by the Declarant or the Association, no playground equipment, bicycle racks or other equipment or material may be placed on the Common Areas.

6.12 No Further Divisions. No Lot may be further subdivided without the approval of the Municipality and the Association and/or the ACC.

## ARTICLE 7. SPECIAL FEATURES

7.1 Storm Water Facilities. The Storm Water Facilities shall be fractionally owned by the Lot Owners and managed by the Association. The Association shall have the ability to impose assessments for the inspection, maintenance, and repair of the Storm Water Facilities. The Common Areas include storm sewer and surface water drainage systems. The Storm Water Facilities are located in commonly owned outlots as shown on the Final Plat and are Common Areas maintained by the Association in accordance with the Storm Water Agreement and shall be used solely for drainage and storm water purposes and not for recreational purposes. The

Association has no duty to ensure the safety of persons using the drainage areas, or to warn of dangers concerning them. Neither the Declarant nor the Association is responsible for the safety of any drainage area for use by humans or Pets, and neither represents nor warrants that any drainage area is safe for any such use.

7.2 Easements. As provided on the Plat, there are easements located on various Lots for storm water utilities, overland storm water flow, underground utilities, and other items. These easements allow access by the Municipality, Association, ACC or other entity to maintain, repair and access the Lots as may be required from time to time.

7.3 Parade of Homes. Declarant discloses that Declarant may arrange for the Subdivision to be included in the Metropolitan Builders Association (the "***MBA***") Parade of Homes or similarly titled event in which members of the public are invited to inspect a number of Lots improved with homes constructed by one or more contractors. Such events may result in temporary periods of significant construction activity, traffic slowdowns and large crowds, and may continue for a period of several weeks. A Lot Owner is deemed to acknowledge the possibility of said event and is deemed to have waived any objection to the issuance of any Municipal permits required for such event. Declarant is not, however, required to include the Subdivision in any such event, and may base its decision on the Declarant's individual needs, if any. While the Parade of Homes is in progress, all construction activities must stop by 2:00 p.m. on weekdays and 10:00 a.m. on weekends and Labor Day. All debris must be properly disposed of and the streets in front of the Lots must be swept clean of mud and stones. Homes which are not included for inspection as a part of the Parade of Homes must be vacated by the Owners during the hours that the Parade of Homes is open to the public. Unbuilt Lots may be used for Parade of Homes parking as determined by Declarant. No home or Lot shall display any Signs indicating the builders, subcontractors, or any property for sale during the duration of the Parade of Homes, except those Signs allowed in accordance with the MBA's rules and regulations. If a Lot Owner fails to participate in the Parade of Homes after agreeing to do so, the Lot Owner shall reimburse the Declarant for any discounts, including but not limited to, Lot price reductions, mailboxes, lanterns, and other fees paid by the Declarant for the Parade of Homes Lot Owner or builder, that the Lot Owner received by being a participant to the Parade of Homes.

7.4 Amenity Area. The Declarant or, after the period of Declarant control has ended, the Association, may, in its sole discretion, construct various recreational amenities (which may include, without limitation, paved pathways and/or other amenities as determined by Declarant or Association) on those improvements on the Amenity Area. Each Owner shall have the right to use the Amenity Area as with any other Common Area, subject to the Rules. Nothing herein is a representation or warranty that any particular amenity will ever be installed or constructed, or as to the quality of any amenity which is installed or constructed. In adding to the Amenity Area, the Declarant or Association (under the conditions above) may install amenities and Common Improvements in any other Common Area.

7.4.1 Rules and Regulations. The Association shall, through its Board of Directors, establish all rules and regulations regarding the use of the Amenity Area, including without limitation rules related to hours of use and permitted and prohibited activities and conduct.

7.4.2 Maintenance, Repair, and Replacement. Subject to other applicable provisions of this Declaration, the Association shall maintain, repair and replace the Amenity Area to the extent determined necessary or advisable by the Association and as required by law.

7.4.3 Insurance. The Association shall insure the Amenity Area against direct loss or damage occasioned by fire, extended coverage perils and other hazards in amounts and with insurers reasonably chosen by the Association. Such insurance shall be issued in an amount without co-insurance at least equal to the full value any Building(s) and other improvements erected thereon. The Association shall also maintain general public liability insurance and such other insurance with coverage, in amounts and with insurers that the Association reasonably requires from time to time.

7.4.4 Annual Budget. The Association shall include in its annual budget an estimate of the total amount necessary to pay the costs for the following calendar year of operating, maintaining, repairing and replacing the Amenity Area. Expenses shall include without limitation all costs of employees, payroll taxes, materials, parking costs, insurance, services, management fees, supplies, maintenance, repair, landscaping, fuel and power, together with a reasonable amount considered by the Board to be necessary for a reserve for contingencies and replacements.

7.4.5 Reserves. The Association, by its Board, shall establish, fund, and maintain a reasonable reserve for contingencies and replacements for the Amenity Area. The Association shall first charge against such reserve all extraordinary expenditures for the Amenity Area not originally included in the annual estimate which may become necessary during the year. If the annual budget proves inadequate for any reason (other than as a result of the failure by one or more unit owners in the Association to pay their assessments), the Board may, at any time, levy a further assessment, which shall be assessed in the same proportion as other general assessments.

## ARTICLE 8. INSURANCE

8.1 Association Insurance. The Association shall obtain and maintain comprehensive general public liability insurance for occurrences on the Common Areas and with respect to Common Improvements not in the Common Areas, all-risk casualty insurance coverage on all Common Improvements, and such other policies and/or coverage as the Board deems necessary or advisable, such as fidelity insurance for Association officers handling fund of the Association.

8.2 Coverage of Association Insurance. The casualty insurance coverage shall be in an amount equal to the maximum insurable replacement value, with an "agreed amount" and a "replacement cost" endorsement, without deduction or allowance for depreciation. This coverage amount shall be annually reviewed and shall insure against loss or damage by fire and other hazards as commonly covered by a standard extended coverage endorsement and such other hazards as customarily covered with respect to buildings similar in construction, location and use. Commercial general liability coverage shall be in such amounts as the Board determines annually, but not less than $1,000,000 per occurrence.

8.3 Proceeds. Association Insurance proceeds for casualty loss shall be for the benefit of the Association in order to finance construction of damaged Common Areas or Common

Improvements. Liability coverage and other insurance proceeds shall be applied as the Association directs.

8.4 Cost. All premiums for Association Insurance and other insurance obtained by the Association shall be a general assessment.

8.5 Waiver. The Association and, by acceptance of a conveyance to a Lot or the use thereof, or any portion thereof or interest therein, each Owner or Occupant acting both for themselves and for their respective insurers, waive any claim it or they may have against the other for any loss insured under any policy obtained by either to the extent of insurance proceeds actually received, however the loss is caused, including such losses as may be due to the negligence of the other party, its agents or employees. All policies of insurance shall contain a provision that they are not invalidated by the foregoing waiver, but such waiver shall cease to be effective if the existence thereof precludes the Association from obtaining any policy of insurance at a reasonable and customary rate.

8.6 Acts Affecting Insurance. No Owner or Occupant shall commit or permit any violation of covenants or agreements contained in any of the Association Insurance, or do or permit anything to be done, or keep or permit anything to be kept, or permit any condition to exist, which might (a) result in termination of any such policies, (b) adversely affect the right of recovery thereunder, (c) result in reputable insurance companies refusing to provide such insurance, or (d) result in an increase in the insurance rate or premium over the premium which would have been charged in the absence of such violation or condition, unless, in the case of such increase, the Owner or Occupant responsible for such increase shall pay the same. If the rate of premium payable with respect to the Association Insurance shall be increased by reason of (1) the size, design or composition of a Building, or (2) anything done or kept in a property subject to this Declaration, or (3) the failure of an Owner or Occupant to comply with Association Insurance requirements, or (4) the failure of any such Owner or Occupant to comply with this Declaration or the Bylaws, then the particular Owner or Occupant shall reimburse the Association for the resulting additional premiums. The Association reimbursement right is without prejudice to any other Association remedy, and may be enforced by special assessment against the particular property involved.

8.7 Exclusions from Coverage. Association Insurance coverage shall exclude (a) coverage on any home or personal property located within or pertaining to the exclusive use of an Owner except to the extent included as a standard coverage in the policy of Association Insurance; and (b) liability coverage on an Owner or Occupant, its guests, invitee, employees or tenants, arising out of any occurrences within a Lot and/or relating in any way to an Owner's or Occupant's personal property. It is the sole responsibility of each Owner or Occupant to obtain such insurance coverage as are excluded from Association Insurance.

## ARTICLE 9. AMENDMENT OF DECLARATION

9.1 General. Except as otherwise provided herein, this Declaration may be amended only by the written consent of at least sixty-seven percent (67%) of the total votes of the Association then entitled to vote. Regardless of the manner of adoption, no amendment shall adversely affect a special right or easement reserved to Declarant under this Declaration, or the

rights of Mortgagees under Article 10, without the express written consent of Declarant or Mortgagee, as applicable. Notwithstanding the foregoing, Declarant reserves the right to unilaterally amend the Declaration until one (1) year after one hundred percent (100%) of the then existing Lots (inclusive of any Lots added to the Expansion Area by Declarant in its discretion or vacant land in the Expansion Area that is not developed) have been sold to an Owner intending to reside thereon and occupancy permits have been granted for each Lot. During such period, Declarant may also enter into other agreements on behalf of Association or Lot Owners for purposes of easements and/or other items necessary for the orderly operation and maintenance of the Subdivision and/or Association, provided however, that any amendments to the restrictions where the Municipality is involved may require the approval by the Municipality.

9.2 Procedures. Except with respect to an amendment by Declarant, amendments to this Declaration shall be prepared and executed by the president of the Association and shall become effective when recorded in the office of the Register of Deeds. No action to challenge the validity of an amendment shall be commenced more than one (1) year after the amendment is recorded.

## ARTICLE 10. RIGHTS OF MORTGAGE HOLDERS

10.1 Notice. Any Mortgage holder, insurer or guarantor of a Mortgage encumbering a Lot that submits a written request to the Association, identifying the name and address of such holder, insurer or guarantor and the Lot involved, will be entitled to timely written notice of:

(a) Any thirty (30) day delinquency in the payment of assessments owed by the Owner of the Lot on which it holds a Mortgage or any breach of the provisions of any of the Documents which is not cured by such Owner within thirty (30) days of such Owner's receipt of notice of such breach;

(b) A lapse, cancellation or material modification of any Association Insurance; and

(c) Any proposed action that requires the consent of a Mortgage holder.

10.2 Mortgagee Acquisition of Lot. A Mortgagee acquiring title to a Lot pursuant to remedies provided in its Mortgage, or by a deed in lieu of foreclosure following an Owner's default under the Mortgage, shall not be liable for such Lot's unpaid assessments under this Declaration accruing prior to the Mortgagee's acquisition of title to such Lot (except to the extent unpaid assessments are included in subsequent budgets generally), but shall ensure that any such prior delinquent assessments are paid upon transfer of the Lot to a third party.

## ARTICLE 11. RIGHTS OF DECLARANT

11.1 Reserved Rights. Prior to the sale of all Lots by Declarant and occupancy permits granted for all Lots, Declarant:

(a) may use the Common Areas or Amenity Area, and any unsold Lots in any manner as may facilitate the sale of Lots including, but not limited to, maintaining a sales and/or rental offices, model homes and signs and/or showing the Lots. Declarant

may from time to time also delegate such rights (on a non-exclusive basis and subject to such conditions as Declarant may impose) to persons desiring to construct Buildings on particular Lots as model homes. In delegating such rights to other persons, Declarant's delegates shall not have the right, without Declarant's express written consent, to locate a general sales office operation in any such model home, although use of a model home to facilitate sales of Lots or sales of Buildings on Lots may be permitted for a period not to exceed forty-eight (48) months from the date of issuance of the certificate of occupancy therefor; provided, however, that once a model home is used as a home for an Occupant, it may not thereafter be used as a "model home".

(b) shall have the right to (1) grant easements upon, over, through and across the Lots (limited to the ten (10) feet area adjacent to each Lot line), which rights shall expire one (1) year after conveyance of a Lot by Declarant. Additionally, the right to grant easements upon, over, through and across the Common Areas as may be required in Declarant's sole opinion for furnishing any kind of utility services, maintenance and replacement thereof, drainage, grading, communications or public purposes including, which easements may be granted to itself or its nominee and as may be necessary for excavation and construction of any Buildings or for ingress and egress and maintenance and replacement thereof, to, from, and within, the Property and other real property adjacent to it.

(c) shall have the right to veto any proposed amendment to this Declaration for any reason or no reason, in which case it shall not be deemed approved or effective.

For purposes of this Section, a "bulk" or multi-Lot conveyance to a party who is not intending to occupy the property conveyed shall not be considered a "sale" for purposes of this Section.

11.2 Addition to or Subtraction from the Subdivision. Declarant reserves the right, at any time during the term of this Declaration and in its sole discretion, from time to time to subject portions of the Expansion Area to this Declaration in accordance with this Section. Each time Declarant subjects a portion of the Expansion Area to this Declaration it is known as an "Expansion".

11.2.1 Expansion. Declarant reserves the right, at any time, and from time to time, during the term of this Declaration and in its sole discretion, to subject additional real estate outside the Subdivision to this Declaration by recording a document imposing on such real estate the provisions of this Declaration (as amended from time to time). The additional real estate shall be located in the Municipality and shall be adjacent to the Subdivision (ignoring streets, railroads and navigable waters which may separate the additional real estate from the Subdivision). The additional real estate will be subject to the provisions of this Article 11 as though it were a part of the original Subdivision.

11.2.2 Procedure for Expansion. Declarant shall add to the Subdivision by recording with the Register of Deeds one or more amendments to this Declaration setting forth the

legal description of the area so affected. An amendment creating an Expansion need be executed only by the Declarant and does not require consent from or notice to any other person.

11.2.3 Contents of Expansion Amendment. An Expansion amendment will (a) state the legal description of the land being subjected to this Declaration; (b) set forth such other limitations on such future Lots as Declarant may desire not inconsistent with this Declaration; and (c) set forth such other information as is reasonable to facilitate the Expansion and the integration of the area into the Association. All other provisions of the Declaration shall apply to the Lots or Outlots included in any Expansion.

11.2.4 Modification of Budget and Assessments. Upon each such Expansion, the Association will amend the annual Budget and annual assessments as appropriate to account for the effects of any Expansion or subtraction. Any assessments prior to the addition or subtraction of the area affected by the Expansion or subtraction will be pro-rated and adjusted by the Association accordingly. Each Owner in the Expansion Area shall have the same rights and obligations as if such Owner was an Owner under the initial Declaration. All Owners acknowledge that the proportionate share of expenses and the corresponding assessments will be revised to reflect the presence of additional Lots. Each Owner also acknowledges that assessments could increase or decrease based on the facts and circumstances in effect at the time of such addition or subtraction.

11.2.5 Effective Date of Expansion. The Subdivision shall be deemed expanded when an amendment to this Declaration, executed by Declarant, is recorded with the Register's Office.

11.2.6 Effect of Expansion on Common Areas. To the extent that Owners have a tenancy in common interest in Common Areas prior to an Expansion, the interests of such Owners will be deemed adjusted, upon the recording of an Expansion amendment and without more, to equally allocate ownership among all Owners, both pre-existing and new. The interest of any Mortgagee in Common Areas by virtue of this tenancy in common interest, shall attach, by operation of law, to the new percentage interests in the Common Areas appurtenant to the Lot on which it has its lien.

