Planning Department

W240N3065 Pewaukee Road
Pewaukee, WI 53072
(262) 691-0770 Fax (262) 691-1798

PLAN COMMISSION
MEETING NOTICE AND AGENDA
Thursday, July 16, 2020
7:00 PM

Common Council Chambers ~ Pewaukee City Hall ~ W240 N3065 Pewaukee Rd., Pewaukee, WI 53072
This meeting is open to the public for in-person attendance and will also be held virtually due to the Governor's Emergency Safer At Home Order due to COVID-19 virus. To attend virtually, please contact Ami Hurd, Deputy Clerk, at 262-691-0770 or via email at hurd@pewaukee.wi.us to obtain the meeting link and ID number. The meeting materials will be available at https://pewaukee.novusagenda.com/AgendaPublic/

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1. Call to Order and Pledge of Allegiance

2. Discussion and Action Regarding a Mitigation Plan for the Keith Tubin Property Located at N37 W26745 Kopmeier Drive (PWC 0894014)

3. Discussion and Action Regarding a Recommendation to the Common Council to Approve the Conditional Use Permit for Michael's House of Prime Located at W278 N2316 Prospect Avenue to Add Outdoor Seating and Outdoor Music to Their Existing Restaurant Operations (PWC 0935039)

4. Discussion and Action Regarding Applications for Outdoor Activity on Premises Where Alcoholic Beverages are Consumed

   4.1 Michael's House of Prime
   4.2 Smokey's Musky & Bait Shop
   4.3 Boomers Sports Pub & Grill
   4.4 Waukesha Gun Club

5. Discussion and Action Regarding a Petition for a Rezoning Public Hearing for Duplainville Land Company, LLC/John Zignego to Rezone Property Located at W226 N2940 Duplainville Road From M-1 General Wholesale Business To M-2 Limited Industrial (PWC 0931997001) and From M-2 Limited Industrial to LC Lowland Conservancy (PWC 0914992001 & PWC 0914991)

6. Discussion and Action Regarding a Certified Survey Map for Duplainville Land Company, LLC/John Zignego for Property Located at W226 N2940 Duplainville Road for the Purpose of Combining all Parcels Owned by Zignego Into One Lot (PWC 0913997001, PWC 0914991, PWC 0914992001)

7. Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit and Site and Building Plans for Duplainville Land Company, LLC/John Zignego for Property Located at W226 N2940 Duplainville Road for the Purpose of Constructing a One-Story 25,000 Square Foot Repair Garage Building (PWC 0913997001, PWC 0914991, PWC 0914992001)

8. Discussion and Action and Public Hearing Regarding Proposed Amendments to Chapter 17 of the City of Pewaukee Zoning Ordinance Including Striking a Portion of Sub-section 17.0706c Related to Digital Signs; Adding New Sub-section 17.0706d and Re-lettering the Subsequent Sections

Accordingly Related to Adding Electronic Message Boards Signs as Permitted Under Certain Conditions; and Striking a Portion of Sub-section 17.0711 Related to Lighting, Design and Color.

9. Adjournment

Ami Hurd
Deputy Clerk

7/9/2020

NOTICE

It is possible that members of other governmental bodies of the municipality may be in attendance to gather information that may form a quorum. At the above stated meeting, no action will be taken by any governmental body other than the governmental body specifically referred to above in this notice.

Any person who has a qualifying disability under the Americans with Disabilities Act that requires the meeting or materials at the meeting to be in an accessible format must contact the City Planner, Nick Fuchs, at (262) 691-0770 three business days prior to the meeting so that arrangements may be made to accommodate your request.

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 2.

DATE: July 16, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Mitigation Plan for the Keith Tubin Property Located at N37 W26745 Kopmeier Drive (PWC 0894014)

BACKGROUND:

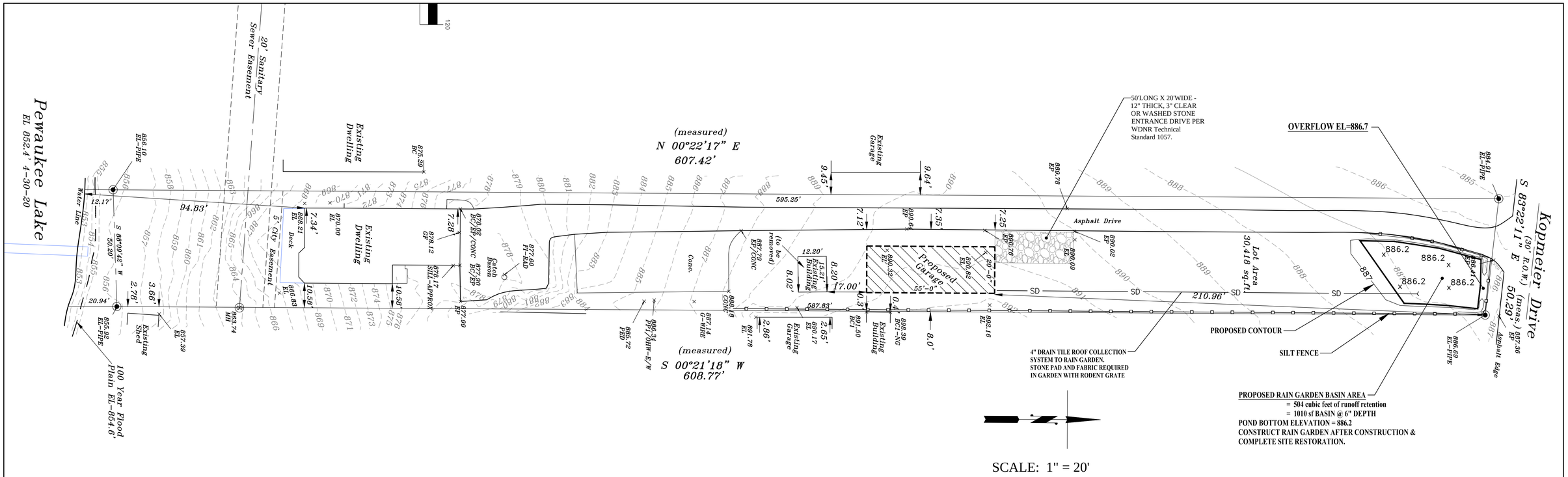
FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Tubin Mitigation Plan



Lot Area to Waters Edge
30,418 sq.ft.

Area Calculations

LOT = 30,418 S.F.

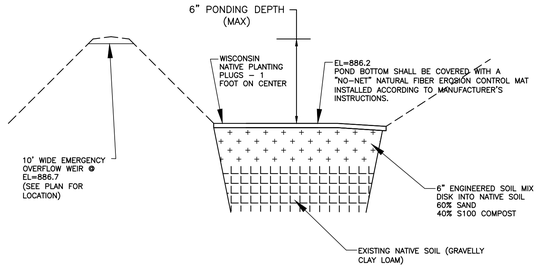
10,613 S.F. = 34.9% COVERAGE OF LOT PROPOSED WITH MITIGATION (35% MAXIMUM)

8,365 S.F. = 27.5% COVERAGE OF LOT ALLOWED STANDARD

2,248 S.F. DIFFERENCE

2,248 S.F. X 2.69" (WATER VOLUME FOR A 2 YEAR, 24 HOUR STORM EVENT) =

504 CUBIC FEET OF STORAGE NEEDED FOR MITIGATION



RAIN GARDEN TYPICAL CROSS-SECTION

CONSTRUCTION PHASING SEQUENCING:

THE CONTRACTOR MUST FOLLOW THE FOLLOWING CONSTRUCTION SEQUENCE AS REQUIRED BY THE CITY OF PEWAUKEE:

1. INSTALL GRAVEL CONSTRUCTION ENTRANCE AS SHOWN ON THE PLAN (TRACKING PAD).
2. INSTALL SILT FENCE AS SHOWN ON THE PLAN.
3. STRIP TOPSOIL FROM THE PROPOSED GARAGE AREA; AS REQUIRED AND HAUL OFFSITE.
4. EXCAVATE RAIN GARDEN, CONSTRUCT BERM & OVERFLOW AND INSTALL ROOF COLLECTOR DRAIN TILE AS NOTED ON PLAN. DO NOT INSTALL ENGINEERED FILL AT THIS TIME. RESTORE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND EROSION CONTROL MATTING.
5. COMPLETE BUILDING, DRIVE & LANDSCAPE AREAS.
6. TOPSOIL, RE-VEGETATE AND STABILIZE ALL REMAINING DISTURBED AREAS.
7. FOLLOWING SITE RESTORATION, REMOVE EXCESS SEDIMENT FROM POND BOTTOM AND CONSTRUCT RAIN GARDEN WITH ENGINEERED FILL. PLACE WISCONSIN NATIVE WETLAND PLUG PLANTINGS 1 FOOT ON CENTER.
8. AFTER ALL DISTURBED AREAS ARE WELL-ESTABLISHED AND FOLLOWING FINAL AS-BUILT ACCEPTANCE BY THE CITY, REMOVE ALL SILT FENCE AND ANY OTHER TEMPORARY BMP'S.

CONSTRUCTION SCHEDULE: START DATE: AUGUST 2020.
SITE RESTORATION DATE: OCTOBER 15, 2020.

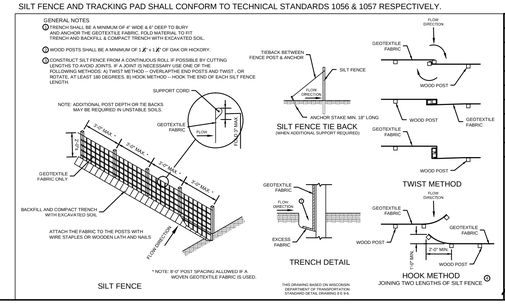
NOTE:
THIS PROJECT SHALL FOLLOW ALL REQUIREMENTS WITHIN THE CITY OF PEWAUKEE STORM WATER MANAGEMENT & EROSION CONTROL ORDINANCE.

GENERAL SPECIFICATIONS:

1. All work shall be in accordance with the Waukesha County Storm Water Management and Erosion Control Ordinance, the Standard Specifications for Highway and Structure Construction, State of Wisconsin, Latest Edition the and the CITY OF PEWAUKEE Ordinances, unless otherwise called for on the plans, specifications or special provisions.
2. All erosion control measures specified on this plan shall meet the design criteria, standards and specifications as set forth in the Department of Natural Resources Wisconsin Technical Standards.
3. All erosion control devices (i.e., silt fence, etc.), shall be installed prior to commencing grading.
4. All activities on the site shall be conducted in a logical sequence to minimize the area of bare soil exposed at any one time.
5. The contractor shall notify Diggers Hotline and government units whose property may be affected by the contractor's operations at least three (3) days before breaking ground. Diggers Hotline number is 811.
6. Public roads shall not be closed to traffic at any time. All ingress and egress traffic to the project shall be limited to the gravel entrance to the property.
8. Contractor shall be responsible for maintaining the Streets. Streets shall be kept free of silt or dirt tracked from areas under construction by sweeping within 24hrs. Dust generated by construction activities shall be minimized by use of watering, calcium chloride surface treatment, construction scheduling or other appropriate methods.
9. Upon completion of the work as specified, respread four (4") inches of salvaged topsoil over all disturbed areas and provide seed, fertilizer and erosion control matting per the WDNR Technical Standards.
10. All disturbed non-field areas shall be revegetated within seven days of no disturbance. WisDOT Highway mix #30 shall be used for seeding with an application rate of 4.0 lbs/1000 sf.
11. All erosion control devices shall be routinely inspected every seven days or within 24 hours of a rainfall greater than 0.5 inches. (By owner or owners representative).
12. If site is not stabilized by September the winter stabilization schedule shall be required to continue construction.

SILT FENCE CONSTRUCTION

SILT FENCE AND TRACKING PAD SHALL CONFORM TO TECHNICAL STANDARDS 1056 & 1057 RESPECTIVELY.



REVISIONS	
DATE	COMMENT
07-09-20	REV1

ELLENA ENGINEERING CONSULTANTS, LLC
SITE CIVIL ENGINEERING & STORMWATER MANAGEMENT
Ellena Engineering Consultants, LLC • 700 Pilgrim Parkway - Suite 100 • Elm Grove, WI 53122
Phone: 262-719-6183 • Fax: 866-457-2584 • Email: mellena@eeceng.com

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

KEITH TUBIN PROPETY

N37 W26745 Kopmeier Drive, Pewaukee, Wisconsin

Rain Garden Storm Plan

SCALE: 1"=20'	DATE: 06-23-20
DESIGNED BY: MRE,PE	PROJECT NO:
APPROVED BY: DATE	C1

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

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 3.

DATE: July 16, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Recommendation to the Common Council to Approve the Conditional Use Permit for Michael's House of Prime Located at W278 N2316 Prospect Avenue to Add Outdoor Seating and Outdoor Music to Their Existing Restaurant Operations (PWC 0935039)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Michael's House of Prime Staff Report

Michael's House of Prime Narrative

Michael's House of Prime Map

Michael's House of Prime Conditional Use Permit

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of July 16, 2020

Date: July 7, 2020

Project Name: Michael's House of Prime Conditional Use

Project Address/Tax Key No.: W278N2316 Prospect Avenue/PWC 0935039

Applicant: Rick Buckley

Property Owner: Edgewood Adventure, LLC

Current Zoning: B-3 General Business District and F-1 Floodplain District

2050 Land Use Map Designation: Retail/Service Commercial and Floodplains, Lowland & Upland Conservancy and Other Natural Areas

Use of Surrounding Properties: B-3 zoned property to the north and west, the Lake Country Recreational Trail to the south, and single-family residential to the east

Project Description/Analysis:

The applicant, Michael's House of Prime, filed a Conditional Use Application for the existing restaurant use and proposed outdoor dining area with associated music and lighting for property located at W278N2316 Prospect Avenue.

Michael's House of Prime recently applied for an Outdoor Entertainment Permit, which it had not done in previous years. In review of that application, staff recommended that a Conditional Use Permit be submitted by the applicant to allow for the existing and proposed/new use of outdoor dining.

The restaurant will continue operations as it has been with no changes other than the addition of the outdoor seating area. The seating area is about 2,500 square feet, will contain 45 seats, and also incorporate the existing gazebo. The applicant is proposing two speakers for music. This will primarily be for background music; however, the applicant indicated that occasionally one or two musicians may be hired to entertain customers.

The improvements will also include café lights hung from trees on the property. The applicant is anticipating about eight strings of lights with twenty-four, 24-watt lights on each sting. Tiki torches will be utilized as well.

The outdoor area is planned to be open for dining until 10:00 p.m. Sunday through Thursday, except for being closed on Mondays, and until 10:30 p.m. on Fridays and Saturdays. The applicant has indicated music will be shut off by 9:00 p.m. on weekdays, including Sunday and 10:00 p.m. on Fridays and Saturdays.

Recommendation

Staff is recommending a motion to recommend approval of the Conditional Use Permit for Michael's House of Prime to allow the continued operation of the restaurant and the proposed outdoor dining use, subject to the conditions below. Note staff finds that these conditions eliminate any potential adverse impacts on the surrounding properties or adjacent uses.

1. *This Conditional Use Permit is personal to Buckley Brothers Family LLC (d/b/a Michael's House of Prime), does not run with the land, and is not transferrable.*
2. *Alcohol sales may not occur outside of the description within the Michael's House of Prime or future owner's liquor license premise description as approved by the Common Council*.
3. *No outdoor activities shall occur between the hours of 10:00 p.m. and 8:00 a.m. Sunday through Thursday and 10:30 p.m. and 8:00 a.m. Friday and Saturday*.
4. *Maximum Permitted sound levels for dining, music, and other outdoor activities shall not exceed 65 decibels as measured at the property line*[1].
5. *All outdoor dining lights shall be shut off by 10:00 p.m. Sunday through Thursday and 10:30 p.m. Friday and Saturday*.

[1] Per OSHA, 60 decibels is equivalent to a conversation (3 feet away). 70 decibels is described as classroom chatter. Examples of 65 decibels from other sources include, Business Office, Normal Conversation, Dishwashers, and Vacuums.

Dear Mayor, Common Council of the City of Pewaukee, and Plan Commission,

Who knew that this year would be so difficult and challenging? Brother David and I, along with our wonderful staff have worked very hard to keep our restaurant open throughout the pandemic. Michael's House of Prime and this location has a long history in the City of Pewaukee going back to 1926. While only being Michael's for now 44 years it has been known as Duke's House of Prime, Coffee Heads, and Gus Frank's. Doubtful many of you go back that long but David and I have been eating here since we were young kids, being brought here by our parents going back to the early 1960s. We bought this restaurant out our history here after Debbie Griepentrog told us, that after 40 years here she had had enough. She said she could not find a buyer who would maintain the family traditions she had been a part of with her parents, brother, and sister, all who have passed. In fact it may have become a parking lot.

We were not steeped in the restaurant business, except maybe for the eating and drinking side (which as we have found is a lot different from owning one). We have given it our all since we bought it in 2016. The pandemic and being forced to close in restaurant dining was a huge blow. We had two options, close, let all our employees go and hope to live another day or fight and switch to a 100% carryout business. This was quite a change but the community support was tremendous. Our team shifted gears and we did all right selling food for carryout. Our financials have been bleak, while the food sales were good, there were very limited takeout bar sales which is the larger profit center in the restaurant business and buying airline sized bottles of liquor is not the most cost effective.

Anyway we have taken some tables out of our restaurant to spread folks out a bit more but that is lost revenue so we are looking to finding other ways to compensate and that took us to outdoors where we have a flat area of ground with a view of the creek and an existing gazebo that dates back many years. This is the area where we could add tables and give our customers the opportunity to eat outside on the lawn, with a nice view of the creek. To begin with we cannot spend a lot of money, COVID took care of that. So the plan is to set used tables (with linens) and old chairs on the lawn, we will have a food and drink menu, we will serve from an outdoor bar in the freshly painted gazebo and food from the kitchen. We have strung café lights from the trees, and put up tiki torches. It actually looks quite nice.

Our hours of operation, lighting, tables, speakers, are all on the application. We are an establishment that attracts generally a little older guest, favoring Sinatra style music, and quite evenings with family and friends.

We appreciate you granting us permission to do this starting after the June 1, 2020 Council meeting. A number of our neighbors have come by to survey what we've done and are excited, once the weather cooperates, to enjoy our outdoor dining option and watching the creek slowly move into Pewaukee Lake.

We are ready to talk with you about how we are working to survive in these challenging times.

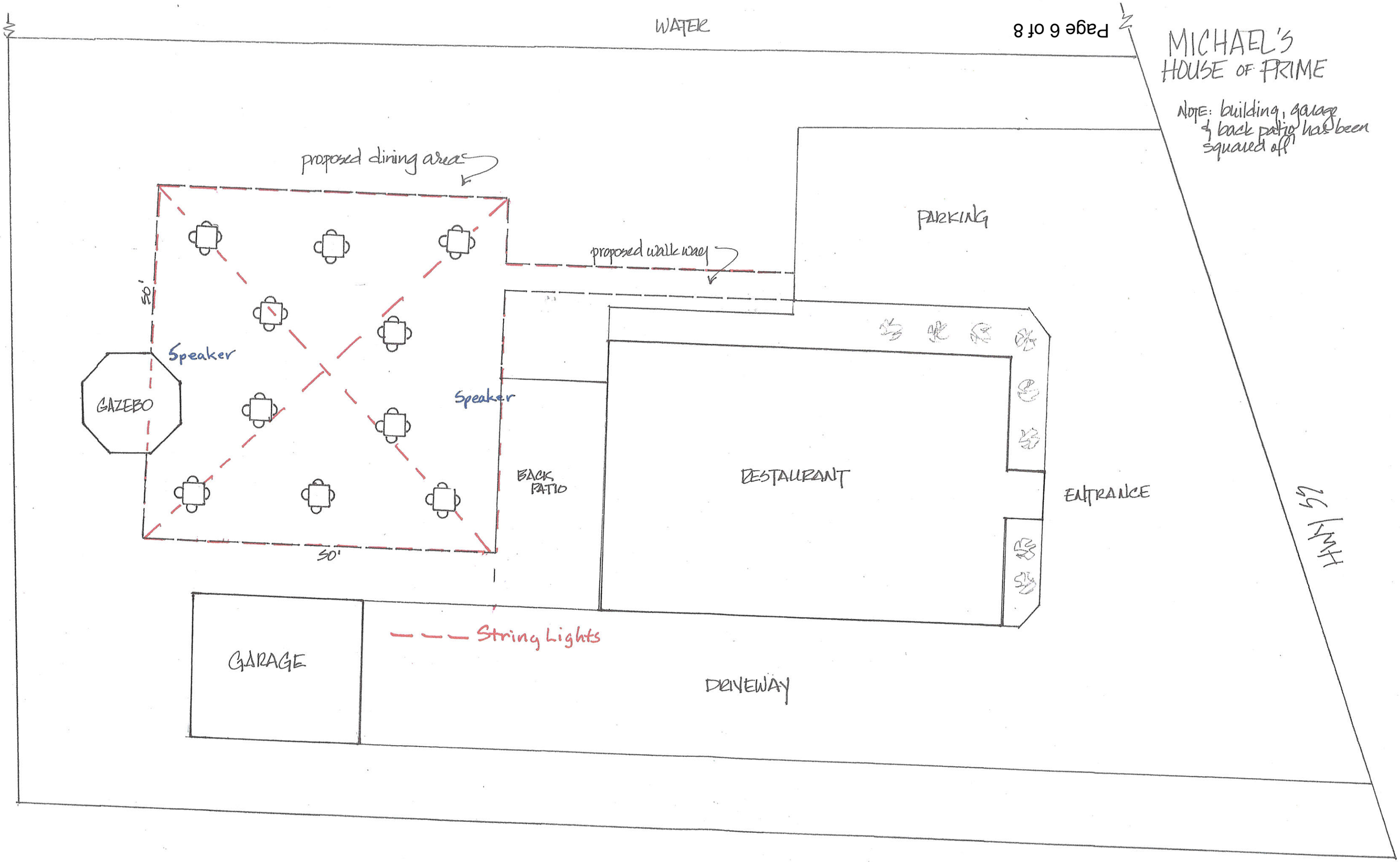
Thank you for your consideration.

Rick & David Buckley

June 16, 2020

MICHAEL'S HOUSE OF PRIME

NOTE: building, garage & back patio has been squared off



SCALE: 1" = 12'

A COVENANT
REGARDING THE ISSUANCE OF A
CONDITIONAL USE PERMIT
BY THE
CITY OF PEWAUKEE

TAX KEY NUMBER(S) OR PARCEL(S) INVOLVED: **CONDITIONAL USE PERMIT: NO. CUP-20-7-1**

PWC 0935039

Recording area

Name & Return Address

City of Pewaukee
W240N3065 Pewaukee Rd
Pewaukee, WI 53072

LEGAL DESCRIPTION:

LOT 51 & 52 EDGEWOOD STATION PT SW ¼ SEC 18 T7N R19E :: DOC# 4253184

PERSON(S), AGENT(S) OR CORPORATION(S) PETITIONING FOR PERMIT:

Michael's House of Prime

WHEREAS, It is understood by all parties to this covenant that Section 62.23 of WIS. Statutes prescribes the legal basis for the granting of a conditional use permit by a City and Chapter 17 of the City Codes and Ordinances provides for the issuance of such permits as well as the standards by which all such uses will be measured; and,

WHEREAS, The City Plan Commission has held a meeting on July 16, 2020; has reviewed the various elements of the petitioners proposal; and has recommended that a Conditional Use Permit be granted to the above named petitioner for the property/parcel identified above; and,

WHEREAS, The City Common Council, held a public hearing meeting held on July 20, 2020.

NOW, THEREFORE, let it be known that the City Common Council by its action on July 20, 2020 has, hereby, granted a Conditional Use Permit for the following use(s):

Restaurant with outdoor dining and music.

FURTHER, such approved use of the above designated parcel(s) are hereby allowed based on the following conditions being continually met:

1. Alcohol sales may not occur outside of the description within the Michael's House of Prime or future owner's liquor license premise description as approved by the Common Council.
2. No outdoor activities shall occur between the hours of 10:00 p.m. and 8:00 a.m. Sunday through Thursday and 10:30 p.m. and 8:00 a.m. Friday and Saturday.
3. Maximum Permitted sound levels for dining, music, and other outdoor activities shall not exceed 65 decibels as measured at the property line[1].
4. All outdoor dining lights shall be shut off by 10:00 p.m. Sunday through Thursday and 10:30 p.m. Friday and Saturday.

The parties hereto, namely the City of Pewaukee and the Equitable Owner of the property for which this conditional use has been sought, set their signatures or the signatures of their representatives below, thereby agreeing to the provisions and conditions set forth in this covenant.

_____	_____
Attest:	Signature of equitable owner
	_____
	Date
_____	_____
Kelly Tarczewski City Clerk	Steve Bierce Mayor, City of Pewaukee
	_____
	Date

State of Wisconsin
County of Waukesha

Signed or attested before me on _____, 2020 by Steve Bierce, Mayor and Kelly Tarczewski, Clerk.

	_____
(Seal)	Ami Hurd My Commission expires _____

This instrument was drafted by Ami Hurd, Deputy Clerk

_____

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 4.

DATE: July 16, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding Applications for Outdoor Activity on Premises Where Alcoholic Beverages are Consumed

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Michael's House of Prime Application

Michael's House of Prime Map

Smokey's Application

Boomer's Application

Boomer's Changes

Waukesha Gun Club Application

2020 APPLICATION FOR OUTDOOR ACTIVITY ON PREMISES WHERE ALCOHOLIC BEVERAGES ARE CONSUMED

FILING DEADLINE IS MAY 8th, 2020

ANNUAL FEE: $30

Buckley Brothers Family LLC, DBA Michael's House of Prime
Name of Business

Commercial
Property Zoned

W278 N2316 Prospect Ave PWC 0935039
Address of Business

Pewaukee, WI
City

53072
Zip

Rick Buckley
Contact Person / Agent for the Business

(414) 303-7599
Phone Number

EDGEWOOD Adventure, LLC
Owner of the Property

(414) 795-4443
Owner's Phone Number

LIST NORMAL BUSINESS HOURS OF OPERATION						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11:30 AM / 1:00 AM	Closed	11:30 AM / 1:00 AM	1130 AM / 1:00 AM	11:30 AM / 1:00 AM	11:30 AM / 1:00 AM	11:30 AM / 1:00 AM

List Proposed Start to Finish Times on Each of the Days *(Please mark "N/A" if not applicable)*

SPORTS RELEATED OUTDOOR ACTIVITIES

VOLLEYBALL						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

HORSESHOES						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

BAGS						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

CLAY TARGET SHOOTING						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

OTHER *(please list in space below)*						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

ENTERTAINMENT RELATED OUTDOOR ACTIVITIES

DINING / DRINKING						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11:30/10:00	Closed	11:30/10:00	11:30/10:00	11:30/10:00	11:30/10:30	11:30/10:30

TYPE OF AREA				
☐ DECK	☐ PATIO	☒ GARDEN	☐ DESIGNATED SMOKING AREA	☐ OTHER
Square Footage of Area	Square Footage of Area	Square Footage of Area 2500SQFT	Square Footage of Area	Square Footage of Area
Seating Capacity	Seating Capacity	Seating Capacity 45	Seating Capacity	Seating Capacity

TYPE OF MUSIC						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11:30/9:00	Closed	11:30/9:00	11:30/9:00	11:30/9:00	11:30/10:00	11:30/10:00
☒ Recorded	☐ Recorded	☒ Recorded	☒ Recorded	☒ Recorded	☒ Recorded	☒ Recorded
☒ Live	☐ Live	☒ Live	☒ Live	☒ Live	☒ Live	☒ Live
☒ Amplified	☐ Amplified	☒ Amplified	☒ Amplified	☒ Amplified	☒ Amplified	☒ Amplified
☒ Unamplified	☐ Unamplified	☒ Unamplified	☒ Unamplified	☒ Unamplified	☒ Unamplified	☒ Unamplified

Sound: Please list how many speakers you will have and on your site plan indicate where they will be located and where the sound is directed.

We would have two speakers to be used as background music. Speakers would be pointed toward the north. On occasion, we may employ one or two musical performers

Lighting: Please list what types of lights you have, how many, what the wattage is and indicate where they will be located on your site plan.

We anticipate using strings of cafe lights around the perimeter and going through the center. 24watt, 24 lights per string, 8 strings

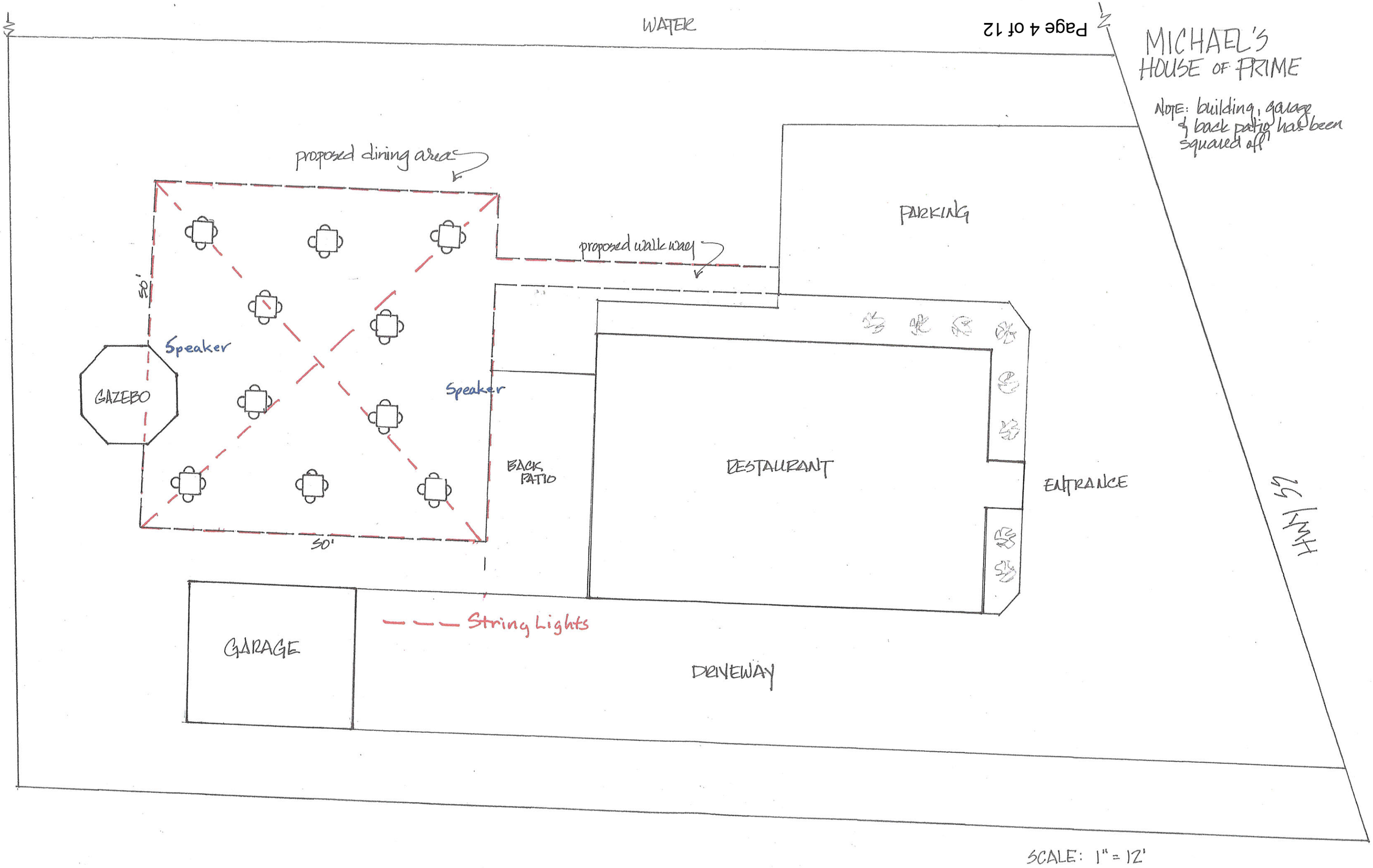
The following items MUST accompany this application:

☐ **SITE PLAN** to scale, showing buildings on the premises, outdoor facilities and distance to buildings on adjoining properties.

☐ **SCALED DRAWING OR MAP** showing the location of all speakers or other means of providing music, television and/or sporting activities.

☐ **BUILDING PLAN OF OPERATION**

If you have any questions about this process, please contact the Community Development Director Nick Fuchs, during his regular office hours of Monday through Friday 8:00 a.m. to 4:30 p.m. at (262) 691-0770.


MICHAEL'S
HOUSE OF PRIME
NOTE: building, garage & back patio has been squared off
WATER
HWY 55
proposed dining area
proposed walk way
PARKING
50'
50'
Speaker
Speaker
GAZEBO
BACK PATIO
RESTAURANT
ENTRANCE
GARAGE
String Lights
DRIVEWAY
SCALE: 1" = 12'

2020 APPLICATION FOR OUTDOOR ACTIVITY ON PREMISES WHERE ALCOHOLIC BEVERAGES ARE CONSUMED

RECEIVED MAY 06 2020 CITY OF PEWAUKEE CLERK'S OFFICE

FILING DEADLINE IS MAY 8th, 2020

ANNUAL FEE: $30

Smokey's Musky & Bait Shop
Name of Business

Property Zoned

N27W27250 Woodland DR
Address of Business PWC 0933138

Pewaukee
City

WI
Zip

Lois Laimon
Contact Person / Agent for the Business

(262) 691 9659
Phone Number

Laimon Family Ltd Ptn
Owner of the Property

(~~383~~ 310) 383 5056
Owner's Phone Number

LIST NORMAL BUSINESS HOURS OF OPERATION						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5:30 8:00	7-8	7-8	7-8	7-8	7-8	5:30-8

List Proposed Start to Finish Times on Each of the Days *(Please mark "N/A" if not applicable)*

SPORTS RELEATED OUTDOOR ACTIVITIES

VOLLEYBALL						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

HORSESHOES						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

BAGS						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

CLAY TARGET SHOOTING						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

OTHER fishing *(please list in space below)*						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			X			

ENTERTAINMENT RELATED OUTDOOR ACTIVITIES

DINING / DRINKING						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

TYPE OF AREA				
☐ DECK	☐ PATIO	☐ GARDEN	☐ DESIGNATED SMOKING AREA	☐ OTHER
Square Footage of Area	Square Footage of Area 100 sq'	Square Footage of Area	Square Footage of Area	Square Footage of Area
Seating Capacity	Seating Capacity	Seating Capacity	Seating Capacity	Seating Capacity

TYPE OF MUSIC						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified

Sound: Please list how many speakers you will have and on your site plan indicate where they will be located and where the sound is directed.

_____

_____

_____

Lighting: Please list what types of lights you have, how many, what the wattage is and indicate where they will be located on your site plan.

_____

_____

_____

The following items MUST accompany this application:

☐ **SITE PLAN** to scale, showing buildings on the premises, outdoor facilities and distance to buildings on adjoining properties.

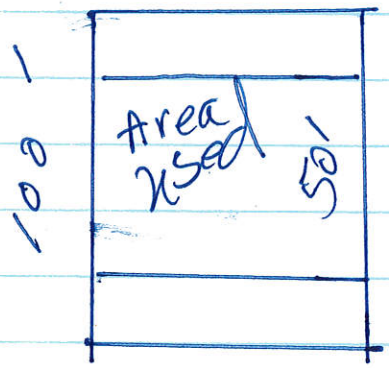
☐ **SCALED DRAWING OR MAP** showing the location of all speakers or other means of providing music, television and/or sporting activities.

☐ **BUILDING PLAN OF OPERATION**

If you have any questions about this process, please contact the Community Development Director Nick Fuchs, during his regular office hours of Monday through Friday 8:00 a.m. to 4:30 p.m. at (262) 691-0770.

May 6, 2020
- Every Wednesday May - October
- 6:00 PM - 8:00 PM

October 17, 2020
- John Lamon Outing
- 7:00 - 2:00 PM



2020 APPLICATION FOR OUTDOOR ACTIVITY ON PREMISES WHERE ALCOHOLIC BEVERAGES ARE CONSUMED

FILING DEADLINE IS MAY 8th, 2020 **ANNUAL FEE: $30**

Boomers Sports Pub + Grill
Name of Business

B-6
Property Zoned

N29 W24493 Hwy 164 Pewaukee WI
Address of Business

PWC 09222987001

Pewaukee WI 53072
City Zip

Tyler Paspera
Contact Person / Agent for the Business

(262) 391-6000
Phone Number

Tyler Paspera
Owner of the Property

(262) 391-6000
Owner's Phone Number

RECEIVED MAY 26 2020 CITY OF PEWAUKEE CLERK'S OFFICE

LIST NORMAL BUSINESS HOURS OF OPERATION						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11am-2pm	11am-2Am	11am-2am	11am-2am	11am-2am	11am 2:30 am	11am-2:30 am

List Proposed Start to Finish Times on Each of the Days *(Please mark "N/A" if not applicable)*

SPORTS RELEATED OUTDOOR ACTIVITIES

VOLLEYBALL						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11am-9pm	11am-10pm	11am-10pm	11am-10pm	11am-10pm	11am-10:30 pm	11am-10:30 pm

HORSESHOES						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

BAGS						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11am-8pm	11am-9pm	11am-9pm	11am-9pm	11am-9pm	11am-9pm	11am-9pm

CLAY TARGET SHOOTING						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

OTHER *(please list in space below)*						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

ENTERTAINMENT RELATED OUTDOOR ACTIVITIES

DINING / DRINKING						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11am - 8pm	11am - 10pm	11am - 10pm	11am - 10pm	11am - 10pm	11am - 10:30 pm	11am - 10:30 pm

TYPE OF AREA				
☐ DECK	☐ PATIO	☐ GARDEN	☐ DESIGNATED SMOKING AREA	☐ OTHER
Square Footage of Area	Square Footage of Area	Square Footage of Area	Square Footage of Area	Square Footage of Area
Seating Capacity	Seating Capacity	Seating Capacity	Seating Capacity	Seating Capacity

TYPE OF MUSIC						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11am - 8pm	11am - 10pm	11am - 10pm	11am - 10pm	11am - 10pm	11am - 11pm	11am - 11pm
☑ Recorded ☑ Live ☑ Amplified ☐ Unamplified	☑ Recorded ☑ Live ☑ Amplified ☐ Unamplified	☑ Recorded ☑ Live ☑ Amplified ☐ Unamplified	☑ Recorded ☑ Live ☑ Amplified ☐ Unamplified	☑ Recorded ☑ Live ☑ Amplified ☐ Unamplified	☑ Recorded ☑ Live ☑ Amplified ☐ Unamplified	☑ Recorded ☑ Live ☑ Amplified ☐ Unamplified

Sound: Please list how many speakers you will have and on your site plan indicate where they will be located and where the sound is directed.

_____

_____

_____

Lighting: Please list what types of lights you have, how many, what the wattage is and indicate where they will be located on your site plan.

_____

_____

_____

The following items MUST accompany this application:

☐ **SITE PLAN** to scale, showing buildings on the premises, outdoor facilities and distance to buildings on adjoining properties.

☐ **SCALED DRAWING OR MAP** showing the location of all speakers or other means of providing music, television and/or sporting activities.

☐ **BUILDING PLAN OF OPERATION**

If you have any questions about this process, please contact the Community Development Director Nick Fuchs, during his regular office hours of Monday through Friday 8:00 a.m. to 4:30 p.m. at (262) 691-0770.

OUTDOOR ENTERTAINMENT PERMIT
VALID FROM JULY 20, 2020 THROUGH JUNE 30, 2021

BOOMERS SPORTS BAR & GRILL
N29 W24483 WATERTOWN ROAD
PEWAUKEE, WI 53072

In accordance with City of Pewaukee Ordinance Section 11.02 an outdoor entertainment permit has been issued for the following activities:

VOLLEYBALL						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11 a.m. – 9 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10:30 p.m.	11 a.m. – 10:30 p.m.

BAGS						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11 a.m. – 8 p.m.	11 a.m. – 9 p.m.	11 a.m. – 9 p.m.	11 a.m. – 9 p.m.	11 a.m. – 9 p.m.	11 a.m. – 9 p.m.	11 a.m. – 9 p.m.

DINING / DRINKING						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11 a.m. – 8 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10:30 p.m.	11 a.m. – 10:30 p.m.

MUSIC						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11 a.m. – 8 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10 p.m.	11 a.m. – 10 p.m.	11 a.m. – 11 p.m.	11 a.m. – 11 p.m.

Given under my hand and the corporate seal of the City of Pewaukee, County of Waukesha, State of Wisconsin, this 20th day of July, 2020.

_____
Kelly Tarczewski – Clerk/Treasurer

NOTICE OF CHANGES FOR BOOMERS

Addition of Bags.

2020 APPLICATION FOR OUTDOOR ACTIVITY ON PREMISES WHERE ALCOHOLIC BEVERAGES ARE CONSUMED

FILING DEADLINE IS MAY 8th, 2020

ANNUAL FEE: $30

Waukesha Gun Club
Name of Business
PWL 0920998

I-2
Property Zoned

N22W23170 Watertown Rd
Address of Business

Waukesha
City

53188
Zip

Patrick A Gerbensky - President
Contact Person / Agent for the Business

(_____)_____
Phone Number

Owner of the Property

(_____)_____
Owner's Phone Number

LIST NORMAL BUSINESS HOURS OF OPERATION						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am - 10pm	8am-10pm	8am - 10pm	8am-10pm	8am - 10pm	8am-10pm	8am-10pm

List Proposed Start to Finish Times on Each of the Days *(Please mark "N/A" if not applicable)*

SPORTS RELEATED OUTDOOR ACTIVITIES

VOLLEYBALL						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

HORSESHOES						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

BAGS						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

CLAY TARGET SHOOTING						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am - 10 pm	8am - 10pm	8am - 10pm	8am - 10pm	8am - 10pm	8am - 10pm	8am - 10pm

OTHER *(please list in space below)*						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

ENTERTAINMENT RELATED OUTDOOR ACTIVITIES

DINING / DRINKING						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am-10pm	8am-10pm	8am-10pm	8am-10pm	8am-10pm	8am-10pm	8am-10pm

TYPE OF AREA				
☐ DECK	☐ PATIO	☐ GARDEN	☐ DESIGNATED SMOKING AREA	☐ OTHER
Square Footage of Area	Square Footage of Area	Square Footage of Area	Square Footage of Area	Square Footage of Area
Seating Capacity	Seating Capacity	Seating Capacity	Seating Capacity	Seating Capacity

TYPE OF MUSIC						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified	☐ Recorded ☐ Live ☐ Amplified ☐ Unamplified

Sound: Please list how many speakers you will have and on your site plan indicate where they will be located and where the sound is directed.

_____

_____

_____

Lighting: Please list what types of lights you have, how many, what the wattage is and indicate where they will be located on your site plan.

_____

_____

_____

The following items MUST accompany this application:

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CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 5.

DATE: July 16, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Petition for a Rezoning Public Hearing for Duplainville Land Company, LLC/John Zignego to Rezone Property Located at W226 N2940 Duplainville Road From M-1 General Wholesale Business To M-2 Limited Industrial (PWC 0931997001) and From M-2 Limited Industrial to LC Lowland Conservancy (PWC 0914992001 & PWC 0914991)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Zignego Staff Report

Zignego Rezoning Exhibit

Zignego Narrative

Zignego Comment Response Letter

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of July 16, 2020

Date: July 9, 2020

Project Name: Zignego repair facility Rezoning, Certified Survey Map, Conditional Use, and Site & Building Plans

Project Address/Tax Key No.: W226N2940, W226N2966, and W226N2974 Duplainville Road/PWC 0913997001, 0914991, and 0914992001

Applicant: Tim Zignego

Property Owner: Duplainville Land Company, LLC and Zignego Co.

Current Zoning: M-1 General Wholesale Business/Warehouse District and M-2 Limited Industrial District

Proposed Zoning: M-2 Limited Industrial District

2050 Land Use Map Designation: Manufacturing / Fabrication / Warehousing

Use of Surrounding Properties: CP Rail System to the north, single-family residential to the south and east and commercial (M-2 zoned) properties to the west

Project Description/Analysis

The applicant submitted a Rezoning Application, Certified Survey Map, Conditional Use Permit, and Site & Building plans related to the construction of a repair garage facility upon property located at W226N2940 Duplainville Road.

The applications involve multiple properties, but the building itself is located on the east side of the railroad tracks. The applicant owns three properties, which consist of the Zignego Group offices and parking lot, a batch plant, an existing repair garage, and vacant developable land.

Rezoning Application

The applicant is proposing to rezone the eastern half of Outlot No. 1 of CSM No. 10888. The rezoning will eliminate an existing split zoning issue and make all lots owned by Zignego and part of the overall current and future development area zoned M-2 Limited Industrial District.

Certified Survey Map

The proposed Certified Survey Map combines all properties owned by Zignego. This includes Lot 1 and Outlot 1 of CSM No. 10888 (W226N2940 Duplainville Road) (Tax Key No. 0913 997 001) as well as the two lots to the north located at W226N2966 Duplainville Road (Tax Key No. 0914 992 001) and W226N2974 Duplainville Road (Tax Key No. 0914 991).

The total area of land depicted as Lot 1 on the proposed CSM is 29.3240 acres. Note that the railroad will bisect the parcel.

Conditional Use Permit

The Conditional Use Application is for the approval of the proposed repair facility, which is not a listed Permitted Use within the M-2 District.

Site & Building Plans

Site Plan:
The applicant is proposing a 24,800 square foot building. The building will be located within an existing paved area of the site, so no new impervious surface is being added. Considering the combined area as shown on the proposed CSM, the site has approximately 46% greenspace, which is in compliance with the City's minimum greenspace ratio of 40%.

The front portion of the site is accessible from Duplainville Road; however, the proposed building will be accessed through a private crossing of the Canadian National Railroad. The applicant has an agreement with SOO Line Railroad Company from 1976 to utilize this crossing. As the applicant is making a modification to the site on the east side of the railroad tracks, *staff is recommending that the applicant provide an approval document from the railroad company that approves of the proposed facility and improvements, prior to issuance of a Building Permit*.

Following their review, the Engineering Department provided the comments below. *Staff recommends that the applicant address the following Engineering Department comments to the satisfaction of the City Engineer or their designee, prior to the issuance of a Building Permit:*

- *Final grading, erosion control and storm water management plans shall be submitted for approval by the Engineering Department prior to any land disturbance activities.*
- *Municipal sewer and water are required for the building. Easements across the other parcels are required for these utilities.*
- *The existing laterals that are unused are required to be abandoned at the main. The existing water laterals 1 inch services so a new lateral will need to be tapped to provide fire protection. This must be coordinated with the Utility Manager.*
- *A sampling manhole is required at the lot line on the sanitary lateral.*
- *A drainage and access easement must be granted for the existing swale through the property, on the north side of the lot, on the south side of the lot, and the east side of the lot.*
- *If filling of the northerly lot is to occur, the Engineering Department must review and approve the grading plan as well as the erosion control plan for the filling operation. This must include a schedule for this operation.*
- *The dilapidated fence/wire along the east and south property lines shall be removed. In addition, any land that is not stabilized shall be stabilized with a substantial vegetative growth*.

Natural Resources:
There is a wetland located in the northeast corner of the property that is located to the west of the railroad tracks at W226N2974 Duplainville Road. This wetland and the required wetland setback are illustrated on the CSM. There is no development proposed near the wetland area.

Parking:

The site plan includes 9 parking spaces on the west side of the building and 5 parking spaces on the north side, including one ADA accessible space. The parking spaces are 9' x 20' (180 square feet) in size, which complies with Zoning Code standards.

Landscaping:
No new landscaping is proposed. The applicant did provide a plan showing existing plantings and tree lines (see Sheet L1.0).

Lighting:
The Lighting Plan consists of building lighting only. This includes two lights mounted at 11-feet on the north side of the building near the entrance and nine other light fixtures mounted at 19-feet around the building. Light levels are at 0.0 footcandles at the property lines; however, glare from the building lights is also a concern. Considering a maximum mounting height of 19-feet as well as the existing wall and landscaping staff does not find that the proposed lights will adversely impact the adjacent properties.

However, in case lighting is a concern or seen through trees, particularly in winter months, *staff recommends that building lighting on the south, east, and west sides of the building be shut off at 9:00 p.m.*

Architecture:
The proposed building consists primarily of painted precast concrete wall panels of different colors. The building has a maximum parapet height of 33'-0". The building includes ten 16' x 16' overhead doors on the north and south sides of the building. There is also a 12' x 12' overhead door on the south side of the building for a total of 21 overhead doors.

From an aesthetic standpoint, staff would typically have concerns with the number of overhead doors on the building, as well as perhaps the lack of other architectural features. However, this building is not visible by any adjacent properties or public rights-of-way; therefore, staff does not have recommendations related to the architecture of the building.

Note that rooftop mechanicals will be screened by a prefinished metal screen wall.

Signage:
Sign plans include the Zignego logo on the north side of the building that will be cast into the precast concrete wall panel and painted as shown on the building elevation. *Signage shall comply with all standards set forth in Section 17.0700 of the City's Zoning Code and require separate review and approval by the City Planner as well as a Sign Permit from the Building Services Department, prior to installation*.

Planning Staff Comments

Staff has discussed two notable concerns with the applicant. The first concern is related to the limited access to the area of the property located east of the railroad tracks where the proposed building is to be located. With access solely via a private crossing of the railroad tracks, there is concern with Emergency Medical Service (EMS) response if a train is stopped in front of this crossing.

The applicant has indicated that the building will not substantially increase the number of employees that will be working on the east side of the railroad tracks. Staff finds that without a significant increase in activity level and use of this portion of the property, the proposed plans will not exacerbate this safety concern, and therefore, staff does not object to the proposed building based on this issue.

Staff's original comment and the applicant's response are below for review and consideration.

> Staff Comment No. 2:
> How much will the proposed building increase business activity and use of the property located on the east side of the railroad tracks? Has the railroad been contacted regarding the development?
>
> Staff has concerns with significantly increasing activities on the east side of the railroad tracks due to the limited accessibility, particularly considering cases of emergency. Presumably this is why it was made an outlot in 2010; so that no further development would occur.
>
> Is the building and this part of the site utilized by Zignego employees only or would customer traffic extend to this side of the property as well?
>
> Applicant's response:
> Zignego does not expect any significant increase in business activity. The main purpose is to provide a better workspace for the them to perform their truck and equipment related repair services which occur in an existing building whKh is located due west about 151 feet of the proposed new repair garage. The current building used for repairs does not lend itself to an efficient layout for Zignego to perform the repairs from. Once the new repair garage is completed, the existing building will house more of the parts required to service their current fleet of trucks and other construction related equipment, some of which is currently stored outside.
>
> The remainder of the existing warehouse building built in the late seventies and early eighties will house the welding operations and parts inventory functions. The new and expanded repair garage will allow Zignego's mechanics to perform all the repair and replacement service requirements needed by Zignego to operate more efficiently and more importantly safely.
>
> Zignego and JSD has reached out to the railroad to let them know what our proposal entails and to work out utility access logistics. Staff has concerns with significantly increasing activities on the east side of the railroad tracks due to the limited accessibility, particularly considering cases of emergency, which is why it was made an out-lot in 2010; so that no further development would occur. Our proposal to build a new building is for improved existing operations and will be used by Zignego employees not outside customers. Zignego is conscientious of safety and respects the concerns of the city staff as well, but they are of the opinion that the addition of a dedicated repair garage is an enhancement of what is already occurring on the east lot currently. Zignego has and will continue to work to maintain safe business operations on the entire parcel.
>
> For reasons spelled out above, we propose to build the new repair garage for Zignego. JSD who is the engineer and surveyor, affirms that no issues with the conversion of the Lot and Out lot

> under the current CSM arrangement to a single lot arrangement with the railroad bisecting the lot.
>
> The new building would only be used by and for Zignego employees. They plan on 10 employees for the daily average occupancy with about 15 employees at the most. This coincides to their current leve1s of occupancy east of the railroad.

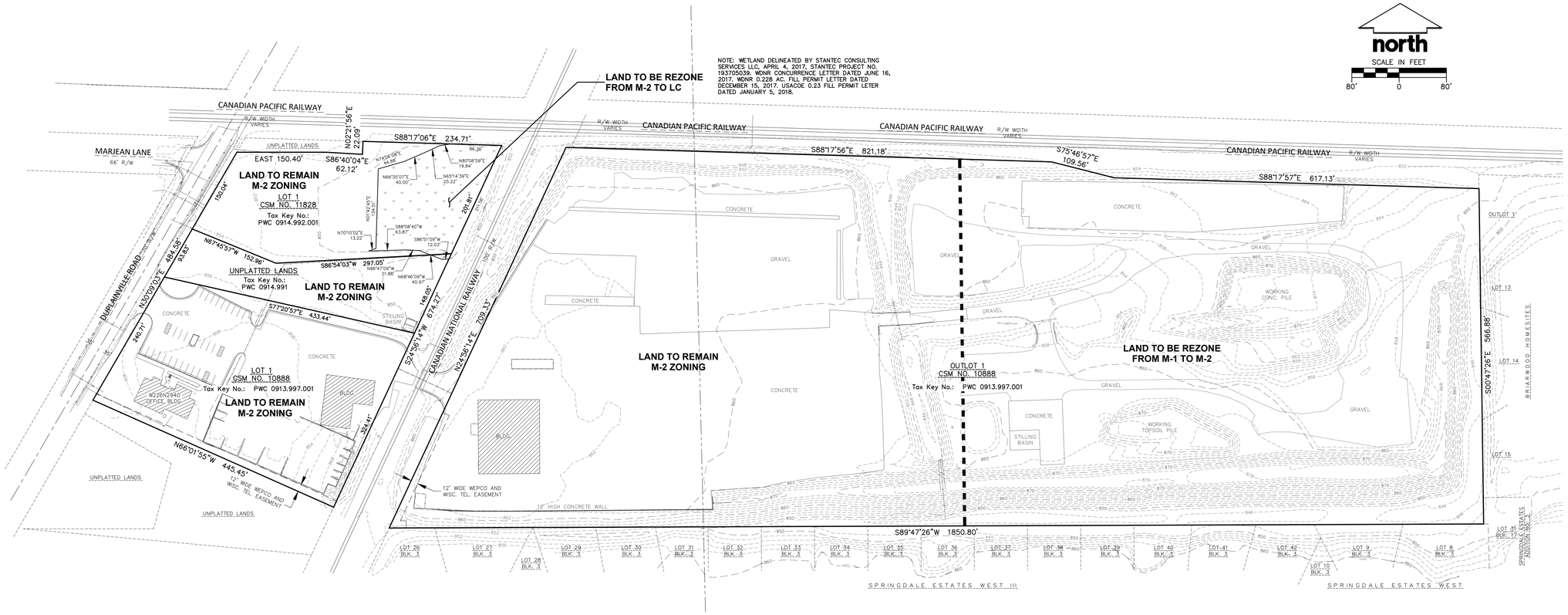
The second concern is related to noise, both with the activity occurring within the facility (when garage doors are left open) and the beeping of trucks backing out of the building. Staff's Comment No. 10 states, "Staff understands it is not preferred, but a drive-through type facility with less overhead doors is suggested. This would reduce potential noise concerns as well as provide higher quality architecture in keeping with the City of Pewaukee design standards."

The applicant's response is below.

> Zignego currently operates its truck and equipment repair in manner which the city describes above and which is preferred by the city. The repair garage function happens on the northern half of the existing CMU building which is located immediately east of the railroad tracks which run north and south. The existing building is located 151 feet west of the proposed new repair garage. The major reason for needing the new repair garage is to improve the efficiency and safety of their current operations. Zignego has operated in both types of garages and has found that the multi door garage works best for their needs. The new garage will incorporate interior top running and jib cranes to help facilitate better material and parts handling as part of their repair operations. They are also adding a wash bay which will allow Zignego to clean the trucks and equipment before and after the equipment and trucks are serviced. Zignego has always operated as a good neighbor and will continue to do so.
>
> The new facility will be managed to minimize truck movements on the south side of the proposed building. The repair work will take place during normal business hours and evenings with repair work rarely happening outside of those hours. The truck movements required will occur more so on the north side of the new building. The proposed new building will provide blockage of current yard sounds which will improve this aspect of their current business operations.

Recommendation

Staff does not find that the noise concern has been fully addressed. As such, staff would like to discuss this issue further with the Plan Commission and hear public comment from adjacent property owners, if any, prior to making a final recommendation.



LAND TO BE REZONE FROM M-1 TO M-2:

The East 11.83 acres, more or less, of Outlot 1 of Certified Survey Map No. 10888, recorded in Waukesha County Register of Deeds Office on August 9, 2011 as Document No. 3848891, being a part of the Northeast 1/4 of the Northwest 1/4 and the Northwest 1/4 of the Northeast 1/4 of Section 13, Township 7 North, Range 19 East, City of Pewaukee, Waukesha County, Wisconsin.

Part of Tax Key No.: PWC 0913.997.001

LAND TO BE REZONE FROM M-2 TO LC:

Being being a part of the Northeast 1/4 of the Northwest 1/4 of Section 13, Township 7 North, Range 19 East, in the City of Pewaukee, Waukesha County, Wisconsin, bounded and described as follows:

Commencing and beginning of the northeast corner of Lot 1 of Certified Survey Map No. 11828, thence South 24°56'14" West along the westerly line of the Canadian National Railway right-of-way, 211.56 feet; thence South 86°51'09" West, 12.03 feet; thence North 68°46'09" West, 40.97 feet; thence North 86°47'09" West, 21.88 feet; thence South 88°08'40" West, 63.87 feet; thence North 70°10'02" East, 13.22 feet; thence North 01°42'45" East, 134.51 feet; thence North 74°05'08" East, 44.88 feet; thence North 66°35'07" East, 40.00 feet; thence North 65°14'39" East, 25.22 feet; thence North 80°08'59" East, 19.84 feet to the south line of the Canadian Pacific Railway right-of-way; thence South 88°17'06" East along said south line, 86.36 feet to the point of beginning.

Part of Tax Key No.: PWC 0914.992.001
Part of Tax Key No.: PWC 0914.991

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
RE-ZONING EXHIBIT

PROPOSED ZIGNAGO
REPAIR FACILITY BUILDING
DUPLAINVILLE ROAD
PEWAUKEE, WI

DIGGERS HOTLINE
Call 811 or (800) 242-8511
Milwaukee Area (262) 432-7910
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

JSD Professional Services, Inc.
• Engineers • Surveyors • Planners
MILWAUKEE REGIONAL OFFICE
W238N1610 BUSSE RD. SUITE 100
WAUKESHA, WISCONSIN 53188
262.513.0666 PHONE | 262.513.1232 FAX
www.jsdinc.com
JSD JOB NO.: 20-9494

JOB:	20-9494
DRAWN:	PSM
CHECKED:	
DATE:	06/01/20

SHEET:
EX-1

Project Narrative for the Proposed New Zignego Repair Garage

PROPOSED ONE-STORY 24,800 SQUARE FOOT (FOOTPRINT) REPAIR GARAGE BUILDING WITH 2,917 SQUARE FOOT MEZZANINE LEVEL (OFFICE AND STORAGE) AT W226 N2940 DUPLAINVILLE ROAD, CITY OF PEWAUKEE, WISCONSIN:

Submission information for:
Petition for Conditional Use Approval
Petition for Rezoning District Map Amendment
Application for Site and Building Plan Review
Application for Minor Land Division / Certified Survey Map

May 28, 2020 Revised June 30, 2020

Applicant's Contact Person:
Domenico Ferrante, AIA
Briohn Design Group, LLC
3885 N. Brookfield Road, Suite 200
Brookfield, Wisconsin 53045
(262) 790-0500

Property Owner:
Duplainville Land Company, LLC
Attn: John W Zignego - Primary and Tim Zignego - Contact
W226 N2940 Duplainville Road
Pewaukee, WI 53186
262-547-4700

Site Data:
<u>Land to be rezoned from M-2 and M-1 (eastern half) to M-2:</u>
<u>Outlot 1 CSM #10888</u>
Property addresses: assigned to W226 N2940 Duplainville Road
Tax key numbers: PWC 0913 997 001
Legal description: See attached legal description and property exhibit

<u>Land to be rezoned from M-2 to M-2:</u>
<u>Lot 1 CSM #10888</u>
Property addresses: assigned to W226 N2940 Duplainville Road
Tax key numbers: PWC 0913 997 001
Legal description: See attached legal description and property exhibit

Land to be rezoned from M-2 to M-2:
Lot 1 CSM #11828
Property addresses: unassigned currently propose assigning to W226 N2940 Duplainville Road
Tax key numbers: PWC 0914 992 001
Legal description: See attached legal description and property exhibit

Land to be rezoned from M-2 to M-2:
Unplatted Lands
Property addresses: assigned to W226 N2940 Duplainville Road
Tax key numbers: PWC 0914 991
Legal description: See attached legal description and property exhibit

We also are proposing the property to be CSM as one lot – refer to draft CSM submitted by JSD.

Current Zoning District:
Parcels West of Railroad Crossing is currently Zoned M2
Parcel East of Railroad Crossing (Outlot) is currently Zoned M2 on western half and M1 on eastern half

Current and Proposed Land Use:
Parcels West of Railroad Crossing is currently used as a Business Office, Batch plant and equipment with employee parking
Parcel East of Railroad Crossing is currently used as an area for equipment and truck parking and storage with a parts warehouse, welding shop and repair garage building and paving contractor's yard – Propose adding a new Repair Garage for equipment and trucks which will take the place of some current equipment and yard storage

Description of Existing Environmental Features:
Parcels are bounded by Duplainville Road on the west with industrial and commercial uses, railroad on the north and other industrial properties and uses, and on the east, there are existing single-family homes. Along the south boundary, the western portion is adjacent to other industrial uses with eastern portion single family homes. Zignego has in the past and continues to be aware of their property's relationship to residential areas. They have and continue to be respectful neighbors.
This is exemplified by the 300 feet long by 12 feet tall concrete sound and visual barrier wall constructed several years ago to buffer their property from the residential area located south of Zignego's property. In addition to the concrete wall, Zignego added a 15 feet tall earth berm planted with a significant amount of landscaping (trees) as part of the overall southern sound and visual barrier.

We purposely sited the building not only to address Zignego's needs but to take advantage of this significant sound and visual buffer.

Projected number of Employees and or customers and hours of operation:
Proposed new building will not have any visitors or customers. Zignego expects a total of 15 full time employees in 2021 with 10 full time employees on average and modest increase over time. The planned for hours of operation for the new repair shop are as follows: operation 6 days a week Monday through Saturday; 10 hours Monday through Friday and 5 hours on Saturday; and nights and weekends when workload requires.

Existing Site:
Total area is 1,277,357 SF (29.32 acres) Combined.
Refer to attached site area exhibit.

Building Overall Area: 27,717 SF
Building Mezzanine Area: 2,917 SF
Building Footprint: 24,800 SF

Parking Proposed:
We are proposing adding by striping 15 new parking stalls near the new building, which satisfies the needed amount of parking required for the new Repair Garage building.

Green space ratio:
Based on the impervious areas noted above, we are indicating an initial green space of 619,987sf (14.23 acres), which is 49.0%, and greater than the 40% Minimum Green Space required per ordinance. Since the proposed new building will replace existing concrete paved area, we are not adding additional impervious surface.

Storm Water Management:
A Storm Water Management Plan is not required as discussed with the city engineers. Our civil engineer will provide and submit a memorandum of understanding to the city of Pewaukee engineering department identifying that the proposed new building will maintain the current SWMP by the replacement of 24,800 SF of existing paved surfaces with new roof surfaces.

Traffic Generation:
The occurrence of onsite generated peak traffic levels anticipated during typical 7am-4pm weekday business hours. Zignego does not intend for the new repair garage to add any significant additional traffic generation. Anticipated customer visitations are anticipated and continue to be very low during normal work hours for Zignego. We do not plan on adding an additional access drive on Duplainville Road. The current access is sufficient to meet the needs of Zignego.

Exterior Building Materials and landscape:
We propose to construct a new single-story repair garage building with materials used in a contemporary architectural style. See building elevations for design and material concepts. Zignego proposes to cast the Zignego logo in relief over the main entry to the new building. This can be seen on the elevations as well. Zignego proposes if required to store the trash and recycling receptacles inside the proposed building or adjacent warehouse building. The proposed building is sited several hundred feet from Duplainville Road and will have little visibility outside of Zignego' s property.

Project Schedule:
We intend to proceed with this project as the pace of municipal approval allow. We are scheduled for state plan review July of this year. We intend to submit for building permit and engineering final reviews immediately afterward. We ideally anticipate that this would have us receiving permits and starting construction mid to late July 2020.