11.2.7 Reserved Easements. Declarant reserves easements over the Common Areas for the benefit of all portions of the Subdivision not yet included in this Declaration, for the purposes of vehicular and pedestrian access; installation, repair, maintenance and replacement of utilities to serve the Expansion areas; marshaling of construction materials and personnel for improvements made to the Expansion area; and the use of Common Improvements and Common Areas for recreational purposes consistent with those uses granted to Owners.

## ARTICLE 12. REMEDIES

12.1 General Remedies. If any Owner or Occupant fails to comply with this Declaration, the Bylaws, or the Rules, such Owner or Occupant shall be liable for damages, subject to injunctive relief (including an order requiring the removal at the Owner's expense of Buildings constructed without ACC approval), subject to any other remedy provided by the Bylaws or at law, or all of

the above, as a result of such noncompliance. The Association or, in a proper case, an aggrieved Owner, may bring an action because of such noncompliance.

12.2 Owner or Occupant Violation; Association Right to Cure. In addition to any other remedies provided herein, if any Owner or Occupant fails to comply with this Declaration, the Bylaws, or the Rules, which failure continues for a period of fifteen (15) days following written notice from the Association, the Association shall have the right, but not the obligation, to perform or cause to be performed such maintenance, replacement, restoration or commence litigation, arbitration or other proceeding or other action as the Association deems necessary or appropriate, in its sole discretion. Expenses incurred therefor by the Association shall be assessed against the Owner or Occupant and shall be subject to all rights and remedies reserved under this Declaration with respect to collection, expense, late payment penalties or interest, filing of a lien and/or foreclosure as reserved at Article 4 of this Declaration. Once the Association has taken such an action, it shall not be obligated to take any other or further action with respect to the same, similar or subsequent failure by the same or a different Owner or Occupant.

## ARTICLE 13. EASEMENTS

13.1 Right of Entry. A right of entry to each Lot or Common Area is reserved to the Association to service utility installations located on, in or under such Lot or Common Area provided request for entry is made in advance and such entry is limited in scope so as to extend only as is reasonably necessary to service such utility installations. In case of emergency, entry by the Association onto any such Lot or Common Area may be made immediately, whether the Owner or Occupant of such Lot or Common Area is or is not present and without liability of the Association or its agents if such entry is necessary for the safety or welfare of persons or property. Any damage or loss caused as a result of such emergency entry shall be the sole expense of the Owner or Occupant if, in the reasonable judgment of those authorizing the entry, such entry was for emergency purposes.

13.2 Common Area Easements. The Association may grant easements over and through the Common Areas for such purposes as the Board deems reasonable for the benefit of the Owners.

## ARTICLE 14. TERMINATION

14.1 Termination. This Declaration shall be in effect for a period of twenty-five (25) years and automatically renewed for successive periods of ten (10) years each, unless terminated at the end of the original or any extended term by: (i) Declarant (if during the period of Declarant control of the Association), or (ii) the written consent of the owners of not less than ninety percent (90%) of the aggregate then existing Lots provided that no vote shall effect an amendment to or termination of any provision hereof conferring on or reserving a special right or easement to Declarant without the express written consent of Declarant, as appropriate. Voluntary termination of this Declaration must be express and shall be effective upon recording a written instrument to such effect in the office of the Register of Deeds. If the Owners decide to terminate the Association, a maintenance and operation plan for the Common Areas and Storm Water Facilities, if any, may need to be presented and approved by the Municipality prior to such termination.

## ARTICLE 15. CONSTRUCTION AND EFFECT

15.1 Number and Gender. Whenever used herein, unless the context shall otherwise provide, the singular shall include the plural, the plural shall include the singular, and the use of any gender shall include all genders.

15.2 Including. Whenever used herein, the term "including" preceding a list of one or more items shall indicate that the list contains examples of a general principle and is not intended as an exhaustive listing.

15.3 Captions. The captions and article and section headings in this Declaration are intended for convenience and reference only and in no way define or limit the scope or intent of the various provisions hereof.

15.4 Severability. If any portion of this Declaration or its application to any person or circumstance is held to be invalid or unenforceable, the remainder of this Declaration, or the application of such provision, or any part thereof, to persons or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby. The remainder of this Declaration shall be valid, and enforced, to the fullest extent permitted by law.

15.5 Remedies. All remedies herein are cumulative.

15.6 Waivers. Whenever a waiver, consent or approval is required or permitted herein, it must be express and in writing; no waiver, consent or approval shall be implied. A waiver, consent or approval to any one matter shall not be deemed a waiver, consent or approval to any subsequent matter whether similar or not.

15.7 Assignment of Declarant's Rights. Declarant may from time to time assign any or all of the rights and benefits conferred on or reserved herein for Declarant in its status as such (as opposed to those rights or benefits conferred on or reserved for all Owners or groups thereof), by an instrument in writing specifically identifying the rights and benefits so assigned which is recorded in the Register's Office.

15.8 Other Regulation. Nothing herein shall preclude or restrict Declarant recording other covenants, conditions or restrictions which further regulate portions of the Subdivision which Declarant owns at the time of recordation.

15.9 Conflict. In the event any covenant or provision of this Declaration is in conflict with any ordinance, code or law of the Municipality or other governmental authority having jurisdiction, the governing authority shall control and supersede that provision of the Declaration. All remaining covenants and provisions of this Declaration shall remain in full force and effect

[SIGNATURES APPEAR ON FOLLOWING PAGE]

**DEVELOPER'S AGREEMENT**
**FOR THE PRESERVE AT HARVEST RIDGE PHASE II**
**TOWN OF LISBON, WAUKESHA COUNTY, WISCONSIN**

**THIS AGREEMENT** made as of this ___ day of June 2020, between The Preserve at Harvest Ridge, LLC, N27W24025 Paul Court, Suite 100, Pewaukee, WI 53072, hereinafter called "DEVELOPER," and the Town of Lisbon in the County of Waukesha and the State of Wisconsin, hereinafter called the "TOWN."

**WHEREAS**, the DEVELOPER is the owner of approximately 106 acres of land in the TOWN, upon which the DEVELOPER desired to construct low-density conservation subdivision, said land being described on **EXHIBIT A**, a copy of which is attached hereto and incorporated herein; and

**WHEREAS**, the DEVELOPER desires to divide and develop such land on **EXHIBIT B** for residential purposes by use of the standard regulations as set forth in Chapter 236 of the Wisconsin Statutes and any municipal ordinances regarding land division including Waukesha County; and

**WHEREAS,** the parties have executed a Phase I Developer's Agreement in which the DEVELOPER agreed to improve Lots 1 through 26 as shown on **EXHIBIT B**; and

**WHEREAS,** the DEVELOPER desires to improve Lots 27 through 37 as part of Phase II of the development, as shown on **EXHIBIT B**, hereinafter called "SUBJECT LANDS"; and

**WHEREAS**, Wis. Stat. § 236.13 provides that, as a condition of approval, the governing body of a municipality within which the subject lands lie may require that the DEVELOPER make and install any public improvements reasonably necessary and/or that the DEVELOPER provide financial security to ensure that the DEVELOPER will make these improvements within reasonable time; and

**WHEREAS**, said SUBJECT LANDS are presently zoned R-1 and utilizing a Residential Planned Unit Development (PUD), which allows the above development; and

**WHEREAS**, said SUBJECT LANDS received approval by the TOWN for a Residential Planned Unit Development (PUD) Overlay to allow for lots sizes of less than one acre. The development shall follow adopted PUD General Development Plan and Specific Development Plan details approved by the Town Board and Plan Commission.

**WHEREAS**, the DEVELOPER and TOWN desire to enter into this Agreement in order to ensure that the DEVELOPER will make and install all public improvements which are reasonably necessary and further that the DEVELOPER shall dedicate the public improvements to the TOWN, and the TOWN agrees to accept said improvements, provided that said public improvements are constructed to municipal specifications, all applicable government regulations and this Agreement without cost to the TOWN; and

**WHEREAS**, this Agreement is necessary to implement the TOWN zoning and land division ordinances; and

**WHEREAS**, the DEVELOPER agrees to develop SUBJECT LANDS as herein described in accordance with this Agreement, conditions approved by the TOWN Plan Commission and TOWN Board, conditions of certain agencies and individuals in the County, all TOWN ordinances and all laws and regulations governing said development;

**WHEREAS,** all lot owners maintain shared ownership in and to their respective outlot and are jointly and severally responsible for all long-term maintenance of that outlot. In the event long term maintenance of any outlot is not being upheld, the Town may take over these duties and charge back the cost of said maintenance to the lot owners through a special assessment;

**NOW, THEREFORE**, in consideration of the mutual promises and covenants contained herein, the DEVELOPER does hereby agree to develop SUBJECT LANDS as follows and as otherwise regulated by TOWN ordinances and all laws and regulations governing said development, the parties hereto agree as follows:

## DEVELOPER'S COVENANTS

## I. IMPROVEMENTS

A. PUBLIC STREETS. The DEVELOPER hereby agrees that:

1. Prior to the start of construction of improvements, the DEVELOPER shall provide to the TOWN written certification from the DEVELOPER'S Engineer or Surveyor that all public street plans are in conformance with all federal, state, county and TOWN specifications, regulations and ordinances, and written proof from the TOWN Engineer evidencing review and approval of said plans.

2. The DEVELOPER shall grade and install all planned public streets in accordance with the preliminary plat, approved development plan of said development or subdivision, which is attached to this document, or final plat as the case may be and the plans and specifications on file in the TOWN Clerk's office.

3. Construction of the public streets providing access to and fronting a specific lot will be completed, presented and approved by the TOWN Board through the first lift of asphalt before any building permits are issued for said lot.

4. The first lift of the public streets will be completed and presented to the TOWN Board no later than December 1, 2020 or as extended by the TOWN Board for lots 27 through 35.

5. The final lift of asphalt shall be placed on all public streets after at least one winter season, and no sooner than 10 months from the installation of the first lift of asphalt but no longer than 14-months from the installation of that first lift of asphalt.

6. The DEVELOPER shall maintain public streets, including snow plowing, until accepted by resolution by the TOWN Board.

7. The DEVELOPER shall furnish "as built" plans showing changes from the construction plans, pursuant to specifications approved by the TOWN Engineer.

8. The DEVELOPER shall have ultimate responsibility for cleaning up any and all construction related mud, dirt, stone or debris on the streets until such time as the final lift of asphalt has been installed by the DEVELOPER and accepted by the TOWN Board. The TOWN shall make a reasonable effort to require the contractor, who is responsible for placing the mud, dirt, stone or debris on the street, to clean up the same or to hold the subject property owner who hired the contractor responsible. The DEVELOPER and/or subject property owner shall clean up the streets within forty-eight (48) hours after receiving a notice from the TOWN. If said mud, dirt, stone or debris are not cleaned up after notification to the DEVELOPER, the TOWN Board will do so at the DEVELOPER'S and/or subject property owner's expense, at the option of the TOWN.

B. SURFACE AND STORM WATER DRAINAGE. The DEVELOPER hereby agrees that:

1. Prior to the start of construction of improvements, the DEVELOPER shall provide to the TOWN written certification from the DEVELOPER'S Engineer or Surveyor that all surface and storm water drainage facilities and erosion control plans are in conformance with all federal, state, county and TOWN regulations, guidelines, specifications, laws, ordinances, and written proof that the TOWN Engineer and the County Department of Environmental Resources, Division of Land Conservation, have reviewed and approved said plans.

2. During the terms of development, the DEVELOPER shall construct, install, furnish and provide adequate facilities for surface and storm water drainage throughout the development with adequate capacity to transmit the anticipated flow from the development and adjacent property, in accordance with all plans and specifications, and all applicable federal, state, county and TOWN regulations, guidelines, specifications, laws and ordinances, and as reviewed and approved by the TOWN Engineer and the County Department of Environmental Resources, Division of Land Conservation, on file in the TOWN Clerk's office, including where necessary as determined by the TOWN Engineer, curb, gutter, storm sewers, catch basins, and infiltration/retention/detention basins.

3. The DEVELOPER agrees that the site grading and construction of surface and storm water drainage facilities shall be completed and accepted by the TOWN Board and comply with Section XI of this agreement before any building permits are issued for any lot.

4. The Developer agrees to maintain storm water drainage and drainage detention facilities as depicted on the drainage plan submitted to, and approve by the Town Engineer. In the event drainage problems arise within the project, or are in any way related to activities conducted on the

project, or are in any way related to the installation or maintenance of the storm water drainage system and detention facilities, or is determined to be related to drainage problems to adjoining lands, they shall be the responsibility of the Developer, or the subsequent owners of the lots-of record, to correct the problems at the owner's expense.

5. The TOWN Board will not accept the surface and storm water drainage system until the entire system is installed and landscaped in accordance with plans and specifications.

6. If required, the DEVELOPER shall clean all storm sewers, if any, prior to issuance of occupancy permits and acceptance of improvements by the TOWN Board.

7. During the time of development or prior to acceptance of all public improvements, whichever is later, the TOWN retains the right to require DEVELOPER to install additional surface and storm water drainage measures if it is determined by the TOWN Engineer that the original surface and storm water drainage plan as designed and/or constructed does not provide reasonable storm water drainage within the development and/or creates additional storm water runoff impacts to the surrounding areas. If DEVELOPER fails to construct the additional improvement within a reasonable period of time, the TOWN may cause such work to be carried out and shall charge the cost of the same against the financial guarantee held by the TOWN pursuant to this Agreement.

8. The DEVELOPER shall furnish "as built" plans of the entire drainage system, pursuant to specifications approved by the TOWN Engineer prior to the issuance of occupancy permits, if required by the TOWN Engineer.

9. The DEVELOPER shall comply with all applicable requirements of Chapter 14, Article VIII of the Waukesha County Code of Ordinances (Storm Water Management and Erosion Control), and any future amendments thereto, including implementation of approved storm water management and erosion control plans. In accordance with an intergovernmental agreement entered between the TOWN and the County, the financial assurance held by the TOWN for purposes of enforcement of this Agreement may be utilized by Waukesha County for enforcement of Chapter 14, Article VIII.

C. GRADING, EROSION AND SILT CONTROL: The DEVELOPER hereby agrees that:

1. Prior to commencing site grading and execution, the DEVELOPER shall provide to the TOWN written certification from the DEVELOPER'S Engineer that said plan, once implemented, shall meet all federal, state, County and local regulations, guidelines, specifications, laws and ordinances, including proof of notification of land disturbances to the State of Wisconsin Department of Natural Resources, and written proof that the TOWN Engineer, Wisconsin Department of Natural Resources and the Army Corps of Engineers, if applicable, have approved said plans.

2. The DEVELOPER shall not materially deviate from the construction sequencing identified in the storm water management and erosion control plans without prior written approval to do so from the Wisconsin Department of Natural Resources and the TOWN Engineer, such approval not to be unreasonably withheld, conditioned, or delayed.

3. The DEVELOPER shall cause all grading, excavation, open cuts, side slopes and other land surface disturbances on or adjacent to the Property to be so seeded and mulched, sodded or otherwise protected that erosion, siltation, sedimentation and washing are prevented in accordance with the plans and specifications reviewed and approved by the TOWN Engineer, Wisconsin Department of Natural Resources and Army Corps of Engineers, if applicable. If needed, the DEVELOPER is responsible for obtaining all necessary consents from neighboring property owners this Section; in the event the DEVELOPER is unable to obtain such consents despite its commercially reasonable good faith efforts, the TOWN and the DEVELOPER agree to cooperate in good faith to perform any required erosion control measures in a manner reasonably acceptable to the TOWN.

4. All disturbed areas of the Property and adjacent to the Property shall be restored in accordance with the approved plans and to the reasonable satisfaction of the TOWN Engineer.

5. Ditches shall be to final grade and seeded before occupancy permits will be issued.

D. LANDSCAPING AND SITE WORK: The DEVELOPER hereby agrees that:

1. To the extent practicable, the DEVELOPER agrees to preserve the existing trees, shrubbery, vines, and grasses not actually lying on the public streets, drainage ways, building foundation sites, private driveways, soil absorption waste disposal areas, paths, and trails by use of sound conservation practices. The Developer shall submit a landscaping plan in a form acceptable to the Town Plan Commission and Town Engineer.

2. The DEVELOPER, as required by the TOWN, shall remove and lawfully dispose of buildings, destroyed trees, brush, tree trunks, shrubs and other natural growth and all rubbish.

3. Landscaping and removal of unwanted items, will be completed and certified as complete by the TOWN Engineer prior to the issuance of any occupancy permits.

4. The TOWN of Lisbon has the right to trim and remove any features which would interfere with safe operation and maintenance of the TOWN right-of-ways and drainage ways.

5. Before an occupancy permit is issued for a respective lot, the DEVELOPER shall install or cause to be installed no less than two, four-inch diameter

trees in accordance with Section 12(8)(12) of the TOWN'S Chapter 12, Land Division and Development Ordinance, and DEVELOPER agrees to place said requirement in the Declaration of Restrictions.

E. STREET SIGNS AND TRAFFIC CONTROL SIGNS: The DEVELOPER hereby agrees that:

1. Street signs, traffic control signs, culverts, posts, and guard rails as required by the TOWN in accordance with Chapter 12 (8)(11) of the TOWN'S Chapter 12, Land Division and Development Ordinance, shall be obtained and placed by the TOWN, and the cost thereof shall be paid by the DEVELOPER.

2. All traffic control signs and street signs, as required by the TOWN, will be installed within five (5) working days of the placement of the first lift of asphalt.

F. FIRE TANK PROTECTION: DEVELOPER shall pay a fee in the amount of $15,000 to the TOWN equivalent to the cost of installed on-site water storage tanks per the schedule listed in Section 8.14(A) of the Land Division and Development Ordinance. All payments in lieu of shall be payed to the Town before the signing of the Final Plat.

G. OTHER UTILITIES. The Developer shall cause gas, electrical power, telephone, and cable television facilities to be installed in such a manner as to make adequate service available to each lot. All new electrical distribution lines, television cables, and telephone lines from which lots are individually served shall be underground unless the TOWN Board, in its sole discretion, specifically allows overhead poles for the following reasons:

1. Topography, soil, water table, solid rock, boulders, or other physical conditions which would make underground installation unreasonable or impractical; or

2. The lots to be served by said facilities can be served directly from existing overhead facilities.

3. DEVELOPER shall work with WE Energies to record any necessary utility easements. Any utility easement shall be recorded by separate documents and copies provided to the Town prior to issuance of building permits.

## II. TIME OF COMPLETION OF IMPROVEMENTS

A. The improvements set forth in Section I above shall be completed by the DEVELOPER in total within 12 months of the date of this Agreement being signed except as otherwise provided for in this Agreement.

B. The DEVELOPER shall, at the DEVELOPER'S expense, retain the services of a consulting engineer and such other professionals as necessary to provide

construction administration and staking. The TOWN will provide periodic construction observation and material testing as necessary during the construction of the Improvements. Said construction review shall not relieve the contractor of any obligation to construct the Improvements in conformity with the plans and specifications, nor shall it in any manner make the TOWN or TOWN Engineer, an insurer of, nor relieve the contractor of, any obligations or guarantees concerning the contractor's performance. The DEVELOPER shall reimburse the TOWN for the actual costs of these services as set forth in this Agreement.

C. In addition to other site visits conducted by the TOWN to observe construction, the Town shall, in the company of a representative of the DEVELOPER'S engineer, make site visits and observe construction at the following stages of construction:

1. After installation of erosion control measures;
2. After the completion of grading;
3. During the construction of storm water ponds;
4. During the roll test of street subgrade;
5. During the installation of culverts;
6. During the installation of concrete curb and gutter;
7. During the installation of storm sewer improvements;
8. During the placement of aggregate base course;
9. During paving;
10. Pre-final surface installation per Paragraph D of this Section below;
11. After completion of the Improvements.

The TOWN Engineer and TOWN shall be given notice of at least two full business days prior to the start of construction, as well as two full business days' notice of when each stage of construction is ready for inspection.

D. Seven (7) days prior to paving, the asphalt mix design(s) shall be provided to the TOWN Engineer for review. During paving, the paving contractor shall submit quality control testing results for actual pavement placed. If quality control testing results indicate the mix was not within mix limits when it was placed, the pavement is subject to removal at the DEVELOPER'S cost at the sole discretion of the TOWN. Also during paving, the TOWN shall conduct testing, including density testing, for binder and surface lifts according to the TOWN'S Public Infrastructure Inspection and Testing Policy. If results from pavement testing yield densities below specified minimums, the DEVELOPER shall be charged an amount as determined by the Fee Schedule in effect on the date of testing. The amount due shall be paid to the TOWN within 15 days of receipt of notice from the TOWN. If not paid by such date, the TOWN may charge interest at the annual percentage rate of 18% until paid, or may, if necessary and at its discretion, draw directly on the DEVELOPER'S surety.

Alternatively, the DEVELOPER may, with the approval of the TOWN Engineer, remove and replace pavement that does not meet the required specifications.

## III. FINAL ACCEPTANCE

A. Throughout this Agreement, various stages of the development will require approval and/or acceptance by the TOWN. It is understood that building permits may be issued by the TOWN prior to the time of Final Acceptance of all of the improvements in the development. The one-year correction period provided for in this Agreement shall not commence to run until Final Acceptance is granted by the TOWN Board of all improvements. The issuance of building permits and approval of various items of development shall not commence the one-year correction period. Acceptance of the improvements by the Town does not constitute a waiver of its right to draw on funds under the required letter of credit in the event of defects or failure of any improvement which is discovered or occurs following such acceptance.

B. The Final Plat may be approved with conditions, in accordance with State Statutes, local and county ordinances, and all other applicable laws. If so, the DEVELOPER agrees to satisfy those conditions of approval prior to the TOWN signing the Final Plat.

## IV. DEDICATION OF IMPROVEMENTS

Subject to all of the other provisions of this Agreement, the DEVELOPER shall, without charge to the TOWN, upon completion of the above-described improvements, unconditionally give, grant, convey and fully dedicate the public improvements to the TOWN, its successors and assigns, forever, free and clear of all encumbrances whatever, together with and including, without limitation because of enumeration, any and all land, buildings, structures, mains, conduits, pipes, lines, plant machinery, equipment, appurtenances and hereditaments which may in any way be a part of or pertain to such improvements and together with any and all necessary easements for access thereto. After such dedication, the TOWN shall have the right to connect or integrate other improvements as the TOWN decides, with no payment or award to, or consent required of, the DEVELOPER.

Dedication shall not constitute acceptance of any improvement by the TOWN Board. All improvements will be accepted by the TOWN Board by separate resolution at such time as such improvements are in acceptable form and according to the TOWN specifications. Said resolution shall be recorded, if needed, with the Waukesha County Register of Deeds. DEVELOPER will furnish proof to the TOWN, prior to the dedication required, that the public land and improvements proposed for dedication are free of all liens, claims and encumbrances, including mortgages.

## V. ACCEPTANCE OF WORK AND DEDICATION

When the DEVELOPER shall have completed the improvements herein required and shall have dedicated the same to the TOWN as set forth herein, the same shall be accepted by the TOWN Board if said improvements have been completed as required by this Agreement and as required by all federal, state, county or TOWN guidelines, specifications, regulations, laws and ordinances. The TOWN agrees to take all necessary actions to accept the improvements upon request of the DEVELOPER once the improvements meet TOWN specifications.

## VI. GUARANTEES OF IMPROVEMENTS

A. GUARANTEE: The DEVELOPER shall guarantee, as allowed under §236.13, after Final Acceptance, the public improvements described in Section I hereof against defects due to faulty materials or workmanship, provided that such defects appear within a period of one year from the date of Final Acceptance, by providing the TOWN with a letter of credit in a form acceptable to the TOWN Attorney in an aggregate amount of one hundred twenty percent (120%) of the total cost of all improvements. The DEVELOPER shall pay for any damages to TOWN property and/or improvements resulting from such faulty materials or workmanship. This guarantee shall not be a bar to any action the TOWN might have for negligent workmanship or materials. Wisconsin law on negligence shall govern such situations. If the DEVELOPER fails to pay for any damages or defects to TOWN property and/or improvements, and the TOWN is required to draw against the letter of credit on file with the TOWN, the DEVELOPER is required to replenish said monies up to the aggregate amount of one hundred twenty percent (120%) of the total cost of all improvements.

B. OBLIGATION TO REPAIR: The DEVELOPER shall make or cause to be made, at its own expense, any and all repairs which may become necessary under and by virtue of the DEVELOPER'S guarantee and shall leave the improvements in good and sound condition, satisfactory to the TOWN Board at the expiration of the guarantee period. DEVELOPER shall be responsible for the costs of repairs to existing roadways and infrastructure for damage caused in areas immediately adjacent to the construction limits as a result of the construction activities called for hereunder.

C. NOTICE OF REPAIR: If during said guarantee period the improvements shall, in the reasonable opinion of the TOWN Staff, require any repair or replacement which, in their judgment, is necessitated by reason of settlement of foundation, structure of backfill, or other defective materials or workmanship, the DEVELOPER shall, upon notification by the TOWN of the necessity for such repair or replacement, make such repair or replacement, at its own cost and expense. Should the DEVELOPER fail to make such repair or replacement within the time specified by the TOWN in the aforementioned notification, after notice has been sent as provided herein, the TOWN Board may cause such work to be done, but has no obligation to do so, either by contract or otherwise, and the TOWN Board may draw upon such guarantee security to pay any costs or expenses incurred in connection with such repairs or replacements. Should the costs or expenses incurred by the TOWN Board in repairing or replacing any portion of the improvements covered by this guarantee exceed the amount of the guarantee security, then the DEVELOPER shall immediately pay any excess cost or expense incurred in the correction process.

D. MAINTENANCE PRIOR TO ACCEPTANCE

1. Until acceptance of the improvements by the TOWN, all improvements shall be maintained by the DEVELOPER so they conform to the approved plans

and specifications at the time of their Final Acceptance by the TOWN Board. This maintenance shall include routine maintenance, such as crack filling, roadway patching, snow plowing and the like, except as limited in Section D (4) below. In cases where emergency maintenance is required, the TOWN Board retains the right to complete the required emergency maintenance in a timely fashion and bill the DEVELOPER for all such associated costs. Said bill shall be paid immediately by the DEVELOPER. The DEVELOPER'S obligation to maintain all improvements shall expire at the expiration of the guarantee period.

2. Street sweeping and dust suppression shall be done by the DEVELOPER upon a regular basis as needed to ensure a reasonably clean and safe roadway until Final Acceptance by the TOWN Board. If after reasonable notice to the DEVELOPER, the DEVELOPER fails to meet this requirement, the TOWN Board will cause the work to be done and will bill the DEVELOPER on a time and material basis. Said bill shall be paid immediately by the DEVELOPER.

3. In the event drainage problems arise within the SUBJECT LANDS or related activities on the SUBJECT LANDS, the DEVELOPER shall correct such problems to the satisfaction of the TOWN. Such correction measures shall include, without limitation because of enumeration, cleaning of soil, loose aggregate and construction debris from culverts, drainage ditches and streets; dredging and reshaping of siltation or retention ponds; replacing of siltation fences; sodding and seeding; construction of diversion ditches, ponds and siltation traps; and restoration of all disturbed areas. This responsibility shall continue until such time as the roads, ditches, and other disturbed areas have become adequately vegetated and the TOWN Board is satisfied that the DEVELOPER has restored all areas which were disturbed because of this development.

4. The TOWN shall snowplow the subdivision streets, as shown on the Final Plat, subsequent to installation of the first lift of asphalt. DEVELOPER agrees they shall defend, indemnify, and hold harmless the TOWN for any damage that may occur as a result of the TOWN'S snowplowing efforts.

E. DEFINITION: For purposes of this Agreement and by way of definition, the parties agree to comply with the general standards acceptable in the particular industry or common practice.

## VII. TOWN RESPONSIBILITY FOR IMPROVEMENTS

The TOWN shall NOT be responsible to perform repair, maintenance on any improvements until Final Acceptance by the TOWN Board.

## VIII. RISK OF PROCEEDING WITH IMPROVEMENTS PRIOR TO APPROVALS OF FINAL PLAT

If DEVELOPER proceeds with the installation of public improvements or other work on the site prior to approval of the final plat, it proceeds at its own risk as to whether or not the final plat will receive all necessary approvals. The DEVELOPER, prior to commencement of the installation of public improvements or other work on site, shall notify the TOWN of the DEVELOPER'S intention to proceed with the installation of public improvements or other work on site, prior to approval of the final plat. Additionally, DEVELOPER shall make arrangements to have any public improvements and/or other work on site inspected by the TOWN Engineer.

## IX. FINANCIAL GUARANTEE

Prior to the execution of this Agreement by the TOWN Board, the DEVELOPER shall file with the TOWN a Letter of Credit setting forth terms and conditions in a form approved by the TOWN Attorney in the amount as approved by the TOWN Engineer as a guarantee that the DEVELOPER will perform all terms of this Agreement no later than one year from the signing of this Agreement except as otherwise set forth in this Agreement. If at any time:

A. The DEVELOPER is in default of any aspect of this Agreement, or

B. The DEVELOPER fails to maintain such letter of credit during the term of this Agreement and fails to provide the TOWN with proof of renewal of such letter of credit at least thirty (30) days prior to the expiration date, if any, of such letter of credit; or

C. The DEVELOPER does not complete the installation of the improvements within one (1) year from the signing of this Agreement unless otherwise extended by this Agreement or by action of the TOWN Board, or

D. If the DEVELOPER fails to provide the TOWN with proof of renewal of the letter of credit at least thirty (30) days prior to its expiration date; or

E. The DEVELOPER fails to maintain a letter of credit in an amount approved by TOWN Engineer, and in a form approved by the TOWN Attorney; the DEVELOPER shall be deemed in violation of this Agreement and the TOWN Board shall have the right to draw upon the Letter of Credit.

The lending institution providing the irrevocable Letter of Credit shall pay to the TOWN all sums available for payment under the irrevocable Letter of Credit upon demand, subject to the terms and conditions of the irrevocable Letter of Credit, and upon its failure to do so, in whole or in part, the TOWN shall be empowered in addition to its other remedies, without notice or hearing, to impose a special charge for the amount of said completion costs, upon each and every lot in the development payable with the next succeeding tax roll.