SITE STATISTICS EXHIBIT FOR ZIGNEGO

Zignego Property	Tax Key	Area (SF)	Area (AC.)	Impervious (SF)	Pervious (SF)	Pervious (%)
Outlot 1 CSM No. 10888	0913 997 001	1,033,907	23.74	563,095	470,812	46% *
Lot 1 CSM No. 10888	0913 997 001	121,997	2.80	93,879	28,118	23%
Unplatted Lands	0914 991	40,391	0.93	396	39,995	99%
Lot 1 CSM No. 11828	0914 992 002	81,062	1.86	0	81,062	100%
TOTAL		**1,277,357**	**29.32**	**657,370**	**619,987**	**49%**

*working concrete pile area considered to be impervious

BRIOHN DESIGN GROUP, LLC

July 1, 2020

Nick Fuchs, Planner & Community Development Director
City of Pewaukee Office of the Planner & Community Development Director
W20 N 3065 Pewaukee Road
Pewaukee, Wisconsin 53072

Re: The June 14, 2020 Comment and Recommendations letter from the office of the Planner about plans submitted for a proposed new repair garage for Zignego to be located on their current out lot – W226N2940, W226N2966 and W225N2974 Duplainville Road

Nick,

The response and answers to questions shall follow the city's comments and recommendations in green.

1. Please include a site data table on the Site Plan that includes site size, building height - 30 feet roof and 33 feet at parapet, and the percentage and square footage of greenspace and impervious surfaces onsite.

   The Site data table which includes the size of the site, building height and the percentage and square footage of greenspace and impervious surfaces are included on JSD sheet C1.0 Site dimension and grading plan.

2. How much will the proposed building increase business activity and use of the property located on the east side of the railroad tracks? Has the railroad been contacted regarding the development?

   Zignego does not expect any significant increase in business activity. The main purpose is to provide a better workspace for the them to perform their truck and equipment related repair services which occur in an existing building which is located due west about 151 feet of the proposed new repair garage. The current building used for repairs does not lend itself to an efficient layout for Zignego to perform the repairs from. Once the new repair garage is completed, the existing building will house more of the parts required to service their current fleet of trucks and other construction related equipment, some of which is currently stored outside.

The remainder of the existing warehouse building built in the late seventies and early eighties will house the welding operations and parts inventory functions. The new and expanded repair garage will allow Zignego's mechanics to perform all the repair and replacement service requirements needed by Zignego to operate more efficiently and more importantly safely.

Zignego and JSD has reached out to the railroad to let them know what our proposal entails and to work out utility access logistics.

Staff has concerns with significantly increasing activities on the east side of the railroad tracks due to the limited accessibility, particularly considering cases of emergency, which is why it was made an out-lot in 2010; so that no further development would occur. Our proposal to build a new building is for improved existing operations and will be used by Zignego employees not outside customers. Zignego is conscientious of safety and respects the concerns of the city staff as well, but they are of the opinion that the addition of a dedicated repair garage is an enhancement of what is already occurring on the east lot currently. Zignego has and will continue to work to maintain safe business operations on the entire parcel.

For reasons spelled out above, we propose to build the new repair garage for Zignego. JSD who is the engineer and surveyor, affirms that no issues with the conversion of the Lot and Out lot under the current CSM arrangement to a single lot arrangement with the railroad bisecting the lot.

Is the building and this part of the site utilized by Zignego employees only or would customer traffic extend to this side of the property as well?

The new building would only be used by and for Zignego employees. They plan on 10 employees for the daily average occupancy with about 15 employees at the most. This coincides to their current levels of occupancy east of the railroad.

3. **Please illustrate setbacks on the site plan. The building setbacks for the property east of the tracks are below.**

a. **Front yard = 45 feet**
b. **Side yard = 25-feet**
c. **Rear yard = 35 feet**

We show the setbacks on the civil site plans.

4. **As already discussed, public sewer and water extensions are required. Note final grading, erosion control, utility, and storm water management plans, as may be necessary, must be approved by the Engineering Department, prior to land disturbance activities.**

   JSD has laid out and designed the grading, utilities and other site related items per accepted codes and civil engineering standard practices. They will work with city engineering to make sure items designed will comply with accepted standards and current codes.

5. **Is everything in green on the Architectural Site Plan greenspace?**

   YES

6. **All new paving shall meet the standards of Section 17.0601c. of the City's Zoning Code.**

   We propose to pave the entire construction area with a heavy-duty concrete. Refer to JSD civil drawings which will make references to the city ordinance requirements.

7. **As discussed, staff would like to schedule a site visit to review the proposed building location as well as the existing screening and landscaping. More comments may follow after that, but it is recommended that details be provided as far as the view from the adjacent residential properties. Could a site line drawing be created to show the portion of the building that will be visible from those properties? This would also assist in reviewing the mounting height of the building lights and the screening of rooftop mechanicals.**

   We did schedule a site visit with the city, and both Nick Fuchs and Scott Klein were in attendance. Tim Zignego, Riz Iskandarsjach and Domenico Ferrante were present as well. This site visit happened June 24, 2020 at 9:00am.
   After walking the site vicinity of the proposed new repair garage. A few conclusions were made:
   The visual concerns for the residential area to the south should not be an issue. The current sound levels would not be increased based on discussions with Zignego. The frequency of onsite truck movement would not be increased. Zignego has and will continue to operate their existing business operations in a manner that is appropriate to the surrounding community.
   They have had few issues with their neighbors over their 40 years located on this site.
   They have been proactive to neighborhood concerns and built a 12 feet tall concrete sound wall and berm with very generous amount of landscaping to help minimize visual and sound concerns. They have also put into place policies which keep noise down. Zignego has had a long history at this location and have made and continue to make investments at this location which benefits not only Zignego but the City of Pewaukee as well.

8. Please provide additional sign details. Is the proposed sign a wall mounted sign or is that something incorporated into the building itself?

   The Zignego logo would cast into the precast concrete panel where shown on the north elevation. The logo would be painted with their corporate colors. The location of the sign generally would be limited to visibility on site only. We will work with the wall panel pre-caster to accomplish this.

9. Related to the Certified Survey Map, please consider the following comments:

a. Section 17.0208a. of the City's Zoning Code and Section 18.0800f. of the City's Land Division Ordinance require 33 feet of frontage abutting a public right-of-way. As the proposed Lot 2 does not meet this requirement, it is recommended that all properties be combined into a single parcel (with the railroad right-of-way bisecting the property). The property was platted as one parcel prior to 2010.
   We propose that the properties to be combined into one parcel – "Lot 1".
b. Please include building setback lines per 18.0603b. as well the 25-foot wetland setback. Setback added.
c. Please show the proposed access easement for Lot 2 (Combined as one parcel) as well as any utility easements and any other proposed easements.
   Shown.

10. Staff understands it is not preferred, but a drive-through type facility with less overhead doors is suggested. This would reduce potential noise concerns as well as provide higher quality architecture in keeping with the City of Pewaukee design standards.

    Zignego currently operates its truck and equipment repair in manner which the city describes above and which is preferred by the city. The repair garage function happens on the northern half of the existing CMU building which is located immediately east of the railroad tracks which run north and south.
    The existing building is located 151 feet west of the proposed new repair garage. The major reason for needing the new repair garage is to improve the efficiency and safety of their current operations.
    Zignego has operated in both types of garages and has found that the multi door garage works best for their needs. The new garage will incorporate interior top running and jib cranes to help facilitate better material and parts handling as part of their repair operations.
    They are also adding a wash bay which will allow Zignego to clean the trucks and equipment before and after the equipment and trucks are serviced. Zignego has always operated as a good neighbor and will continue to do so.

    The new facility will be managed to minimize truck movements on the south side of the proposed building. The repair work will take place during normal business hours and evenings with repair work

rarely happening outside of those hours. The truck movements required will occur more so on the north side of the new building. The proposed new building will provide blockage of current yard sounds which will improve this aspect of their current business operations.

Respectfully submitted,

Domenico Ferrante AIA, Principal-In-Charge
Briohn Design Group, LLC

c/o:
Mike Byrne VP, Project Manager
Briohn Building Corp
Tim Zignego
Zignego Red-Mix, Inc.

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 6.

DATE: July 16, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Certified Survey Map for Duplainville Land Company, LLC/John Zignego for Property Located at W226 N2940 Duplainville Road for the Purpose of Combining all Parcels Owned by Zignego Into One Lot (PWC 0913997001, PWC 0914991, PWC 0914992001)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Zignego CSM

CERTIFIED SURVEY MAP No. _____

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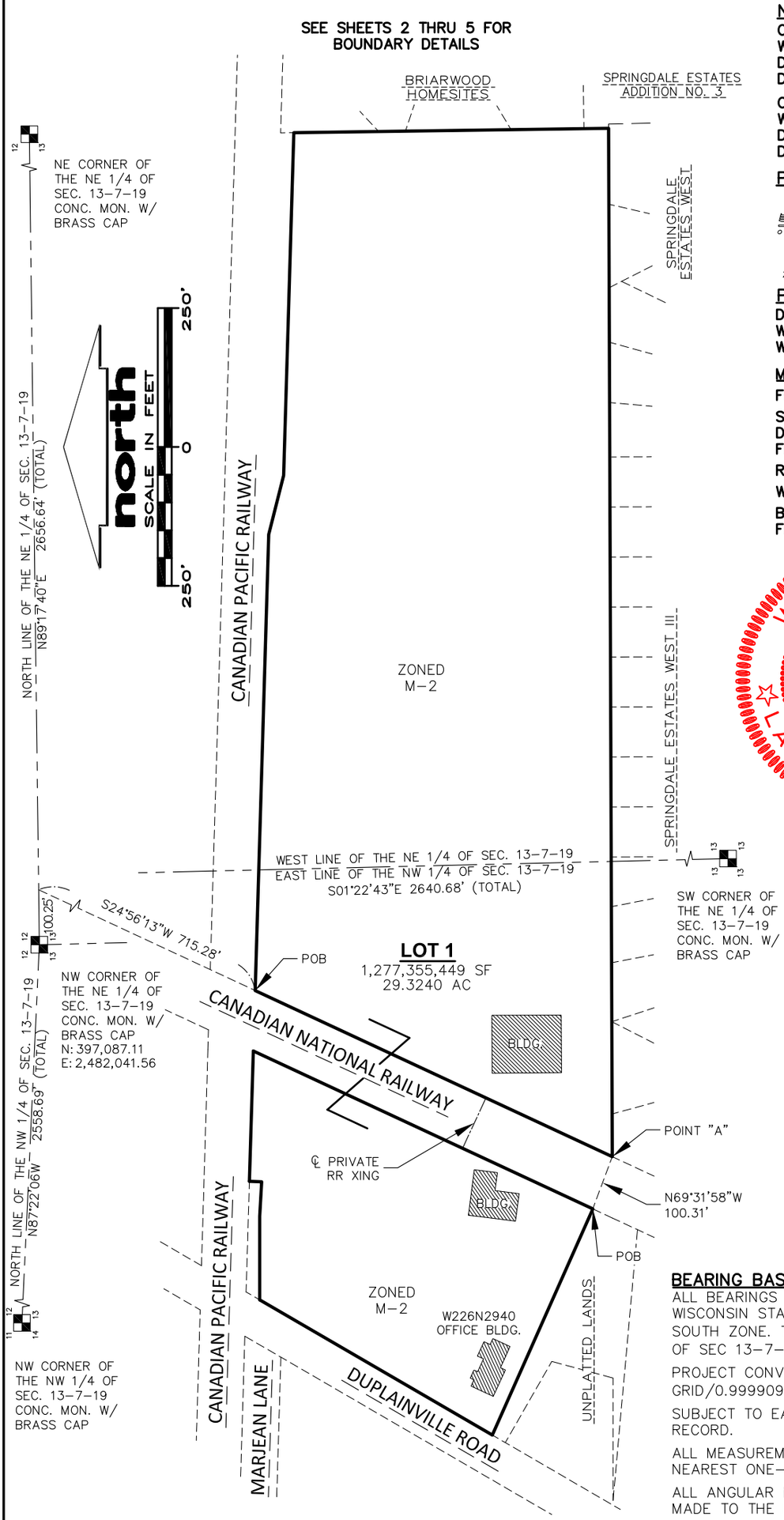

NOTE:

CSM NO. 10888 RECORDED IN WAUKESHA CO. REGISTER OF DEEDS ON AUG. 9, 2011, AS DOC. NO. 3848891.

CSM NO. 11828 RECORDED IN WAUKESHA CO. REGISTER OF DEEDS ON MAR. 25, 2019, AS DOC. NO. 4388415.

PREPARED BY:

JSD Professional Services, Inc.
Engineers • Surveyors • Planners
MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
262.513.0666 PHONE | 262.513.1232 FAX

PREPARED FOR:

DUPLAINVILLE LAND COMPANY LLC
W226N2940 DUPLAINVILLE RD
WAUKESHA, WI 53186-8815

M-2 ZONING SETBACKS:

FRONT: 45 FEET

SIDE: EQUAL TO ADJACENT DISTRICT BUT NOT LESS THAN 25 FEET.

REAR: 25 FEET

WETLAND: 25 FEET

BUILDINGS NOT CLOSER THAN 50 FEET FROM OTHER STRUCTURES.

WISCONSIN
RIZAL W. ISKANDARSJACH
S-2738
MILWAUKEE, WIS.
LAND SURVEYOR

BEARING BASIS:

ALL BEARINGS ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. THE NORTH LINE OF THE NE 1/4 OF SEC 13-7-19, WAS USED AS N89°17'40"E.

PROJECT CONVERSION FACTOR:
GRID/0.99990961 = GROUND

SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.

ALL MEASUREMENTS HAVE BEEN MADE TO THE NEAREST ONE-HUNDREDTH OF A FOOT.

ALL ANGULAR MEASUREMENTS HAVE BEEN MADE TO THE NEAREST ONE SECOND.

DATED THIS _____ DAY OF JULY, 2020
THIS INSTRUMENT WAS DRAFTED BY RIZAL W. ISKANDARSJACH, S-2738

SHEET 1 OF 11

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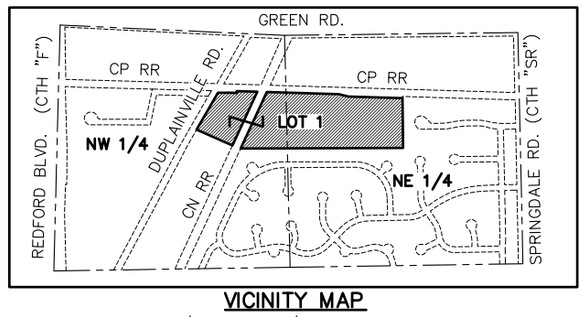
*NOTE: WETLAND DELINEATED BY STANTEC CONSULTING SERVICES LLC, APRIL 4, 2017, STANTEC PROJECT NO. 193705039. WDNR CONCURRENCE LETTER DATED JUNE 16, 2017. WDNR 0.228 AC. FILL PERMIT LETTER DATED DECEMBER 15, 2017. USACOE 0.23 FILL PERMIT LETER DATED JANUARY 5, 2018.



VICINITY MAP
NW 1/4 & NE 1/4 SEC. 13-7-19
SCALE: 1"=2000'

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MILWAUKEE, WIS.
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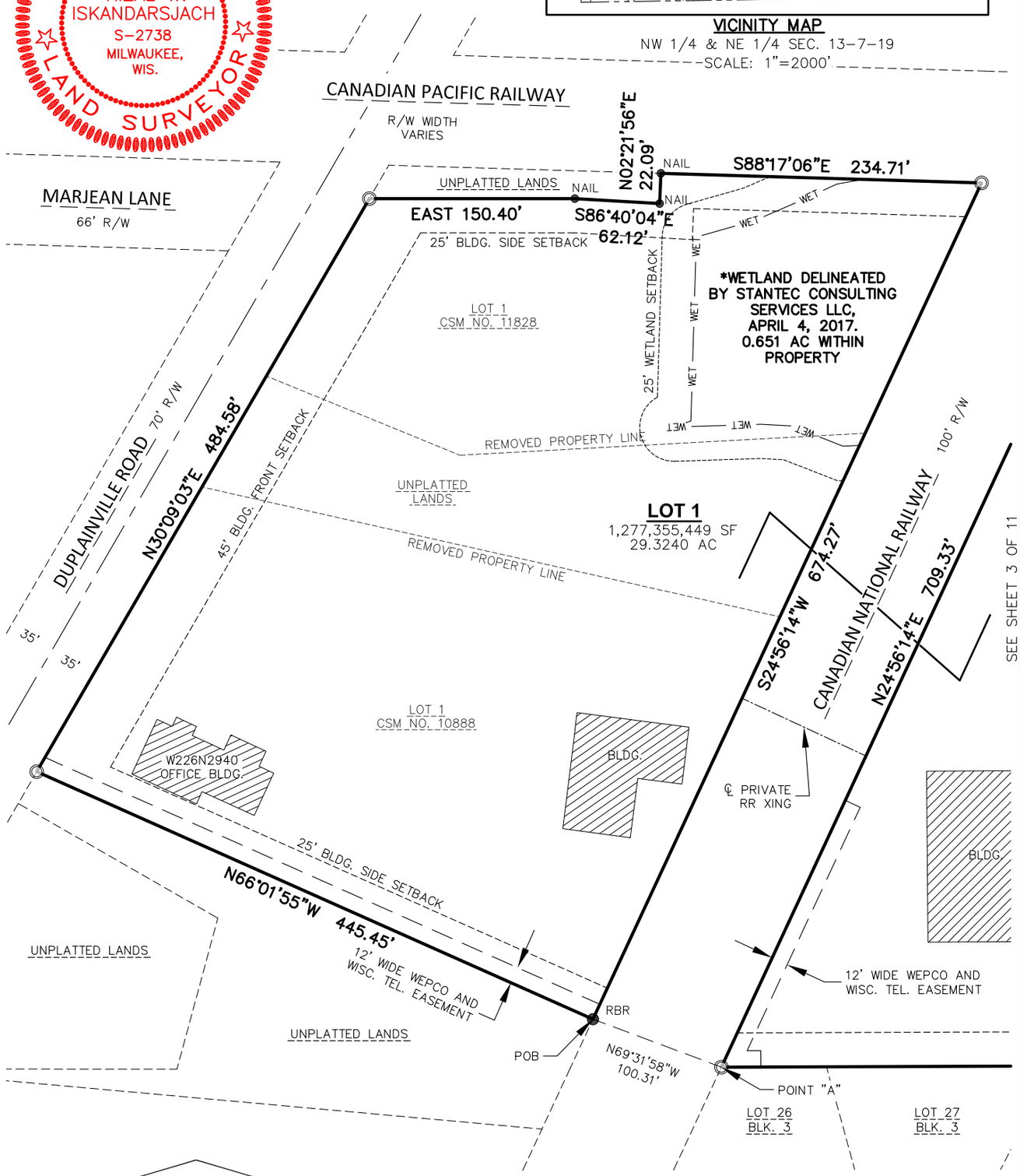

north
SCALE IN FEET
100' 0 100'

LEGEND:
1" IRON PIPE FOUND
RBR 3/4" REBAR FOUND
NAIL 7/8" NAIL FOUND

DATED THIS _____ DAY OF JULY, 2020
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SHEET 2 OF 11

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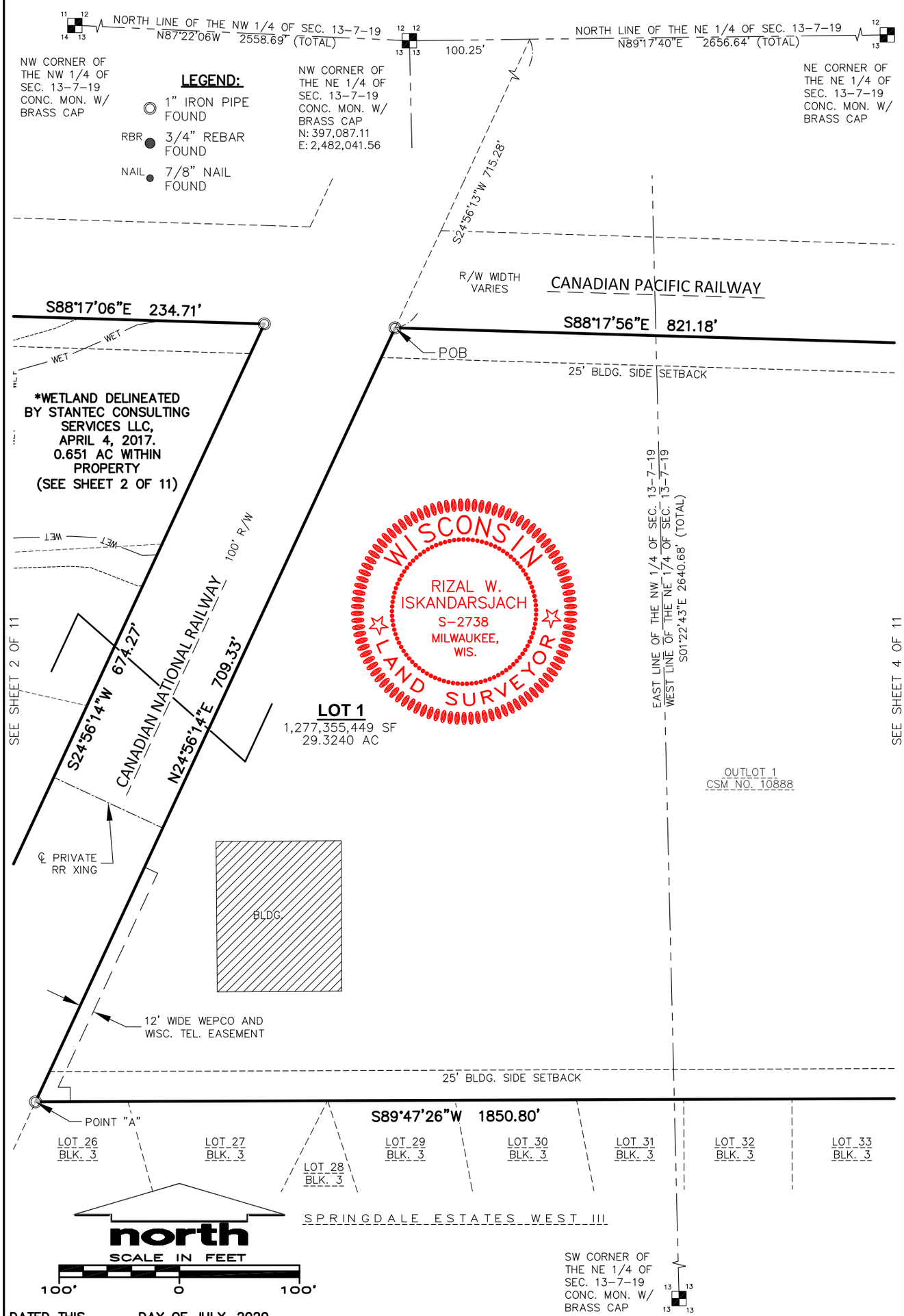

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LEGEND:

- 1" IRON PIPE FOUND
- RBR 3/4" REBAR FOUND
- NAIL 7/8" NAIL FOUND

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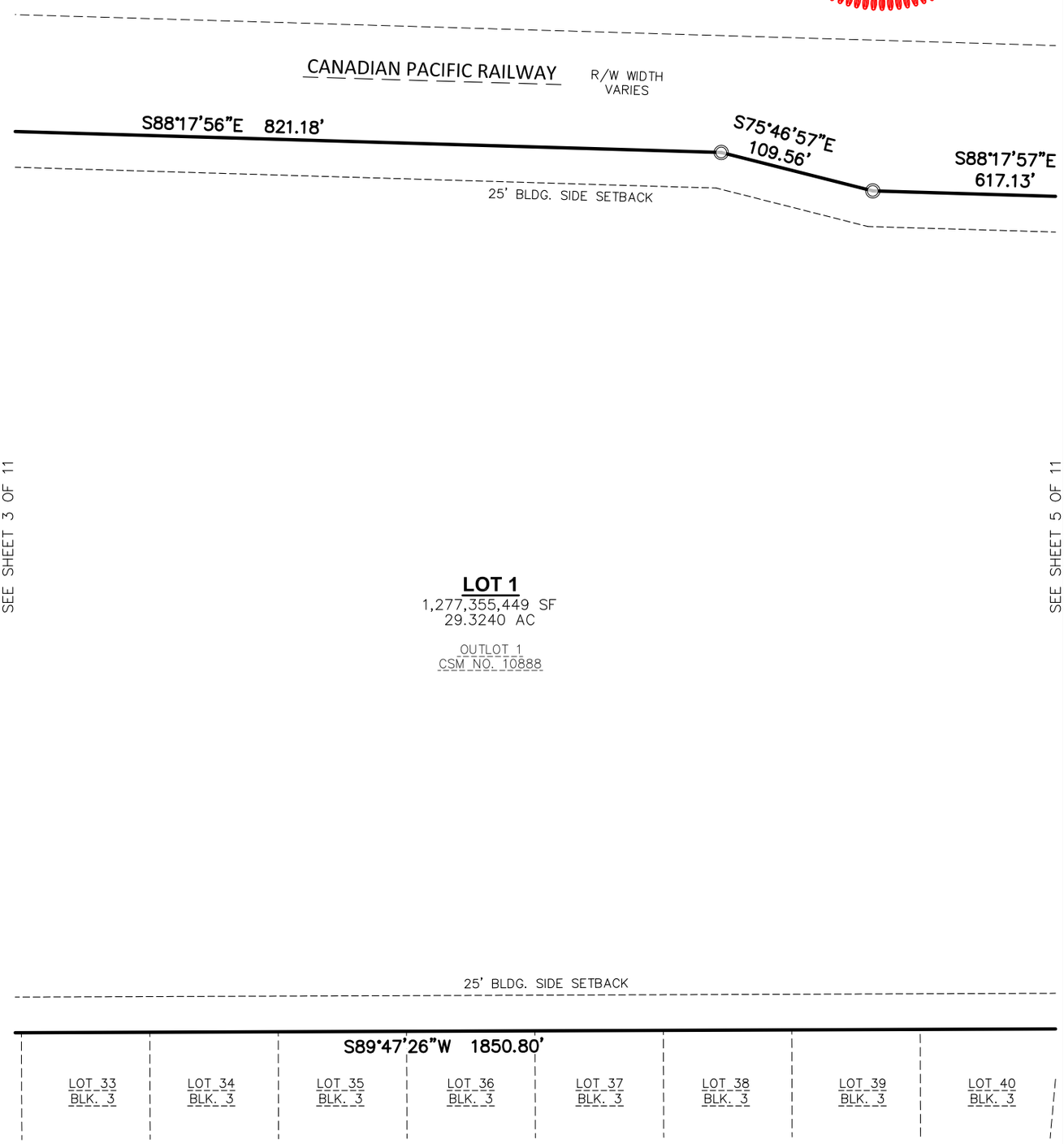

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north

SCALE IN FEET

100' 0 100'

LEGEND:

1" IRON PIPE FOUND

RBR 3/4" REBAR FOUND

NAIL 7/8" NAIL FOUND

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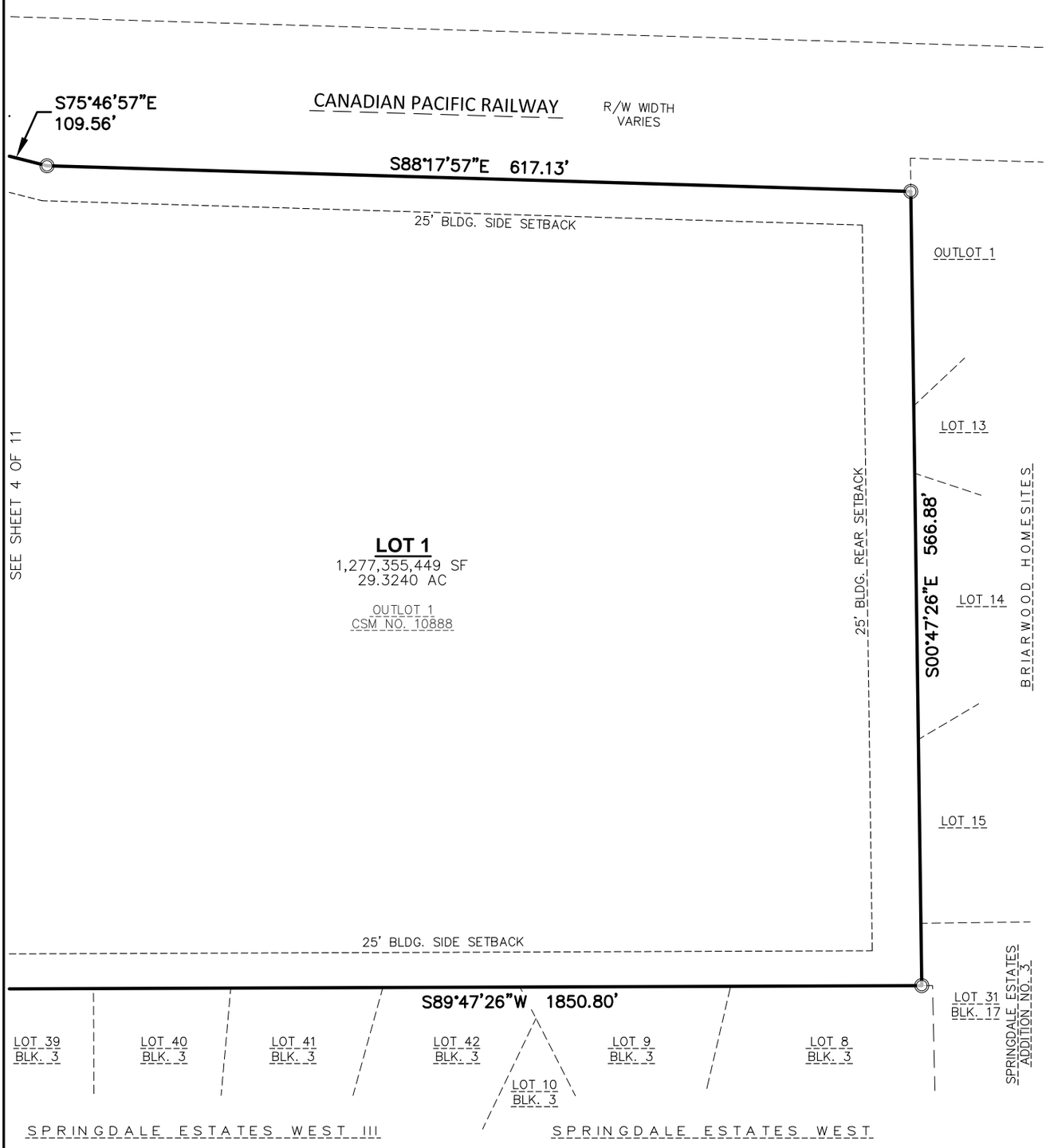

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SHEET 5 OF 11

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NOTE: SHEETS 6 THRU 9 ARE FOR PLANIMETRICS REFERENCE ONLY. REFER TO SHEETS 1 THRU 5 FOR BOUNDARY INFORMATION.

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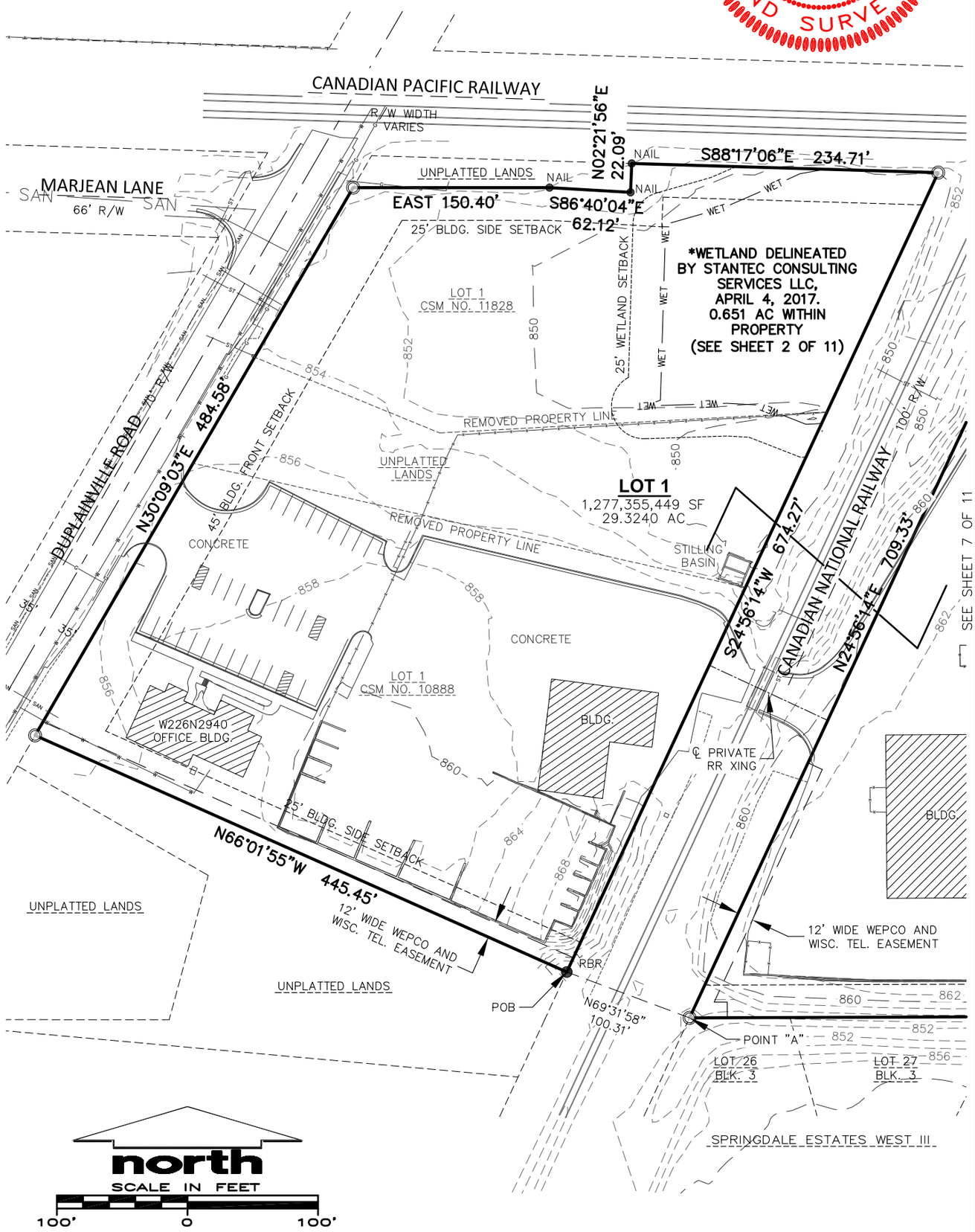

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SHEET 6 OF 11

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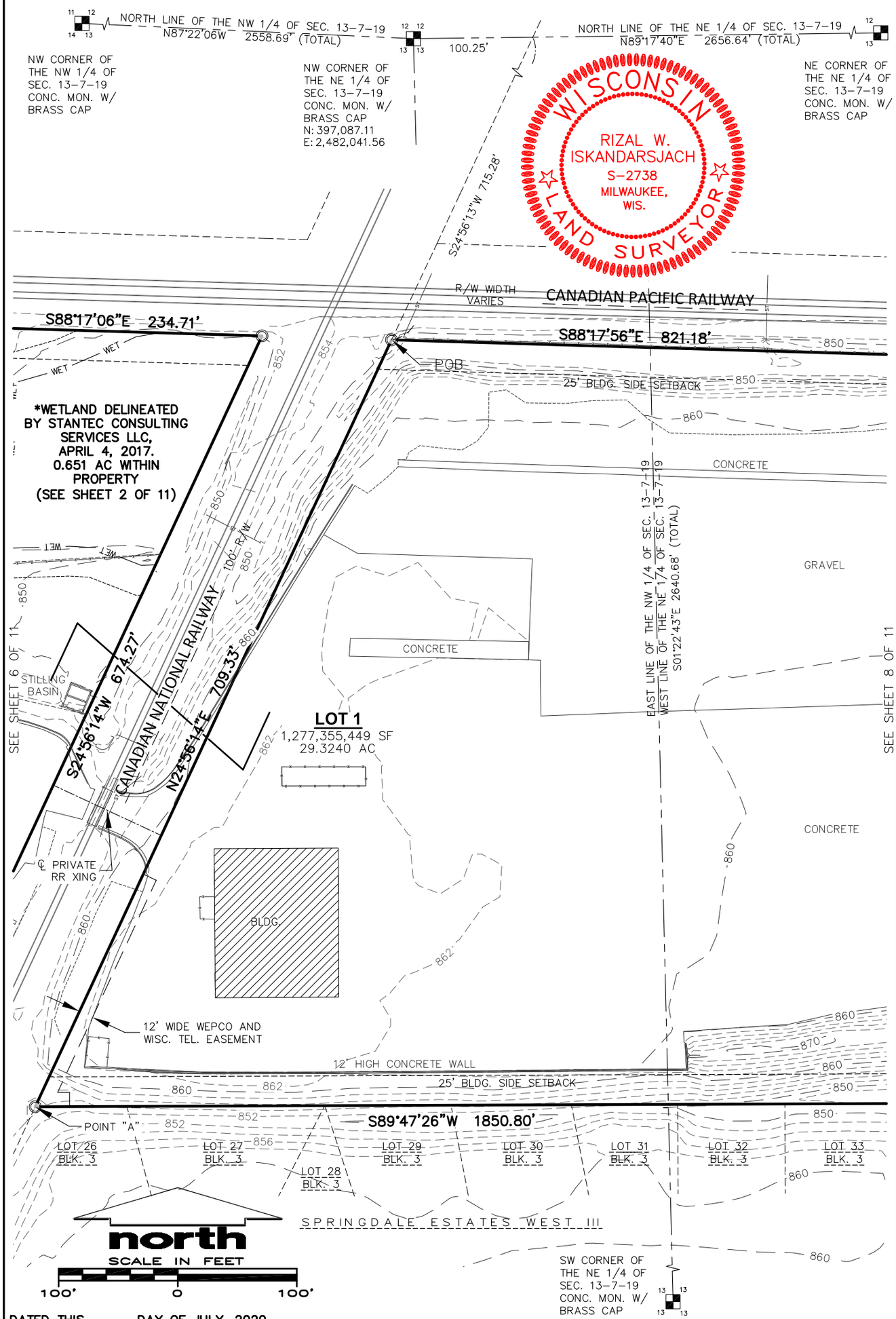

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north

SCALE IN FEET

100' 0 100'

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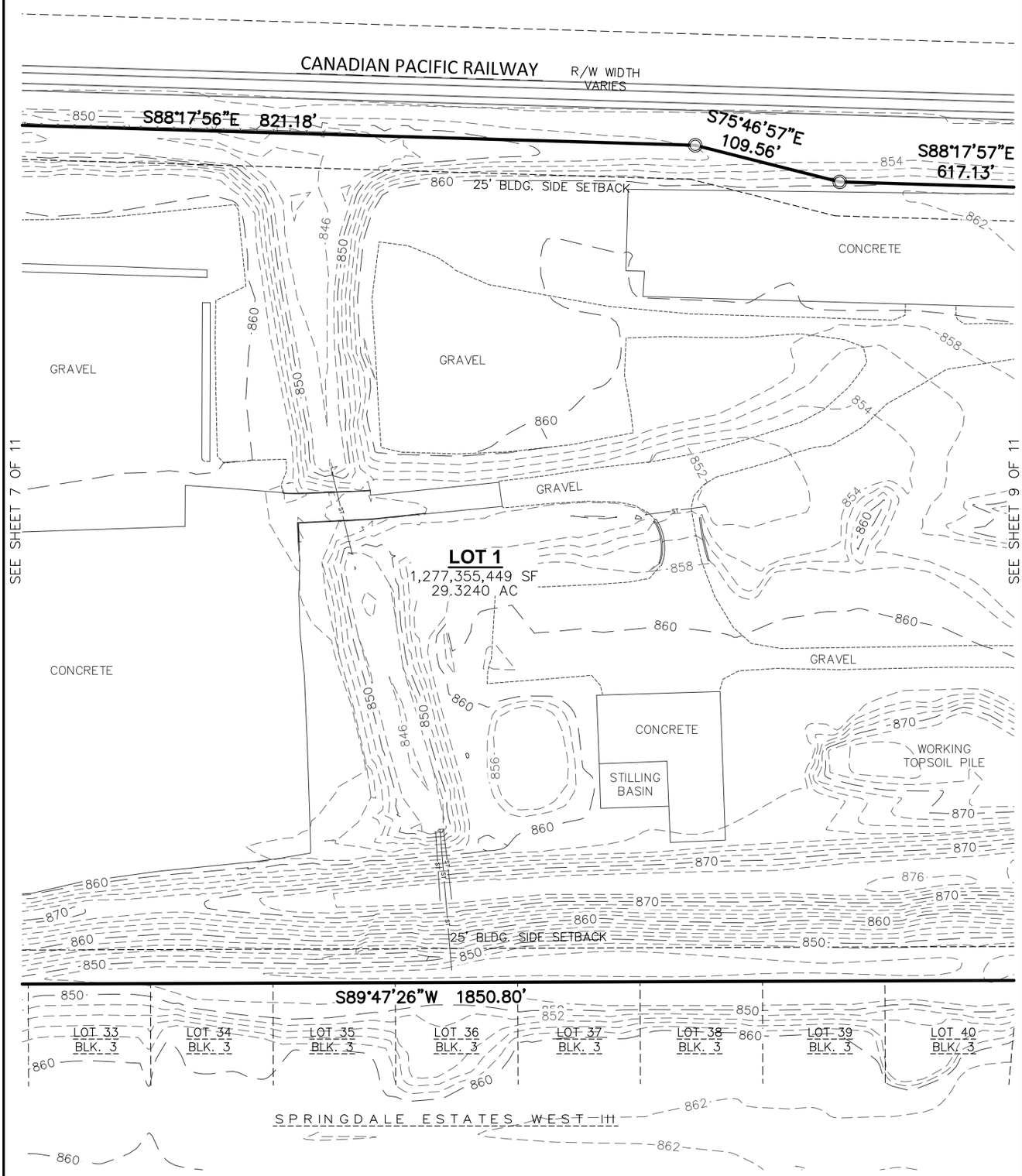

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north

SCALE IN FEET

100' 0 100'

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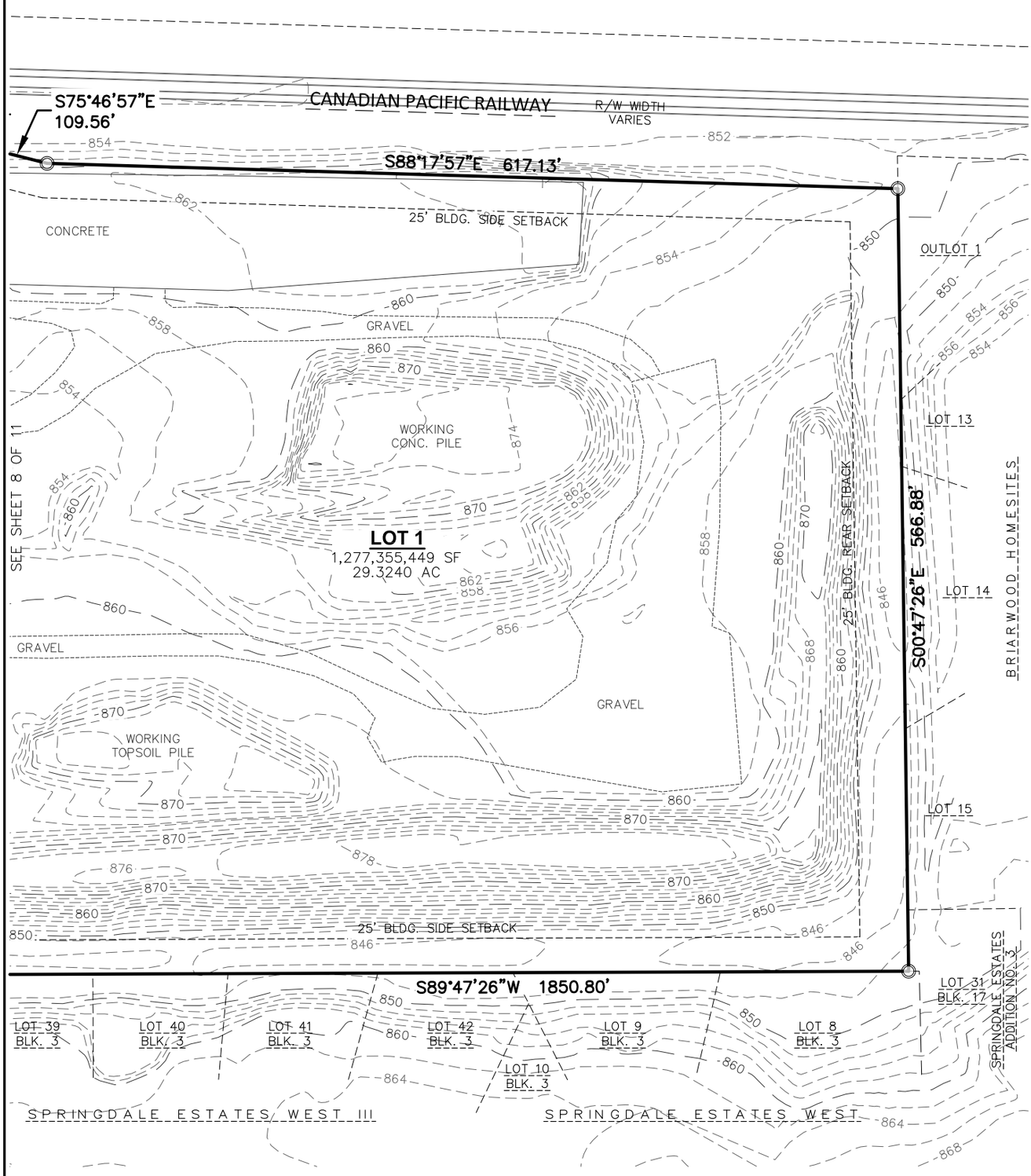

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SHEET 9 OF 11

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SURVEYOR'S CERTIFICATE:

State of Wisconsin)
) SS
Waukesha County)

I, Rizal W. Iskandarsjach, Professional Land Surveyor, do hereby certify that I have surveyed, divided, and mapped all of Lot 1 and Outlot 1 of Certified Survey Map No. 10888; Lot 1 of Certified Survey Map No. 11828; and additional lands, located in the Northeast 1/4 of the Northwest 1/4 and the Northwest 1/4 or the Northeast 1/4 of Section 13, Township 7 North, Range 19 East, City of Pewaukee, Waukesha County, Wisconsin, bounded and described as follows:

Commencing at the northwest corner of the Northeast 1/4 of said Section 13; thence North 89°17'40" East along the north line of said Northeast 1/4 section, 100.25 feet to the easterly line of the Canadian National Railway right-of-way; thence South 24°56'13" West along said easterly line, 715.28 feet to the south line of the Canadian Pacific Railway right-of-way, the northwest corner of said Outlot 1 and the point of beginning;

Thence South 88°17'57" East along said south line, 821.18 feet; thence South 75°46'57" East along said south line, 109.56 feet; thence South 88°17'57" East along said south line, 617.13 feet to the west line of Briarwood Homesites Subdivision; thence South 00°47'26' East along said west line and then along the west line of Springdale Estates Addition No. 3 Subdivision, 566.88 feet to the north line of Springdale Estates West Subdivision; thence South 89°47'25" West along said north line and then along the north line of Springdale Estates West III Subdivision, 1850.80 feet to the easterly line of said Canadian National Railway right-of-way and POINT "A"; thence North 24°56'14" East along said easterly line, 709.33 feet to the point of beginning.

ALSO, commencing at said POINT "A"; thence North 69°31'58" West, 100.31 feet to the southeast corner of Lot 1 of said Certified Survey Map No. 10888 and a second point of beginning;

Thence North 66°01'55" West, 445.45 feet to the easterly line of Duplainville Road, thence North 30°09'03" East along said easterly line, 484.58 feet to the northwest corner of Lot 1 of said Certified Survey Map No. 11828; thence Due East along the northerly line of said Lot 1, 150.40 feet; thence South 86°40'04" East along said northerly line, 62.12 feet; thence North 02°21'56" East along said northerly line, 22.09 feet to the south line of said Canadian Pacific Railway right-of-way; thence South 88°17'06" East along said south line, 234.71 feet to the westerly line of said Canadian National Railway right-of-way; thence South 24°56'14" West along said westerly line, 674.27 feet to the second point of beginning.

Containing in all 1,277,355 square feet (29.3240 acres) of land, more or less.

All subject to easements and restrictions of record and potential future road widening and government restrictions, if any.

That I have made such survey, land division, and map by the direction of DUPLAINVILLE LAND COMPANY LLC, owner said lands.

That such map is a correct representation of all 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 regulations of the City of Pewaukee in surveying, dividing and mapping the same.

DATED THIS _____ DAY OF JULY, 2020

_____
Rizal W. Iskandarsjach, P.L.S.
Professional Land Surveyor, S-2738

WISCONSIN
RIZAL W. ISKANDARSJACH
S-2738
MILWAUKEE, WIS.
LAND SURVEYOR

THIS INSTRUMENT WAS DRAFTED BY RIZAL W. ISKANDARSJACH, S-2738

SHEET 10 OF 11

R:\2020\209494\DWG\20-9494 CSM.dwg

CERTIFIED SURVEY MAP No. _____

ALL THAT PART OF LOT 1 AND OUTLOT 1 OF CERTIFIED SURVEY MAP NO. 10888; LOT 1 OF CERTIFIED SURVEY MAP NO. 11828; AND ADDITIONAL LANDS, LOCATED IN THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 13, TOWNSHIP 7 NORTH, RANGE 19 EAST, CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN.

OWNER'S CERTIFICATES

DUPLAINVILLE LAND COMPANY, LLC, as owner, do hereby certify that said company caused the land described in the foregoing affidavit of Rizal W. Iskandarsjach, to be surveyed, divided, and mapped as represented on this map, in accordance with the provisions of Chapter 236 of the Wisconsin Statutes and the regulations of the City of Pewaukee in surveying, dividing and mapping the same.

DUPLAINVILLE LAND COMPANY, LLC

_____(sign) _____
_____(print) Date
_____(title)

State of Wisconsin)
) SS
_____ County)

Personally came before me this _____ day of _____, 2020, the above named _____, as the _____ of the above named company and acknowledged that they executed the foregoing instrument as such officers as the deed of said company, as Manager, by its authority.

_____(sign)
_____(print)
Notary Public, _____ County, _____
My Commission Expires _____

PLAN COMMISSION APPROVAL

This Certified Survey Map is hereby approved by the Plan Commission of the City of Pewaukee, on this _____ day of _____, 2020.

_____ _____
Steve Bierce, Chairperson Date

_____ _____
Brandon Bergman, Secretary Date

COMMON COUNCIL APPROVAL

This Certified Survey Map is approved and dedication accepted by the Common Council of the City of Pewaukee, on this ____ day of _____, 2020.

_____ _____
Steve Bierce, Mayor Date

_____ _____
Kelly Tarczewski, Clerk /Treasurer Date

WISCONSIN
RIZAL W. ISKANDARSJACH
S-2738
MILWAUKEE, WIS.
LAND SURVEYOR

DATED THIS _____ DAY OF JULY, 2020
THIS INSTRUMENT WAS DRAFTED BY RIZAL W. ISKANDARSJACH, S-2738

SHEET 11 OF 11

R:\2020\209494\DWG\20-9494 CSM.dwg

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 7.

DATE: July 16, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit and Site and Building Plans for Duplainville Land Company, LLC/John Zignego for Property Located at W226 N2940 Duplainville Road for the Purpose of Constructing a One-Story 25,000 Square Foot Repair Garage Building (PWC 0913997001, PWC 0914991, PWC 0914992001)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Zignego Site & Building Plans

PROPOSED NEW REPAIR FACILITY BUILDING:

ZIGNEGO REPAIR FACILITY

W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

1 AERIAL VIEW - NORTH ELEVATION LOOKING SOUTH
NO SCALE

2 AERIAL VIEW - LOOKING NORTH / NORTH EAST
NO SCALE

CODE CALCULATIONS AND ANALYSIS: SHELL BUILDING

OCCUPANCY CALCULATION: (ACTUAL OCCUPANT LOAD IS 222)

OCCUPANCY S-1 EQUIPMENT AND VEHICLE REPAIR GARAGE (PRIMARY)
500 SQUARE FEET IS MAXIMUM FLOOR AREA ALLOWANCE PER OCCUPANT
21,764 SQUARE FEET GROSS / 100 SQUARE FEET PER PERSON = 218 PEOPLE MAXIMUM

OCCUPANCY B BUSINESS (SECONDARY)
100 SQUARE FEET IS MAXIMUM FLOOR AREA ALLOWANCE PER OCCUPANT
5,953 SQUARE FEET GROSS / 100 SQUARE FEET PER PERSON = 60 PEOPLE MAXIMUM

TOTAL OCCUPANCY = 278 PEOPLE MAXIMUM (ACTUAL OCCUPANCY WILL BE LESS THAN 500)

PLUMBING FIXTURE CALCULATION:

BASED ON TOTAL OCCUPANCY = 222 PEOPLE MAXIMUM

PLUMBING FACILITIES TO BE ADDED AS NEEDED IN THE FUTURE TENANTS. ACTUAL PLUMBING CALCULATIONS PROVIDED IN THE CODE ANALYSIS FOR EACH TENANT.

EXIT WIDTH REQUIRED AND EXIT ACCESS TRAVEL DISTANCE:

EXIT WIDTH REQUIRED 278 x .20 = 55.6 INCHES OR 32 INCHES EACH MINIMUM CLEAR X (2) EXITS
EXIT WIDTH PROVIDED (9) 36" WIDE DOORS x 34" = 306" WIDTH
TOTAL EXIT WIDTH PROVIDED OF 306" EXCEEDS REQUIRED EXIT WIDTH CALCULATED (55.6")
TOTAL NUMBER OF EXISTING EXITS PROVIDED (9) EXCEEDS THE NUMBER OF EXITS REQUIRED (2)
REFER TO SHEET A0.1 FOR ADDITIONAL INFORMATION

EXIT TRAVEL DISTANCE:
CURRENT TRAVEL DISTANCE TO EXITS ALONG EXIT EGRESS DOES NOT EXCEED CODE MAXIMUM OF 250 FEET. REFER TO EXITING DIAGRAM ON SHEET A0.1.

AREA AND HEIGHT LIMITATION CALCULATIONS:

PER IBC TABLE 504.3, 504.4 AND 506.2:
FOR OCCUPANCY GROUP S-1 WHICH IS MORE RESTRICTIVE THAN B (TYPE 2B CONSTRUCTION - WITH AUTOMATIC SPRINKLER INCREASE)
3 STORIES AND 70,000 S.F. ALLOWED FROM TABLE 506.2 WITH AUTOMATIC SPRINKLER SYSTEM INCREASE 70,000 S.F. MAXIMUM ALLOWED. (WITH FRONTAGE INCREASE) 73,625 S.F. MAXIMUM ALLOWED
THE ACTUAL OVERALL SIZE IS 27,770 S.F. AND 1 (ONE) STORY.
THE BUILDING AREA WITH THE PROPOSED ADDITION WAS AND IS MORE THAN ABOVE THE MAXIMUM ALLOWABLE AREA LIMITS PER TABLE 504.4 WITH AUTOMATIC SPRINKLER AND FRONTAGE INCLUDED. THE BUILDING IS CLASSIFIED AS CONSTRUCTED (TYPE 2B).

BUILDING IS BELOW ALLOWABLE HEIGHT LIMIT OF 75 FEET. THE ACTUAL IS 29'-6" FEET MAXIMUM WHICH BELOW THE 75 FEET MAXIMUM HEIGHT ALLOWED PER TABLE 504.3.OK

MULTIPLE OCCUPANCIES:

BUILDING DESIGN IS BASED ON NON-SEPARATED OCCUPANCIES PER IBC 508.3.
THE ALLOWABLE AREA, STORY AND HEIGHT BELOW IS THE MORE RESTRICTIVE OCCUPANCY GROUP, WHICH IS F-1. REFER TO IBC TABLE 506.2.
ALL OF THESE OCCUPANCIES ARE ALLOWED AS PART OF IBC 507.

CONSTRUCTION CLASSIFICATION REQUIREMENTS:

PER IBC TABLE 601 AND TABLE 602:
TYPE IIB CONSTRUCTION:

PRIMARY STRUCTURAL FRAME	"0" RATING REQUIRED
INTERIOR BEARING WALLS	"0" RATING REQUIRED
EXTERIOR BEARING WALLS (PER TABLE 602 > 30 FEET	"0" RATING REQUIRED
NONBEARING WALLS AND PARTITIONS	"0" RATING REQUIRED
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	"0" RATING REQUIRED
ROOF CONSTRUCTION AND SECONDARY MEMBERS	"0" RATING REQUIRED

BUILDING ENVELOPE REQUIREMENTS: PROPOSED TO USE PRESCRIPTIVE METHOD. PER SPS 363.0402 BUILDING ENVELOPE REQUIREMENTS. (1) OPAQUE ASSEMBLIES. SUBSTITUTE 2009 IECC TABLE 502.2 (1) PER SPS 363.5402 BUILDING ENVELOPE REQUIREMENTS. (1) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT. REFER TO SHEET A5.1 ARCHITECTURAL ELEVATIONS.

SHEET INDEX

0 - GENERAL

T1.1	TITLE SHEET
T1.2	EXTERIOR PERSPECTIVES

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GS.2	SPECIFICATIONS

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EX1	EXISTING CONDITIONS MAP
EX2	EXISTING CONDITIONS MAP
EX3	EXISTING CONDITIONS MAP

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C0.1	SITE CROSS-SECTIONS EXHIBIT
C1.0	SITE DIMENSION AND GRADING PLAN
C1.1	MASS GRADING PLAN
C2.0	SITE UTILITY PLAN
C3.0	DETAILS
C3.1	DETAILS

4 - LANDSCAPING

L1.0	EXISTING LANDSCAPE AND NATURAL RESOURCES EXHIBIT

5 - ARCHITECTURAL

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A1.0	OVERALL FLOOR PLAN
A1.1	MEZZANINE FLOOR PLAN
A1.2	ENLARGED FIRST FLOOR PLAN, SCHEDULES & NOTES
A1.3	ENLARGED MEZZANINE FLOOR PLAN, SCHEDULES & NOTES
A4.1	ROOF PLAN
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A6.1	BUILDING SECTIONS

6 - ELECTRICAL

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E2.0	LIGHTING CUT SHEETS
E2.1	LIGHTING CUT SHEETS
E2.2	LIGHTING CUT SHEETS

CITY OF PEWAUKEE SUBMISSION FOR: SITE AND BUILDING; REZONING; CSM AND CONDITIONAL USE APPROVAL TO: PLAN COMMISSION AND COUNCIL

MAY 28, 2020

OWNER :
ZIGNEGO COMPANY, INC.
TIM ZIGNEGO & TER ZIGNEGO

W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WI 53186

GENERAL CONTRACTOR :
BRIOHN BUILDING CORPORATION
MIKE BYRNE

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

ARCHITECT :
BRIOHN DESIGN GROUP LLC
DOMENICO FERRANTE, AIA

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

STRUCTURAL ENGINEER:
BRIOHN DESIGN GROUP LLC
KEVIN JANKOWSKI, PE
CHRIS CLINE, PE

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

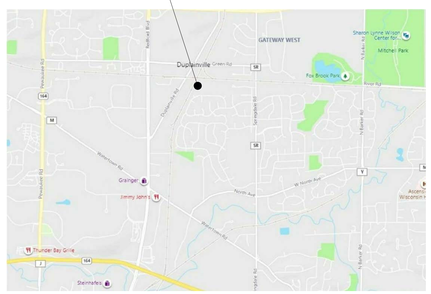
CIVIL ENGINEER:
JSD PROFESSIONAL SERVICES, INC.
RIZAL W. ISKANDARSJACH, P.E., P.L.S.

W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
(262) 513-0666 PHONE
(262) 513-1232 FAX

LANDSCAPE DESIGNER:
JSD PROFESSIONAL SERVICES, INC.
KRISTIN SHERFINSKI

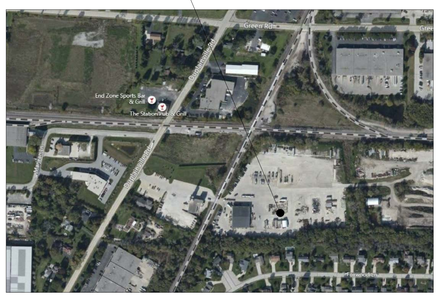
W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
(262) 513-0666 PHONE
(262) 513-1232 FAX

PROJECT LOCATION:



3 SITE LOCATION MAP
NO SCALE

PROJECT SITE LOCATION:



4 VICINITY MAP
NO SCALE

PROJECT INFORMATION:

CODE:	SPS 360-366 WISCONSIN COMMERCIAL BUILDING CODE (IBC 2015, IECC 2015/2009, IEBC 2015, IMC 2015 AND IFGC 2009) SPS 314 FIRE PREVENTION (REFERENCED NFPA) SPS 316 ELECTRICAL SPS 381-387 PLUMBING
OCCUPANCY:	F-1 (MANUFACTURING) S-1 (STORAGE) B (BUSINESS - OFFICE)
CLASS OF CONSTRUCTION:	TYPE 2B
SPRINKLER SYSTEM:	FULL - NFPA 13
FLOOR LEVELS:	2 (ONE STORY PLUS MEZZANINE)
NUMBER OF STORIES:	1 + MEZZANINE
TOTAL SITE AREA:	1,033,907 SF 23.74 ACRES
TOTAL BUILDING AREA:	24,800 SF FOOTPRINT (MAIN LEVEL), 2,917 SF MEZZANINE = 27,717 SF OVERALL COMBINED TOTAL AREA

NOTE:

ALL MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SPRINKLER ENGINEERING BY DESIGN-BUILD CONTRACTORS

APPLICABLE TO ALL PLAN VIEWS

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
TITLE SHEET

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB:	3239
DRAWN:	CK
CHECKED:	DF / KJ
DATE:	MAY 28, 2020
SHEET:	T1.1

1 AERIAL VIEW - LOOKING SOUTHWEST - EXISTING
NO SCALE

2 AERIAL VIEW - LOOKING SOUTHWEST - PROPOSED
NO SCALE

3 AERIAL VIEW - LOOKING EAST - EXISTING
NO SCALE

4 AERIAL VIEW - LOOKING EAST - PROPOSED
NO SCALE

5 AERIAL VIEW - LOOKING NORTHEAST - EXISTING
NO SCALE

6 AERIAL VIEW - LOOKING NORTHEAST - PROPOSED
NO SCALE

7 AERIAL VIEW - LOOKING SOUTH VIEW - EXISTING
NO SCALE

8 AERIAL VIEW - LOOKING SOUTH VIEW - PROPOSED
NO SCALE

BRIOHN
DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
EXTERIOR PERSPECTIVES

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB:	3239
DRAWN:	CW / CK
CHECKED:	DF/KJ
DATE:	MAY 28, 2020
SHEET:	T1.2

GENERAL NOTES

1. THE FOLLOWING SHALL APPLY TO ALL SUBCONTRACTORS AND SUPPLIERS ENGAGED IN EXECUTION OF THE WORK SHOWN ON THESE DRAWINGS AND SPECIFICATIONS.

2. THE COMPLETE CONSTRUCTION DOCUMENT SET IS INCLUSIVE OF THE DRAWING SHEETS LISTED IN THE DRAWING INDEX.

3. ALL WORK SHALL CONFORM TO ALL APPLICABLE PROVISIONS OF THE LOCAL AND STATE BUILDING, HVAC AND FIRE SAFETY CODE; LOCAL AND STATE PLUMBING CODE; LOCAL AND STATE MECHANICAL CODES; LOCAL AND STATE ELECTRICAL CODE; OSHA BARRIER FREE DESIGN; LOCAL AND STATE FIRE PROTECTION CODES. ALL WORK SHALL CONFORM TO ALL NATIONAL CODES AND REFERENCE STANDARDS AS REFERENCED IN THE LOCAL AND STATE CODES. ALL WORK, MATERIALS AND INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH ALL ORDINANCES, STATE AND LOCAL BUILDING CODES, LATEST EDITION, OF THE AUTHORITIES HAVING JURISDICTION. DESIGN LOADS: LOADS AND CODE RESTRICTIONS FOR ALL DESIGN CONSIDERATIONS SHALL CONFORM TO THE LOCAL AND STATE CODES AND ALL GOVERNING CODES, AND ALL CONSTRUCTION IS TO COMPLY WITH ALL LOCAL SEISMIC REQUIREMENTS. REFER TO STRUCTURAL SPECIFICATIONS.

4. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER APPLICATION FOR AND SECURING OF ALL NECESSARY PERMITS, AS WELL AS THE OBSERVANCE OF ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL LAWS, REGULATIONS OR ORDINANCES.