The security shall be provided no later than ten (10) days before the commencement of the installation of the improvements.

No land surface disturbance or construction shall commence within this Development prior to the DEVELOPER providing surety for the Improvements.

## X. REDUCTION AND RELEASE OF GUARANTEE

The amount of the Letter of Credit will be reduced from time to time as and to the extent that the portion of work required under this Agreement is completed and paid for, provided that the remaining letter of credit is sufficient to secure payment for any remaining improvements and also provided that no reduction shall occur until it is approved in writing by the TOWN Engineer and TOWN Board. The remaining balance within the Letter of Credit, as required by this Agreement, will be refunded by the Town after the one-year warranty period has expired and all sums due the Town from the Developer have been paid.

## XI. BUILDING PERMITS

It is expressly understood and agreed that no building permits shall be issued for any homes, until the TOWN Engineer has determined that the following has been completed and subject to TOWN Board approval:

A. The first lift of asphalt (and shoulder stone) shall be complete, including both sides of any corner lots, before building permits can be issued.

B. Driveway culvert map has been approved by the TOWN Engineer.

C. Proof of payment for Subdivision gas, electric, telephone and cable television utilities are provided to the TOWN.

D. Recorded versions of Final Plat documents have been provided to the Town.

E. All other subdivision street and drainage Improvements are substantially complete.

F. Street and regulatory signs are in place and the TOWN has been reimbursed for costs incurred.

G. All applicable TOWN Standards have been met.

H. Upon Developer's request, a permit to commence construction of a foundation or any other noncombustible structure will be granted before substantial completion of Improvements provided all Improvements related to public safety are complete and the security requirement has been met. This permit does not authorize commencement of work on a building until a permit for the construction of the building is issued.

I. All utility easements shall be prepared and recorded.

Additionally, the TOWN reserves the right to withhold issuance of any and all building permits if DEVELOPER is in violation of this Agreement.

## XII. OCCUPANCY PERMITS

It is expressly understood and agreed that no occupancy permits shall be issued for any homes, until the TOWN Engineer has determined that:

A. All required grading plans have been submitted to, reviewed by and approved by the TOWN Engineer.

B. The DEVELOPER has paid in full all permit fees and reimbursement of administrative costs as required by this Agreement (if wooded lot). The storm water management plan was approved based upon wooded lots and corresponding runoff coefficients. No trees shall be removed from any buildable lot prior to the issuance of a building permit. A building survey showing the size and location of existing trees, which are proposed to be removed for the home construction, shall be submitted to the TOWN Engineer for approval prior to issuance of a building permit.

C. All destroyed trees, brush, tree trunks, shrubs and other natural growth and all rubbish are removed from the development and disposed of lawfully.

D. The DEVELOPER is not in default of any aspect of this Agreement.

E. All street trees per TOWN Ordinances have been installed and approved by the TOWN of Lisbon.

F. All trail easements have been approved by the TOWN of Lisbon and recorded.

## XIII. MISCELLANEOUS REQUIREMENTS

The DEVELOPER shall:

A. EASEMENTS: Provide any easements including vision easements on SUBJECT LANDS deemed necessary by the TOWN Engineer before the final plat is signed or on the final plat and such easements shall be along lot lines if at all possible.

B. MANNER OF PERFORMANCE: Cause all construction called for by this Agreement to be carried out and performed in a good and worker like manner.

C. SURVEY MONUMENTS: Properly place and install any lot, block or other monuments required by State Statute, TOWN Ordinance or the TOWN Engineer.

D. DEED RESTRICTIONS: Execute and record deed restrictions and provide proof of recording prior to sale of lots for the SUBJECT LANDS in a form approved by the Town Board.

E. LOT GRADE: Each lot owner must strictly adhere to and finish grade its lot in accordance with the Master Lot Grading Plan or any amendment thereto approved by the TOWN Engineer on file in the office of the TOWN Clerk. The DEVELOPER

and/or the TOWN and/or their agents, employees or independent contractors shall have the right to enter upon any lot, at any time, for the purpose of inspection, maintenance, correction of any drainage condition, and the property owner is responsible for cost of the same.

F. ISSUANCE OF BUILDING PERMIT/GRADES: Prior to the issuance of a building permit for a specific lot, lot owner and/or their agent shall furnish to the Building Inspector of the TOWN a copy of the stake out survey, which is based on USGS Vertical Datum, showing the street grade in front of the lot, the finished yard grade, the grade of all four corners of the lot, and the lot corner grades of the buildings on adjoining lots where applicable, as existing and as proposed.

G. PERMITS: Provide and submit to the TOWN requesting the same, valid copies of any and all governmental agency permits.

H. PARK AND PUBLIC SITE DEDICATION FEES: To pay as provided in the TOWN'S Ordinances, a fee per lot developed in lieu of dedication of lands for park and public sites. The fee shall be paid, in full, at the time of application for a building permit. All applicable fees for this development are attached on **EXHIBIT C** which is incorporated herein by reference.

I. NOISE: Make every effort to minimize noise, dust, and similar disturbances, recognizing that the SUBJECT LANDS are located near existing residences. Construction of improvements, which includes right of way and trails, shall not begin before 6:00 AM and it shall end before 6:00 PM, Monday through Saturday. There shall be no construction activities on Sundays and holidays.

J. DOCUMENTS: The DEVELOPER shall provide three (3) complete sets of recorded final plat documents to the TOWN including, but not limited to:

1. A full-size Final Plat.

2. An 11" x 17" or smaller Final Plat.

3. AutoCAD version of Final Plat document.

4. Deed Restrictions and Protective Covenants.

5. Other documents recorded with the Register of Deeds, or as determined by the Town Attorney.

## XIV. PAYMENT OF COSTS, INSPECTION & ADMINISTRATIVE FEES

The DEVELOPER shall pay and reimburse the TOWN promptly upon billing for all reasonable fees, expenses, costs and disbursements which shall be incurred by the TOWN in connection with this subdivision or relative to the construction, installation, dedication and acceptance of the subdivision improvements covered by this Agreement, including without limitation by reason of enumeration, design, engineering, review, supervision, inspection and legal, administrative and fiscal work according to Section 10 of the Land Division and Development Ordinance. Any such

charge not paid by DEVELOPER within thirty (30) days of being invoiced may be charged against the financial guarantee held by the TOWN pursuant to this Agreement. All applicable fees set forth on **EXHIBIT C** to this development are set.

## XV. GENERAL INDEMNITY

In addition to, and not to the exclusion or prejudice of, any provisions of this Agreement or documents incorporated herein by reference, the DEVELOPER shall indemnify and save harmless and agrees to accept tender of defense and to defend and pay any legal, accounting, consulting, engineering and other expenses relating to the defense of any claim asserted or imposed upon the TOWN, its officers, agents, employees and independent contractors related to the actions and conduct of DEVELOPER conducted in accordance of this Agreement as stated above by any party or parties. This indemnity is limited to the conduct of the DEVELOPER or its agents and shall not apply to conduct of third parties in the development or any subsequent changes to the property involved in the development.

## XVI. INSURANCE

The DEVELOPER, its contractors, suppliers, and any other individual working on the SUBJECT PROPERTY shall maintain at all times until the expiration of the guarantee period insurance coverage in the forms and in the amounts as set forth on **EXHIBIT D**.

## XVII. EXCULPATION OF TOWN CORPORATE AUTHORITIES

The parties mutually agree that the TOWN Chair of the TOWN Board and/or the TOWN Clerk entered into and are signatory to this Agreement solely in their official capacity and not individually and shall have no personal liability or responsibility hereunder and personal liability as may otherwise exist being expressly released and/or waived.

## XVIII. GENERAL CONDITIONS AND REGULATIONS

All provisions of the TOWN Ordinances are incorporated herein by reference, and all such provisions shall bind the parties hereto and be a part of this Agreement as fully as if set forth at length herein. This Agreement and all work and improvements required hereunder shall be performed and carried out in strict accordance with and subject to the provisions of said Ordinances.

## XIX. PLANNED UNIT DEVELOPMENT (PUD)

The development shall follow adopted PUD General Development Plan (GDP) and Specific Development Plan (SDP) details approved by the Town Board and Plan Commission. The PUD's GDP and SDP details are included as **EXHIBIT E** to this agreement.

## XX. COMPLIANCE WITH CODES AND STATUTES

The DEVELOPER shall comply with all current applicable codes of the TOWN, County, State, and federal government, and further, DEVELOPER shall follow all current and future lawful orders of any and all duly authorized employees and/or representatives of the TOWN, County, State, or federal government.

## XXI. PRELIMINARY PLAT AND FINAL PLAT CONDITIONS

The DEVELOPER acknowledges that the SUBJECT LANDS are subject to a conditional preliminary plat approval and a conditional final plat approval by the TOWN of Lisbon. The DEVELOPER and the TOWN further agree that they are bound by these conditions. If there is a conflict between the conditions as forth in said conditional approvals and the DEVELOPER'S Agreement, the more restrictive shall apply.

## XXII. ASSIGNMENT

The DEVELOPER shall not assign this Agreement without the prior written consent of the TOWN. The assignee must agree to all terms and conditions of this document in writing. Said Developer's Agreement shall be recorded with the Waukesha County Register of Deeds, by the TOWN and paid for by the DEVELOPER.

## XXIII. PARTIES BOUND

The DEVELOPER or its assignees shall be bound by the terms of this Agreement or any part herein as it applies to the development of the subdivision.

## XXIV. HEIRS & ASSIGNS

This Agreement is binding upon the DEVELOPER, owners, their heirs, their assigns, and successors, and all future owners of the SUBJECT LANDS.

## XXV. REVIEW PROCESS

If the TOWN Engineer and DEVELOPER cannot agree with the decision of the TOWN Engineer, then DEVELOPER shall have the right to have the matter reviewed by the TOWN Attorney or TOWN Board and to present such evidence as may be warranted. The TOWN Attorney or TOWN Board may modify, correct, or affirm the TOWN Engineer's decision.

## XXVI. AMENDMENTS

The TOWN and the DEVELOPER, by mutual consent, may amend this Developer's Agreement at any meeting of the TOWN Board. The TOWN shall not, however, consent to an amendment until after first having received a recommendation from the TOWN'S Plan Commission. After an amendment has been consented to by the Town Board, it must be reduced to a written amendment which shall be approved and executed by both the TOWN and DEVELOPER.

IN WITNESS WHEREOF, the DEVELOPER and the TOWN have caused this Agreement to be signed by their appropriate officers and their corporate seals to be hereunto affixed in three original counterparts the day and year first above written.

*Signature Pages to Follow*

DEVELOPER

The Preserve at Harvest Ridge, LLC, a Wisconsin limited liability company

By: Neumann Developments, Inc., its sole member

By:_____
Steve DeCleene, President

STATE OF WISCONSIN )
) ss.
COUNTY OF WAUKESHA )

Personally came before me this _____ day of _____, 2020, the above named _____, Authorized Signatory of _____, to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____
Notary Public, State of Wisconsin
My commission:

TOWN OF LISBON
WAUKESHA COUNTY, WISCONSIN

By:_____
Joseph Osterman, Chairman

By:_____
_____, [Interim] Town Clerk

STATE OF WISCONSIN )
) ss.
COUNTY OF WAUKESHA )

Personally came before me this _____ day of _____, 2020, the above named Joseph Osterman and _____, TOWN Chairman and [Interim] TOWN Clerk respectively, of the above-named municipal corporation, to me known to be the persons who executed the foregoing instrument and to me known to be the TOWN Chairman and Interim TOWN Clerk of said municipal corporation and acknowledged that they executed the foregoing instrument as such officers as the deed of said municipal corporation by its authority and pursuant to the authorization by the TOWN Board.

_____
Notary Public, State of Wisconsin
My commission: _____

APPROVED AS TO FORM:

_____
TOWN Attorney

**ATTACHMENTS:**
EXHIBIT A: Preliminary Plat
EXHIBIT B: Final Plat
EXHIBIT C: Dedication Fees
EXHIBIT D: Certificate of Insurance
EXHIBIT E: GDP/SDP

This document reviewed by:
Attorney Kathryn Sawyer Gutenkunst
Attorney Michael P. Van Kleunen
CRAMER, MULTHAUF & HAMMES, LLP
1601 East Racine Avenue • Suite 200
P.O. Box 558
Waukesha, WI 53187
(262)-542-4278

# Item 5F – Attachments

LAND INFORMATION SYSTEMS DIVISION

# Waukesha County GIS Map

**Legend**

- Municipal Boundary_2K
- FacilitySites_2K_Labels
- Lots_2K
  - Lot
  - Outlot
  - Unit
- SimultaneousConveyance
  - Assessor Plat
  - CSM
  - Condominium
  - Subdivision
- Cartoline_2K
  - <all other values>
  - EA-Easement_Line
  - PL-DA
  - PL-Extended_Tie_line
  - PL-Meander_Line
  - PL-Note
  - PL-Tie
  - PL-Tie_Line
- Road Centerlines_2K
- Railroad_2K
- TaxParcel_2K
- Waterbodies_2K_Labels
- Waterlines_2K_Labels

0 200.00 Feet

The information and depictions herein are for informational purposes and Waukesha County specifically disclaims accuracy in this reproduction and specifically admonishes and advises that if specific and precise accuracy is required, the same should be determined by procurement of certified maps, surveys, plats, Flood Insurance Studies, or other official means. Waukesha County will not be responsible for any damages which result from third party use of the information and depictions herein, or for use which ignores this warning.

**Notes:**

Printed: 6/4/2020

REEL 1112 IMAGE 0970

1538568

LAND COVENANT
FOR A
CONDITIONAL USE GRANT
BY THE
LISBON TOWN BOARD

Waukesha County
Register of Deeds
No. _____

RECEIVED JUL 14 1989

On May 22 19 89, the equitable owners of the premises hereinafter described, petitioned for and were granted by the Lisbon Town Board of Supervisors a Conditional use, as hereinafter described, the said premises which use is not a permitted principal or accessory use in the zoning district classification within which the premises is encompassed.

EQUITABLE OWNERS OF PREMISES: Robert E. & Lulita L. Zellmer

ADDRESS OF EQUITABLE OWNERS OF PREMISES: N59 W27099 Ainsworth Road, Sussex, Wisconsin 53089

ADDRESS OF PREMISES: N59 W27099 Ainsworth Road

fd
6

LEGAL DESCRIPTION OF PREMISES:

All that part of the S.E. 1/4 of Section 30, T8N, R19E, Town of Lisbon, Waukesha County, Wisconsin, bounded and described as follows:

Commencing at the East 1/4 corner of Sec. 30 and running thence N89°18'20"W along the North line of said S.E. 1/4 and the centerline of Ainsworth Road, 253.00 ft. to the point of beginning of the parcel of land hereinafter described; continuing thence N89°18'20"W along said line 506.00 ft. to a point; thence S01°35'10"W, 758.83 ft. to a point; thence S01°35'10"W, 758.83 ft. to a point; thence S88°26'20"E, 506.08 ft. to a point; thence N01°33'40"W, 767.31 ft. to the point of beginning.