5. FIRE PROTECTION: SUBCONTRACTOR SHALL PROVIDE FIRE EXTINGUISHERS WITHIN THE
PREMISES AS REQUIRED BY CODE AND OR INSURANCE COMPANIES (FOLLOW MORE STRINGENT REQUIREMENTS), OR VERIFY THAT AN ADEQUATE NUMBER OF FIRE EXTINGUISHERS EXIST IN THE CASE OF A REMODELING OR ALTERATION. DISCONNECT AND SEAL UTILITIES SERVING STRUCTURE TO BE DEMOLISHED, PRIOR TO START OF DEMOLITION WORK IF DEMOLITION WORK IS PART OF THE SCOPE OF WORK REQUIRED.
FIRE SPRINKLERS: THE GENERAL CONTRACTOR SHALL EMPLOY THE SERVICES OF A LICENSED FIRE SPRINKLER CONTRACTOR TO REWORK AND MODIFY THE EXISTING SYSTEM TO CONFORM WITH THE NEW ROOM AND CEILING HEIGHTS AS SHOWN IN THESE DRAWINGS. THE SPRINKLER CONTRACTOR SHALL DESIGN AND PREPARE SHOP DRAWINGS FOR THE PROPOSED SYSTEM MODIFICATIONS AND SUBMIT THESE DRAWINGS TO THE LOCAL AND STATE BUILDING AND CODE OFFICIALS AND THE ARCHITECT TO GAIN APPROVALS PRIOR TO CONNECTING ANY WORK. PROVIDE CONCEALED HEADS FOR AREAS WITH FINISHED CEILINGS UNLESS OTHERWISE NOTED.

6. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS.

7. CONTRACTOR COMPLIANCE: THE SUBCONTRACTOR SHALL VISIT THE PREMISES AND VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION AND SHALL REPORT ALL DISCREPANCIES TO THE ARCHITECT AND THE GENERAL CONTRACTOR. THE SUBCONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS REGARDING CONSTRUCTION PROCEDURES, INSURANCE, ETC AS SET FORTH BY THE GENERAL CONTRACTOR.

8. THE SUBCONTRACTOR SHALL SUBMIT A SPECIFIC CONSTRUCTION SCHEDULE TO THE GENERAL CONTRACTOR'S CONSTRUCTION/PROJECT MANAGER WITHIN 7 DAYS AFTER THE AWARD OF THE SUBCONTRACT.

9. HAZARDOUS MATERIALS: IN THE EVENT HAZARDOUS MATERIALS ARE ENCOUNTERED ON THE PREMISES DURING THE EXECUTION OF THE WORK, NOTIFY THE GENERAL CONTRACTOR BEFORE PROCEEDING WITH THE WORK. THE GENERAL CONTRACTOR SHALL NOTIFY THE OWNER/LANDLORD. AFTER THE OWNER/LANDLORD IS NOTIFIED AND WORK IS SUSPENDED, THE OWNER/LANDLORD IS RESPONSIBLE FOR DIRECTIONS TO THE GENERAL CONTRACTOR AS TO THE REMOVAL AND HANDLING OF HAZARDOUS MATERIALS. PROCEED WITH WORK WHEN THE OWNER/LANDLORD GIVES WRITTEN APPROVAL. REMOVAL AND HANDLING OF HAZARDOUS MATERIALS SHALL FOLLOW LOCAL AND STATE CODES AND REQUIREMENTS.

10. INFORMATION RELATED TO EXISTING CONDITIONS GIVEN IN THE CONSTRUCTION DOCUMENTS WAS OBTAINED FROM EXISTING BUILDING SCHEMATIC DRAWINGS AVAILABLE AT THE TIME OF DESIGN. ACCURACY CAN NOT BE GUARANTEED. DRAWINGS AND SPECIFICATIONS ARE INTENDED FOR ASSISTANCE AND GUIDANCE, BUT EXACT DIMENSIONS AND ELEVATIONS SHALL BE GOVERNED BY ACTUAL CONDITIONS AT THE SITE AND SHALL BE VERIFIED BY THE SUBCONTRACTOR.

11. NOTES ARE AN AID FOR THE SUBCONTRACTOR IN UNDERSTANDING THE WORK AND SHALL NOT BE CONSTRUED AS BEING COMPLETE IN EVERY DETAIL. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO VISIT THE SITE, BECOME THOROUGHLY FAMILIAR WITH THE WORK AND REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE ACTUAL CONDITIONS TO THE ARCHITECT AND THE GENERAL CONTRACTOR.

12. DO NOT SUBSTITUTE, REVISE OR CHANGE THE WORK WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT AND THE GENERAL CONTRACTOR.

13. INSTALL WORK PLUMB LEVEL SQUARE TRUE AND IN PROPER ALIGNMENT.

14. WORK SHALL BE SCHEDULED AND PERFORMED SO AS NOT TO DISTURB OR CAUSE DAMAGE TO EXISTING BUILDING ELEMENTS INTENDED TO REMAIN WHICH IS NOT PART OF THE SCOPE OF THE WORK. WORK SHALL BE SCHEDULED AND PERFORMED SO AS NOT TO DISTURB OR CAUSE DAMAGE TO INSTALLED WORK.

15. NO WORK SHALL BE DONE IN OTHER NON DESIGNATED AREAS OR OTHER TENANT AREAS, UNLESS OTHERWISE NOTED. SCHEDULE AND PERFORM THE WORK SO THAT THE OTHER AREAS NOT DESIGNATED TO RECEIVE WORK AND THE OTHER TENANTS IN THE BUILDING WILL NOT BE DISTURBED AND COMPLY WITH THE BUILDING OWNERS REQUIREMENTS.

16. COORDINATE WORK AS REQUIRED WITH THE OWNER/LANDLORD'S REPRESENTATIVE INCLUDING THE USE OF ELEVATORS, TEMPORARY STORAGE, LOADING DOCKS, BUILDING KEYING INCLUDING THE USE OF ELEVATORS, TEMPORARY STORAGE, LOADING DOCKS, BUILDING KEYING SYSTEMS, ETC. AND PROVIDE NECESSARY BARRICADES, LIGHTING, SIGNAGE AND GUARDRAILS AS REQUIRED BY OWNER/LANDLORD AND/OR APPLICABLE REGULATORY AGENCIES FOR THE PROTECTION OF BUILDING OCCUPANTS, WORKERS, VISITORS, CUSTOMERS AND PEDESTRIANS.

17. EACH SUBCONTRACTOR IS CONSIDERED A SPECIALIST IN HIS/HER RESPECTIVE FIELD, AND PRIOR TO THE SUBMISSION OF BID OR PERFORMANCE OF WORK EACH SUBCONTRACTOR SHALL NOTIFY THE ARCHITECT AND GENERAL CONTRACTOR OF WORK CALLED OUT IN THE DRAWINGS OR SPECIFICATIONS IN HIS/HER TRADE THAT CANNOT BE FULLY GUARANTEED OR CONSTRUCTED ACCORDING TO THE DESIGN INTENT.

18. PROVIDE AND COORDINATE LOCATION AND TYPE OF BLOCKING/BACKING REQUIRED WITHIN PARTITIONS AT LOCATIONS OF WALL MOUNTED ITEMS.

19. THE DRAWINGS INDICATE LOCATION, DIMENSIONS, REFERENCE AND TYPICAL DETAILS OF CONSTRUCTION. THE DRAWINGS DO NOT ILLUSTRATE EVERY CONDITION. WORK NOT PARTICULARLY DETAILED SHALL BE OF CONSTRUCTION SIMILAR TO PARTS THAT ARE DETAILED. VERIFY WITH ARCHITECT AND GENERAL CONTRACTOR PRIOR TO FABRICATION OR INSTALLATION OF SPECIFIC DETAILS OF CONSTRUCTION.

20. DISCREPANCY IN THE PLANS SHALL BE REPORTED TO ARCHITECT AND GENERAL CONTRACTOR IMMEDIATELY. SUBCONTRACTOR SHALL NOT MAKE A DETERMINATION FOR CONFLICTS IN PLAN DIMENSIONS.

21. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT THE APPROVAL OF THE ARCHITECT AND GENERAL CONTRACTOR UNLESS NOTED +/-.

22. VERTICAL DIMENSIONS ARE FROM THE TOP OF FLOOR FINISH, ESTABLISHED BY THE ARCHITECT AND GENERAL CONTRACTOR UNLESS OTHERWISE NOTED.

23. DIMENSIONS MARKED "FIELD VERIFY" SHALL BE VERIFIED IN THE FIELD BY THE SUBCONTRACTOR'S AFFECTED.

24. HORIZONTAL DIMENSIONS SHALL BE SHOWN FROM THE FINISHED FACE OF CONSTRUCTION UNLESS OTHERWISE NOTED.

25. WASTE AND REFUSE CAUSED BY WORK SHALL BE REMOVED FROM THE PREMISES AND DISPOSED OF OR RECYCLED PROPERLY BY THE SUBCONTRACTOR DAILY. FINAL CLEANING PRIOR TO FINAL INSPECTION SHALL INCLUDE A THOROUGH CLEANING OF ALL SURFACES AND REPLACEMENT OF ALL FILTERS IN NEW INSTALLED HVAC EQUIPMENT AND EXISTING HVAC EQUIPMENT AFFECTED BY CONSTRUCTION OF WORK.

26. MAINTAIN STRICT CONTROL OF DUST AND DEBRIS EMANATING FROM THE PROJECT AREA. KEEP PROJECT AREA BROOM CLEAN AND CLEAR OF DEBRIS DAILY.

27. SUBCONTRACTOR SHALL PERFORM ANY AND ALL EXCAVATING, CUTTING, PATCHING, REPAIRING, RESTORING AND THE LIKE NECESSARY TO COMPLETE THE WORK OF THIS CONTRACT. RESTORE ANY DAMAGED OR AFFECTED SURFACES RESULTING FROM THE WORK OF THIS CONTRACT TO THEIR ORIGINAL CONDITION AND TO THE SATISFACTION OF THE ARCHITECT, GENERAL CONTRACTOR, AND THE OWNER/LANDLORD. PATCH DAMAGE WITHIN THE WORK AREA, AS WELL AS OUTSIDE THE LIMIT OF WORK AREA IF CAUSED BY THE EXECUTION OF THE WORK.

28. EACH SUBCONTRACTOR SHALL LEAVE THE SITE IN A NEAT, CLEAN AND ORDERLY CONDITION ON A DAILY BASIS AND UPON CONCLUSION OF HIS WORK. ALL WASTE, RUBBISH AND EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE PROMPTLY. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL TRASH GENERATED FOR THE DURATION OF THE PROJECT.

29. CONSULT PROPERTY AS BUILT UTILITY PLANS BEFORE SAW CUTTING CONCRETE SLAB IF REQUIRED. IF AS BUILT DRAWINGS ARE NOT AVAILABLE UTILIZE OTHER MEANS TO UNCOVER BURIED UTILITIES.

30. NO SUBSTITUTIONS SHALL BE PERMITTED UNLESS PRIOR APPROVAL BY THE ARCHITECT AND THE GENERAL CONTRACTOR IS GIVEN.

31. PATCH AND REPAIR ALL FIREPROOFING AND FIRE STOPPING DAMAGED OR REMOVED DURING THE PERFORMANCE OF THE WORK.

32. ACCESSORIES, ETC. THEY SHALL BE PAINTED TO MATCH THE ADJACENT SURFACE AND AS DIRECTED BY THE ARCHITECT AND THE GENERAL CONTRACTOR.

33. EXTERIOR WALL OPENINGS, FLASHING, COUNTER FLASHING, COPING AND EXPANSION JOINTS SHALL BE WEATHERPROOF.

34. CAULKING AND SEALANTS: OPEN JOINTS PENETRATIONS AND OTHER OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED, CAULKED, GASKETED, OR WEATHER STRIPPED TO LIMIT AIR LEAKAGE. MAINTAIN REQUIRED FIRE RATING.

35. USE ACOUSTICAL SEALANT AROUND ALL PIPES, DUCTS, CONDUITS, SWITCHES, ETC. ON BOTH SIDES OF WALLS (CROSSING/PENETRATION) WITH THERMAL AND ACOUSTIC INSULATION. MAINTAIN REQUIRED FIRE RATING.

36. NOISE BARRIER BATTS (SOUND INSULATION) SHALL BE NON COMBUSTIBLE.

37. MECHANICAL CONTRACTORS SHALL VERIFY EXACT LOCATIONS AND EXACT DIMENSIONS WITH EQUIPMENT MANUFACTURERS. MECHANICAL CONTRACTORS SHALL VERIFY ALL SIZES AND LOCATIONS OF DUCT OPENINGS BEFORE INSTALLATION AND VERIFY DISCREPANCIES, IF ANY.

38. DEFINITIONS:
A) AS REQUIRED: AS REQUIRED BY REGULATORY REQUIREMENTS BY REFERENCED STANDARDS, BY EXISTING CONDITIONS, BY GENERALLY ACCEPTED CONSTRUCTION PRACTICE OR BY THE CONTRACT DOCUMENTS.
B) TYPICAL: IDENTICAL FOR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED.
C) SIMILAR: COMPARABLE CHARACTERISTICS FOR THE CONDITION NOTED. DIFFERENCES CAN BE INFERRED FROM OTHER INFORMATION INDICATED. VERIFY DIMENSIONS AND ORIENTATIONS.
D) REMOVE: ELIMINATE AND RECYCLE OR DISPOSE OF PROPERLY.

39. SUBCONTRACTOR TO CROSS CHECK WITH ARCHITECTURAL, HVAC, AND PLUMBING PLANS FOR OTHER DETAILS, DIMENSIONS, ELEVATIONS, OPENINGS, INSERTS, BRICK LEDGES, ETC. BRIOHN DESIGN GROUP, LLC TO BE NOTIFIED OF ANY VARIANCE BEFORE CONTRACTOR BEGINS WORK.

40. DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS SUPERSEDE DIMENSIONS SHOWN ON STRUCTURAL PLANS. THE USE OF A SCALE TO OBTAIN DIMENSIONS NOT SHOWN ON DRAWINGS IS NOT PERMITTED.

41. IN NO CASE SHALL STRUCTURAL ALTERATIONS OR WORK AFFECTING A STRUCTURAL MEMBER BE MADE, UNLESS APPROVED BY BRIOHN DESIGN GROUP, LLC.

42. IT IS THE SUBCONTRACTORS SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS AS MAY BE NECESSARY. ALL CONSTRUCTION AND ERECTION TO CONFORM TO OSHA REQUIREMENTS.

43. WHERE DETAILS ARE CALLED FOR IN A CERTAIN PORTION OF THE BUILDING, THEY SHALL BE DUPLICATED IN SIMILAR PORTIONS OF THE BUILDING UNLESS SHOWN OTHERWISE. CLARIFY WITH ARCHITECT BEFORE SUBCONTRACTOR BEGINS WORK.

44. CONSTRUCTION DOCUMENTS SHOW DIMENSIONS AND ELEVATIONS TO SIGNIFICANT WORKING POINTS (COLUMN CENTERLINES, OUTSIDE FACES OF WALLS, TOP OF FRAMING MEMBERS, ETC.) MATERIAL SUPPLIERS AND DESIGNERS ARE RESPONSIBLE FOR ALL OTHER INFORMATION IN ORDER TO DETAIL/FABRICATE THEIR WORK. CONTACT THE ARCHITECT WITH ANY DISCREPANCIES.

45. SUBCONTRACTOR SHALL PROVIDE A MINIMUM OF FOUR DETAILED SHOP DRAWINGS, OTHER RELATED DRAWINGS, ERECTION DRAWINGS AND SAMPLES WHERE REQUIRED PRIOR TO COMMENCEMENT OF FABRICATION AND INSTALLATION OF WORK.

GENERAL REQUIREMENTS

1. THE WORK SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY FOR AND SAID HEADING AS INDICATED IN THE SPECIFICATIONS, DRAWINGS AND DESIGN BUILD CONSTRUCTION CONTRACT.

2. SUBCONTRACTORS SHALL VISIT THE PREMISES WHILE BIDDING AND SHALL FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND THE REQUIREMENTS OF THE PROJECT PRIOR TO DEVELOPING THEIR BID. MATERIAL QUANTITIES SHALL BE BASED ON ACTUAL FIELD CONDITIONS AND MEASUREMENTS. DO NOT RELY ON SCALING PLANS FOR ACCURATE DIMENSIONING.

3. PRIOR TO BEGINNING THE WORK, VERIFY ALL EXISTING DIMENSIONS AND SQUARE FOOTAGES. NOTIFY THE OWNER/LANDLORD OF COMPLIANCE OR DISCREPANCIES, COMPARING THOSE DISCREPANCIES TO THE NUMBERS ON THE TITLE SHEET.

4. SUBCONTRACTORS SHALL TAKE CARE TO PROTECT ADJACENT AREAS FROM DUST AND DAMAGE DURING THE CONSTRUCTION PROCESS AND SHALL CLEAN UP AFTER THEMSELVES AT THE END OF EACH WORKING DAY. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PROTECTION OF ADJACENT ITEMS AND SURFACES FROM DAMAGE RESULTING FROM THE FURNISHING OR INSTALLATION OF SUBCONTRACTORS WORK AND SHALL PROMPTLY REPLACE, AT HIS OWN COST, SUCH DAMAGED WORK. SUBCONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE PROPER PROTECTION OF HIS AND OTHERS WORK FROM DAMAGE. USE APPROPRIATE COVERINGS OVER FURNITURE, DISPLAY CASES, EQUIPMENT AND FINISHES AS REQUIRED.

5. RUBBISH AND TRASH SHALL BE REMOVED FROM THE PREMISES AND RECYCLED AND/OR PROPERLY DISPOSED OF EACH DAY. NO RUBBISH SHALL BE LEFT IN THE PREMISES AFTER WORK IS COMPLETED.

6. UPON COMPLETION OF THE WORK INTERIOR AND EXTERIOR OF ALL GLASS AND GLAZING, FLOORS, WALLS AND CEILING SURFACES, ELECTRICAL FIXTURES, MECHANICAL EQUIPMENT, ETC.; IT IS NECESSARY TO REMOVE ALL DIRT, STAINS AND MARKS.

7. DRAWINGS HEREIN CREATE AN ENTIRE PACKAGE. ALL TRADES SHALL BE RESPONSIBLE FOR REVIEWING THEIR RESPECTIVE REQUIREMENTS AND COORDINATING THEIR HIDDEN OR EXPOSED WORK WITH OTHER RELATED TRADES.

8. COORDINATE WORK OF THE VARIOUS TRADES AND SUBCONTRACTORS TO ASSURE EFFICIENT AND ORDERLY INSTALLATION. PROVIDE ACCOMMODATION FOR ITEMS INSTALLED AT A LATER DATE. VERIFY THAT CHARACTERISTICS OF ELEMENTS OF INTERRELATED OPERATING EQUIPMENT ARE COMPATIBLE. COORDINATE WORK OF VARIOUS SECTIONS WHICH HAVE INTERDEPENDENT RESPONSIBILITIES FOR INSTALLING, CONNECTING TO, AND PLACING IN SERVICE, SUCH EQUIPMENT. COORDINATE SPACE REQUIREMENTS AND INSTALLATION OF MECHANICAL AND ELECTRICAL WORK AND FIRE SPRINKLER SYSTEM WHICH ARE INDICATED, DETAILED OR IMPLIED DIAGRAMMATICAL ALLY ON DRAWINGS.

9. UNLESS SPECIFICALLY NOTED, PROVIDE AND PAY FOR LABOR, MATERIALS AND EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT AND MACHINERY AND OTHER FACILITIES AND SERVICES NECESSARY FOR PROPER EXECUTION AND COMPLETION OF WORK, INCLUDING PERMITS.

10. GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL PURCHASE AND MAINTAIN INSURANCE COVERAGE IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER/LANDLORD.

11. FURNISH REQUIRED TEMPORARY FACILITIES AND TEMPORARY UTILITIES IMMEDIATELY AFTER RECEIPT OF NOTICE TO PROCEED FOR USE IN CONVENIENCE OF THOSE ENGAGED IN THE PROJECT WORK.

12. SUBCONTRACTORS MUST STAY BEHIND THE BARRIERS AND MAINTAIN ACCESS TO SUCH AREAS CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS. FAILURE TO MAINTAIN CLEAN WORK AREAS WILL RESULT IN GENERAL CONTRACTOR HAVING SUCH MATERIALS AND DEBRIS REMOVED AND CHARGES FOR MAINTENANCE BILLED TO THE SUBCONTRACTOR.

13. COORDINATE CONSTRUCTION, SCHEDULING WITH THE OWNER/LANDLORD OR REPRESENTATIVE REVIEWING SCHEDULED ACTIVITIES AT OUTSET OF CONSTRUCTION.

14. ALLOWABLE TOLERANCES - UNLESS OTHERWISE NOTED OR INDICATED, THE FOLLOWING TOLERANCES SHALL APPLY TO WORK WITHIN AND RELATED TO THE SCOPE OF THESE DOCUMENTS.
A) VERTICAL SURFACES SHALL BE PLUMB OR CONSTRUCTED TO THE EXACT SLOPES OR ANGLES INDICATED.
B) THE MAXIMUM DEVIATION FROM THE TRUE PLANE FOR VERTICAL AND HORIZONTAL SURFACES SHALL NOT BE GREATER THAN 1/8" IN 10'-0" AS MEASURED BY A STRAIGHT EDGE PLACED ANYWHERE ON THE SURFACE.
C) HORIZONTAL SURFACES SHALL BE LEVEL OR CONSTRUCTED TO THE EXACT ANGLE INDICATED OR INTENDED.
D) WALL AND SOFFIT INTERSECTIONS SHALL BE 90 DEGREES OR THE EXACT ANGLE INDICATED OR INTENDED.
E) CORNERS AND EDGES SHALL BE STRAIGHT AND TRUE WITHOUT DENTS, WAVES, BULGES OR OTHER BLEMISHES.
F) JOINTS SHALL BE TIGHT, STRAIGHT, EVEN AND SMOOTH.
G) OPERABLE ITEMS SHALL OPERATE SMOOTHLY WITHOUT STICKING OR BINDING AND WITHOUT EXCESSIVE "PLAY" OR LOOSENESS.

15. THE FOLLOWING MATERIALS SHALL BE LEFT AT THE JOBSITE. THEY SHALL BE TAKEN FROM THE SAME MATERIAL, LOT OR RUN USED TO CONSTRUCT AND FINISH THE PROJECT:
A) (5) PIECES OF EACH ENTRY OF TILE, IF USED.
B) (1) GALLON OF EACH COLOR PAINT IN A TIGHTLY SEALED AND MARKED CAN.
C) (1) BOX OF EACH TYPE OF CEILING TILE, IF USED.

16. THE OWNER/LANDLORD OR OWNER/LANDLORD'S SUBCONTRACTORS MAY OCCUPY PORTIONS OF THE PROJECT DURING THE FINAL STAGE OF CONSTRUCTION, WITH THE COOPERATION AND COORDINATION OF THE GENERAL CONTRACTOR AND APPROVAL OF THE LOCAL CODE OFFICIAL IF REQUIRED.

17. DIMENSIONS AND FINISHES SHALL BE VERIFIED AND COORDINATED WITH EXISTING CONDITIONS PRIOR TO CONSTRUCTION, FABRICATION OR PURCHASING. IN CASE OF CONFLICT BETWEEN THE PROJECT REQUIREMENTS AND/OR EXISTING CONDITIONS, THE ONE HAVING THE MOST STRINGENT REQUIREMENTS SHALL GOVERN, AS APPROVED BY THE ARCHITECT AND THE GENERAL CONTRACTOR.

18. PERFORM WORK IN ACCORDANCE WITH ACCEPTABLE TRADE PRACTICE TO ENSURE THE HIGHEST QUALITY FINISHED PRODUCT - EXPRESSED OR IMPLIED. PERFORM WORK BY SKILLED MECHANICS IN ACCORDANCE WITH ESTABLISHED STANDARDS OF WORKMANSHIP IN EACH OF THE VARIOUS TRADES.

19. COORDINATE BLOCKING REQUIREMENTS WITH ADJACENT OR RELATED TRADES, ACCESSORIES, EQUIPMENT AND FIXTURES INSTALL REQUIRED BLOCKING AT NO ADDITIONAL COST TO CONTRACT.

20. REPAIR PROPERTY DAMAGE BY THE INSTALLERS TO A LIKE - NEW CONDITION OR REPLACE DAMAGED SURFACES AND MATERIALS OF THE PREVIOUSLY INSTALLED WORK BY OTHER TRADES, INSTALLERS AND SUBCONTRACTORS.

21. WHERE REQUESTED BY THE OWNER/LANDLORD TO CERTIFY CONFORMANCE TO TRADE STANDARDS OR THE PROJECT REQUIREMENTS, THE SUBCONTRACTOR SHALL ENLIST A TESTING LABORATORY AT THE OWNER/LANDLORD'S COST. IF THE REQUESTED TEST SHOWS NON - CONFORMANCE TO GENERALLY ACCEPTED TRADE STANDARDS OR THE PROJECT REQUIREMENTS, THE SUBCONTRACTOR SHALL CORRECT THE DEFICIENCY AT NO ADDITIONAL COSTS TO THE OWNER/LANDLORD AND REIMBURSE THE COSTS OF THE TESTING TO THE OWNER/LANDLORD, UNLESS THE CONTRACTOR HAS USED PRODUCTS INCORRECTLY LABELED BY THE MANUFACTURER OR HAS MADE PREVIOUSLY APPROVED CHANGES.

22. PROVIDE SECURITY OF THE WORK, INCLUDING TOOLS AND UNINSTALLED MATERIALS. PROTECT THE WORK, STORED PRODUCTS, CONSTRUCTION EQUIPMENT AND OWNER/LANDLORD'S PROPERTY FROM THEFT AND VANDALISM AND THE PREMISES FROM ENTRY BY UNAUTHORIZED PERSONNEL UNTIL FINAL ACCEPTANCE BY OWNER/LANDLORD.

23. MAINTAIN ACTIVE FIRE EXTINGUISHERS AT THE PROJECT AS REQUIRED TO ADEQUATELY COVER THE WORK AREA.

24. DO NOT USE MATERIALS OR EQUIPMENT FOR A PURPOSE OTHER THAN THAT FOR WHICH IT IS SPECIFICALLY DESIGNED OR SPECIFIED FOR. MATERIALS AND EQUIPMENT THAT ARE SIMILAR SHALL BE THE SAME TYPE, MODEL AND STYLE FOR THE SAME USE THROUGHOUT THE PROJECT OR THEY SHALL BE REJECTED.

25. WHEN THE PROJECT REQUIREMENTS REQUIRE THAT THE INSTALLATION OF WORK SHALL COMPLY WITH MANUFACTURER'S INSTRUCTIONS, PERFORM THE WORK IN STRICT ACCORDANCE WITH THE MOST CURRENT WRITTEN MANUFACTURER'S INSTRUCTIONS.

26. PRODUCTS AND EQUIPMENT SHALL BE DELIVERED IN UNDAMAGED CONDITION AND STORED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS TO AVOID DISRUPTION OF THE WORK OR DAMAGE TO THE ITEMS. REPLACE DAMAGED OR UNFIT MATERIALS, AT NO ADDITIONAL COST TO OWNER/LANDLORD.

27. NOTIFY THE OWNER/LANDLORD WHEN THE WORK IS SUBSTANTIALLY COMPLETE AND READY FOR INSPECTION. PROVIDE WRITTEN OPERATION AND MAINTENANCE INSTRUCTIONS AND GUARANTEES FOR ALL EQUIPMENT AND MATERIALS INSTALLED. PROVIDE WRITTEN GUARANTEES FOR A PERIOD OF ONE (1) YEAR FROM THE THE DATE OF FINAL ACCEPTANCE OF THE WORK.

28. PROVIDE FINAL CLEAN - UP AND DAMAGE REPAIR AT THE PROJECT CONCLUSION. LEAVE THE PREMISES NEAT, CLEAN AND CLEAR OF TOOLS, EQUIPMENT AND SURPLUS MATERIALS, UNLESS REQUESTED BY THE OWNER/LANDLORD. CLEAN - UP SHALL INCLUDE AND NOT BE LIMITED TO:

29. SUBCONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS CORRESPONDING TO THE LOCATION OF EXISTING ELEMENTS SUCH AS COLUMNS, BEAMS, WALLS, ETC. NEEDED TO CONSTRUCT THIS PROJECT.

30. SUBCONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARCHITECT OF ANY CONFLICTS WITH CONSTRUCTION DOCUMENTS.

31. REMOVE, REPLACE AND/OR MODIFY ALL EXISTING CONSTRUCTION (ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL) AS REQUIRED IN ORDER TO PLACE NEW STRUCTURAL WORK SHOWN ON THE CONSTRUCTION DOCUMENTS.

32. SUBCONTRACTOR SHALL DESIGN AND PROVIDE ALL SHORING REQUIRED TO SUPPORT EXISTING CONSTRUCTION AND NEW CONSTRUCTION AS REQUIRED TO BUILD THIS PROJECT.

33. IT SHALL BE THE SUBCONTRACTOR'S SOLE RESPONSIBILITY TO RECEIVE, CHECK AND CONFIRM THE ARRIVAL IN GOOD ORDER ALL ITEMS CALLED FOR TO BE FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. THE SUBCONTRACTOR SHALL NOTIFY BRIOHN BUILDING CORP. AND OWNER IN WRITING OF ANY SUCH ITEMS MISSING OR DAMAGED WITHIN 3 DAYS OF RECEIVING DATE. FAILURE TO SO NOTIFY THE BRIOHN BUILDING CORP. AND OWNER WILL BE CONSIDERED PROOF THE PROPER QUANTITIES WERE DELIVERED AND IN GOOD CONDITION, AND IT SHALL BE THE SUBCONTRACTOR'S RESPONSIBILITY (AT SUBCONTRACTOR'S OWN COST) TO PROMPTLY REORDER, REPLACE AND OR REPAIR ANY SUCH ITEMS NEEDED FOR THE PROPER COMPLETION OF THIS PROJECT, ON THE AGREED DATE OF COMPLETION.

34. THE APPLICATION OF A MATERIAL AND OR EQUIPMENT ITEM BY A SUBCONTRACTOR TO UNSATISFACTORY WORK INSTALLED BY OTHERS, CONSTITUTES ACCEPTANCE OF THAT WORK AND ASSUMPTION OF FULL RESPONSIBILITY. PRIOR TO STARTING THE SPECIFIC APPLICATION, NOTIFY BRIOHN BUILDING CORP. IN WRITING OF ANY DEFECT OR DEFICIENCY WHICH WOULD IMPAIR COMPLETE AND SATISFACTORY APPLICATIONS OR INSTALLATION OF SUBCONTRACTOR'S WORK INCLUDING GUARANTEE.

35. WHERE INSTALLATION INCLUDE MANUFACTURED PRODUCTS, COMPLY WITH MANUFACTURER'S APPLICABLE INSTRUCTIONS AND RECOMMENDATIONS FOR INSTALLATION, TO THE EXTENT THESE ARE MORE EXPLICIT OR MORE STRINGENT THAN REQUIREMENTS INDICATED IN THE CONTRACT DOCUMENTS.

36. PROVIDE ATTACHMENT AND CONNECTION DEVISES AND METHODS FOR SECURING WORK PROPERLY AS IT IS INSTALLED; TRUE TO LINE AND LEVEL, AND WITHIN RECOGNIZED INDUSTRY TOLERANCES UNLESS OTHERWISE NOTED. ALLOW FOR EXPANSION AND BUILDING MOVEMENT.

37. PROVIDE UNIFORM JOINT WIDTHS IN EXPOSED WORK, ORGANIZED FOR BEST POSSIBLE VISUAL EFFECT. REFER QUESTIONABLE VISUAL-EFFECT CHOICES TO ARCHITECT AND GENERAL CONTRACTOR FOR A FINAL DECISION. RECHECK MEASUREMENTS AND DIMENSIONS OF THE WORK, AS AN INTEGRAL STEP OF STARTING EACH INSTALLATION.

38. MOUNTING HEIGHTS: WHERE MOUNTING HEIGHTS ARE NOT INDICATED, MOUNT INDIVIDUALUNITS OF WORK AT INDUSTRY RECOGNIZED STANDARD MOUNTING HEIGHTS FOR APPLICATIONS INDICATED. REFER QUESTIONABLE MOUNTING HEIGHT CHOICES TO ARCHITECT AND GENERAL CONTRACTOR FOR FINAL DECISION.

39. PROVIDE AND COMPLETE ALL PRELIMINARY WORK AND TEMPORARY CONSTRUCTION REQUIRED AS INDICATED AND REQUIRED. INSTALL TEMPORARY BARRICADE AS REQUIRED BY LOCAL OFFICIALS IN MANNER STIPULATED BY SAME.

40. INSTALLATION OF ANY COMBUSTIBLE MATERIALS ABOVE FINISHED CEILINGS OR IN ANY OTHER CONCEALED, NON-SPRINKLERED SPACE IS STRICTLY PROHIBITED.

41. IMPOSING ANY STRUCTURAL LOAD, TEMPORARY OR PERMANENT ON ANY PART OF THE EXISTING OR PROPOSED STRUCTURE WITHOUT ARCHITECT AND STRUCTURAL ENGINEER'S APPROVAL IS STRICTLY PROHIBITED.

42. CUTTING ANY HOLE IN EXISTING OR PROPOSED FLOOR SLABS, WALLS, COLUMNS, BEAMS OR ROOF WITHOUT PROPER APPROVAL BY ARCHITECT AND STRUCTURAL ENGINEER AND NOT IN ACCORDANCE WITH INSTRUCTIONS HEREIN AND PROPER CONSTRUCTION PROCEDURES IS STRICTLY PROHIBITED.

42. ATTACHING ANY WORK TO METAL DECK OR HANGING WORK FROM PLUMBING AND SPRINKLER PIPING OR CONDUIT IS STRICTLY PROHIBITED.

SITE WORK

WATER DISTRIBUTION

PART 1 GENERAL
1.1 SUMMARY
A. THIS SECTION INCLUDES WATER-DISTRIBUTION PIPING AND RELATED COMPONENTS OUTSIDE THE BUILDING FOR COMBINED WATER SERVICE AND FIRE-SERVICE.
B. UTILITY-FURNISHED PRODUCTS INCLUDE WATER METERS THAT WILL BE FURNISHED TO THE SITE. C. RELATED SECTIONS:
1. EARTHWORK

1.2 REFERENCES
A. STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
B. MILWAUKEE WATER WORKS RULES AND REGULATIONS GOVERNING WATER SERVICE AND WATER SERVICE PIPING
SPECIFICATIONS, LATEST EDITION.

1.3 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.

1.4 QUALITY ASSURANCE
A. REGULATORY REQUIREMENTS:
1. COMPLY WITH REQUIREMENTS OF MILWAUKEE WATER WORKS.
2. COMPLY WITH STANDARDS OF AUTHORITIES HAVING JURISDICTION FOR POTABLE-WATER-SERVICE PIPING, INCLUDING MATERIALS, INSTALLATION, TESTING, AND DISINFECTION.
3. COMPLY WITH STANDARDS OF AUTHORITIES HAVING JURISDICTION FOR FIRE-SUPPRESSION WATER- SERVICE PIPING, INCLUDING MATERIALS, HOSE THREADS, INSTALLATION, AND TESTING.

1.5 PROJECT CONDITIONS
A. INTERRUPTION OF EXISTING WATER-DISTRIBUTION SERVICE: DO NOT INTERRUPT SERVICE TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY WATER-DISTRIBUTION SERVICE ACCORDING TO REQUIREMENTS INDICATED:
1. NOTIFY ARCHITECT AND OWNER NO FEWER THAN FIVE (5) DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF SERVICE.
2. DO NOT PROCEED WITH INTERRUPTION OF WATER-DISTRIBUTION SERVICE WITHOUT ARCHITECT'S AND
OWNER'S WRITTEN PERMISSION.

1.6 COORDINATION
A. COORDINATE CONNECTION TO WATER MAIN WITH MILWAUKEE WATER UTILITY.

PART 2 PRODUCTS

2.1 PIPE AND FITTINGS
A. DUCTILE-IRON PIPE WITH PUSH-ON RUBBER GASKETS JOINTS: CONFORM TO AWWA C151/A21.51-96 AND MILWAUKEE WATER WORKS WATER SERVICE PIPING SPECIFICATIONS.

2.2 CORPORATION VALVES AND CURB VALVES
A. CONFORM TO MILWAUKEE WATER WORKS WATER SERVICE PIPING SPECIFICATIONS.

2.3 WATER METERS
A. WATER METERS WILL BE FURNISHED BY UTILITY COMPANY.

PART 3 EXECUTION

3.1 EARTHWORK
A. REFER TO DIVISION 2 SECTION "EARTHWORK" FOR EXCAVATING, TRENCHING, AND BACKFILLING.

3.2 PIPING INSTALLATION
A. WATER-MAIN CONNECTION: TAP WATER MAIN ACCORDING TO REQUIREMENTS OF WATER UTILITY COMPANY AND OF SIZE AND IN LOCATION INDICATED.
B. INSTALL DUCTILE-IRON, WATER-SERVICE PIPING ACCORDING TO AWWA C600 AND AWWA M41 AND IN ACCORDANCE WITH MILWAUKEE WATER WORKS WATER SERVICE PIPING SPECIFICATIONS.

3.3 JOINT CONSTRUCTION
A. MAKE PIPE JOINTS ACCORDING TO THE FOLLOWING:.
1. DUCTILE-IRON PIPING, GASKETED JOINTS FOR WATER-SERVICE PIPING: AWA C600 AND AWWA M41 AND MILWAUKEE WATER WORKS WATER SERVICE PIPING SPECIFICATIONS.

3.4 VALVE INSTALLATION
A. IN ACCORDANCE WITH MILWAUKEE WATER WORKS WATER SERVICE PIPING SPECIFICATIONS.

3.5 FIELD QUALITY CONTROL
A. ARRANGE INSPECTION AND TESTING OF WATER SERVICE PIPING WITH MILWAUKEE WATER WORKS AND CITY OF MILWAUKEE DEPARTMENT OF NEIGHBORHOOD SERVICES PLUMBING INSPECTION. CONDUCT INSPECTION AND TESTING BEFORE JOINTS ARE COVERED.

3.6 CLEANING/DISINFECTION
A. CLEAN AND DISINFECT WATER SERVICE PIPING IN ACCORDANCE WITH DCOMM CHAPTER 82.40(8)(I) AND
MILWAUKEE WATER WORKS REQUIREMENTS.

SANITARY SEWERAGE

PART 1 GENERAL

1.1 SUMMARY
A. THIS SECTION INCLUDES GRAVITY-FLOW, NONPRESSURE SANITARY SEWERAGE OUTSIDE THE BUILDING, WITH THE FOLLOWING COMPONENTS:
1. CLEANOUTS.
2. PRECAST CONCRETE MANHOLES.
B. RELATED SECTIONS
1. SECTION 31 20 00 EARTHWORK

1.2 REFERENCES
A. STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION
B. WISCONSIN DEPARTMENT OF COMMERCE PLUMBING CODE DCOMM CHAPTERS 82 – 85.

1.3 SUBMITTALS
A. SHOP DRAWINGS: FOR MANHOLES. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND FRAMES AND COVERS.
B. PRODUCT DATA: FORE EACH TYPE OF PRODUCT INDICATED.

PART 2 PRODUCTS

2.1 PIPING MATERIALS
A. PVC SEWER PIPE AND FITTINGS, ASTM D 3034, [SDR 35] , WITH BELL-AND-SPIGOT ENDS FOR GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.

2.2 NONPRESSURE-TYPE PIPE COUPLINGS
A. COMPLY WITH ASTM C 1173, ELASTOMERIC, SLEEVE-TYPE, REDUCING OR TRANSITION COUPLING, FOR JOINING UNDERGROUND NONPRESSURE PIPING. INCLUDE ENDS OF SAME SIZES AS PIPING TO BE JOINED AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.

B. SLEEVE MATERIALS:
1. FOR PLASTIC PIPES: ASTM F 477, ELASTOMERIC SEAL OR ASTM D 5926, PVC.
2. FOR DISSIMILAR PIPES: ASTM D 5926, PVC OR OTHER MATERIAL COMPATIBLE WITH PIPE MATERIALS BEING JOINED.
C. UNSHIELDED, FLEXIBLE COUPLINGS: ELASTOMERIC SLEEVE WITH STAINLESS-STEEL SHEAR RING AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
1. MANUFACTURERS:
A. DALLAS SPECIALTY & MFG. CO. B. FERNCO INC.
C. LOGAN CLAY PRODUCTS COMPANY (THE).
D. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC. E. NDS INC.
F. PLASTIC ODDITIES, INC.
G. SHIELDED, FLEXIBLE COUPLINGS: ASTM C 1460, ELASTOMERIC OR RUBBER SLEEVE WITH FULL-LENGTH, CORROSION-RESISTANT OUTER SHIELD AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
1. MANUFACTURERS:
A. CASCADE WATERWORKS MFG.
B. DALLAS SPECIALTY & MFG. CO.
C. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.
E. RING-TYPE, FLEXIBLE COUPLINGS: ELASTOMERIC COMPRESSION SEAL WITH DIMENSIONS TO FIT INSIDE BELL OF LARGER PIPE AND FOR SPIGOT OF SMALLER PIPE TO FIT INSIDE RING.
1. MANUFACTURERS:
A. FERNCO INC.
B. LOGAN CLAY PRODUCTS COMPANY (THE).
C. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.

2.3 CLEANOUTS
A. CLEANOUTS: IN ACCORDANCE WITH DEPARTMENT OF COMMERCE CODE CHAPTER 82.35.

2.4 MANHOLES
A. STANDARD PRECAST CONCRETE MANHOLES: CONFORM TO ASTM C478 AND SECTION 8.39.0 AND FILE NO. 12 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
B. MANHOLE STEPS: CONFORM TO SECTION 8.40.0 AND FILE NO. 15 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.

PART 3 EXECUTION

3.1 PIPING APPLICATIONS
A. PIPE COUPLINGS AND FITTINGS WITH PRESSURE RATINGS AT LEAST EQUAL TO PIPING RATING MAY BE USED IN APPLICATIONS BELOW, UNLESS OTHERWISE INDICATED.
1. USE NONPRESSURE-TYPE FLEXIBLE COUPLINGS WHERE REQUIRED TO JOIN GRAVITY-FLOW, NONPRESSURE SEWER PIPING, UNLESS OTHERWISE INDICATED.
A. UNSHIELDED FLEXIBLE COUPLINGS FOR SAME OR MINOR DIFFERENCE OD PIPES.
B. UNSHIELDED, INCREASER/REDUCER-PATTERN, FLEXIBLE COUPLINGS FOR PIPES WITH DIFFERENT OD.
C. RING-TYPE FLEXIBLE COUPLINGS FOR PIPING OF DIFFERENT SIZES WHERE ANNULAR SPACE BETWEEN SMALLER PIPING'S OD AND LARGER PIPING'S ID PERMITS INSTALLATION.

3.2 PIPING INSTALLATION
A. GENERAL LOCATIONS AND ARRANGEMENTS: DRAWING PLANS AND DETAILS INDICATE GENERAL LOCATION AND ARRANGEMENT OF UNDERGROUND SANITARY SEWERAGE PIPING. LOCATION AND ARRANGEMENT OF PIPING LAYOUT TAKE DESIGN CONSIDERATIONS INTO ACCOUNT. INSTALL PIPING AS INDICATED, TO EXTENT PRACTICAL. WHERE SPECIFIC INSTALLATION IS NOT INDICATED, FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS.
B. INSTALL IN ACCORDANCE WITH CHAPTER 3.2.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER
CONSTRUCTION IN WISCONSIN, LATEST EDITION.
C. INSTALL PROPER SIZE INCREASERS, REDUCERS, AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. REDUCING SIZE OF PIPING IN DIRECTION OF FLOW IS PROHIBITED.
D. USE CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
E. CLEAR INTERIOR OF PIPING AND MANHOLES OF DIRT AND SUPERFLUOUS MATERIAL AS WORK PROGRESSES.
MAINTAIN SWAB OR DRAG IN PIPING, AND PULL PAST EACH JOINT AS IT IS COMPLETED. PLACE PLUG IN END OF INCOMPLETE PIPING AT END OF DAY AND WHEN WORK STOPS.
F. INSTALL TRACER WIRE OVER NON-METALLIC PIPING IN ACCORDANCE WITH DCOMM CH. 82.30(11)(H).

3.3 PIPE JOINT CONSTRUCTION
A. FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS.
B. JOIN GRAVITY-FLOW, NONPRESSURE, DRAINAGE PIPING ACCORDING TO THE FOLLOWING:
1. JOIN PVC SEWER PIPING ACCORDING TO ASTM D 2321 AND ASTM D 3034 FOR ELASTOMERIC- GASKET JOINTS.
2. JOIN DISSIMILAR PIPE MATERIALS WITH NONPRESSURE-TYPE, FLEXIBLE COUPLINGS.

3.4 MANHOLE INSTALLATION
A. SET MANHOLE RIMS TO ELEVATIONS INDICATED.
B. INSTALL IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.

3.5 CLEANOUT INSTALLATION
A. INSTALL CLEANOUTS AND RISER EXTENSIONS FROM SEWER PIPES TO CLEANOUTS AT GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE.
1. USE LIGHT-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT-TRAFFIC AREAS.
2. USE MEDIUM-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT-TRAFFIC AREAS.
3. USE HEAVY-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICLE-TRAFFIC SERVICE AREAS.
4. USE EXTRA-HEAVY-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN [ROADS] <INSERT OTHER>.
B. SET CLEANOUT FRAMES AND COVERS IN EARTH IN CAST-IN-PLACE-CONCRETE BLOCK, 18 BY 18 BY 12 INCHES DEEP. SET WITH TOPS 1 INCH ABOVE SURROUNDING GRADE.
C. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT WITH TOPS FLUSH WITH PAVEMENT SURFACE.

SITE WORK CONTINUED

3.6 FIELD QUALITY CONTROL
A. INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED.
INSPECT AFTER APPROXIMATELY 24 INCHES OF BACKFILL IS IN PLACE, AND AGAIN AT COMPLETION OF PROJECT.
1. DEFECTS REQUIRING CORRECTION INCLUDE THE FOLLOWING:
A. ALIGNMENT: LESS THAN FULL DIAMETER OF INSIDE OF PIPE IS VISIBLE BETWEEN STRUCTURES.
B. DEFLECTION: FLEXIBLE PIPING WITH DEFLECTION THAT PREVENTS PASSAGE OF BALL OR CYLINDER OF SIZE NOT LESS THAN 92.5 PERCENT OF PIPING DIAMETER.
C. CRUSHED, BROKEN, CRACKED, OR OTHERWISE DAMAGED PIPING.
D. INFILTRATION: WATER LEAKAGE INTO PIPING.
E. EXFILTRATION: WATER LEAKAGE FROM OR AROUND PIPING.
1. REPLACE DEFECTIVE PIPING USING NEW MATERIALS, AND REPEAT INSPECTIONS UNTIL DEFECTS ARE WITHIN ALLOWANCES SPECIFIED.
2. REINSPECT AND REPEAT PROCEDURE UNTIL RESULTS ARE SATISFACTORY.
F. TEST NEW SANITARY BUILDING SEWER IN ACCORDANCE WITH SECTION 5.4.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
1. DO NOT ENCLOSE, COVER, OR PUT INTO SERVICE BEFORE INSPECTION AND APPROVAL.
2. SCHEDULE TESTS AND INSPECTIONS BY AUTHORITIES HAVING JURISDICTION WITH AT LEAST 24 HOURS' ADVANCE NOTICE.
3. SUBMIT SEPARATE REPORT FOR EACH TEST.
4. LEAKS AND LOSS IN TEST PRESSURE CONSTITUTE DEFECTS THAT MUST BE REPAIRED.
5. REPLACE LEAKING PIPING USING NEW MATERIALS, AND REPEAT TESTING UNTIL LEAKAGE IS WITHIN ALLOWANCES SPECIFIED.

SITE CLEARING

PART 1 GENERAL

1.1 SUMMARY
A. THIS SECTION INCLUDES THE FOLLOWING:
1. REMOVING EXISTING TREES, SHRUBS, GROUNDCOVERS, PLANTS, AND GRASS.
2. CLEARING AND GRUBBING.
3. STRIPPING AND STOCKPILING TOPSOIL.
4. REMOVING ABOVE- AND BELOW-GRADE SITE IMPROVEMENTS.
5. DISCONNECTING AND CAPPING OR SEALING SITE UTILITIES.
6. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES.

1.2 MATERIAL OWNERSHIP
A. EXCEPT FOR STRIPPED TOPSOIL OR OTHER MATERIALS INDICATED TO REMAIN OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM PROJECT SITE.

1.3 PROJECT CONDITIONS
A. TRAFFIC: MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE-CLEARING OPERATIONS.
1. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION.
2. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
B. SALVABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS INDICATED TO BE SALVAGED AND STORE ON OWNER'S PREMISES WHERE INDICATED.
C. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE SITE CLEARING.
D. DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.

PART 2 PRODUCTS

2.1 SOIL MATERIALS
A. SATISFACTORY SOIL MATERIALS: REQUIREMENTS FOR SATISFACTORY SOIL MATERIALS ARE SPECIFIED IN SECTION "EARTHWORK."
1. OBTAIN APPROVED BORROW SOIL MATERIALS OFF-SITE WHEN SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE.

PART 3 EXECUTION

3.1 PREPARATION
A. PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.
B. LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED.
C. PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION.
1. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL
A. CONTRACTOR SHALL OBTAIN EROSION CONTROL PERMIT FROM CITY OF MILWAUKEE PRIOR TO ANY LAND DISTURBANCE.
B. PROVIDE TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS, ACCORDING TO SITE EROSION CONTROL PLAN, AND CITY OF MILWAUKEE EROSION CONTROL PERMIT.
C. INSPECT, REPAIR, AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.
D. REMOVE EROSION AND SEDIMENTATION CONTROLS AND RESTORE AND STABILIZE AREAS DISTURBED DURING REMOVAL.

3.3 UTILITIES
A. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED.
1. ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.
B. EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES ACCORDING TO REQUIREMENTS INDICATED:
1. NOTIFY ARCHITECT NOT LESS THAN TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.
2. DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT ARCHITECT'S WRITTEN PERMISSION.
C. REMOVAL OF UNDERGROUND UTILITIES IS INCLUDED IN DIVISION 2 SECTIONS COVERING SITE UTILITIES.

3.4 CLEARING AND GRUBBING
A. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED.
1. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES (200 MM), AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

3.5 TOPSOIL STRIPPING
A. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.
B. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.
C. STOCKPILE TOPSOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.

3.6 SITE IMPROVEMENTS
A. REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION.

3.7 DISPOSAL
A. DISPOSAL: REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
1. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NONRECYCLABLE MATERIALS. STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

EARTHWORK

PART 1 GENERAL

1.1 RELATED DOCUMENTS
A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2 SUMMARY
A. THIS SECTION INCLUDES THE FOLLOWING:
1. PREPARING SUBGRADES FOR SLABS-ON-GRADE, WALKS, PAVEMENTS, LAWNS AND GRASSES AND EXTERIOR PLANTS.
2. EXCAVATING AND BACKFILLING FOR BUILDINGS AND STRUCTURES.
3. DRAINAGE COURSE FOR SLABS-ON-GRADE.
4. BASE COURSE FOR CONCRETE WALKS, PAVEMENTS.
5. BASE COURSE FOR ASPHALT PAVING.
6. EXCAVATING AND BACKFILLING FOR UTILITY TRENCHES.
B. RELATED SECTIONS INCLUDE THE FOLLOWING:
1. DIVISION 1 SECTION "TEMPORARY FACILITIES AND CONTROLS" FOR TEMPORARY CONTROLS, UTILITIES, AND SUPPORT FACILITIES.
2. SECTION "SITE CLEARING" FOR TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES, SITE STRIPPING, GRUBBING, STRIPPING AND STOCKPILING TOPSOIL, AND REMOVAL OF ABOVE- AND BELOW- GRADE IMPROVEMENTS AND UTILITIES.

1.3 REFERENCES
A. STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION
B. STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
C. PRELOADING COMPLETION REPORT, NORTH REGION OF BLOCK 4 LOT 1 MENOMONEE VALLEY INDUSTRIAL PARK; GESTRA ENGINEERING; JUNE 30, 2011
D. GEOTECHNICAL RECOMMENDATIONS REVIEW, PROPOSED INDUSTRIAL DEVELOPMENT, NORTHERN HALF BLOCK 4 LOT 1 (MVBP); GESTRA ENGINEERING; JULY 22, 2013

1.4 DEFINITIONS
A. BACKFILL: SOIL MATERIAL USED TO FILL AN EXCAVATION.
B. BASE COURSE: COURSE PLACED BETWEEN THE PREPARED SUBGRADE AND HOT-MIX ASPHALT PAVING OR CEMENT CONCRETE PAVEMENT, SIDEWALK OR CURB AND GUTTER.
C. BEDDING COURSE: COURSE PLACED OVER THE EXCAVATED SUBGRADE IN A TRENCH BEFORE LAYING PIPE.
D. BORROW SOIL: SATISFACTORY SOIL IMPORTED FROM OFF-SITE FOR USE AS FILL OR BACKFILL.
E. DRAINAGE COURSE: COURSE SUPPORTING THE SLAB-ON-GRADE THAT ALSO MINIMIZES UPWARD CAPILLARY FLOW OF PORE WATER.
F. EXCAVATION: REMOVAL OF MATERIAL ENCOUNTERED ABOVE SUBGRADE ELEVATIONS AND TO LINES AND DIMENSIONS INDICATED.
1. AUTHORIZED ADDITIONAL EXCAVATION: EXCAVATION BELOW SUBGRADE ELEVATIONS OR BEYOND INDICATED LINES AND DIMENSIONS AS DIRECTED BY ARCHITECT. AUTHORIZED ADDITIONAL EXCAVATION AND REPLACEMENT MATERIAL WILL BE PAID FOR ACCORDING TO CONTRACT PROVISIONS FOR CHANGES IN THE WORK.
2. UNAUTHORIZED EXCAVATION: EXCAVATION BELOW SUBGRADE ELEVATIONS OR BEYOND INDICATED LINES AND DIMENSIONS WITHOUT DIRECTION BY ARCHITECT. UNAUTHORIZED EXCAVATION, AS WELL AS REMEDIAL WORK DIRECTED BY ARCHITECT, SHALL BE WITHOUT ADDITIONAL COMPENSATION.
G. FILL: SOIL MATERIALS USED TO RAISE EXISTING GRADES.
H. PIPE COVER MATERIAL: MATERIAL WHICH IS PLACED IN A TRENCH AROUND AND OVER SEWER OR WATER PIPE ABOVE THE BEDDING COURSE.
I. STRUCTURES: BUILDINGS, FOOTINGS, FOUNDATIONS, RETAINING WALLS, SLABS, TANKS, CURBS, MECHANICAL AND ELECTRICAL APPURTENANCES, OR OTHER MAN-MADE STATIONARY FEATURES CONSTRUCTED ABOVE OR BELOW THE GROUND SURFACE.
J. SUBGRADE: SURFACE OR ELEVATION REMAINING AFTER COMPLETING EXCAVATION, OR TOP SURFACE OF A FILL OR BACKFILL IMMEDIATELY BELOW BASE COURSE, DRAINAGE FILL, OR TOPSOIL MATERIALS.
K. TRENCH BACKFILL: MATERIAL PLACED IN A TRENCH AVOVE THE PIPE COVER MATERIAL FOR SEWER OR WATER PIPE.
L. UTILITIES: ON-SITE UNDERGROUND PIPES, CONDUITS, DUCTS, AND CABLES, AS WELL AS UNDERGROUND SERVICES WITHIN BUILDINGS.

1.5 SUBMITTALS
A. MATERIAL TEST REPORTS: FROM A QUALIFIED TESTING AGENCY INDICATING AND INTERPRETING TEST RESULTS FOR COMPLIANCE OF THE FOLLOWING WITH REQUIREMENTS INDICATED:
1. CLASSIFICATION ACCORDING TO ASTM D 2487 OF EACH ON-SITE AND BORROW SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL.
2. LABORATORY COMPACTION CURVE ACCORDING TO ASTM D 1557 FOR EACH ON-SITE AND BORROW SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL.
B. PREEXCAVATION PHOTOGRAPHS OR VIDEOTAPE: SHOW EXISTING CONDITIONS OF ADJOINING CONSTRUCTION AND SITE IMPROVEMENTS, INCLUDING FINISH SURFACES, THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY EARTHWORK OPERATIONS. SUBMIT BEFORE EARTHWORK BEGINS.

1.6 QUALITY ASSURANCE
A. GEOTECHNICAL TESTING AGENCY QUALIFICATIONS: AN INDEPENDENT TESTING AGENCY QUALIFIED ACCORDING TO ASTM E 329 TO CONDUCT SOIL MATERIALS AND ROCK-DEFINITION TESTING, AS DOCUMENTED ACCORDING TO ASTM D 3740 AND ASTM E 548.

1.7 PROJECT CONDITIONS
A. EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED IN WRITING BY ARCHITECT AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES ACCORDING TO REQUIREMENTS INDICATED.
1. NOTIFY ARCHITECT NOT LESS THAN TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.
2. DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT ARCHITECT'S WRITTEN PERMISSION.
3. CONTACT UTILITY-LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE EXCAVATING.
B. DEMOLISH AND COMPLETELY REMOVE FROM SITE EXISTING UNDERGROUND UTILITIES INDICATED TO BE REMOVED. COORDINATE WITH UTILITY COMPANIES TO SHUT OFF SERVICES IF LINES ARE ACTIVE.

SITE WORK CONTINUED

PART 2 PRODUCTS

2.1 SOIL MATERIALS
A. GENERAL: PROVIDE BORROW SOIL MATERIALS WHEN SUFFICIENT SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE FROM EXCAVATIONS.
B. SATISFACTORY SOILS: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER OR ANY SOIL GROUP OR COMBINATION OF GROUPS APPROVED OF BY THE PROJECT GEOTECHNICAL ENGINEER
C. UNSATISFACTORY SOILS: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT
ACCORDING TO ASTM D 2487 OR A COMBINATION OF THESE GROUPS.
1. UNSATISFACTORY SOILS ALSO INCLUDE SATISFACTORY SOILS NOT MAINTAINED WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.
D. BASE COURSE: SHALL BE 1-1/4" DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.
E. ENGINEERED FILL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; WITH AT LEAST 90 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE.
F. BEDDING COURSE: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND CONFORMING TO THE REQUIREMENTS OF SECTION 8.43.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
G. DRAINAGE COURSE: NARROWLY GRADED MIXTURE OF WASHED,CRUSHED STONE, OR CRUSHED OR UNCRUSHED GRAVEL; ASTM D 448; COARSE-AGGREGATE GRADING SIZE 57; WITH 100 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND 0 TO 5 PERCENT PASSING A NO. 8 SIEVE.
H. PIPE COVER MATERIAL: CONFORM TO SECTION 8.43.3 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
I. TRENCH BACKFILL: CONFORM TO SECTIONS 8.43.4 AND 8.43.5 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. TRENCH BACKFILL BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS SHALL BE GRANULAR BACKFILL. TRENCH BACKFILL BENEATH LANDSCAPE AREAS MAY BE SATISFACTORY SOIL MATERIAL.

PART 3 EXECUTION

3.1 PREPARATION
A. SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE REFERENCED PRELOADING COMPLETION REPORT AND GEOTECHNICAL RECOMMENDATIONS REVIEW OR AS DIRECTED BY THE PROJECT GEOTECHNICAL ENGINEER IN THE FIELD.
B. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTHWORK OPERATIONS.
C. PREPARATION OF SUBGRADE FOR EARTHWORK OPERATIONS INCLUDING REMOVAL OF VEGETATION, TOPSOIL, DEBRIS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE IS SPECIFIED IN DIVISION 2 SECTION "SITE CLEARING."
D. PROTECT AND MAINTAIN EROSION AND SEDIMENTATION CONTROLS, WHICH ARE SPECIFIED IN DIVISION 2 SECTION "SITE CLEARING," DURING EARTHWORK OPERATIONS.
E. PROVIDE PROTECTIVE INSULATING MATERIALS TO PROTECT SUBGRADES AND FOUNDATION SOILS AGAINST FREEZING TEMPERATURES OR FROST.

3.2 DEWATERING
A. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA.
B. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT, AND DAMAGE BY RAIN OR WATER ACCUMULATION.
1. REROUTE SURFACE WATER RUNOFF AWAY FROM EXCAVATED AREAS. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. DO NOT USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES.
2. INSTALL A DEWATERING SYSTEM TO KEEP SUBGRADES DRY AND CONVEY GROUND WATER AWAY FROM EXCAVATIONS. MAINTAIN UNTIL DEWATERING IS NO LONGER REQUIRED.

3.3 EXPLOSIVES
A. EXPLOSIVES: DO NOT USE EXPLOSIVES.

3.4 EXCAVATION, GENERAL
A. UNCLASSIFIED EXCAVATION: EXCAVATE TO SUBGRADE ELEVATIONS REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. UNCLASSIFIED EXCAVATED MATERIALS MAY INCLUDE ROCK, SOIL MATERIALS, AND OBSTRUCTIONS. NO CHANGES IN THE CONTRACT SUM OR THE CONTRACT TIME WILL BE AUTHORIZED FOR ROCK EXCAVATION OR REMOVAL OF OBSTRUCTIONS.
1. IF EXCAVATED MATERIALS INTENDED FOR FILL AND BACKFILL INCLUDE UNSATISFACTORY SOIL MATERIALS AND ROCK, REPLACE WITH SATISFACTORY SOIL MATERIALS.
B. SHORING, SHEETING AND BRACING: SHORE, BRACE OR SLOPE BANKS OF EXCAVATION TO PROTECT WORKWEN, BANKS, ADJACENT PAVING, STRUCTURES, AND UTILITIES TO MEET OSHA REQUIREMENTS. DESIGN OF TEMPORARY SUPPORT OF EXCAVATION IS THE RESPONSIBILITY OF THE CONTRACTOR.

3.5 EXCAVATION FOR STRUCTURES
A. EXCAVATE TO INDICATED ELEVATIONS AND DIMENSIONS WITHIN A TOLERANCE OF PLUS OR MINUS 1 INCH. IF APPLICABLE, EXTEND EXCAVATIONS A SUFFICIENT DISTANCE FROM STRUCTURES FOR PLACING AND REMOVING CONCRETE FORMWORK, FOR INSTALLING SERVICES AND OTHER CONSTRUCTION, AND FOR INSPECTIONS.
1. EXCAVATIONS FOR FOOTINGS AND FOUNDATIONS: DO NOT DISTURB BOTTOM OF EXCAVATION.
EXCAVATE BY HAND TO FINAL GRADE JUST BEFORE PLACING CONCRETE REINFORCEMENT. TRIM BOTTOMS TO REQUIRED LINES AND GRADES TO LEAVE SOLID BASE TO RECEIVE OTHER WORK.
2. PILE FOUNDATIONS: STOP EXCAVATIONS 6 TO 12 INCHES ABOVE BOTTOM OF PILE CAP BEFORE PILES ARE PLACED. AFTER PILES HAVE BEEN DRIVEN, REMOVE LOOSE AND DISPLACED MATERIAL. EXCAVATE TO FINAL GRADE, LEAVING SOLID BASE TO RECEIVE CONCRETE PILE CAPS.
3. EXCAVATION FOR UNDERGROUND TANKS, BASINS, AND MECHANICAL OR ELECTRICAL UTILITY STRUCTURES: EXCAVATE TO ELEVATIONS AND DIMENSIONS INDICATED WITHIN A TOLERANCE OF PLUS OR MINUS 1 INCH. DO NOT DISTURB BOTTOM OF EXCAVATIONS INTENDED AS BEARING SURFACES.

3.6 EXCAVATION FOR WALKS AND PAVEMENTS
A. EXCAVATE SURFACES UNDER WALKS AND PAVEMENTS TO INDICATED LINES, CROSS SECTIONS, ELEVATIONS, AND SUBGRADES.

3.7 EXCAVATION FOR UTILITY TRENCHES
A. EXCAVATE TRENCHES TO INDICATED GRADIENTS, LINES, DEPTHS, AND ELEVATIONS.
B. TRENCH BOTTOMS: EXCAVATE TRENCHES DEEPER THAN BOTTOM OF PIPE ELEVATION TO ALLOW FOR REQUIRED BEDDING COURSE.
C. CONFORM TO CLASS B COMPACTED SECTION IN ACCORDANCE WITH FILE NO. 4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.

3.8 SUBGRADE INSPECTION
A. PROOF-ROLL SUBGRADE BELOW THE BUILDING SLABS AND PAVEMENTS WITH HEAVY PNEUMATIC-TIRED EQUIPMENT TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES. PROOF ROLL IN PRESENCE OF PROJECT GEOTECHNICAL ENGINEER.
1. COMPLETELY PROOF-ROLL SUBGRADE IN ONE DIRECTION, REPEATING PROOF-ROLLING IN DIRECTION PERPENDICULAR TO FIRST DIRECTION. LIMIT VEHICLE SPEED TO 5 MPH.
2. PROOF-ROLL WITH A 20-TON TRI-AXIAL DUMP TRUCK.
3. EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS, AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY ENGINEER, AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.
B. AUTHORIZED ADDITIONAL EXCAVATION AND REPLACEMENT MATERIAL WILL BE PAID FOR ACCORDING TO CONTRACT PROVISIONS FOR CHANGES IN THE WORK.
C. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES, AS DIRECTED BY ARCHITECT, WITHOUT ADDITIONAL COMPENSATION.

3.9 UNAUTHORIZED EXCAVATION
A. FILL UNAUTHORIZED EXCAVATION UNDER FOUNDATIONS OR WALL FOOTINGS BY EXTENDING BOTTOM ELEVATION OF CONCRETE FOUNDATION OR FOOTING TO EXCAVATION BOTTOM, WITHOUT ALTERING TOP ELEVATION. LEAN CONCRETE FILL, WITH 28-DAY COMPRESSIVE STRENGTH OF 2500 PSI, MAY BE USED WHEN APPROVED BY ARCHITECT.
1. FILL UNAUTHORIZED EXCAVATIONS UNDER OTHER CONSTRUCTION OR UTILITY PIPE AS DIRECTED BY .

3.10 STORAGE OF SOIL MATERIALS
A. STOCKPILE BORROW SOIL MATERIALS AND EXCAVATED SATISFACTORY SOIL MATERIALS WITHOUT INTERMIXING. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.
1. STOCKPILE SOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS. DO NOT STORE WITHIN DRIP LINE OF REMAINING TREES.

3.11 BACKFILL
A. PLACE AND COMPACT BACKFILL IN EXCAVATIONS PROMPTLY, BUT NOT BEFORE COMPLETING THE FOLLOWING:
1. CONSTRUCTION BELOW FINISH GRADE INCLUDING, WHERE APPLICABLE, SUBDRAINAGE, DAMPPROOFING, WATERPROOFING, AND PERIMETER INSULATION.
2. SURVEYING LOCATIONS OF UNDERGROUND UTILITIES FOR RECORD DOCUMENTS.
3. TESTING AND INSPECTING UNDERGROUND UTILITIES.
4. REMOVING CONCRETE FORMWORK.
5. REMOVING TRASH AND DEBRIS.
6. REMOVING TEMPORARY SHORING AND BRACING, AND SHEETING.
7. INSTALLING PERMANENT OR TEMPORARY HORIZONTAL BRACING ON HORIZONTALLY SUPPORTED WALLS.
B. PLACE BACKFILL ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.

3.12 UTILITY TRENCH BACKFILL
A. PLACE BACKFILL ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
B. PLACE AND COMPACT BEDDING COURSE ON TRENCH BOTTOMS AND WHERE INDICATED. SHAPE BEDDING COURSE TO PROVIDE CONTINUOUS SUPPORT FOR BELLS, JOINTS, AND BARRELS OF PIPES AND FOR JOINTS, FITTINGS, AND BODIES OF CONDUITS.
C. CONFORM TO CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH FILE NO. 4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
D. BEDDING PLACEMENT: CONFORM TO SECTION 3.2.6 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
E. BACKFILL PLACEMENT: CONFORM TO SECTION 2.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWERE AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION EXCEPT THAT FLOODING OF GRANULAR TRENCH BACKFILL SHALL NOT BE ALLOWED FOR BACKFILL CONSOLIDATION.
F. INSTALL TRACER WIRE ABOVE NON-METALLIC PIPING IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF COMMERCE CODE SECTION 82.30(11)(H).

3.13 SOIL FILL
A. PLOW, SCARIFY, BENCH, OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SO FILL MATERIAL WILL BOND WITH EXISTING MATERIAL.
B. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS AS FOLLOWS:
1. UNDER GRASS AND PLANTED AREAS, USE SATISFACTORY SOIL MATERIAL.
2. UNDER WALKS AND PAVEMENTS, USE SATISFACTORY SOIL MATERIAL.
3. UNDER STEPS AND RAMPS, USE ENGINEERED FILL.
4. UNDER BUILDING SLABS, USE ENGINEERED FILL.
5. UNDER FOOTINGS AND FOUNDATIONS, USE ENGINEERED FILL.
C. PLACE SOIL FILL ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.

3.14 SOIL MOISTURE CONTROL
A. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL SOIL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT.
1. DO NOT PLACE BACKFILL OR FILL SOIL MATERIAL ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN FROST OR ICE.
2. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY OTHERWISE SATISFACTORY SOIL MATERIAL THAT EXCEEDS OPTIMUM MOISTURE CONTENT BY 2 PERCENT AND IS TOO WET TO COMPACT TO SPECIFIED DRY UNIT WEIGHT.

3.15 COMPACTION OF SOIL BACKFILLS AND FILLS
A. PLACE BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
B. PLACE BACKFILL AND FILL SOIL MATERIALS EVENLY ON ALL SIDES OF STRUCTURES TO REQUIRED ELEVATIONS, AND UNIFORMLY ALONG THE FULL LENGTH OF EACH STRUCTURE.
C. COMPACT SOIL MATERIALS TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 1557:
1. UNDER STRUCTURES, BUILDING SLABS, AND STEPS, SCARIFY AND RECOMPACT TOP 12 INCHES OF EXISTING SUBGRADE AND EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL AT 92 PERCENT.
2. UNDER PAVEMENTS AND WALKWAYS, SCARIFY AND RECOMPACT TOP 6 INCHES BELOW SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL WITHIN THREE FEET OF THE BASE COURSE ELEVATION AT 92 PERCENT.
3. UNDER LAWN OR UNPAVED AREAS, SCARIFY AND RECOMPACT TOP 6 INCHES BELOW SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL AT 85 PERCENT.

SITE WORK CONTINUED

3.16 GRADING
A. GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED.
1. PROVIDE A SMOOTH TRANSITION BETWEEN ADJACENT EXISTING GRADES AND NEW GRADES.
2. CUT OUT SOFT SPOTS, FILL LOW SPOTS, AND TRIM HIGH SPOTS TO COMPLY WITH REQUIRED SURFACE TOLERANCES.
B. SITE GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS WITHIN THE FOLLOWING TOLERANCES:
1. LAWN OR UNPAVED AREAS: PLUS OR MINUS 1 INCH.
2. WALKS: PLUS OR MINUS 1/2 INCH .
3. PAVEMENTS: PLUS OR MINUS 1/2 INCH.
C. GRADING INSIDE BUILDING LINES: FINISH SUBGRADE TO A TOLERANCE OF 1/2 INCH WHEN TESTED WITH A 10- FOOT STRAIGHTEDGE.

3.17 SUBBASE AND BASE COURSES
A. PLACE BASE COURSE ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
B. ON PREPARED SUBGRADE, PLACE BASE COURSE UNDER PAVEMENTS AND WALKS AS FOLLOWS:
1. SHAPE BASE COURSE TO REQUIRED CROWN ELEVATIONS AND CROSS-SLOPE GRADES.
2. COMPACT BASE COURSE AT OPTIMUM MOISTURE CONTENT TO REQUIRED GRADES, LINES, CROSS SECTIONS, AND THICKNESS TO CONFORM TO STANDARD COMPACTION REQUIREMENTS CONTAINED IN SECTION 301.3.4.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.

3.18 DRAINAGE COURSE
A. PLACE DRAINAGE COURSE ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
B. ON PREPARED SUBGRADE, PLACE AND COMPACT DRAINAGE COURSE UNDER CAST-IN-PLACE CONCRETE SLABS- ON-GRADE AS FOLLOWS:
1. INSTALL SUBDRAINAGE GEOTEXTILE ON PREPARED SUBGRADE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, OVERLAPPING SIDES AND ENDS.
2. PLACE DRAINAGE COURSE 6 INCHES OR LESS IN COMPACTED THICKNESS IN A SINGLE LAYER.
3. PLACE DRAINAGE COURSE THAT EXCEEDS 6 INCHES IN COMPACTED THICKNESS IN LAYERS OF EQUAL THICKNESS, WITH NO COMPACTED LAYER MORE THAN 6 INCHES THICK OR LESS THAN 3 INCHES THICK.
4. COMPACT EACH LAYER OF DRAINAGE COURSE TO REQUIRED CROSS SECTIONS AND THICKNESSES TO NOT LESS THAN 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698.

3.19 FIELD QUALITY CONTROL
A. TESTING AGENCY: OWNER WILL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM FIELD QUALITY-CONTROL TESTING.
B. ALLOW TESTING AGENCY TO INSPECT AND TEST SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS.
C. FOOTING SUBGRADE: AT FOOTING SUBGRADES, AT LEAST ONE TEST OF EACH SOIL STRATUM WILL BE PERFORMED TO VERIFY DESIGN BEARING CAPACITIES. SUBSEQUENT VERIFICATION AND APPROVAL OF OTHER FOOTING SUBGRADES MAY BE BASED ON A VISUAL COMPARISON OF SUBGRADE WITH TESTED SUBGRADE WHEN APPROVED BY ARCHITECT.
D. TESTING AGENCY SHALL OBSERVE PROOF ROLLING OF BUILDING AND PAVEMENT SUBGRADES.
E. TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922, AND ASTM D 2937, AS APPLICABLE. TESTS WILL BE PERFORMED AT THE FOLLOWING LOCATIONS AND FREQUENCIES:
1. BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST 1 TEST FOR EVERY 2500 SQ. FT. OR LESS OF BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS.
2. PAVEMENT AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST ONE TEST FOR EVERY 5,000 SQUARE FEET OF PAVEMENT AREA.
3. FOUNDATION WALL BACKFILL: AT EACH COMPACTED BACKFILL LAYER, AT LEAST 1 TEST FOR EACH 100 FEET OR LESS OF WALL LENGTH, BUT NO FEWER THAN 2 TESTS.
4. TRENCH BACKFILL: AT EACH COMPACTED INITIAL AND FINAL BACKFILL LAYER, AT LEAST 1 TEST FOR EACH 150 FEET OR LESS OF TRENCH LENGTH, BUT NO FEWER THAN 2 TESTS.
F. WHEN TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.

3.20 PROTECTION
A. PROTECTING GRADED AREAS: PROTECT NEWLY GRADED AREAS FROM TRAFFIC, FREEZING, AND EROSION. KEEP FREE OF TRASH AND DEBRIS.
B. REPAIR AND REESTABLISH GRADES TO SPECIFIED TOLERANCES WHERE COMPLETED OR PARTIALLY COMPLETED SURFACES BECOME ERODED, RUTTED, SETTLED, OR WHERE THEY LOSE COMPACTION DUE TO SUBSEQUENT CONSTRUCTION OPERATIONS OR WEATHER CONDITIONS.
1. SCARIFY OR REMOVE AND REPLACE SOIL MATERIAL TO DEPTH AS DIRECTED BY ARCHITECT; RESHAPE AND RECOMPACT.
C. WHERE SETTLING OCCURS BEFORE PROJECT CORRECTION PERIOD ELAPSES, REMOVE FINISHED SURFACING, BACKFILL WITH ADDITIONAL SOIL MATERIAL, COMPACT, AND RECONSTRUCT SURFACING.
1. RESTORE APPEARANCE, QUALITY, AND CONDITION OF FINISHED SURFACING TO MATCH ADJACENT WORK, AND ELIMINATE EVIDENCE OF RESTORATION TO GREATEST EXTENT POSSIBLE.

3.21 DISPOSAL OF SURPLUS AND WASTE MATERIALS
A. DISPOSAL: REMOVE SURPLUS SATISFACTORY SOIL AND WASTE MATERIAL, INCLUDING UNSATISFACTORY SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF IT OFF OWNER'S PROPERTY.

HOT-MIX ASPHALT PAVING

PART 1 GENERAL

1.1 SUMMARY
A. THIS SECTION INCLUDES HOT-MIX ASPHALT PAVING.
B.RELATED SECTIONS:
1. SECTION 31 20 00 – EARTHWORK

1.2 REFERENCES
A. STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION).

1.3 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED. INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES.
B. JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
C. MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

1.4 QUALITY ASSURANCE
A. MANUFACTURER QUALIFICATIONS: MANUFACTURER SHALL BE REGISTERED WITH AND APPROVED BY THE DOT OF THE STATE IN WHICH PROJECT IS LOCATED.
B. REGULATORY REQUIREMENTS: COMPLY WITH WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION FOR ASPHALT PAVING WORK.

1.5 PROJECT CONDITIONS
A. ENVIRONMENTAL LIMITATIONS: DO NOT APPLY ASPHALT MATERIALS IF BASE COURSE IS WET OR EXCESSIVELY DAMP OR IF THE FOLLOWING CONDITIONS ARE NOT MET:
1. ASPHALT LOWER LAYER COURSE, TACK COAT, ASPHALT UPPER LAYER COURSE: MINIMUM SURFACE TEMPERATURE OF 36 DEG F AND RISING AT TIME OF PLACEMENT.
B. PAVEMENT-MARKING PAINT: PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES. DO NOT APPLY BELOW THE MINIMUM PAVEMENT TEMPERATURE AS RECOMMENDED BY THE MANUFACTURER.

PART 2 PRODUCTS

2.1 AGGREGATES
A. IN ACCORDANCE WITH SECTION 460.2.2 OF THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.

2.2 ASPHALT MATERIALS
A. IN ACCORDANCE WITH CHAPTER 455 OF THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.

2.3 PAVEMENT MARKING PAINT
A. PROVIDE PAINT FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCTS LIST.
1. COLOR: WHITE

2.4 MIXES
A. HOT-MIX ASPHALT: ASPHALTIC BINDER COURSE AND SURFACE COURSE SHALL BE MIXTURE E-1 COMPLYING WITH THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.

PART 3 EXECUTION

3.1 GENERAL
A. ASPHALT CONCRETE PAVING EQUIPMENT, WEATHER LIMITATIONS, JOB-MIX FORMULA, MIXING, CONSTRUCTION METHODS, COMPACTION, FINISHING, TOLERANCE AND PROTECTION SHALL CONFORM TO THE REQUIREMENTS OF THE APPROPRIATE SECTIONS OF THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.

3.2 SURFACE PREPARATION
A. PROOF-ROLL BASE COURSE USING HEAVY, PNEUMATIC-TIRED ROLLERS TO LOCATE AREAS THAT ARE UNSTABLE OR THAT REQUIRE FURTHER COMPACTION.
B. IMMEDIATELY BEFORE PLACING ASPHALT MATERIALS, REMOVE LOOSE AND DELETERIOUS MATERIAL FROM SUBSTRATE SURFACES. ENSURE THAT PREPARED BASE COURSE IS READY TO RECEIVE PAVING.
1. SWEEP LOOSE GRANULAR PARTICLES FROM SURFACE OF UNBOUND-AGGREGATE BASE COURSE. DO NOT DISLODGE OR DISTURB AGGREGATE EMBEDDED IN COMPACTED SURFACE OF BASE COURSE.

3.3 HOT-MIX ASPHALT PLACING
A. SPREAD AND FINISH ASPHALTIC MIXTURE IN ACCORDANCE WITH SECTION 450.3.2.5 OF THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
B. PROMPTLY CORRECT SURFACE IRREGULARITIES IN PAVING COURSE BEHIND PAVER. USE SUITABLE HAND TOOLS TO REMOVE EXCESS MATERIAL FORMING HIGH SPOTS. FILL DEPRESSIONS WITH HOT-MIX ASPHALT TO PREVENT SEGREGATION OF MIX; USE SUITABLE HAND TOOLS TO SMOOTH SURFACE.

3.4 COMPACTION
A. COMPACT ASPHALTIC PAVEMENT IN ACCORDANCE WITH SECTION 450.3.2.6 OF THE WISDOT STANDARD
SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.
B. PROTECTION: AFTER FINAL ROLLING, DO NOT PERMIT VEHICULAR TRAFFIC ON PAVEMENT UNTIL IT HAS COOLED AND HARDENED.
C. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC UNTIL MIXTURE HAS COOLED ENOUGH NOT TO BECOME MARKED.

3.5 INSTALLATION TOLERANCES
A. THICKNESS: COMPACT EACH COURSE TO PRODUCE THE THICKNESS INDICATED WITHIN THE FOLLOWING TOLERANCES:
1. BASE COURSE: PLUS OR MINUS 1/2 INCH.
2. SURFACE COURSE: PLUS 1/4 INCH, NO MINUS.
B. SURFACE SMOOTHNESS: COMPACT EACH COURSE TO PRODUCE A SURFACE SMOOTHNESS WITHIN THE FOLLOWING TOLERANCES AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED TRANSVERSELY OR LONGITUDINALLY TO PAVED AREAS:
1. LOWER LAYER: 1/4 INCH.
2. UPPER LAYER: 1/8 INCH.
3. REMOVE AND REPLACE ALL HUMPS OR DEPRESSIONS EXCEEDING THE SPECIFIED TOLERANCES

CEMENT CONCRETE PAVEMENT

PART 1 GENERAL

1.1 SUMMARY
A. THIS SECTION INCLUDES EXTERIOR CEMENT CONCRETE PAVEMENT FOR THE FOLLOWING:
1. SITE CURBS AND GUTTERS
2. SITE WALKWAYS
3. PUBLIC SIDEWALK
4. DRIVE APPROACH
5. PUBLIC CURB AND GUTTER
B. RELATED SECTIONS
1. SECTION 31 20 00 EARTHWORK

1.2 REFERENCES
A. WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
B. CITY OF MILWAUKEE STREET CONSTRUCTION SPECIFICATIONS
1.3 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
B. DESIGN MIXTURES: FOR EACH CONCRETE PAVEMENT MIXTURE.

1.4 QUALITY ASSURANCE
A. MANUFACTURER QUALIFICATIONS: MANUFACTURER OF READY-MIXED CONCRETE PRODUCTS WHO COMPLIES WITH ASTM C 94/C 94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT AND APPROVED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
B. ACI PUBLICATIONS: COMPLY WITH ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE," UNLESS MODIFIED BY REQUIREMENTS IN THE CONTRACT DOCUMENTS.
C. MOCKUPS: PROVIDE MOCKUPS OF DECORATIVE STAMPED CONCRETE PAVING NOT LESS THAN 96 INCHES BY
96 INCHES TO DEMONSTRATE SURFACE COLOR, PATTERN, AND TEXTURE.

SITE WORK CONTINUED

PART 2 PRODUCTS

2.1 CONCRETE MATERIALS: ON-SITE WORK
A. CONCRETE GRADE: GRADE A OR GRADE A-2 CONFORMING TO SECTION 501.3.1.3 OF THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
B. AGGREGATES: CONFORM TO SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS. PROVIDE AGGREGATES FROM A SINGLE SOURCE.
C. WATER: ASTM C 94/C 94M AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
D. AIR-ENTRAINING ADMIXTURE: ASTM C 260 AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
E. CHEMICAL ADMIXTURES: PER SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
F. COLOR PIGMENT: ASTM C 979, SYNTHETIC MINERAL-OXIDE PIGMENTS OR COLORED WATER-REDUCING ADMIXTURES; COLOR STABLE, NONFADING, AND RESISTANT TO LIME AND OTHER ALKALIS.
G. CURING MATERIALS
1. IN ACCORDANCE WITH SECTION 415.3.12 OF THE WISDOT STANDARD SPECIFICATIONS.
H. RELATED MATERIALS
1. EXPANSION JOINT MATERIAL: CONFORM TO SECTION 415.2.2 OF THE WISDOT STANDARD
SPECIFICATIONS.
I. CONCRETE MIXTURES
1. GRADE A OR GRADE A2 CONFORMING TO SECTION 501.3.1 OF THE WISDOT STANDARD SPECIFICATIONS.
J. CONCRETE MIXING
1. MEASURE, BATCH, AND MIX CONCRETE MATERIALS AND CONCRETE IN ACCORDANCE WITH SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.

2.2 CONCRETE MATERIALS: PUBLIC RIGHT OF WAY
A. CONFORM TO SECTION 902 OF THE CITY OF MILWAUKEE STREET CONSTRUCTION SPECIFICATIONS

PART 3 EXECUTION

3.1 GENERAL
A. CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS FOR CONCRETE PAVEMENTS FOR ON- SITE WORK
B. CONFORM TO THE CITY OF MILWAUKEE STREET CONSTRUCTION SPECIFICATIONS FOR WORK IN THE PUBLIC RIGHT- OF-WAY.

3.2 EXAMINATION AND PREPARATION
A. PROOF-ROLL PREPARED SUBBASE OR BASE SURFACE BELOW CONCRETE PAVING TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING.
B. REMOVE LOOSE MATERIAL FROM COMPACTED SUBBASE OR BASE SURFACE IMMEDIATELY BEFORE PLACING CONCRETE.

3.3 EDGE FORMS AND SCREED CONSTRUCTION
A. SET, BRACE, AND SECURE EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED GUIDES FOR PAVEMENT TO REQUIRED LINES, GRADES, AND ELEVATIONS. INSTALL FORMS TO ALLOW CONTINUOUS PROGRESS OF WORK AND SO FORMS CAN REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE PLACEMENT.
B. CLEAN FORMS AFTER EACH USE AND COAT WITH FORM-RELEASE AGENT TO ENSURE SEPARATION FROM CONCRETE WITHOUT DAMAGE.

3.4 JOINTS
A. GENERAL: FORM CONSTRUCTION, ISOLATION, AND CONTRACTION JOINTS AND TOOL EDGINGS TRUE TO LINE WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE, UNLESS OTHERWISE INDICATED. CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS FOR ON-SITE WORK. CONFORM TO CITY OF MILWAUKEE STREET CONSTRUCTION SPECIFICATIONS FOR WORK IN THE PUBLIC RIGHT-OF-WAY.
B. CONSTRUCTION JOINTS: SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATIONS OF PAVEMENT AND AT LOCATIONS WHERE PAVEMENT OPERATIONS ARE STOPPED FOR MORE THAN ONE-HALF HOUR UNLESS PAVEMENT TERMINATES AT ISOLATION JOINTS.
C. ISOLATION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT-FILLER STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, WALKS, OTHER FIXED OBJECTS, AND WHERE INDICATED.
D. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS TO MATCH JOINTING OF EXISTING ADJACENT CONCRETE PAVEMENT.
E. EDGING: TOOL EDGES OF PAVEMENT, GUTTERS, CURBS, AND JOINTS IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/4-INCH RADIUS. REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ELIMINATE TOOL MARKS ON CONCRETE SURFACES.

3.5 CURBING
A. COMPLY WITH SECTION 601 OF THE WISDOT STANDARD SPECIFICATIONS FOR ON-SITE WORK.
B. COMPLY WITH SECTION 502 OF THE CITY OF MILWAUKEE STREET CONSTRUCTION SPECIFICATIONS FOR WORK IN THE PUBLIC RIGHT-OF-WAY.

3.6 SIDEWALKS
A. COMPLY WITH SECTION 602 OF THE WISDOT STANDARD SPECIFICATIONS FOR ON-SITE WORK.
B. COMPLY WITH SECTION 503 OF THE CITY OF MILWAUKEE STREET CONSTRUCTION SPECIFICATIONS FOR PUBLIC SIDEWALK CONSTRUCTION.

3.7 DRIVE APPROACH
A. COMPLY WITH SECTION 503 OF THE CITY OF MILWAUKEE STREET CONSTRUCTION SPECIFICATIONS.

3.8 CONCRETE PLACEMENT
A. MOISTEN SUBBASE TO PROVIDE A UNIFORM DAMPENED CONDITION AT TIME CONCRETE IS PLACED.
B. COMPLY WITH ACI 301 REQUIREMENTS AND WISDOT STANDARD SPECIFICATIONS SECTION 501 REQUIREMENTS FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE.

3.9 FINISHING
A. ON-SITE WORK
1. FINISH CURBING IN ACCORDANCE WITH SECTION 601.3.5 OF THE WISDOT STANDARD
SPECIFICATIONS.
2. FINISH SIDEWALK AND PATIO IN ACCORDANCE WITH SECTION 602.3.2.3 OF THE WISDOT STANDARD
SPECIFICATIONS (LIGHT BROOM FINISH).
B. COMPLY WITH CITY OF MILWAUKEE STREET CONSTRUCTION SPECIFICATIONS FOR WORK IN THE PUBLIC RIGHT-OF- WAY.
3.10 STAMPING
A. MAT STAMPING: AFTER FLOATING AND WHILE CONCRETE IS PLASTIC, APPLY MAT-STAMPED FINISH.
1. PIGMENTED POWDER RELEASE AGENT: UNIFORMLY DISTRIBUTE ONTO CONCRETE AT A RATE OF 3 TO 4 LB./100 SQ. FT.
2. LIQUID RELEASE AGENT: APPLY LIQUID RELEASE AGENT TO THE CONCRETE SURFACE AND THE STAMP MAT. UNIFORMLY MIST SURFACE OF CONCRETE AT A RATE OF 5 GAL/1000 SQ. FT.
3. AFTER APPLICATION OF RELEASE AGENT, ACCURATELY ALIGN AND PLACE STAMP MATS IN SEQUENCE.
4. PRODUCE REQUIRED IMPRINT AND PATTERN AND DEPTH OF IMPRINT ON CONCRETE SURFACE. HAND STAMP EDGES AND SURFACES UNABLE TO BE IMPRINTED BY STAMP MATS.
5. REMOVE RESIDUAL RELEASE AGENT ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, BUT NO FEWER THAN THREE DAYS AFTER STAMPING CONCRETE.
B. TOOL STAMPING: AFTER FLOATING AND WHILE CONCRETE IS PLASTIC, APPLY TOOL-STAMPED FINISH.
1. COVER SURFACE WITH POLYETHYLENE FILM, STRETCH TAUT TO REMOVE WRINKLES, LAP SIDES AND ENDS, AND SECURE TO EDGE FORMS. LIGHTLY BROOM SURFACE TO REMOVE AIR BUBBLES.
2. ALIGN AND PLACE STAMP TOOLS IN SEQUENCE AND TAMP INTO CONCRETE TO PRODUCE REQUIRED IMPRINT PATTERN AND DEPTH OF IMPRINT ON CONCRETE SURFACE. HAND STAMP EDGES AND SURFACES UNABLE TO BE IMPRINTED BY STAMP TOOLS.
3. CAREFULLY REMOVE POLYETHYLENE FILM IMMEDIATELY AFTER TOOL STAMPING.
A. ROLLER STAMPING: AFTER FLOATING AND WHILE CONCRETE IS PLASTIC, APPLY ROLLER-STAMPED FINISH.
1. COVER SURFACE WITH POLYETHYLENE FILM, STRETCH TAUT TO REMOVE WRINKLES, LAP SIDES AND ENDS, AND SECURE TO EDGE FORMS. LIGHTLY BROOM SURFACE TO REMOVE AIR BUBBLES.
2. ALIGN ROLLER AND PERFORM ROLLING OPERATION TO PRODUCE REQUIRED IMPRINT PATTERN AND EPTH OF IMPRINT ON CONCRETE SURFACE. HAND STAMP SURFACES INACCESSIBLE TO ROLLER.
3. CAREFULLY REMOVE POLYETHYLENE FILM IMMEDIATELY AFTER ROLLER STAMPING.

3.11 CONCRETE PROTECTION AND CURING
A. ON-SITE WORK
1. PROTECT AND CURE SIDEWALK IN ACCORDANCE WITH SECTION 602.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS.
2. PROTECT AND CURE CURBING IN ACCORDANCE WITH SECTION 601.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
B. COMPLY WITH CITY OF MILWAUKEE STREET CONSTRUCTION SPECIFICATIONS FOR WORK IN THE PUBLIC RIGHT-OF- WAY.

3.12 REPAIRS AND PROTECTION
A. REMOVE AND REPLACE CONCRETE PAVEMENT THAT IS BROKEN, DAMAGED, OR DEFECTIVE OR THAT DOES NOT COMPLY WITH REQUIREMENTS IN THIS SECTION.
B. PROTECT CONCRETE FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVEMENT FOR AT LEAST 7 DAYS AFTER PLACEMENT.
C. MAINTAIN CONCRETE PAVEMENT FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP CONCRETE PAVEMENT NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS.

STORM DRAINAGE

PART 1 GENERAL

1.1 SUMMARY
A. THIS SECTION INCLUDES GRAVITY-FLOW, NONPRESSURE STORM DRAINAGE OUTSIDE THE BUILDING, WITH THE FOLLOWING COMPONENTS:
1. STORM SEWER PIPING
2. PRECAST CONCRETE CATCH BASINS.
B.RELATED SECTIONS:
1. SECTION 31 20 00 EARTHWORK

1.2 REFERENCES
A. STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION
B. WISCONSIN DEPARTMENT OF COMMERCE PLUMBING CODE DCOMM CHAPTERS 82 – 85.

1.3 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
B. SHOP DRAWINGS: FOR CATCH BASINS. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND CATCH BASIN FRAMES AND GRATES.

PART 2 PRODUCTS

2.1 PIPING MATERIALS
A. PVC SEWER PIPE AND FITTINGS: ASTM D 3034, SDR 35, WITH BELL-AND-SPIGOT ENDS WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. JOINTS SHALL CONFORM TO ASTM D-3212.

2.2 NONPRESSURE-TYPE PIPE COUPLINGS
A. COMPLY WITH ASTM C 1173, ELASTOMERIC, SLEEVE-TYPE, REDUCING OR TRANSITION COUPLING, FOR JOINING UNDERGROUND NONPRESSURE PIPING. INCLUDE ENDS OF SAME SIZES AS PIPING TO BE JOINED AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
B. SLEEVE MATERIALS:
1. FOR PLASTIC PIPES: ASTM F 477, ELASTOMERIC SEAL OR ASTM D 5926, PVC.
2. FOR DISSIMILAR PIPES: ASTM D 5926, PVC OR OTHER MATERIAL COMPATIBLE WITH PIPE MATERIALS BEING JOINED.
C. UNSHIELDED FLEXIBLE COUPLINGS: ELASTOMERIC SLEEVE WITH STAINLESS-STEEL SHEAR RING AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
1. MANUFACTURERS:
A. DALLAS SPECIALTY & MFG. CO. B. FERNCO INC.
B. LOGAN CLAY PRODUCTS COMPANY (THE).
C. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC. NDS INC.
D. PLASTIC ODDITIES, INC.
E. SHIELDED FLEXIBLE COUPLINGS: ASTM C 1460, ELASTOMERIC OR RUBBER SLEEVE WITH FULL-LENGTH, CORROSION-RESISTANT OUTER SHIELD AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
1. MANUFACTURERS:
A.CASCADE WATERWORKS MFG.
B. DALLAS SPECIALTY & MFG. CO.
C. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.
D. RING-TYPE FLEXIBLE COUPLINGS: ELASTOMERIC COMPRESSION SEAL WITH DIMENSIONS TO FIT INSIDE BELL OF LARGER PIPE AND FOR SPIGOT OF SMALLER PIPE TO FIT INSIDE RING.
1. MANUFACTURERS:
A. FERNCO INC.
B. LOGAN CLAY PRODUCTS COMPANY (THE).
C. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.

2.3 CLEANOUTS
A. CLEANOUTS SHALL BE IN ACCORDANCE WITH DEPARTMENT OF COMMERCE CODE CHAPTER 82.35.

2.4 CATCH BASINS
A. STANDARD PRECAST CONCRETE CATCH BASINS: CONFORMING TO CHAPTER 3.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION, OF DEPTH INDICATED.
1. BASE SECTION: 12-INCH MINIMUM THICKNESS FOR FLOOR SLAB AND 5-INCH MINIMUM THICKNESS FOR WALLS AND BASE RISER SECTION.
2. TOP SECTION: ECCENTRIC-CONE TYPE.
B. FRAMES AND GRATES: ASTM A-48, CLASS NO. 35B. NEENAH R-2501 WITH TYPE G GRATE OR EQUAL. NEENAH R-3229-A FOR CURB TYPE FRAMES OR EQUAL.

2.5 MANHOLES
A. STANDARD PRECAST REINFORCED CONCRETE MANHOLES: CONFORM TO ASTM C478 AND SECTION 8.39.0 AND FILE NO. 12 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
B. MANHOLE STEPS: CONFORM TO SECTION 8.40.0 AND FILE NO. 15 OF THE STANDARD SPECIFICATIONS FOR
SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. C. FRAMES AND COVERS: AS INDICATED ON PLANS

2.6 TRENCH DRAIN
A. ACO MODEL S200K, OR EQUAL

SITE WORK CONTINUED

PART 3 EXECUTION

3.1 PIPING APPLICATIONS
A. PIPE COUPLINGS AND FITTINGS WITH PRESSURE RATINGS AT LEAST EQUAL TO PIPING RATING MAY BE USED IN APPLICATIONS BELOW, UNLESS OTHERWISE INDICATED.
1. USE NONPRESSURE-TYPE FLEXIBLE COUPLINGS WHERE REQUIRED TO JOIN GRAVITY-FLOW, NONPRESSURE SEWER PIPING, UNLESS OTHERWISE INDICATED.
A. UNSHIELDED FLEXIBLE COUPLINGS FOR SAME OR MINOR DIFFERENCE OD PIPES.
B. UNSHIELDED, INCREASER/REDUCER-PATTERN, FLEXIBLE COUPLINGS FOR PIPES WITH DIFFERENT OD.
C. RING-TYPE FLEXIBLE COUPLINGS FOR PIPING OF DIFFERENT SIZES WHERE ANNULAR SPACE BETWEEN SMALLER PIPING'S OD AND LARGER PIPING'S ID PERMITS INSTALLATION.

3.2 PIPING INSTALLATION
A.GENERAL LOCATIONS AND ARRANGEMENTS: DRAWING PLANS AND DETAILS INDICATE GENERAL LOCATION AND ARRANGEMENT OF UNDERGROUND STORM DRAINAGE PIPING. LOCATION AND ARRANGEMENT OF PIPING LAYOUT TAKE DESIGN CONSIDERATIONS INTO ACCOUNT. INSTALL PIPING AS INDICATED, TO EXTENT PRACTICAL. WHERE SPECIFIC INSTALLATION IS NOT INDICATED, FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS.
B. INSTALL IN ACCORDANCE WITH CHAPTER 3.2.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER
CONSTRUCTION IN WISCONSIN, LATEST EDITION.
C. INSTALL PROPER SIZE INCREASERS, REDUCERS, AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. REDUCING SIZE OF PIPING IN DIRECTION OF FLOW IS PROHIBITED.
D. USE CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR
SEWER AND WATER CONSTRUCTION IN WISCONSIN.
E. CLEAR INTERIOR OF PIPING AND MANHOLES OF DIRT AND SUPERFLUOUS MATERIAL AS WORK PROGRESSES.
F. INSTALL TRACER WIRE OVER NON-METALLIC PIPING IN ACCORDANCE WITH DCOMM CH. 82.30(11)(H) AND 82.36(7)(D).

3.3 PIPE JOINT CONSTRUCTION
A.BASIC PIPE JOINT CONSTRUCTION IS SPECIFIED IN DIVISION 2 SECTION "PIPED UTILITIES - BASIC MATERIALS AND METHODS." WHERE SPECIFIC JOINT CONSTRUCTION IS NOT INDICATED, FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS.
B. JOIN GRAVITY-FLOW, NONPRESSURE DRAINAGE PIPING ACCORDING TO THE FOLLOWING:
1. JOIN PVC SEWER PIPING ACCORDING TO ASTM D 2321 AND ASTM D 3034 FOR ELASTOMERIC- GASKET JOINTS.
2. JOIN DISSIMILAR PIPE MATERIALS WITH NONPRESSURE-TYPE FLEXIBLE COUPLINGS.

3.4 CLEANOUT INSTALLATION
A. INSTALL CLEANOUTS AND RISER EXTENSIONS FROM SEWER PIPES TO CLEANOUTS AT GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE.
1. USE LIGHT-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT-TRAFFIC AREAS.
2. USE MEDIUM-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT-TRAFFIC AREAS.
3. USE HEAVY-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICLE-TRAFFIC SERVICE] AREAS. B. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT WITH TOPS FLUSH WITH PAVEMENT SURFACE.

3.5 CATCH BASIN INSTALLATION
A. SET FRAMES AND GRATES TO ELEVATIONS INDICATED.
B. INSTALL IN ACCORDANCE WITH CHAPTER 3.6.1 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER
CONSTRUCTION IN WISCONSIN, LATEST EDITION.
C. CATCH BASIN EXCAVATION AND PREPARATION OF SUBGRADE SHALL BE IN ACCORDANCE WITH SECTION 3.5.4(A) AND (B) OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.

3.6 MANHOLE INSTALLATION
A. SET MANHOLE RIMS TO ELEVATIONS INDICATED.
B. INSTALL IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER
CONSTRUCTION IN WISCONSIN, LATEST EDITION.

3.7 FIELD QUALITY CONTROL
A. INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED.
B. CONDUCT DEFLECTION TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SECTION 3.2.6(I)4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
1. REPLACE ANY PIPE SECTION NOT PASSING THE DEFLECTION TEST USING NEW MATERIALS.
2.REINSPECT AND REPEAT PROCEDURE UNTIL RESULTS ARE SATISFACTORY.

BRIOHN
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SHEET TITLE
SPECIFICATIONS

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB:	3239
DRAWN:	CK
CHECKED:	DF
DATE:	MAY 28, 2020

SHEET:
GS.1

CONCRETE

01. ALL CONCRETE, UNLESS OTHERWISE SPECIFIED, SHALL BE READY MIXED IN ACCORDANCE WITH ASTM C94.

02. ALL CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150 TYPE 1 AND SHALL BE THE PRODUCT OF ONE MANUFACTURER, IF POSSIBLE. PLEASE NOTIFY BRIOHN BUILDING CORP. IN WRITING IF NOT POSSIBLE, SO THAT THEY MAY DISCUSS IMPACT WITH THE CUSTOMER. THE TEMPERATURE OF CEMENT DELIVERED TO THE PLANT SHALL NOT EXCEED 150° AT THE TIME OF MIXING.

03. MIX DESIGN TO BE SUBMITTED TO BRIOHN DESIGN GROUP A MINIMUM OF 3 WEEKS PRIOR TO POUR AND APPROVED IN WRITING FOLLOWING PRE-POUR MEETING.

1. CLASS 'C' FLY ASH MAY BE ADDED.
2. 1 ½" STONE TO BE USED IN ALL SLABS THAT ARE MINIMUM 5" THICK.
3. TYPE 'A' WATER REDUCERS ARE PERMITTED.
4. LOW SHRINKAGE CEMENTS ARE PERMITTED.

04. CEMENT CONTENT PER CUBIC YARD SHALL CONFORM TO THE FOLLOWING BASIC REQUIREMENTS:

1. 2,000 PSI = SLURRY CONCRETE (SUBMIT SUPPLIERS MIX DESIGN FOR APPROVAL)
2. 3,000 PSI = 5 BAGS, 470# MIN. CEMENT
3. 3,500 PSI = 5 ½ BAGS, 510# MIN. CEMENT
4. 4,000 PSI =5 ½ BAGS, 550# MIN. CEMENT
5. 4,500 PSI = 6 ½ BAGS 590# MIN. CEMENT
6. 5,000 PSI = 6 ½ BAGS, 630# MIN. CEMENT
7. 3,000 PSI CONCRETE FOR FOOTINGS MAY BE REDI-MIX SUPPLIERS STANDARD FOOTING DESIGN.

05. AGGREGATES SHALL CONFORM TO ASTM C33.

06. ALL WATER SHALL BE CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OIL, ACID, ALKALI, SALT, ORGANIC MATTER, AND OTHER DELETERIOUS SUBSTANCES. IN ALL CASES WATER FROM A MUNICIPAL WATER SOURCE WILL BE ACCEPTABLE.

07. THE USE OF CHEMICAL ADMIXTURES IN CONCRETE SHALL ALWAYS BE SUBJECT TO THE WRITTEN APPROVAL OF BRIOHN DESIGN GROUP, LLC.

08. CURING COMPOUNDS TO CONFORM TO ASTM C309, TYPE 1, MIN. 12%WEIGHT SOLIDS CONTENT, CLEAR SOLVENT TYPE. SONNEBORN KURE 'n SEAL IS ACCEPTABLE.

09. ISOLATION JOINT MATERIAL TO BE POLYETHYLENE FOAM EXPANSION ISOLATION JOINT FILLER OF ½" THICKNESS UNLESS OTHERWISE INDICATED. THE MINIMUM DEPTH OF ISOLATION JOINT MATERIAL TO BE EQUAL TO THE SMALL OF THE CONCRETE SLAB THICKNESS WITH WHICH IT COMES IN CONTACT.

10. VAPOR BARRIER TO BE MOISTOP GRADE 395 AS MANUFACTURED BY FORTIFIBER CORP.

11. USE FIBER MESH REINFORCED CONCRETE OVER PRE CAST DECK UNLESS OTHERWISE INDICATED.

12. MAXIMUM WATER TO CEMENT RATIO TO BE 0.5.

1. ASTM C94 REQUIRES THAT NO WATER FROM THE TRUCK WATER SYSTEM OR ELSEWHERE SHALL BE ADDED, EXCEPT WHEN ON ARRIVAL AT THE JOB SITE, THE SLUMP OF THE CONCRETE IS LESS THAN SPECIFIED.
2. IF WATER IS ADDED, FOLLOW DIRECTIONS OF ASTM C94. ONLY THE INDIVIDUAL AGREED TO AT THE PRE-POUR MEETING HAS AUTHORITY TO ADD WATER AFTER PRODUCT HAS LEFT BATCH PLANT.
3. SUCH ADDITIONAL WATER THAT IS ADDED TO BRING THE SLUMP WITHIN REQUIRED LIMITS SHALL BE INJECTED INTO THE MIXER UNDER CORRECT PRESSURES AND DIRECTION. THE DRUM OR BLADES SHALL BE TURNED AN ADDITIONAL 30 REVOLUTIONS OR MORE IF NECESSARY, AT MIXING SPEED, UNTIL UNIFORMITY OF THE CONCRETE. WATER SHALL NOT BE ADDED TO THE BATCH AT ANY LATER TIME. DISCHARGE OF THE CONCRETE SHALL BE COMPLETED WITHIN 1 ½ HOURS OR BEFORE THE DRUM HAS REVOLVED 300 TIMES, WHICHEVER COMES FIRST. SEE ASTM C94 FOR ADDITIONAL REQUIREMENTS. NO DEVIATION ALLOWED FROM THIS SECTION.

13. SLUMPS SHALL CONFORM TO THE FOLLOWING STANDARDS:

3 ½" = FORMED REINFORCED FOUNDATION WALLS AND FOOTINGS
3 ½" = FORMED PLAIN FOOTINGS AND STRUCTURAL WALLS
5" = EARTH FORM FOUNDATIONS
8" = CAISSONS
3 ½" = BUILDING COLUMNS
3 ½" = PAVEMENTS AND SLABS ON GRADE
3 ½" = STRUCTURAL SLABS
2" = MASS CONCRETE
4" = BOND BEAMS AND LINTELS
5" = METAL PANS AND STAIRS AND LANDINGS
9" = HIGH SLUMP CONCRETE FOR FILLING MASONRY PIERS AND PILASTERS

14. TOLERANCES = WHEN SPECIFIED SLUMP IS 3" OR LESS, + OR - ½"

15. TOLERANCES = WHEN SPECIFIED SLUMP IS GREATER THAN 3", + OR - 1"

16. ALL CONCRETE EXPOSED TO FREEZING AND THAWING AND/OR REQUIRED TO BE WATERTIGHT SHALL HAVE AN AIR CONTENT AT THE TIME OF PLACEMENT OF 4.5% TO 7.5%. (CONCRETE TO BE "NON-REACTIVE" CHERT.)

17. ALL STRENGTH TESTS SHALL CONSIST OF FOUR STANDARD CYLINDERS, WITH TESTS AT THREE AND SEVEN DAYS AND TWO TESTS AT 28 DAYS. STRENGTH AT THREE DAYS TO BE MINIMUM 1800 PSI. CONCRETE TEST REPORTS SHALL DIRECTLY STATE WHETHER OR NOT THE TEST RESULTS COMPLY WITH THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS. CONCRETE TEST REPORTS SHALL STATE THE FOLLOWING INFORMATION:

LOCATION ON THE PROJECT WHERE THE CONCRETE IS USED
7 DAY COMPRESSIVE STRENGTH
28 DAY COMPRESSIVE STRENGTH
AIR CONTENT
SLUMP
AMOUNT OF WATER ADDED ON JOB SITE
MIX USED

18. PRIOR TO ALL WORK OF THIS SECTION, CAREFULLY INSPECT THE INSTALLED WORK OF OTHER TRADES AFFECTING CONCRETE PLACEMENT AND VERIFY THAT ALL SUCH WORK IS COMPLETE TO THE POINT WHERE THIS INSTALLATION MAY PROPERLY COMMENCE.

19. VERIFY THAT ALL ITEMS TO BE EMBEDDED IN CONCRETE ARE IN PLACE.

20. VERIFY THAT CONCRETE MAY BE PLACED TO THE LINES AND ELEVATIONS INDICATED ON THE DRAWINGS, WITH ALL REQUIRED CLEARANCE FROM REINFORCEMENT. PROVIDE THE FOLLOWING CLEAR COVER DISTANCES FOR REINFORCEMENT IN CONCRETE:

FOOTINGS - BOTTOM AND SIDES..................3"
FOOTINGS - TOP......................................2"
SLABS - BOTTOM AND SIDES......................1"
SLABS - TOP.. 3/4"
INTERIOR WALLS......................................1"
EXTERIOR WALLS - OUTSIDE FACE................1 1/2"
BEAMS AND GIRDERS..............................1 1/2"
PIERS AND COLUMNS...............................2"

21. CONVEY CONCRETE FROM MIXER TO PLACE OF FINAL DEPOSIT BY METHODS THAT WILL PREVENT SEPARATION AND LOSS OF MATERIAL.

22. DEPOSIT CONCRETE AS NEARLY AS POSSIBLE IN ITS FINAL POSITION TO AVOID SEGREGATION DUE TO RE HANDLING AND FLOWING.

23. PLACE CONCRETE AS DRY AS POSSIBLE CONSISTENT WITH GOOD WORKMANSHIP, NEVER EXCEEDING THE MAXIMUM SPECIFIED SLUMP.

24. PLACE CONCRETE AT SUCH A RATE THAT CONCRETE IS AT ALL TIMES PLASTIC AND FLOWS READILY BETWEEN REINFORCEMENT.

25. WHEN PLACING IS ONCE STARTED, CARRY IT ON AS CONTINUOUS OPERATION UNTIL PLACEMENT OF THE PANEL SECTION IS COMPLETE.

26. DO NOT PLACE A GREATER AREA AT ONE TIME THAN CAN BE PROPERLY FINISHED WITHOUT CRACKING. THIS IS PARTICULARLY IMPORTANT DURING HOT OR DRY WEATHER.

27. THOROUGHLY CONSOLIDATE CONCRETE BY SUITABLE MEANS DURING PLACEMENT, WORKING IT AROUND ALL EMBEDDED FIXTURES AND INTO CORNERS OF THE FORMS. TYPE AND USE OF VIBRATORS SHALL BE IN STRICT CONFORMANCE WITH ACI C309.

28. INSTALL EXPANSION AND CONTROL JOINTS ONLY IN LOCATIONS SHOWN AND AS DETAILED ON THE DRAWINGS.

29. PLACE, CONSOLIDATE, STRIKE OFF AND LEVEL CONCRETE TO THE PROPER ELEVATIONS.

30. AFTER THE CONCRETE HAS STIFFENED SUFFICIENTLY TO PERMIT THE OPERATION AND THE WATER SHEEN HAS DISAPPEARED, THE SURFACE SHALL BE FLOATED AT LEAST TWICE TO A UNIFORM SANDY TEXTURE.

CONCRETE CONTINUED

31. TAKE CARE THAT THE SURFACE OF THE SLAB MEETS THE SCREEDS ACCURATELY AND DOES NOT RISE ABOVE OR FALL BELOW THEM.

32. CAREFULLY PROVIDE SLAB DEPRESSIONS AS REQUIRED FOR THE FINISHES INDICATED ON THE DRAWINGS.

33. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, MAKE ALL SLABS EVEN AND UNIFORM IN APPEARANCE AND IN TRUE PLANES, SO THE DEPRESSIONS BETWEEN HIGH SPOTS DO NOT EXCEED ¼" UNDER A 10' STRAIGHT EDGE, OR Ff30.

34. WHERE FLOOR DRAINS OR FLOOR SLOPES ARE INDICATED, SLOPE SLABS UNIFORMLY TO PROVIDE EVEN FALL FOR DRAINAGE.

35. TROWEL ALL INTERIOR SLABS TO A SMOOTH, HARD FINISH USING STEEL TROWELS.

36. WHERE 'BROOM FINISH' IS INDICATED AND WHERE NO OTHER EXTERIOR SLAB FINISH IS INDICATED, FINISH THE EXPOSED CONCRETE SURFACES BY LIGHTLY COMBING WITH A MEDIUM STIFF BROOM AFTER FLOATING IS COMPLETE.

37. RUBBED SURFACES SHALL BE PROVIDED ON ALL EXPOSED WALLS AND PIERS, IMMEDIATELY AFTER FORMS ARE REMOVED. EXPOSED SURFACES SHALL BE WETTED AND RUBBED WITH CARBORUNDUM BRICK OR OTHER ABRASIVE UNTIL EVEN, SMOOTH, AND UNIFORM IN APPEARANCE.

38. PVC WATER STOPS SHALL BE INSTALLED IN LOCATIONS INDICATED, SUBCONTRACTOR SHALL ATTACH WATER STOPS FIRMLY TO REINFORCEMENT AND/OR FORM WORK TO ENSURE THAT WATER STOP WILL NOT BE DISPLACED OR BENT DURING CONCRETE OPERATIONS.

39. BRIOHN SUPERINTENDENT IS TO BE PRESENT DURING CONCRETE POURS, UNLESS SPECIFIC AUTHORITY IS GRANTED BY BRIOHN TO POUR WITHOUT SUPERINTENDENT PRESENT.

40. THE FOLLOWING CONCRETE FLOOR POUR PROCEDURES SHALL BE USED AS A GUIDE AND AMENDED AS NECESSARY FOR INDIVIDUAL PROJECT NEEDS. A PRE-POUR MEETING IS TO BE HELD WITH REPRESENTATIVES OF THE OWNER, BRIOHN BUILDING CORP., CONCRETE SUBCONTRACTOR, ELECTRICIAN, PLUMBER, TESTING AGENCY, CONCRETE SUPPLIER AND FLOORING CONTRACTOR. THIS MEETING TO BE HELD A MINIMUM OF ONE (1) WEEK PRIOR TO POURING. ACTUAL POUR PROCEDURES WILL BE AGREED TO AT THIS MEETING AND PUT IN WRITING BEFORE POURING BEGINS. THE FOLLOWING PROCEDURE WILL BE FOLLOWED, UNLESS OTHERWISE AGREED TO OR AUTHORIZED AT PRE-POUR MEETING:

41. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY IRREGULARITIES OR DEFECTS IN CONCRETE SLABS (CRACKS, BUMPS, FLOOR CURLING, ETC.) BEFORE ANY FLOOR FINISHES ARE APPLIED.

A. POUR CONCRETE FLOORS ONLY AFTER THE ROOF IS ON.

B. MAKE SURE THERE IS EQUIVALENT TEMPERATURES BETWEEN THE SUB GRADE AND THE AIR TEMPERATURE.

C. IF THE SUB GRADE IS EXTREMELY DRY, IT SHOULD BE WET DOWN PRIOR TO POURING THE CONCRETE TO AVOID RAPID DRYING UNDER SIDE OF SLAB.

D. THE TOP OF SLAB WILL BE COVERED WITH A 6 MIL VISQUEEN AS SOON AS POSSIBLE AFTER FINISHING TO PREVENT RAPID DRYING FOR A MINIMUM OF 7 DAYS.

E. THE CONCRETE SHALL BE POURED PER THIS SPECIFICATION WITH A 3 ½" SLUMP, PLUS OR MINUS 1". BRIOHN BUILDING CORP. HAS THE RIGHT TO TEST ALL LOADS PRIOR TO PLACEMENT.

F. MESH WILL BE FLAT, NOT ROLLED.

G. "DIAMOND" OVER POURS AT COLUMNS TO BE POURED ½" LOW.

H. THE FLOOR WILL BE SAW CUT ON A GRID PER PLANS GETTING ON THE FLOOR AS SOON AS POSSIBLE WITH A SOFT CUT SAW, AFTER IT IS POURED.

I. PUT A HARD TROWEL FINISH IN THIS CONCRETE.

J. KURE-N-SEAL WILL BE APPLIED TO ALL SLABS, INCLUDING A DOUBLE COAT ON ALL SAW CUTS, AS SOON AS POSSIBLE AFTER FINISHING.

K. NO WATER MAY BE ADDED TO CONCRETE ON SITE, UNLESS PRIOR AUTHORITY GRANTED. (SEE SECTION 3.01 A)

L. VERIFY FLOOR DRAINS ARE AT LOW POINT OF FLOOR AND FLOOR PITCHES TOWARDS DRAIN.

REINFORCED CONCRETE

1. WHERE REQUIRED, REMOVE UNSUITABLE EXISTING SOILS BELOW FOOTINGS AND SLABS ON GRADE. PROVIDE ENGINEERED FILL TO RAISE SITE TO ELEVATIONS CALLED FOR ON PLANS. REVIEW SOIL REPORT AND SITE PLAN. FILL MATERIAL SHALL HAVE A MINIMUM 3000 PSF BEARING CAPACITY. FILL MATERIAL SHALL BE APPROVED BY BRIOHN DESIGN GROUP, LLC. PLACEMENT SHALL CONFORM TO SOIL REPORT UNDER THE DIRECTION AND SUPERVISION OF BRIOHN BUILDING CORP.

2. FOOTING EXCAVATIONS MUST EXTEND TO COMPETENT BEARING MATERIAL. BRIOHN BUILDING CORP. TO HIRE A SOILS ENGINEER TO FIELD VERIFY NET ALLOWABLE SOIL BEARING CAPACITY STATED ON THESE CONSTRUCTION DOCUMENTS AND IN GEOTECHNICAL REPORT FOR THIS PROJECT. IF SUITABLE BEARING STRATUM DOES NOT EXIST AT FOOTING ELEVATIONS STATED ON CONSTRUCTION DOCUMENTS, EXCAVATIONS SHALL EXTEND UNTIL SOIL WITH STATED BEARING CAPACITY IS REACHED. PLACE COMPACTED FILL OR SLURRY BELOW FOOTINGS OR EXTEND FOOTINGS DOWN TO SUITABLE BEARING STRATUM. ENGINEERED FILL BELOW SLABS ON GRADE AND FOOTINGS SHALL BE FREE DRAINING GRANULAR MATERIAL COMPACTED TO 95% MODIFIED PROCTOR AND PLACED PER THE SOIL ENGINEERS' RECOMMENDATIONS.

3. ALL BACK FILL AGAINST WALLS TO BE FREE-DRAINING GRANULAR MATERIAL AS APPROVED BY BRIOHN DESIGN GROUP, LLC AND COMPACTED PER SOIL REPORT RECOMMENDATIONS UNDER SUPERVISIONS OF BRIOHN BUILDING CORP.

4. CENTER PIERS AND COLUMN FOOTINGS ON COLUMN CENTERLINES, AND CENTER WALL FOOTINGS ON WALL CENTERLINES, UNLESS NOTED OTHERWISE.

5. FILL OR BACK FILL SHALL EXTEND LATERALLY BEYOND THE EDGE OF BUILDING OR FOUNDATIONS A MINIMUM OF TWO FEET. SLOPES SHOULD NOT EXCEED 1:1 FOR COHESIVE SOILS AND 2(HORIZONTAL):1(VERTICAL) FOR GRANULAR SOILS.

6. SUBCONTRACTOR SHALL PLACE FOUNDATIONS ON UNDISTURBED NON-ORGANIC BEARING SOILS. IF EXCAVATION ACTIVITY LOOSENS BOTTOM OF FOOTING, BASE SHALL BE COMPACTED.

7. SUBCONTRACTOR SHALL FOLLOW ANY AND ALL ADDITIONAL REQUIREMENTS AS SPECIFIED IN SOIL REPORT.

8. ALL EXTERIOR FOOTINGS MUST BEAR AT A MINIMUM DEPTH OF 4'-0" BELOW ADJACENT FINISH EXTERIOR GRADE.

9. DO NOT PLACE ANY FOOTINGS ON FROZEN SUB-GRADE.

10. WHERE NEW FOOTINGS ABUT EXISTING FOOTINGS, STEP THE NEW FOOTING AS REQUIRED TO HAVE NEW BOTTOM OF FOOTING ELEVATION MATCH THE EXISTING BOTTOM OF FOOTING ELEVATION. SUBCONTRACTOR SHALL FIELD VERIFY EXISTING BOTTOM OF FOOTING ELEVATION.

REINFORCED CONCRETE FOUNDATIONS

1. WHERE REQUIRED, REMOVE UNSUITABLE EXISTING SOILS BELOW FOOTINGS AND SLABS ON GRADE. PROVIDE ENGINEERED FILL TO RAISE SITE TO ELEVATIONS CALLED FOR ON PLANS. REVIEW SOIL REPORT AND SITE PLAN. FILL MATERIAL SHALL HAVE A MINIMUM 3000 PSF BEARING CAPACITY. FILL MATERIAL SHALL BE APPROVED BY BRIOHN DESIGN GROUP, LLC. PLACEMENT SHALL CONFORM TO SOIL REPORT UNDER THE DIRECTION AND SUPERVISION OF BRIOHN BUILDING CORP.

2. FOOTING EXCAVATIONS MUST EXTEND TO COMPETENT BEARING MATERIAL. BRIOHN BUILDING CORP. TO HIRE A SOILS ENGINEER TO FIELD VERIFY NET ALLOWABLE SOIL BEARING CAPACITY STATED ON THESE CONSTRUCTION DOCUMENTS AND IN GEOTECHNICAL REPORT FOR THIS PROJECT. IF SUITABLE BEARING STRATUM DOES NOT EXIST AT FOOTING ELEVATIONS STATED ON CONSTRUCTION DOCUMENTS, EXCAVATIONS SHALL EXTEND UNTIL SOIL WITH STATED BEARING CAPACITY IS REACHED. PLACE COMPACTED FILL OR SLURRY BELOW FOOTINGS OR EXTEND FOOTINGS DOWN TO SUITABLE BEARING STRATUM. ENGINEERED FILL BELOW SLABS ON GRADE AND FOOTINGS SHALL BE FREE DRAINING GRANULAR MATERIAL COMPACTED TO 95% MODIFIED PROCTOR AND PLACED PER THE SOIL ENGINEERS' RECOMMENDATIONS.

3. ALL BACK FILL AGAINST WALLS TO BE FREE-DRAINING GRANULAR MATERIAL AS APPROVED BY BRIOHN DESIGN GROUP, LLC AND COMPACTED PER SOIL REPORT RECOMMENDATIONS UNDER SUPERVISIONS OF BRIOHN BUILDING CORP.

4. CENTER PIERS AND COLUMN FOOTINGS ON COLUMN CENTERLINES, AND CENTER WALL FOOTINGS ON WALL CENTERLINES, UNLESS NOTED OTHERWISE.

5. FILL OR BACK FILL SHALL EXTEND LATERALLY BEYOND THE EDGE OF BUILDING OR FOUNDATIONS A MINIMUM OF TWO FEET. SLOPES SHOULD NOT EXCEED 1:1 FOR COHESIVE SOILS AND 2(HORIZONTAL):1(VERTICAL) FOR GRANULAR SOILS.

6. SUBCONTRACTOR SHALL PLACE FOUNDATIONS ON UNDISTURBED NON-ORGANIC BEARING SOILS. IF EXCAVATION ACTIVITY LOOSENS BOTTOM OF FOOTING, BASE SHALL BE COMPACTED.

7. SUBCONTRACTOR SHALL FOLLOW ANY AND ALL ADDITIONAL REQUIREMENTS AS SPECIFIED IN SOIL REPORT.

8. ALL EXTERIOR FOOTINGS MUST BEAR AT A MINIMUM DEPTH OF 4'-0" BELOW ADJACENT FINISH EXTERIOR GRADE.

9. DO NOT PLACE ANY FOOTINGS ON FROZEN SUB-GRADE.

10. WHERE NEW FOOTINGS ABUT EXISTING FOOTINGS, STEP THE NEW FOOTING AS REQUIRED TO HAVE NEW BOTTOM OF FOOTING ELEVATION MATCH THE EXISTING BOTTOM OF FOOTING ELEVATION. SUBCONTRACTOR SHALL FIELD VERIFY EXISTING BOTTOM OF FOOTING ELEVATION.

TILT UP CONCRETE

01. TILT UP DESIGN SHALL CONFORM TO TCI AND ACI STANDARDS. GOVERNING SPECIFICATION FOR TILT UP CONCRETE PANELS TO BE IN ACCORDANCE WITH THE TILT-UP CONCRETE ASSOCIATIONS GUIDELINE SPECIFICATIONS. DESIGN LOADS SHALL CONFORM TO DESIGN LOADS INDICATED IN "DESIGN LOADS" SECTION OF THE PLAN AND APPLICABLE CODES. DESIGN AND CONSTRUCT TILT-UP WALL PANELS TO WITHSTAND CONSTRUCTION LOADS WHICH MAY OCCUR DURING LIFTING, BRACING, AND IMPACT OF ADJOINING PANELS. PERMANENT LOADS SHALL CONFORM TO CODE REQUIREMENTS.

02. THE PROJECT ARCHITECT/ENGINEER HAS NOT BEEN RETAINED TO DESIGN THE WALL PANELS OR THE FLOOR SLAB TO RESIST THE STRESSES CAUSED BY ERECTION OF THE WALL PANELS, NOR TO DETERMINE THE MEANS AND METHODS TO BE USED FOR ERECTION AND BRACING UNTIL PERMANENT BRACING IS IN PLACE.

03. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ERECT THE PANEL IN A MANNER THAT WILL BE BOTH SAFE FOR PERSONNEL AND PROPERTY, AND TO BRACE AND OTHERWISE PROTECT THE PANELS AGAINST WIND AND OTHER FORCES THAT MAY OCCUR DURING CONSTRUCTION AND UNTIL CONNECTIONS TO THE PERMANENT STRUCTURAL SYSTEM ARE COMPLETED.

04. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT A SUITABLE SLAB HAS BEEN PREPARED TO PROVIDE FOR THE LEVEL OF FINISH THAT HAS BEEN ESTABLISHED WITHIN THIS SPECIFICATION.

05. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO COORDINATE THE SLAB FINISHING INCLUDING SAW CUTTING OF ALL JOINTS WITH THE PANEL FORMING TO MINIMIZE THE IMPACT TO THE ARCHITECTURAL FINISH OF THE PANELS.

06. SHOP DRAWINGS
A. DRAWINGS SHALL BE COMPLETE AND INCLUDE PLANS, ELEVATIONS, CROSS SECTIONS AND DETAILS OF ALL BUILDING COMPONENTS AND ACCESSORIES TO BE FURNISHED BY THE TILT UP SUPPLIER.
B. APPROVAL OF SHOP AND ERECTION DRAWINGS IS AN APPROVAL OF GENERAL DESIGN ONLY AND DOES NOT RELIEVE THE TILT UP SUPPLIER FROM THE NECESSITY OF MAKING, WITHOUT COST, CHANGES OR CORRECTIONS DUE TO ERRORS IN FABRICATION, OR RESULTING FROM ERRORS IN SHOP AND/OR ERECTION DRAWING DIMENSIONS.
C. CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND COORDINATE ALL OPENINGS IN TILT UP WITH TILT UP SUPPLIER.
D. ONE TILT UP SUPPLIER WILL BE RESPONSIBLE FOR COORDINATING ENGINEERING, DRAFTING, AND SHOP DRAWING SUBMITTALS IN THE EVENT THAT TILT UP COMPONENTS WILL BE PROVIDED BY MORE THAN ONE SUPPLIER.
E. SUBMIT PRODUCT DATA, SHOP DRAWINGS, AND CONCRETE MIX DESIGNS TO OWNER AND OWNERS CONTRACTED TESTING LABORATORY FOR REVIEW.

07. TILT UP SUPPLIER SHALL INCLUDE ERECTION, GROUTING, SAWING OF OPENINGS AT NEW AND EXISTING TILT UP . TILT UP SUPPLIER SHALL INCLUDE CAULKING OF ALL TILT UP TO TILT UP JOINTS, AND CAULKING OF ALL TILT UP TO OTHER MATERIAL JOINTS AT ALL EXPOSED AREAS. CAULK TO BE "TREMCO DYMERIC 240 FC". PROVIDE "SONNEBORN DEGUSSA NP1" CAULK AT ALL STRANLOK FINISH LOCATIONS IN FOOD PROCESSING FACILITIES, FOOD PREP AND FOOD STORAGE AREAS. PROVIDE "TREMCO DYMERIC 240 FC" AT ALL NON-FINISH INTERIOR AND EXTERIOR LOCATIONS. SEE FLOOR PLAN.

08. FACING CONCRETE SHALL BE DESIGNED FOR MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS INDICATED ON PROJECT DRAWINGS, OR SPECIFIED, AND TESTED ACCORDING TO ASTM C39.

09. THE BOND BREAKER USED ON THE TILT-UP PANELS AND THE CASTING SLAB MUST BE COMPATIBLE WITH ANY COATING SUITABLE FOR INTERIOR AND EXTERIOR CONCRETE PANELS AND SLAB.