ZONING DISTRICT CLASSIFICATION: Residence "A-2" District

CONDITIONAL USE: To operate a private target range with the conditions: 1) That the line of fire be located no closer than 100 fee from the residence; 2) That the backstop be offset at least 20 feet from the side lot line; 3) That the berm to be constructed be similar to the existing one but creating a 10 ft. high and 10 ft. long structure; 4) That the target range be used only for muzzleloading firearms (black powder weapons); 5) That the conditional use would be terminated should the property be sold by the Zellmers; and 6) That the conditional use would be subject to review should the properties immediately to the west of said property be developed.

FOR THE EQUITABLE OWNER:

BY Robert E. Zellmer
Robert E. Zellmer, Equitable Owner

BY Lulita L. Zellmer
Lulita L. Zellmer, Equitable Owner

BY _____
, Equitable Owner

STATE OF WISCONSIN )
Waukesha COUNTY )

Personally came before me, this 22nd day of May 19 89,

Robert E Zellmer
Lulita L. Zellmer

to me known to be the person(s) who executed the foregoing instrument, and to me known to be the equitable owner(s) of the aforedescribed premises.

James W. Hammes
Notary Public Waukesha County, Wisconsin

My Commission Permanent

THIS INSTRUMENT DRAFTED BY:

James W. Hammes, Attorney at Law

FOR THE TOWN OF LISBON:

1538568
REGISTER'S OFFICE
WAUKESHA COUNTY, WIS.
RECORDED
1989 JUN -6 AM 10:09
REEL 1112 IMAGE 970
REGISTER OF DEEDS
REEL 1112 IMAGE 0971

BY Donald R. Holt
Donald R. Holt, Town Chairman

BY Daniel F. Meissner
Daniel F. Meissner, Town Supervisor

BY Michael J. Ertl
Michael J. Ertl, Town Supervisor

BY Jane C. Stadler
Jane Stadler, Town Supervisor

BY Teryl R. Williamson
Teryl R. Williamson, Town Supervisor

ATTEST:

Betty Fryda
Betty Fryda, Town Clerk

# Item 5G – Attachments

vierbicher
planners | engineers | advisors

600 W. Virginia Street, Suite 601
Milwaukee, WI 53204
(262) 875-5000 phone
(608) 826-0530 FAX
www.vierbicher.com

June 3, 2020

Chairperson Osterman and Town Plan Commission Members
Town of Lisbon
W23N8676 Woodside Road
Lisbon, WI 53089

Re: Chapter 13 Sign code update

Dear Plan Commission Members:

In order comply with the 2015 Reed v. Town of Gilbert U.S. Supreme Court decision, which determined that content-based sign regulations are unconstitutional, and to reflect new sign standards and construction, Chapter 13 Signs is proposed to be repealed and replaced. The replacement sign code attempts to maintain some of the current sign standards which are still applicable, while updating the code to be content-neutral, easier to reference, consistent, and more flexible. One method of making the code easier to reference is the replacement of the listing of permitted signs with a sign chart, which is to be considered part of the sign code. Also, a sign guide was previously provided which is considered to be supplemental and not part of the sign code. The sign guide can and should be changed as different sign types are discovered which the Town deems as exemplary.

I will be in attendance at the June Plan Commission meeting to answer any questions.

Sincerely,

Joshua Langen, AICP
Community Development Planner

Rachel Holloway, AICP
Town Planner

cc: Natasha Girard, Deputy Clerk, Town of Lisbon

M:Lisbon, Town of\200200 - 2020 Town Planning Services\General Tasks\02_Sign Code Update\Meetings\2020-06-11 Plan Commission\2020_06_11_PC_Sign_Code_Update_Memo.docx

**<u>Section 11.5 of the Lisbon Zoning Code is hereby created as follows</u>**:

**SECTION 11.5 SIGNS**

(a) PURPOSE

1. To regulate the size, type, construction standard, maintenance and placement of signs situated within the boundaries of the Town of Lisbon, Wisconsin.
2. To promote the public health, safety, welfare and comfort of the general public and to provide comprehensive and balanced sign regulations that will:
   - A. Preserve the right of free speech and expression
   - B. Reduce distractions and obstructions from signs which would adversely affect traffic safety, and alleviate hazards caused by signs projecting over or encroaching upon the public right-of-way;
   - C. Discourage excessive visual competition in signage and ensure that signs aid orientation and adequately identify uses and activities to the public; and
   - D. Preserve or enhance the natural beauty and unique physical characteristics of the Town of Lisbon as a community in which to live and work by requiring new and replacement signage which is:
     - i. Harmonious with the building and surrounding neighborhood aesthetics, and other signs in the area;
     - ii. Appropriate to the type of use to which it pertains;
     - iii. Expressive of the Town's identity in a manner which will not diminish property values; and
     - iv. Complementary to the Town's architectural character and unobtrusive commercial developments.

(b) SCOPE OF REGULATIONS

Except as otherwise noted herein, the regulations of this ordinance shall govern all outdoor signs, advertising structures or devices with respect to location, safety, size, construction standard, erection, attachment, support, lighting, anchorage, maintenance, appearance, and aesthetics.

(c) DEFINITIONS

When used in this chapter, the following words and phrases shall have the specific meaning as hereinafter defined and any words or phrases not listed shall have the meaning defined by the zoning code of the Town of Lisbon:

**Advertising Vehicles:** Any vehicle or trailer on a public right-of-way property or on private properties so as to be seen from a public right-of-way, which has attached thereto or located thereon any sign or advertising device for the basic purpose of providing advertisement of products or directing people to a business activity located on the same or nearby property or any other premises.

**Animation**: A background playback image which exceeds 30 frames per second.

**Approved Combustible Materials**: Wood, combustible plastics, or other rigid material impervious to water.

**Approved Combustible Plastics**: Only those combustible plastic materials which when tested in accordance with the Standard Method of Testing for Flammability of Plastics (A.S.T.M.) over

DRAFT FOR REVIEW

0.050 inch in thickness, D635 (Latest Revision), burn no faster than 2.5 inches per minute in sheets of 0.060-inch thickness.

**Base Setback Line**: The edge of the established ultimate street right-of-way.

**Beacon**: A stationary or revolving single or multi-colored light which flashes or projects illumination in any manner, which is intended to attract or divert attention.

**Canopy:** A structural protective cover located over a commercial service area, such as gas pumps or bank tellers.

**Copy:** Text or symbols used for the purpose of advertising.

**Changeable Copy**: A sign element, whether electronic or manual, where copy, including electronic letters and/or pictorial display changes.

**Display Surface**: The surface made available on the sign, either for the direct mounting of letters and decorations, or for the mounting of facing material intended to carry the entire advertising message.

**External Illumination**: Illumination of a sign by an exterior light source.

**Facing**: The surface of the sign or billboard upon, against, or through which the message of the sign or billboard is displayed, or transferred.

**Flag:** A piece of cloth or similar material, typically oblong or square, attachable by one edge to a pole or rope and used as the symbol or emblem of a country or institution. Does not include banner signs.

**Grade**: The existing, preconstruction elevation at the base of a freestanding sign, or bottom edge of a building nearest a sign in the case of a wall or projecting sign.

**Height**: The height of all freestanding signs shall be the distance between the existing preconstruction grade at the base of the sign and perpendicular to the highest point on the sign or supporting structure.

**Internal Illumination**: Illumination of a sign in which the source of light is contained within the sign itself.

**Letters and Decorations:** The letters, illustrations, symbols, figures, insignia, logo and other media employed to express and/or illustrate the message or a sign.

**Lot**: A designated parcel, tract, or area of land established by plat, subdivision, or as otherwise permitted by law.

**Lot Line**: A line of record bounding a lot which divides one lot from another lot, or from a public or private street, or any other public space.

**Marquee:** A permanent, roof-like structure, extending from part of the wall of a building but not individually supported by the ground, which is constructed of durable material such as metal or glass.

**Mixed-Use Center**: A planned/coordinated grouping of architecturally unified combination of residential and commercial establishments, built on the same site and managed as one operating unit.

**Neon or Other Gas Tube Illumination**: Illumination from a light source consisting of a neon or other gas tube which forms letters, symbols or other shapes.

**Offset**: The regulated minimum horizontal distance a structure must be from a side or rear lot line.

**Right-of-Way (street)**: The area dedicated for public access and use, including the street or alley, parkway and sidewalk areas between property lines.



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**Setback:** The regulated minimum horizontal distance a structure must be from the base setback line.

**Shopping Center**: A planned/coordinated grouping of architecturally unified commercial establishments, built on the same site and managed as one operating unit, offering for sale goods such as food, drugs, hardware and personal services.

**Sign**: Any object, device, display, structure, or part thereof which is designed to advertise, announce, direct, identify, or inform by any means, including words, letters, figures, designs, symbols, fixtures, colors, illumination, or projected images.

*Graphic Courtesy of the American Planning Association*

**Abandoned sign**: A sign which no longer correctly advertises a business or use which is no longer in operation or which is dilapidated or beyond repair, under the provisions of Section 66.0413 of the Wisconsin Statutes, or a sign for which the applicable fees have not been paid or which is hazardous to public safety.

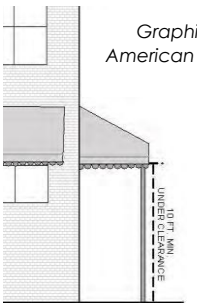
**A-Frame Sign:** A sign which is portable, self-supporting, and not affixed to the ground. Includes Sandwich, Sidewalk, Menu Board, and Curb signs.

**Agricultural Sign**: A sign identifying farm operations on parcels of land containing not less than twenty (20) acres.

**Air-Activated Sign**: A sign, all or any part of, which is designed to be moved by action of forced air so as to make the sign appear to be animated or otherwise have motion.

**Awning Sign:** A sign that is attached to, or made of, an awning, or other fabric, plastic or structural protective cover located over a door, entrance, window or outdoor service or recreation area.

*Graphic Courtesy of the American Planning Association*

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**Banner Sign**: A sign intended to be hung either with or without a frame, and which possesses characters, letters, illustrations, or ornamentation's applied to paper, plastic, or fabric of any kind. Includes pennant signs.

**Blade Sign:** See projecting sign.

**Bulletin Board**: A changeable copy sign or sign incorporating changeable copy not to exceed fifteen (15) square feet in area located on the premises of a charitable, religious, educational, institutional, non-profit, or non-exempt public use.

**Canopy Sign**: A sign that is attached to a structural protective cover located over a commercial service area, such as gas pumps or bank tellers.

**Changeable Copy Sign**: A sign which incorporates changeable copy.

**Detached Sign:** A permanent sign which is located on the premises of the use with which it is associated and not mounted on or affixed to a building.

**Double Faced Sign**: A sign with copy on two parallel faces that are back to back, facing opposite directions.

**Feather Sign:** Vertical signs resembling a feather that are supported by a single, curved structural member and base with a banner attached to said single structure.

**Flashing Sign**: A sign whose illumination is not kept at a constant intensity when in use, and/or which exhibits changes in light, color, direction, animation, wording or text.

**Freestanding Sign**: A sign that is attached to, or made part of, a completely self-supporting structure other than a building. The supporting structure shall be set firmly in, upon, or below the ground surface and shall not be attached to any building.

**Government Sign:** A sign directed to be installed by the Town for notification of events, regulations, safety measures, conduct of Town duties, or other purposes, and any sign erected by the State of Wisconsin or Federal government. Any sign erected by other governmental entities are not considered government signs for the purposes of this ordinance and shall follow the regulations for other sign types defined herein.

**Ground Sign:** A free-standing sign which is not a pole, pedestal, or monument sign and which is supported by a base of at least 50% of the sign width and is independent from any building.

**Interior Sign:** Those signs located within the interior of any building and which are not readily visible from the exterior of the building.

**Illuminated Sign**: A sign which is illuminated by an artificial light source; whether internal or external, a light source whose primary purpose is to display or draw attention to said sign.

**Inflatable Sign**: A sign which is kept inflated by mechanical means or filled by a gas and is tethered to a building, structure or the ground. Includes Balloon signs.

**Legal Non-Conforming Sign**: A sign that did meet code regulations when it was originally installed prior to the adoption of this ordinance.

**Marquee Sign**: A sign attached to, painted on, or supported by a marquee that has its copy manually changed at regular intervals.

**Menu Board Sign:** A permanently mounted sign displaying the foods, products, or services for a drive-through or walk-up facility.

**Monument Sign**: Any free-standing sign which is supported by a base of at least 75% of the sign width and is independent from any building. The structural base of a monument

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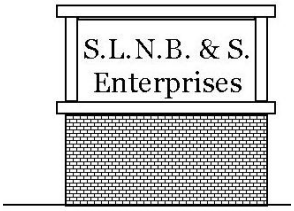
sign is defined as a base constructed of stone, rock, brick, concrete clad in masonry or scored or died, or man-made masonry material.




*Graphic Courtesy of the American Planning Association*

**Moveable Sign**: See definition for Portable Sign.

**Nonconforming Sign**: A sign which existed prior to the effective date of the adoption of this chapter which does not conform to the terms of this chapter.

**Off-premises Sign**: A sign that is not located on the premises of the associated use.

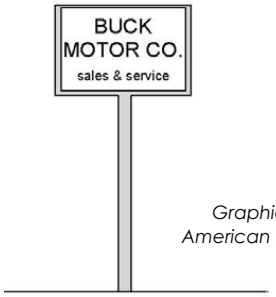
**On-premises Sign**: A sign associated with the property use situated on the same lot as the sign.

**Pedestal Sign**: A free-standing sign that is not a pole, ground, or monument sign, and is supported by solid pier(s), pedestal base, square tube(s), or pylons of at least 30% of the sign width and is independent of any building. Pedestal signs shall not be supported by cylindrical pole(s).

**Pennant Sign:** A banner sign which is triangular in shape.

**Plaque Sign:** Copy cut into a masonry surface or constructed of bronze of other non-combustible materials and placed on buildings, property, structures, graves, statuary or the like with historical importance, such as being listed on the National Register of Historic Places, local historical listings, or similar demarcation.

**Pole Sign:** A free-standing sign affixed to a cylindrical pole(s), square tube(s) support or other fabricated post(s) without any type of secondary support that is embedded in the soil where the supporting structure element(s) width measures less than 30% of the width of the sign face or frame, whichever is larger.




*Graphic Courtesy of the American Planning Association*

**Portable Sign**: A sign not permanently affixed to the ground, a building, or other structure, which may be moved from place to place.

**Price Sign**: A sign which incorporates changeable copy, yet has different display and sign element composition characteristics than a changeable copy sign, as defined in Section 11.5.(m).

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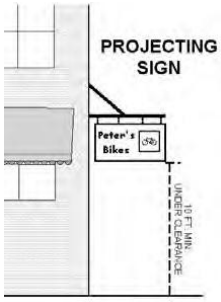
**Projecting Sign**: A sign, that is normally double-faced, which is affixed or attached directly to the exterior wall of a building or structure that extends more than ten (10) inches from the exterior wall of the building or structure. Includes blade signs.




*Graphic Courtesy of the American Planning Association*

**Residential Wall Sign:** A wall sign on a building with a legal residential use in a residential or non-residential zoning district.

**Roadside Stand Sign**: A sign associated with a roadside stand.

**Roof Sign**: A sign or billboard which is located on, or projects above, the lowest point of the eaves or the top of the parapet wall of a building, or which is painted on or fastened to a roof.