10. CONTRACTOR SHALL ENSURE THAT FINISHED FLOOR SLAB DOES NOT SHOW SPALLING, BOLT HOLES, OR OTHER SURFACE DEFECTS AFTER TILT-UP CONSTRUCTION IS COMPLETE. CONTRACTOR SHALL FIGURE ALL COSTS REQUIRED TO PROVIDE OWNER WITH FLOOR SLABS THAT MEET ALL QUALITY REQUIREMENTS STATED WITHIN THIS SPECIFICATION. WASTE SLABS ARE STRONGLY RECOMMENDED.

11. CASTING SLAB SHALL BE CURED. SAW CUTS, CRACKS OR JOINTS IN THE CASTING BED SHALL BE FILLED AND LEVELED WITH A SEALANT SO AS TO MINIMIZE TRANSFER OF THE JOINT LINE TO THE PANEL FACE.

12. SURFACES TO BE PAINTED SHALL BE PREPARED TO RECEIVE PAINT FINISH AS SPECIFIED. ALL EXPOSED EXTERIOR SURFACES SHALL BE SACKED AND GROUTED TO CREATE A SMOOTH HONECOMB-FREE SURFACE TO ACCEPT FINAL PAINT.

13. PANELS DAMAGED DURING ERECTION, CRACKS READILY VISIBLE FROM 40 FEET, PERMANENT BOWING FROM ERECTION, SPALLS AND PANELS WITH INSUFFICIENT TESTED STRENGTH, SHALL BE REPAIRED OR REPLACED IN A MANNER ACCEPTABLE TO OWNER, AT THE CONTRACTORS EXPENSE. ANY DEMOLITION OR REPAIR OF OTHER MATERIALS OR SYSTEMS AS A RESULT OF REPAIR OR REPLACEMENT OF DEFECTIVE CONCRETE SHALL BE AT THE CONTRACTORS EXPENSE.

MASONRY

1. MASONRY CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" ACI AND "SPECIFICATIONS FOR MASONRY STRUCTURES" ACI.

2. BOND BEAMS, PILASTERS, AND LINTELS SHALL BE FILLED WITH CONCRETE HAVING F'c = 3000 PSI UNLESS NOTED OTHERWISE, COARSE AGGREGATE SHALL PEA GRAVEL. REINFORCE ALL CONTINUOUS BOND BEAMS WITH 2-#5, U.N.O. PROVIDE CORNER BARS TO MATCH. THE MINIMUM LENGTH OF LAP FOR BARS EMBEDDED IN CONCRETE SHALL BE 24" FOR #4 BARS, 30" FOR #5 BARS, 36" FOR #6 BARS AND 42" FOR #7 BARS.

3. MASONRY CONTRACTORS TO GROUT COURSE(S) SOLID WHERE EXPANSION ANCHORS ARE SHOWN/CALLED OUT ON DRAWINGS.

4. USE ONLY U-SHAPED LINTEL BLOCK FOR MASONRY LINTELS. CENTERLINE OF REINFORCING TO BE LOCATED 3" MAX FROM BOTTOM OF LINTEL BLOCK.

5. LINTELS SHALL BEAR A MINIMUM OF 8" AT EACH END. THE FIRST COURSE OF MASONRY ABOVE THE LINTEL SHALL BE LAID WITH FULL MORTAR BEDDING. AT BEARING WALLS, GROUT END CELL SOLID TO FLOOR BELOW. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR SPECIAL BOND BEAM AND LINTEL CONDITIONS.

6. FOR STEEL BEAMS BEARING PERPENDICULAR TO MASONRY WALL, GROUT AN AREA OF 4 CELLS WIDE, 4 COURSES DEEP, UNLESS NOTED OTHERWISE.

7. PROVIDE POCKETS IN MASONRY WALLS FOR STEEL BEAMS, JOISTS, GIRDERS AND COLUMN BASE PLATES AND BACK PATCH.

8. WALLS MUST BE BRACED OR TIED INTO FLOORS PRIOR TO BACKFILLING.

9. GROUT PLACEMENT IN REINFORCED MASONRY WALLS OR PIERS SHALL FOLLOW THE PROCEDURES DESCRIBED IN NCMA TEK MANUAL 3-2A FOR EITHER LOW-LIFT OR HIGH-LIFT GROUTING.

10. PROVIDE HORIZONTAL JOINT REINFORCEMENT SUCH AS DUR-O-WALL, 16 INCHES ON CENTER VERTICALLY FOR RUNNING BOND WALLS, AND 8" AND 10" STACK BOND WALLS. FOR 12" STACK BOND WALLS, STANDARD HORIZONTAL JOINT REINFORCEMENT AT 8" ON CENTER OR HEAVY (A = 0.056"MIN) JOINT REINFORCEMENT AT 16" ON CENTER.

11. CONSTRUCTION SHALL BE RUNNING BOND UNLESS OTHERWISE NOTED.

12. REFER TO ARCHITECTURAL DRAWINGS &/OR STRUCTURAL FOUNDATION PLAN FOR LOCATION OF ALL VERTICAL CONTROL JOINTS IN EXTERIOR WALLS. SEE STANDARD CONTROL JOINT DETAIL.

13. CONNECTIONS OF MASONRY VENEERS TO STRUCTURAL BACKUP WALL TO ADHERE TO THE FOLLOWING:

A. MASONRY VENEER ANCHORED TO MASONRY BACKING MAY BE ATTACHED USING WIRE ANCHORS, ADJUSTABLE ANCHORS, OR JOINT REINFORCEMENT. VENEER ANCHORED TO A CONCRETE OR STEEL BACKING MUST BE ATTACHED WITH ADJUSTABLE ANCHORS. VENEER ANCHORED TO WOOD STUDS TO BE ATTACHED WITH MINIMUM 22 GA. CORRUGATED SHEET METAL. ANCHOR SPACING TO BE SPACED AT MAXIMUM 32" HORIZONTALLY & 18" VERTICALLY WITH A MAXIMUM WALL SURFACE SUPPORTED OF 2.67 SQ. FT.

B. AROUND OPENINGS LARGER THAN 16" IN EITHER DIMENSION, SPACE ANCHORS AROUND PERIMETER OF OPENING AT A MAXIMUM OF 3 FT. ON CENTER & PLACE ANCHORS WITHIN 12" OF OPENING.

C. WHEN MASONRY VENEER IS ANCHORED TO WOOD BACKING, ANCHOR TO BE ATTACHED WITH A CORROSION RESISTANT 8d COMMON MAIL, OR A FASTENER EQUIVALENT OR GREATER PULL-OUT VALUE. WHEN VENEER IS ANCHORED TO STEEL BACKING, ATTACH WITH CORROSION-RESISTANT SCREW THAT HAS A MINIMUM NOMINAL SHANK DIAMETER OF 0.19".

D. ALL WALL TIES, ANCHORS, AND CONNECTORS TO CONFORM WITH NCMA TEK MANUALS 3-6B AND 12-1A.

14. TEMPORARY CONSTRUCTION BRACING OF FREESTANDING WALLS IS THE RESPONSIBILITY OF THE SUB-CONTRACTOR. PROCEDURES OUTLINED IN NCMA TEK MANUAL 3-4B TO BE FOLLOWED.

METALS

01. PROVIDE MISCELLANEOUS METAL ITEMS INCLUDING MATERIALS, FABRICATIONS, FASTENINGS AND ACCESSORIES REQUIRED FOR FINISHED INSTALLATION AS INDICATED AND SPECIFIED.

02. WHERE METAL ITEMS ARE TO BE ERECTED AND IN CONTACT WITH DISSIMILAR MATERIALS, PROVIDE CONTACT SURFACES WITH COATING OF AN IMPROVED ZINC CHROMATE PRIMER IN A MANNER TO OBTAIN NOT LESS THAN 1.0 MIL DRY FILM THICKNESS.

03. ALUMINUM EXTRUSIONS SHALL CONFORM TO ASTM B221. PROVIDE A CLEAR ANODIZED FINISH UNLESS OTHERWISE NOTED.

04. FASTENERS SHALL BE AS REQUIRED FOR PROPER ASSEMBLY AND INSTALLATION OF FABRICATED ITEMS.

05. MISCELLANEOUS MATERIALS: PROVIDE INCIDENTAL ACCESSORY MATERIALS, TOOLS, METHODS AND METHODS AND EQUIPMENT REQUIRED FOR FABRICATION AND INSTALLATION OF MISCELLANEOUS METAL ITEMS AS INDICATED ON DRAWINGS.

06. VERIFY DIMENSIONS PRIOR TO FABRICATION OR CASTING. FORM METAL ITEMS TO ACCURATE SIZES AND CONFIGURATIONS AS INDICATED ON DRAWINGS AND OTHERWISE REQUIRED FOR PROPER INSTALLATION.
FABRICATE WITH ALL LINES STRAIGHT AND ANGLES SHARP, CLEAN AND TRUE. DRILL, COUNTERSINK, TAP AND OTHERWISE PREPARE ITEMS FOR CONNECTION WITH WORK OF OTHER TRADES MAKE PERMANENT CONNECTIONS BY WELDING AND GRIND ALL EXPOSED WELDS SMOOTH TO MATCH ADJACENT SURFACES. ROUGH JOINT SURFACES NOT PERMITTED. AVOID USING BOLTS AND SCREWS UNLESS SPECIFICALLY INDICATED OR APPROVED. WHEN USED, DRAW UP TIGHT AND TIE THREADS TO PREVENT LOOSENING.

07. ALL FERROUS METAL ITEMS SHALL BE SHOP FINISHED. TOUCH UP OR REPAIR DAMAGED AREAS PRIOR TO INSTALLATION WITH SAME MATERIAL.

08. PROVIDE ALL STEEL BLOCKING AND BRACING IN METAL STUD FRAMED PARTITIONS NECESSARY FOR A COMPLETE INSTALLATION INCLUDE AS REQUIRED FOR SUPPORT OF ALL WALL-MOUNTED EQUIPMENT AND FABRICATIONS AS INDICATED ON DRAWINGS. PROVIDE SUPPORTS AT JAMBS OF DOORS AND ELSEWHERE, AS REQUIRED.

09. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND SPECIFICATIONS.

METALS: STRUCTURAL STEEL

1. DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL MEMBERS SHALL BE GOVERNED BY THE CURRENT EDITION OF AISC "MANUAL OF STEEL CONSTRUCTION".

2. ALL WELDERS TO BE CERTIFIED. ALL WELDING TO CONFORM TO AWS D1.1 LATEST EDITION USING E70-XX ELECTRODES.

3. BOLTED CONNECTIONS TO BE DOUBLE ANGLE WITH " DIAMETER ASTM A-325 BOLTS UNLESS SHOWN OTHERWISE. USE " DIAMETER A-325 BOLTS FOR SINGLE SHEAR, WING PLATE CONNECTIONS. PROVIDE MAXIMUM NUMBER OF BOLTS IN A SINGLE LINE WITH 3" GAGE. PROVIDE WASHERS FOR ALL ANCHOR BOLTS (ASTM A-307).

4. PROVIDE AND MAINTAIN TEMPORARY BRACING OF STEEL UNTIL SECURELY INCORPORATED INTO CONSTRUCTION SUCH AS SHEAR WALLS, X-BRACING, ETC.

5. STEEL COLUMNS BUILT IN MASONRY SHALL HAVE ADJUSTABLE MASONRY WALL ANCHORS AT 2-0" ON CENTER VERTICALLY EACH SIDE, LOCATED IN COURSING.

6. WIDE FLANGE BEAMS 12" OR DEEPER SHALL HAVE A " STIFFENER PLATE EACH SIDE AT ALL POINTS OF SUPPORT INCLUDING BEARING ENDS ON CONCRETE OR MASONRY. PROVIDE " BEARING PLATES WITH (2) - " ANCHOR BOLTS 12" LONG WITH 3" HOOKS.

7. UNLESS NOTED OTHERWISE, FRAME AROUND ALL ROOF DECK OPENINGS LARGER THAN 12" IN DIAMETER, INCLUDING ROOF DRAINS/SUMPS, WITH 4-L's 3x3x " DOWN-TURNED.

8. ALL STEEL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER (WITHIN THE MILL TOLERANCE) LOCATED ABOVE THE HORIZONTAL CENTERLINE BETWEEN THE END CONNECTIONS.

9. STAIRS, HANDRAILS, AND GUARDRAILS SHALL BE DESIGNED BY THE STEEL SUPPLIER.

10. SUBCONTRACTOR SHALL SUBMIT FIVE SETS OF STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS MUST BE SUBMITTED TO BRIOHN DESIGN GROUP A MINIMUM OF SEVEN WORKING DAYS PRIOR TO FABRICATION DATE NEEDED FOR PROJECT SCHEDULING.

11. ROOF SLOPE TO BE " PER FOOT UNLESS OTHERWISE NOTED, ON CONSTRUCTION DOCUMENTS. ROOF SLOPE IS GENERALLY TO BE ACHIEVED BY SLOPING THE STRUCTURE UNLESS THICKENED OR TAPERED INSULATION IS NOTED ON THE ROOF PLAN. ROOF SLOPE MAY BE " PER FOOT IF A PONDING ANALYSIS IS PERFORMED PROVING STABILITY OF THE ROOF STRUCTURE AGAINST PROGRESSIVE DEFLECTIONS. SEE ASCE 7-05 SECTIONS 7.11 & 8.4. IF DIFFERENCE IN HEIGHT BETWEEN ROOF DRAINS AND HIGH POINT IN ROOF IS GREATER THAN 6", PLUMBING CONTRACTOR TO PROVIDE OVERFLOW DRAINS @ EACH DRAINAGE "FIELD" ON THE ROOF.

METALS: DECK

1. DECK, ACCESSORIES, AND ATTACHMENTS SHALL CONFORM WITH THE CURRENT EDITION OF "STEEL DECK INSTITUTE SPECIFICATIONS".

2. PROVIDE SUPPORT AT COLUMNS AS REQUIRED FOR DECK SUPPORT. PROVIDE L2X2X 3/16" MINIMUM.

3. AT OPENINGS IN DECK LESS THAN 12"X12", PROVIDE A 16 GAUGE COVER PLATE FASTENED TO DECK WITH #12 TEK SCREWS.

4. AT CHANGE IN DECK DIRECTION, PROVIDE A 22 GAUGE X 12" CONTINUOUS PLATE. PROVIDE SAME PLATE AT ALL RIDGES, VALLEYS, AND HIPS BENT TO MATCH PROFILE OF ROOF.

METALS: STEEL JOISTS & JOIST GIRDERS

1. DESIGN, FABRICATION, AND ERECTION SHALL CONFORM TO THE CURRENT EDITION OF "STEEL JOIST INSTITUTE SPECIFICATIONS."

2. JOIST MANUFACTURER SHALL BE A MEMBER OF THE SJI (STEEL JOIST INSTITUTE).

3. SUBCONTRACTOR SHALL SUBMIT FIVE SETS OF STEEL JOIST SHOP DRAWINGS TO BRIOHN DESIGN GROUP FOR APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS MUST BE SUBMITTED TO BRIOHN DESIGN GROUP A MINIMUM OF SEVEN WORKING DAYS PRIOR TO FABRICATION DATE NEEDED FOR PROJECT SCHEDULING.

4. PROVIDE SJI STANDARD BRIDGING AS SHOWN ON THE CONSTRUCTION DOCUMENTS OR AS REQUIRED BY DESIGN.

5. DO NOT DRILL OR CUT THROUGH ANY JOIST OR GIRDER.

6. ALL CONCENTRATED LOADS SHALL BE APPLIED AT A JOIST PANEL POINT UNLESS SPECIFICALLY NOTED OTHERWISE.

7. JOIST MANUFACTURER SHALL DESIGN JOISTS FOR ROOF TOP UNIT LOADS AND SUSPENDED UNIT OR BULKHEAD LOADS SHOWN ON CONSTRUCTION DOCUMENTS. COORDINATE EXACT LOCATION OF APPLIED LOAD WITH APPROPRIATE SUB-CONTRACTOR.

8. DESIGN JOIST, JOIST GIRDERS, AND BRIDGING TO RESIST A NET UPLIFT LOAD OF 5 PSF UNLESS OTHERWISE NOTED.

9. PROVIDE CAMBER IN JOIST AS RECOMMENDED BY SJI SPECIFICATIONS UNLESS OTHERWISE NOTED ON CONSTRUCTION DOCUMENTS.

10. JOIST SUPPLIER SHALL COORDINATE HIS WORK WITH THE STEEL SUPPLIER ON THE PROJECT.

11. DESIGN JOISTS AND JOIST GIRDERS FOR L/240 LIVE LOAD DEFLECTION UNLESS NOTED OTHERWISE.

METALS: COLD-FORMED STEEL FRAMING

1. DESIGN, FABRICATION, AND ERECTION OF COLD-FORMED STEEL FRAMING SHALL BE IN ACCORDANCE WITH THE AISI DESIGN MANUAL AS AMENDED TO DATE. ALL FRAMING MEMBERS SHOWN ON PLANS ARE SCHEMATIC AND ARE SHOWN FOR INTENT ONLY. (ASSUMES THAT THE DESIGN AND CALCULATIONS ARE DONE BY THE SUPPLIER)

1A. ALL LIGHT GAUGE FRAMING DESIGN & CALCULATIONS TO BE DONE BY SUPPLIER. THIS INCLUDES BEAMS, HEADERS, STUDS, COLUMNS, ECT. INCLUDING ALL CONNECTIONS TO MASONRY, CONCRETE, STEEL & OTHER LIGHT GAUGE MEMBERS.

2. STEEL STUD CURTAIN WALL AND CONNECTIONS TO BE DESIGNED BY SUPPLIER. (STEEL STUD CURTAIN WALL AND CONNECTION DESIGN SHALL BE SEALED BY PROFESSIONAL STRUCTURAL ENGINEER EXPERIENCED IN THIS WORK)

COMPONENTS & CLADDING

UPLIFT..	PER ASCE 7 (FM 1-28)
V	90 MPH
I	1.15
GCPI	0.55

LIVE LOADS:	GROUND SNOW LOAD	30 PSF
	IMPORTANCE FACTOR	1.0
	FLAT ROOF SNOW LOAD	27 PSF
	FACTOR Ct	1.1
	FACTOR Ce	1.1

L/600 FOR BRICK VENEER
L/360 FOR WALL STUDS W/ATTACHED DRYWALL

3. MINIMUM DESIGN THICKNESS OF STUDS AND TRACK AT EXTERIOR OF BUILDING VERTICALLY SUPPORTING MASONRY SHALL BE 0.045 INCHES (GAGE: 18)

4. MINIMUM DESIGN THICKNESS OF STUDS AND TRACK AT EXTERIOR OF BUILDING VERTICALLY NOT SUPPORTING MASONRY SHALL BE 0.045 INCHES (GAGE: 18)

5. LOAD BEARING STUDS VERTICALLY SUPPORTING MASONRY SHALL BE DESIGNED TO CARRY ALL GRAVITY LOADS AND LATERAL FORCES INCLUDING BUT NOT LIMITED TO DEAD LOADS, LIVE LOADS, WIND LOADS, AND AXIAL LOAD ECCENTRICITIES.

6. LOAD BEARING STUDS NOT VERTICALLY SUPPORTING MASONRY SHALL BE DESIGNED TO CARRY ALL GRAVITY LOADS AND LATERAL FORCES INCLUDING BUT NOT LIMITED TO DEAD LOADS, LIVE LOADS, WIND LOADS, AND AXIAL LOAD ECCENTRICITIES.

7. NON-LOAD BEARING STUDS NOT VERTICALLY SUPPORTING MASONRY SHALL TRANSFER LATERAL LOADS TO STRUCTURE BY MEANS OF SLIDE CLIPS TO ALLOW FOR VERTICAL MOVEMENT OF PRIMARY STRUCTURAL MEMBERS.

8. SPLICES IN AXIALLY LOADED STUDS ARE NOT PERMITTED.

9. STUDS, TRACK, AND ACCESSORIES SHALL BE GALVANIZED WITH A MINIMUM G-90 COATING PER ASTM A-525

10. STUDS SHALL BE PLUMBED, ALIGNED, AND SECURELY ATTACHED TO FLANGES OR WEBS OF LOWER TRACK. STUDS SHALL BE SEATED TIGHT TO TRACK, EXCEPT AS NEEDED FOR DIAGONAL BRACING OR REQUIRED FOR NON-PLUMB WALLS OR WARPED SURFACES AND SIMILAR REQUIREMENTS.

11. JOINTS SHALL BE LOCATED DIRECTLY OVER BEARING STUDS OR A LOAD DISTRIBUTION MEMBER SHALL BE PROVIDED AT THE TOP OF THE WALL.

12. REFER TO ARCHITECTURAL WALL SECTIONS AND DETAILS FOR ADDITIONAL INFO.

13. ALL MEMBERS 0.0566 INCH MINIMUM THICKNESS OR THICKER (16 GAGE OR LOWER) SHALL BE OF MINIMUM 50 KSI STEEL. ALL MEMBERS OF 0.0451 INCH MINIMUM THICKNESS OR THINNER (18 GAGE OR HIGHER) AND ALL ACCESSORIES SHALL BE OF MINIMUM 33 KSI STEEL.

14. STEEL STUD ERECTOR SHALL CONSTRUCT ALL LIGHT GAGE FRAMING IN A MANNER WHICH PROTECTS LATERAL STABILITY OF THE STRUCTURE.

15. ALL WELDS PERFORMED ON GALVANIZED LIGHT GAGE COMPONENTS SHALL BE COATED WITH ZINC RICH PAINT FOR CORROSION PROTECTION IN ACCORDANCE WITH ASTM A780. CONTRACTOR SHALL NOTIFY THE ENGINEER TO ALLOW ADEQUATE TIME FOR WELDS TO BE REVIEWED BEFORE SYSTEMS ARE ENCLOSED

16. STEEL STUD WALLS SHALL BE DESIGNED AND CONSTRUCTED TO PROVIDE REQUIRED CAPACITIES TO CARRY CONSTRUCTION LOADS. CONTRACTOR SHALL PROVIDE NECESSARY BRIDGING OR ATTACHMENT TO WALL SHEATHING BEFORE STRUCTURAL COMPONENTS ARE LOADED.

METALS: COLD-FORMED STEEL FRAMING CONT

17. INSTALL SUPPLEMENTARY FRAMING, BLOCKING AND BRACING IN METAL FRAMING SYSTEM WHENEVER WALLS OR PARTITIONS ARE INDICATED TO SUPPORT FIXTURES, EQUIPMENT, SERVICES, CASEWORK, HEAVY TRIM AND FURNISHING AND SIMILAR WORK.

WOOD AND PLASTICS

01. PROVIDE AND OR INSTALL ALL ROUGH CARPENTRY, FINISH CARPENTRY INCLUDING MILLWORK, FINISH HARDWARE, ROUGH HARDWARE, FASTENING DEVICES AND MISCELLANEOUS ACCESSORIES AS MAY BE REQUIRED HEREIN AND OR AS SHOWN ON THE DRAWINGS.

02. ROUGH CARPENTRY: FURNISH AND INSTALL ALL FRAMING AS MAY BE REQUIRED FOR INTERIOR PARTITION, BAFFLE, WALLS, SOFFITS, CEILINGS, STOREFRONTS, EXTERIOR WALLS, ETC. AS NOTED AND WHERE SHOWN ON THE DRAWINGS.

03. FINISH CARPENTRY: FURNISH AND INSTALL ALL THAT IS REQUIRED FOR DOORS AND FRAMES, FINISH TRIM AND MOLDING AND PANELING. PERFORM FINISH CARPENTRY WORK IN ACCORDANCE WITH AWI QUALITY STANDARDS, PREMIUM GRADE. USE FULL LENGTH PIECES, MITER ALL JOINTS, SHOULDER JOINT AT DOOR JAMBS. FILL ALL NAIL HOLES AND SAND SMOOTH.

04. PROVIDE ROUGH LUMBER AND PLYWOOD IN STANDARD DIMENSIONS, MOISTURE CONTENT NOT MORE THAN 19%.

05. PROVIDE ALL NECESSARY ROUGH HARDWARE IN SIZES AND QUANTITIES REQUIRED BY LOCAL CODE OR APPROVED BY ARCHITECT.

06. USE FINISH OR CASING NAILS FOR EXPOSED WORK. USE TYPE "S" TRIM HEAD SCREWS FOR ATTACHMENT OF WOOD TRIM TO METAL STUDS, RUNNERS OR FURRING.

07. RELIEVE BACKS OF WOOD TRIM. KERF BACKS OF MEMBERS MORE THAN 5" WIDE AND 1" NOMINAL THICKNESS. EASE ALL EXTERNAL CORNERS.

08. INSTALL LAMINATES ONLY WHEN RECEIVING SURFACES ARE IN A SATISFACTORY CONDITION FOR INSTALLATION.

09. USE ADHESIVES RECOMMENDED BY THE MANUFACTURER FOR THE PARTICULAR APPLICATION. INSTALL IN ACCORDANCE WITH MANUFACTURER'S MOST CURRENT PRINTED APPLICATION INSTRUCTIONS. USE LOWEST VOC ADHESIVES AVAILABLE WHICH MEET OR EXCEED THE MANUFACTURES REQUIREMENTS.

10. PROTECT FROM DAMAGE BY OTHER TRADES WORKING ADJACENT TO THE INSTALLATION. REPLACE DAMAGED SURFACES.

11. REMOVE EXCESS ADHESIVE AND CLEAN SURFACES USING MANUFACTURER'S RECOMMENDED SOLVENT AND CLEANING PROCEDURES.

12. FILL IN ALL SEAMS WITH MANUFACTURER'S RECOMMENDED SOLVENT AND CLEANING PROCEDURES. USE LOWEST VOC CLEANING AGENTS AVAILABLE THAT MEET OR EXCEED THE MANUFACTURER'S REQUIREMENTS.

13. WOOD PRODUCTS SHALL MEET OR EXCEED THE AMERICAN WOODWORK INSTITUTE STANDARDS.

14. INSTALL WOODS AND PLASTICS IN CONFORMANCE WITH DETAILS AND THE FOLLOWING CONSIDERATIONS AND REQUIREMENTS:
A) INSTALL WOODS AND PLASTICS WITH TIGHT JOINTS.
B) MITER CASINGS AND MOLDINGS UNLESS OTHERWISE NOTED.
C) ALL RUNNING TRIM ONE (1) PIECE UP TO 10'-0" LONG. MATCH GRAIN AND COLOR PIECE TO PIECE.
D) USE FINISH NAILS EXCEPT WHERE ARE SPECIFICALLY CALLED FOR OR WHERE SCREWS DO NOT SHOW.
E) SET FASTENERS FOR PUTTYING.
F) WHERE SCREW ATTACHMENT REQUIRED, SPACE SCREWS AT EQUAL INTERVALS. SINK AND PUTTY IN FINISH WOOD SURFACES.
G) ALL MEMBERS AND LINES LEVEL AND PLUMB.
H) SELECT AND CUT MATERIAL TO EXCLUDE DAMAGED, MARKED OR DEFECTIVE AREAS.
I) FINISH EXPOSED SURFACES SMOOTH, FREE FROM TOOL AND MACHINE MARKS.
J) EASE ALL EXPOSED WOOD EDGES 1/8" MINIMUM RADIUS.
K) INSTALL FIRE RATED DOORS IN ACCORDANCE WITH REQUIREMENTS OF NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RECOMMENDATIONS.

15. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND SPECIFICATIONS.

WOOD: LUMBER

01. LUMBER SHALL BE GRADED AND STAMPED WITH MINIMUM STRUCTURAL DESIGN VALUES AS LISTED BELOW:
A. #1/#2 DOUGLAS FIR 850 PSI FB. 95 PSI FV. 1600 KSI E (BEAMS, JOISTS, LINTELS & HEADERS, UNLESS OTHERWISE NOTED)
B. #1/#2 S.P.F. 875 PSI FB. 1150 PSI FV. 1400 KSI E (ALL STUDS & PLATES, UNLESS OTHERWISE NOTED)
C. LVL @1800 KSI E OR MICRO-LAM @1900 KSI E 2600 PSI FB. 285 PSI FV (OR AS NOTED ON THE STRUCTURAL DRAWINGS)
D. WOOD HEADER AND FRAMING MATERIAL MATERIAL SHALL BE THOROUGHLY SEASONED, FREE FROM WARP AND FREE OF ALL SPLITS, SHAKES AND CHECKS.

02. MISCELLANEOUS LUMBER: PROVIDE NO. 3 OR STANDARD GRADE LUMBER OF ANY SPECIES FOR SUPPORT OR ATTACHMENT OF OTHER CONSTRUCTION, INCLUDING ROOFTOP EQUIPMENT CURBS AND SUPPORT BASES, CANT STRIPS, BUCKS, NAILERS, BLOCKING AND SIMILAR MEMBERS.

03. PROTECTION AGAINST DECAY WITH PRESERVATIVE-TREATED WOOD SHALL BE REQUIRED IN THE FOLLOWING AREAS:
A. ALL WOOD SILL PLATES, FRAMING AND FURRING STRIPS ATTACHED TO EXTERIOR BELOW GRADE MASONRY AND CONCRETE WALLS.
B. ALL WOOD PLATES, BLOCKING, FRAMING AND FURRING STRIPS ATTACHED TO EXTERIOR, SINGLE WITHE MASONRY WALLS.
C. ALL WOOD CAP FLASHING BLOCKING ATTACHED TO MASONRY OR CONCRETE PARAPETS.
D. ALL WOOD SLEEPERS AND SILL PLATES ON CONCRETE SLABS IN DIRECT CONTACT WITH EARTH.
E. ALL WOOD IN CONTACT WITH GROUND OR EXPOSED TO THE WEATHER.

04. EXCEPTION: WOOD SILL PLATES ON CONCRETE SLABS SEPARATED FROM DIRECT CONTACT TO THE EARTH WITH A 10 MIL POLYETHYLENE VAPOR BARRIER WILL NOT REQUIRE PRESERVATIVE-TREATMENT.

05. FINISHES FOR FASTENERS AND HARDWARE IN CONTACT WITH PRESERVATIVE-TREATED WOOD ARE BASED ON THE FOLLOWING ASSUMPTIONS:
A. ALL INTERIOR TREATED WOOD SHALL USE AN ACQ-C, ACQ-D (CARBONATE), CBA-A OR CA-B TREATMENT WITH RETENTION LEVELS LESS THAN OR EQUAL TO 0.40 PCF, 0.40 PCF, 0.41 PCF AND 0.21 PCF RESPECTIVELY.
B. ALL CONNECTION HARDWARE AND FASTENERS IN DIRECT CONTACT WITH INTERIOR TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED, MECHANICALLY GALVANIZED OR STAINLESS STEEL.
C. ALL CONNECTION HARDWARE AND FASTENERS IN DIRECT CONTACT WITH EXPOSED EXTERIOR TREATED WOOD OR UNKNOWN TREATMENTS SHALL BE STAINLESS STEEL.
D. USE TAPCON CLIMASEAL FASTENERS TO CONNECT ACQ-TREATED WOOD BLOCKING TO MASONRY OR CONCRETE PARAPETS.

06. SHOP DRAWINGS FOR PRESERVATIVE-TREATED WOOD, HARDWARE AND FASTENERS:
A. THE SUBCONTRACTOR SHALL FURNISH MATERIAL CERTIFICATES FOR ALL PRESERVATIVE TREATED WOOD TYPES, SPECIFYING THE NAME OF THE TREATING COMPANY, THE PRESERVATIVE USED, THE LEVEL OF TREATMENT (0.10, 0.25, 0.40, ETC.). THE INTENDED USE (ABOVE GROUND, GROUND CONTACT, ETC.) AND A REFERENCE TO THE APPROPRIATE AWPA STANDARD.
B. THE SUBCONTRACTOR SHALL FURNISH MATERIAL DATA SHEETS FOR HARDWARE AND FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED WOOD.

07. PLACE 2" THICK NOMINAL FIRE-BLOCKING IN STUD WALLS AT CEILING, SOFFIT, FLOOR LEVELS AND AT EACH10'0" HEIGHT OF STUD.

08. JOISTS SHALL BE BLOCKED AT SUPPORTS AND BRIDGED OR BLOCKED AT INTERVALS OF 8"0" WHERE JOISTS ARE 2'x12" OR DEEPER.

09. JOISTS UNDER NON-BEARING PARTITIONS SHALL BE DOUBLED AND TRIPLED FOR BEARING PARTITIONS ABOVE, UNLESS OTHERWISE NOTED.

10. COMMON NAILS SHALL BE USED, UNLESS OTHERWISE NOTED.

11. LAG BOLTS AND SCREWS SHALL BE PRE-DRILLED TO SHANK DIAMETER AND FULL DEPTH AND SCREWED, NOT DRIVEN INTO PLACE.

12. CUT WASHERS SHALL BE PLACED UNDER HEADS AND NUTS OF ALL BOLTS AND UNDER HEADS OF LAG BOLTS. ONE CUT WASHER SHALL BE USED FOR BOLTS CONNECTING WOOD LEDGERS TO CONCRETE OR MASONRY WALLS.

13. SEE LUMBER, PLYWOOD AND NAILING SPECIFICATIONS ON STRUCTURAL DRAWINGS. PROVIDE AND INSTALL ALL WOOD FRAMING AS INDICATED ON THE DRAWINGS.

14. METAL CONNECTORS AND FRAMING DEVICES SHOWN ON DRAWINGS OTHER THAN CUSTOM FABRICATED ITEMS SHALL BE "STRONG-TIE" CONNECTORS BY SIMPSON COMPANY.

THERMAL AND MOISTURE PROTECTION

01. CAULK AROUND ALL WINDOWS (HEAD AND JAMB), DOORS, VENT, OPENINGS, WHERE DIFFERENT MATERIALS MEET, ROOF OPENINGS, EAVES, SOFFITS, JOINTS, COUNTERTOPS, DOOR FRAMES, ETC. AS REQUIRED FOR A WATERTIGHT AND AIRTIGHT CONNECTION. PROVIDE CAULK PER MANUFACTURERS RECOMMENDATIONS. CAULK TO BE "TREMCO DYMERIC 240 FC" FOR FOOD PROCESSING FACILITIES OR FOOD PREP/FOOD STORAGE AREAS. CAULK TO BE INSTALLED AFTER FINISH IS APPLIED TO SURFACES PER MANUFACTURE'S RECOMMENDATIONS.

02. PROVIDE NON-SAG SEALANT COMPLYING WITH REQUIREMENTS OF FEDERAL SPECIFICATIONS TTS-1543 OR FS TT-S-230 TYPE "II", CLASS "A". PROVIDE ACOUSTICAL SEALANT WHICH SHALL BE NON-HARDENING, NONDRYING SYNTHETIC RUBBER SEALING COMPOUND WITH MINIMUM 90% SOLIDS. USE AT ALL INTERIOR JOINTS AT INTERSECTIONS BETWEEN PLANES. AROUND DOOR AND WINDOW FRAMES PRIMER SHALL BE MADE OR RECOMMENDED BY SEALANT MANUFACTURER FOR THE SPECIFIC CONDITIONS AND SUBSTRATES. USE LOWEST VOC SEALANTS AND CAULKING AVAILABLE WHICH MEET OR EXCEED THE CODE AND MANUFACTURES REQUIREMENTS.

03. PROVIDE BACKING MATERIAL BY DOW "ETHAFOAM" OR APPROVED EQUAL. APPLY SEALANT OVER BACKING TO UNIFORM THICKNESS IN CONTINUOUS BEADS FILLING ALL JOINTS AND VOIDS, SOLID. SUPERFICIAL POINTING WITH A SKIM BEAD WILL NOT BE ACCEPTED.

04. ALL SURFACES SHALL BE ADEQUATELY CLEANED AND PREPARED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS PRIOR TO INSTALLATION. USE LOWEST VOC CLEANING AGENTS AVAILABLE THAT MEET OR EXCEED THE MANUFACTURER'S REQUIREMENTS.

05. ISOLATION AND CONTROL JOINT MATERIAL TO BE POLYETHYLENE FOAM EXPANSION ISOLATION JOINT FILLER OF 1/2" THICKNESS UNLESS OTHERWISE INDICATED. THE MINIMUM DEPTH OF ISOLATION JOINT MATERIAL TO BE EQUAL TO THE SMALL OF THE CONCRETE SLAB THICKNESS WITH WHICH IT COMES IN CONTACT.

06. WIND RESISTANCE OF EDGE FLASHING SHALL MEET OR EXCEED THE MINIMUM STANDARDS PER THE CODE AND SATISFY THE ANSI AND SPRI REFERENCED STANDARDS INCLUDING TESTING.

07. REFER TO ROOF PLAN FOR ADDITIONAL REQUIREMENTS AND SPECIFICATIONS FOR ROOFING MATERIALS AS THEY PERTAIN TO THERMAL AND MOISTURE PROTECTION.

DOORS AND WINDOWS

01. PROVIDE PRIMED HOLLOW METAL GALVANIZED FRAMES FOR EXTERIOR DOOR FRAMES. PROVIDE PRIMED HOLLOW METAL FRAMES FOR INTERIOR DOORS. WHERE WEATHERSTRIPPING IS IDENTIFIED ON THE DOOR SCHEDULE PROVIDE "CURRISEAL" TYPE WEATHER STRIPPING FOR EXTERIOR AND INTERIOR APPLICATIONS.

02. PROVIDE HOLLOW METAL EXIT DOOR CONSTRUCTED WITH THE FOLLOWING MATERIALS:
A) MINIMUM 18 GA. FOR FACE SHEETS OF INTERIOR DOORS.
B) 16GA. FOR EDGE CHANNELS.
C) MINIMUM 22 GA. FOR FACE STIFFENERS.
D) MINIMUM 16GA. FOR INTERIOR FRAMES.

03. PROVIDE DOORS OF SIZES AND TYPES INDICATED ON DRAWINGS, FULLY WELDED SEAMLESS CONSTRUCTION WITH NO VISIBLE SEAMS OR JOINTS ON FACES OR VERTICAL EDGES. THICKNESS AS SCHEDULED ON DRAWINGS.

04. FACE STIFFENERS, EDGES AND HARDWARE REINFORCEMENT SHALL BE THE HIGHEST QUALITY WORKMANSHIP AND MATERIALS. PROVIDE IN ACCORDANCE WITH BEST TRADE PRACTICE AND MANUFACTURER'S WRITTEN REQUIREMENTS AND RECOMMENDATIONS FOR THE USE INTENDED.

05. PROVIDE CUSTOM MADE WELDED UNITS WITH INTEGRAL TRIM. SIZES AND SHAPES AS INDICATED ON DRAWINGS. FABRICATE UNITS SQUARE, TRUE AND FREE FROM DEFECTS.

06. HARDWARE REINFORCEMENT AND ANCHORS (ERECTION, FLOOR, AND JAMS) SHALL BE AS REQUIRED FOR A SECURE INSTALLATION AND SHALL BE IN ACCORDANCE WITH TRADE REQUIREMENTS FOR THE SPECIFIED HARDWARE AND INTENDED USE.

07. INSTALL FRAMES IN ACCURATE LOCATIONS AS INDICATED ON DRAWINGS. INSTALL RIGID, PLUMB, LEVEL AND TRUE. ALIGN WITH ADJACENT CONSTRUCTION. SECURE FLOOR ANCHORS TO FLOOR CONSTRUCTION WITH APPROVED TYPE MECHANICAL FASTENINGS. ANCHOR TO ADJOINING WALLS WITH SPECIFIED ANCHORS. BRACE FRAMES TO RETAIN POSITION AND CONTINUOUSLY CHECK ALIGNMENT DURING CONSTRUCTION OF ADJACENT WALLS. ADJUST FRAME LOCATIONS AS NECESSARY USING SHIMS BEFORE FASTENING. LEAVE READY TO RECEIVE SEALANT WHERE INDICATED ON DRAWINGS. ADJUST AND CHECK OPERATION OF EVERY UNIT. REPAIR OR REPLACE UNITS WHICH CANNOT BE ADJUSTED TO OPERATE FREELY AND SMOOTHLY.

08. INSTALL WOOD DOORS, FRAMES AND TRIM. SIZES AND THICKNESS AS SCHEDULED ON THE DRAWINGS.

09. HANG DOORS AS SCHEDULED ON DRAWINGS, IN ACCURATE LOCATIONS WITH 1/8" CLEARANCE AT THE TOPS AND 3/8" CLEARANCE AT BOTTOM, UNLESS SPECIFICALLY NOTED FOR "UNDERCUTS" OR OTHER DEVIATIONS IN FIT. MAKE NO JOB SITE FIT IN CUTS UNLESS APPROVED. HANG PAIRS OF DOORS AS SPECIFIED WITH 3/32" CLEARANCE AT MEETING EDGES. DEMONSTRATE THAT DOORS OPEN FREELY WITHOUT BINDING, AND WHEN CLOSED, WILL LATCH PROPERLY.

10. PROVIDE ACCESS DOORS AS REQUIRED FOR SPECIFIED RATING. SIZE AS INDICATED.

11. PROVIDE ALL DOORS PER DOOR AND FRAME AND HARDWARE SCHEDULES. INSTALLATION TO COMPLY WITH MANUFACTURER'S INSTRUCTIONS.

12. PROVIDE ALL HARDWARE WITH ALL NECESSARY SCREWS, AND OTHER FASTENERS OF SUITABLE SIZE AND TYPE TO ANCHOR THE HARDWARE IN POSITION FOR LONG LIFE UNDER HARD USE. FURNISH ITEMS COMPLETE WITH EXPANSION SHIELDS, TOGGLE BOLTS AND OTHER ANCHORS, IN ACCORDANCE WITH THE MATERIAL TO WHICH THE HARDWARE IS TO BE APPLIED TO AND THE RECOMMENDATIONS OF THE HARDWARE MANUFACTURER. FASTENER FINISH SHALL HARMONIZE WITH THE HARDWARE MATERIAL.

13 COORDINATE WITH OTHER TRADES TO ASSURE PROPER AND ADEQUATE PROVISION IN THE WORK OF THOSE TRADES FOR INTERFACE WITH THE WORK OF THIS SECTION.

FINISHES

01. GENERAL FINISH REQUIREMENTS:
A) PROVIDE AND INSTALL ALL FINISHES AS INDICATED ON PLANS.
B) INSTALL ALL MATERIALS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
C) "FINISH" INSTALLER INSPECT SUBSURFACE AND PREPARE AS PER MANUFACTURER'S REQUIREMENTS, RECOMMENDATIONS, AND SPECIFICATIONS PRIOR TO INSTALLATION OF PRODUCT.
D) ALL FINISHES TO MEET ALL CODE REQUIREMENTS AND REGULATIONS INCLUDING FLAME SPREAD AND SMOKE DEVELOPMENT.

SPECIALTIES
01. NOT USED.

EQUIPMENT
01. NOT USED.

FURNISHINGS
01. NOT USED.

SPECIAL CONSTRUCTION
01. NOT USED.

CONVEYING SYSTEMS
01. REFER TO ELEVATOR DRAWINGS.

MECHANICAL
01. REFER TO MECHANICAL DRAWINGS.

ELECTRICAL
01. REFER TO ELECTRICAL DRAWINGS.

BRIOHN
DESIGN GROUP
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BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
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SHEET TITLE

SPECIFICATIONS

PROPOSED NEW REPAIR FACILITY BUILDING

ZIGNEGO REPAIR FACILITY

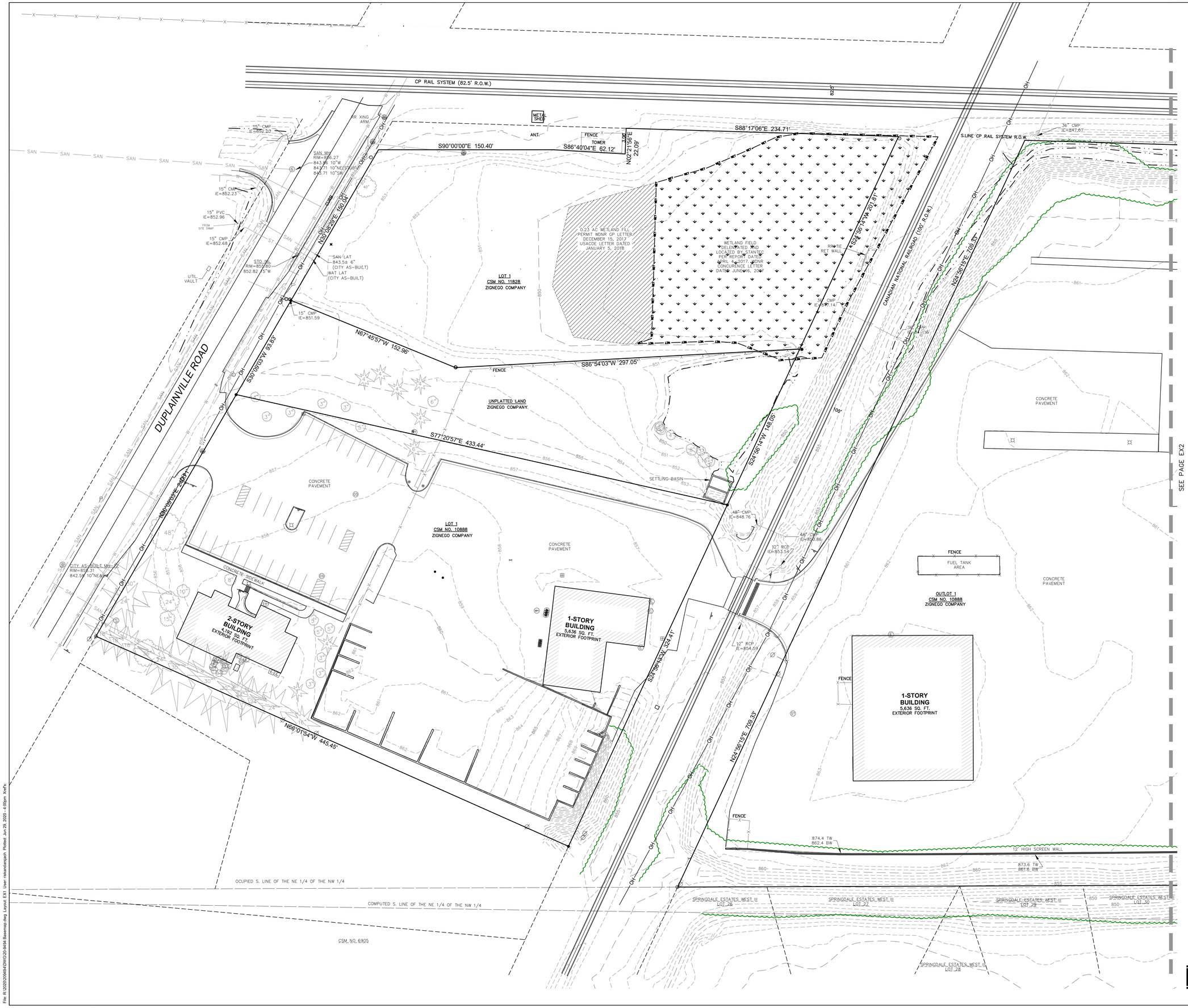
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB:	3239
DRAWN:	CK
CHECKED:	DF
DATE:	MAY 28, 2020

SHEET:

GS.2



north
SCALE IN FEET
30' 0 30'

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MILWAUKEE REGIONAL OFFICE
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WAUKESHA, WISCONSIN 53188
P. 262.513.0666

CLIENT:
BRIOHN DESIGN GROUP

CLIENT ADDRESS:
3885 N BROOKFIELD RD, STE 200
BROOKFIELD, WI, 53045

PROJECT:
PROPOSED ZIGNAGO REPAIR FACILITY BUILDING

PROJECT LOCATION:
PEWAUKEE, WI
WAUKESHA COUNTY

PLAN MODIFICATIONS:

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Design/Drawn: IRN
Approved: RWI

SHEET TITLE:
EXISTING CONDITIONS MAP

SHEET NUMBER:
EX1

JSD PROJECT NO: 20-9494

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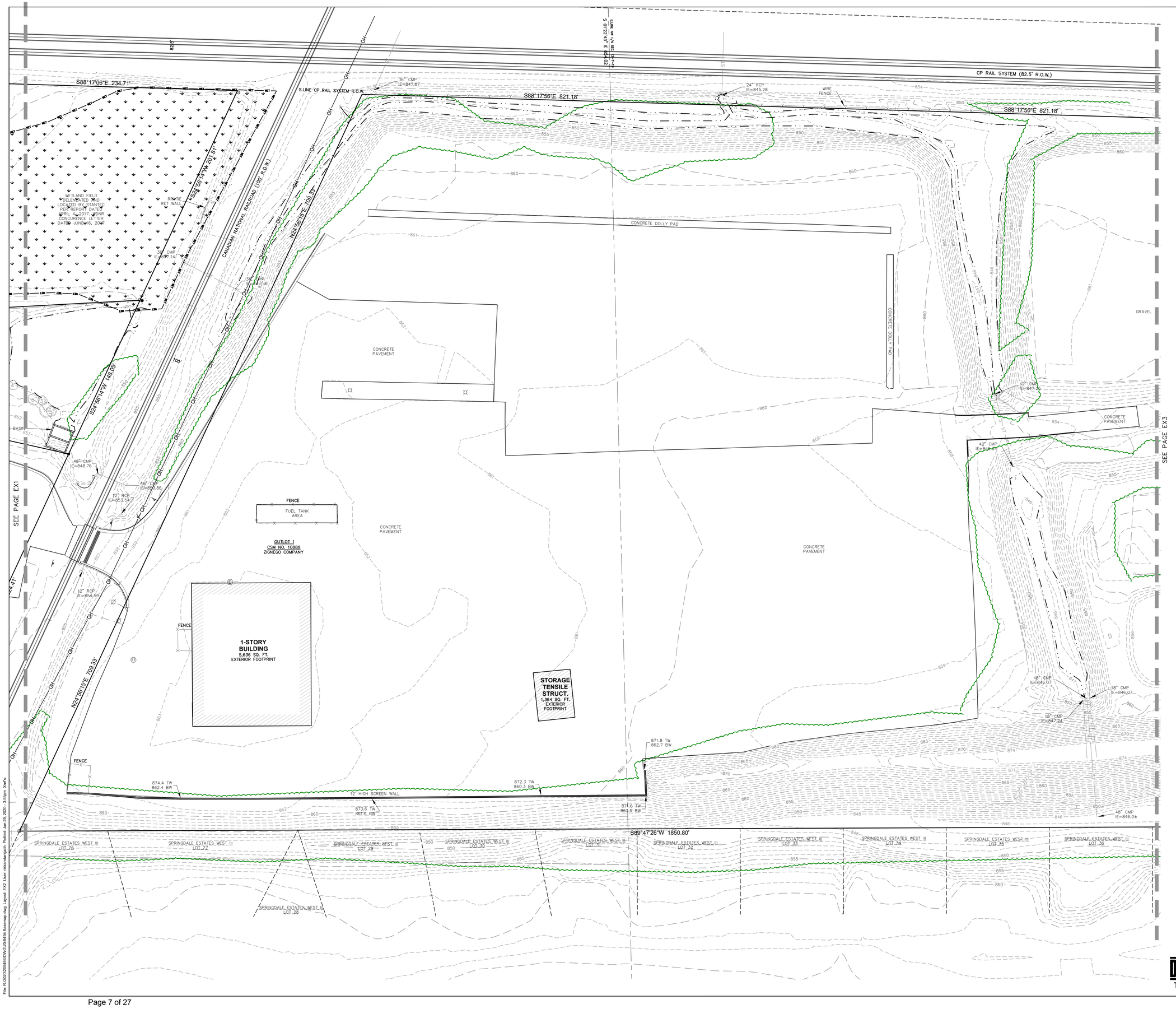

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P. 262.513.0666

CLIENT:

CLIENT ADDRESS:

PROJECT:
PROPOSED ZIGNAGO REPAIR FACILITY BUILDING

PROJECT LOCATION:
PEWAUKEE, WI
WAUKESHA COUNTY

PLAN MODIFICATIONS:

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Design/Drawn: IRN
Approved: RW

SHEET TITLE:
EXISTING CONDITIONS MAP

SHEET NUMBER:
EX2

JSD PROJECT NO: 20-9494

north
SCALE IN FEET
30' 0 30'

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CLIENT:

CLIENT ADDRESS:

PROJECT:
PROPOSED ZIGNAGO REPAIR FACILITY BUILDING

PROJECT LOCATION:
PEWAUKEE, WI
WAUKESHA COUNTY

PLAN MODIFICATIONS:

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Design/Drawn: IRN
Approved: RW

SHEET TITLE:
EXISTING CONDITIONS MAP

SHEET NUMBER:
EX3

JSD PROJECT NO: 20-9494

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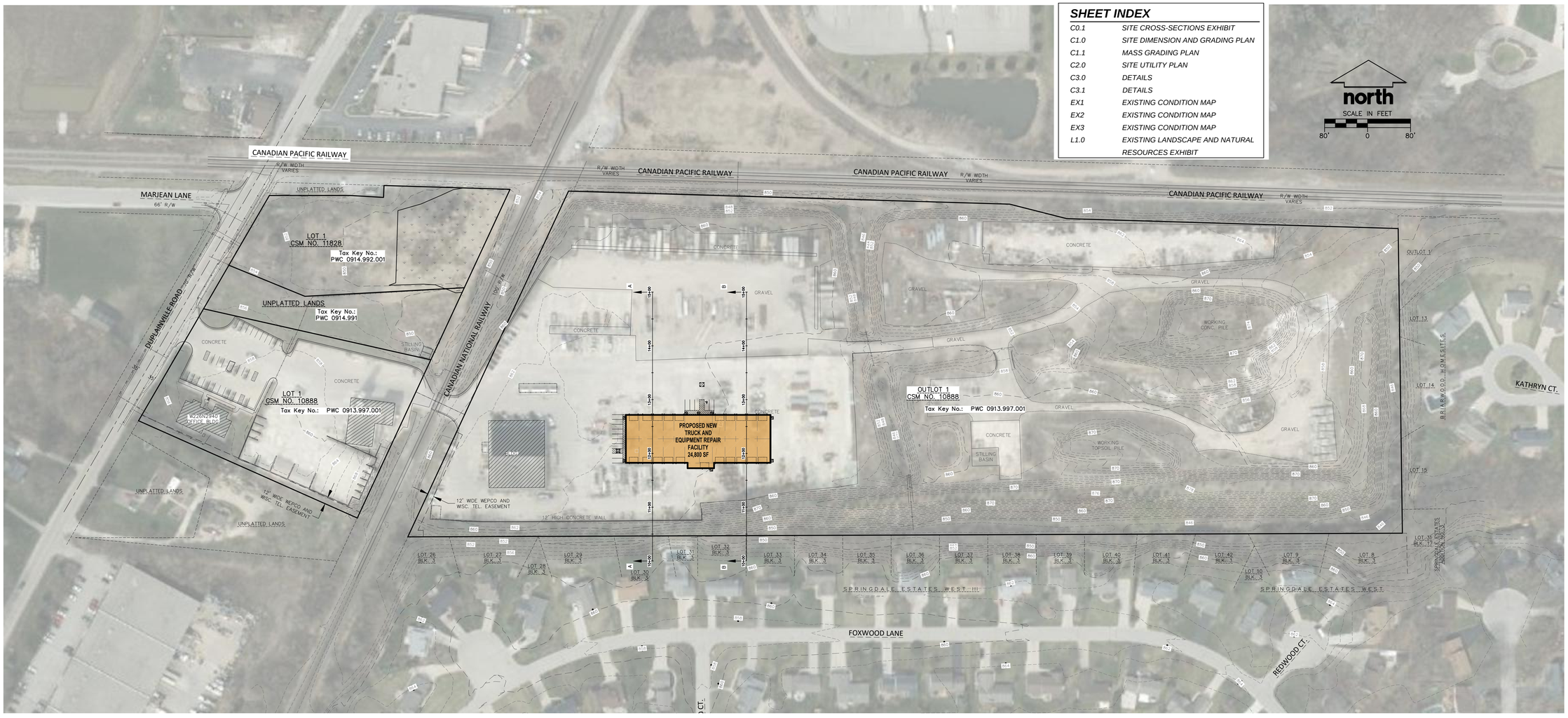
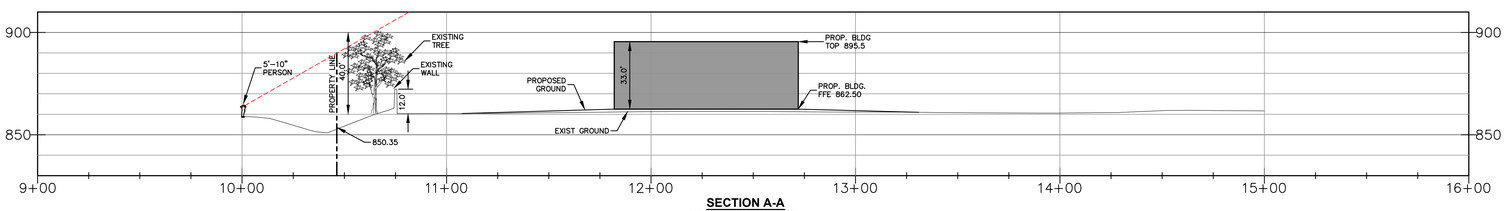
SHEET INDEX

C0.1	SITE CROSS-SECTIONS EXHIBIT
C1.0	SITE DIMENSION AND GRADING PLAN
C1.1	MASS GRADING PLAN
C2.0	SITE UTILITY PLAN
C3.0	DETAILS
C3.1	DETAILS
EX1	EXISTING CONDITION MAP
EX2	EXISTING CONDITION MAP
EX3	EXISTING CONDITION MAP
L1.0	EXISTING LANDSCAPE AND NATURAL RESOURCES EXHIBIT





SECTION A-A
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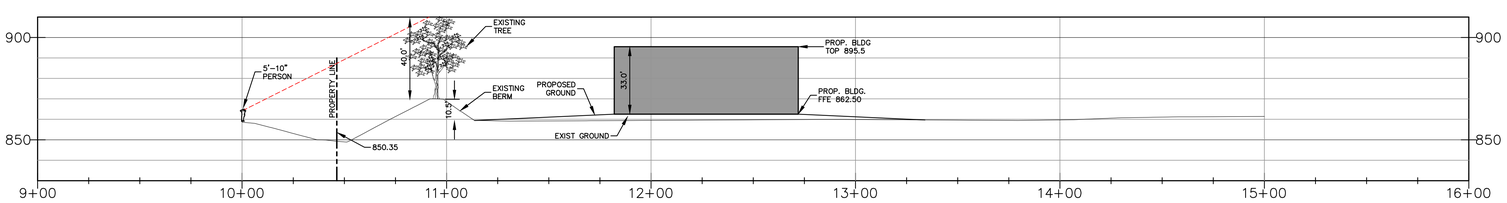

SECTION B-B
SCALE: 1"=30' HORIZ./VERT.

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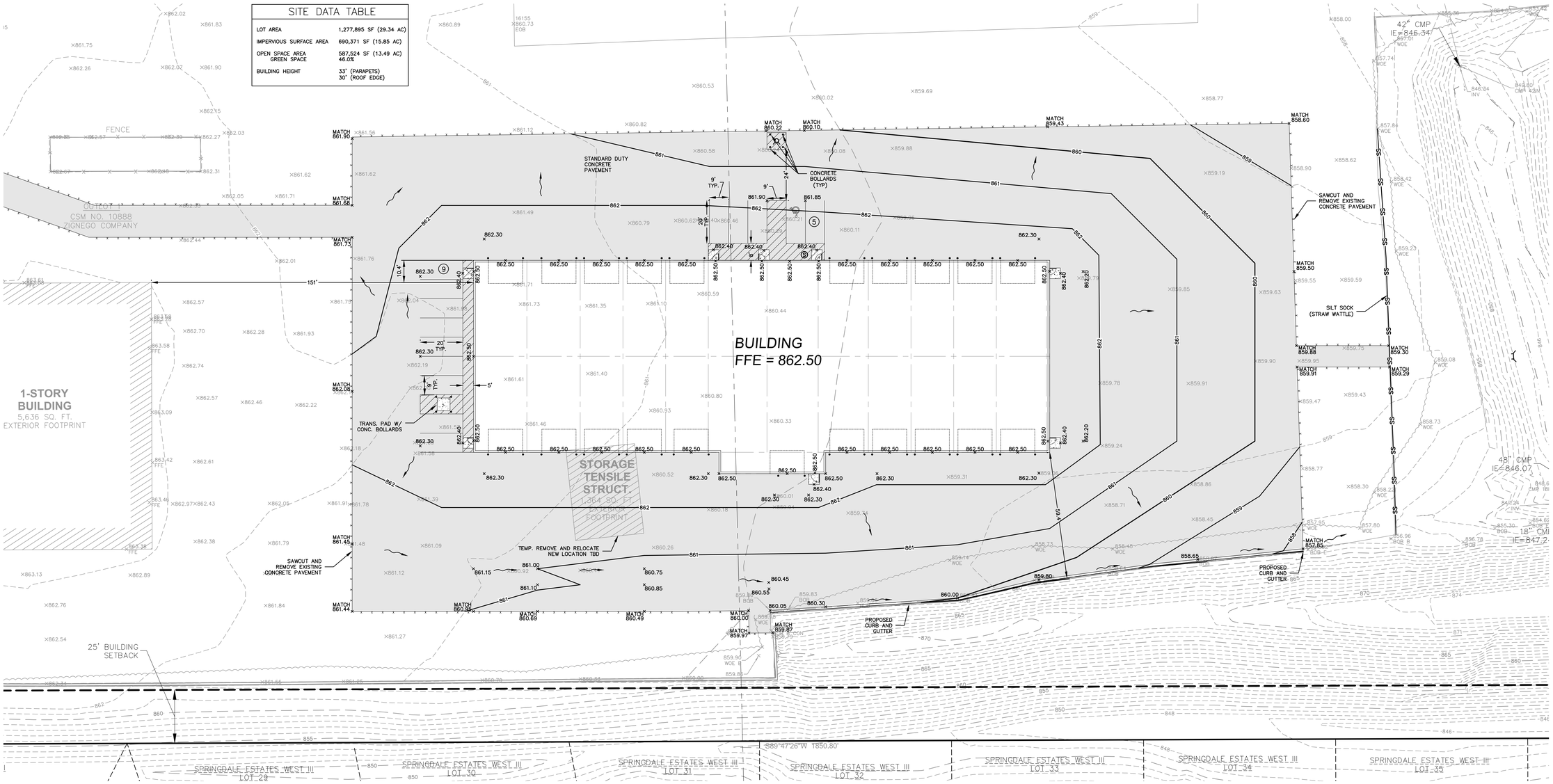
SHEET TITLE
SITE CROSS-SECTIONS EXHIBIT

PROPOSED ZIGNAGO REPAIR FACILITY BUILDING
DUPLAINVILLE ROAD
PEWAUKEE, WI

REVISED PLAN COMMISION 06/30/20

JOB:	20-9494
DRAWN:	PSM
CHECKED:	
DATE:	06/01/20
SHEET:	C0.1

SITE DATA TABLE	
LOT AREA	1,277,895 SF (29.34 AC)
IMPERVIOUS SURFACE AREA	690,371 SF (15.85 AC)
OPEN SPACE AREA GREEN SPACE	587,524 SF (13.49 AC) 46.0%
BUILDING HEIGHT	33' (PARAPETS) 30' (ROOF EDGE)



GENERAL NOTES AND SPECIFICATIONS

1. THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.
4. THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES DISCOVERED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON THEIR OWN COMPUTATIONS AND UNDER NO CIRCUMSTANCES BE BASED ON THE ENGINEER'S ESTIMATE.
6. QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD–OF–MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.
7. PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.
8. COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN THEIR ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
9. SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
10. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS IN OBTAINING PERMITS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
11. THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND "DIGGER'S HOTLINE" IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS. CONTRACTOR IS RESPONSIBLE TO DETERMINE WHICH ORDINANCES/CODES/RULES/ETC. ARE APPLICABLE.
12. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
13. CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING."
14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, JSD, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
15. ALL FIELD/DRAIN TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY REPORTED TO ENGINEER/OWNER. TILES ORIGINATING OUTSIDE THE PROJECT LIMITS SHALL BE RECONNECTED OR REROUTED TO MAINTAIN DRAINAGE. ENGINEER/OWNER SHALL DETERMINE THE MOST FAVORABLE METHOD OF RE–ESTABLISHMENT OF OFFSITE DRAINAGE. IF TILE IS ENCOUNTERED DURING TRENCH EXCAVATIONS, RE–ESTABLISHING TILE FUNCTIONALITY SHALL BE CONSIDERED AN INCIDENTAL EXPENSE.

PAVING NOTES

1. ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION AND APPLICABLE CITY OF PEWAUKEE ORDINANCES.
2. CONCRETE PAVING SPECIFICATIONS–

   CODES AND STANDARDS – THE PLACING, CONSTRUCTION AND COMPOSITION OF THE CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 415 AND 416 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS STATE HIGHWAY SPECIFICATIONS.

   CRUSHED AGGREGATE BASE COURSE – THE BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS.

   SURFACE PREPARATION – NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.
3. GRADE CONTROL – ESTABLISH AND MAINTAIN REQUIRED LINES AND ELEVATIONS FOR EACH COURSE DURING CONSTRUCTION.

   CRUSHED AGGREGATE BASE COURSE – BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS.

   SURFACE PREPARATION – NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.

PAVEMENT THICKNESS NOTES

ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION – CURRENT EDITION AND ADDENDUM, APPLICABLE CITY OF PEWAUKEE ORDINANCES, AND THE GEOTECHNICAL REPORT.

**** FINAL PAVEMENT DESIGN TO BE DETERMINED BY OWNER BASED ON GEOTECHNICAL ENGINEER OF RECORD RECOMMENDATIONS. ALL PAVING SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER OF RECORDS RECOMMENDATIONS AS SPECIFIED IN THE SAID GEOTECHNICAL REPORT.**

MINIMUM PAVEMENT STRUCTURE

- CONCRETE PAVEMENT
- CONCRETE STOOP
- SAWCUT
- SS — SILT SOCK

GRADING NOTES

1. CONTRACTOR SHALL VERIFY ALL GRADES, ENSURE ALL AREAS DRAIN PROPERLY AND REPORT ANY DISCREPANCIES TO JSD PROFESSIONAL SERVICES, INC. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
2. ALL EXISTING CONTOURS REPRESENT EXISTING SURFACE GRADES UNLESS OTHERWISE NOTED. ALL PROPOSED GRADES SHOWN ARE FINISH SURFACE GRADES UNLESS OTHERWISE NOTED.
3. ALL EXCAVATIONS AND MATERIAL PLACEMENT SHALL BE COMPLETED TO DESIGN ELEVATIONS AS DEPICTED IN THE PLANS.
   - CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATION(S) OF ALL GRADING QUANTITIES. WHILE JSD ATTEMPTS TO PROVIDE A COST EFFECTIVE APPROACH TO BALANCE EARTHWORK, GRADING DESIGN IS BASED ON MANY FACTORS, INCLUDING SAFETY, AESTHETICS, AND COMMON ENGINEERING STANDARD OF CARE, THEREFORE NO GUARANTEE CAN BE MADE FOR A BALANCED SITE.
   - THE CONTRACTOR MAY SOLICIT APPROVAL FROM ENGINEER/OWNER TO ADJUST FINAL GRADES FROM DESIGN GRADES TO PROVIDE AN OVERALL SITE BALANCE AS A RESULT OF FIELD CONDITIONS.
4. GRADING ACTIVITIES SHALL BE IN A MANNER TO ALLOW POSITIVE DRAINAGE ACROSS DISTURBED SOILS, WHICH MAY INCLUDE EXCAVATION OF TEMPORARY DITCHES TO PREVENT PONDING, AND IF NECESSARY PUMPING TO ALLEVIATE PONDING. CONTRACTOR SHALL PREVENT SURFACE WATER FROM ENTERING INTO EXCAVATIONS. IN NO WAY SHALL OWNER BE RESPONSIBLE FOR REMEDIATION OF UNSUITABLE SOILS CREATED/ORIGINATED AS A RESULT OF IMPROPER SITE GRADING OR SEQUENCING. CONTRACTOR SHALL SEQUENCE GRADING ACTIVITIES TO LIMIT EXPOSURE OF DISTURBED SOILS DUE TO WEATHER.
5. THE CONTRACTOR IS RESPONSIBLE FOR MEETING MINIMUM COMPACTION STANDARDS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL ENGINEERING SERVICES REPORT FOR SITE COMPACTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY ENGINEER/OWNER IF PROPER COMPACTION CANNOT BE OBTAINED. THE PROJECT'S GEOTECHNICAL CONSULTANT SHALL DETERMINE WHICH IN–SITU SOILS ARE TO BE CONSIDERED UNSUITABLE SOILS. THE ENGINEER/OWNER AND GEOTECHNICAL TESTING CONSULTANT WILL DETERMINE IF REMEDIAL MEASURES WILL BE NECESSARY.
6. IN THE EVENT THAT ANY MOISTURE–DENSITY TEST(S) FAIL TO MEET SPECIFICATION REQUIREMENTS, THE CONTRACTOR SHALL PERFORM CORRECTIVE WORK AS NECESSARY TO BRING THE MATERIAL INTO COMPLIANCE AND RETEST THE FAILED AREA AT NO COST TO THE OWNER.
7. WITH THE AUTHORIZATION OF THE ENGINEER/OWNER, MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON FILL AREAS IN AN EFFORT TO DRY. CONTRACTOR SHALL CLEARLY FIELD MARK THE EXTERIOR LIMITS OF SPREAD MATERIAL WITH PAINTED LATH AND SUBMIT A PLAN TO THE ENGINEER/OWNER THAT IDENTIFIES THE LIMITS. UNDER NO CONDITION SHALL THE SPREAD MATERIAL DEPTH EXCEED THE MORE RESTRICTIVE OF: THE EFFECTIVE TREATMENT DEPTH OF MACHINERY THAT WILL BE USED TO TURNOVER THE SPREAD MATERIAL; OR THE MAXIMUM COMPACTION LIFT DEPTH.
8. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION.
9. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ADEQUATE AND SAFE TEMPORARY SHORING, BRACING, RETENTION STRUCTURES, AND EXCAVATIONS.
10. THE SITE SHALL BE COMPLETED TO WITHIN 0.10–FT (+/–) OF THE PROPOSED GRADES AS INDICATED WITHIN THE PLANS PRIOR TO PLACEMENT OF TOPSOIL OR STONE. CONTRACTOR IS ENCOURAGED TO SEQUENCE CONSTRUCTION SUCH THAT THE SITE IS DIVIDED INTO SMALLER AREAS TO ALLOW STABILIZATION OF DISTURBED SOILS IMMEDIATELY UPON COMPLETION OF INDIVIDUAL SMALLER AREAS.
11. CONTRACTOR SHALL CONTACT "DIGGER'S HOTLINE" FOR LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES AND SHALL BE RESPONSIBLE FOR PROTECTING SAID UTILITIES FROM ANY DAMAGE DURING CONSTRUCTION.
12. CONTRACTOR SHALL PROTECT INLETS AND ADJACENT PROPERTIES WITH SILT FENCING OR APPROVED EROSION CONTROL METHODS UNTIL CONSTRUCTION IS COMPLETED. CONTRACTOR SHALL PLACE SILT FENCING AT DOWN SLOPE SIDE OF GRADING LIMITS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING FACILITIES OR UTILITIES. ANY DAMAGE SHALL BE REPAIRED TO THE OWNER S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.
14. WORK WITHIN THE ROADWAY RIGHT–OF–WAY SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPAL OFFICIAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FEES. GRADING WITHIN RIGHT–OF–WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS. RESTORATION OF RIGHT–OF–WAY IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF GRADING. RESTORATION SHALL INCLUDE ALL ITEMS NECESSARY TO RESTORE RIGHT–OF–WAY IN–KIND INCLUDING LANDSCAPING.
15. CONTRACTOR SHALL COMPLY WITH ALL CITY AND/OR STATE CONSTRUCTION STANDARDS/ORDINANCES.

north

SCALE IN FEET
20' 0 20'

LEGEND

SANITARY SEWER MANHOLE		POWER POLE	
STORM MANHOLE		GUY WIRE	
CLEAN OUT		BOLLARD	
CATCH BASIN ROUND		TRAFFIC LIGHT	
CATCH BASIN SQUARE		SOIL BORING	
CURB INLET	SAN	SANITARY SEWER	
FIRE HYDRANT	W	WATER MAIN	
WATER VALVE	ST	STORM SEWER	
GAS VALVE	G	UNDERGROUND GAS	
LIGHT POLE	E	UNDERGROUND ELECTRIC	
YARD LIGHT	T	UNDERGROUND TELEPHONE	
MAIL BOX	FIB	UNDERGROUND FIBER OPTICS	
TELEPHONE PEDESTAL	OH	OVERHEAD UTILITY	
ELECTRICAL MANHOLE			
SIGN			

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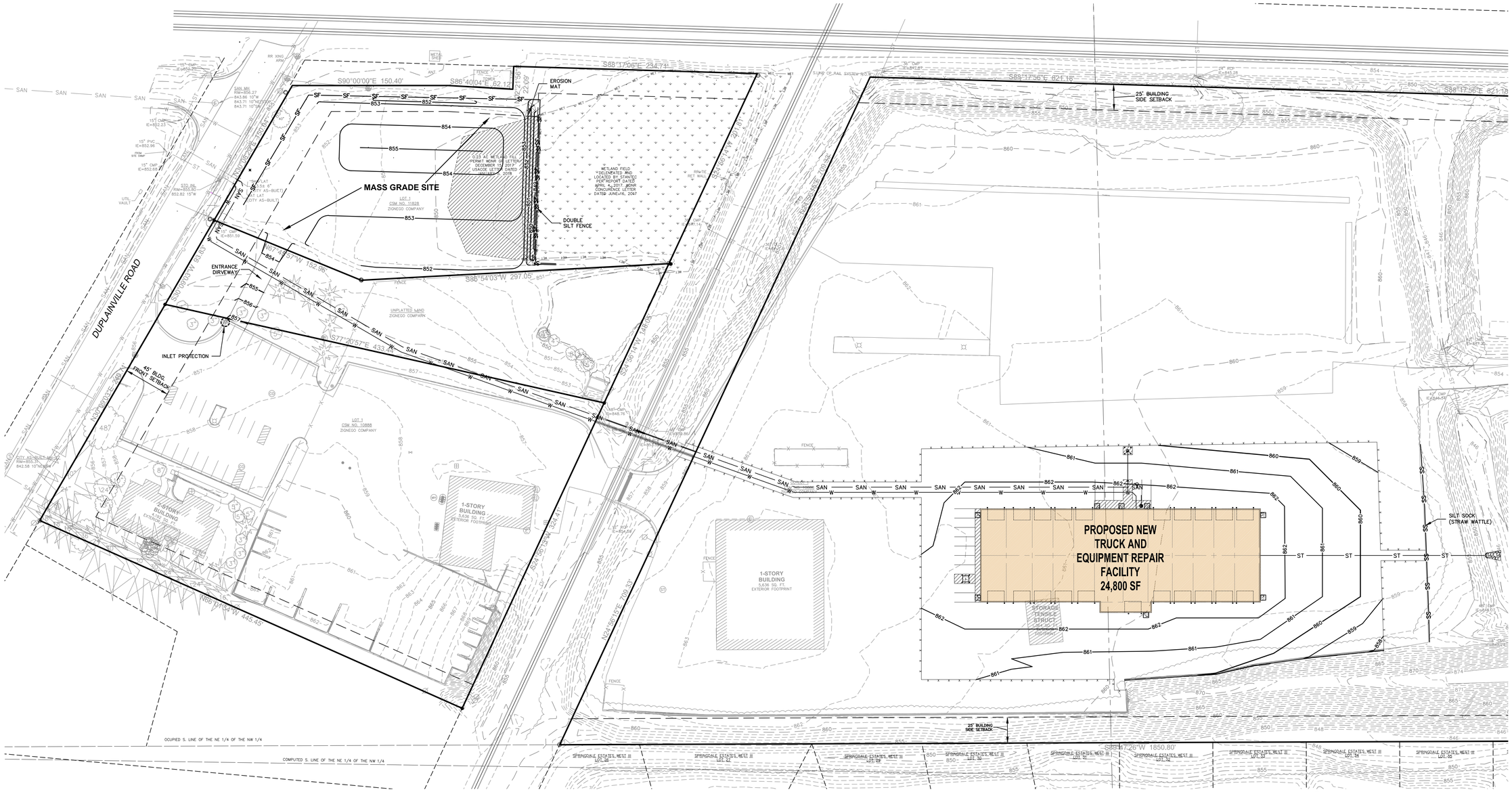
SHEET TITLE
SITE DIMENSION AND GRADING PLAN

PROPOSED ZIGNAGO
REPAIR FACILITY BUILDING
DUPLAINVILLE ROAD
PEWAUKEE, WI

REVISED PLAN COMMISION 06/30/20

JOB:	20-9494
DRAWN:	PSM
CHECKED:	
DATE:	06/01/20
SHEET:	C1.0



EROSION AND SEDIMENT CONTROL NOTES:

1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN WISCONSIN'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) TECHNICAL STANDARDS (REFERRED TO AS BMP'S) AND CITY OF OAK CREEK ORDINANCE. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY JSD PROFESSIONAL SERVICES, INC. OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
3. MODIFICATIONS TO THE APPROVED EROSION CONTROL PLAN IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY JSD/MUNICIPALITY PRIOR TO DEVIATION OF THE APPROVED PLAN.
4. INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
5. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE PRIOR APPROVED BY THE APPLICABLE GOVERNING AGENCIES PRIOR TO INSTALLATION.
6. PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST AFTER THE END OF EACH WORK DAY AND AS REQUESTED BY THE GOVERNING AGENCIES.
7. ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER. ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
8. EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER CONTROLS SHALL INCORPORATE THE FOLLOWING:
   - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
   - BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
   - DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMP'S PRIOR TO RELEASE INTO STORM SEWER OR DITCHES.
9. AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE DISCHARGE OF UNTREATED RUNOFF.
10. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE PROJECT.
11. TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERIMETER SILT FENCE TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.
12. EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER PRIOR TO THE COMPLETION OF EACH WORK DAY.
13. MAINTAIN SOIL EROSION CONTROL DEVICES THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.

EROSION AND SEDIMENT CONTROL NOTES:

1. PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS.
2. GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF THIRTY (30) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
3. ALL DISTURBED SLOPES EXCEEDING 4:1 YET LESS THAN 3:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75BN EROSION MATTING (OR APPROVED EQUAL) AND DISTURBED SLOPES EXCEEDING 3:1 YET LESS THAN 2:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN C125BN (OR APPROVED EQUAL) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
4. DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.
5. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS.
6. QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH, OR MORE, PRECIPITATION EVENTS AND WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH PART IV D.4. (a–f). OF THE NPDES GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
7. THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN. UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY. THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE BELOW.
   - SILT FENCE – REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
   - CONSTRUCTION ENTRANCE – AS NEEDED, ADD STONE TO MAINTAIN CONSTRUCTION ENTRANCE DIMENSIONS AND EFFECTIVENESS.
   - DITCH CHECK (STRAW BALES) – RE-SECURE STAKES; ADJUST OR REPOSITION BALES TO ADDRESS PROPER FLOW OF STORMWATER; AND REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE BALE.
   - EROSION CONTROL MATTING – REPAIR MATTING IMMEDIATELY IF INSPECTION REVEALS BREACHED OR FAILED CONDITIONS. REPAIR AND RE-GRADE SOIL WHERE CHANNELIZATION HAS OCCURRED.
   - DIVERSION BERM/SWALE – REPLACE OR RE-COMPACT THE CONSTRUCTION MATERIALS AS NECESSARY.
   - INLET PROTECTION – CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE BAG BECOMES ONE-HALF FULL OF SEDIMENT.

   ADDITIONAL POLLUTANT CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING.

   - CONSTRUCTION WASTE SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND WASTE FROM VEHICLE TRACKING OF SEDIMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE. VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARPAULIN TO PREVENT BLOWING DEBRIS.
   - DUST CONTROL SHALL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
     - A. COVERING 30% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL.
     - B. ROUGHENING THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT.
     - C. FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
     - D. PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES, PARKING AREAS AND TRANSIT PATHS.
   - STREET SWEEPING SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS.

LEGEND

- SF — SILT FENCE
- SS — SILT SOCK
- INLET PROTECTION
- TEMPORARY TOPSOIL STOCKPILE
- RIPRAP
- EROSION MAT

north

SCALE IN FEET
40' 0 40'

LEGEND

SANITARY SEWER MANHOLE	POWER POLE
STORM MANHOLE	GUY WIRE
CLEAN OUT	BOLLARD
CATCH BASIN ROUND	TRAFFIC LIGHT
CATCH BASIN SQUARE	SOIL BORING
CURB INLET	SANITARY SEWER
FIRE HYDRANT	WATER MAIN
WATER VALVE	STORM SEWER
GAS VALVE	UNDERGROUND GAS
LIGHT POLE	UNDERGROUND ELECTRIC
YARD LIGHT	UNDERGROUND TELEPHONE
MAIL BOX	UNDERGROUND FIBER OPTICS
TELEPHONE PEDESTAL	OVERHEAD UTILITY
ELECTRICAL MANHOLE	
SIGN	

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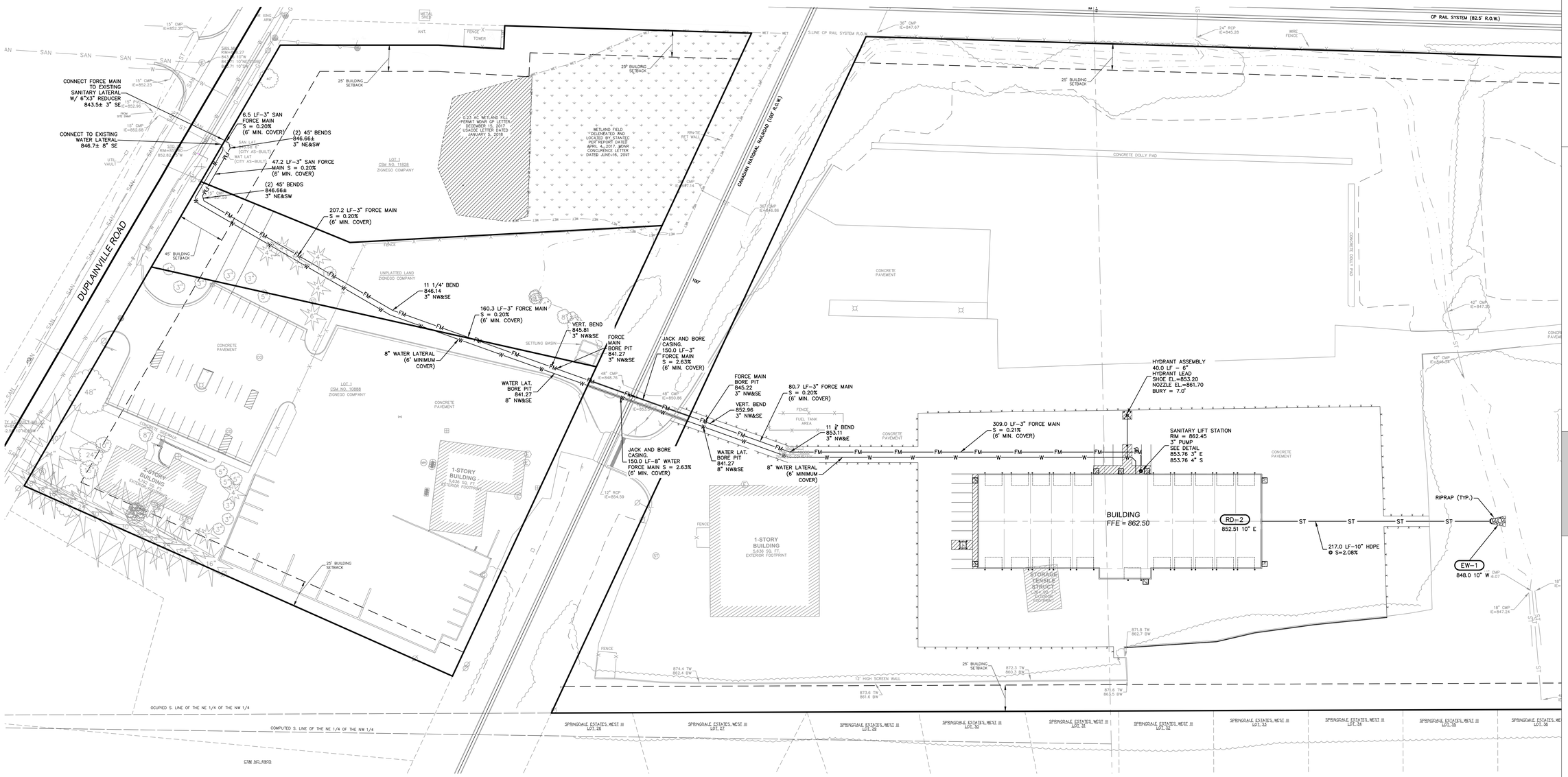
SHEET TITLE
MASS GRADING PLAN

PROPOSED ZIGNAGO
REPAIR FACILITY BUILDING
DUPLAINVILLE ROAD
PEWAUKEE, WI

REVISED PLAN COMMISION 06/30/20

JOB:	20-9494
DRAWN:	PSM
CHECKED:	
DATE:	06/01/20
SHEET:	C1.1



UTILITY NOTES

1. EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND/OR TO AVOID DAMAGE THERETO. CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.
2. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN (WISCONSIN LATEST EDITION AND ADDENDUM) AND ALL STATE AND LOCAL CODES AND SPECIFICATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS AND CODES APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.
3. UTILITY CONSTRUCTION AND SPECIFICATIONS SHALL COMPLY WITH THE CITY OF PEWAUKEE CONSTRUCTION STANDARDS AND WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES DSPS 382.
4. TRACER WIRE SHALL BE INSTALLED AS NECESSARY IN ACCORD WITH 182.0715(2R) OF THE STATE STATUTES AND CITY OF PEWAUKEE REQUIREMENTS.
5. LENGTHS OF PROPOSED UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS ARE SHOWN FOR CONTRACTOR CONVENIENCE ONLY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPUTATIONS OF MATERIALS REQUIRED TO COMPLETE WORK. LENGTHS SHALL BE FIELD VERIFIED DURING CONSTRUCTION.
6. CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT EXISTING UTILITY COVERS (SUCH AS MANHOLE COVERS, VALVE BOX COVERS, ETC.) TO MATCH FINISHED GRADES OF THE AREAS DISTURBED DURING CONSTRUCTION.
7. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF PROPOSED UTILITIES AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS PRIOR TO ATTEMPTING CONNECTIONS AND BEGINNING UTILITY CONSTRUCTION.
8. STORM SEWER SPECIFICATIONS –

   PIPE – HIGH DENSITY DUAL-WALL POLYETHYLENE CORRUGATED PIPE SHALL BE AS MANUFACTURED BY ADS OR EQUAL WITH WATER TIGHT JOINTS, AND SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATION M-294 TYPE "S".

   INLETS/CATCH BASINS – INLETS/CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NO. 25 OF THE "STANDARD SPECIFICATIONS". FRAME & GRATE SHALL BE NEENAH R-2501 WITH TYPE G GRATE, OR EQUAL. CURB FRAME & GRATE SHALL BE NEENAH R-3067, OR EQUAL.

   FIELD TILE CONNECTION – ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE(S) FOR STORM SEWER. TILE LINES CROSSED BY THE TRENCH SHALL BE REPLACED WITH THE SAME MATERIAL AS THE STORM SEWER.
9. SANITARY FORCE MAIN SPECIFICATIONS

   PIPE – SANITARY FORCE MAIN MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) MEETING REQUIREMENTS OF ASTM D-2241-09 CLASS 160, WITH EITHER SOLVENT WELD OR ELASTOMERIC JOINTS, MEETING THE REQUIREMENTS OF ASTM D-2241-09 CLASS 160.

   BEDDING AND COVER MATERIAL – PIPE BEDDING AND COVER MATERIAL SHALL BE SAND, CRUSHED STONE CHIPS OR CRUSHED STONE SCREENINGS CONFORMING TO CHAPTER 8.43.2 OF THE "STANDARD SPECIFICATIONS".

   BACKFILL – BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".

UTILITY NOTES

1. WATER MAIN SPECIFICATIONS –

   PIPE – POLYVINYL CHLORIDE (PVC) PIPE SHALL MEET THE REQUIREMENTS OF AWWA STANDARD C-900, CLASS 150, DR-18 WITH CAST IRON O.D. AND INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS. NON-METALLIC WATERMAINS SHALL BE INSTALLED WITH BLUE INSTALLATION TRACER WIRE AND CONFORM WITH SPS 382.30 (11)(h).

   VALVES AND VALVE BOXES – GATE VALVES SHALL BE AWWA GATE VALVES MEETING THE REQUIREMENTS OF AWWA C-500 AND CHAPTER 8.27.0 OF THE "STANDARD SPECIFICATIONS". GATE VALVES AND VALVE BOXES SHALL CONFORM TO LOCAL PLUMBING ORDINANCES.

   HYDRANTS – HYDRANTS SHALL CONFORM TO THE SPECIFICATION OF THE CITY OF PEWAUKEE. THE DISTANCE FROM THE GROUND LINE TO THE CENTERLINE OF THE LOWEST NOZZLE AND THE LOWEST CONNECTION OF THE FIRE DEPARTMENT SHALL BE NO LESS THAN 18-INCHES AND NO GREATER THAN 23-INCHES.

   BEDDING AND COVER MATERIAL – PIPE BEDDING AND COVER MATERIAL SHALL BE SAND, CRUSHED STONE CHIPS OR CRUSHED STONE SCREENINGS CONFORMING TO CHAPTER 8.43.2 OF THE "STANDARD SPECIFICATIONS".

   BACKFILL – BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".
2. SANITARY SEWER SPECIFICATIONS –

   PIPE – SANITARY SEWER PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) MEETING REQUIREMENTS OF ASTM D 3034, SDR-35, WITH INTEGRAL BELL TYPE FLEXIBLE ELASTOMERIC JOINTS, MEETING THE REQUIREMENTS OF ASTM D-3212.

   BEDDING AND COVER MATERIAL – BEDDING AND COVER MATERIAL SHALL CONFORM TO THE APPROPRIATE SECTIONS OF THE "STANDARD SPECIFICATION" WITH THE FOLLOWING MODIFICATION: "COVER MATERIAL SHALL BE THE SAME AS USED FOR BEDDING AND SHALL CONFORM TO SECTION 8.43.2 (A). BEDDING AND COVER MATERIAL SHALL BE PLACED IN A MINIMUM OF THREE SEPARATE LIFTS, OR AS REQUIRED TO INSURE ADEQUATE COMPACTING OF THESE MATERIALS, WITH ONE LIFT OF BEDDING MATERIAL ENDING AT OR NEAR THE SPRINGLINE OF THE PIPE. THE CONTRACTOR SHALL TAKE CARE TO COMPLETELY WORK BEDDING MATERIAL UNDER THE HAUNCH OF THE PIPE TO PROVIDE ADEQUATE SIDE SUPPORT."

   BACKFILL – BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS." GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS."

   MANHOLES – MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NOS. 12, 13 AND 15 OF THE "STANDARD SPECIFICATIONS" AND ALL SPECIAL PROVISIONS OF THE CITY OF PEWAUKEE.

   MANHOLE FRAMES AND COVERS – MANHOLE FRAMES AND COVERS SHALL BE NEENAH R-1642 WITH TYPE "B" SELF SEALING LIDS, NON-ROCKING OR EQUAL.
3. WATER MAIN, SANITARY FORCE MAIN, AND SANITARY SEWER SHALL BE INSULATED WHEREVER THE DEPTH OF COVER IS LESS THAN 6 FEET. INSULATION AND PLACING OF INSULATION SHALL CONFORM TO CHAPTER 4.17.0 "INSULATION" OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN 6TH EDITION UPDATED WITH ITS LATEST ADDENDUM (TYP.).
4. TRACER WIRE SHALL BE INSTALLED ALONG THE SANITARY SEWER SERVICE. THE TRACER WIRE SHALL BE CONTINUOUS AND SHALL BE EXTENDED ABOVE GRADE VIA A 4-INCH PVC PIPE WITH SCREW-ON CAP ADJACENT TO THE PROPOSED TERMINATION POINT OF THE LATERAL FOR THE PROPOSED BUILDING.
5. ALL NEW ON-SITE SANITARY, STORM AND WATER UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER.
6. THE CONTRACTOR SHALL CONTACT THE CITY OF PEWAUKEE ENGINEERING DEPARTMENT 72-HOURS IN ADVANCE OF SANITARY, WATER AND STORM CONNECTIONS TO THE CITY-OWNED SYSTEM TO SCHEDULE INSPECTIONS.

north

SCALE IN FEET
40' 0 40'

LEGEND

	SANITARY SEWER MANHOLE		POWER POLE
	STORM MANHOLE		GUY WIRE
	CLEAN OUT		BOLLARD
	CATCH BASIN ROUND		TRAFFIC LIGHT
	CATCH BASIN SQUARE		SOIL BORING
	CURB INLET	SAN	SANITARY SEWER
	FIRE HYDRANT	W	WATER MAIN
	WATER VALVE	ST	STORM SEWER
	GAS VALVE	G	UNDERGROUND GAS
	LIGHT POLE	E	UNDERGROUND ELECTRIC
	YARD LIGHT	T	UNDERGROUND TELEPHONE
	MAIL BOX	FIB	UNDERGROUND FIBER OPTICS
	TELEPHONE PEDESTAL	OH	OVERHEAD UTILITY
	ELECTRICAL MANHOLE		
	SIGN		

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WAUKESHA, WISCONSIN 53188
262.513.0666 PHONE | 262.513.1232 FAX
www.jsdinc.com
JSD JOB NO.: 20-9494

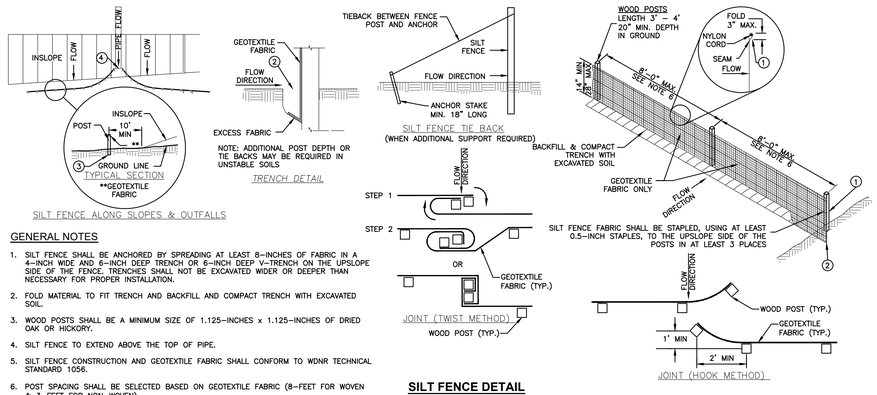
BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
SITE UTILITY PLAN

PROPOSED ZIGNAGO
REPAIR FACILITY BUILDING
DUPLAINVILLE ROAD
PEWAUKEE, WI

REVISED PLAN COMMISSION 06/30/20

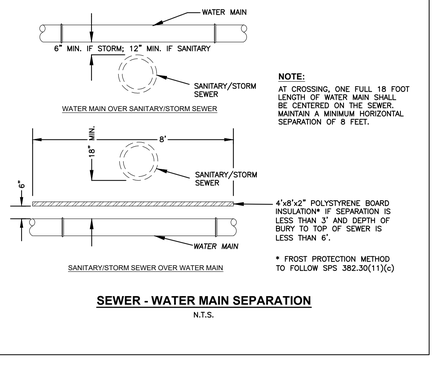
JOB:	20-9494
DRAWN:	PSM
CHECKED:	
DATE:	06/01/20
SHEET:	C2.0



GENERAL NOTES

1. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8-INCHES OF FABRIC IN A 4-INCH WIDE AND 6-INCH DEEP TRENCH OR 6-INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
2. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES x 1.125-INCHES OF DRIED OAK OR HICKORY.
4. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE.
5. SILT FENCE CONSTRUCTION AND GEOTEXTILE FABRIC SHALL CONFORM TO WDNR TECHNICAL STANDARD 1056.
6. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8-FEET FOR WOVEN & 3-FEET FOR NON-WOVEN)

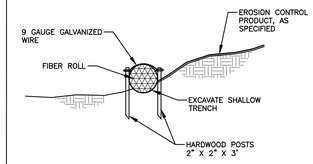
SILT FENCE DETAIL
N.T.S.



NOTE:
AT CROSSING, ONE FULL 18 FOOT LENGTH OF WATER MAIN SHALL BE CENTERED ON THE SEWER. MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 8 FEET.

* FROST PROTECTION METHOD TO FOLLOW SPS 382.30(11)(c)

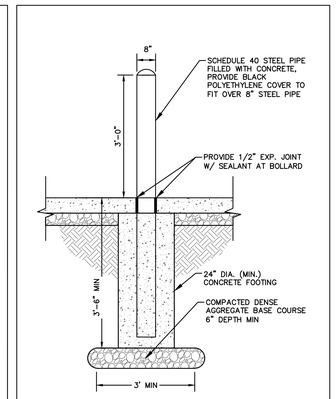
SEWER - WATER MAIN SEPARATION
N.T.S.



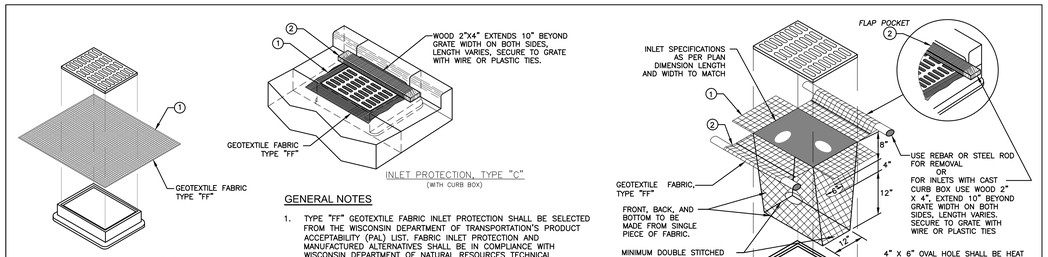
GENERAL NOTES:

1. EXCAVATE A SHALLOW TRENCH SLIGHTLY BELOW BASEFLOW OR A 4" TRENCH ON SLOPE CONTOURS.
2. PLACE THE ROLL IN THE TRENCH AND ANCHOR WITH 2" X 2" POSTS PLACED ON BOTH SIDES OF THE ROLL AND SPACED LATERALLY ON 2' TO 4' CENTERS. TRIM THE TOP OF THE POSTS EVEN WITH THE EDGE OF THE ROLL, IF NECESSARY.
3. NOTCH THE POSTS AND TIE TOGETHER, ACROSS THE ROLL, WITH 9 GAUGE GALVANIZED WIRE OR 1/8" DIAMETER BRAIDED NYLON ROPE.
4. PLACE SOIL EXCAVATED FROM THE TRENCH BEHIND THE ROLL AND HAND TAMP. PLANT WITH SUITABLE HERBACEOUS OR WOODY VEGETATION AS SPECIFIED.

FIBER SILT SOCK
N.T.S.



CONCRETE BOLLARD
N.T.S.



TYPE "B" INSTALLATION NOTES

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHODS TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

GENERAL NOTES

1. TYPE "FF" GEOTEXTILE FABRIC INLET PROTECTION SHALL BE SELECTED FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S PRODUCT ACCEPTABILITY (PAL) LIST. FABRIC INLET PROTECTION AND MANUFACTURED ALTERNATIVES SHALL BE IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1060.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE 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 POCKET WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

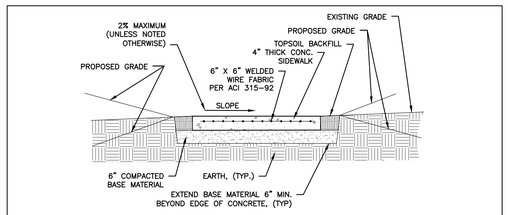
(2) FOR INLET PROTECTION, TYPE "C" (WITH CURB BOX), AN ADDITIONAL 18 INCHES OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

(3) FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.

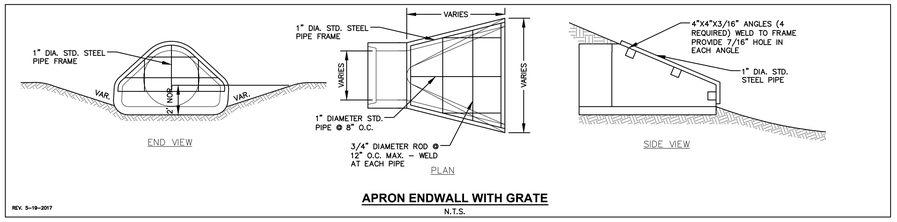
TYPE "D" INSTALLATION NOTES

1. DO NOT INSTALL INLET PROTECTION TYPE "D" IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
2. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.
3. 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 INCHES. WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCHES CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4 INCHES FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
N.T.S.

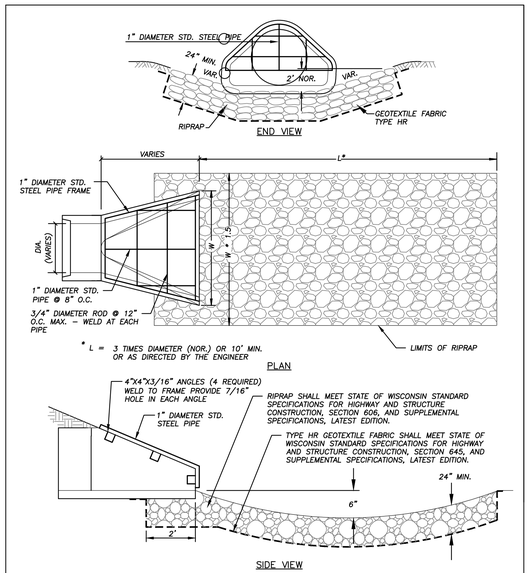


CONCRETE SIDEWALK
N.T.S.

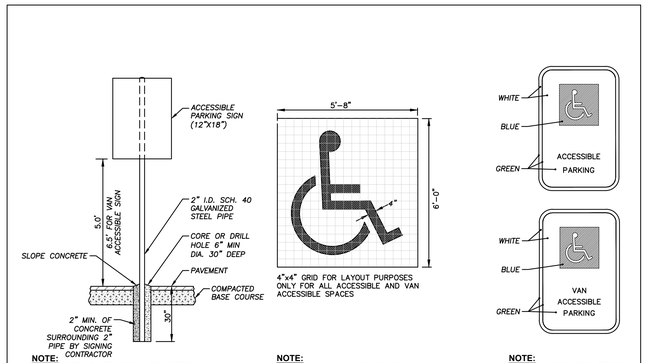


REV. 5-19-2017

APRON ENDWALL WITH GRATE
N.T.S.



APRON ENDWALL WITH GRATE
N.T.S.



NOTE:
SIGNAGE DETAILS ARE SHOWN FOR INTENT ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS PRIOR TO CONSTRUCTION.

ACCESSIBLE PARKING SIGN AND POST INSTALLATION
N.T.S.

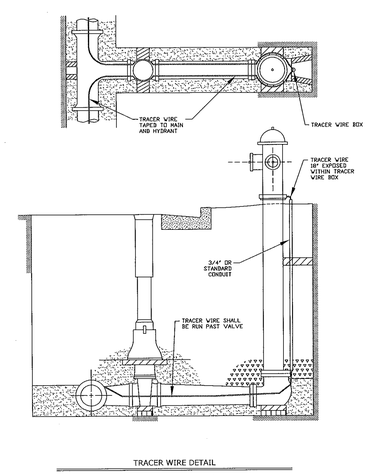
NOTE:
SYMBOL DETAILS ARE SHOWN FOR INTENT ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS PRIOR TO CONSTRUCTION.

PAINTED SYMBOL
N.T.S.

NOTE:
SIGNAGE AND SYMBOL DETAILS ARE SHOWN FOR INTENT ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS PRIOR TO CONSTRUCTION.

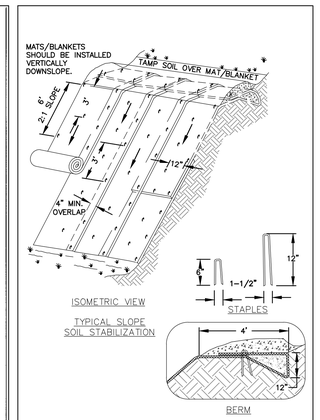
SIGN DETAILS
N.T.S.

Figure E



TRACER WIRE DETAIL

CITY OF PEWAUKEE		
SCALE: 1"=3'	SEPTEMBER 2016	DRAWN BY: JJF



GENERAL NOTES:

1. EROSION MAT CONSTRUCTION SHALL BE IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1052 "NON-CHANNEL EROSION MAT".
2. ONLY WisDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.
3. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
5. ONLY WisDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.

EROSION MATTING
N.T.S.

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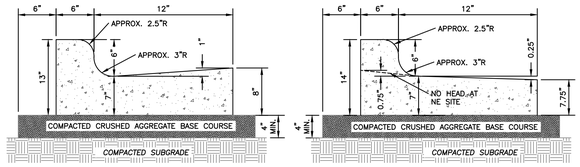
DETAILS

SHEET TITLE

PROPOSED ZIGNAGO REPAIR FACILITY BUILDING
DUPLAINVILLE ROAD
PEWAUKEE, WI

REVISED PLAN COMMISION 06/30/20

JOB:	20-9494
DRAWN:	PSM
CHECKED:	RWI
DATE:	06/01/20
SHEET:	C3.0



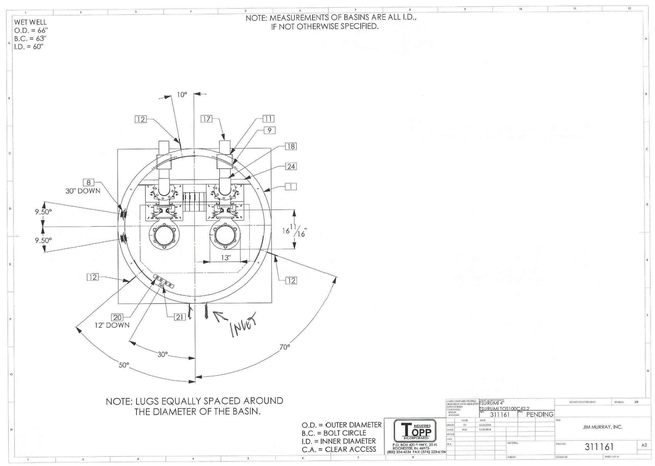
CONCRETE LOW SIDE
(COLLECT) CURB & GUTTER

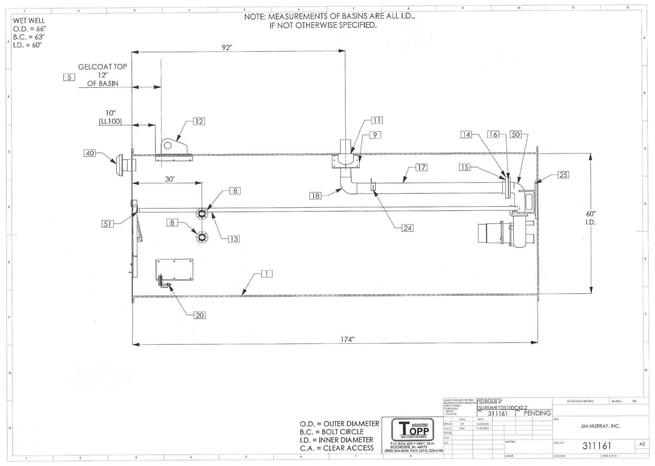
CONCRETE HIGH SIDE
(REJECT) CURB & GUTTER

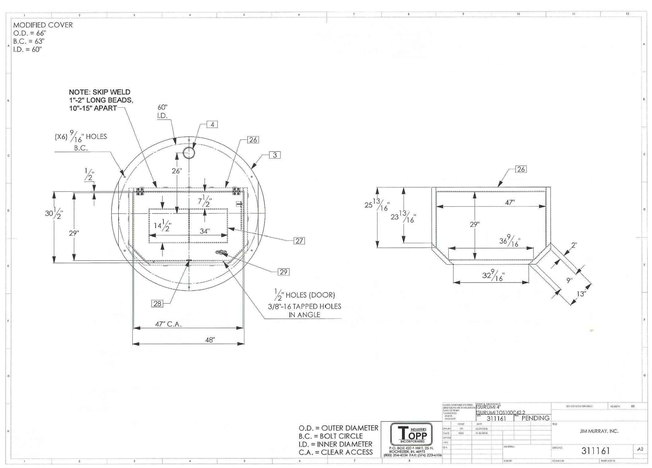
GENERAL NOTES

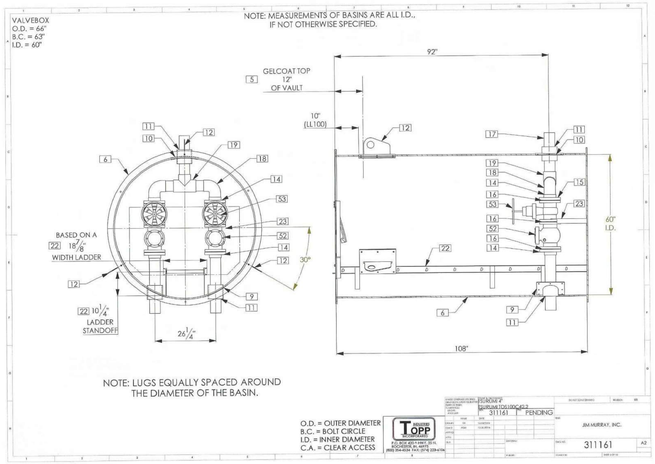
1. LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15 FEET NOR LESS THAN 6 FEET. THE JOINTS SHALL BE A MINIMUM OF 3 INCHES IN DEPTH
2. EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200 FEET OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER OF RECORD. THE EXPANSION JOINT FILLER SHALL BE A ONE PIECE FIBER BOARD OR THE APPROVED EQUIVALENT MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 0.5 INCH THICK.
3. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE

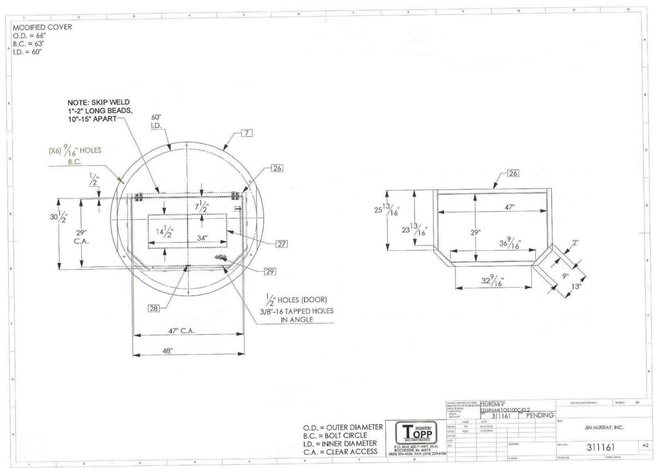
18" STANDARD CURB & GUTTER
N.T.S.











ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FB60X1745	60" X 174" FG BASIN W/SIL. ANTI-FLOAT	1
2	SD	DUPLEX PUMP MOUNTING STUDS	1
3	311141_C6SHSA	1/4" ALUM. HATCH CVR, HINGED & LOCKABLE	1
4	17-0108	4" Alum Coupling - Welded In Cover	1
5	GELW0605	GELCOAT TOP 12" OF BASIN AND VAULT	1
6	FB60X108F	60" X 108" FIBERGLASS BASIN W/FG ANTI-FLOAT	1
7	311141_V8_C6SHSA	1/4" ALUM. HATCH CVR, HINGED & LOCKABLE, NO VENT	1
8	C200FG	2" NPT BOLT-ON COMPOSITE FG COUPLING - ELECTRICAL	2
9	SLV0600A60_26.25 PLATE	6" ALUM SLEEVE FOR 60" BASINS - DISCHARGE	4
10	SLV0600A60	6" ALUMINUM SLEEVE FOR 60" BASIN - DISCHARGE	1
11	LS-300-S316	LS-300-S316 SS LINKSEALS	50
12	LL100	I.E. STEEL LIFTING LUG	6
13	13-0103	1 1/4" 304 SS Pipe	80 FT
14	14-1103	4" Sch80 PVC Varaloxe Flange SW	6
15	100-0001	SS BOLTS, WASHERS & LOCK NUTS	44
16	17-0212	3/16 X 4" Rubber Ring Gasket	8
17	14-0108	4" Sch80 PVC Pipe	40 FT
18	14-0217	4" Sch80 PVC 90° Elbow (SW)	4
19	14-0318	4" Sch80 PVC Tee (SW)	1
20	SSFB4	STAINLESS STEEL FLOAT BRACKET W/(4) CORD GRIPS	1
21	FBCLIP	Float bracket clip	1
22	AL12	Alum Ladder	9 FT
23	17-0360L	SS Valve Bracing	2
24	14-8103	ALUMINUM SHIPPING BRACING FOR 60" BASIN	1
25	SPLFG4DUP	STUD PLATE, 26.25" SPREAD	1
26	A1A1-422	1/4" X 2" X 2" ALUMINUM ANGLE	2
27	AL8T1-4C060	1/2" X 2" ALUMINUM FLAT BAR	2
28	Lock Plate	LOCKING PLATE	2
29	ALUMINUM HANDLE	RECESSED ALUMINUM HANDLE	2

ITEM NO.	PART NUMBER	ITEMS SHIPPED LOOSE	QTY.
40	GV4005	4" GREEN VENT W/SS CLOSE NIPPLE	1
	H600C	6" CURVED RACK CAULKING HUB	1
	CHNG15	3/16" X 15' 316 SS CHAIN, W/2 SHACKLES	2
	14-8253	3 PVC DWV P-TRAP	1
	14-8254	2 PVC DRWR DRN W/SS STRN	1
	SLV0400A60	4" ALUM SLEEVE FOR 60" BASINS	1
	LS-300-C	LS-300-C LINKSEALS	6

ITEM NO.	PART NUMBER	'CUSTOMER SUPPLIED MATERIAL	QTY.
50		BASE ELBOWS (TBURUM #'S)	2
51		UPPER GUIDE RAIL BRACKETS	
52		LEGEND CHECK VALVES	
53		LEGEND GATE VALVES	

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
DETAILS

PROPOSED ZIGNAGO
REPAIR FACILITY BUILDING
DUPLAINVILLE ROAD
PEWAUKEE, WI

REVISED PLAN COMMISION 06/30/20

JOB:	20-9494
DRAWN:	PSM
CHECKED:	RWI
DATE:	06/01/20
SHEET:	C3.1

DIGGERS HOTLINE
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W238N1610 BUSSE RD. SUITE 100
WAUKESHA, WISCONSIN 53188
262.513.0666 PHONE | 262.513.1232 FAX
www.jsdinc.com
JSD JOB NO.: 20-9494

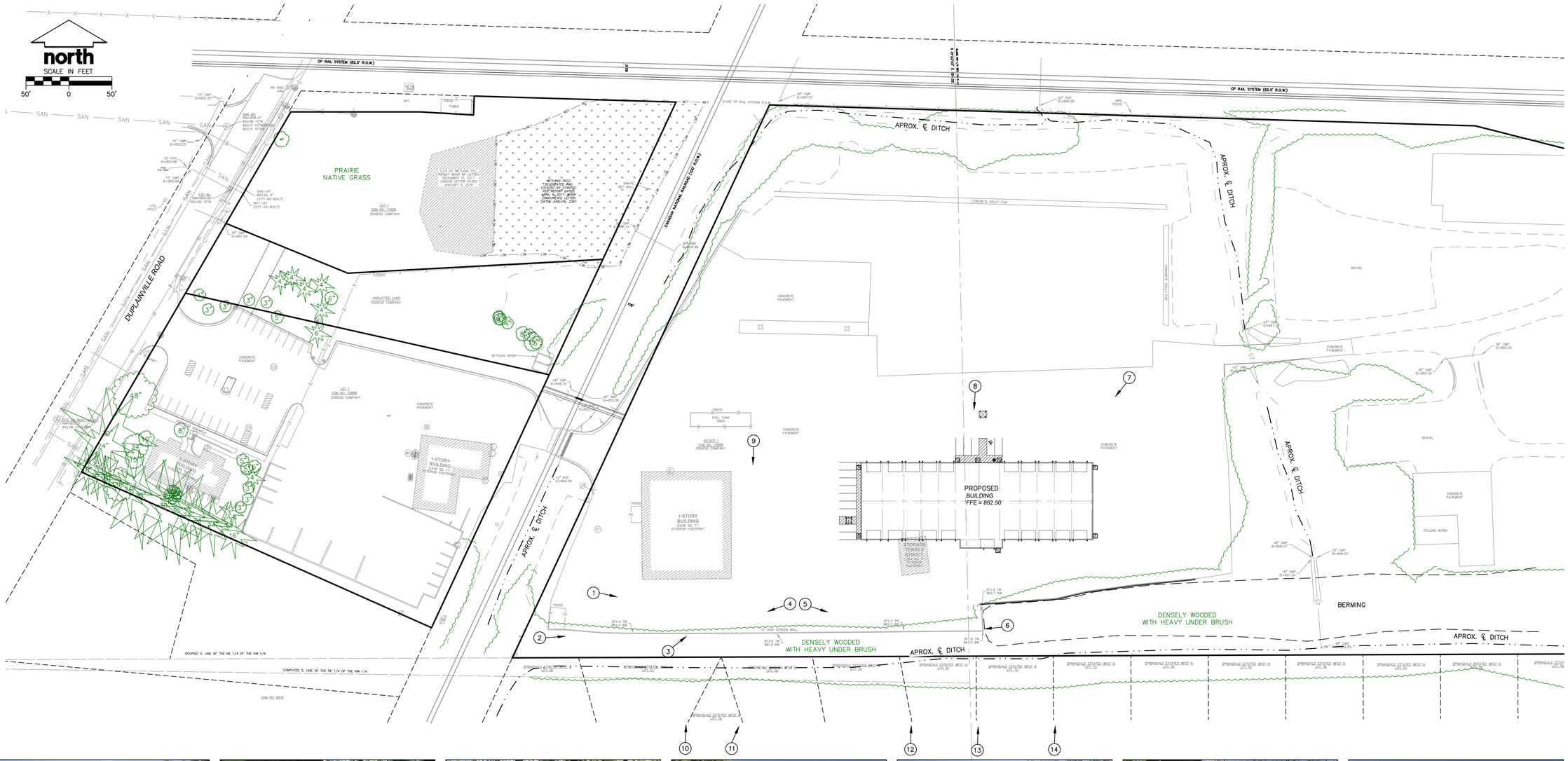

PHOTO 1 (5/29/20)

PHOTO 2 (5/29/20)

PHOTO 3 (5/29/20)

PHOTO 4 (5/29/20)

PHOTO 5 (5/29/20)

PHOTO 6 (5/29/20)

PHOTO 7 (5/29/20)

PHOTO 8 (5/29/20)

PHOTO 9 (5/29/20)

PHOTO 10 FROM FOXWOOD LN. (5/29/20)

PHOTO 11 FROM FOXWOOD LN. (5/29/20)

PHOTO 12 FROM FOXWOOD LN. (5/29/20)

PHOTO 13 FROM FOXWOOD LN. (5/29/20)

PHOTO 14 FROM FOXWOOD LN. (5/29/20)

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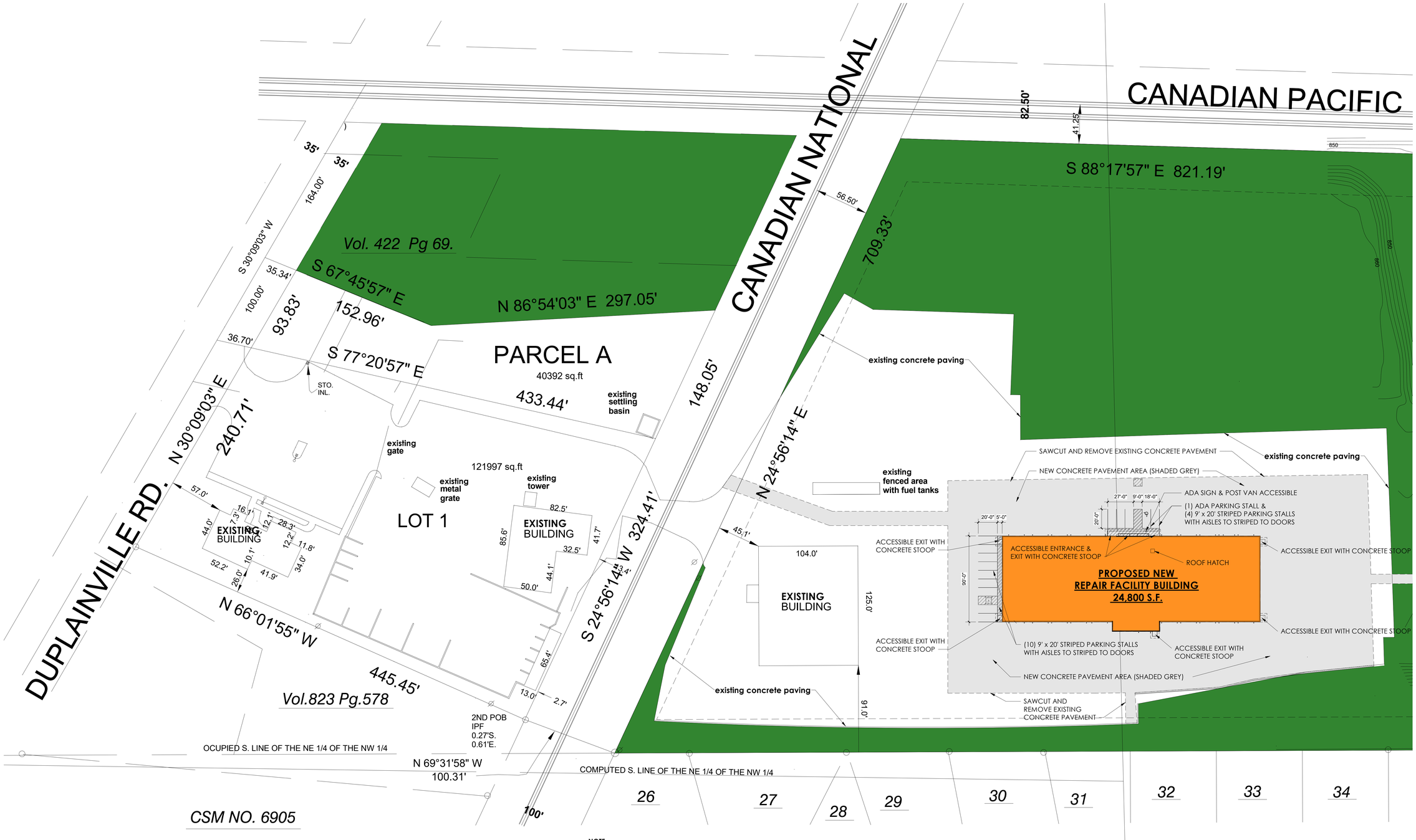
SHEET TITLE
EXISTING LANDSCAPE AND NATURAL RESOURCES EXHIBIT

PROPOSED ZIGNAGO REPAIR FACILITY BUILDING
DUPLAINVILLE ROAD
PEWAUKEE, WI

REVISED PLAN COMMISION 06/30/20

JOB:	20-9494
DRAWN:	PSM
CHECKED:	
DATE:	06/01/20
SHEET:	L1.0



NOTE:
TRASH AND RECYCLING TO BE STORED IN EXISTING BUILDING AND NEW BUILDING

1 ARCHITECTURAL SITE PLAN
1" = 40'-0"

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
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SHEET TITLE
ARCHITECTURAL SITE PLAN

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

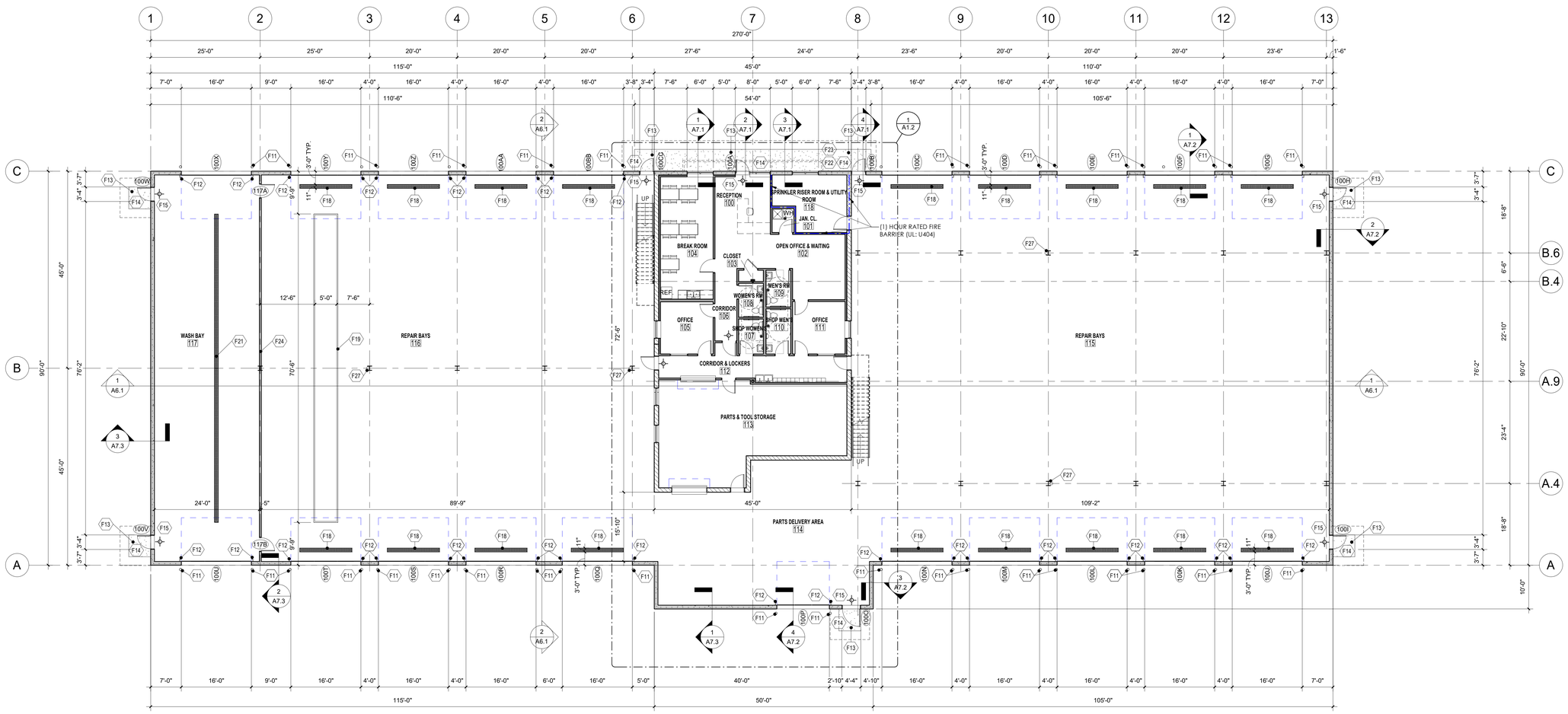
Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB:	3239
DRAWN:	CK
CHECKED:	DF/KJ
DATE:	MAY 28, 2020
SHEET:	A0.1

APPLICABLE TO ALL PLAN VIEWS

KEYNOTE LEGEND FLOOR PLAN

MARK	FLOOR PLAN CODED NOTES
F11	6" DIAMETER X 4'-0" TALL CONCRETE FILLED STEEL PIPE BOLLARD(S). PAINTED SAFETY YELLOW.
F12	PAINTED "SAFETY YELLOW" OSHA "Z" SHAPED GUARDS 4'-0" TALL AT OVERHEAD DOOR TRACK LOCATIONS BOLTED TO PRECAST WALL.
F13	CONCRETE STOOP - REFER TO STRUCTURAL PLAN AND CIVIL DRAWINGS. (PROVIDE RIGID INSULATION 4" THICK EXTENDING 24" PAST EDGE OF CONCRETE TYPICAL).
F14	PROVIDE EXTERIOR CODE REQUIRED EXIT DOOR LIGHT FIXTURES - REFER TO ELECTRICAL PLANS.
F15	EXIT DOORS TO HAVE CODE COMPLIANT EXITS LIGHTS AND EMERGENCY EGRESS LIGHTING PER CODE TYPICAL.
F18	12" X 12'-0" TRENCH DRAIN AT DRIVE THRU DOORS WITH SLOPING CONCRETE FLOOR - REFER TO PLUMBING DRAWINGS.
F19	SERVICE PIT 5'-0" DEEP WITH SUMP AND CONCRETE STAIRS AT EITHER END - REFER TO STRUCTURAL DRAWINGS.
F21	12" X 70'-0" TRENCH DRAIN AT DRIVE THRU DOORS WITH SLOPING CONCRETE FLOOR - REFER TO PLUMBING DRAWINGS.
F22	FIRE DEPARTMENT ACCESS TO SPRINKLER RISER ROOM WITH KNOX BOX LOCATED NEAR DOOR.
F23	FIRE DEPARTMENT CONNECTION WITH STROBE ALARM LOCATED ABOVE 17-18 FEET AFF TO BE CONFIRMED BY FIRE OFFICIAL.
F24	IMP PANEL SEPARATION WALL.
F27	VERTICAL CONDUCTOR. NOTE: PROVIDE COLUMN AND VERTICAL CONDUCTOR PROTECTION FOR WAREHOUSE COLUMNS (PROVIDE CLEAN-OUT AS REQUIRED).