**Rotating Sign:** A sign which rotates around a center point.

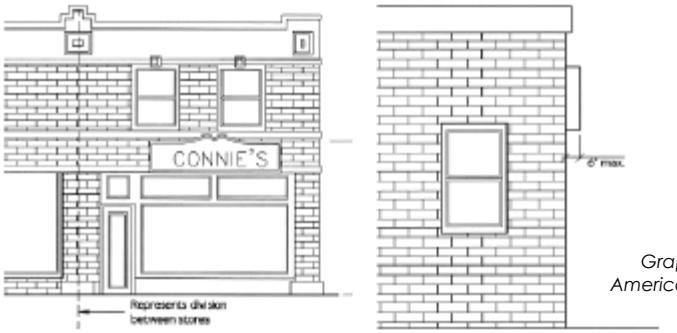
**Safety Sign:** A sign erected for public or private traffic control, legal notices, railroad crossings, danger, security, and such temporary emergency purposes, as may be erected for the public safety.

**Service Door Sign:** A sign located at above a door used for service, such as deliveries, to a building with a non-residential use and in a non-residential zoning district.

**Temporary Sign**: A sign intended to be used for a period of no more than thirty (30) days unless otherwise specified herein.

**Under Canopy Sign:** A sign located under a canopy, such as signs on covered gas pumps or bank tellers.

**Wall Sign**: A sign or billboard affixed to the exterior wall of a building that extends ten (10) or less inches from the exterior wall of the building, including signs that are painted directly on the wall itself.

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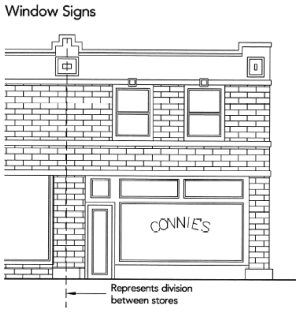
**Window Sign**: A sign attached to, placed upon, or painted on a window or door of a building that is intended for viewing from the exterior of such building.




*Graphic Courtesy of the American Planning Association*

**Yard Sign**: An on-premises temporary sign placed on a property in a residential zoning district and associated with a residence, occupied or vacant.

**Sign Area:** The area of all elements of a sign including the face area, sign frame, and sign structure.

**Sign Face Area:** Sign face area shall be the sum of the area within the smallest regular polygon that will encompass all elements of the actual sign face which is not included in a sign frame. Otherwise, sign face area shall be calculated as the area within the sign frame. For a sign painted on or applied to a building, the sign face area shall be considered to include all lettering, wording and accompanying designs or symbols, together with any background of a different color than the natural color, or finish material, of the building.

**Sign Frame:** Architectural or structural elements which surround sign copy.

**Sign Structure**: Any device or material which supports, has supported, or is capable of supporting a sign in a stationary position, including decorative covers.

**Street:** A public or private right-of-way that is used to carry pedestrian or vehicular traffic.

**Trim**: The moldings, battens, capping, nailing strips, latticing and platforms attached to any sign or billboard structure.

(d) PERMIT APPLICATION

1. Authority

It shall be unlawful for any person to erect, repair, alter, relocate or possess any sign or other advertising structure as defined in this chapter without first obtaining a sign permit from the Town of Lisbon and paying the fees required by this chapter. In addition, all illuminated signs are subject to the provisions of the Electrical and Building Codes, and the permit fees required thereunder.

2. Application for Permit

A complete application for a sign permit shall be submitted to the Town of Lisbon, and shall contain, or have attached thereto, the following information:

A. Name, address, and telephone number of the applicant.
B. Name, address, and telephone number of the person, firm, corporation, or association proposing to erect the sign.
C. Written consent of the owner of the building, structure, or land to which, or upon which, the sign is to be affixed, or erected.
D. A scale drawing of the proposed sign indicating the dimensions, materials to be used, color scheme, type of illumination, if any, and the methods of construction and attachment.

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E. A scale drawing indicating the location, position and orientation of the proposed sign in relation to nearby buildings, structures, and lot lines, said drawing shall clearly indicate the setback and offset to the sign foundation.

Sign permit applications shall be filed with the Town of Lisbon and the Zoning Administrator shall review the application for its completeness and accuracy, and approve or deny, in writing, the application within thirty (30) days of receipt unless the time is extended by written agreement between the applicant and the Zoning Administrator. A sign permit shall become null and void if work authorized under the permit has not been completed within twelve (12) months of the date of issuance.

1. Issuance of Permits

A. Upon the filing of an application for a sign permit, the Zoning Administrator shall examine such plans, specifications, and other data needed to determine compliance with the requirements of this ordinance.

B. After examining the Sign Permit Application, the Zoning Administrator shall take one of the following actions within thirty (30) days:

i. Deny the application, stating the reasons therewith, if the proposed sign is not in compliance with the requirements of this ordinance.

ii. Deny the application, stating the reasons therewith, if a sign application has been found to be incomplete and additional information or clarification is needed from the applicant.

iii. Issue a permit, stating any conditions or stipulations upon which the approval is based.

2. Submittal to Plan Commission in Conjunction with Conditional Use Permit

If the sign permit(s) are being applied for in conjunction with a Conditional Use Permit the applicant may submit the sign permit application to the Zoning Administrator for review and approval or to the Plan Commission for review and approval as part of the Conditional Use Permit review and approval process.

3. Appeal of Denied Permit

Applicants may appeal the decision of a denied permit by the Zoning Administrator in accordance with the Town Code.

(e) FEES

1. Application Fees

2. An application for a sign permit shall be filed with the Zoning Administrator along with a non-refundable application review fee for each individual sign permit application. In addition to the application review fee, a separate sign permit fee shall be submitted with the application in accordance with the adopted fee schedule for the following sign types. Fees for the following signs shall be set by resolution adopted by the Town Board from time to time;

A. Permanent Signs

B. Temporary Signs



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3. Supplemental Fees
   If the Town must remove or repair a permitted sign by reason of danger to the public, such as obstruction of traffic, a fee equal to 110% of the Town's incurred cost shall be charged to the sign owner.
4. Payment and acceptance of the application review fee does not guarantee that a sign permit will be issued by the Town of Lisbon.

(f) REVOCATION OF PERMITS

The Zoning Administrator is hereby authorized and empowered to revoke any sign permit upon determination that the sign authorized by the permit has been constructed or is being maintained in violation of the permit or the provisions of this chapter.

(g) MEASUREMENT STANDARDS

1. Sign Area Measurement:
   Sign area shall be measured by both sign face area and by total sign area, as defined in Section 11.5.(c).
2. When a sign has two (2) or more faces, the area of all faces shall be included in determining the sign face area, except where two faces are placed back to back and are at no point more than two (2) feet from each other. In such case, the sign area shall be taken as the area of the largest face of a two (2) face sign.
3. Sign Height Measurement:

   A. Ground Signs:
      Sign height shall be measured perpendicular from the preconstruction grade at the base of the sign to the highest point of the sign face, framework, or support structure, whichever is taller.

   B. Monument Signs:
      Sign height shall be measured perpendicular from the preconstruction grade at the base of the sign to the highest point of the sign face, framework, or support structure, whichever is taller.

   C. Pedestal Signs:
      Sign height shall be measured perpendicular from the preconstruction grade at the base of the sign to the highest point of the sign face, framework, or support structure, whichever is taller.

(h) ILLUMINATION STANDARDS

1. In addition to complying with the provisions of this ordinance, all signs in which electrical wiring and connections are to be used shall be subject to the applicable provisions of the Town Electrical Code. No person may erect a sign with exposed electrical cords and wires.
2. The use of unshielded lighting, including exposed incandescent light bulbs hung or strung on poles, wires or any other type of support intended to illuminate a sign or other advertising device is expressly prohibited.
3. No sign located in a non-residential district, except permitted changeable copy signs, shall be illuminated, either internally or externally, between the hours of 11 p.m. and sunrise if the premises on which it is located is open for business during that time and if the premises abuts a residential district. Signs located in residential districts shall not be illuminated between the hours of 9 p.m. and sunrise.



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4. All sign lighting shall be so designed, located, shielded or hooded so as to prevent the casting of glare or direct light upon adjacent roadways, surrounding properties, or into the sky.
5. No temporary signs shall be illuminated.

(i) LANDSCAPING STANDARDS

1. In the case of monument or pedestal signs, a landscape area shall extend a minimum of five (5) feet from the base of the sign in all directions.
2. The landscaped area shall be 70% covered in decorative vegetation, 50% of which shall be evergreen. The landscaped area shall be bordered by an acceptable surround.
3. Where any sign is proposed to be externally illuminated using ground mounted fixtures (i.e. floodlight), landscape plantings shall be installed in such a manner as to entirely shield the light source from the surrounding view. Landscape plantings shall be of the type as will ensure effective yearlong screening.

(j) LOCATION STANDARDS

1. No sign or sign supporting structure shall be setback/offset less than 10 feet from an abutting lot line, right-of-way line or driveway edge.
2. Placement of all signs shall be subject to the vision setback regulations as put forth in the Town of Lisbon Zoning Code.
3. No sign in a non-residential zoning district shall be located closer than 50 feet to an abutting residential zoning district.
4. If a ground, monument, or pedestal sign is to be located within an entrance island area, the entrance island shall be a minimum of 10 feet wide and a minimum of 25 feet in length. The sign shall not be located any closer than 3 feet to the side island right-of-way lines nor closer to the connector street than the vision corner easement.

(k) PROHIBITED SIGNS

The following types of signs are prohibited in the Town of Lisbon:

1. Roof signs.
2. Signs placed on, or affixed to, vehicles and/or trailers which are not legally parked or operational on public right-of-way, public property, or private property so as to be visible from a public right-of-way where the apparent purpose is to advertise a product or direct people to a business or activity. This does not apply to signs placed on or affixed to vehicles and trailers, such as lettering on motor vehicles, where the sign is incidental to the primary use of the vehicle or trailer.
3. Signs that are attached or otherwise affixed to rocks, trees or other living vegetation.
4. Signs that imitate, interfere with, obstruct the view of, or can be confused with any authorized traffic control sign, signal, or other devise.
5. Flashing or rotating signs (do not remain stationary for a minimum of 3 seconds). Signs containing moving parts and signs containing reflective elements that sparkle or twinkle in the sunlight.
6. Off-premises signs, except as specifically allowed for in this ordinance.

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7. Any sign advertising or identifying a business or use which is either defunct, or no longer located on the premises, shall be removed within thirty (30) days of receiving written notice from the Town of Lisbon.
8. Portable and wheeled signs which are not permitted as exempt or temporary in accordance with this ordinance.
9. Signs or other advertising painted directly on walls, unless specifically approved.
10. Signs that obstruct free and clear vision of vehicular traffic or that, by reason of the position, shape, or color, interfere with, obstruct the view of, or be confused with any authorized traffic sign, signal or device or which otherwise creates a public safety hazard.
11. Signs whose content violates State or Federal laws or regulations, including but not limited to, the obscenity provisions of Chapter 944 of the Wisconsin Statutes.
12. Window signs, or combination of window signs, which exceed 30% of the window area.
13. Air-activated or inflatable signs.

(I) EXEMPTIONS

The following signs shall be exempted from the permit processes outlined in this ordinance, except subject to the following regulations:

1. One wall sign, not to exceed six (6) square feet in sign area on the principal structure of where a legal home occupation is operating, for which a permit has been granted and is currently valid, in any residential zoning district . Such signs shall not be illuminated.
2. Bulletin boards not to exceed fifteen (15) square feet in sign area for public, charitable or religious organizations when the same are located on the premises of said institution. Such signs shall be subject to the location, lighting and landscaping standards set forth in this ordinance, and shall not exceed seven (7) feet in height.
3. Plaque signs cut into a masonry surface or constructed of bronze of other non-combustible materials and placed on buildings, property, structures, graves, statuary or the like with historical importance, such as being listed on the National Register of Historic Places, local historical listings, or similar demarcation. Plaque signs shall be limited to four (4) square feet in sign area.
4. Flush signs carved Into or affixed flat to a building in such a way that they are not directly illuminated, are not made of a reflecting material, do not contrast sharply in color with the building, and do not exceed two (2) inches in thickness.
5. Residential wall signs, such as address lettering, not to exceed two (2) square feet in sign area and mounted flush against a dwelling.
6. Safety signs such as traffic signs, legal notices, railroad crossing signs, danger, security, directional, and such temporary emergency or non-advertising signs, as may be erected for the public safety.
7. Awning signs painted, applied, or integral to awnings. Such signs shall not exceed an aggregate gross surface area of four (4) square feet per display with individual letters not exceeding six (6) inches in height.
8. Marquee signs which are affixed to a building with a theatre, cinema, or other performing arts use.
9. Under canopy signs, located under a canopy, as defined in the ordinance, and no greater than four (4) square feet in size.



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10. Signs physically associated with permitted outdoor storage of goods for sale in commercial districts, such as firewood, gas cylinders, and water bottles.
11. Flags of the United States, State of Wisconsin, or other sign depicting government organization or entity which do not pose a safety hazard.
12. Government sign that is erected by the Town of Lisbon, Waukesha County, State of Wisconsin Agency, or Federal Agency. Government signs that are not Town, County, State, or Federal , shall be required to adhere to the regulations of this ordinance.
13. Interior signs located within the interior of any building and which are not readily visible from the exterior of the building.
14. Menu board signs in non-residential districts. Four (4) menu board signs shall be allowed for any business with drive-up or drive-through service and which are 100% screened by evergreen vegetation or a combination of 50% brick wall and 50% evergreen vegetation so as not to be visible from any public road right-of-way and not to exceed 36 square feet in total sign area each.
15. Yard signs that are temporarily located in residential districts, provided they are not attached to utility poles, meter posts, trees, or other public utility in or along any street right-of-way within the Town, and are not attached to any building, wall fence, or other property of another person without having first obtained the prior written consent of the owner of such property. The maximum time limit for all yard signs is three (3) consecutive days, and nine (9) cumulative days in a one-year period. Such signs shall not exceed ten (10) square feet in area.
16. Service Door signs in non-residential districts. One (1) sign per service door shall be allowed and shall not exceed five (5) square feet in area. Sign shall be located at or below eight (8) feet from adjacent ground elevation. Said exempt signs shall not be visible from abutting right-of-way lines or residential property lines.
17. Window signs, or combination of window signs, including glass doors, which do not exceed 30% of the window area.
18. One additional temporary freestanding Sign, not exceeding six (6) square feet in sign area per side, provided that no such signs shall exceed four (4) feet in height or be erected or placed within a public right-of-way. Such temporary signs are limited to no more than three (3) consecutive days, and forty eight cumulative days in a one-year period.
19. Temporary freestanding or wall signs on properties or buildings for sale, lease, or rent:

    A. Number: There shall not be more than one (1) temporary sign for each lot being advertised for sale, lease, or rent, except where a lot abuts two (2) or more streets, in which case one (1) such sign may be allowed for each abutting street frontage.
    B. Residential Areas: In residential areas, such signs shall not exceed twelve (12) square feet in sign area.
    C. Non-Residential Areas: In non-residential and multi-family (four-plex and greater) residential areas, such signs shall not exceed twenty five (25) square feet in sign area.
    D. Location: Such signs shall be located only upon the premises for sale, lease, or rent, and shall be setback a minimum of ten feet (10') from an abutting property line, road right-of-way, or driveway.

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E. Height: Such signs shall not project higher than seven feet (7'), as measured from preconstruction grade at the base of the sign and shall not project higher than the highest permanent freestanding sign on the property.