1 OVERALL FIRST FLOOR PLAN
3/32" = 1'-0"

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
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SHEET TITLE
OVERALL FLOOR PLAN

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
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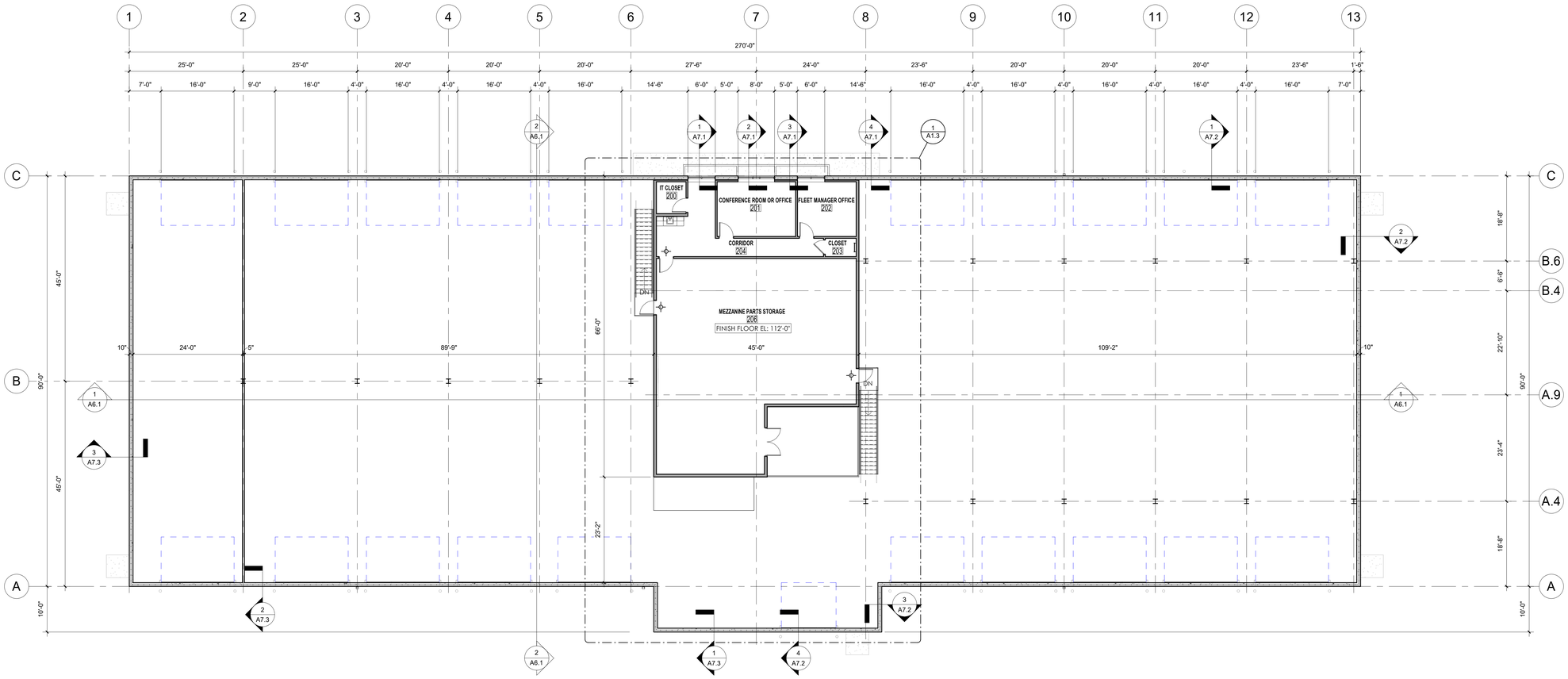

1 MEZZANINE FLOOR PLAN
3/32" = 1'-0"

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
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SHEET TITLE
MEZZANINE FLOOR PLAN

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB: 3239
DRAWN: CK
CHECKED: DF/KJ
DATE: MAY 28, 2020
SHEET:
A1.1

DOOR & DOOR HARDWARE NOTES:

1. ALL HANDLES, PULLS, LATCHES, LOCKS, AND OTHER PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND SOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE. SUCH HARDWARE SHALL BE 34 INCHES MINIMUM TO 48 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.
2. DOORS CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES SHALL BE 5 SECONDS MINIMUM.
3. DOOR SPRING HINGES SHALL BE ADJUSTED SO THAT THE OPEN POSITION OF 70 DEGREES, THE DOOR SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MINIMUM. MEASURED UNDER AMBIENT CONDITIONS.
4. FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE AUTHORITY. THE MAXIMUM FORCE FOR PUSHING OPEN OR PULLING OPEN DOORS OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS:
A. INTERIOR HINGED DOOR: 5.0 POUNDS (22.2N)
B. SLIDING OR FOLDING DOOR: 5.0 POUNDS (22.2N)
THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR IN A CLOSED POSITION.
5. DOOR SURFACE WITHIN 10 INCHES OF THE FLOOR OR GROUND MEASURED VERTICALLY SHALL BE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN SUCH SURFACE SHALL BE WITHIN 1/16 INCH OF THE SMA PLANE AS THE OTHER. CAVITIES CREATED BY ADDED KICK PLATE SHALL BE CAPPED.
EXCEPTIONS:
A. SLIDING DOORS
B. TEMPERED GLASS DOORS WITHOUT STILES AND HAVING A BOTTOM RAIL OR SHOE WITH THE TOP LEADING EDGE TAPERED AT NO LESS THAN 60 DEGREES FROM THE HORIZONTAL SHALL NOT BE REQUIRED TO MEET THE 10 INCH BOTTOM RAIL HEIGHT REQUIREMENT.
C. DOORS WHICH DO NOT EXTEND TO WITHIN 10 INCHES OF THE FLOOR OR GROUND.
6. DOORS AND SIDELIGHTS ADJACENT TO DOORS CONTAINING ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS SHALL HAVE THE BOTTOM OF AT LEAST ONE PANEL 43 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND.
7. EGRESS DOORS SHALL BE READILY OPENABLE FROM EGRESS SIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT UNLESS SPECIFICALLY PERMITTED IN IBC 1010.1.9.

TOILET ROOM NOTES:

1. 6-1/2" MAXIMUM SINK DEPTH.
2. INSULATE PIPES BELOW COUNTERTOPS (WATER AND WASTE LINES w/ PVC MOLDED PROTECTION.
3. FLUSH VALVE FOR URINAL MUST NOT EXCEED 44" IN HEIGHT.
4. PROVIDE LEVER FAUCETS HANDLES AAT ALL SINKS AND LAVATORIES.
5. ALL DIMENSIONS SHOWN ARE FROM WALL FINISH.

DRINKING FOUNTAIN NOTES:

1. CONTROLS MUST BE MOUNTED IN FRONT OR SIDE MOUNTED NEAR FRONT EDGE
2. PROVIDE 30" x 48" CLEAR FLOOR SPACE

STANDARD MOUNTING HEIGHT NOTES:

1. ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF ADA AND ANSI A117.1 SEC. 703.
2. SIGN SHALL BE MOUNTED WHERE INDICATED. WHERE THERE IS NO WALL SPACE ADJACENT TO LATCH SIDE OF DOOR. SIGN SHALL BE MOUNTED ON NEAREST ADJACENT WALL.
3. MOUNTING LOCATION FOR SIGNAGE SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR.
4. FACILITIES AND ELEMENTS REQUIRED TO BE IDENTIFIED AS ACCESSIBLE SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.

GENERAL NOTES

1.VERIFY ALL CONDITIONS, DIMENSIONS, AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION / CONSTRUCTION BEGINS.
2.VERIFY LOCATION OF ACCESS PANELS WITH MECHANICAL AND ELECTRICAL DRAWINGS FOR ACCESS TO MECHANICAL AND ELECTRICAL ITEMS.
3.SEAL PENETRATIONS IN FIRE RATED ASSEMBLIES AND SMOKE BARRIERS TO MEET REQUIRED RATINGS. UTILIZE UL APPROVED METHODS.
4.DURING CONSTRUCTION , AREA SHALL BE KEPT BROOM CLEAN AND FREE OF DEBRIS.
5.CONCRETE SLABS AND SIDEWALKS. REFER TO STRUCTURAL DRAWINGS.
6.(AS REQUIRED BY IECC 502.4 AIR LEAKAGE)
SEAL PENETRATIONS AT WINDOW AND DOOR ASSEMBLIES (IECC 502.4.1)
SEAL PENETRATIONS AT CURTAIN WALL, STOREFRONT GLAZING, AND COMMERCIAL ENTRANCE DOORS (IECC 502.4.2)
SEALING ON THE BUILDING ENVELOPE (IECC 502.4.3)
SEAL PENETRATIONS AT OUTDOOR AIR INTAKES AND EXHAUST OPENING (IECC 502.4.4)
SEAL LOADING DOCK WEATHER SEALS (IECC 502.4.5)
SEAL PENETRATIONS AT VESTIBULES (IECC 502.4.6)
SEAL PENETRATIONS AT RECESSED LUMINARIES (IECC 502.4.7)
7.FIRE EXTINGUISHERS TO BE FURNISHED BY G.C. AND LOCATED AS REQUIRED BY INTERNATIONAL FIRE CODE & LOCAL FIRE INSPECTOR AND OR FIRE DEPT.
8.STUD FRAMING EXTENDED UP TO STRUCTURE ABOVE SHALL HAVE SLIP TRACK W/O MECH. FASTENING ALLOWING DEFLECTION.
9.ALL EXPOSED GYPSUM WALL BOARD SHALL BE TYPE "X" TAPED AND COATED SMOOTH READY TO PAINT.
10.RETURN GYPSUM WALLBOARD INTO JAMBS AND HEADS @ EXTERIOR WALLS WITH WINDOWS AND DOORS.
11.VERIFY LOCATION OF ACCESS PANELS REQUIRED AND COORDINATE SPECIFIC FINISH REQUIREMENTS WITH BOG.
12.ALL NEW INTERIOR SPACES SHALL BE CONSTRUCTED AS ACCESSIBLE AND IN ACCORDANCE WITH CHAPTER 11 AND ICC / ANSI A117.1-2003 REQUIREMENTS.
13.SEAL PENETRATIONS IN FIRE RATED ASSEMBLIES AND SMOKE BARRIERS TO MEET THE REQUIRED RATINGS. UL APPROVED METHODS.
14. RECEPTION DESK, OFFICE FURNITURE, FIXTURES AND EQUIPMENT BY TENANT.
15. BREAK ROOM FURNITURE BY TENANT.

FLOOR PLAN LEGEND

ROOM 100	ROOM NAME ROOM NUMBER		PARTITION TO BE DEMOLISHED
100	DOOR NUMBER		DOOR AND FRAME TO BE REMOVED
A	PARTITION TYPE		EXISTING PARTITION TO REMAIN
1	PLAN NOTES		EXISTING DOOR TO REMAIN
F.E.	SURFACE MOUNTED FIRE EXTINGUISHER		NEW CONSTRUCTION
F.E.C.	RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER		NEW DOOR & FRAME
	EXIT LIGHT		
	EXIT LIGHT (DIRECTIONAL)		

KEYNOTE LEGEND FLOOR PLAN

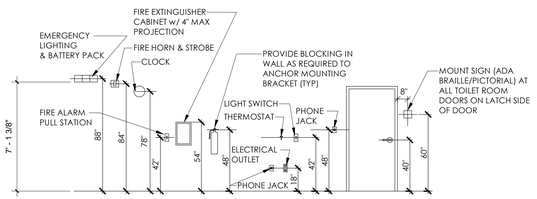
MARK	FLOOR PLAN CODED NOTES
F01	PLASTIC LAMINATED SILL.
F02	MOP SINK LOCATION. PROVIDE FRP UP TO 4'-0" AFF BEHIND SINK AND 12" TO EACH SIDE.
F03	PROVIDE FLOOR MOUNTED ELECTRIC WATER HEATER. PROVIDE SPILL CONTAINMENT PAN.
F04	FLOOR DRAIN - SEE PLUMBING FOR RIM. ELEVATION.
F05	BASE & UPPER MILLWORK. SEE INTERIOR ELEVATIONS.
F06	4'-0"W x 4'-0"H BORROWED LITE. IF APPLICABLE. (NOTE: TOP OF FRAME TO ALIGN WITH ADJACENT DOOR FRAME).
F07	PROVIDE 1" SEPARATION BETWEEN FURRING STUDS AND PRECAST FOR TO ALLOW FOR PRECAST MOVEMENT.
F08	ALL OFFICE FURNITURE, FIXTURES AND EQUIPMENT BY OWNER (TYPICAL). INCLUDING APPLIANCES BY OWNER.
F11	6" DIAMETER X 4'-0" TALL CONCRETE FILLED STEEL PIPE BOLLARD(S). PAINTED SAFETY YELLOW.
F12	PAINTED "SAFETY YELLOW" OSHA "Z" SHAPED GUARDS 4'-0" TALL AT OVERHEAD DOOR TRACK LOCATIONS BOLTED TO PRECAST WALL.
F13	CONCRETE STOOP - REFER TO STRUCTURAL PLAN AND CIVIL DRAWINGS. (PROVIDE RIGID INSULATION 4" THICK EXTENDING 24" PAST EDGE OF CONCRETE TYPICAL).
F14	PROVIDE EXTERIOR CODE REQUIRED EXIT DOOR LIGHT FIXTURES - REFER TO ELECTRICAL PLANS.
F15	EXIT DOORS TO HAVE CODE COMPLIANT EXITS LIGHTS AND EMERGENCY EGRESS LIGHTING PER CODE TYPICAL.
F18	12" X 12'-0" TRENCH DRAIN AT DRIVE THRU DOORS WITH SLOPING CONCRETE FLOOR - REFER TO PLUMBING DRAWINGS.
F20	TWO COMPARTMENT SHOP SIDE HAND WASHING SINK PER CODE.
F22	FIRE DEPARTMENT ACCESS TO SPRINKLER RISER ROOM WITH KNOX BOX LOCATED NEAR DOOR.
F23	FIRE DEPARTMENT CONNECTION WITH STROBE ALARM LOCATED ABOVE 17-18 FEET AFF TO BE CONFIRMED BY FIRE OFFICIAL.

PARTITION TYPES

TAG	STUD TYPE	STUD HEIGHT	INSULATION	VAPOR BARRIER	NOTED SIDE SURFACE MATERIAL	NOTED SIDE SURFACE HEIGHT	OPPOSITE SIDE SURFACE MATERIAL	OPPOSITE SIDE SURFACE HEIGHT
A1	3 5/8" STEEL STUD FURRING	TO 6" ABOVE CEILING	R-11 BATT.	6 MIL POLY	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING	----	----
A2	3 5/8" STEEL STUDS	TO 6" ABOVE CEILING	3.5" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING
A3	3 5/8" STEEL STUD FURRING	TO 6" ABOVE CEILING	R-11 BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING	----	----
A4	3 5/8" STEEL STUDS	TO UNDERSIDE OF DECK	3.5" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO DECK	5/8" TYPE "X" GYP. WALLBOARD	TO DECK (1) HOUR RATED FIRE BARRIER UL404
B1	6" STEEL STUDS	TO UNDERSIDE OF STRUCTURE	6" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING
B2	6" STEEL STUDS	TO UNDERSIDE OF DECK	6" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO DECK	5/8" TYPE "X" GYP. WALLBOARD	TO DECK
B3	6" STEEL STUDS	TO UNDERSIDE OF DECK	6" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO DECK	5/8" TYPE "X" GYP. WALLBOARD	TO DECK (1) HOUR RATED FIRE BARRIER UL404
C1	12" CMU	11'-0" A.F.F.	----	----	----	----	----	----

1. ALL STEEL STUDS SHALL BE 25 GAUGE STUDS @ 16" O.C., (UNLESS NOTED OTHERWISE) - SEE STRUCTURAL FOR GAUGE AND SIZE
2. ALL EXPOSED GYPSUM WALL BOARD SHALL BE TAPED & COATED SMOOTH, READY FOR PAINT - LEVEL 4 FINISH
3. USE 8" METAL STUDS AND INSTALL MOISTURE RESISTANT GYPSUM WALL BOARD AT ALL "WET WALL" LOCATIONS - UNO
4. AT EXTERIOR WALLS, RETURN GYPSUM WALL BOARD INTO WINDOW JAMBS AND HEAD
5. STUDS EXTENDED TO DECK AND/OR JOIST SHALL HAVE A SLIP CONNECTION TO ALLOW FOR DEFLECTION
6. INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH IBC SECTION 803 AND ASTM E84 AND UL 723 ; NOTE PROVIDE CLASS A MINIMUM
7. INTERIOR FLOOR FINISHES SHALL COMPLY WITH IBC SECTION 804
8. BATT INSULATION LOCATED ABOVE CEILING AND EXPOSED SHALL BE COVERED TO MEET EXPOSED RATED BARRIER REQUIREMENTS.

NOTE : PROVIDE A 7/8" - 1" GAP BETWEEN PRECAST WALL INTERIOR SIDE STEEL STUD FURRING AND DO NOT ATTACH FURRING TO PRECAST.

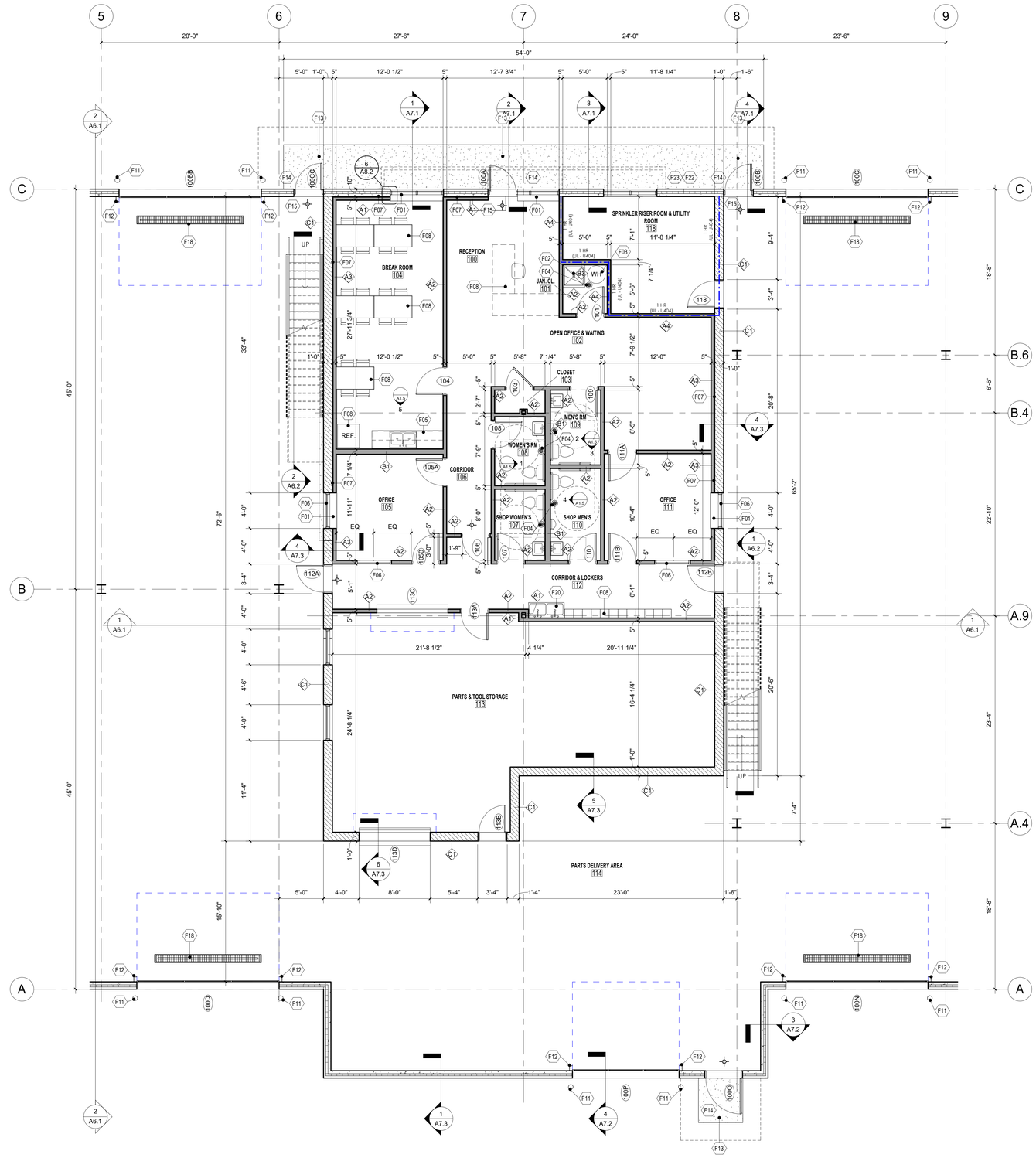


STANDARD MOUNTING HEIGHTS

NOT ALL ARE USED. SEE PLANS FOR APPLICABLE FIXTURES & ACCESSORIES. FOR INFORMATION ONLY.

STANDARD MOUNTING HEIGHT NOTES:

1. ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF ADA AND ANSI A117.1 SEC. 703.
2. SIGN SHALL BE MOUNTED WHERE INDICATED. WHERE THERE IS NO WALL SPACE ADJACENT TO LATCH SIDE OF DOOR. SIGN SHALL BE MOUNTED ON NEAREST ADJACENT WALL.
3. MOUNTING LOCATION FOR SIGNAGE SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR.
4. FACILITIES AND ELEMENTS REQUIRED TO BE IDENTIFIED AS ACCESSIBLE SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.



1 ENLARGED FIRST FLOOR PLAN
3/16" = 1'-0"

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
ENLARGED FIRST FLOOR PLAN, SCHEDULES & NOTES

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB: 3239
DRAWN: CK
CHECKED: DF/KJ
DATE: MAY 28, 2020
SHEET: A1.2

DOOR & DOOR HARDWARE NOTES:

1. ALL HANDLES, PULLS, LATCHES, LOCKS, AND OTHER PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND SOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE. SUCH HARDWARE SHALL BE 34 INCHES MINIMUM TO 48 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.
2. DOORS CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES SHALL BE 5 SECONDS MINIMUM.
3. DOOR SPRING HINGES SHALL BE ADJUSTED SO THAT THE OPEN POSITION OF 70 DEGREES, THE DOOR SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MINIMUM, MEASURED UNDER AMBIENT CONDITIONS.
4. FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE AUTHORITY. THE MAXIMUM FORCE FOR PUSHING OPEN OR PULLING OPEN DOORS OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS:
A. INTERIOR HINGED DOOR: 5.0 POUNDS (22.2N)
B. SLIDING OR FOLDING DOOR: 5.0 POUNDS (22.2N)
THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR IN A CLOSED POSITION.
5. DOOR SURFACE WITHIN 10 INCHES OF THE FLOOR OR GROUND MEASURED VERTICALLY SHALL BE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN SUCH SURFACE SHALL BE WITHIN 1/16 INCH OF THE SMA PLANE AS THE OTHER. CAVITIES CREATED BY ADDED KICK PLATE SHALL BE CAPPED.
EXCEPTIONS:
A. SLIDING DOORS
B. TEMPERED GLASS DOORS WITHOUT STILES AND HAVING A BOTTOM RAIL OR SHOE WITH THE TOP LEADING EDGE TAPERED AT NO LESS THAN 60 DEGREES FROM THE HORIZONTAL SHALL NOT BE REQUIRED TO MEET THE 10 INCH BOTTOM RAI REQUIREMENT.
C. DOORS WHICH DO NOT EXTEND TO WITHIN 10 INCHES OF THE FLOOR OR GROUND.
6. DOORS AND SIDELIGHTS ADJACENT TO DOORS CONTAINING ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS SHALL HAVE THE BOTTOM OF AT LEAST ONE PANEL 43 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND.
7. EGRESS DOORS SHALL BE READILY OPENABLE FROM EGRESS SIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT UNLESS SPECIFICALLY PERMITTED IN IBC 1010.1.9.

TOILET ROOM NOTES:

1. 6-1/2" MAXIMUM SINK DEPTH.
2. INSULATE PIPES BELOW COUNTERTOPS (WATER AND WASTE LINES w/ PVC MOLDED PROTECTION.
3. FLUSH VALVE FOR URINAL MUST NOT EXCEED 44" IN HEIGHT.
4. PROVIDE LEVER FAUCETS HANDLES AAT ALL SINKS AND LAVATORIES.
5. ALL DIMENSIONS SHOWN ARE FROM WALL FINISH.

DRINKING FOUNTAIN NOTES:

1. CONTROLS MUST BE MOUNTED IN FRONT OR SIDE MOUNTED NEAR FRONT EDGE
2. PROVIDE 30" x 48" CLEAR FLOOR SPACE

STANDARD MOUNTING HEIGHT NOTES:

1. ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF ADA AND ANSI A117.1 SEC. 703.
2. SIGN SHALL BE MOUNTED WHERE INDICATED. WHERE THERE IS NO WALL SPACE ADJACENT TO LATCH SIDE OF DOOR, SIGN SHALL BE MOUNTED ON NEAREST ADJACENT WALL.
3. MOUNTING LOCATION FOR SIGNAGE SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR.
4. FACILITIES AND ELEMENTS REQUIRED TO BE IDENTIFIED AS ACCESSIBLE SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.

GENERAL NOTES

1.VERIFY ALL CONDITIONS, DIMENSIONS, AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION / CONSTRUCTION BEGINS.
2.VERIFY LOCATION OF ACCESS PANELS WITH MECHANICAL AND ELECTRICAL DRAWINGS FOR ACCESS TO MECHANICAL AND ELECTRICAL ITEMS.
3.SEAL PENETRATIONS IN FIRE RATED ASSEMBLIES AND SMOKE BARRIERS TO MEET REQUIRED RATINGS. UTILIZE UL APPROVED METHODS.
4.DURING CONSTRUCTION , AREA SHALL BE KEPT BROOM CLEAN AND FREE OF DEBRIS.
5.CONCRETE SLABS AND SIDEWALKS, REFER TO STRUCTURAL DRAWINGS.
6.(AS REQUIRED BY IECC 502.4 AIR LEAKAGE)
SEAL PENETRATIONS AT WINDOW AND DOOR ASSEMBLIES (IECC 502.4.1)
SEAL PENETRATIONS AT CURTAIN WALL, STOREFRONT GLAZING, AND COMMERCIAL ENTRANCE DOORS (IECC 502.4.2)
SEALING ON THE BUILDING ENVELOPE (IECC 502.4.3)
SEAL PENETRATIONS AT OUTDOOR AIR INTAKES AND EXHAUST OPENING (IECC 502.4.4)
SEAL LOADING DOCK WEATHER SEALS (IECC 502.4.5)
SEAL PENETRATIONS AT VESTIBULES (IECC 502.4.6)
SEAL PENETRATIONS AT RECESSED LUMINARIES (IECC 502.4.7)
7.FIRE EXTINGUISHERS TO BE FURNISHED BY G.C. AND LOCATED AS REQUIRED BY INTERNATIONAL FIRE CODE & LOCAL FIRE INSPECTOR AND OR FIRE DEPT.
8.STUD FRAMING EXTENDED UP TO STRUCTURE ABOVE SHALL HAVE SLIP TRACK W/O MECH. FASTENING ALLOWING DEFLECTION.
9.ALL EXPOSED GYPSUM WALL BOARD SHALL BE TYPE "X" TAPED AND COATED SMOOTH READY TO PAINT.
10.RETURN GYPSUM WALLBOARD INTO JAMBS AND HEADS @ EXTERIOR WALLS WITH WINDOWS AND DOORS.
11.VERIFY LOCATION OF ACCESS PANELS REQUIRED AND COORDINATE SPECIFIC FINISH REQUIREMENTS WITH BDG.
12.ALL NEW INTERIOR SPACES SHALL BE CONSTRUCTED AS ACCESSIBLE AND IN ACCORDANCE WITH CHAPTER 11 AND ICC / ANSI A117.1-2003 REQUIREMENTS.
13.SEAL PENETRATIONS IN FIRE RATED ASSEMBLIES AND SMOKE BARRIERS TO MEET THE REQUIRED RATINGS. UL APPROVED METHODS.
14. RECEPTION DESK, OFFICE FURNITURE, FIXTURES AND EQUIPMENT BY TENANT.
15. BREAK ROOM FURNITURE BY TENANT.

FLOOR PLAN LEGEND

ROOM 100	ROOM NAME ROOM NUMBER		PARTITION TO BE DEMOLISHED
100	DOOR NUMBER		DOOR AND FRAME TO BE REMOVED
A	PARTITION TYPE		EXISTING PARTITION TO REMAIN
1	PLAN NOTES		EXISTING DOOR TO REMAIN
F.E.	SURFACE MOUNTED FIRE EXTINGUISHER		NEW CONSTRUCTION
F.E.C.	RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER		NEW DOOR & FRAME
	EXIT LIGHT		
	EXIT LIGHT (DIRECTIONAL)		

KEYNOTE LEGEND FLOOR PLAN

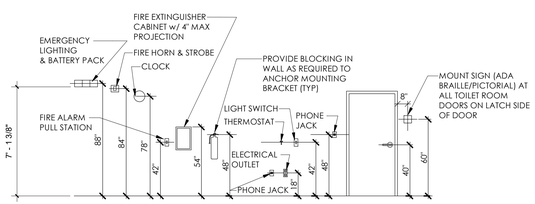
MARK	FLOOR PLAN CODED NOTES
F01	PLASTIC LAMINATED SILL.
F05	BASE & UPPER MILLWORK. SEE INTERIOR ELEVATIONS.
F07	PROVIDE 1" SEPARATION BETWEEN FURRING STUDS AND PRECAST FOR TO ALLOW FOR PRECAST MOVEMENT.
F16	ROOF HATCH AND STEEL LADDER (PAINTED) WITH DESIGN AND FABRICATION TO BE CODE/OSHA/ANSI COMPLIANT, FOR ACCESS TO INTERMEDIATE TRANSFER PLATFORM THEN LADDER FROM PLATFORM TO ROOF HATCH AT TALL ROOF. PROVIDE 2x8 FIRE TREATED WOOD BLOCKING IN WALL @ 5'-0" O.C., PROVIDE CURB AND FLASHING AS REQUIRED - REFER TO STRUCTURAL DRAWINGS.
F25	42" HIGH GUARDRAIL WITH INTERMEDIATE RAILS AND 4" HIGH TOE PLATE PER ADA. WITH REMOVABLE RAILINGS.
F26	DESIGNATED AS "UNOCCUPIED SPACE".
F28	PAINTED STEEL TUBE SUNSHADE - SEE STRUCTURAL & REFERENCED ARCHITECTURAL SECTIONS.

PARTITION TYPES

TAG	STUD TYPE	STUD HEIGHT	INSULATION	VAPOR BARRIER	NOTED SIDE SURFACE MATERIAL	NOTED SIDE SURFACE HEIGHT	OPPOSITE SIDE SURFACE MATERIAL	OPPOSITE SIDE SURFACE HEIGHT
A1	3 5/8" STEEL STUD FURRING	TO 6" ABOVE CEILING	R-11 BATT.	6 MIL POLY	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING	----	----
A2	3 5/8" STEEL STUDS	TO 6" ABOVE CEILING	3.5" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING
A3	3 5/8" STEEL STUD FURRING	TO 6" ABOVE CEILING	R-11 BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING	----	----
A4	3 5/8" STEEL STUDS	TO UNDERSIDE OF DECK	3.5" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO DECK	5/8" TYPE "X" GYP. WALLBOARD	TO DECK (1) HOUR RATED FIRE BARRIER UL404
B1	6" STEEL STUDS	TO UNDERSIDE OF STRUCTURE	6" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING	5/8" TYPE "X" GYP. WALLBOARD	TO 6" ABOVE CEILING
B2	6" STEEL STUDS	TO UNDERSIDE OF DECK	6" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO DECK	5/8" TYPE "X" GYP. WALLBOARD	TO DECK
B3	6" STEEL STUDS	TO UNDERSIDE OF DECK	6" SOUND BATT.	----	5/8" TYPE "X" GYP. WALLBOARD	TO DECK	5/8" TYPE "X" GYP. WALLBOARD	TO DECK (1) HOUR RATED FIRE BARRIER UL404
C1	12" CMU	11'-0" A.F.F.	----	----	----	----	----	----

1. ALL STEEL STUDS SHALL BE 25 GAUGE STUDS @ 16" O.C., (UNLESS NOTED OTHERWISE) - SEE STRUCTURAL FOR GAUGE AND SIZE
2. ALL EXPOSED GYPSUM WALL BOARD SHALL BE TAPED & COATED SMOOTH, READY FOR PAINT - LEVEL 4 FINISH
3. USE 8" METAL STUDS AND INSTALL MOISTURE RESISTANT GYPSUM WALL BOARD AT ALL "WET WALL" LOCATIONS - UNO
4. AT EXTERIOR WALLS, RETURN GYPSUM WALL BOARD INTO WINDOW JAMBS AND HEAD
5. STUDS EXTENDED TO DECK AND/OR JOIST SHALL HAVE A SLIP CONNECTION TO ALLOW FOR DEFLECTION
6. INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH IBC SECTION 803 AND ASTM E84 AND UL 723 : NOTE PROVIDE CLASS A MINIMUM
7. INTERIOR FLOOR FINISHES SHALL COMPLY WITH IBC SECTION 804
8. BATT INSULATION LOCATED ABOVE CEILING AND EXPOSED SHALL BE COVERED TO MEET EXPOSED RATED BARRIER REQUIREMENTS.

NOTE : PROVIDE A 7/8" - 1" GAP BETWEEN PRECAST WALL INTERIOR SIDE STEEL STUD FURRING AND DO NOT ATTACH FURRING TO PRECAST.



STANDARD MOUNTING HEIGHTS

NOT ALL ARE USED. SEE PLANS FOR APPLICABLE FIXTURES & ACCESSORIES. FOR INFORMATION ONLY.

STANDARD MOUNTING HEIGHT NOTES:

1. ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF ADA AND ANSI A117.1 SEC. 703.
2. SIGN SHALL BE MOUNTED WHERE INDICATED. WHERE THERE IS NO WALL SPACE ADJACENT TO LATCH SIDE OF DOOR, SIGN SHALL BE MOUNTED ON NEAREST ADJACENT WALL.
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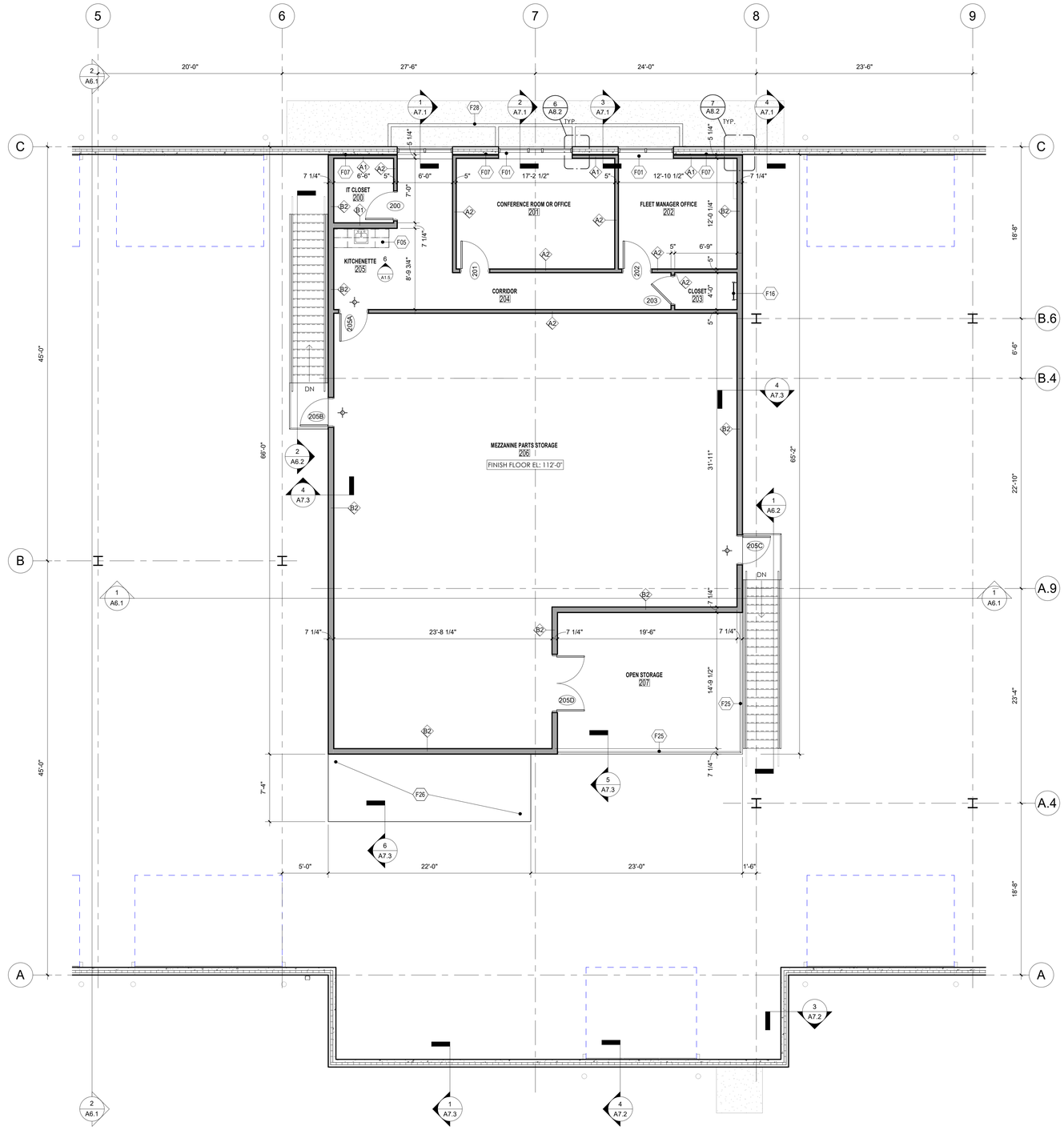


1 ENLARGED MEZZANINE FLOOR PLAN
3/16" = 1'-0"

APPLICABLE TO ALL PLAN VIEWS

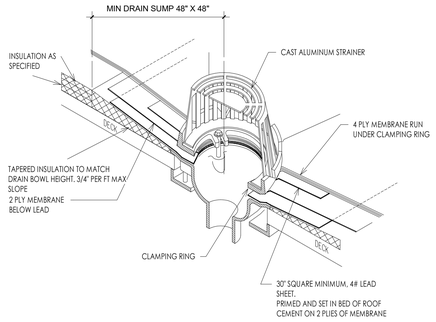
BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
ENLARGED MEZZANINE FLOOR PLAN, SCHEDULES & NOTES

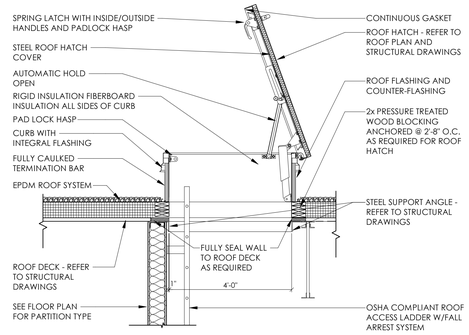
PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB: 3239
DRAWN: CK
CHECKED: DF/KJ
DATE: MAY 28, 2020
SHEET: A1.3



3 ROOF DRAIN DETAIL
1/2" = 1'-0"



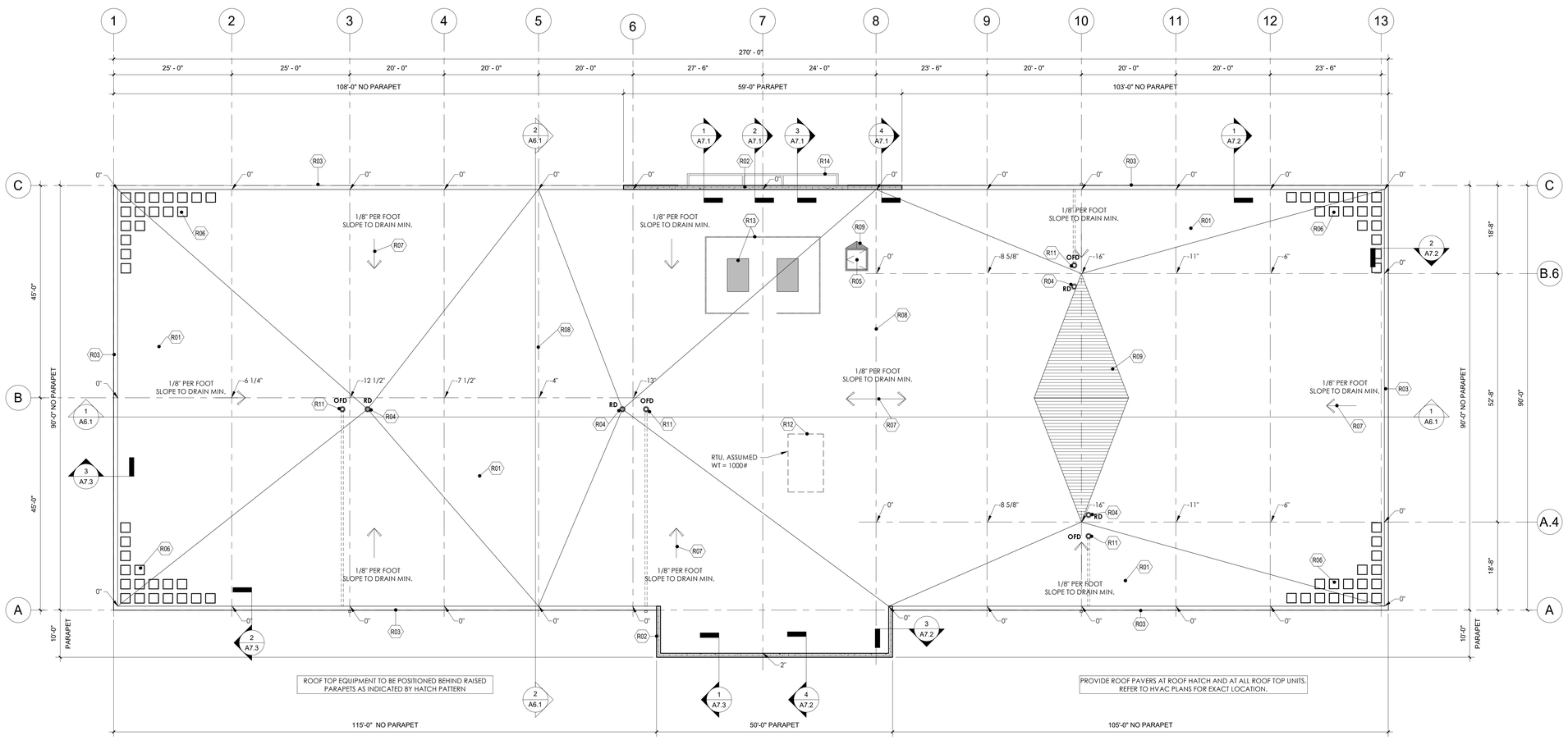
2 ROOF HATCH DETAIL
1/2" = 1'-0"

KEYNOTE LEGEND ROOF PLAN

MARK	ROOF PLAN CODED NOTES
R01	BALLASTED SINGLY-PLY MEMBRANE ROOFING SYSTEM. SEE ROOF SPECIFICATIONS FOR ROOF TYPE 1.
R02	PRE-FINISHED METAL CAP/COPING ON SINGLE 2x PRESSURE TREATED WOOD BLOCKING. EXTEND RUBBER MEMBRANE FLASHING TO EXTEND UP AND OVER PT WOOD BLOCKING AND FULLY SEAL TO FACE OF PRE-CAST CONCRETE WALL PANEL.
R03	PRE-FINISHED METAL GRAVEL STOP, FASCIA AND RUBBER MEMBRANE FLASHING AND ROOFING.
R04	ROOF DRAINS AND SUMP PANS - REFER TO STRUCTURAL. (SEE DETAIL "3" ON THIS SHEET).
R05	ROOF HATCH. PROVIDE CODE-COMPLIANT HATCH SIZE, FOR USE WITH OSHA APPROVED STEEL LADDER ACCESS FROM FLOOR LEVEL BELOW. PROVIDE FRAMING CURB, FLASHING AND TAPPERED INSULATION FOR DRAINAGE AROUND HATCH AS REQUIRED. SEE DETAIL 2/A4.1.
R06	CONCRETE BALLAST PAVERS - 2' X 2' X 2" WITH PROTECTION SHEET.
R07	SLOPE DIRECTION ARROWS - TYPICAL.
R08	ROOF HIGH POINT.
R09	PROVIDE TAPERED INSULATION TO SLOPE TO ROOF DRAINS.
R11	SECONDARY ROOF DRAINS WITH EXTERIOR PIPE DISCHARGE THROUGHWALL - REFER TO ARCHITECTURAL ELEVATION DRAWINGS, STRUCTURAL, AND PLUMBING DRAWINGS. PLACE DRAINS 2" HIGHER THAN LOCATION OF PRIMARY DRAINS DO NOT PLACE PIPE OUTFALL DIRECTLY ABOVE EXTERIOR DOORS OR WINDOWS. COORDINATE PIPE SIZE WITH PLUMBING CONTRACTOR.
R12	CAMBRIDGE UNIT.
R13	SPACE DESIGNATED FOR ROOF TOP UNITS AND PREFINISHED METAL SCREEN WALL.
R14	PAINTED STEEL TUBE SUNSHADE - SEE STRUCTURAL & REFERENCED ARCHITECTURAL SECTIONS.

ROOFING SYSTEM NOTES:

ROOF SYSTEM #1:
BALLASTED SINGLE PLY EPDM 60 MIL ON MIN. 5" EPS TYPE II (1.35 LB/CUFT) DIRECT TO DECK ON CONTINUOUS INSULATION (TWO LAYERS STAGGERED) MIN. R-24.
ROOF SYSTEM #2:
DIRECTLY ADHERED SINGLE PLY EPDM (60 MIL.) ON TAPERED INSULATION (SEE ROOF PLAN)



1 ROOF PLAN
3/32" = 1'-0"

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
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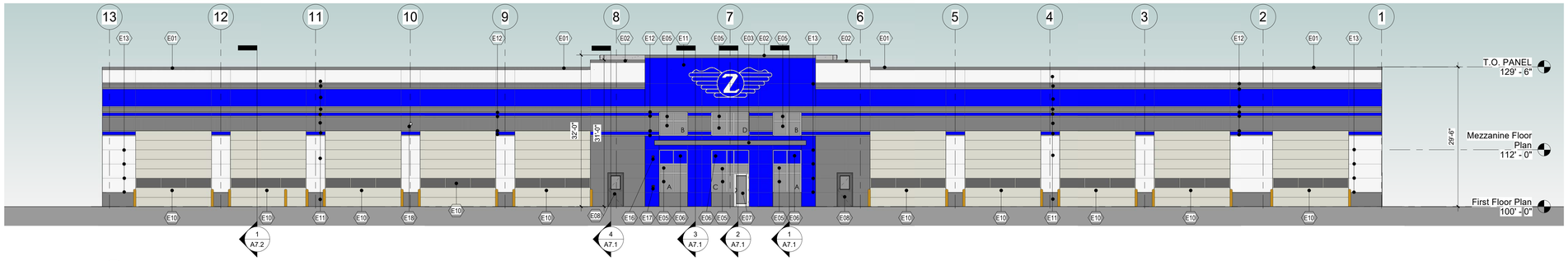
SHEET TITLE
ROOF PLAN

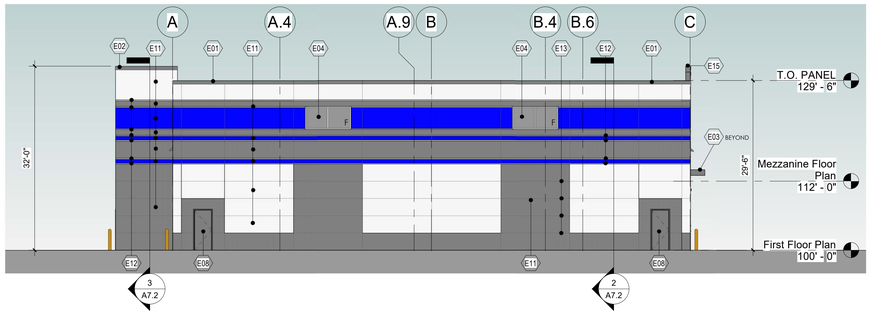
PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

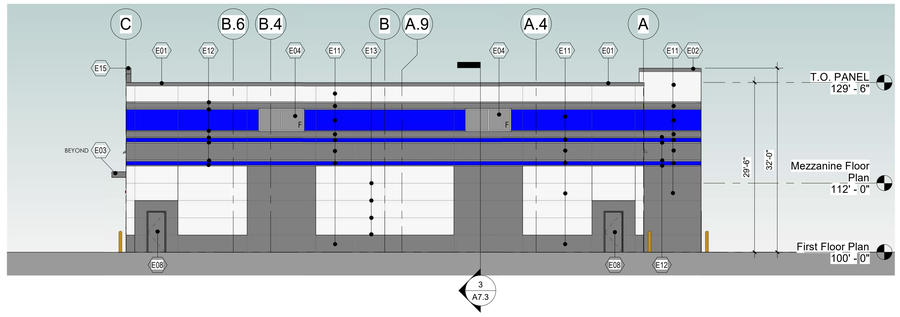
JOB:	3239
DRAWN:	CK
CHECKED:	DF/KJ
DATE:	MAY 28, 2020
SHEET:	A4.1



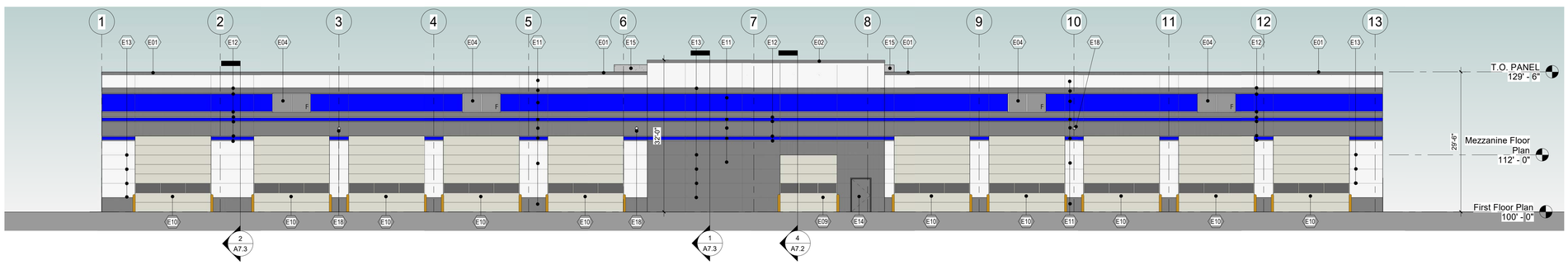
1 NORTH ELEVATION
3/32" = 1'-0"



2 EAST ELEVATION
3/32" = 1'-0"



3 WEST ELEVATION
3/32" = 1'-0"



4 SOUTH ELEVATION
3/32" = 1'-0"

THE PROPOSED COMMERCIAL NON-RESIDENTIAL BUILDING TO BE LOCATED IN CLIMATE ZONE 6 (PER IECC SECTION 502) PER TABLE 502.2 (1) BUILDING ENVELOPE REQUIREMENTS - OPAQUE ASSEMBLIES.

ROOFS - PROPOSED ROOF INSULATION ENTIRELY ABOVE DECK R-20ci REQUIRED AND R-25ci PROVIDED MEETS OR EXCEEDS CODE MINIMUM.

WALLS ABOVE GRADE PROPOSED EXTERIOR WALL - MASS (PRECAST INSULATED CONCRETE) R-13.3ci REQUIRED AND R-15.37ci PROVIDED MEETS OR EXCEEDS CODE MINIMUM.

SLAB-ON-GRADE FLOORS - PROPOSED UNHEATED SLABS R-10 FOR 24 INCHES BELOW REQUIRED AND R-10 FOR 24 INCHES OR MORE PROVIDED MEETS OR EXCEEDS CODE MINIMUM.

PER TABLE 502.3 BUILDING ENVELOPE REQUIREMENTS: FENESTRATION
VERTICAL FENESTRATION (40% MAXIMUM ALLOWED ABOVE GRADE) 10.32% ACTUAL PROVIDED. REQUIRED U- FACTOR .40; ACTUAL PROVIDED .29 AND SHGC .41

PER 2015 IECC:

C402.5 AIR LEAKAGE THERMAL ENVELOPE.
PROPOSED BUILDING COMPLIES.

C402.5.1 AIR BARRIER PER C402.5.1.2.1 MATERIALS SEE EXCEPTION 13 CAST-IN-PLACE AND PRECAST CONCRETE.
PROPOSED BUILDING COMPLIES.

C402.5.2 AIR LEAKAGE FENESTRATION SEE EXCEPTION 1. FIELD FABRICATED FENESTRATION ASSEMBLIES THAT ARE SEALED IN ACCORDANCE WITH SECTION C402.5.1.
PROPOSED BUILDING COMPLIES.

C402.5.3 ROOMS CONTAINING FUEL - BURNING APPLIANCES EXCEPTION 1. DIRECT VENT APPLIANCES WITH BOTH INTAKE AND EXHAUST PIPES INSTALLED CONTINUOUS TO OUTSIDE.
PROPOSED BUILDING COMPLIES.

C402.5.4 DOORS AND ACCESS OPENINGS TO SHAFTS, CHUTES, STAIRWAYS AND ELEVATOR LOBBIES.
NOT APPLICABLE TO PROPOSED BUILDING.

C402.5.5 AIR INTAKES, EXHAUST OPENINGS, STAIRWAYS AND SHAFTS. IF REQUIRED TO BE DAMPERED.
PROPOSED BUILDING COMPLIES.

C402.5.6 LOADING DOCK WEATHER SEALS TO BE PROVIDED FOR LOADING DOCK DOORS.
PROPOSED BUILDING COMPLIES.

C402.5.7 VESTIBULES EXCEPTION 2. DOORS NOT INTENDED TO BE USED BY THE PUBLIC, SUCH AS DOORS TO MECHANICAL OR ELECTRICAL EQUIPMENT ROOMS, ON INTENDED SOLELY FOR EMPLOYEE USE. EXCEPTION 4 DOORS THAT OPEN DIRECTLY FROM A SPACE LESS THAN 3,000 SQUARE FEET IN AREA. EXCEPTION 6 DOORS USED PRIMARILY TO FACILITATE VEHICULAR MOVEMENT OR MATERIAL AND ADJACENT PERSONNEL DOORS.
PROPOSED BUILDING COMPLIES.

C402.5.8 RECESSED LIGHTING.
NOT APPLICABLE TO PROPOSED BUILDING.

ELEVATION PAINT COLOR KEY:

OFF WHITE BASE FIELD COLOR "SW7015 REPOSE GRAY "

MEDIUM GREY SECONDARY ACCENT COLOR "SW "

BLUE SIGNATURE ACCENT COLOR "SW "

KEYNOTE LEGEND ELEVATION

MARK	ELEVATION CODED NOTES
E01	PRE FINISHED METAL 24 GA. GRAVEL STOP COLOR SHALL BE "CLEAR ANODIZED FINISH".
E02	PRE FINISHED METAL 24 GA. METAL CAP/COPING FINISH COLOR SHALL BE "CLEAR ANODIZED FINISH".
E03	PRE FINISHED METAL 24 GA. METAL CANOPY AND SOFFIT FINISH COLOR SHALL BE "GREY FINISH" AS INDICATED ON ELEVATIONS.
E04	FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E TINTED CLERSTORY WINDOWS UNITS.
E05	FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E TINTED STANDARD WINDOWS UNITS - VISION.
E06	FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E TINTED STANDARD WINDOWS UNITS - SPANDREL.
E07	FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E TINTED STANDARD WINDOW AND ENTRY UNITS.
E08	3'-0" x 7'-0" INSULATED AND PAINTED GALVANIZED HOLLOW METAL DOOR AND FRAME WITH ADA HARDWARE - PAINTED TO MATCH ADJACENT WALL COLOR. INCLUDE PREFINISHED GALVANIZED METAL DRIP EDGE AT HEAD - FINISH TO DOOR FRAME AND DOOR COLOR.
E09	3'-0" x 1'2'-0" INSULATED FACTORY PRE FINISHED "WHITE" STEEL OVERHEAD DOOR AND FRAME WITH WEATHER-SEAL - PRE FINISHED COLOR TO COMPLIMENT OFF WHITE COLOR OF WALL COLOR. NOTE PROVIDE FULL PANEL VISION LITES. PROVIDE 6" DIA x 3'-6" H PAINTED STEEL BOLLARDS.
E10	16'-0" x 16'-0" INSULATED FACTORY PRE FINISHED "WHITE" STEEL OVERHEAD DOOR AND FRAME WITH WEATHER-SEAL - PRE FINISHED COLOR TO COMPLIMENT OFF WHITE COLOR OF WALL COLOR. NOTE PROVIDE FULL PANEL VISION LITES. PROVIDE 6" DIA x 3'-6" H PAINTED STEEL BOLLARDS.
E11	TYPICAL FOR - BUILDING WALLS SHALL BE CONSTRUCTED OF 10" INSULATED AND PAINTED PRE-CAST CONCRETE WALL PANELS "PAINT FINISH SHALL BE TWO COLORS WITH THE MAIN FIELD COLOR - OFF WHITE WITH TWO ACCENT COLORS AS INDICATED ON ELEVATIONS.
E12	TYPICAL FOR - BUILDING WALLS SHALL BE CONSTRUCTED OF 10" INSULATED AND PAINTED PRE-CAST CONCRETE WITH 2" REVEALS AS INDICATED ON ELEVATIONS".
E13	TYPICAL FOR - BUILDING WALLS SHALL BE CONSTRUCTED OF 10" INSULATED AND PAINTED PRE-CAST CONCRETE WITH 1 1/2" REVEALS AS INDICATED ON ELEVATIONS".
E14	4'-0" x 7'-0" INSULATED AND PAINTED GALVANIZED HOLLOW METAL DOOR AND FRAME WITH ADA HARDWARE - PAINTED TO MATCH ADJACENT WALL COLOR. INCLUDE PREFINISHED GALVANIZED METAL DRIP EDGE AT HEAD - FINISH TO DOOR FRAME AND DOOR COLOR.
E15	PARAPET - BEYOND.
E16	PROVIDE ALARM (HORN / STROBE).
E17	PROVIDE KNOX BOX - VERIFY LOCATION WITH FIRE INSPECTOR PRIOR TO INSTALLATION. PROVIDE KNOX BOX - VERIFY LOCATION WITH FIRE INSPECTOR PRIOR TO INSTALLATION.
E18	PROVIDE SECONDARY DRAIN METAL COVERED DISCHARGE.

NOTE:
ALL EXTERIOR DOORS WHERE REQUIRED SHALL BE NUMBERED ON EXTERIOR SIDE REQUIRED BY THE OAK CREEK FIRE DEPARTMENT.

NOTE:
ALL WINDOWS SHALL BE LOW "E" COATED BRONZE-GREY TINTED 1" INSULATED GLAZING SET IN THERMALLY BROKEN "CLEAR" ANODIZED ALUMINUM WINDOW FRAMES WITH ACCENT METAL WHERE REFERENCED ON THE ELEVATIONS SHALL MATCH "CLEAR" COLOR. SPANDREL GLASS SHALL BE "BRONZE" TO COMPLIMENT VISION GLASS. U - VALUE / FACTOR - .29 WITH SH GC - .41

SAFETY GLAZING :
PER IBC 2406.4 PROVIDE SAFETY GLAZING IN HAZARDOUS LOCATIONS AS REQUIRED DEFINED IN THIS CODE SECTION. GLAZING SHALL MEET CPSC SAFETY GLAZING TEST.

NOTE:
ROOF TOP UNITS SHALL BE INSTALLED BEHIND THE PARAPETS ON THE ROOF TO PROVIDE SCREENING.

WINDOW TYPE NOTES:

SEE WINDOW TYPES ON SHEET A5.2 FOR INFORMATION ON SPECIFIED WINDOWS.

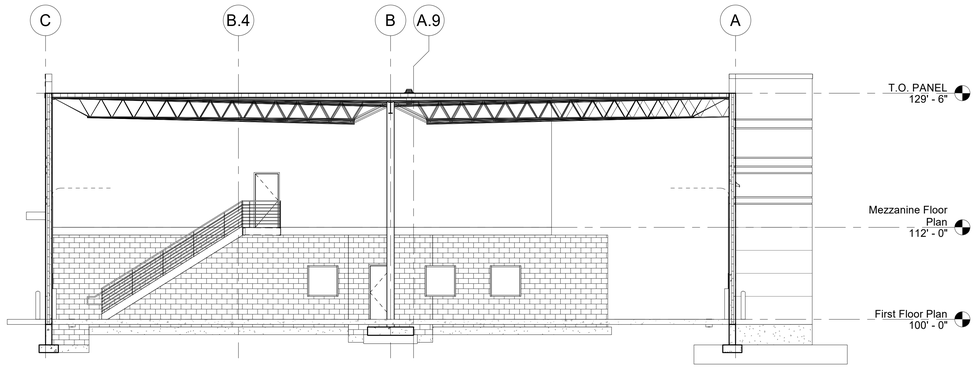
BRIOHN
DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
EXTERIOR ELEVATIONS

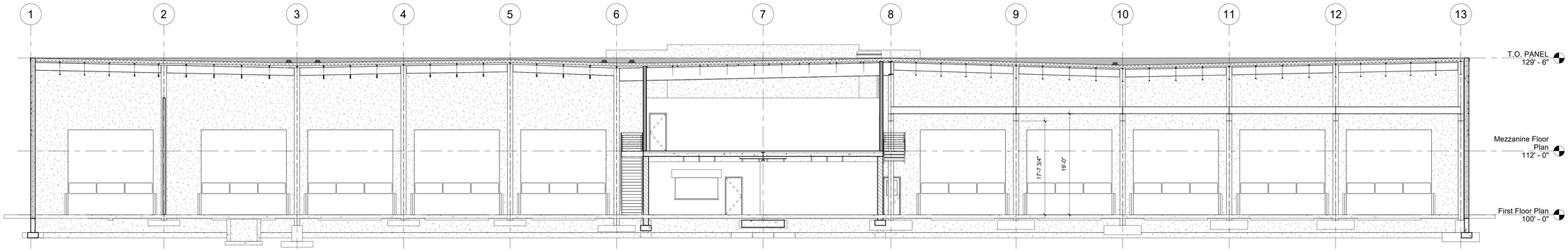
PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB: 3239
DRAWN: CK
CHECKED: DF / KJ
DATE: MAY 28, 2020
SHEET:
A5.1



2 BUILDING SECTION B
1/8" = 1'-0"



1 BUILDING SECTION A
1/8" = 1'-0"

BRIOHN
DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
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SHEET TITLE
BUILDING SECTIONS

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

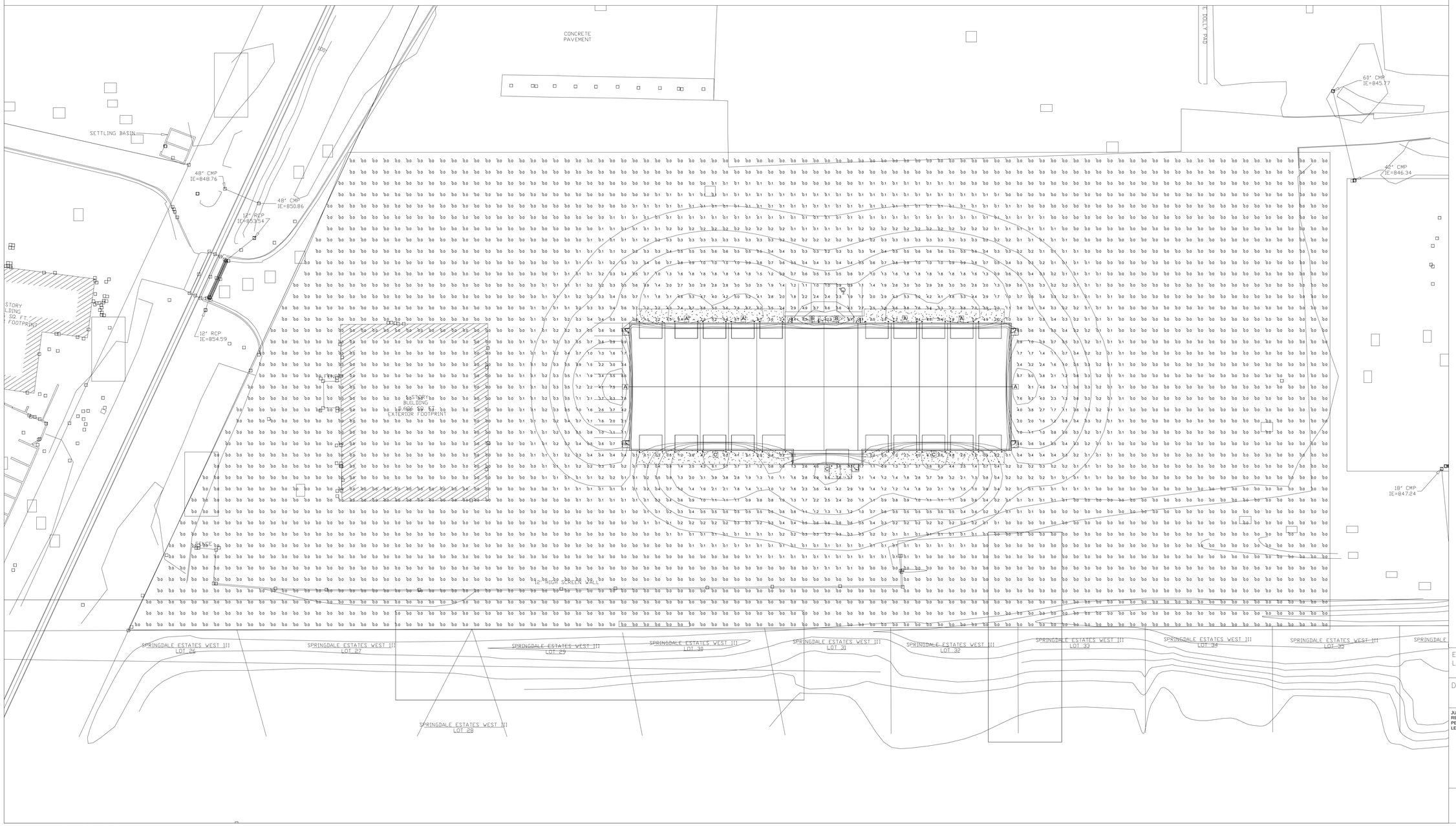
JOB:	3239
DRAWN:	CK
CHECKED:	DF/KJ
DATE:	MAY 28, 2020

SHEET:
A6.1

APPLICABLE TO ALL PLAN VIEWS

Luminaire Schedule							
Symbol	Label	Quantity	Manufacturer	Description	Number Lamps	Lumens Per Lamp	Wattage
	A	6	SLG-Spring Lighting Group	ALS 130 T4 G1 5K Wall Mounted @ 19'	1	12885	104.9
	B	2	SLG-Spring Lighting Group	WFM 49 G1 5K Wall Mounted @ 11'	1	4900	45
	C	3	SLG-Spring Lighting Group	ALS 90 T3 G1 5K Wall Mounted @ 19'	1	9000	73.44

Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
Calc Zone #1	+	0.4 fc	16.9 fc	0.0 fc	N/A	N/A	0.0:1



HFR electric
ELECTRICAL CONTRACTOR
RESIDENTIAL · COMMERCIAL · INDUSTRIAL
262-644-6940

ZIGNEGO REPAIR FACILITY

Exterior Photometric Lighting Plan

DATE: 5-28-2020

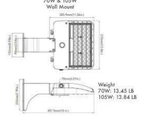
JUNE 30, 2020
REVISED PLAN COMMISSION
PER CITY OF PEWAUKEE
LETTER DATED JUNE 15, 2020.