F. Special Conditions: Such signs shall be removed within seven (7) days of the sale, lease, or rental of the premises upon which the sign is located.

20. Temporary freestanding signs on properties which are under construction, with a valid permit:

A. There shall not be more than one (1) temporary sign for each project or development, except that where a project or development abuts two (2) or more streets, one (1) sign may be allowed for each abutting street frontage.

B. Residential Areas: In residential areas, such signs shall not exceed twenty-five (25) square feet in sign area. Nonresidential Areas: In nonresidential areas, such signs shall not exceed fifty (50) square feet in sign area.

C. Locations: Such signs shall be located only upon the premises upon which construction is about to occur or is occurring. Such signs shall be setback/offset a minimum of ten (10) feet from an abutting property line, road right-of-way, or driveway

D. Height: Such signs shall not project higher than seven (7) feet, as measured from pre-construction grade at the base of the sign.

E. Special Conditions: Such signs shall be permitted only as accessory to an approved building permit. Such signs may be erected and maintained for a period not to exceed thirty (30) days prior to the commencement of construction, and shall be removed within thirty (30) days of the termination of construction as determined by the Town of Lisbon.

21. Political campaign signs equal to or less than eleven (11) square feet in size shall be allowed in all zoning districts in compliance with Wisconsin State Statute 12.04 and which are not prohibited by Section 11.5(k) of this Chapter.

(m) PERMANENT SIGNS BY PERMIT

Permanent signs which are not exempt require permit approval. Permanent signs shall adhere to the following regulations;

1. See Table 11.5.1 for permanent sign regulations by district and by type.
2. Changeable Copy and Price Signs

A. Allowed ground, bulletin board, pedestal, or monument signs may incorporate a changeable copy sign, subject to the following;

i. Messages must be static for a minimum of eight (8) seconds.
ii. No flashing, blinking or, change of intensity of the light.
iii. All frames and/or messages changes should be instant but never longer than one (1) second.
iv. There shall be no more than one (1) scrolling message per sign.

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B. Allowed ground and pedestal signs may incorporate a price sign, subject to the following;

   i. Messages must be static for a minimum of one (1) hour.
   ii. No flashing, blinking or, change of intensity of the light.

C. The sign face area of an incorporated changeable copy sign other than prices shall not exceed 28 square feet per sign face, or exceed 25% of total sign face area for pedestal or monument signs, whichever is less. Bulletin boards and grounds signs, as defined in this chapter, may incorporate all of the allowable sign face area.

D. The sign face area of an incorporated price sign shall not exceed 52 square feet per sign face, or exceed 40% of total sign face area for all signs, whichever is less, and shall be composed of multiple price changeable sign elements, but not including sign structural elements, none of which shall be greater than 2 sq ft. in area.

E. Any sign incorporating a changeable copy or price sign shall be located at least one hundred fifty feet (150') from another sign containing changeable copy, except for bulletin boards, as defined in this chapter.

F. Any sign incorporating a changeable copy sign shall not exceed an additional 0.5 foot candles of the ambient light level. Said brightness shall be measured at the nearest point to the travelling public or designated pedestrian route. Any sign containing a changeable copy sign shall be equipped with photo cell or computer driven software to control light level during operating period.

G. Scrolling message signs shall not be located within four hundred (400) feet of a residential zoned property

H. Scrolling message signs shall not face the long axis of the sign at residential zoned property.

I. Any sign incorporating a changeable copy sign or price sign is to be considered a single sign.

J. No changeable copy or price sign shall be allowed which is not incorporated into another sign, except for bulletin board and ground signs, as noted above.

3. Allowable deviations from sign standards

The Zoning Administrator may allow for a 20% change in any standard for any sign, or allow for additional signs, provided additional landscaping area of equal size to the additional sign(s) face area(s) to be added is installed on the business site. The landscaped area shall be 70% covered in decorative vegetation, 50% of which shall be evergreen. The landscaped area shall be bordered by an acceptable surround and shall be used to enhance the view of the property from any public right-of-way, at the Zoning Administrator's discretion. The landscaped area shall be in addition to and shall be maintained in the same manner as all other landscaping on the site and shall conform to any permit-specific and other Town regulations. Should additional landscape area not be feasible, a 3 foot high brick wall with coping shall be installed in the parking landscaping or perimeter buffer with a linear feet equal to the additional sign face area(s). Where site landscaping or screen walls are not possible, a 10%

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change in standards and one additional wall sign may be allowed at the Zoning Administrator's discretion and requirements.

(n) TEMPORARY SIGNS BY PERMIT

The following portable signs are allowed if granted a temporary permit and subject to the restrictions of this section;

1. A-frame

   A. One (1) A-frame sign per business or use shall be allowed by permit in the following districts;

      i. B-1, B-2, B-3, B-4
      ii. P-I
      iii. PR

   B. The sign shall not exceed 2.5 feet in width or four (4) feet in height.
   C. The sign shall not be permanently attached to the sidewalk and shall not be chained or attached to street trees, street furniture, or other structures or fixtures.
   D. The sign shall be displayed only during hours in which the business it advertises is open, and shall be located within ten (10) feet of the main building entrance.
   E. The sign shall be placed to allow at least three (3) feet of sidewalk width for pedestrian movement.
   F. A-frame sign permits expire in 12 months or when the associated business is no longer active. A-frame sign permits may be re-applied for at the end of each 12 month period.

2. Banner

   A. One (1) banner sign shall be allowed by permit in the following districts;
   B. The signs shall not be in place for a period of more than three (3) weeks.
   C. Each business or organization shall be limited to four (4) temporary banner sign permits for a Banner sign in any 12-month period.
   D. Signs shall be located on the premises of the related use.
   E. The sign shall not be chained or attached to street trees, street furniture, street fixtures or other permanent structures, other than the associated building.
   F. Banners shall not exceed 32 square feet in sign area.

3. Feather Signs

   A. One (1) feather sign shall be allowed by permit in the following districts;

      iv. B-1, B-2, B-3, B-4
      v. P-I
      vi. PR

   B. The signs shall not be in place for a period of more than two (2) weeks,
   C. Each business or organization shall be limited to three (3) temporary sign permits for a feather sign in any 12 month period.

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D. Signs shall be located on the premises of the related use.
E. The sign shall be connected to its own self-supporting structure which is not permanently affixed to the ground.
F. Feather signs shall not exceed 12 square feet in sign area.

4. Roadside stand signs

A. Signs associated with roadside stands as allowed in A-10, A-5, and A-3 zoning districts.
B. Not to exceed twenty (20) square feet in area, may be erected and said sign shall be at least ten (20) feet from the edge of the road pavement.
C. Roadside stand sign permits expire when the associated roadside stand is no longer active.

(o) EXISTING SIGNS

1. Existing Signs

A. Existing signs which become nonconforming upon adoption of this ordinance shall not be reconstructed, remodeled, relocated or altered in any way unless such action will make the sign conforming in all respects with this ordinance (note: normal maintenance is permitted).
B. A nonconforming sign or sign structure which is damaged may be restored only after the owner has shown that the damage did not exceed fifty (50) percent of the appraised value of the sign. If such sign or sign structure is destroyed, or damaged to an extent exceeding fifty (50) percent of the appraised sign value, it shall be removed and shall not be reconstructed or replaced unless such action makes the sign and sign structure conforming, in all respects, to the sign code. If restoration of a damaged sign is not completed within three (3) months of the date damage occurred, such sign shall be removed or replaced in a manner as will conform with all specifications of this ordinance.

(p) DESIGN, CONSTRUCTION AND ERECTION STANDARDS

1. Structure Design

A. Wind pressure. All signs shall be designed, constructed, erected and maintained to safely withstand wind pressure as specified by Wisconsin State Statute and applicable administrative code.
B. The design, construction and erection of all signs shall be by a competent professional in the sign design and construction industry.
C. Wall signs attached to the exterior of a building shall be anchored or attached in such a manner as to ensure its stability and safety.

2. Aesthetic Design
The sign's design shall fulfill the purpose cited in Section 11.5(a).

(q) MAINTENANCE AND REMOVAL OF SIGNS

The Town may cause any sign or other advertising structure that is, in their opinion, an immediate peril to persons or property, to be removed summarily and without notice. The owner of a sign shall keep it in good repair which includes restoring, repainting or replacement of a worn or damaged legally existing sign to its original condition; and



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shall maintain the premises on which the sign is erected in a clean, sanitary and inoffensive condition, free and clear of obnoxious substances, rubbish, weeds and grass.

1. Appearance Requirements

   A. The owner of a sign as defined and regulated by this ordinance shall be required to properly maintain the appearance of all parts and supports of their sign as directed by the Town.

   B. In the event that a sign owner does not provide proper sign maintenance within ten (10) days of receiving written notice to do so from the Town, the sign may be removed as provided in Section 11.5(q)2. of this ordinance.

2. Removal of Certain Signs And Billboards

   A. Any sign or billboard now or hereafter existing which no longer advertises a bonafide business or product, or which is dilapidated, in disrepair, unsafe, insecure, or has been constructed, erected or maintained in violation of the provisions of this ordinance, shall be taken down and removed by the owner, agent, or person having the beneficial use of the building or land upon which said sign may be found. If, within ten (10) days of receiving written notification from the Town, the sign owner fails to comply with such notice, the Town may remove such sign. Any expense incurred thereto shall be paid by the owner of the building or land to which such sign is attached. In the event such cost and expenses are not paid within thirty (30) days from the date of billing, then the costs and expenses incurred for such removal may be assessed against the real estate upon which said sign is located and collected as other taxes are collected on said real estate.

   B. Any sign that is constructed without a valid permit shall be removed promptly, unless a proper permit is obtained within five (5) days of receiving written notice of the illegal sign. In the event that the owner of such sign is not issued a permit, or fails to remove said sign in a prompt manner, the Town may remove such sign. Any expense incurred thereto shall be paid by the owner of the building or land to which said sign is attached. In the event such cost and expenses are not paid within ten (10) days from the date of billing, then the costs and expenses incurred for such removal may be assessed against the real estate upon which said sign is located, and collected as other taxes are collected on said real estate.

   C. In the event that the owner of an illegal sign cannot be ascertained by the Town, then notice as indicated in Section 13.15(c)(3) shall be given to the owner of the real estate upon which the sign is located. In the event that the owner of the real estate is not issued a proper permit, or does not remove the sign within ten (10) days of receiving written notice to do so, the Town of Lisbon may remove said sign. Any expense incurred thereto shall be paid by the owner of the building or land to which said sign is attached. In the event such cost and expenses are not paid within thirty (30) days from the date of billing, then the costs and expenses incurred for such removal may be assessed against the real estate upon which such sign is

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located, and collected as other taxes are collected on said real estate.

D. The cost of removing or relocating signs located in the road right-of-way at a time when the road is proposed to be, or is being, widened, shall be removed or relocated at sign owner's expense.

(r) PENALTY & ENFORCEMENT

Any person, firm, company or corporation that knowingly violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this chapter shall be subject to a forfeiture of not less than ten ($10) dollars nor more than two hundred ($200) dollars for each offense, together with the costs of the action. Default of the payment may result in imprisonment. Each day that a violation exists shall constitute a separate violation, and shall be punishable as such.

**Various Sections of the Lisbon Zoning Code related to signs are hereby repealed and/or recreated as follows:**

**Table of Contents**

Sec. 3m. ~~Signs~~ (Reserved)
Sec. 5 ~~(Reserved)~~ Signs
ADDENDUM A ~~Sign Ordinance, Chapter 13, General Code of Ordinances~~ (Reserved)

**SECTION 2 DEFINITIONS**

**Sign** ~~Any structure or device that draws attention to, conveys or displays visual advertising, messages, directions, invitations, announcements, or information in the form of lettering, logos, colors, lights, pictures, symbols, illuminated neon tubes, or other media, and the supporting structure either on the lot or on any other premises.~~ Any object, device, display, structure, or part thereof which is designed to advertise, announce, direct, identify, or inform by any means, including words, letters, figures, designs, symbols, fixtures, colors, illumination, or projected images.

**~~Sign, Abandoned~~** ~~A sign that no longer advertises a bonafide business, product, owner, lesser, or activity, or a sign for which the required fees have not been paid, or a sign that has not been maintained and is determined to be hazardous.~~

**~~Sign, Awning~~** ~~A sign painted, stamped, perforated, stitched or otherwise applied on the valance of an awning.~~

**~~Sign, Banner~~** ~~A sign intended to be hung either with or without a frame, and which possesses characters, letters, illustrations, or ornamentations applied to paper, plastic, fabric or other similar material.~~

**~~Sign, Billboard (also Off-Premise Sign)~~** ~~A sign that identifies, advertises or communicates a message related to a property, person, activity conducted, a service rendered, or a commodity sold at a location other than where the sign is located.~~

**~~Sign, Bulletin Board~~** ~~A sign located on the premises of a charitable, religious, educational, institutional, or public body for the purposes of announcing events held on the premises. For the purpose of this ordinance, the Town of Lisbon's official bulletin boards may be located off-site.~~

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**Sign, Canopy** A sign that is attached to, or made of, an awning, canopy, or other fabric, plastic, or structural protective cover located over a door, entrance, window, or outdoor service or recreation area.

**Sign, Changeable Message (also Electronic Message Board)** A sign such as a manual, electronic or electric controlled sign, message center, or reader board, where the copy or message can be electronically programmed and modified.

**Sign, Construction** A sign identifying individuals, companies, or agencies involved in the design, construction, wrecking, financing, or development of a building/lot, and/or identifying the future use of a building/lot.

**Sign, Directional** A sign that directs the public to an establishment or organization off of the main traveled way, and/or a sign used solely to indicate driveway ingress and egress, and both of which contain no advertising material. A directional sign may be on premise or off premise.

**Sign, Directory** A sign that indicates the names of the occupants/tenants located on the premises.

**Sign, Double-Sided/Faced** A sign with copy on two parallel faces that are back-to-back and facing in opposite directions.

**Sign, Flashing** A sign whose illumination flashes on and off in a blinking manner with varying light intensity, color, direction, animation, wording, text, or that shows motion, the illusion of motion, or revolves creating the illusion of turning on and off. Illuminated signs that indicate the date, time and/or temperature are not considered flashing signs for the purpose of this ordinance if the remainder of the sign is kept at a constant intensity.

**Sign, Free Standing** A sign self supported by one or more upright poles, columns, or braces placed in, upon or below the ground surface and not attached to any building or structure.

**Sign, Ground** A sign erected on the ground or on one or more freestanding supports or uprights on or attached to the ground and not attached to any building.

**Sign, Illuminated** A sign illuminated in any manner by an artificial light source, whether internal or external, whose primary purpose is to display or draw attention to said sign. For the purpose of this ordinance, illuminated signs include neon or other gas tube signs.

**Sign, Marquee/Arcade** A sign attached to, painted on, or supported by a marquee that has its copy manually changed to reflect changes on the premises.

**Sign, Off-Premise (see Billboard Sign)**

**Sign, On-Premise** A sign that identifies, advertises or communicates a message related to a property, person, activity conducted, a service rendered, or a commodity sold at the same location where the sign is located.