E-1.0

SLG LIGHTING GENERATION 1 & 2

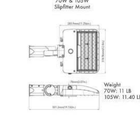
DIMENSIONS

SMALL
70W & 105W
Wall Mount



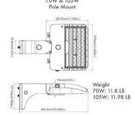
Weight
70W: 13.45 LB
105W: 13.84 LB

SMALL
70W & 105W
Slipfitter Mount



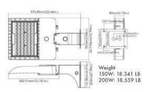
Weight
70W: 11 LB
105W: 11.40 LB

LARGE
70W & 105W
Pole Mount



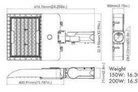
Weight
70W: 11.8 LB
105W: 11.98 LB

MEDIUM
150W & 200W
Wall Mount



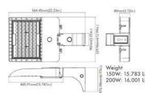
Weight
150W: 18.341 LB
200W: 18.559 LB

MEDIUM
150W & 200W
Slipfitter Mount



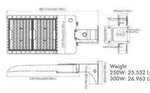
Weight
150W: 16.308 LB
200W: 16.526 LB

MEDIUM
150W & 200W
Pole Mount



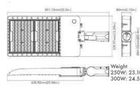
Weight
150W: 15.783 LB
200W: 16.001 LB

LARGE
250W & 300W
Wall Mount



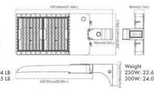
Weight
250W: 25.552 LB
300W: 26.963 LB

LARGE
250W & 300W
Slipfitter Mount



Weight
250W: 23.104 LB
300W: 24.515 LB

LARGE
250W & 200W
Pole Mount



Weight
250W: 22.686 LB
300W: 24.097 LB

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SLG LIGHTING GENERATION 1 & 2

OPTIONS

MS-FSP-212
Dimmable Motion Sensor

MS-FSP-L3/L7
Lens

The *MS-FSP-212* provides multi-level control base on motion and daylight level. Requires L3 or L7 lens depending the mounting height.

Operation Voltage	Shape	Adjustable Time Delay	Fade Down Time	Operating Temperature	Mounting Height For MS-FSP-L3	Mounting Height For MS-FSP-L7
120/277V	Cone	30 sec - 30 min	0-10 sec	-40°F to 158°F	20 ft*	40 ft**

*Covers a 40 ft diameter when mounting height is 20 ft. Coverage is equal to 2x the height.
**Covers a 100 ft diameter when mounting height is 40 ft. Coverage is equal to 2.5x the height

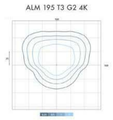
PHOTOMETRIC

Type III
Type III optics produce an asymmetrical pattern that directs the majority of the light forward and equally on both sides of the luminaire. In a back-to-back configuration, it creates a rectangular pattern which can extend pole spacings.

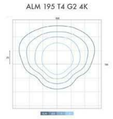
Type IV
Type IV is suitable for applications where light is primarily required forward with minimal back light. Typical installations include perimeter poles.

Type V
Type V optics produce a symmetrical square distribution pattern that distributes light equally on all sides of the luminaire. Type V luminaires is universal for most area lighting applications.

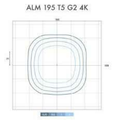
ALM 195 T3 G2 4K



ALM 195 T4 G2 4K



ALM 195 T5 G2 4K



Mounting Height	15	20	25	30	35
Multiplier	2.8	1.6	1.0	0.7	0.5

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SLG LIGHTING GENERATION 1 & 2

SPECIFICATIONS

HOUSING
One piece die-cast aluminum housing with anti-corrosive paint.

AMBIENT TEMPERATURE
Suitable for use in -40°C to +45°C (-40°F to 113°F)

MOUNTING
Mounting options include Square and Round Pole Mount, Wall Mount, Adjustable Slipfitter Mount and option for photocell, Trunnion Mount for ALS and ALM, and Yoke Mount for ALL

EFFICACY
Up to 133 lumen's per watt (see individual wattage data)

CCT AND CRI
4000K and 5000K CCT available; 70CRI

OPTICS
Precision molded secondary optics produce superior uniformity, minimal light trespass and maximum pole spacing. Optics sealed to LED package for IP66 protection.

WARRANTY
10-year limited warranty. Comprehensive warranty terms can be located on www.slgcs.com.

ELECTRICAL
Standard 120-277V. Optional HVU 347V/480V. 50/60Hz with open/short circuit protection. 10K Surge protector per ANSI/IEEE C62.41.2. Dimming 0-10V optional. Optional NEMA twist-lock photocell control.

ENERGY DATA
Constant current driver efficiency above 90%.

FINISH
Polyester Powder Dark Bronze finish. Custom colors available. Multiple stage process to produce 3 mil thickness for superior corrosion resistance and maximum durability.

CERTIFICATIONS
UL Listed for wet locations. Equivalent to IP66 rating. FCC compliant. RoHs compliant. IDA dark-sky compliance. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.slgcs.com/DLC to confirm which versions are qualified.

MOUNTING

AL-SPAR

AL-WM

AL-SFD

AL-T

AL(G2)-Y

AL-BC-ML

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SLG LIGHTING GENERATION 1 & 2

Type: A

PROJECT:
CATALOG #:
FIXTURE TYPE:
NOTES:

AL Area Light Generation 1 & 2

ALL Large

ALM Medium

ALS Small

Images are shown for illustration purpose only.

The *AL Series Area Light Gen 1 and Gen 2* comes in three sizes small, medium, and large with a lumen output between 9,000 to 39,300 lumens. This versatile luminaire has different mounting options, photocell, and motion sensors for efficiency and greater energy savings.

APPLICATIONS
Auto Dealerships, Parking Lots, Walkways, Roadways, and other Public Areas, etc.

REPLACEMENT
ALS: 175W- 250W MH, **ALM:** 400W MH,
ALL: 750W-1000W MH

PERFORMANCE INFORMATION

SERIES NUMBER	WATT	LUMENS	DIST	CCT
ALS 90 T3 G1 5K	70W	9,000	Type III	5000K
ALS 130 T3 G1 5K	105W	13,400	Type III	5000K
ALM 195 T3 G2 5K	150W	19,700	Type III	5000K
ALM 195 T3 G2 HVU 5K	150W	19,700	Type III	5000K
ALM 260 T3 G2 5K	200W	26,200	Type III	5000K
ALM 260 T3 G2 HVU 5K	200W	26,380	Type III	5000K
ALL 330 T3 G2 5K	250W	33,250	Type III	5000K
ALL 330 T3 G2 HVU 5K	250W	33,000	Type III	5000K
ALL 390 T3 G2 5K	300W	39,300	Type III	5000K
ALL 390 T3 G2 HVU 5K	300W	39,300	Type III	5000K

MOUNTING & OPTIONS

AL-SPAR AL-WM AL-SFD AL-T AL(G2)-Y PC-1 PC-2 MS-FSP-212 L3/L7

ORDERING GUIDE

EXAMPLE: ALM 140 T3 G1 5K

Luminaire Type	Lumen Output	Dist. Type	Generation	Voltage	CCT	Finish	Mount	Options
ALS= Area Light Small	**90** 9,000 Lumens **130** 13,400 Lumens	**T3=** Type III **T4=** Type IV **T5=** Type V	**G1** **G2**	**BLANK=** 120-277V **HVU=** 347-480V	**4K** 4000K **5K** 5000K **C=** Custom*	**BLANK=** Dark Bronze	**AL-SPAR=** Square and Round Pole Mount **AL-WM=** Wall Mount **AL-SFD=** Slipfitter Mount **AL-SFD-P1=** Slipfitter Mount with PC-1 (Photocell 120V-277V) **AL-T=** Trunnion Mount **AL(G2)-Y=** Yoke Mount (ALL only)	**PC-1=**Twist-lock Photocell (120-277V) **PC-2=**Twist-lock Photocell (347-480V) **PC-3=**7-Pin receptacle **MS-FSP-212=**Motion Sensor (Choose 1) **L3=**40° diameter lens **L7=**100° diameter lens **AL-BC-ML=**House side shield for ALM-ALL G2 Series only, ALL requires 2 shields
ALM= Area Light Medium	**195** 19,700 Lumens **260** 26,200 Lumens							
ALL= Area Light Large	**330** 33,250 Lumens **390** 39,300 Lumens							

*For a custom color, please call to place your order

Due to continuous product improvements, specification and/or equipment updates may change without notice.

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SLG LIGHTING GENERATION 1 & 2

ELECTRICAL LOAD

	Series Number	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
ALS	ALS 90 T3 G1 5K	70W	0.58	0.34	0.30	0.25	N/A	N/A
	ALS 130 T3 G1 5K	105W	0.87	0.50	0.44	0.38	N/A	N/A
ALM	ALM 195 T3 G2 5K	150W	1.25	0.72	0.63	0.54	0.43	0.31
	ALM 195 T3 G2 HVU 5K	150W	1.25	0.72	0.63	0.54	0.43	0.31
	ALM 260 T3 G2 5K	200W	1.66	0.96	0.83	0.72	0.58	0.42
	ALM 260 T3 G2 HVU 5K	200W	1.66	0.96	0.83	0.72	0.58	0.42
ALL	ALL 330 T3 G2 5K	250W	2.08	1.20	1.04	0.90	0.72	0.52
	ALL 330 T3 G2 HVU 5K	250W	2.08	1.20	1.04	0.90	0.72	0.52
	ALL 390 T3 G2 5K	300W	2.5	1.44	1.25	1.08	0.87	0.62
	ALL 390 T3 G2 HVU 5K	300W	2.5	1.44	1.25	1.08	0.87	0.62

PROJECTED LUMINAIRE MAINTENANCE

Ambient Temperature	OPERATING HOURS 0	25,000	50,000	100,000	Calculated L70 (Hours)
25°C / 77°F	1	0.95	0.91	0.81	>214,973

Lumien Ambient Temperature (LAT) Multipliers

Ambient		Lumen Multipliler
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.98
40°C	104°F	0.98

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SLG LIGHTING GENERATION 1 & 2

PERFORMANCE INFORMATION

Series Number	Wattage	5000K CCT Lumen	Dist Type	B	U	G	4000K CCT Lumen	B	U	G
ALS 90 T3 G1 5K	70W	9,000 Lm	Type III	2	0	2	9,000 Lm	2	0	2
		8,670 Lm	Type IV	2	0	2	8,750 Lm	2	0	2
		9,479 Lm	Type V	3	0	1	9,777 Lm	3	0	1
ALS 130 T3 G1 5K	105W	13,400 Lm	Type III	3	0	2	13,400 Lm	3	0	2
		13,676 Lm	Type IV	3	0	3	13,999 Lm	3	0	3
		12,787 Lm	Type V	3	0	1	12,885 Lm	3	0	1
ALM 195 T3 G2 5K	150W	19,700 Lm	Type III	3	0	2	19,497 Lm	3	0	2
		18,800 Lm	Type IV	3	0	3	18,800 Lm	3	0	3
		21,150 Lm	Type V	4	0	2	21,385 Lm	4	0	2
ALM 260 T3 G2 5K	200W	26,200 Lm	Type III	3	0	2	26,096 Lm	3	0	2
		25,000 Lm	Type IV	3	0	3	25,000 Lm	3	0	3
		27,200 Lm	Type V	4	0	2	27,086 Lm	4	0	2
ALL 330 T3 G2 5K	250W	33,250 Lm	Type III	4	0	3	32,883 Lm	4	0	3
		30,500 Lm	Type IV	4	0	3	30,000 Lm	4	0	3
		35,250 Lm	Type V	5	0	2	34,623 Lm	5	0	2
ALL 390 T3 G2 5K	300W	39,300 Lm	Type III	4	0	3	39,495 Lm	4	0	3
		37,000 Lm	Type IV	4	0	4	36,000 Lm	4	0	4
		42,300 Lm	Type V	5	0	2	42,998 Lm	5	0	2

PERFORMANCE COMPARISON

Product Series	Wattage	Lumen	Efficacy	Replaces	Voltage	Max Mounting Height	DLC
ALS 90	70W	9,000 Lm	129 Lm/W	175W	120-277V	15-20 ft	Standard
ALS 130	105W	13,400 Lm	128 Lm/W	250W	120-277V	15-20 ft	Standard
ALM 195	150W	19,700 Lm	131 Lm/W	400W	120-277V	20-30 ft	Premium
ALM 260	200W	26,200 Lm	131 Lm/W	400W	120-277V	20-30 ft	Premium
ALL 330	250W	33,250 Lm	133 Lm/W	750W	120-277V	30-50 ft	Premium
ALL 390	300W	39,300 Lm	131 Lm/W	1000W	120-277V	30-50 ft	Premium

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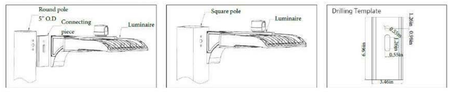
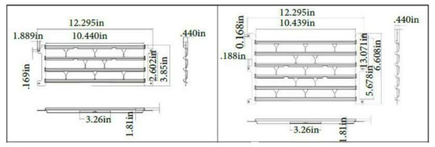
SLG LIGHTING GENERATION 1 & 2

MOUNTING DIMENSIONS



BACKLIGHT CONTROL OPTIONS



EPA OF AREA LIGHT

S	ALS 90 ALS 130	70W 105W	0.626	0.705	0.971	0.981	0.982	0.975	0.982
M	ALM 195 ALM 260	150W 200W	0.4418	0.7145	0.8813	0.8836	1.0548	1.0135	1.0548
L	ALL 330 ALL 390	250W 300W	0.5614	0.8471	1.105	1.1228	1.294	1.2503	1.294

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BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
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(262) 790-5505 FAX

SHEET TITLE
LIGHTING CUT SHEETS

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB: 3239
DRAWN: CK
CHECKED: DF/KJ
DATE: MAY 28, 2020
SHEET:
E2.0

SLG LIGHTING GENERATION 3

ELECTRICAL LOAD

		Current (A)					
Series Number	Wattage	120V	208V	240V	277V	347V	480V
WFM 40 G3 5K	27W	0.23	0.13	0.11	0.10	-	-
WFM 65 G3 5K	45W	0.38	0.22	0.19	0.16	0.13	0.09
WFM 100 G3 5K	70W	0.58	0.34	0.29	0.25	0.20	0.15
WFL 125 G3 5K	90W	0.75	0.44	0.38	0.32	0.26	0.19
WFL 180 G3 5K	135W	1.13	0.66	0.56	0.49	0.39	0.28

PERFORMANCE COMPARISON

		4000K		5000K			
Product Series	Wattage	Lumens	Efficacy (LPW)	Lumens	Efficacy (LPW)	Replaces	Max Mounting Height
WFM 40 G3	27W	3,900 Lm	145	3,950 Lm	146	150W	8-20 ft
WFM 65 G3	45W	6,400 Lm	142	6,450 Lm	143	250W	12-20 ft
WFM 100 G3	70W	9,800 Lm	140	9,900 Lm	141	320W	12-20 ft
WFL 125 G3	90W	12,000 Lm	133	12,200 Lm	136	400W	15-301 ft
WFL 180 G3	135W	18,000 Lm	133	18,000 Lm	133	400W	15-30 ft1

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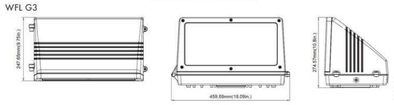
SLG LIGHTING GENERATION 3

DIMENSIONS

WFM G3

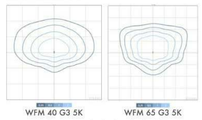
Weight
WFM 40 G3: 5.77 lb
WFM 65 G3: 5.98 lb
WFM 100 G3: 6.16 lb

WFL G3



Weight
WFL T25 G3: 10.48 lb
WFL 180 G3: 10.95 lb

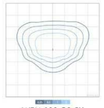
PHOTOMETRIC



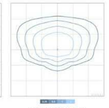
WFM 40 G3 5K

WFM 65 G3 5K

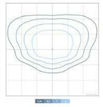
Mounting Height	12	14	16	18	20
Multiplier	1.8	1.3	1.0	0.8	0.6



WFM 100 G3 5K



WFL 125 G3 5K



WFL 180 G3 5K

Mounting Height	15	20	25	30	35
Multiplier	2.8	1.6	1.0	0.7	0.5

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SLG LIGHTING GENERATION 3

SPECIFICATIONS

HOUSING
Sealed die-casting aluminum casing thermally conducts heat from LEDs for optimal performance and long life.

AMBIENT TEMPERATURE
Suitable for use in -40°C to 50°C (-40°F to 122°F)
Recommended for use in -40°C to 45°C (-40°F to 113°F)

MOUNTING
Die-cast back box with four (4) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged housing and bubble level included for easy installation.

EFFICACY
Up to 143 lumens per watt (see individual wattage data)

CCT AND CRI
4000K and 5000K CCT available; 80CRI

OPTICS
Tempered UV coated flat lens provide outstanding performance, uniformity, and glare control.

LIFESPAN
More than 100,000 hours base.

WARRANTY
10-year limited warranty. Comprehensive warranty terms can be located on www.slgus.com.

ELECTRICAL
Standard voltage 120-277V, 50/60Hz input. Optional 277-480V and Optional dimming for WFL G3.

FINISH
Polyester Powder Dark Bronze finish. Custom colors available. Multiple stage process to produce 3 mil thickness for superior corrosion resistance and maximum durability.

CERTIFICATIONS
UL Listed for wet locations. Equivalent to IP65 rating. FCC compliant. RoHs compliant. NSF compliant. Design Lights Consortium® (DLC) Premium qualified product pending. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.slgus.com/DLC to confirm which versions are qualified.

OPTIONS

MS-FSP-212
Dimmable Motion Sensor

MS-FSP-L3/L7
Lens

The *MS-FSP-212* provides multi-level control base on motion and daylight level. Requires L3 or L7 lens depending the mounting height.

Operation Voltage	Shape	Adjustable Time Delay	Fade Down Time	Operating Temperature	Mounting Height For MS-FSP-L3	Mounting Height For MS-FSP-L7
120/277V	Cone	30 sec - 30 min	0-10 sec	-40°F to 158°F	20 ft*	40 ft**

*Covers a 40 ft diameter when mounting height is 20 ft. Coverage is equal to 2x the height.
**Covers a 100 ft diameter when mounting height is 40 ft. Coverage is equal to 2.5x the height

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SLG LIGHTING GENERATION 3

Type: B

PROJECT:
CATALOG #:
FIXTURE TYPE:
NOTES:

WF Full Cutoff Wall Pack Series Gen 3

WFL G3 Large

WFM G3 Medium

The next generation *WF Full Cutoff Wall Pack Series Gen 3* comes with newly designed optics for increased beam angle and illumination. This versatile luminaire provides excellent uniformity and full cutoff light distribution and is available in medium and large for varied mounting heights. This can be used in a variety of Commercial, Industrial, and Security applications.

APPLICATIONS
Security Lighting, Perimeter Lighting, Building Entrances, Walkways, etc.

REPLACEMENT
150W - 400W MH

PERFORMANCE INFORMATION

SERIES NUMBER	MOUNTING HEIGHT	WATT	LUMENS	CCT
WFM 40 G3 5K	8-20 ft	27W	3,800	5000K
WFM 65 G3 5K	12-20 ft	45W	6,300	5000K
WFM 100 G3 5K	12-30 ft	70W	9,750	5000K
WFL 125 G3 5K	15-30 ft	90W	12,300	5000K
WFL 180 G3 5K	15-30 ft	135W	18,000	5000K

OPTIONS

ORDERING GUIDE

EXAMPLE: WFM 40 G3 4K

Luminaire Type	Lumen Output	Generation	Voltage	CCT	Finish	Options
WFM Full Cutoff Wall Pack Medium	**40** 3,800 Lumens **65** 6,300 Lumens **100** 9,750 Lumens	**G3**	**BLANK=** 120-277V **BLANK=** 120-277V **HVU=** 347-48BV	**4K** 4000K **5K** 5000K	**BLANK=** Dark Bronze **C=** Custom*	**BLANK=**No Option **PC UNV B3=**Button Photocell
WFL Full Cutoff Wall Pack Large	**125** 12,300 Lumens **180** 18,000 Lumens					**BLANK=**No Option **PC UNV B3=**Button Photocell **MS-FSP-212=**Motion Sensor (Choose 1) **L3=**40' diameter lens **L7=**100' diameter lens **EL UNV-BW=**Emergency Backup Kit

*For a custom color, please call to place your order

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SLG LIGHTING GENERATION 3

PROJECTED LUMINAIRE MAINTENANCE

	OPERATING HOURS				
Ambient Temperature	0	25,000	50,000	100,000	Calculated L70 (Hours)
25°C / 77°F	1	0.95	0.91	0.81	>214,973

Lumien Ambient Temperature (LAT) Multipliers

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.98
40°C	104°F	0.98

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BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
LIGHTING CUT SHEETS

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

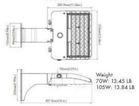
Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB: 3239
DRAWN: CK
CHECKED: DF/KJ
DATE: MAY 28, 2020
SHEET:
E2.1

SLG LIGHTING GENERATION 1 & 2

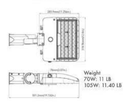
DIMENSIONS

SMALL
70W & 105W
Wall Mount



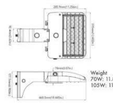
Weight
70W: 13.45 LB
105W: 13.84 LB

SMALL
70W & 105W
Slipfitter Mount



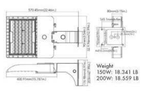
Weight
70W: 11 LB
105W: 11.40 LB

LARGE
70W & 105W
Pole Mount



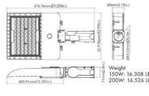
Weight
70W: 11.6 LB
105W: 11.98 LB

MEDIUM
150W & 200W
Wall Mount



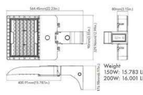
Weight
150W: 18.341 LB
200W: 18.559 LB

MEDIUM
150W & 200W
Slipfitter Mount



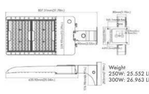
Weight
150W: 16.308 LB
200W: 16.526 LB

MEDIUM
150W & 200W
Pole Mount



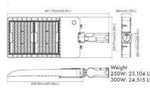
Weight
150W: 15.783 LB
200W: 16.001 LB

LARGE
250W & 300W
Wall Mount



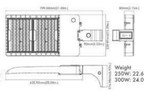
Weight
250W: 25.552 LB
300W: 26.963 LB

LARGE
250W & 300W
Slipfitter Mount



Weight
250W: 23.104 LB
300W: 24.515 LB

LARGE
250W & 300W
Pole Mount



Weight
250W: 22.686 LB
300W: 24.097 LB

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SLG LIGHTING GENERATION 1 & 2

OPTIONS

MS-FSP-212
Dimmable Motion Sensor

MS-FSP-L3/L7
Lens

The ***MS-FSP-212*** provides multi-level control base on motion and daylight level. Requires L3 or L7 lens depending the mounting height.

Operation Voltage	Shape	Adjustable Time Delay	Fade Down Time	Operating Temperature	Mounting Height For MS-FSP-L3	Mounting Height For MS-FSP-L7
120/277V	Cone	30 sec - 30 min	0-10 sec	-40°F to 158°F	20 ft*	40 ft**

*Covers a 40 ft diameter when mounting height is 20 ft. Coverage is equal to 2x the height.
**Covers a 100 ft diameter when mounting height is 40 ft. Coverage is equal to 2.5x the height

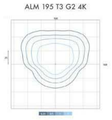
PHOTOMETRIC

Type III
Type III optics produce an asymmetrical pattern that directs the majority of the light forward and equally on both sides of the luminaire. In a back-to-back configuration, it creates a rectangular pattern which can extend pole spacings.

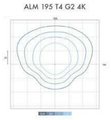
Type IV
Type IV is suitable for applications where light is primarily required forward with minimal back light. Typical installations include perimeter poles.

Type V
Type V optics produce a symmetrical square distribution pattern that distributes light equally on all sides of the luminaire. Type V luminaires is universal for most area lighting applications.

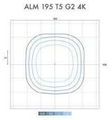
ALM 195 T3 G2 4K



ALM 195 T4 G2 4K



ALM 195 T5 G2 4K



Mounting Height	15	20	25	30	35
Multiplier	2.8	1.6	1.0	0.7	0.5

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SLG LIGHTING GENERATION 1 & 2

SPECIFICATIONS

HOUSING
One piece die-cast aluminum housing with anti-corrosive paint.

AMBIENT TEMPERATURE
Suitable for use in -40°C to +45°C (-40°F to 113°F)

MOUNTING
Mounting options include Square and Round Pole Mount, Wall Mount, Adjustable Slipfitter Mount and option for photocell, Trunnion Mount for ALS and ALM, and Yoke Mount for ALL

EFFICACY
Up to 133 lumen's per watt (see individual wattage data)

CCT AND CRI
4000K and 5000K CCT available; 70CRI

OPTICS
Precision molded secondary optics produce superior uniformity, minimal light trespass and maximum pole spacing. Optics sealed to LED package for IP66 protection.

WARRANTY
10-year limited warranty. Comprehensive warranty terms can be located on www.slgcs.com.

ELECTRICAL
Standard 120-277V. Optional HVU 347V/480V. 50/60Hz with open/short circuit protection. 10K Surge protector per ANSI/IEEE C62.41.2. Dimming 0-10V optional. Optional NEMA twist-lock photocell control.

ENERGY DATA
Constant current driver efficiency above 90%.

FINISH
Polyester Powder Dark Bronze finish. Custom colors available. Multiple stage process to produce 3 mil thickness for superior corrosion resistance and maximum durability.

CERTIFICATIONS
UL Listed for wet locations. Equivalent to IP66 rating. FCC compliant. RoHs compliant. IDA dark-sky compliance. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.slgcs.com/DLC to confirm which versions are qualified.

MOUNTING

AL-SPAR

AL-WM

AL-SFD

AL-T

ALG2-Y

AL-BC-ML

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SLG LIGHTING GENERATION 1 & 2

Type: C

PROJECT:
CATALOG #:
FIXTURE TYPE:
NOTES:

AL Area Light Generation 1 & 2

ALS Large

ALM Medium

ALS Small

Images are shown for illustration purpose only.

The ***AL Series Area Light Gen 1 and Gen 2*** comes in three sizes small, medium, and large with a lumen output between 9,000 to 39,300 lumens. This versatile luminaire has different mounting options, photocell, and motion sensors for efficiency and greater energy savings.

APPLICATIONS
Auto Dealerships, Parking Lots, Walkways, Roadways, and other Public Areas, etc.

REPLACEMENT
ALS: 175W- 250W MH, **ALM:** 400W MH, **ALL:** 750W-1000W MH

PERFORMANCE INFORMATION

SERIES NUMBER	WATT	LUMENS	DIST	CCT
ALS 90 T3 G1 5K	70W	9,000	Type III	5000K
ALS 130 T3 G1 5K	105W	13,400	Type III	5000K
ALM 195 T3 G2 5K	150W	19,700	Type III	5000K
ALM 195 T3 G2 HVU 5K	150W	19,700	Type III	5000K
ALM 260 T3 G2 5K	200W	26,200	Type III	5000K
ALM 260 T3 G2 HVU 5K	200W	26,380	Type III	5000K
ALL 330 T3 G2 5K	250W	33,250	Type III	5000K
ALL 330 T3 G2 HVU 5K	250W	33,000	Type III	5000K
ALL 390 T3 G2 5K	300W	39,300	Type III	5000K
ALL 390 T3 G2 HVU 5K	300W	39,300	Type III	5000K

MOUNTING & OPTIONS

AL-SPAR | AL-WM | AL-SFD | AL-T | ALG2-Y | PC-1 | PC-2 | MS-FSP-212 | L3/L7

ORDERING GUIDE — EXAMPLE: ALM 140 T3 G1 5K

Luminaire Type	Lumen Output	Dist. Type	Generation	Voltage	CCT	Finish	Mount	Options
ALS= Area Light Small	**90** 9,000 Lumens **130** 13,400 Lumens	**T3=** Type III **T4=** Type IV **T5=** Type V	**G1** **G2**	**BLANK=** 120-277V **HVU=** 347-480V	**4K** 4000K **5K** 5000K	**BLANK=** Dark Bronze **C=** Custom*	**AL-SPAR=** Square and Round Pole Mount **AL-WM=** Wall Mount **AL-SFD=** Slipfitter Mount **AL-SFD-P1=** Slipfitter Mount with PC-1 (Photocell 120V-277V) **AL-T=** Trunnion Mount **ALG2-Y=** Yoke Mount (ALL only)	**PC-1=**Twist-lock Photocell (120-277V) **PC-2=**Twist-lock Photocell (347-480V) **PC-3=**7-Pin receptacle **MS-FSP-212=**Motion Sensor (Choose 1) **L3=**40' diameter lens **L7=**100' diameter lens **AL-BC-ML=**House side shield for ALM-AL G2 Series only, ALL requires 2 shields
ALM= Area Light Medium	**195** 19,700 Lumens **260** 26,200 Lumens							
ALL= Area Light Large	**330** 33,250 Lumens **390** 39,300 Lumens							

*For a custom color, please call to place your order

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SLG LIGHTING GENERATION 1 & 2

ELECTRICAL LOAD

	Series Number	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
ALS	ALS 90 T3 G1 5K	70W	0.58	0.34	0.30	0.25	N/A	N/A
	ALS 130 T3 G1 5K	105W	0.87	0.50	0.44	0.38	N/A	N/A
ALM	ALM 195 T3 G2 5K	150W	1.25	0.72	0.63	0.54	0.43	0.31
	ALM 195 T3 G2 HVU 5K	150W	1.25	0.72	0.63	0.54	0.43	0.31
	ALM 260 T3 G2 5K	200W	1.66	0.96	0.83	0.72	0.58	0.42
	ALM 260 T3 G2 HVU 5K	200W	1.66	0.96	0.83	0.72	0.58	0.42
ALL	ALL 330 T3 G2 5K	250W	2.08	1.20	1.04	0.90	0.72	0.52
	ALL 330 T3 G2 HVU 5K	250W	2.08	1.20	1.04	0.90	0.72	0.52
	ALL 390 T3 G2 5K	300W	2.5	1.44	1.25	1.08	0.87	0.62
	ALL 390 T3 G2 HVU 5K	300W	2.5	1.44	1.25	1.08	0.87	0.62

PROJECTED LUMINAIRE MAINTENANCE

Ambient Temperature	OPERATING HOURS 0	25,000	50,000	100,000	Calculated L70 (Hours)
25°C / 77°F	1	0.95	0.91	0.81	>214,973

Lumien Ambient Temperature (LAT) Multipliers

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.98
40°C	104°F	0.98

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SLG LIGHTING GENERATION 1 & 2

PERFORMANCE INFORMATION

Series Number	Wattage	5000K CCT Lumen	Dist Type	B	U	G	4000K CCT Lumen	B	U	G
ALS 90 T3 G1 5K	70W	9,000 Lm	Type III	2	0	2	9,000 Lm	2	0	2
		8,670 Lm	Type IV	2	0	2	8,750 Lm	2	0	2
		9,479 Lm	Type V	3	0	1	9,777 Lm	3	0	1
ALS 130 T3 G1 5K	105W	13,400 Lm	Type III	3	0	2	13,400 Lm	3	0	2
		13,676 Lm	Type IV	3	0	3	13,999 Lm	3	0	3
		12,787 Lm	Type V	3	0	1	12,885 Lm	3	0	1
ALM 195 T3 G2 5K	150W	19,700 Lm	Type III	3	0	2	19,497 Lm	3	0	2
		18,800 Lm	Type IV	3	0	3	18,800 Lm	3	0	3
		21,150 Lm	Type V	4	0	2	21,385 Lm	4	0	2
ALM 260 T3 G2 5K	200W	26,200 Lm	Type III	3	0	2	26,096 Lm	3	0	2
		25,000 Lm	Type IV	3	0	3	25,000 Lm	3	0	3
		27,200 Lm	Type V	4	0	2	27,086 Lm	4	0	2
ALL 330 T3 G2 5K	250W	33,250 Lm	Type III	4	0	3	32,883 Lm	4	0	3
		30,500 Lm	Type IV	4	0	3	30,000 Lm	4	0	3
		35,250 Lm	Type V	5	0	2	34,623 Lm	5	0	2
ALL 390 T3 G2 5K	300W	39,300 Lm	Type III	4	0	3	39,495 Lm	4	0	3
		37,000 Lm	Type IV	4	0	4	36,000 Lm	4	0	4
		42,300 Lm	Type V	5	0	2	42,998 Lm	5	0	2

PERFORMANCE COMPARISON

Product Series	Wattage	Lumen	Efficacy	Replaces	Voltage	Max Mounting Height	DLC
ALS 90	70W	9,000 Lm	129 Lm/W	175W	120-277V	15-20 ft	Standard
ALS 130	105W	13,400 Lm	128 Lm/W	250W	120-277V	15-20 ft	Standard
ALM 195	150W	19,700 Lm	131 Lm/W	400W	120-277V	20-30 ft	Premium
ALM 260	200W	26,200 Lm	131 Lm/W	400W	120-277V	20-30 ft	Premium
ALL 330	250W	33,250 Lm	133 Lm/W	750W	120-277V	30-50 ft	Premium
ALL 390	300W	39,300 Lm	131 Lm/W	1000W	120-277V	30-50 ft	Premium

Due to continuous product improvements, specification and/or equipment updates may change without notice.

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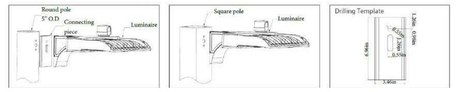
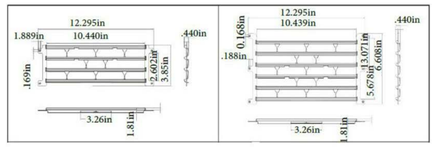
SLG LIGHTING GENERATION 1 & 2

MOUNTING DIMENSIONS



BACKLIGHT CONTROL OPTIONS



EPA OF AREA LIGHT

S	ALS 90 ALS 130	70W 105W	0.626	0.705	0.971	0.981	0.982	0.975	0.982
M	ALM 195 ALM 260	150W 200W	0.4418	0.7145	0.8813	0.8836	1.0548	1.0135	1.0548
L	ALL 330 ALL 390	250W 300W	0.5614	0.8471	1.105	1.1228	1.294	1.2503	1.294

Due to continuous product improvements, specification and/or equipment updates may change without notice.

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SHEET TITLE
LIGHTING CUT SHEETS

PROPOSED NEW REPAIR FACILITY BUILDING
ZIGNEGO REPAIR FACILITY
W226 N2940 DUPLAINVILLE ROAD
PEWAUKEE, WISCONSIN 53186

Date	Revision
June 30, 2020	Revised Plan Commission Per City Of Pewaukee Letter Dated June 15, 2020

JOB: 3239
DRAWN: CK
CHECKED: DF / KJ
DATE: MAY 28, 2020
SHEET:
E2.2

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 8.

DATE: July 16, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action and Public Hearing Regarding Proposed Amendments to Chapter 17 of the City of Pewaukee Zoning Ordinance Including Striking a Portion of Sub-section 17.0706c Related to Digital Signs; Adding New Sub-section 17.0706d and Re-lettering the Subsequent Sections Accordingly Related to Adding Electronic Message Boards Signs as Permitted Under Certain Conditions; and Striking a Portion of Sub-section 17.0711 Related to Lighting, Design and Color.

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Sign Code Amendment

Sign Code Amendment Staff Report

SECTION 17.0700 SIGNS AND GRAPHICS

17.0701 INTENT AND PURPOSE

The intent of this section is to provide for and regulate the location and safe construction of signs in the City in a manner that will ensure that such signs are compatible with surrounding land uses, are aesthetic in design and structure and express the identity of individual proprietors and the community as a whole. It is the further intent that by these regulations, the community will be spared the presence of visual clutter and distraction along its thoroughfares by the display of multiple signs on the same property or on adjacent parcels with near identical content while at the same time ensuring that no property owner is denied his/her right to visually communicate in a regulated, aesthetic and morally responsible manner. It shall be unlawful for any person, firm or corporation to locate, erect, move, reconstruct, extend, enlarge, convert, or structurally alter any sign without first complying with the requirements of this section. All signs shall be maintained and kept in good repair. Signs intended to be permanent must be structurally affixed to a building, structure or a ground mounting and constructed of materials that are permanent in nature. All other signs are classified as temporary signs. Lighting and landscaping of permanent signs must be accomplished to the satisfaction of the Plan Commission. Certain types of signs may be prohibited as set forth in subsection 17.0708.

17.0702 SIGNS PERMITTED IN ALL ZONING DISTRICTS **WITHOUT A PERMIT**

Certain signs are permitted on private property in all zoning districts without a permit as may be set forth in the individual district regulations. No sign, however, may be located within a public right of way or on public lands without written permission of the public body having jurisdiction. No sign shall be erected on any property without a 'vision triangle' at street intersections. Signs erected in violation of the regulations in this section may be removed without notice. (See sub-section 17.0708) The following signs may be permitted in any zoning district without permit:

a. Memorial Sign, Tablet, Name of Building and Date of Erection Sign when cut into any masonry surface or when constructed of metal and affixed flat against a structure and not illuminated, thereby rendering them 'permanent' signs.

b. Any Official Sign such as traffic control, parking restrictions, public information and notices, not exceeding six (6) feet in height unless extended over public right-of-way by use of a cantilevered pole or structure, when authorized by the City. Portable temporary traffic warning or control equipment may be used by

the City or County emergency personnel or authorized highway construction crews within public rights-of-way without a permit.

c. Election Campaign Signs. Election campaign signs may be allowed in any district without a permit provided that permission shall be obtained from the property owner, renter, or lessee; and provided that such sign shall not be erected for more than the election campaign period (Wis. Stat. 12.04), and removed within seven (7) days following the election. Such signs in residential zoning districts shall not exceed 16 square feet on each sign face per sign, unless located on a county or state trunk highway or City designated arterial street, in which case the maximum sign area may be increased to 32 square feet; may not exceed six (6) feet in height; and, may not exceed a total of 32 square feet per lot. To avoid sign clutter and visual distraction, individual signs more than four square feet in area should be spaced apart from other signs on the property at least 30 feet. No such sign shall be placed on public lands, within public rights-of-way without permission of the unit or agency of government having jurisdiction and if so placed without such permission will be subject to removal without notice.

d. A Short Term Temporary Sign advertising such neighborhood or community-wide coming activities or events as: a garage sale; a civic organizations annual picnic, bicycle race or boat race; a 'grand opening'; a 'final close out'; a church raffle, picnic or ice cream social; or, a community or county annual fair or outing. Because such signs are intended to be temporary and, therefore, are usually not constructed of materials that will withstand wind, rain and snow conditions for long periods of time, they should be erected for only a short period of time in advance of the event and shall be removed within seven (7) days following the advertised event or activity. The signs shall conform to the size, height and location restrictions in section 17.0702c, above. No such sign shall be placed on public lands, within the rights of way of public streets or highways without written permission of the unit or agency of government having jurisdiction and if so placed without such permission will be subject to removal without notice. (Also see 17.0708).

e. Real estate 'For Sale' or "For Lease' sign. Such signs on an individual residential parcel shall not exceed 16 square feet in sign face area or, if related to an entire residential subdivision or development plat, may not exceed 32 square feet in area. Such signs in other zoning districts may not exceed 32 square feet in area. If such signs are illuminated a permit issued by the Building Inspector is required. Only one sign will be permitted for each street or lake frontage and must be placed on the property involved. Because such signs, though temporary, might be in place for a long period of time, such signs should be constructed of durable material and shall be maintained in good repair and must be removed within seven (7) days following the sale or lease of the individual building parcel or, if a multi-parcel development, the initial sale or lease of the last parcel in the development. The City may order removal or replacement of signs that are in disrepair. Such signs may not be erected in a location that will block vision of motorists at intersecting streets or at driveways. No such sign may be more than eight (8) feet in height and no such sign may advertise 'for sale' or 'for lease' land or property other than the premises on which the sign is located. (Also see sub-section 17.0708).

f. Small, Permanent On-Site Traffic Directional Signs erected within private development and not more than nine (9) square feet in area and not more than five (5) feet high.

17.0703 SIGNS PERMITTED IN INDIVIDUAL ZONING DISTRICTS **WITH A PERMIT**
The following signs may be permitted in any specific zoning district after application and issuance of a permit by the Building Inspector or Zoning Administrator**.** No sign, however, may be located within a public right of way or on public lands without written permission of the public body having jurisdiction or on any property within a 'vision triangle' of intersecting streets and if so erected or placed in violation of the regulations in this section may be removed without notice. (Also see 17.0708).

a. Permanent Bulletin Board for public, charitable or religious institutions not to exceed thirty-two (32) square feet in sign area, eight (8) feet in height and located on the premises of the institutional use. Such signs shall be set back from the property line at least one-quarter (1/4) of the building setback requirements of the District in which the property is located and be illuminated only to the extent necessary to permit reading of the sign from a maximum distance of 10 feet**.** Such signs may have a portion of the sign devoted to words and numbers that are changeable by hand and are not larger than four (4) inches in height.

b. Temporary Sign or Banner, other than those allowed under sub-section 17.0702. For purposes of this section a temporary sign or banner is one which will be used for no more than sixty (60) days in a six (6) calendar month period, measured from the date the sign is erected. In order to avoid visual clutter of multiple signs only one such sign or banner may be placed on a property street frontage. Such signs shall not exceed 16 square feet in area in residential districts, 32 square feet in sign area in all other districts when placed on the property line abutting a minor, collector or standard arterial street, or up to 100 square feet in sign area when placed on commercial or industrial zoned property and at least 100 feet from the edge of the nearest through traffic lane of an expressway or freeway; shall be attached to the principle building or be erected as a ground sign no more than eight (8) feet in height in an aesthetic and structurally sound manner and shall meet all setback regulations as set forth in this section. Portable signs with or without wheels and signs on trucks, trailers or other vehicles that are parked on public or private property with the intent to be used for temporary or permanent advertisement purposes are not in keeping with the aesthetic requirements of this ordinance and are, therefore, not allowed.

17.0704 SIGNS PERMITTED IN AGRICULTURAL ZONING DISTRICTS **WITH A PERMIT**
The following signs are permitted in Agricultural Zoning Districts upon the issuance of a permit by the Building Inspector or Zoning Administrator, and subject to the following regulations:

a. Permanent Name, Occupation or Organization Sign not to exceed ten (10) square feet in sign area, six (6) feet in height, and not exceeding one (1) sign per 450 feet of street or highway frontage. No such sign may be erected on public street or highway rights of way or within the vision triangle of two intersecting streets**.**

b. 'For Sale' or 'For Lease/rent' sign pertaining to the sale or lease of a farm building or the sale of farm produce raised on the farm, farm equipment or animals. Such signs shall not exceed six (6) feet in height; may be located on the property line up to 25 square feet in area and must be set back from the

property line one (1) foot for each additional square foot in sign area over 25 square feet up to 50 square feet in area; and, shall not exceed one (1) sign per street frontage. No such sign shall be erected or maintained within an inside curve of a highway unless such signs are placed at least fifty (50) feet from the highway right-of-way and further than fifty (50) feet from the right-of-way as may be necessary to prevent such sign from interfering with vision along the highway for a distance of at least one thousand (1,000) feet in each direction by those traveling thereon. Such signs are considered temporary signs and shall be removed no later than seven (7) days after closing of the sale or lease and the permit for such sign shall expire on June 30th each year unless extended for a specific period of time by official action of the Zoning Administrator or Plan Commission.

17.0705 SIGNS PERMITTED IN RESIDENTIAL DISTRICTS **WITH A PERMIT**

The following signs are permitted in residential districts upon the issuance of a permit by the Building Inspector or Zoning Administrator and subject to the following regulations:

a. Permanent Name Sign not exceeding four (4) square feet in sign area and located on the premises.

b. Permanent Subdivision/Development Identification Sign no more than six (6) feet in height; constructed of wood, metal and/or masonry; and, of a design which will be compatible with the landscape and shall state only the name and address of the subdivision. Such signs and their location**,** height and size shall be reviewed and approved by the Plan Commission and/or the City Planner prior to issuance of a permit.

17.0706 SIGNS PERMITTED IN BUSINESS, INDUSTRIAL, PARK AND INSTITUTIONAL DISTRICTS **WITH A PERMIT**

The following signs are permitted in all Business, Industrial, Park and Institutional Districts upon the issuance of a permit by the Building Inspector or Zoning Administrator and subject to the following restrictions:

a. Permanent Wall Sign placed on or against the exterior wall(s) of buildings shall not extend more than one (1) foot outside of a building's wall surface; shall not exceed in sign area the equivalent of two (2) square feet for each linear one (1) foot of building (store) and, any ancillary lighting shall be shielded to avoid glare. Wall signs (and structure) shall not extend above the ceiling level of the top floor of the building upon which they are located and shall not block window, door or vent openings. Such signs may not be used as ‘for sale’ or ‘for lease/rent’ signs except for the property on which the sign is located. The sign must comply with the site and building standards set forth in sub-section 17.0210.

b. Permanent Projecting Sign fastened to, suspended from or supported by structures on buildings shall not exceed 50 square feet in sign area, or 100 percent of the building setback from the property line as expressed in square feet, whichever is larger, to a maximum of 150 square feet for any one premise; shall not extend into any public right-of-way; shall not extend above the lowest point on the roof; shall not be less than ten (10) feet from all side lot lines, or beyond the building wall, whichever is less; shall not exceed a height of 16 feet above the adjacent center line street grade and shall not be less than ten (10) feet above the level of the primary access, nor less than 15 feet above a driveway and, shall not be located within 150 feet from any ground sign. Such

sign must comply with the site and building standards set forth in sub-section 17.0210.

c. Permanent Ground Sign, other than billboards, as defined herein, shall not exceed 12 feet in height above the mean centerline grade of the nearest street unless approved by the Plan Commission; shall not exceed in sign area 25 square feet on one side at the street property line but may be increased in sign area size one (1) square foot for each one (1) foot the sign is set back from the street property line to a maximum of 150 square feet on one side. Only one (1) ground sign shall be allowed on a street frontage of a single (individual) property and no ground sign shall be placed closer than 150 feet from another ground sign, projecting sign or billboard. Any such sign located within 660 feet of a residential zoning district boundary shall not be illuminated during the seven hour period beginning at eleven (11) PM and ending at six (6) AM. ~~No such sign shall have exposed flashing, digital or electrically movable lighting or images of any kind with the exception that such signs may have movable words and numbers if required by local, state or federal law.~~ Such signs must comply with the site and building standards set forth in sub-section 17.0210. Permanent ground signs on parcels of more than five acres in area, over 75 feet in sign area, and any subsequent changes to such signs must be approved by the Plan Commission. (Also see sub-section 17.0708).

d. Permanent Electronic Message Board Signs, as defined herein, shall be allowed under the following conditions:

1. Electronic Message Board Signs shall be allowed only when permitted by the Plan Commission, except for the following:
   i. Electronic Message Board Signs required by local, state, or federal law.
   ii. Digital time and temperature signs.
2. All Permitted Electronic Message Board Signs shall comply with the following standards:
   i. Signs must meet the same standards, including but not limited to size, height, and lighting, as set forth for Permanent Ground Signs in sub-section c. above.
   ii. The changeable copy portion of the sign must occupy a secondary position to the name of tenant. The area of changeable copy and electronic message boards shall not exceed sixty-five percent (65%) of the sign face, excepting gas stations for the purpose of displaying price.
   iii. The sign may be double-faced.
   iv. Each sign shall be permanently installed or located.
   v. Each sign shall be placed in such a manner so as to not interfere with, confuse or present any hazard to traffic.
   vi. Duration/Hold time: Any portion of the message must have a minimum duration of eight (8) seconds and must be a static display. Transition time must be no longer than three seconds.
   vii. Display Change Frequency: The content of a digital display must transition instantly, with no transition graphics.
   viii. Motion: No portion of the message may flash, scroll, twirl, change color, fade in or out or in any manner imitate movement.
   ix. Animation: Limited animation (such as snowflakes falling, clouds moving, flags waving, etc.) is allowed when no text is displayed. Animation such as video is prohibited.
   x. Text/Spelling: The text of the sign must be limited to three

lines to allow passing motorists to read the entire copy with minimal distraction. Scrolling text is prohibited.

xi. Lighting/Brightness: The sign shall not exceed a maximum illumination of 5,000 nits (candelas per square meter) during daylight hours and a maximum illumination of 500 nits (candelas per square meter) between dusk to dawn as measured from the sign's face at maximum brightness.

xii. Dimmer Control: The electronic message boards shall be equipped to automatically control the brightness of the emissions based upon current ambient conditions, so that the sign does not exceed the maximum brightness levels allowed under "Lighting/Brightness" above.

xiii. Hours of operation: Messages may be displayed between the hours of 6:00 a.m. and 11:00 p.m. Only time and temperature displays are allowed between the hours of 11:00 p.m. and 6:00 a.m.

xiv. When malfunctioning, all electronic message board signs must either be turned off or display a blank black screen.

xv. Speakers are prohibited in association with electronic message board signs.

xvi. Message content shall be limited to businesses located on the same premise as the sign. Advertising messages for other businesses is prohibited.

xvii. Public service announcements such as City of Pewaukee community events, weather emergencies, seasonal messages, and holiday greetings are allowed.

xviii. Electronic message board signs shall conform to City of Pewaukee Sign Code standards as amended in the future. Applicant shall not have any vested rights under this approval for any electronic message board signs or regulations.

xix. Sign standards and functions not addressed per these conditions require City of Pewaukee approval.

~~d.~~e. Off-Premise Directional/Sales Sign as defined herein, other than billboards when permitted by the Plan Commission, shall meet the requirements of the type of sign as set forth in this Section; shall not exceed two (2) in number within the City per business, resort or commercial recreation facility as well as the principal merchandise sold; shall not exceed in sign area 25 square feet on one side at the street property line but may be increased in size one (1) square foot for each one (1) foot the sign is set back from the street property line to a maximum of 50 square feet on one side; and, shall be a maximum three (3) miles distance from the designated business being advertised. Such sign may be placed only in a retail business or industrial zoning district. The permit for such sign shall expire on June 30th each year but may be extended for one year upon issuance of a new permit by the Zoning Administrator or Building Inspector. (Also see sub-section 17.0708).

f. Permanent Window Sign shall be placed only on the inside of the window and shall not exceed twenty-five (25) percent of the glass area of the window upon which the sign is displayed. Illuminated window signs shall not be illuminated after the business is closed for the day.

g. Billboard as defined herein is considered a commercial use and as such may only be permitted in retail business or industrial zoned areas and when permitted by the Plan Commission shall not exceed 25 feet in height; shall be set back from a property line the same distance as set forth for principal

buildings in the zoning district regulations; shall be located not closer than 1,320 feet from another billboard**,** ground sign or off-premises sign and no such sign shall have exposed, flashing, digital or electrically movable lighting, or images of any kind. A billboard located within 660 feet of a residential zoning district boundary shall not be illuminated during the seven hour period beginning at eleven (11) PM and ending at six (6) AM.

h. Combinations of any signs in this Section shall meet all the requirements for the individual sign.

i. Roof Signs as defined herein shall not be allowed.

j. All signs with no current permit must be removed.

17.0707 SIGNS PERMITTED IN CONSERVANCY AND FLOODPLAIN ZONING DISTRICTS WITH A PERMIT

Signs as permitted in sub-section 17.0703 (a) and (b) shall be permitted in the Upland and Lowland Conservancy Zoning Districts upon the issuance of a permit by the Building Inspector or Zoning Administrator. No sign may be permitted in a Floodplain District.

17.0708 SPECIAL RESTRICTIVE PROVISIONS

Following are special restrictive provisions that relate, generally, to all signs or premises in the City:

a. Roof Top signs; Flashing, Blinking or Electronically Movable Copy Signs, Portable and other movable signs, as well as any sign within a public street or highway right-of-way, shall be prohibited except as provided in sub-section 17.0706 . Small permanent directional signs for religious and other institutional or governmental destinations within the community such as a hospital, a school, government building or a church may be located within public right-of-ways when approved by the Plan Commission or the county or state agency having jurisdiction.

b. Signs Facing on Federal Interstate or Federal Aid Primary Highways shall meet all the requirements and regulations set forth in Wisconsin statutes and federal regulations as well as the regulations for the type and location of signs set forth herein, whichever is more restrictive.

c. Words and Phrases on Signs should be kept to a minimum to allow reading or interpretation from a moving vehicle at posted speed limits without slowing down**,** thereby reducing potential traffic hazard. A combination of ten (10) words, sets of numbers, logos, or pictures should, under normal circumstances, be considered as a guide for maximum sign phrasing.

d. The Plan Commission or Zoning Administrator may require a cash bond or irrevocable letter of credit of the applicant for a permanent sign permit to ensure that the sign is erected as required by these regulations and the Plan Commissions directions.

e. Signs advertising land or building space 'For Sale' or 'For Lease/Rent' are temporary signs and may not be a permanent sign and must be removed when the property/premises on which the sign is located is sold, leased or rented. The permit for any such sign requiring a permit will expire on June 30th each year and must be renewed in writing by the Building Inspector to extend the permit. Such signs may not advertise properties other than the property on

which the sign is located.

17.0709 SEARCHLIGHTS/BALLOONS

The Zoning Administrator or Building Inspector may permit the temporary use of a searchlight or balloons for advertising purposes in any district except residential districts provided that the searchlight or balloon will not be located in any public right-of-way; will not be located closer than 10 feet to an adjacent property; and, will not be a vision or audio nuisance or cause a hazard to traffic or adjoining properties. Searchlight and balloon permits shall be granted for a period of not more than five (5) days in any six (6) month period and the searchlight shall not be illuminated during the period beginning at 10:00 PM and ending at dawn.

17.0710 FACING OF SIGNS

No illuminated signs, except those permitted in residential zoning districts, shall be permitted to face an adjoining residence and no sign-related illuminating device shall be directed toward residential parcels in a residential zoned district.

17.0711 LIGHTING, DESIGN AND COLOR

Signs shall not resemble, imitate, or approximate the shape, size, form or color of railroad or traffic signs, signals or devices. Signs shall not obstruct or interfere with the effectiveness of railroad or traffic signs, signals, or devices. Signs shall not be erected, relocated, or maintained so as to prevent free ingress to or egress from any door, window, or fire escape and no sign shall be attached to a standpipe or fire escape. Signs shall be placed so as not to obstruct or interfere with traffic visibility and shall not be lighted in a way which causes glare or impairs driver visibility upon public ways. ~~Continuous moving (traveling) copy, electronically movable copy, or flashing picture signs shall not be allowed.~~ Signs may be illuminated as set forth herein, but non-flashing, decorative or wall art shall only be allowed after affirmative action by the Plan Commission.

17.0712 EXISTING SIGNS

Signs lawfully existing at the time of the adoption of or related amendment to this section may be continued although the size or location does not conform to this section provided that the owners of such signs shall, within three (3) months of the effective date of this section or any amendment thereto, fill out a permit application for the Building Inspector's records. Upon the filing of such application, the Building Inspector shall issue an initial permit to the sign owner without fee. Certain existing signs are of a type that requires a permit that is valid for a specific time period and are subject to the regulation of such signs as set forth herein.

Nonconforming permanent signs shall be kept in good repair, but the cost of maintenance shall not be considered grounds for their continued use. If not kept in good repair to the satisfaction of the Building Inspector, the Building Inspector may require removal of the sign within a 60 day period. The owners of signs which are not repaired, painted, or maintained pursuant to written notification and orders by the Building Inspector shall also be subject to enforcement action. (See sub-section 17.0715)

17.0713 ADMINISTRATION

Applications for permits for the erection of signs requiring a permit shall be filed with the Building Inspector, who shall review the application for its completeness, accuracy and adherence to this ordinance and approve or deny the application within a reasonable period from the date of receipt unless the time is extended by written agreement with the applicant. A sign permit shall become null and void if work authorized under the permit has not been completed within six (6) months from the date of issuance. Applications shall be made on forms provided by the

Building Inspector and shall contain or have attached thereto at least the following information:

a. Name, Address, and Telephone Number of the applicant, and location of building, structure, lot or property to which or upon which the sign is to be attached or erected.

b. Name of Person, Firm, Corporation, or Association erecting the sign.

c. Written Consent of the owner or lessee of the building, structure, or land to which or upon which the sign is to be affixed or erected.

d. A Scale Drawing of such sign indicating the dimensions, the materials to be used, the type of illumination, if any, and the method of construction and attachment.

e. A Scale Site Drawing indicating the location and position of such sign in relation to nearby buildings, structures, property boundaries, streets, driveways or other signs.

f. Type of Sign such as 'permanent' or 'temporary' or 'for sale/lease'.

g. Copies of any other permit required and issued for said sign, including the written approval by the Electrical Inspector in the case of illuminated signs. The Building Inspector shall examine the plans and specifications, inspecting all wiring and connections to determine if the same complies with the City Codes and Ordinances.

h. Additional Information such as photographs

i. Payment of a fee as set forth herein. The Building Inspector may, if necessity requires, direct that the applicant for a sign permit meet with the Plan Commission to review the request and provide guidance in the issuance of the permit or interpretation of the standards.

17.0714 INSPECTION AND REMOVAL OF SIGNS

From time to time the Zoning Administrator or Building Inspector may inspect signs within the City for compliance with the provisions of this Section and if such provisions are not being met, such fact shall be reported to the sign owner with a request that the sign be made to comply with this Section. If, within a reasonable period of time set by the Building Inspector (see Sections 17.0712 and 17.0713), the sign is not made to comply with this Section, the Building Inspector may direct that the sign be removed by the owner, and if not so removed shall cause the sign to be removed and the cost of such removal assessed to the sign owner or the owner of the property from which the sign is removed.

17.0715 MAINTENANCE OF PERMANENT SIGNS

The owner of a permanent sign and/or the owner of the land on which the sign is located shall maintain such sign in good and safe condition which includes restoring, repainting, or replacement of a worn or damaged legally existing sign to its original condition, and shall maintain the premises on which the sign is erected in a clean, sanitary, and inoffensive condition, free and clear of all obnoxious substances, rubbish, weeds, and grass. Failure to do so after notice from the Building Inspector shall be cause for the removal of such signs under sub-section 17.0714. Whenever the Building Inspector determines that the cost to repair a sign will exceed 50% of its replacement cost, such sign shall be deemed a hazard and

the Building Inspector shall order its removal as set forth in sub-section 17.0714. This Section shall apply to both new and legal nonconforming signs.

17.0716 SIGN CONSTRUCTION STANDARDS

a. Wind Pressure and Dead Load Requirements: All permanent signs and other advertising structures shall and temporary signs should be designed and constructed to withstand wind pressure of not less than 30 pounds per square foot of area, and shall be constructed to receive dead loads as required in the City Building Code or other Ordinances.

b. Protection of the Public: The temporary occupancy of a sidewalk or street or other public property during construction, removal, repair, alteration, or maintenance of a sign is permitted provided the space occupied is roped off, fenced off, or otherwise isolated to prevent hazard to pedestrians and property.

c. Supporting Members or Braces of all signs shall be constructed of galvanized iron, properly treated wood, stainless steel, or other non-corrosive, non-combustible material. All projecting signs, if placed at an angle to the wall of any building, shall be attached by such non-corrosive metal bolts, anchors, cable, or other metal attachments as shall ensure permanent and safe construction and shall be maintained free from defects, rust or other deterioration. Every means or device used for attaching any sign shall extend through the walls of the building should the Building Inspector determine that the safe and permanent support of such sign so requires and shall be securely anchored by wall plates and nuts to the inside of the walls or to bearings on the underside of two (2) or more roof or ceiling joists in accordance with instruction given by the Building Inspector. Small, flat signs containing less than 10 square feet of area may be attached to a building by the use of non-corrosive lag bolts or other means to the satisfaction of the Building Inspector.

d. No Signs, or any part thereof, or sign anchors, braces, or guide rods shall be attached, fastened, or anchored to any fire escape, fire ladder, or stand pipe, and no such sign or any part of any such sign or any anchor, brace, or guide rod shall be erected, put up, or maintained so as to hinder or prevent ingress or egress through a door, doorway, or window or so as to hinder or prevent the raising or placing of ladders against a building by the Fire Department as necessity therefore may require.

17.0717 PERMIT FEES

a. Initial Application for a Sign Erection Permit and extension of such permits as required herein**.** Each application for a required permit or extension of a permit shall be accompanied by a fee as set forth in the City approved fee schedule. (See Appendix A). Each individual sign requires a permit unless specifically stated otherwise in these regulations. All permits for temporary signs expire on June 30th each year unless stated otherwise herein. The fees have been established by the Common Council as a part of the City's comprehensive fee schedule and are subject to periodic review and change by action of the Common Council.

b. Liability. The acceptance of fees as provided herein shall not be deemed an assumption of liability by the City.

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REPORT TO THE PLAN COMMISSION

Meeting of June 18, 2020

Date: June 9, 2020

Project Name: Electronic Message Board Sign Code Amendment

Project Address/Tax Key No.: City-wide

Project Description/Analysis

Recently, a discussion item regarding electronic message boards (i.e. movable copy signs) was presented to the Common Council at their March 2, 2020 meeting. This item was brought forward for several reasons: 1) Inlanta Mortgage recently requested to install an electronic message board at W239N3490 Pewaukee Road; 2) It is a question that comes up periodically from businesses and sign companies; and 3) There was an issue with existing portable/manual changeable signs with two Pewaukee restaurants/bar establishments. These signs had to be removed; however, if allowed these businesses may have a desire to replace those signs with modern electronic message boards.

The Common Council discussed the matter and passed a motion directing staff to research and explore amending the current ordinance for Plan Commission review and recommendation to the Common Council.

Attached is a draft amendment for consideration. It is currently set up to allow electronic message board signs for any use, city-wide when approved by the Plan Commission. Alternatively, staff did consider allowing them by use, such as the language below for example.

1. Electronic Message Board Signs shall be allowed for the following uses when permitted by the Plan Commission:
    a. Institutional uses, such as Local, State, and Federal governmental uses, schools, and churches.
    b. Banks and financial institutions.
    c. Restaurants and bars/taverns establishments

The draft ordinance includes a list of specific standards that must be met for electronic message board signs. Otherwise, these signs would be subject to the same size, height, and lighting restrictions as Permanent Ground Signs.

This item is being brought forward for discussion purposes at this time. The next step is for the Plan Commission to hold a public hearing at their July 16th meeting and make a final recommendation to the Common Council. The Ordinance would then proceed to the July 20th Common Council meeting for final consideration.

Recommendation

Staff drafted the sign ordinance change for review and discussion; however, does not recommend amending the City's Ordinance.