**Sign, Portable** A sign not permanently affixed to the ground, a building, or other

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~~structure, and which may be moved from place to place.~~

~~**Sign, Projecting** A sign, other than a wall sign as defined in this ordinance, that is attached to and projects from an exterior wall or face of a building or structure, and is normally double- faced.~~

~~**Sign, Real Estate** A sign that is used to offer for sale, lease, or rent, the premises upon which such sign is placed.~~

~~**Sign, Roof** A sign which is located on, against, or projects directly above a roof or roof eave, or on top or above the parapet or on a functional architectural appendage above the roof or roof eave, or which is painted on or fastened to a roof.~~

~~**Sign, Subdivision Entrance** A sign identifying the name of the subdivision at one or more of the entrances to the subdivision.~~

~~**Sign, Temporary** An informational sign, display, banner or other advertising device constructed of cloth, canvas, fabric, wood, or other temporary material, with or without a structural frame, and intended to be used only for a limited period of time as determined by the Town. For the purpose of this ordinance this includes decorative holiday displays, public demonstrations, and the like.~~

~~**Sign, Wall – Exterior** A sign painted directly on, or attached to, the exterior wall of a building, and parallel to the face of the building and supported throughout its length by the building.~~

~~**Sign, Wall – Interior** A sign or display attached to the interior wall of a building the purpose of which is to be readable from the exterior of building.~~

~~**Sign, Warning** A sign that is devoid of advertising material, whose sole purpose is to warn the public of the existence of, or potential for, danger.~~

~~**Sign, Window** A sign attached to, or painted, stenciled, or placed on, a window or door of a building that is intended for viewing from the exterior of the building.~~

**Section 3.(b)5.E.**
~~A rendering of all signs visible from the exterior, along with the location, dimensions, overall height, illumination, and colors of the signs, which shall comply with this ordinance and Chapter 13, Signs, of the Town of Lisbon General Code of Ordinances (refer to Addendum A)~~ Location of signs, which shall be in accordance with Chapter 11 Section 5 Signs.

**Section 4(h)5.D.**
One (1) on-premise sign may be allowed ~~provided that such sign is compatible with the residential use of the site and its surrounding areas and is not more than fifteen (15) square feet in size with letter sizes not less than five (5) inches in height~~ and shall be in compliance with the regulations for a ground sign in the A-3/A-5/A-10/AD-10/ RD-5/EFD district standards in Chapter 11 Section 5 Signs.

**Section 4(h)36.M**
~~A Signage Plan shall be submitted to the Town Plan Commission for review and approval. Addendum A Supplemental Design Standards of the Town of Lisbon's Land Division and Development Ordinance, and the Town of Lisbon's Sign Ordinance, may be used by the Town Plan Commission in their review and approval of the Signage Plan in addition to the regulations~~

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~~contained in this Zoning Ordinance~~ Signage shall be in compliance with Chapter 11 Section 5 Signs.

**Section 8(b)6.**
~~Signs not to exceed forty (40) feet in area displaying the name of the farm or farm organization. Signs shall be in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A)~~ Signs shall be in accordance with Chapter 11 Section 5 Signs.

**Section 10(c)2.**
~~Signs displaying the name of the site or facility provided they are no greater than fifty (50) square feet in area. Signs shall be in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A)~~ Signs shall be in accordance with Chapter 11 Section 5 Signs.

**Section 11.(c)4.**
A. ~~Sign not to exceed twelve (12) square feet in area, displaying the name of the farm or farm organization~~ Signs shall be in accordance with Chapter 11 Section 5 Sign.
~~B. Signs, including subdivision signs, shall be in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A).~~

**Section 11.(c)6.**
~~C. One temporary sign, not to exceed twenty (20) square feet in area, may be erected and said sign shall be at least ten (20) feet from the edge of the road pavement.~~

**Section 12.(c)4.**
A. ~~Sign not to exceed twelve (12) square feet in area, displaying the name of the farm or farm organization~~ Signs shall be in accordance with Chapter 11 Section 5 Sign.
~~B. Signs, including subdivision signs, shall be in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A).~~

**Section 12.(c)6.**
~~C. One temporary sign, not to exceed twenty (20) square feet in area, may be erected and said sign shall be at least ten (20) feet from the edge of the road pavement.~~

**Section 13(b)4.**
~~Signs not to exceed forty (40) feet in area displaying the name of the farm or farm organization. Signs shall be in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A)~~ Signs shall be in accordance with Chapter 11 Section 5 Signs.

**Section 13.(b)11.**
~~C. One temporary sign, not to exceed twenty (20) square feet in area, may be erected and said sign shall be at least ten (20) feet from the edge of the road pavement.~~

**Section 14(b)4.**
~~Signs not to exceed forty (40) feet in area displaying the name of the farm or farm organization. Signs shall be in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A)~~ Signs shall be in accordance with Chapter 11 Section 5 Signs.

**Section 14.(b)9.**
~~C. One temporary sign, not to exceed twenty (20) square feet in area, may be erected and said sign shall be at least ten (20) feet from the edge of the road pavement.~~

**Section 15(b)7.**

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~~A sign pertaining to the lease or sale of any building or land provided such sign does not exceed twenty (20) square feet in area. A sign not exceeding six (6) square feet in area may be maintained by the owner or occupant of any land or building for the purpose of displaying the name of the owner or occupant, or for the purpose of warning against trespasses. Signs shall be in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A).~~ Signs shall be in accordance with Chapter 11 Section 5 Signs.

**Section 19(b)3.B.**
~~A sign pertaining to the lease or sale of any building or land provided such sign does not exceed twenty (20) square feet in area. A sign not exceeding six (6) square feet in area may be maintained by the owner or occupant of any land or building for the purpose of displaying the name of the owner or occupant, or for the purpose of warning against trespasses. All signs shall be in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A)~~ Signs shall be in accordance with Chapter 11 Section 5 Signs.

**Section 23.(c)2.**
~~Signs displaying the name of the institution or facility provided they are no greater than fifty (50) square feet in area, and in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A)~~ Signs shall be in accordance with Chapter 11 Section 5 Signs.

**Section 24(b)3.**
~~A. Non-illuminated signs and non-flashing but illuminated business signs. However, no sign shall include illuminating devices or be constructed of illuminated material or be specifically illuminated except by properly shielded cove or back lighting of a non-intermittent type on an opaque background, such source of light not to be more than two (2) feet from the vertical face to be illuminated.~~
~~B. No freestanding sign shall exceed a total height of twenty five (25) feet, as measured from the ground, and shall not exceed 50 square feet in area. No ground sign shall exceed a total height of 10 feet, as measured from the existing grade, and said sign shall not exceed 50 square feet in area.~~
~~C. Only one (1) free-standing sign shall be permitted for each lot or parcel. However, the owner of a corner lot or parcel may, subject to plan commission review and approval, erect one freestanding sign for each abutting street.~~
~~D. All signs are subject to a Site Plan and Plan of Operation being submitted to, and approved by, the plan commission as to design, location, area, size, number, purpose and any other relevant factors affecting use of the property or any adjoining properties.~~
~~E. No sign attached to a building shall be higher than four (4) feet above the top of the roof line or in any case exceed thirty-five (35) feet in height.~~
~~F. All signs shall be in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A), unless otherwise regulated in this subsection~~ Signs shall be in accordance with Chapter 11 Section 5 Signs.

**Section 30.(b)7.**
~~Signs, either illuminated or non-illuminated, may be erected subject to Plan Commission approval as to design, location, area, size, number, purpose, and any other relevant factors affecting use of the property or any adjoining properties, and in accordance with Chapter 13, Signs, of the General Code of Ordinances (refer to Addendum A)~~ Signs shall be in accordance with Chapter 11 Section 5 Signs

**Repeal Addendum A and replace with "(Reserved)" in Table of Contents as well as at Addendum section**.

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| Permanent Signs by Zoning District | Development Type | Allowable Sign Area (Sq. Ft.) | Allowable Sign Face Area (Sq. Ft.) | Minimum Setback (Feet) | Maximum Height (Feet) | Maximum Number | Additional Requirements |
|---|---|---|---|---|---|---|---|
| **A-3/A-5/A-10/AD-10/ RD-5/EFD** | | | | | | | |
| Wall | | +15% of Sign Face | 6 | n/a | n/a | 1 | |
| Ground | | 15/40 | 15/40 | 10 | 7 | 1 (on properties >= 20 acres) | 40 sq. ft. allowable sign area for farm operations in A-10, A-5, and EFD districts, 15 sq. ft. in other districts or for other than farm operations |
| **R-1/R-2/R-3/RD-5** | | | | | | | |
| Monument | Residential subdivisions | 32 - 50 | 32 - 50 | 10 | 7 | 2 per entrance | |
| **RM** | | | | | | | |
| Wall | MF Development w/4+ Unit Bldgs. | +15% of Sign Face | 10 | n/a | n/a | 1 | |
| Ground | Single Parcel w/4+ Unit Bldg. | +75% of Sign Face | 32 +1' per additional 2' of setback, up to 50 | 10 | 7 | 1 | |
| | MF Development w/4+ Unit Bldgs. | +75% of Sign Face | 32 +1' per additional 2' of setback, up to 50 | 10 | 7 | 1 (or 1 monument sign) | |
| Monument | MF Development w/4+ Unit Bldgs. | 32 - 50 | 32 - 50 | 10 | 7 | 1 (or 1 monument sign) | |
| **B-2/B-3/B-4/M-1/Q-1** | | | | | | | |
| Wall | Single-Tenant Properties | +15% of Sign Face | 50 (or 85% of façade frontage, whichever is greater) | | A wall sign shall not project higher than the parapet line of the wall to which the sign is to be affixed. | 1 | A wall sign may be located on the outermost wall of the principal building, but shall not project more than ten (10) inches from the wall to which the sign is to be affixed. |
| | Multi-Tenant (Shopping Center/Business Park) Properties | +15% of Sign Face | 50 (or 85% of façade frontage, whichever is greater) | | A wall sign shall not project higher than the parapet line of the wall to which the sign is to be affixed. | 1 per tenant plus 1 per building side facing traffic | A wall sign may be located on the outermost wall of the principal building, but shall not project more than ten (10) inches from the wall to which the sign is to be affixed. The wall sign shall not be located any closer than 4 feet to the tenant's wall line. This 4 feet clear zone shall apply to each end of the wall sign. Therefore multi-tenant facades will have eight (8) feet of clear zone between tenant wall signs. |
| Projecting | Single-Tenant Properties | 15 | 15 | | The minimum clearance to grade shall be eight (8) feet as measured from the lowest part of the sign. The maximum height shall not exceed fifteen (15) feet above the grade immediately below the projecting sign. | 1 | |

Table 11.5.1

| Permanent Signs by Zoning District | Development Type | Allowable Sign Area (Sq. Ft.) | Allowable Sign Face Area (Sq. Ft.) | Minimum Setback (Feet) | Maximum Height (Feet) | Maximum Number | Additional Requirements |
|---|---|---|---|---|---|---|---|
| | Multi-Tenant (Shopping Center/Business Park) Properties | 15 | 15 | | The minimum clearance to grade shall be eight (8) feet as measured from the lowest part of the sign. The maximum height shall not exceed fifteen (15) feet above the grade immediately below the projecting sign. | 1 per tenant | |
| Ground | Single-Tenant Properties | +75% of Sign Face | 32 +1' per additional 2' of setback, up to 50 | 10 | 7 | 1 | |
| | Multi-Tenant (Shopping Center/Business Park) Properties | +75% of Sign Face | 50 +1' per additional 2' of setback, up to 100 | 10 | 7 | 1 (or 1 monument sign) per entrance | |
| Pedestal | Single-Tenant Properties | +85% of Sign Face | 32 +1' per additional 2' of setback, up to 50 | 10 | 30 | 1 | |
| | Multi-Tenant (Shopping Center/Business Park) Properties | +85% of Sign Face | 50 +1' per additional 2' of setback, up to 100 | 10 | 30 | 1 | |
| Monument | Single-Tenant Properties | 60 | 60 | 10 | 7 | 1 (or 1 ground sign) | |
| | Multi-Tenant (Shopping Center/Business Park) Properties | 60 | 60 | 10 | 7 | 1 (or 1 ground sign) per entrance | |
| **P-I/PR** | | | | | | | |
| Wall | Single-Tenant Properties | +15% of Sign Face | 50 (or 85% of façade frontage, whichever is greater) | | A wall sign shall not project higher than the parapet line of the wall to which the sign is to be affixed. | 1 | A wall sign may be located on the outermost wall of the principal building, but shall not project more than ten (10) inches from the wall to which the sign is to be affixed. |
| | Multi-Tenant (Institutional/Recreational Complex) Properties | +15% of Sign Face | 50 (or 85% of façade frontage, whichever is greater) | | A wall sign shall not project higher than the parapet line of the wall to which the sign is to be affixed. | 1 per tenant plus 1 per building side facing traffic | A wall sign may be located on the outermost wall of the principal building, but shall not project more than ten (10) inches from the wall to which the sign is to be affixed. The wall sign shall not be located any closer than 4 feet to the tenant's wall line. This 4 feet clear zone shall apply to each end of the wall sign. Therefore multi-tenant facades will have eight (8) feet of clear zone between tenant wall signs. |
| Projecting | Single-Tenant Properties | 15 | 15 | | The minimum clearance to grade shall be eight (8) feet as measured from the lowest part of the sign. The maximum height shall not exceed fifteen (15) feet above the grade immediately below the projecting sign. | 1 | |

Table 11.5.1

| Permanent Signs by Zoning District | Development Type | Allowable Sign Area (Sq. Ft.) | Allowable Sign Face Area (Sq. Ft.) | Minimum Setback (Feet) | Maximum Height (Feet) | Maximum Number | Additional Requirements |
|---|---|---|---|---|---|---|---|
| | Multi-Tenant (Institutional/Recreational Complex) Properties | 15 | 15 | | The minimum clearance to grade shall be eight (8) feet as measured from the lowest part of the sign. The maximum height shall not exceed fifteen (15) feet above the grade immediately below the projecting sign. | 1 per tenant | |
| Ground | Single-Tenant Properties | +75% of Sign Face | 32 +1' per additional 2' of setback, up to 50 | 10 | 10 | 1 | |
| | Multi-Tenant (Institutional/Recreational Complex) Properties | +75% of Sign Face | 50 +1' per additional 2' of setback, up to 100 | 10 | 10 | 1 (or 1 monument sign) per entrance | |
| Monument | Single-Tenant Properties | 60 | 60 | 10 | 7 | 1 (or 1 ground sign) | |
| | Multi-Tenant (Institutional/Recreational Complex) Properties | 60 | 60 | 10 | 7 | 1 (or 1 ground sign) per entrance | |

The Zoning Administrator may allow for a 20% change in any standard for any sign, or allow for additional signs, provided additional landscaping area of equal size to the additional sign(s) face area(s) to be added is installed on the business site. The landscaped area shall be 70% covered in decorative vegetation, 50% of which shall be evergreen. The landscaped area shall be bordered by an acceptable surround and shall be used to enhance the view of the property from any public right-of-way, at the Zoning Administrators discretion. The landscaped area shall be in addition to and shall be maintained in the same manner as all other landscaping on the site and shall conform to any permit-specific and other Town regulations. Should additional landscape area not be feasible, a 3 foot high brick wall with coping shall be installed in the parking landscaping or perimeter buffer with a linear feet equal to the additional sign face area(s). Where site landscaping or screen walls are not possible, a 10% change in standards and one additional wall sign may be allowed at the Zoning Administrator's discretion and requirements.

Table 11.5.1